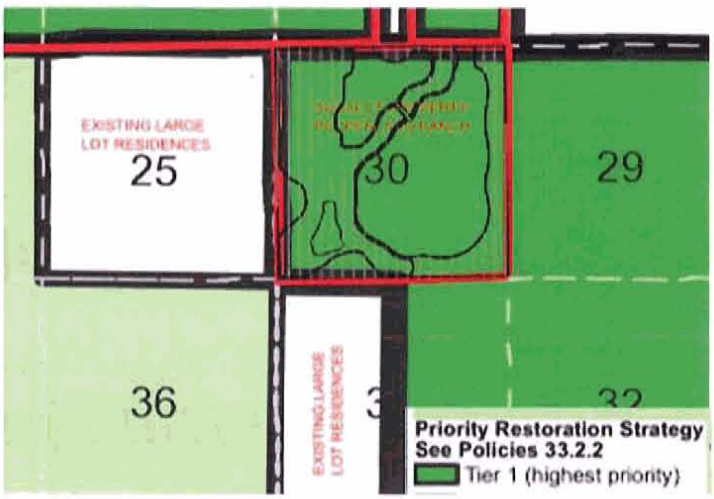
BCF™
Management Group LLC
Consultants in Land Management

RECEIVED
NOV 28 2016
COMMUNITY DEVELOPMENT
CPA 2016-00003

Pepperland Ranch

CPA2016-00003

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



Prepared by:

BANKS ENGINEERING

Consulting Ecologists
PASSARELLA & ASSOCIATES INC

TRANSPORTATION CONSULTANTS, INC.

HAHN LOESER

Water Science Associates

I. Original Application dated 03/09/16
    a. Items removed since superseded
        i. Legal Description and Sketch
        ii. Stormwater Planning Report
        iii. Enhanced Lake Management Plan
II. Resubmittal dated 06/02/2016
    a. Items removed since superseded
        i. Enhanced Lake Management Plan
        ii. Revised Stormwater Planning Report
        iii. Surface Water and Groundwater Monitoring Plan
III. Resubmittal dated 09/09/2016 (received 09/12/2016)
    a. Items removed since superseded
        i. Revised Surface Water and Groundwater Monitoring Plan
IV. Electronic Resubmittal dated 09/30/2016

I. ORIGINAL APPLICATION DATED 03/09/16

A. ITEMS REMOVED SINCE SUPERSEDED

I. LEGAL DESCRIPTION AND SKETCH

II. STORMWATER PLANNING REPORT

III. ENHANCED LAKE MANAGEMENT PLAN

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

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT

PROJECT NAME: Pepperland Ranch

PROJECT SUMMARY:

The application seeks to improve and restore important regional hydrologic and wildlife connections. The applicant seeks inclusion of the 637.5± acre site into the Environmental Enhancement and Preservation Community as depicted on Map 17. The applicant is seeking the additional density afforded by inclusion within this Community 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 inclusion in this Southeast DR/GR Residential Overlay. The Pepperland Ranch restoration strategy includes site conditions that 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 700 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 subject property which is identified on Lee Plan Map 1 as a Tier 1 Priority Restoration property. The Restoration Strategy is designed to enhance the site's hydrology and wildlife utilization. The site is strategically located with a large restoration project and public conservation lands located to the north and large lot residential and agricultural uses and then public conservation lands to the south. The project will be required to connect to Lee County Utilities for potable water and sanitary sewer services by inclusion in Maps 6 and 7 and placement within the Environmental Enhancement and Preservation Community 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 — Date: 3/1/16

Brian F. Farrar, President, BCF Management Group, LLC, Authorized Agent
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: Pepperland LLC
Address: 107 Enterprise CT
City, State, Zip: Oxford, NC 33928
Phone Number: _____ Email: _____

Agent*: Brian F. Farrar, President, BCF Management Group, LLC
Address: 22190 Fairmount Court
City, State, Zip: Estero, FL 33928
Phone Number: (239) 495-2435 Email: Brian@BCFMgmtGroup.com

Owner(s) of Record: Peppperland LLC
Address: 107 Enterprise CT
City, State, Zip: Oxford NC 27565
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: 18500 Corkscrew Road.
   2. STRAP(s): 30-46-27-00-00001.0000

B. Property Information:
   Total Acreage of Property: 637.50 acres
   Total Acreage included in Request: 637.50 acres
   Total Uplands: 586.19 ac.
   Total Wetlands: 51.31 ac.
   Current Zoning: IPD
   Current Future Land Use Designation: DR/GR and wetlands
   Area of each Existing Future Land Use Category: 586.19 ac. DR/GR, 51.31 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: Add property to the Environmental Enhancement and Preservation Community as depicted on Map 17, add property to the Lee County Utilities service areas, Map 6 & 7.

E. Potential development of the subject property:
   1. Calculation of maximum allowable development under existing FLUM:

Residential Units/Density	61 dwelling units
Commercial intensity	NA
Industrial intensity	NA

2. Calculation of maximum allowable development under proposed FLUM:

Residential Units/Density	700 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, Brian F. Farrar, President, BCF Management Group, LLC, 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

3/1/16
Date

Brian F. Farrar, President, BCF Management Group, LLC, Authorized Agent
Printed Name of Applicant

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was sworn to (or affirmed) and subscribed before me on 3/1/16 (date) by Brian F Farrar (name of person providing oath or affirmation), who is personally known to me or who has produced _____ (type of identification) as identification.

MEGAN L. BISHOP
MY COMMISSION # FF 937058
EXPIRES: November 17, 2019
Bonded Thru Notary Public Underwriters

Megan L Bishop
Signature of Notary Public

megan L Bishop
(Name typed, printed or stamped)

LETTER OF AUTHORIZATION

The undersigned hereby acknowledges to be the owner or otherwise unified control of the real property described below and further authorizes BCF Management Group, LLC to act as agent in obtaining information and permits for this real property.

Pepperland, LLC

By: _____
Signature

Randy Bailey, Member-Manager
Print Name and Title

Property Description: 30-46-27-00-00001.0000

ATTEST/NOTARY
Sworn and subscribed to me this 19 day of February, 2016.

_____
Signature

Kevin S. Breedlove
Notary Public, State of ~~Florida~~ North Carolina

KEVIN S. BREEDLOVE
Notary Public
North Carolina
Granville County

My Commission Expires 04-02-18

Commission No. _____

S:\Jobs\81xx\8112\Documents\Zoning\Letter of Authorization.doc

LIST OF EXHIBITS BY APPLICATION SECTION

I. Additional Agents
II.A.1 Surrounding Property Owners List, Map and 2 sets mailing labels
IV.A.2. & IV.A.3 FLUM depicting boundaries of the subject property, surrounding streets, & natural
resources & Proposed FLUM

- Additional Support Documents:
  - Lee Plan Map 6 – Future Water Service Areas Depicting Proposed Addition
  - Lee Plan Map 7 – Future Sewer Service Areas Depicting Proposed Addition
  - Lee Plan Map 17 – Southeast DR/GR Residential Overlay Depicting Proposed Addition
  - Conservation 20/20 Overlay
  - Special Treatment Areas – Lee Plan Map 1, Page 4 of 8 Depicting Subject Property in Priority Restoration Strategy - Tier 1 (highest priority)
  - Historical Hydropatterns Surrounding Area Map

IV.A.4. – Description of Existing Land Uses of the Subject Property and Surrounding Properties

- Map of surrounding land uses –aerial exhibit

IV.A.5. Map of surrounding zoning designations
IV.A.6 – Legal Description and Sketch
IV.A.7 – Copy of Deed
IV.A.8. Aerial map showing subject property and surrounding properties
IV.B.1 – Traffic Impact Statement
IV.B.2 – Public Facilities Impacts – Existing and Future Conditions Analysis
IV.B.3 – Agency Letters

- Fire protection
- EMS
- Sheriff
- Solid Waste
- Mass Transit (will submit upon receipt)
- Schools

IV.C. Environmental Assessment – including:

- IV.C.1 FLUCCS
- IV.C.2 Soils
- IV.C.3. Topo Map (QUAD Map)
- IV.C.5. Map depicting wetlands, aquifer recharge areas, and rare and unique uplands

IV.C.4. FIRM Map depicting property

IV.D.2. Map depicting property and the archeological sensitivity map
IV.E. Internal Consistency with Lee Plan

- IV.E.1 Population Projections & Table 1(b) Discussion
- IV.E.2. Lee Plan Goals Objectives and Policies Discussion
- IV.E.3 Adjacent Governments & Their Comprehensive Plans
- IV.E.4 State Policy Plan & Regional Policy Plan Discussion

IV.F.2 Requests moving lands from a Non-Urban Area to a Future Urban Area
IV.F.4. Hydrogeological and Water Resources Report
IV.G. – Proposal Represents Sound Planning Principles
Additional Support Documents:

- Stormwater Planning Report
- Enhanced Lake Management Plan

I. Pepperland Ranch Additional Agent Information

Agent: Thomas Lehnert, Jr., PSM, President/CEO, Banks Engineering
Address: 10511 Six Mile Cypress Parkway, Ft. Myers, FL 33966
Phone: 239-939-5490
Email: tlehnert@bankseng.com

Agent: Stacy Hewitt, AICP, Director of Planning, Banks Engineering
Address: 10511 Six Mile Cypress Parkway, Ft. Myers, FL 33966
Phone: 239-939-5490
Email: shewitt@bankseng.com

Agent: Matthew A. Noble, AICP, Manager, ANoblePlan, LLC
Address: 1842 Seafan Circle, N. Ft. Myers, FL 33903
Phone: 239-898-5182
Email: anobleplan@gmail.com

Agent: Brian K. Barnes, Principal Scientist, Water Science Associates, Inc.
Address: 13620 Metropolis Avenue, Suite 110, Ft. Myers, FL 33912
Phone: 239-204-5302
Email: brian@wsaconsult.com

Agent: Robert A. Cooper, Esq., Hahn Loeser & Parks LLP
Address: 2400 First Street, Ft. Myers, FL 33901
Phone: 239-337-6700
Email: racooper@hahnlaw.com

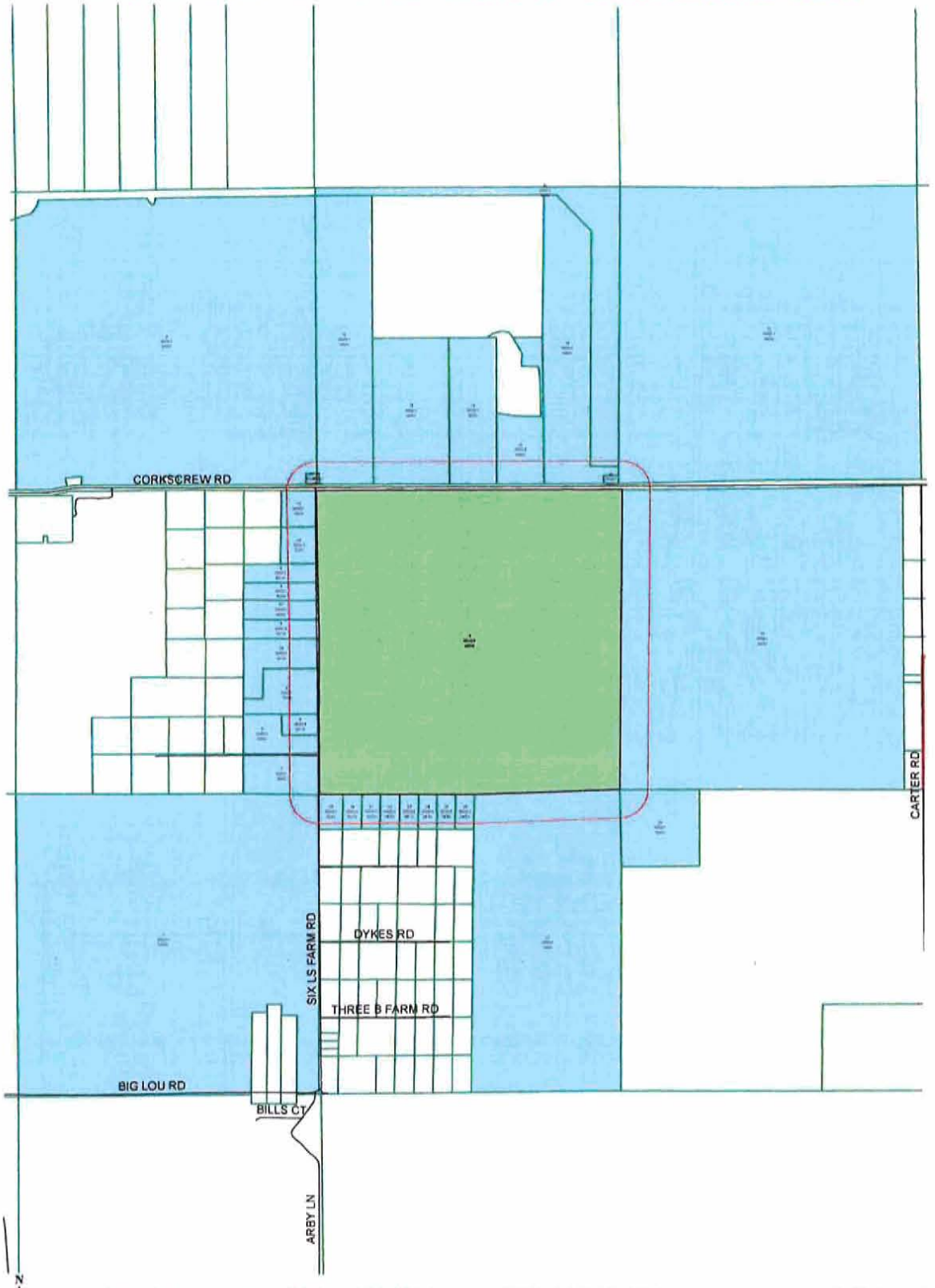
Agent: Shane Johnson, Senior Ecologist I,
Address: 13620 Metropolis Avenue, Suite 200, Fort Myers, FL 33912
Phone: 239-274-0067
Email: shanej@passarella.net

Agent: Ted B. Treesh, P.E., President, TR Transportation Consultants, Inc.
Address: 2726 Oak Ridge Court, Suite 503, Ft. Myers, FL 33901
Phone: 239-278-3090
Email: tbt@trtrans.net

VARIANCE REPORT

2/26/2016

Subject Parcels: 1 Affected Parcels: 34 Buffer Distance: 500 ft



30-46-27-00-00001.0000

2,960 0 1,480 2,960 Feet

THE INFORMATION CONTAINED IN THIS REPORT IS GOVERNED BY FLORIDA STATUTE 119.071 (GENERAL EXEMPTIONS FROM INSPECTION OR COPYING OF PUBLIC RECORDS).

Lee County Property Appraiser

Kenneth M. Wilkinson, C.F.A.

GIS Department / Map Room

Phone: (239) 533-6159 • Fax: (239) 533-6139 • eMail: MapRoom@LeePA.org

VARIANCE REPORT

Date of Report: 2/26/2016 3:14:23 PM
Buffer Distance: 500 ft
Parcels Affected: 34
Subject Parcels: 30-46-27-00-00001.0000

OWNER NAME AND ADDRESS	STRAP AND LOCATION	LEGAL DESCRIPTION	MAP INDEX
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	24-46-26-00-00001.0000 17501 CORKSCREW RD ESTERO FL 33928	ALL OF SEC 24 TWN 46 RGE 26 LESS N PT AS DESC IN INST# 2010000260251 + LESS S PT AS DESC IN INST# 2011000095941	2
SANCTA TRINITAS ACRES LLC 20500 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.0010 20500 SIX LS FARM RD ESTERO FL 33928	S 1/2 OF SE 1/4 OF NE 1/4 LESS OR 3497 PG 2798	3
SUMMERS DAVID M 20720 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.1000 20730 SIX LS FARM RD ESTERO FL 33928	NE 1/4 OF SE 1/4 LESS PARL DESC IN INST#2006-185304	4
KELLY D WAYNE + LEONA E 20750 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.2000 20750 SIX LS FARM RD ESTERO FL 33928	N 1/2 OF SE 1/4 OF SE 1/4 LESS PARL 1.201	5
KELLY D WAYNE + LEONA E 20750 SIX L FARM RD ESTERO, FL 33928	25-46-26-00-00001.2010 20740 SIX LS FARM RD ESTERO FL 33928	N 1/2 OF NE 1/4 OF SE 1/4 OF SE 1/4 OF SEC 25 DESC IN OR 1795 PG 1378	6
VIERLING ERIC F 9885 EL GRECO CIR BONITA SPRINGS, FL 34135	25-46-26-00-00001.3000 20940 SIX LS FARM RD ESTERO FL 33928	S 1/2 OF SE 1/4 OF SE 1/4 DESC IN OR 1509 PG 98	7
LEFORT RAYMOND L III + 20290 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.6000 20290 SIX LS FARM RD ESTERO FL 33928	S 1/2 OF N 1/2 OF SE 1/4 OF N E 1/4	8
STROM ERIC DAVID 20200 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.6010 20200 SIX LS FARM RD ESTERO FL 33928	N1/2 OF N1/2 OF SE1/4 OF NE1/4 AS DESC IN OR 2174 PG 0245	9
YOUNGQUIST HARVEY B JR 9099 ESTERO RIVER CIR ESTERO, FL 33928	25-46-26-00-00001.7000 17880 CORKSCREW RD ESTERO FL 33928	NE 1/4 OF NE 1/4 OF NE 1/4 OF SEC 25	10
FFD LAND CO INC PO BOX 3088 IMMOKALEE, FL 34143	36-46-26-00-00001.0000 21000-416 SIX LS FARM RD ESTERO FL 33928	ALL SEC 36LES OR3288/2420,2422,2424	11
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	19-46-27-00-00001.0000 ACCESS UNDETERMINED FORT MYERS FL	W 990 FT PF SECTION 19-46-27 LESS CORKSCREW RD R/W + LESS INST# 2010000260251 + LESS INST# 2011000095941	12
LEE COUNTY PO BOX 398 FORT MYERS, FL 33902	19-46-27-00-00001.0030 18501 CORKSCREW RD ESTERO FL 33928	TH W 1/2 OF S 1/2 OF W 3/4 LESS W 2310 FT LESS RD R/W	13
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	19-46-27-00-00001.0040 18901 CORKSCREW RD ESTERO FL 33928	PARCE LOCATED IN E 1/4 OF SEC 19 TWN 46 RGE 27 LESS INST# 2010000260251 + 2011000095941	14
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	19-46-27-00-00001.0050 ACCESS UNDETERMINED FORT MYERS FL	THE S 1/2 OF E 1320 FT OF W 2310 FT LESS RD R/W + LESS INST# 2011000095941	15
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	19-46-27-00-00001.0060 18701 CORKSCREW RD ESTERO FL 33928	THE E 1/2 OF S 1/2 OF W 3/4 LESS W 2310 FT LESS RD R/W LESS INST# 2010000260251 LESS INST# 2011000095941	16

All data is current at time of printing and subject to change without notice.
THE INFORMATION CONTAINED IN THIS REPORT IS GOVERNED BY FLORIDA STATUTE 119.071 (GENERAL EXEMPTIONS FROM INSPECTION OR COPYING OF PUBLIC RECORDS).

OWNER NAME AND ADDRESS	STRAP AND LOCATION	LEGAL DESCRIPTION	MAP INDEX
SOUTH FLA WATER MGMT DIST LAND MANAGEMENT PO BOX 24680 WEST PALM BEACH, FL 33416	20-46-27-00-00001.0000 ACCESS UNDETERMINED FORT MYERS FL	ALL OF SEC 20 TWN 46 RGE 27 LESS RD R/W	17
PAN TERRA HOLDINGS LTD 150 ALHAMBRA CIRCLE STE 925 CORAL GABLES, FL 33134	29-46-27-00-00001.0000 19500 CORKSCREW RD ESTERO FL 33928	ALL SEC 29 + LESS E 330 FT	18
ATCHISON EUGENE + 18423 FUSCHIA RD FORT MYERS, FL 33967	31-46-27-00-00001.0010 21061 SIX LS FARM RD ESTERO FL 33928	E 1/2 OF NW 1/4 OF NW 1/4 OF NW 1/4	19
WICKS JOHN A 21051 SIX LS FARM RD ESTERO, FL 33928	31-46-27-00-00001.0200 21051 SIX LS FARM RD ESTERO FL 33928	W 1/2 OF NW 1/4 OF NW 1/4 OF NW 1/4	20
WALTER GLENN J + BETCY A 21071 SIX LS FARM RD ESTERO, FL 33928	31-46-27-00-00001.0280 21071 SIX LS FARM RD ESTERO FL 33928	W 1/2 OF NE 1/4 OF NW 1/4 OF NW 1/4	21
MARKHAM CHARLES R TR 16844 FOX DEN FORT MYERS, FL 33908	31-46-27-00-00001.0400 21091 SIX LS FARM RD ESTERO FL 33928	E1/2 OF NE1/4 OF NW1/4 OF NW1/4 OF SEC 31 TWN 46 RGE 27	22
MARKHAM CHARLES R TR 16844 FOX DEN FORT MYERS, FL 33908	31-46-27-00-00001.0410 ACCESS UNDETERMINED ESTERO FL	W1/2 OF NW1/4OF NE1/4 OF NW1/4 OF SEC 31 TWN 46 RGE 27	23
SIMPSON KARL T + DEBRA K 17309 CASTILE RD FORT MYERS, FL 33967	31-46-27-00-00001.0430 ACCESS UNDETERMINED ESTERO FL	E1/2 OF NW1/4 OF NE1/4 OF NW1/4 OF SEC 31 TWN 46 RGE 27	24
SIMPSON KARL T + DEBRA K 17309 CASTILE RD FORT MYERS, FL 33967	31-46-27-00-00001.0440 ACCESS UNDETERMINED ESTERO FL	W1/2 OF NE1/4 OF NE1/4 OF NW1/4 OF SEC 31 TWN 46 RGE 27	25
SIMPSON KARL T + DEBRA K 17309 CASTILE RD FORT MYERS, FL 33967	31-46-27-00-00001.0450 ACCESS UNDETERMINED ESTERO FL	E1/2 OF NE1/4 OF NE1/4 OF NW1/4 OF SEC 31 TWN 46 RGE 27	26
PAN TERRA HOLDINGS LTD 150 ALHAMBRA CIRCLE STE 925 CORAL GABLES, FL 33134	31-46-27-00-00001.1000 ACCESS UNDETERMINED ESTERO FL	E 1/2 OF SEC 31 TWN 46 RGE 27 AS DESC IN OR 3172 PG 3074	27
MASON ROBERTA J TR + 1685 BENT TREE CIR SW FORT MYERS, FL 33907	32-46-27-00-00001.0000 ACCESS UNDETERMINED ESTERO FL	NW 1/4 OF NW 1/4 OF SEC 32	28
NEUVILLE BLAKE J + DEBORAH TR 20180 SIX LS FARM RD ESTERO, FL 33928	25-46-26-00-00001.7110 20180 SIX LS FARM RD ESTERO FL 33928	SE 1/4 OF THE NE 1/4 OF THE NE 1/4 AS DESC IN OR 2834/2877	29
COLAS ALAIN + MEGAN E 5230 HARBORAGE DR FORT MYERS, FL 33908	25-46-26-00-00001.0060 20430 SIX LS FARM RD ESTERO FL 33928	N 1/2 OF S 1/2 OF SE 1/4 OF NE 1/4 DESC OR 3497 PG 2798	30
WELLS FARGO BANK NA 1661 WORTHINGTON RD STE 100 WEST PALM BEACH, FL 33409	25-46-26-00-00001.1010 20720 SIX LS FARM RD ESTERO FL 33928	PT OF NE 1/4 OF SE 1/4 AS DESC IN INST#2006-185304	31
PLACE AT CORKSCREW LLC 4954 ROYAL GULF CIR FORT MYERS, FL 33966	19-46-27-00-00001.0070 ACCESS UNDETERMINED FORT MYERS FL 33913	PARCEL AS DESC IN INST# 2010000260251	32
LEE COUNTY PO BOX 398 FORT MYERS, FL 33902	19-46-27-00-00001.0090 ACCESS UNDETERMINED FORT MYERS FL 33913	PAR IN SW COR SECTION 19-46-27 AS DESC IN INST# 2011000095941 AS PARCELS #16 (105)	33
LEE COUNTY PO BOX 398 FORT MYERS, FL 33902	19-46-27-00-00001.0100 ACCESS UNDETERMINED FORT MYERS FL 33913	PARCE LOCATED IN SE 1/4 OF SEC 19 TWN 46 RGE 27 AS DESC PARCEL 27 (109) IN INST#2011000095941	34
LEE COUNTY PO BOX 398 FORT MYERS, FL 33902	24-46-26-00-00001.0040 17891 CORKSCREW RD FORT MYERS FL	SOUTH PART OF SEC 24 TWN 46 RGE 26 AS DESC IN INST# 2011000095941 AS PARCEL 15 (104C)	35

34 RECORDS PRINTED

All data is current at time of printing and subject to change without notice.
THE INFORMATION CONTAINED IN THIS REPORT IS GOVERNED BY FLORIDA STATUTE 119.071
(GENERAL EXEMPTIONS FROM INSPECTION OR COPYING OF PUBLIC RECORDS).

24-46-26-00-00001.0000
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

25-46-26-00-00001.0010
SANCTA TRINITAS ACRES LLC
20500 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.1000
SUMMERS DAVID M
20720 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.2000
KELLY D WAYNE + LEONA E
20750 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.2010
KELLY D WAYNE + LEONA E
20750 SIX L FARM RD
ESTERO, FL 33928

25-46-26-00-00001.3000
VIERLING ERIC F
9885 EL GRECO CIR
BONITA SPRINGS, FL 34135

25-46-26-00-00001.6000
LEFORT RAYMOND L III +
20290 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.6010
STROM ERIC DAVID
20200 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.7000
YOUNGQUIST HARVEY B JR
9099 ESTERO RIVER CIR
ESTERO, FL 33928

36-46-26-00-00001.0000
FFD LAND CO INC
PO BOX 3088
IMMOKALEE, FL 34143

19-46-27-00-00001.0000
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

19-46-27-00-00001.0030
LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

19-46-27-00-00001.0040
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

19-46-27-00-00001.0050
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

19-46-27-00-00001.0060
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

20-46-27-00-00001.0000
SOUTH FLA WATER MGMT DIST
LAND MANAGEMENT
PO BOX 24680
WEST PALM BEACH, FL 33416

29-46-27-00-00001.0000
PAN TERRA HOLDINGS LTD
150 ALHAMBRA CIRCLE STE 925
CORAL GABLES, FL 33134

31-46-27-00-00001.0010
ATCHISON EUGENE +
18423 FUSCHIA RD
FORT MYERS, FL 33967

31-46-27-00-00001.0200
WICKS JOHN A
21051 SIX LS FARM RD
ESTERO, FL 33928

31-46-27-00-00001.0280
WALTER GLENN J + BETCY A
21071 SIX LS FARM RD
ESTERO, FL 33928

All data is current at time of printing and subject to change without notice.

31-46-27-00-00001.0400
MARKHAM CHARLES R TR
16844 FOX DEN
FORT MYERS, FL 33908

31-46-27-00-00001.0410
MARKHAM CHARLES R TR
16844 FOX DEN
FORT MYERS, FL 33908

31-46-27-00-00001.0430
SIMPSON KARL T + DEBRA K
17309 CASTILE RD
FORT MYERS, FL 33967

31-46-27-00-00001.0440
SIMPSON KARL T + DEBRA K
17309 CASTILE RD
FORT MYERS, FL 33967

31-46-27-00-00001.0450
SIMPSON KARL T + DEBRA K
17309 CASTILE RD
FORT MYERS, FL 33967

31-46-27-00-00001.1000
PAN TERRA HOLDINGS LTD
150 ALHAMBRA CIRCLE STE 925
CORAL GABLES, FL 33134

32-46-27-00-00001.0000
MASON ROBERTA J TR +
1685 BENT TREE CIR SW
FORT MYERS, FL 33907

25-46-26-00-00001.7110
NEUVILLE BLAKE J + DEBORAH TR
20180 SIX LS FARM RD
ESTERO, FL 33928

25-46-26-00-00001.0060
COLAS ALAIN + MEGAN E
5230 HARBORAGE DR
FORT MYERS, FL 33908

25-46-26-00-00001.1010
WELLS FARGO BANK NA
1661 WORTHINGTON RD STE 100
WEST PALM BEACH, FL 33409

19-46-27-00-00001.0070
PLACE AT CORKSCREW LLC
4954 ROYAL GULF CIR
FORT MYERS, FL 33966

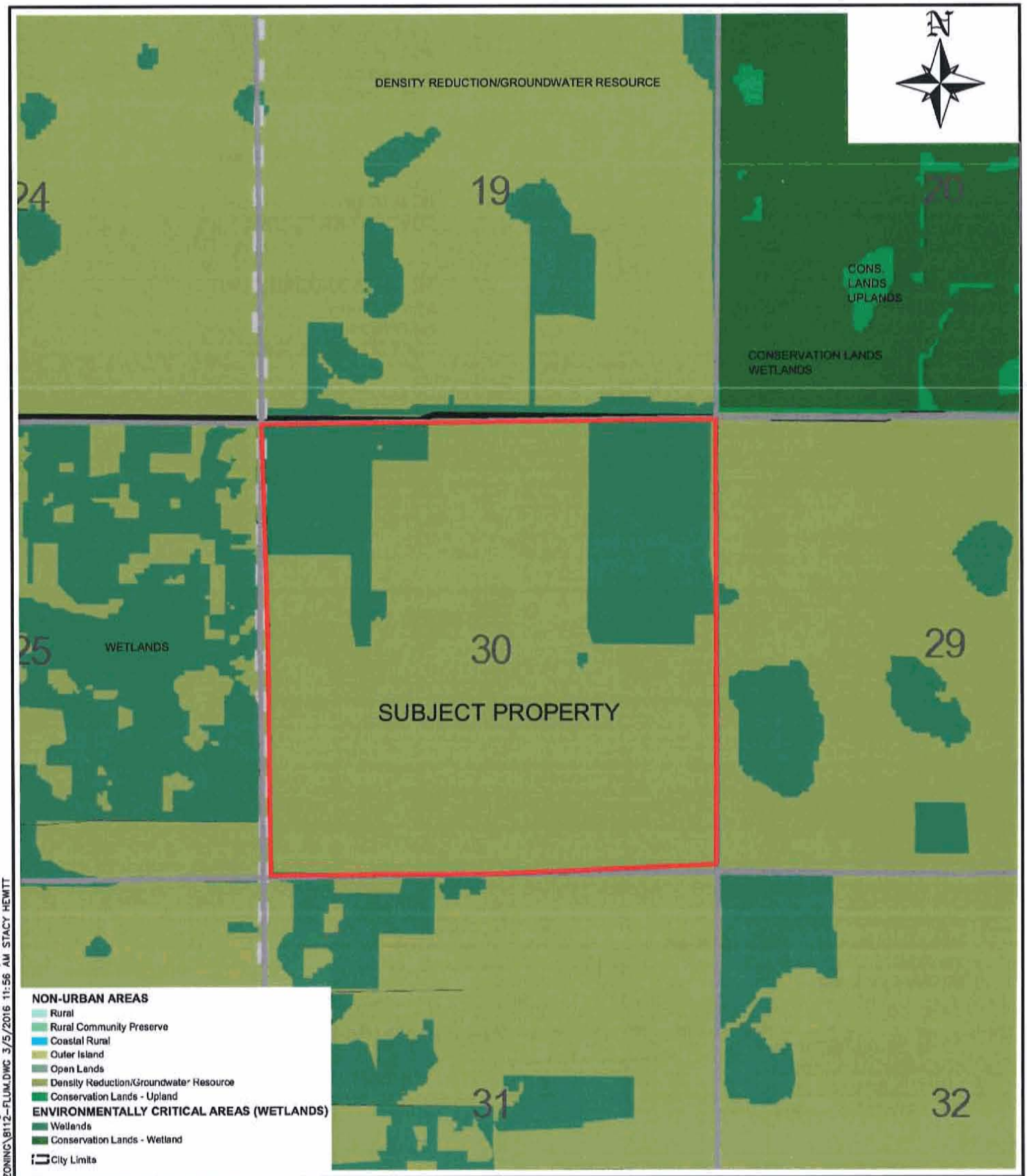
19-46-27-00-00001.0090
LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

19-46-27-00-00001.0100
LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

24-46-26-00-00001.0040
LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

34 LABELS PRINTED

All data is current at time of printing and subject to change without notice.



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 8469
SURVEY LICENSE # LB 8680
WWW.BANKSENG.COM

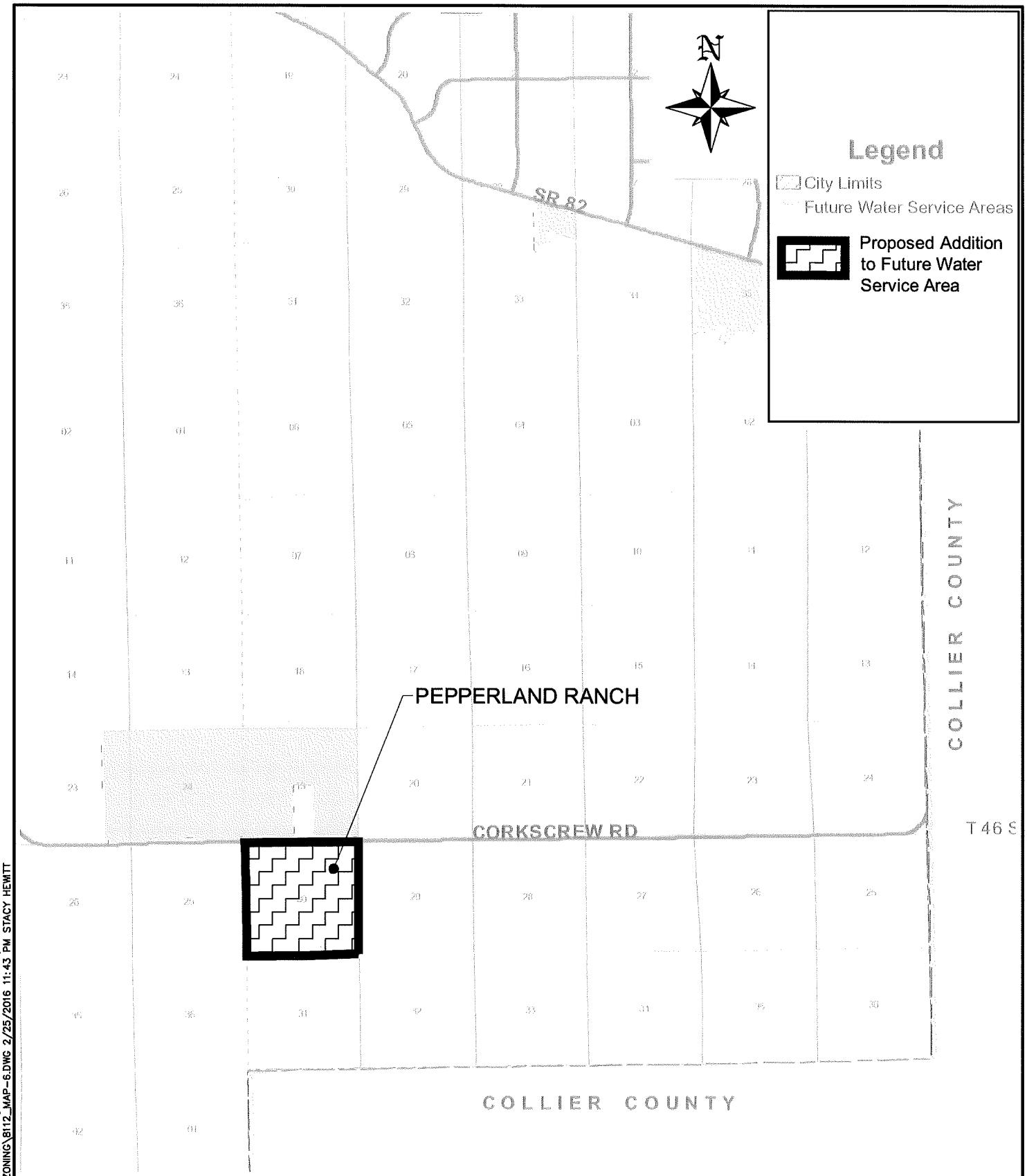
FUTURE LAND USE MAP (IV.A.2 & IV.A.3)

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
03/04/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112-FLUM.dwg, 3/5/2016 11:56:03 AM, stacy hewitt
S:\JOBS\81XX\8112\ZONING\8112-FLUM.DWG 3/5/2016 11:56 AM STACY HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

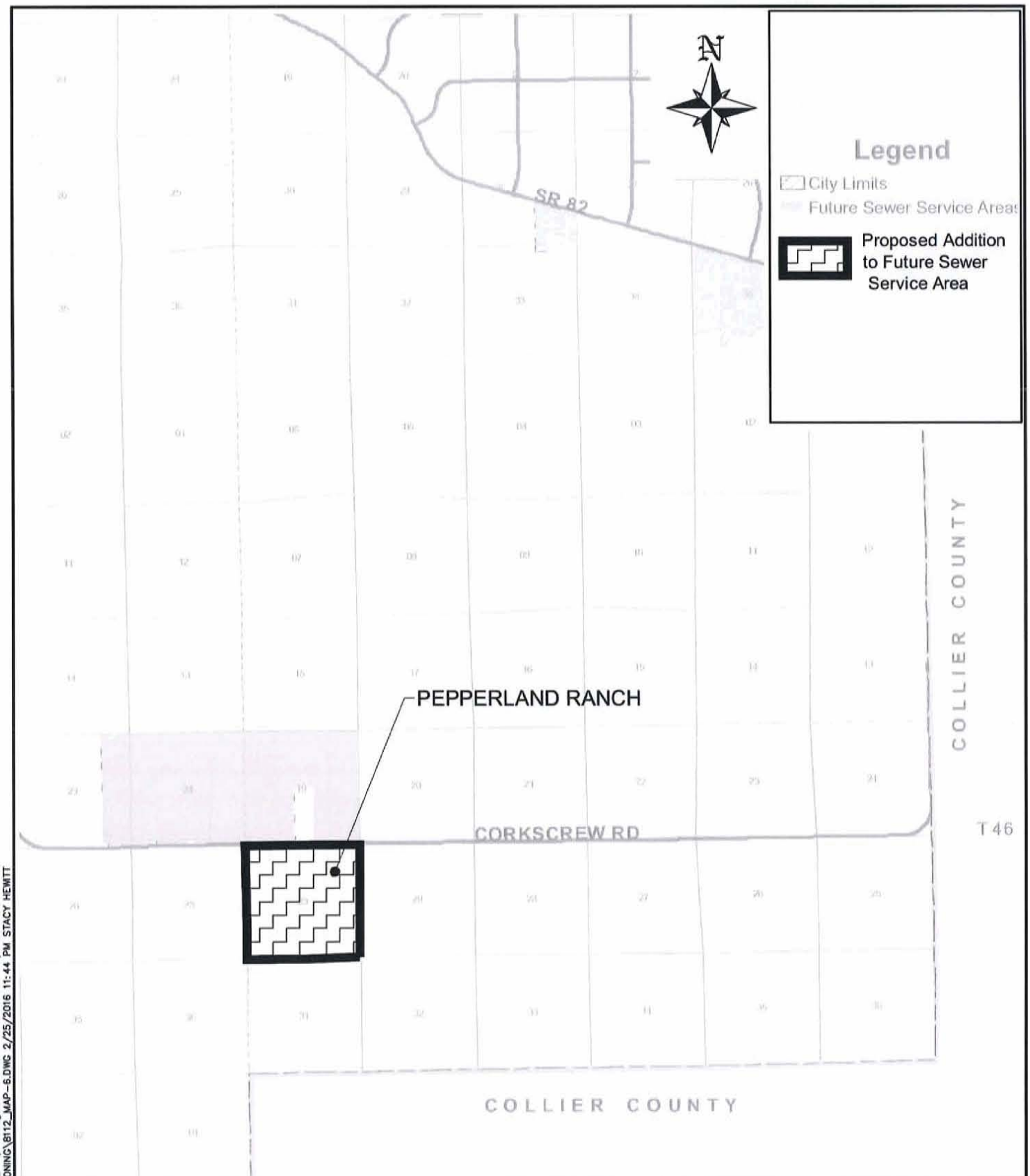
LEE PLAN MAP 6 - FUTURE WATER SERVICE AREAS

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_MAP	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112_Map-6.dwg, 2/25/2016 11:43:38 PM, Stacy Hewitt
S:\JOBS\81XX\8112\ZONING\8112_MAP-6.DWG 2/25/2016 11:43 PM STACY HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6890
WWW.BANKSENG.COM

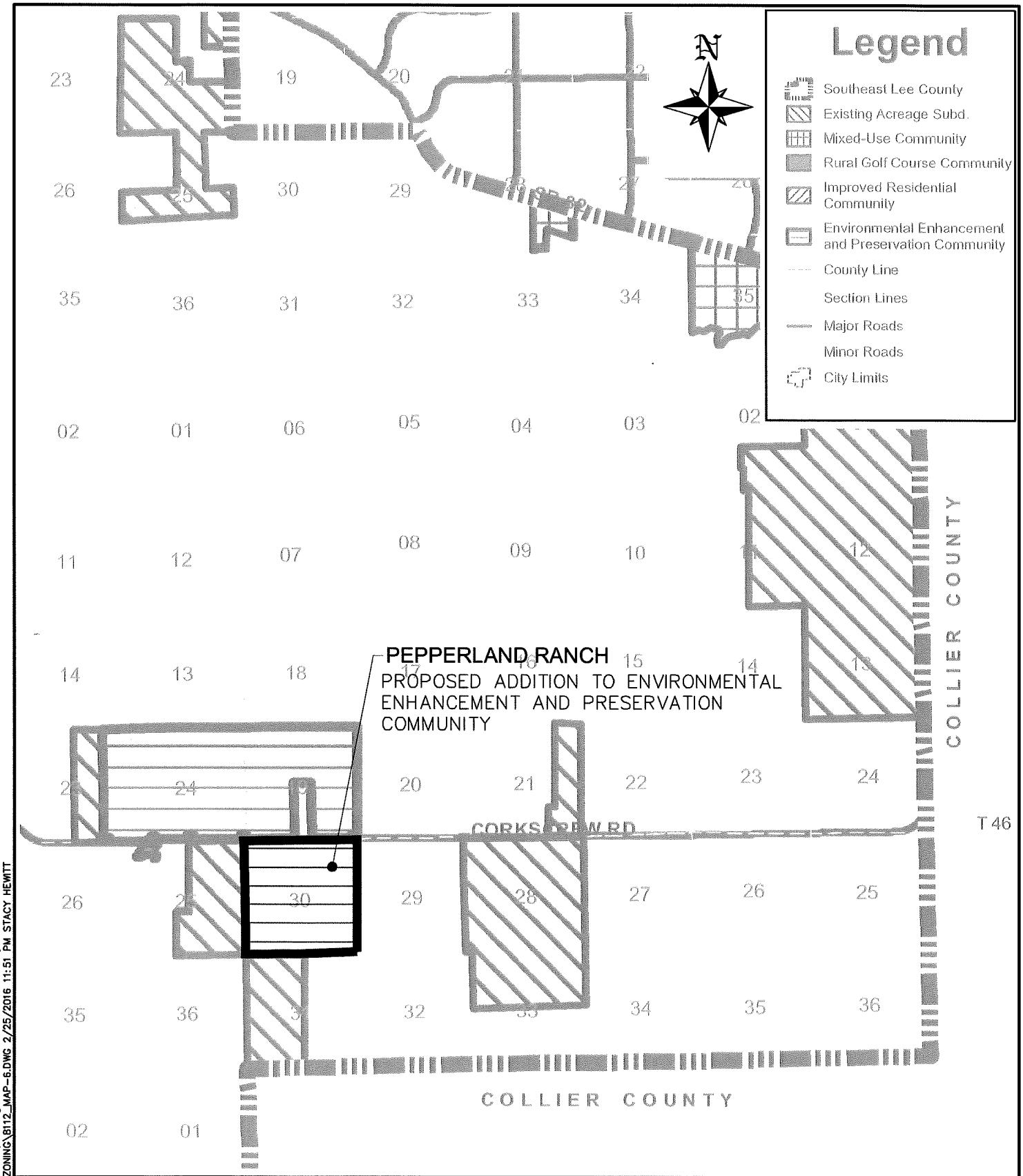
LEE PLAN MAP 7 - FUTURE SEWER SERVICE AREAS

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_MAP	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112_Map-6.dwg, 2/25/2016 11:44:36 PM, Stacy Hewitt
S:\JOBS\81XX\8112\ZONING\8112_MAP-6.DWG 2/25/2016 11:44 PM STACY HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

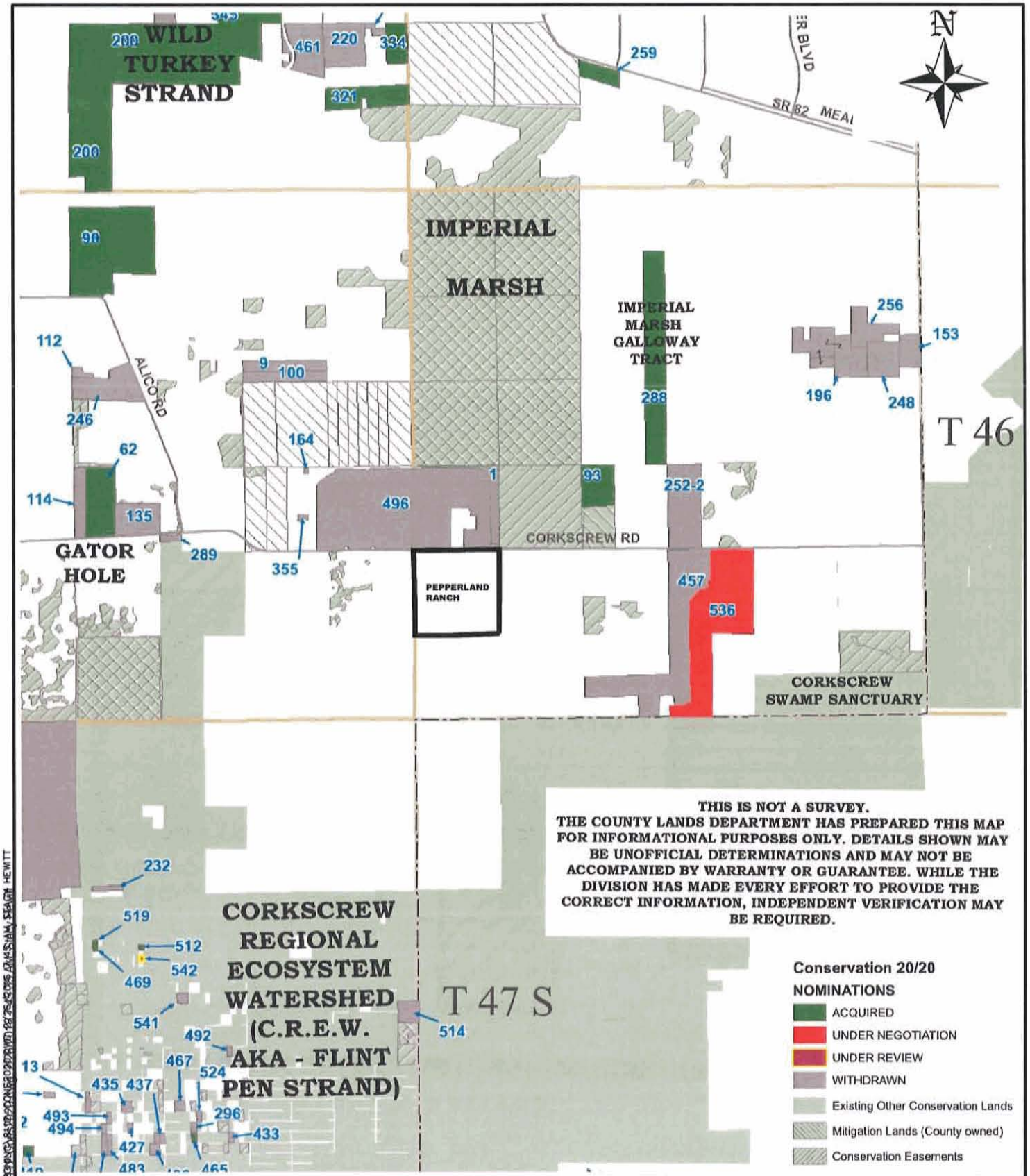
LEE PLAN MAP 17 - SOUTHEAST DR/GR RESIDENTIAL OVERLAY

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_MAP	SDJ	SDJ	SWH	N.T.S.	1

S:\JOBS\81XX\8112\ZONING\8112_map-6.dwg, 2/25/2016 11:51:49 PM, Stacy Hewitt
S:\JOBS\81XX\8112\ZONING\8112_MAP-6.DWG 2/25/2016 11:51 PM STACY HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

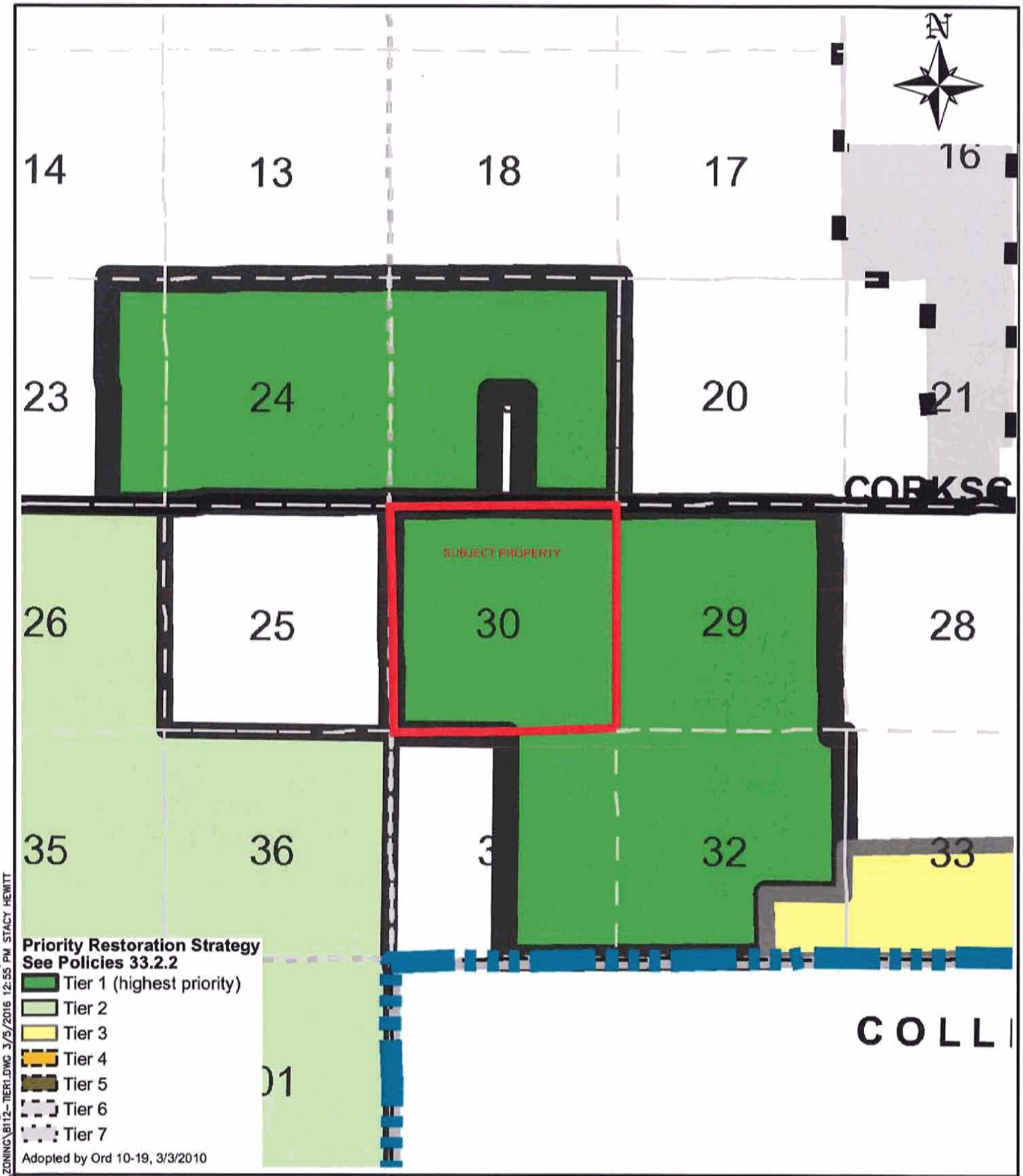
CONSERVATION 20/20 OVERLAY

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\8112\Graphics\Overlays\8112_FLUM_Overlay.dwg 02/25/2016 08:25:45 AM EST HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

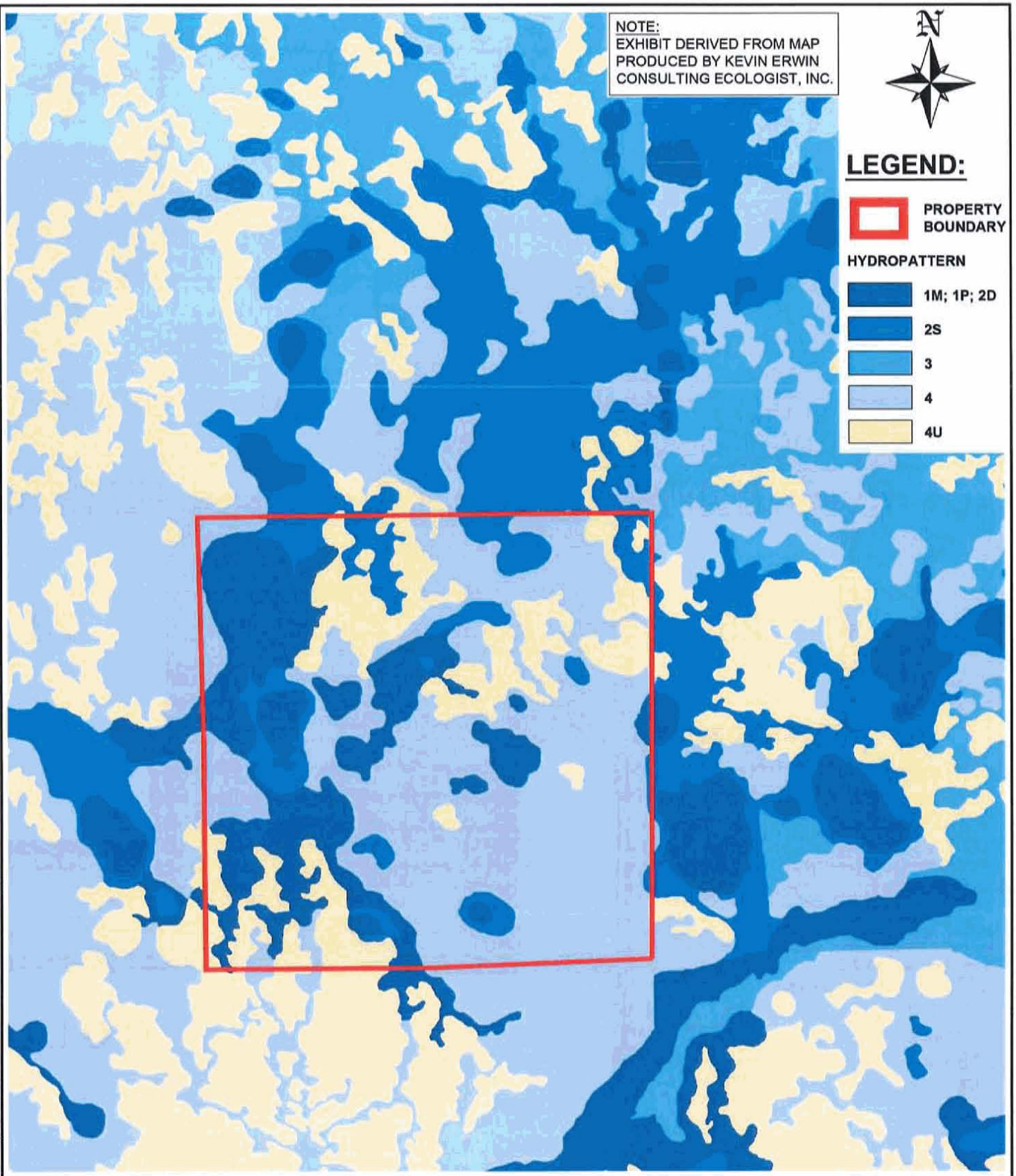
Special Treatment Areas - Lee Plan Map 1, Page 4 of 8

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
03/04/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112-Tier1.dwg, 3/3/2016 12:55:29 PM, stacy hewitt
S:\JOBS\81XX\8112\ZONING\8112-TIER1.DWG 3/5/2016 12:55 PM STACY HEWITT



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

HISTORICAL HYDROPATTERNS SURROUNDING AREA MAP

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_MAP	SDJ	SDJ	SWH	N.T.S.	1

S:\JOBS\81XX\8112\ZONING\8112-HISTORICAL HYDROPATTERN-EXHIBIT.DWG 3/8/2016 11:10 AM STEVE JOHNSON

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

The Pepperland Ranch property has been previously cleared and is currently being used for agricultural activities. In the past, the Pepperland Ranch property has been used for a variety of agricultural and farming uses such as citrus groves and row cropping. The Pepperland Ranch property is proximate to an area of mitigation/conservation lands such as the Corkscrew Regional Mitigation Bank (CRMB) located north of the property. Ongoing agricultural and farming activities are also located in close proximity to the Pepperland Ranch property as well as a private recreational facilities and residential uses. These land uses in close proximity to the property are further discussed below.

Located west of the Pepperland Ranch property on Six L's Farm Road is one of the Six L's single family residential areas. This residential area (unrecorded subdivision) contains approximately thirty (30) single family lots, on which 18 single family homes have been constructed. The balance of the remaining single family lots are vacant. This area also contains a couple of nursery operations. The majority of the residential lots are ten (10) acres in size. Further to the west of these single family homes is the Old Corkscrew Golf Course. The proposed restoration plan for the Pepperland Ranch property will preserve the forested wetland area located in the northwest corner of the property. The restoration plan will also provide a flowway on the western portion of the subject property which will provide a significant buffer to the residential uses on the west side of Six L's Farm Road.

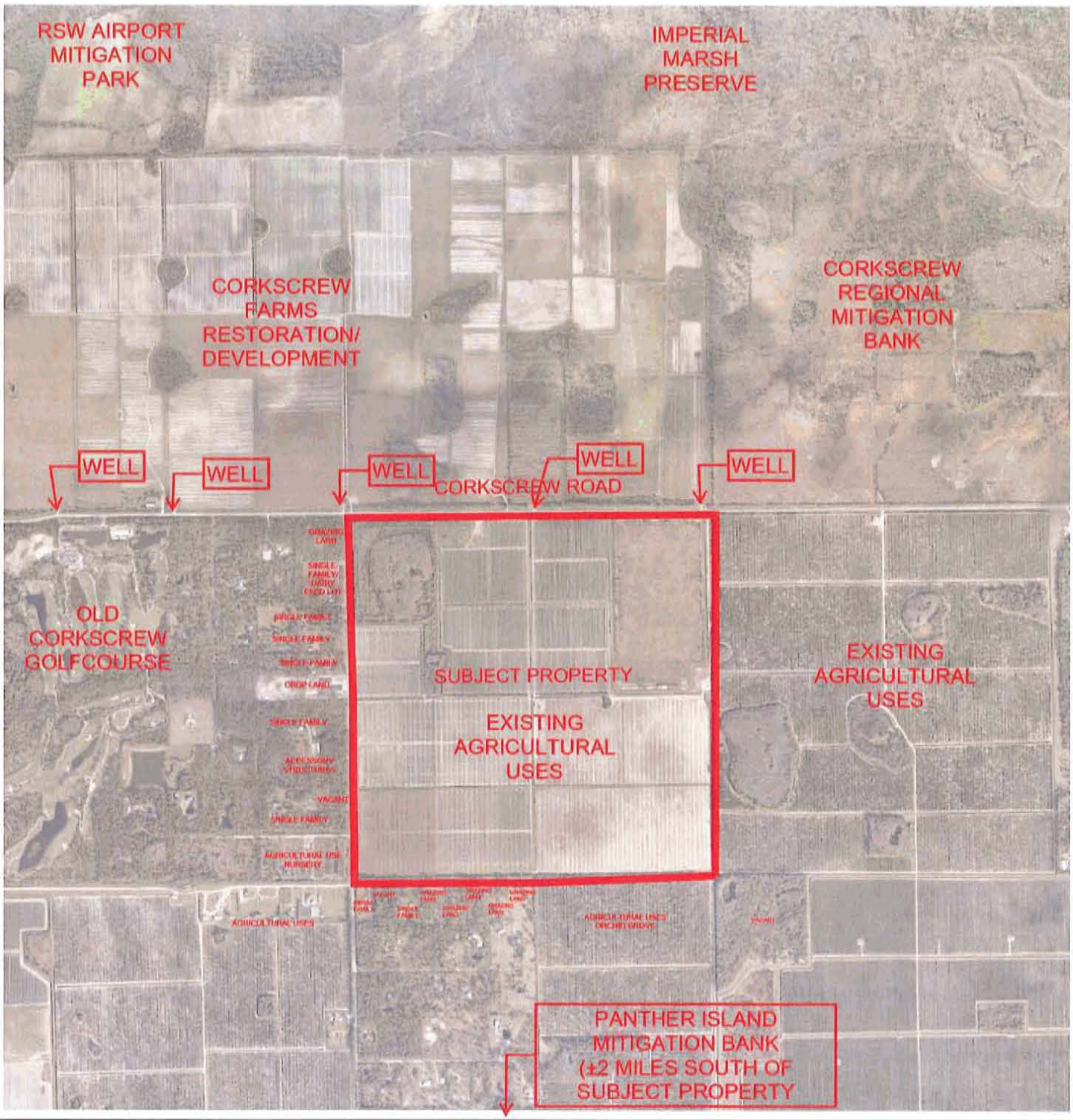
Located south of the Pepperland Ranch property off of Six L's Farm Road is another residential area. This residential area contains approximately sixty (60) single family lots, on which approximately thirty (30) single family homes have been constructed. The balance of the remaining single family lots are vacant. The majority of the single family lots are five (5) acres in size. The proposed restoration plan for the Pepperland Ranch property includes large areas of upland and flowway restoration adjacent to this large lot residential area. The Pepperland Ranch restoration area will provide a significant buffer to this residential area. Located east of the Pepperland Ranch are lands being utilized for agricultural purposes. South of this residential area is the Panther Island Mitigation Bank.

Located to the east of the Pepperland Ranch property are lands being used for agricultural purposes. North of the site is Corkscrew Road. Located along the northside of Corkscrew Road are a series of public potable wells (Lee County). Also north of Corkscrew Road is the recently approved Corkscrew Farms restoration and development project. The Corkscrew Farms project is located on a 1361 acre site and is approved for 1,325 single family dwelling units. The Corkscrew Farms project contains significant preservation and restoration areas that line up with the proposed restoration and preservation areas on the Pepperland Ranch property.

Also north of Corkscrew Road and northeast of the Pepperland Ranch property 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 is to restore historic wetland functions through hydroperiod restoration, exotic removal and controlled burns. The Pepperland Ranch restoration strategy will complement the ongoing restoration efforts on the CRMB and Imperial Marsh Preserve properties as well as the Panther Island Mitigation Park to the south of the Pepperland Ranch property. The Pepperland Ranch restoration strategy will expand the amount of contiguous restored and protected conservation land in the area.

North of the Corkscrew Farms site is the RSW Airport Mitigation Park. The RSW Airport Mitigation 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 Pepperland Ranch restoration strategy complements the ongoing restoration efforts on the RSW Airport Mitigation Park property. The strategy includes re-establishing flowways and increasing wildlife habitat in this area of the DR/GR.



S:\JOBS\81XX\8112\ZONING\8112-AERIAL.DWG 2/26/2016 3:54 PM STEVE JOHNSON

BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

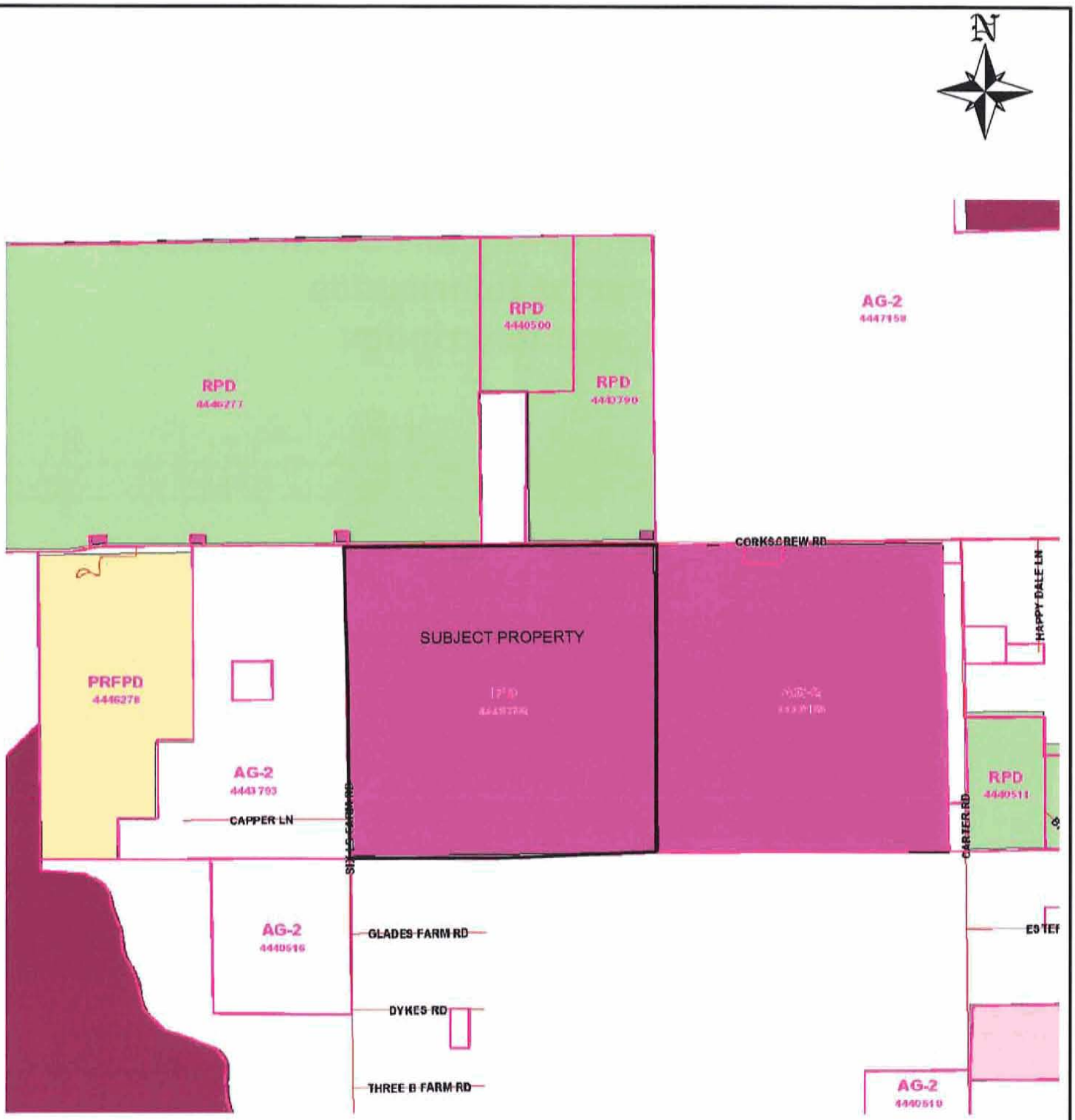
SURROUNDING LAND USES AERIAL EXHIBIT IV.A.4

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

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



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida
10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

MAP OF SURROUNDING ZONING DESIGNATIONS - EXHIBIT IV.A.5

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
3/04/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112-Zoning.dwg, 3/5/2016 1:44:17 PM, stacy hewitt
S:\JOBS\81XX\8112\ZONING\8112-ZONING.DWG 3/5/2016 1:44 PM STACY HEWITT

Pepperland Ranch
Part IV. Amendment Support Documentation
A. General Information
6. Legal Description

Pepperland Ranch
Part IV. Amendment Support Documentation
A. General Information
7. Copy of Deeds

INSTR # 2013000243597, Doc Type D, Pages 4, Recorded 10/25/2013 at 02:58 PM, Linda Doggett, Lee County Clerk of Circuit Court, Deed Doc. D $33600.00 Rec. Fee $35.50 Deputy Clerk CFELTMAN

This instrument prepared by:
Frank H. Fee, III, Esquire
Fee, DeRoss & Fee, P.L.
426 Avenue A
Fort Pierce, FL 34950

_____/

SPECIAL WARRANTY DEED

THIS INDENTURE is made this 18th day of October, 2013, between **RLF CORKSCREW HOLDINGS, LLC,** a Colorado limited liability company, whose address is 1530 16th Street, Suite 300, Denver, CO 80202 (hereinafter referred to as "Grantor") and **PEPPERLAND, LLC,** a North Carolina limited liability company, whose address is 107 Enterprise Court, Oxford, North Carolina 27565, (hereinafter referred to as "Grantee") ("Grantor" and "Grantee" to include their respective heirs, successors, executors, administrators, legal representatives and assigns where the context requires or permits).

WITNESSETH:

GRANTOR, in consideration of the sum of ONE HUNDRED ($100.00) DOLLARS and other valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and does hereby grant, bargain, sell, alien, convey and confirm unto Grantee the following described tracts or parcels of land, and including all easements and easement rights appurtenant to the same (the "Land"):

SEE THE DESCRIPTION ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE AS EXHIBIT "A"

This conveyance is made subject to the lien of general real estate taxes on the Land for the year 2013 and subsequent years, which Grantee assumes and agrees to pay, and other matters of record and apparent, including, but not limited to the following:

1. Lee County Ordinance No. 76-14 relating to garbage and solid waste collection and assessments recorded in Official Records Book 2189, Page 3281, of the Public Records of Lee County, Florida.

2. All oil, gas and mineral rights conveyed in that Oil, Gas and Mineral Deed from Barron Collier, III; Lamar Gable; Frances G. Villere; Phyllis G. Alden; Donna G. Keller; and Katherine G. Sproul, Juliet A. Sproul and Jennifer S. Sullivan, as Trustees, to Barron Collier Resources, Ltd., a Florida limited partnership, recorded in Instrument No. 2008000252521, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes.

3. All oil, gas and mineral rights reserved in deed from Consolidated Naval Stores Company to Malvin Englander, Trustee, recorded in Deed Book 262, Page 361, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes; as assigned

to Consolidated-Tomoka Land Co., a Delaware corporation in Warranty Deed recorded in Official Records Book 553, Page 114; as affected by Notice Pursuant to Section 704.05 and 712, Florida Statutes recorded in Official Records Book 1093, Page 493; Clarification of Oil, Gas and Mineral Reservations recorded June 2, 2000 in Official Records Book 3262, Page 3882; and as conveyed to Indigo Group Inc., a Florida corporation, in that Warranty Deed recorded December 8, 2004 in Official Records Book 4516, Page 2118, all recording references of the Public Records of Lee County, Florida.

4. All oil, gas and mineral rights contained in Oil, Gas and Mineral Lease from A. Donald Bass and Louise N. Bass, husband and wife, to Tribal Oil Corporation recorded in Official Records Book 1115, Page 2158, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes; as assigned to Total Leonard, Inc. in that Assignment of Oil, Gas and Mineral Leases recorded in Official Records Book 1120, Page 2038; and further assigned to GS Oil & Gas Co. in Assignment recorded in Official Records Book 1156, Page 1538, all recording references of the Public Records of Lee County, Florida.

5. Easement in favor of Lee County Electric Cooperative, Inc. recorded in Official Records Book 2167, Page 1885, of the Public Records of Lee County, Florida.

6. Covenant of Unified Control recorded July 14, 2000 in Official Records Book 3279, Page 4835, of the Public Records of Lee County, Florida.

7. All matters (including Agreement Regarding Earnout Payments and Royalty Agreement) contained in Quit Claim Deed from Schwab Materials, Inc. to RLF Corkscrew Holdings, LLC, recorded June 4, 2010 in Official Records at Instrument No. 2010000140126, Doc Type D, Pages 75 et seq., of the Public Records of Lee County, Florida.

TOGETHER WITH all minerals rights owned by Grantor, subject to the foregoing matters set forth herein.

TO HAVE AND TO HOLD the Land, with the appurtenances, estate, title and interest thereto belonging to said Grantee, its successors and assigns, forever. Grantor covenants that it is lawfully seized and possessed of said property in fee simple subject to those matters set forth herein; has a good and lawful right to convey the same, and that it is free and unencumbered subject to those matters set forth herein.

AND GRANTOR WILL WARRANT and forever defend the right and title to the Land unto Grantee against the claims of all persons whomsoever claiming by, through or under Grantor but no further or otherwise.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed in its company name, by its duly authorized officer, the day and year first above written.

RLF CORKSCREW HOLDINGS, LLC,
a Colorado limited liability company

By: RESOURCE LAND FUND IV, LLC,
a Colorado limited liability company,
its Managing Member

By: Aaron Patsch
Its: Authorized Representative

State of Colorado)
)
County of Denver)

Personally appeared before me, the undersigned authority, a Notary Public in and for said County and State, **Aaron Patsch**, with whom I am personally acquainted, or proven to me on the basis of satisfactory evidence, and who, acknowledged that he executed the foregoing instrument for the purposes therein contained, and who further acknowledged that he is the **Authorized Representative of Resource Land Fund IV, LLC, a Colorado limited liability company, the Managing Member of RLF Corkscrew Holdings, LLC, a Colorado limited liability company,** and that he executed the within and foregoing instrument as Authorized Representative, being authorized to do so.

WITNESS my hand and seal of office this 11th day of October, 2013.

SUSAN JEND
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20124071314
MY COMMISSION EXPIRES NOVEMBER 07, 2016

Susan Jend
Notary Public

My commission expires: Nov. 7, 2016

Exhibit A

All of Section 30, Township 46 South, Range 27 East, Lee County, Florida.

Less and Excepting:

A parcel or tract of land being that portion of Corkscrew Road Right-of-Way lying in Section 30, Township 46 South, Range 27 East, Lee County, Florida, being described as follows:

Commencing at the Point of Beginning at the Northwest corner of aforesaid Section 30; thence run North 89°02'00" East along the North line of said Section 30 for 2632.32 feet to the Northeast corner of the Northwest quarter (NW 1/4) of said Section 30; thence run North 89°01'54" East along said North line for 2639.17 feet to the Northeast corner of said Section 30; thence run South 00°55'27" East along the East line of said Section 30 for 50.00 feet to a point on the Southerly maintained right-of-way line of Corkscrew Road (100 feet in width); thence run South 89°32'31" West along said right-of-way line for 2639.24 feet to a point on the East line of the Northwest quarter (NW 1/4) of said Section 30; thence run South 89°23'19" West along said right-of-way line for 2632.40 feet to a point on the West line of said Section 30; thence North 00°46'40" West along said West line for 10.24 feet to the Point of Beginning.

PIN: 30-46-27-00-00001.0000



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523

ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690

WWW.BANKSENG.COM

AERIAL EXHIBIT IV.A.8

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_FLUM	SDJ	SDJ	SWH	N.T.S.	1

S:\JOBS\81XX\8112\ZONING\8112-AERIAL.DWG 2/26/2016 3:54 PM STEVE JOHNSON

Pepperland Ranch
Part IV. Amendment Support Documentation
B. Public Facilities Impacts
1. Traffic Circulation Analysis

Prepared by:
TED B. TREESH, TR TRANSPORTATION CONSULTANTS, INC.
2726 Oak Ridge Court, Suite 503
Fort Myers, Florida 33901

TR TRANSPORTATION CONSULTANTS, INC.

TRAFFIC IMPACT STATEMENT

FOR

PEPPERLAND RANCH COMPREHENSIVE PLAN AMENDMENT & REZONING

(PROJECT NO. 1511.08)

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

March 2, 2016

TRANSPORTATION CONSULTANTS, INC.

CONTENTS

I. INTRODUCTION

II. EXISTING CONDITIONS

III. PROPOSED DEVELOPMENT

IV. TRIP GENERATION

V. COMPREHENSIVE PLAN AMENDMENT ANALYSIS

VI. ZONING ANALYSIS

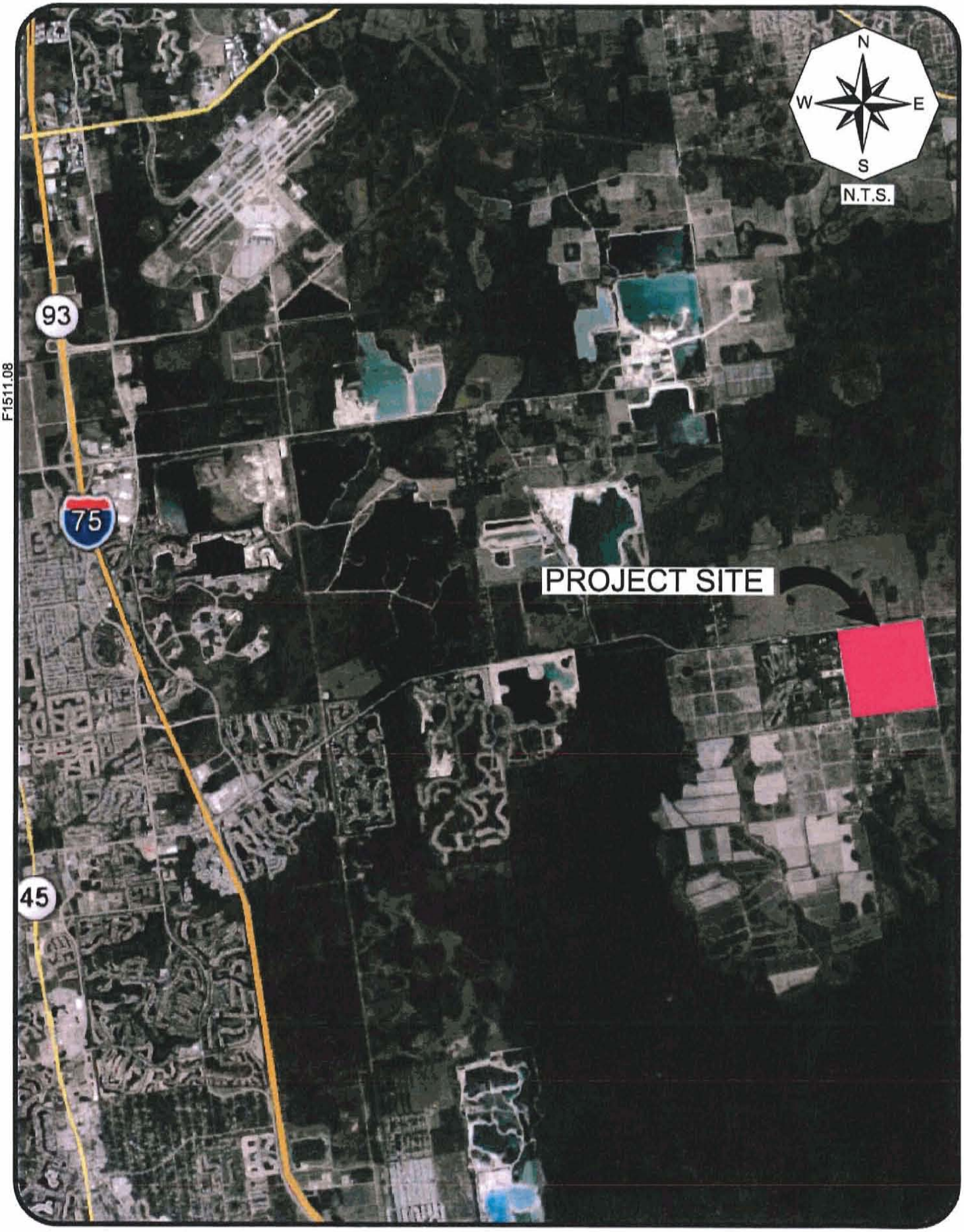
VII. CONCLUSION

I. INTRODUCTION

TR Transportation Consultants, Inc. has conducted a traffic impact statement to fulfill requirements set forth by Lee County Development Services for projects seeking an amendment to the Comprehensive Land Use Plan and re-zoning approval. The subject site is located along the south side of Corkscrew Road approximately 2.75 miles east of Alico Road in Lee County, Florida. **Figure 1** illustrates the approximate location of the subject site.

The approximately 637-acre site is currently utilized for agricultural purposes. The plan amendment will provide 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. The proposed amendment to the comprehensive land use plan would including the property in an overlay on Map 17 in the existing land use category (DRGR) consistent with Lee Plan Objective 2.4 and Lee Plan Policy 33.3.4 to permit the development of a residential project on the subject site while providing restoration to a majority of the site. The zoning request would permit the development of a maximum of 700 residential units on the subject site. Access to the site would be provided to Corkscrew Road via two access locations.

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



F1511.08

TRANSPORTATION CONSULTANTS, INC.

PROJECT LOCATION MAP
PEPPERLAND RANCH

Figure 1

II. EXISTING CONDITIONS

The subject site is currently utilized for agricultural purposes. This site is bordered on the north by the Corkscrew Road, to the west by 6L's Farm Road and to the east and south by residential and agricultural uses.

Corkscrew Road is two lane undivided east/west arterial roadway in the vicinity of the subject site. Corkscrew Road east of Alico Road has a posted speed limit of 55 mph and west of Bella Terra Boulevard has a posted speed limit of 45 mph. Corkscrew Road is under the jurisdiction of Lee County.

Alico Road is a two lane arterial roadway that extends north of Corkscrew Road then turns west and terminates at U.S. 41. North of Corkscrew Road, Alico Road has a posted speed limit of 55 mph and is also under the jurisdiction of Lee County.

III. PROPOSED DEVELOPMENT

The subject 637 acres is proposed to be developed as a residential subdivision. The subject site is currently within the DRGR Future Land Use Category based on the Future Land Use Map as adopted by Lee County. The property will remain in the DRGR land use category and will seek inclusion in an overlay on Map 17 with the Comprehensive Plan Amendment pursuant to the Lee Plan Policy 33.3.4. The subject site is also seeking a concurrent rezoning from the existing zoning designation on the property of IPD to RPD to permit the development of up to 700 residential dwelling units. Multi-family units may be permitted but for trip generation purposes, it was assumed that 100% of the units were single family detached houses as this generates the greatest trip generation of the site. **Table 1** summarizes the land uses that were utilized for the remainder of the analysis in terms of trip generation.

Table 1
Pepperland Ranch
Proposed Land Uses

Land Use	Proposed Uses
Single Family Homes (LUC 210)	700 Dwelling Units

IV. TRIP GENERATION

The trip generation for the proposed development was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation***, 9th Edition. Land Use Code 210 (Single-Family Detached Housing) was utilized for the single family units. The equations for this land use are included in the Appendix of this report for reference. **Table 2** outlines the anticipated weekday AM and PM peak hour trip generation for Pepperland Ranch as currently proposed. The daily trip generation is also indicated in the table.

Table 2
Pepperland Ranch
Trip Generation

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single Family (700 Dwelling Units)	125	375	500	381	224	605	6,292

V. COMPREHENSIVE PLAN AMENDMENT ANALYSIS

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

The proposed creation of an overlay on the subject site would permit the development of a residential community on the subject site per the requirements outlined in Policy 33.3.4

of the Lee Plan. Along with some additional units being requested through the Transfer of Density Rights (TDR), the proposed Comprehensive Plan Amendment would request a maximum of 700 residential dwelling units. The property would remain in the DRGR Land Use Category and be included in an overlay on Map 17 (Southeast DRGR Residential Overlay). **Table 3** identifies the maximum intensities that would be permitted under the existing Land Use Category and the maximum land uses that would be permitted if the overlay is adopted by the Board of County Commissioners.

Table 3
Land Uses
Pepperland Ranch

Land Use Category	Intensity
Existing Land Use Category (DRGR)	61 Residential Dwelling Units (0.10 DU/Acre)
Proposed Land Use Category (DRGR)	700 Residential Dwelling Units (1.0 DU/Acre + TDR Units)

Long Range Impacts (20-year horizon)

The Lee County Metropolitan Planning Organization's (MPO) 2040 Long Range Transportation Plan was reviewed to determine if any future roadway improvements were planned in the vicinity of the subject site. Based on the review, several roadway improvements are identified on the 2040 Financially Feasible Plan. These include the widening of Corkscrew Road to a four lane roadway between Alico Road and Ben Hill Griffin Parkway, the widening of Alico Road from Green Meadow Road to Ben Hill Griffin Parkway and the extension of Alico Road from Green Meadow Road to S.R. 82. Currently, all of these roadway capacity improvements are shown in the adopted 2040 Financially Feasible Plan that is utilized in the base 2040 travel model.

The Lee County Metropolitan Planning Organization's (MPO) long range transportation travel model was also reviewed in order to determine the impacts the amendment would have on the surrounding area. The base 2040 loaded network volumes were determined for the roadways within the study area then the peak hour trips to be generated from the

project as shown in Table 1 were added to the projected 2040 volumes. The Level of Service for those roadways were then evaluated.

The results of the analysis indicate that there will be no adverse impact on the roadways in the study area with the proposed change to the permissible uses on the subject parcel. All of the roadway segments are shown to operate at acceptable Levels of Service in 2040 both with and without the proposed land use change.

A Level of Service analysis for the 2040 Existing plus Committed (E + C) roadway network is attached to this report for reference. **Table 1A** and **Table 2A** reflect the Level of Service analysis based on the 2040 conditions. The resultant land use change will not impact the results of the Level of Service analysis as reported in the adopted 2040 travel model.

Short Range Impacts (5-year horizon)

The 2015/2016 – 2019/2020 Lee County and Florida Department of Transportation Adopted Work Programs were reviewed to determine the short term impacts the proposed land use change would have on the surrounding roadways. Based on this review there are no programmed improvements in the vicinity of the subject site.

The trip generation potential of the subject site was evaluated based on the existing roadway network in the short term Level of Service analysis. **Table 3A** and **Table 4A** attached to this report indicate the projected 5-year planning Level of Service on the area roadways based on the uses that would be permitted under the proposed change to the Comprehensive Land Use Plan. From Table 2A, all of these roadways are anticipated to operate within their recommended minimum Level of Service standards as identified in the Lee County Comprehensive Plan.

The proposed Comprehensive Plan Amendment is to create an overlay on the subject site within the DRGR future land use category to permit the development of a residential community with a density of up to 700 dwelling units. The approximately 637 acre site is

located along the south side of Corkscrew Road east of Alico Road in Lee County, Florida. Based on the analysis, no modifications are necessary to the adopted work programs of the Florida Department of Transportation or Lee County. No changes are required to the adopted 2040 Long Range Transportation plan to support the proposed Comprehensive Plan Amendment.

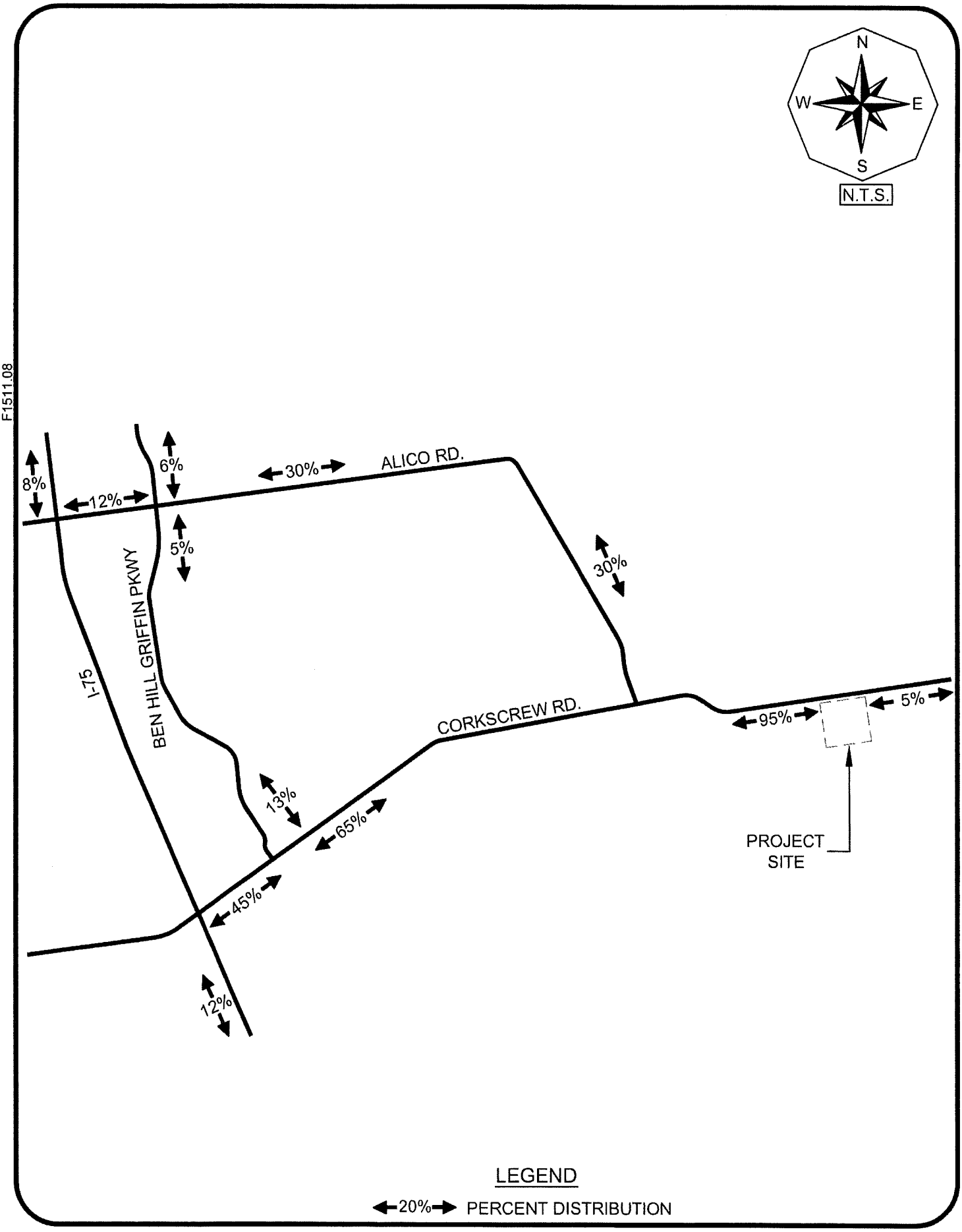
VI. ZONING ANALYSIS

An analysis was also completed to support the rezoning of the subject site from the current IPD zoning to RPD zoning. The existing zoning (Approved under Z-89-081) allows for the site to be utilized as a fill dirt mine operation. The maximum development intensity proposed is the same maximum development intensity proposed as part of the Comprehensive Plan Amendment, up to 700 residential dwelling units. There may be a mix of single family detached and multi-family units within the project, but at this time that breakdown is not known. Therefore, all 700 units were assumed to be single family dwelling units to ensure a "worst case" in terms of trip generation was computed.

The trips the proposed development is anticipated to generate, as shown in the Table 2, were assigned to the surrounding roadway network. The trips were assigned based upon the routes drivers are anticipated to utilize to approach the subject site. **Figure 2** illustrates the anticipated trip distribution. The trip distribution was formulated based on referencing recent traffic studies prepared for a residential project on the north side of Corkscrew Road.

In order to determine which roadway segments surrounding the site will be significantly impacted as outlined in the Lee County Traffic Impact Statement Guidelines, **Table 3A**, contained in the Appendix, was created. This table indicates which roadway links will experience a significant impact as a result of the added development traffic. Significant impact is defined as any roadway projected to experience greater than 10% of the Peak Hour – Peak Direction Level of Service "C" volumes.

F1511.08



TRANSPORTATION CONSULTANTS, INC.

TRIP DISTRIBUTION
PEPPERLAND RANCH

Figure 2

The Level of Service Threshold volumes for each roadway link were taken from the Lee County Generalized Level of Service Tables provided by the Lee County Department of Transportation for all roadways in the study area. Based on the information contained within Table 3A, Corkscrew Road from the site access drive to Ben Hill Griffin Parkway and Alico Road from Corkscrew Road to Ben Hill Griffin Parkway were shown to experience a significant impact due to the addition of the project traffic.

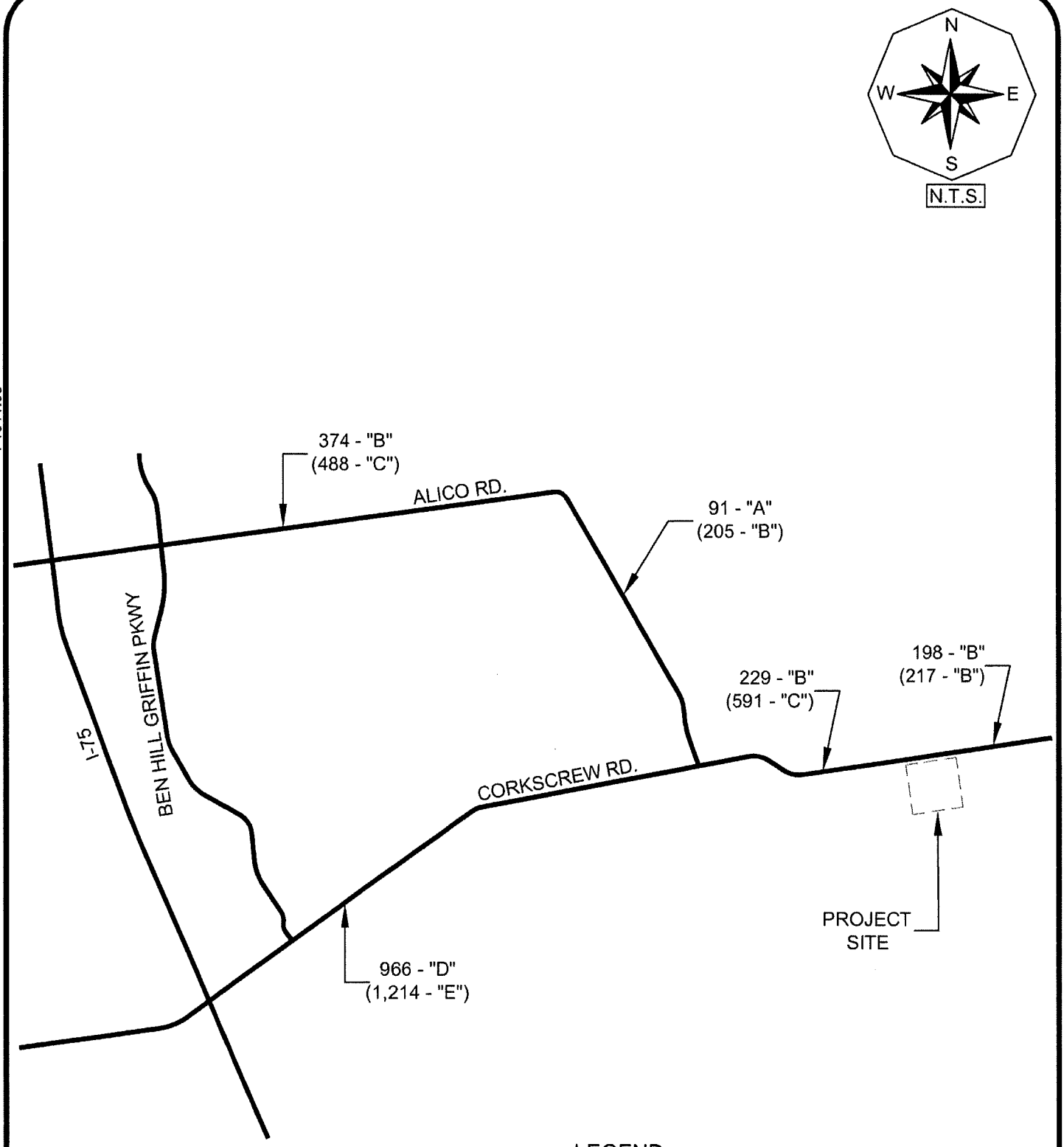
Level of Service Analysis

The future Level of Service analysis was based on a 5-year horizon, or year 2022. Based on this horizon year analysis, the surrounding roadway network was analyzed under 2022 traffic conditions. A growth rate was applied to the existing traffic conditions for all roadway links and intersections that could be significantly impacted by this development. For the roadway links, the existing and historical traffic data was obtained from the *2014 Lee County Traffic Count Report*.

Table 4A in the Appendix of the report indicates the methodology utilized to obtain the year 2014 base year traffic volumes, taken from the *2015 Lee County Concurrency Management Report*, as well as the growth rate utilized for each roadway segment.

Table 4A also indicates the methodology utilized to calculate the 2022 background traffic data for the surrounding roadway links. **Figure 3** indicates the year 2022 peak hour – peak direction traffic volumes and Level of Service for the various roadway links within the study area. Noted on Figure 3 is the peak hour – peak direction volume and Level of Service of each link should no development occur on the subject site and the peak hour – peak direction volume and Level of Service for the weekday P.M. peak hour with the development traffic added to the roadways. These figures are derived from **Table 4A** contained in the Appendix.

F1511.08



LEGEND

XXX - "C" 2022 PEAK SEASON PEAK HOUR PEAK DIRECTION BACKGROUND TRAFFIC AND LEVEL OF SERVICE DESIGNATION

(XXX -"C") 2022 PEAK SEASON PEAK HOUR PEAK DIRECTION BACKGROUND TRAFFIC PLUS PM PEAK HOUR PROJECT TRIPS AND LEVEL OF SERVICE DESIGNATION

TR TRANSPORTATION CONSULTANTS, INC.

PROJECTED 2022 LEVEL OF SERVICE ANALYSIS
PEPPERLAND RANCH

Figure 3

As can be seen from Figure 3, the roadway links analyzed as part of this report will not be adversely impacted as a result of the proposed commercial development. All roadway segments analyzed as a part of this report, once the development is completed, will maintain the minimum recommended Level of Service as contained in the Lee County Comprehensive Plan.

Turn lanes will likely be required as a result of this development based on the requirements contained within the Lee County Turn Lane Policy (AC-11-4). However, the turn lane improvements will be further defined at the Development Order stage when a more specific development scenario is determined.

VII. CONCLUSION

The proposed Pepperland Ranch project is located along the south side of Corkscrew Road approximately seven miles east of Ben Hill Griffin Parkway in Lee County, Florida. Based upon the roadway link Level of Service analysis conducted as a part of this report for both a Comprehensive Plan amendment and zoning request, the development of the subject site meets the requirements set forth by the Lee County Comprehensive Plan and Land Development Code in that there is sufficient capacity available to accommodate the new trips that will be generated by the proposed development.

The 2040 Financially Feasible Roadway network and the short term 5-year Capital Improvement Program currently in place in Lee County will not require modification in order to accommodate the Land Use Change. The rezoning analysis also indicates that there will be sufficient roadway capacity on the existing roadway network to accommodate the requested zoning change to accommodate up to 700 residential dwelling units on the 637-acre site. Therefore, no roadway capacity improvements are necessary to accommodate the proposed development.

APPENDIX

TABLES 1A & 2A

PEPPERLAND RANCH

2040 LEVEL OF SERVICE

EVALUATION

TABLE 1A
LEVEL OF SERVICE THRESHOLDS

	ROADWAY SEGMENT		2040 E + C NETWORK LANES		GENERALIZED SERVICE VOLUMES				
					LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	FROM	TO	# Lanes	Roadway Designation	VOLUME	VOLUME	VOLUME	VOLUME	VOLUME
Corkscrew Road	Pepperland Ranch	SR 82	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Alico Road	Pepperland Ranch	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Bella Terra	Alico Road	4LD	Class I - Arterial	0	260	1,840	1,960	1,960
	Ben Hill Griffin	Bella Terra	4LD	Class I - Arterial	0	260	1,840	1,960	1,960
Alico Road	Corkscrew Road	Green Meadow Rd.	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Ben Hill Griffin	Green Meadow Rd.	4LD	Class I - Arterial	260	1,840	1,960	1,960	1,960

[ ] - Denotes the LOS Standard for each roadway segment

TABLE 2A
2040 ROADWAY LINK LEVEL OF SERVICE CALCULATIONS
PEPPERLAND RANCH - 700 DWELLING UNITS

TOTAL PM PEAK HOUR PROJECT TRAFFI(605 VPH IN= 381 OUT= 224

ROADWAY	ROADWAY SEGMENT FROM	TO	2040 FSUTMS PSWDT	LCDOT PCS OR FDOT SITE #	PEAKSEASON FACTOR	AADT BACKGROUND TRAFFIC	K-100 FACTOR	100TH HIGHEST HOUR PK DIR 2-WAY VOLUME	D FACTOR	PM PK HR PEAK DIRECTION	2040 BACKGROUND PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS	PROJECT TRAFFIC DIST.	PK DIR PM PROJ TRAFFIC	2040 BACKGROUND PLUS PRO. PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS
Corkscrew Road	Pepperland Ranch	SR 82	3,060	15	1.147	2,668	0.0990	264	0.52	EAST	137	B	5%	19	156	B
	Alico Road	Pepperland Ranch	8,138	15	1.147	7,095	0.0990	702	0.52	EAST	365	B	95%	362	727	C
	Bella Terra	Alico Road	14,733	15	1.147	12,845	0.0990	1,272	0.52	EAST	661	C	65%	248	909	C
	Ben Hill Griffin	Bella Terra	28,619	15	1.147	24,951	0.0990	2,470	0.52	EAST	1284	C	65%	248	1532	C
Alico Road	Corkscrew Road	Green Meadow Rd.	8,092	53	1.203	6,727	0.0930	626	0.53	EAST	332	B	30%	114	446	C
	Ben Hill Griffin	Green Meadow Rd.	30,661	53	1.203	25,487	0.0930	2,370	0.53	EAST	1256	B	20%	76	1332	B

TABLES 3A & 4A

PEPPERLAND RANCH

2022 LEVEL OF SERVICE

EVALUATION

TABLE 3A
PEAK DIRECTION PROJECT TRAFFIC VS. 10% LOS C LINK VOLUMES
PEPPERLAND RANCH

TOTAL AM PEAK HOUR PROJECT TRAFFIC = 500 VPH IN= 125 OUT= 375

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 605 VPH IN= 381 OUT= 224

ROADWAY	SEGMENT	ROADWAY CLASS	LOS A VOLUME	LOS B VOLUME	LOS C VOLUME	LOS D VOLUME	LOS E VOLUME	PERCENT PROJECT TRAFFIC	PROJECT TRAFFIC	PROJ/ LOS C
Alico Road	N. of Corkscrew Rd.	2LN	120	420	840	1190	1640	30%	114	13.6%
	E. of Ben Hill Griffin	2LN	120	420	840	1190	1640	30%	114	13.6%
	W. of Ben Hill Grffin	6LD	0	410	2840	2940	2940	12%	46	1.6%
Corkscrew Rd	E. of Site Access.	2LN	120	420	840	1,190	1,640	5%	19	2.3%
	W. of Site Access	2LN	120	420	840	1,190	1,640	95%	362	43.1%
	W. of Alico Road	2LD	120	420	840	1,190	1,640	65%	248	29.5%
	W. of Ben Hill Griffin Pkwy	4LD	0	260	1,840	1,960	1,960	45%	171	9.3%
	W. of I-75	4LD	0	260	1,840	1,960	1,960	25%	95	5.2%
Ben Hill Griffin Pkwy	N. of Corkscrew Rd.	4LD	0	260	1,840	1,960	1,960	13%	50	2.7%
	S. of Alico Rd.	6LD	0	410	2840	2940	2940	5%	19	0.7%
	N. of Alico Rd.	4LD	0	260	1,840	1,960	1,960	6%	23	1.2%
I-75	N. of Corkscrew Rd.	6LF	0	3,360	4,580	5,500	6,080	8%	30	0.7%
	S. of Corkscrew Rd.	6LF	0	3,360	4,580	5,500	6,080	12%	46	1.0%

* Level of Service thresholds were obtained from the Lee County Generalized Level of Service Volumes on Arterials

For I-75, FDOT Q/LOS Handbook, Table 7 (Dec. 2012) service volumes were utilized

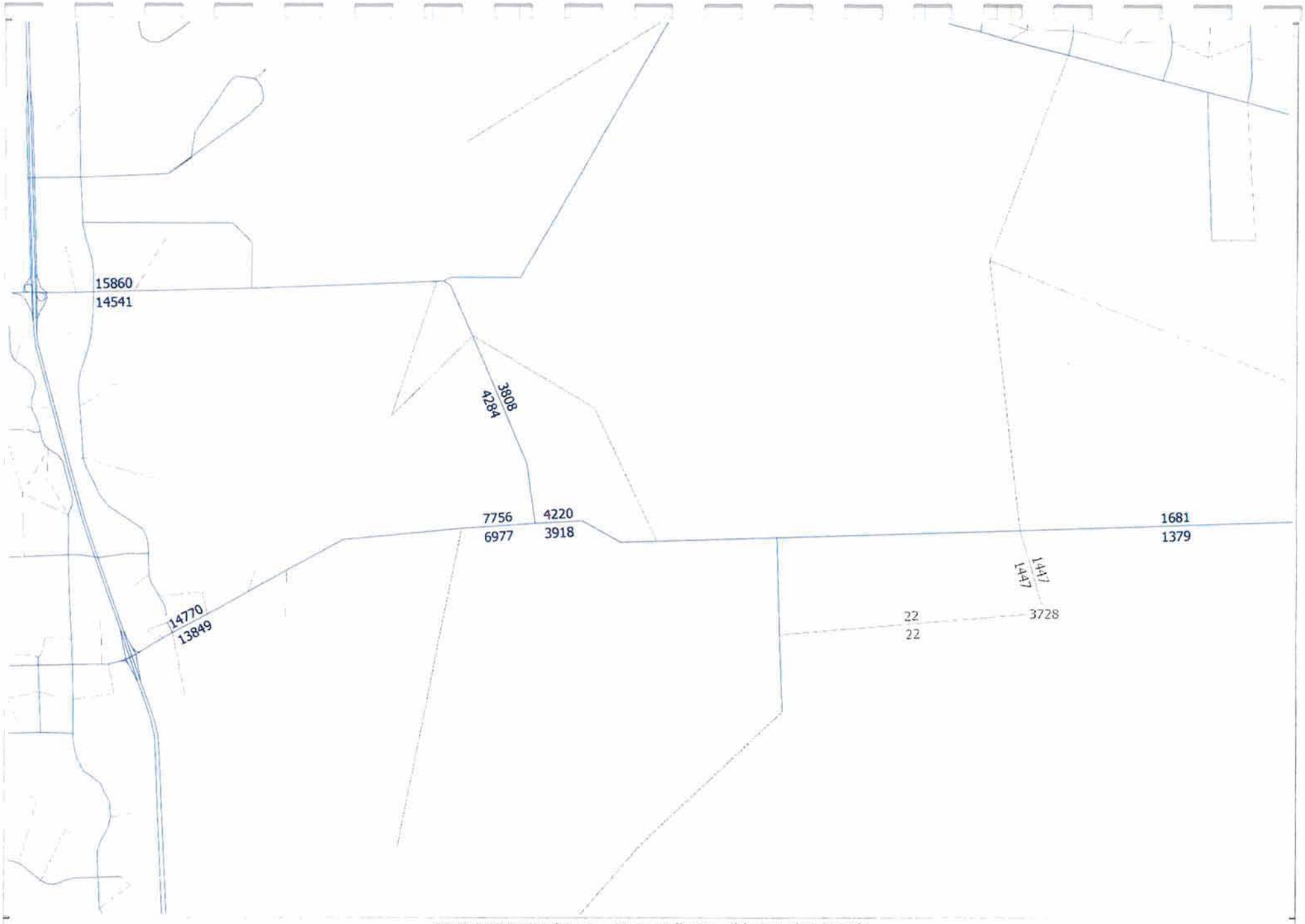
TABLE 4A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
PEPPERLAND RANCH

TOTAL PROJECT TRAFFIC AM =	500	VPH	IN =	125	OUT=	375
TOTAL PROJECT TRAFFIC PM =	605	VPH	IN=	381	OUT=	224

ROADWAY	SEGMENT	PCS#	BASE YR ADT	2014 ADT	YRS OF GROWTH	ANNUAL RATE	2014 PK HR PK SEASON PEAK DIR.[1]	2022 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2022 BCKGRND + AM PROJ VOLUME	LOS	2022 BCKGRND + PM PROJ VOLUME	LOS
Alico Road	N. of Corkscrew Rd.	53	13,100	7,500	9	1.00%	84	91	A	30%	113	114	203	B	205	B
	E. of Ben Hill Griffin Rd.	53	13,100	7,500	9	1.00%	345	374	B	30%	113	114	486	C	488	C
Corkscrew Rd	E. of Site Access.	15	3,900	3,100	9	1.00%	183	198	B	5%	19	19	217	B	217	B
	W. of Site Access	15	10,100	13,000	9	2.84%	183	229	B	95%	356	362	585	C	591	C
	W. of Alico Road	15	10,100	13,000	9	2.84%	772	966	D	65%	244	248	1,210	E	1,214	E

1 Current peak hour peak season peak direction traffic volumes for Alico Road were obtained from the 2014 Lee County Concurrency Report
Current peak hour peak season peak direction traffic volumes for Oriole Road were obtained from turning movement count factored by peak season factors

2040 E + C NETWORK VOLUMES WITHOUT PROJECT



2040 PSWDT Volumes - Financially Feasible Road Network
Pepperland Ranch

cube

(Licensed to TR Transportation Consultants, Inc.)

LEE COUNTY GENERALIZED SERVICE VOLUME TABLE

Lee County
Generalized Peak Hour Directional Service Volumes
Urbanized Areas

Sept. 2013 c:\input4

Uninterrupted Flow Highway

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	120	420	840	1,190	1,640
2	Divided	1,060	1,810	2,560	3,240	3,590
3	Divided	1,600	2,720	3,840	4,860	5,380

Arterials

Class I (40 mph or higher posted speed limit)

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	140	800	860	860
2	Divided	*	260	1,840	1,960	1,960
3	Divided	*	410	2,840	2,940	2,940
4	Divided	*	550	3,840	3,940	3,940

Class II (35 mph or slower posted speed limit)

Level of Service

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

Controlled Access Facilities

Level of Service

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

Collectors

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	310	670	740
1	Divided	*	*	330	710	780
2	Undivided	*	*	740	1,460	1,460
2	Divided	*	*	780	1,530	1,530

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

TRAFFIC DATA FROM THE 2015 LEE COUNTY CONCURRENCY REPORT

ROAD LINK VOLUMES
Peak Direction of Flow

ROADWAY LINK NAME	FROM	TO	ROAD TYPE	PERFORMANCE STANDARD		2014 100th HIGHEST HR		EST 2015 100th HIGHEST HR		FORECAST FUTURE VOL		NOTES*	LINK NO.
				LOS	CAPACITY	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME		
A & W BULB RD*	GLADIOLUS DR	McGREGOR BL	2LU	E	860	C	352	C	354	C	365		00100
ALABAMA RD	IMMOKALEE RD (SR 82)	MILWAUKEE BL	2LN	E	990	C	336	C	359	C	359		00200
ALABAMA RD	MILWAUKEE BL	HOMESTEAD RD	2LN	E	990	C	403	C	404	C	404		00300
ALEX BELL BL	IMMOKALEE RD (SR 82)	MILWAUKEE BL	2LN	E	990	C	382	C	383	C	383		00400
ALEX BELL BL	MILWAUKEE BL	JOEL BL	2LN	E	990	C	382	C	385	C	388		00500
ALICO RD	US 41	DUSTY RD	4LD	E	1,940	B	965	B	965	B	965		00590
ALICO RD	DUSTY RD	LEE RD	6LD	E	2,920	B	965	B	967	B	1,142		00600
ALICO RD*	LEE RD	THREE OAKS PKWY	6LD	E	2,920	B	1,130	B	1,155	B	1,425		00700
ALICO RD	THREE OAKS PKWY	I-75	6LD	E	2,920	B	1,995	B	2,012	B	2,193		00800
ALICO RD	I-75	BEN HILL GRIFFIN PKWY	6LD	E	2,920	B	1,503	B	1,503	B	1,503		00900
ALICO RD	BEN HILL GRIFFIN PKWY	GREEN MEADOW DR	2LN	E	1,100	C	345	C	452	D	613	4 Ln construction in FY 17/18 to Airport Haul Rd	01000
ALICO RD*	GREEN MEADOW DR	CORKSCREW RD (CR 850)	2LN	E	1,100	B	84	B	84	B	84		01050
BABCOCK RD*	US 41	ROCKEFELLER CIR	2LN	E	860	C	55	C	55	C	55		01200
BARRETT RD*	PONDELLA RD	PINE ISLAND RD	2LN	E	860	C	103	C	103	C	104		01400
BASS RD*	SUMMERLIN RD	GLADIOLUS DR	4LD	E	1,790	C	475	C	475	C	582		01500
BAYSHORE RD (SR78)	BUSINESS 41	HART RD	4LD	E	1,940	B	1,567	B	1,625	B	1,873		01600
BAYSHORE RD (SR78)	HART RD	SLATER RD	4LD	E	1,940	A	1,316	A	1,316	B	1,395		01700
BAYSHORE RD (SR78)	SLATER RD	I-75	4LD	E	1,940	A	1,125	A	1,125	A	1,249		01800
BAYSHORE RD (SR78)*	I-75	NALLE RD	2LN	E	1,100	C	495	C	496	C	522		01900
BAYSHORE RD (SR78)	NALLE RD	SR 31	2LN	E	1,100	C	451	C	451	C	451		02000
BEN HILL GRIFFIN PKWY	CORKSCREW RD	FGCU ENTRANCE	4LD	E	1,960	B	1,059	B	1,059	B	1,128		02100
BEN HILL GRIFFIN PKWY	FGCU ENTRANCE	COLLEGE CLUB DR	4LD	E	1,960	B	1,124	B	1,124	B	1,191		02200
BEN HILL GRIFFIN PKWY	COLLEGE CLUB DR	ALICO RD	6LD	E	2,960	B	1,624	B	1,645	B	1,707		02250
BEN HILL GRIFFIN PKWY	ALICO RD	TERMINAL ACCESS RD	4LD	E	1,960	B	1,529	B	1,603	B	1,785		26950
BETH STACEY BL*	23rd ST	HOMESTEAD RD	2LU	E	860	C	357	C	396	C	496		02300
BONITA BEACH RD	HICKORY BL	VANDERBILT RD	4LD	E	1,900	C	631	C	632	C	834		02400
BONITA BEACH RD	VANDERBILT RD	US 41	4LD	E	1,900	C	1,525	C	1,525	C	1,525		02500
BONITA BEACH RD*	US 41	OLD 41	4LD	E	1,820	C	1,167	C	1,167	C	1,167	6 Ln design complete	02600
BONITA BEACH RD	OLD 41	IMPERIAL ST	6LD	E	2,740	C	1,760	C	1,760	C	1,763		02700

ROADWAY LINK NAME	FROM	TO	ROAD TYPE	PERFORMANCE STANDARD		2014 100th HIGHEST HR		EST 2015 100th HIGHEST HR		FORECAST FUTURE VOL		NOTES*	LINK NO.
				LOS	CAPACITY	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME		
COLONIAL BL (SR 884)	METRO PKWY	WINKLER AVE	6LD	E	3,220	C	2,633	C	2,633	C	2,656		05900
COLONIAL BL (SR 884)	WINKLER AVE	SIX MILE CYPRESS PKWY	6LD	E	3,220	C	3,179	C	3,179	C	3,179		06000
COLONIAL BL (SR 884)	SIX MILE CYPRESS PKWY	I-75	6LD	E	3,220	F	3,531	F	3,531	F	3,531	FDOT IMR underway for interchange area	06100
COLONIAL BL	I-75	IMMOKALEE RD (SR 82)	6LD	D	3,240	B	2,127	B	2,127	B	2,127		06200
COLUMBUS BL*	SR 82	MILWAUKEE BL	2LU	E	860	C	88	C	88	C	90		06300
CONSTITUTION BL*	US 41	CONSTITUTION CIR	2LU	E	860	C	217	C	220	C	220		06400
CORBETT RD*	PINE ISLAND RD	LITTLETON RD	2LU	E	860	C	22	C	22	C	22		06500
CORKSCREW RD*	US 41	THREE OAKS PKWY	4LD	E	1,900	C	688	B	689	B	700		06600
CORKSCREW RD	THREE OAKS PKWY	I-75	4LD	E	1,900	C	1,575	C	1,601	F	2,308		06700
CORKSCREW RD	I-75	BEN HILL GRIFFIN BL	4LD	E	1,900	C	1,147	C	1,147	C	1,854		06800
CORKSCREW RD	BEN HILL GRIFFIN BL	ALICO RD	2LN	E	1,130	E	772	E	772	E	772		06900
CORKSCREW RD*	ALICO RD	COLLIER COUNTY LINE	2LN	E	1,080	B	183	B	184	D	537		07000
COUNTRY LAKES	LUCKETT RD	TICE ST	2LU	E	860	C	143	C	168	C	191		07100
CRYSTAL DR	US 41	METRO PKWY	2LU	E	860	C	476	C	476	D	631	2LD design in FY 18/19, ROW in FY 19/20	07200
CRYSTAL DR	METRO PKWY	PLANTATION RD	2LU	E	860	C	259	C	259	C	267		07300
CYPRESS LAKE DR*	McGREGOR B	SO POINTE BL	4LD	E	1,940	D	890	D	890	D	890		07400
CYPRESS LAKE DR	SOUTH POINTE BL	WINKLER RD	4LD	E	1,940	D	1,231	D	1,231	D	1,256		07500
CYPRESS LAKE DR	WINKLER RD	SUMMERLIN RD	4LD	E	1,940	D	1,535	D	1,535	D	1,538		07600
CYPRESS LAKE DR	SUMMERLIN RD	US 41	6LD	E	2,940	D	1,625	D	1,628	D	1,628		07700
DANIELS PKWY	US 41	METRO PKWY	6LD	E	2,680	D	2,248	D	2,248	D	2,343		07800
DANIELS PKWY	METRO PKWY	SIX MILE CYPRESS PKWY	6LD	E	2,680	D	2,172	D	2,172	D	2,207	Constrained v/c = 0.81	07900
DANIELS PKWY	SIX MILE CYPRESS PKWY	PALOMINO RD	6LD	E	3,000	C	2,685	C	2,692	C	2,974	Constrained v/c = 0.90	08000
DANIELS PKWY	PALOMINO RD	I-75	6LD	E	3,000	C	2,494	C	2,496	C	2,769	Constrained v/c = 0.83	08100
DANIELS PKWY	I-75	TREELINE AVE	6LD	E	3,180	A	2,506	A	2,510	A	2,527		08200
DANIELS PKWY*	TREELINE AVE	CHAMBERLIN PKWY	6LD	E	3,180	A	2,356	A	2,406	A	2,483		08300
DANIELS PKWY	CHAMBERLIN PKWY	GATEWAY BL	6LD	E	3,180	A	2,293	A	2,293	A	2,293		08400
DANIELS PKWY	GATEWAY BL	IMMOKALEE RD (SR82)	4LD	E	2,120	A	1,585	A	1,638	A	1,665		08500
DANLEY RD	US 41	METRO PKWY	2LU	E	860	C	279	C	316	C	414		08600
DAVIS RD*	McGREGOR BL	IONA RD	2LU	E	860	C	15	C	31	C	55		08700
DEL PRADO BL*	CAPE CORAL PKWY	SE 46th ST	6LD	E	2,820	C	1,304	C	1,304	C	1,304		08800
DEL PRADO BL*	SE 46th ST	CORONADO PKWY	6LD	E	2,820	C	1,392	C	1,392	C	1,392		08900
DEL PRADO BL	CORONADO PKWY	CORNWALLIS PKWY	6LD	E	2,820	D	1,843	D	1,843	D	1,843		09000
DEL PRADO BL	CORNWALLIS PKWY	VETERANS MEM PKWY	6LD	E	2,820	F	2,948	F	2,948	F	2,948		09100
DEL PRADO BL	VETERANS MEM PKWY	CORAL POINT DR	6LD	E	2,840	D	2,396	D	2,396	D	2,396		09150
DEL PRADO BL	CORAL POINT DR	HANCOCK BR PKWY	6LD	E	2,840	D	2,063	D	2,063	D	2,063		09200

TRAFFIC DATA FROM LEE COUNTY
TRAFFIC COUNT REPORT

STREET	LOCATION	Station #	Daily Traffic Volume (AADT) 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	PCS
A & W BULB RD	N OF GLADIOLUS DR	215	5700	5800	6100			6400	7700		6800		37
ALABAMA RD	N OF IMMOKALEE RD	201	5300	6300	4700	6100	5700	5700					6
ALABAMA RD	S OF HOMESTEAD RD	200	8800	9500	9900	8800	9000	9100	8800	11100	9000	9300	6
BELL BLVD	N OF IMMOKALEE RD	202	2600	3200	2800	2400	1900	1900					6
BELL BLVD	S OF LEELAND HEIGHTS BV	203	6100	8500	9100	7800	7200	7900	7900	9500	8100	8800	6
ALICO RD	E OF US 41	204		18900	21200	18100	19500	21400	21800	21700	23400	19900	10
ALICO RD	E OF LEE RD	207		22600	22900	20100	19900	22700					10
ALICO RD	W OF I - 75	10	U/C	U/C	U/C	28300	26600	26100	25800	27200	29100	38400	
ALICO RD	E OF I - 75	53	12500	11700	U/C	12300	20800	25700	26200	26000	26900	28400	
ALICO RD	E OF BEN HILL GRIFFIN PKWAY	205	13100	12600	9400	5800	3600	2600				7500	53
ALICO RD	N OF CORKSCREW RD	206	1600	2800	2400	2000	1400	1500					53
ARROYAL ST	N OF BONITA BEACH RD	496	6500	6400	5300	4700	4000						42
BABCOCK RD	E OF US 41	461		900	700	1400	1300	1200					25
BALLARD RD	W OF ORTIZ AV	504	5300	6400	4900	4100	3500	3400					20
BARRETT RD	S OF PINE ISLAND RD	509	3200	3100	3200	2600	2300						49
BASS RD	N OF SUMMERLIN RD	216	9200	5900	10900	9100	10400	10000	8200		8400		36

STREET	LOCATION	Sta-tion #	Daily Traffic Volume (AADT) 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	PCS
COLONIAL BLVD	W OF I - 75	242	65700	71500	70500	64500	61100	61600					14
COLONIAL BLVD	W OF IMMOKALEE RD	246	34900	35400	39500	31700	35300				35400	39500	22
CORBETT RD	N OF PINE ISLAND RD	508	600	900	500	600	500						49
CORKSCREW RD	E OF US 41	247	13900	17700	19200	15400	13800	13700	18600		14300		15
CORKSCREW RD	E OF VIA COCONUT POINTE	260						16900					15
CORKSCREW RD	W OF I - 75	15	29400	U/C	U/C	32700	27300	23600	27200	29500	28800	30600	
CORKSCREW RD	E OF I - 75	249	10100	13500	14900	12900	10900	10400			13000		15
CORKSCREW RD	W OF ALICO RD	248									3800		
CORKSCREW RD	E OF ALICO RD	250	3900	4600	4500	3700	2900	2900				3100	15
CORTEZ BLVD	W OF US 41	614		2400	2700	2200	1700						29
CRYSTAL DR	E OF US 41	254	13400	13500	12700	10800	9700	10100			8600	11200	9
CRYSTAL DR	E OF METRO PKWY	255	4600	5800	4900	4000	4500	5200				6100	9
COUNTRY LAKES DR	S OF TICE ST	505		3300	3900	3300	2900	3000					11
CYPRESS LAKE DR	W OF SOUTH POINTE BLVD	256	21900	22500	21600	19300	17000	19700					30
CYPRESS LAKE DR	E OF SOUTH POINTE BLVD	257	27600	26400	29100	24800	21500	25500					30
CYPRESS LAKE DR	E OF OVERLOOK DR	73									29400	24700	
CYPRESS LAKE DR	W OF SUMMERLIN RD	259	34300	34200	34600	28800	36300	30400	28700	27900	27800		30
CYPRESS LAKE DR	W OF US 41	258	43100	43600	43500	34200	34500	37100	33700	31700	34000	35900	30
DANIELS PKWY	W OF METRO PKWY	30	48300	49900	48300	41200	44100	43400	43100	40500	40100	46400	
DANIELS PKWY	W OF PLANTATION RD	263	56800	54100	52500	43300	47100	46700				48000	30

PCS 15 - Corkscrew Rd west of I-75

2014 AADT = 30,600 VPD

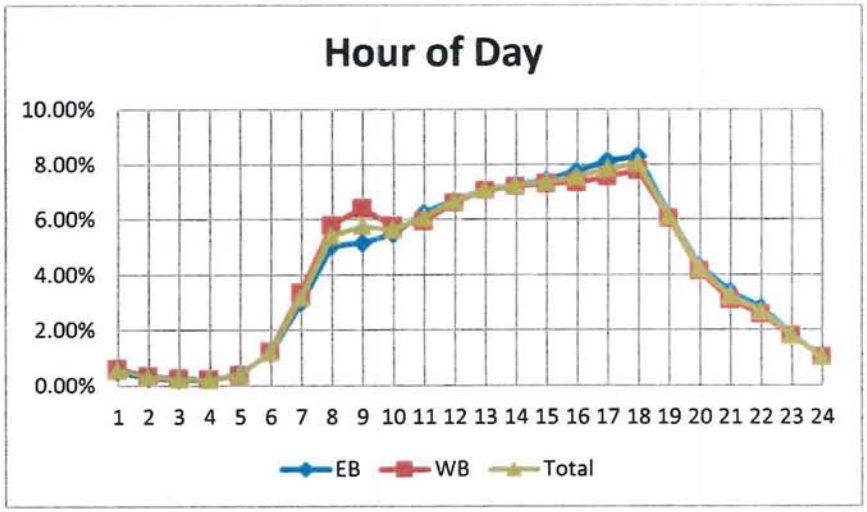
Hour	EB	WB	Total
0	0.51%	0.61%	0.56%
1	0.27%	0.35%	0.31%
2	0.21%	0.27%	0.24%
3	0.20%	0.23%	0.21%
4	0.46%	0.38%	0.42%
5	1.15%	1.23%	1.19%
6	2.99%	3.38%	3.18%
7	5.06%	5.80%	5.42%
8	5.16%	6.43%	5.79%
9	5.49%	5.78%	5.64%
10	6.25%	5.94%	6.10%
11	6.72%	6.63%	6.67%
12	7.12%	7.07%	7.09%
13	7.29%	7.22%	7.25%
14	7.44%	7.32%	7.38%
15	7.78%	7.35%	7.57%
16	8.13%	7.56%	7.85%
17	8.30%	7.80%	8.05%
18	6.17%	6.05%	6.11%
19	4.31%	4.16%	4.23%
20	3.39%	3.08%	3.24%
21	2.79%	2.57%	2.68%
22	1.83%	1.79%	1.81%
23	0.99%	1.00%	1.00%

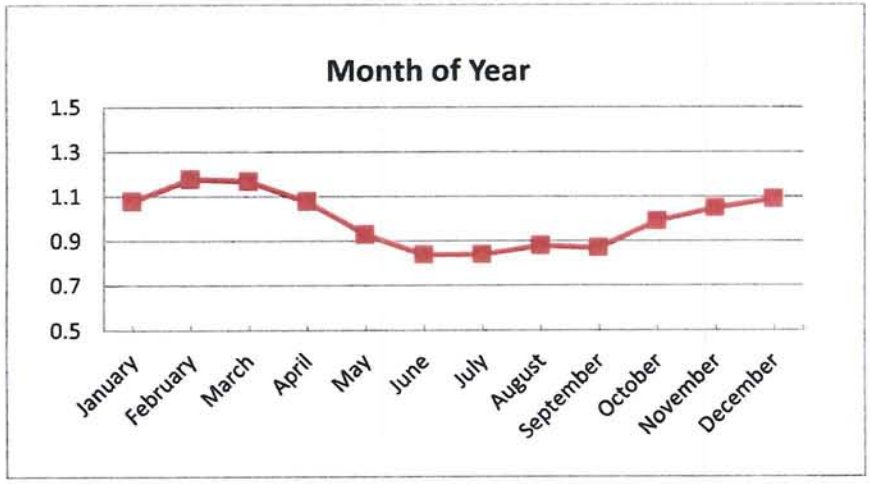
Month of Year	Fraction
January	1.08
February	1.18
March	1.17
April	1.08
May	0.93
June	0.84
July	0.84
August	0.88
September	0.87
October	0.99
November	1.05
December	1.09

Day of Week	Fraction
Sunday	0.75
Monday	1
Tuesday	1.06
Wednesday	1.06
Thursday	1.06
Friday	1.12
Saturday	0.94

Directional Factor		
AM	0.53	WB
PM	0.52	EB

Design Hour Volume		
#	Volume	Factor
5	3356	0.110
10	3287	0.107
20	3227	0.105
30	3174	0.104
50	3108	0.102
100	3029	0.099
150	2958	0.097
200	2899	0.095





PCS 53 - Alico Road West of Ben Hill Griffin Parkway

2014 AADT = 28,400 VPD

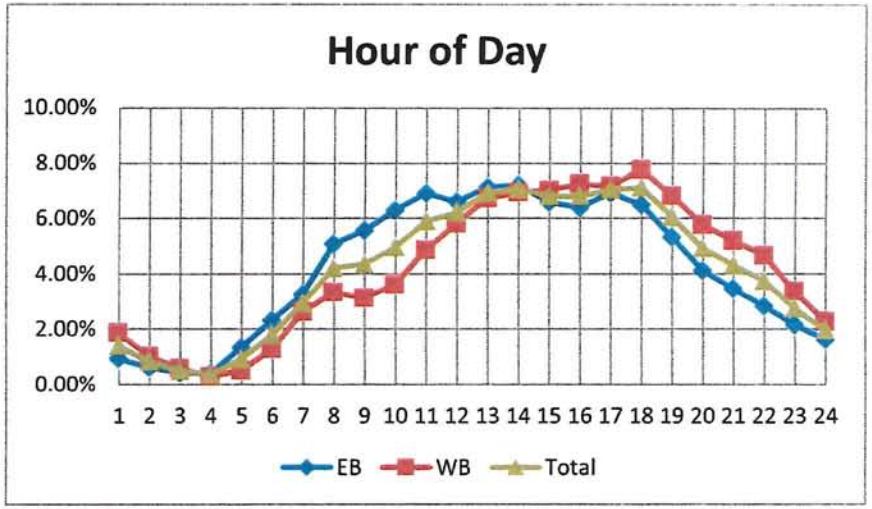
Hour	EB	WB	Total
0	0.93%	1.86%	1.39%
1	0.60%	1.02%	0.81%
2	0.41%	0.58%	0.49%
3	0.39%	0.28%	0.34%
4	1.33%	0.50%	0.92%
5	2.31%	1.28%	1.80%
6	3.26%	2.62%	2.94%
7	5.09%	3.34%	4.22%
8	5.58%	3.13%	4.37%
9	6.30%	3.62%	4.98%
10	6.93%	4.87%	5.91%
11	6.61%	5.83%	6.23%
12	7.15%	6.74%	6.95%
13	7.23%	6.96%	7.10%
14	6.59%	7.04%	6.81%
15	6.39%	7.26%	6.82%
16	6.93%	7.18%	7.05%
17	6.49%	7.79%	7.13%
18	5.33%	6.83%	6.07%
19	4.12%	5.78%	4.94%
20	3.46%	5.21%	4.32%
21	2.83%	4.67%	3.74%
22	2.14%	3.36%	2.74%
23	1.61%	2.27%	1.94%

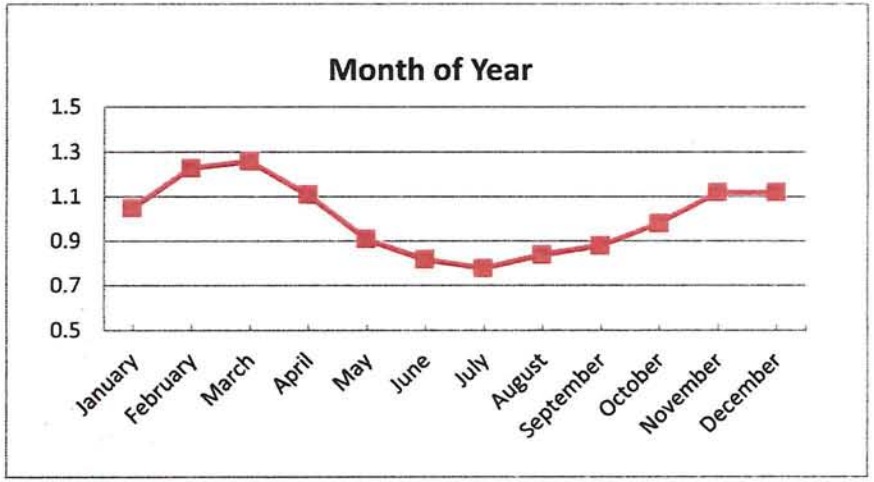
Month of Year	Fraction
January	1.05
February	1.23
March	1.26
April	1.11
May	0.91
June	0.82
July	0.78
August	0.84
September	0.88
October	0.98
November	1.12
December	1.12

Directional Factor		
AM	0.60	EB
PM	0.53	WB

Day of Week	Fraction
Sunday	0.81
Monday	1
Tuesday	1.05
Wednesday	1.04
Thursday	1.07
Friday	1.1
Saturday	0.93

Design Hour Volume		
#	Volume	Factor
5	3020	0.106
10	2906	0.102
20	2853	0.100
30	2787	0.098
50	2729	0.096
100	2651	0.093
150	2568	0.090
200	2517	0.089





TRIP GENERATION EQUATIONS

TRIP GENERATION EQUATIONS
PEPPERLAND RANCH
ITE TRIP GENERATION REPORT, 9th EDITION

Land Use	Weekday AM Peak Hour	Weekday PM Peak Hour	Daily (2-way)
Single-Family Detached Housing (LUC 210)	T = 0.70 (X) + 9.74 (25% In/75% Out)	Ln (T) = 0.90 Ln (X) + 0.51 (63% In/37% Out)	Ln (T) = 0.92 Ln (X) + 2.72
T = Number of Trips, X = Number of dwelling units			

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

This analysis utilizes the data provided in the 2015 Lee County Concurrency Report.

Sanitary Sewer

The Pepperland Ranch property is located on the south side of Corkscrew Road approximately two and one-half miles east of the intersection of Corkscrew Road and Alico Road. The plan amendment for Pepperland Ranch proposes to include the property 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 Pepperland Ranch project will 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 dwelling unit that is connected to the system. The Pepperland Ranch project proposes to connect a maximum of 700 residential dwelling units to the Lee County Utility sewer system.

According to the October, 2015 Lee County Concurrency Report, the Three Oaks Wastewater Treatment Plant had an actual average daily flow of 3,163,000 GPD in 2014, with an estimated flow of 3,200,000 GPD in 2015. 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 2016 and beyond, as projected.

Currently, the Pepperland Ranch property, which is used for agricultural and farming activities, does not generate any sanitary sewer use. It is estimated that the Pepperland Ranch project will generate 140,000 GPD. This would not cause a sanitary sewer issue because 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 Pepperland Ranch property.

Placing the Pepperland Ranch property on centralized sanitary sewer service is a benefit to the public given the location of the adjacent public wellfield. Given that the Pepperland Ranch property is not currently in the sanitary sewer service area, if single family residences were developed on the property, each unit would have to be on an individual septic system that would be subject to individual maintenance or lack of maintenance at the whim of the individual homeowner.

Potable Water

The LOS standard for Potable Water is 250 gallons (per Policy 95.1.3) per residential connection or unit. The Pepperland Ranch project 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 2014, Pinewoods had an actual average daily flow of 4,009,000 GPD. Pinewoods Water Treatment Plant has an estimated flow in 2015 of 4,100,000 and projected 2016 flow of 4,100,000. In 2014 Corkscrew had an actual average daily flow of 11,555,000 GPD. Corkscrew Water Treatment Plant has an estimated 2015 flow of 11,800,000 and projected 2016 flow of 12,000,000. It is estimated that the Pepperland Ranch project will have a potable water demand of 175,000 GPD. This would not cause a potable water issue at either facility because there is excess capacity to handle this amount of demand. Infrastructure will have to be extended to the Pepperland Ranch property.

Placing the Pepperland Ranch project 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).

Pepperland Ranch 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 2015 Concurrency Report confirms that none of the evacuation routes in the studied watersheds are anticipated to be flooded for more than 24 hours, and that new developments that receive approval from the South Florida Water Management District will be deemed concurrent with the Lee Plan's surface water management LOS:

> *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.*

The Pepperland Ranch project will receive approval from the South Florida Water Management District and, as such, will be concurrent with the surface water management Level of Service standards of the Lee Plan. Flooding conditions on the Pepperland Ranch property will be improved upon completion of a surface water management system for the property.

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 2015 Lee County Concurrency report states there are 3,149 acres of Regional Parks by Lee County. 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 2014 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 2014 and will continue to do so at least through the year 2019 as currently projected.

It is estimated that the Pepperland Ranch project can could accommodate a population of 1,449 persons (700 units X 2.07 persons per unit, a figure for the Estero Area and as discussed with Lee County Planning staff). So dividing this figure by 1,000, (the total seasonal population) results in a factor of 1.449. Multiply this factor by 6 (acres) results in a Regional Park demand of 8.694 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 Land and Water Trust lands.

Community Parks

The 2015 Concurrency Report states that there are 907 acres of existing Community Parks within unincorporated Lee County. The non-regulatory Level of Service Standard for Community Parks is currently eight-tenths (0.8) acres of developed standard Community Parks open for public use per 1,000 permanent population in the unincorporated area of each district. The non-regulatory Desired Future Level of Service is two (2) acres per 1,000 permanent population and has been in effect since September 30, 1998. In 2014, Community Park Impact Fee Districts were revised and renamed. The Pepperland Ranch property is located in the South District #53. The Community Park District inventory of three-hundred-forty-three (343) acres meets the non-regulatory Level of Service standard (132.4-acres in 2014). The non-regulatory "Desired" Level of Service was also met in 2014 (331.0-acres) but, as projected, will not be met after year 2016 even with the construction of the future planned Jerry Brooks Park Expansion.

As previously stated, the Pepperland Ranch could accommodate approximately 1,449 persons. So dividing this figure by 1,000, results in a factor of 1.449. Multiplying this factor by 2 (acres of desired community parks), results in a Community Park demand of 2.898 acres. The applicant notes that the Pepperland Ranch project is providing community park level of recreational amenities internal to the development to promote the healthy lifestyles of the development's residents and that the Community Parks Level of Service is non-regulatory. The proposed amenity parcel for the Pepperland Ranch project is in excess of 4 acres and sidewalks will be provided through out the development. The Pepperland Ranch property is also located in close proximity to the Old Corkscrew Golf course.

Public Schools

Lee County has adopted School Concurrency Service Areas (CSA), which includes three zones: East Zone, South Zone, and West Zone. The Pepperland Ranch project is located within the South Zone. The Lee County School District uses a generation rate of .295 students per each single family dwelling unit. This rate is further broken down by school type (elementary, middle school and high school), with a rate of .147 for elementary, .071

for middle school, and .077 for high school. Utilizing these rates results in a demand of 207 school aged children, 103 elementary students, 50 middle school students, and 54 high school students for the Pepperland Ranch project.

The Concurrency Report indicates that there are 1,243 available elementary seats, 673 available middle school seats and 53 available 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:

> *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. For example, the East Zone has 1,503 available elementary seats, 407 middle school seats and 947 high school seats.

Conclusions

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

Pepperland Ranch
Part IV. Amendment Support Documentation
B. Public Facilities Impacts
3. Agency Review Letters

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

March 1, 2016

Matthew A. Noble
ANoblePlan, LLC
1842 Seafan Circle
North Fort Myers, Florida 33903

Re: Pepperland LLC

Mr. Noble,

The property located at strap 30-46-27-00-00001.0000 aka Pepperland LLC is located within the established boundaries of Estero Fire Rescue. Estero Fire Rescue is capable of providing fire suppression services as well as non-transport Advanced Life Support medical services from Fire Station 44 located at 21300 Fire House Lane Estero Florida.

Please note that this fire station is over 5 miles from the subject property. An additional fire station is planned for the general of the subject property. However, the timeframe for that fire station is approximately 3-5 years away.

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

Respectfully,

Phillip Green
Division Chief of Prevention

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

John E. Manning
District One

Cecil L Pendergrass
District Two

Larry Kiker
District Three

Brian Hamman
District Four

Frank Mann
District Five

Roger Desjarlais
County Manager

Richard Wm. Wesch
County Attorney

Donna Marie Collins
Hearing Examiner

March 4, 2016

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

Re: Initial development review for Pepperland Ranch

Mr. Noble,

I am in receipt of your email dated February 26, 2016, requesting a letter to determine the adequacy of existing and proposed services for the development of Pepperland Ranch, located off Corkscrew Road. The property is referenced as STRAP 30-46-27-00-00001.0000.

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 7 miles from the proposed entrance off Corkscrew Road: 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
Interim Chief
Division of Emergency Medical Services

Mike Scott
Office of the Sheriff

State of Florida
County of Lee

February 29, 2016

Matthew Noble, AICP
1842 Seafan Circle
North Fort Myers, FL 33903

Reference to Project: Pepperland Ranch

Mr. Noble,

The proposed Comprehensive Plan Amendment for property located at STRAP 30-46-27-00-00001.0000 on Corkscrew Road would not affect the ability of the Lee County Sheriff's Office to provide core levels of service at this time. This request incorporates the Pepperland Ranch into the Environmental Enhancement and Preservation Community Overlay on Lee Plan Map 17 and permits total residential development to a projected maximum of 700 units. This request also amends the Future Land Use Map Series Maps 6 and 7 to place the 637+ acre property within the Lee County Utilities Service Areas.

Law enforcement services will be provided from our South District office in Bonita Springs, with supplemental support from City of Bonita Springs contract deputies. As this development builds out, we will factor its impact into our annual manpower review and make adjustments accordingly. At the time of application for a Development Order or building permit, we request that the applicant 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 address further correspondence to me at the address listed below. Please contact Community Relations Supervisor Beth Schell at 258-3287 with any questions regarding the CPTED study.

Respectfully,

Major Kathryn Rairden
Lee County Sheriff's Office
14750 Six Mile Cypress Parkway
Fort Myers, FL 33912

LEE COUNTY
SOUTHWEST FLORIDA
BOARD OF COUNTY COMMISSIONERS

John E. Manning
District One

Cecil L Pendergrass
District Two

Larry Kiker
District Three

Brian Hamman
District Four

Frank Mann
District Five

Roger Desjarlais
County Manager

Richard Wm. Wesch
County Attorney

Donna Marie Collins
Hearing Examiner

February 29, 2016

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

SUBJECT: Pepperland Ranch 18500 Corkscrew Road
STRAP No. 30-46-27-00-00001.0000
Letter of Availability

Dear Mr. Noble:

The Lee County Solid Waste Division is capable of providing solid waste collection service for the planned 700 residential dwelling units of the proposed Pepperland Ranch development through our franchised hauling contractors. 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.

Please review Lee County Land Development Code, Chapter 10, Section 261, with requirements for on-site space for placement and servicing of solid waste containers. Solid Waste Ordinance (11-27) defines those residential dwelling units that are eligible to receive curbside residential collection service and requirements for those as multi-family and/or commercial dwellings. It further establishes that Property Owners will be responsible for all future applicable solid waste assessments and fees.

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

Sincerely,

Brigitte Kantor

Brigitte Kantor
Manager, Public Utilities
Lee County Solid Waste Division

THE SCHOOL DISTRICT OF LEE COUNTY

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

DAWN M HUFF
LONG-RANGE PLANNER
Planning, Growth & School Capacity
Phone: 239-337-8142
FAX: 239-335-1460

STEVEN K. TEUBER
CHAIRMAN, DISTRICT 4

MARY FISCHER
VICE CHAIRMAN, DISTRICT 1

JEANNE S. DOZIER
DISTRICT 2

CATHLEEN O'DANIEL MORGAN
DISTRICT 3

PAMELA H. LARIVIERE
DISTRICT 5

GREGORY K. ADKINS, ED. D.
SUPERINTENDENT

KEITH B. MARTIN, ESQ.
BOARD ATTORNEY

March 4, 2016

Matthew Noble
A NoblePlan, LLC
1842 Seafan Cir
North Fort Myers, Florida 33903

RE: Pepperland Ranch

Dear Mr. Noble:

This letter is in response to your request for comments dated February 26, 2016 for the Pepperland Ranch in regard to educational impact. This project is located in the South Choice Zone, Sub Zone 3.

The request is for a plan amendment to accommodate 700 dwelling units. There is no clarification as to the type of unit therefore single-family will be utilized for the purpose of determining capacity. With regard to the inter-local 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 homes, the generation rate is .295 and further broken down by grade level into the following, .147 for elementary, .071 for middle and .077 for high. A total of 207 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 seats is not an issue within the Concurrency Service Area (CSA). For middle and high school, the development adds to the projected deficit for 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 call.

Sincerely,

Dawn Huff

Dawn Huff,
Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Pepperland Ranch
OWNER/AGENT	Pepperland LLC
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	On the south side of Corkscrew Rd, 7+ miles east of I-75
ACRES	630
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR)/ Wetlands (W)
CURRENT ZONING	Industrial Planned Development (IPD)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
700	0	0

	Student Generation Rates			
STUDENT GENERATION	**SF**	**MF**	**MH**	**Projected Students**
Elementary School	0.147			102.90
Middle School	0.071			49.70
High School	0.077			53.90

Source: Lee County School District, March 4, 2016 letter

CSA SCHOOL NAME 2019/20	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	10,726	1,687	103	1584	87%	
South CSA, Middle	5,621	5,803	-182	50	-232	104%	
South CSA, High	7,070	7,947	-877	54	-931	113%	

(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 Property Appraiser

Tax Year 2015

Next Parcel Number Previous Parcel Number Tax Estimator Tax Bills Print

Property Data

STRAP: 30-46-27-00-00001.0000 Folio ID: 10435901

Owner Of Record

PEPPERLAND LLC
107 ENTERPRISE CT
OXFORD NC 27565

Site Address

18500 CORKSCREW RD
ESTERO FL 33928

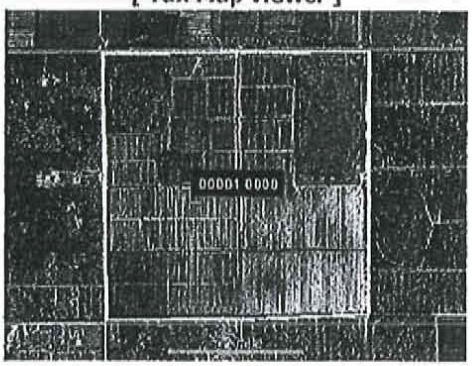
Legal Description

ALL SEC 30 TWN 46 RGE 27
DESC IN OR 1520 PG 1283

Classification / DOR Code

CROPLAND CLASS I / 51

[Tax Map Viewer]



[Pictometry Aerial Viewer]

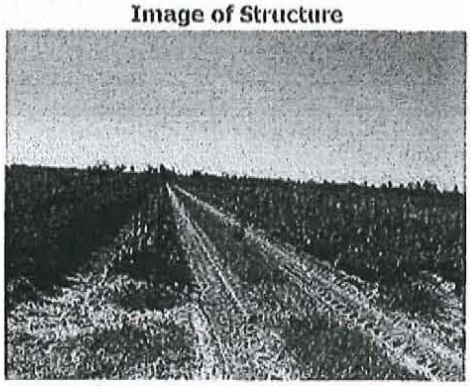
Current Working Values

Just	3,200,000	As Of	07/14/2015

Attributes

Land Units Of Measure	AC
Units	640.00
Frontage	0
Depth	0
Total Number of Buildings	0
Total Bedrooms / Bathrooms	0 / 0
Total Living Area	0
1st Year Building on Tax Roll	0
Historic District	No

Image of Structure



< Photo Date April of 2014 >

+ Exemptions

+ Values (2015 Tax Roll)

+ Taxing Authorities

+ Sales / Transactions

+ Location Information

+ Solid Waste (Garbage) Roll Data

+ Flood and Storm Information

+ Appraisal Details

PEPPERLAND RANCH
ENVIRONMENTAL ASSESSMENT

March 2016

Prepared For:

BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928
(239) 495-2435

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067

Project No. 15BCF2389

TABLE OF CONTENTS

Page

Introduction 1

Land Uses and Vegetation Associations 1

Soils 3

Jurisdictional Wetlands 3

Listed Species 3

Summary 7

References 8

LIST OF FIGURES

Page

Figure 1. Project Location Map.....2

LIST OF TABLES

Page

Table 1. SFWMD Wetland and OSW Acreages by FLUCFCS Code 3

Table 2. Listed Wildlife Species That Could Potentially Occur within Pepperland Ranch 4

Table 3. Listed Plant Species That Could Potentially Occur within Pepperland Ranch 6

Table 4. Listed Wildlife Species Observed within Pepperland Ranch 7

LIST OF EXHIBITS

		Page
Exhibit A.	Aerial with Boundary	A-1
Exhibit B.	SFWMD FLUCFCS and Wetlands Map	B-1
Exhibit C.	Aerial with SFWMD FLUCFCS and Wetlands Map	C-1
Exhibit D.	Existing Land Use and Cover Summary Table and FLUCFCS Descriptions	D-1
Exhibit E.	Soils Map	E-1
Exhibit F.	Soils Summary Table and Descriptions	F-1
Exhibit G.	Quad Sheet	G-1
Exhibit H.	Documented Occurrences of Listed Species	H-1
Exhibit I.	Aerial with FLUCFCS Map, Survey Transects, and Listed Species Locations	I-1

INTRODUCTION

An environmental assessment was conducted on Pepperland Ranch (Project) to document existing land uses and vegetative cover; document the presence of state jurisdictional wetlands; research potential utilization by wildlife and plant species listed by the Florida Fish and Wildlife Conservation Commission (FWCC), the Florida Department of Agriculture and Consumer Services (FDACS), and the U.S. Fish and Wildlife Service (USFWS) as Threatened, Endangered, or Species of Special Concern; and document listed species utilization on the Project site. The assessment included field surveys to map vegetation communities, an office review of agency records for documented occurrences of listed species on the property, and field surveys to document listed species utilization within the Project. This report summarizes the results of the environmental assessment.

The Project totals 637.50± acres and is located in Section 30, Township 46 South, Range 27 East, Lee County (Figure 1). The Project is bounded by Corkscrew Road and agricultural land to the north; Six Ls Farm Road and low-density, single-family residences to the west; low-density, single-family residences and agricultural land to the south; and agricultural land to the east (Exhibit A). Corkscrew Regional Mitigation Bank (CRMB) is adjacent to the northeast corner of the Project site.

The property currently consists of row crops, agricultural support operations, and remnant native habitats within an agricultural reservoir

LAND USES AND VEGETATION ASSOCIATIONS

The vegetation mapping for the Project was conducted by Passarella & Associates, Inc. (PAI) using January-February 2015 Lee County rectified aerials. Groundtruthing to map the vegetative communities was conducted in December 2015 utilizing the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III and IV (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote hydrological conditions and disturbance. To identify levels of exotic infestation (i.e., melaleuca (*Melaleuca quinquenervia*) and Brazilian pepper (*Schinus terebinthifolius*)), "E" codes were used. AutoCAD Map 3D 2015 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS and wetlands map (Exhibit B). An aerial photograph of the property with an overlay of the FLUCFCS and wetlands map is provided as Exhibit C.

A total of 11 vegetative associations and land uses (i.e., FLUCFCS codes) were identified on the property. Agricultural uses occupy 520.32± acres or 81.6 percent of the site. Ditches, berms, and disturbed land associated with the agricultural uses on-site occupy 69.10± acres or 10.8 percent of the site. The site contains disturbed wetland native habitats including willow, cypress, and freshwater marsh habitats. The wetland habitats on-site have been disturbed by ditching and exotic vegetation infestation. Approximately 27.67 acres of the wetlands contain high levels of exotic vegetation, primarily Brazilian pepper. A summary of the FLUCFCS codes with acreage breakdown and description of each FLUCFCS code is presented in Exhibit D. No rare or unique uplands were identified within the Project site.

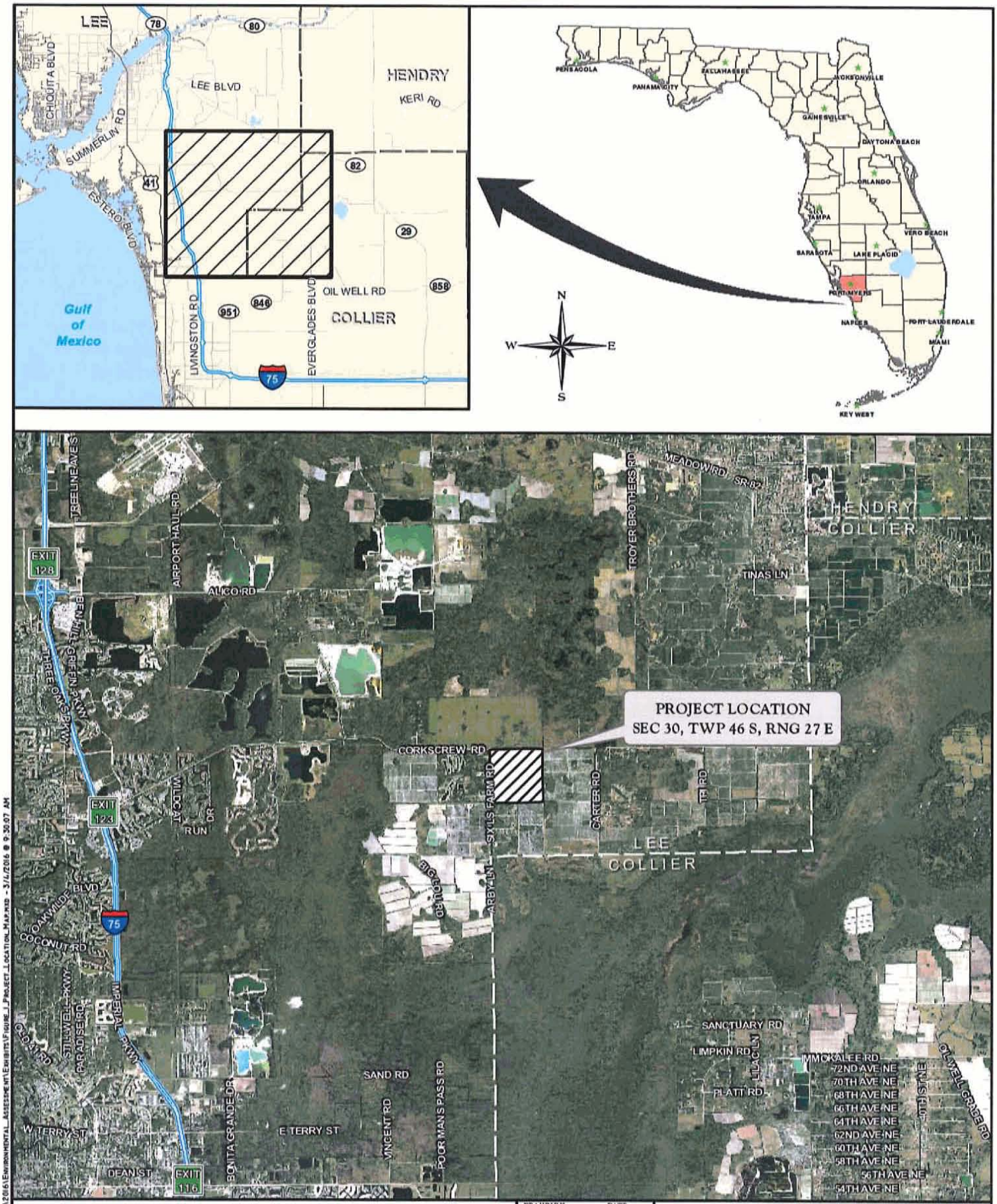


FIGURE 1. PROJECT LOCATION MAP
PEPPERLAND RANCH

DRAWN BY	DATE
W.C.	2/15/16
REVIEWED BY	DATE
S.J.	2/15/16
REVISED	DATE

PASSARELLA & ASSOCIATES, INC.
Consulting Ecologists

SOILS

The soils for the property, per the Natural Resource Conservation Service (formerly the Soil Conservation Service), are shown on Exhibit E. A brief description for each soil type per the Soil Survey of Lee County, Florida (Soil Conservation Service 1998) is presented in Exhibit F.

JURISDICTIONAL WETLANDS

The jurisdictional wetlands and "other surface waters" (OSWs) by FLUCFCS code are summarized in Table 1. SFWMD jurisdictional wetlands constitute a total of 51.31± acres or approximately 8.0 percent of the site. SFWMD OSWs constitute a total of 22.32± acres or approximately 3.5 percent of the site.

Table 1. SFWMD Wetland and OSW Acreages by FLUCFCS Code

FLUCFCS Code	Description	SFWMD Jurisdictional Wetlands and OSW (Acres)
Wetlands		
6189 E4	Willow, Disturbed (76-100% Exotics)	27.39
6219 E2	Cypress, Disturbed (25-49% Exotics)	19.97
6219 E4	Cypress, Disturbed (76-100% Exotics)	0.28
6419 E1	Freshwater Marsh, Disturbed (0-24% Exotics)	0.44
7401	Disturbed Land, Hydric	3.23
Sub-Total		**51.31**
OSWs		
514	Ditch	22.32
Sub-Total		**22.32**
Total		**73.63**

The prominent wetland feature consists of an area that contains a mix of willow, cypress, and freshwater marsh habitats. This wetland feature is part of an agricultural reservoir located in the northwest corner of the Project site. There are two other smaller wetlands on-site, one located within the agricultural area near the center of the Project site and one located near the northeast corner of the larger wetland feature. A U.S. Geological Survey Quadrangle Map is provided as Exhibit G. This map shows the location of some of the wetland systems within the Project.

LISTED SPECIES

Listed wildlife species as listed by the FWCC and the USFWS (FWCC 2016) that have the potential to occur on the Project site are listed in Table 2. Listed plant species as listed by the FDACS and the USFWS (FDACS Chapter 5B-40) that have the potential to occur on the Project site are listed in Table 3. Information used in assessing the potential occurrence of these species

included the Lee County Land Development Code, Field Guide to the Rare Plants of Florida (Chafin 2000), Atlas of Florida Vascular Plants (Wunderlin 2004), and professional experience and knowledge of the geographic region. In addition, FWCC and USFWS records for documented listed species were reviewed for listed species records on or adjacent to the property (Exhibit H).

Table 2. Listed Wildlife Species That Could Potentially Occur within Pepperland Ranch

Common Name	Scientific Name	Designated Status		Potential Habitats (FLUCFCS Code)
		FWCC	USFWS	
Amphibians and Reptiles				
American Alligator	*Alligator mississippiensis*	FT(S/A)	FT(S/A)	514, 6189, 6219, 6419
Eastern Indigo Snake	*Drymarchon corais couperi*	FT	FT	740, 747
Gopher Frog	*Rana capito*	SSC	-	6219
Gopher Tortoise	*Gopherus polyphemus*	ST	*	740, 747
Birds				
Crested caracara	*Caracara cheriway*	FT	FT	214, 261
Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	FE	FE	514, 6419
Florida Sandhill Crane	*Grus canadensis pratensis*	ST	-	6419, 7401
Limpkin	*Aramus guarauna*	SSC	-	514, 6189, 6219, 6419
Little Blue Heron	*Egretta caerulea*	SSC	-	
Snowy Egret	*Egretta thula*	SSC	-	
Tri-Colored Heron	*Egretta tricolor*	SSC	-	
White Ibis	*Eudocimus albus*	SSC	-	
Wood Stork	*Mycteria americana*	FT	FT	
Mammals				
Big Cypress Fox Squirrel	*Sciurus niger avicennia*	ST	-	6219
Everglades Mink	*Neovison vison evergladensis*	ST	-	514, 6219, 6419
Florida Black Bear	*Ursus americanus floridanus*	**	-	6219
Florida Panther	*Puma concolor coryi*	FE	FE	6219

FWCC – Florida Fish and Wildlife Conservation Commission
USFWS – U.S. Fish and Wildlife Service
FE – Federally Endangered
FT – Federally Threatened
FT(S/A) – Federally Threatened due to similarity of appearance
SSC – Species of Special Concern
ST – State Threatened
*The gopher tortoise is currently listed as a candidate species by the USFWS.
**No longer listed by the FWCC; however, certain protection measures still apply.

American Alligator (*Alligator mississippiensis*)
The American alligator could potentially occur within the open water habitats and native forested and herbaceous wetlands within the site.

Eastern Indigo Snake (*Drymarchon corais couperi*)
The Eastern indigo snake could potentially occur within disturbed upland habitats on the Project site. The Eastern indigo snake is typically found in association with populations of gopher tortoise (*Gopherus polyphemus*).

Gopher Frog (*Rana areolata*)
The gopher frog is typically found in association with populations of gopher tortoise. Preferred breeding habitat includes seasonally flooded, grassy ponds and cypress ponds that lack fish populations (Moler 1992).

Gopher Tortoise (*Gopherus polyphemus*)
Potential habitat for gopher tortoises on the Project site includes disturbed lands and berms.

Crested Caracara (*Caracara cheriway*)
Potential foraging habitat for the crested caracara includes row crops and fallow cropland on the Project site.

Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)
Potential foraging habitat for the Everglade snail kite includes ditches and freshwater marshes on the Project site.

Florida Sandhill Crane (*Grus canadensis pratensis*)
Potential foraging habitat for the Florida sandhill crane may exist within the Project's freshwater marshes and hydric disturbed lands. Preferred sandhill crane habitat includes prairies and shallow marshes dominated by pickerelweed (*Pontedaria cordata*) and maidencane (*Panicum hemitomon*).

Limpkin (*Aramus guarauna*), Little Blue Heron (*Egretta caerulea*), Snowy Egret (*Egretta thula*), Tri-Colored Heron (*Egretta tricolor*), and White Ibis (*Eudocimus albus*)
Potential habitat for the limpkin on the Project site includes the willow (*Salix* sp.), cypress (*Taxodium distichum*), and freshwater marsh habitats, as well as ditches.

Wood Stork (*Mycteria americana*)
Potential wood stork foraging habitat within the Project site includes the forested and herbaceous wetlands, as well as ditches. Almost any wetland depression where fish tend to become concentrated, either through local reproduction by fishes or as a consequence of area drying, may be good for feeding habitat (Rodgers *et al.* 1996).

Big Cypress Fox Squirrel (*Sciurus niger avicennia*)
Potential nesting and foraging habitat for the Big Cypress fox squirrel on the Project site includes cypress areas. Dense interiors of mixed cypress-hardwood strands seem to be avoided by fox squirrels (Moler 1992).

Everglades Mink (*Neovison vison evergladensis*)
The Everglades mink inhabits southern Florida and in particular the shallow fresh water marshes of the Everglades and Big Cypress Swamp region. Most sightings and specimens have come from either Collier or Dade County, but the Everglades mink presumably inhabits northern and eastern Monroe County as well (Humphrey 1992). The Everglades mink is listed as a protected species by Lee County and potentially could utilize the open water and wetland habitats on the Project site.

Florida Black Bear (*Ursus americanus floridanus*)
Potential habitat for the Florida black bear includes the native wetland forested habitats on the Project site.

Florida Panther (*Puma concolor coryi*)
The Project is located primarily within the panther secondary zone with panthers in the primary zone (Kautz *et al.* 2006). Telemetry points from radio-collared panthers have been in the general vicinity of the property (Exhibit H).

Table 3. Listed Plant Species That Could Potentially Occur within Pepperland Ranch

Common Name	Scientific Name	Designated Status		Potential Location (FLUCFCS Code)
		FDACS	USFWS	
Pine-Pink Orchid	*Bletia purpurea*	T	-	740, 7401
Twisted Air Plant	*Tillandsia flexuosa*	C	-	6219

FDACS – Florida Department of Agriculture and Consumer Services
USFWS – U.S. Fish and Wildlife Service
C – Commercially Exploited
T – Threatened

A Lee County protected species survey was conducted on the Project site on February 16 and 17, 2016. Eight Lee County protected species were observed during the survey and additional fieldwork conducted on the Project on December 18 and 21, 2015 and February 3 and 4, 2016. The protected species documented by PAI included 6 American alligators, 4 crested caracaras, 4 Florida sandhill cranes, 4 little blue herons, 48 roseate spoonbills, 15 snowy egrets, 5 tri-colored herons, and 45 wood storks. Although not listed as protected species by Lee County, 1 bald eagle was observed circling above the site and 53 white ibises were documented utilizing the site. The bald eagle is not a listed species, but is protected under Lee County Ordinance No. 08-25, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act. The white ibis is listed as a species of special concern by the FWCC. No Lee County protected plant species were documented on-site.

A summary of the listed species observed within the Project is provided in Table 4. The locations of the observed listed species or their signs are depicted in Exhibit I.

Table 4. Listed Wildlife Species Observed within Pepperland Ranch

Common Name	Scientific Name	Designated Status		Observed Location (FLUCFCS Code)
		FWCC	USFWS	
American alligator	*Alligator mississipiensis*	FT(S/A)	FT(S/A)	514, 6189 E4
Bald eagle	*Haliaeetus leucocephalus*	*	*	214
Crested caracara	*Caracara cheriway*	FT	FT	214, 740, 747
Florida sandhill crane	*Grus canadensis pratensis*	ST	-	214, 747
Little blue heron	*Egretta caerulea*	SSC	-	214, 261, 514
Roseate spoonbill	*Ajaia ajaja*	SSC	-	214, 261, 514, 747
Snowy egret	*Egretta thula*	SSC	-	747
Tri-colored heron	*Egretta tricolor*	SSC	-	214, 261, 514, 7401
White ibis	*Eudocimus albus*	SSC	-	214, 261, 514, 747
Wood stork	*Mycteria americana*	FT	FT	214, 261, 514, 747

FWCC – Florida Fish and Wildlife Conservation Commission
USFWS – U.S. Fish and Wildlife Service
FT(S/A) – Federally Threatened due to similarity of appearance
FT – Federally Threatened
SSC – Species of Special Concern
ST – State Threatened
*Protected under Lee County Ordinance No. 08-25, the Bald and Golden Eagle Protection Act (BGEPA), and the Migratory Bird Treaty Act (MBTA).

SUMMARY

The property currently supports agricultural operations. A total of 11 vegetative associations and land uses (i.e., FLUCFCS types) have been identified on the 637.50± acre Project site. Agricultural uses occupy 520.32± acres or 81.6 percent of the site. Ditches, berms, and disturbed land associated with the agricultural uses on-site occupy 69.10± acres or 10.8 percent of the site. No rare or unique uplands were identified on the Project site. The site consists of 51.31± acres of SFWMD jurisdictional wetlands and 22.32± acres of OSWs. The prominent wetland feature consists of a mix of willow, cypress, and freshwater marsh habitats and is associated with an agricultural reservoir located in the northwest corner of the Project site.

A Lee County protected species survey was conducted on the Project site in February 2016. Eight Lee County protected species were observed during the survey and additional fieldwork conducted on the Project on December 18 and 21, 2015 and February 3 and 4, 2016. The documented protected wildlife species included the American alligator, crested caracara, Florida sandhill crane, little blue heron, roseate spoonbill, snowy egret, tri-colored heron, and wood stork. Although not listed as a Lee County protected species, the bald eagle and white ibis were also documented using the site. No Lee County protected plant species were documented on-site.

REFERENCES

Chafin, Linda G. 2000. Field Guide to the Rare Plants of Florida. Florida Natural Areas Inventory. Tallahassee, Florida.

Florida Department of Agriculture and Consumer Services. Florida's Federally Listed Plant Species. Chapter 5B-40, F.A.C.

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.

Florida Fish and Wildlife Conservation Commission. 2016. Florida's Endangered Species, Threatened Species and Species of Special Concern. Official Lists. Florida Fish and Wildlife Conservation Commission. Tallahassee, Florida.

Humphrey, Stephen R. 1992. Rare and Endangered Biota of Florida; Volume I. Mammals. University Press of Florida, Gainesville, Florida. 392 pages.

Kautz, R., R. Kawula, T. Hoctor, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, F. Mazzotti, R. McBride, L. Richardson, K. Root. 2006. How much is enough? Landscape-scale conservation for the Florida panther. Biological Conservation, Volume 130, Issue 1, Pages 118-133.

Moler, P.E. 1992. Rare and Endangered Biota of Florida. Volume III. Amphibians and Reptiles. University Press of Florida, Gainesville, Florida.

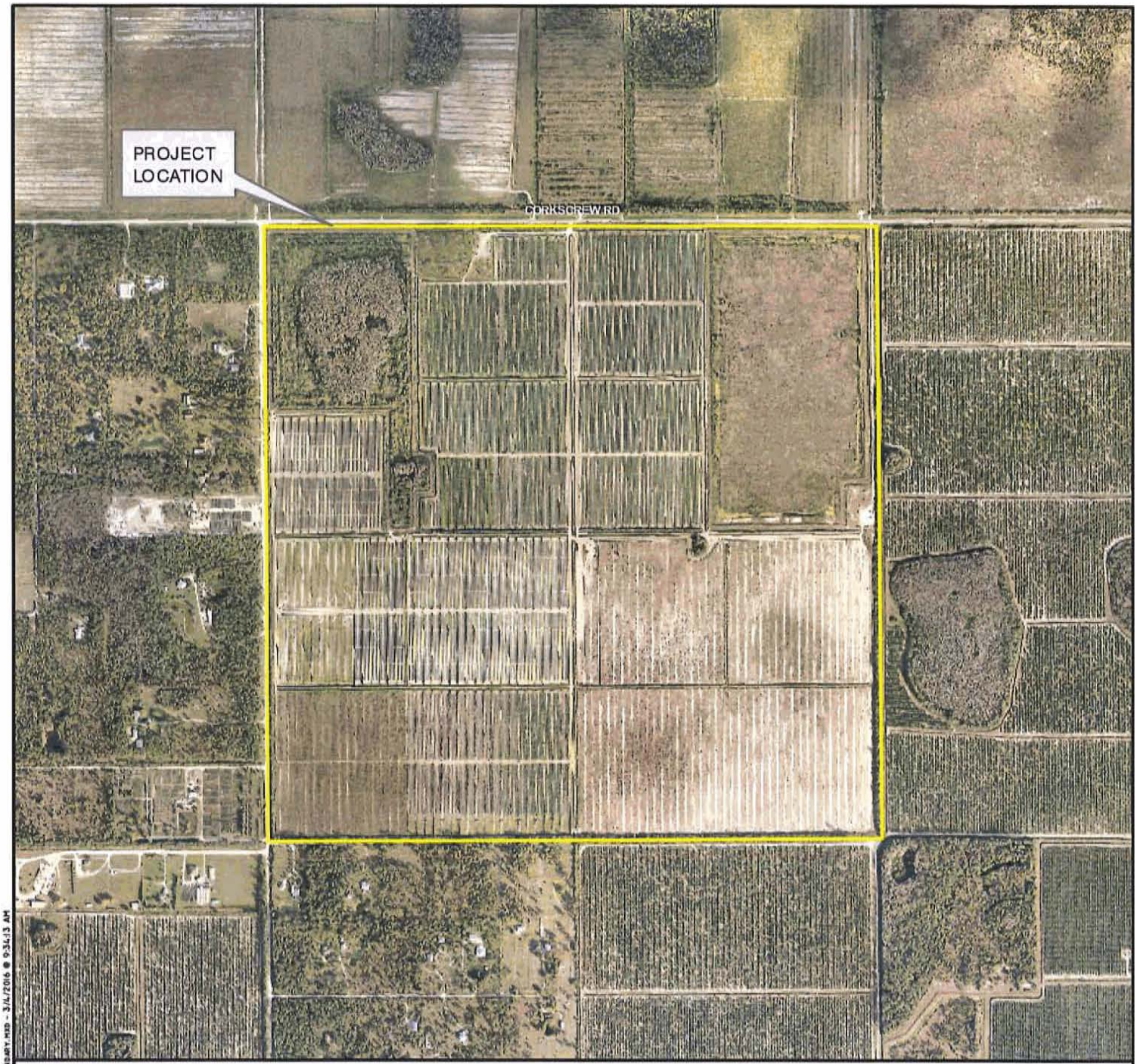
Rodgers, J.A, H.W. Kale, and H.T. Smith. 1996. Rare and Endangered Biota of Florida. Volume V. Birds. University Press of Florida, Gainesville, Florida.

Soils Conservation Service. 1998. Soil Survey of Lee County, Florida.

Wunderlin, R. P., and B. F. Hansen. 2004. *Atlas of Florida Vascular Plants*. (http://www.plantatlas.usf.edu/).] Institute for Systematic Botany, University of South Florida, Tampa.

EXHIBIT A

AERIAL WITH BOUNDARY



LEGEND

PEPPERLAND RANCH

N
W E
S

0 1,000 2,000
Feet

NOTES:

AERIAL PHOTOGRAPHS WERE PROVIDED BY THE LEE COUNTY PROPERTY APPRAISER'S OFFICE AND WERE FLOWN JANUARY-FEBRUARY 2015.

PROPERTY BOUNDARY PER BANKS ENGINEERING, INC. DRAWING NO. 8112-SR EM_1-26-2016.DWG DATED JANUARY 27, 2016.

ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

EXHIBIT A. AERIAL WITH BOUNDARY
PEPPERLAND RANCH

DRAWN BY	DATE
W.C.	2/15/16
REVIEWED BY	DATE
S.J.	2/15/16
REVISED	DATE

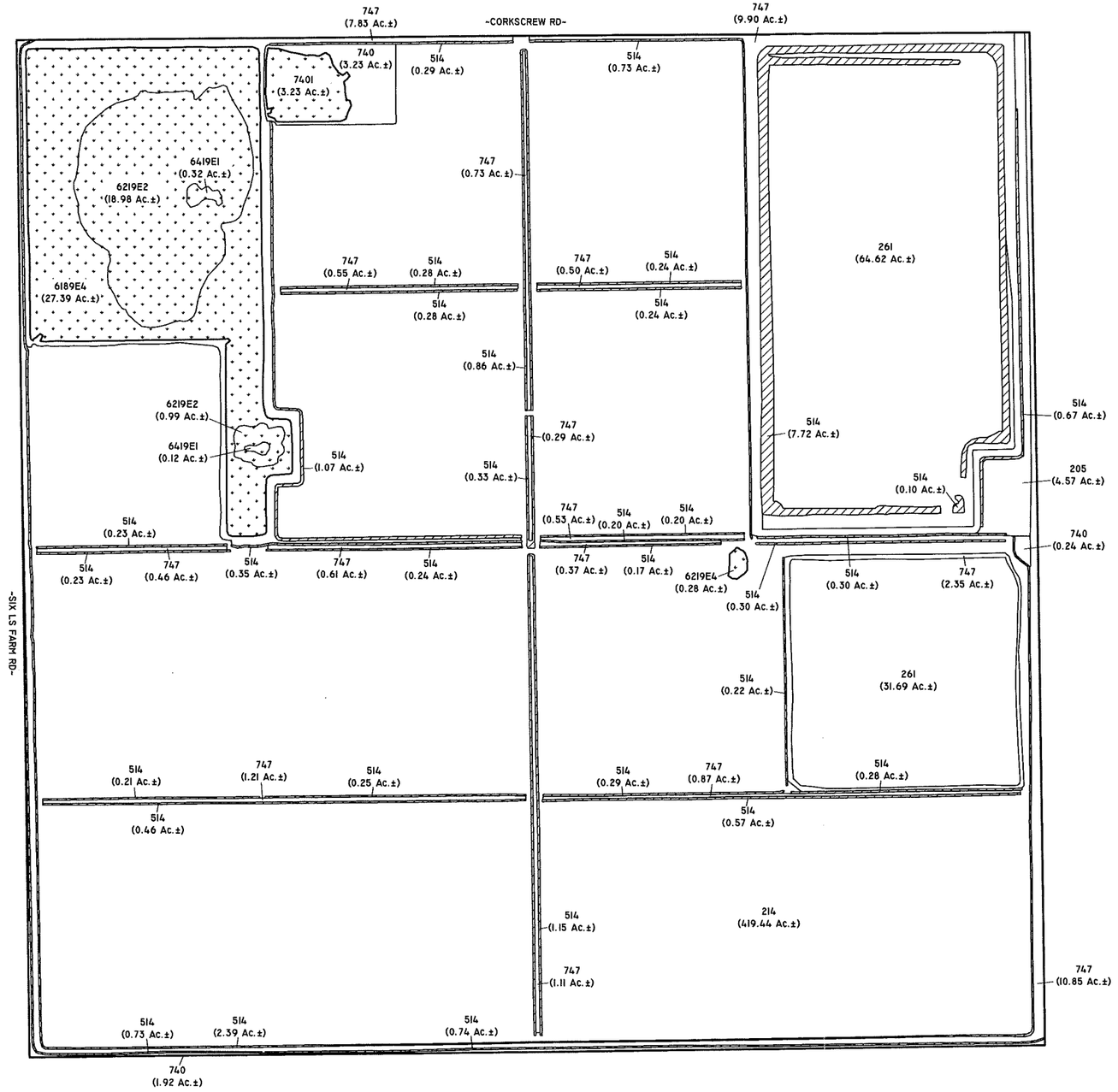
PASSARELLA & ASSOCIATES INC.

J:\2015\15sar258\GIS\2016\Environmental_Assessment\Exhibits\Exhibit_A_Aerial_with_Boundary.mxd - 3/4/2016 @ 9:34:13 AM

EXHIBIT B

SFWMD FLUCFCS AND WETLANDS MAP

SCALE: 1" = 300'



LEGEND:

- SFWMD WETLANDS (51.31 Ac.±)
- SFWMD "OTHER SURFACE WATERS" (22.32 Ac.±)
- SURVEYED WETLAND LINE

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
205	AGRICULTURAL SUPPORT OPERATIONS	4.57 Ac.±	0.7%
214	ROW CROPS	419.44 Ac.±	65.8%
261	FALLOW CROP LAND	96.31 Ac.±	15.1%
514	DITCH	22.32 Ac.±	3.5%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	27.39 Ac.±	4.3%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	19.97 Ac.±	3.1%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	0.28 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	0.44 Ac.±	0.1%
740	DISTURBED LAND	5.39 Ac.±	0.8%
7401	DISTURBED LAND, HYDRIC	3.23 Ac.±	0.5%
747	BERM	38.16 Ac.±	6.0%
	TOTAL	637.50 Ac.±	100.0%

NOTES:

PROPERTY BOUNDARY PER BANKS ENGINEERING DRAWING No. 8112-SR EM_1-26-2016.DWG DATED JANUARY 27, 2016.

SURVEYED WETLAND LINES PER BANKS ENGINEERING DRAWING No. 8112-WET-FLAG-LOC-2-13-16.DWG DATED FEBRUARY 18, 2016.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

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

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2015\15bcf2389\2016\Environmental Assessment\Exhibit B SFWMD FLUCFCS and Wetlands Map 2-18-16.dwg Tab: 36x24-H Mar 04, 2016 - 9:39am Plotted By: Thones

REVISIONS	DATE
Surveyed wetland lines	2/18/16
Surveyed boundary	2/18/16

		DATE
DRAWN BY	T.S.	1/4/16
DESIGNED BY	K.M.	1/4/16
REVIEWED BY	S.J.	1/4/16

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

PEPPERLAND RANCH

SFWMD FLUCFCS AND WETLANDS MAP

DRAWING No. 15BCF2389

SHEET No. EXHIBIT B

EXHIBIT C

AERIAL WITH SFWMD FLUCFCS AND WETLANDS MAP



LEGEND:

- SFWMD WETLANDS (51.31 Ac.±)
- SFWMD "OTHER SURFACE WATERS" (22.32 Ac.±)
- SURVEYED WETLAND LINE

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
205	AGRICULTURAL SUPPORT OPERATIONS	4.57 Ac.±	0.7%
214	ROW CROPS	419.44 Ac.±	65.8%
261	FALLOW CROP LAND	96.31 Ac.±	15.1%
514	DITCH	22.32 Ac.±	3.5%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	27.39 Ac.±	4.3%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	19.97 Ac.±	3.1%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	0.28 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	0.44 Ac.±	0.1%
740	DISTURBED LAND	5.39 Ac.±	0.8%
7401	DISTURBED LAND, HYDRIC	3.23 Ac.±	0.5%
747	BERM	38.16 Ac.±	6.0%
	TOTAL	637.50 Ac.±	100.0%

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH FLIGHT DATES OF JANUARY - FEBRUARY 2015.

PROPERTY BOUNDARY PER BANKS ENGINEERING DRAWING No. 8112-SR EM_1-26-2016.DWG DATED JANUARY 27, 2016.

SURVEYED WETLAND LINES PER BANKS ENGINEERING DRAWING No. 8112-WET-FLAG-LOC-2-13-16.DWG DATED FEBRUARY 18, 2016.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

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

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2015\15bcf2389\2016\ENVIRONMENTAL ASSESSMENT\EXHIBIT C AERIAL WITH SFWMD FLUCFCS AND WETLANDS MAP 2-18-16.DWG TAB: 36X24-C TB MAR 04, 2016 - 9:43AM PLOTTED BY: THOMES

REVISIONS	DATE
Surveyed wetland lines	2/18/16
Surveyed boundary	2/18/16

		DATE
DRAWN BY	T.S.	1/4/16
DESIGNED BY	K.M.	1/4/16
REVIEWED BY	S.J.	1/4/16

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

Consulting Ecologists
PASSARELLA & ASSOCIATES INC

PEPPERLAND RANCH

AERIAL WITH SFWMD FLUCFCS AND WETLANDS MAP

DRAWING No. 15BCF2389

SHEET No. EXHIBIT C

EXHIBIT D

EXISTING LAND USE AND COVER SUMMARY TABLE AND FLUCFCS DESCRIPTIONS

PEPPERLAND
EXISTING LAND USE AND COVER SUMMARY TABLE AND FLUCFCS DESCRIPTIONS

March 2016

The following table summarizes the Florida Land Use, Cover and Forms Classification System (FLUCFCS) codes and provides an acreage breakdown of the habitat types found on Pepperland Ranch (Project), while a description of each of the FLUCFCS classifications follows.

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage	Percent of Total
205	Agricultural Support Operations	4.57	0.7
214	Row Crops	419.44	65.8
261	Fallow Crop Land	96.31	15.1
514	Ditch	22.32	3.5
6189 E4	Willow, Disturbed (76-100% Exotics)	27.39	4.3
6219 E2	Cypress, Disturbed (25-49% Exotics)	19.97	3.1
6219 E4	Cypress, Disturbed (76-100% Exotics)	0.28	<0.1
6419 E1	Freshwater Marsh, Disturbed (0-24% Exotics)	0.44	0.1
740	Disturbed Land	5.39	0.8
7401	Disturbed Land, Hydric	3.23	0.5
747	Berm	38.16	6.0
Total		**637.50**	**100.0**

Agricultural Support Operations (FLUCFCS Code 205)
This land use type consists of a dedicated area used for the storage of various materials and equipment used in the active agricultural operations.

Row Crops (FLUCFCS Code 214)
This land use type consists of active row crop operations. The various crops consist of tomatoes, peppers, chili peppers, and tomatillos.

Fallow Crop Land (FLUCFCS Code 261)
This land use type consists of harvestable crop land that is no longer currently in use. The canopy is open while the sub-canopy consists of widely scattered Carolina willow (*Salix caroliniana*). The ground cover includes torpedograss (*Panicum repens*), turkey tangle frog-fruit (*Phyla nodiflora*), ragweed (*Ambrosia artemisifolia*), dayflower (*Commelina diffusa*), broomsedge bluestem (*Andropogon virginicus*), tropical flatsedge (*Cyperus surinamensis*), and shrubby false buttonweed (*Spermacoce verticillata*).

Ditch (FLUCFCS Code 514)
The canopy within this land use type is open. The sub-canopy consists of scattered Carolina willow. The ground cover includes cattail (*Typha* sp.) and water hyacinth (*Eichhornia crassipes*).

Willow, Disturbed (76-100% Exotics) (FLUCFCS Code 6189 E4)
The canopy of this wetland community is dominated by Carolina willow. The sub-canopy consists of Carolina willow and high concentration of Brazilian pepper (*Schinus terebinthifolius*). The ground cover includes Peruvian primrose willow (*Ludwigia peruviana*), cattail, and swamp fern (*Blechnum serrulatum*).

Cypress, Disturbed (25-49% Exotics) (FLUCFCS Code 6219 E2)
The canopy of this wetland community is dominated by bald cypress (*Taxodium distichum*). The sub-canopy includes bald cypress, Brazilian pepper, and scattered Carolina willow. The ground cover is primarily open with duckweed (*Lemnoideae* sp.) floating on the surface of the standing water.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)
Vegetation within this wetland community is the same as that found in FLUCFCS Code 6219 E2, but with dayflower present in the ground cover and a higher percentage of Brazilian pepper.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)
The canopy of this wetland community is primarily open with scattered bald cypress along the edges. The sub-canopy is primarily open with scattered Carolina willow. The ground cover includes pickerelweed (*Pontederia cordata*), alligator flag (*Thalia geniculata*), scattered swamp fern, and water lettuce (*Pistia stratiotes*).

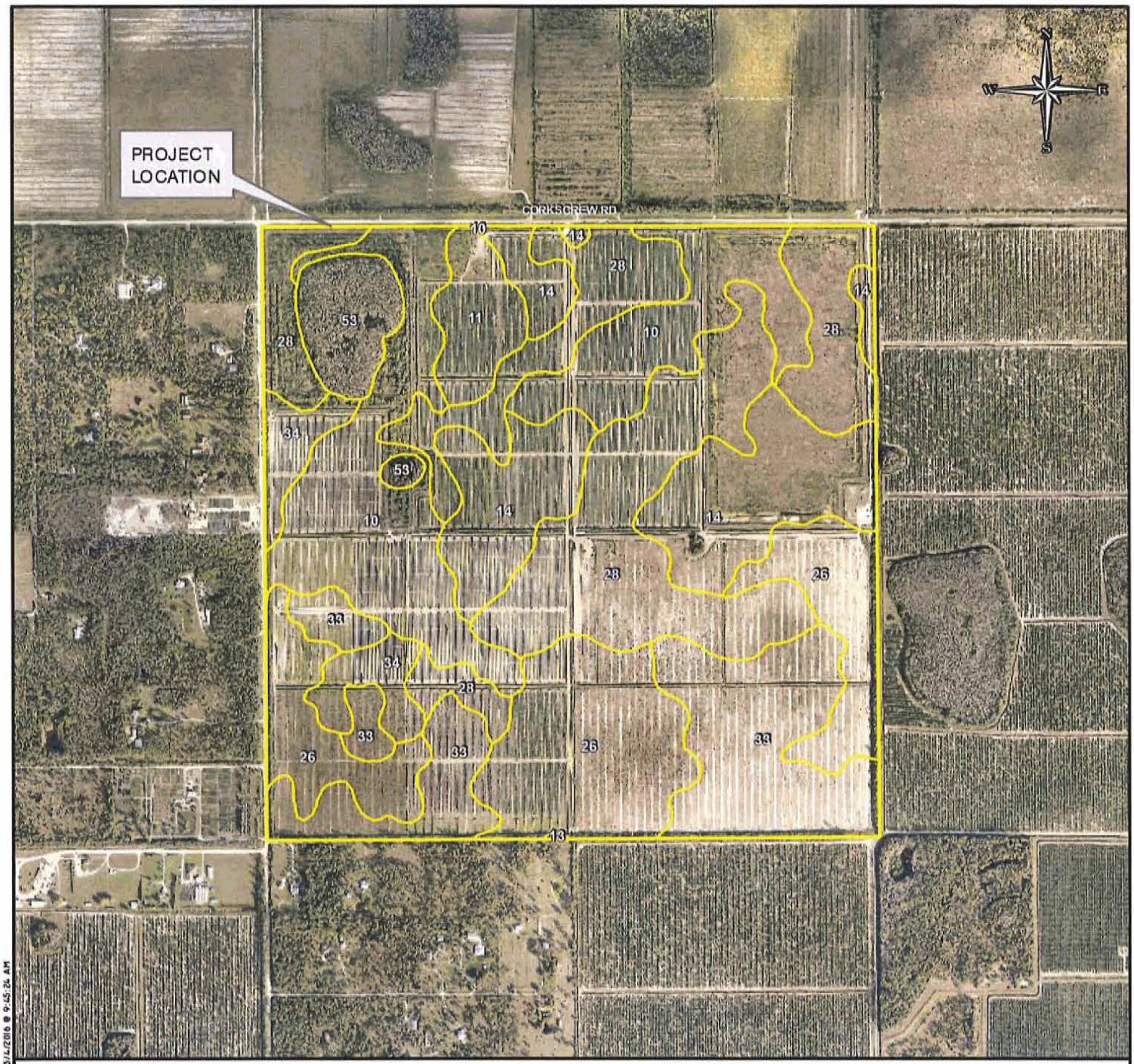
Disturbed Land (FLUCFCS Code 740)
The canopy of this upland community is open, while the sub-canopy is dominated by Brazilian pepper. The ground cover includes dog fennel (*Eupatorium capillifolium*), caesarweed (*Urena lobata*), cogongrass (*Imperata cylindrica*), and bahiagrass (*Paspalum notatum*).

Disturbed Land, Hydric (FLUCFCS Code 7401)
The canopy of this wetland community is open while the sub-canopy is occupied by scattered Brazilian pepper and Carolina willow. Ground cover includes ragweed, Peruvian primrose willow, cattail, torpedograss, and water pennywort (*Hydrocotyl umbellata*).

Berm (FLUCFCS Code 747)
The canopy of this land use type consists of scattered slash pine (*Pinus elliottii*) and the sub-canopy includes Brazilian pepper. The ground cover includes caesarweed, bahiagrass, muscadine grapevine (*Vitis rotundifolia*), and beggar-ticks (*Bidens alba*).

EXHIBIT E

SOILS MAP



LEGEND

PEPPERLAND RANCH

Soil Unit	Description
10	POMPANO FINE SAND
11	MYAKKA FINE SAND
13	BOCA FINE SAND
14	VALKARIA FINE SAND
26	PINEDA FINE SAND
28	IMMOKALEE SAND
33	OLDSMAR SAND
34	MALABAR FINE SAND
53	MYAKKA FINE SAND, DEPRESSIONAL

0 1,000 2,000

Feet

NOTES:

AERIAL PHOTOGRAPHS WERE PROVIDED BY THE LEE COUNTY PROPERTY APPRAISER'S OFFICE AND WERE FLOWN JANUARY-FEBRUARY 2015.

PROPERTY BOUNDARY PER BANKS ENGINEERING, INC. DRAWING NO. 8112-SR EM_I-26-2016.DWG DATED JANUARY 27, 2016.

ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

SOILS MAPPING WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE OCTOBER 2007 AND CREATED BY THE NATURAL RESOURCES CONSERVATION SERVICE 1990.

EXHIBIT E. SOILS MAP
PEPPERLAND RANCH

DRAWN BY	DATE
W.C.	2/15/16
REVIEWED BY	DATE
S.J.	2/15/16
REVISED	DATE

PASSARELLA & ASSOCIATES INC.

J:\2015\15807\GIS\2016\ENVIRONMENTAL_ASSESSMENT\EXHIBITS\EXHIBIT_E_SOILS_MAP.MXD - 3/4/2016 @ 9:45:24 AM

EXHIBIT F

SOILS SUMMARY TABLE AND DESCRIPTIONS

PEPPERLAND RANCH
SOILS SUMMARY TABLE AND DESCRIPTIONS

Table 1. Soils Listed by the Natural Resource Conservation Service on the Project

Mapping Unit	Description
10	Pompano Fine Sand
11	Myakka Fine Sand
13	Boca Fine Sand
14	Valkaria Fine Sand
26	Pineda Fine Sand
28	Immokalee Sand
33	Oldsmar Sand
34	Malabar Fine Sand
53	Myakka Fine Sand, Depressional

10 – Pompano Fine Sand

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. Typically, the surface layer is dark gray fine sand about 4 inches thick. The underlying layers are light gray, very pale brown, or white fine sand and extend to a depth of 80 inches or more. 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.

11 – Myakka Fine Sand

This is a nearly level, poorly drained soil on broad flatwoods areas. Slopes are smooth to slightly concave and range from 0 to 2 percent. Typically, the surface layer is very dark gray fine sand about 3 inches thick. The subsurface layer is fine sand about 23 inches thick. In the upper 3 inches it is gray, and in the lower 20 inches it is light gray. The subsoil is fine sand to a depth of 80 inches or more. The upper 4 inches is black and firm, the next 5 inches is dark reddish brown and friable, the nest 17 inches is black and firm, the next 11 inches is dark reddish brown and friable, and the lower 17 inches is mixed black and dark reddish brown and friable. 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 is more than 40 inches below the surface during extended dry periods.

13 – Boca Fine Sand

This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth and range from 0 to 2 percent. Typically, the surface layer is gray fine sand about 3 inches thick. The subsurface layer is fine sand about 22 inches thick. The upper 11 inches is light gray and the lower 11 inches is very pale brown. The subsoil, about 5 inches thick, is gray fine sandy loam with brownish yellow mottles and calcareous nodules. At a depth of 30 inches is a layer of fractured limestone. In most years, under natural conditions, the water table is within 10 inches of the surface for 2 to 4 months. It recedes below the limestone for about 6 months.

14 – Valkaria Fine Sand

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. Typically, the surface layer is about 2 inches of dark grayish brown fine sand. The subsurface layer is 5 inches of very pale brown fine sand. The subsoil is loose fine sand to a depth of 80 inches or more. The upper 9 inches is yellow, the next 4 inches is brownish yellow, the next 6 inches is yellowish brown, and the lowermost 54 inches is pale yellow, yellow, brown, and very pale brown. 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.

26 – Pineda Fine Sand

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to slightly concave and range from 0 to 1 percent. Typically, the surface layer is black fine sand about 1 inch thick. The subsurface layer is very pale brown fine sand about 4 inches thick. The upper part of the subsoil is brownish yellow fine sand about 8 inches thick. The next 10 inches is strong brown fine sand. The next 6 inches is yellowish brown fine sand. The next 7 inches is light gray fine sand with brownish yellow mottles. The lower part of the subsoil is light brownish gray fine sandy loam with light gray sandy intrusions about 18 inches thick. The substratum is light gray fine sand to a depth of 80 inches or more. 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.

28 – Immokalee Sand

This is a nearly level, poorly drained soil in flatwoods areas. Slopes are smooth to convex and range from 0 to 2 percent. Typically, the surface layer is black sand about 4 inches thick. The subsurface layer is dark gray sand in the upper 5 inches and light gray sand in the lower 27 inches. The subsoil is sand to a depth of 69 inches. The upper 14 inches is black and firm, the next 5 inches is dark reddish brown, and the lower 14 inches is dark yellowish brown. The substratum is very pale brown sand to a depth of 80 inches or more. 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.

33 – Oldsmar Sand

This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth to slightly convex and range from 0 to 2 percent. Typically, the surface layer is black sand about 3 inches thick. The subsurface layer is gray and light gray sand about 39 inches thick. The upper part of the subsoil is very dark gray sand about 5 inches thick. The lower part of the subsoil is yellowish brown and mixed light brownish gray and brown fine sandy loam about 11 inches thick. Pale brown sand extends to a depth of 80 inches or more. 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.

34 – Malabar Fine Sand

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. Typically, the surface layer is dark gray fine sand about 5 inches thick. The next 12 inches is light gray and very pale brown fine sand. Below this is a 16-inch layer of light yellowish brown fine sand with yellow mottles and a 9-inch layer of brownish yellow fine sand. The subsoil layer is gray loamy fine sand about 9 inches thick with large yellowish brown mottles. The next 8 inches is gray fine sandy loam with large brownish yellow mottles. Below is light gray loamy fine sand with yellowish brown mottles to a depth of 80 inches or more. 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.

53 – Myakka Fine Sand, Depressional

This is a nearly level, poorly drained soil in depressions. Slopes are smooth to concave and are less than 1 percent. Typically, the surface layer is black fine sand about 3 inches thick. The subsurface layer is fine sand about 26 inches thick. The upper 4 inches is light gray, and the lower 22 inches is light brownish gray. The subsoil is fine sand about 17 inches thick. The upper 6 inches is dark brown with grayish brown streaks, and the sand grains are well coated with organic matter. The lower 11 inches is very brown with many well coated sand grains. Below this, extending to a depth of 80 inches or more is brown fine sand. 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.

EXHIBIT G

QUAD SHEET



LEGEND

PEPPERLAND RANCH

N
W E
S

0 1,000 2,000 3,000 4,000
Feet

NOTES:

COUNTY INFORMATION AND ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

PROPERTY BOUNDARY PER BANKS ENGINEERING, INC. DRAWING NO. 8112-SR EM_1-26-2016.DWG DATED JANUARY 27, 2016.

DIGITAL RASTER GRAPHIC USGS TOPOGRAPHIC QUADRANGLES WERE ACQUIRED FROM THE LAND BOUNDARY INFORMATION SYSTEM (LABINS) WEBSITE JULY 2007.

EXHIBIT G. QUAD SHEET
PEPPERLAND RANCH

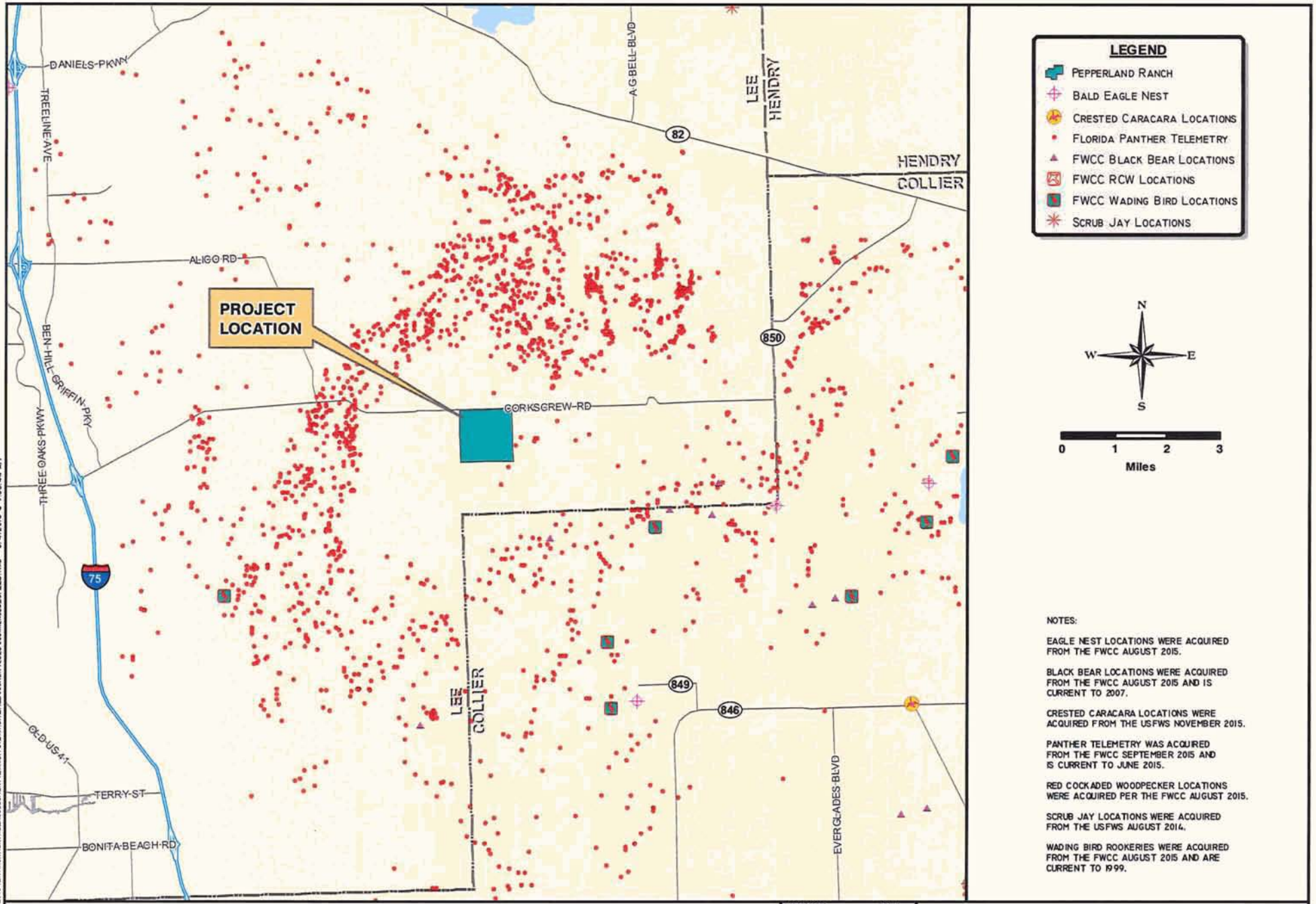
DRAWN BY	DATE
W.C.	2/15/16
REVIEWED BY	DATE
S.J.	2/15/16
REVISED	DATE

PASSARELLA & ASSOCIATES INC.

J:\2015\15807239\GIS\2016\Environmental_Assessment\Exhibits\Exhibit_G_Quad_Sheet.mxd - 3/4/2016 @ 9:52:36 AM

EXHIBIT H

DOCUMENTED OCCURRENCES OF LISTED SPECIES



NOTES:

EAGLE NEST LOCATIONS WERE ACQUIRED FROM THE FWCC AUGUST 2015.

BLACK BEAR LOCATIONS WERE ACQUIRED FROM THE FWCC AUGUST 2015 AND IS CURRENT TO 2007.

CRESTED CARACARA LOCATIONS WERE ACQUIRED FROM THE USFWS NOVEMBER 2015.

PANTHER TELEMETRY WAS ACQUIRED FROM THE FWCC SEPTEMBER 2015 AND IS CURRENT TO JUNE 2015.

RED COCKADED WOODPECKER LOCATIONS WERE ACQUIRED PER THE FWCC AUGUST 2015.

SCRUB JAY LOCATIONS WERE ACQUIRED FROM THE USFWS AUGUST 2014.

WADING BIRD ROOKERIES WERE ACQUIRED FROM THE FWCC AUGUST 2015 AND ARE CURRENT TO 1999.

EXHIBIT H. DOCUMENTED OCCURRENCES OF LISTED SPECIES
PEPPERLAND RANCH

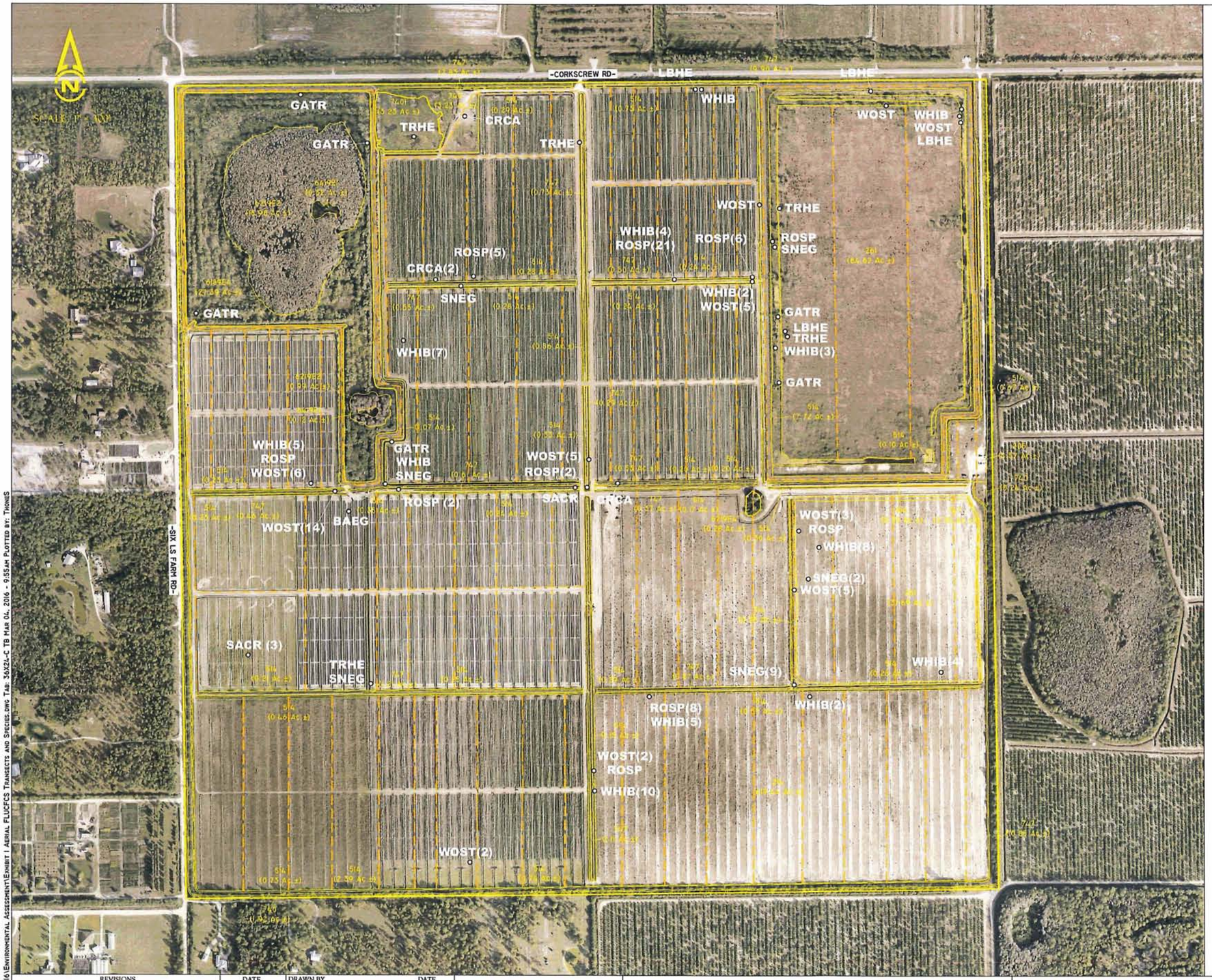
DRAWN BY	DATE
W.C.	2/15/16
REVIEWED BY	DATE
S.J.	2/15/16
REVISED	DATE

PASSARELLA & ASSOCIATES, INC.
Consulting Ecologists

J:\2015\15-07-23\04\05\2016\ENVIRONMENTAL_ASSESSMENT\EXHIBITS\EXHIBIT_H_DOCUMENTED_OCCURRENCES_OF_LS.mxd - 3/4/2016 @ 9:53:44 AM

EXHIBIT I

AERIAL WITH FLUCFCS MAP, SURVEY TRANSECTS, AND LISTED SPECIES LOCATIONS



LEGEND:

	APPROXIMATE LOCATION OF WALKED TRANSECTS
WHIB	WHITE IBIS
WOST	WOOD STORK
TRHE	TRI-COLORED HERON
SNEG	SNOWY EGRET
ROSP	ROSEATE SPOONBILL
GATR	AMERICAN ALLIGATOR
LBHE	LITTLE BLUE HERON
CRCA	AUDUBON'S CRESTED CARACARA
BAEG	BALD EAGLE
SACR	SANDHILL CRANE

FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
205	AGRICULTURAL SUPPORT OPERATIONS	4.57 Ac.±	0.7%
214	ROW CROPS	419.44 Ac.±	65.8%
261	FALLOW CROP LAND	96.31 Ac.±	15.1%
514	DITCH	22.32 Ac.±	3.5%
6189 E4	WILLOW, DISTURBED (76-100% EXOTICS)	27.39 Ac.±	4.3%
6219 E2	CYPRESS, DISTURBED (25-49% EXOTICS)	19.97 Ac.±	3.1%
6219 E4	CYPRESS, DISTURBED (76-100% EXOTICS)	0.28 Ac.±	0.0%
6419 E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	0.44 Ac.±	0.1%
740	DISTURBED LAND	5.39 Ac.±	0.8%
7401	DISTURBED LAND, HYDRIC	3.23 Ac.±	0.5%
747	BERM	38.16 Ac.±	6.0%
	TOTAL	637.50 Ac.±	100.0%

NOTES:

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH FLIGHT DATES OF JANUARY - FEBRUARY 2015.

PROPERTY BOUNDARY PER BANKS ENGINEERING DRAWING No. 8112-SR EM_I-26-2016.DWG DATED JANUARY 27, 2016.

SURVEYED WETLAND LINES PER BANKS ENGINEERING DRAWING No. 8112-WET-FLAG-LOC-2-13-16.DWG DATED FEBRUARY 18, 2016.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

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

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2015\15bcf2389\2016\Environmental Assessment\Exhibit I Aerial FLUCFCS Transects and Species.dwg Tab: 36x24-C TB Mar 04, 2016 - 9:55am Plotted by: Thones

REVISIONS	DATE

		DATE
DRAWN BY	T.S., D.B.	2/25/16
DESIGNED BY	K.M.	2/25/16
REVIEWED BY	S.J.	2/25/16

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

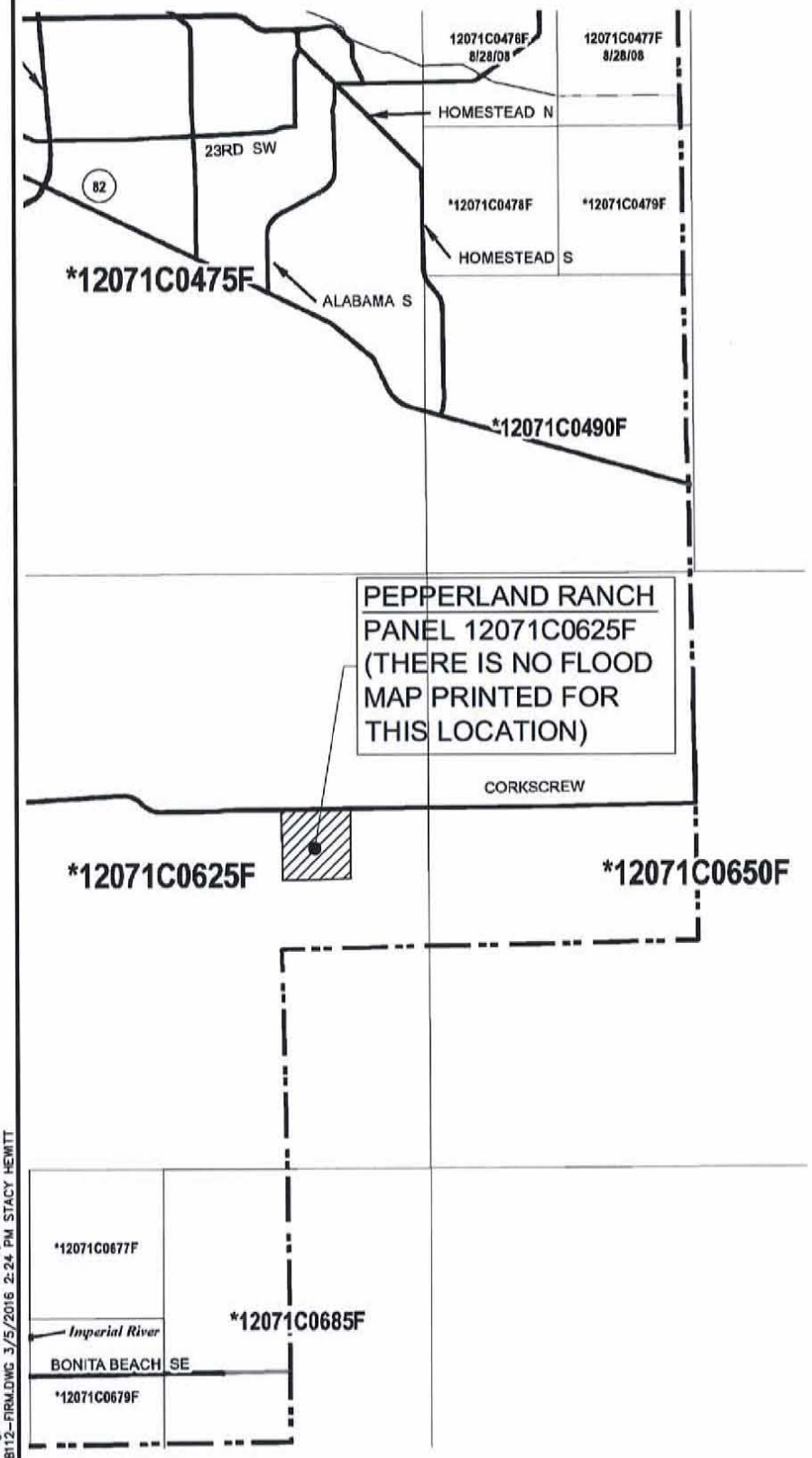
PEPPERLAND RANCH

AERIAL WITH FLUCFCS MAP, SURVEY TRANSECTS, AND LISTED SPECIES LOCATIONS

DRAWING No. 15BCF2389

SHEET No. EXHIBIT I

Pepperland Ranch
Part IV. Amendment Support Documentation
C. Environmental Impacts
4. Flood Insurance Rate Map



N

NATIONAL FLOOD INSURANCE PROGRAM

MAP INDEX

FIRM

FLOOD INSURANCE RATE MAP

LEE COUNTY, FLORIDA
AND INCORPORATED AREAS
(See Listing of Communities table)

MAP INDEX

PANELS PRINTED: 17, 19, 36, 38, 40, 65, 70, 95, 115, 119, 120, 138, 139, 143, 163, 182, 184, 192, 203, 205, 210, 211, 213, 215, 220, 230, 235, 240, 245, 258, 259, 260, 265, 267, 270, 276, 277, 278, 279, 281, 282, 283, 284, 286, 287, 288, 289, 291, 292, 295, 301, 302, 303, 304, 306, 307, 308, 309, 311, 312, 314, 316, 317, 318, 326, 327, 328, 329, 336, 337, 338, 339, 351, 352, 353, 354, 360, 362, 364, 370, 380, 385, 390, 395, 405, 410, 415, 416, 417, 418, 419, 426, 427, 428, 429, 431, 432, 433, 436, 437, 438, 439, 476, 477, 502, 506, 507, 508, 509, 517, 530, 531, 532, 533, 534, 536, 537, 541, 551, 552, 554, 556, 557, 558, 559, 566, 567, 569, 576, 577, 578, 579, 581, 583, 584, 586, 587, 588, 589, 591, 592, 593, 594, 651, 652, 653, 654, 656, 657, 658, 659, 676, 678

MAP NUMBER
12071CIND0A

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

FEMA FLOOD INSURANCE RATE PANEL (FIRM) - EXHIBIT IV.C.4

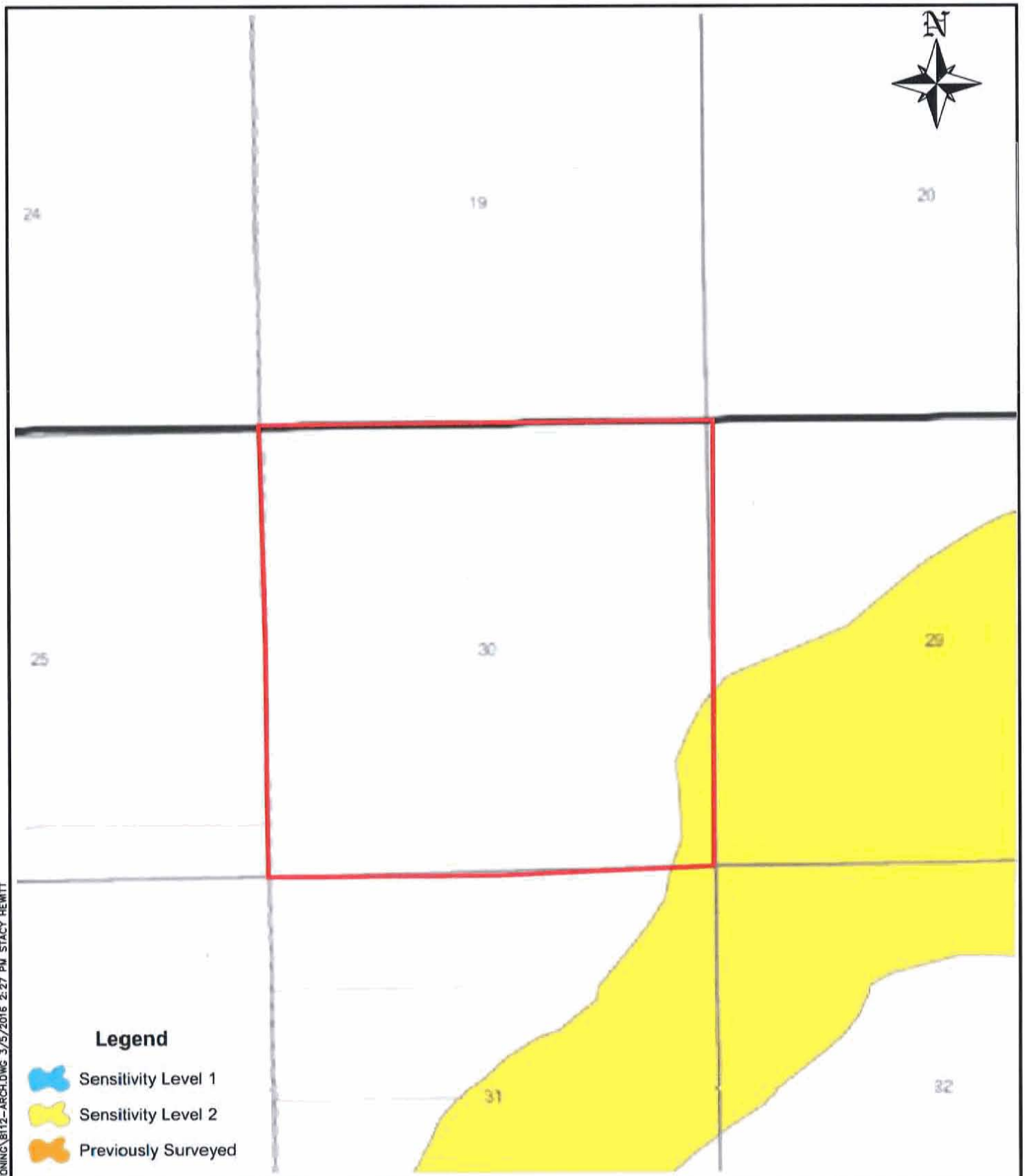
PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
2/25/2016	8112	_FIRM	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112-FIRM.dwg, 3/5/2016 2:24:55 PM, stacy hewitt
S:\JOBS\81XX\8112\ZONING\8112--FIRM.DWG 3/5/2016 2:24 PM STACY HEWITT

Pepperland Ranch
Part IV. Amendment Support Documentation
D. Impacts on Historic Resources
2. Subject Property Depicted on the Archaeological Sensitivity Map



BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490 FAX: (239) 939-2523
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

ARCHAEOLOGICAL SENSITIVITY MAP - EXHIBIT IV.D.2

PEPPERLAND RANCH

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
03/04/2016	8112	_ARCH	SDJ	SDJ	SWH	N.T.S.	1

S:\Jobs\81xx\8112\Zoning\8112-Arch.dwg, 3/5/2016 2:27:09 PM, stacy hewitt
S:\JOBS\81XX\8112\ZONING\8112-ARCH.DWG 3/5/2016 2:27 PM STACY HEWITT

Pepperland Ranch
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
1. Population Projections & Table 1(b) Discussion

The proposed restoration strategy and companion planned development rezoning for the Pepperland Ranch property will strictly limit the development footprint on the property. The proposed plan amendment is not proposing any amendment 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 2,112 acres have been developed for residential uses, leaving 1,903 acres available for development before the year 2030. The development footprint for the Pepperland Ranch property, including lots, roads, amenity areas, and water management lakes is approximately 280 acres. The proposal is consistent with the allocations contained in Table 1(b).

The Pepperland Ranch project would result in a maximum of 700 dwelling units (637 dwelling units generated from the property at 1 dwelling unit per acre and an additional 63 dwelling units by transferring development rights from other qualifying DR/GR property). The population that would be accommodated by these 700 dwelling units is insignificant when compared against the total population capacity of the Lee Plan Future Land Use Map. These 700 dwelling units, in essence, are already accommodated by the Lee Plan. The 637 dwelling units are accommodated by the Environmental Enhancement and Preservation Communities Overlay in Policy 33.3.4, and the additional 63 residential units via TDRs by the current density provisions of the DR/GR future land use category.

Pepperland Ranch
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
2. Lee Plan Goals Objectives and Policies Discussion

INTRODUCTION

Pepperland Ranch is a ±637.50 acre restoration, conservation, and water management project that allows for a small portion of the property to be used for a residential community. The Pepperland Ranch 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 Pepperland Ranch property has been significantly impacted by these activities that have been occurring on the property over many decades.

The proposed plan amendment for the Pepperland Ranch 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. The proposed plan amendment seeks to:

1. Incorporate Pepperland Ranch property into the Environmental Enhancement and Preservation Communities Overlay and depict the inclusion of the property as being located within this overlay on Lee Plan Map 17.

2. Amend Future Land Use Map Series, Maps 6 and 7 to place the property within the Lee County Utilities Service Areas.

The Pepperland Ranch 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 for the Southeast Lee County Planning Community provides as follows:

> ***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 Pepperland Ranch project proposes hydrologic restoration of the property that will more closely mimic natural conditions, increase the storage and flows of surface water and improve wildlife habitat. The Pepperland Ranch project will also expand land that is permanently preserved for the use of wildlife, which will result in the expansion of natural preserves in the DR/GR. The proposal will allow the concentration of development rights from other areas of the DR/GR. Regionally significant public conservation lands are located to the north and south of the Pepperland Ranch property. The Pepperland Ranch project will help connect these public conservation lands.

FUTURE LAND USE MAP DESIGNATION

The Pepperland Ranch property 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, 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.

Consistent with the DR/GR designation and the approved IPD (see Resolution Z-89-081) the Pepperland Ranch property can be mined for fill dirt. The property contains approximately 586.19 acres of uplands and 51.31 acres of wetlands. Consistent with the DR/GR and Wetlands designations a maximum of 61 dwelling units could be permitted on the site. A recent amendment would allow additional density if certain criteria are met. These criteria are discussed later in this analysis under Policy 33.3.4.

The approved mine plan demonstrates almost complete impact to the subject site. There is presently very little limitation on the footprint for the development of the fill extraction areas and subsequent residential units. These units would be spread across the entire property. These units would be serviced by independent individual potable water wells and septic systems which could be a detriment to the nearby public wellfield. The development of residential units on central water and sewer provides a benefit to the nearby public water wellfield which is located to the north along Corkscrew Road. The proposed plan amendment for the Pepperland Ranch 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 Water Science Associates demonstrates that the proposed plan amendment for the Pepperland Ranch project will serve to maintain and improve surface and groundwater levels.

The Pepperland Ranch property 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 no wetland impacts. The restoration strategy for the Pepperland Ranch will improve and re-create historic flowway patterns and improve the existing degraded wetland areas on the property. The Pepperland Ranch restoration strategy will be a benefit to the adjacent public conservation lands to the northeast of the property and the private restoration project north of Corkscrew Road.

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 Pepperland Ranch property 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 acreage of the Pepperland Ranch property. In all probability less than 280 acres of the property will be inventoried for residential use at the development order stage. No change to the allocations for residential development in the DR/GR category is being proposed at this time because there is sufficient allocation available as set forth in Table 1(b). The Pepperland Ranch project is consistent with Policy 1.7.6 of the Lee Plan and with the allocations contained in Table 1(b).

The proposed plan amendment for the Pepperland Ranch project proposes to add the property to the Environmental Enhancement and Preservation Communities Overlay (on Map 17) by incorporating a restoration strategy specific to the subject property. Policy 1.7.13 describes five overlays that affect DR/GR lands in Southeast Lee County. One of which is the Environmental Enhancement and Preservation Communities Overlay. This policy describes the overlay as "Properties adjacent to Corkscrew and Alico Roads that have the potential to improve and restore important regional hydrological and wildlife connections." The proposed plan amendment improves the hydrological and wildlife conditions of the Pepperland Ranch property.

The proposed restoration plan takes into account the property's "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 an applicant seeking an amendment 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 Water Science Associates indicates that irrigation for the Pepperland Ranch property will be a central system that draws from the surficial aquifer. A central irrigation system provides greater control of irrigation water and will

result in lower water use than will an individual private well system. When individual homeowners have control of their irrigation system, there is a high chance that the cumulative development water use will exceed a centrally controlled, permitted system. The analysis includes the necessary data and analysis to demonstrate that the proposal will not cause harm to present or future water resources. In fact, the proposal will result in a significant reduction in the consumption of water as compared to the current consumption of water for the ongoing agricultural activities on the property.

The proposed Pepperland Ranch project 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 project. The connection to central utilities would eliminate the potential of individual potable water wells and septic systems on the property.

The applicant notes that the State of Florida has repealed 9J-5. The amendment represents an opportunity to end a long running controversy between the landowners and the community. A fill dirt mine has been approved as a use on the Pepperland Ranch property in the past. Mining requests in this general area have generated substantial public opposition to mining uses for a variety of reasons. This proposed plan amendment, if approved, would foreclose the establishment and operation of a mine on the subject site. The proposed plan amendment represents an opportunity to accommodate an appropriately planned residential community and provide for a substantial restoration of the property. The proposed plan amendment 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 proposed plan amendment for the Pepperland Ranch property is compatible with the existing single family uses, recreational uses, and conservation/mitigation uses that are adjacent and near the property. The proposed plan amendment will provide substantial setbacks from these adjacent uses, and will reestablish and restore historic flowways on the Pepperland Ranch property. This will help both the adjacent single family uses as

well as providing additional wildlife habitat in an area of Lee County that is designated as a priority area for restoration by the Lee Plan. These regional benefits occur with no public expenditures required.

The proposed plan amendment for the Pepperland Ranch property, if approved, would result in significant restoration of the property which would enhance the hydrology of the property. The result of the restoration of the property would be an increase in wildlife habitat on the property. The Pepperland Ranch project would also provide two (2) restored flowways from the northern boundary of the property to the southern boundary of the property, which will preserve the ability to expand this flowway further to the south when opportunity to do so arises.

GOAL 33 SOUTHEAST LEE COUNTY

The Pepperland Ranch property is located in Southeast Lee County. Goal 33 of the Lee Plan is specific to this area of Lee County and represents Lee County's goal of restoring and protecting the natural resources of the area while balancing 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. Goal 33 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 Pepperland Ranch property is designated as being a Tier 1 Restoration property by Policy 33.2.2. Policy 33.2.1 provides that parameters for restoration will be established in the LDC or within

planned development zoning approvals. 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 or within planned development zoning approvals as established in Objective 33.3.*
>
> ***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.*

Objective 33.3 also addresses the Overlays in the DR/GR Southeast Lee County planning community. This objective is reproduced below:

> ***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).

Policy 33.3.4 provides that additional densities and accessory commercial uses will be granted if a proposed Planned Development demonstrates consistency with specified criteria. This policy is reproduced below:

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 of 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. For the developments known as WildBlue (CPA2014-00004) and Corkscrew Farms (CPA2015-00001) if the instrument is recorded prior to the final determination of the proportionate share amount, the proportionate share payment may not exceed $1,600 per unit above the road impact fee amount.

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 fro 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 Tier 1 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.

The Pepperland Ranch property is located west of the Imperial Marsh Preserve and is located within one mile south of Corkscrew Road. The subject site is eligible per this provision of Policy 33.3.4 to be included in the Environmental Enhancement and Preservation Communities Overlay and is consistent with the other specified criteria

contained in the policy. The companion planned development rezoning request will demonstrate consistency with these criteria. The planned development will include a minimum of 60% open space.

Lee County recognizes, through these Lee Plan provisions that surface and groundwater levels and flowways on the Pepperland Ranch property should be improved and restored, together with the protection of natural resources such as wetlands and wildlife habitat on the property. This is critical to Lee County given the level of public investment in conservation and mitigation lands in the area near the Pepperland Ranch property. The proposed plan amendment for the Pepperland Ranch property provides for restoration of surface and groundwater levels to the extent possible given other development in the area. The Pepperland Ranch restoration strategy includes the restoration and protection of the existing wetlands on the subject site. The strategy includes restoration of wetlands as well as restoration of uplands that can be used by wildlife adjacent to public and private preserves, all of which will enhance those preserves, at no cost to the taxpayers.

The proposed plan amendment for Pepperland Ranch places the subject property into the Environmental Enhancement and Preservation Community Overlay and incorporates a restoration strategy specific to the property. The restoration strategy will permit a residential community or neighborhood with a compact and clustered design located outside of the restored flowway areas. This neighborhood is located internal to the property with significant separations from adjacent uses. The separation protects adjacent uses and residential neighborhoods including the residential neighborhoods to the south of the property. The project will provide a minimum 100 foot buffer along Corkscrew Road. The proposed open space areas will be designed to allow the re-creation of onsite flowways that will, if possible, be connect to off-site conservation areas in the future. This design will have the affect of providing improved water resources and natural habitat. The remaining forested lands on the Pepperland Ranch property are incorporated into the open space plan. The restoration strategy for the Pepperland Ranch project includes an increase in density to make the private water and natural resource restoration and preservation feasible without the investment of public dollars.

The Pepperland Ranch project includes an enhanced lake management plan consistent with the requirements of Policy 33.3.4. The project will be in compliance with the Well Field Protection Ordinance. The project will mitigate traffic impacts consistent with Policy 33.3.4. The project will connect to public water and sewer service and has requested inclusion in the Lee County service areas as part of this amendment. The Pepperland Ranch project will not result in significant detrimental impacts on present or future water resources.

The Pepperland Ranch project has been designed to allow the concentration of additional density from other DR/GR properties. The Environmental Enhancement and Preservation Community Overlay permit a density of 1 dwelling unit per acre for a Tier 1 property. The property is approximately 637 acres. As such, 637 dwelling units are permitted for this property. The applicant is proposing to add an additional 63 dwelling

units on this property by transferring development rights from other eligible DR/GR lands.

SURFACE WATER MANAGEMENT

The Pepperland Ranch project furthers Lee 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 for the Pepperland Ranch includes 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 also includes the restoration of flowways and associated wetland habitats, including the existing cypress area in the northwest corner of the property, in furtherance of Policy 60.1.2. The Pepperland Ranch project furthers Policy 60.1.3 by the restoration of the property 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 for the Pepperland Ranch property incorporates 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 of the property. The restoration strategy also includes preservation of the remaining forested wetlands on the property, and incorporation of these forested wetland areas into restored flowways on the property. The proposed plan amendment for the Pepperland Ranch 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 for the Pepperland Ranch property includes a water management system that will improve the water quality of the surface water that is currently being discharged into receiving waters. The surface water management system for the Pepperland Ranch project will restore historic conditions on the property 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 onsite flowways. The restoration strategy has been designed to recognize the property's 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 proposed plan amendment for the Pepperland Ranch furthers and is consistent with these Lee Plan Provisions.

RESOURCE PROTECTION

The Lee Plan contains a goal, Goal 107, which seeks to manage Lee County's wetland and upland ecosystems to protect habitats, floral and faunal species, water quality and natural surface water characteristics. 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 for the Pepperland Ranch property restores and protects a significant area of land that is directly adjacent to existing preservation areas (*i.e.*, the Corkscrew Regional Mitigation Bank and Corkscrew Farms north of Corkscrew Road). The subject site is also near Panther Island Mitigation Bank which is located south and is part of the Corkscrew Regional Ecological Watershed (CREW) conservation and restoration efforts. The restoration strategy for the subject site includes a mix of flowways, areas subject to flooding (wetland slough systems), restored historic native habitats, recreational trails, and significant wildlife corridors, including corridors for black bears and the Federally Endangered Florida panther. Approval of the plan amendment for Pepperland Ranch 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 Pepperland Ranch project will not result in incompatible development in and around environmentally sensitive lands (as defined in Policy 107.1.1.4.b.). The Pepperland Ranch 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 for Pepperland Ranch.

> ***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 for Pepperland Ranch 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 two (2) restored flowways and associated wetland habitats, including the existing cypress areas, in furtherance of Policy 60.1.2. The Pepperland Ranch 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 on the Pepperland Ranch property

for common species and protected species, such as the Florida panther, wood stork, little blue heron and white ibis. The proposed plan amendment for Pepperland Ranch 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 for Pepperland Ranch incorporates the high-quality natural plant communities in the open space area outside of the development footprint. Natural plant communities are preserved on the property. The property'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 for Pepperland Ranch furthers Policy 107.2.8. The project will provide enhancement and restoration of natural systems on the property. A conservation easement will be placed over the preservation areas. Long-term management (*e.g.*, exotic vegetation removal, trash/refuse removal, signage, etc.) of the preservation areas will be in accordance with Lee County-approved plans and the conservation easement. Long-term management of the conservation areas will occur in perpetuity.

> ***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 for the Pepperland Ranch will preserve, enhance and restore native plant communities. Invasive exotic plants will be removed from the property and controlled in perpetuity. The restoration strategy for the Pepperland Ranch property 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 for Pepperland Ranch is consistent with Policy 107.2.10. When the Pepperland Ranch project is complete, the restored and preservation areas will protect and enhance the natural character of the adjacent aquatic and nature preserves (i.e., the Corkscrew Regional Mitigation Bank and Panther Island Mitigation Bank).

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 for Pepperland Ranch will comply with Policy 107.2.11. No invasive exotic plants will be planted on the property.

POLICY 107.2.13: *Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning.*

The restoration strategy for Pepperland Ranch furthers Policy 107.2.13 by means of the proposed limited 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 for Pepperland Ranch furthers Policy 107.2.14. Exotic plant species will be removed and managed in perpetuity. No invasive exotic plants will be planted on the property.

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 for Pepperland Ranch 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, and preserved on the property as part of the restoration strategy. The restoration strategy for the Pepperland Ranch property will assist wetland and upland systems in functioning in a more natural way in order to closely mimic historic natural conditions.

The restoration strategy for Pepperland Ranch will restore primary and secondary panther habitat. The restored panther habitat 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 Pepperland Ranch restoration strategy's habitat restoration activities. Also, preservation areas on the Pepperland Ranch property 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 of the property and Corkscrew Regional Mitigation Bank to the east of the property). These wildlife corridors can be extended to the south of the property as opportunity arises.

> ***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 for the Pepperland Ranch property is consistent with Objective 107.4 and all included policies. Listed species (*i.e.*, endangered, threatened,

and species of special concern) surveys were conducted by experienced ecologists as a part of the Pepperland Ranch project planning process. All known listed species on the property, 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. Additions to the Pepperland Ranch project's known list of listed species observations, or potential, will be reported immediately. Ultimately, the Pepperland Ranch 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.*

One bald eagle was observed flying over the property. No nests were observed during the wildlife surveys and none are anticipated to occur on the property. Ultimately, the Pepperland Ranch 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 signs (*i.e.*, burrows, scat, tracks, etc.) have been observed on the Pepperland Ranch property. In the event that gopher tortoises are found on the property, 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 signs (*i.e.*, nest cavities, forage trees, calls, etc.) have been observed on the Pepperland Ranch property 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 for the Pepperland Ranch is in full accordance with Objective 107.10 and all included Policies. The Pepperland Ranch 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 Pepperland Ranch 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 for the Pepperland Ranch is in full accordance with Objective 107.11 and all included Policies. The Pepperland Ranch 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 Pepperland Ranch project's restoration/preservation plans will significantly enhance onsite habitats for the Florida panther and black bear. The restoration/preservation plans for the Pepperland Ranch property will greatly benefit not only the Florida panther, but also panther prey species and the black bear. Also, the Pepperland Ranch project's preservation areas will provide additional wildlife corridors and significantly improve existing wildlife corridors by linking to the neighboring preserved systems when

opportunity arises (*i.e.*, Airport Mitigation Lands and Corkscrew Regional Mitigation Bank to the north and the Panther Island Mitigation Bank to the south).

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 housing in the future in a variety of types, costs, and locations to meet the needs of the Lee County population. The Objective provides that Lee County will need nearly 115,000 additional dwelling units, nearly 40,000 of these units will be needed in unincorporated Lee County. The proposed amendment helps, in part, to fulfill this identified housing need. The proposed plan amendment for Pepperland Ranch 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 plan amendment for Pepperland Ranch furthers this policy by incorporating a restoration strategy that permits the restoration of the property incentivized by clustered development. The Pepperland Ranch 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 restoration strategy for Pepperland Ranch is compatible with the existing residential neighborhoods adjacent to the subject property such as the Six L's residential neighborhoods. The restoration strategy will improve the area's existing character. The restoration strategy will also 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 for the property is clustered interior to the property with substantial setbacks from adjacent uses. The restoration strategy will permanently preserve a large portion of the property as open space, containing restored flowways and wildlife habitat, all of which will maximize aesthetic qualities of the property. The restoration strategy for Pepperland Ranch is consistent and furthers these provisions of the Lee Plan.

CONCLUSIONS

The plan amendment is consistent with and in furtherance of the intent of the Lee Plan as discussed in this analysis. The plan amendment for Pepperland Ranch represents an opportunity to incentivize the restoration of significant on-site natural resources such as flowways and wildlife habitats on the Pepperland Ranch property. The restoration strategy for the Pepperland Ranch property furthers Lee County's goal of restoration of Tier 1 properties. The plan amendment for the Pepperland Ranch is also consistent with protecting the public potable wells adjacent to the property.

Pepperland Ranch
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
3. Adjacent Local Governments & Their Comprehensive Plans

The plan amendment for Pepperland Ranch will have no affect on existing adjacent local governments and their comprehensive plans. The closest local government to the subject property is The Village of Estero. The restoration strategy for the Pepperland Ranch will improve surface and groundwater levels and water quality, and will permanently eliminate the use of the property as a fill mining operation with associated blasting and truck traffic. The elimination of potential uses of the property for the fill mine will be a benefit to Lee County and adjacent local governments, including The Village of Estero. The Pepperland Ranch restoration strategy will mitigate its traffic impacts on Corkscrew Road by paying impact fees or proportionate share payments.

Pepperland Ranch
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
4. State Policy Plan & Regional Policy Plan Discussion

State Comprehensive Plan

The plan amendment for Pepperland Ranch 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 Pepperland Ranch project will increase the availability of moderate income housing in this rural portion of Lee County. The plan amendment includes assuring environmental quality through significant onsite preservation and restoration of land including the restoration of flowways. The plan amendment seeks to incentivize these preservation and restoration activities with appropriately placed residential development to offset the cost of preservation and restoration of the property.

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 Pepperland Ranch project will promote a healthy lifestyle. Pepperland Ranch residents will experience clean air and will have potable water provided by Lee County Utilities. The plan amendment includes recreational amenities such as tennis courts, bocce and pickle courts, fitness center, a pool, and a play ground. Sidewalks will be provided throughout the Pepperland Ranch project. 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, dated February 29, 2016 that provides that the proposed development does not affect their ability to provide core services. The Sheriff's Office letter states that law enforcement services will be provided from their South District office. This letter also provides that the applicant provide a Crime Prevention Through Environmental Design (CPTED) report at the time of application for a development order.

Estero Fire Rescue has reviewed the request and provided a review letter dated March 1, 2016. This letter provides that Estero Fire Rescue is capable of providing fire suppression services as well as non-transport Advanced Life Support medical services from Fire Station 44 located at 21300 Fire House Lane Estero Florida. In addition, a new Estero Fire District fire station is being planned in close proximity to the subject site. The review letter provides that the timeframe for the new station is approximately 3-5 years. The new fire station will be located on the north side of Corkscrew Road directly opposite from the northeast corner of the Pepperland Ranch property. In addition, a new water main along Corkscrew Road will allow for fire protection to the existing and future residents and properties along Corkscrew Road.

Pepperland Ranch's on-site storm water management system has the potential of minimizing the existing Corkscrew Road flooding. Reconstruction of historical on-site

surface water flow and restoration of flowways on the Pepperland Ranch property has the potential to redirect sheet flow away from existing residential neighborhoods.

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 Pepperland Ranch project better protects the adjacent public water sources when compared to the ongoing agricultural and farming activities on the property. The restoration strategy for Pepperland Ranch includes creating a water regime on the property that more closely mimics the historic hydrology. The restoration strategy includes significant preservation and restoration activities that will protect the function of the water recharge areas on the property. The restoration strategy uses a green infrastructure strategy to incorporate restored flowways in the design of the project. The restoration strategy is compatible with the existing potable wellfield and conservation land uses in the vicinity of the Pepperland Ranch property. Substantial setbacks as specified in the plan amendment will be incorporated in the design of the Pepperland Ranch project. The restoration strategy for Pepperland Ranch will protect surface and groundwater quality and quantity.

The restoration strategy for Pepperland Ranch will potentially enhance hydrology to thousands of acres of existing public conservation lands. These conservation lands are located north, south and east of the Pepperland Ranch property. The Pepperland Ranch

project will utilize less surficial aquifer water than the ongoing agricultural and farming use of the property.

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 Pepperland Ranch will preserve all of the remaining forested areas of the property with no wetland impacts. The restoration strategy will permanently preserve and restore wildlife habitat for endangered and threatened species such as the Florida panther. The restoration strategy will restore ecological functions of the onsite wetland systems and will restore several flowways. The Pepperland Ranch 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 Pepperland Ranch project has been reviewed by the Lee County Solid Waste Division and they have provided a review letter dated February 29, 2016. This letter provides that Lee County Solid Waste Division is capable of providing solid waste collection service for the Pepperland Ranch project.

187.201(14) Property Rights

> *Goal. - Florida shall protect private property rights and recognize the existence of legitimate and often competing public and private interests in land use regulations and other government action.*
>
> *Policies. -*
>
> *1. Provide compensation, or other appropriate relief as provided by law, to a landowner for any governmental action that is determined to be an unreasonable exercise of the state's police power so as to constitute a taking.*
>
> *2. Determine compensation or other relief by judicial proceeding rather than by administrative proceeding.*
>
> *3. Encourage acquisition of lands by state or local government in cases where regulation will severely limit practical use of real property.*

The proposed restoration strategy and associated comprehensive plan amendment represents a balancing of public and private interests concerning the use of the Pepperland Ranch property. The restoration strategy will result in significant restoration of the Pepperland Ranch property at no cost to the public.

187.201(15) Land Use

> *Goal. - In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally acceptable manner.*
>
> *Policies. -*
>
> *1. Promote state programs, investments, and development and redevelopment activities which encourage efficient development and occur in areas which will have the capacity to service new population and commerce.*
>
> *2 Develop a system of incentives and disincentives which encourages a separation of urban and rural land uses while protecting water supplies, resource development, and fish and wildlife habitats.*

There are or will be adequate services available to the Pepperland Ranch property 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 Pepperland Ranch project. The Pepperland Ranch project will pay all required permit and impact fees, as well as all utility connection fees. A new water main along Corkscrew Road will provide fire protection to the existing and future residents and properties, including the Pepperland Ranch project. Sanitary sewer service will be provided to the Pepperland Ranch property. The plan amendment for Pepperland Ranch 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 plan amendment provides for mitigation of Pepperland Ranch transportation impacts so that 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 plan amendment and restoration strategy for the Pepperland Ranch promotes the business climate in Lee County, providing new employment opportunities in an environmentally responsible manner.

Conclusion

The proposed plan amendment for Pepperland Ranch is consistent with and generally furthers the State Comprehensive Plan. The Construction Industry is well established in the community and the restoration strategy for the Pepperland Ranch assures that the property will be compatible 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 of the Strategic Regional Policy Plan 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 plan amendment and restoration strategy for Pepperland Ranch will increase employment opportunities in the housing construction industry which is an important component of the local employment sector. The plan amendment will also result in significant environmental restoration of the property, which will result employment opportunities during the restoration phase and monitoring phase of the project. This portion of the regional 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 plan amendment meets or exceeds all environmental requirements. The applicant is hopeful that this proposal will be expedited avoiding delays.

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 Pepperland Ranch property is identified by the Lee Plan as being a Tier 1 Priority Restoration property. The plan amendment and restoration strategy for Pepperland Ranch will protect onsite natural systems as well as recreating natural systems such as flowways that have been negatively impacted by years of agricultural and farming activities. The restoration strategy for the Pepperland Ranch project will be done without the need for public acquisition. The restoration strategy for the Pepperland Ranch project will enhance the hydrology of the property.

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 plan amendment and restoration strategy for Pepperland Ranch will result in the long term sustainability of the onsite natural resources as well as nearby conservation lands and public wellfields. Wildlife habitat will also be improved and maximized by the restoration strategy for the Pepperland Ranch property.

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 restoration strategy for Pepperland Ranch will maintain and enhance habitat conditions for the Florida 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 plan amendment for Pepperland Ranch will mitigate transportation impacts to Corkscrew Road to help assure that residents of the Pepperland Ranch project and other area residents have timely and efficient access to services, jobs, markets and attractions.

Conclusion

The plan amendment and restoration strategy for Pepperland Ranch is consistent with and generally furthers the Strategic Regional Policy Plan.

Pepperland Ranch
Part IV. Amendment Support Documentation
F. Additional Requirements
2. Requests moving lands from a Non-Urban Area to a Future Urban Area

The plan amendment for Pepperland Ranch maintains the property's DR/GR Future Land Use Map designation. The plan amendment requests that the Pepperland Ranch property be placed in the Environmental Enhancement and Preservation Communities Overlay and be depicted as being located in this Overlay on Lee Plan Map 17. The plan amendment protects and conserves the natural resources located on the property. The restoration strategy for the Pepperland Ranch property includes creating a water regime on the property that more closely mimics the historic hydrology. The restoration strategy includes significant preservation and restoration activities that protect the function of the water recharge areas on the property. Restoration details will be provided in the zoning and development order processes. The restoration strategy uses a green infrastructure concept to incorporate restored flowways in the design of the project. The restoration strategy is compatible with the existing potable well field and conservation land uses in the vicinity of the Pepperland Ranch property. Substantial setbacks are incorporated in the design of the Pepperland Ranch project. The design of the Pepperland Ranch project will protect surface and groundwater quality and quantity. A minimum of 60% of the Pepperland Ranch property will be protected as permanent open space as required by Lee Plan Policy 33.3.4. The Pepperland Ranch project will demonstrate consistency with the requirements of the Environmental Enhancement and Preservation Communities Overlay through the Planned Development rezoning process.

The Pepperland Ranch project will pay the costs associated with providing utilities to the property. The Pepperland Ranch project will build out over several years and will pay all impact fees as well as other fees such as connection fees. The plan amendment for Pepperland Ranch represents an opportunity to incentivize the restoration and preservation of this priority restoration site with appropriately placed residential development to offset the cost of restoration and preservation of the property.

Hydrogeologic and Water Resources Report, Pepperland Ranch, Lee County, Florida



BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

MARCH 2016

Water Science Associates

13620 Metropolis Avenue, Suite 110
Fort Myers, Florida 33912
O 239.204.5300 - F 866.398.2426
www.waterscienceassociates.com

Hydrogeologic and Water Resources Report, Pepperland Ranch, Lee County, Florida



BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

Water Science *Associates*

MARCH 2016

W. Kirk Martin, P.G. 0079
Principal Scientist

Brian K. Barnes
Principal Scientist

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

INTRODUCTION 3

GROUNDWATER RESOURCES 8

SURFACE WATER RESOURCES 12

WATER DEMANDS 14

IRRIGATION IMPACT ASSESSMENT 16

WELLHEAD PROTECTION 22

CONCLUSIONS 26

FIGURES

Figure 1. Location of the Pepperland Ranch Project
Figure 2. Map Showing Existing Conditions and Wells at Pepperland Ranch Project
Figure 3. Aquifer System Underlying Lee County (Lee County Integrated Water Masterplan)
Figure 4. Conceptual Site Plan
Figure 5. Typical Stormwater Management Lake
Figure 6. Location of Nearby LCDNR Monitoring Wells
Figure 7. Inferred Groundwater Elevations During Typical Wet Season
Figure 8. Inferred Groundwater Elevations During Typical Dry Season
Figure 9. Hydrograph of LCDNR Well 49-GW5
Figure 10. Hydrograph of LCDNR Well 49-GW6
Figure 11. Hydrograph of LCDNR Well 49-GW7
Figure 12. Hydrograph of LCDNR Well 49-GW25
Figure 13. Excerpt of Lee County Wellfield Protection Zone Map WHP Ordinance
Figure 14. Map Showing Wellfield Protection Zones on Pepperland Ranch Project

TABLES

Table 1. Summary of Permitted Allocations for Permit 36-00883-W
Table 2. Summary of Well Details (December 15, 2015)
Table 3. Groundwater Elevation Measured on December 15, 2015
Table 4. Summary of Allocations
Table 5. Summary of Preliminary Modeling Results

SECTION A

EXECUTIVE SUMMARY

The proposed Pepperland Ranch development is located in Lee County, Florida, approximately eight miles east of Interstate 75, on the south side of Corkscrew Road, within Section 30, Township 46 South, Range 27 East. The Pepperland Ranch site lies within the Estero Bay Watershed and has historically been used for agriculture. The Pepperland Ranch property is currently zoned as a fill dirt mine under Industrial Planned Development (IPD) resolution Z-89-081A. This proposed residential project would remove the potential of future fill mining at the project site. In addition, a significant portion of the project will include restoration areas to improve surface water flow, groundwater levels, groundwater recharge, and wildlife habitat.

The Pepperland Ranch project is a proposed 700-unit residential development comprising approximately 637.5 acres. The project will include approximately 60% of the property in preserves, flowways, and protected areas. The development footprint will comprise approximately 274 acres. The project will include a perimeter lake and internal amenity lakes and will be comprised of residential tracts, water management lakes, restored flow-ways and wetland preserves, and common areas associated with the residential development. The stormwater management system will be designed to aid in accommodating future stormwater from north of Corkscrew Road and directing the water to the southeastern portion of the Pepperland Ranch property. The stormwater system will ultimately be directed to the Corkscrew Regional Ecosystem Watershed (CREW) lands thereby restoring an important watershed connection.

The project site has been used for crop production and pasture since the 1960's. The earliest water use permit (WUP No. 36-00883-W) for this property was issued by the South Florida Water Management District (SFWMD) for the irrigation of 540 acres of citrus in 1988. The project is currently allocated for about 1.2 million gallons per day (MGD) on an annual average basis and 3.5 MGD on a maximum monthly basis from the Water Table Aquifer. Projected irrigation water demands assuming 45% irrigation of developable areas are 147.4 million gallons on an annual average basis (or 0.4 MGD) and 19.8 million gallons (or 0.6 MGD) on a maximum monthly basis.

Projected irrigation water demands for the project are significantly lower than the historic agricultural use and proposed irrigation supplies will be developed from a combination of stormwater harvesting of the project stormwater management system with supplements from groundwater from the Water Table Aquifer.

Portions of the project lie within Lee County's Wellfield Protection Ordinance (Ordinance No. 07-35) for the Water Table Aquifer. The proposed project will meet all provisions and restrictions outlined in the Wellfield Protection Ordinance.

The project lies within Lee County's Density Reduction Groundwater Recharge (DRGR) land use designation which requires that proposed projects maintain surface and groundwater levels at their historic levels. The project will result in significantly less water use than agricultural operations that have been ongoing since the 1960's. Further, the stormwater management system and flowways will be designed to aid in improving the ecology of the

former farm fields and to provide connection of regional water flows from north of the project to CREW lands to the south.

Policy 1.4.5 of the Lee Plan requires new land uses in the DRGR: "*to 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.*"

Policy 2.4.3 requires in part, that applicants for land use changes within the DRGR: "*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 ...; and, 3. present data and analysis that the proposed land uses will not cause any significant harm to present and future public water resources;.....*"

In addition to the above Goals and Policies, Goals 115 (Water Quality and Wastewater) and 117 (Water Resources) of the Lee Plan address requirements, policies, and objectives for new developments to achieve during Comprehensive Plan Amendments. Specific to water resource management and potential water use associated with the project, Goal 115 requires facilities "*To ensure that water quality is maintained or improved for the protection of the environment and people of Lee County.*" Objective 115.1 requires facilities under Comprehensive Plan Amendment to "*Maintain high water quality, meeting or exceeding state and federal water quality standards.*"

Goal 117 requires developments "*To conserve, manage, and protect the natural hydrologic system of Lee County to insure continued water resource availability. (Amended by Ordinance No. 94-30).*" Objective 117.1 requires facilities to "*Insure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.*"

The above goals, policies and objectives are relevant to this project as they require a developer to consider water resources, water use, water supply, and water quality issues that the development must address for approval. The applicant has carefully considered these requirements in their project design resulting in a project that meets the criteria of the Lee Plan for water supply, water management, water levels, and water quality. The sections below provide the analysis and assessment to address Lee Plan Goals, Policies, and Objectives.

SECTION B

INTRODUCTION

Project Overview

The proposed Pepperland Ranch development is located in Lee County, Florida, approximately eight miles east of Interstate 75, on the south side of Corkscrew Road, within Section 30, Township 46 South, Range 27 East. The Pepperland Ranch site lies within the Estero Bay Watershed and has historically been used for agriculture. The Pepperland Ranch project is an approximately 637.5 acre proposed residential development. The Pepperland Ranch site is currently in active agricultural production but was rezoned in 1990 from AG-2 (agricultural use) to Industrial Planned Development (IPD) for the purpose of surface mining of fill material and currently maintains this zoning designation. The approved IPD, was known as Corkscrew Lakes IPD, included the removal of the surficial material to a depth of up to 20 feet from approximately 228 acres of site.



Figure 1. Location of the Pepperland Ranch Project

The project site is bordered to the north by agricultural lands that are approved for residential development as the Corkscrew Ranch project and by two small parcels containing public water supply wells owned by Lee County which are part of the Lee County Utilities Corkscrew Wellfield. The site is bordered to the east by a citrus grove. The site is bordered to the south by a citrus grove to the southwest and by several single family residential properties along the

southeast boundary. The site is bordered to the west by residential properties and two parcels currently operating horticulture businesses.

The project is located immediately south of a portion of the Lee County Utilities Corkscrew Wellfield and a portion of the project falls within wellfield protection zones of that wellfield, established by Lee County Ordinance #07-35.

Past Land Use and Water Use

The Pepperland Ranch project occupies an entire section of land, the majority of which is currently being used for agricultural production (refer to Figure 2). The project site has been used for crop production and pasture at least since 1970. Review of historical aerial photography suggests that active agricultural activity began during the 1960's. The earliest water use permit (WUP No. (36-00883-W) for this property was issued by the South Florida Water Management District for irrigation of 540 acres of citrus in 1988. When the permit was issued, the land was being used as pasture but was planned to be converted to citrus production. At that time there were 7 existing Water Table Aquifer wells which were reportedly not in use. Conversion from improved pasture to citrus was never implemented; however, in 1994, the permit was modified to include an additional 5 Water Table Aquifer wells to be used for irrigation of 350 acres of tomatoes. This permit modification included 2 additional proposed wells to utilize the Lower Tamiami aquifer.

Historic water use allocations at the site ranged between about 0.7 and 9.7 MGD. The current water use permit allocates 3.5 MGD on a maximum monthly basis and 1.2 MGD on an average annual basis. Table 1 below summarizes permitted water allocations since 1988.

Table 1. Summary of Permitted Allocations for Permit No. 36-00883-W.

Allocation	Application Number 02048-F	Application Number 931008-7	Application Number 100902-23	
Project Name	Limited 3 Grove	Harvey Brothers Corkscrew Farm	RLF Corkscrew Potato	RLF Corkscrew Potato
Final Action Date	08/09/88	02/10/94	09/30/14	09/30/2014
Total Irrigated Acreage	520	350	482	482
Crop Type	Citrus	Tomatoes	Potatoes	Potatoes
Notes	NA	NA	Temporary 1-year increased allocation expired 10/31/2014	After 10/31/2014
No. of Existing Wells	7	13	13	13
Maximum Monthly (MGM)	88.16 MG	94.3	300.33	109.66
Maximum Monthly (MGD)	2.8	3.0	9.7	3.5
Annual Average (MGY)	239.2 MG	489 MG	1396.31	421.38
Annual Average (MGD)	0.66	1.3	3.8	1.2

On December 15, 2015, Water Science Associates inspected the Pepperland Ranch site and observed the current status of existing wells. Water samples were obtained from selected wells and water levels and total depths were measured from accessible wells. Table 2 below shows a summary of well details.

Table 2. Summary of Well Details (December 15, 2015)

Well Name	Status	Observed Pumping Rate (gpm)	Dissolved Chlorides (mg/l)	Casing Diameter (inches)	Measured Total Depth (ft. btoc**)	Permitted Casing Depth (ft. bls***)	Permitted Total Depth (ft. bls)
30-1	Pumping	950 gpm	27	8	NM	23	32
30-2	Offline, Disconnected	NM*	No Sample	8	NM	20	30
30-3	Offline, Disconnected	NM	33	8	41.4	25	42
30-4	Pumping	720 gpm	27	8	NM	25	40
30-5	Pumping	650 gpm	33	8	NM	25	60
30-6	Not Pumping, Connected	NM	No Sample	8	NM	25	60
30-7	Offline, Disconnected	NM	27	8	77.15	25	50
30-8	Offline, Disconnected	NM	24	8	32.2	30	55
30-9	Offline, Disconnected	NM	No Sample	8	NM	30	60
30-10	Offline, Disconnected	NM	82	8	33.52	25	40
30-11	Not Pumping, Connected	NM	No Sample	8	NM	30	50
30-12	Pumping	1500 gpm	27	12	NM	54	100
30-13W	Pumping	1200 gpm	27	12	NM	52	98

***NM - Not Measured, **btoc - Below Top of Casing, ***bls - below land surface**

Review of data indicates that dissolved chloride concentrations (an indicator of salinity) range between 24 and 82 mg/l, which is fresh. Further, water levels were measured from accessible wells (Wells 30-3, 30-7, 30-8, and 30-10) and the top of casings were subsequently surveyed to NAVD88. Table 3 below summarizes onsite water elevations which range between about 21.6 and 23.5 feet NAVD. Note that active agricultural activities result in control of groundwater elevations during the growing seasons. Numerous wells were pumping when water levels were obtained in mid-December 2015.

Table 3. Groundwater Elevations Measured on December 15, 2015

Well Name	Depth to Water on 12/15/15 (ft. btoc)	Top of Casing Elevation (ft. NAVD)	Groundwater Elevation on 12/15/15 (ft. NAVD)
30-3	2.31	25.81	23.50
30-7	5.09	26.70	21.61
30-8	6.82	27.49	20.67
30-10	3.02	25.75	22.73

Agricultural practices in Southwest Florida rely on significant manipulation of groundwater levels onsite during active cultivation. Water levels are typically controlled by well and canal pumping into onsite reservoirs to maintain water levels generally between about 1 and 2 feet below the root zone of crops. Water pumped from the fields is directed to a reservoir located at the northeastern portion of the site to reduce water levels while preparing fields for crop production. The proposed residential development will eliminate the water level manipulation that is necessary for agricultural production.



Figure 2. Map Showing Existing Conditions and Wells at the Pepperland Ranch Project.

SECTION C

GROUNDWATER RESOURCES

Introduction

The hydrostratigraphy underlying the Pepperland Ranch project is typical for southern Lee County with a series of aquifers and confining beds occupying the Surficial, Intermediate, and Floridan Aquifer Systems. Figure 3 provides a schematic showing the groundwater sources in Lee County. In general, freshwater sources are the Water Table and the Lower Tamiami Aquifers of the Surficial Aquifer System. The underlying Sandstone and Mid-Hawthorn Aquifers of the Intermediate Aquifer System are fresh to moderately brackish. Highly brackish and saline water sources include the Lower Hawthorn Aquifer and underlying zones of the Upper Floridan Aquifer.

Four primary aquifers are of significance beneath the Pepperland Ranch site and are described below in order of increasing depth. These are the Water Table, the Sandstone, the Mid-Hawthorn, and the Lower Hawthorn Aquifers. The Lower Tamiami aquifer is unconfined at this location and therefore considered a part of the Water Table aquifer. The primary sources of information used to characterize the groundwater resources include information from Lee County, South Florida Water Management District, the U. S. Geological Society, and onsite borings.

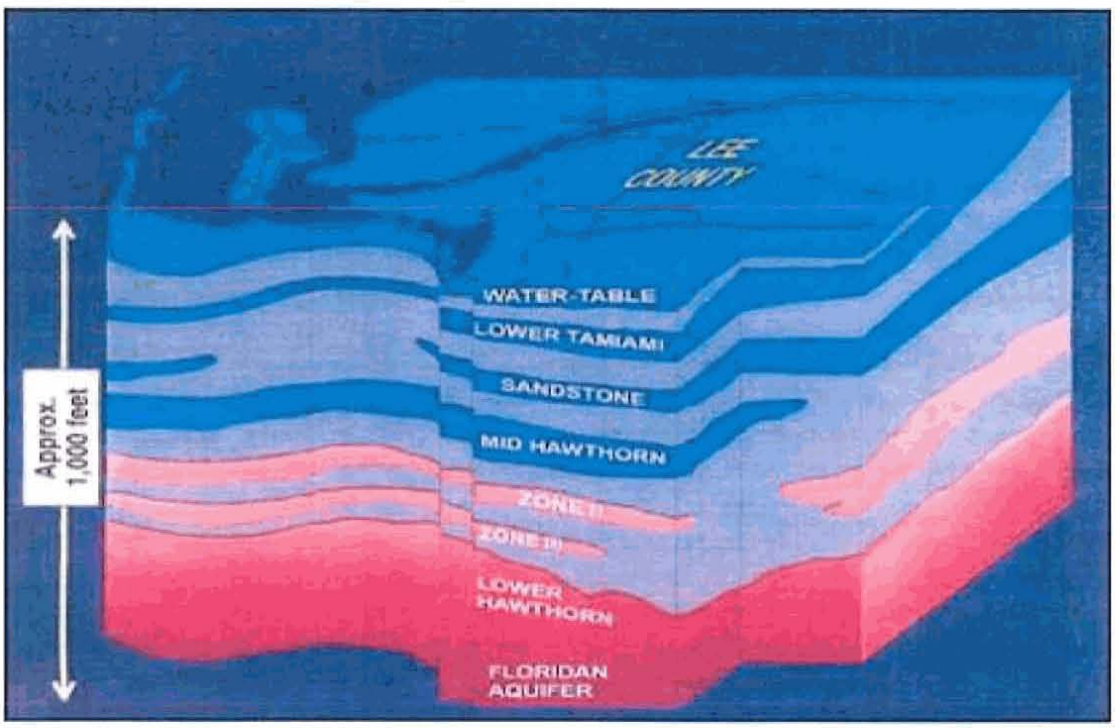


Figure 3. Aquifer System Underlying Lee County (Lee County Integrated Water Masterplan)

Water Table Aquifer

The Water Table Aquifer is an unconfined aquifer that covers all of Lee County. The aquifer is defined as occurring at or near land surface downward to the top of the first regional confining bed. Beneath the Pepperland Ranch project site, the aquifer occurs within an upper section of unconsolidated sand and shells and an underlying lower section of limestone.

The upper unconsolidated portion of the Water Table Aquifer consists of a layer of fine sand with an average thickness of about 20 feet overlying a shell hash layer with an average thickness of about 3 feet. The sand is described as fine silica sand with variable amounts of silt ranging from brown to gray in color. The shell layer has been described as unconsolidated coarse shell and silty fine sand that varies in color from gray to white. These sand and shell units are identified as being part of the Pleistocene age Fort Thompson Formation. Based on soil borings, the top of the underlying limestone occurs at an average depth of about 22 feet bls. The depth to the base of the limestone ranges from between 60 to 80 feet bls with and the unit has an average thickness of about 40 feet. The limestone has been described as ranging from white to brown to gray in color, very hard to very soft, sandy and fossiliferous, with occasional thin beds of coralline limestone and frequent zones of high permeability where loss of drilling fluid circulation occurred. The limestone present within the lower portion of the Water Table Aquifer includes the Pinecrest and Ochopee Members of the Pliocene age Tamiami Formation. The Water Table Aquifer is underlain by low permeability marls and clays with an estimated thickness of about 70 feet at this site. The confining unit below the Water Table Aquifer consists of the Buckingham Marl Member of the Tamiami Formation underlain by the Cape Coral Clay Member of the Peace River Formation.

The limestone portion of the Water Table Aquifer typically has a moderate to high permeability making the aquifer suitable for medium to large capacity water production wells. The aquifer is used for municipal supply, domestic self-supply and irrigation of agricultural and landscaping foliage. Use of the aquifer is typically limited by the potential for impacts to natural wetland areas from drawdown in the aquifer water level. The aquifer is recharged directly by rainfall with discharges occurring by way of natural or man-made surface drainage features, evaporation and transpiration, and by withdrawal from wells. Groundwater flow and levels in the aquifer fluctuate seasonally in response to climatic conditions but are also impacted by local and regional drainage features. Water quality in the aquifer is generally very good and is sufficient for both potable water and irrigation water needs; however, high concentrations of naturally occurring iron and organic material are sometimes reported.

The Water Table Aquifer is used in the area of the project site for public water supply by Lee County Utilities, for agricultural irrigation, for livestock, and by private residences for domestic self-supply. The project site is located immediately south of a portion of the Lee County Corkscrew wellfield which includes several public water supply wells that tap into the limestone portion of the Surficial Aquifer System and the Sandstone Aquifer. To prevent potential interference with these public water supply wells, the Pepperland Ranch project proposes to significantly reduce the use of groundwater from the Water Table Aquifer below that amount currently used for irrigation of crops. In addition, the Pepperland Ranch project will abide by all of the provisions of the current Lee County Wellhead Protection Ordinance. The project will include an improved surface water management system that will provide for enhanced water levels in the Water Table Aquifer and will increase overall groundwater

recharge to the underlying limestones of the Tamiami Formation in the vicinity of the project site.

Sandstone Aquifer

The Sandstone Aquifer is the uppermost aquifer in the Intermediate Aquifer System and consists of unconsolidated sands and poorly consolidated sandstones within the Lehigh Acres Sandstone Member of the Peace River Formation. Based on the total depths of public water supply wells located along the northern margin of the property, the top of the Sandstone Aquifer occurs at about 150 feet bls and extends to a depth of about 200 feet bls. The Sandstone Aquifer is considered a freshwater source although there are large areas, especially in the southwestern portions of Lee County and areas near and parallel to the Caloosahatchee River where there are elevated salinity levels which may limit the usefulness of the aquifer for public supply. Salinities however, are generally low enough for general irrigation supply. Productivity of the aquifer is moderate to low but it does provide large quantities of water for public water supply by Lee County Utilities, for domestic self-supply in eastern Lee County and for agricultural irrigation in eastern Lee and western Hendry Counties. The aquifer is recharged where overlying confining beds are thin or absent in Hendry and Glades County or where there is large use of the aquifer that induces increased recharge directly from the Water Table Aquifer through the overlying confining beds. Discharge from the aquifer generally occurs as pumpage from wells. Large fluctuations in seasonal water levels are common due to the heavy use of the aquifer with wet season levels near their historic highs but dry season water levels often at depths of 50 feet or more. For this reason, the aquifer is considered a source of limited availability although opportunities for seasonal use and storage may be considered.

Mid Hawthorn Aquifer

The Mid Hawthorn Aquifer is the lowermost aquifer in the Intermediate Aquifer System in Lee County. Where present, the aquifer consists of moderately permeable limestones of the Arcadia Formation and is separated from the overlying Sandstone Aquifer and underlying Lower Hawthorn Aquifer by thick clay confining beds of the Peace River and Arcadia Formations. Based upon reports by the USGS and Florida Geological Survey, there is little viable yield from the limestones of the upper part of the Arcadia Formation in this part of Lee County. Test drilling has indicated that the limestone section is marly and that the aquifer is not present in the vicinity of the Pepperland Ranch project site. At the Corkscrew Water Treatment Plant, located about 3 miles northeast of the project site, Lee County uses a permeable portion of the Mid Hawthorn Aquifer for aquifer storage and recovery (ASR) to store seasonally available water in wet summer months to meet peak season demands in dryer winter and spring periods.

Where present, the Mid Hawthorn Aquifer is a generally a lower yield, discontinuous water bearing unit that has utility as a limited supply resource or for seasonal storage in an ASR system. The aquifer is recharged north of Lee County where the aquifer is much closer to land surface and is upper confining layers are thin or absent. Much of the Mid-Hawthorn Aquifer is fresh in northwestern and central Lee County but salinities increase southward with chloride concentrations in excess of 1000 mg/l in southwest areas of the County. The unit is mostly absent in the easternmost portion of Lee County

Lower Hawthorn Aquifer

The Lower Hawthorn Aquifer is the uppermost water bearing unit in the Upper Floridan Aquifer System. The aquifer has good yield potential but contains brackish water that is only useful for irrigation if blended with other freshwater resources and is only useful for public water supply using reverse osmosis or other desalination technologies. Dissolved chlorides in the Lower Hawthorn at the project site are estimated to be between 1000 and 1500 milligrams per liter. The top of this aquifer is anticipated to be encountered at depths between 500 and 600 feet below grade at the Pepperland Ranch site. The aquifer is separated from the overlying Mid Hawthorn Aquifer (if present) by the Lower Hawthorn Confining Zone which consists of marine silts and clays of low permeability.

The aquifer is recharged in the central Florida highlands area between Tampa and Orlando. In general, the South Florida Water Management District supports increased use of the Lower Hawthorn/Upper Floridan aquifer especially for public water supply use. The Pepperland Ranch project proposes no use of the Lower Hawthorn Aquifer.

SECTION D
SURFACE WATER RESOURCES

Onsite Lakes

The development will include stormwater management lakes to provide flood control and water quality treatment of runoff (refer to Figure 4 for a conceptual site plan). A number of design and control features are planned for the Pepperland Ranch project to protect and enhance the quality of water in the lakes and adjacent watersheds and provide for ecological and hydrological improvements on the project site. These elements include collection, treatment, and conveyance of stormwater within the project water management system and the construction of a flowway system to direct water flows from north of the project site to the southeast for ultimate discharge to Corkscrew Regional Ecosystem Watershed (CREW) lands. The flowway system will include grading to provide wetland habitats within freshwater marshes that will be created within the flowway. The project's stormwater system will meet or exceed the standards for quality and quantity treatment of stormwater as outlined and

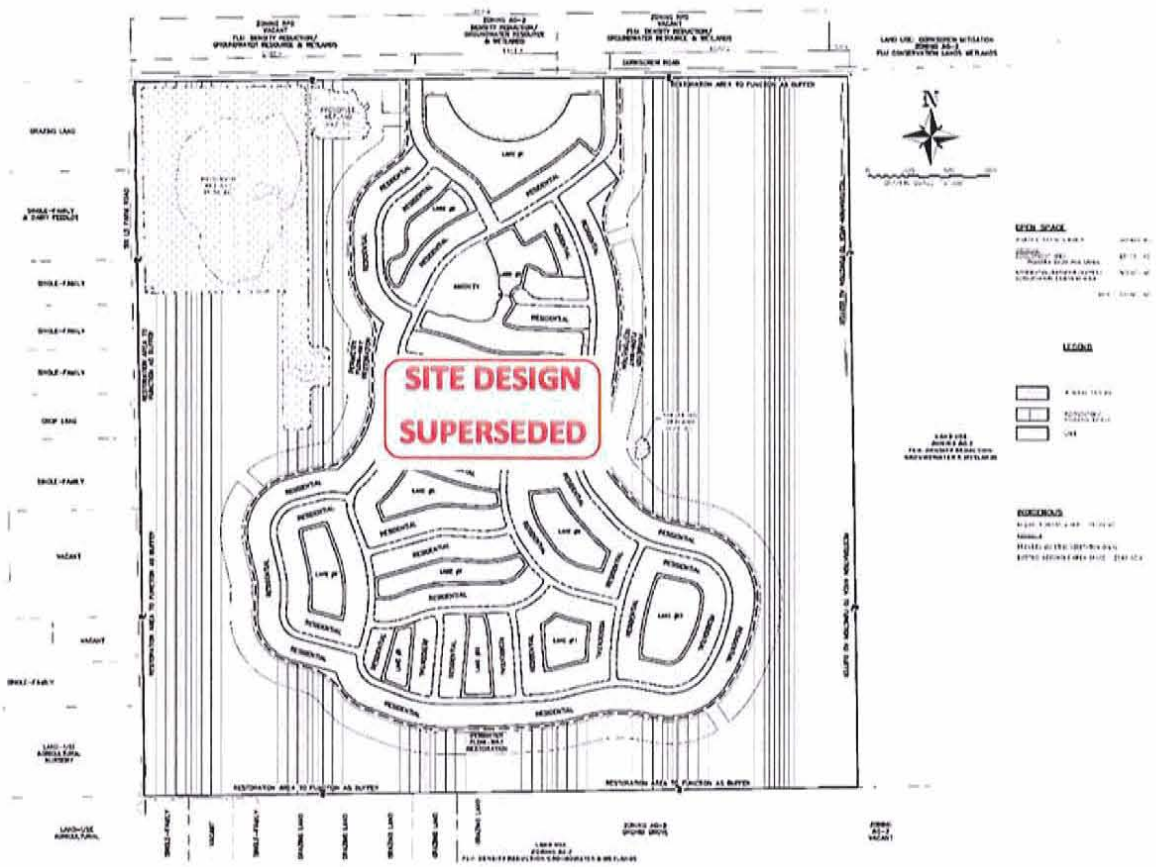


Figure 4. Conceptual Site Plan

regulated by SFWMD and Lee County. After treatment, stormwater will be directed to the restoration areas to help improve the onsite hydrology. Additional polishing of the runoff water quality and nutrient uptake will occur in the large restoration areas further reducing downstream nutrient loading.

The existing surface drainage system of the Pepperland Ranch project is comprised of active farm furrows and internal swales which route water to the crops. The water table is manipulated during farming operations to maintain optimum moisture to crop roots. The farm has a perimeter berm and ditch and large water storage areas in the northeast and northwest corners of the property. Water is pumped from the farm fields to these storage areas during the wet season when water levels within cultivated fields may need to be lowered to prepare fields for planting. The farm outfalls to the roadway ditch on 6L Road. This ditch discharges south and ultimately to CREW lands. The proposed system will discharge stormwater to the flowways and ultimately to CREW lands to the south.

The proposed Pepperland Ranch project will also provide for centralized control over the application of fertilizers and pesticides, and centralized control over the application of irrigation water. Centralized control of the application of fertilizers and operation of the irrigation system results in improved adherence to Best Management Practices and water use compliance than if individual homeowners have control of these functions or the ability to override irrigation programming. Application of fertilizers and pesticides will be controlled and managed by the homeowners' association and utilize only licensed contractors for turf maintenance. Similarly, the irrigation of residential lots and common areas will be centrally controlled to meet conditions of applicable water use permits, local ordinances, and periodic water use restrictions. Individual homeowners will not have the ability to override irrigation times or quantities or be allowed to apply lawn maintenance chemicals.

The stormwater management system will include the collection and detention of all stormwater generated on the site, and will provide stormwater treatment and conveyance within the development footprint that meet or exceed water quality requirements of the South Florida Water Management District and/or Lee County.



Figure 5. Stormwater Management Lake

SECTION E

WATER DEMANDS

Water demands at the project site will consist of in-house potable water and outside irrigation uses. Lee County Utilities will provide potable water and sanitary sewer service at the Pepperland Ranch project. Irrigation demands will be met with onsite sources including harvesting stormwater from the onsite stormwater lake system with partial re-supply by groundwater withdrawals. The lake withdrawals will provide an efficient and low impact method for tapping the Water Table Aquifer underlying the project site and effectively harvest available stormwater supplies. Lake volume storage will minimize potential impacts to surface and groundwater levels. The project has a long history of permitted agricultural withdrawals from the Water Table Aquifer that are considerably larger than the proposed irrigation demands for the Pepperland Ranch project.

Potable Water and Wastewater

Lee County Utilities will provide potable water and wastewater services to the project. This will eliminate the need for individual domestic self-supply wells and individual onsite sewage treatment and disposal systems (septic tanks) which are common for many rural areas of Lee County. Provision of central public utilities to the project will provide a number of desirable environmental and hydrological advantages. Supplying potable water to the project from the nearby Lee County Utilities Corkscrew Water Treatment Plant will remove a potentially competing water use from the freshwater aquifers and allow for improved control of area water resources. Similarly, provision of a central sewer system will eliminate septic tank discharges in the area providing a higher level of protection to the existing Lee County Utilities wellfields.

Projected potable water demands for the project were calculated based on 100 gallons per person per day (gpd), 2.5 persons per residence, and 700 residences planned for the project. These assumptions are below the per capita water use rate of 118 gallons per day (gpd) per person outlined in the "*Lee County Utilities Integrated Water Resources Master Plan Summary Report.*" However, the lower per capita demand is appropriate since the project is providing for a separate irrigation water source. Using these assumptions, potable water demand for the Pepperland Ranch project is projected to be approximately 175,000 gpd average daily flow with a 2.5 peak flow factor of 437,500 gpd. Discussions are ongoing with Lee County Utilities for availability and provision of potable water supply and wastewater service.

Irrigation Water

The project was historically permitted for Water Table Aquifer withdrawals for agricultural production. Water use permit WUP No. 36-00883-W was established in the late 1980's and was last modified in 2010. The current water use permit which is valid until 2018 allocates about 3.5 MGD on a maximum monthly basis and about 1.2 MGD on an average annual basis.

Projected irrigation water demands were calculated using the modified Blaney-Criddle calculation consistent with SFWMD permitting criteria. The project will have about 274 acres of developable area that will include lakes, impervious areas, and areas requiring irrigation.

Assuming 42% irrigation of developable areas (115 acres) allocations based on the modified Blaney-Criddle calculation are:

- 148 million gallons on an annual average basis (or 0.4 MGD)
- 20 million gallons (or 0.6 MGD) on a maximum monthly basis

Projected irrigation demands for the Pepperland Ranch project indicate an approximate 80% reduction in the historic maximum monthly use. Table 4 provides a comparison of project water use to the historic use along with a projected breakdown of irrigation use by source.

Table 4. Summary of Allocations.

Permit	Water Use Category	Irrigated Acreage	Annual Average Allocation		Maximum Monthly Allocation	
			MGY	MGD	MGM	MGD
Existing RLF Corkscrew Potato	Agricultural Irrigation	482	421	1.2	110	3.5
Proposed Pepperland Ranch	Residential Landscape Irrigation	115	148	0.4	20	0.6
Net Changes to Allocation		-367	-273	-0.8	-90	-2.9
Net Percentage Reduction		76%	65%		82%	

Note: MYG = Million gallons per year
MGM = Million gallons per month
MGD = Million gallons per day

The Pepperland Ranch project will include stormwater management lakes that will intersect the upper unconsolidated portion of the Water Table Aquifer. The proposed irrigation system will maximize stormwater harvesting from the stormwater lake management system with a percentage of these withdrawals re-supplied by groundwater. The proposed source of groundwater to supplement lake withdrawals will be from wells within the Water Table Aquifer. Actual percentages of lake and groundwater withdrawals will be determined during the water use permitting process with the South Florida Water Management District (SFWMD). Use of stormwater as a primary irrigation resource reduces use of potable water supplies, provides additional stormwater treatment, reduces offsite discharges of stormwater, reduces nutrient levels of the stormwater outfalls, and reduces reliance on groundwater systems being used to supply potable water to Lee County Utilities and home sites on individual wells.

SECTION F

IRRIGATION IMPACT ASSESSMENT

Groundwater Modeling

Preliminary modeling of groundwater withdrawals was conducted to assess potential drawdown impacts in the Water Table Aquifer based on a currently permitted agricultural allocations of 3.50 MGD compared to proposed residential allocations of 0.64 MGD. Groundwater withdrawals were simulated from four production wells in both scenarios for a period of 90 days with no rainfall recharge, which is a common SFWMD modeling criteria for water use permitting. The model is based on the USGS MODFLOW code. A transmissivity value of 200,000 gpd/ft was used in the model from aquifer performance testing at the LCU Corkscrew Wellfield. Results of modeling indicate that the withdrawal of 3.5 MGD under the current agricultural allocations results in about 7 feet of drawdown near well nodes and about 3-feet of drawdown at property boundaries. The simulation of withdrawal of 0.64 MGD based on proposed residential irrigation use results in about 1-foot of drawdown near well nodes and about 0.5 feet of drawdown at property boundaries. Results of preliminary modeling (refer to Table 5) suggest that potential drawdown onsite will be reduced by over 80%.

Table 5. Summary of Preliminary Modeling Results

Permit	Water Use Category	Number of Simulated Wells	Maximum Monthly Allocation (MGD)	Simulated Withdrawal Rate Per Well (GPD)	Drawdown Near Well Node (feet)	Drawdown at Property Boundary
Existing RLF Corkscrew Potato	Agricultural Irrigation	4	3.50	875,000 GPD	7 feet	3 feet
Proposed Pepperland Ranch	Residential Landscape Irrigation	4	0.64	160,000 GPD	1 foot	0.5 feet
Reduction		***NA***	***2.86***	***NA***	***6-feet***	***2.5-feet***
Reduction Percentage		***NA***	***82%***	***82%***	***86%***	***83%***

Additional groundwater and surface water modeling will be conducted during the SFWMD water use permitting process to ensure proposed withdrawals meet criteria for no adverse impacts.

Water Levels

Water Science Associates measured water levels in accessible onsite wells on December 15, 2015. Results indicate that groundwater elevations in the surficial aquifer ranges between 20.67 and 23.50 feet NAVD. Groundwater flow is typically from the northeast to the southwest in southwest Florida. On December 15, 2015, the hydraulic gradient of groundwater onsite was from the southwest to the northeast across the site. However, active pumping was occurring from five onsite wells at rates ranging from 650 to 1500 gpm; therefore, the hydraulic gradient measured in mid-December is not considered typical of the site under non-pumping condition.

Water Science Associates reviewed hydrographs of nearby monitoring wells maintained by Lee County Division of Natural Resources (LCDNR), shown on Figure 6. The nearest of these LCDNR wells to the project site with long term water level data (1990 to present) are 49-GW5 (located about 0.6 miles west of the site), 49-GW6 (located about 2.7 miles southwest of the site), and 49-GW7 (located 2.6 miles south-southwest of the site. Well 49-GW25 is located 0.3 miles northeast of the site and has data beginning in 2006.

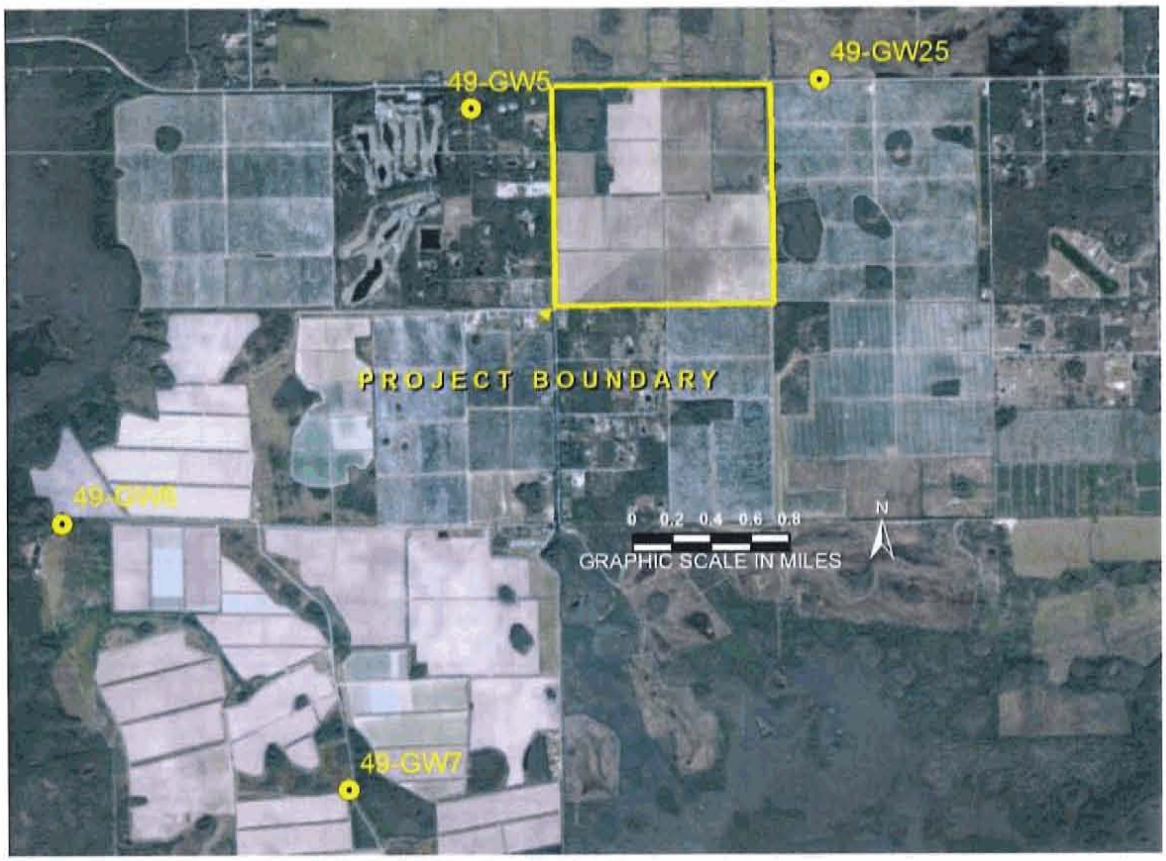


Figure 6. Location of Nearby LCDNR Monitoring Wells

Water Science Associates reviewed water level data from the period of record of these LCDNR wells and estimated the typical wet season and dry season observed water levels. Contour maps of groundwater elevation (in NAVD88) were interpolated and are shown on Figure 7 (Wet Season) and Figure 8 (Dry Season). It should be noted that nearby Lee County Utilities Water Table Aquifer withdrawals can affect the resulting water levels in LCDNR wells 49-GW5 and 49-GW25. Agricultural pumping may also impact measured water levels in the four LCDNR wells during the dry season, when these farms are typically in operation and water levels are actively manipulated. The topography in the area of the project site which influences water elevations, drops significantly from the uplands along Corkscrew Road to the CREW lands south and southwest of the project site.



Figure 7. Inferred Groundwater Elevations During Typical Wet Season (Feet NAVD88).

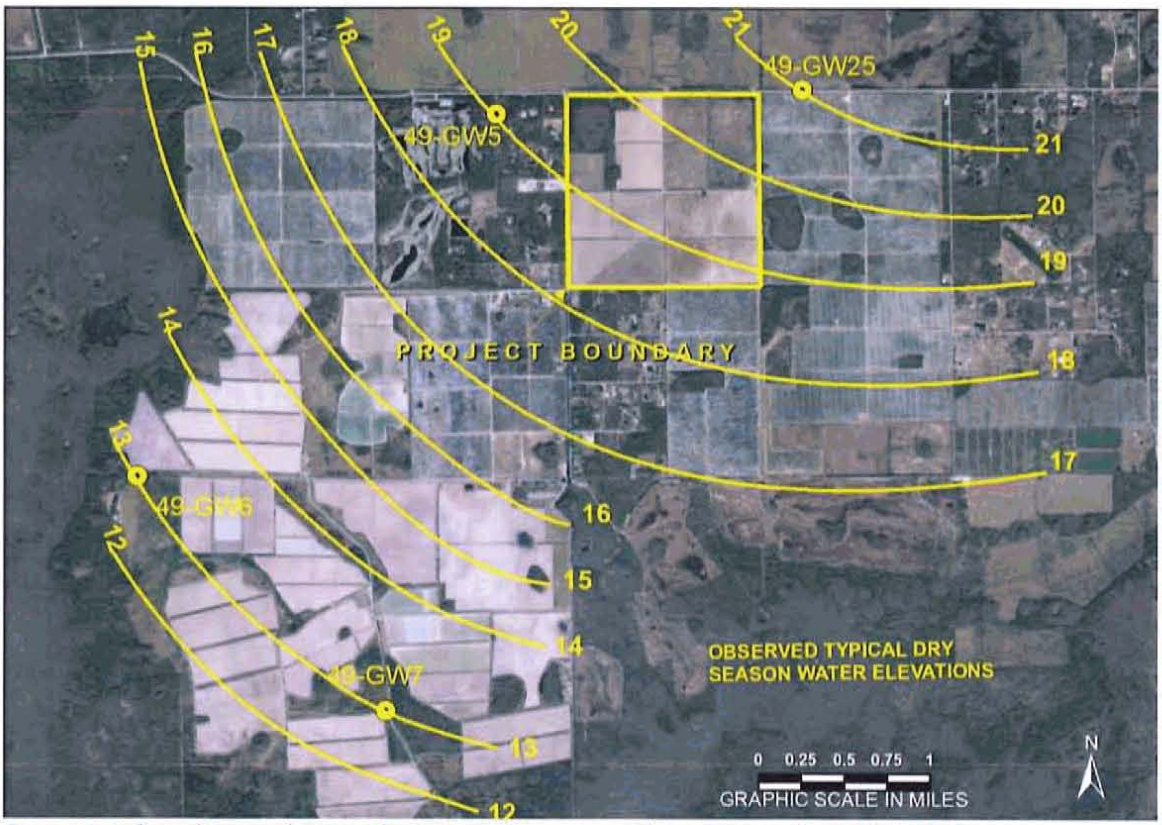


Figure 8. Inferred Groundwater Elevations During Typical Dry Season (Feet NAVD88).

The following observations are based on the review of hydrographs from LCDNR wells 49-GW5, 49-GW6, 49-GW-7, and 49-GW25:

Groundwater elevations in well 49-GW5 (Figure 9) range from a dry season low of about 15.5 feet NAVD to a wet season high of about 25.2 feet NAVD. Wet season high water levels average about 24 feet NAVD and dry season low water levels average about 19 feet NAVD. Wet season groundwater elevations in well 49-GW5 shows a slight rising trend between about 2000 and 2013.

Groundwater elevations in well 49-GW6 (Figure 10) range from a dry season low of about 11 feet NAVD to a wet season high of about 18 feet NAVD. Wet season high water levels average about 18 feet NAVD and dry season low water levels average between 12 and 13 feet NAVD. Wet season groundwater elevations in this well show a consistent rising trend from 2000 to 2015.

Water levels in well 49-GW7 (Figure 11) range from a dry season low of about 12 feet NAVD to a wet season high of about 17.8 feet NAVD. Wet season high water levels average between 17 and 18 feet NAVD and dry season low water levels average between 12 and 13 feet NAVD. Wet season water levels in this well show fluctuations in peak elevations with a slight decrease between 2002 and 2011.

Water levels in 49-GW25 (Figure 12) range from a dry season low of about 20 feet NAVD to a wet season high of about 27 feet NAVD. Wet season high water levels average between 26 and 27 feet NAVD and dry season low water levels average between 20 and 21 feet NAVD. Wet season water levels in this well do not show any consistent trends.

It should be noted that the land surface elevations at 49-GW5 (24.53 feet NAVD) and 49-GW-25 (26.39 feet NAVD) are about 7 to 10 feet higher than at 49-GW6 (17.4 feet NAVD) and 49-GW7 (16.3 feet NAVD). Also, dry season water levels in the LCDNR well system may be inconclusive since water levels may fall below the measuring instrument or bottom of the well during some years.

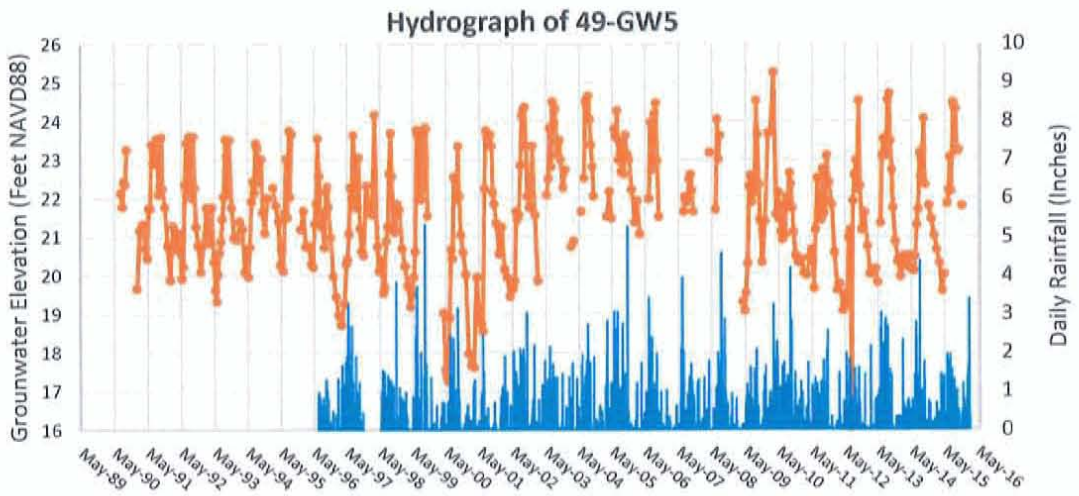


Figure 9. Hydrograph of LCDNR Well 49-GW5.

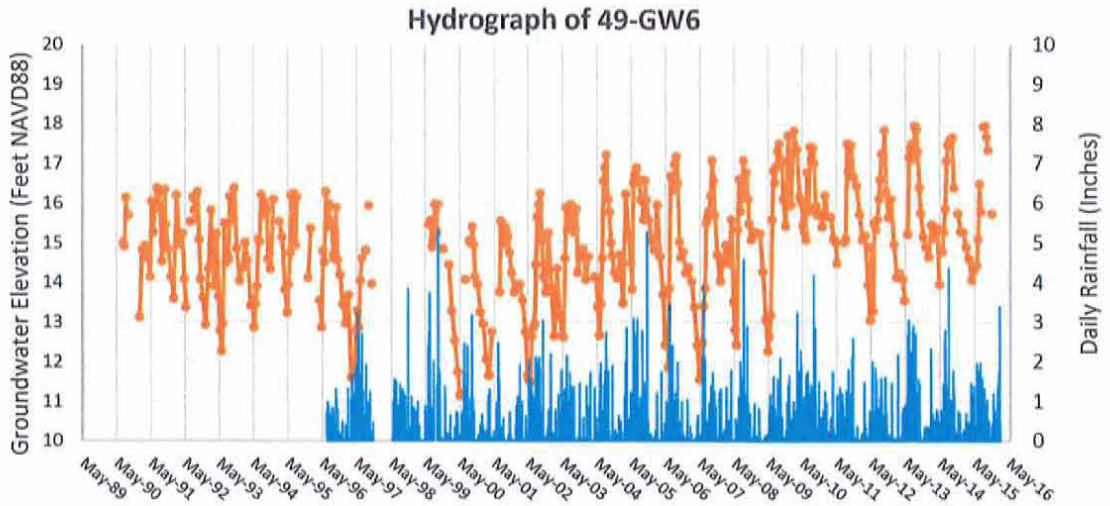


Figure 10. Hydrograph of LCDNR Well 49-GW6.

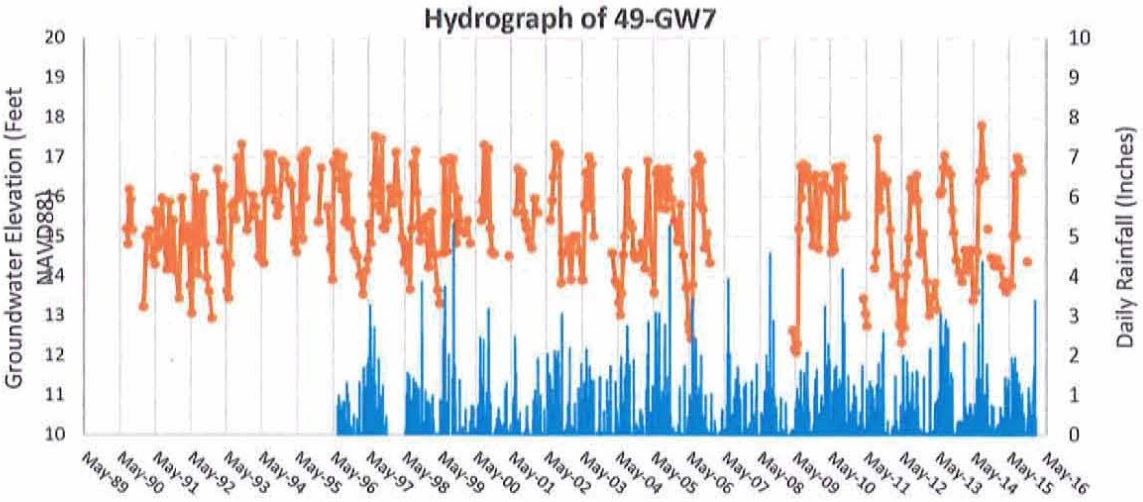


Figure 11. Hydrograph of LCDNR Well 49-GW7.

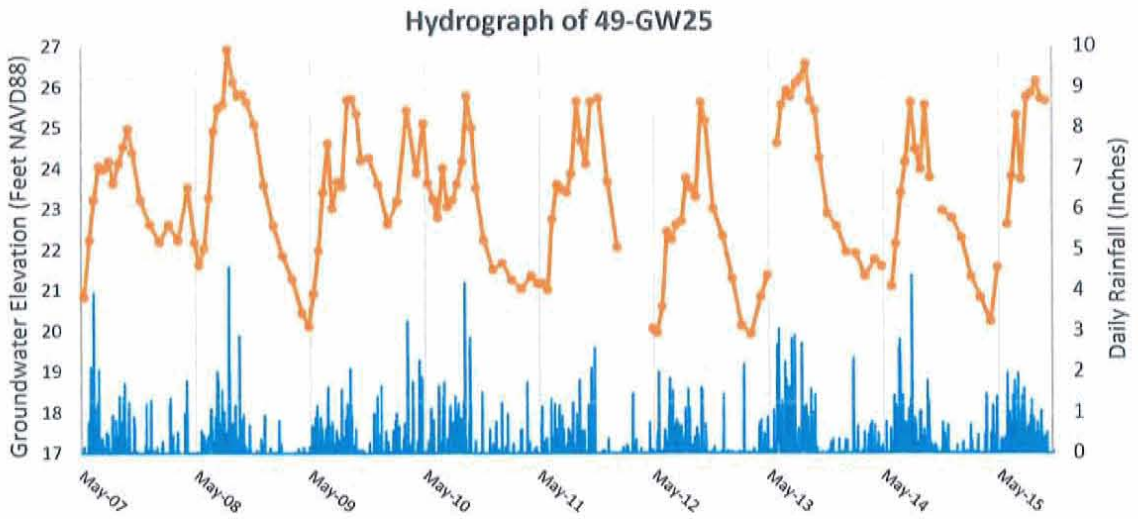


Figure 12. Hydrograph of LCDNR Well 49-GW25.

Water Quality

Water samples were collected from accessible wells on the Pepperland Ranch property on December 15, 2015, and analyzed for dissolved chloride concentrations. Water samples were obtained from nine wells on site and groundwater exhibited dissolved chloride concentrations between 24 mg/l and 82 mg/l. The average dissolved chloride concentration is 34 mg/l. The SFWMD threshold for saline water is 250 mg/l dissolved chloride concentration. Results indicate that groundwater within the Surficial Aquifer onsite is fresh.

Water Level and Quality Monitoring

Groundwater and surface water elevations and water quality will be measured onsite prior to development. Measurement parameters and frequencies will be outlined in a ***Surface Water and Groundwater Level and Quality Plan*** to be submitted under separate cover.

SECTION G

WELLHEAD PROTECTION

The Pepperland Ranch project site falls partially within the Wellfield Protection Area of the Lee County Utilities Corkscrew Wellfield. Six existing public water supply wells are located within easements on the north side of Corkscrew Road adjacent to the northern boundary of the project site. The presence of these wells places portions of the project site within Zones 1 through 4 of the established protection zones from the Lee County Wellfield Protection Ordinance (Ordinance No. 07-35). Refer to Figures 13 and 14 for the locations of the wellfield protection zones relative to the project site.

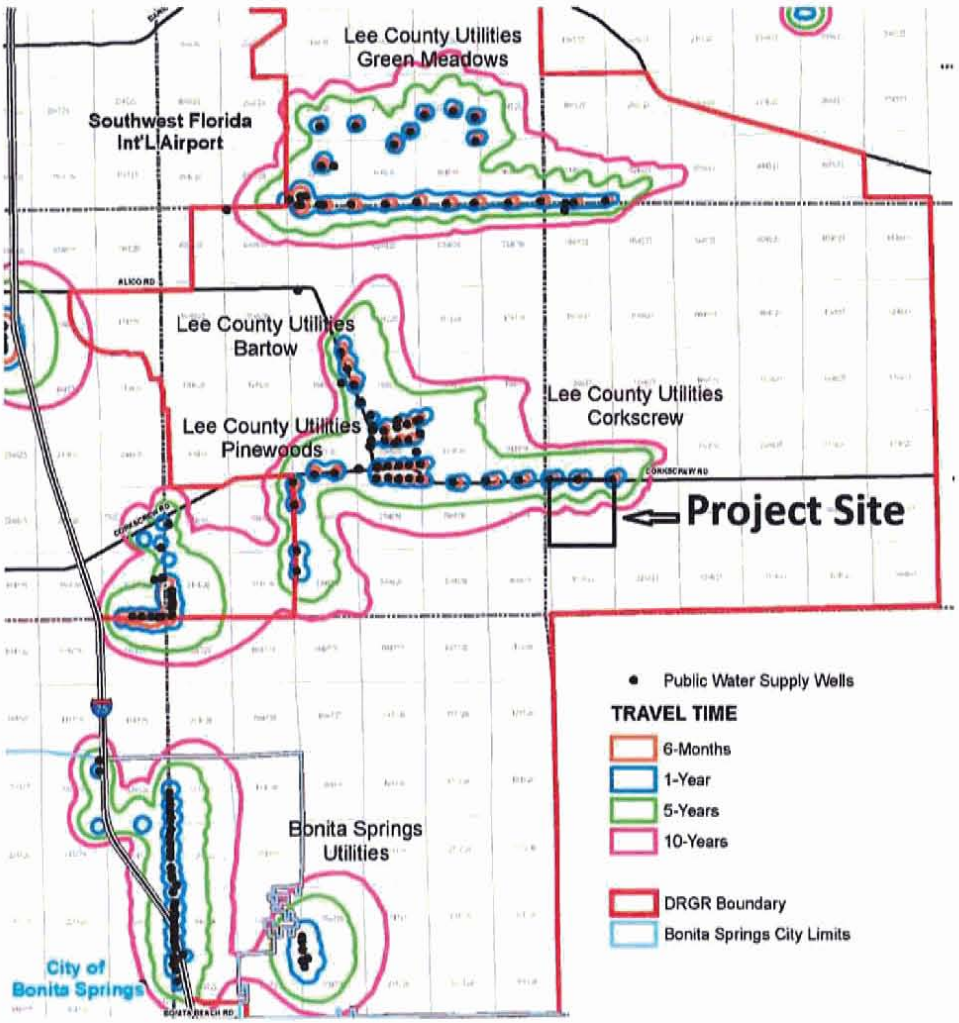


Figure 13. Excerpt of Lee County Wellfield Protection Zone Map WHP Ordinance

Wellfield protection zones are commonly created with the use of groundwater flow modeling to assess the time it may take for a potential contaminant to arrive at a public supply wellfield. The "protection zones" correspond to the modeled location were a potential contaminant could travel to a well location within the given "travel time." The closer a facility is to the wellfield (shorter travel distance) the more restrictions are typically applied to potential land

uses. The protection zones defined by various lengths of travel time are as follows:

Zone 1: Between the well and the 6-month travel time line
Zone 2: Between the 6-month and 1-year travel time lines
Zone 3: Between the 1-year and 5-year travel time lines
Zone 4: Between the 5-year and 10-year travel time lines.

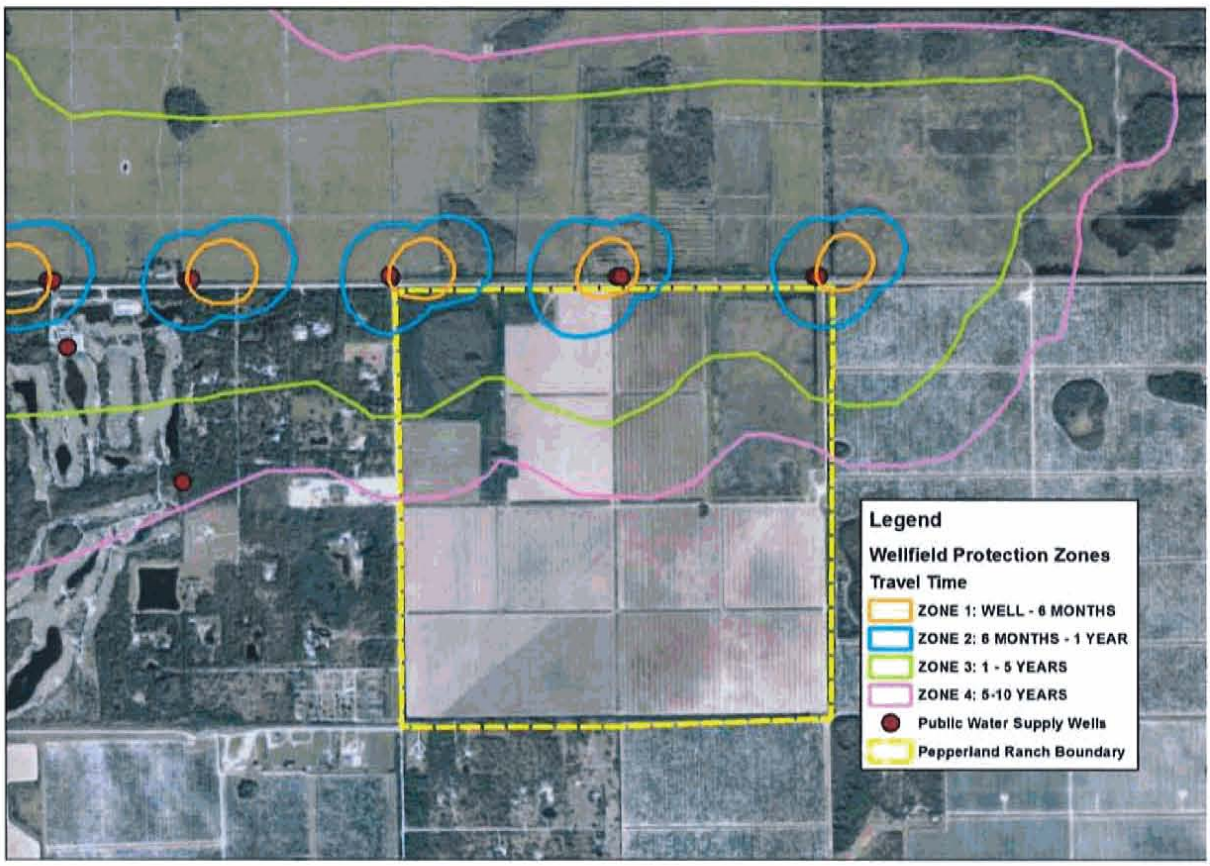


Figure 14. Map Showing Wellfield Protection Zones on the Pepperland Ranch Project

Prohibitions within Zones 1 to 4 include the following:

a. The use, handling, production or storage of regulated substances associated with land uses or activities regulated by this article in quantities greater than those set forth in section 14-208. ***ZONES 1 to 4***

b. Wastewater effluent disposal, except for public access reuse of reclaimed water and land application under the conditions set forth and as-defined in F.A.C. chapter 62-610, part III. Where public access reuse is permitted the chloride content must be no greater than 500 milligrams per liter. ***ZONES 1 to 3***

c. Liquid waste disposal. ***ZONES 1 to 3***

d. Solid waste disposal. ***ZONES 1 and 2***

e. Earth mining within a 500-foot radius of an existing wellhead. ***ZONE 1***

Regulations within Zone 1 include.

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, use or production of regulated substances in quantities greater than those set forth in section 14-208 are prohibited within protection zone 1 unless an operating permit for the prohibited activity, issued on or before September 1, 1989, remains viable.

b. The owners of any sanitary sewer, force main, gravity sewer or lateral must notify the division of any break in the sewer lines within 24 hours of discovery. The purpose of this requirement is to allow the division to monitor repairs to the line and any necessary cleanup activities.

c. Stormwater or surface water discharges within this protection zone must conform to existing South Florida Water Management District and state department of environmental protection rules.

Regulations within Zone 2 include.

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, use or production of regulated substances in quantities greater than those set forth in section 14-208 are prohibited within protection zone 2 unless an operating permit for the prohibited activity, issued on or before September 1, 1989, remains viable, or an administrative exemption is granted under section 14-208 to allow issuance of an operating permit under section 14-244.

b. Stormwater or surface water discharges within this protection zone must conform to existing South Florida Water Management District and state department of environmental protection rules.

Regulations within Zone 3 include the following.

a. Except as provided in section 14-209, all land uses or activities involving the storage, handling, use or production of regulated substances occurring within protection zone 3 must be conducted in accordance with a valid operating permit issued pursuant to section 14-244.

b. All operating permits must be renewed annually and will be subject to the conditions set forth in section 14-244.

c. 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.

Regulations within Zone 4 include.

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, production or use of regulated substances in protection zone 4 must be conducted in accordance with a valid operating permit issued pursuant to section 14-244.

b. All operating permits must be renewed annually.

c. Stormwater or surface water discharged within this protection zone must conform to existing SFWMD and FDEP rules.

Protective restrictions within Zone 2 through 4 include progressively fewer restrictions than Zone 1 as distance increases from the protected wells. Pepperland Ranch project will fully comply with the strictest protective measures for each of the wellfield protection zones.

Facilities at the Pepperland Ranch project will not use, handle, produce, or store applicable regulated substances. The project will not discharge wastewater, liquid waste or solid waste. Irrigation water will maintain a chloride concentration below allowable limits. The stormwater management system will be designed to exceed the water quality requirements of the SFWMD. No earth mining is proposed within 500 feet of any Lee County Utilities wellheads.

It should be noted that the proposed residential land use will replace the current agricultural use which can involve storage and application of regulated substances such as pesticides, herbicides, fungicides, and rodenticides. Based upon the expected decrease in the amount of water to be used for landscape versus crop irrigation and the curtailment of agricultural application of chemicals, this project should significantly reduce the potential risks of groundwater contamination and benefit the protection of nearby public water supply wells.

SECTION H

CONCLUSIONS

This hydrogeologic assessment included evaluation of information and data to assess potential impacts of a proposed development at the Pepperland project. The facility is currently an approved Industrial Planned Development (IPD) for a fill mine to excavate about 228 acres of lakes to depths between 12 and 20 feet below grade. The project is currently in agricultural production. The Pepperland Ranch project is a proposed residential development that will include residences, access roads, stormwater management lakes, and preserves. Preserves will include a flowway with created fresh water marshes for ecological enhancement and hydrological restoration. This report provides analysis regarding water resources for the proposed development to satisfy Goals, Policies, and Objectives of the "***Lee Plan 2013 Codification, as Amended through September 2013***" (Lee Plan). The project falls within the Density Reduction/Groundwater Resource (DR/GR) area of Southeastern Lee County.

Analysis and review of the permitting history and site development, surface water and groundwater resources, water management and water supply and demand needs, options for potable and non-potable water supplies, and potential impact assessments to water levels and natural resources and water storage, has resulted in the following conclusions.

- The proposed project will maintain or improve surface and groundwater levels at their historic levels and result in increased storage capacity pursuant to Policy 1.4.5 of the Lee Plan.

- The project will have no adverse impacts on water resources to properties located upstream, downstream, or adjacent to the site pursuant to Policy 1.4.5 of the Lee Plan.

- The proposed project will determine availability of irrigation and domestic water sources, identify potential irrigation and domestic water sources consistent with the Regional Water Supply Plan, and demonstrate that the proposed land uses will not cause any significant harm to present and future public water resources pursuant to Policy 2.4.3 of the Lee Plan.

- The proposed project will ensure that water quality is maintained or improved for the protection of the environment and people of Lee County pursuant to Goal 115 of the Lee Plan.

- The proposed project will maintain high water quality, meeting or exceeding state and federal water quality standards pursuant to Objective 115.1 of the Lee Plan.

- The proposed project will conserve, manage, and protect the natural hydrologic system of Lee County to insure continued water resource availability pursuant to Goal 117 of the Lee Plan.

- The proposed project plan has insured water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems pursuant to Objective 117.1 of the Lee Plan.

- The proposed project represents less demand on water resources than historic and currently permitted uses.

- Historic withdrawals of groundwater for agriculture have not resulted in adverse impacts to the aquifer system indicating that the system can accommodate proposed site water use which is significantly less than historic uses.

- The irrigation water demand for the proposed Pepperland Ranch project will result in a reduction in total annual water demand from the currently permitted irrigation water allocations of between 65% and 82%.

- The proposed project will provide improvements in site water levels and groundwater recharge, improved surface water quality, and improved connectivity of regional water flow systems.

Pepperland Ranch
Part IV. Amendment Support Documentation
G. Proposal Represents Sound Planning Principles

The plan amendment and restoration strategy for the Pepperland Ranch property 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 plan amendment balances this public interest with those of the property owner. The plan amendment represents a kind of public-private partnership. The public interest, including hydrologic restoration and protection of wildlife habitat, is satisfied by the restoration strategy for Pepperland Ranch. The private interest in utilizing and developing the property is satisfied in a responsible environmental manner. This represents sound planning.

The plan amendment utilizes the planning principle of clustered development. 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 locates buildings in concentrated portions of a site, leaving the remainder of the site undeveloped. Typically this form of development is utilized to limit sprawling development patterns while protecting such things as open space, environmentally sensitive areas and natural resources. The project design protects the remaining forested areas of the site, restores onsite flowways, and provides large setbacks to adjacent uses. These uses include conservation and mitigation lands, agricultural uses as well as single family residences.

The restoration 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 property identified the location of wetlands and forested areas on the property 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 strategy offers many benefits to the region in which the property is located. The project design will provide residents 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 project design will accommodate community sidewalks throughout the developed portion of the property. The project will include various recreational amenities such as a pool, tennis courts, bocce and pickle ball courts, fitness center and a play ground.

The Pepperland Ranch project represents compatible land uses with existing surrounding uses which include conservation and mitigation uses, public wellfield, single family, recreational and agricultural uses. The project's residential uses are clustered inside the property with large setbacks to adjacent uses and properties. The project's open spaces and restored flowways and native habitats compliment and enhance adjacent public and private preserves. The project is compatible to the area's wildlife habitat. The Pepperland Ranch property will result in larger contiguous native habitats suitable for use by large mammals and other protected species.

The Pepperland Ranch 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 and ongoing agricultural use of the property. The project will control the application of fertilizers and pesticides.

The Pepperland Ranch project residential uses are compatible with the existing residential use located to the west and south of the property. The project will retain the existing forested area in the northwest corner of the property. The restoration areas on the west and south sides of the project will buffer nearby residential uses. The project's compatibility with nearby land uses represents sound planning for the region in which the property is located.

The Pepperland Ranch project will be connected to and serviced by a centralized water and sewer system. This system is compatible with the property's location adjacent to a public potable wellfield. Connecting this property to a centralized water and sewer system represents sound planning with the DR/GR's goal of protecting groundwater resources.

The Pepperland Ranch project represents a high quality master planned project. The addition of the project to this portion of Lee County will enhance the quality of the overall 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 plan amendment that proposes that the Pepperland Ranch property by included in the Environmental Enhancement and Preservation Communities Overlay be approved to realize these regional benefits.

II. RESUBMITTAL DATED 06/02/2016

A. ITEMS REMOVED SINCE SUPERSEDED

I. ENHANCED LAKE MANAGEMENT PLAN

II. REVISED STORMWATER PLANNING REPORT

III. SURFACE WATER AND GROUNDWATER MONITORING PLAN

BANKS ENGINEERING

Professional Engineers, Planners & Land Surveyors

June 2, 2016

Brandon D. Dunn
Lee County Development Services
1500 Monroe Street
Fort Myers, Florida 33901

Reference: **PEPPERLAND RANCH**
CPA2016-00003

Dear Mr. Dunn:

This letter is written in response to your review comments dated April 6, 2016. With this letter we are submitting the additional information you requested.
Attached please find six (6) copies of the following submittal items (except the Phase I which 1 double-sided copy is provided since 255 pages – additional copies can be provided upon request):

1) Enhanced Lake Management Plan SUPERSEDED
2) Legal Description and sketch
3) TR Transportation Response
4) Lee County Utilities Conditional Letter of Availability
5) Letter from Lee Tran
6) Revised Stormwater Planning Report SUPERSEDED
7) Phase I Environmental Site Assessment by TDC Consulting Group
8) Surface Water and Groundwater Monitoring Plan SUPERSEDED
9) Old soil borings and lithologic data for the site.
10) Water Budget
11) Soils Map
12) Survey
13) Title Opinion
14) Aerial with Florida Panther Primary and Secondary Zones
15) Wood Stork (Mycteria americana) Nesting Colonies and 18.6 Mile Core Foraging Areas map

The Pepperland Ranch property is targeted by Lee Plan Policy 33.3.4.1.a. for inclusion into the Environmental Enhancement and Preservation Communities Overlay. The property has been highly impacted from years of commercial agricultural activities and is zoned IPD for potential use as a dirt mine. The project will permanently eliminate the possibility of the approved onsite mining activities and associate truck trips on Corkscrew Road. The project will also eliminate potential blasting impacts to the residential neighborhoods adjacent to the site.

The property was included as a possible addition to the overlay because the property has the potential to improve, preserve, and restore regional surface and groundwater resources and indigenous wildlife habitats. The plan amendment proposal realizes this potential in exchange for a modest increase in density. The proposed plan amendment for the Pepperland Ranch project will protect, conserve, enhance and restore natural resources on the property such as flow-ways, wetland and upland preserves and wildlife habitats, as well as providing other distinct and measurable regional benefits. These benefits are consistent with, and further the overall goals of the Density Reduction/ Groundwater Resource land use category.

The Pepperland Ranch project is proposing to utilize 286.87± acres of the overall 637.5+/- acres of the property for a clustered residential housing project. The remaining 350.63± acres (or approximately 55%) of

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

the Pepperland Ranch property will be put in a conservation easement to be used for water resources, wetland and upland preserves and wildlife habitat.

Regional benefits include water resource and wildlife enhancements adjacent to other lands that are already restored or proposed to be restored. The project will provide a missing link between conservation lands to the north (Imperial Marsh Preserve and the proposed restoration lands for Corkscrew Farms development) and conservation lands to the south (CREW a/k/a Flint Pen Strand). The Pepperland Ranch proposal results in substantial additional permanently preserved open space in the DR/GR land use category. The project will eliminate agricultural activities including the application of fertilizers and pesticides as part of the farm operations. The project will eliminate onsite agricultural ditches and re-establish flowways and provide wildlife habitat. The project will eliminate the possibility of individual potable water wells and septic tanks and drainfields as the project will be serviced by centralized public water and sanitary sewer services.

The project increases the amount of land available for water recharge functions consistent with the intent of the DR/GR. The proposal will eliminate agricultural utilization of the aquifers for crop irrigation and will significantly result in less water utilization on the site. The developed project will significantly pump less water for irrigation purposes than the current agricultural operations.

The project is designed to accept additional water from Corkscrew Road. Two (2) locations have been strategically located to align with the 2 proposed onsite flowways that are proposed to be restored. The project preserves the opportunity to take additional surface water flow from lands located immediately north of Corkscrew Road. The Pepperland Ranch flowways have been designed to transmit water to the south allowing for water treatment prior to any offsite discharge. Pepperland Ranch will utilize a wet detention system with created marshes in order to treat stormwater runoff to maintain or improve surface water runoff from the property and reduce nutrient loading. Pepperland Ranch incorporates a series of water control basins with control elevations tied to the vegetation and necessary hydrological factors to maintain water levels in the existing and proposed flowways. Pepperland Ranch includes increased basin storage that will accommodate additional surface water flows to enter the site from Corkscrew Road.

The project is designed with additional water storage capacity and will have reduced discharges at the project outfall which is located in the southwest corner of the site. This is a benefit to the single family homes located to the south of the project.

The Pepperland Ranch proposal preserves the opportunity to provide additional flowway connections in the future. These future connections could be done as part of a Lee County project, private project, and/or public/private partnership. The project represents a unique opportunity to provide these regional benefits.

Regional Benefits can be summarized as follows:

1. No onsite mining and associated activities such as truck traffic & blasting;
2. Eliminates AG use, reduce use of pesticides, herbicides & fertilizers;
3. Restores flowways;
4. Preserves and restores wetlands/uplands and enhances by exotic removal; restores wildlife habitats including creation of wood stork habitat/foraging habitat for wading birds;
5. Preserves opportunity to provide additional flowway connections to adjacent properties;
6. Increases the amount of land available for water recharge, while reducing impacts on groundwater resources;
7. Reduced water utilization, project will use less water than current AG use;
8. AG fields & ditches will be removed & the land re-graded to restore historic flowways;
9. Provides additional wildlife connections & corridors from conservation lands to the north & south of the property.
10. Preserve areas & restored wildlife habitats will increase the biological diversity of wildlife using Pepperland Ranch;
11. The project will increase the species of native vegetation on the property;
12. The project will be connected to public water & sewer services eliminating individual private wells & septic systems which will provide further protection of the area's public water wellfields;

13. The project will increase basin storage that will allow additional surface water flows to enter the property from Corkscrew Road;
14. The project will accommodate water treatment of any additional surface water flow that enters the property prior to any offsite discharge;
15. The project water management system is designed to reduce discharges at the existing outfall, which is located in the southwest corner of the property. Reduced discharges will be a benefit to the single family homes located to the south of the property;
16. Preserves future opportunities for further wildlife corridor connections in addition to flowway connections;
17. Project results in a more compatible use with adjacent single-family homes;
18. Enhanced Lake Management Plan to reduce nitrogen and phosphorus loading (attached);
19. Install monitoring wells and coordination of ground and surface water monitoring with Lee County Natural Resources;
20. Requires centralized irrigation system controlled by homeowner's association with complete control of duration and timing;
21. Central management of fertilizers and pesticides with prohibition of application by individual homeowners;
22. 55% of site in conservation easement with restoration without 20/20 or tax dollars. (In 2012 the property north of this proposed project was reviewed as a 20/20 nomination (#496) at $52,902/acre, which is comparable since this property is also tier 1 and agricultural. Given the subject property at that price, 55% of 637.5 acres (350.63 acres) , the conservation value is an estimated $18,548,763.75;
23. Florida Friendly plants with low irrigation requirements will be utilized in common elements.
24. Wildlife management & co-existence plans will be implemented;
25. Impact fees in the estimated amount of $6,194.88 x 700 = $4,336,416.00.

The applicant understands that additional discussions need to occur with County Staff concerning the project and additional regional benefits and possible enhancements such as the provision of additional water level data. The applicant is willing to collaborate with County Staff on this Environmental Enhancement and Preservation Community.

Presented below are responses to each review comment.

IV A. 6. General Information and Maps, The legal description(s) for the property

Comment 1: The legal description and sketch included in the application does not include State Plane coordinates for the point of beginning and the opposing corner. Please provide a sketch with this information included.

Response: **Please see attached revised legal description and sketch.**

IV B. 1. Traffic Circulation Analysis

Comment 1: Alico Road from Corkscrew Road to Green Meadows is a collector facility according to AC-11-1, but it is treated as an arterial in the traffic study.

Response: **Please see attached response from TR Transportation Consultants, Inc., dated May 17, 2016.**

Comment 2: The service volumes used for 5 year analysis should be based on the Lee County Link-Specific Service Volumes Table.

Response: **Please see attached response from TR Transportation Consultants, Inc., dated May 17, 2016.**

Comment 3: The TAZ data of 2040 travel model does not include the projects approved recently within the study area, the traffic of Monte Cristo, WildBlue, and Corkscrew Farm shall be included for the 5 year and long range impacts analysis.

Response: Please see attached response from TR Transportation Consultants, Inc., dated May 17, 2016.

Comment 4: There is a 2015 AADT traffic count on Corkscrew Road between Ben Hill Griffin Parkway and Alico Road (Count #249) available in the 2015 traffic count report. It shall be used for this segment analysis in the Table 4A.

Response: Please see attached response from TR Transportation Consultants, Inc., dated May 17, 2016.

Comment 5: In the Table 4A, the AADT of Alico Road north of Corkscrew Road and east of Ben Hill Griffin Parkway are 7,500, but one of the peak hour directional volumes is 84 and another is 345.

Response: Please see attached response from TR Transportation Consultants, Inc., dated May 17, 2016.

IV B. 2. Public Facilities Analysis

Comment 1: Please provide a letter from Lee County Utilities stating their availability to provide water and sewer services.

Response: Please see attached conditional letter of availability from Lee County Utilities.

IV B. 3. b. Public Facilities Impacts, provide a letter from the appropriate agency determining the adequacy/provision of existing/proposed support facilities, including, Emergency Medical Service (EMS) provisions

Comment 1: Lee County EMS has stated that they will not be able to meet existing service standards as required by County Ordinance 08-16. If these standards are not able to be met the concurrent rezoning cannot be found consistent with the Lee Plan, how will this be addressed.

Response: The applicant has a meeting scheduled with Lee County EMS and will provide supplemental information after the meeting is held.

IV B. 3. e. Public Facilities Impacts, provide a letter from the appropriate agency determining the adequacy/provision of existing/proposed support facilities, including, Mass Transit

Comment 1: Please provide a letter from LeeTran stating their availability to provide service.

Response: Please see attached letter from H. Wayne Gaither dated May 11, 2016 indicating that there is currently no plans to expand Lee Tran services to this area.

IV 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

Comment 1: Please identify and provide three different layouts on the location of this project, historic, existing, and proposed drainage patterns on the site. Explain measure taken to restore historic flow-ways during the proposed development.

Response: Lee Plan Policy 33.3.4.2.a.1 states, *"Restore and accommodate existing and historic regional flowways where they currently or previously existed."* Please see attached revised Stormwater Planning Report; specifically pages 7-11 which demonstrate the site's historic, existing, and proposed drainage patterns consistent with the DR/GR studies.

Comment 2: Explain how the adjacent properties are protected by the proposed development due to change in existing drainage patterns including the restoration of "historic flow-ways".

Response: Please see attached revised Stormwater Planning Report

Comment 3: The stormwater runoff must be directed to specifically designed and designated stormwater treatment areas; it must not be directly diverted or placed into the proposed lakes.

Response: Although the proposed lakes will provide the stormwater treatment for the developed areas of the project, the restoration area can function as a regional storage and treatment facility.

Comment 4: What actions/measures will be taken to interconnect the historical flow-ways from north of Corkscrew Road to the project site and continue to CREW lands to the south?

Response: The restoration area can accept inflows from Corkscrew Road and the properties to the North. This inflow can help hydrate the proposed wetlands that help to restore the historic drainage connections. The restoration area can accommodate and convey significant offsite flows if additional connections to the south are made in the future.

Comment 5: 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?

Response: A Phase I Environmental Site Assessment was prepared for the project by TDC Consulting Group (attached). A Surface Water and Groundwater Monitoring Plan is also attached. The plan includes water level monitoring and water quality sampling and analysis. Attached are old soil borings and lithological data for the site as well.

Comment 6: Please verify total acres of the proposed project and proposed irrigated acres of the new project footprint.

Response: The irrigated acreage was previously estimated to be about 115 acres based on about 42% of the developable area. The latest site plan indicates an irrigated acreage of 98.3 acres based on open space calculations not including lakes and preserves. The total acreage of the project is 637.5 acres.

Comment 7: There is a proposal of use of onsite Surficial aquifer wells as an irrigation source replenishment, is the applicant proposing a centralized irrigation system for everyone's use designed to meet the in-place irrigation ordinance, or numerous withdrawals from the lakes?

Response: The project will have a centralized irrigation system for the irrigation of home sites as well as common areas. The POA/HOA documents will prohibit individual lake (or well) withdrawals by residences within the community. The centralized irrigation system will be permitted through the South Florida Water Management District. The potential for "over watering" will be greatly reduced with this centralized system.

Comment 8: Please provide your water budget for the project, historic, existing and proposed footprint.

Response: **A Water Budget is attached.**

IV C. 2. Environmental Impacts, A map and description of the soils found on the property

Comment 1: Please provide a soils map at the same scale as the FLUCCS map.

Response: **A Soils Map is attached as requested.**

IV C. 3. Environmental Impacts, A topographic map

Comment 1: Please provide a topo map at the same scale as the FLUCCS map.

Response: **Please see attached boundary and topographic survey which is at the same scale as the FLUCCS map.**

IV E. 2. Internal Consistency with the Lee Plan, List goals and objectives of the Lee Plan. Include an evaluation of all relevant policies under each goal and objective.

Comment 1: Please provide information on restoring existing and historic flow-ways per Policy 33.3.4.

Response: **The restoration area can accept inflows from Corkscrew Road and the properties to the North. This inflow can help hydrate the proposed wetlands that help to restore the historic drainage connections. The restoration area can accommodate and convey significant offsite flows if additional connections to the south are made in the future.**

Miscellaneous Comments

Comment 1: The Letter of Authorization is incomplete since the executing Notary Public did not include her Commission Number and Expiration of Commission. Please resubmit a properly executed document with the noted information.

Response: **Pursuant to our email correspondence with John Fredyma, the North Carolina General Statutes do not require notaries to disclose their Commission Number. The submitted letter of authorization on file does include the expiration of commission.**

Comment 2: According to the deed filed with the application, the property contains oil, gas and mineral rights reservations. Staff is concerned that these reservations could prohibit the ability to properly provide for the necessary conservation easement(s) on this property. Please address this concern.

Response: **The new Title Opinion provides that surface entry to the subject property for purposes of oil, gas and mineral rights has been extinguished by operation of law pursuant to the Florida Marketable Record Title Act, Chapter 712, Fla. Stat. The existing oil, gas and mineral rights without surface entry rights will not affect the requested action or prevent the achievement of the planned development.**

Comment 3: Please provide more recent panther telemetry information for this area. Please include primary and secondary panther as well as black bear habitat; current panther telemetry; wood stork rookeries/habitat; and sandhill crane habitat.

Response: Please refer to the Environmental Assessment provided by Passarella & Associates, Inc. for information on listed species habitat. The most recent Florida panther (Puma concolor coryi) telemetry information available is depicted in Exhibit H of the Environmental Assessment. Per discussion with Lee County Environmental Sciences staff on May 24, 2016, an Aerial with Florida Panther Primary and Secondary Zones, and a Wood Stork (Mycteria americana) Nesting Colonies and 18.6 Mile Core Foraging Areas map are attached. Per the Florida Fish and Wildlife Conservation Commission, the Project site is within the identified range of the Florida black bear (Ursus americanus floridanus) and the distribution area of the Florida sandhill crane (Grus canadensis). Since the majority of the Project site is currently an active agricultural operation, the proposed enhancement and restoration activities for the Project will result in a net benefit to the quality of existing habitat on-site and will provide additional wildlife habitat by restoring existing farm fields to native upland and wetland habitat types. Additionally, the proposed habitat enhancement and restoration areas on-site will provide connectivity to existing and proposed conservation lands north of the Project site.

If you have any questions or I may be of further assistance, please feel free to contact me at our Fort Myers office.

Sincerely,
BANKS ENGINEERING

Stacy Hewitt, AICP
Director of Planning

BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

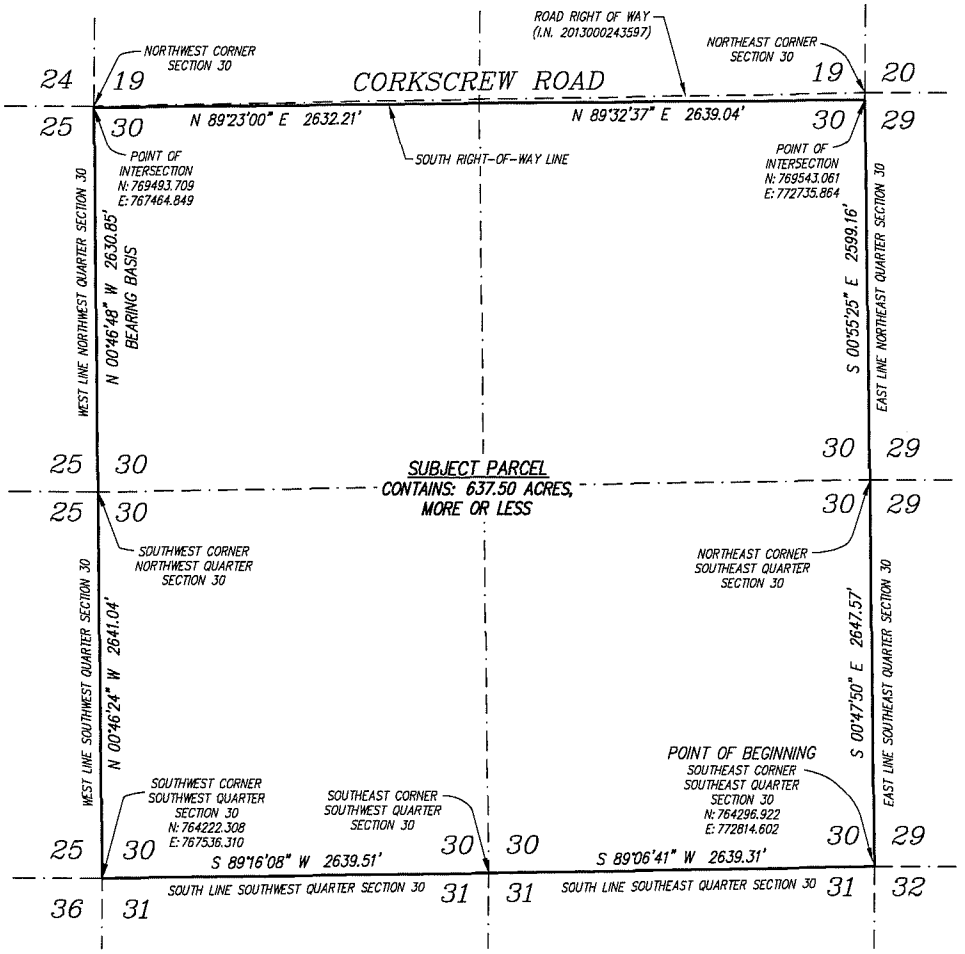
10511 SIX MILE CYPRESS PARKWAY, SUITE 101
FT. MYERS, FLORIDA 33966
PHONE (239)939-5490 FAX (239)939-2523
ENGINEERING LICENSE # EB 8466
SURVEY LICENSE # LB 8590
WWW.BANKSENG.COM

LEGAL DESCRIPTION AND SKETCH

OF
A TRACT OR PARCEL OF LAND LYING IN
SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST
LEE COUNTY, FLORIDA



1" = 1000'



NOTES:

1.) SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY OF RECORD.

2.) BEARINGS DISTANCES AND COORDINATES ARE BASED ON THE "STATE PLANE COORDINATE SYSTEM" FLORIDA ZONE WEST NAD 83 (CORS). WHEREIN THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST BEARS N 00°46'48" W. THE SCALE FACTOR IS 0.999959921.

LEGAL DESCRIPTION:

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST, BEING ALL OF SAID SECTION 30 LESS THAT PORTION OF CORKSCREW ROAD RIGHT-OF-WAY AS DESCRIBED IN 20130002435 97 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, BEING FURTHER BOUND AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION; THENCE S 89°06'41" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.31 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION; THENCE S 89°16'08" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.51 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION; THENCE N 00°46'24" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,641.04 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION; THENCE N 00°46'48" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,630.85 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF SAID CORKSCREW ROAD RIGHT-OF-WAY; THENCE N 89°23'00" E ALONG SAID SOUTH LINE FOR 2,632.21 FEET; THENCE N 89°32'37" E ALONG SAID SOUTH LINE FOR 2,639.04 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION; THENCE S 00°55'25" E ALONG SAID EAST LINE FOR 2,599.16 FEET TO THE NORTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE S 00°47'50" E ALONG THE EAST LINE OF SAID FRACTION FOR 2,647.57 FEET TO THE **POINT OF BEGINNING.**

THIS IS NOT A BOUNDARY SURVEY

Richard M. Ritz

RICHARD M. RITZ
REGISTERED LAND SURVEYOR
FLORIDA CERTIFICATION NO. 4009

- DATE SIGNED: 05-19-2016
- THIS LEGAL DESCRIPTION AND SKETCH IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

LEGEND:

I.N. INDICATES INSTRUMENT NUMBER

S:\JOBS\81XX\8112\SURVEYING\DESCRIPTIONS\8112 BNDY LGL-SKT.DWG

PREPARED 2-27-2016
REVISED 5-19-2016

TR TRANSPORTATION CONSULTANTS, INC.

2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906
WWW.TRTRANS.NET

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

May 17, 2016

Mr. Brian Farrar
BCF Management Group, LLC
22190 Fairmount Ct.
Estero, FL 33928

RE: Pepperland Ranch
CPA2016-00003/DCI2015-00003

Dear Mr. Farrar:

TR Transportation Consultants, Inc. has reviewed the Traffic Impact Statement (TIS) comments issued by the Lee County Department of Community Development and Lee County Department of Transportation regarding the proposed Comprehensive Plan Amendment and Rezoning of the Pepperland Ranch site on Corkscrew Road east of Alico Road in Lee County, Florida. The comments and TR Transportation's response to those comments are listed below for reference.

CPA2016-00003 – Comprehensive Plan Comments

Traffic Circulation Analysis

1. *Alico Road from Corkscrew Road to Green Meadows is a collector facility according to AC-11-1, but it is treated as an arterial in the traffic study.*

It was assumed that in 2040, Alico Road would be treated as an arterial roadway. Alico Road is shown in the 2040 Financially Feasible Road network as a four lane divided roadway extending from U.S. 41 to S.R. 82. The facility type listed in the 2040 FSUTMS model is the same as Corkscrew Road, which is an arterial. This is also the same Level of Service Thresholds utilized in the recent traffic studies prepared for Wild Blue and Corkscrew Farms. No change was made to the service volume for Alico Road.

2) *The service volumes used for 5-year analysis should be based on the Lee County Link Specific Service Volume Tables.*

The Generalized Service Volume Tables were utilized for the year 2022 analysis consistent with other rezoning traffic studies completed in the area and studies specifically completed by TR Transportation Consultants. The County has previously advised consultants that the Link Specific Service Volume Tables are NOT to be used if the year of the analysis was more than five (5) years from the development of the Link Specific Service Volume Table. The current Link Specific Service Volume Table is developed based on data from 2013 and is dated May 2014. This is clearly more than five years from 2022. That is why the Generalized Service Volume Tables were utilized for this analysis. No changes were made to Table 3A and Table 4A.

3) *The TAZ data of 2040 travel model does not include the projects approved recently within the study area, the traffic of Monte Cristo, Wild Blue and Corkscrew Farms shall be included for the 5 year and long range impacts analysis.*

Monte Cristo was approved in 2007 by Zoning Resolution Z-07-047 and therefore should be included in the most recent model update, which was just released this year. A cumulative analysis of all the projects impacts along Corkscrew Road is being undertaken by Lee County in the Environmental Enhancement and Preservation Overlay Study (CN160192DK) that is being conducted later this year and in early 2017. That study will take a detailed look at the impacts of these and other projects along Corkscrew Road that will impact the traffic volumes in the area.

A supplemental analysis was completed for the long range 2040 analysis that included the trips from Wild Blue and Corkscrew Farms in the overall Level of Service analysis on the roadway links that were identified in the original traffic study for Pepperland Ranch. The traffic data from Wild Blue and Corkscrew Farms were taken from the respective traffic studies submitted to Lee County during their approval process. **Table 5A** and **Table 6A** reflect the cumulative Level of Service Analysis that includes the background 2040 volumes and the peak hour, peak direction volumes of Pepperland Ranch, Wild Blue and Corkscrew Farms.

4) *There is a 2015 AADT traffic count on Corkscrew Road between Ben Hill Griffin Pkwy and Alico Rd. (Count #249) available in the 2015 traffic count report. It shall be used for this segment analysis in the Table 4A.*

The AADT data in Table 4A was only used to compute a historical growth rate to apply to the 2014 Peak Hour, Peak Season Peak Direction traffic volume, which was obtained from the 2015 Concurrency Report. Where there was no historical traffic count data available, the nearest count station was utilized to compute the historical growth rate. Count Station #249 has only been operational for one year and therefore has no historical count data to determine a growth rate. A minimum growth rate of 1% per year, compounded annually, was utilized on all roadway segments.

5) *In the Table 4A, the AADT of Alico Rd. north of Corkscrew Rd. and east of Ben Hill Griffin Pkwy are 7,500, but one of the peak hour peak directional volume is 84 and another is 345.*

As discussed in the response to comment #4, the AADT data was only utilized to compute a historical growth rate in order to estimate the projected 2022 background traffic volumes. Where recent data was not available, the nearest count station with recent count data was utilized to compute a historic growth rate. The 2014 peak hour, peak direction volume was taken from the 2015 Lee County Concurrency Report. That is the reason for the differing volumes on each roadway link.

DCI2016-00003 – Rezoning Comments

LC ZTIS PD Application Sufficiency Checklist

3) The TIS does not appear to contain a drawing that shows the location of site access points in relation to non-site access points on both sides of the street within proximity of this site. Please review and revise the TIS accordingly.

The Master Concept Plan, prepared by Banks Engineering, provides this information. The TIS only contains graphical representation of site access drives onto Corkscrew Road and is not to scale.

5a) The TIS does not appear to contain a graphical depiction of all turning movements at each of the project access points. Please review and revise the TIS accordingly.

Figure 2A, attached, reflects the assignment of the site traffic to the two site access drives along Corkscrew Road.

7a) The TIS does not appear to contain a LOS analysis for each of the projects access points. Please review and revise the TIS accordingly.

The HCS analysis for the two site access drives are attached to this response for reference.

8) The TIS does not appear to contain a LOS analysis for intersections within the proposed projects area of influence. See the intersections of Corkscrew Road with Ben Hill Griffin Pkwy and Alico Road. Please review and revise the TIS accordingly.

The HCS analysis for Corkscrew Road with Ben Hill Griffin Parkway and Alico Road are attached for reference.

LCDOT Sufficiency Checklist

1) What is this projects build-out year? The Level of Service (LOS) analysis in the TIS is only for 5 years (Year 2022). Is 5 year to build out for this project realistic

The size of this project could possibly yield a build-out date of 2022. Build-out is subject to market conditions and is completely speculative.

2) *The service volumes used for 5-year analysis should be based on the Lee County Link Specific Service Volume Tables.*

The Generalized Service Volume Tables were utilized for the year 2022 analysis consistent with other rezoning traffic studies completed in the area and studies specifically completed by TR Transportation Consultants. The County has previously advised consultants that the Link Specific Service Volume Tables are NOT to be used if the year of the analysis was more than five (5) years from the development of the Link Specific Service Volume Table. The current Link Specific Service Volume Table is developed based on data from 2013 and is dated May 2014. This is clearly more than five years from 2022. That is why the Generalized Service Volume Tables were utilized for this analysis. No changes were made to Table 3A and Table 4A.

3) *There is a 2015 AADT traffic count on Corkscrew Road between Ben Hill Griffin Pkwy and Alico Rd. (Count #249) available in the 2015 traffic count report. It shall be used for this segment analysis in the Table 4A.*

The AADT data in Table 4A was only used to compute a historical growth rate to apply to the 2014 Peak Hour, Peak Season Peak Direction traffic volume, which was obtained from the 2015 Concurrency Report. Where there was no historical traffic count data available, the nearest count station was utilized to compute the historical growth rate. Count Station #249 has only been operational for one year and therefore has no historical count data to determine a growth rate. A minimum growth rate of 1% per year, compounded annually, was utilized on all roadway segments.

4) *In the Table 4A, the AADT of Alico Rd. north of Corkscrew Rd. and east of Ben Hill Griffin Pkwy are 7,500, but one of the peak hour peak directional volume is 84 and another is 345.*

As discussed in the response to comment #3, the AADT data was only utilized to compute a historical growth rate in order to estimate the projected 2022 background traffic volumes. Where data was not recently available, the nearest count station with recent count data was utilized to compute a historic growth rate. The 2014 peak hour, peak direction volume was taken from the 2015 Lee County Concurrency Report. That is the reason for the differing volumes on each roadway link.

5) *In the Table 4A, the peak hour peak directional volumes of Corkscrew Road east of site access and west of site access are 183, but one of the AADT is 3,100 and another is 13,000.*

Again, the historical AADT was only utilized to compute a historical growth rate. West of the site access, the historical traffic data for Corkscrew Road further west was used to compute the historical growth rate due to the future developments that are occurring to the west of Pepperland Ranch. The growth rate to the east of Pepperland Ranch, which

there are currently no major planned projects, was based on a minimum growth rate of 1% per year, compounded annually.

6) *The traffic analysis shall include the traffic of the projects approved within the study area, such as Monte Cristo, Wild Blue and Corkscrew Farms.*

The zoning traffic study requirements as outlined in Administrative Code 13-17 (Traffic Study Guidelines for Planned Development Re-zonings) was followed in the preparation of the zoning traffic study. Including planned or undeveloped projects in the analysis is not required and was not included in the zoning traffic study prepared for this project. The main purpose of applying a historical growth rate to the existing traffic volumes is to estimate future traffic based on what actually has occurred in the past (growth due to home construction, development, etc.) and not estimate future traffic based approved zoning traffic studies.

A cumulative analysis of all the projects that are approved or planned along Corkscrew Road is being undertaken by Lee County in the Environmental Enhancement and Preservation Overlay Study (CN160192DK) that is being conducted later this year and in early 2017. That study will take a detailed look at the traffic impacts of these and other projects along Corkscrew Road that will impact the traffic volumes in the area.

If you have any additional questions, please do not hesitate to contact me.

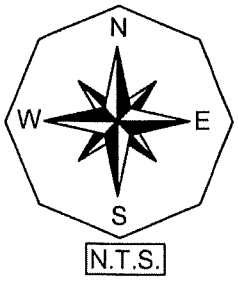
Sincerely,

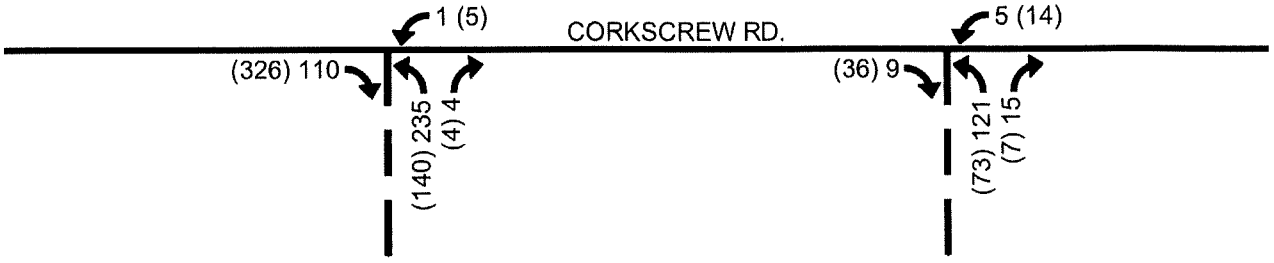
Ted B. Treesh, PTP
President

Attachments

FIGURE 2A

F1511.08/Sufficiency





LEGEND

← 000 WEEKDAY AM PEAK HOUR SITE TRAFFIC
←(000) WEEKDAY PM PEAK HOUR SITE TRAFFIC

TR TRANSPORTATION CONSULTANTS, INC.

SITE TRAFFIC ASSIGNMENT
PEPPERLAND RANCH

Figure 2A

TABLES 5A & 6A

CUMULATIVE 2040 LEVEL OF SERVICE EVALUATION

TABLE 5A
LEVEL OF SERVICE THRESHOLDS
2040 FINANCIALLY FEASIBLE ROADWAY NETWORK

	ROADWAY SEGMENT		2040 E + C NETWORK LANES		GENERALIZED SERVICE VOLUMES				
					LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	FROM	TO	# Lanes	Roadway Designation	VOLUME	VOLUME	VOLUME	VOLUME	VOLUME
Corkscrew Road	Pepperland Ranch	SR 82	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Corkscrew Farms	Pepperland Ranch	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Alico Road	Corkscrew Farms	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Bella Terra	Alico Road	4LD	Class I - Arterial	0	260	1,840	1,960	1,960
	Wild Blue	Bella Terra	4LD	Class I - Arterial	0	260	1,840	1,960	1,960
	Ben Hill Griffin	Wild Blue	4LD	Class I - Arterial	0	260	1,840	1,960	1,960
Alico Road	Corkscrew Road	Green Meadow Rd.	2LN	Uninterrupted Flow Hightway	120	420	840	1,190	1,640
	Ben Hill Griffin	Green Meadow Rd.	4LD	Class I - Arterial	260	1,840	1,960	1,960	1,960

[ ] - Denotes the LOS Standard for each roadway segment

TABLE 6A
2040 ROADWAY LINK LEVEL OF SERVICE CALCULATIONS
CUMULATIVE LINK ANALYSIS
TRIPS FROM PEPPERLAND RANCH, CORKSCREW FARMS & WILD BLUE

TOTAL PM PEAK HOUR PROJECT TRAFFI 605 VPH IN= 381 OUT= 224

ROADWAY SEGMENT			2040 FSUTMS	LCDOT PCS OR	PEAKSEASON	AADT BACKGROUND	K-100	100TH HIGHEST HOUR PK DIR	D	PM PK HR PEAK	2040 BACKGROUND PEAK DIRECTION TRAFFIC VOLUMES & LOS		PEPPERLAND RANCH PK DIR PM PROJ	CORKSCREW FARMS PK DIR PM PROJ	WILD BLUE PK DIR PM PROJ	2040 BACKGROUND PLUS PROJ PEAK DIRECTION TRAFFIC VOLUMES & LOS	
ROADWAY	FROM	TO	PSWDT	FDOT SITE #	FACTOR	TRAFFIC	FACTOR	2-WAY VOLUME	FACTOR	DIRECTION	VOLUME	LOS	TRAFFIC	TRAFFIC	TRAFFIC	VOLUME	LOS
Corkscrew Road	Pepperland Ranch	SR 82	3,060	15	1.147	2,668	0.0990	264	0.52	EAST	137	B	19	19	6	181	B
	Corkscrew Farms	Pepperland Ranch	3,060	15	1.147	2,668	0.0990	264	0.52	EAST	137	B	362	19	6	524	C
	Alico Road	Corkscrew Farms	8,138	15	1.147	7,095	0.0990	702	0.52	EAST	365	B	362	644	6	1377	E
	Bella Terra	Alico Road	14,733	15	1.147	12,845	0.0990	1,272	0.52	EAST	661	C	248	429	8	1346	C
	Wild Blue	Bella Terra	20,961	15	1.147	18,275	0.0990	1,809	0.52	EAST	941	C	248	429	8	1626	C
	Ben Hill Griffin	Wild Blue	28,619	15	1.147	24,951	0.0990	2,470	0.52	EAST	1284	C	248	429	400	2361	F
Alico Road	Corkscrew Road	Green Meadow Rd.	8,092	53	1.203	6,727	0.0930	626	0.53	EAST	332	B	114	113	3	562	C
	Ben Hill Griffin	Green Meadow Rd.	30,661	53	1.203	25,487	0.0930	2,370	0.53	EAST	1256	B	76	175	133	1640	B

DEVELOPMENT OF INTERSECTION FUTURE YEAR BACKGROUND TURNING MOVEMENT VOLUMES

Development of Future Year Background Turning Volumes

Intersection	**Corkscrew Road at Ben Hill Griffin Pkwy**
Count Date	March 2015
Build-Out Year	2022

AM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	114	181	11	197	34	170	482	351	48	39	856	244
Peak Season Correction Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Current Peak Season Volumes	111	176	11	191	33	165	468	340	47	38	830	237
Growth Rate	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%
Years to Build-out	7	7	7	7	7	7	7	7	7	7	7	7
2022 Background Turning Volumes	**135**	**214**	**13**	**232**	**40**	**201**	**569**	**414**	**57**	**46**	**1,010**	**288**
Project Turning Volumes	0	0	0	16	0	0	0	56	0	0	169	49
2022 Background + Project	**135**	**214**	**13**	**248**	**40**	**201**	**569**	**470**	**57**	**46**	**1,179**	**337**

PM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	157	161	28	261	153	454	598	498	169	143	584	207
Peak Season Correction Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Current Peak Season Volumes	152	156	27	253	148	440	580	483	164	139	566	201
Growth Rate	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%	2.84%
Years to Build-out	7	7	7	7	7	7	7	7	7	7	7	7
2022 Background Turning Volumes	**185**	**190**	**33**	**308**	**180**	**535**	**706**	**588**	**200**	**169**	**689**	**245**
Project Turning Volumes	0	0	0	50	0	0	0	171	0	0	101	29
2022 Background + Project	**185**	**190**	**33**	**358**	**180**	**535**	**706**	**759**	**200**	**169**	**790**	**274**

Development of Future Year Background Turning Volumes

Intersection	**Corkscrew Road at Alico Road**
Count Date	December 2014
Build-Out Year	2022

AM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	47	0	63	53	96	0	0	207	76
Peak Season Correction Factor	0.00	0.00	0.00	1.10	0.00	1.10	1.10	1.10		0.00	1.10	1.10
Current Peak Season Volumes	0	0	0	52	0	69	58	106	0	0	228	84
Growth Rate				2.00%		2.00%	2.00%	2.00%			2.00%	2.00%
Years to Build-out	0	0	0	8	0	8	8	8	0	0	8	8
2022 Background Turning Volumes	**0**	**0**	**0**	**61**	**0**	**81**	**68**	**124**	**0**	**0**	**267**	**98**
Project Turning Volumes	0	0	0	38	0	0	0	81	0	0	243	113
2022 Background + Project	**0**	**0**	**0**	**99**	**0**	**81**	**68**	**205**	**0**	**0**	**510**	**211**

PM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	101	0	24	24	197	0	0	94	59
Peak Season Correction Factor	0.00	0.00	0.00	1.10	0.00	1.10	1.10	1.10	0.00	0.00	1.10	1.10
Current Peak Season Volumes	0	0	0	111	0	26	26	217	0	0	103	65
Growth Rate	0.00%	0.00%	0.00%	2.00%	0.00%	2.00%	2.00%	2.00%	0.00%	0.00%	2.00%	2.00%
Years to Build-out	0	0	0	8	0	8	8	8	0	0	8	8
2022 Background Turning Volumes	**0**	**0**	**0**	**130**	**0**	**30**	**30**	**254**	**0**	**0**	**121**	**76**
Project Turning Volumes	0	0	0	114	0	0	0	248	0	0	146	67
2022 Background + Project	**0**	**0**	**0**	**244**	**0**	**30**	**30**	**502**	**0**	**0**	**267**	**143**

HCS SUMMARY SHEETS

CORKSCREW ROAD @ BEN HILL

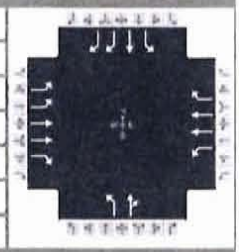
GRIFFIN PKWY

2022 BACKGROUND TRAFFIC

PM PEAK HOUR

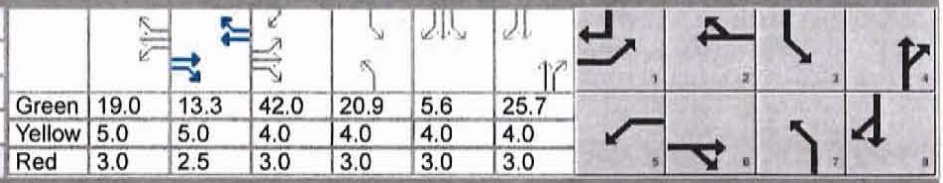
HCS 2010 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 Background	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM B...		
Project Description	F1511.08 - Pepperland Ranch				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	706	588	200	169	689	245	185	190	33	308	180	535

Signal Information			
Cycle, s	170.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	19.0	13.3	42.0	20.9	5.6	25.7						
Yellow	5.0	5.0	4.0	4.0	4.0	4.0						
Red	3.0	2.5	3.0	3.0	3.0	3.0						

Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	706	588	200	169	689	245	185	190	33	308	180	535
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	2		2	2	2
Ped / Bike / RTOR, /h	0	0	26	0	0	16	0	0	0	0	0	57
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	550	0	335	415	0	475	210	0		350	0	490
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	45	45	45	45	45	45

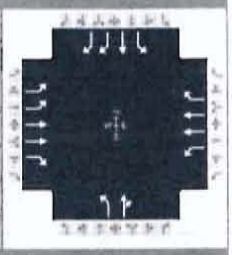
Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	63.0	82.0	15.0	34.0	56.0	25.0	48.0	17.0
Yellow Change Interval (*Y*), s	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
Red Clearance Interval (R_c), s	3.0	2.5	3.0	2.5	3.0	3.0	3.0	3.0
Minimum Green (G_{min}), s	10	25	7	25	7	10	7	10
Start-Up Lost Time (*l1*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No		0.50	No		0.50	No		0.50	No		0.50

Copyright © 2016 University of Florida. All Rights Reserved.

HCS 2010 Signalized Intersection Results Summary

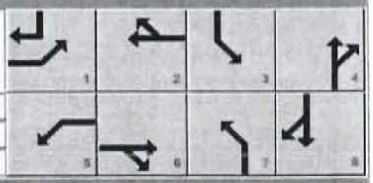
General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 Background	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM B...		
Project Description	F1511.08 - Pepperland Ranch				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	706	588	200	169	689	245	185	190	33	308	180	535

Signal Information			
Cycle, s	170.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	19.0	13.3	42.0	20.9	5.6	25.7	
Yellow	5.0	5.0	4.0	4.0	4.0	4.0	
Red	3.0	2.5	3.0	3.0	3.0	3.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	49.0	69.8	27.0	47.8	27.9	32.7	40.5	45.2
Change Period, ($Y+R_c$), s	7.5	7.5	8.0	7.5	7.0	7.0	7.0	7.0
Max Allow Headway (*MAH*), s	3.0	0.0	3.0	0.0	3.0	3.1	3.0	3.1
Queue Clearance Time (g_s), s	37.8		19.0		20.6	23.7	32.9	22.1
Green Extension Time (g_e), s	3.7	0.0	0.1	0.0	0.3	2.0	0.6	2.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.03		1.00		0.00	0.01	0.00	0.00

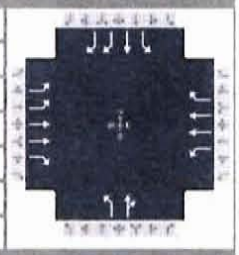
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	751	626	185	180	733	244	197	237		328	191	509
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1723	1773	1579	1774	1773	1579	1774	1814		1774	1863	1397
Queue Service Time (g_s), s	35.8	23.0	14.3	17.0	33.8	23.7	18.6	21.7		30.9	15.1	20.1
Cycle Queue Clearance Time (g_c), s	35.8	23.0	14.3	17.0	33.8	23.7	18.6	21.7		30.9	15.1	20.1
Green Ratio (*g/C*)	0.24	0.37	0.37	0.11	0.24	0.24	0.12	0.15		0.20	0.22	0.47
Capacity (*c*), veh/h	842	1301	579	198	841	374	218	274		349	419	1311
Volume-to-Capacity Ratio (*X*)	0.892	0.481	0.320	0.909	0.872	0.651	0.901	0.865		0.938	0.457	0.388
Available Capacity (c_a), veh/h	1125	1301	579	217	841	374	657	421		574	570	1538
Back of Queue (*Q*), veh/ln (90 th percentile)	21.3	14.3	8.8	13.5	21.6	7.7	12.5	14.7		19.9	10.5	7.0
Queue Storage Ratio (*RQ*) (90 th percentile)	0.98	0.00	0.67	0.83	0.00	0.41	1.51	0.00		1.44	0.00	0.36
Uniform Delay (d_1), s/veh	62.1	41.4	38.6	74.7	62.4	13.8	73.5	70.5		67.2	56.9	15.3
Incremental Delay (d_2), s/veh	6.1	1.3	1.5	34.0	12.1	8.5	5.4	7.4		11.6	0.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (*d*), s/veh	68.2	42.6	40.1	108.6	74.4	22.3	78.9	77.8		78.8	57.2	15.4
Level of Service (LOS)	E	D	D	F	E	C	E	E		E	E	B
Approach Delay, s/veh / LOS	54.6	D		68.8	E		78.3	E		43.4	D	
Intersection Delay, s/veh / LOS	58.2						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	3.1	C	3.0	C	3.1	C
Bicycle LOS Score / LOS	1.8	A	1.4	A	1.2	A	2.2	B

Copyright © 2016 University of Florida. All Rights Reserved.

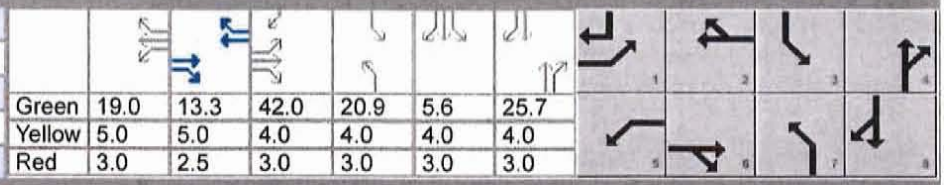
HCS 2010 Signalized Intersection Intermediate Values

General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 Background	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM B...		
Project Description	F1511.08 - Pepperland Ranch				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	706	588	200	169	689	245	185	190	33	308	180	535

Signal Information			
Cycle, s	170.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Green	19.0	13.3		42.0	20.9	5.6	25.7					
Yellow	5.0	5.0		4.0	4.0	4.0	4.0					
Red	3.0	2.5		3.0	3.0	3.0	3.0					

Saturation Flow / Delay	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	1.000	0.980	0.980	0.980
Approach Grade Adjustment Factor (f_g)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	0.885
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000			0.000			0.974			0.000	
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Movement Saturation Flow Rate (s), veh/h	3445	3547		1774	3547		1774	1546		1774	1863	
Proportion of Vehicles Arriving on Green (P)	0.24	0.37	0.37	0.11	0.24	0.24	0.12	0.15	0.15	0.20	0.22	0.22
Incremental Delay Factor (k)	0.19	0.50	0.50	0.34	0.50	0.50	0.04	0.10		0.11	0.04	0.04

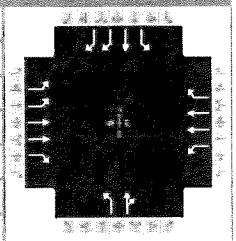
Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0
Green Ratio (g/C)	0.24	0.37	0.11	0.24	0.12	0.15	0.20	0.22
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	0	0	0	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Permitted Queue Service Time (g_{ps}), s								
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		0		0				1397
Protected Right Effective Green Time (g_R), s		0.0		0.0				41.5

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.00	2.224	0.08	2.224	0.02	2.336	0.04
Pedestrian F_s / F_{delay}	0.000	0.142	0.000	0.156	0.000	0.165	0.000	0.158
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	733.01	34.11	488.63	48.54	302.26	61.25	449.92	51.06
Bicycle F_w / F_v	-3.64	1.29	-3.64	0.95	-3.64	0.72	-3.64	1.70

Copyright © 2016 University of Florida, All Rights Reserved.

HCS 2010 Signalized Intersection Input Data

General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 W/Project	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM...		
Project Description	F1511.08 - Pepperland Ranch				

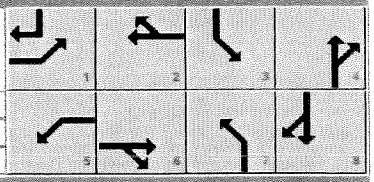


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	706	759	200	169	689	274	185	190	33	358	180	535

Signal Information			
Cycle, s	170.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	15.4	11.5		42.5	20.9	10.6	25.5					
Yellow	5.0	5.0		4.0	4.0	4.0	4.0					
Red	3.0	2.5		3.0	3.0	3.0	3.0					



Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	706	759	200	169	689	274	185	190	33	358	180	535
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	2	2	2	2	2	2	2	2		2	2	2
Ped / Bike / RTOR, /h	0	0	26	0	0	16	0	0	0	0	0	57
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	550	0	335	415	0	475	210	0		350	0	490
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	45	45	45	45	45	45	45	45	45	45	45	45

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	63.0	82.0	15.0	34.0	56.0	25.0	48.0	17.0
Yellow Change Interval (Y), s	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
Red Clearance Interval (R_c), s	3.0	2.5	3.0	2.5	3.0	3.0	3.0	3.0
Minimum Green (G_{min}), s	10	25	7	25	7	10	7	10
Start-Up Lost Time (*l*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Min	Off	Min	Off	Off	Off	Off
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Clearance Time (*PC*), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0	No	25	0	No	25	0	No	25	0	No	25
Walkway / Crosswalk Width / Length, ft	9.0	12	0	9.0	12	0	9.0	12	0	9.0	12	0
Street Width / Island / Curb	0	0	No	0	0	No	0	0	No	0	0	No
Width Outside / Bike Lane / Shoulder, ft	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0	12	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

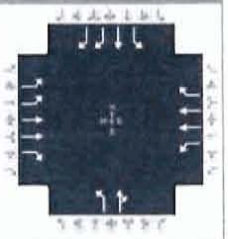
Copyright © 2016 University of Florida, All Rights Reserved.

2022 WITH PROJECT TRIPS

PM PEAK HOUR

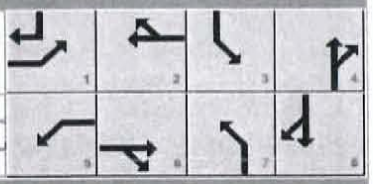
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 W/Project	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM...		
Project Description	F1511.08 - Pepperland Ranch				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	706	759	200	169	689	274	185	190	33	358	180	535

Signal Information					EB			WB			NB			SB		
Cycle, s	170.0	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	15.4	11.5		42.5	20.9	10.6	25.5					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	5.0	5.0		4.0	4.0	4.0	4.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	2.5		3.0	3.0	3.0	3.0					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	49.5	68.5	23.4	42.5	27.9	32.5	45.6	50.1
Change Period, ($Y+R_c$), s	7.5	7.5	8.0	7.5	7.0	7.0	7.0	7.0
Max Allow Headway (MAH), s	3.0	0.0	3.0	0.0	3.0	3.1	3.0	3.1
Queue Clearance Time (g_s), s	37.7		17.4		20.6	23.7	37.9	20.9
Green Extension Time (g_e), s	4.3	0.0	0.0	0.0	0.3	1.8	0.6	2.1
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.05		1.00		0.00	0.06	0.00	0.00

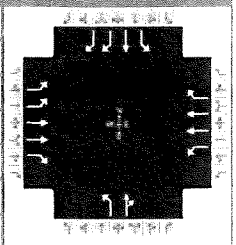
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	751	807	185	180	733	274	197	237		381	191	509
Adjusted Saturation Flow Rate (s), veh/h/ln	1723	1773	1579	1774	1773	1579	1774	1814		1774	1863	1397
Queue Service Time (g_s), s	35.7	32.1	14.5	15.4	35.0	28.4	18.6	21.7		35.9	14.5	18.9
Cycle Queue Clearance Time (g_c), s	35.7	32.1	14.5	15.4	35.0	28.4	18.6	21.7		35.9	14.5	18.9
Green Ratio (g/C)	0.25	0.36	0.36	0.09	0.21	0.21	0.12	0.15		0.23	0.25	0.50
Capacity (c), veh/h	851	1273	566	161	729	325	218	272		402	473	1399
Volume-to-Capacity Ratio (X)	0.883	0.634	0.327	1.116	1.005	0.846	0.901	0.872		0.946	0.405	0.363
Available Capacity (c_a), veh/h	1125	1273	566	161	729	325	652	362		569	565	1538
Back of Queue (Q), veh/ln (90 th percentile)	21.2	19.2	8.9	16.8	24.8	10.0	12.5	15.2		23.4	10.1	7.0
Queue Storage Ratio (RQ) (90 th percentile)	0.98	0.00	0.68	1.03	0.00	0.53	1.51	0.00		1.70	0.00	0.36
Uniform Delay (d_1), s/veh	61.6	45.2	39.6	77.3	67.5	14.1	73.5	70.7		64.7	52.8	15.3
Incremental Delay (d_2), s/veh	5.6	2.4	1.5	105.3	34.6	22.9	5.4	13.3		17.8	0.2	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Control Delay (d), s/veh	67.2	47.7	41.1	182.6	102.1	37.0	78.9	84.0		82.5	53.0	15.4
Level of Service (LOS)	E	D	D	F	F	D	E	F		F	D	B
Approach Delay, s/veh / LOS	55.4	E		99.2	F		81.7	F		45.7	D	
Intersection Delay, s/veh / LOS	67.3						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	3.1	C	3.0	C	3.1	C
Bicycle LOS Score / LOS	1.9	A	1.5	A	1.2	A	2.3	B

Copyright © 2016 University of Florida, All Rights Reserved.

HCS 2010 Signalized Intersection Intermediate Values

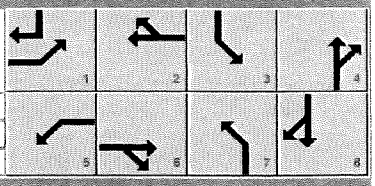
General Information				Intersection Information	
Agency	TR Transportation Consultants			Duration, h	0.25
Analyst	tbt	Analysis Date	May 17, 2016	Area Type	Other
Jurisdiction	LCDOT	Time Period	PM Peak Hour	PHF	0.94
Urban Street	Corkscrew Road	Analysis Year	2022 W/Project	Analysis Period	1> 16:45
Intersection	Ben Hill Griffin Parkway	File Name	Corkscrew Rd at Ben Hill Griffin Pkwy 2022 PM...		
Project Description	F1511.08 - Pepperland Ranch				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	706	759	200	169	689	274	185	190	33	358	180	535

Signal Information			
Cycle, s	170.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	15.4	11.5	42.5	20.9	10.6	25.5						
Yellow	5.0	5.0	4.0	4.0	4.0	4.0						
Red	3.0	2.5	3.0	3.0	3.0	3.0						



	EB			WB			NB			SB		
Saturation Flow / Delay	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width Adjustment Factor (f_w)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	1.000	0.980	0.980	0.980
Approach Grade Adjustment Factor (f_g)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Parking Activity Adjustment Factor (f_p)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Bus Blockage Adjustment Factor (f_{bb})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Area Type Adjustment Factor (f_a)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Lane Utilization Adjustment Factor (f_{LU})	0.971	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	0.885
Work Zone Adjustment Factor (f_{wz})	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Left-Turn Adjustment Factor (f_{LT})	0.952	0.000		0.952	0.000		0.952	0.000		0.952	0.000	
Right-Turn Adjustment Factor (f_{RT})		0.000			0.000			0.974			0.000	
Left-Turn Pedestrian Adjustment Factor (f_{Lpb})	1.000			1.000			1.000			1.000		
Right-Turn Ped-Bike Adjustment Factor (f_{Rpb})			1.000			1.000			1.000			1.000
Movement Saturation Flow Rate (s), veh/h	3445	3547		1774	3547		1774	1546		1774	1863	
Proportion of Vehicles Arriving on Green (P)	0.25	0.36	0.36	0.09	0.21	0.21	0.12	0.15	0.15	0.23	0.25	0.25
Incremental Delay Factor (k)	0.19	0.50	0.50	0.50	0.50	0.50	0.04	0.18		0.20	0.04	0.04

Signal Timing / Movement Groups	EBL	EBT/R	WBL	WBT/R	NBL	NBT/R	SBL	SBT/R
Lost Time (t_L)	7.0	7.5	8.0	7.5	7.0	7.0	7.0	7.0
Green Ratio (g/C)	0.25	0.36	0.09	0.21	0.12	0.15	0.23	0.25
Permitted Saturation Flow Rate (s_p), veh/h/ln	0	0	0	0	0	0	0	0
Shared Saturation Flow Rate (s_{sh}), veh/h/ln								
Permitted Effective Green Time (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Permitted Service Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Permitted Queue Service Time (g_{ps}), s								
Time to First Blockage (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Service Time Before Blockage (g_{fs}), s								
Protected Right Saturation Flow (s_R), veh/h/ln		0		0				1397
Protected Right Effective Green Time (g_R), s		0.0		0.0				42.0

Multimodal	EB		WB		NB		SB	
Pedestrian F_w / F_v	1.557	0.00	2.224	0.08	2.224	0.02	2.336	0.04
Pedestrian F_s / F_{delay}	0.000	0.143	0.000	0.155	0.000	0.165	0.000	0.155
Pedestrian M_{corner} / M_{cw}								
Bicycle c_b / d_b	717.57	34.95	493.98	48.20	299.94	61.42	507.37	47.34
Bicycle F_w / F_v	-3.64	1.44	-3.64	0.98	-3.64	0.72	-3.64	1.78

Copyright © 2016 University of Florida. All Rights Reserved.

CORSKCREW ROAD AT ALICO ROAD

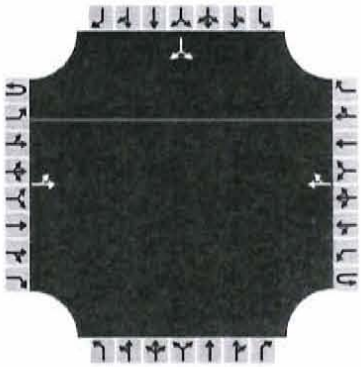
2022 BACKGROUND TRAFFIC

PM PEAK HOUR

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	tbt	Intersection	Corkscrew Rd at Alico Rd
Agency/Co.	TR Transportation Consult	Jurisdiction	Lee County
Date Performed	5/17/2016	East/West Street	Corkscrew Rd.
Analysis Year	2022	North/South Street	Alico Rd.
Time Analyzed	PM Peak - Background	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	F1511.08 - Pepperland Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		30	254				121	76						130		30
Percent Heavy Vehicles		20												20		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		309													174	
Capacity		1255													520	
v/c Ratio		0.25													0.33	
95% Queue Length		0.1													1.5	
Control Delay (s/veh)		7.9													15.4	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)	1.1												15.4			
Approach LOS	A												C			

Copyright © 2016 University of Florida. All Rights Reserved.

2022 WITH PROJECT TRIPS

PM PEAK HOUR

HCS 2010 Two-Way Stop Control Summary Report

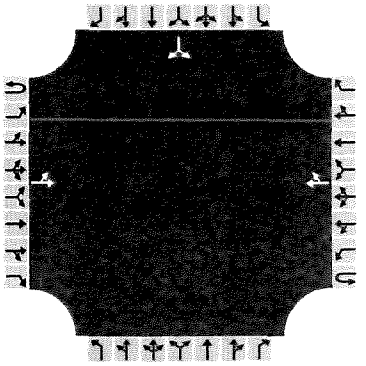
General Information

Analyst	tbt
Agency/Co.	TR Transportation Consult
Date Performed	5/17/2016
Analysis Year	2022
Time Analyzed	PM Peak - W/Project
Intersection Orientation	East-West
Project Description	F1511.08 - Pepperland Ranch

Site Information

Intersection	Corkscrew Rd at Alico Rd
Jurisdiction	Lee County
East/West Street	Corkscrew Rd.
North/South Street	Alico Rd.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration		LT						TR							LR	
Volume (veh/h)		30	502				267	143						244		30
Percent Heavy Vehicles		20												20		3
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)		579													298	
Capacity		1026													267	
v/c Ratio		0.56													1.11	
95% Queue Length		0.1													12.7	
Control Delay (s/veh)		8.6													130.4	
Level of Service (LOS)		A													F	
Approach Delay (s/veh)	0.9												130.4			
Approach LOS	A												F			

Copyright © 2016 University of Florida. All Rights Reserved.

CORKSCREW ROAD AT
WEST SITE ACCESS

HCS 2010 Two-Way Stop Control Summary Report

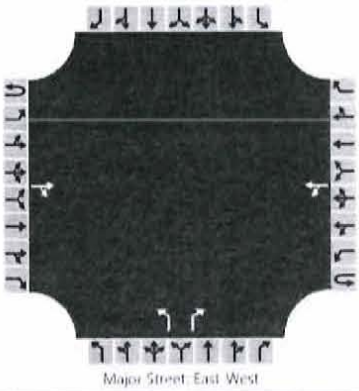
General Information

Analyst	tbt
Agency/Co.	TR Transportation Consult
Date Performed	5/17/2016
Analysis Year	2022
Time Analyzed	PM Peak - W/Project
Intersection Orientation	East-West
Project Description	F1511.08 - Pepperland Ranch

Site Information

Intersection	Corkscrew Rd at W Site Dr
Jurisdiction	Lee County
East/West Street	Corkscrew Rd.
North/South Street	W. Site Access Dr.
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			420	326		5	270			140		4				
Percent Heavy Vehicles						3				1		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						298				152		4				
Capacity						810				245		477				
v/c Ratio						0.37				0.62		0.01				
95% Queue Length						0.0				3.7		0.0				
Control Delay (s/veh)						9.5				41.2		12.6				
Level of Service (LOS)						A				E		B				
Approach Delay (s/veh)					0.2				40.5							
Approach LOS					A				E							

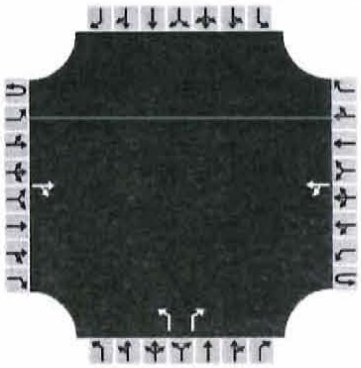
Copyright © 2016 University of Florida. All Rights Reserved.

CORKSCREW ROAD AT
EAST SITE ACCESS

HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	tbt	Intersection	Corkscrew Rd at E Site Dr
Agency/Co.	TR Transportation Consult	Jurisdiction	Lee County
Date Performed	5/17/2016	East/West Street	Corkscrew Rd.
Analysis Year	2022	North/South Street	E. Site Access Dr.
Time Analyzed	PM Peak - W/Project	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	F1511.08 - Pepperland Ranch		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			384	36		14	197			73		7				
Percent Heavy Vehicles						3				1		3				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						229				79		8				
Capacity						1098				362		618				
v/c Ratio						0.21				0.22		0.01				
95% Queue Length						0.0				0.8		0.0				
Control Delay (s/veh)						8.3				17.7		10.9				
Level of Service (LOS)						A				C		B				
Approach Delay (s/veh)					0.7				17.1							
Approach LOS					A				C							

Copyright © 2016 University of Florida. All Rights Reserved.

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

John E. Manning
District One

Cecil L Pendergrass
District Two

Larry Kiker
District Three

Brian Hamman
District Four

Frank Mann
District Five

Roger Desjarlais
County Manager

Richard Wm Wesch
County Attorney

Donna Marie Collins
County Chief Hearing Examiner

May 31, 2016

Via E-Mail

Matt Noble
Anobleplan LLC
1842 Seafan Circle
North Fort Myers, FL 33903

RE: Potable Water and Wastewater Availability – Conditional
Pepperland Ranch, 18500 Corkscrew Road
STRAP #: 30-46-27-00-00001.0000

Dear Mr. Noble:

The subject parcel is 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 wastewater lines are not in operation adjacent to the parcel mentioned above. This conditional availability letter is provided while Lee County Utilities is evaluating the Environmental Enhancement and Preservation Communities Boundary within the Corkscrew Area and preparing a Corkscrew Overlay Area Wastewater Master Plan to determine current and proposed flows and capacity. In order to provide service to this project, developer funded system enhancements such as line extensions will be required.

Your firm has indicated that this project will consist of 700 single family residential units with an estimated flow demand of approximately 175,000 gallons per day. Presently, sufficient capacity exists to provide potable water service as estimated above. Wastewater capacity should be sufficient pending determination by the Lee County Utilities Corkscrew Overlay Area Wastewater Master Plan. Once complete, a final letter of availability will be provided.

Availability of potable water and wastewater service is contingent upon final acceptance of the infrastructure to be constructed by the developer and determination by the Corkscrew Overlay Area Master Plan. Upon completion and final acceptance of this project, potable water service will be provided through the Corkscrew Water Treatment Plant.

Wastewater service will be provided by our Three Oaks Wastewater Treatment Plant, pending determination after completion of the Corkscrew Overlay Area Wastewater Master Plan. 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 meet with Jessica Muñoz 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 conditional availability of service. Lee County Utilities will commit to serve only upon receipt of all appropriate connection fees, a signed request for service, the approval of all State and local regulatory agencies, and determination by the Corkscrew Overlay Area Wastewater Master Plan.

Further, this letter of availability of potable water and wastewater service is to be utilized for Comprehensive Plan Amendment purposes for this project only. Individual letters of availability will be required for the purpose of obtaining regulatory and building permits.

Sincerely,



Nathan Beals, PMP
Principal Planner
(239) 533-8157
LEE COUNTY UTILITIES

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

John Manning
District One

Cecil L Pendergrass
District Two

Larry Kiker
District Three

Brian Hamman
District Four

Frank Mann
District Five

Roger Desjarlais
County Manager

Richard Wm. Wesch
County Attorney

Donna Marie Collins
Hearing Examiner

5/11/2016

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

Re: CPA2016-00003 Pepperland Ranch
DCI-2016-0003

Matt
~~Mr. Noble:~~

I received your request for service availability for Pepperland Ranch (STRAP: 30-46-27-00-00001.0000).

Currently, the closest route (Route 60) to the proposed development site is greater than seven miles away. This property is outside of the ¼ mile fixed route buffer and the ¾ mile ADA Service Corridor.

The current Transit Development Plan (TDP) does not identify for the expansion of LeeTran's transit service to this area as a need within the 10-year horizon of the document. Analysis from the current TDP also suggests this area would not be a successful area for future transit service based on the demographic information, density, and intensity datasets that were available.

There currently is no LeeTran service to this area. There are currently no plans to expand LeeTran services to this area.

Should you have any additional questions, please feel free to contact me at your convenience.

Sincerely,

H. Wayne Gaither
LeeTran, Principal Planner

Cc:
File
Brandon Dunn
Alvin Block

TDC Consulting Group
5621 Strand Boulevard, Suite 307; Naples, Florida 34110
Phone: 239-254-9263 Fax: 239-254-9274

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Pepperland

18500 Corkscrew Road

Lee Co., FL

May 27, 2016
TDC Project No. 6300-0003

Prepared For:

PEPPERLAND LLC
c/o
BCF Management Group, LLC
22190 Fairmount Court
Estero, FL 33928

Prepared By:

TDC Consulting Group
5621 Strand Boulevard, Suite 307
Naples, FL 34110

TDC Consulting Group

5621 Strand Boulevard, Suite 307; Naples, Florida 34110
Phone: 239-254-9263 Fax: 239-254-9274

May 27, 2016

PEPPERLAND LLC
c/o
BCF Management Group, LLC
22190 Fairmount Court
Estero, FL 33928
Attn: Brian F. Farrar, President

Subject: Phase I Environmental Site Assessment
Pepperland
18500 Corkscrew Road
Lee Co., FL

Dear Mr. Farrar:

Attached is the Phase I Environmental Site Assessment (ESA) report for the above-referenced property. The ESA was conducted in accordance with the ASTM International (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* E1527-13 (the Standard), the All Appropriate Inquiries (AAI) Rule 40 CFR Part 312, TDC's proposal, and generally accepted industry standards.

This report was prepared solely for the use of PEPPERLAND LLC and BCF Management Group, LLC, (hereinafter "Client" or "User") and any party specifically referenced in Section 1.6 - User Reliance. No other party shall use or rely on this report or the findings herein, without the prior written consent of TDC. TDC appreciates this opportunity to provide our environmental consulting services to you. If you have any questions concerning this project, please contact me at (239)-254-9263.

Sincerely,

John J. Driscoll
Principal

Attachments

EXECUTIVE SUMMARY

TDC Consulting Group (TDC) performed a Phase I Environmental Site Assessment (ESA) of Pepperland, located at 18500 Corkscrew Road, in Estero, Lee County, Florida. The ESA was conducted in general accordance with ASTM Standard Practice E1527-13. This ESA does not include discussion of ASTM non-scope considerations.

A summary of our key findings is provided below:

- The subject site consists of approximately 640 acres of land located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The majority of the site has been graded for agricultural use. An undeveloped natural area is present in the northwest corner of the site and a graded impoundment area is present in the northeast corner of the site.
- Based upon observations made during the site reconnaissance of the subject property and the supporting information gathered during the performance of this ESA, it is TDC's opinion that no on-site recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) are present. There was no evidence of the significant discharge of hazardous wastes or petroleum products on the subject site.
- Approximately 10 diesel fuel ASTs were located throughout the property for diesel irrigation pumps. One of the tanks is labeled for road usage and located within a secondary containment structure near the packing area on the east side of the site. No significant evidence of spills or releases was noted. It is likely that the actual number and location of on-site ASTs varies depending upon irrigation requirements
- Based upon a review of regulatory agency databases, the subject site was identified in the regulatory database search. Troyer Brothers Florida (Troyer), located at 18500 Corkscrew Road was cross-listed on the aboveground storage tank (AST) and Financial Assurance databases. Troyer installed a 1,000-gallon diesel fuel AST in 1994, which was removed without incident in 1998.
- W H E W-RADIO TOWER, located at 21999 Carter Road, was listed on the Financial Assurance database and appears to have been erroneously plotted in the southwestern quadrant of the subject site. No evidence of a radio tower was observed on the property.
- Based upon a review of regulatory agency databases, off-site RECs were not identified. One Leaking Underground Storage Tank (LUST); one AST, and two Financial Assurance facilities were identified within their respective search radii. These listings were not considered to represent RECs for the site.
- TDC contacted the Fort Myers office of the Florida Department of Environmental Protection (FDEP), the Lee County Division of Natural Resources (DNR), and the Lee County Department of Community Development, Codes and Enforcement Section for information concerning hazardous materials incidents, reported violations, or complaints for the subject site. Lee County DNR does not maintain files over five years old; they are sent to the FDEP for scanning. AST registration was reviewed on the Oculus FDEP online portal. Responses from Lee County Community Development, Codes and Enforcement remained outstanding at the time of report completion. This item represents a data gap. Due to the information gathered from other sources, including the regulatory database report and on-line government websites, this data gap is not expected to alter the findings.

- Adjoining land use is a mixture of vacant land, agricultural and residential uses. A visual inspection of adjoining properties did not identify any evidence of RECs.
- Several business environmental risk items were identified in connection with the subject site:
    - Current and historical agricultural land use on the subject property has included the use of pesticides, herbicides, fertilizers, and petroleum products. Active irrigation pumps with diesel fuel ASTs are present. Although no physical or documentary evidence of significant impacts from such uses was identified during this assessment, this should not be construed to mean that the property is free of potentially localized impacts relating to current and historical agricultural uses.
    - Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest. Trash was overflowing from the large roll-off dumpster located near the eastern packing area. No evidence of hazardous material or petroleum product releases were observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk.

Conclusion

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property.

CONTENTS

EXECUTIVE SUMMARY II

1.0 INTRODUCTION 1

1.1 Purpose 1

1.2 Detailed Scope of Services 1

1.3 Significant Assumptions 2

1.4 Limitations and Exceptions 2

1.5 Special Terms and Conditions 3

1.6 User Reliance 3

2.0 SUBJECT PROPERTY DESCRIPTION 3

2.1 Location and Legal Description 3

2.2 Subject Property and Vicinity General Characteristics 4

2.3 Current Use of the Subject Property 4

2.4 Descriptions of Structures, Roads, and Other Improvements on the Subject Property .. 4

2.4.1 Source of Potable Water 4

2.4.2 Sewage Disposal System 4

2.4.3 Solid Waste Disposal 4

2.4.4 Heating/Cooling Systems 5

2.5 Current Uses of Adjoining Properties 5

3.0 USER-PROVIDED INFORMATION 5

3.1 Title Records 5

3.2 Environmental Liens or Activity and Use Limitations 5

3.3 Specialized Knowledge 6

3.4 Commonly Known or Reasonably Ascertainable Information 6

3.5 Valuation Reduction for Environmental Issues 6

3.6 Owner, Property Manager, and Occupant Information 6

3.7 Reason for Performing Phase I 7

4.0 RECORDS REVIEW 7

4.1 Historical Use Information 7

4.1.1 Previous Environmental Reports 7

4.1.2 Historic Map Review 7

4.1.3 Aerial Photograph Review 7
4.1.4 City Directories 8
4.1.5 Historical Topographic Maps 9
4.1.6 Lee County Property Appraiser 9
4.1.7 Summary of Historical Information 9
4.2 Historical Use Information on Adjoining Properties 9
4.3 Physical Setting Source 10
4.3.1 Geology 10
4.3.2 Hydrology 11
4.4 Standard Environmental Record Sources – Federal and State 11
4.4.1 Federal Environmental Record Sources 12
4.4.2 State Environmental Record Sources 13
4.4.3 Unmapped Sites 14
4.5 Additional Environmental Records Sources 14
4.5.1 Estero Fire Rescue 14
4.5.2 Florida Department of Environmental Protection (FDEP) 15
4.5.3 Florida Department of Health, Lee County Environmental Health and Engineering 15
4.5.4 Lee County Division of Natural Resources 15
4.5.4 Historic Preservation/Endangered Species 15
5.0 SUBJECT PROPERTY RECONNAISSANCE 15
5.1 Methodology and Limiting Conditions 15
5.2 General Subject Property Setting 15
5.3 Subject Property Observations 16
5.3.1 Underground Storage Tanks (USTs) 16
5.3.2 Aboveground Storage Tanks (ASTs) 16
5.3.3 Hazardous Substance and Petroleum Products 16
5.3.4 Unlabeled Drums/Containers 16
5.3.5 Stained Soil or Pavement 17
5.3.6 Stains or Corrosion 17
5.3.7 Stressed Vegetation 17
5.3.8 Polychlorinated Biphenyls (PCBs) 17
5.3.9 Solid Waste/Dumping 17

5.3.10 Subject Property Drainage 17
5.3.11 Pits, Ponds, Lagoons and Pools of Liquid 17
5.3.12 Wastewater 17
5.3.13 Floor Drains, Sumps, Oil/Water Separators and Clarifiers 18
5.3.14 Wells 18
5.3.15 Septic Systems 18
5.3.16 Odors 18
5.3.17 Other Observations 18
5.3.18 Wetlands 18

6.0 INTERVIEWS 18
6.1 Interview with Owner/Key Subject Property Manager 18
6.2 Occupants 18
6.3 Interviews with Local Regulatory Agencies 18

7.0 FINDINGS/OPINION 19

8.0 DEVIATIONS/DATA GAPS 19

9.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S) 20

11.0 REFERENCES 21

13.0 STAFF QUALIFICATIONS 22

FIGURES

1 Site Vicinity Map
2 Site Plan
3 USGS Topographic Map

PHOTOGRAPHS

APPENDICES

A User Questionnaire
B Previous Reports
C Sanborn Map "No Coverage" letter
D Aerial Photograph Report
E Historical Topographic Map Report
F Radius Map Report
G Other Pertinent Documents

1.0 INTRODUCTION

TDC Consulting Group (TDC) has performed a Phase I Environmental Site Assessment (ESA) of Pepperland, located at 18500 Corkscrew Road, in Estero, Lee County, Florida (the Subject Property). The subject site consists of approximately 640 acres of land located on the south side of Corkscrew Road, east of Six Ls Farm Road.

1.1 Purpose

TDC was retained to conduct an ESA of the subject property to assist in real estate due diligence associated with a potential acquisition. The ESA was designed to provide an objective, professional opinion of environmental risks, if any, associated with the property through the identification of RECs, CRECs and HRECs to the extent feasible pursuant to the process prescribed in the Standard.

The term REC is defined in the Standard as "as the presence or likely presence of any hazardous substances or petroleum products in, on or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

A REC, resulting from a past release that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of formal or implied controls, is considered a Controlled Recognized Environmental Condition (CREC).

A past release of any hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority or meets the unrestricted use criteria established by a regulatory authority, that does not subject to the property to any formal or implied controls, is considered an HREC.

The ASTM Standard recognizes that there may be environmental issues or conditions at a property that parties may wish to consider, such as the presence of ACM, LBP or radon. This assessment was designed to address some of these other business environmental risk (BER).

1.2 Detailed Scope of Services

This ESA was conducted in accordance with the American Society for Testing and Materials (ASTM) *Standard Guide for Environmental Site Assessments: Phase I Environmental Site Assessment Process* E1527-13 (Standard), the All Appropriate Inquiry (AAI) Rule 40 CFR Part 312, and any additional requirements of Client. While the AAI rule still references the E1527-05 as demonstrating compliance with AAI, the USEPA's position is that the revised 2013 standard includes clarifications to the previous standard and its use will provide greater precision with regard to identification of RECs.

- A reconnaissance-level visit of the subject property to look for evidence of releases of hazardous materials or petroleum products, and to assess the potential for on-site releases of hazardous materials and petroleum products from existing operations.
- Drive-by observations of adjacent properties and the general site vicinity.

- Interviews with people familiar with the subject property, as available.
- Review of regulatory agency files, as necessary,
- Review of information concerning properties, within the specified minimum search distances from the property, available in the agency databases specified in Section 8.2.1 of the ASTM Standard, and those in local environmental record sources.
- Review of current and past uses of the property and surrounding area through an evaluation of historical sources specified in Section 8.3.4 of the ASTM Standard, such as aerial photographs, fire insurance maps, city directories, interviews and prior reports.
- Preparation of a report presenting our findings, including a summary of conclusions and recommendations

The ASTM Standard recognizes that there may be environmental issues or conditions at a property that parties may wish to consider. These are considered ASTM Non-Scope Considerations.

1.3 Significant Assumptions

The purpose of this Phase I ESA is to provide appropriate inquiry into the previous ownership and use of the Subject Property consistent with good commercial and customary practice in an effort to minimize liability. TDC also assumes that the information provided by the Client, the regulatory database provider, and regulatory agencies is true and reliable.

1.4 Limitations and Exceptions

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by TDC and the original party for whom this report was originally prepared.

This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. To the extent that TDC relied upon any information prepared by other parties not under contract to TDC, TDC makes no representation as to the accuracy or completeness of such information.

Only the party for whom this report was originally prepared, and other specifically named parties, may make use of and rely upon the information in this report.

The findings presented in this report apply solely to subject property conditions existing at the time when TDC's assessment was performed. The Phase I Environmental Site Assessment is a limited and non-exhaustive survey that is intended to evaluate whether readily available information indicates that the historical or current use of the subject property may have resulted in contamination by hazardous substances or wastes. As a result, without a comprehensive sampling and analysis program or implementation of services beyond the original scope of work, certain potential conditions, including, but not limited to those summarized below, may not be revealed:

- Naturally occurring toxic substances or elements found in subsurface soils, rocks, or water;
- Toxic substances commonly found in habitable environments, such as stored household products, building materials, and consumables;
- Biological or infectious agents and pathogens;
- Contaminant Plumes (liquid or gaseous) below the surface from a remote or unknown source; and,
- Unknown, unreported and not readily visible site contamination, which may have been caused by "midnight" dumping and/or accidental spillage.

TDC, therefore, does not provide any guarantees, certifications, or warranties (express or implied) that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and all applicable laws, codes, regulations, or standards.

1.5 Special Terms and Conditions

The scope of work for this Phase I ESA did not include testing of electrical equipment for the potential presence of polychlorinated biphenyls (PCBs) or the assessment of natural hazards such as naturally occurring asbestos or methane gas, assessment of the potential presence of radionuclides, assessment for the presence of microbial contamination, or assessment of nonchemical hazards such as the potential for damage from earthquakes or floods. This Phase I ESA also did not include an extensive assessment of the environmental compliance status of the Subject Property, or a health-based risk assessment.

1.6 User Reliance

This report is for the exclusive use of PEPPERLAND LLC and BCF Management Group, their partners, affiliates, lenders, insurers, attorneys, and each of their successors and assigns. Use of this report by any other party shall be at such party's sole risk.

2.0 SUBJECT PROPERTY DESCRIPTION

2.1 Location and Legal Description

The subject property is identified as approximately 640 acres of land located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The project parcel is described as follows:

- **18500 CORKSCREW RD, ESTERO FL 33928**

STRAP Number:	30-46-27-00-00001.0000
Folio ID:	10435901
Owner of Record:	PEPPERLAND LLC, 107 ENTERPRISE CT, OXFORD NC 27565
Abbreviated Legal Description:	ALL SEC 30 TWN 46 RGE 27 DESC IN OR 1520 PG 1283

A Subject Property Location Map, Subject Property Plan, and United States Geological Survey (USGS) topographic map are included as Figures 1 through 3, respectively.

2.2 Subject Property and Vicinity General Characteristics

The subject property is located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The property is bounded by the Corkscrew Road along the north; Six Ls Farm Road to the west; and, undeveloped agricultural, and residential land to the east and south. The site is a mix of undeveloped and agricultural land.

2.3 Current Use of the Subject Property

The subject property is presently a mix of undeveloped and agricultural land.

2.4 Descriptions of Structures, Roads, and Other Improvements on the Subject Property

As noted above, the subject property is a mix of undeveloped and agricultural land. There are two active access points from Corkscrew Road. Happy Dale Lane, an unimproved dirt road, extends south from Corkscrew Road at the approximate center of the property. A second road extends south from Corkscrew Road along the eastern property boundary to a packing area. Carter Road which winds around the undeveloped natural area in the northwestern portion of the site appears to have been a historical access point from Corkscrew Road evident in the 2012 USGS Topographic Quadrangle.

The majority of the site has been graded for agricultural use. An undeveloped natural area is present in the northwest corner of the site and a graded impoundment area is present in the northeast corner of the site.

2.4.1 Source of Potable Water

Potable water is not provided to the subject site.

2.4.2 Sewage Disposal System

Sanitary sewer service is not provided for the subject site. Portable restroom facilities were present which are pumped out as needed by a contractor.

2.4.3 Solid Waste Disposal

Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest.

Solid waste is collected in a large roll-off dumpster located in the eastern portion of the site. No significant concerns were noted, although some materials had blown out onto the ground surrounding the dumpster. No evidence of hazardous material or petroleum product

releases were observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk item.

2.4.4 Heating/Cooling Systems

The subject site is presently vacant.

2.5 Current Uses of Adjoining Properties

The use of the adjoining properties at the time of TDC's investigation is summarized as follows:

- Agricultural land is present to the east of the subject site.
- Mixed residential and small-scale agricultural uses are present to the west of the subject site, across Six Ls Farm Road.
- Undeveloped and former agricultural land is present to the north of the subject site, across Corkscrew Road.
- Mixed residential and small-scale agricultural uses are present south of the subject site.

3.0 USER-PROVIDED INFORMATION

The Standard lays out the responsibilities of the User of the report in order for the User to satisfy the all appropriate inquiry, into previous ownership of the property, requirement in order to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability, herein after landowner liability protections.

The following questions regarding the Subject Property were requested by TDC to the Client's representative. The questionnaire was answered by Mr. Brian Farrar, the Key Site Manager. A copy of the completed questionnaire is included in Appendix A.

3.1 Title Records

Title records were not provided to TDC for review.

3.2 Environmental Liens or Activity and Use Limitations

The Client was asked the following questions as part of the assessment:

- Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law? Answer: No
- Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions, or institutional controls, that are in place at the Subject Property and/or have been filed or recorded in a registry under federal, tribal, state, or local law? Answer: No

3.3 Specialized Knowledge

The Client was asked the following questions as part of the assessment:

- Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are they involved in the same line of business as the current or former occupants of the property or an adjoining property so that they would have specialized knowledge of the chemicals and processes used by this type of business? Answer: No.
- Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? Answer: No.
- Do you know the past uses of the property? Answer: No.
- Do you know of spills or other chemical releases that have taken place at the property? Answer: No
- Do you know of any environmental cleanups that have taken place at the Subject Property? Answer: No

3.4 Commonly Known or Reasonably Ascertainable Information

The Client was asked the following question regarding the degree of obviousness of the presence of likely presence of contamination at the Subject Property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)

- As User of this report, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property based on your knowledge and experience related to the Subject Property? Answer: No

3.5 Valuation Reduction for Environmental Issues

The Client was asked the following question as part of the assessment:

- Is the purchase price being paid for the Subject Property significantly less than the fair market value? Answer: No. This evaluation is not in support of a real estate transaction.

3.6 Owner, Property Manager, and Occupant Information

The subject property is presently utilized as agricultural land, with a limited portion which remains vacant. Property ownership information from the Lee County Property Appraiser is below.

- **18500 CORKSCREW RD, ESTERO FL 33928**

STRAP Number:	30-46-27-00-00001.0000
Folio ID:	10435901
Owner of Record:	PEPPERLAND LLC, 107 ENTERPRISE CT, OXFORD NC 27565

Abbreviated Legal Description: ALL SEC 30 TWN 46 RGE 27 DESC IN OR 1520 PG 1283

3.7 Reason for Performing Phase I

The Phase I ESA was conducted to support the update of existing land use entitlements.

4.0 RECORDS REVIEW

The following sections provide information regarding the regulatory status and history of the subject property and vicinity developed from information available from local, state and federal agencies and ASTM Standard Historical Sources. It also provides topographic, hydrologic and soil conditions in the area of the Subject Property.

4.1 Historical Use Information

The objective of consulting historical sources is to develop a history of the previous uses of the subject property and surrounding area, in order to identify the likelihood of past uses having led to RECs in connection with the Subject Property.

4.1.1 Previous Environmental Reports

The Client provided excerpts of previous environmental reports that were completed on the northern adjacent property.

- *Phase I Environmental Site Assessment, Proposed Corkscrew Farms, 1,350 Acre Property, Corkscrew Road, Estero, Lee County, Florida*, prepared by Universal Engineering Sciences, Inc. (Universal), and dated October 7, 2014 ;
- *Phase II ESA, Corkscrew Farms Property, Corkscrew Road, Estero, Lee County, Florida*, prepared by Universal, and dated November 3, 2014
- *CONFIRMATORY SOIL SAMPLING, Corkscrew Farms Property, Estero, Lee County, Florida*, prepared by Universal, and dated November 17, 2014

4.1.2 Historic Map Review

TDC contracted Environmental Data Resources, Inc. (EDR) to conduct a search for historical Sanborn Fire Insurance (Sanborn) maps for the subject property and immediate vicinity. No Sanborn coverage was available for the subject property and surrounding areas. A copy of the No Coverage letter is provided in **Appendix C**.

4.1.3 Aerial Photograph Review

TDC reviewed historical aerial photographs provided by EDR for the years 1944, 1953, 1958, 1968, 1972, 1979, 1980, 1986, 1990, 1996, 1999, 2005, 2006, 2007 and 2010 (Appendix D). The photographs were reviewed to identify former land use on and in the vicinity of the subject property. The photographs consisted of variable altitude, black-and-white photographs. A summary of the information on each photograph is provided below:

- **1944** – The subject property and surrounding area are depicted as generally undeveloped, natural areas. A roadway which angles slightly north of due west is present immediately north of the future Corkscrew Road. This is the only development noted in the aerial.
- **1953 and 1958** - The subject property and surrounding area are depicted as generally undeveloped, natural areas. The 1958 aerial reveals a narrow roadway where the existing Corkscrew Road is present.
- **1968 and 1972** – Subject property and eastern adjacent property appear as agricultural land use. Six Ls Farm Road is present along the west. Northern, western, and southern adjacent properties appear undeveloped natural areas with some scattered trails evident.
- **1979 and 1980** – The subject property and most of the surrounding area appears as agricultural land use. Limited rural residential land use is evident to the west of the site.
- **1986** – The subject property is generally unchanged.
- **1990** – The subject property and surrounding area remain similar to the 1986 photograph.
- **1996** and **1999** - The subject property and nearby surrounding area are generally unchanged, except the northwestern natural area is now bordered by a berm/dirt road and the packing area on the east-central portion of the site has been graded.
- **2005, 2006, 2007, and 2010** – The subject property and surrounding area are generally unchanged.

4.1.4 City Directories

City directory coverage for the subject property was obtained from EDR. City directory information was available for 2013, 2008, 2003, 1999, 1995, and 1992. Prior directory coverage was not available from EDR or at the City of Fort Myers Public Library.

Historical City Directory Summary		
Address	***Occupant***	***Concern?***
2013		
18500 Corkscrew Road	No Listing	No
2008		
18500 Corkscrew Road	No Listing	No
2003		
18500 Corkscrew Road	DGR DISTRIBUTORS INC	No

1999		
18500 Corkscrew Road	No Listing	No
1995		
18500 Corkscrew Road	No Listing	No
1992		
18500 Corkscrew Road	No Listing	No

Due to the rural nature of the site vicinity, only limited city directory information was identified. No significant concerns were identified through the historical city directory review.

4.1.5 Historical Topographic Maps

TDC reviewed the Corkscrew NW, FL topographic maps for the years 1958, 1973, 1987, and 2012. These maps depict the subject property as undeveloped land. The 1958 amp depicts the property as undeveloped natural land with a trail that crosses the northern portion of the site. The 1973 and 1987 maps show the property to be transected by multiple drainage ditches with a large natural area in the northwestern portion of the site. Agricultural land use is indicated to the east and south of the subject site. The 2012 map reveals Happy Dale Lane as an unimproved north-south road dividing the site in half. Carter Road is an unimproved road that winds around a natural area in the northwest portion of the site. No structures are indicated. Site elevation is indicated as 25 feet Mean Sea Level (MSL). Copies of the topographic maps are provided in Appendix D.

4.1.6 Lee County Property Appraiser

Tax files are files kept for property tax purposes by the local jurisdiction where the property is located and may include records of past ownership, appraisals, maps, sketches, and photographs. TDC reviewed the property tax files for the Property available on line from the Lee County Property Appraiser's website. The website included general property information such as property size and owner, which has been incorporated into the applicable sections on this report. No building permits or significant historical use information was noted.

4.1.7 Summary of Historical Information

The subject property was been undeveloped from at least 1944 until sometime between 1958 and 1968 according to historical aerial photographs. The boundaries of the agricultural areas have remained largely similar from the late 1960s through present.

4.2 Historical Use Information on Adjoining Properties

The surrounding area was primarily undeveloped from at least 1944 through at least 1958. Sometime between 1958 and 1968 the eastern adjacent property began agricultural

land use. From the late 1970s to present, increasing agricultural and scattered residential uses were noted. No off-site historical RECs were identified.

4.3 Physical Setting Source

4.3.1 Geology

The geology beneath the region is primarily comprised of recent to post-Eocene age deposits of marine origin. From a depth of more than 350 feet to the surface, the area is dominated by carbonates with a lesser volume of clastic sediments. At the surface, and just below, are Pleistocene and Recent marine terrace sands and other clastics that commonly blanket the county, but may be discontinuous (McCoy, 1962). Below the terrace sands are older Pleistocene deposits, which include the Anastasia Limestone that occurs along southwestern coastal Florida, and marl of the Fort Thompson Formation (McCoy, 1962). Underlying the region are the Tamiami Formation and the Hawthorn Group which are alternating sequences of carbonates, sand, and other very fine grained clastics (Knapp, Burns, & Sharp, 1986).

4.3.1.1 Surface Features

According to the United States Geological Survey (USGS) Corkscrew NW, FL topographic quadrangle (7.5-minute series), the subject property elevation is 25 feet MSL. There is no significant slope across the majority of the site, except for a small depressional area located in the northwest corner.

4.3.1.2 Subsurface Features

Based on information obtained from the USDA Natural Resources Conservation Service *Soil Survey of Lee County*, and the Lee County Property Appraiser's geographic information system (GIS) spatial overlays, the subject property includes numerous soil types. Surficial sediments on, and in the vicinity of the subject property, are primarily fine quartz sands, and organic loams over limestone bedrock. The following map units are present within the project area:

Pepperland Soil Types		
Map Symbol	***Soil Name***	***Approximate Coverage***
28	*Immokalee fine sand*	*25.25%*
26	*Pineda fine sand*	*18.05%*
10	*Pompano fine sand*	*17.7%*
33	*Oldsmar fine sand*	*14.66%*
14	*Valkaria fine sand*	*14.34%*
34	*Malabar fine sand*	*3.45%*

Pepperland Soil Types		
Map Symbol	***Soil Name***	***Approximate Coverage***
53	*Myakka fine sand, depressional*	*3.44%*
11	*Myakka fine sand*	*3.01%*
13	*Boca fine sand*	*0.09%*

4.3.2 Hydrology

The upper hydrostratigraphic sequences, pertinent to the project, consist of three major units. From the land surface, these units are the surficial aquifer (water table aquifer), the Tamiami confining unit, and Tamiami Aquifer. The Composition of these units consists of sand, shell, silt and permeable, fossiliferous sandy-limestone in the surficial aquifer, clayey marls in the confining unit, and calcareous sandstone and hard sandy limestone in the Tamiami Aquifer. These units range in age from recent to the Miocene Epoch, and extend to a depth of approximately 145 ft. below land surface (Boggess and Missimer, 1985).

Within Lee County, Florida, freshwater is obtained from the surficial (water table) aquifer the Tamiami Aquifer, and the Caloosahatchee River. The shallow aquifer is composed of sand units comprising the Pamlico sand as well as sandstones and sandy limestones of the Anastasia and Fort Thompson formations of the Pleistocene Epoch. The Tamiami Aquifer is composed of permeable limestones of the late Miocene Epoch, Tamiami Formation.

4.3.2.1 Surface Water

The subject property is transected by several shallow irrigation/drainage canals. Standing water is also present at the undeveloped natural area in the northwest corner of the site and a graded impoundment area in the northeast corner of the site.

4.3.2.2 Ground Water

Area groundwater levels are influenced by numerous factors including precipitation, surface run-off, water management and local agricultural activity. Groundwater flow is expected to be variable. Groundwater is anticipated to be encountered at depths of less than five feet below ground surface.

4.4 Standard Environmental Record Sources – Federal and State

TDC contracted with EDR to conduct a search of the standard environmental record sources identified in ASTM E1527-13 as well as any additional environmental record source determined to be: 1) reasonably ascertainable; 2) sufficiently useful, accurate and complete; and 3) generally obtained, pursuant to local good commercial or customary practice in initial ESAs in the type of commercial real estate transaction involved. A

detailed description of the records reviewed and a listing of all of the identified sites are provided in Appendix E. Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. While TDC cannot warrant the accuracy of the information, it has made a reasonable effort to compensate for mistakes or insufficiencies in the information reviewed that are obvious in light of other information of which TDC has actual knowledge.

The purpose of the records review is to help identify RECs in connection with the Property. This includes both indications of the storage, use, generation, disposal, or release of hazardous substance at the Property and the potential for contaminants to migrate onto the Property from off-site sources via soil, groundwater, or vapor.

In evaluating the potential for a vapor encroachment condition (VEC), TDC attempted to determine if there was information indicating that chemicals of concern were located within the critical distance, defined as the lineal distance between the nearest edge of the contaminated plume and the nearest target property boundary. Based on ASTM E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, the critical distance is equal to 100 feet, with the exception of dissolved petroleum hydrocarbons, which have a critical distance of 30 feet. If non-aqueous phase petroleum hydrocarbons are present, the 100 feet distance is utilized. If a VEC was identified, TDC attempted to determine if the VEC represented a REC.

4.4.1 Federal Environmental Record Sources

ASTM E 1527-13 guidance required review of the following federal databases.

Database	Search Distance	No.	Discussion
National Priorities List (NPL)	1.0 mile	0	No NPL facilities were identified in the search radius.
Delisted NPL Subject Property List	1.0 mile	0	No Delisted NPL facilities were identified in the search radius.
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	0.5 mile	0	No CERCLA facilities were was identified in the search radius.
CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP)	0.5 mile	0	No CERCLA NFRAP facilities were identified in the search radius.
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	1.0 mile	0	No RCRA CORRACTS facilities were identified in the search radius.
RCRA Treatment, Storage, and Disposal (TSD) Facilities	0.5 mile	0	No RCRA TSD facilities were identified in the search radius.
RCRA Generators Lists (RCRA-SQG, -LQG, CESQG)	Subject Property and Adjoining Properties	0	No RCRA Generators were identified on, or adjacent to the subject property.
Federal Institutional Control/Engineering Control Reg.	0.5 mile	0	No US ENG or INST CONTROL facilities were identified within the search radius.
Emergency Response Notification System (ERNS)	Subject Property Only	0	The subject property was not identified as an ERNS facility.

Database	Search Distance	No.	Discussion
US Brownfields	0.5 mile	0	No US BROWNFIELDS facilities were identified within the search radius.
Facility Index System (FINDs)	Subject Property Only	0	The subject property is not identified in the FINDS database.

4.4.2 State Environmental Record Sources

ASTM E 1527-13 guidance required review of the following State databases.

Database	Search Distance	No.	Discussion
State and Tribal-Equivalent CERCLIS Hazardous Waste Sites (SHWS)	1.0 mile	0	No STATE facilities were identified in the search radius.
State and Tribal Leaking Underground Storage Tanks (LUST)	0.5 mile	1	One LUST facility was identified within the search radius. FARM-OP #2 at 21000 SIX L'S FARM RD., is located more than one-quarter mile south-southwest of the subject property. A Site Rehabilitation Completion Order (SRCO) was issued for the site on March 22, 2007. Based on its distance and case closed status, it is not considered to be REC.
State and Tribal Registered Underground Storage Tank (UST)	Subject Property and Adjoining Properties	0	No State UST facilities were identified on or adjacent to the subject property.
Above Ground Storage Tanks (ASTs)	Subject Property and Adjoining Properties	1	One State AST facility was identified on the subject property. Troyer Brothers Florida (Troyer), located at 18500 Corkscrew Road was cross-listed on the AST and Financial Assurance databases. According to tank registration information, Troyer installed a 1,000-gallon diesel fuel AST in 1994, which was removed without incident in 1998/1999.
State Solid Waste Facilities/Landfills (SWF/LF)	0.5 mile	0	No State SWF/LF listings were identified within the prescribed search radius.
Solid Waste Recycling Facilities (SWRCY)	0.5	0	No State SWRCY facilities were identified in the search radius.
State Brownfields	0.5 mile	0	No State BROWNFIELDS facilities were identified in the search radius.
State Institutional and Engineering Controls	Subject Property Only	0	The Subject Property was not identified with State Institutional or Engineering Controls.
Voluntary Cleanup Program (VCP)	0.5	0	No Voluntary Cleanup Program facilities were identified in the search radius.

Dry Cleaners	0.25	0	No Dry Cleaner facilities were identified in the search radius.
Priority Cleaners	0.5	0	No Priority Cleaner facilities were identified in the search radius.
Tier 2	0.5	0	No Tier 2 facilities were identified in the search radius.

4.4.3 Supplemental Environmental Record Sources

The following supplemental environmental records sources were reviewed.

Database	Search Distance	No.	Discussion
DWM Contaminated Sites	0.5	0	This listing includes contaminated sites that require investigation and/or remediation but are not actively being worked on because the agency currently does not have funding allocated (primarily petroleum and dry cleaning sites). No DWM Contaminated Sites were identified within the prescribed search radius.
Financial Assurance	0.25	2	This database includes listings of financial assurance information for storage tank facilities. Listed facilities are not considered to be RECs.
EDR Historical Auto Stations	0.5	0	No Historical Auto Stations were identified within the prescribed search radius.
EDR Historical Cleaners	0.5	0	This proprietary database includes potential dry cleaning sites that were identified by EDR researchers through historical data sources such as business directories and city directory listings. No Historical Cleaners were identified within the search radius.
National Pollutant Discharge Elimination System (NPDES)	0.25	0	This database includes facilities permitted under the Clean Water Act. No NPDES facilities were identified within the prescribed search radius.

Supplemental records were not considered to represent a REC for the subject site.

4.4.3 Unmapped Sites

The unmapped sites section of the EDR report includes properties that could not be properly located due to inadequate information provided by the reporting agency. No unmapped facilities were identified.

4.5 Additional Environmental Records Sources

4.5.1 Estero Fire Rescue

TDC contacted the Estero Fire Rescue in an effort to obtain information pertaining to USTs, ASTs, reported incidents of hazardous material releases, or other similar

circumstances that could be of environmental concern at the property, and of historical uses of the Property. Although significant issues are not anticipated, at the time of report completion, a response remained outstanding.

4.5.2 Florida Department of Environmental Protection (FDEP)

TDC submitted a formal request to the Fort Myers Branch of the FDEP for any files pertaining to the subject site. Although significant issues are not anticipated, a formal agency response remains pending. Some pertinent records concerning the subject site were obtained from the FDEP's OCULUS online web portal. These records are briefly discussed in Section 4.4.2.

4.5.3 Florida Department of Health, Lee County Environmental Health and Engineering

TDC contacted the Florida Department of Health, Lee County Environmental Health and Engineering, for information concerning hazardous materials incidents, reported violations, or complaints for the subject site.

4.5.4 Lee County Division of Natural Resources

TDC contacted the Lee County Division of Natural Resources, for information concerning hazardous materials incidents, reported violations, or complaints for the subject site. According to Mr. Steve Johnson, of DNR, one AST was removed from the subject site in 1998/1999, but no records were available for review. Mr. Johnson indicated that records are archived with the FDEP after five years. This item represents a data gap. Due to the information gathered from other sources, including the regulatory database report and on-line government websites, this data gap is not expected to alter the findings

4.5.4 Historic Preservation/Endangered Species

The subject property was not evaluated for cultural resources or endangered/threatened species.

5.0 SUBJECT PROPERTY RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Mr. John Driscoll visited the Subject Property on May 27, 2016. The weather at the time of TDC's investigation was sunny, with a temperature of approximately 85 degrees Fahrenheit. TDC physically walked the perimeter of the property as well as interior pathways.

5.2 General Subject Property Setting

The subject property is located within a rural area of unincorporated Lee County. The subject property is located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The property is bounded by the Corkscrew Road

along the north; Six Ls Farm Road to the west; and, undeveloped agricultural, and residential land to the east and south. The site is a mix of undeveloped and agricultural land.

Adjoining and nearby land use is a mixture of undeveloped, agricultural, and residential development. Agricultural land is present to the east of the subject site. Mixed residential and small-scale agricultural uses are present to the west of the subject site, across Six Ls Farm Road. Undeveloped and former agricultural land is present to the north of the subject site, across Corkscrew Road. Mixed residential and small-scale agricultural uses are present south of the subject site.

5.3 Subject Property Observations

As noted above, the subject property is primarily used for agricultural purposes. The majority of the site has been graded for agricultural use. An undeveloped natural area is present in the northwest corner of the site and a graded impoundment area is present in the northeast corner of the site.

5.3.1 Underground Storage Tanks (USTs)

No USTs were observed at the subject property.

5.3.2 Aboveground Storage Tanks (ASTs)

Approximately 10 diesel fuel ASTs were located throughout the property for diesel irrigation pumps. One of the tanks is labeled for road usage and located within a secondary containment structure near the packing area on the east side of the site. No significant evidence of spills or releases was noted. It is likely that the actual number and location of on-site ASTs varies depending upon irrigation requirements.

5.3.3 Hazardous Substance and Petroleum Products

The subject property is used for agricultural purposes. Agricultural operations incorporate the use of hazardous substances, including pesticides and herbicides, and petroleum products as part of routine activities. Diesel fuel, motor oil, pesticides and herbicides are present on-site. No evidence of significant releases or misuse of regulated materials was noted.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) was enacted in 1947 to require registration, specific labeling, and directions for use (among others) of agricultural chemicals. The regulatory approach to agricultural use is that if pesticides and herbicides are applied in accordance FIFRA, it is not be considered a "release" under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, aka Superfund) and therefore not a REC.

5.3.4 Unlabeled Drums/Containers

Unlabeled drums were not observed on the subject property. Five steel, 55-gallon drums of motor oil were observed in the packing area on the east side of the site. No spills or

releases were noted. Ten, stainless steel irrigation filters were also observed in the packing area. These vessels are not an environmental concern.

5.3.5 Stained Soil or Pavement

TDC did not observe evidence of significant soil or pavement staining on the subject site. De minimis staining was noted at the vehicle diesel AST, located at the packaging area on the east side of the property.

5.3.6 Stains or Corrosion

No significant areas of staining or corrosion were noted.

5.3.7 Stressed Vegetation

TDC did not observe evidence of stressed vegetation at the Subject Property.

5.3.8 Polychlorinated Biphenyls (PCBs)

TDC observed pole-mounted, utility-owned transformers along Corkscrew Road. The pole-mounted transformers were not labeled as non-PCB, however, no spills or leaks were noted. Due to the utility ownership and responsibility, the transformers are not considered to be a REC.

5.3.9 Solid Waste/Dumping

Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest. Trash was overflowing from the large roll-off dumpster located near the eastern packing area. No evidence of hazardous material or petroleum product releases was observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk.

5.3.10 Subject Property Drainage

Drainage at the subject site appears to be via surface water flow to adjacent drainage ditches bordering the agricultural fields or via direct infiltration into the unpaved areas of the site.

5.3.11 Pits, Ponds, Lagoons and Pools of Liquid

TDC did not observe pits, ponds, lagoons, or pools of liquid indicating any improper use of hazardous substances or petroleum products.

5.3.12 Wastewater

Sanitary wastes are collected in mobile restroom facilities which are pumped out via contract. There were no concerns associated with these facilities.

5.3.13 Floor Drains, Sumps, Oil/Water Separators and Clarifiers

TDC did not observe floor drains, sumps, separators or clarifiers at the subject property.

5.3.14 Wells

TDC did not observe monitoring wells at the subject property. There are approximately 13 irrigation wells located across the site which support agricultural operations. These wells are not considered to be an environmental concern or REC.

5.3.15 Septic Systems

TDC did not observe evidence of septic systems or cesspools at the subject property.

5.3.16 Odors

TDC did not identify readily noticeable strong, pungent, or noxious odors at the time of the subject property visit.

5.3.17 Other Observations

No other observations of environmental significance were noted.

5.3.18 Wetlands

TDC did not evaluate the subject property for the presence of wetlands.

6.0 INTERVIEWS

6.1 Interview with Owner/Key Subject Property Manager

Mr. Brian Farrar provided property specific information via e-mail. Mr. Farrar was unaware of environmental concerns related to the subject property. No prior on-site ESA documentation was provided, although several reports for the adjacent site to the north were provided.

6.2 Occupants

The subject property is currently occupied by Bailey Farms.

6.3 Interviews with Local Regulatory Agencies

Research conducted at local regulatory offices has been summarized in Sections 4.5. No additional interviews with local regulatory agencies were conducted.

7.0 FINDINGS/OPINION

TDC performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the property identified as Pepperland, located at 18500 Corkscrew Road, Estero, Lee County, Florida. Any exceptions to, or deletions from, this practice are described in Section 9 of this report. This assessment has revealed no evidence of RECs in connection with the Subject Property.

An HREC refers to an environmental condition which would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment and/or remediation of any contaminants to below the most restrictive (residential) cleanup target concentrations or regulatory closure with no formal or implied restricted uses. TDC did not identify evidence of HRECs in connection with the subject site.

The ASTM Standard was designed solely to meet the requirements of the USEPA's All Appropriate Inquiries (AAI) to permit the potential purchaser to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability, but recognizes that a User may choose to evaluate other business environmental risks (BERs). The investigation has revealed the following BER associated with the standard ASTM scope considerations:

- Current and historical agricultural land use on the subject property has included the use of pesticides, herbicides, fertilizers, and petroleum products. Active irrigation pumps with diesel fuel ASTs are present. Although no physical or documentary evidence of significant impacts from such uses was identified during this assessment, this should not be construed to mean that the property is free of potentially localized impacts relating to current and historical agricultural uses.
- Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest. Trash was overflowing from the large roll-off dumpster located near the eastern packing area. No evidence of hazardous material or petroleum product releases was observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk.

8.0 DEVIATIONS/DATA GAPS

Interviews with past owners were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from the current owner and other historical sources, this data gap is not significant and it is not expected to alter the findings of this assessment.

TDC was unable to determine the property use at 5-year intervals, which constitutes a data gap. All reasonably ascertainable aerial photographs and topographic maps were reviewed. However, based on the lack of significant changes in the area on the sources reviewed, these data gaps are not significant and did not affect our ability to identify RECs.

ASTM E 1527-13 "Standard for Environmental Site Assessments" suggests historical usage for a property be determined back to 1940 or the property's first developed use, whichever is earliest. TDC reviewed aerial photographs to 1944 but was unable to document the historical usage of the subject property prior to 1944. No additional historical sources were deemed reasonably ascertainable and likely to be sufficiently useful were identified at the time of the assessment. However, it is the opinion of TDC that this limitation would not alter the conclusions of this report.

The Standard offers a "Recommended Table of Contents and Report Format." While TDC's report includes all of the information required by the Standard, TDC did not follow the recommend table of contents and report format for all sections of the report.

The Standard only requires that the preparer of the report determine the presence of RECs, CRECs and HREC, if any, or data gaps that prevent a conclusion regarding the presence of RECs, CRECs and HRECs be made.

9.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 C.F.R. 312. I, have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

Report Prepared By:



John J. Driscoll
Principal

11.0 REFERENCES

1. **Persons/Offices Contacted Regarding the Subject Property:**

   Mr. Brian F. Farrar, BCF Management Group, LLC

   Lee County

   - Division of Natural Resources
   - Property Appraiser's office
   - Department of Community Development, Codes and Enforcement Section
   - Planning and Zoning Records

   State of Florida

   - Department of Environmental Protection

   South Florida Water Management District

2. **Reports, Plans and Other Documents Reviewed:**

   USGS:

   - Corkscrew NW, FL, 7.5-Minute Series Topographic Quadrangle, 1958, 1973, 1987, and 2012

   USDA:

   - Soil Survey of Lee County, Florida, 1984
   - ~~http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/florida/FL071/0/Lee.pdf~~

   Environmental Data Resources (EDR):

   - *Certified Sanborn Map Report*, Inquiry Number 4626937.3, May 23, 2016
   - *Radius EDR Radius Map™ Report with GeoCheck®*, Inquiry Number: 4626937.2s, May 23, 2016
   - *Aerial Photo Decade Package*, Inquiry Number: 4626937.9, May 27, 2016
   - *City Directory Report*, Inquiry Number: 4626937.5, May 25, 2016
   - *Historical Topographic Map Report*, Inquiry Number: 4626937.4, May 23, 2016

   Previous Environmental Reports:

   - *Phase I Environmental Site Assessment, Proposed Corkscrew Farms, 1,350 Acre Property, Corkscrew Road, Estero, Lee County, Florida*, prepared by Universal Engineering Sciences, Inc. (Universal), and dated October 7, 2014 (Excerpt)
   - *Phase II ESA, Corkscrew Farms Property, Corkscrew Road, Estero, Lee County, Florida*, prepared by Universal, and dated November 3, 2014 (Excerpt)
   - *CONFIRMATORY SOIL SAMPLING, Corkscrew Farms Property, Estero, Lee County, Florida*, prepared by Universal, and dated November 17, 2014 (Excerpt)

13.0 STAFF QUALIFICATIONS

Resume for John Driscoll is included on the following pages.

JOHN J. DRISCOLL
PRINCIPAL

FIELDS OF EXPERTISE

Management and senior review; third-party review of environmental documentation; phase I/II environmental site assessment performance; contamination assessment; environmental impact assessment; wetland delineation; endangered species surveys; hazardous materials evaluation.

PROFESSIONAL SUMMARY

Mr. Driscoll has more than 25 years of experience in the areas of environmental due diligence program implementation, report review, environmental study documentation, hazardous materials site assessments, and property evaluations. Mr. Driscoll is an Environmental Professional as defined by the EPA's All Appropriate Inquiry rule. He is currently the Third-Party Reviewer for several national mortgage loan servicing entities, and the reviewer for multiple commercial mortgage originators. Environmental Impact Assessment experience includes wetland delineation, threatened and endangered species surveys, and hazardous material evaluations. Environmental site assessments include historical and regulatory inquiries, physical condition evaluation, and investigation of potential waste streams, treatment/storage/disposal sites, and potential receptors.

SELECTED PROJECT EXPERIENCE

- Third-party environmental coordinator/reviewer for several of the top 10 commercial mortgage special servicers. Developed environmental due diligence program parameters, prepared bid documents, selected consultants, managed evaluations, and reviewed pre-acquisition environmental evaluations for compliance with client scope.
- Consultant for two large financial institutions responsible with preparing environmental report summaries for rating agency review. Assisted in several large merger/acquisition deals. One required the preparation of significantly more than 150 environmental summary reviews within two weeks.
- Developed a conservative Environmental Risk Management Program for one of the 10 largest mortgage loan special servicers. Tasks included establishing due diligence scope of work, qualifying consultants, reviewing contracts, and managing pre-foreclosure due diligence activities.
- Active participant or reviewer in more than 2,000 real estate transactional audits/Phase I Environmental Site Assessments. Responsible for proper report format for various financial institution requirements including mortgage conduits. Notable clients included Aetna, Allstate, Banc One, Barnett, Citibank, Equitable, GE Capital, ING Capital, and Prudential.
- Participated in combined Environmental Site Assessment, Physical Evaluation, and Compliance Audit evaluations of South Miami Hospital, and James Archer Smith Hospital. The hospital evaluations were part of an acquisition by a national medical corporation.
- Managed UST compliance field activities or more than 20 United States Postal facilities. Tasks included preparation of Contamination Assessment Reports, well installation, UST removal/replacement, retrofitting of overfill and overspill protection, precision tank testing, and final report preparation. Total project costs were in excess of $400,000.
- Motorola RCRA Facility Investigation, Plantation, Florida - Field Manager for sampling and evaluation of surface water sediments; conducted quarterly surface water sampling, including study documentation; performed biological sampling, collection and field preservation of tissue samples for bioassay; Site Safety Manager for buried pipeline investigation.
- Golden Glades Interchange Master Plan Study, Dade County, Florida, performed noise/air quality modeling of an interchange system considered by the Federal Highway Administration to be among the five most complex interchanges in the United States. Interchange layout for existing conditions and proposed improvements exceeded the parameters of computer models. The Hazardous Materials Evaluation Report involved over 150 parcels.

- Performed field management of soil sampling for toxaphene under EPA Superfund Innovative Technology program. Performed all activities under EPA oversight prior to initiating bench-scale, and small-scale field trial of innovative remedial technology.
- Performed a Phase II Environmental Assessment and Baseline Study of the South Riding Point Crude Oil Trans-shipment Terminal, Freeport, Grand Bahama, Bahamas. Performed logistical coordination of equipment and samples through customs, well installation, soil borings, and associated soil/groundwater sampling.
- Interstate 4 Corridor Master Plan Study, Hillsborough and Polk Counties, Florida - including analysis of a 48-mile interstate highway corridor encompassing wetlands delineation, preliminary hazardous materials evaluation report, noise and air quality impact assessment utilizing MOBILE3/CALINE3.
- Frog Pond Agricultural Area, Solid/Special Waste and Contaminated Soil Removal. Performed field oversight of solid/special waste and contaminated soil removal on environmentally sensitive land scheduled to be acquired by the South Florida Water Management District (SFWMD).

CERTIFICATES AND REGISTRATIONS

40-Hour Hazwoper Training, 40 CFR 1910.120
8-Hour Supervisor Training, 40 CFR 1910.120
Confined Space Entry Training, 29 CFR 1910.146
BLOODBORNE PATHOGENS TRAINING COURSE, 29 CFR 1910.1030
AHERA-certified Asbestos Inspector (FL, NY) - inactive
Red Cross First-Aid/CPR
PADI-certified Open Water Diver/Advanced Open Water Diver

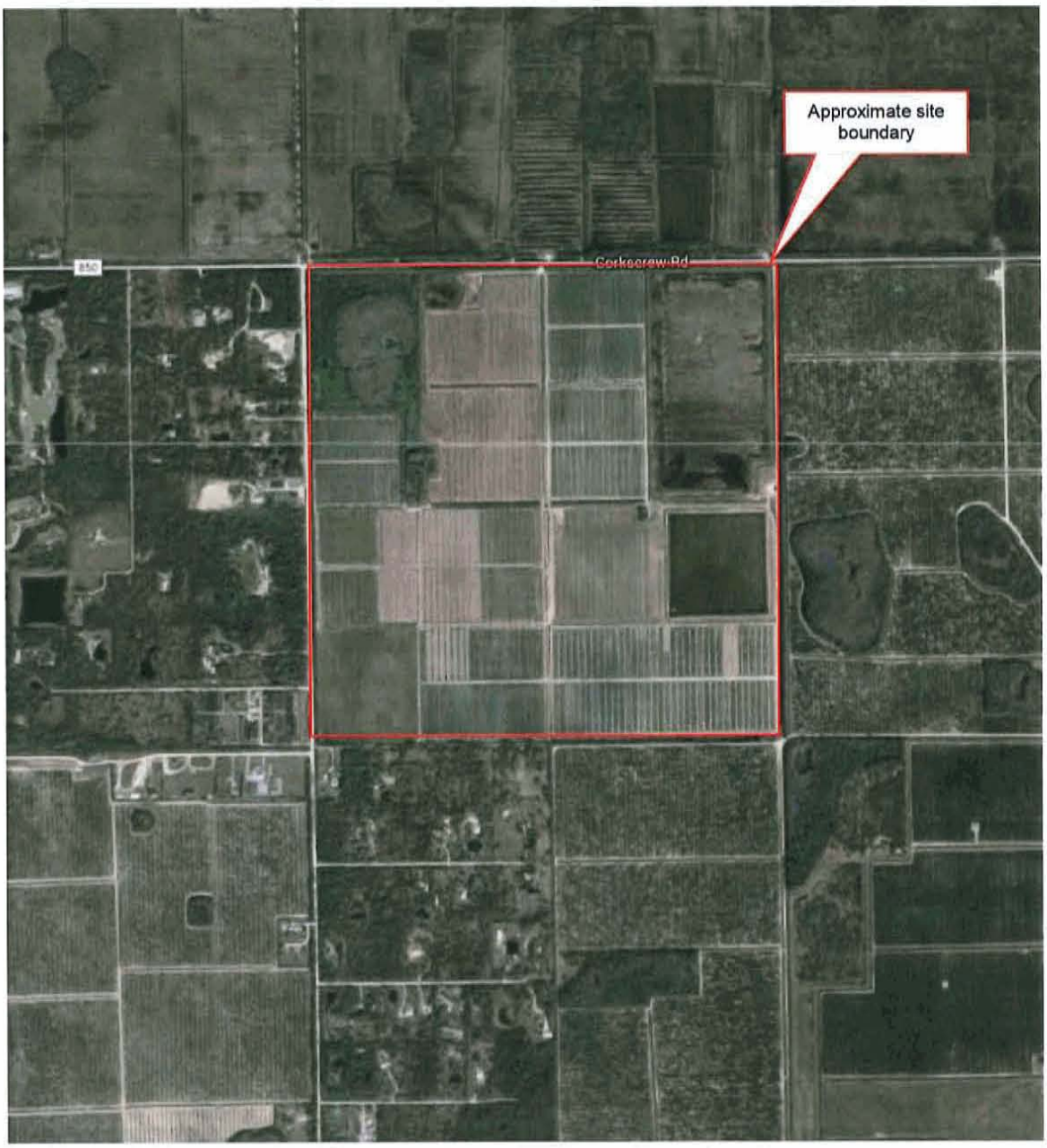
PROFESSIONAL MEMBERSHIPS

American Society for Testing and Materials (ASTM)
ASTM E50, Subcommittee for Environmental Assessment (*presently inactive*)

EDUCATION/CONTINUING STUDIES

Bachelor of Science, Biology, University of Notre Dame, 1985
Candidate for Certificate of Environmental Studies, Florida International University
Dames & Moore, Inc., Risk Management/Contracting Seminar 12/29-30, 1994
Florida Gas Transmission Company, Phase III Expansion Environmental Training Program, 4/11/94.
10th Annual Environmental Permitting Summer School, 7/17-19, 1996 (FDEP/FEAA)
Due Diligence at Dawn, *The Phase I Standard ASTM E 1527... "The Devil is in the Details"*, 11/13/97.
Due Diligence at Dawn, *Risky Business: Case Studies and Lessons Learned from Phase I Litigation*, 11/17/98.
Due Diligence at Dawn, *AAI & Liability: Prepare, Preserve and Protect*, 11/15/05.
American Society for Testing and Materials, *Property Condition Assessments Standard Guide E 2018-01 (PCN#36-003011-00)*, 11/13-11/14/2007.
CERT Advanced Training – Bioreadiness Training, USF Center for Biological Defense, Naples Fire Department, 01/21/09
Due Diligence at Dawn, *The ASTM E 1527-13 Playbook: Get Your Game On*, 12/10/13.

FIGURES



Map Not To Scale

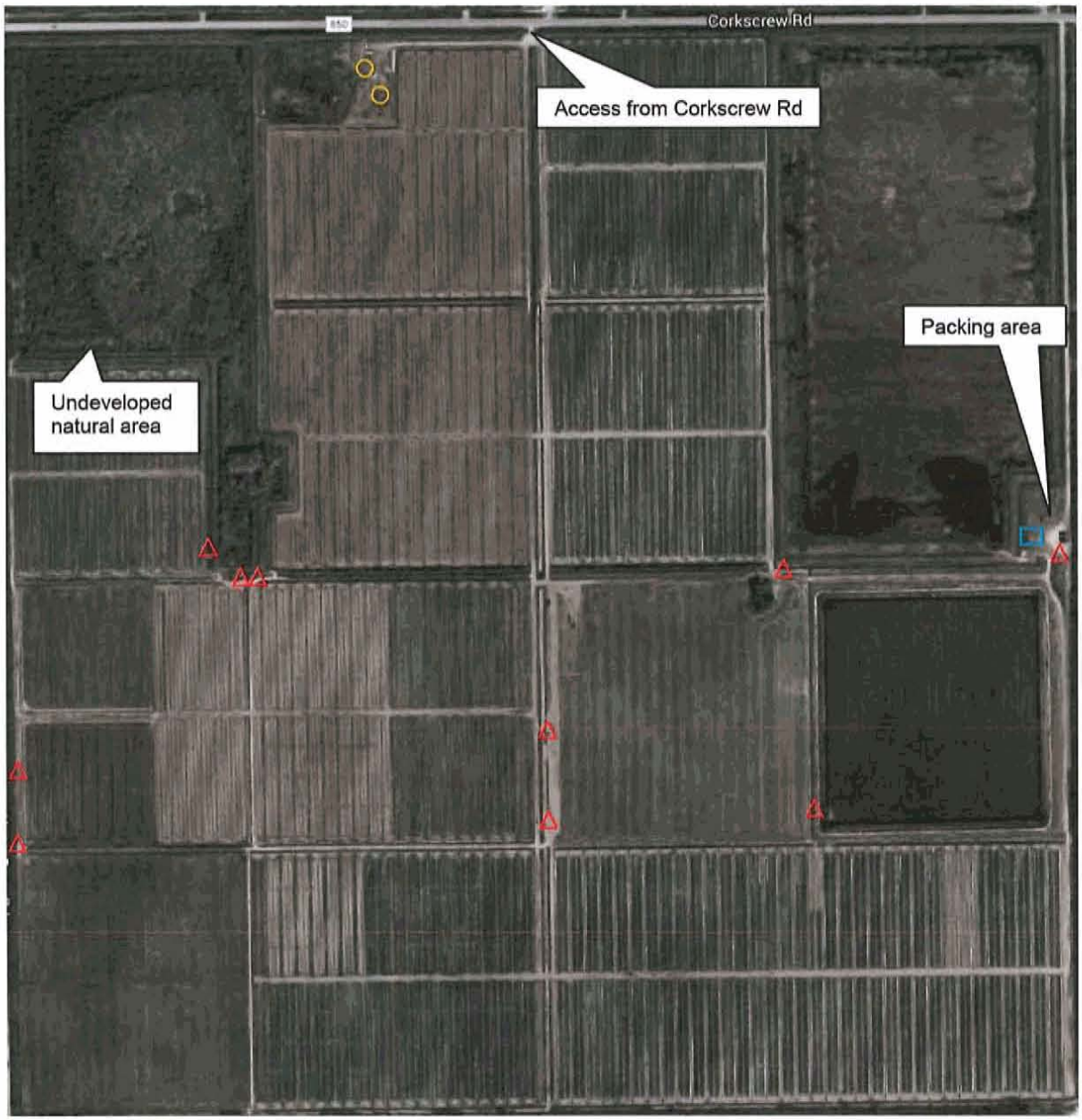
TDC Consulting Group
5621 Strand Boulevard, Suite 307
Naples, Florida 34110
Phone 239-254-9263
Fax 239-254-9274

Figure 1

Site Vicinity Map

Source: Google Maps

↑N



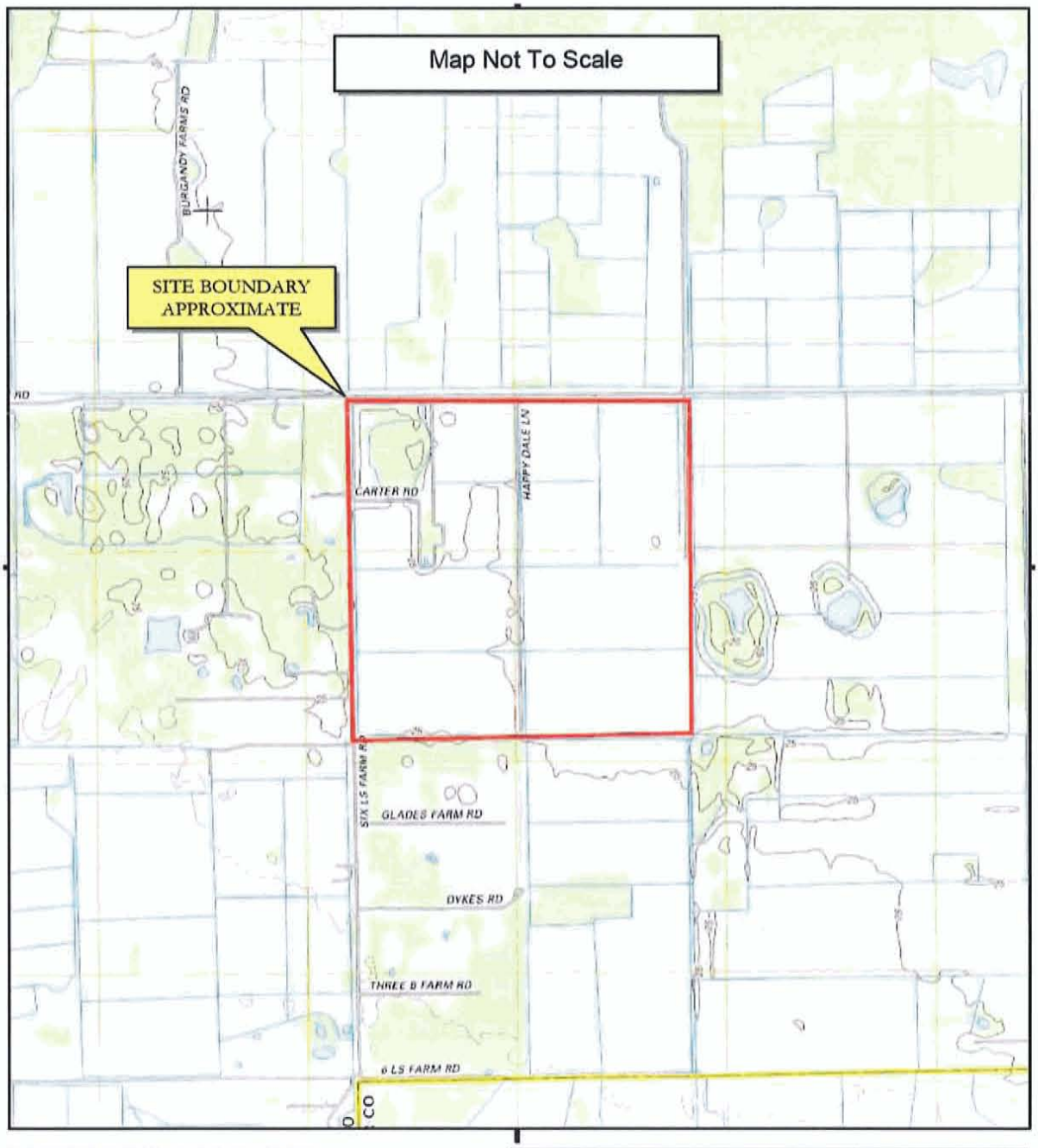
TDC Consulting Group
5621 Strand Boulevard, Suite 307
Naples, Florida 34110
Phone 239-254-9263
Fax 239-254-9274

Figure 2

Site Plan

Source: Google Maps

↑N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

TDC Consulting Group
5621 Strand Boulevard, Suite 307
Naples, Florida 34110
Phone 239-254-9263
Fax 239-254-9274

Figure 3

USGS Topographic Map

Source: USGS Topographic Quadrangle, Corkscrew NW, FL (2012)

↑N

PHOTOGRAPHS



1. Entrance to site from Corkscrew Road.



2. Information board.



3. View west along Corkscrew Road from central entrance.



4. View east along Corkscrew Road.



5. Rolled stakes on northern portion of site, west of entrance.



6. Discarded stakes on northern portion of site, west of entrance.



7. Graded field in northern portion of site.



8. Mobile restrooms and wash tank.



9. View south along drainage canal bordering natural area.



10. Vegetative debris in natural area.



11. Cypress trees in northwestern portion of site.



12. Diesel fuel AST located south of natural area in northwestern portion of site.



13. Eastern north-south road which leads to packing area.



14. Irrigation filters staged in packing area.



15. Dumpster and overflowing materials.



16. Secured TRIMAX insecticide material in secondary containment at packing area.



17. 55-gallon drums of motor oil on pallet at packing area.



18. Road diesel fuel AST with *de minimis* surficial staining adjacent to secondary containment.



19. Loading dock with standing water.



20. Staged packaging material at packing area.

APPENDIX A

User Questionnaire

AAI QUESTIONNAIRE

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownsfields Revitalization Act of 2001 (the "Brownfields Amendments"), the *user/property owner/key site manager* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

1.	Name of Property:	Pepperland Ranch
2.	Address:	18500 Corkscrew Road, Estero, Fl. 33928
3.	Property Use:	Agriculture
4.	Acreage:	637.5
5.	Number of Buildings:	0
6.	Building Square Footage:	0
7.	Age of Improvements:	0

Questions 8 – 16:

8. Previous environmental reports available?

No x□ *Yes* □ – *Please forward the information to the environmental professional.*

9. Title Records: Do you currently have any title records for the property?

No □ *Yes* x□ – *Please forward the information to the environmental professional.*

10. Are you aware of environmental cleanup liens that are filed or recorded against the site under federal, tribal, state or local law?

No x□ *Yes* □ – *Please forward the information to the environmental professional.*

11. Are you aware of Activity Use Limitations (AULs) such as engineering controls, land use restrictions or institutional controls that are in place on the site or that have been filed or recorded in a registry under federal, tribal, state or local law?

No x□ *Yes* □ – *Please forward the information to the environmental professional.*

12. Do you have Specialized Knowledge or experience related to the property? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No x□ *Yes* □ – *Please forward the information to the environmental professional.*

13. Have you evaluated the relationship of the purchase price to the fair market value of the property? If the purchase price is significantly less that the fair market value is there any reason to suspect the price difference is due to potential contamination of the site? **(If applicable… not all investigations involve sales transactions)**

No x□ *Yes □ – Please forward the information to the environmental professional.*

14. Do you have commonly known or reasonably ascertainable information about the property that would help to identify environmental conditions? (For example, past uses of the property, specific chemicals that are present or were present at the property, spills or chemical releases that have occurred at the property, and environmental cleanups that have occurred at the property.)

No x□ *Yes □ – Please forward the information to the environmental professional.*

15. Are you aware of the current or former presence of aboveground/underground storage tanks or heating oil tanks at the property?

No x□ *Yes □ – Please forward the information to the environmental professional.*

16. Are you aware of any obvious indicators that point to the presence or likely presence of contamination at the property?

No x□ *Yes □ – Please forward the information to the environmental professional.*

17. Do you know the previous owner of the property? Name and phone number?

No x□ *Yes □ – Please forward the information to the environmental professional.*

Prior Owner Name: _____

Phone Number: _____

Questionnaire Certification

Respondent Name: Brian F. Farrar

Title: President

Signature: _____

Company: BCF Management Group, LLC

Telephone Number: 239-495-2435

Date: May 26, 2016

Relationship to Property/Investigation (Circle One): User (Potential Purchaser) / Property Owner / Key Site Manager

If you have questions or need help completing this form, please call 239-254-9263. Please return questionnaire via e-mail to jdriscoll@tdc-consulting-group.com

APPENDIX B

Previous Reports

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

UNIVERSAL
ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Engineering
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

OFFICES IN
• Atlanta, GA
• Daytona Beach, FL
• Fort Myers, FL
• Fort Pierce, FL
• Gainesville, FL
• Jacksonville, FL
• Leesburg, FL
• Miami, FL
• Ocala, FL
• Orange City, FL
• Orlando, FL
• Palm Coast, FL
• Panama City, FL
• Pensacola, FL
• Rockledge, FL
• Sarasota, FL
• St. Augustine, FL
• Tampa, FL
• West Palm Beach, FL

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)

UNIVERSAL
ENGINEERING SCIENCES

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:

Universal Engineering Sciences, Inc.
5971 Country Lakes Drive
Fort Myers, Florida 33905
(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

MICHAEL GEDEN LICENSE NO. 408 STATE OF FLORIDA PROFESSIONAL GEOLOGIST

UNIVERSAL
ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences
• Construction Materials Testing • Private Provider & Threshold Inspections

OFFICES IN:
Atlanta, DeBary, Fort Pierce, Jacksonville, Miami, Orlando, Panama City, Rockledge, St. Augustine, West Palm Beach, Daytona, Fort Myers, Gainsville, Leesburg, Ocala, Palm Coast, Pensacola, Sarasota, Tampa, Clermont

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)

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.

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

APPENDIX C

Sanborn No Coverage Letter

Pepperland
18500 Corkscrew Road
Estero, FL 33928

Inquiry Number: 4626937.3
May 23, 2016

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/23/16

Site Name:	Client Name:
Pepperland	TDC Consulting Group
18500 Corkscrew Road	5621 Strand Boulevard
Estero, FL 33928	Naples, FL 34110
EDR Inquiry # 4626937.3	Contact: John Driscoll

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by TDC Consulting Group were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 7462-4D06-B4E8

PO # NA

Project 6300-0003

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 7462-4D06-B4E8

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

TDC Consulting Group (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

APPENDIX D

Aerial Photograph Report

Pepperland
18500 Corkscrew Road
Estero, FL 33928

Inquiry Number: 4626937.9
May 27, 2016

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

05/27/16

Site Name:

Pepperland
18500 Corkscrew Road
Estero, FL 33928
EDR Inquiry # 4626937.9

Client Name:

TDC Consulting Group
5621 Strand Boulevard
Naples, FL 34110
Contact: John Driscoll

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1999	1"=500'	Acquisition Date: February, 14 1999	USGS/DOQQ
1996	1"=500'	Flight Date: February, 06 1996	FLDOT
1990	1"=500'	Flight Date: February, 24 1990	FLDOT
1986	1"=500'	Flight Date: February, 26 1986	FLDOT
1980	1"=500'	Flight Date: December, 13 1980	U of FL
1979	1"=500'	Flight Date: March, 07 1979	FLDOT
1972	1"=500'	Flight Date: March, 06 1972	FLDOT
1968	1"=500'	Flight Date: March, 05 1968	FLDOT
1958	1"=500'	Flight Date: January, 11 1958	U of FL
1953	1"=500'	Flight Date: January, 26 1953	U of FL
1944	1"=500'	Flight Date: April, 14 1944	U of FL

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.


INQUIRY #: 4626937.9
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2010
= 500'
N
EDR

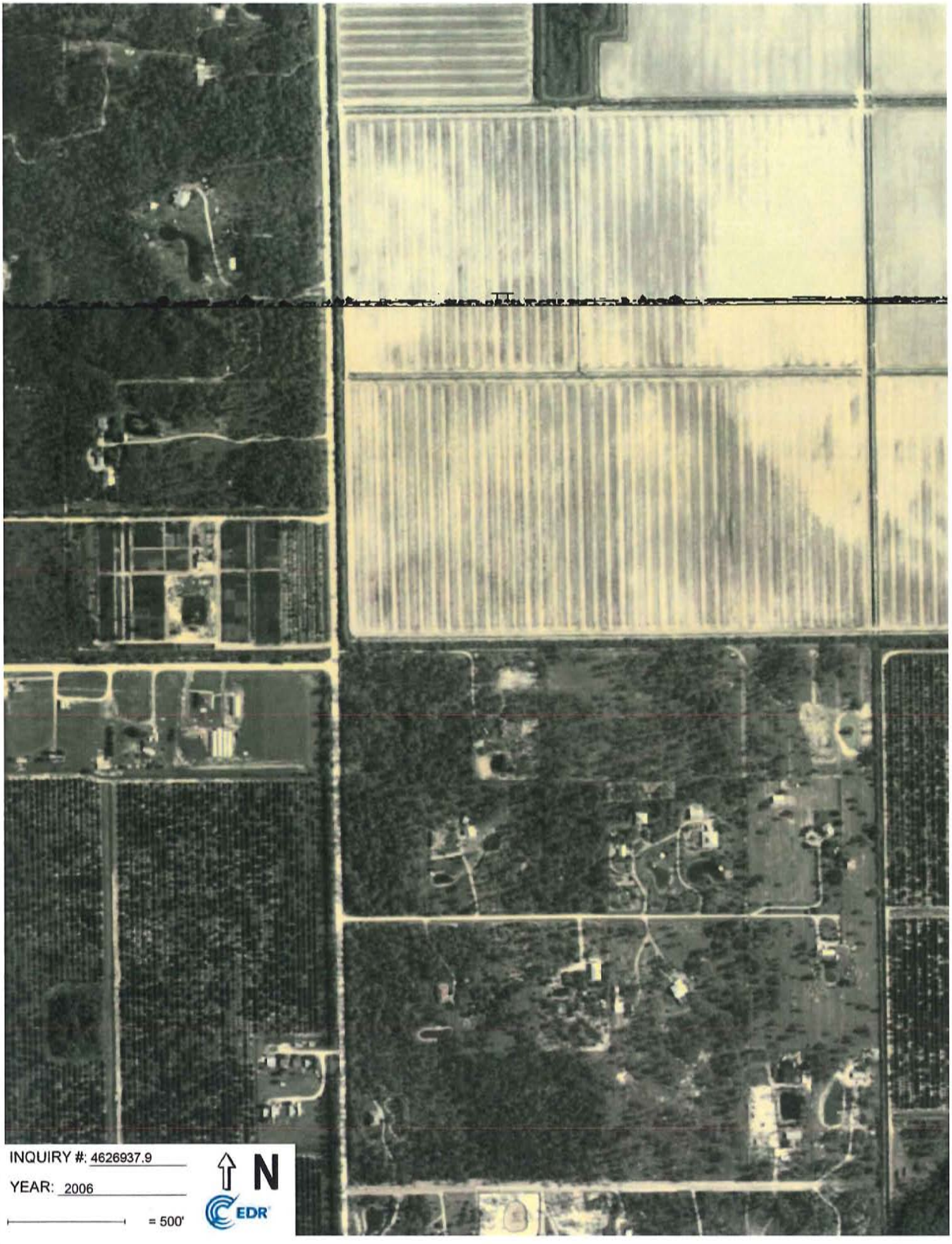

INQUIRY #: 4626937.9
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2007
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2007
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2007
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2007
= 500'
N
EDR



INQUIRY #: 4626937.9

YEAR: 2006

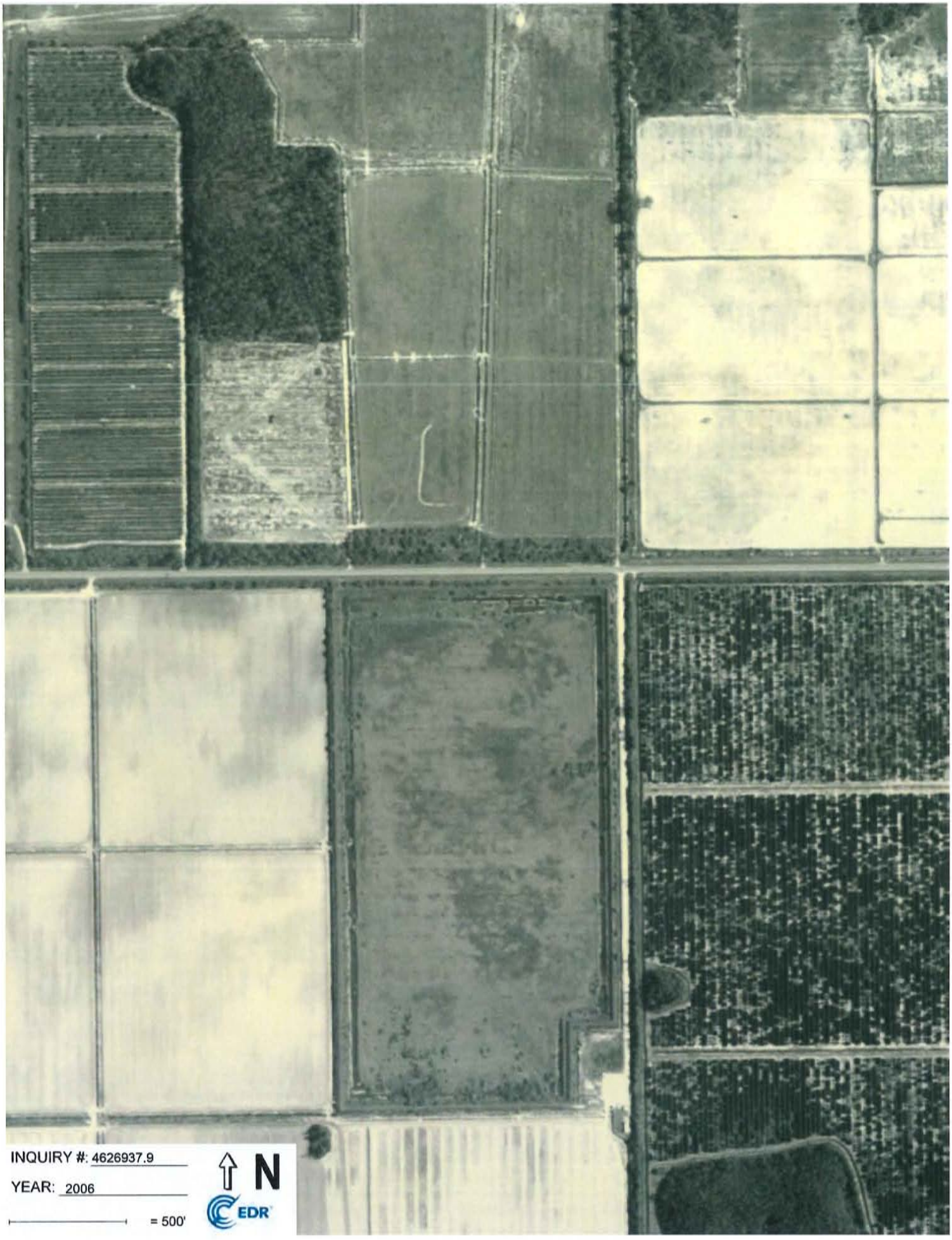
= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 2005
= 500'
N
EDR



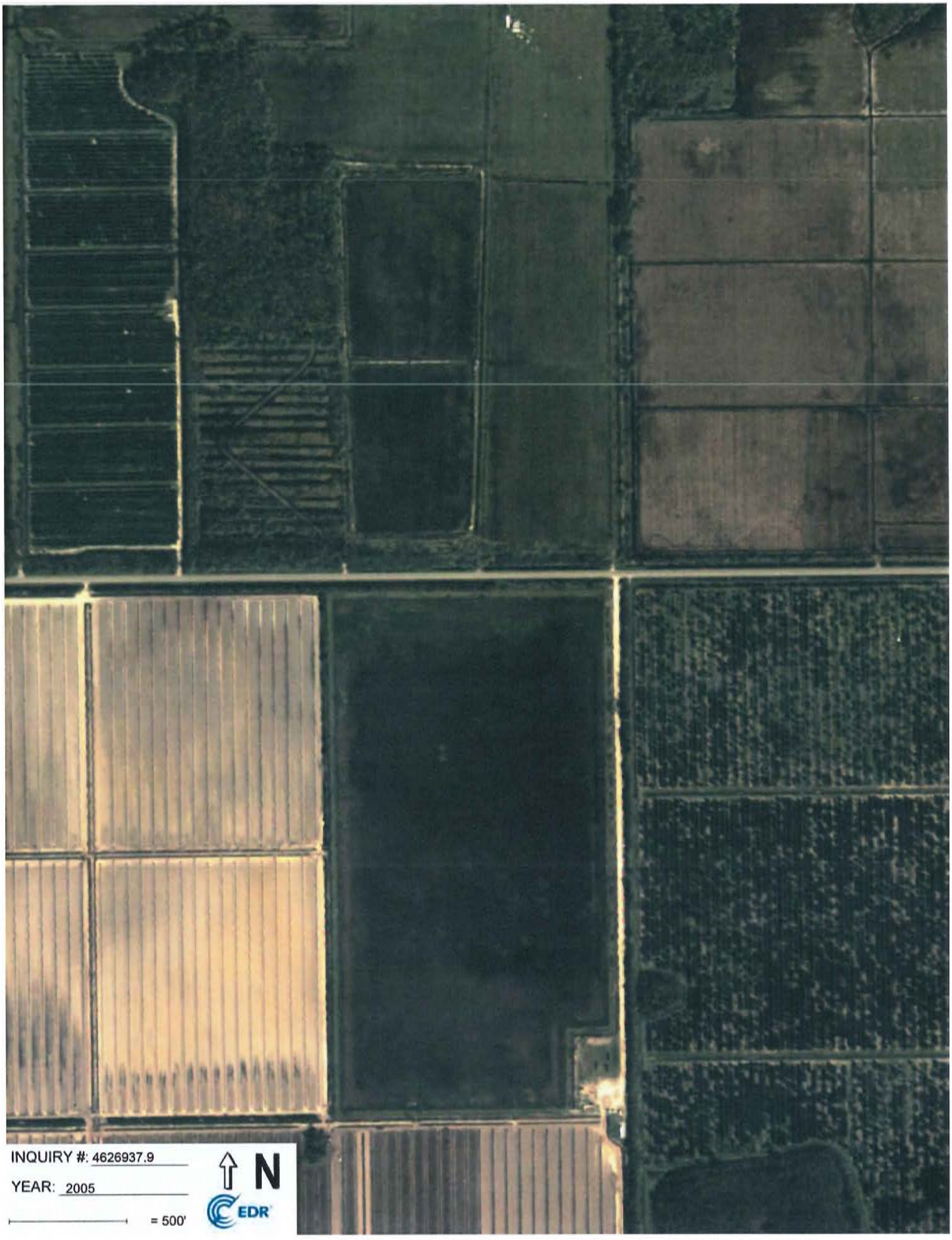
INQUIRY #: 4626937.9

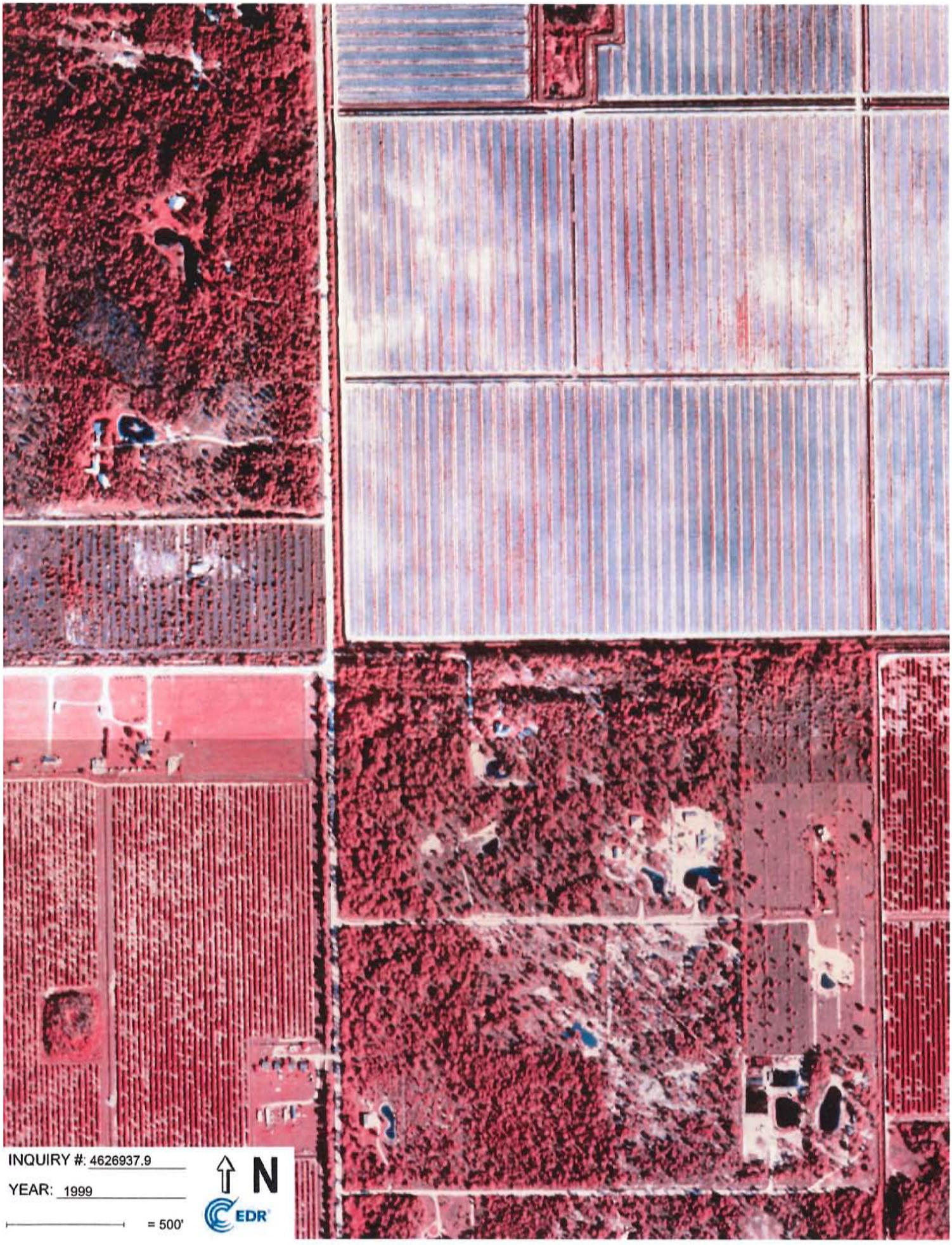
YEAR: 2005

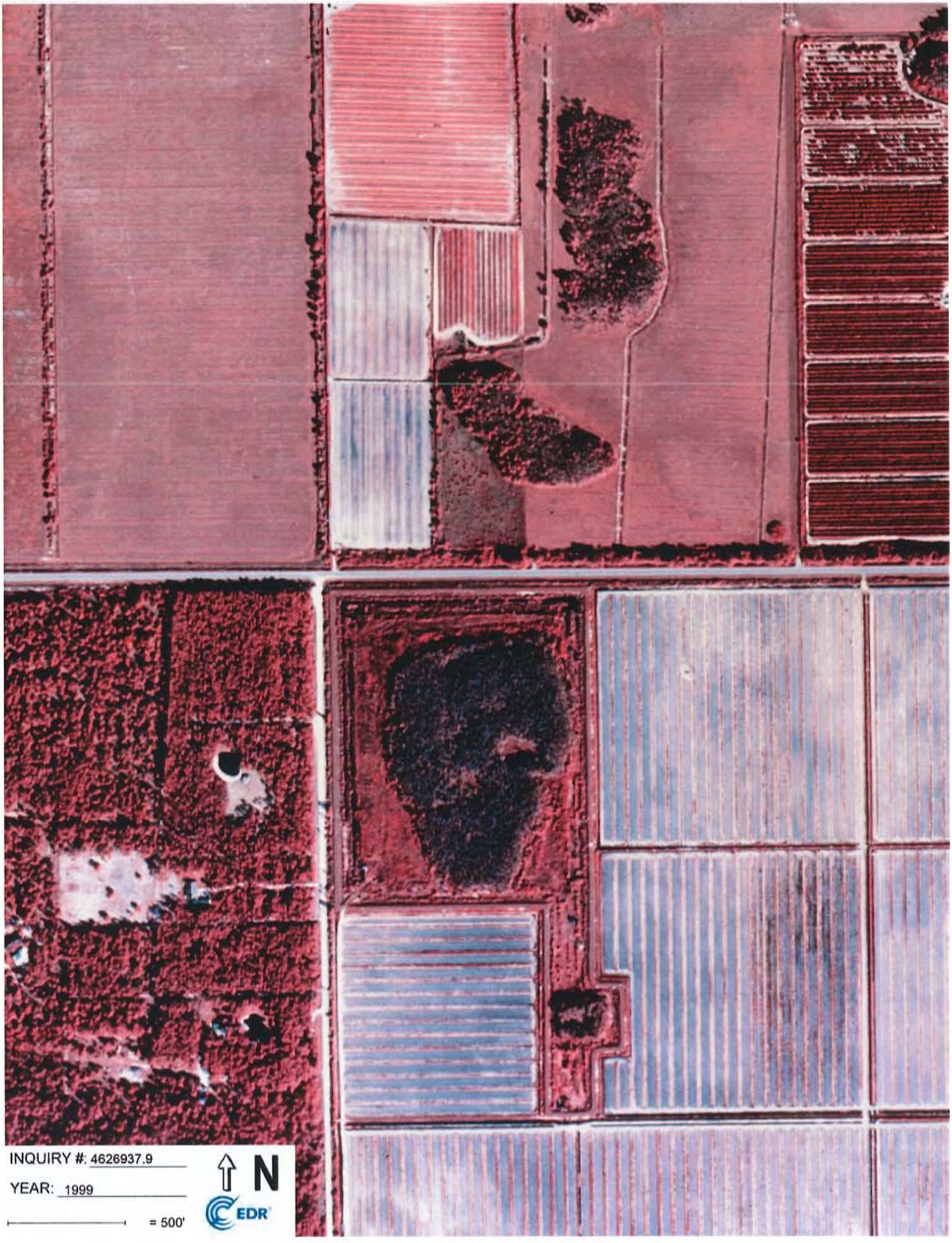
= 500'

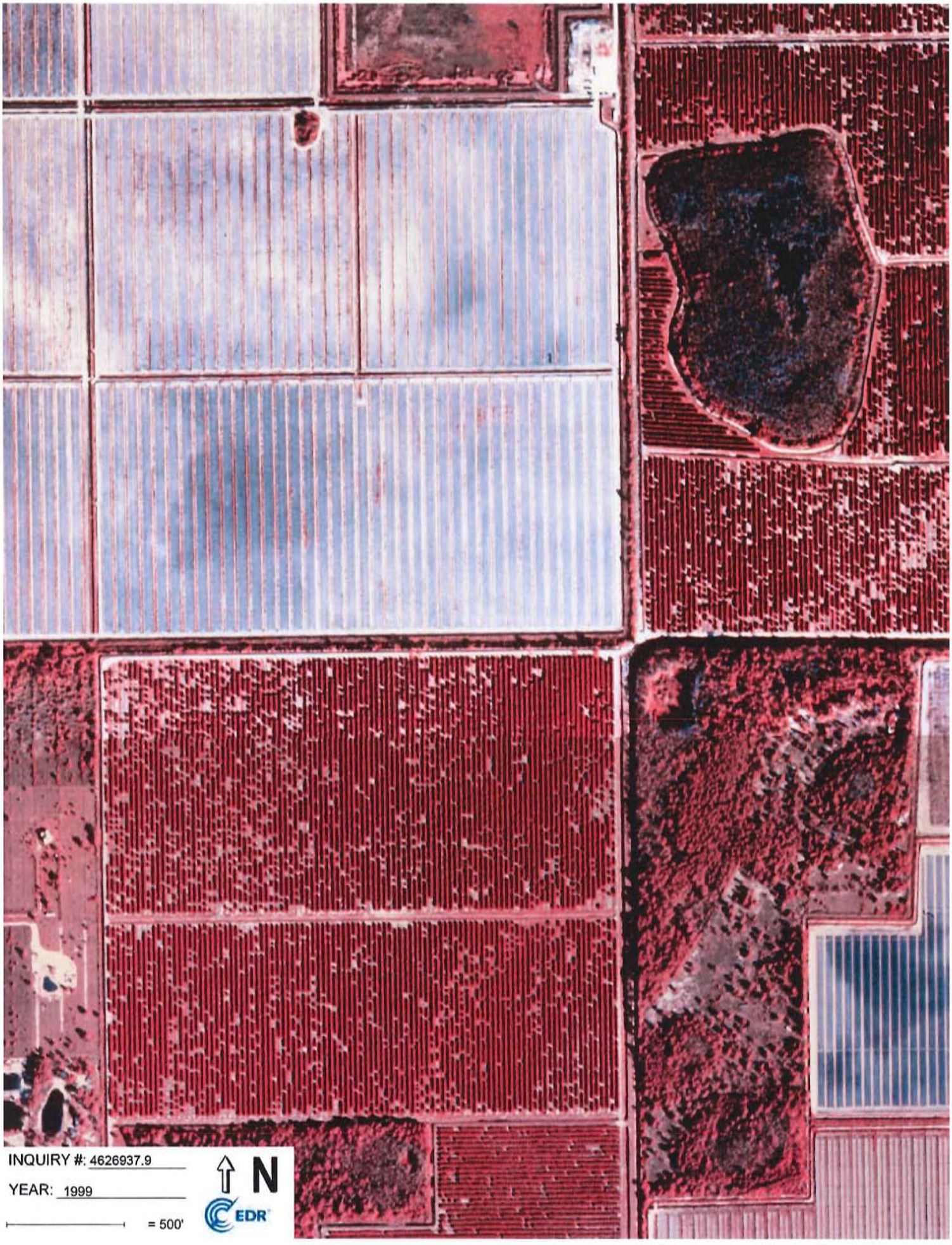
N

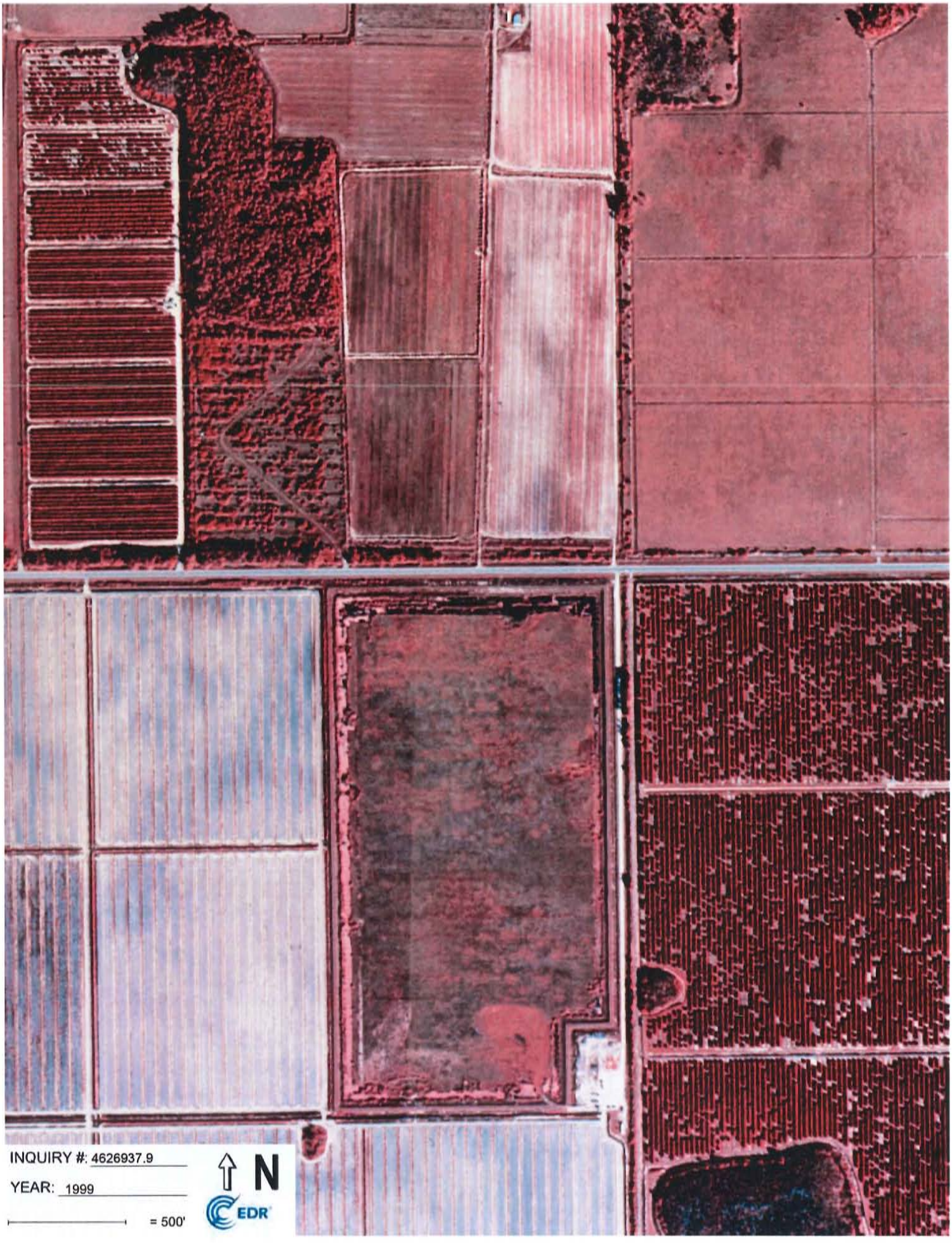
EDR


INQUIRY #: 4626937.9
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1999
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1999
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1999
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1999
= 500'
N
EDR



INQUIRY #: 4626937.9

YEAR: 1996

= 500'

N

EDR



INQUIRY #: 4626937.9

YEAR: 1996

= 500'

N

EDR



INQUIRY #: 4626937.9

YEAR: 1990

= 500'

N

EDR



INQUIRY #: 4626937.9

YEAR: 1990

= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 1986
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1986
= 500'
N
EDR



INQUIRY #: 4626937.9

YEAR: 1980

= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 1979
= 500'
N
EDR



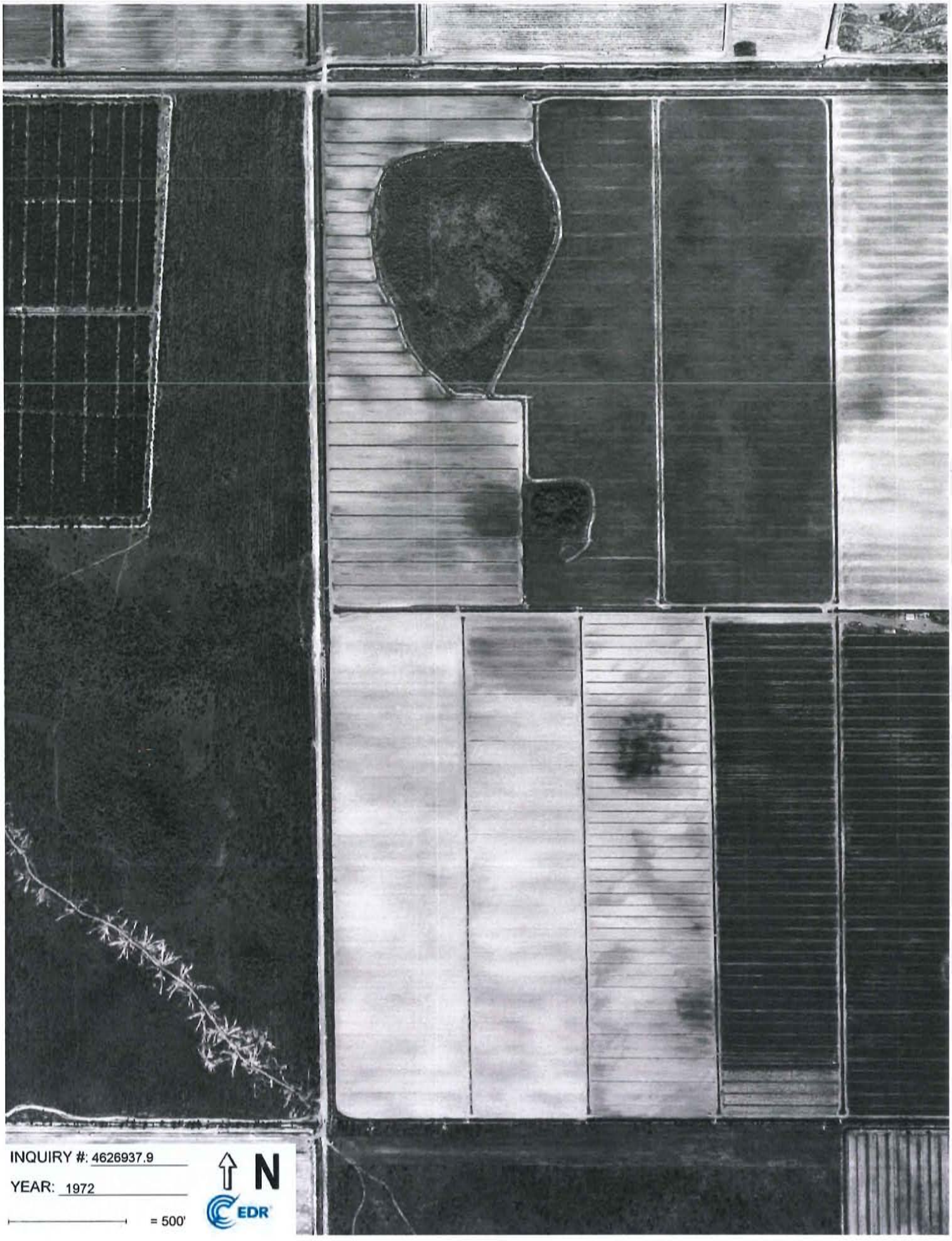
INQUIRY #: 4626937.9

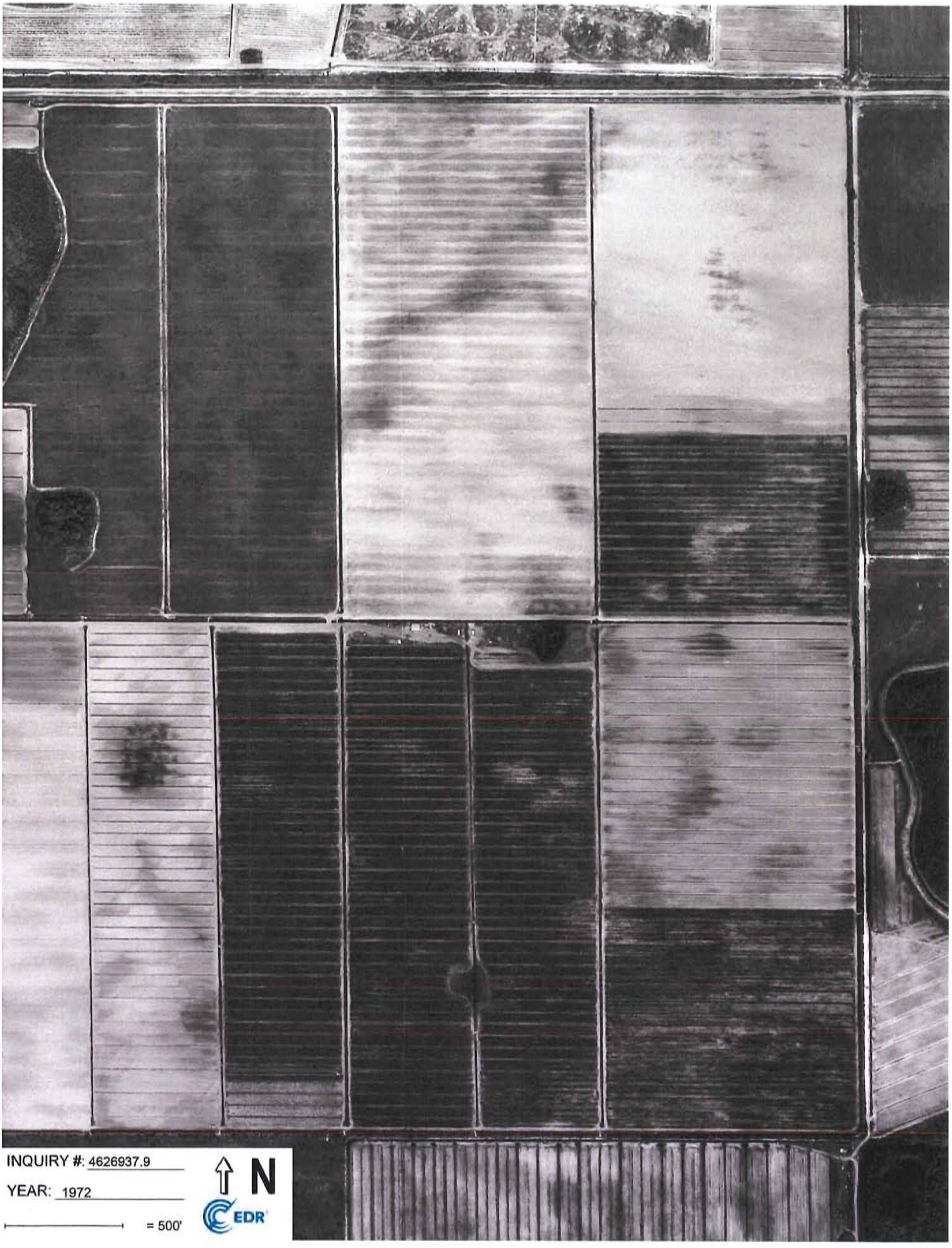
YEAR: 1979

= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 1972
= 500'
N
EDR



INQUIRY #: 4626937.9

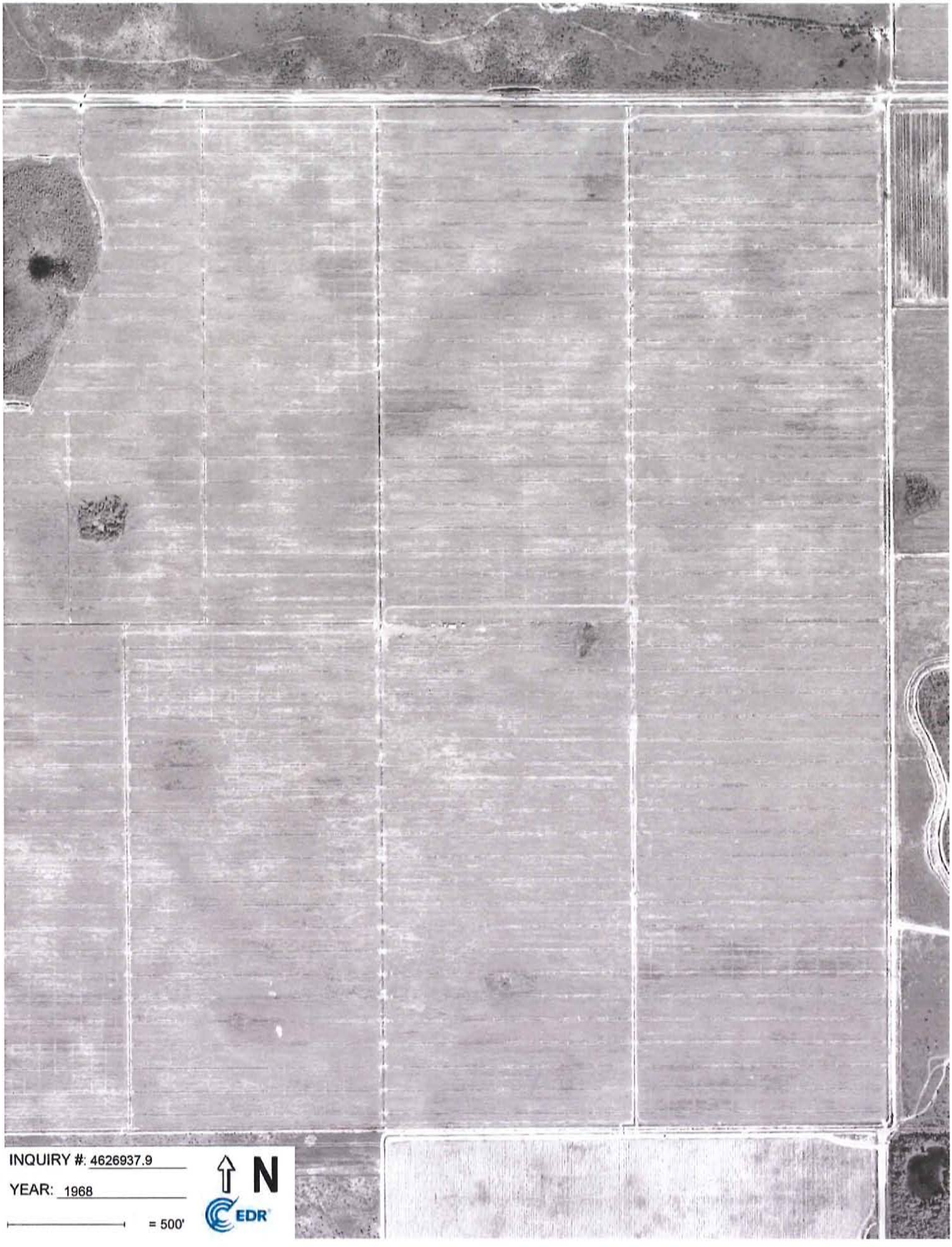
YEAR: 1972

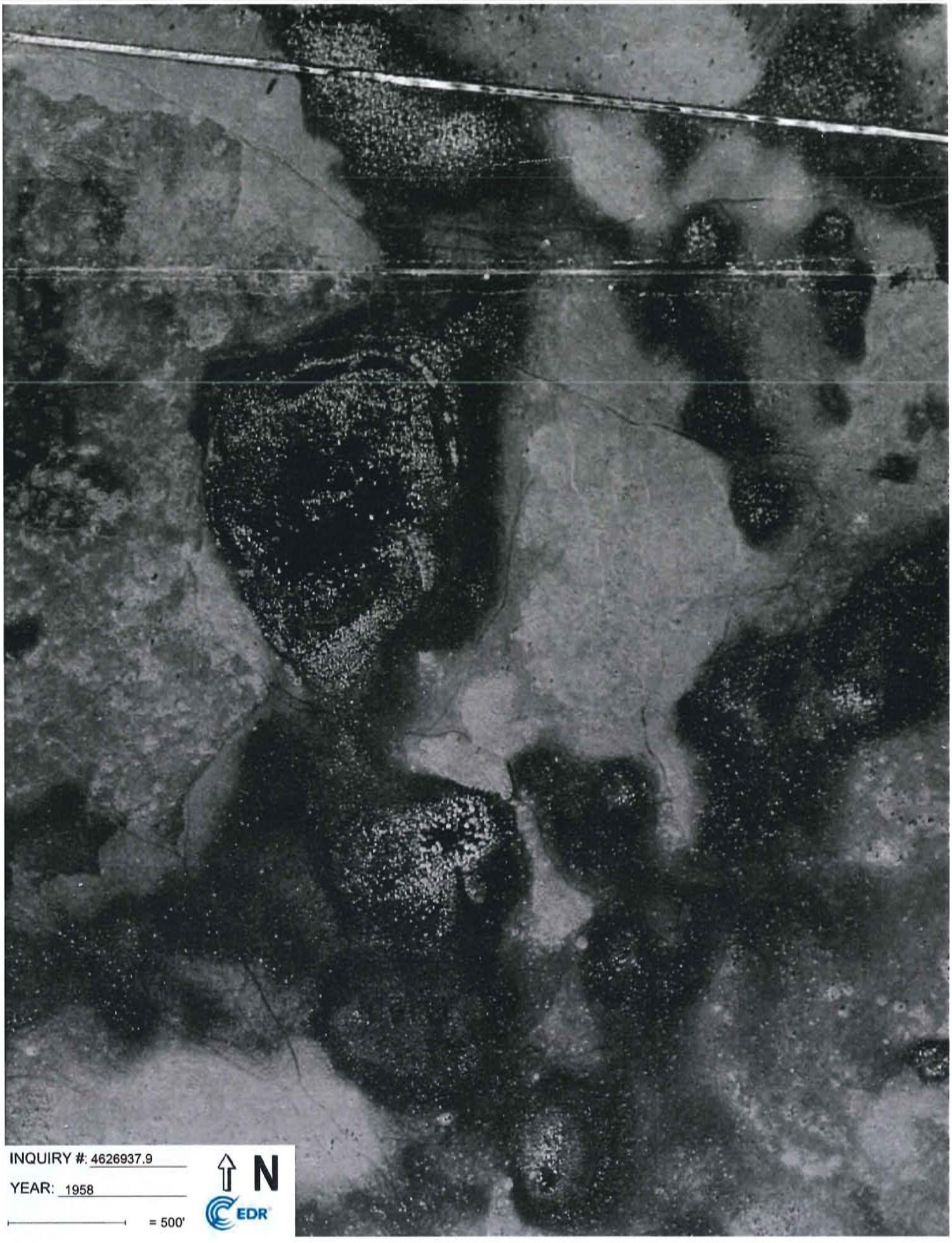
= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 1968
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1968
= 500'
N
EDR



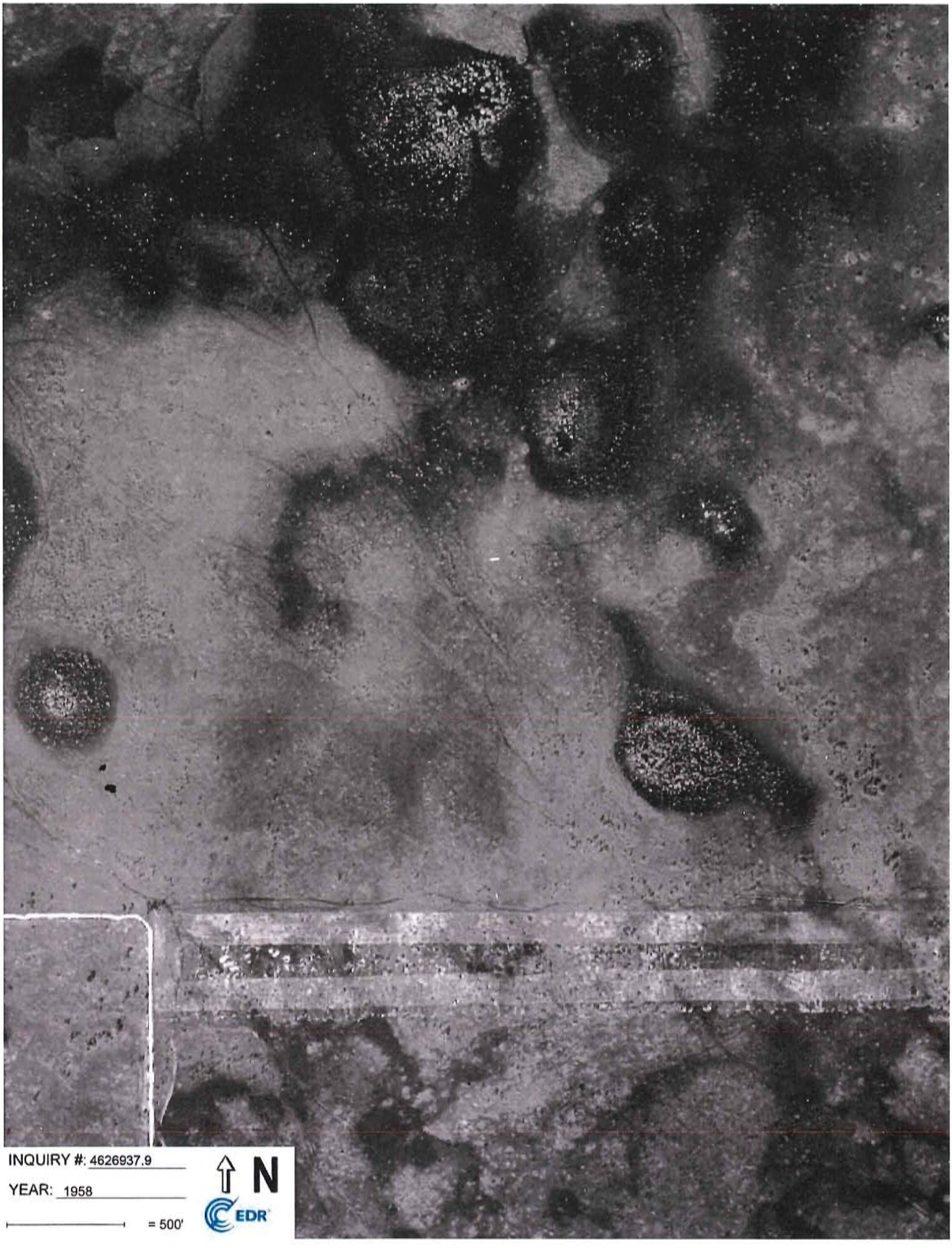
INQUIRY #: 4626937.9

YEAR: 1958

= 500'

N

EDR



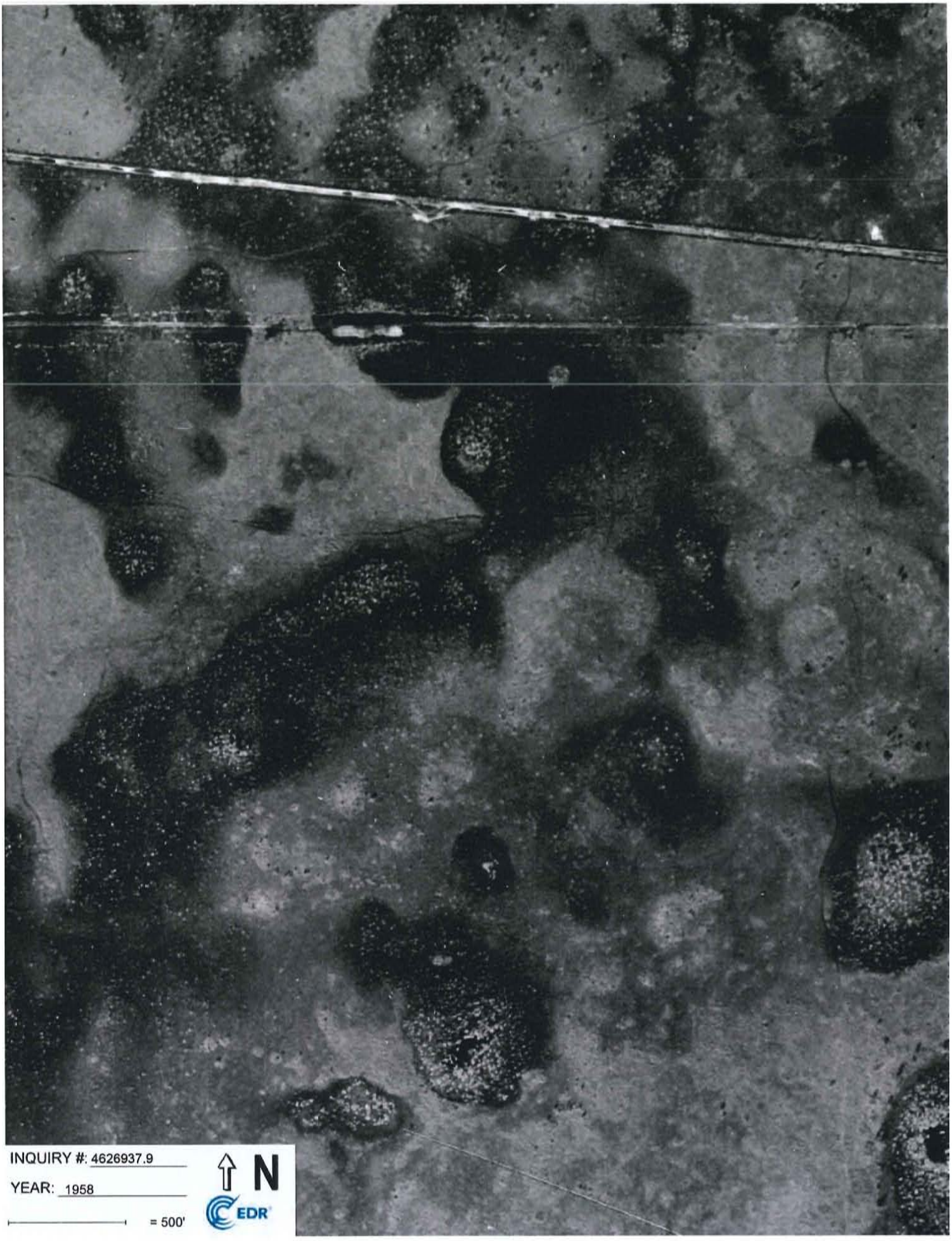
INQUIRY #: 4626937.9

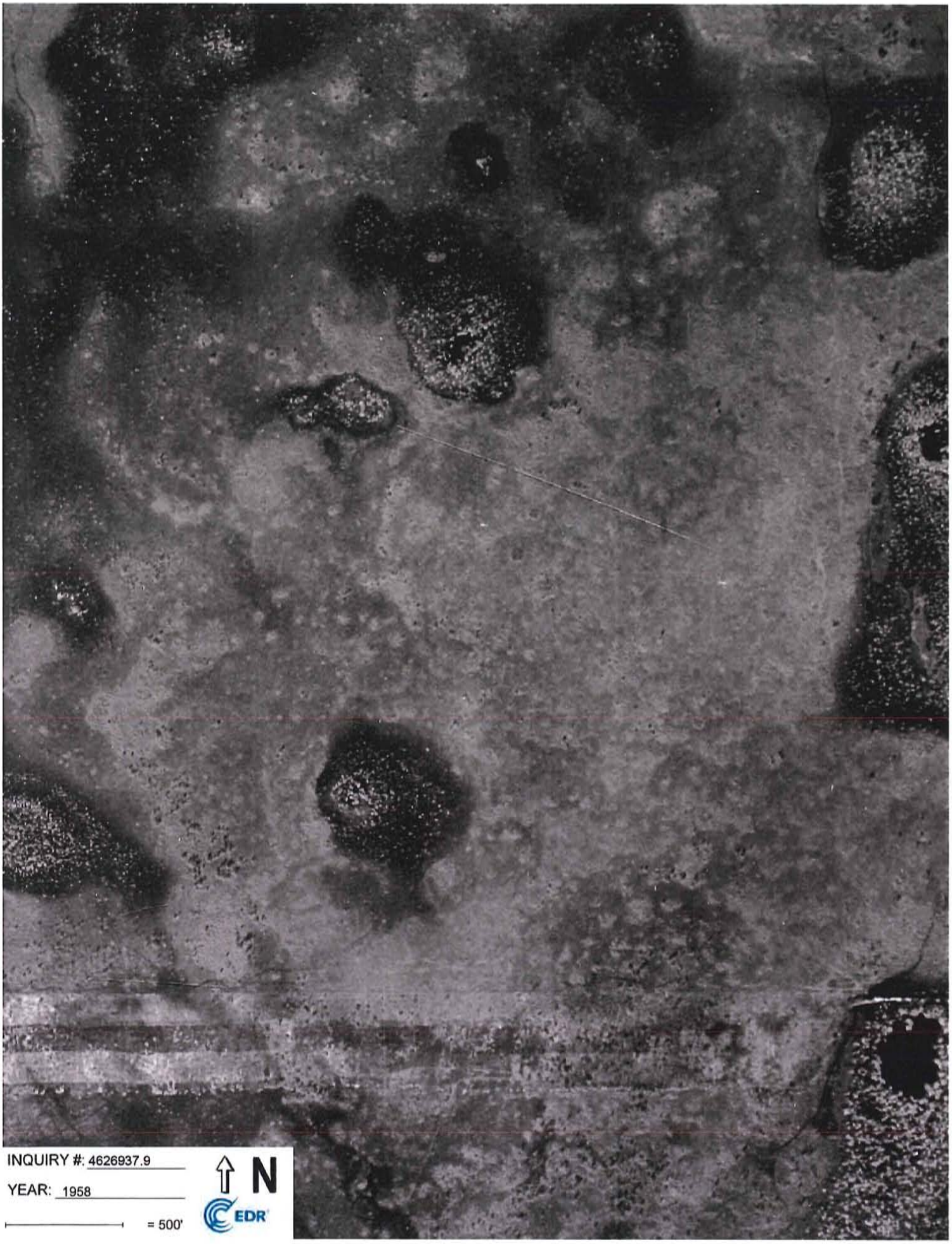
YEAR: 1958

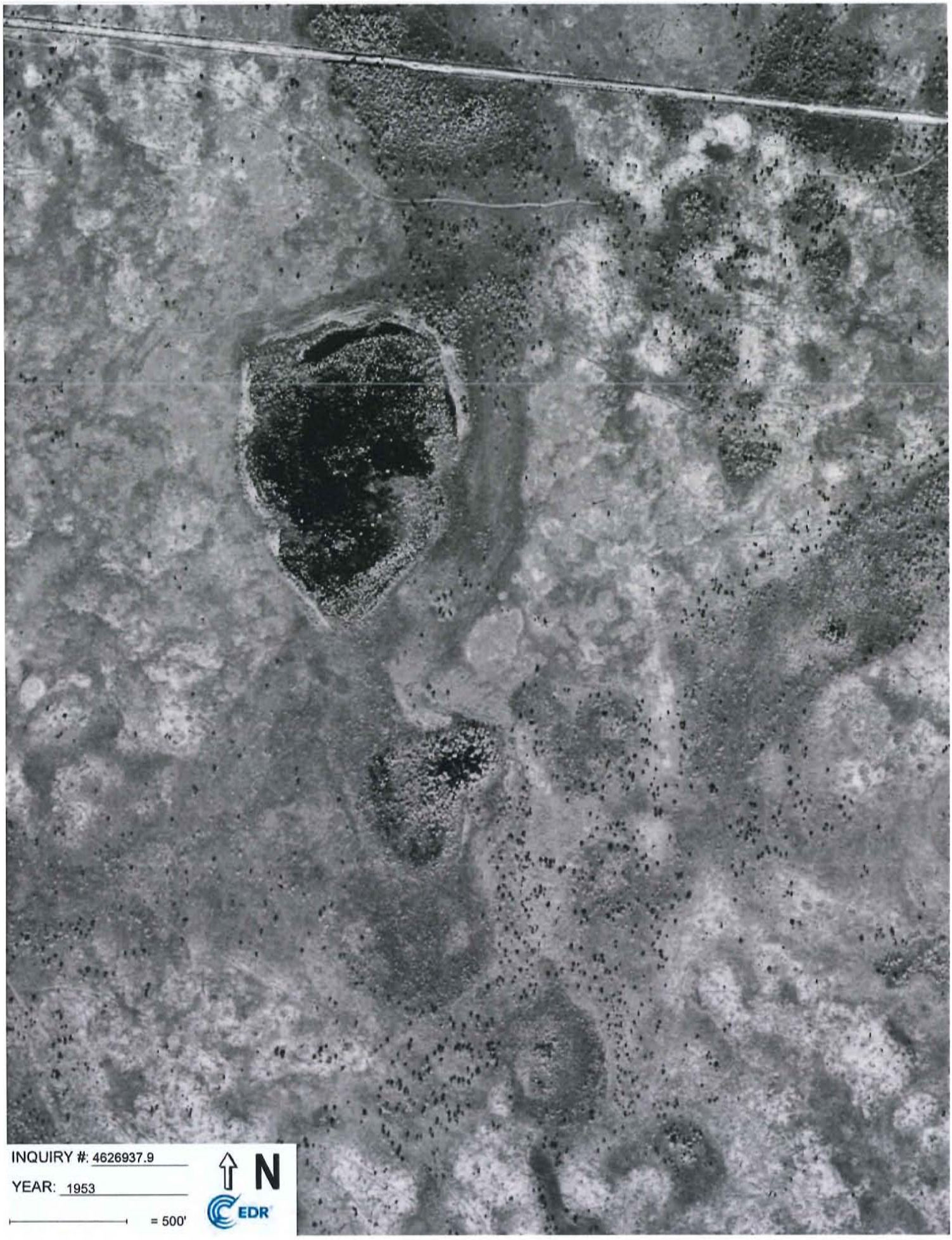
= 500'

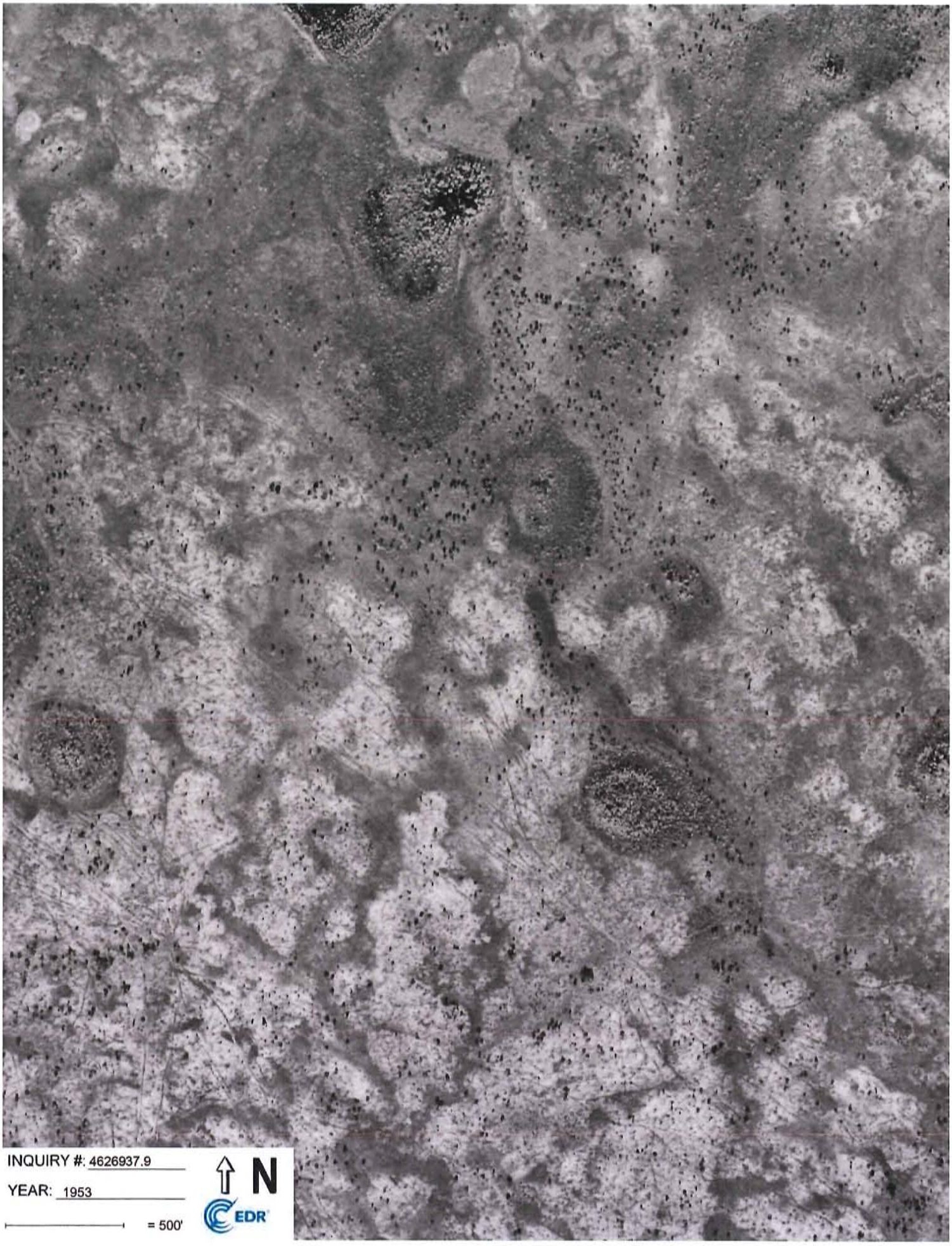
N

EDR


INQUIRY #: 4626937.9
YEAR: 1958
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1958
= 500'
N
EDR


INQUIRY #: 4626937.9
YEAR: 1953
= 500'
N
EDR



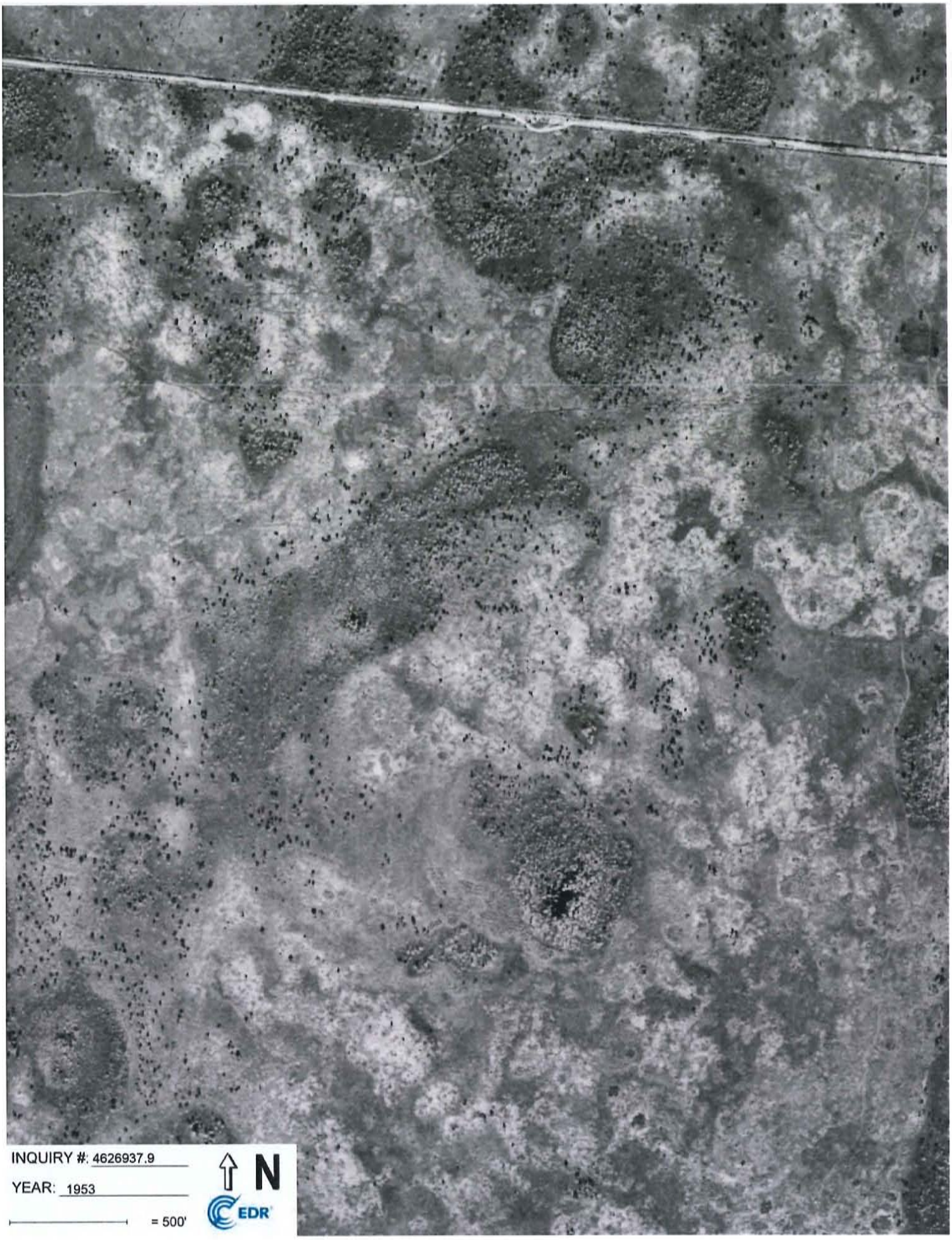
INQUIRY #: 4626937.9

YEAR: 1953

= 500'

N

EDR



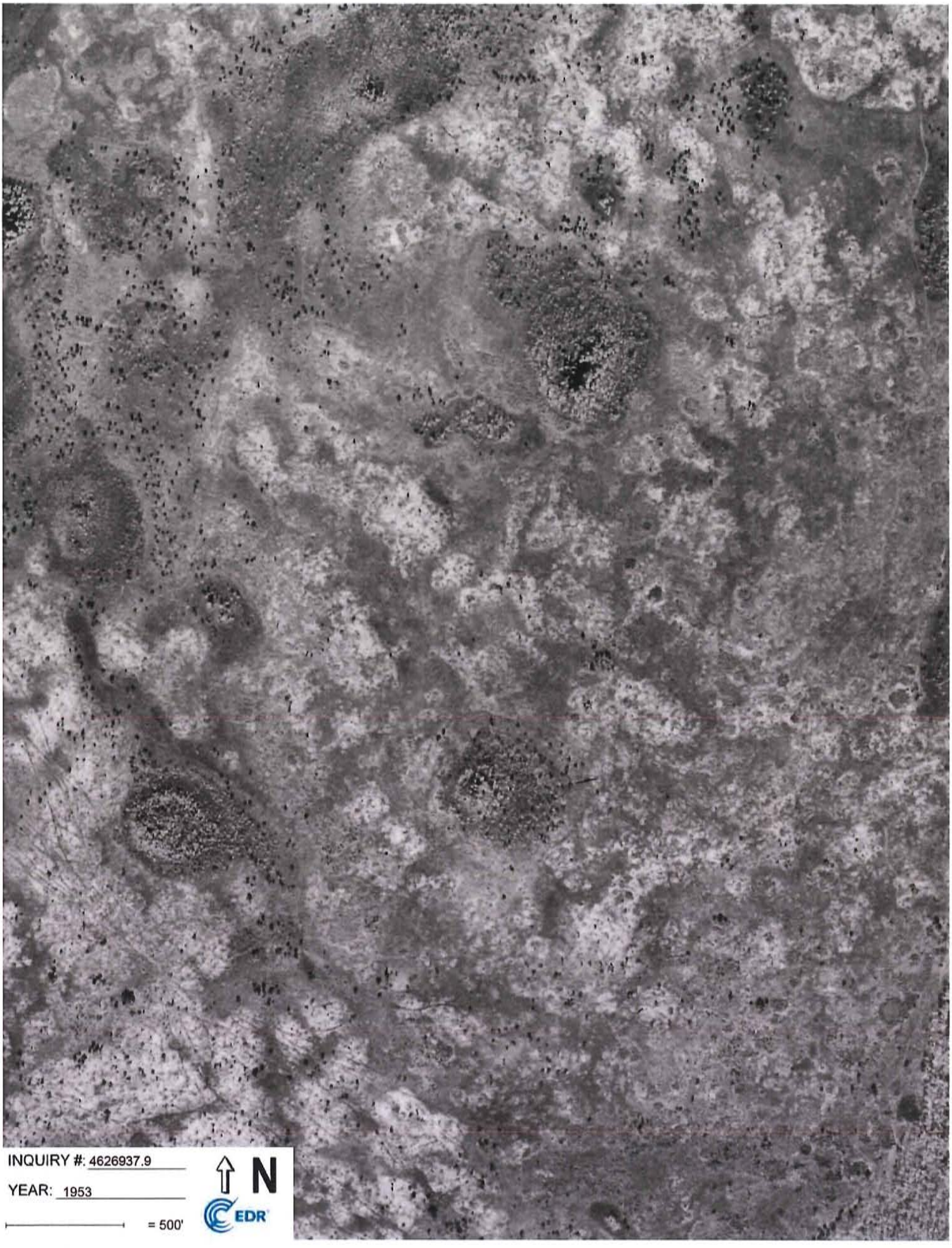
INQUIRY #: 4626937.9

YEAR: 1953

= 500'

N

EDR



INQUIRY #: 4626937.9

YEAR: 1953

= 500'

N

EDR



INQUIRY #: 4626937.9

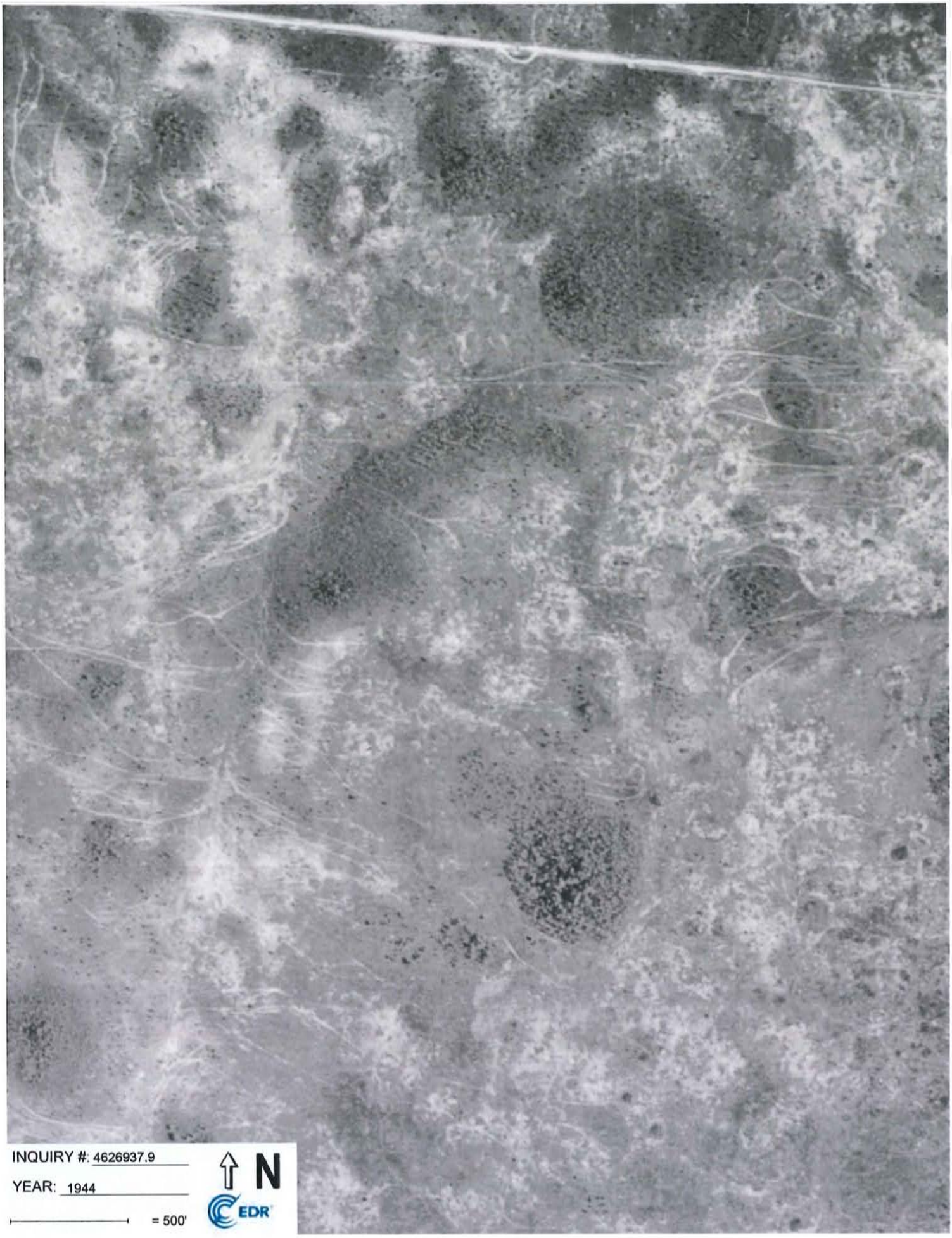
YEAR: 1944

= 500'

N

EDR


INQUIRY #: 4626937.9
YEAR: 1944
= 500'
N
EDR



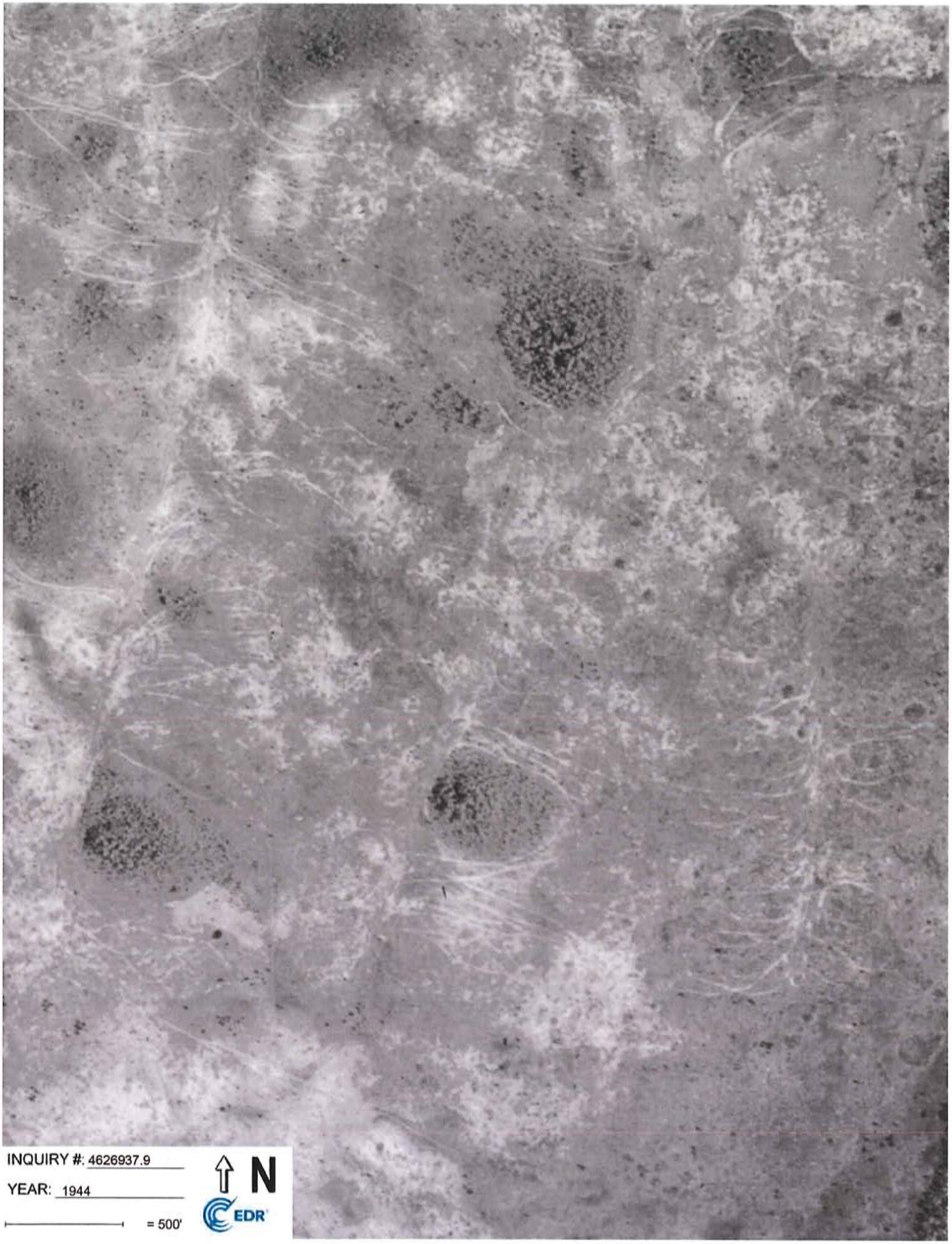
INQUIRY #: 4626937.9

YEAR: 1944

= 500'

N

EDR



INQUIRY #: 4626937.9

YEAR: 1944

= 500'

N

EDR

APPENDIX E

Historical Topographic Map Report

Pepperland
18500 Corkscrew Road
Estero, FL 33928

Inquiry Number: 4626937.4
May 23, 2016

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

05/23/16

Site Name:

Pepperland
18500 Corkscrew Road
Estero, FL 33928
EDR Inquiry # 4626937.4

Client Name:

TDC Consulting Group
5621 Strand Boulevard
Naples, FL 34110
Contact: John Driscoll

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by TDC Consulting Group were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: 6300-0003

Coordinates:

Latitude:	26.44307 26° 26' 35" North
Longitude:	-81.65155 -81° 39' 6" West
UTM Zone:	Zone 17 North
UTM X Meters:	435040.09
UTM Y Meters:	2924917.03
Elevation:	25.00' above sea level

Maps Provided:

2012
1987
1973
1958

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Corkscrew NW
2012
7.5-minute, 24000

1987 Source Sheets



Corkscrew NW
1987
7.5-minute, 24000
Aerial Photo Revised 1984
Edited 1987

1973 Source Sheets



Corkscrew NW
1973
7.5-minute, 24000
Photo Revised 1973
Aerial Photo Revised 1973

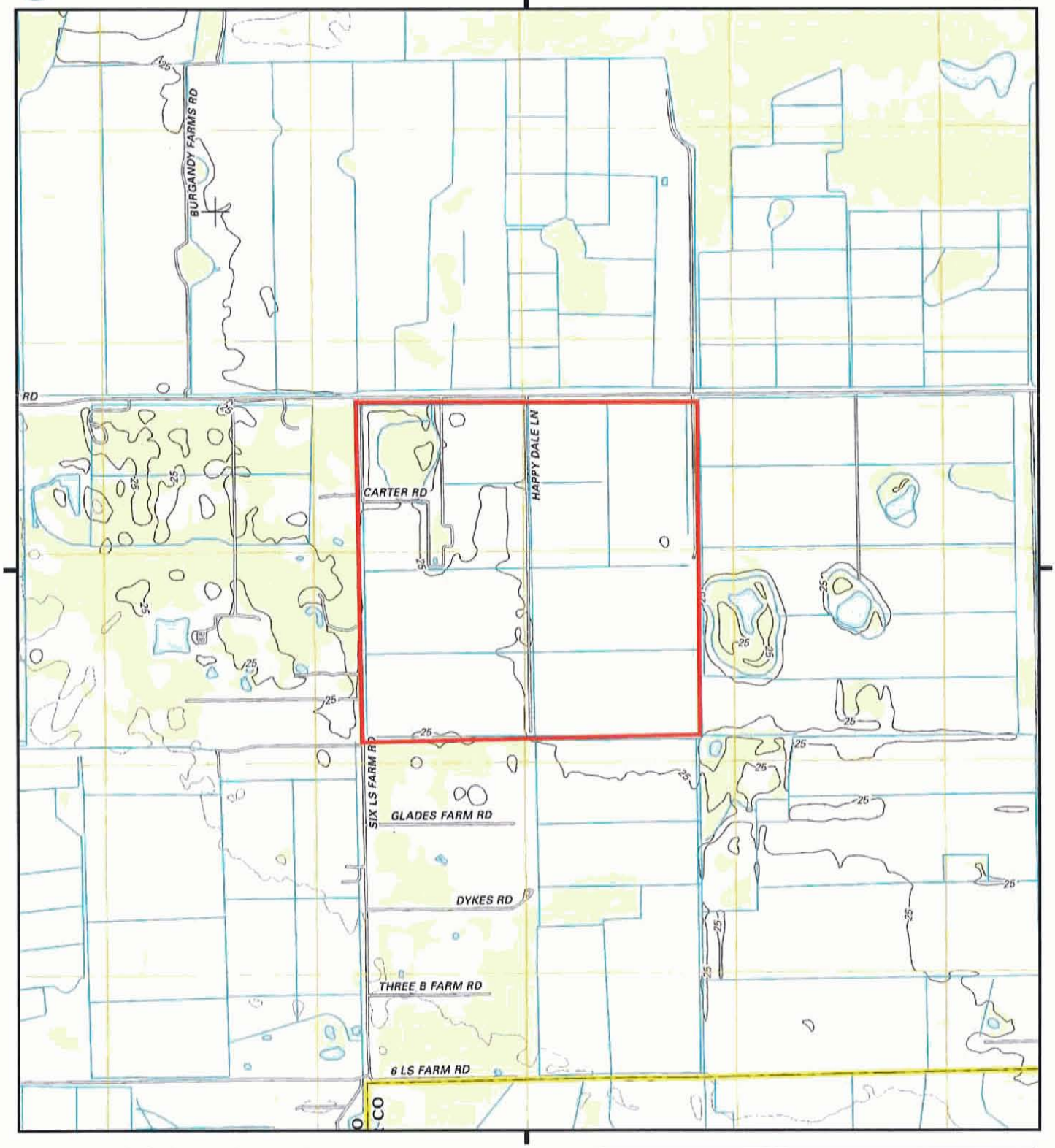
1958 Source Sheets



Corkscrew NW
1958
7.5-minute, 24000
Aerial Photo Revised 1951

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

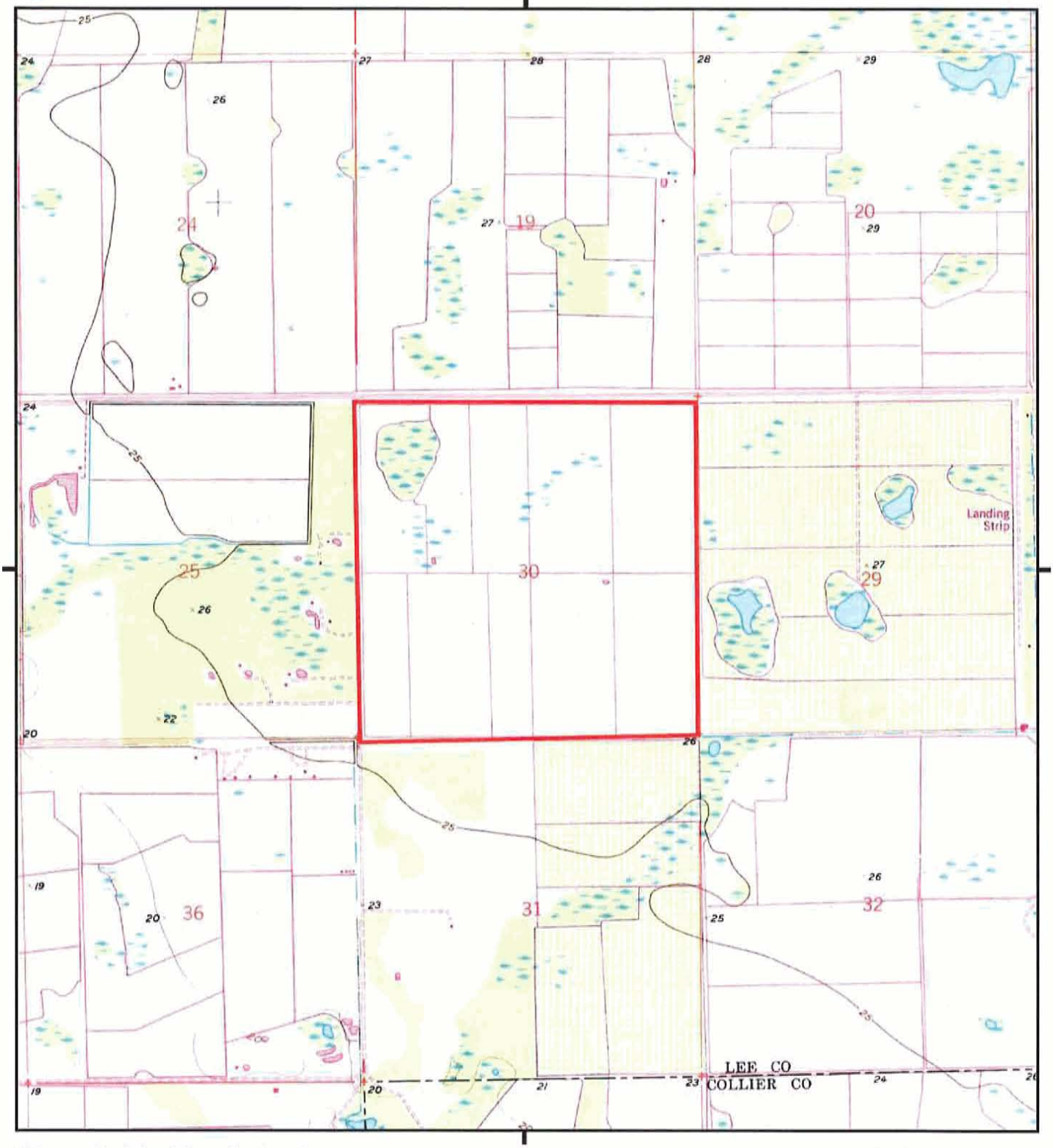
TP, Corkscrew NW, 2012, 7.5-minute

SITE NAME: Pepperland
ADDRESS: 18500 Corkscrew Road
Estero, FL 33928
CLIENT: TDC Consulting Group

N

Historical Topo Map

1987



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

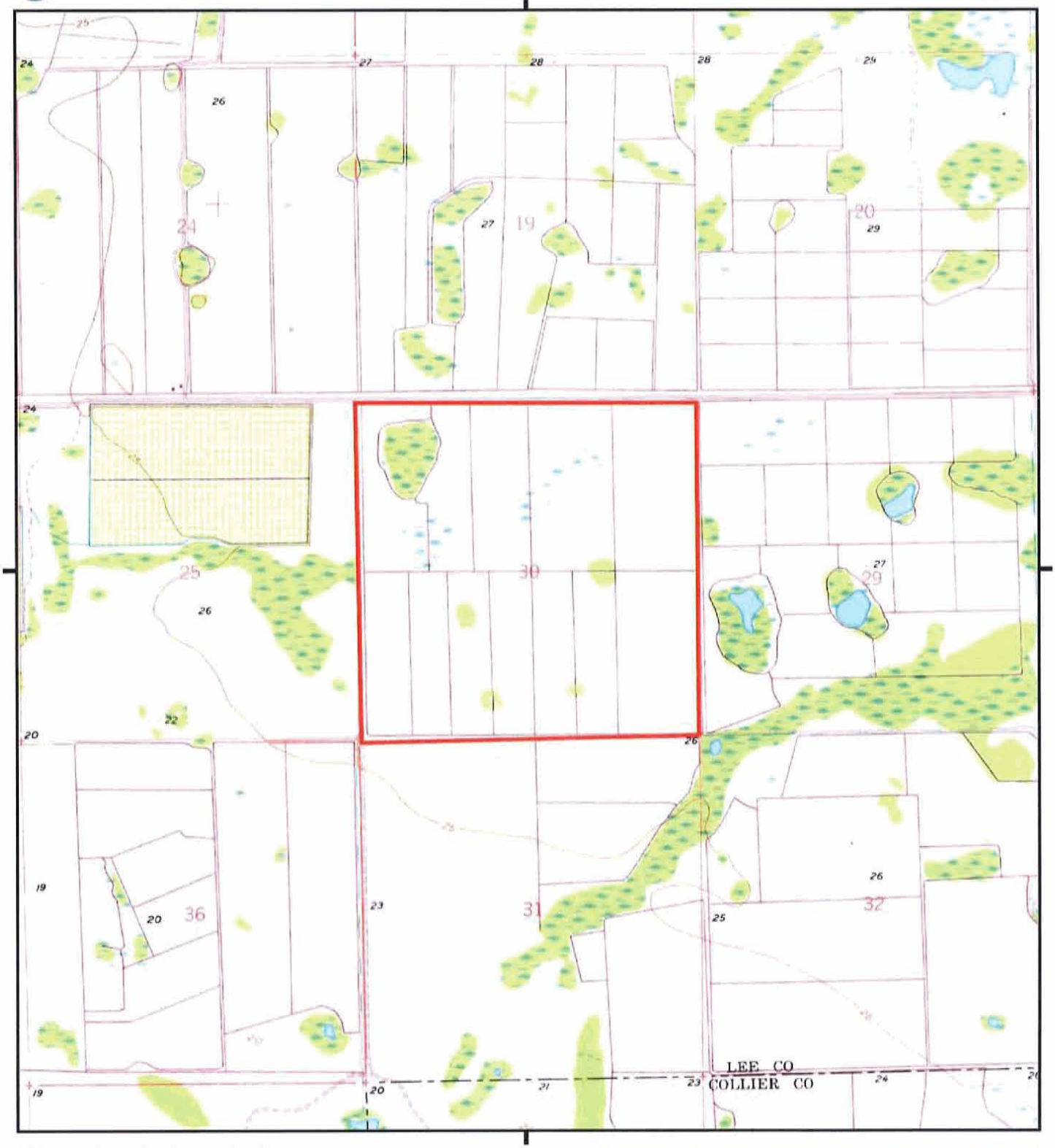
TP, Corkscrew NW, 1987, 7.5-minute

SITE NAME: Pepperland
ADDRESS: 18500 Corkscrew Road
Estero, FL 33928
CLIENT: TDC Consulting Group

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

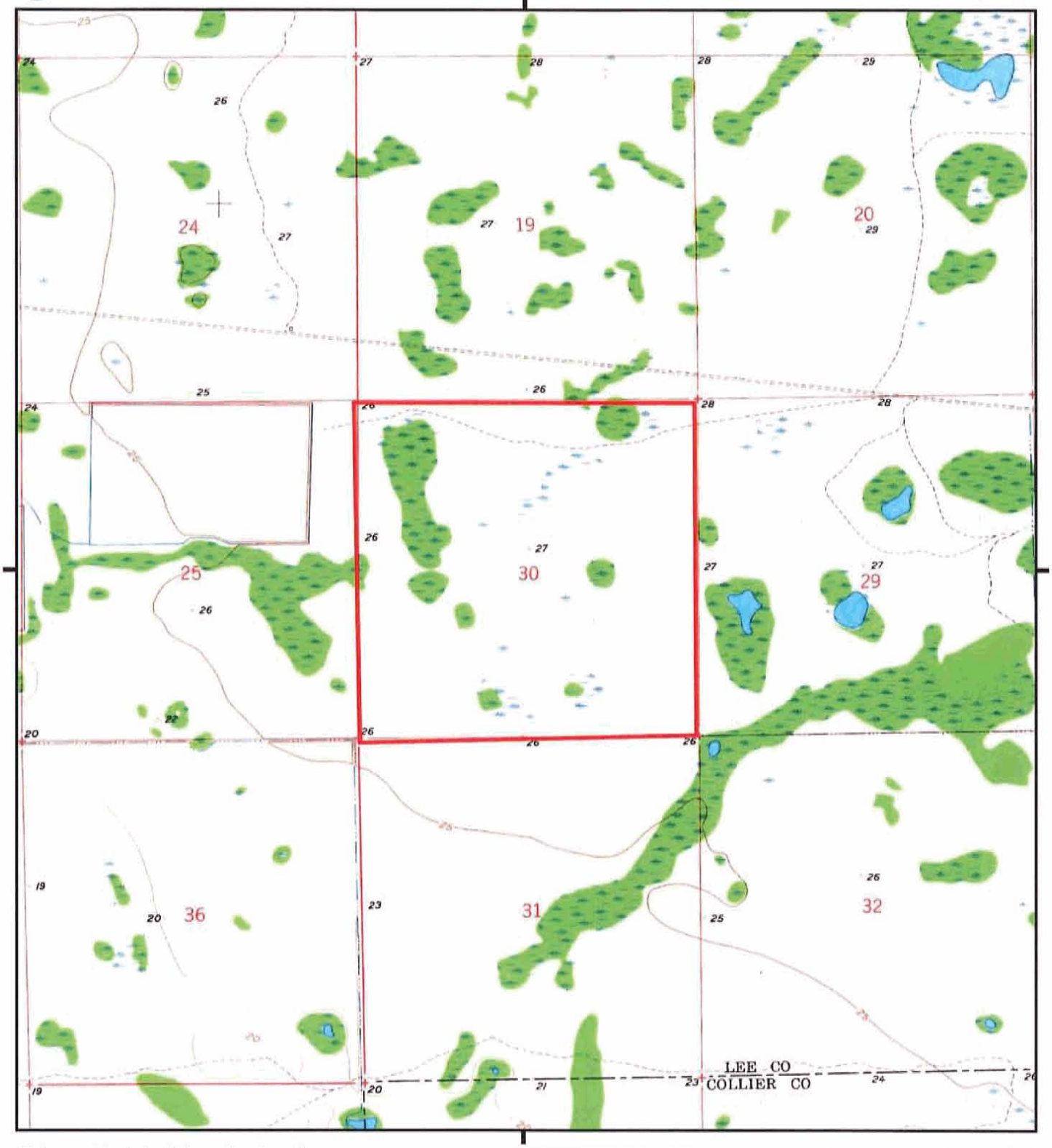
TP, Corkscrew NW, 1973, 7.5-minute

SITE NAME: Pepperland
ADDRESS: 18500 Corkscrew Road
Estero, FL 33928
CLIENT: TDC Consulting Group

N

Historical Topo Map

1958



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Corkscrew NW, 1958, 7.5-minute

SITE NAME: Pepperland
ADDRESS: 18500 Corkscrew Road
Estero, FL 33928
CLIENT: TDC Consulting Group

N

APPENDIX F

Radius Map Report

Pepperland
18500 Corkscrew Road
Estero, FL 33928

Inquiry Number: 4626937.2s
May 23, 2016

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	25
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-9
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

18500 CORKSCREW ROAD
ESTERO, FL 33928

COORDINATES

Latitude (North):	26.4430700 - 26° 26' 35.05"
Longitude (West):	81.6515500 - 81° 39' 5.58"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	435038.9
UTM Y (Meters):	2924752.2
Elevation:	25 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5653756 CORKSCREW NW, FL
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20100428
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
18500 CORKSCREW ROAD
ESTERO, FL 33928

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	TROYER BROS FL	18500 CORKSCREW RD	AST		TP
A2	TROYER BROS FL	18500 CORKSCREW RD	Financial Assurance		TP
3	W H E W-RADIO TOWER	21999 CARTER RD	Financial Assurance	Lower	1 ft.
4	FARM-OP #2	21000 SIX L'S FARM R	LUST, UST, AST, Financial Assurance	Lower	1962, 0.372, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
TROYER BROS FL 18500 CORKSCREW RD ESTERO, FL 33928	AST Facility-Site Id: 9600432 Facility Status: CLOSED Facility Status: CLOSED	N/A
TROYER BROS FL 18500 CORKSCREW RD ESTERO, FL 33928	Financial Assurance Facility Status: CLOSED Facility ID: 9600432	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL---------- National Priority List
Proposed NPL---------- Proposed National Priority List Sites
NPL LIENS---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY---------- Federal Facility Site Information listing
SEMS---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF---------- RCRA - Treatment, Storage and Disposal

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Florida's State-Funded Action Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Facility Database

State and tribal leaking storage tank lists

LAST..... Leaking Aboveground Storage Tank Listing
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FF TANKS..... Federal Facilities Listing
FEMA UST..... Underground Storage Tank Listing
UST..... Storage Tank Facility Information
INDIAN UST..... Underground Storage Tanks on Indian Land
TANKS..... Storage Tank Facility List

State and tribal institutional control / engineering control registries

ENG CONTROLS..... Institutional Controls Registry
INST CONTROL..... Institutional Controls Registry

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Sites
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites Database

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY	Recycling Centers
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
PRIORITYCLEANERS	Priority Ranking List
FI Sites	Sites List
US CDL	National Clandestine Laboratory Register

Local Land Records

LIENS 2	CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
SPILLS	Oil and Hazardous Materials Incidents
SPILLS 90	SPILLS 90 data from FirstSearch
SPILLS 80	SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations

EXECUTIVE SUMMARY

FUSRAP---------- Formerly Utilized Sites Remedial Action Program
UMTRA---------- Uranium Mill Tailings Sites
LEAD SMELTERS---------- Lead Smelter Sites
US AIRS---------- Aerometric Information Retrieval System Facility Subsystem
US MINES---------- Mines Master Index File
FINDS---------- Facility Index System/Facility Registry System
UXO---------- Unexploded Ordnance Sites
DOCKET HWC---------- Hazardous Waste Compliance Docket Listing
AIRS---------- Permitted Facilities Listing
CLEANUP SITES---------- DEP Cleanup Sites - Contamination Locator Map Listing
DEDB---------- Ethylene Dibromide Database Results
DRYCLEANERS---------- Drycleaning Facilities
DWM CONTAM---------- DWM CONTAMINATED SITES
FL Cattle Dip. Vats---------- Cattle Dipping Vats
RESP PARTY---------- Responsible Party Sites Listing
SITE INV SITES---------- Site Investigation Section Sites Listing
TIER 2---------- Tier 2 Facility Listing
UIC---------- Underground Injection Wells Database Listing
NPDES---------- Wastewater Facility Regulation Database
ECHO---------- Enforcement & Compliance History Information
FUELS PROGRAM---------- EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto---------- EDR Exclusive Historic Gas Stations
EDR Hist Cleaner---------- EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS---------- Recovered Government Archive State Hazardous Waste Facilities List
RGA LF---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's PCTO1--Petroleum Contamination Detail Report.

A review of the LUST list, as provided by EDR, and dated 01/08/2016 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FARM-OP #2	***21000 SIX L'S FARM R***	***SSW 1/4 - 1/2 (0.372 mi.)***	***4***	***11***
Discharge Cleanup Status: SRCR - SRCR COMPLETE Facility Status: OPEN Facility-Site Id: 8627146				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

A list of hazardous waste facilities required to provide financial assurance under RCRA.

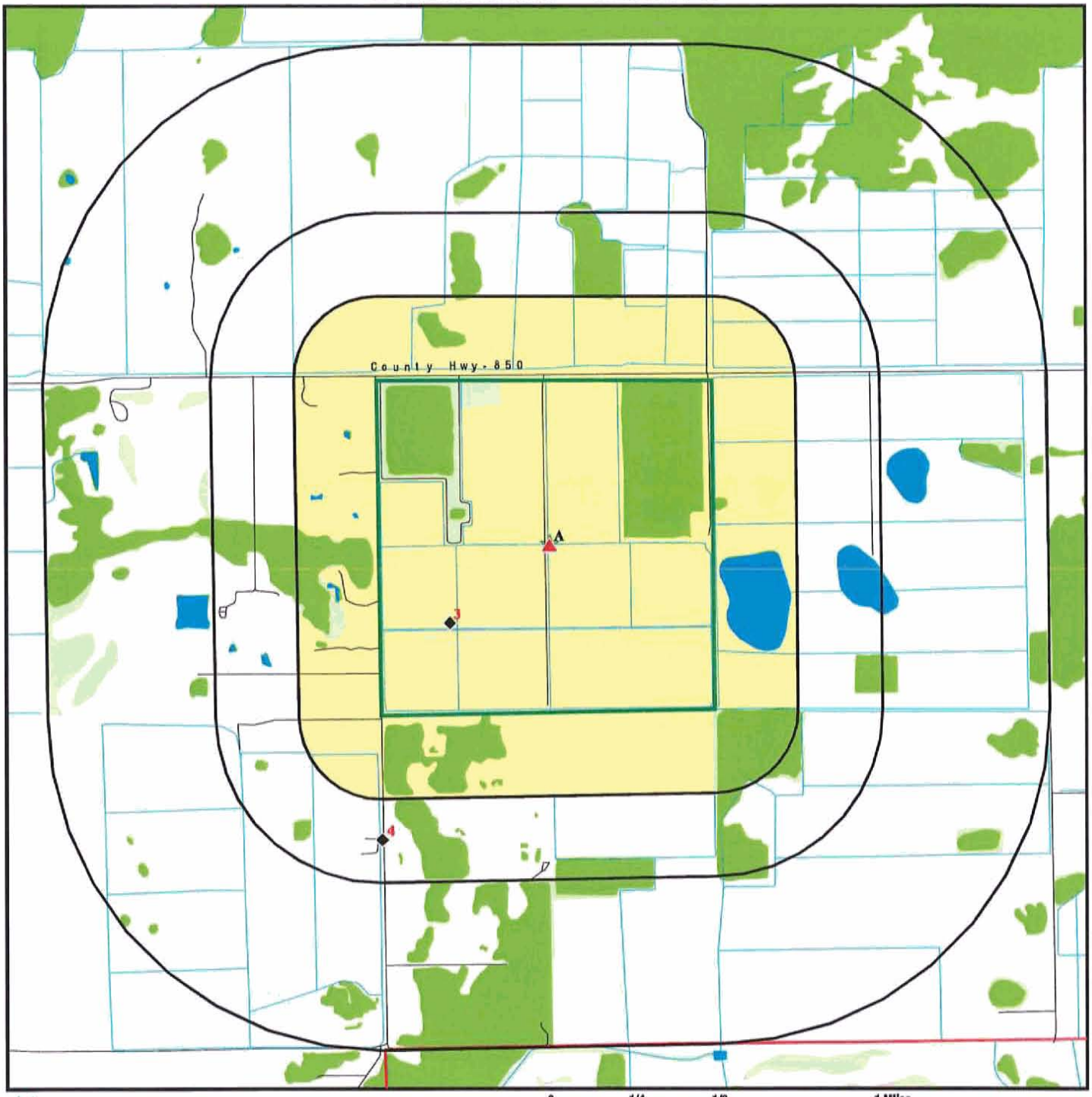
A review of the Financial Assurance list, as provided by EDR, and dated 02/02/2016 has revealed that there is 1 Financial Assurance site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
W H E W-RADIO TOWER Facility Status: CLOSED Facility ID: 9300950	21999 CARTER RD	0 - 1/8 (0.000 mi.)	3	9

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4626937.2S



0 1/4 1/2 1 Miles

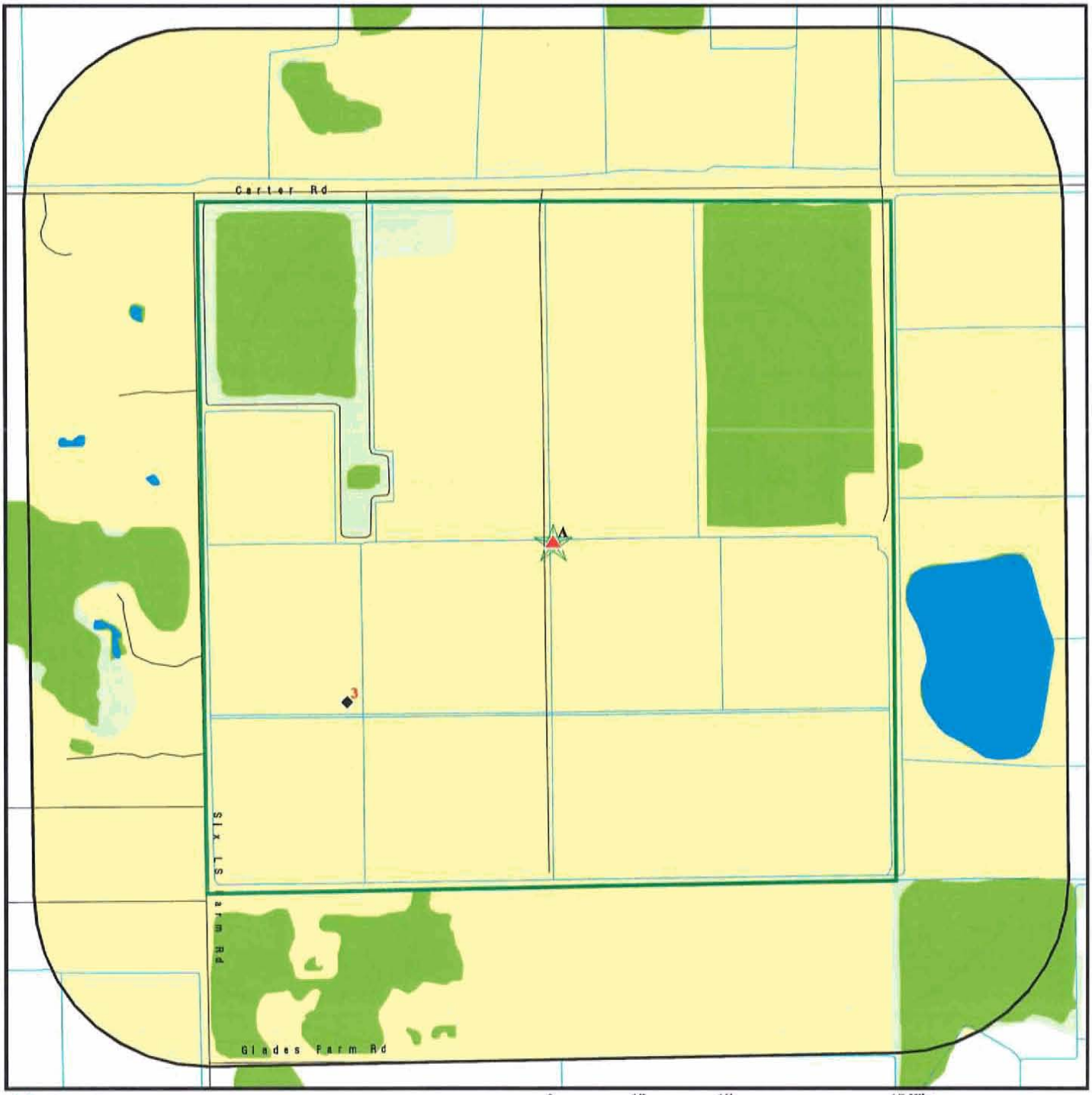
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pepperland ADDRESS: 18500 Corkscrew Road Estero FL 33928 LAT/LONG: 26.44307 / 81.65155	CLIENT: TDC Consulting Group CONTACT: John Driscoll INQUIRY #: 4626937.2s DATE: May 23, 2016 4:25 pm

Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 4626937.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/8 1/4 1/2 Miles

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Pepperland	CLIENT: TDC Consulting Group
ADDRESS: 18500 Corkscrew Road Estero FL 33928	CONTACT: John Driscoll
LAT/LONG: 26.44307 / 81.65155	INQUIRY #: 4626937.2s DATE: May 23, 2016 4:25 pm

Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FF TANKS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250	1	0	0	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
TANKS	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		0	0	0	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
PRIORITYCLEANERS	0.500		0	0	0	NR	NR	0
FI Sites	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
CLEANUP SITES	0.001		0	NR	NR	NR	NR	0
DEDB	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
DWM CONTAM	0.500		0	0	0	NR	NR	0
Financial Assurance	0.001	1	1	NR	NR	NR	NR	2
FL Cattle Dip. Vats	0.250		0	0	NR	NR	NR	0
RESP PARTY	0.500		0	0	0	NR	NR	0
SITE INV SITES	0.500		0	0	0	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		2	1	0	1	0	0	4

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **TROYER BROS FL** **AST** **A100131374**
Target **18500 CORKSCREW RD** **N/A**
Property **ESTERO, FL 33928**

Site 1 of 2 in cluster A

Actual:
25 ft.

AST:

Facility ID:	9600432
Facility Status:	CLOSED
Type Description:	Agricultural
Facility Phone:	(941) 369-5588
DEP Contractor Own:	P
Region:	STATE
Positioning Method:	UNVR
Lat/Long (dms):	26 26 48 / 81 38 41

Owner:

Owner Id:	47659
Owner Name:	TROYER BROS FL
Owner Address:	PO BOX 599
Owner Address 2:	Not reported
Owner City,St,Zip:	IMMOKALEE, FL 33934
Owner Contact:	DON TROYER
Owner Phone:	(941) 369-5588

Tank Id:	1
Status:	Removed
Status Date:	01-OCT-1998
Install Date:	01-JAN-1994
Substance:	Vehicular diesel
Content Description:	Vehicular Diesel
Gallons:	1000
Tank Location:	ABOVEGROUND

Click here for Florida Oculus:

A2 **TROYER BROS FL** **Financial Assurance** **S107938008**
Target **18500 CORKSCREW RD** **N/A**
Property **ESTERO, FL 33928**

Site 2 of 2 in cluster A

Actual:
25 ft.

FL Financial Assurance 3:

Region:	3
Facility ID:	9600432
Facility Phone:	(941) 369-5588
Facility Status:	CLOSED
Facility Type:	M
Type Description:	Agricultural
DEP CO:	P
Finaincial Responsibility:	INSURANCE
Insurance Company:	FPLIPA
Effective Date:	20-MAR-1995
Expire Date:	20-MAR-1999
Owner ID:	47659
Onwer Name:	TROYER BROS FL
Owner Address:	PO BOX 599
Owner Address2:	Not reported

TROYER BROS FL (Continued) **S107938008**

Owner City,St,Zip: IMMOKALEE, FL 33934
Contact: DON TROYER
Resp Party Phone: (941) 369-5588

FL Financial Assurance 3:
Region: 3
Facility ID: 9600432
Facility Phone: (941) 369-5588
Facility Status: CLOSED
Facility Type: M
Type Description: Agricultural
DEP CO: P
Finaincial Responsibility: INSURANCE
Insurance Company: FPLIPA
Effective Date: 20-MAR-1995
Expire Date: 20-MAR-1999
Owner ID: 47659
Onwer Name: TROYER BROS FL
Owner Address: PO BOX 599
Owner Address2: Not reported
Owner City,St,Zip: IMMOKALEE, FL 33934
Contact: DON TROYER
Resp Party Phone: (941) 369-5588

FL Financial Assurance 3:
Region: 3
Facility ID: 9600432
Facility Phone: (941) 369-5588
Facility Status: CLOSED
Facility Type: M
Type Description: Agricultural
DEP CO: P
Finaincial Responsibility: INSURANCE
Insurance Company: FPLIPA
Effective Date: 20-MAR-1995
Expire Date: 20-MAR-1999
Owner ID: 47659
Onwer Name: TROYER BROS FL
Owner Address: PO BOX 599
Owner Address2: Not reported
Owner City,St,Zip: IMMOKALEE, FL 33934
Contact: DON TROYER
Resp Party Phone: (941) 369-5588

---

3 **W H E W-RADIO TOWER** **Financial Assurance** **S107938472**
21999 CARTER RD **N/A**
< 1/8 **FORT MYERS, FL 33902**
1 ft.

Relative:
Lower

Actual:
24 ft.

FL Financial Assurance 3:
Region: 3
Facility ID: 9300950
Facility Phone: (813) 332-2102
Facility Status: CLOSED
Facility Type: C
Type Description: Fuel user/Non-retail
DEP CO: P

Pepperland
18500 Corkscrew Road
Estero, FL 33928

Inquiry Number: 4626937.5
May 25, 2016

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2016 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2013	☑	☑	Cole Information Services
2008	☑	☑	Cole Information Services
2003	☑	☑	Cole Information Services
1999	☑	☑	Cole Information Services
1995	☑	☑	Cole Information Services
1992	☑	☑	Cole Information Services

RECORD SOURCES

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

FINDINGS

TARGET PROPERTY STREET

18500 Corkscrew Road
Estero, FL 33928

Year	*CD Image*	*Source*
CORKSCREW RD		
2013	pg A2	Cole Information Services
2008	pg A8	Cole Information Services
2003	pg A14	Cole Information Services
1999	pg A19	Cole Information Services
1995	pg A21	Cole Information Services
1992	pg A22	Cole Information Services

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*
6 LS FARM RD		
2003	pg. A13	Cole Information Services
1999	pg. A18	Cole Information Services
1995	pg. A20	Cole Information Services
SIX LS FARM RD		
2013	pg. A7	Cole Information Services
2008	pg. A12	Cole Information Services
1992	pg. A23	Cole Information Services

City Directory Images

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2013

1	ESTERO FLORIST
	ESTERO FLORIST LINKS
3800	KORESHAN STATE HISTORIC SITE
3826	STATE OF FLORIDA
3850	RALPH LACIVITA
8660	BB&T
8741	OCCUPANT UNKNOWN
8751	OCCUPANT UNKNOWN
8761	OCCUPANT UNKNOWN
8791	HAPPEHATCHEE CENTER INC
	OCCUPANT UNKNOWN
8800	CHEVRON
8801	OCCUPANT UNKNOWN
8901	OCCUPANT UNKNOWN
8980	OCCUPANT UNKNOWN
	TROPEX PLANT LEASING SALES & MAINTEN
8990	OCCUPANT UNKNOWN
9100	STEPHANIE MILLER
9250	A R TRIBUIANI DPM FACFAS
	ADVANCED DERMATOLOGY
	CHIROPRACTIC CARE & REHAB CENTER
	DAOUD MAZEN MD
	DAVID S GEDESTERO
	ESTERO CHAMBER OF COMMERCE
	ESTERO URGENT CARE
	FLIGHTDOCS
	FLORIDA GULF COAST EAR NOSE & THROAT
	MAZEN DAOUD
	PHYSIOTHERAPY ASSOCIATES
	REAL ESTATE MORTGAGE NETWORK
	SELECT REAL ESTATE BY STEPHANIE MILL
	SONU AESTHETIC DAY SPA
	SOUTHWEST FLORIDA ANKLE & FOOT CARE
	WEIGHT CONTROL SERVICES
	ZAFAR D A DPM FACFAS
9351	SELECT REAL ESTATE
9480	GULF COAST MD PA
9520	OCCUPANT UNKNOWN
9550	ESTERO ANIMAL HOSPITAL
9570	DICK HRABAK
9600	OCCUPANT UNKNOWN
9911	BARAJAS DIANA M DDS
	ESTERO DENTAL CARE
	GULF COAST ORTHODONTICS
	ISLAND COAST PEDIATRICS
	MCKENNA MARTIN J MD
9921	GREEN ABACO ISLAND DEVELOPMENT COMPA
9975	ARBYS
10351	DUNKIN DONUTS
	FUELNGO LLC

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2013 (Cont'd)

10371	ESTERO FOOD MART
10800	ANGELA FINE FURNISHING
	ANN SACKS
	AZAR FLOORING GALLERIES ESTERO
	BAKER FURNITURE
	CALIFORNIA CLOSETS
	CASA ITALIA
	CHALON USA
	CLIVE CHRISTIAN NAPLES
	CLUBHOUSE ITALIA OF NAPLES
	FINE LINES EXPERIENCE CENTER
	FOCUS TIME INC
	FRANCESCO MOLON
	GOLD COAST TILE & MARBLE
	HENREDON INTERIOR DESIGN SHOWROOM
	IDC BISTRO
	JARDIN DE VILLE USA INC
	LIGHTING SOLUTIONS
	MARK BILLER & ASSOCIATES
	MIROMAR DESIGN CENTER
	NAPLES MATTRESS
	PARIS CERAMICS
	POGGENPOHL FLORIDA WEST
	RICHLIN INTERIORS
	ROCHEBOBOIS
	SOHO KITCHEN & DESIGNS
	STRAUSS LIGHTING
	WALKER ZANGER
	WEBSTER & CO
10801	ADIDAS OUTLET STORE
	AEROSOLES
	ALDO
	ANNE KLEIN
	AUNTIE ANNES
	BAILEY BANK BIDDLE JEWELRY STORE
	BANANA REPUBLIC
	BARE ESCENTUALS
	BASS
	BATH & BODY WORKS
	BB BAILY
	BCBGMAXAZRIA
	BEACH HOUSE THE
	BEBE MIROMAR OUTLET
	BIJOUX TERNER LLC
	BON APPETIT FRENCH BISTRO
	BOOK WAREHOUSE
	BOSE
	BOSTONIANCLARKS
	BROOKS BROTHERS
	CALPHALON KITCHEN OUTLET

CORKSCREW RD 2013 (Cont'd)

10801 CARTERS
CENTEX HOMES SELECTIONS CENTER
CHICOS
CLAIRES
COACH
COLE HAAN
COLUMBIA SPORTS WEAR CO
CONVERSE
COSMETIC COMPANY STORE AT MIROMAR OU
CRABTREE & EVELYN
CROCS RETAIL LOCATION
CROCSMIROMAR LOCATION
DAIRY QUEEN
DESIGNER FRAGRANCE & COSMETIC CO
DISNEYS CHARACTER WAREHOUSE
DONCASTERO OUTLET
DRESSBARN
EASY SPIRIT OUTLET
ECCO
ECKO
EDDIE BAUER
ESCADA
FACTORY BRAND SHOES
FOSSIL
FRAGRANCE
GAP
GODIVA CHOCOLATIER
GOLF MANIA PRO SHOPS
GUESS
GURU DENIM INC
GYMBOREE
HAGGER DIRECT INC
HARTMANN
HURLEY
I EMPRESS DESIGN LLC
ICELL INC
INDUSTRY RETAIL GROUP
INTERNATIONAL TILE & STONE
ITALIAN COLLECTIONS
IZOD
J CREW
JNY
JOCKEY
JOHNSTON & MURPHY
JOURNEYS
JUICY COUTURE OUTLET
JUSTICE MIROMAR OUTLETS
KENNETH COLE
LA BAMBA
LACOSTE

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2013 (Cont'd)

10801	LE CREUSET
	LE GOURMET CHEF
	LEGGS HANES BALI PLAYTEX EXPRESS
	LUNA PIZZA
	LUNA ROSSA
	MACARON ET CHOCOLAT MIORORA
	MICHAEL KORS OUTLET
	MIRAMAR OUTLETSTIMBERLAND
	MIROMAR LAKES SPA & FITNESS
	MIROMAR REALTY OF SW FLORIDA
	MOTHERHOOD MATERNITY
	MOVADO GROUP INC
	NAPLES FLAT BREAD & WINE BAR
	NAUTICA OF NAPLES
	NEIMAN MARCUS
	NIKE FACTORY STORE
	NINE WEST OUTLET
	NYS COLLECTION
	OAKLEY VAULT MIROMAR
	ORANGE LEAF
	OSHKOSH BGOSH
	OUTLET 325
	PACSUN
	PERFUMANIA
	PERRY ELLIS
	PHILLIPS VAN HEUSEN CALVIN KLEIN
	PHILLIPS VAN HEUSEN CALVIN KLEIN 11
	PIERCING PAGODA
	POLO RALPH LAUREN FASHION
	PORT JAVA CAFE
	PUMA OUTLET STORE
	RACK ROOM SHOES
	REEBOK FACTORY DIRECT STORE
	ROCKFORD FOOTWEAR DEPOT
	SAKS FIFTH AVENUE
	SAMSONITE FACTORY OUTLET
	SKETCHERS STORE 340
	SOMA INTIMATES
	SOUTHWEST FLOOR CARE
	ST JOHN
	STARBUCKS COFFEE
	STORM SMART BUILDING SYSTEM
	SUBWAY SANDWICHES
	SUNGLASS HUT
	TALBOTS
	THE CHILDRENS PLACE
	THE LUGGAGE FACTORY
	TIMBERLAND STORE MAIN LINE
	TIME FACTORY WATCH OUTLET
	TIPSY TARPON

CORKSCREW RD 2013 (Cont'd)

10801	TOMMY HILFIGER
	TOTES ISOTONER
	TRUE BRAND RELIGION JEANS
	ULTRA DIAMONDS
	UNDER ARMOUR
	UNITED STATES POLO ASSOCIATION
	VERA BRADLEY
	VIP NAILS
	WATERFORD WEDGWOOD
	WATERSIDE SEAFOOD & GRILL
	WHITE HOUSE BLACK MARKET
	WILSONS LEATHER
	WOK KITCHEN
	WORTH LTD MIROMAR OUTLETS
	ZALES OUTLET
10851	DEB SHAN
12481	FLORIDA DEVELOPMENT PARTNERS
14751	HARRY LOWELL
17314	OLD CORKSCREW GOLF CLUB
17350	MICHAEL JOYCE
17380	JERRY NUNN
17390	MARVIN BRANTLEY
	TOP FUEL 555 INC
17400	ALL FLORIDA REAL ESTATE INC
	CHARLES KING
17440	OCCUPANT UNKNOWN
17501	OCCUPANT UNKNOWN
17520	MARK GINOCCHIO
17550	IRVIN WEATHERS
17600	AMIEL VILLANI
17650	BENJAMIN HERSHEY
17700	HARVEY YOUNGQUIST
20100	PABLO GAMEZ
20150	MARK HANSEN
20200	OCCUPANT UNKNOWN
20280	MARK BRYANT
20340	G SMITH
20500	OCCUPANT UNKNOWN
20600	DOUGLAS KENDALL
20731	OCCUPANT UNKNOWN
20800	NOEL ABRAMSON
20850	MICHAEL BRAY
21400	OCCUPANT UNKNOWN
21750	OCCUPANT UNKNOWN
22451	OCCUPANT UNKNOWN
22500	CORKSCREW OLD
22971	MARTY CONNORS
23990	CORKSCREW OLD

Target Street	Cross Street	Source
-	✓	Cole Information Services

SIX LS FARM RD 2013

20180	BLAKE NEUVILLE
20200	OCCUPANT UNKNOWN
20290	KRISTEN LEFORT
20430	DALE SKIBA
20720	DAVID SUMMERS
20750	DONALD KELLY
	YOUNGQUIST KELLY INC
20940	ERIC VIERLING
21000	REDI PLANTS
21010	SCOTT RUSH
21020	OCCUPANT UNKNOWN
21051	JOHN WICKS
21071	ROBERT WALTER
21150	RUBEN VASQUEZ
21160	OCCUPANT UNKNOWN
21170	SOUTHWEST FLORIDA WETLANDS JOINT VEN
21370	ELISA CANTU
21390	OCCUPANT UNKNOWN
21410	ANA RAMIREZ
21414	OCCUPANT UNKNOWN
21416	OCCUPANT UNKNOWN
21450	OCCUPANT UNKNOWN
21452	VELMA LOPEZ
21458	OCCUPANT UNKNOWN
21470	MIGUEL CHAVEZ
21601	GILBERT LICINA
21611	OCCUPANT UNKNOWN
	TOMMY DYKES
21640	DUSTIN IGO
21641	OCCUPANT UNKNOWN
21701	OCCUPANT UNKNOWN
21801	THOMAS THAYER
21821	JAY NELSON
21841	TIMOTHY MCBRIDE
21861	OCCUPANT UNKNOWN
21901	STEPHEN PANCZYSZYN
22030	ENRIQUE VILLAREAL
22051	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2008

0	DORIS CRUZ
3830	STEPHEN GIGUERE
3850	RALPH LACIVITA
8661	CHARLES DAURAY
	COLLEGE OF LIFE FOUNDATION
	KORESHAN UNITY FOUNDATION
8700	WACHOVIA BANK NATIONAL ASSN
8741	OCCUPANT UNKNOWN
8751	OCCUPANT UNKNOWN
8761	OCCUPANT UNKNOWN
8791	HAPPEHATCHEE CENTER INC
	JOSEPH STAIGER
8800	CHEVRON
	CORKSCREW ENERGY LLC
8801	OCCUPANT UNKNOWN
8980	OCCUPANT UNKNOWN
8990	OCCUPANT UNKNOWN
9100	STEPHANIE MILLER
9250	ADVANCED DERMATOLOGY SPECIALTIES
	BATELLI EUGENE A DPM FACFAS
	CHIROPRACTIC CARE & REHAB CENTER
	CHRISTOPHER GREEN DC
	CYPRESS VIEW EAST LLC
	DAOUD MAZEN MD
	DAVID GIROUX
	ESTERO URGENT CARE
	GULF COAST PREMIER REALTY INC
	MAZEN DAOUD
	METRO NEW PARTNERS LLC
	MICHELLE GIROUX DC
	PHYSIOTHERAPY ASSOCIATES
	PLATINUM COAST HEALTHCARE PA
	SELECT R E LLC
	SELECT RE BY STEPHANIE MILLER
9351	EMPIRE BUILDERS
9480	SAMADHI MASSAGE THERAPY
9490	OCCUPANT UNKNOWN
9500	G CESPEZES
9520	OCCUPANT UNKNOWN
9550	OCCUPANT UNKNOWN
9570	DICK HRABAK
9600	OCCUPANT UNKNOWN
9975	ARBYS
10351	PIK N RUN PIZZA CITY
10800	BAKERKNAPP & TUBBS INC
	CALIFORNIA CLOSETS CO INC
	CASA ITALIA LLC
	CZS COFFEE & TEA WITH ME
	F I A
	FLORIDAS DECORATOR

CORKSCREW RD 2008 (Cont'd)

10800	GALLERY ON FIFTH
	HOME ENTERTAINMENT DESIGN CENTER
	LIGHTING SOLUTIONS
	MARK BILLER & ASSOCIATES
	MINIMALISTA
	PAUL ERWIN DESIGN INC KIT
	PRANASLEEP
	SOHO KITCHENS & DESIGN INC
	STICKLEY FURNITURE
	STONEYBROOK GOLF
	STRAUSS LIGHTING INC
	THE WOOD FLOOR CO
	WALKER ZANGER
	WATERWORKS
	WEBSTER NAPLES LLC
	WEST COAST FURNITURE
10801	ASIAN BISTRO
	BOSE CORP
	BOSTONIAN CLARKS OUTLET
	CALVIN KLEIN
	COLE HAAN FOOTWARE & ASSOCIATES
	COSMETIC CO STORE
	CRABTREE & EVELYN LTD
	CROSCILL HOME FASHION OUTLET
	DESIGNER FRAGRANCES & COSMETICS CO
	DONNA KARAN CO LLC THE
	ETIENNE AIGNER INC
	FASHIONS OUTLET OF AMERICA
	FORGET ME NOT BY AMERICAN GREETING
	FOSSIL STORES INC
	GUESS INC
	GYMBOREE OUTLET
	HARRY & DAVID
	HARTSTRINGS INC
	IZOD
	J PAUL ARMAND INC
	KEY WESTERN GRILLE INC
	LE CREUSET
	LENOX INC
	LITTLE ME RETAIL STORE
	MADELINE UNIQUE FURNISHINGS
	MAIDENFORM INC
	MIROMAR DEVELOPMENT CORP
	MIROMAR OUTLET EAST LLC
	MIROMAR TITLE CO
	OFF 5TH
	OSHKOSH B GOSH
	PERRY ELLIS
	PICTURE THIS & MORE
	RACK ROOM SHOES

CORKSCREW RD 2008 (Cont'd)

10801	REEBOK FACTORY DIRECT STORE
	ROCKY MOUNTAIN CHOCOLATE FACTORY
	RUG DECOR OF MIROMAR
	SILK LOOM INC
	SOSSIL
	STARBUCKS CORP
	STRASBURG CHILDREN
	SUBWAY
	SUNGLASS HUT
	THE BEACH HO WIM WEAR INC
	THE LEVIS OUTLET
	THE WILLIAM CARTER CO
	TIMEX
	TOMMY HILFIGER
	VIP NAILS
	VITAMIN WORLD INC
	WESTPOINT STEVENS INC
	ZALES JEWELRY OUTLET
14500	CEMEX INC
	FLORIDA RMC GROUP
	RUBEN ARMENDARIZ WELDING
	SINGELTARY CONCRETE PRODUCE INC
14751	HARRY LOWELL
17320	OLD CORKSCREW GOLF CLUB
17350	MICHAEL JOYCE
17380	JERRY NUNN
17390	BRANTLEY ENVIRONMENTAL SERVICES LLC
	JAMES BRANTLEY
	TOP FUEL 555 INC
17400	ALL FLORIDA REAL ESTATE INC
	NANCY KING
17440	FIRE GUYS LAWN CARE
	OCCUPANT UNKNOWN
17501	OCCUPANT UNKNOWN
17520	MARK GINOCCHIO
17550	IRVIN WEATHERS
17600	AMIEL VILLANI
17650	BENJAMIN HERSHEY
	LEE HERSHEY BUILDERS LLC
17700	HARVEY YOUNGQUIST
17880	HARVEY YOUNGQUIST
19050	ARVO RAHE
19990	CORKSCREW COUNTRY STORE
20100	PABLO GAMEZ
20150	MARK HANSEN
20200	DAVID DAVENPORT
20280	BRYANT ONE DESIGN YACHTS INC
	MARK BRYANT
20340	ESTERO CARPENTRY INC
	JAY NEWBERRY

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2008 (Cont'd)

20500	OLD CORKSCREW NURSERY INC
20600	DOUGLAS KENDALL
20731	KEVIN HILL
20800	OCCUPANT UNKNOWN
20850	OCCUPANT UNKNOWN
20950	SHANE KIDDER
21400	OCCUPANT UNKNOWN
21500	ISLAND CLUB HOMEOWNER
21600	COMMUNITY RE CONNECTION INC
21750	OCCUPANT UNKNOWN
21751	WESTWIND CORKSCREW MINING LLC
22451	JOHN SHAVONE
22500	CORKSCREW OLD
22951	SBN GROVE MAINTENANCE
22971	MARTY CONNORS
23750	OCCUPANT UNKNOWN
23900	OCCUPANT UNKNOWN
23990	CORKSCREW OLD
23998	CREW LAND & WATER TRUST

Target Street	Cross Street	Source
-	✓	Cole Information Services

SIX LS FARM RD 2008

20180	BLAKE NEUVILLE
20200	JEFFERY KAULBARA
20290	ALL INCLUSIVE HOME SERVICES
	DIMITRI SCHWARZ
20430	RICHARD MONTGOMERY
20471	OCCUPANT UNKNOWN
20720	DANE GRAY
20750	DONALD KELLY
20940	ERIC VIERLING
21010	SCOTT RUSH
21051	WILLIAM NELSON
21071	MICHAEL MITSOS
21100	OCCUPANT UNKNOWN
21150	RUBEN VASQUEZ
21160	ALAN MORGAN
21170	SOUTHWEST FLORIDA WETLAND
21370	ELISA CANTU
21380	BALTAZAR PADILLA
21390	MARIA MINOR
21400	ERICA CARDENAS
21410	EVERARDO GOMEZ
21414	OCCUPANT UNKNOWN
21416	ANDRES SAAVEDRA
21420	OCCUPANT UNKNOWN
21452	JOSE PORTILLO
21458	OCCUPANT UNKNOWN
21470	MIGUEL CHAVEZ
21601	GILBERT LICINA
21610	OCCUPANT UNKNOWN
21611	OCCUPANT UNKNOWN
	TOMMY DYKES
21640	DUSTIN IGO
21641	OCCUPANT UNKNOWN
21801	THOMAS THAYER
21821	JAY NELSON
21861	TIMOTHY MCBRIDE
21901	OCCUPANT UNKNOWN
22030	ENRIQUE VILLAREAL
22032	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
-	✓	Cole Information Services

6 LS FARM RD 2003

20180	BLAKE NEUVILLE
20200	WANDA DAWSON
20290	ROBERT BROWN
20430	OCCUPANT UNKNOWN
20471	DAVID MARSIGLIO
20750	DONALD KELLY
	KELLY YOUNGQUIST INC
20940	ERIC VIERLING
21000	FARM OP INC
	JASON SHIVELER
21014	AMADEO CAVAZOS
21071	MICHAEL MITSOS
21150	OCCUPANT UNKNOWN
21160	OCCUPANT UNKNOWN
21170	SOUTHWEST FLORIDA WTLND JOINT
21370	ELISA CANTU
21380	ABEL CAVAZOS
21390	GUADALUPE TREVINO
21400	OCCUPANT UNKNOWN
21414	BALTAZAR PADILLA
21420	OCCUPANT UNKNOWN
21450	MARIA MINOR
21458	OCCUPANT UNKNOWN
21601	GILBERT LICINA
21610	OCCUPANT UNKNOWN
21611	L MONTGOMERY
	TOMMY DYKES
21640	OCCUPANT UNKNOWN
21641	OCCUPANT UNKNOWN
21801	THOMAS THAYER
21821	JAY NELSON
22030	ENRIQUE VILLAREAL
22032	OCCUPANT UNKNOWN

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2003

0	DORIS CRUZ
3830	PETER HICKS
3850	RALPH LACIVITA
8660	COLONIAL BANK
8661	COLLEGE OF LIFE FOUNDATION INC
8700	FIRST UNION FINANCIAL CENTERS
	WILLIAM RIVERA
8741	OCCUPANT UNKNOWN
8751	SARAH BERGQUIST
8761	OCCUPANT UNKNOWN
8791	ELLEN PETERSON
	RYAN COMBS
8801	COLLEGE OF LIFE FOUNDATION
8980	PEDRO BAYLON
8990	OCCUPANT UNKNOWN
9100	OCCUPANT UNKNOWN
9500	GEORGE HORNE
9550	ERIC MADDEN
9570	OCCUPANT UNKNOWN
9975	ARBYS
10351	PIK N RUN PIZZA CITY
10800	STONEYBROOK GOLF & CC
	US HOME STONEY BROOK
10801	AEROSOLES
	ANT ANNES HAND RLD SOFT PRTZL
	BANISTER
	BEACH HOUSE
	BEST BRANDS ELECTRONICS
	BIG & TALL FACTORY STORE
	BIG DOG SPORTSWEAR
	BOSE FACTORY STORE
	BOSTONIAN CLARKS OUTLET
	BROOKS BROTHERS
	CA ONE SERVICES
	CARTERS CHILDRENSWEAR
	CENTEX HOUSE
	CHICOS
	CLAIRES BOUTIQUES INC
	COACH INC
	COASTAL COTTON CO
	COSMETIC CO
	COST CUTTERS HAIR SALON
	COUNTRY CLUTTER
	CRABTREE & EVELYN
	CRICKET SHOP
	CROSCILL HOME FSHN OTLT STORE
	DANSK
	DAVID BROOKS OUTLET STORE
	DONNA KARAN CO
	ELEGANT ILLUSIONS INC

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 2003 (Cont'd)

10801	ELLEN TRACY OF NAPLES INC
	ELLIS PERRY
	ESCADA CO
	ETIENNE AIGNER RTL OTLT STORE
	FABINS PIZZERIA
	FACTORY BRAND SHOES
	FARBERWARE OUTLET STORE
	FILA
	FLORSHEIM FACTORY OUTLET
	FORGET ME NOT
	HAGGAR CLOTHING CO
	HARRY & DAVID STORE
	HARTSTRINGS
	HUGO BOSS INC
	IZOD
	J PAUL ARMAND INC
	JOAN VASS USA
	JOCKEY INTERNATIONAL INC
	LABAMBA MEXICAN RESTAURANT
	LEGGS HANES BALI PLYTX EXPRS
	LENOX FACTORY OUTLET
	LEVIS & DCKR OTLT BY DSGN
	LITTLE ME RETAIL STORE OF FLRD
	LITTLE ME RETAIL STR OF FLRD L
	LUNA ROSSA
	MAIDENFORM
	MARIKITA
	MIROMAR DEVELOPMENT
	MIROMAR LAKES GOLF CLUB
	MIROMAR OUTLETS
	MUSIC 4 LESS
	NAUTICA OF NAPLES
	NIKE FACTORY STORE
	NOVA FASHIONS USA LLC
	ONEIDA HOME
	OSHKOSH BGOSH
	PERFUMANIA
	PICTURE OUTLET INC
	PIERCING PAGODA
	POLO RALPH LAUREN FASHION
	POTTERY ROW
	RACK ROOM SHOES
	RBK FCTRY DRCT STR MRMR FCTRY
	REEBOK INTERNATIONAL 149
	ROBERT ORTH
	ROCKY MOUNTAIN CHOCOLATE FCTRY
	ROYAL DOULTON USA INC
	RUG DECOR AT MIROMAR
	SAKS FIFTH AVENUE
	SAMSONITE CO

CORKSCREW RD 2003 (Cont'd)

10801	SAND DECOR CORP
	SANFORD CHUNG ADVERTISING
	SHERIDAN AUSTRALIA
	ST JOHN KNITS
	STRASBURG CHILDREN
	STRIDE RITE INC
	TELERAVE WIRELESS
	THE DRESS BARN
	THE GLASS COLLECTION
	THUY BUI
	TIME FACTORY WATCH OUTLET
	TOMMY HILFIGER
	ULTRA DIAMOND & GOLD OUTLET
	UMBRO FACTORY OUTLET
	VALUE NUTRITION STORES
	VIP NAILS
	WARNACO OUTLET 180
	WAVES MUSIC
	WESTPOINT STVN BED BATH & LNN
10901	WESTPOINT STEVENS STORS INC
11501	STNYBRK GOLF & CNTRY CLUB PRO
	US HOME CORP
11800	PINEWOOD ELEMENTARY
	SCHL DIST OF LEE CNTY ELMNTRY
14500	RMC SOUTH FLORIDA MATERIALS
	YOUNGQUIST BROTHERS
17320	TERRY JOHNSON
17350	MICHAEL JOYCE
17380	JERRY NUNN
17390	TIMOTHY YOUNGQUIST
17400	MARK KING
17440	PAUL HETSER
17550	IRVIN WEATHERS
17600	AMIEL VILLIANI
17700	HARVEY YOUNGQUIST
18500	DGR DISTRIBUTORS INC
19500	SCHOENBRUN FARMS
19990	CORKSCREW COUNTRY STORE
	RHONDA HALCOMB
20150	REBECCA HANSEN
20200	WILLIAM ADAMS
20280	CAROL BRYANT
20600	GUILLERMO HERNANDEZ
20731	KEVIN HILL
20800	NOEL ABRAMSON
20850	MICHAEL BRAY
20950	BENJAMIN SUMNER
21230	R SCHMIDT
21400	ROBERT SCHMIDT
21600	COMMUNITY RE CONNECTION

CORKSCREW RD 2003 (Cont'd)

21751	OCCUPANT UNKNOWN
22451	OCCUPANT UNKNOWN
22951	SBN GROVE MAINTENANCE
22971	LEO CONNORS
23750	OCCUPANT UNKNOWN
23900	FELIX COLLAZO
23998	FELIX COLLAZO
23999	YOUNGQUIST GROVES

Target Street	Cross Street	Source
-	✓	Cole Information Services

6 LS FARM RD 1999

20430	CONCRETE PRESERVATION & REPAIR INCORPORATED PETER ZAWILINSKI
20720	WILLIAM COOPER
20940	JOHN KELLEY
21071	JOHN MITSOS
21160	JACK MORGAN
21370	S WHITE
21380	ERNESTO DELRIO
21390	TERESA CANTU
21400	MARIA GALLEGOS
21414	DANNY STEWART
21601	GILBERT LICINA
21611	TOMMY DYKES
21640	DAVID DAWSON

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 1999

3826	KORESHAN STATE HISTORIC SITE
3830	A KOLB
	JEANNE STRAUB
3850	EZELL GIVENS
8660	COLONIAL BANK
	COLONIAL BANK SAN CARLOS
8791	ELLEN PETERSON
8801	THOMAS RESNER
8980	C DANZI
9500	GEORGE HORNE
11800	LEE COUNTY GOVERNMENT ELEMENTARY SCHOOLS
	PINEWOODS ELEMENTARY SCHOOL
	SCHOOL DISTRICT OF LEE COUNTY ELEMENTARY SCHOOLS
	SERVE INCORPORATED
14500	YOUNGQUIST BROTHERS ROCK
17380	JERRY NUNN

Target Street	Cross Street	Source
-	✓	Cole Information Services

6 LS FARM RD 1995

20750	KELLY, DONALD W
21000	FARM, O P
	MOSS, DANNY W
21150	SHIVER, JOEL
21380	CANTU, ELISA
21390	TREVINO, G
21610	BARRY, DAVE
21611	DYKES, TOMMY B

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 1995

0	CRUZ, DORIS
	HUDDLESTON, BRYAN
3991	KOLB, A
8661	KORESHAN UNITY FOUNDATION
8700	GRAMAJO, GABRIEL
8751	LOCKWOOD, GORDON
8761	PARK, HOLLY
8791	PETERSON, ELLEN W
8801	WALTER, JOHN
9500	HORNE, GEORGE
9550	DAVENPORT, HENRIE
9570	LIBBERT, TERRY
9600	FISCHER, MARK
	HORNE, CORA L
17320	STANDERFER, ANNE
17400	KING, CHARLES N
17501	FLINT, HARRY
	RAMIREZ, ZULEMA C
17550	WEATHERS, IRVIN
18950	SCOWDEN, JEFF
19500	MITCHELL, PETER
19990	COUNTRY STORE
	WALKER, GREGORY
20150	HANSEN, REBECCA
20200	LUPFER, WILBUR D
20600	KENDALL, WILLIAM J
20731	HILL, KEVIN U
20800	ABRAMSON, WAYNE
20850	BRAY, MICHAEL S
20950	SIMPSON, CHARLES W
	SUMNER, B
21200	FARRAR, WILLIAM
21400	KOEHL, ANDREW F
21751	DUNAWAY, GRANT L
22451	MARSH, LARRY
23997	WELLES, W W
23998	HOWARD, DANIEL
	SPRADLING, ROBERT

Target Street	Cross Street	Source
✓	-	Cole Information Services

CORKSCREW RD 1992

0	CRUZ, DORIS
	HUDDLESTON, BRYAN
	JOHNSON BROTHERS GV
	SBN GROVE MAINT
3991	CLOSE, CATHY
8661	KORESHAN UNITY
	KORESHAN, UNITY
8751	LOCKWOOD, GORDON
8761	PARK, HOLLY
8791	PETERSON, ELLEN W
8801	DOWLATY, ALI
8901	BLAKLEY, PETE
8990	SMITH, STEVEN
9100	DAHL, G
9451	KING, J J
	LINZALONE, JOSEPH SR
9500	HORNE, GEORGE
9550	DAVENPORT, HENRIE
9570	KNUST, MAX R
9600	FISCHER, MARK
	HORNE, CORA L
11950	ELKINS CNSTRCTR INC
17320	STANDERFER, ANNE
17400	KING, CHARLES N
17501	FLINT, HARRY
	RAMIREZ, ZULEMA C
19500	BERRYS GROVES

Target Street	Cross Street	Source
-	✓	Cole Information Services

SIX LS FARM RD 1992

20750	KELLY, DONALD W
21000	MOSS, DANNY W
21150	SHIVER, JOEL
21390	TREVINO, G
21610	BARRY, DAVE
21611	DYKES, TOMMY B
21998	FARM O P
204306	SIMONSEN, VERA L

W H E W-RADIO TOWER (Continued) **S107938472**

Finaincial Responsibility:	NONE
Insurance Company:	Not reported
Effective Date:	Not reported
Expire Date:	Not reported
Owner ID:	26049
Onwer Name:	HECKSHER, ROBERT
Owner Address:	2835 HANSON ST
Owner Address2:	Not reported
Owner City,St,Zip:	FORT MYERS, FL 33901
Contact:	ROBERT HECKSHER
Resp Party Phone:	(813) 332-2102

FL Financial Assurance 3:

Region:	3
Facility ID:	9300950
Facility Phone:	(813) 332-2102
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	P
Finaincial Responsibility:	NONE
Insurance Company:	Not reported
Effective Date:	Not reported
Expire Date:	Not reported
Owner ID:	26049
Onwer Name:	HECKSHER, ROBERT
Owner Address:	2835 HANSON ST
Owner Address2:	Not reported
Owner City,St,Zip:	FORT MYERS, FL 33901
Contact:	ROBERT HECKSHER
Resp Party Phone:	(813) 332-2102

FL Financial Assurance 3:

Region:	3
Facility ID:	9300950
Facility Phone:	(813) 332-2102
Facility Status:	CLOSED
Facility Type:	C
Type Description:	Fuel user/Non-retail
DEP CO:	P
Finaincial Responsibility:	NONE
Insurance Company:	Not reported
Effective Date:	Not reported
Expire Date:	Not reported
Owner ID:	26049
Onwer Name:	HECKSHER, ROBERT
Owner Address:	2835 HANSON ST
Owner Address2:	Not reported
Owner City,St,Zip:	FORT MYERS, FL 33901
Contact:	ROBERT HECKSHER
Resp Party Phone:	(813) 332-2102

4 **FARM-OP #2** **LUST** **U001353068**
SSW **21000 SIX L'S FARM RD** **UST** **N/A**
1/4-1/2 **ESTERO, FL 33928** **AST**
0.372 mi. **Financial Assurance**
1962 ft.

Relative:
Lower

Actual:
22 ft.

LUST:

Region:	STATE
Facility Id:	8627146
Facility Status:	OPEN
Facility Type:	M - Agricultural
Facility Phone:	(239)949-6734
Facility Cleanup Rank:	4215
District:	South District
Lat/Long (dms):	26 26 6.1429 / 81 39 49.3841
Section:	021
Township:	465
Range:	32E
Feature:	Not reported
Method:	AGPS
Datum:	0
Score:	40
Score Effective Date:	09/21/2004
Score When Ranked:	40
Operator:	JASON SHIVELER
Name Update:	08/19/2009
Address Update:	Not reported

Discharge Cleanup Summary:

Discharge Date:	06/10/2003
PCT Discharge Combined:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	03/22/2007
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	LAB RESULTS
Eligibility Indicator:	I - INELIGIBLE
Site Manager:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - SD CLEANUP & COMPLIANCE ASSURANCE PROGRAM

Contaminated Media:

Discharge Date:	06/10/2003
Pct Discharge Combined With:	Not reported
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	03/22/2007
Cleanup Work Status:	COMPLETED
Information Source:	D - DISCHARGE NOTIFICATION
Other Source Description:	LAB RESULTS
Elig Indicator:	I - INELIGIBLE
Site Manager:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - SD CLEANUP & COMPLIANCE
Contaminated Drinking Wells:	0
Contaminated Monitoring Well:	No
Contaminated Soil:	Yes
Contaminated Surface Water:	No
Contaminated Ground Water:	No

FARM-OP #2 (Continued) **U001353068**

Pollutant:	D - Vehicular Diesel
Pollutant Other Description:	UNKNOWN
Gallons Discharged:	26

Task Information:

District:	SD
Facility ID:	8627146
Facility Status:	OPEN
Facility Type:	M - Agricultural -
County:	LEE
County ID:	36
Cleanup Eligibility Status:	I
Source Effective Date:	03-22-2007
Discharge Date:	06-10-2003
Cleanup Required:	R - CLEANUP REQUIRED
Discharge Cleanup Status:	SRCR - SRCR COMPLETE
Disch Cleanup Status Date:	03-22-2007
SRC Action Type:	SRCR - SITE REHABILITATION COMPLETION REPORT
SRC Submit Date:	02-08-2007
SRC Review Date:	03-08-2007
SRC Completion Status:	A - APPROVED
SRC Issue Date:	03-22-2007
SRC Comment:	Not reported
Cleanup Work Status:	COMPLETED
Site Mgr:	MELE_V
Site Mgr End Date:	Not reported
Tank Office:	PCSD - South District
SR Task ID:	Not reported
SR Cleanup Responsible:	-
SR Funding Eligibility Type:	-
SR Actual Cost:	Not reported
SR Completion Date:	Not reported
SR Payment Date:	Not reported
SR Oral Date:	Not reported
SR Written Date:	Not reported
SR Soil Removal:	Not reported
SR Free Product Removal:	Not reported
SR Soil Tonnage Removed:	Not reported
SR Soil Treatment:	Not reported
SR Other Treatment:	Not reported
SR Alternate Proc Received Date:	Not reported
SR Alternate Procedure Status:	Not reported
SR Alternate Procedure Status Date:	Not reported
SR Alternate Procedure Comments:	Not reported
SA Task ID:	71634
SA Cleanup Responsible:	-
SA Funding Eligibility Type:	-
SA Actual Cost:	Not reported
SA Completion Date:	Not reported
SA Payment Date:	Not reported
RAP Task ID:	79465
RAP Cleanup Responsible ID:	RP - RESPONSIBLE PARTY
RAP Funding Eligibility Type:	-
RAP Actual Cost:	Not reported
RAP Completion Date:	07-18-2006
RAP Payment Date:	Not reported
RAP Last Order Approved:	Not reported
RA Task ID:	79246

FARM-OP #2 (Continued) **U001353068**

RA Cleanup Responsible: RP - RESPONSIBLE PARTY
RA Funding Eligibility Type: -
RA Years to Complete: 0
RA Actual Cost: Not reported

Click here for Florida Oculus:

UST:
Facility Id: 8627146
Facility Status: OPEN
Type Description: Agricultural
Facility Phone: (239) 949-6734
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 26 26 1 / 81 39 50

Owner:
Owner Id: 6899
Owner Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Owner Contact: KEVIN YUE
Owner Phone: (239) 657-4421

Tank Info:
Tank Id: 1
Status: Removed
Status Date: 30-JUN-1990
Install Date: 01-JUN-1979
Substance: Unleaded gas
Content Description: Unleaded Gas
Gallons: 3000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: C

Tank Id: 2
Status: Removed
Status Date: 30-JUN-1990
Install Date: 01-JUN-1979
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 4000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: C

Tank Id: 3
Status: Removed
Status Date: 30-JUN-1990
Install Date: 01-JUN-1979
Substance: Leaded gas
Content Description: Leaded Gas
Gallons: 4000
Vessel Indicator: TANK
Tank Location: UNDERGROUND

FARM-OP #2 (Continued) **U001353068**

DEP Contractor: C

Tank Id: 4
Status: Removed
Status Date: 30-JUN-1990
Install Date: 01-JUN-1979
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 4000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: C

Tank Id: 5
Status: Removed
Status Date: 30-JUN-1990
Install Date: 01-JUN-1979
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 4000
Vessel Indicator: TANK
Tank Location: UNDERGROUND
DEP Contractor: C

Click here for Florida Oculus:

AST:
Facility ID: 8627146
Facility Status: OPEN
Type Description: Agricultural
Facility Phone: (239) 949-6734
DEP Contractor Own: C
Region: STATE
Positioning Method: AGPS
Lat/Long (dms): 26 26 1 / 81 39 50

Owner:
Owner Id: 6899
Owner Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address 2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Owner Contact: KEVIN YUE
Owner Phone: (239) 657-4421

Tank Id: 6
Status: In service
Status Date: Not reported
Install Date: 01-JUN-1990
Substance: Unleaded gas
Content Description: Unleaded Gas
Gallons: 4000
Tank Location: ABOVEGROUND

FARM-OP #2 (Continued) **U001353068**

Construction:

Tank Id:	6
Construction Category:	Primary Construction
Construction Description:	Steel
Tank Id:	6
Construction Category:	Secondary Containment
Construction Description:	AST containment
Tank Id:	6
Construction Category:	Overfill/Spill
Construction Description:	Tight fill
Tank Id:	6
Construction Category:	Overfill/Spill
Construction Description:	Level gauges/alarms

Monitoring:

Tank ID:	6
Monitoring Description:	Visual inspection of ASTs
Tank ID:	6
Monitoring Description:	Visual inspect dispenser liners

Piping:

Tank ID:	6
Piping Category:	Miscellaneous Attributes
Piping Description:	Dispenser liners
Tank ID:	6
Piping Category:	Miscellaneous Attributes
Piping Description:	Pressurized piping system
Tank ID:	6
Piping Category:	Miscellaneous Attributes
Piping Description:	Abv, no soil contact
Tank ID:	6
Piping Category:	Primary Construction
Piping Description:	Steel/galvanized metal

Tank Id:	7
Status:	Removed
Status Date:	03-JUN-2002
Install Date:	01-JUN-1990
Substance:	Vehicular diesel
Content Description:	Vehicular Diesel
Gallons:	4000
Tank Location:	ABOVEGROUND
Tank Id:	8
Status:	Removed
Status Date:	03-JUN-2002
Install Date:	01-JUN-1990
Substance:	Vehicular diesel
Content Description:	Vehicular Diesel

FARM-OP #2 (Continued) **U001353068**

Gallons: 4000
Tank Location: ABOVEGROUND

Tank Id: 9
Status: Removed
Status Date: 14-MAY-2003
Install Date: 01-JUN-1990
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 6000
Tank Location: ABOVEGROUND

Tank Id: 10
Status: In service
Status Date: 01-FEB-2002
Install Date: 01-FEB-2002
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 8000
Tank Location: ABOVEGROUND

Construction:
Tank Id: 10
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 10
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 10
Construction Category: Secondary Containment
Construction Description: AST containment

Tank Id: 10
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Monitoring:
Tank ID: 10
Monitoring Description: Visual inspection of ASTs

Tank ID: 10
Monitoring Description: Visual inspect dispenser liners

Piping:
Tank ID: 10
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 10
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank ID: 10
Piping Category: Miscellaneous Attributes

FARM-OP #2 (Continued) **U001353068**

Piping Description: Pressurized piping system

Tank ID: 10
Piping Category: Miscellaneous Attributes
Piping Description: Dispenser liners

Tank Id: 11
Status: In service
Status Date: 01-FEB-2002
Install Date: 01-FEB-2002
Substance: Vehicular diesel
Content Description: Vehicular Diesel
Gallons: 2000
Tank Location: ABOVEGROUND

Construction:
Tank Id: 11
Construction Category: Primary Construction
Construction Description: Steel

Tank Id: 11
Construction Category: Secondary Containment
Construction Description: AST containment

Tank Id: 11
Construction Category: Overfill/Spill
Construction Description: Tight fill

Tank Id: 11
Construction Category: Overfill/Spill
Construction Description: Level gauges/alarms

Monitoring:
Tank ID: 11
Monitoring Description: Visual inspection of ASTs

Tank ID: 11
Monitoring Description: Visual inspect dispenser liners

Piping:
Tank ID: 11
Piping Category: Primary Construction
Piping Description: Steel/galvanized metal

Tank ID: 11
Piping Category: Miscellaneous Attributes
Piping Description: Pressurized piping system

Tank ID: 11
Piping Category: Miscellaneous Attributes
Piping Description: Abv, no soil contact

Tank ID: 11
Piping Category: Miscellaneous Attributes
Piping Description: Dispenser liners

FARM-OP #2 (Continued) **U001353068**

Click here for Florida Oculus:

FL Financial Assurance 3:

Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2011
Expire Date:	15-AUG-2012
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421

Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2010
Expire Date:	15-AUG-2011
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421

Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2014
Expire Date:	15-AUG-2015
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS

FARM-OP #2 (Continued) **U001353068**

Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2008
Expire Date:	15-AUG-2009
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2012
Expire Date:	15-AUG-3013
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2009
Expire Date:	15-AUG-2010
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS

FARM-OP #2 (Continued) **U001353068**

Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

FL Financial Assurance 3:
Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2011
Expire Date: 15-AUG-2012
Owner ID: 6899
Onwer Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2010
Expire Date: 15-AUG-2011
Owner ID: 6899
Onwer Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2014
Expire Date: 15-AUG-2015
Owner ID: 6899
Onwer Name: FARM-OP INC
Owner Address: PO BOX 3088

FARM-OP #2 (Continued) **U001353068**

Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2008
Expire Date:	15-AUG-2009
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2012
Expire Date:	15-AUG-3013
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2009
Expire Date:	15-AUG-2010
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088

FARM-OP #2 (Continued) **U001353068**

Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

FL Financial Assurance 3:
Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2011
Expire Date: 15-AUG-2012
Owner ID: 6899
Onwer Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2010
Expire Date: 15-AUG-2011
Owner ID: 6899
Onwer Name: FARM-OP INC
Owner Address: PO BOX 3088
Owner Address2: ATTN: STORAGE TANK REGIS
Owner City,St,Zip: IMMOKALEE, FL 34143
Contact: KEVIN YUE
Resp Party Phone: (239) 657-4421

Region: 3
Facility ID: 8627146
Facility Phone: (239) 949-6734
Facility Status: OPEN
Facility Type: M
Type Description: Agricultural
DEP CO: C
Finaincial Responsibility: INSURANCE
Insurance Company: COMMERCE & INDUSTRY
Effective Date: 15-AUG-2014
Expire Date: 15-AUG-2015
Owner ID: 6899
Onwer Name: FARM-OP INC

FARM-OP #2 (Continued) **U001353068**

Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2008
Expire Date:	15-AUG-2009
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2012
Expire Date:	15-AUG-3013
Owner ID:	6899
Onwer Name:	FARM-OP INC
Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421
Region:	3
Facility ID:	8627146
Facility Phone:	(239) 949-6734
Facility Status:	OPEN
Facility Type:	M
Type Description:	Agricultural
DEP CO:	C
Finaincial Responsibility:	INSURANCE
Insurance Company:	COMMERCE & INDUSTRY
Effective Date:	15-AUG-2009
Expire Date:	15-AUG-2010
Owner ID:	6899
Onwer Name:	FARM-OP INC

FARM-OP #2 (Continued) **U001353068**

Owner Address:	PO BOX 3088
Owner Address2:	ATTN: STORAGE TANK REGIS
Owner City,St,Zip:	IMMOKALEE, FL 34143
Contact:	KEVIN YUE
Resp Party Phone:	(239) 657-4421

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 135

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/16/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Florida's State-Funded Action Sites
State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 12/30/2015
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 48

Source: Department of Environmental Protection
Telephone: 850-488-0190
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 01/19/2016
Date Data Arrived at EDR: 01/20/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 47

Source: Department of Environmental Protection
Telephone: 850-922-7121
Last EDR Contact: 04/20/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LAST: Leaking Aboveground Storage Tank Listing
The file for Leaking Aboveground Storage Tanks. Please remember STCM does not track the source of the discharge so the agency provides a list of facilities with an aboveground tank and an open discharge split by facilities with aboveground tanks only and facilities with aboveground and underground tanks.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 34

Source: Department of Environmental Protection
Telephone: 850-245-8799
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

LUST: Petroleum Contamination Detail Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015
Date Data Arrived at EDR: 01/08/2015
Date Made Active in Reports: 02/09/2015
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

FF TANKS: Federal Facilities Listing
A listing of federal facilities with storage tanks.

Date of Government Version: 01/12/2016
Date Data Arrived at EDR: 01/14/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 850-245-8250
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

UST: Storage Tank Facility Information
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

AST: Storage Tank Facility Information
Registered Aboveground Storage Tanks.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: 850-245-8839
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

TANKS: Storage Tank Facility List

This listing includes storage tank facilities that do not have tank information. The tanks have either be closed or removed from the site, but the facilities were still registered at some point in history.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 69

Source: Department of Environmental Protection
Telephone: 850-245-8841
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. ECs include fences, signs, guards, landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems.

Date of Government Version: 12/01/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

Inst Control: Institutional Controls Registry

The registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

Date of Government Version: 12/01/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 01/06/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites
Listing of closed and active voluntary cleanup sites.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 48

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS AREAS: Brownfields Areas Database
A "brownfield area" means a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government resolution. Such areas may include all or portions of community redevelopment areas, enterprise zones, empowerment zones, other such designated economically deprived communities and areas, and Environmental Protection Agency (EPA) designated brownfield pilot projects. This layer provides a polygon representation of the boundaries of these designated Brownfield Areas in Florida.

Date of Government Version: 01/03/2016
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

BSRA: Brownfield Site Rehabilitation Agreements Listing
The BSRA provides DEP and the public assurance that site rehabilitation will be conducted in accordance with Florida Statutes and DEP's Contaminated Site Cleanup Criteria rule. In addition, the BSRA provides limited liability protection for the voluntary responsible party. The BSRA contains various commitments by the voluntary responsible party, including milestones for completion of site rehabilitation tasks and submittal of technical reports and plans.
It also contains a commitment by DEP to review technical reports according to an agreed upon schedule. Only those brownfield sites with an executed BSRA are eligible to apply for a voluntary cleanup tax credit incentive pursuant to Section 376.30781, Florida Statutes.

Date of Government Version: 12/18/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 850-245-8934
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

BROWNFIELDS: Brownfields Sites Database
Brownfields are defined by the Florida Department of Environmental Protection (FDEP) as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 01/03/2016
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/22/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Centers

A listing of recycling centers located in the state of Florida.

Date of Government Version: 07/24/2014
Date Data Arrived at EDR: 10/22/2014
Date Made Active in Reports: 01/12/2015
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 850-245-8718
Last EDR Contact: 04/22/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

PRIORITYCLEANERS: Priority Ranking List

The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a drycleaning facility.

Date of Government Version: 12/28/2015
Date Data Arrived at EDR: 02/17/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 55

Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

FL SITES: Sites List

This summary status report was developed from a number of lists including the Eckhardt list, the Moffit list, the EPA Hazardous Waste Sites list, EPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

Date of Government Version: 12/31/1989
Date Data Arrived at EDR: 05/09/1994
Date Made Active in Reports: 08/04/1994
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 850-245-8705
Last EDR Contact: 03/24/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

SPILLS: Oil and Hazardous Materials Incidents
Statewide oil and hazardous materials inland incidents.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 01/12/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 55

Source: Department of Environmental Protection
Telephone: 850-245-2010
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/10/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/04/2013
Number of Days to Update: 60

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch
Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/01/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/26/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/04/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 03/08/2016
Next Scheduled EDR Contact: 06/20/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 03/01/2016
Date Data Arrived at EDR: 03/03/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 33
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67
Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

AIRS: Permitted Facilities Listing
A listing of Air Resources Management permits.

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 32
Source: Department of Environmental Protection
Telephone: 850-921-9558
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

CLEANUP SITES: DEP Cleanup Sites - Contamination Locator Map Listing
This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/01/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 42
Source: Department of Environmental Protection
Telephone: 866-282-0787
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

DEDB: Ethylene Dibromide Database Results
Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells. The amount found exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. It is a potential threat to public health when present in drinking water.

Date of Government Version: 01/06/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 59
Source: Department of Environmental Protection
Telephone: 850-245-8335
Last EDR Contact: 05/02/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Facilities
The Drycleaners database, maintained by the Department of Environmental Protection, provides information about permitted dry cleaner facilities.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 40
Source: Department of Environmental Protection
Telephone: 850-245-8927
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

DWM CONTAM: DWM CONTAMINATED SITES

A listing of active or known sites. The listing includes sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and drycleaning).

Date of Government Version: 09/30/2015
Date Data Arrived at EDR: 10/20/2015
Date Made Active in Reports: 12/01/2015
Number of Days to Update: 42

Source: Department of Environmental Protection
Telephone: 850-245-7503
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A list of hazardous waste facilities required to provide financial assurance under RCRA.

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 32

Source: Department of Environmental Protection
Telephone: 850-245-8793
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities.

Date of Government Version: 01/27/2016
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 34

Source: Department of Environmental Protection
Telephone: 850-245-8743
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for storage tanks sites.

Date of Government Version: 01/08/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: 850-245-8853
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

FL Cattle Dip. Vats: Cattle Dipping Vats

From the 1910's through the 1950's, these vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides, such as DDT, were also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Date of Government Version: 02/04/2005
Date Data Arrived at EDR: 06/29/2007
Date Made Active in Reports: 07/11/2007
Number of Days to Update: 12

Source: Department of Environmental Protection
Telephone: 850-245-4444
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: No Update Planned

RESP PARTY: Responsible Party Sites Listing

Open, inactive and closed responsible party sites

Date of Government Version: 01/03/2016
Date Data Arrived at EDR: 01/07/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 60

Source: Department of Environmental Protection
Telephone: 850-245-8758
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

SITE INV SITES: Site Investigation Section Sites Listing

Statewide coverage of Site Investigation Section (SIS) sites. Site Investigation is a Section within the Bureau of Waste Cleanup, Division of Waste Management. SIS provides technical support to FDEP District Waste Cleanup Programs and conducts contamination assessments throughout the state.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 48

Source: Department of Environmental Protection
Telephone: 850-245-8953
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

TIER 2: Tier 2 Facility Listing
A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/15/2015
Date Made Active in Reports: 11/20/2015
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: 850-413-9970
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

UIC: Underground Injection Wells Database Listing
A listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost USDW.

Date of Government Version: 01/25/2016
Date Data Arrived at EDR: 01/27/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: 850-245-8655
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

WASTEWATER: Wastewater Facility Regulation Database
Domestic and industrial wastewater facilities.

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 850-245-8600
Last EDR Contact: 05/11/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/23/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Floridia.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALACHUA COUNTY:

Facility List
List of all regulated facilities in Alachua County.

Date of Government Version: 04/01/2015
Date Data Arrived at EDR: 04/07/2015
Date Made Active in Reports: 04/10/2015
Number of Days to Update: 3

Source: Alachua County Environmental Protection Department
Telephone: 352-264-6800
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

BROWARD COUNTY:

Aboveground Storage Tanks
Aboveground storage tank locations in Broward County.

Date of Government Version: 12/04/2015
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 34

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

Underground Storage Tanks
All known regulated storage tanks within Broward County, including those tanks that have been closed

Date of Government Version: 12/04/2015
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 03/07/2016
Number of Days to Update: 34

Source: Broward County Environmental Protection Department
Telephone: 954-818-7509
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Annually

HILLSBOROUGH COUNTY:

Hillsborough County LF
Hillsborough county landfill sites.

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 10/13/2015
Date Made Active in Reports: 11/20/2015
Number of Days to Update: 38

Source: Hillsborough County Environmental Protection Commission
Telephone: 813-627-2600
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

MIAMI-DADE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Air Permit Sites

Facilities that release or have a potential to release pollutants.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

Liquid Waste Transporter List

The Liquid Waste Transporter permit regulates the transportation of various types of liquid and solid waste, including hazardous waste, waste oil and oily waste waters, septic and grease trap waste, biomedical waste, spent radiator fluid, photo chemical waste, dry sewage sludge, and other types of non-hazardous industrial waste. The Liquid Waste Transporter permits needed to protect the environment and the public from improperly handled and transported waste.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: DERM
Telephone: 305-372-6755
Last EDR Contact: 12/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Marine Facilities Operating Permit

What is this permit used for? Miami-Dade County Ordinance 89-104 and Section 24-18 of the Code of Miami-Dade County require the following types of marine facilities to obtain annual operating permits from DERM: All recreational boat docking facilities with ten (10) or more boat slips, moorings, davit spaces, and vessel tie-up spaces. All boat storage facilities contiguous to tidal waters in Miami-Dade County with ten (10) or more dry storage spaces including boatyards and boat manufacturing facilities.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Maimi River Enforcement

The Miami River Enforcement database files were created for facilities and in some instances vessels that were inspected by a workgroup within the Department that was identified as the Miami River Enforcement Group. The files do not all necessarily reflect enforcement cases and some were created for locations that were permitted by other Sections within the Department.

Date of Government Version: 06/05/2013
Date Data Arrived at EDR: 06/06/2013
Date Made Active in Reports: 08/06/2013
Number of Days to Update: 61

Source: DERM
Telephone: 305-372-3576
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Quarterly

Hazardous Waste Sites

Sites with the potential to generate waste

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: Dade County Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

Industrial Waste Permit Sites

Facilities that either generate more than 25,000 of wastewater per day to sanitary sewers or are pre-defined by EPA.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: Department of Environmental Resources Management
Telephone: 305-372-6700
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

Enforcement Case Tracking System Sites
Enforcement cases monitored by the Dade County Department of Environmental Resources Management.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

Fuel Spills Cases
DERM documents fuel spills of sites that are not in a state program.

Date of Government Version: 01/08/2009
Date Data Arrived at EDR: 01/13/2009
Date Made Active in Reports: 02/05/2009
Number of Days to Update: 23

Source: Department of Environmental Resources Management
Telephone: 305-372-6755
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

Storage Tanks
A listing of aboveground and underground storage tank site locations.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/12/2016
Number of Days to Update: 41

Source: Department of Environmental Resource Management
Telephone: 305-372-6700
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

PALM BEACH COUNTY:

Palm Beach County LF
Palm Beach County Inventory of Solid Waste Sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/20/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 20

Source: Palm Beach County Solid Waste Authority
Telephone: 561-640-4000
Last EDR Contact: 03/18/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/13/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2016
Date Data Arrived at EDR: 02/03/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 03/21/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/19/2015
Date Made Active in Reports: 04/07/2015
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/14/2016
Next Scheduled EDR Contact: 06/27/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Department of Children & Families
Source: Provider Information
Telephone: 850-488-4900

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PEPPERLAND
18500 CORKSCREW ROAD
ESTERO, FL 33928

TARGET PROPERTY COORDINATES

Latitude (North):	26.44307 - 26° 26' 35.05"
Longitude (West):	81.65155 - 81° 39' 5.58"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	435038.9
UTM Y (Meters):	2924752.2
Elevation:	25 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5653756 CORKSCREW NW, FL
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

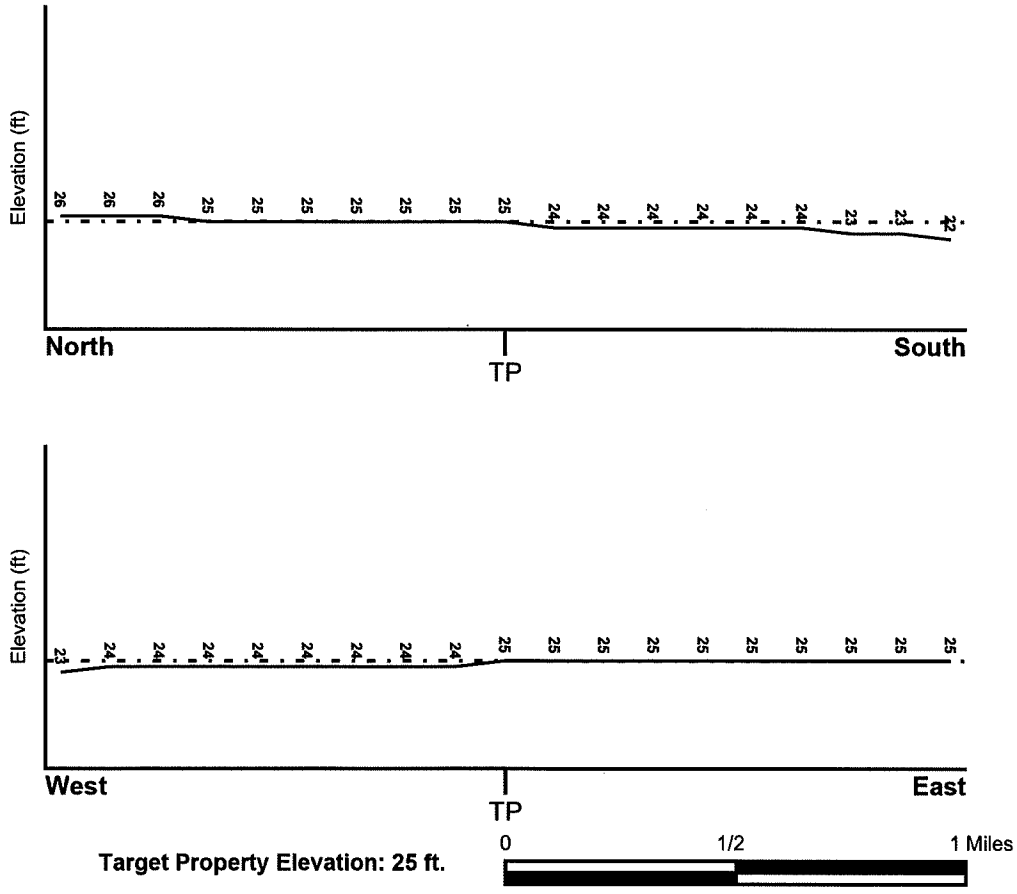
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LEE, FL	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 12071C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CORKSCREW NW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	SMYRNA
Soil Surface Texture:	fine sand
Hydrologic Group:	Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.
Soil Drainage Class:	Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	13 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 7.30 Min: 3.60
2	13 inches	28 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 0.60	Max: 7.30 Min: 3.60
3	28 inches	80 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 20.00 Min: 6.00	Max: 5.50 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: mucky - fine sand

Surficial Soil Types: mucky - fine sand

Shallow Soil Types: sand

Deeper Soil Types: fine sand

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
F27	USGS40000236694	1/2 - 1 Mile NW
49	USGS40000236693	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

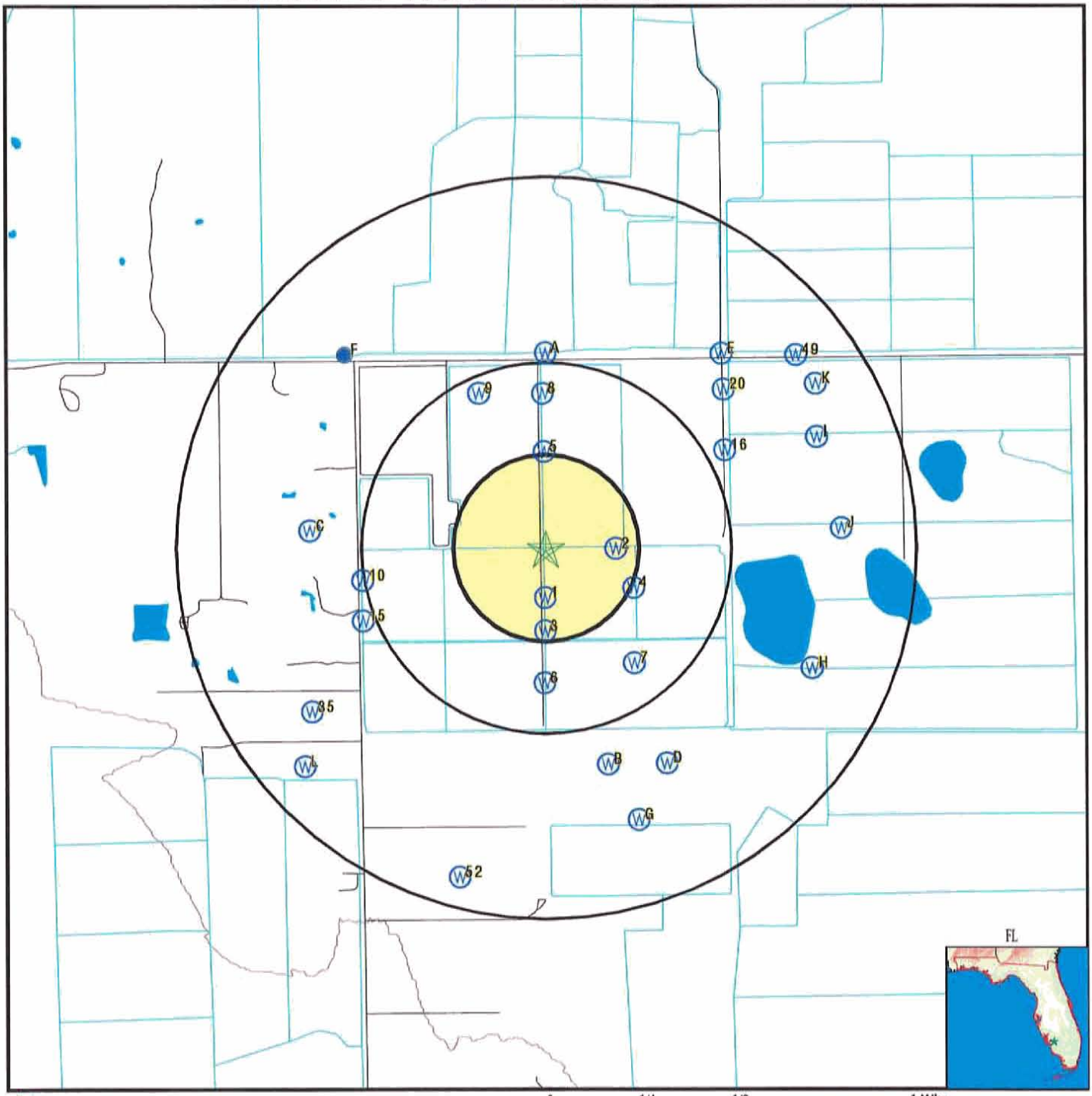
MAP ID	WELL ID	LOCATION FROM TP
1	FLSO80000033635	1/8 - 1/4 Mile South
2	FLSO80000033641	1/8 - 1/4 Mile East
3	FLSO80000033632	1/8 - 1/4 Mile South
4	FLSO80000033629	1/4 - 1/2 Mile ESE
5	FLSO80000033634	1/4 - 1/2 Mile North
6	FLSO80000033631	1/4 - 1/2 Mile South
7	FLSO80000033630	1/4 - 1/2 Mile SE
8	FLSO80000033633	1/4 - 1/2 Mile North
9	FLSO80000033636	1/4 - 1/2 Mile NNW
10	FLSO80000033639	1/2 - 1 Mile West
A11	FLSA80000097461	1/2 - 1 Mile North
A12	FLSA80000097460	1/2 - 1 Mile North
A13	FLSO80000027020	1/2 - 1 Mile North
A14	FLSO80000027026	1/2 - 1 Mile North
15	FLSO80000033640	1/2 - 1 Mile WSW
16	FLSO80000033638	1/2 - 1 Mile ENE
B17	FLSO80000000150	1/2 - 1 Mile SSE
B18	FLSO80000000151	1/2 - 1 Mile SSE
C19	FLSO80000056138	1/2 - 1 Mile West
20	FLSO80000033637	1/2 - 1 Mile NE
D21	FLSO80000000332	1/2 - 1 Mile SSE
D22	FLSO80000000333	1/2 - 1 Mile SSE
C23	FLSO80000056137	1/2 - 1 Mile West
E24	FLSO80000027021	1/2 - 1 Mile NE
E25	FLSA80000097462	1/2 - 1 Mile NE
E26	FLSA80000097463	1/2 - 1 Mile NE
E28	FLSO80000027027	1/2 - 1 Mile NE
E29	FLSO80000027266	1/2 - 1 Mile NE
E30	FLSO80000027267	1/2 - 1 Mile NE
F31	FLSA80000097459	1/2 - 1 Mile NW
F32	FLSO80000027019	1/2 - 1 Mile NW
F33	FLSA80000097458	1/2 - 1 Mile NW
F34	FLSO80000027025	1/2 - 1 Mile NW
35	FLSA80000001415	1/2 - 1 Mile SW
G36	FLSO80000000158	1/2 - 1 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G37	FLSO80000000159	1/2 - 1 Mile SSE
F38	FLSO80000027262	1/2 - 1 Mile NW
F39	FLSO80000027270	1/2 - 1 Mile NW
F40	FLSO80000052864	1/2 - 1 Mile NW
H41	FLSO80000000164	1/2 - 1 Mile ESE
H42	FLSO80000000331	1/2 - 1 Mile ESE
I43	FLSO80000000154	1/2 - 1 Mile ENE
I44	FLSO80000000155	1/2 - 1 Mile ENE
J45	FLSO80000000163	1/2 - 1 Mile East
J46	FLSO80000000162	1/2 - 1 Mile East
K47	FLSO80000000144	1/2 - 1 Mile ENE
K48	FLSO80000000145	1/2 - 1 Mile ENE
L50	FLSO80000001210	1/2 - 1 Mile SW
L51	FLSA80000001414	1/2 - 1 Mile SW
52	FLSO80000041518	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 4626937.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME: Pepperland	CLIENT: TDC Consulting Group
ADDRESS: 18500 Corkscrew Road Estero FL 33928	CONTACT: John Driscoll
LAT/LONG: 26.44307 / 81.65155	INQUIRY #: 4626937.2s DATE: May 23, 2016 4:26 pm

Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **South** **1/8 - 1/4 Mile** **Higher**			**FL WELLS**	**FLSO80000033635**
Permit no:	36-00883-W	App no:	140108-11	
Actual per:	IND	Project na:	PEPPERLAND	
Lu code:	AGR			
Acres serv:	482			
Id:	45649			
Facinv typ:	WELL			
Fac name:	30-5			
Pumptype c:	CEN			
Pump diame:	0			
Cul diamet:	0			
Well diame:	8			
Pump capac:	1182			
Pump intak:	-3			
Pump int 1:	0			
Invert ele:	0			
Pump coord:	442961			
Pump coo 1:	766570			
Well depth:	60			
Cased dept:	25			
Usests cod:	PRM	Facwlsts c:	E	
Factypwu c:	IRR			
Source nam:	Surficial Aquifer System			
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND	
Site id:	FLSO80000033635			

2 **East** **1/8 - 1/4 Mile** **Higher**			**FL WELLS**	**FLSO80000033641**
Permit no:	36-00883-W	App no:	140108-11	
Actual per:	IND	Project na:	PEPPERLAND	
Lu code:	AGR			
Acres serv:	482			
Id:	266384			
Facinv typ:	WELL			
Fac name:	30-13 (PS 6E & 6W)			
Pumptype c:	CEN			
Pump diame:	0			
Cul diamet:	0			
Well diame:	12			
Pump capac:	1491			
Pump intak:	0			
Pump int 1:	0			
Invert ele:	0			
Pump coord:	443968			
Pump coo 1:	767266			
Well depth:	98			
Cased dept:	52			
Usests cod:	PRM	Facwlsts c:	E	

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033641		

3
South
1/8 - 1/4 Mile
Higher

FL WELLS **FLSO80000033632**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45646		
Facinv typ:	WELL		
Fac name:	30-4		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	757		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442958		
Pump coo 1:	766097		
Well depth:	40		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033632		

4
ESE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033629**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45642		
Facinv typ:	WELL		
Fac name:	30-1		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1222		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444219		
Pump coo 1:	766708		
Well depth:	32		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033629		

5
North
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033634**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45648		
Facinv typ:	WELL		
Fac name:	30-12		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	2045		
Pump intak:	-40		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442961		
Pump coo 1:	768648		
Well depth:	100		
Cased dept:	54		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033634		

6
South
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033631**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45644		
Facinv typ:	WELL		
Fac name:	30-3		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	311		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442945		
Pump coo 1:	765356		
Well depth:	42		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033631		

7
SE
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033630**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45643		
Facinv typ:	WELL		
Fac name:	30-2		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1182		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444219		
Pump coo 1:	765637		
Well depth:	30		
Cased dept:	20		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033630		

8
North
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033633**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45647		
Facinv typ:	WELL		
Fac name:	30-6		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1012		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442943		
Pump coo 1:	769474		
Well depth:	60		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033633		

9
NNW
1/4 - 1/2 Mile
Higher

FL WELLS **FLSO80000033636**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45650		
Facinv typ:	WELL		
Fac name:	30-7		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1399		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442024		
Pump coo 1:	769482		
Well depth:	50		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033636		

10
West
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000033639**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45653		
Facinv typ:	WELL		
Fac name:	30-10		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1255		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	440350		
Pump coo 1:	766827		
Well depth:	40		
Cased dept:	25		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033639		

A11
North
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097461**

Fluwid:	AAN2631	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.65148		
Latitude:	26.4507		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 38 S		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported
Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	9.44		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported
Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007776		
Gps id:	1007776		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	239-267-8228		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097461		

A12
North
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097460**

Fluwid:	AAN2632	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.65161		
Latitude:	26.45072		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 38 D		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported

Phone:	239-267-8228	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	10.17		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported
Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007774		
Gps id:	1007774		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097460		

A13
North
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027020**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129346		
Facinv typ:	WELL		
Fac name:	38D Corkscrew (ssa)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	500		
Pump intak:	155		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	442969		
Pump coo 1:	770054		
Well depth:	238		
Cased dept:	166		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Sandstone Aquifer		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027020		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A14 **North** **1/2 - 1 Mile** **Higher**		**FL WELLS**	**FLSO80000027026**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129352		
Facinv typ:	WELL		
Fac name:	38S Corkscrew (sas)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	400		
Pump intak:	35		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	443019		
Pump coo 1:	770054		
Well depth:	116		
Cased dept:	43		
Usests cod:	SEC	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Surficial Aquifer System		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027026		

---

15 **WSW** **1/2 - 1 Mile** **Higher**		**FL WELLS**	**FLSO80000033640**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45654		
Facinv typ:	WELL		
Fac name:	30-11		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1430		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	440352		
Pump coo 1:	766252		
Well depth:	50		
Cased dept:	30		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033640		

16
ENE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000033638**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45652		
Facinv typ:	WELL		
Fac name:	30-9		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1255		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445531		
Pump coo 1:	768657		
Well depth:	60		
Cased dept:	30		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033638		

B17
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000150**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45594		
Facinv typ:	WELL		
Fac name:	31-2		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	700		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	443837		
Pump coo 1:	764196		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000150		

B18
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000151**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCH
Lu code:	AGR		
Acres serv:	730		
Id:	45594		
Facinv typ:	WELL		
Fac name:	31-2		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	700		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	443837		
Pump coo 1:	764196		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000151		

C19
West
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000056138**

Permit no:	36-07862-W	App no:	120824-16
Actual per:	GP	Project na:	IRRIGATION WELLS
Lu code:	NUR		
Acres serv:	5		
Id:	263404		
Facinv typ:	WELL		
Fac name:	W-2		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	50		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	439737		
Pump coo 1:	767536		
Well depth:	200		
Cased dept:	90		
Usests cod:	PRM	Facwlsts c:	P

Factypwu c:	IRR		
Source nam:	Sandstone Aquifer		
Display na:	Nexhip Maska, P.G.	Fee catego:	GP MIN
Site id:	FLSO80000056138		

20
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000033637**

Permit no:	36-00883-W	App no:	140108-11
Actual per:	IND	Project na:	PEPPERLAND
Lu code:	AGR		
Acres serv:	482		
Id:	45651		
Facinv typ:	WELL		
Fac name:	30-8		
Pumptype c:	CEN		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1182		
Pump intak:	-3		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445518		
Pump coo 1:	769520		
Well depth:	55		
Cased dept:	30		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000033637		

D21
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000332**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	118004		
Facinv typ:	WELL		
Fac name:	31-1		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444674		
Pump coo 1:	764209		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E

Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000332		

D22
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000333**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCH
Lu code:	AGR		
Acres serv:	730		
Id:	118004		
Facinv typ:	WELL		
Fac name:	31-1		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444674		
Pump coo 1:	764209		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000333		

C23
West
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000056137**

Permit no:	36-07862-W	App no:	120824-16
Actual per:	GP	Project na:	IRRIGATION WELLS
Lu code:	NUR		
Acres serv:	5		
Id:	263403		
Facinv typ:	WELL		
Fac name:	W-1		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	50		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	439450		
Pump coo 1:	767545		
Well depth:	200		
Cased dept:	90		
Usests cod:	PRM	Facwlsts c:	P

Factypwu c:	IRR		
Source nam:	Sandstone Aquifer		
Display na:	Nexhip Maska, P.G.	Fee catego:	GP MIN
Site id:	FLSO80000056137		

E24
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027021**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129347		
Facinv typ:	WELL		
Fac name:	39D Corkscrew (ssa)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	500		
Pump intak:	125		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445390		
Pump coo 1:	770048		
Well depth:	200		
Cased dept:	146		
Usests cod:	SEC	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Sandstone Aquifer		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027021		

E25
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097462**

Fluwid:	AAN2633	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.6442		
Latitude:	26.45074		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 39 D		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported
Phone:	239-267-8228	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	9.19		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported

Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007778		
Gps id:	1007778		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097462		

E26
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097463**

Fluwid:	AAN2634	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.64407		
Latitude:	26.45072		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 39 S		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported
Phone:	239-267-8228	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	10.44		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported
Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007780		
Gps id:	1007780		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097463		

F27
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000236694**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-262659081393601		
Monloc name:	L - 617		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	03090204	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	26.4500792
Longitude:	-81.6598043	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	26.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Intermediate aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19670101	Welldepth:	340
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E28
NE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027027**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129353		
Facinv typ:	WELL		
Fac name:	39S Corkscrew (sas)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	300		
Pump intak:	40		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445440		
Pump coo 1:	770048		
Well depth:	120		
Cased dept:	40		
Usests cod:	SEC	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Surficial Aquifer System		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027027		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
E29 **NE** **1/2 - 1 Mile** **Higher**	**FL WELLS**	**FLSO80000027266**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	258273		
Facinv typ:	WELL		
Fac name:	MW-OI CORKSCREW (sas)		
Pumptype c:	N/A		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	0		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445650		
Pump coo 1:	770000		
Well depth:	120		
Cased dept:	40		
Usests cod:	MON	Facwlsts c:	E
Factypwu c:	MON		
Source nam:	Surficial Aquifer System		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027266		

	Database	EDR ID Number
E30 **NE** **1/2 - 1 Mile** **Higher**	**FL WELLS**	**FLSO80000027267**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	258274		
Facinv typ:	WELL		
Fac name:	MW-OII CORKSCREW (ssa)		
Pumptype c:	N/A		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	0		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	445650		
Pump coo 1:	770000		
Well depth:	200		
Cased dept:	146		
Usests cod:	MON	Facwlsts c:	E

Factypwu c:	MON		
Source nam:	Sandstone Aquifer		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027267		

F31
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097459**

Fluwid:	AAN2630	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.66002		
Latitude:	26.45067		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 37 D		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported
Phone:	239-267-8228	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	6.48		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported
Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007772		
Gps id:	1007772		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097459		

F32
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027019**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129345		
Facinv typ:	WELL		
Fac name:	37D Corkscrew (ssa)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	500		
Pump intak:	104		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	440210		
Pump coo 1:	770052		
Well depth:	200		
Cased dept:	146		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Sandstone Aquifer		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027019		

F33
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000097458**

Fluwid:	AAN2629	Well type:	40
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.66009		
Latitude:	26.45076		
Well depth:	0		
Length:	0		
Diameter:	16	Permit num:	Not Reported
Comment :	Well 37 S		
Sanit seal:	Yes	Name:	CORKSCREW WTP
First name:	Not Reported	Last name:	Not Reported
Phone:	239-267-8228	Phone ext:	Not Reported
Lg pws:	0		
Datum:	Not Reported		
Hae:	9.47		
Gps date:	30-NOV-10	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Pete
Insp lname:	Haenggi	Insp chd:	LEE
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	16101 ALICO RD
Number :	16101	Predir:	Not Reported
Prefix:	Not Reported	Street:	ALICO
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33967	City:	FT MYERS
Loc id:	1007770		
Gps id:	1007770		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	OWNER
Other id:	Not Reported	Software:	Well_Solo_v2
Streetside:	No	Agency:	DOH
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000097458		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
F34		
NW	**FL WELLS**	**FLSO80000027025**
1/2 - 1 Mile		
Higher		

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	129351		
Facinv typ:	WELL		
Fac name:	37S Corkscrew (sas)		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	400		
Pump intak:	40		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	440192		
Pump coo 1:	770085		
Well depth:	110		
Cased dept:	45		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	PWS		
Source nam:	Surficial Aquifer System		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027025		

35		
SW	**FL WELLS**	**FLSA80000001415**
1/2 - 1 Mile		
Higher		

Fluwid:	AAG3782	Well type:	42
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.66179		
Latitude:	26.43668		
Well depth:	140		
Length:	0		
Diameter:	4	Permit num:	Not Reported
Comment :	Not Reported		
Sanit seal:	Yes	Name:	DRAGONFLY NURSERY
First name:	Not Reported	Last name:	Not Reported
Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	WS1984		
Hae:	14.26		
Gps date:	08-JUL-04	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Not Reported
Insp lname:	Not Reported	Insp chd:	Not Reported
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	20940 SIX L'S FARM RD
Number :	20940	Predir:	Not Reported

Prefix:	Not Reported	Street:	SIX L'S FARM
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33928	City:	ESTERO
Loc id:	143146		
Gps id:	143146		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	Not Reported
Other id:	Not Reported	Software:	Not Reported
Streetside:	Not Reported	Agency:	Not Reported
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000001415		

G36
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000158**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCH\
Lu code:	AGR		
Acres serv:	730		
Id:	45604		
Facinv typ:	WELL		
Fac name:	31-3		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	650		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444267		
Pump coo 1:	763405		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000158		

G37
SSE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000159**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCH\
Lu code:	AGR		
Acres serv:	730		
Id:	45604		
Facinv typ:	WELL		
Fac name:	31-3		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	650		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	444267		
Pump coo 1:	763405		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000159		

F38
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027262**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	254352		
Facinv typ:	WELL		
Fac name:	JE-467 CORKSCREW (ssa)		
Pumptype c:	N/A		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	0		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	439914		
Pump coo 1:	770013		
Well depth:	214		
Cased dept:	182		
Usests cod:	MON	Facwlsts c:	E
Factypwu c:	MON		
Source nam:	Sandstone Aquifer		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027262		

F39
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000027270**

Permit no:	36-00003-W	App no:	130429-15
Actual per:	IND	Project na:	LEE COUNTY UTILITIES
Lu code:	PWS		
Acres serv:	1		
Id:	258283		
Facinv typ:	WELL		
Fac name:	JE-467 WT CORKSCREW (sas)		
Pumptype c:	N/A		
Pump diame:	0		
Cul diamet:	0		

Well diame:	4		
Pump capac:	0		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	439900		
Pump coo 1:	770013		
Well depth:	120		
Cased dept:	40		
Usests cod:	MON	Facwlsts c:	E
Factypwu c:	MON		
Source nam:	Surficial Aquifer System		
Display na:	John Randall	Fee catego:	IND
Site id:	FLSO80000027270		

F40
NW
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000052864**

Permit no:	36-06874-W	App no:	080530-10
Actual per:	IND	Project na:	CORKSCREW EXCAVATION
Lu code:	IND		
Acres serv:	1387		
Id:	225246		
Facinv typ:	WELL		
Fac name:	MW-2		
Pumptype c:	N/A		
Pump diame:	0		
Cul diamet:	0		
Well diame:	2		
Pump capac:	0		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	440018		
Pump coo 1:	770167		
Well depth:	45		
Cased dept:	40		
Usests cod:	MON	Facwlsts c:	P
Factypwu c:	MON		
Source nam:	Water Table Aquifer		
Display na:	Nexhip Maska, P.G.	Fee catego:	IND
Site id:	FLSO80000052864		

H41
ESE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000164**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45615		
Facinv typ:	WELL		
Fac name:	29-9		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	700		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446753		
Pump coo 1:	765552		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000164		

H42
ESE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000331**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45615		
Facinv typ:	WELL		
Fac name:	29-9		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	700		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446753		
Pump coo 1:	765552		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000331		

I43
ENE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000154**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/S
Lu code:	AGR		
Acres serv:	730		
Id:	45598		
Facinv typ:	WELL		
Fac name:	29-4		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446843		
Pump coo 1:	768839		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000154		

I44
ENE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000155**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45598		
Facinv typ:	WELL		
Fac name:	29-4		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446843		
Pump coo 1:	768839		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000155		

J45
East
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000163**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45610		
Facinv typ:	WELL		
Fac name:	29-6		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	650		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	447182		
Pump coo 1:	767540		
Well depth:	110		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000163		

J46
East
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000162**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCH\
Lu code:	AGR		
Acres serv:	730		
Id:	45610		
Facinv typ:	WELL		
Fac name:	29-6		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	650		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	447182		
Pump coo 1:	767540		
Well depth:	110		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000162		

K47
ENE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000144**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/S
Lu code:	AGR		
Acres serv:	730		
Id:	45589		
Facinv typ:	WELL		
Fac name:	29-3		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		

Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446832		
Pump coo 1:	769596		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	FRZ		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000144		

K48
ENE
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000000145**

Permit no:	36-00327-W	App no:	051031-48
Actual per:	IND	Project na:	RLF CORKSCREW OLD M&W (FKA SCHOENBRUN/SCHV
Lu code:	AGR		
Acres serv:	730		
Id:	45589		
Facinv typ:	WELL		
Fac name:	29-3		
Pumptype c:	DIT		
Pump diame:	0		
Cul diamet:	0		
Well diame:	12		
Pump capac:	600		
Pump intak:	0		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	446832		
Pump coo 1:	769596		
Well depth:	140		
Cased dept:	60		
Usests cod:	PRM	Facwlsts c:	E
Factypwu c:	IRR		
Source nam:	Surficial Aquifer System		
Display na:	Nancy Demonstranti, P.G.	Fee catego:	IND
Site id:	FLSO80000000145		

49
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000236693**

Org. Identifier:	USGS-FL		
Formal name:	USGS Florida Water Science Center		
Monloc Identifier:	USGS-262659081382501		
Monloc name:	L -2192		
Monloc type:	Well		
Monloc desc:	Reported Depth: 184ft, Measured Depth: 180.2ft		
Huc code:	03090204	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	26.4506345
Longitude:	-81.6406373	Sourcemap scale:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	27.3
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Intermediate aquifer system		
Formation type:	Sandstone Aquifer		
Aquifer type:	Not Reported		
Construction date:	19750723	Welldepth:	184
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 323

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-07-27		14.25	2004-06-10		12.09
2004-05-20		12.14	2004-04-19		12.09
2004-03-24		11.66	2004-02-19		16.90
2004-01-27		17.22	2003-12-17		18.01
2003-11-18		18.72	2003-10-16		18.87
2003-09-16		20.26	2003-08-21		17.69
2003-07-22		16.95	2003-06-26		16.33
2003-05-22		16.45	2003-04-16		17.62
2003-04-02		18.27	2003-02-26		20.24
2002-12-20		24.82	2002-05-20		5.91
2002-03-20		8.72	2002-02-20		9.54
2002-01-23		12.05	2001-12-17		11.72
2001-11-20		13.10	2001-10-24		17.62
2001-10-01		20.09	2001-08-24		18.94
2001-07-26		17.82	2001-06-26		13.82
2001-05-23		8.20	2001-04-24		7.43
2001-03-22		5.03	2001-02-23		5.41
2001-01-29		6.66	2000-12-19		9.63
2000-11-27		11.96	2000-10-25		17.21
2000-10-03		27.41	2000-08-22		17.26
2000-07-13		18.03	2000-06-19		12.29
2000-05-23		11.24	2000-04-18		6.42
2000-03-27		-5.32	2000-02-28		13.52
2000-01-24		15.61	1999-12-14		18.50
1999-11-19		21.02	1999-11-01		23.29
1999-10-05		26.87	1999-08-24		17.33
1999-07-27		17.08	1999-06-24		17.29
1999-05-25		13.78	1999-04-26		13.70
1999-03-26		14.97	1999-02-22		17.70
1999-01-27		17.79	1998-12-22		19.19
1998-10-30		11.35	1998-08-25		18.38
1998-07-31		17.46	1998-06-25		16.12
1998-06-02		16.74	1998-04-29		18.91
1998-03-25		20.50	1998-02-26		19.89
1998-01-28		18.91	1997-12-31		17.63
1997-11-26		15.66	1997-10-28		16.46
1997-10-01		19.74	1997-08-27		20.35
1997-08-01		19.87	1997-06-27		17.08
1997-05-29		15.39	1997-04-22		12.43
1997-03-26		11.04	1997-02-25		11.53
1997-01-28		12.69	1996-12-31		14.41

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1996-11-25		17.00
1996-07-30		19.26
1996-02-02		17.86
1995-07-25		19.55
1995-01-24		19.29
1994-10-03		20.51
1994-07-25		18.04
1994-05-25		15.46
1994-03-29		15.44
1994-01-24		15.13
1993-11-22		18.71
1993-10-07		18.69
1993-07-20		15.68
1993-05-19		10.28
1993-03-25		18.55
1993-01-20		11.34
1992-11-20		12.81
1992-10-05		19.83
1992-07-22		17.81
1992-05-18		9.25
1992-03-25		10.36
1992-01-23		9.48
1991-11-20		12.64
1991-09-25		16.71
1991-07-24		17.28
1991-05-21		11.86
1991-03-20		10.54
1991-01-29		12.08
1990-11-28		9.17
1990-10-05		14.40
1990-07-31		14.07
1990-04-24		7.92
1990-02-26		10.54
1989-12-27		10.61
1989-10-26		14.07
1989-08-30		16.23
1989-06-30		11.81
1989-04-28		10.10
1989-02-24		8.86
1988-12-29		10.27
1988-10-26		12.27
1988-08-29		17.10
1988-06-29		12.04
1988-04-28		10.74
1988-02-25		13.25
1988-01-04		14.36
1987-11-03		16.63
1987-08-27		16.67
1987-07-01		15.85
1987-04-27		13.49
1987-02-25		14.02
1986-12-31		12.29
1986-10-28		14.56
1986-08-29		18.50
1986-06-26		14.99
1996-10-31		19.50
1996-04-26		12.04
1995-10-25		22.84
1995-04-27		16.92
1994-10-28		20.00
1994-08-23		19.39
1994-06-21		16.44
1994-04-28		15.01
1994-02-23		16.14
1993-12-21		15.49
1993-10-26		19.03
1993-08-25		15.07
1993-06-24		13.27
1993-04-24		15.33
1993-02-18		18.21
1992-12-16		11.66
1992-10-20		19.25
1992-08-17		19.39
1992-06-23		14.23
1992-04-23		12.51
1992-02-21		8.90
1991-12-20		10.26
1991-10-24		15.98
1991-08-21		17.36
1991-06-20		15.16
1991-04-30		11.10
1991-02-21		9.36
1990-12-28		5.74
1990-10-24		13.80
1990-08-28		14.88
1990-06-26		10.29
1990-03-26		8.16
1990-01-30		11.06
1989-11-29		11.35
1989-10-04		15.64
1989-07-27		15.41
1989-06-01		10.09
1989-03-31		9.92
1989-01-26		10.28
1988-11-28		11.39
1988-10-03		16.51
1988-07-27		13.91
1988-05-26		10.48
1988-03-28		13.48
1988-01-26		13.80
1987-11-24		16.77
1987-09-30		16.54
1987-07-31		15.98
1987-05-28		15.03
1987-03-27		14.68
1987-01-29		13.77
1986-11-26		13.24
1986-09-25		17.70
1986-07-29		16.58
1986-06-03		11.34

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1986-04-29		10.60
1986-02-27		12.32
1985-12-26		12.71
1985-11-07		15.66
1985-09-03		17.68
1985-06-28		12.73
1985-04-29		10.17
1985-02-28		10.68
1984-12-28		11.40
1984-10-31		15.33
1984-08-30		17.33
1984-06-29		15.06
1984-04-30		12.89
1984-03-30		15.32
1984-01-31		14.69
1983-11-30		16.48
1983-10-31		17.73
1983-08-31		18.54
1983-06-30		16.97
1983-04-28		16.51
1983-04-01		16.72
1983-01-31		14.58
1982-11-30		15.21
1982-09-30		18.39
1982-07-30		17.95
1982-05-28		12.71
1982-03-31		11.04
1982-01-29		11.06
1981-11-30		11.21
1981-09-30		17.17
1981-07-30		17.21
1981-05-27		11.03
1981-03-31		11.43
1981-01-29		12.45
1980-11-26		15.06
1980-09-30		16.96
1980-07-31		17.56
1980-05-30		15.56
1980-03-31		15.09
1980-01-30		16.37
1979-11-29		16.05
1979-09-27		18.56
1979-07-31		16.33
1979-05-31		15.80
1979-03-28		14.73
1979-01-30		15.35
1978-11-30		14.04
1978-09-27		17.28
1978-07-27		17.82
1978-05-30		15.25
1978-03-30		15.83
1978-01-30		16.26
1977-11-29		14.53
1977-10-03		18.81
1977-07-28		18.08
1986-03-28		12.38
1986-01-31		12.18
1985-12-02		14.73
1985-09-27		17.96
1985-07-31		16.39
1985-05-30		11.71
1985-03-29		10.41
1985-01-31		10.66
1984-11-30		13.00
1984-09-28		17.47
1984-07-31		17.80
1984-05-31		14.54
1984-04-16		14.30
1984-02-29		14.74
1983-12-30		14.99
1983-11-01		17.68
1983-09-28		18.50
1983-07-28		12.79
1983-05-31		12.93
1983-04-20		17.11
1983-03-01		17.06
1982-12-30		13.43
1982-10-28		17.35
1982-08-31		18.08
1982-06-30		17.21
1982-04-30		11.61
1982-02-26		11.45
1981-12-30		10.99
1981-10-29		13.41
1981-08-31		17.56
1981-06-30		14.54
1981-04-30		9.81
1981-02-26		12.91
1980-12-31		15.96
1980-10-30		15.39
1980-08-28		17.45
1980-06-30		14.74
1980-04-30		14.84
1980-02-28		16.61
1979-12-31		16.79
1979-10-31		17.32
1979-08-30		17.42
1979-06-28		15.61
1979-04-30		13.69
1979-02-27		15.56
1978-12-29		14.10
1978-10-30		15.84
1978-08-30		18.84
1978-06-28		16.42
1978-04-26		13.98
1978-02-27		15.73
1977-12-27		16.16
1977-10-27		16.08
1977-08-30		18.76
1977-06-29		15.94

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1977-04-28		12.72	1977-03-29		14.09
1977-02-25		16.43	1977-01-27		16.54
1976-12-29		15.86	1976-11-29		16.57
1976-10-28		17.46	1976-09-29		19.09
1976-08-30		18.58	1976-07-29		17.36
1976-06-29		17.71	1976-05-24		15.60
1976-04-29		14.64	1976-03-29		14.90
1976-02-26		15.11	1976-01-28		15.98
1975-12-30		16.58	1975-11-26		17.75
1975-10-29		19.41	1975-09-26		19.79
1975-08-27		19.30			

L50
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSO80000001210**

Permit no:	36-05361-W	App no:	050502-19
Actual per:	GP	Project na:	FARM OP #2 / GREENHOUSE / NURSERY
Lu code:	AGR		
Acres serv:	1		
Id:	179344		
Facinv typ:	WELL		
Fac name:	Well - 1		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	8		
Pump capac:	1000		
Pump intak:	125		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	439567		
Pump coo 1:	764161		
Well depth:	300		
Cased dept:	240		
Usests cod:	PRM	Facwlsts c:	P
Factypwu c:	IRR		
Source nam:	Mid-Hawthorn Aquifer		
Display na:	Saurabh Srivastava	Fee catego:	GP MIN
Site id:	FLSO80000001210		

L51
SW
1/2 - 1 Mile
Higher

FL WELLS **FLSA80000001414**

Fluwid:	AAG3781	Well type:	43
Status:	ACTIVE	Casing mat:	PVC
Longitude:	-81.66231		
Latitude:	26.43461		
Well depth:	150		
Length:	0		
Diameter:	4	Permit num:	Not Reported
Comment :	Not Reported		
Sanit seal:	Yes	Name:	FL FARM DEV CO
First name:	Not Reported	Last name:	Not Reported

Phone:	Not Reported	Phone ext:	Not Reported
Lg pws:	0		
Datum:	WS1984		
Hae:	10.27		
Gps date:	08-JUL-04	Loc method:	DGPS
Project id:	SUPER	Insp fname:	Not Reported
Insp lname:	Not Reported	Insp chd:	Not Reported
Req numb:	Not Reported	Property i:	Not Reported
County:	LEE	Address:	21010 SIX L'S FARM RD
Number :	21010	Predir:	Not Reported
Prefix:	Not Reported	Street:	SIX L'S FARM
Suffix:	RD	Postdir:	Not Reported
Zipcode:	33928	City:	ESTERO
Loc id:	143144		
Gps id:	143144		
Wsrp id:	Not Reported	Action:	Not Reported
Port stat:	POTABLE	Res type:	Not Reported
Other id:	Not Reported	Software:	Not Reported
Streetside:	Not Reported	Agency:	Not Reported
Parcel id:	Not Reported		
Pws design:	0		
Pws verify:	0		
Site id:	FLSA80000001414		

52
SSW
1/2 - 1 Mile
Lower

FL WELLS **FLSO80000041518**

Permit no:	36-03428-W	App no:	980610-5
Actual per:	GP	Project na:	LEIGH PROPERTY
Lu code:	LIV		
Acres serv:	20		
Id:	27431		
Facinv typ:	WELL		
Fac name:	1		
Pumptype c:	SUB		
Pump diame:	0		
Cul diamet:	0		
Well diame:	4		
Pump capac:	25		
Pump intak:	100		
Pump int 1:	0		
Invert ele:	0		
Pump coord:	441700		
Pump coo 1:	762600		
Well depth:	180		
Cased dept:	160		
Usests cod:	PRM	Facwlsts c:	P
Factypwu c:	LIV		
Source nam:	Mid-Hawthorn Aquifer		
Display na:	Lee Werst	Fee catego:	GP
Site id:	FLSO80000041518		

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: FL Radon

Radon Test Results

Zip	Total Buildings	% of sites>4pCi/L	Data Source
33928	20	0.0	Certified Residential Database
33928	1	0.0	Mandatory Non-Residential Database

Federal EPA Radon Zone for LEE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LEE COUNTY, FL

Number of sites tested: 94

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	1.100 pCi/L	94%	6%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Department of Environmental Protection
Telephone: 850-245-8238

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

DEP GWIS - Generalized Water Information System Well Data
Source: Department of Environmental Protection
Telephone: 850-245-8507
Data collected for the Watershed Monitoring Section of the Department of Environmental Protection.

DOH and DEP Historic Study of Private Wells
Source: Department of Environmental Protection
Telephone: 850-559-0901
Historic database for private supply wells.

Well Construction Permitting Database
Source: Northwest Florida Water Management District
Telephone: 850-539-5999

Consumptive Use Permit Well Database
Source: St. Johns River Water Management District
Telephone: 386-329-4841

Permitted Well Location Database
Source: South Florida Water Management District
Telephone: 561-682-6877

Super Act Program Well Data
This table consists of data relating to all privately and publicly owned potable wells investigated as part of the SUPER Act program. The Florida Department of Health's SUPER Act Program (per Chapter 376.3071(4)(g), Florida Statutes), was given authority to provide field and laboratory services, toxicological risk assessments, investigations of drinking water contamination complaints and education of the public
Source: Department of Health
Telephone: 850-245-4250

Water Well Location Information
Source: Suwannee River Water Management District
Telephone: 386-796-7211

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Water Well Permit Database
Source: Southwest Water Management District
Telephone: 352-796-7211

OTHER STATE DATABASE INFORMATION

Florida Sinkholes
Source: Department of Environmental Protection, Geological Survey
The sinkhole data was gathered by the Florida Sinkhole Research Institute, University of Florida.

Oil and Gas Permit Database
Source: Department of Environmental Protection
Telephone: 850-245-3194
Locations of all permitted wells in the state of Florida.

RADON

State Database: FL Radon
Source: Department of Health
Telephone: 850-245-4288
Zip Code Based Radon Data

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX G

Other Pertinent Documents

Spatial District Query Report

STRAP Number: 30-46-27-00-00001.0000

District Name	District Value		Pct Of Parcel In District (If Fractional)	Notes
Taxing Authorities	Name	Lee County Unincorporated MSTU	200%	
	Authority	020		
	Name	Solid Waste Area 3		
	Authority	003		
	Name	Lee County Library Fund		
	Authority	052		
	Name	SFL Water MGMT Okeechobee Levy		
	Authority	308		
	Name	Lee County All Hazards Unic		
	Authority	101		
	Name	District #079		
	Authority	079		
	Name	Lee County Mosquito Control		
	Authority	053		
	Name	SFL Water Mgmt Everglades Const		
	Authority	084		
	Name	West Coast Inland Waterway		
	Authority	098		
	Name	SFL Water Mgmt District Levy		
	Authority	110		
	Name	Estero Fire Rescue		
	Authority	029		
	Name	School District By Local Board		
	Authority	012		
	Name	Lee County Hyacinth Control		
	Authority	051		
	Name	Lee County General Revenue		
	Authority	044		
	Name	School District By State Law		
	Authority	013		
Commissioner District	District	3		
	Commissioner	Larry Kiker		
Road Impact Fee Districts	District	5		
	Tidemark ID	55		
	Name	SOUTHEAST		
School Board District	District	3		
	School Board Member	Cathleen O'Daniel Morgan		

School Choice Zone	Choice Zone	South Zone		
Water Franchise			NOT FOUND	
Wastewater Franchise			NOT FOUND	
Res. Garbage Collection Day	Hauling Day	Wednesday		
Res. Recycling Collection Day	Hauling Day	Tuesday		
Res. Horticulture Collection Day	Hauling Day	Tuesday		
Subdivisions			NOT FOUND	
Census Tract	Tract Name	12071050312		
Traffic Analysis Zone	Zone #	1652		
Unincorporated Lee County Zoning	Zoning Designation Community	IPD		Zoning Notes
Planning Community	ID Plan Community	18 Southeast Lee County		
Planning Land Use 2010	Landuse	Density Reduction/Groundwater Resource	77.56%	
	Landuse	Wetlands	22.44%	
Development Orders	Development Order Status Wet Season Water Table	LDO2001-00070	99.98%	
Airport Noise Zone			NOT FOUND	
Airspace Notification			NOT FOUND	
Coastal Building Zone			NOT FOUND	
Coastal High Hazard Area			NOT FOUND	
Sanibel/County Agreement			NOT FOUND	
Archaeological Sensitivity	Sensitivity Level	2	2.63%	1
Vegetation Permit Required			NOT FOUND	
Watersheds	Watershed Name	Cocohatchee River	95.5%	
	Watershed Name	Imperial River	4.5%	1
Florida Land Cover	Code Landuse	2140 Row Crops	76.02%	
	Code Landuse	2610 Fallow Cropland	13.28%	
	Code Landuse	3200 Upland Shrub And Brushland	5.55%	1
	Code Landuse	6210 Cypress	2.97%	1
	Code Landuse	2210 Citrus Groves	1.16%	1
	Code Landuse	1180 Rural Residential	0.75%	1
	Code Landuse	4110 Pine Flatwoods	0.25%	1
	Code Landuse	2430 Ornamentals	0.02%	1
Soil	Map Symbol Soil Name	28 IMMOKALEE SAND	25.25%	
	Map Symbol Soil Name	26 PINEDA FINE SAND	18.05%	2
	Map Symbol Soil Name	10 POMPANO FINE SAND	17.7%	2
	Map Symbol Soil Name	33 OLDSMAR SAND	14.66%	

	Map Symbol Soil Name	14 VALKARIA FINE SAND	14.34%	2
	Map Symbol Soil Name	34 MALABAR FINE SAND	3.45%	1 2
	Map Symbol Soil Name	53 MYAKKA FINE SAND, DEPRESSIONAL	3.44%	1 2
	Map Symbol Soil Name	11 MYAKKA FINE SAND	3.01%	1
	Map Symbol Soil Name	13 BOCA FINE SAND	0.09%	1
Eagle Nesting Site Buffer			NOT FOUND	
Panther Habitat	Habitat	1	20.64%	
Sea Turtle Lighting Zone			NOT FOUND	
Storm Surge	Category Previous Category	E 5		
Flood Insurance Panel	Full Panel Name Community Panel Version Date	12071C0625F 071C 0625 F 8/28/2008 12:00:00 AM		
Flood Insurance Coastal Barrier			NOT FOUND	
Flood Insurance Zone	Flood Zone	X		
FIRM Floodway			NOT FOUND	
(DNR Flood Zones) Zone A BFE			NOT FOUND	

[Modify Report Settings]

Note	Details
1	Small Percentages Can Result From Slight Variations In The Way Lines Are Drawn Or Imported Into Our System. Such Values May Not Accurately Reflect An Overlap With The Subject Parcel.
2	Contact DEP (239) 332-6975 For Wetland Determination

Our goal is to provide the most accurate data available, however no warranties, expressed or implied, are provided with this data, its use, or interpretation. All information subject to change without notice.

Lee County Property Appraiser

Tax Year 2015

Property Data

STRAP: 30-46-27-00-00001.0000 Folio ID: 10435901

Owner Of Record

PEPPERLAND LLC
107 ENTERPRISE CT
OXFORD NC 27565

Site Address

18500 CORKSCREW RD
ESTERO FL 33928

Legal Description

ALL SEC 30 TWN 46 RGE 27
DESC IN OR 1520 PG 1283

Classification / DOR Code

CROPLAND CLASS I / 51

[Tax Map Viewer]



[Pictometry Aerial Viewer]

Current Working Values

Just	3,200,000	As Of	02/04/2016

Attributes

Land Units Of Measure	AC
Units	640.00
Frontage	0
Depth	0
Total Number of Buildings	0
Total Bedrooms / Bathrooms	0
Total Living Area	0
1st Year Building on Tax Roll	0
Historic District	No

Image of Structure



Photo Date April of 2014

Exemptions

Exemption	Amount
Agriculture	2,952,604.00

Values (2015 Tax Roll)

Property Values		Attributes	
Just	3,200,000	Land Units Of Measure	AC
Assessed	247,396	Units	640.00
Portability Applied	0	Frontage	0
Cap Assessed	247,396	Depth	0
Taxable	247,396	Total Number of Buildings	0
Cap Difference	0	Total Bedrooms / Bathrooms	0 / 0
		Total Living Area	0
		1st Year Building on Tax Roll	0
		Historic District	No

TRIM (proposed tax) Notices are available for the following tax years

Taxing Authorities

Sales / Transactions

Sale Price	Date	OR Number	Type	Description	Vacant/Improved
4,800,000.00	10/18/2013	2013000243597	40	**Sales disqualified as a result of credible, verifiable, and documented evidence** Transfer where the consideration paid for real property is verified to be significantly influenced by non-market financing or assumption of non-market lease	V
11,500,000.00	06/02/2010	2010000140126	05	**Sales qualified but excluded from sales ratio analysis** Arm's-length transaction transferring multiple parcels with multiple parcel identification numbers There are 3 additional parcel(s) with this document (may have been split after the transaction date)... 29-46-27-00-00001.0000 31-46-27-00-00001.1000 32-46-27-00-00001.1000	V
4,943,000.00	11/30/1999	3201/1962	01	**Sales disqualified as a result of examination of the deed** Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
3,189,000.00	02/01/1994	2472/3482	01	**Sales disqualified as a result of examination of the deed** Disqualified (Doc Stamp .70 / SP less th $100 / Other Disq)	V
1,904,700.00	05/01/1981	1520/1283	06	**Sales qualified and included for sales ratio analysis** Qualified (Fair Market Value / Arms Length / One STRAP #)	V

Location Information

Township	Range	Section	Block	Lot
46	27E	30		

Municipality	Latitude	Longitude
Lee County Unincorporated	26.44299	-81.65173

Links

View Parcel on Google Maps | View Parcel on GeoView

Solid Waste (Garbage) Roll Data

Solid Waste District	Roll Type	Category	Unit / Area	Tax Amount
003 - Service Area 3	-		0	0.00

Collection Days

Garbage	Recycling	Horticulture
Wednesday	Tuesday	Tuesday

Flood and Storm Information

Storm Surge Zone	Evacuation Zone	Flood Insurance [FIRM Look-up]			
		Community	Panel	Version	Date
E	E	125124	0625	F	8/28/2008

Appraisal Details (2015 Tax Roll)

Land

Land Tracts

Use Code	Use Code Description	Depth	Frontage	Number of Units	Unit of Measure
5130	Vegetables (Processing)	0	0	516.65	Acres
5210	Vegetables (Waste)	0	0	123.35	Acres

[2007 2008 2009 2010 2011 2012 2013 2014 2015]

Previous Parcel Number | Next Parcel Number | New Query | Search Results | Home



OLD SOIL BORINGS AND LITHOLOGIC DATA FOR THE SITE:

- Geologic Report Limestone Reserve Calculations-Creative Environmental Solns-11-11-1999
- Excerpts of South Lee Corkscrew Testing Report 1978
- Excerpts of Economic Feasibility Analysis -Richard W Bass-December 19, 2001

GEOLOGICAL REPORT

LIMESTONE RESERVE CALCULATIONS

POTENTIAL QUARRY SITE--PHASE II

ESTERO, FLORIDA

Prepared for:

SCHOENBRUN FARMS

Ft. Myers, Florida

Prepared by:

CREATIVE ENVIRONMENTAL SOLUTIONS, INC.

Brooksville, Florida

November 11, 1999

GEOLOGICAL REPORT

LIMESTONE RESERVE CALCULATIONS

POTENTIAL QUARRY SITE--PHASE II

ESTERO, FLORIDA

Prepared for:

SCHOENBRUN FARMS

Ft. Myers, Florida

Prepared by:

CREATIVE ENVIRONMENTAL SOLUTIONS, INC.

Brooksville, Florida

November 11, 1999

FLORIDA PROFESSIONAL GEOLOGIST CERTIFICATION

This geologic report describing reserve estimates for the Schoenbrun Farms property (Phase II) near Estero, Lee County, Florida has been reviewed by George K. Foster of Creative Environmental Solutions, Inc. (CES), Brooksville, Florida, and appears to comply with the current standards and practices in the field of geology in the State of Florida. CES's professional services have been performed using the degree of care and skill ordinarily exercised under similar circumstances by other professionals practicing in this field. The certification of geologic work contained herein applies only to the original sealed document(s), and specifically does not pertain to any copies of this document or any portion thereof including mylars, linen, sepia or other materials which can be changed by the entity or entities with whom such document(s) are filed. No other warranty, expressed or implied, is made as to the professional advice in this report.

George K. Foster, PG 403
Professional Geologist

11/11/98
Date of signature

1.0 PROJECT DESCRIPTION

Creative Environmental Solutions, Inc. (CES) was contracted by Schoenbrun Farms (Schoenbrun) to prepare a geologic evaluation of a parcel of land near Estero in Lee County, Florida. The exact location of the parcel is intentionally omitted from this report. The parcel, which represents Phase II of a three phase project, is approximately 640 acres in size and measures 5,280 feet (ft) on each side. The parcel is currently used as a potato field. There is a small isolated wetland near the center of the parcel, and a large wetland in the northwest corner of the parcel. The property is bordered by an improved road to the north and drainage/irrigation ditches to the south, east, and west. A site plan prepared from an air photograph is attached.

The geologic evaluation included the following:

1. Description of environmental setting (physiography, geology, and hydrogeology),
2. Collection of limestone core samples from 11 test holes (hole numbers 10 to 20),
3. Los Angeles abrasion testing of limestone samples, and
4. Calculations of unit volumes and reserves.

2.0 ENVIRONMENTAL SETTING

2.1 PHYSIOGRAPHY

The subject property is situated in the Corkscrew Swamp subdivision of the Southwestern Flatwoods District described by Brooks in Physiographic Provinces of Florida. The Southern Flatwoods is a province of Miocene and Pliocene sedimentary rocks and sediments overlain by a thin veneer of Quaternary deposits. The Corkscrew Swamp subdivision is characterized by flatwoods and cypress swamp on a low plain between 15 and 25 ft-mean sea level (msl) in elevation.

2.2 GEOLOGY

Lee County is underlain by thousands of feet of sedimentary rocks and deposits. These include, from bottom to top, the Eocene-age Avon Park Limestone and Ocala Limestone; the Oligocene-age Suwannee Limestone; the Miocene/Pliocene-age Hawthorn Group; the Pliocene Tamiami, Caloosahatchee, and Ft. Thompson Formations; and the undifferentiated Pleistocene-Holocene deposits. The Tamiami Formation is the oldest unit exposed in Lee County.

The Avon Park, Ocala and Suwannee Limestones are dolomitic and calcareous limestone deposits. The Hawthorn Group (500 to 700 ft thick) is made up of a lower carbonate unit and an upper siliclastic unit. Phosphate is common throughout the Hawthorn. The Tamiami Formation (10 to 100 ft thick) varies from a marl to a limestone. In the northwest part of Lee County, the Tamiami has an upper layer of quartz sand in a clay and carbonate matrix. The Caloosahatchee and Ft. Thompson Formations (10 to 60 ft thick, combined) are fossiliferous sands and carbonates. The undifferentiated surface deposits (10 to 20 ft thick) vary from quartz sands to fossiliferous sands and shell beds, thin marl beds, and organic-rich sediments.

2.3 HYDROGEOLOGY

The Floridan aquifer, which is confined, is comprised of the saturated portions of the Eocene and Oligocene carbonate rocks and the lower carbonate portion of the Hawthorn. The lowest

impermeable beds of the overlying Hawthorn serve as the confining unit for the Floridan. Water quality in the Florida is generally not good.

The sediments of the middle and upper Hawthorn comprise the intermediate aquifer/confining system in Lee County. Two distinct aquifers exist in the Hawthorn: the Sandstone aquifer and the mid-Hawthorn aquifer. Both are confined by impermeable Hawthorn beds. Water quality in the Hawthorn aquifers is generally better than in the deeper Floridan.

The permeable beds of the units overlying the Hawthorn constitute the surficial aquifer in Lee County, which is unconfined. Water quality in the surficial is better than in the Floridan or Hawthorn aquifers, but is still not considered exceptional.

3.0 TEST HOLES

Eleven test holes were drilled at the locations shown on the attached site plan. All drilling was supervised by a Florida registered professional geologist. The test holes were advanced to depths of 80 ft-below land surface (bls). The holes were advanced by wash drilling with a drag bit to the top of rock. Temporary 4-inch surface casing was set to this same depth in each hole. The underlying rock was drilled and sampled with a 10-ft long 2-inch inside diameter core barrel to the total depths of the holes. Drilling logs made by the geologist in the field are attached.

The upper unit encountered in the test holes was characterized by silty fine silica sand with variable amounts of clay that ranged from brown to gray in color. This unit extended to depths of 11 to 28 ft-bls. This sand unit is considered to be overburden for purposes of this report.

The sand unit was underlain in 9 of the 11 test holes by a non-indurated coarse shell/silty fine sand/clay hash (marl) that varied in color from gray to white. The shells consisted of gastropods and bivalves. The top of this unit was found as shallow as 11ft-bls, and the base of the unit as deep as 36.5 ft-bls. The maximum thickness of the unit was 10.5 ft in hole number 12. This unit is considered to be overburden for purposes of this report.

Limestone was encountered in all of the test holes below the sand and/or shell units. Core recovery was generally poor, and examination of cuttings was often infeasible because of the loss of circulation in the test holes. The limestone that was recovered ranged from white to brown to gray in color and was extremely variable in texture and degree of induration. Most of the limestone was sandy (silica sand) and fossiliferous. Thin beds of coralline limestone were found in several of the test holes. The limestone varied in each hole from non-indurated (very soft) to well indurated (hard). The texture and degree of induration generally changed significantly every few inches. This limestone unit extended to a depth of at least 60 ft in all of the test holes, and to 80 ft in one of the holes. The limestone is considered to be the mining target for purposes of this report.

Below the limestone was found a unit of poorly indurated carbonate sand, generally brown in color, slightly siliceous, and fossiliferous. Large oyster shells were found in some of the sections. Generally, this material can be reduced to its sand-sized constituent grains by crushing between the palms or between the fingers. This unit is considered to be of too poor quality for aggregate production for purposes of this report.

4.0 LIMESTONE TESTING

4.3 LOS ANGELES ABRASION TESTING

Los Angeles (LA) abrasion tests were conducted on the cores. Sections of core from above the 40 ft depth from all of the test holes were combined into a single sample (Sample 1). Sections of core from between 40 and 60 ft from all of the holes were combined into two samples (Samples 2A and 2B). Sections of core from greater than 60 ft from all of the holes were combined into two samples (Samples 3A and 3B). The samples were run through a laboratory-scale jaw crusher to break the core sections into aggregate-sized pieces. No attempt was made to remove soft and/or poorly indurated sections of core prior to crushing. After Samples 1, 2, and 3 were crushed, a composite sample representing equal parts of these samples was prepared (Sample Comp). The samples were then washed and sieved to prepare gradations required by Florida Department of Transportation (FDOT) for testing No. 57 aggregate (50% retained on the 3/8 inch screen and 50% retained on the 1/2 inch screen).

The LA abrasion test reports are attached. The testing yielded the following results:

Sample ID	LA Value (% loss)
1	42.69
2A	46.51
2B	45.84
3A	60.46
3B	61.23
Comp	46.77

The maximum loss allowed for FDOT-grade aggregate is 45%. Sample 1 yielded an acceptable value, and samples 2A, 2B, and Comp yielded borderline values. Values for Samples 3A and 3B were well above the acceptable maximum. With regard to samples 2A, 2B, 3A, and 3B, it is important to bear in mind that results of LA tests made on material prepared from core sections may not be the same as results of tests made on aggregate produced commercially from the same

deposit on a large scale. For example, aggregate made in the laboratory from core sections has more rounded surfaces than commercially produced aggregate; rounded surfaces could artificially lower (improve) LA values. On the other hand, the blasting, excavating, crushing, screening, and washing processes that occur during commercial mining and production will remove some or most of the softest material that was purposely not removed from the core samples that were tested; less soft material could translate to even better LA values than reported for the cores.

It is important to consider that the LA tests were conducted on material recovered in the core barrel. As described earlier, core recovery was generally poor. Much of the material that was not recovered drilled as if were non- to poorly indurated, and it is assumed that this soft material would simply dissaggregate and wash out of the aggregate during mining and processing. It is possible, however, that this material could be just hard enough that it would not dissaggregate, which means that soft aggregate pieces could become incorporated in the final product. If this occurs, production LA values could be higher than anticipated.

4.2 OTHER OBSERVATIONS

No specific tests for other properties were conducted on either the core sections or the aggregate prepared from the core sections. However, several relevant observations were made. Chert (amorphous or cryptocrysalline silica) was not observed in any of the samples. Some cherts can give rise to deleterious alkali-aggregate reactions in concrete. No organic matter was observed in any of the samples. Organics can give rise to structural and aesthetic problems in concrete. A small amount of shell was observed in the samples, but the amount did not seem to be excessive. Too much shell can result in structural problems in concrete.

5.0 VOLUME AND RESERVE CALCULATIONS

5.1 GRID AND MAP PREPARATION

The deposit was modeled using the Gridzo program licensed by RockWares, Inc. First, grids of land elevation, top of shell elevation, top of limestone elevation, and base of limestone elevation were prepared using Gridzo [land elevations were all assumed to be 20 feet mean sea level (ft-msl)]. Next, the various grids were subtracted from one another to generate grids of unit thicknesses. Finally, the grids were contoured using Gridzo to prepare structure contour maps and isopach maps (see attached).

By overlaying the property lines and wetland boundary lines on the isopach grids and assigning null values (zero) to the areas outside the property lines and inside the wetlands, new isopach grids were derived that represent volumes inside the property lines and outside the wetlands (grid statistics attached). The computer calculations yielded the following volumes of materials for the site:

Unit	Volume (ft^3)
silica sand	549,443,277
shell hash	74,421,973
limestone	1,110,667,269

5.2 BLOCK MODEL AND COLOR SLICE DIAGRAMS

The various grids were stacked to prepare a three-dimensional color block model of the deposit using the RockSolid program licensed by RockWares. Vertical slices through the model show how the geology changes with depth and location (attached). In these slices, the blue is the silica sand, the yellow is the shell hash, the red is the limestone, and the green is the carbonate sand.

5.3 RESERVE CALCULATIONS

Density values are used with volume estimates to develop reserve quantities. Density values for limestone were measured on the core sections collected in Phase I of this study. Density values

for the other materials are estimates only. As shown in the table below, the limestone reserves are estimated to be 62.4 million tons:

Site No.	Volume (ft^3)	Density (lb/ft^3)	Mass (t)
Silica Sand	549,443,277	100	27,472,164
Shell Hash	74,421,973	90	3,348,989
Limestone	1,110,667,269	112.3	62,363,967

These values represent the masses of materials *in situ*, or in the ground. The amount of aggregate that will actually be produced from this deposit (the yield) will vary as functions of the quality of the rock, the mining and processing techniques used by the mining company, and the number of acres that can be mined (setbacks, production areas, etc., were not considered in the reserve calculations).

ATTACHMENT--BORING LOGS

Job No. _____

Client Schwab

Project Kestrel Phase II

Location of Boring: NW corner of retention area	
Water Level	~4'
Time	
Date	

Boring No. 10 Date 10/10/99 Sheet 1 of 1

Type of Boring MR Rig Failing 1500

Casing used 4" Size Steel Drilling mud used Bent

Boring begun 10/10/99 Boring completed 10/10/99

Ground Elevation ~20' referred to MSL Datum

Field Party: Hasl - Edwin; CES - G Foster

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION Soil type, color, texture, consistency, sampler driving notes, blows per foot on casing, depths wash water lost, observed fluctuations in water level, notes on drilling ease, etc.
		0-19							Silty F sand, loose, w.pl, Brown
27'		19-27			4"				Limestone, soft & poorly ind., no recovery lost circ. @ 19'
	1	27-30	core 1	2"	0.3				Limestone - poorly - mod ind, Sandy, Shelly Fossil, grayish brown; Drilled 1' soft to med
	2	30-40	core 2		40"				Limestone, A.A.
	3	40-43	core 3		6"				Limestone, poorly - well ind, Sl. Sandy, Sl. Fossil, gray; Drilled soft - hard
	4	43-50	core 4		25"				Limestone, F. poorly to mod ind (mostly poorly) Sandy, Fossil, Pockets gravel - Crush & drilled mostly V. soft, then soft
	5	50-60	core 5		80"				Limestone, poorly - mod. ind, Sandy, Fossil, Soft Shaking to Blue-gray; Drilled soft to med except 54½-55½, 56-56½ - med - hard
	6	60-70	core 6		58"				Limestone, poorly ind, Sandy, Shelly, Fossily, mottled - Fossil Blue gray; drilled soft - med
	7	70-80	core 7		60"				Limestone, poorly ind, Sandy, Fossil, Soft to firm, Drilled soft to 75, soft - med to 80'
		EOH @ 80'							(Base of 4" Steel rods @ 60'?)

Geologist

Job No. _____

Client Schwab

Project Eastern Phase II

Location of Boring: Center of N½	
Water Level	~ 4'
Time	
Date	

Boring No. 11 Date 10/10/55 Sheet 1 of 1

Type of Boring M/R Rig Failing 1500

Casing used Steel Size 4" Drilling mud used Bent

Boring begun 10/10/55 Boring completed _____

Ground Elevation ~20' referred to U.S.(Datu

Field Party: Huss-Edwin; CES-Gross

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
		0-25							Silty f. sand, loose, n-sl. pl., tan speckled gr. gray, brown clayey, v 10', lively clayey @ 22'
35		25-35							Sand/sl. gravel, angular, non-undulating; some mod. ind. gravel-size pieces beginning 32'
	1	35-40	core	2"	27"				Limestone, poorly to well ind., sandy & clayey, fossil, pale gray to buff; drilled medium
	2	40-50	core		43"				Limestone, poorly to well ind., sandy, fossil, buff to pale gray; drilled soft 40-42½ & 47½-48'; other med
	3	50-60	core		102" (8½')				Limestone, poorly-mod ind. sandy, fossil, buff; gray sandy to buff; drilled med to 55', then soft
	4	60-70	core		40"				Limestone, poorly ind. sandy, v fossil, buff; stone oyster shell (Ostrea); drilled mostly soft, v little med.
	5	70-80	core		90"				Limestone, A.A., v. poorly to poorly ind. sandy, v. fossil, drilled soft
									End of 4" rock @ 60' (Yr)
		80'							

Geologist

Job No. _____

Client Schwab

Project Estero Phase II

Location of Boring:	
Water Level	
Time	
Date	

Boring No. 12 Date 10/11/95 Sheet 1 of

Type of Boring M.R. Rig 3-9:/Mg 1500

Casing used Steel Size 4" Drilling mud used Used

Boring begun 10/11/95 Boring completed 10/11/95

Ground Elevation ~20' referred to MSL Datum

Field Party: Hust-Eblum; CES-G Fuller

Depth of Casing, ft.	Sample No.	Sample depth (from-to) (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION Soil type, color, texture, consistency, sampler driving notes, blows per foot on casing, depths wash water lost, observed fluctuations in water level, notes on drilling ease, etc.
		0-26							Silty f. sand, loose, wet, tan to gray; sl. clayey w/ depths Shell & coarse rock; limestone fragments / sand wash, water loss
36½		26-36½							
	1	36½-40	core	2"	9"				Limestone, coralline & very fossil, sandy, generally soft in thin light layers, drill coarse to gray drilled generally steady w/ some hard limestone, fossil, sandy, wood incl; bulk grading to gray drilled 50ft - with 40-46, 49-50, plus 21-26-29
	2	40-50	core	2.7"					
	3	50-60	core	90"					Limestone, mud ind, to 55', then poorly to mud ind, sandy, fossil, to shell below 55', Sage-brown (mud) to lt brown drilled generally, mod. thin plates
	4	60-70	core	36"					Limestone, mostly poorly ind, occ. mud ind, sandy, fossil, occ. oysters & bivalves, drilled soft - med. steady
	5	70-80	core	28"					Limestone, v. poorly - poorly ind, sandy, fossil, drill. dg pale brown drilled steady, soft - med
		EOH @ 80'							End of "good" rock @ 70' (?)

Geologist

Job No. _____

Client Schwab

Project Expand Phase II

Location of Boring: SW corner of N ½	
Water Level	wet
Time	
Date	

Boring No. 13 Date 10/4/95 Sheet 1 of 1
Type of Boring MR Rig Failing 1500
Casing used Steel Size 4" Drilling mud used Gen
Boring begun 10/4/95 Boring completed 10/4/95
Ground Elevation ± 20 referred to MSL
Data
Field Party: Huss - Blum; CES - Gross

Depth of Casing, ft.	Sample No.	Sample depth from to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
		0-28'							Soft, f. sand, loose, wet, gray/Brown; Decayed clayey, ± 5 ft. @ 20
31		28-30							Stiff, sandy, shale, limestone, Fossils, Limestone gravel
	1	31-40	core	2"	13'				Limestone, poorly - moderately, porous, sandy, Brownish-gray; drilled soft to some wet
	2	40-50	core		74"				Limestone, A.A.
	3	50-60	core		85"				Limestone, A.A. wispy, more gray than brown
	4	60-70	core		74"				Limestone, poorly, wet to ~65', then non-poorly, wet, V. sandy, fossil, some oysters (gravel), grayish brown, drilled generally soft
	5	70-80	core		72"				Limestone, V. poorly - poorly, wet, sandy, fossil, tr. shell (oysters), Silt brown, drilled soft
		80 ft @							
		80							Base of "good" rock @ 65'

Geologist

Job No. _____

Client Schrock

Project Estero Phase II

Location of Boring:	
west end	@ 5½
Water Level	@ ~ 4'
Time	
Date	

Boring No. 14 Date 10/14/99 Sheet 1 of 1

Type of Boring MR Rig Failing 150 w

Casing used steel Size 4" Drilling mud used Quest

Boring begun 10/14/99 Boring completed _____

Ground Elevation +20' referred to msl Datum

Field Party: Hacs - Eberwein; CES - Foster

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION Soil type, color, texture, consistency, sampler driving notes, blows per foot on casing, depths wash water lost, observed fluctuations in water level, notes on drilling ease, etc.
									Silty F sand, loose, n. pl., brown
		0-16							
22		16-22							Clayey sand/shell wash - clayey sand green-gray, shell white.
	1	22-30	core	2"	64"				Limestone, poorly-mod. ind, some well ind. vesters, fossil, sandy, lt brown → gray
	2	30-40	core		3"				Most of sample followed - 8" of wash in hole; drilled hard ~ 36-36½, soft otherwise.
	3	40-48½	core		18"				Limestone, V poorly to well ind, little rec - drills like broken rock in places, fossil, sandy, gray
	4	48½-60	core		60"				Limestone, poorly-well ind, sandy, fossil, lt-med gray, drilled hard to med @ 60-61', V. hard
	5	60-70	core		22"				Limestone, V poorly - poorly ind, sandy, fossil, some shell, v. pale gray, brown; drilled med to 62', then soft
	6	70-80	core		48"				Limestone, same as 62-70
		70 ft @							
		80'							
									Base of rock @ 62' (?)

Geologist

Job No. _____

Client Schwab

Project Estero Phase I

Location of Boring:	
Water Level	~4'
Time	
Date	

Boring No. 15 Date 10/12/99 Sheet 1 of 1
Type of Boring MR Rig Failing 1500
Casing used Steel Size 4" Drilling mud used Bent
Boring begun 10/12/99 Boring completed 10/12/99
Ground Elevation +20 referred to MSL Datum
Field Party: Hurs-Edwin; SES-Foster

Depth of Casing, ft.	Sample No.	Sample depth (from-to) (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Ter. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
		0-11							S. lt. f. sand loose, wet, sloppy, grades to clayey f. sand, sl. pl., Broken Shell/sand rock, white
		11-15							Limestone, fossil., sandy, poorly to non-ind., soft
16		15-18½							
	1	18½-23½		2"	33"				Limestone, v. poorly to well ind., sandy, fossil., brown to gray to white, drilled v. soft to 25, hard 25-27, soft-med to 29±
	2	23½-40			43"				A.A., drilled hard 31±-32½; soft-med 29±-31±; 32½-35; 35 v. soft
	3	40-47			35"				A.A., drilled hard 40-40½, thereafter soft w. occ. med., plugged @ 47'
	4	47-59½			90"				Limestone, poorly-mod. ind., sandy, fossil, v. clayey @ top & occ. thereafter, Grayish-brown, drilled soft-med
	5	59½-70			74"				Limestone, poorly ind., sandy, fossil, mol. oyster shell, gray-brown, drilled soft
	6	70-80			84"				Limestone, A.A.
		FOUND @ 80'							Base of Hard @ 60'

Geologist

Job No. _____

Client Schwab

Project Estero Phase II

Location of Boring: Center, south end of parcel	
Water Level	~4'
Time	
Date	

Boring No. 16 Date 10/12/99 Sheet 1 of 1

Type of Boring MR Rig Failing 1500

Casing used Sol Size 4" Drilling mud used Bent

Boring begun 10/12/99 Boring completed _____

Ground Elevation 20' referred to MSL

Datum

Field Party: Huss, Klein, CES-Fasken

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
									Soft, F. sand, loose, v. pl., brown
		0-21							
22		21-22							Shell, white
	1	22-30	core	2"	31"				Limestone, poorly to well ind., sandy, fossil, pale brown with gray; drilled hard 22-25, soft to 28, 2-3 ft/min
	2	30-40	core		14"				Limestone, A.A., poorly to mod. ind. drilled soft to med.
	3	40-50	core		15"				Limestone, well ind. nodules in poorly ind. matrix, white water, gray packstone; coral head @ tip of sample, drilled v. soft to 45', then med.
	4	50-60	core		41"				Limestone, mod. ind., fossil, sandy, gray to ~ 55, then limestone, same as 40-50' ind.; drilled soft/med to 55', then soft
	5	60-70	core		28"				Limestone, intermixed high well & poorly ind.; fossil, sandy, white, then soft, gray where broken, drilled soft to med. throughout
	6	70-76	core		6"				Limestone, A.A.
									Rods pushed to 80'.
		70 ft @							Total recovery only ~ 12 ft
		80							

Geologist

Job No. _____

Client Schwab

Project Exten Phase II

Location of Boring:	
Water Level	~4'
Time	
Date	

Boring No. 17 Date 10/12/99 Sheet 1 of 1

Type of Boring MR Rig Failing 1500

Casing used Steel Size 4" Drilling mud used Drisc

Boring begun 10/12/99 Boring completed 10/12/99

Ground Elevation ~20 referred to MLW Datum

Field Party: Hull-Shaw; CES-Foster

Depth of Casing, ft.	Sample No.	Sample depth (from-to) (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
									Soil type, color, texture, consistency, sampler driving notes, blows per foot on casing, depths wash water lost, observed fluctuations in water level, notes on drilling ease, etc.
22		0-22							Silty f. sand loose, v. pl., clayey below 15', fr. coarse gravel to gravel
	1	22-30	core	2"	25"				Limestone, poorly-mod ind., sandy fossil, white to gray; soft/mod to 29', then v. soft
	2	30-40	core		6"				Limestone, V. H., drilled mod/harsh 33-33½', otherwise soft
	3	40-50	core		31"				Limestone, poorly ind., v. algal head (6") at top, shelly, fossil, pale gray to light brown; drilled soft/mod 47-47½, otherwise soft
	4	50-60	core		40"				Limestone, poorly-mod. ind., sandy, fossil, light med gray; drilled mod 53-58, soft otherwise
	5	60-70	core		44"				Limestone, poorly-mod ind., sandy, fossil, pale gray coralline to pale brown; drilled soft to 67', then soft-mod
	6	70-80	core		30"				Limestone, poorly ind., sandy, fossil, some clay, pale brown; drilled soft
		EOH @ 80'							Base good rock @ 70'

Geologist _____

Job No. _____

Client Schwab

Project Esters Phase II

Location of Boring: Center of parcel.
Water Level 6' ±
Time
Date

Boring No. 18 Date 10/13/89 Sheet 1 of 1
Type of Boring HSA Rig Failing 1500
Casing used Steel Size 4" Drilling mud used Drisol
Boring begun 10/13/89 Boring completed 10/17/89
Ground Elevation ± 20 referred to msl
Datum
Field Party: Huss - Edwards, ES - Foster

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
									Soft f. sand, loose, wet, brown to gray
		0-26							Shell / sand hash, white
27		26-27							Limestone, poorly well ind, fossil, sandy, broken fair, drilled rod to 28', then soft
	1	27-30	core	2"	14"				Limestone, A.A., drilled v. soft to 37', then soft to 39'
	2	30-40	core		8"				Limestone, A.A., drilled soft to 48', rock rod to 50'
	3	40-50	core		14"				Limestone, mod. ind. sandy, fossil, brown cuttings to gray, drilled rod 56-60
	4	50-60	core		24"				Limestone, poorly-mod. ind to ± 65', then mod. ind, sandy, fossil, mod. cystes cuttings ± 65', ± 65', ± broken, occ. gray, drilled generally soft, occ. mod.
	5	60-70	core		100"				No recovery - drilled 10' v. soft limestone
	6	70-80	core		0"				
		EOH @ 80.1							Base fossil rock ± 65' ±

Geologist

Job No. _____

Client Schwab

Project Extra Phase II

Location of Boring: SE corner of tract	
Water Level	Dry
Time	
Date	

Boring No. 19 Date 10/13/55 Sheet 1 of 1

Type of Boring MR ; Rig Failing 1500

Casing used Cal Size 4" Drilling mud used Cal

Boring begun 10/13/55 Boring completed 10/17/55

Ground Elevation 720' referred to msl Datum

Field Party: Hann-Elwan; CES-Frank

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
									Silty f. sand, loose, wet, tan to gray
	2	0-15							
16½		15-16½							Sltst/sandstone, white
20	1	16½-20	core	2"	31"				Limestone, mod-well, wd to 18', then poorly ind, sandy, fossil, brown to 18', then white; drilled mud
	2	20-30	core		10"				Limestone, poorly to mod. ind, sandy, fossil, pale brown to white; drilled, blocky, soft in some thin zones
	3	30-40	core		24"				Limestone, v. poorly - poorly ind to 38', then poorly - mod ind, pale brown to buff, sandy, fossil; drilled v. soft to 38', then soft
	4	40-50	core		27"				Limestone, poorly ind to 46', then mod. ind, sandy, fossil, pale brown @ top, lt-med gray @ bottom
	5	50-60	core		29"				Limestone, mod ind to 55', then poorly ind, sandy, fossil, gray; drilled mud to 55', then soft
	6	60-70	core		5"				Limestone, poorly ind, sandy, fossil, gray (cuttings only); drilled soft w occasional hard seam
	7	70-80	core		23"				Limestone, poorly ind, lt. gray,
		EOH @ 80'							Base 1' 11" rock @ 60'

Geologist

Job No. _____

Client Edwards

Project Eastern Phase II

Location of Boring: East line	
Water Level	~4'
Time	
Date	

Boring No. 20 Date 10/14/99 Sheet 1 of 1

Type of Boring MR Rig Failing 1500

Casing used Steel Size 4" Drilling mud used Rev

Boring begun 10/14/99 Boring completed 10/14/99

Ground Elevation ~20' referred to MSL Datu

Field Party: Huss-Elvin; CES-Foster

Depth of Casing, ft.	Sample No.	Sample depth from-to (in feet)	Blows/foot on Sampler	ID of Sampler (inches)	Tot. length of recov. sample	Length of Lab. sample	DEPTH IN FEET	SOIL GRAPH	DESCRIPTION
	~~0-19~~	0-19							Silty f. sand, loose, wpl, brown to gray
20	~~19-20~~	19-20							Shell/sand, white, numerous.
1	~~20-24~~	20-24		2"	18"				Limestone, hard - well ind, slightly sandy, fossil, white to brown, drilled med
	2	24-30			23"				LS, well ind to ~26', then poorly ind, sandy, fossil, white, drilled med to 26, then soft
	3	30-40			10"				Limestone, ~~non~~ well ind to 36, then mod ind, sandy, fossil, coral head @ top of sample, white to brown, gray, drilled very soft to 36', then refusal.
	4	40-50			8"				Limestone, poorly ind, to mod ind, sandy, fossil, brown, drilled soft
	5	50-60			44"				Limestone, mod ind, sandy, fossil, brown to gray, drilled soft w. occ. coral stone.
	6	60-70			60"				Limestone, mod ind, some poorly ind, sandy, fossil, some gastropod shell fr. Lowis sample, drilled med
	7	70-80			0"				Drilled soft
		Eot @ 80							Refusal @ good rock @ 65' (?)

Geologist

HYDROLOGY AND GEOLOGY OF A PROPOSED NEW WELL FIELD SITE IN SOUTH LEE COUNTY, FLORIDA

PREPARED FOR

LEE COUNTY

MARCH 1978

POST, BUCKLEY, SCHUH & JERNIGAN, INC.
FORT MYERS, FLORIDA
MISSIMER AND ASSOCIATES, INC.
CAPE CORAL, FLORIDA

HYDROLOGY AND GEOLOGY OF A PROPOSED NEW WELL FIELD SITE IN SOUTH LEE COUNTY, FLORIDA

Prepared For

LEE COUNTY, FLORIDA

By

POST, BUCKLEY, SCHUH & JERNIGAN, INC.
Consulting Engineers and Planners
2180 West First Street
Suite 303
Fort Myers, Florida 33901

AND

MISSIMER AND ASSOCIATES, INC.
2500 Del Prado Boulevard
Suite B
Cape Coral, Florida 33901

March 1978

058-031.00

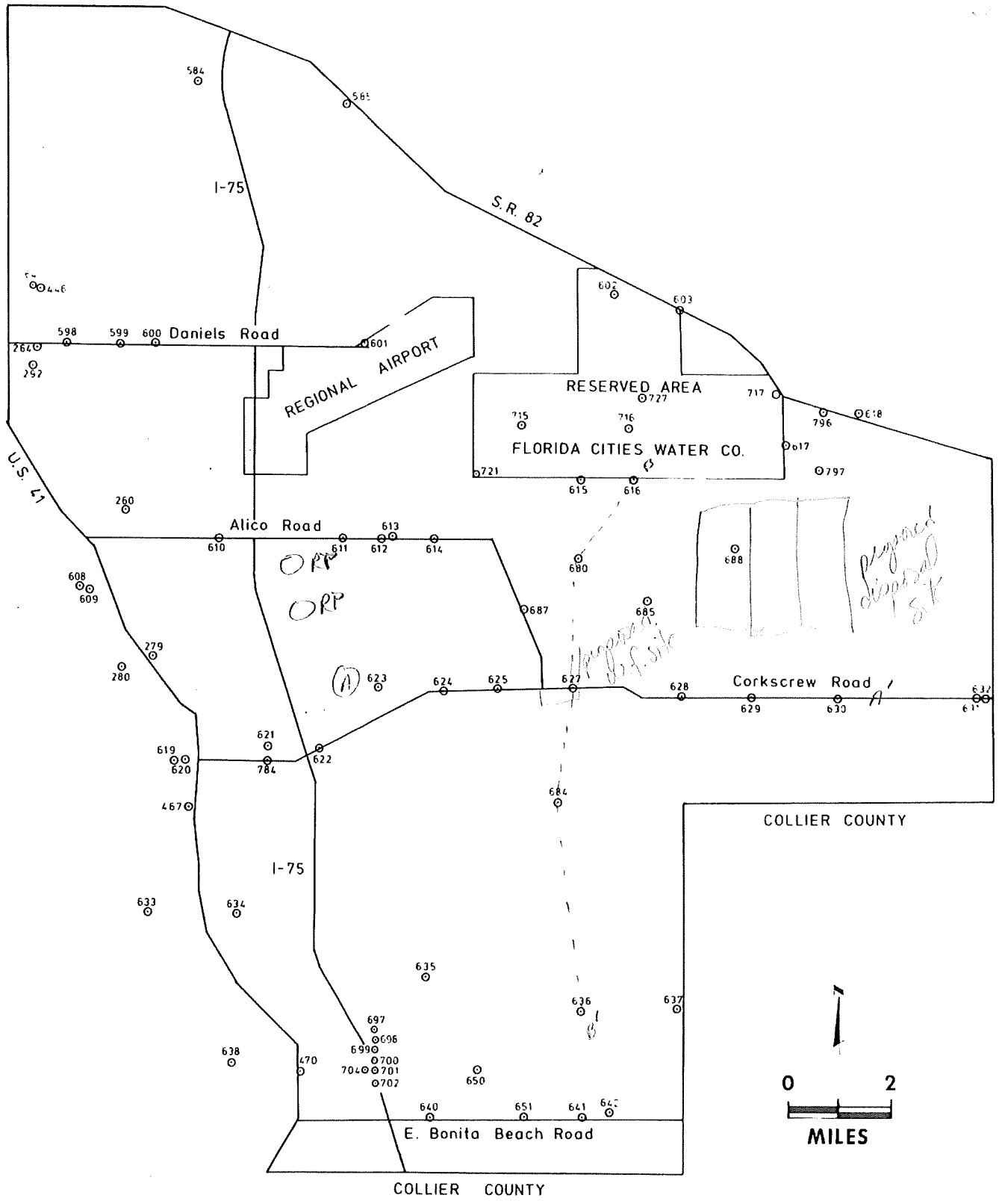
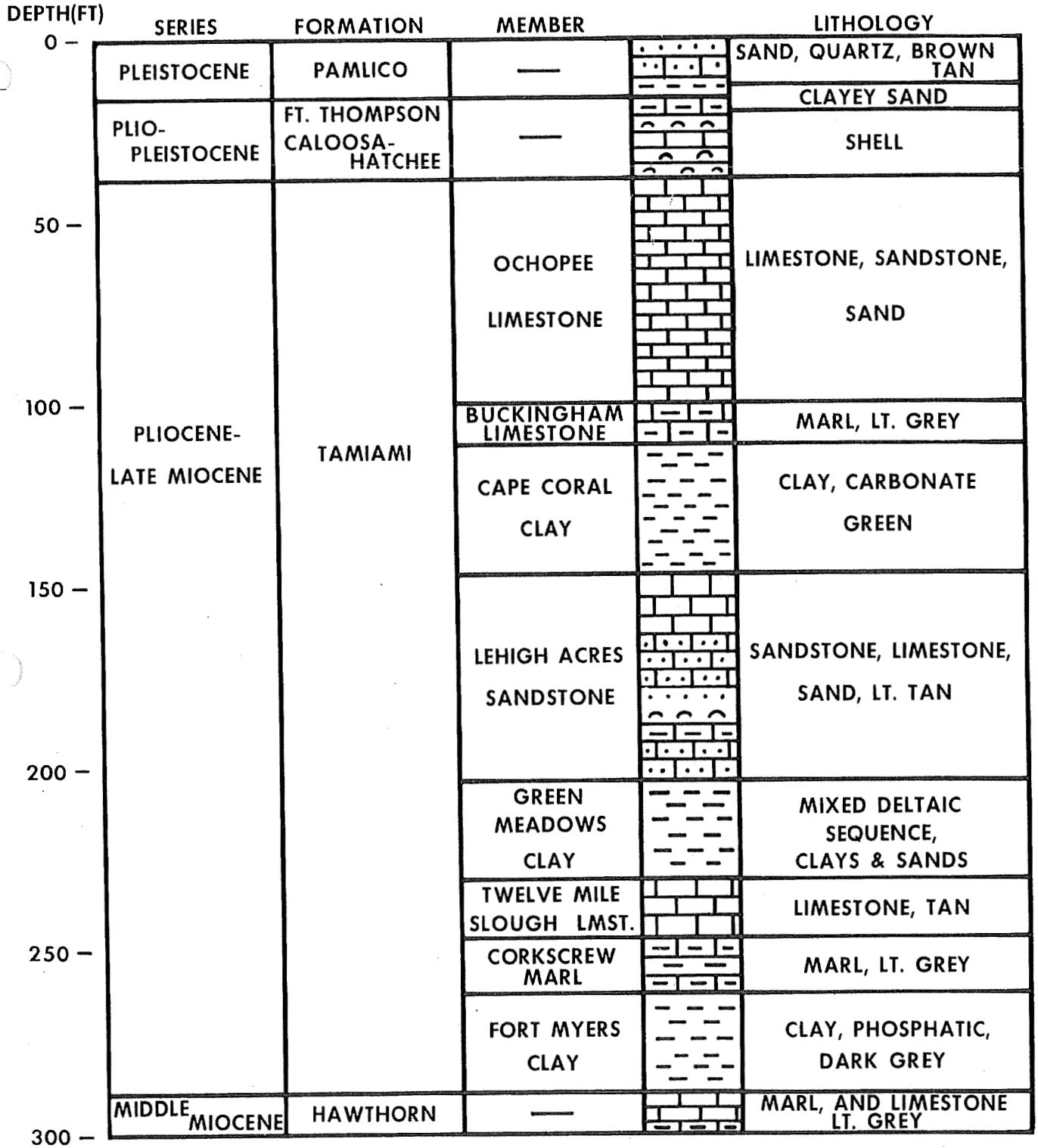


FIGURE 3 MAP OF SOUTH LEE COUNTY SHOWING THE LOCATION OF TEST HOLES AND WELLS USED IN THE PRELIMINARY ANALYSIS



1. DEPTHS VARY CONSIDERABLY WITH LOCAL.
2. INFORMAL MEMBER NAMES USED FOR DISCUSSION.

FIGURE 4 GENERALIZED GEOLOGY OF SOUTH LEE COUNTY(FROM MISSIMER, 1978).

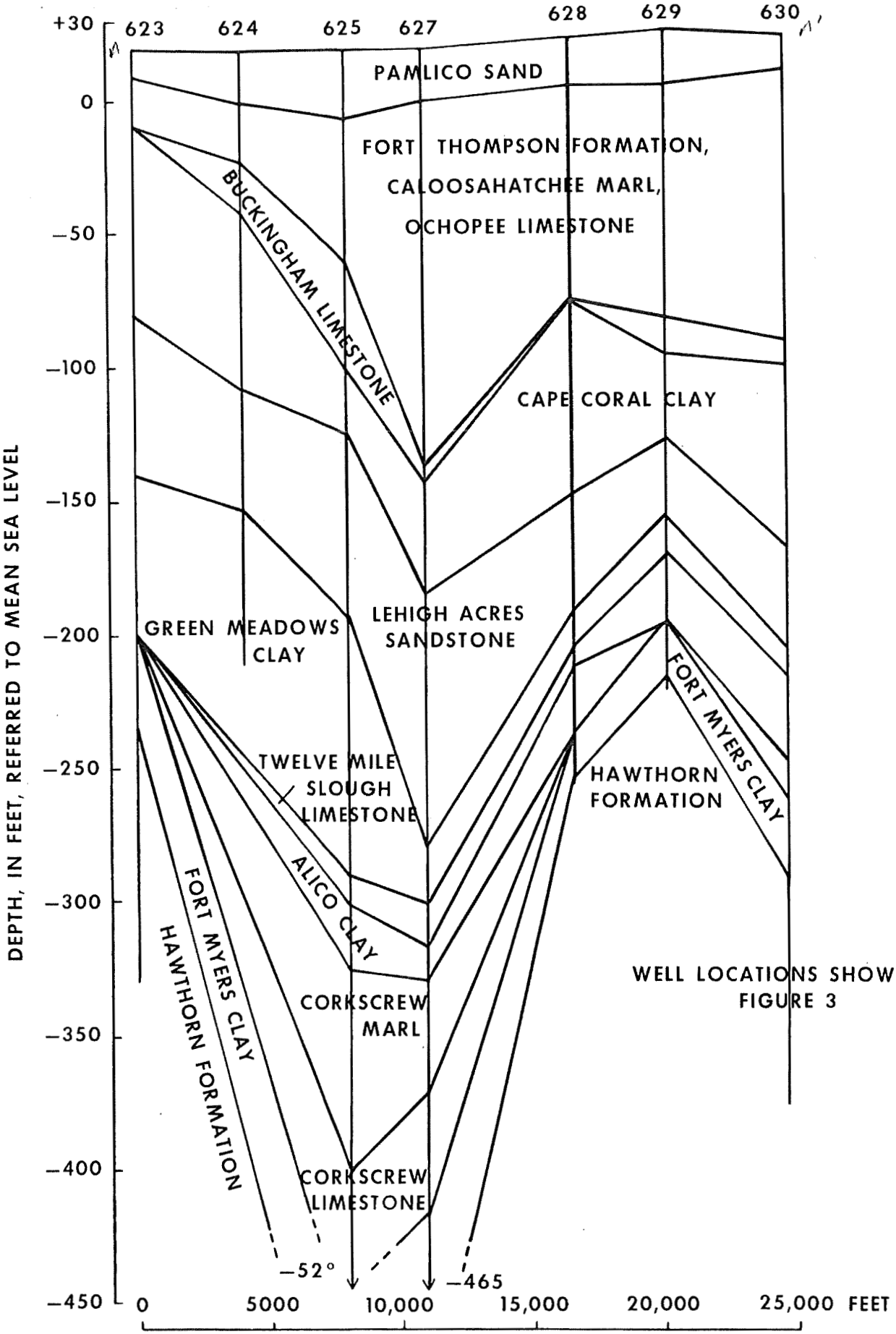


FIGURE 5 GEOLOGIC CROSS-SECTION A-A' LOCATED WEST TO EAST ACROSS CORKSCREW ROAD IN SOUTH LEE COUNTY.

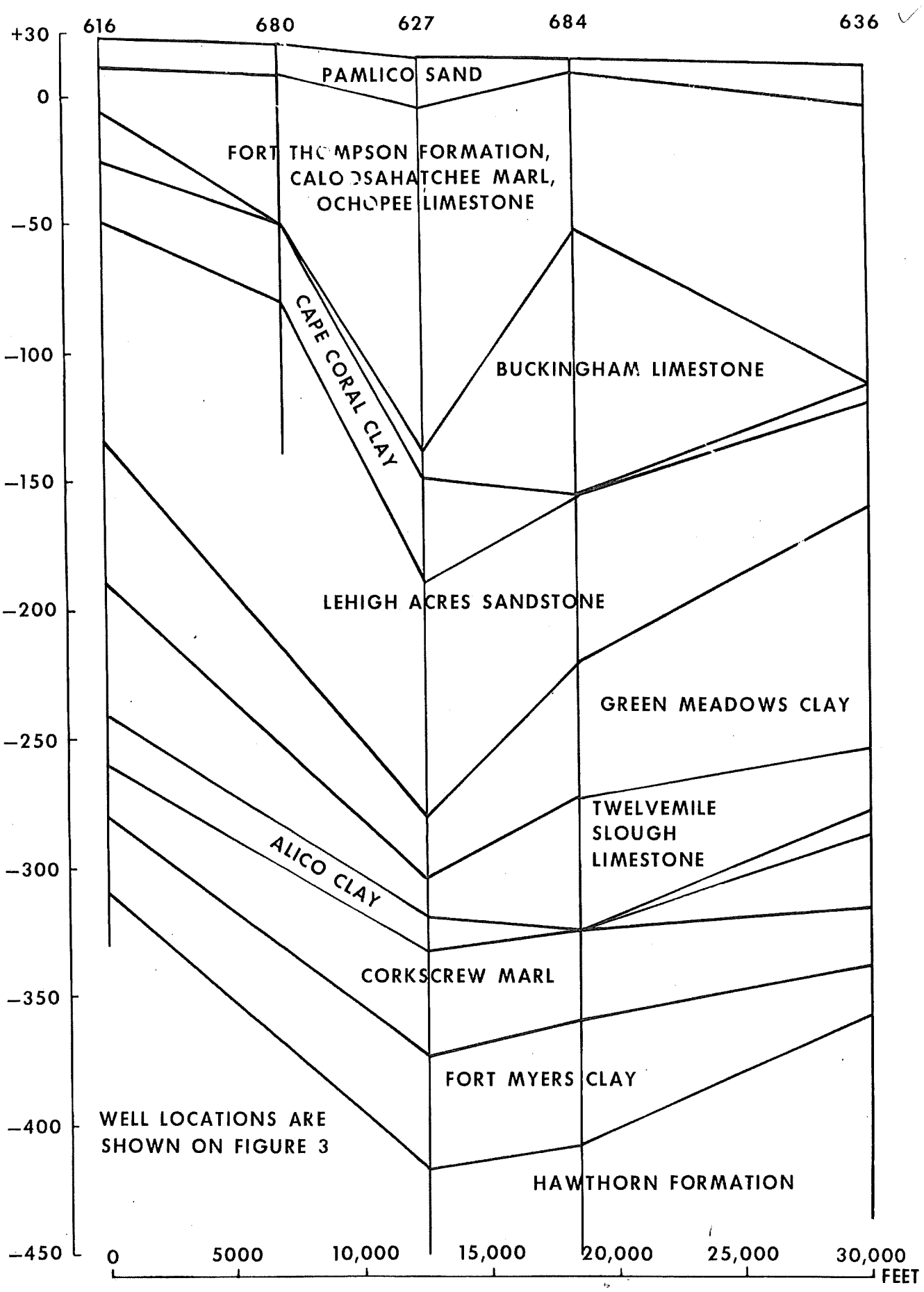


FIGURE 6 GEOLOGIC CROSS-SECTION B-B' LOCATED NORTH TO SOUTH ACROSS THE PROJECT AREA.

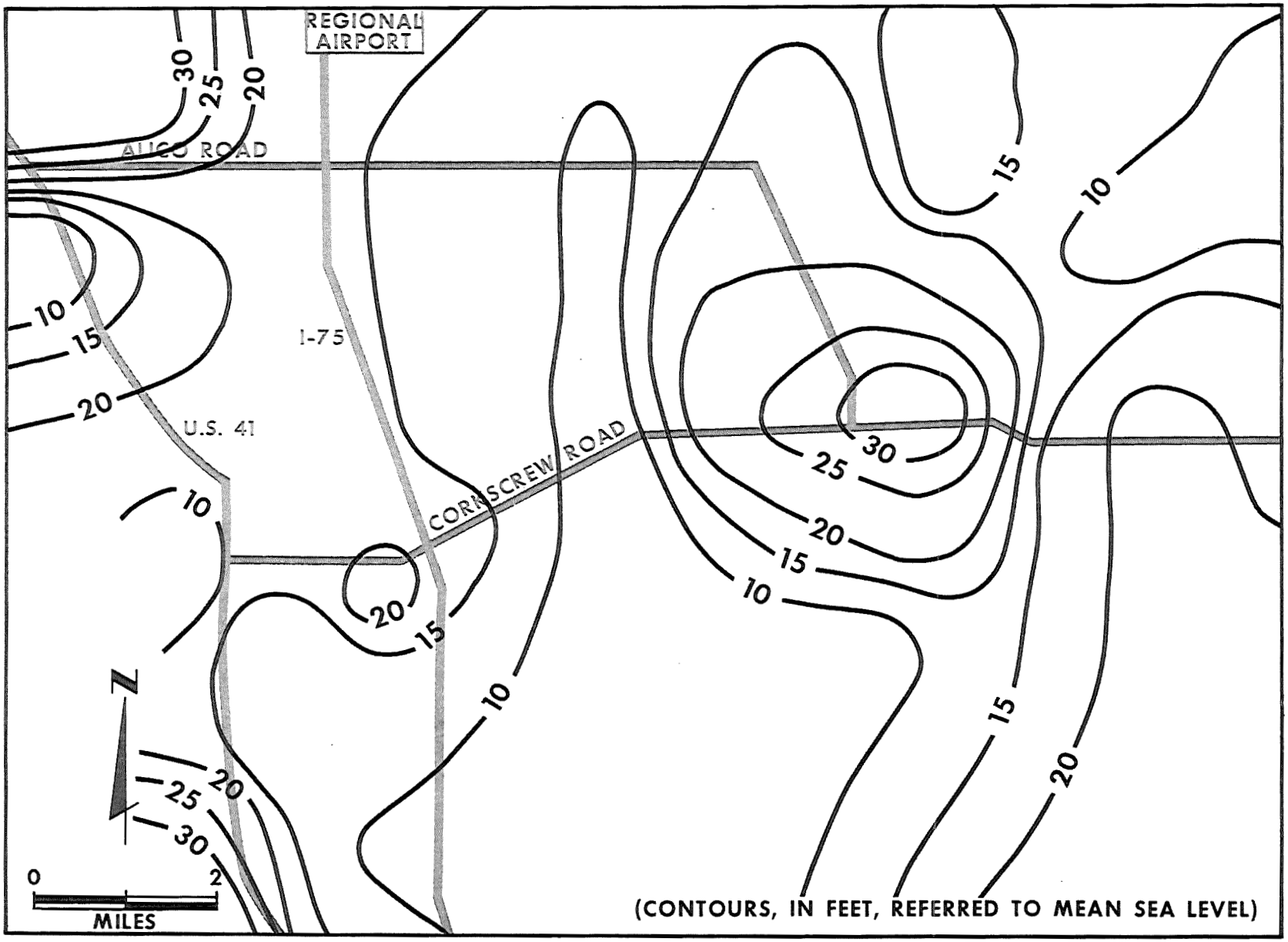


FIGURE 7 ISOPACH MAP SHOWING THE THICKNESS OF UNCONSOLIDATED SEDIMENTS IN SOUTH LEE COUNTY

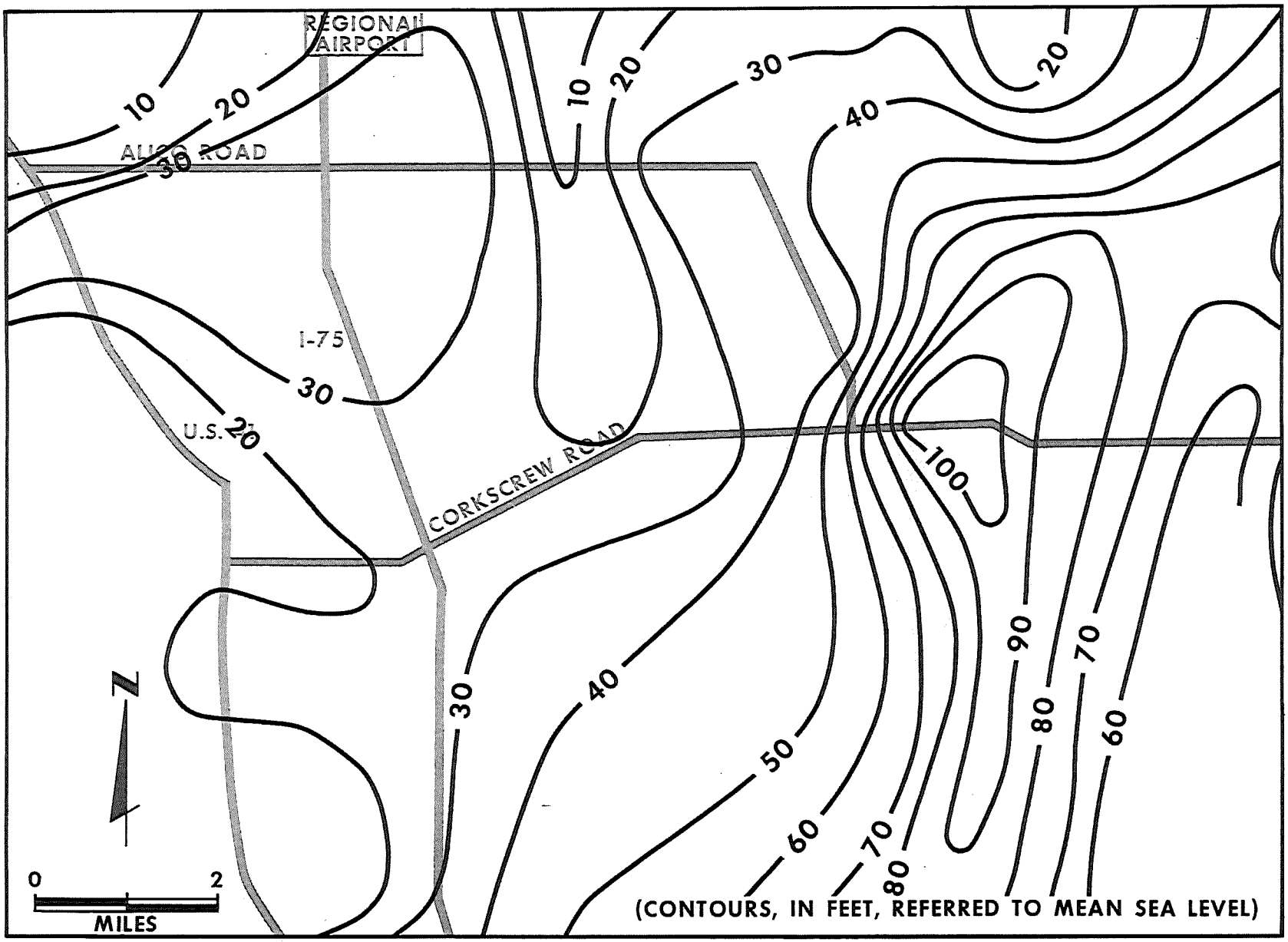


FIGURE 8 ISOPACH MAP SHOWING THE THICKNESS OF THE OCHOPEE LIMESTONE IN SOUTH LEE COUNTY

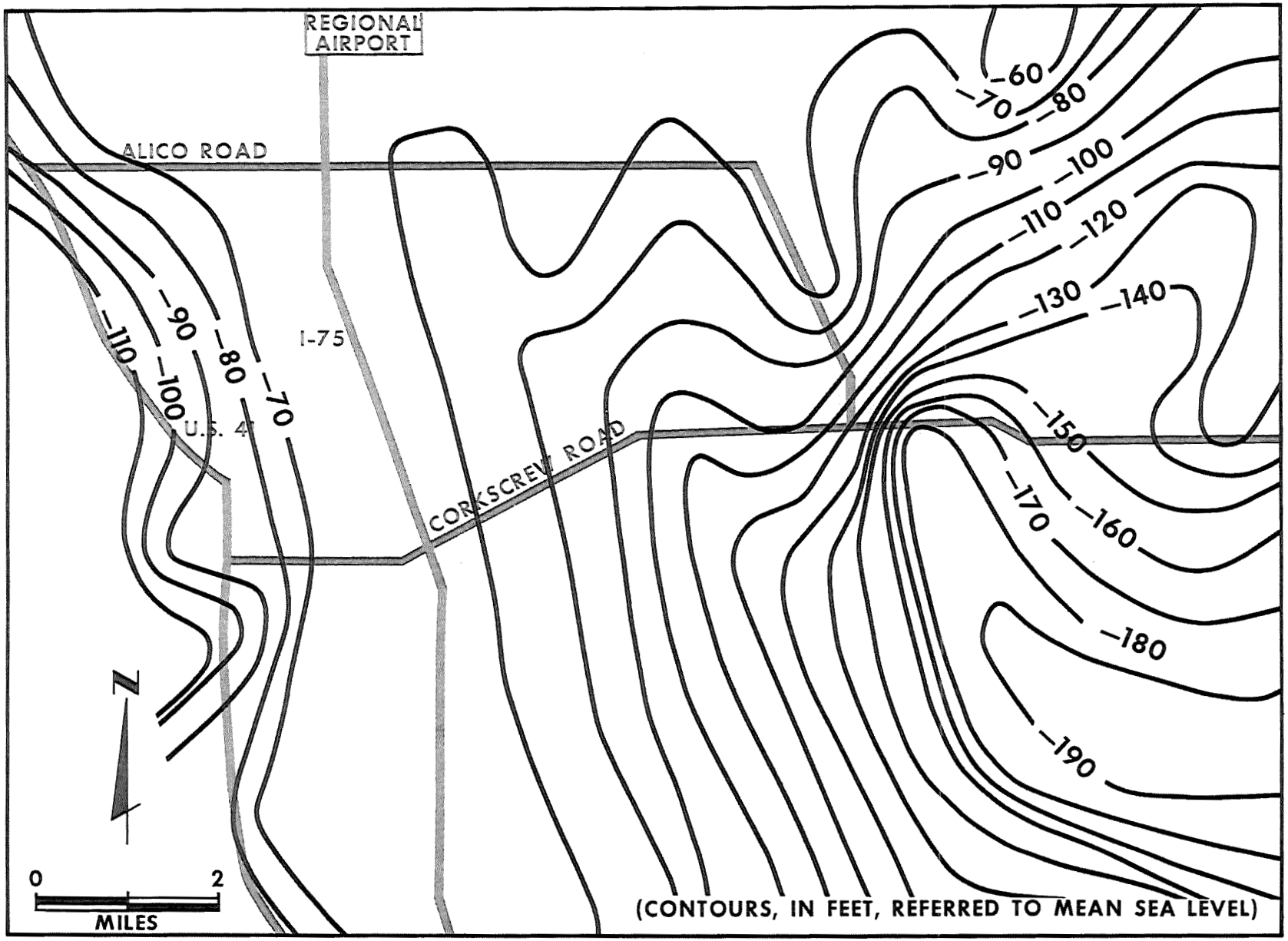


FIGURE 9 MAP SHOWING THE DEPTH TO THE TOP OF THE LEHIGH ACRES SANDSTONE IN SOUTH LEE COUNTY

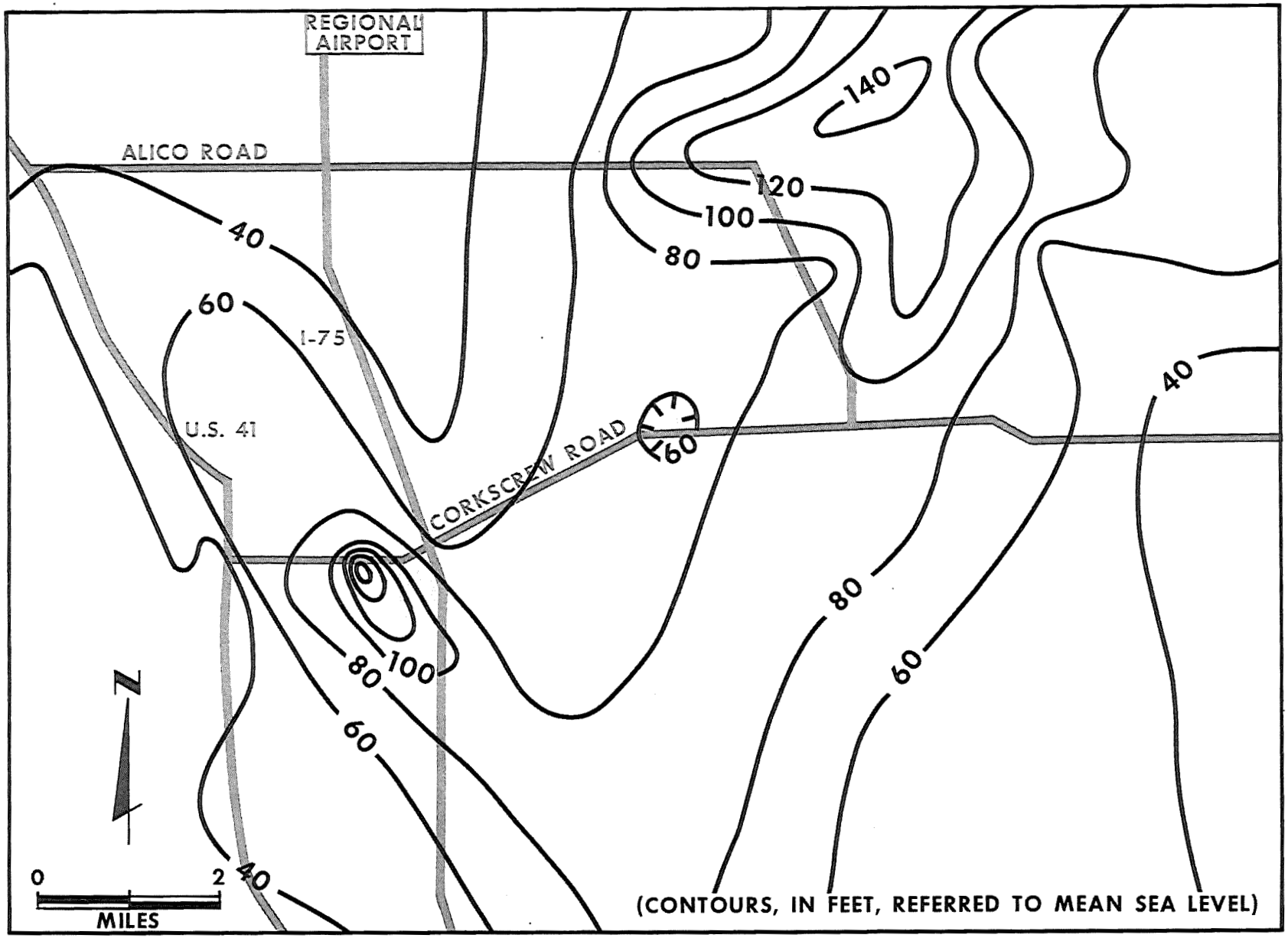


FIGURE 10 ISOPACH MAP SHOWING THE THICKNESS OF THE LEHIGH ACRES SANDSTONE IN SOUTH LEE COUNTY.

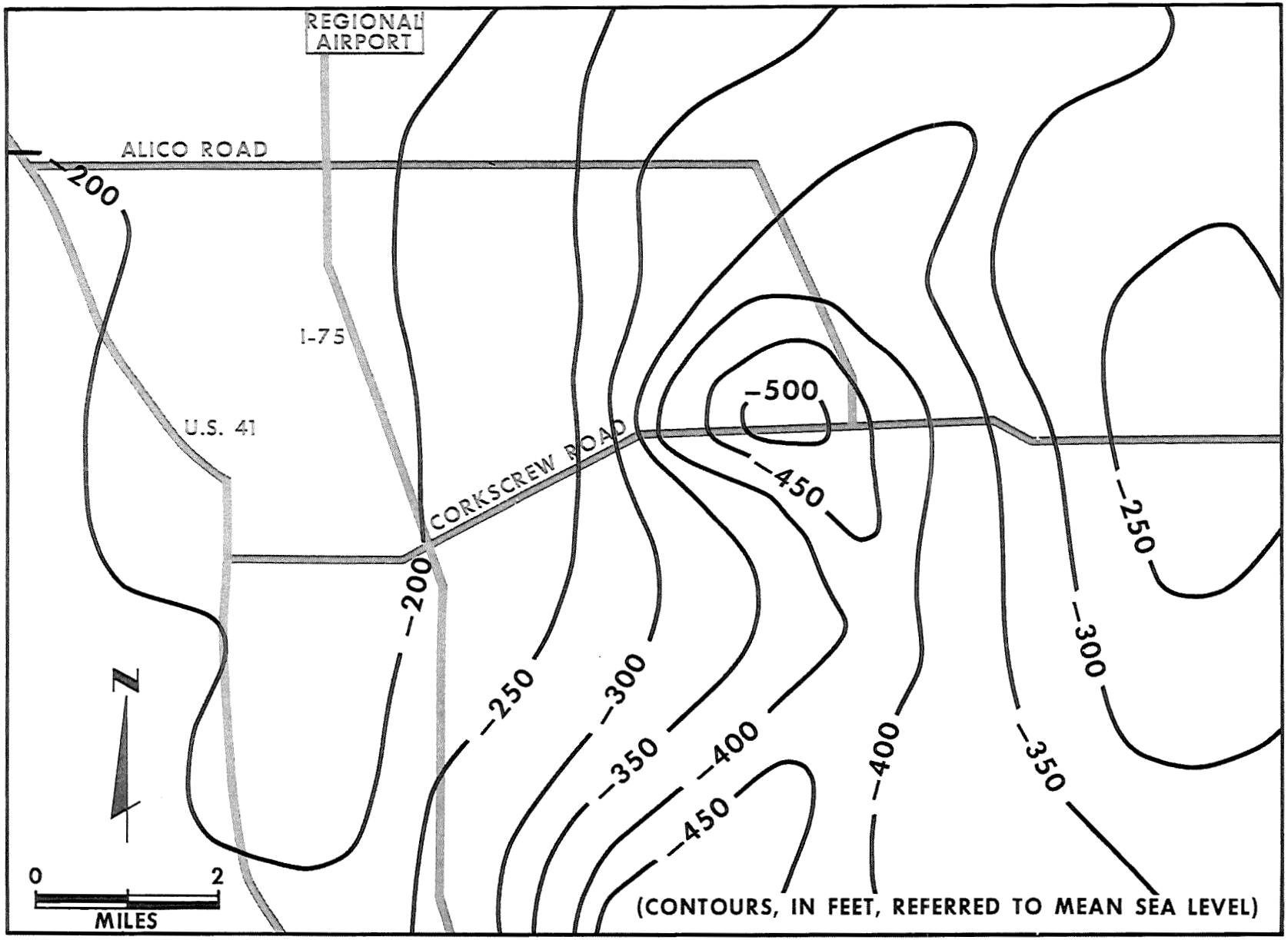


FIGURE 11 MAP SHOWING THE DEPTH TO THE TOP OF THE HAWTHORN FORMATION IN SOUTH LEE COUNTY

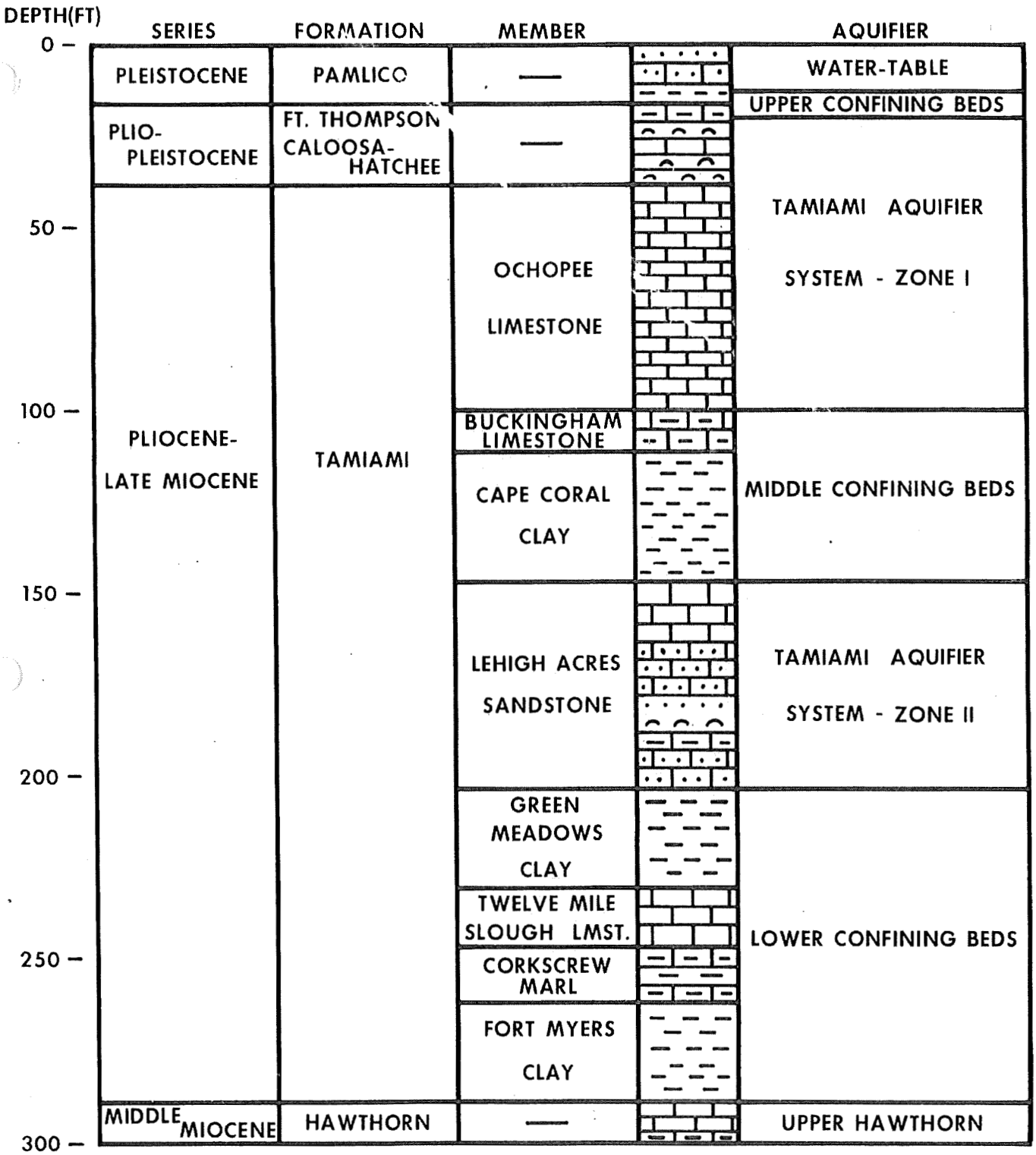
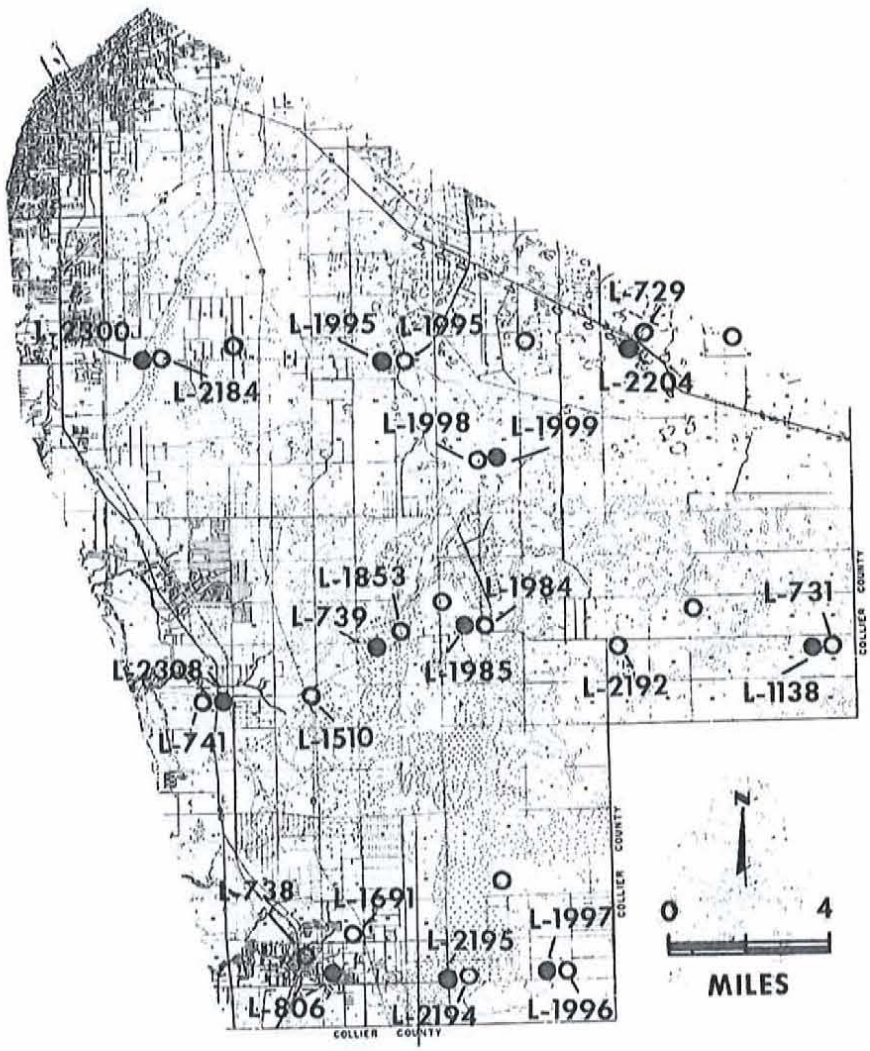


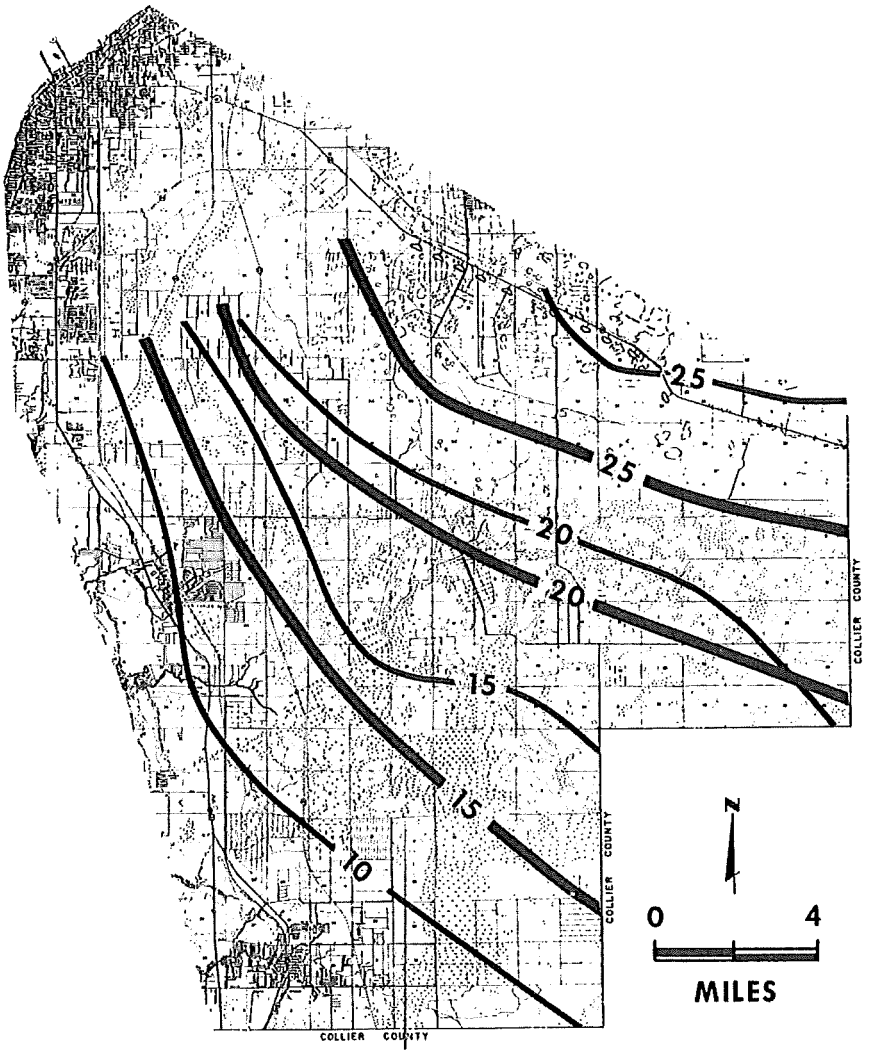
FIGURE 12 DIAGRAM SHOWING THE STRATIGRAPHIC POSITIONS OF THE FRESHWATER AQUIFERS OF SOUTH LEE COUNTY, FLORIDA.



LEGEND

- ● WATER-TABLE AQUIFER
- ○ 'SANDSTONE' AQUIFER

FIGURE 13 MAP SHOWING THE LOCATION OF U.S. GEOLOGICAL SURVEY OBSERVATION WELLS IN SOUTH LEE COUNTY



LEGEND

AUGUST 31, 1976

APRIL 28, 1977

CONTOURS, IN FEET, REFERRED TO MEAN SEA LEVEL

FIGURE 14 MAP SHOWING THE GENERAL POSITION OF THE WATER TABLE IN SOUTH LEE COUNTY ON AUGUST 31, 1976 AND APRIL 28, 1977



FIGURE 16 MAP SHOWING THE ESTIMATED VOLUME OF WATER STORED WITHIN THE WATER TABLE AQUIFER IN A PORTION OF SOUTH LEE COUNTY



FIGURE 17 MAP SHOWING THE ESTIMATED VOLUME OF WATER STORED WITHIN TAMIAMI AQUIFER SYSTEM – ZONE 1



FIGURE 18 MAP SHOWING THE ESTIMATED VOLUME OF WATER STORED WITH THE TAMIAMI AQUIFER SYSTEM – ZONE II IN A PORTION OF SOUTH LEE COUNTY

RICHARD W. BASS ASSOCIATES, INC.
PLANNERS • ECONOMISTS • APPRAISERS

SUPPLEMENT TO

PROXIMITY STUDY

AN EVALUATION ASSIGNMENT

ECONOMIC FEASIBILITY ANALYSIS

SCHWAB 640 MINE
LEE COUNTY, FLORIDA
PLANNED DEVELOPMENT/DCI
Case Number DCI2001-00002

SUBMITTED TO
Russell Schropp, Esquire
Henderson, Franklin, Starnes, & Holt, P.A.
1715 Monroe Street
Ft. Myers, Florida 33901

DATE
PROXIMITY STUDY - DECEMBER 19, 2001
ECONOMIC FEASIBILITY ANALYSIS - FEBRUARY 20, 2002

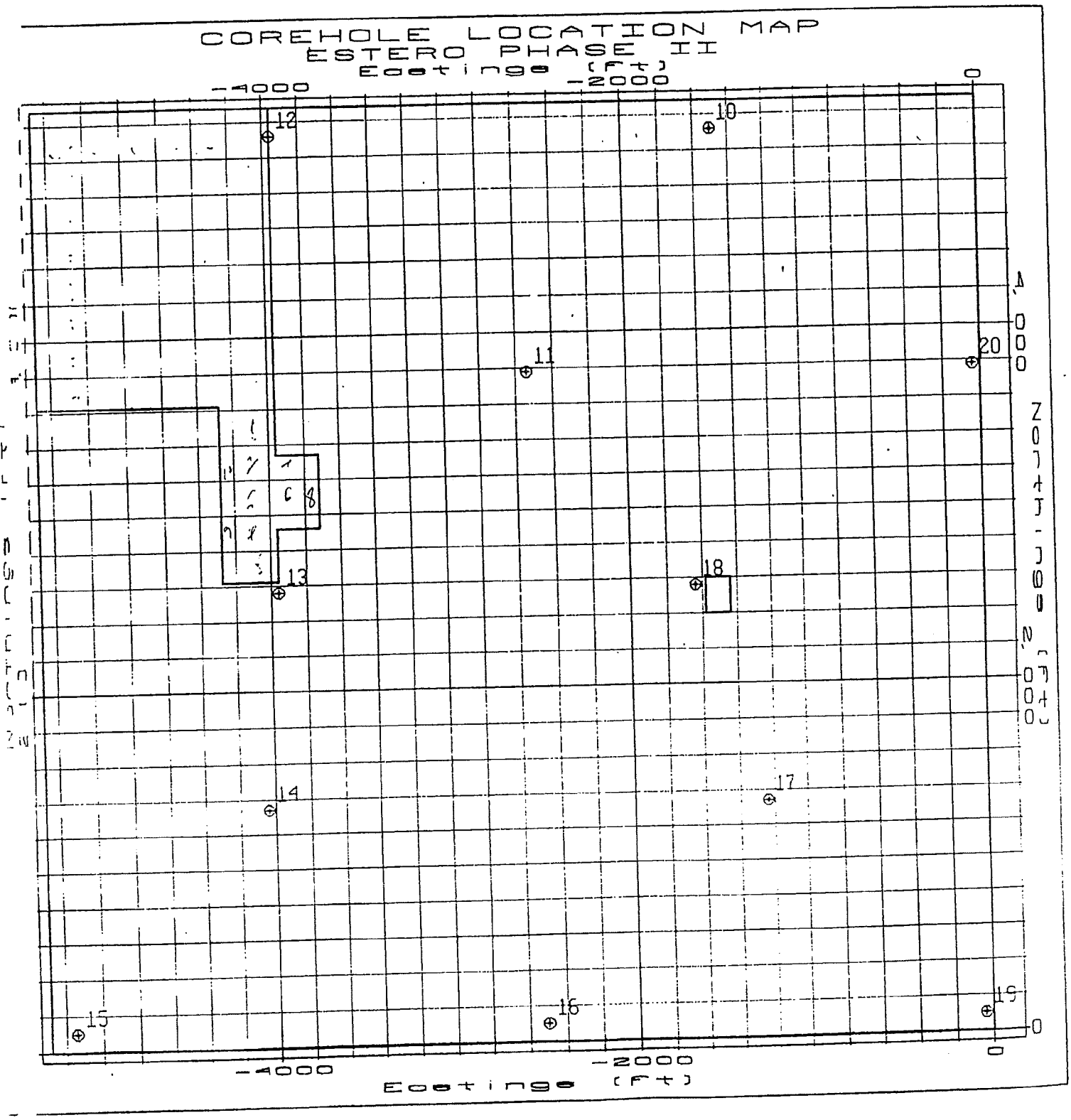
File #01-219

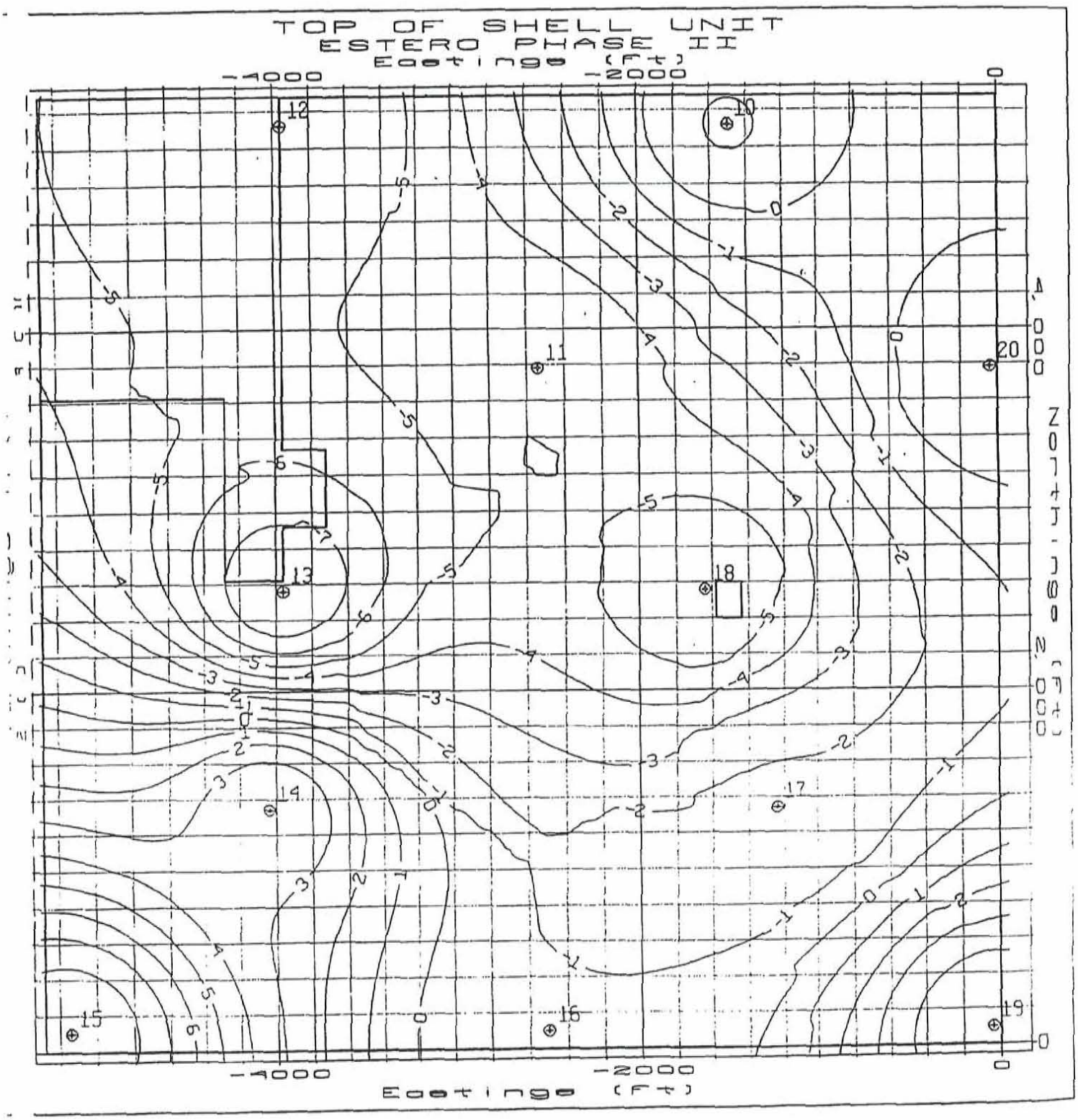
PREPARED BY
RICHARD W. BASS ASSOCIATES INC.

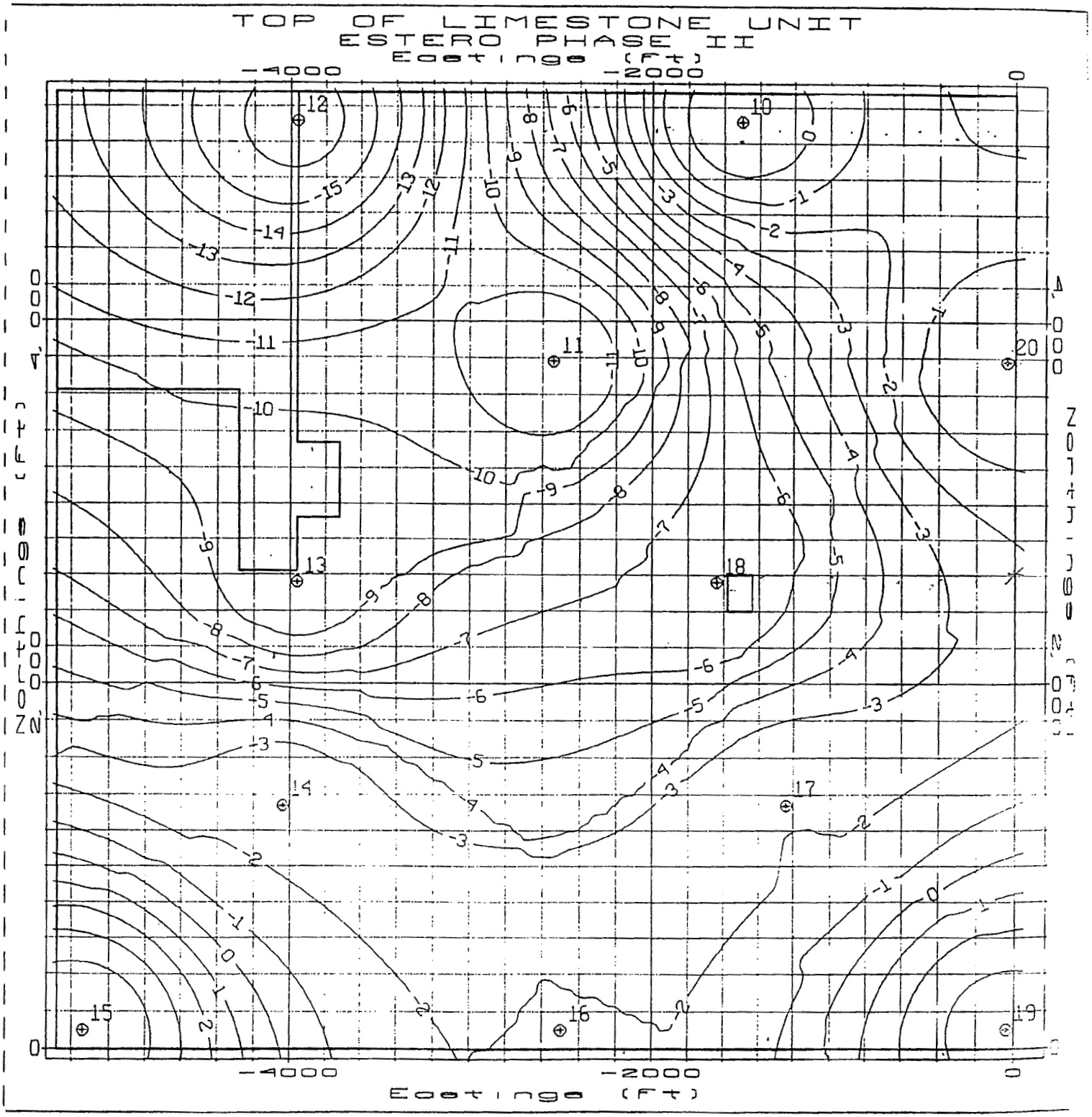
1953 Eighth Street • Sarasota, Florida 34236-4226 • [941] 954-7553 • Fax: [941] 952-9440 • Licensed Real Estate Broker

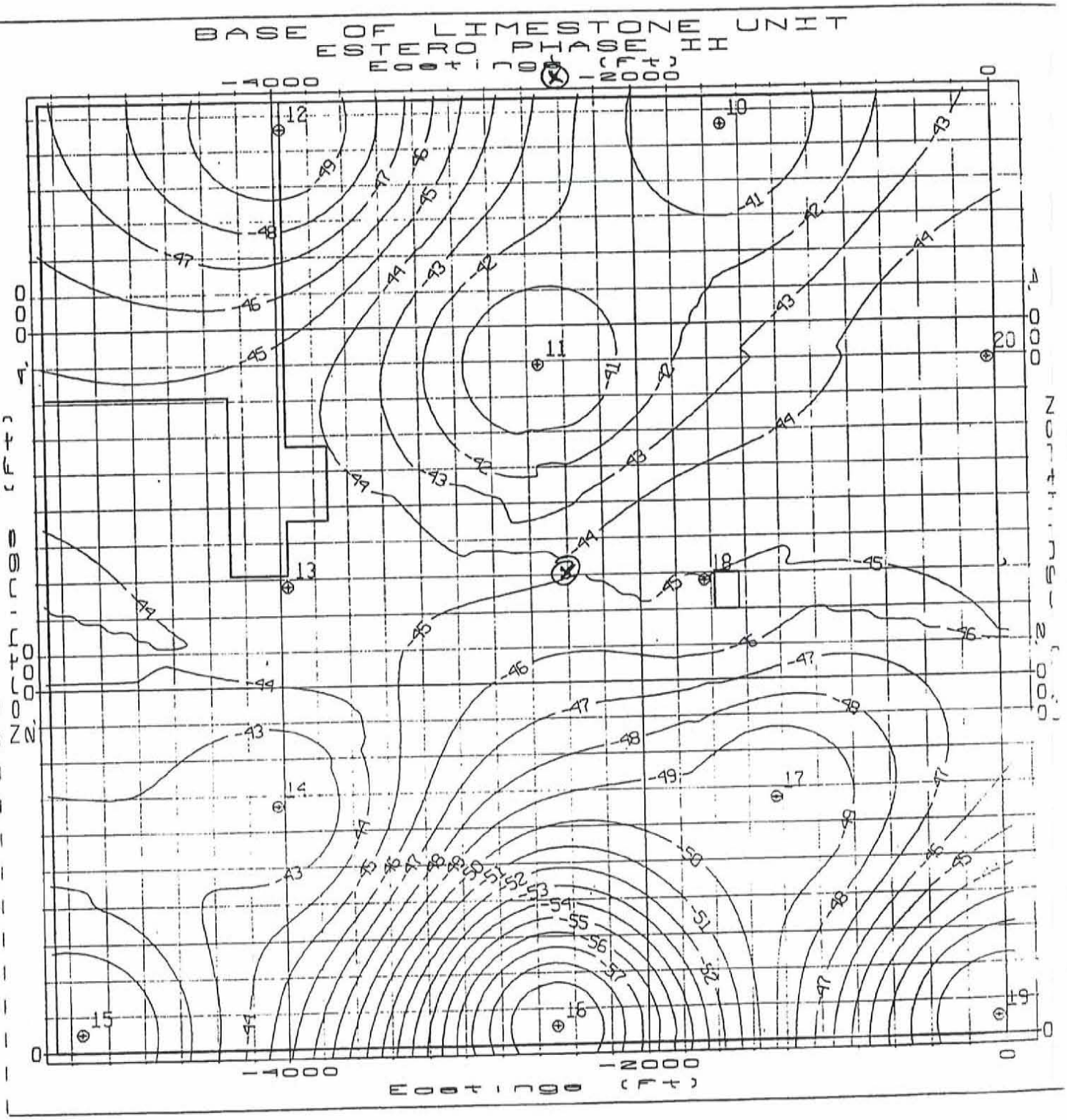
Data Set Used for Modelling

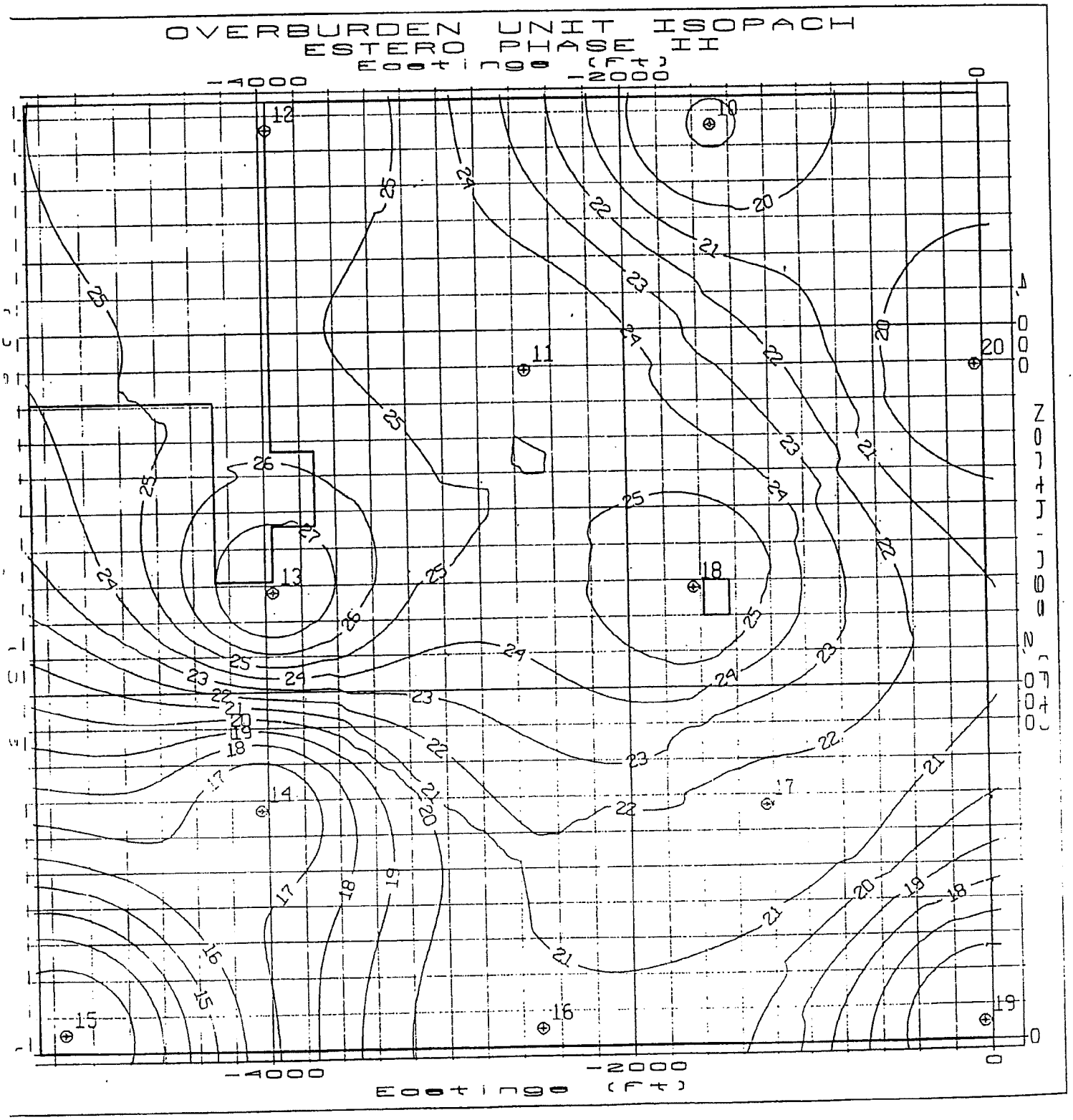
Hole ID	Easting (ft)	Northing (ft)	Land Surface Elevation (ft-msl)	Top of Shell Depth (ft-bls)	Top of Limestone Depth (ft-bls)	Base of Limestone Depth (ft-bls)	Top of Shell Elevation (ft-msl)	Top of Limestone Elevation (ft-msl)	Base of Limestone Elevation (ft-msl)
10	-1500	5120	20	18.9	19	60	1.1	1	-40
11	-2540	3780	20	25	32	60	-5	-12	-40
12	-3960	5120	20	28	36.5	70	-8	-16.5	-50
13	-3960	2560	20	28	30	65	-8	-10	-45
14	-4040	1340	20	16	22	62	4	-2	-42
15	-5140	100	20	11	15	60	9	5	-40
16	-2500	100	20	21	22	80	-1	-2	-60
17	-1240	1340	20	21.9	22	70	-1.9	-2	-50
18	-1640	2560	20	26	27	65	-6	-7	-45
19	-40	100	20	15	16.5	60	5	3.5	-40
20	-40	3780	20	19	20	65	1	0	-45

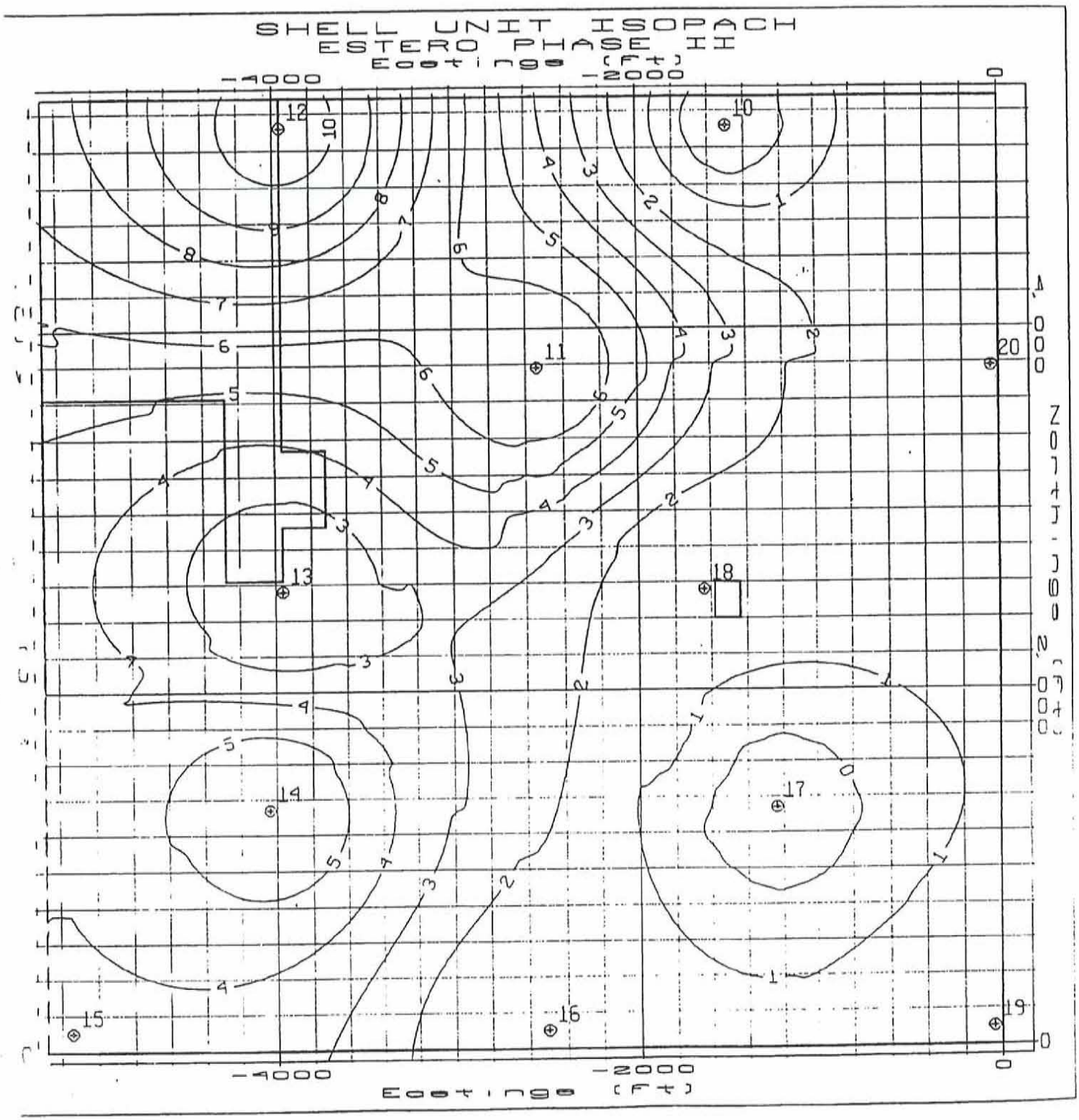

COREHOLE LOCATION MAP
ESTERO PHASE II
Eastings (Ft)
-4000
-2000
0
10
11
12
13
14
15
16
17
18
19
20
4,000
2,000
0
Northings (Ft)
Eastings (Ft)

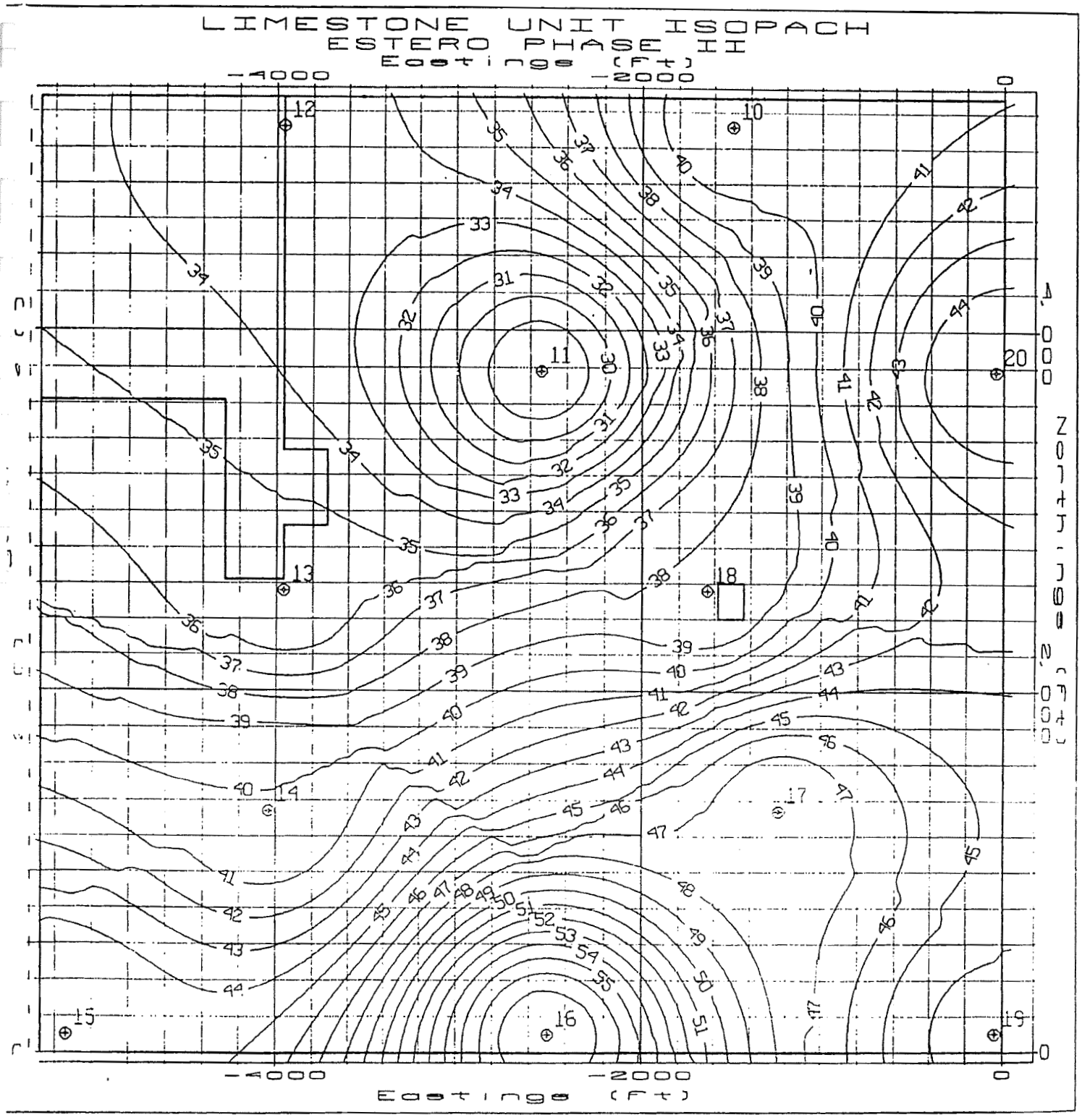

TOP OF SHELL UNIT
ESTERO PHASE II
Eastings (Ft)
-4000
-2000
0
4,000
2,000
0
Northings (Ft)
Eastings (Ft)
10
11
12
13
14
15
16
17
18
19
20

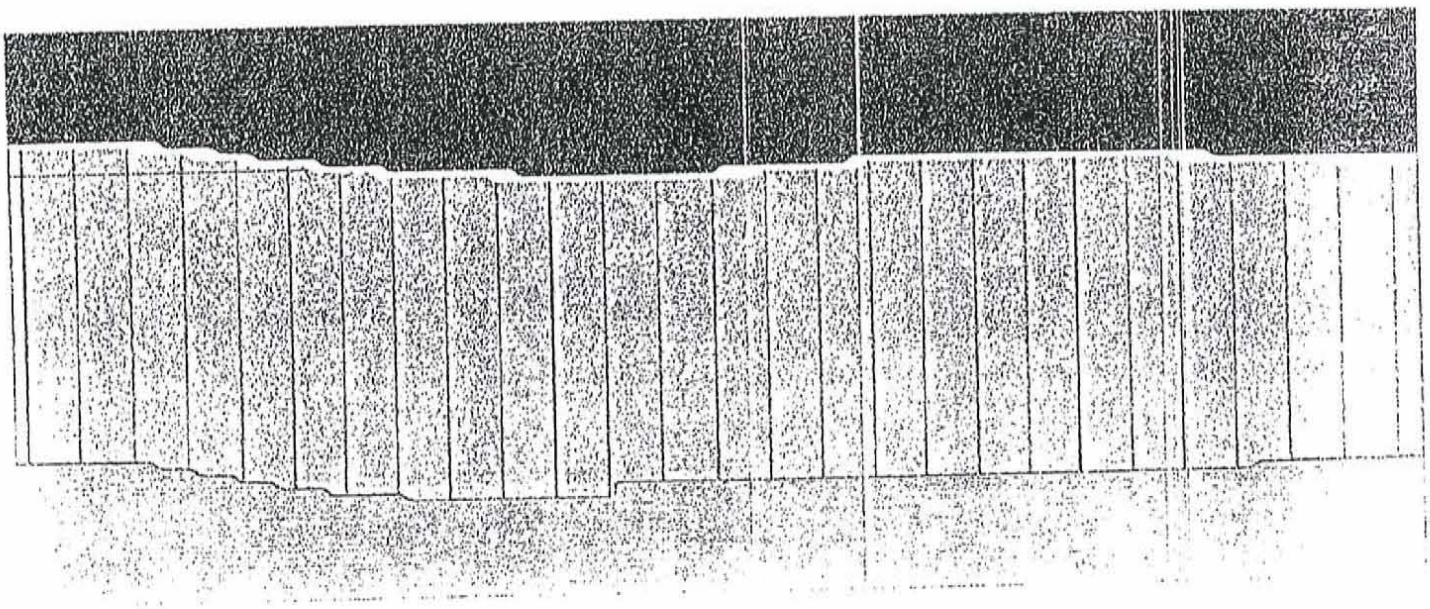

TOP OF LIMESTONE UNIT
ESTERO PHASE II
Eastings (Ft)
-4000
-2000
0
4,000
2,000
0
Northings (Ft)
Eastings (Ft)
10
11
12
13
14
15
16
17
18
19
20

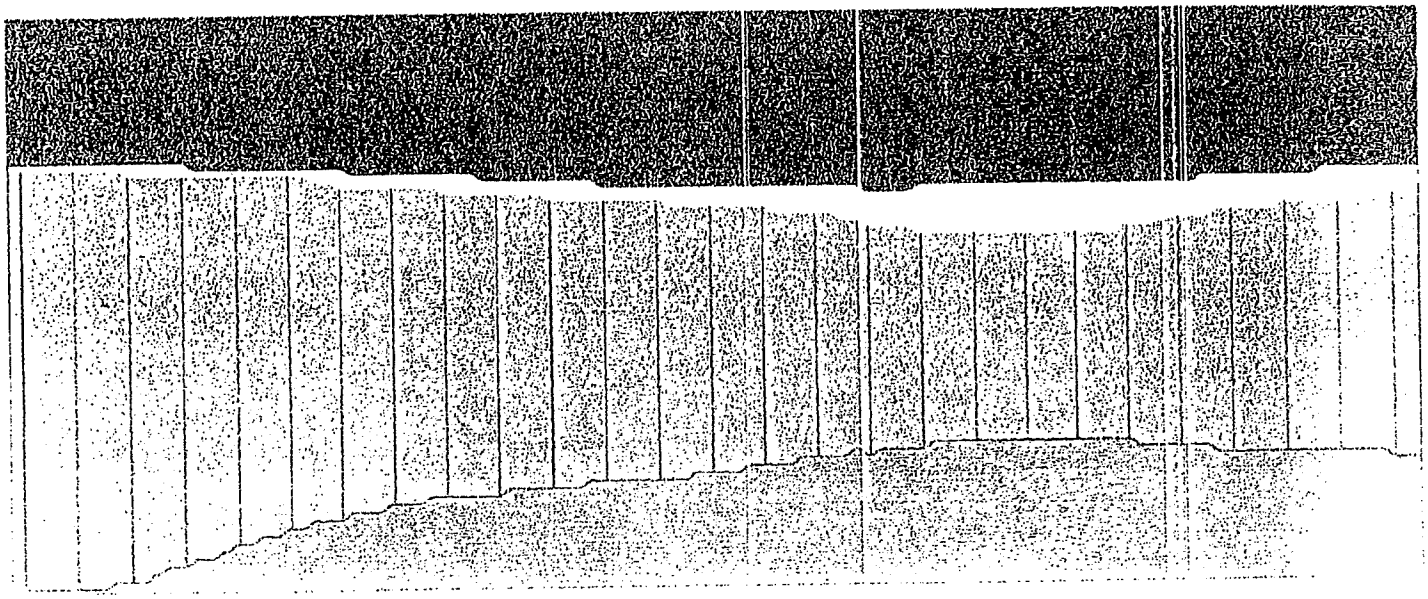

BASE OF LIMESTONE UNIT
ESTERO PHASE II
Eastings (Ft)
-4000
-2000
0
4,000
0
Northings (Ft)
Eastings (Ft)
10
11
12
13
14
15
16
17
18
19
20

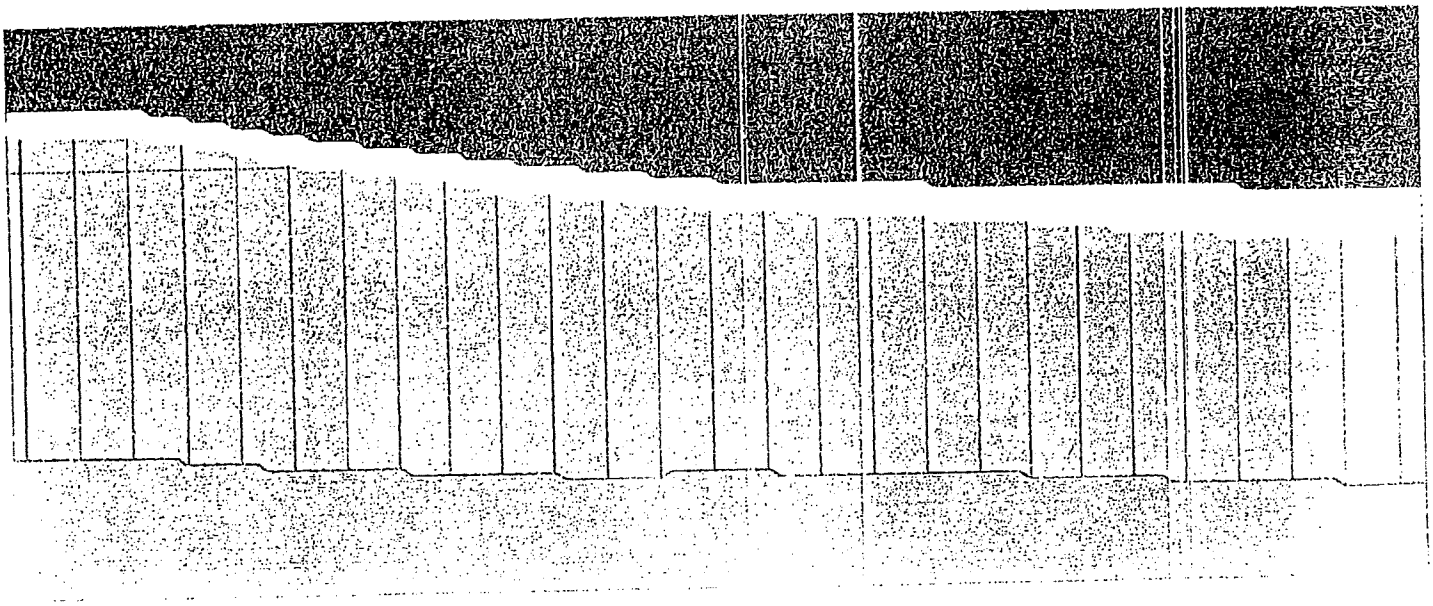

OVERBURDEN UNIT ISOPACH
ESTERO PHASE II
Eastings (ft)
-4000
-2000
0
4,000
2,000
0
Northings (ft)
Eastings (ft)
10
11
12
13
14
15
16
17
18
19
20

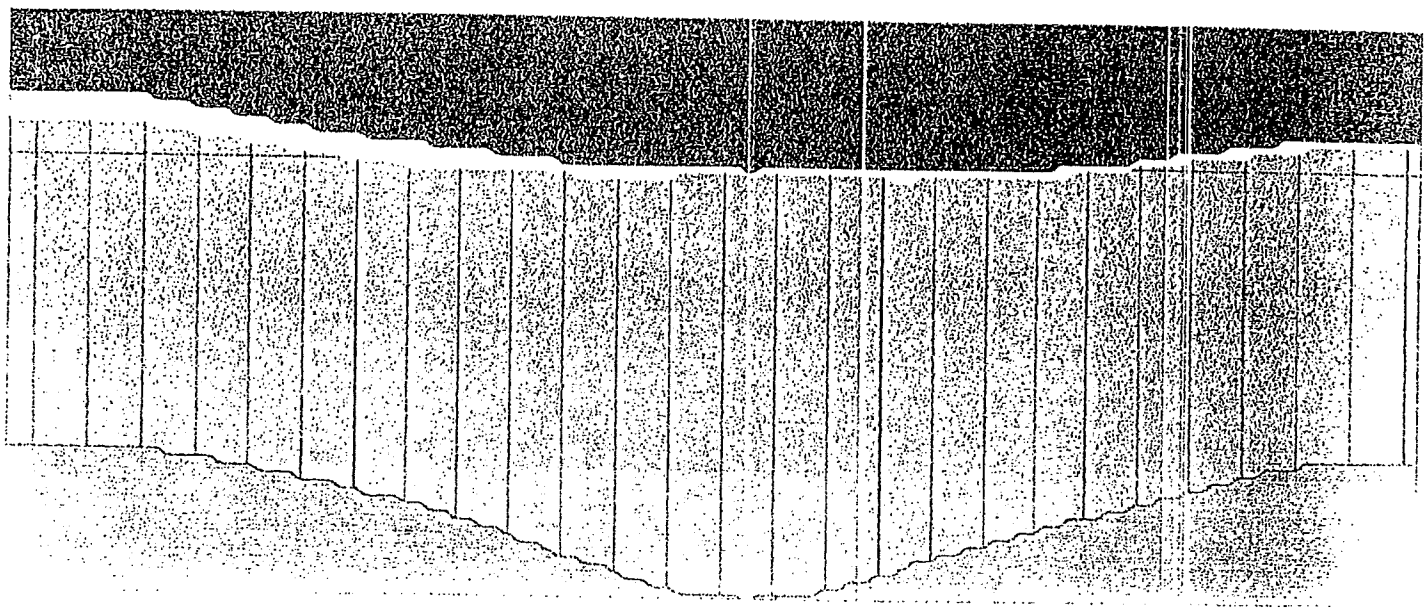

SHELL UNIT ISOPACH
ESTERO PHASE HH
Eastings (Ft)
-4000
-2000
0
4,000
2,000
0
Northings (Ft)
Eastings (Ft)
10
11
12
13
14
15
16
17
18
19
20

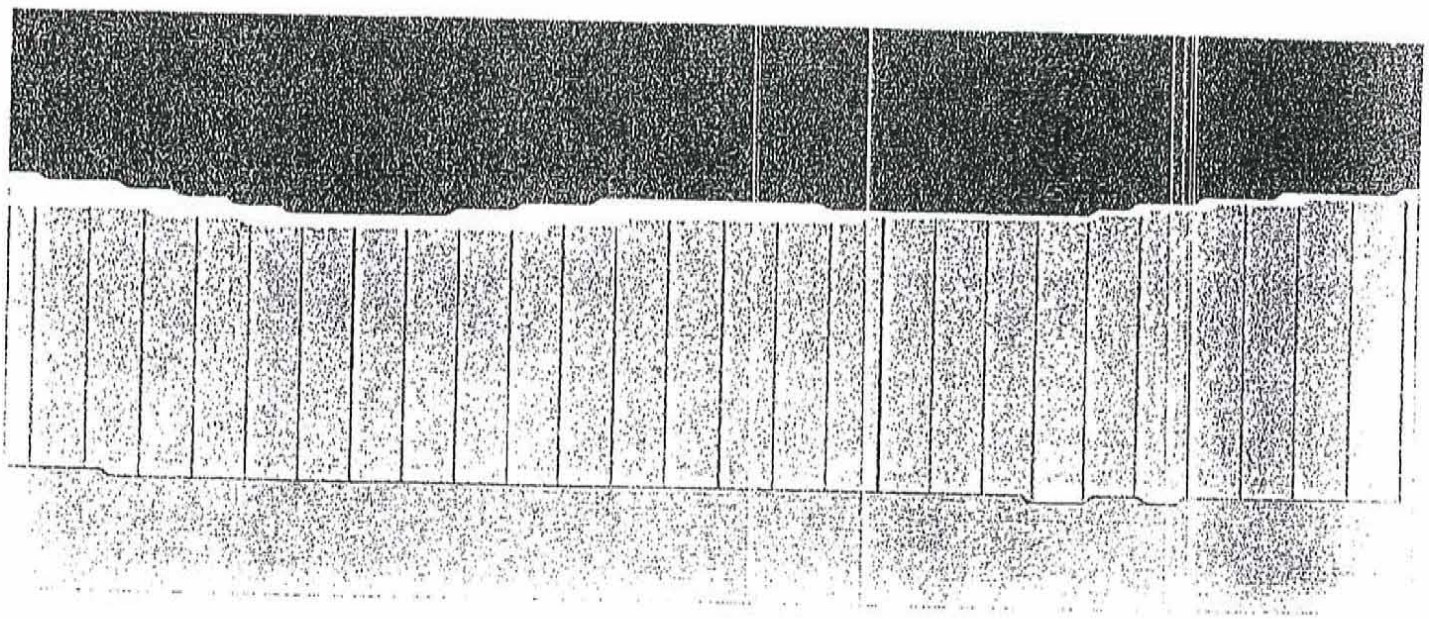

LIMESTONE UNIT ISOPACH
ESTERO PHASE II
Eastings (Ft)
-4000
-2000
0
4,000
2,000
0
Northings (Ft)
Eastings (Ft)
10
11
12
13
14
15
16
17
18
19
20













Technical Memorandum

To:	Mr. Brian C. Farrar, BCF Management Group
From:	Brian K. Barnes and W. Kirk Martin, P.G., Water Science Associates
Date	May 23, 2016
Re:	Water Budget for Pepperland Ranch

INTRODUCTION

Water Science Associates prepared a water budget for the Pepperland Ranch project considering three scenarios: Natural Condition (Scenario 1), Existing Agricultural Conditions (Scenario 2), and Proposed Residential Development and Preserve (Scenario 3).

A water budget is used to calculate water inflows and outflows to a finite system or area. The basic equation solves for storage or recharge in length/time units. The following equation is used:

$$\Delta S = P - E - ET - SRO - PW$$

Where

ΔS = *change in storage (inches)*

P = *precipitation (inches)*

E = *Evaporation (inches)*

ET = *Evapotranspiration (inches)*

SRO = *Surface runoff (inches)*

PW = *Well withdrawals (inches)*

The primary parameters of the water budget are summarized below.

This approach simplifies the overall water budget analysis by setting groundwater and surface water flow coming into the property equal to groundwater and surface water flow leaving the property for all development conditions. This is a reasonable assumption given the three land use scenarios and it allows the analysis to focus on the more critical changes to land cover and water use. We have also set runoff to be equal for all conditions, which creates a more conservative analysis for the residential development / preserve condition where water retention lakes are proposed to discharge to the bermed flowway preserve.

PRECIPITATION

According to the Florida Climate Center Office of the State Climatologist, the average precipitation from the Fort Myers data station is 55.93 inches per year. Refer to Exhibit A for supporting information. We included monthly average rainfall data in the water budget.

EVAPORATION

Evaporation is the process of water converting to liquid vapor. To calculate evaporation at a given water body (Eo), a measured evaporation rate is needed (Pan Evaporation, or Ep) and a conversion factor (Kp) that is for the season, location and pan that was used for Pan Evaporation measurements.

$$Eo = Kp * Ep$$

Where

Eo = lake evaporation

Kp = the evaporation coefficient

Ep = pan evaporation

Pan evaporation data was obtained from the South Florida Water Management District (SFWMD) DBHYDRO database for the Lehigh_E station. Monthly Pan Evaporation rates from this station for the years 1979 to 1989 were used in the water budget. The average annual pan evaporation rate is 65.9 inches. The Kp coefficient in Florida can range between 0.64 and 0.91, with an average for Florida sites of 0.76 (Abtew, 1999). We used a conservative Kp value of 0.79 for lake evaporation. Refer to Table 1 for a summary of conversions used in the water budget.

Evaporation was not calculated for Scenario 1 since it was presumed that no lakes were present. However, Eo was calculated for the existing conditions (Scenario 2) and proposed development (Scenario 3). The Kp values were weighted based on percentage of lake coverage relative to the total project site.

EVAPOTRANSPIRATION

Evapotranspiration (ET) is the combined effect of evaporation from the land surface and transpiration from growing plants. The Potential Evapotranspiration was obtained from the SFWMD DBHYDRO database for Station FPWX, located about one mile south of the project site. The average annual potential ET is 52.4 inches/year. The potential ET is converted to estimated or calculated site ET by multiplying the potential ET with a crop coefficient (ETc).

$$ET_{actual} = ET_{potential} * ETc$$

Where

ET_{actual} = *Calculated site ET*

$ET_{potential}$ = *Potential ET*

ETc = crop coefficient

Crop coefficients from the SFWMD (Barnes and Tarboton, 2002) and is included in Exhibit A. These crop coefficients were used to estimate the average evapotranspiration in each scenario. It was necessary to make assumptions regarding the vegetative coverage in the various scenarios. The Etc values used in the water budget were normalized based on percentage of total land coverage.

Natural Conditions (Scenario 1) were presumed to consist of uplands, wetlands, and a slough, and no lakes. Assumptions of vegetative cover for natural pre-agriculture conditions (Scenario 1) were based on review of a 1958 aerial photograph and digitizing the former flowway and other wetland areas. Assumed vegetative coverage includes Ridge & Slough I, Forested Wetlands, and Forested Uplands. Current conditions (Scenario 2) considers the site as ditches (Water), Row Crops, and Forested Wetlands. Proposed conditions (Scenario 3) include Forested Uplands, Forested Wetlands, Medium Density Urban development, and Lakes.

WELL WITHDRAWALS

Natural Conditions (Scenario 1) had no well withdrawals; however, well withdrawals occur under the current agricultural conditions (Scenario 2) and will occur under the residential development (Scenario 3). Annual well withdrawals (allocations) were obtained from the South Florida Water Management District modified Blaney-Criddle calculation for the current agricultural permit (WUP No. 36-00883-W) of 421 million gallons per year and the proposed irrigation of 98 acres with an allocation of 126 million gallons per year. The amount of water removed from the system for agricultural irrigation (353 million gallons) accounts for 15% recharge back to the system from flood seepage irrigation methods, in accordance with SFWMD guidelines. Blaney-Criddle data from the existing permit and proposed development is provided in Exhibit A.

Table 1 - Annual Water Balance for Pepperland Ranch (Inches and Million Gallons of Recharge Onsite)

	Natural System	**Annual Recharge (inches)**	**Million Gallons Recharge Onsite**
SCENARIO 1	Precipitation	55.93	968.89
	Potential ET	52.38	
	Actual ET	39.92	691.51
	Pan Evaporation	65.91	
	Evaporation	0.00	0.00
	Irrigation Withdrawal	NA	0.00
	ΔS (Natural System)	***16.01***	**277.38**

	Existing Conditions	**Annual Recharge (inches)**	**Million Gallons Recharge Onsite**
SCENARIO 2	Precipitation	55.93	968.89
	Potential ET	52.38	
	Actual ET	39.32	681.18
	Pan Evaporation	65.91	
	Evaporation	2.27	39.37
	Irrigation Withdrawal	NA	353.17
	ΔS (Existing Conditions)	***14.34***	**-104.84**

	Proposed Conditions	**Annual Recharge (inches)**	**Million Gallons Recharge Onsite**
SCENARIO 3	Precipitation	55.93	968.89
	Potential ET	52.38	
	Actual ET	31.11	538.85
	Pan Evaporation	65.91	
	Evaporation	5.17	89.48
	Irrigation Withdrawal	NA	125.87
	ΔS (Proposed Development)	***19.66***	**214.69**

Notes: Inputs for the water budget are normalized based on percentage land cover, lake vs land area, etc
Million Gallons Recharge Onsite represents Inputs and Outputs over the 638-acre site

Monthly rainfall, evapotranspiration, and evaporation were used to calculate the total recharge in inches and are provided in Exhibit A as Table 1A. Monthly well withdrawals were not calculated for each scenario because the withdrawal rates vary considerably in the modified Blaney-Criddle calculation based on crop use, irrigation method, etc. Instead, the annual recharge rate in inches were converted top million gallons and compared to the annual allocations for well withdrawals.

RESULTS OF THE WATER BUDGET

Water Science Associates conducted a water budget as described above. Inputs are summarized in Tables A and B and the Annual Water Budget is presented as Table 1. Results of the water budget indicate:

- Annual net storage change for the natural condition is about 16 inches
- Annual net storage change for the existing agricultural condition is about 14 inches
- Annual net storage change for the proposed condition is about 20 inches

- The annual recharge to the project site under natural conditions is about 277 million gallons
- The annual recharge to the project site under agricultural production is about -105 million gallons
- The annual recharge to the project site under proposed residential conditions is about 215 million gallons

Results of the water budget indicate that the proposed development results in a significant increase in both water storage and gallons of recharge with respect to existing agricultural conditions. The proposed conditions result in an increase in water storage from natural conditions with the exception of well withdrawals. Results of the water budget suggest that the proposed development will not result in adverse water resources demands, and that the development meets Goal 117 of the Lee Plan, which states: "*To conserve, manage, and protect the natural hydrologic system of Lee County to insure continued water resource availability. (Amended by Ordinance No. 94-30).*"

EXHBIT A

Supporting Information

Table 1A - Annual Water Balance for Pepperland Ranch (Inches and Million Gallons of Recharge Onsite) - Monthly Inputs

	Natural System	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Recharge (inches)	Million Gallons Recharge Onsite
SCENARIO 1	Precipitation	1.94	2.15	2.88	2.18	2.65	10.09	9.04	10.14	8.31	2.88	1.96	1.71	55.93	968.89
	Potential ET	3.44	3.60	4.84	5.64	5.92	4.72	5.07	4.83	4.04	4.02	3.33	2.93	52.38	
	Actual ET	2.62	2.74	3.69	4.30	4.51	3.60	3.86	3.68	3.08	3.06	2.54	2.23	39.92	691.51
	Pan Evaporation	3.53	4.07	5.94	6.81	7.90	7.20	6.47	6.42	5.39	5.15	3.79	3.24	65.91	
	Evaporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Irrigation Withdrawal													NA	0.00
	ΔS (Natural System)	*-0.68*	*-0.59*	*-0.81*	*-2.12*	*-1.86*	*6.49*	*5.18*	*6.46*	*5.23*	*-0.18*	*-0.58*	*-0.52*	*16.01*	277.38

	Existing Conditions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Recharge (inches)	Million Gallons Recharge Onsite
SCENARIO 2	Precipitation	1.94	2.15	2.88	2.18	2.65	10.09	9.04	10.14	8.31	2.88	1.96	1.71	55.93	968.89
	Potential ET	3.44	3.60	4.84	5.64	5.92	4.72	5.07	4.83	4.04	4.02	3.33	2.93	52.38	
	Actual ET	2.58	2.70	3.63	4.23	4.44	3.54	3.81	3.63	3.03	3.02	2.50	2.20	39.32	681.18
	Pan Evaporation	3.53	4.07	5.94	6.81	7.90	7.20	6.47	6.42	5.39	5.15	3.79	3.24	65.91	
	Evaporation	0.12	0.14	0.20	0.23	0.27	0.25	0.22	0.22	0.19	0.18	0.13	0.11	2.27	39.37
	Irrigation Withdrawal													NA	353.17
	ΔS (Existing Conditions)	*-0.76*	*-0.69*	*-0.96*	*-2.29*	*-2.07*	*6.30*	*5.01*	*6.29*	*5.09*	*-0.32*	*-0.67*	*-0.60*	*14.34*	-104.84

	Proposed Conditions	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Recharge (inches)	Million Gallons Recharge Onsite
SCENARIO 3	Precipitation	1.94	2.15	2.88	2.18	2.65	10.09	9.04	10.14	8.31	2.88	1.96	1.71	55.93	968.89
	Potential ET	3.44	3.60	4.84	5.64	5.92	4.72	5.07	4.83	4.04	4.02	3.33	2.93	52.38	
	Actual ET	2.04	2.14	2.87	3.35	3.52	2.80	3.01	2.87	2.40	2.39	1.98	1.74	31.11	538.85
	Pan Evaporation	3.53	4.07	5.94	6.81	7.90	7.20	6.47	6.42	5.39	5.15	3.79	3.24	65.91	
	Evaporation	0.28	0.32	0.47	0.53	0.62	0.56	0.51	0.50	0.42	0.40	0.30	0.25	5.17	89.48
	Irrigation Withdrawal													NA	125.87
	ΔS (Proposed Development)	*-0.38*	*-0.31*	*-0.46*	*-1.70*	*-1.48*	*6.72*	*5.52*	*6.77*	*5.49*	*0.09*	*-0.31*	*-0.28*	*19.66*	214.69

Note: inputs for the water budget are normalized based on percentage land cover, lake vs land area, etc

Million Gallons Recharge Onsite represents Inputs and Outputs over the 638-acre site

Table A. Water Budget Inputs (Percentage Land Type, and Evapotranspiration/Evaporation Coefficients)

Scenario	Type	Acres	% of Total	ET c	Weigted ET c for Table 2	Lake Kp	Wighted Kp for Table 2
Natural System (Scenario 1)	Forested Uplands	422	66.1%	0.78	NA	NA	NA
	Forested Wetlands	51	8.0%	0.75	NA	NA	NA
	Flowway (Ridge/Slough 1)	165	25.9%	0.72	NA	NA	NA
	Total	638	100.0%	NA	0.76	NA	NA
Current System (Scenario 2)	Crop Cultivation	565	88.6%	0.78	NA	NA	NA
	Forested Wetlands	51	8.0%	0.75	NA	NA	NA
	Ditches-Water Bodies	22	3.4%	NA	NA	1	0.034
	Total	638	100.0%	NA	0.75	NA	NA
Proposed System (Scenario 3)	Forested Uplands	165	25.9%	0.78	NA	NA	NA
	Medium Density Urban	258	40.4%	0.49	NA	NA	NA
	Lake	50	7.8%	NA	NA	1	0.078
	Forested Wetlands	165	25.9%	0.75	NA	NA	NA
	Total	638	100.0%	NA	0.59	NA	NA

ET c = Average Evapotranspiration Crop Coefficient for Land Cover
Lake Kp = Evaporation Coefficient

Table B. Monthly Crop Coefficients (from SFWMD 2002)

Land Use Type	Vegetation/Crop Coefficient												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
Low Density Urban	0.556	0.502	0.534	0.542	0.562	0.562	0.628	0.706	0.702	0.686	0.604	0.552	0.59
Medium Density Urban	0.460	0.412	0.443	0.452	0.467	0.467	0.511	0.575	0.562	0.570	0.503	0.457	0.49
High Density Urban	0.363	0.321	0.352	0.361	0.372	0.372	0.394	0.443	0.421	0.453	0.402	0.361	0.38
Citrus	0.701	0.693	0.610	0.542	0.661	0.710	0.744	0.810	0.822	0.702	0.723	0.700	0.70
Row (or truck) Crops	0.640	0.690	0.870	0.950	0.860	0.660	0.610	0.660	0.710	0.870	0.930	0.880	0.78
Sugar Cane	0.800	0.600	0.550	0.800	0.950	1.00	1.05	1.05	1.05	1.00	0.950	0.900	0.89
Irrigated Pasture	0.650	0.700	0.750	0.950	0.950	0.980	0.980	0.980	0.940	0.800	0.870	0.650	0.85
Shrubland	0.855	0.802	0.850	0.875	0.875	0.871	0.881	0.901	0.901	0.882	0.824	0.811	0.86
Marl Prairie	0.893	0.862	0.905	0.933	0.933	0.921	0.957	0.975	0.970	0.92	0.941	0.894	0.93
Ridge & Slough I	0.705	0.692	0.710	0.715	0.715	0.710	0.721	0.740	0.740	0.715	0.724	0.701	0.72
Ridge & Slough II	0.775	0.750	0.800	0.810	0.820	0.810	0.820	0.825	0.825	0.780	0.790	0.771	0.80
Ridge & Slough III	0.775	0.750	0.800	0.810	0.820	0.810	0.820	0.825	0.825	0.780	0.790	0.771	0.80
Ridge & Slough IV	0.775	0.750	0.800	0.810	0.820	0.810	0.820	0.825	0.825	0.780	0.790	0.771	0.80
Ridge & Slough V	0.795	0.770	0.815	0.825	0.836	0.839	0.851	0.868	0.868	0.810	0.793	0.781	0.82
Sawgrass Plains	0.815	0.790	0.830	0.840	0.852	0.868	0.882	0.910	0.910	0.840	0.795	0.790	0.84
Cattail	0.795	0.770	0.800	0.810	0.822	0.838	0.852	0.894	0.890	0.830	0.795	0.787	0.82
Mix Cattail/Sawgrass	0.800	0.790	0.810	0.820	0.832	0.848	0.862	0.904	0.900	0.835	0.795	0.788	0.83
Wet Prairie	0.742	0.725	0.760	0.761	0.765	0.775	0.791	0.815	0.815	0.772	0.764	0.741	0.77
STA	0.852	0.802	0.85	0.875	0.883	0.881	0.901	0.941	0.952	0.892	0.824	0.811	0.87
Forested Wetland	0.723	0.702	0.745	0.750	0.770	0.760	0.770	0.790	0.790	0.740	0.770	0.735	0.75
Forested Uplands	0.743	0.722	0.768	0.773	0.783	0.784	0.805	0.820	0.820	0.760	0.771	0.754	0.78
Mangroves	0.791	0.760	0.830	0.855	0.882	0.880	0.882	0.904	0.900	0.824	0.803	0.753	0.84
Melaleuca	0.800	0.770	0.850	0.880	0.910	0.900	0.910	0.970	0.970	0.860	0.880	0.800	0.88
Water	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source of data is SFWMD memo from J.Barnes and K.Tarboton to J.Obeysekera dated June 5, 2002

Calculations Of Irrigation Requirements (1-in-10)

Rainfall Station:	Ft. Myers 1-in-10
Irrigation System:	Sprinkler
Irrigated Acreage:	98.00
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)	1.90	2.00	1.50	1.90	4.10	9.40	8.70	8.60	8.40	3.50	1.50	1.50	53.00
Evapotranspiration (inches)	1.86	2.14	3.70	5.11	6.83	7.60	8.05	7.72	6.48	4.92	3.07	2.15	59.63
Average Effective Rainfall (inches)	0.88	0.94	0.79	1.06	2.31	4.91	4.71	4.58	4.19	1.81	0.76	0.72	27.66
1-in-10 Effective Rainfall (inches)	0.74	0.79	0.66	0.89	1.94	4.12	3.96	3.85	3.52	1.52	0.64	0.61	23.24
Average Irrigation (inches)	0.98	1.20	2.91	4.05	4.52	2.69	3.34	3.14	2.29	3.11	2.31	1.43	31.97
1-in-10 Irrigation (inches)	1.12	1.35	3.04	4.22	4.89	3.48	4.09	3.87	2.96	3.40	2.43	1.54	36.39

1-in-10 Annual Supplemental Crop Requirement = 36.39 inches

Annual Supplemental Crop Water Use:

36.39 inches X 98 Acres X 1.3 X 0.02715 MG/AC-IN = 125.87 MG

1-in-10 Maximum Monthly Supplemental Crop Requirement = 4.89 inches

Maximum Monthly Supplemental Crop Water Use:

4.89 inches X 98 Acres X 1.3 X 0.02715 MG/AC-IN = 16.91 MG

Notes:

Evapotranspiration was calculated using a modified Blaney-Criddle method.
Average effective rainfall is the amount that is useful to crops in an average year.
Drought rainfall is the rainfall minimum representative of a 1-in-10 year drought
Drought effective rainfall is the amount that is useful to crops in a 1-in-10 year drought event.
Average irrigation is the net amount that should be required for maximum yields during an average year.
Drought irrigation is the net amount that should be required for maximum yields during a 1-in-10 year drought.

Calculations Of Irrigation Requirements

APPLICATION NUMBER: 100902-23

RAINFALL STATION: Immokalee
IRRIGATION SYSTEM: Seepage/Furrow
PARCEL ACREAGE: 482
LAND USE: Agricultural

CROP: Potatoes
SOIL TYPE: 0.8
PARCEL NAME:
IRR. MULTIPLIER: 2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MEAN RAINFALL	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	5.17	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.64	3.27	4.73	20.69
AVG. EFFECTIVE RAIN	1.19	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	0.98	0.84	5.59
DROUGHT RAINFAL	0.98	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.80	0.69	4.59
AVERAGE IRRIGATION	3.98	3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29	2.29	3.89	15.10
DROUGHT IRRIGATION	4.19	3.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53	2.47	4.04	16.10

ANNUAL SUPPLEMENTAL CROP REQUIREMENT: 16.10 INCHES

ANNUAL SUPPLEMENTAL CROP WATER USE:

16.10 IN X 482 AC X 2 X 0.02715 MG/AC-IN = 421.38 MG

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 4.19 INCHES

MAXIMUM MONTHLY SUPPLEMENTAL CROP WATER USE:

4.19 IN X 482 AC X 2 X 0.02715 MG/AC-IN = 109.66 MG

TOTAL ANNUAL DEMAND: 421.38 MG
TOTAL MAXIMUM MONTHLY DEMAND: 109.66 MG

Application No. 100902-23 Exhibit No. 6A



N
W E
S

LEGEND
PEPPERLAND RANCH

Soil Unit	Description
10	POMPANO FINE SAND
11	MYAKKA FINE SAND
13	BOCA FINE SAND
14	VALKARIA FINE SAND
26	PINEDA FINE SAND
28	IMMOKALEE SAND
33	OLDSMAR SAND
34	MALABAR FINE SAND
53	MYAKKA FINE SAND, DEPRESSIONAL

0 300 600 900
Feet

NOTES

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY 2016.

PROPERTY BOUNDARY PER BANKS ENGINEERING, INC. DRAWING NO. 812-SR EM_1-26-2016 DWG DATED JANUARY 27, 2016.

ROADWAY NETWORKS WERE ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE.

SOILS MAPPING WAS ACQUIRED FROM THE FLORIDA GEOGRAPHIC DATA LIBRARY WEBSITE OCTOBER 2007 AND CREATED BY THE NATURAL RESOURCES CONSERVATION SERVICE 1990.

DRAWN BY	DATE
W.C./T.S.	5/12/16
REVIEWED BY	DATE
S.J.	5/12/16
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES, INC.

PEPPERLAND RANCH
SOILS MAP

DRAWING No. 15BCF2389
SHEET No. EXHIBIT B

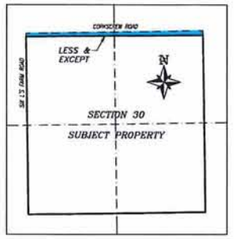
SURVEY PLAT

OF

A TRACT OR PARCEL OF LAND LYING IN SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST LEE COUNTY, FLORIDA



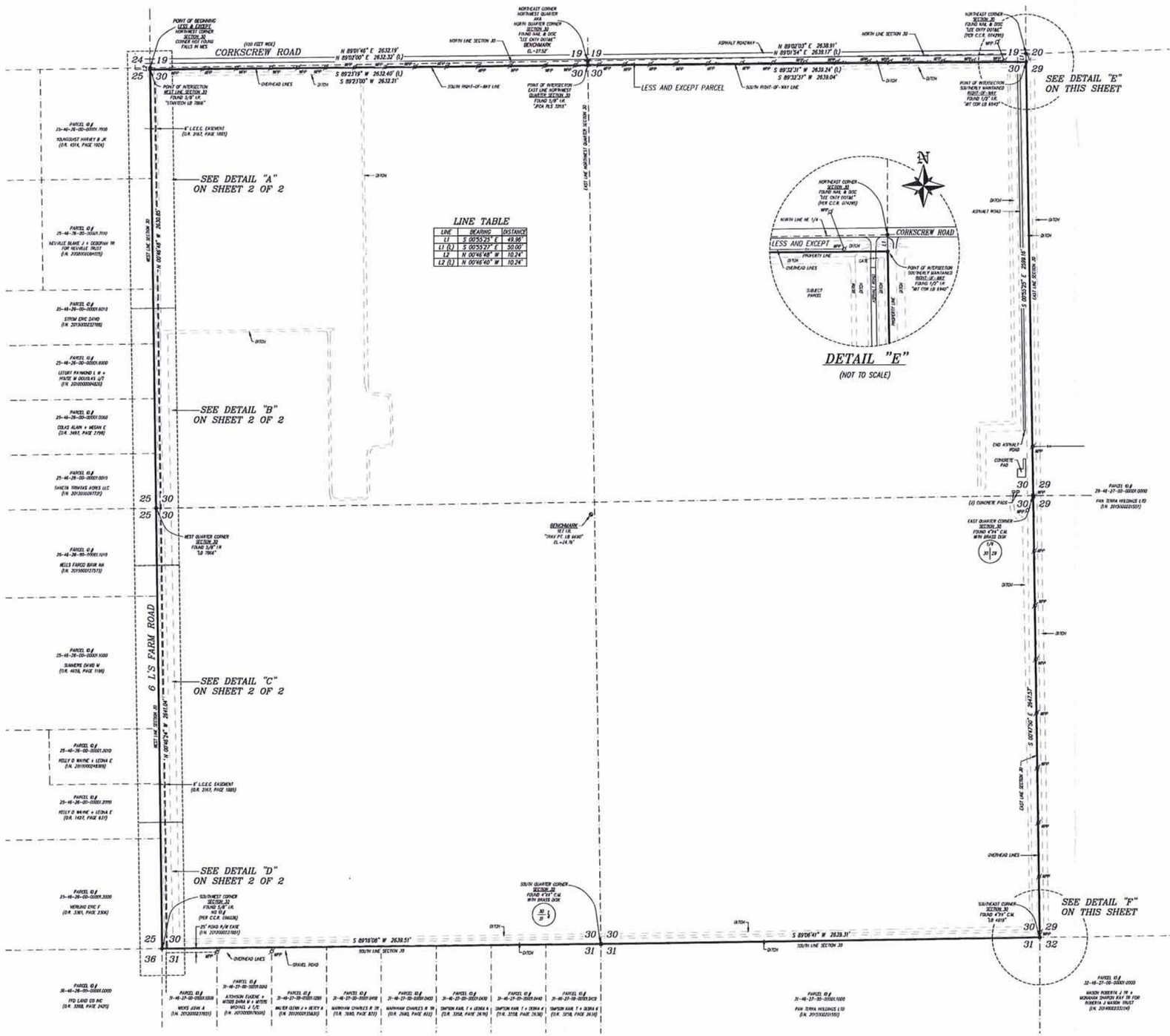
VICINITY MAP
NOT TO SCALE



PROPERTY DETAIL
NOT TO SCALE

NOTE:

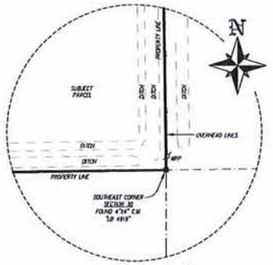
THE LESS AND EXCEPT PARCEL SHOWN WITHIN THE PROPERTY DETAIL HAS BEEN EXAGGERATED AND SHADED BLUE, AND IS FOR GRAPHICAL PURPOSES ONLY.



LINE TABLE

LINE	BEARING	DISTANCE
L1	S 00°53'25" E	49.96'
L1 (L)	S 00°53'27" E	50.00'
L2	N 00°46'48" W	10.24'
L2 (L)	N 00°46'40" W	10.24'

DETAIL "E"
(NOT TO SCALE)



DETAIL "F"
(NOT TO SCALE)

LEGEND:

P.B.	INDICATES PAGE
RNG.	INDICATES RANGE
TWSHP.	INDICATES TOWNSHIP
EL.	INDICATES ELEVATION
ENG	INDICATES ENGINEERING
R/W	INDICATES RIGHT-OF-WAY
-OH-	INDICATES OVERHEAD LINE
WPP	INDICATES WOOD POWER POLE
U/G	INDICATES BUT WIRE ANCHOR
LB	INDICATES LICENSED BUSINESS
⌀	INDICATES EXISTING ELEVATION
I.N.	INDICATES INSTRUMENT NUMBER
C.M.	INDICATES CONCRETE MONUMENT
NTS	INDICATES NOTHING FOUND OR SET
ID #	INDICATES IDENTIFICATION NUMBER
O.R.	INDICATES OFFICIAL RECORDS BOOK
L1	INDICATES LINE 1 FROM LINE TABLE
PLS	INDICATES REGISTERED LAND SURVEYOR
L.C.E.C.	INDICATES LEE COUNTY ELECTRIC COMPANY
I.R.	INDICATES 5/8" IRON ROD, LB #6990 "BANKS ENG" UNLESS OTHERWISE NOTED
(NAVD 88)	INDICATES NORTH AMERICAN VERTICAL DATUM OF 1988
30-46-27	INDICATES SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST
(L)	INDICATES BEARING AND/OR DISTANCE PER LEGAL DESCRIPTION
C.C.R.	INDICATES DEPARTMENT OF NATURAL RESOURCES CERTIFIED CORNER RECORD

LEGAL DESCRIPTION:

(PER EXHIBIT "A-1" OF THAT CERTAIN TITLE OPINION PREPARED BY HANN LOESER & PARKS LLP, RE: APPLICANT: PEPPERLAND PARCEL, LLC; VALID THROUGH 8:00 A.M. ON MAY 25, 2016.)

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST, BEING ALL OF SAID SECTION 30 LESS THAT PORTION OF CORKSCREW ROAD RIGHT-OF-WAY AS DESCRIBED IN 2013000243597 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, BEING FURTHER BOUND AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION; THENCE S 89°18'41" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.31 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION; THENCE S 89°18'08" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.51 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION; THENCE N 00°46'24" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,641.04 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION; THENCE N 00°46'48" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,630.85 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF SAID CORKSCREW ROAD RIGHT-OF-WAY; THENCE N 89°23'00" E ALONG SAID SOUTH LINE FOR 2,632.21 FEET; THENCE N 89°32'31" E ALONG SAID SOUTH LINE FOR 2,639.04 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION; THENCE S 00°53'25" E ALONG SAID EAST LINE FOR 2,598.16 FEET TO THE NORTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE S 00°47'50" E ALONG THE EAST LINE OF SAID FRACTION FOR 2,647.57 FEET TO THE POINT OF BEGINNING.

SURVEYOR'S NOTES:

THIS PLAT IS PREPARED AS A BOUNDARY AND TOPOGRAPHIC SURVEY AND IS NOT INTENDED TO DELINEATE THE JURISDICTION OR JURISDICTIONAL AREAS OF ANY FEDERAL, STATE, REGIONAL OR LOCAL AGENCY, BOARD, COMMISION OR OTHER ENTITY.

BOUNDARY SURVEY BASED ON THE FOLLOWING:

(1) LEGAL DESCRIPTION AS RECORDED IN INSTRUMENT NUMBER 2013000243597 OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA.

(2) LEE COUNTY DEPARTMENT OF TRANSPORTATION MAPS FOR CORKSCREW ROAD IMPROVEMENTS, DATED 9/1992.

(3) DEPARTMENT OF NATURAL RESOURCES CERTIFIED CORNER RECORDS (C.C.R.) FOR SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST, LEE COUNTY, FLORIDA.

(4) EXISTING MONUMENTATION.

BEARINGS AND DISTANCES UNLESS OTHERWISE SHOWN ARE BASED ON THE "STATE PLANE COORDINATE SYSTEM" FLORIDA ZONE WEST NAD 83/2011 (CORS), WHEREIN THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST BEARS BEARS N 00°46'48" W. THE STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA BASED AT PAGE FIELD. THE STATION IS A GPS CONTINUOUSLY OPERATING REFERENCE STATION DESIGNATION – FORT MYERS CORS ARP. HORIZONTAL VALUES WERE ESTABLISHED AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN MARCH 2004. THE HORIZONTAL VALUES WERE ESTABLISHED BY GPS OBSERVATIONS. THE SCALE FACTOR IS 0.99993921.

ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ALL DISTANCES SHOWN ARE IN FEET AND DECIMALS THEREOF.

ABOVE AND UNDERGROUND IMPROVEMENTS WERE NOT LOCATED UNLESS OTHERWISE SHOWN.

THE SUBJECT PARCEL AS SHOWN HEREON IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA ON THE NATIONAL FLOOD INSURANCE PROGRAM'S FLOOD INSURANCE RATE MAPS.

PER FLOOD INSURANCE RATE MAP NUMBER 12071C0425F, EFFECTIVE DATE OF AUGUST 28, 2008, THE SUBJECT PARCEL LIES IN ZONE X HAVING NO BASE FLOOD ELEVATION.

STREET ADDRESS: 18500 CORKSCREW ROAD, ESTERO, FLORIDA 33928

STRAP NUMBER: 30-46-27-00-00001.0000

SUBJECT PARCEL CONTAINS: 637.50 ACRES, MORE OR LESS

DATE OF LAST FIELD WORK: 1-5-2016.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, THAT THIS PLAT OF THE HEREON DESCRIBED PROPERTY IS A TRUE REPRESENTATION OF A FIELD SURVEY MADE UNDER MY DIRECTION AND MEETS THE STANDARDS OF PRACTICE SET FORTH IN CHAPTER 5J-17 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

RICHARD M. RITZ, R.L.S.
FLORIDA CERTIFICATION NO. 4009
DATE SIGNED: 3-25-2016

- THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- THIS CERTIFICATION IS ONLY FOR THE LANDS DESCRIBED HEREON.
- THIS SURVEY WAS PREPARED WITH THE BENEFIT OF TITLE OPINION TITLE OPINION PREPARED BY HANN LOESER & PARKS LLP, RE: APPLICANT: PEPPERLAND PARCEL, LLC; VALID THROUGH 8:00 A.M. ON MAY 25, 2016 AND ALL ITEMS WITHIN THAT OPINION THAT CAN BE DELINEATED ON THE SURVEY ARE SHOWN OR ADDRESSED HEREON.
- ALL MATTERS OF TITLE SHOULD BE REFERRED TO AN ATTORNEY AT LAW.

NO.	DATE	REVISION DESCRIPTION	BY
2	3-25-16	REVISED SURVEYORS CERTIFICATION PER NEW TITLE OPINION	JDW
1	3-19-16	REVISED SURVEYORS CERTIFICATION PER COUNTY COMMENTS	JDW

BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490
FAX: (239) 939-2523

ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690

WWW.BANKSENG.COM

BOUNDARY AND TOPOGRAPHIC SURVEY

SECTION 30, TWNSHP. 46 S, RNG. 27 E

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DRAWN	CHECKED	SCALE	SHEET	OF	FILE NO. (S-T-R)
12-31-2015	8112	8112-SR	AMV/JDW	RMR	1"=300'	1	2	30-46-27

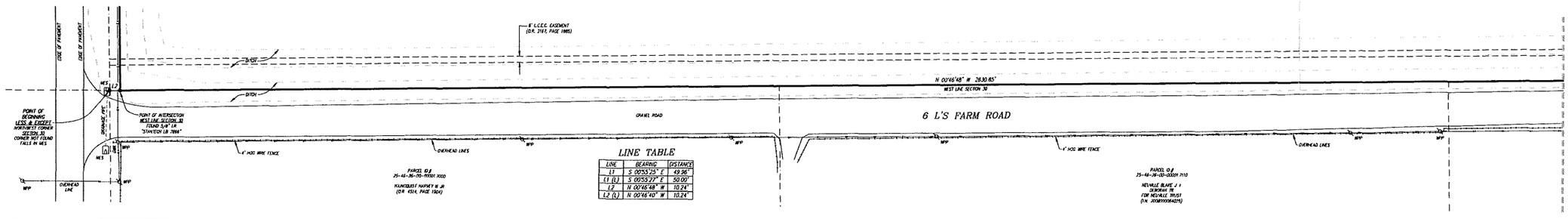
SURVEY PLAT

OF

A TRACT OR PARCEL OF LAND LYING IN
SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST
LEE COUNTY, FLORIDA

DETAIL "A"

1" = 50'

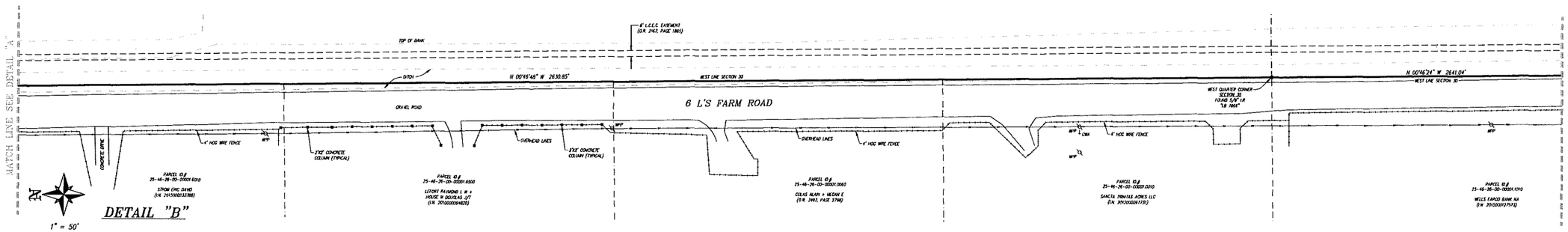


LINE TABLE

LINE	BEARING	DISTANCE
L1	S 00°53'25" E	49.96'
L1 (L)	S 00°53'27" E	50.00'
L2	N 00°46'48" W	10.24'
L2 (L)	N 00°46'40" W	10.24'

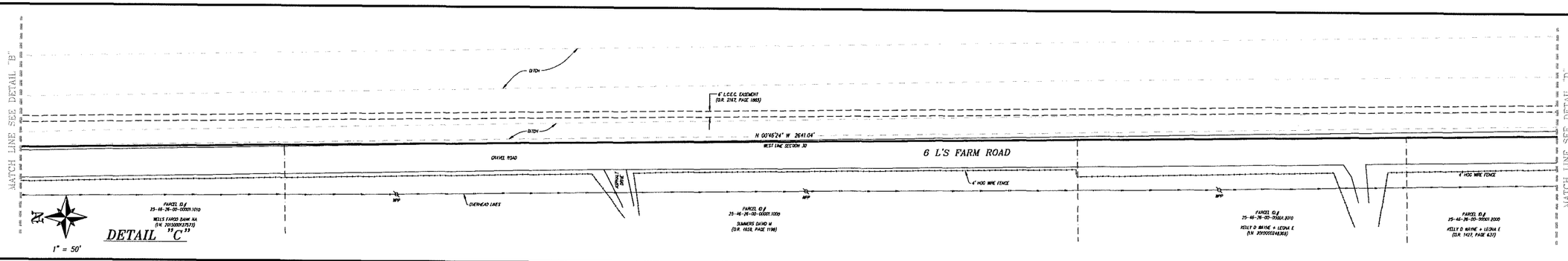
DETAIL "B"

1" = 50'



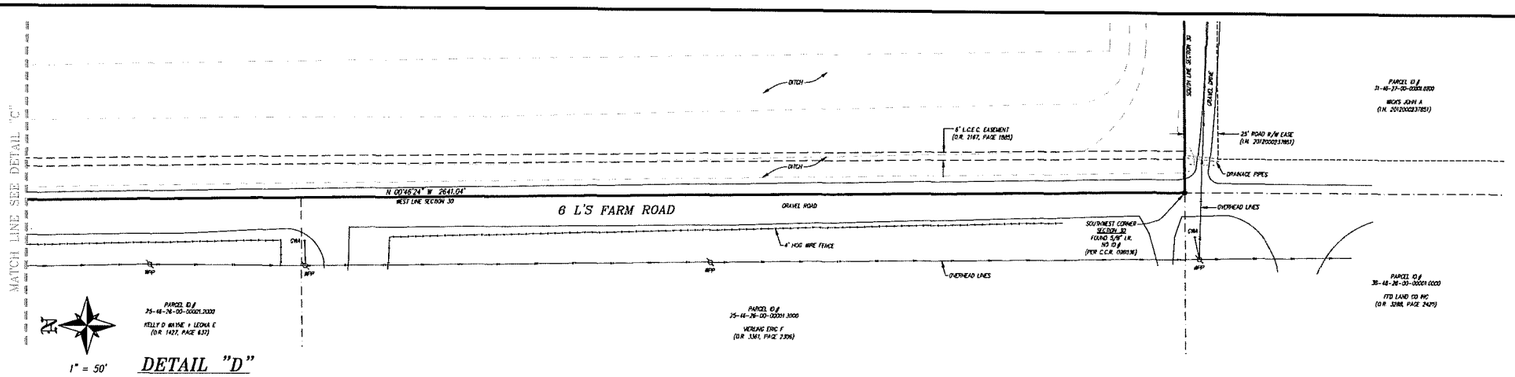
DETAIL "C"

1" = 50'



DETAIL "D"

1" = 50'



LEGEND:

PG	INDICATES PAGE
RNG.	INDICATES RANGE
TWNSHP.	INDICATES TOWNSHIP
EL.	INDICATES ELEVATION
ENG.	INDICATES ENGINEERING
R/W	INDICATES RIGHT-OF-WAY
-OHL-	INDICATES OVERHEAD LINE
WPP	INDICATES WOOD POWER POLE
OHL	INDICATES GUY WIRE ANCHOR
LB	INDICATES LICENSED BUSINESS
±E	INDICATES EXISTING ELEVATION
I.N.	INDICATES INSTRUMENT NUMBER
C.M.	INDICATES CONCRETE MONUMENT
WES	INDICATES WITNESS END SECTION
ID #	INDICATES IDENTIFICATION NUMBER
O.R.	INDICATES OFFICIAL RECORDS BOOK
L1	INDICATES LINE 1 FROM LINE TABLE
RLS	INDICATES REGISTERED LAND SURVEYOR
L.C.E.C.	INDICATES LEE COUNTY ELECTRIC COMPANY
I.R.	INDICATES 5/8" IRON ROD LB #6661 "BANKS ENG" UNLESS OTHERWISE NOTED
(NAD 83)	INDICATES NORTH AMERICAN VERTICAL DATUM OF 1988
30-46-27	INDICATES SECTION 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST
(L)	INDICATES BEARING AND/OR DISTANCE PER LEGAL DESCRIPTION
C.C.R.	INDICATES DEPARTMENT OF NATURAL RESOURCES CERTIFIED CORNER RECORD

BANKS ENGINEERING
Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

10511 SIX MILE CYPRESS PARKWAY
FORT MYERS, FLORIDA 33966
PHONE: (239) 939-5490
FAX: (239) 939-2523

ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690

WWW.BANKSENG.COM

BOUNDARY AND TOPOGRAPHIC SURVEY
SECTION 30, TWNSHP. 46 S, RNG. 27 E
LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DRAWN	CHECKED	SCALE	SHEET	OF	FILE NO. (S-T-R)
12-31-2015	8112	8112-SR	AAN/JDN	RWR	1"=50'	2	2	30-46-27

TITLE OPINION

Hahn Loeser & Parks LLP
2400 First Street, Suite 300
Fort Myers, FL 33901

RE: Applicant: Pepperland Ranch, LLC;
DCI2016-00003 – Planned Development Zoning Application

This Title Opinion is be rendered to the Board of County Commissioners of Lee County, Florida, 2120 Main Street, Fort Myers, Florida, for the sole and specific purpose of complying with the Lee County Land Development Code in connection with the Planned Development zoning application (DCI2016-00003) filed by Pepperland Ranch, LLC, and for no other purpose. This Title Opinion is based solely on the following documents and searches which we believe, in our professional opinion, consists of the available documents sufficient and information to render this Title Opinion: Special Warranty Deed recorded as Instrument No. 2013000243597, in the Public Records of Lee County, Florida; Owner and Encumbrance Search Report (File No. 16043435) effective through April 7, 2016 @11:00 P.M., the Surveyor's Affidavit, dated May 25, 2016, prepared by Richard M. Ritz, Registered Land Surveyor (Florida certification No. 4009), Banks Engineering; and a search of the Public Records of Lee County, Florida, on May 25, 2016 at 8:00 A.M.

This Title Opinion is valid through 8:00 A.M. on May 25, 2016.

We opine as follows:

1. Description of the Real Property situated in Lee County, Florida: See **Exhibit "A"** attached hereto and incorporated herein by reference (the "Property"). The Surveyor's Affidavit attached hereto as **Exhibit "A-1"** and incorporated herein confirms that the lands described in **Exhibit "A"** are the same lands described in **Exhibit "A-1"**.

2. Record Title to the Property is vested in: Pepperland Ranch, LLC, a North Carolina limited liability company, as evidence by that certain Special Warranty Deed recorded as Instrument No. 2013000243597, in the Public Records of Lee County, Florida (the "Special Warranty Deed"). The Special Warranty Deed is attached hereto as **Exhibit "B"** and incorporated herein by reference.

3. The Property is subject to the following mortgage: Mortgage to AgCarolina Farm Credit, ACA, recorded as Instrument No. 2016000095162, in the Public Records of Lee County, Florida.

4. The Property is subject to the following easement: Easement granted in favor of Lee County Electric Cooperative, Inc., recorded in Official Record Book 2167, Page 1885 (Instrument No. 2888401), in the Public Records of Lee County, Florida.

5. Oil, Gas and Mineral Reservation Rights. The Property is subject to certain Oil, Gas and Mineral Reservation of Rights as specifically described in the Special Warranty Deed. As stated in the Special Warranty Deed, the right of surface entry to the Property as it relates to each Oil, Gas and Mineral Reservation of Right has been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes.

   In addition, the Property is subject to that certain Assignment of Agreement Regarding Earnout Payments, recorded as Instrument No. 2013000243598, in the Public Records of Lee County, Florida. The Assignment relates to royalty payments from mining operations on the Property, if the Property is used for mining purposes. There is no right of surface entry right to the Property reserved in the Assignment.

6. Taxes. The 2015 taxes are paid.

Dated May 25, 2016.

Hahn Loeser & Parks LLP

By: _____
Robert A. Cooper, Esq., Partner
Florida Bar No. 50507

EXHIBIT "A"
Legal Description of Property

All of Section 30, Township 46 South, Range 27 East, Lee County, Florida.

Less and Excepting:

A parcel or tract of land being that portion of Corkscrew Road Right-of-Way lying in Section 30, Township South, Range 27 East, Lee County, Florida, being described as follows:

Commencing at the Point of Beginning at the Northwest corner of aforesaid Section 30; thence run North 89°02'00" East along the North line of said Section 30 for 2632.32 feet to the Northeast corner of the Northwest quarter (NW 1/4) of said Section 30; thence run North 89°01'54" East along said North line for 2639.17 feet the Northeast corner of said Section 30; thence run South 00°55'27" East along the East line of said Section 30 for 50.00 feet to a point on the Southerly maintained right-of-way line of Corkscrew Road (100 feet in width);thence run South 89°32'31" West along said right-of-way line for 2639.24 feet to a point on the East line of the Northwest quarter (NW 1/4) of said Section 30; thence run South 89°23'19" West along said right-of-way line for 2632.40 feet to a point on the West line of said Section 30; thence North 00°46'40" West along said West for 10.24 feet to the Point of Beginning.

EXHIBIT "A-1"
SURVEYOR AFFIDAVIT

BANKS ENGINEERING

Professional Engineers, Planners & Land Surveyors

SURVEYOR'S AFFIDAVIT

I, Richard M. Ritz of Fort Myers, Florida, County of Lee, hereby certify to the following:

1. That I am a registered land surveyor authorized to practice in the State of Florida.

2. That the Description of Real Property shown in Exhibit "A" of the Title Opinion prepared by Hahn Loeser & Parks LLP, Valid through May 25, 2016 @ 8:00 am. RE: Applicant: Pepperland Ranch, LLC, is the same lands described in attached Exhibit "A".

By: Richard M. Ritz
Richard M. Ritz
Registered Land Surveyor
Florida Certification No. 4009

State of: Florida
County of: Lee

The foregoing instrument was acknowledged before me this 25th day of May 2016 by Richard M. Ritz who is personally known to me and did not take an oath.

By: David L. Sheppard
Notary Signature

DAVID L. SHEPPARD
Notary Printed Name

DAVID L SHEPPARD
MY COMMISSION # FF 062471
EXPIRES: February 5, 2018
Bonded Thru Notary Public Underwriters

• SERVING THE STATE OF FLORIDA •

10511 Six Mile Cypress Parkway • Suite 101 • Fort Myers, Florida 33966
Phone 239-939-5490 • www.bankseng.com • Fax 239-939-2523
Engineering License No. EB 6469 • Surveying License No. LB 6690
S:\Jobs\80xx\8060\Survey\Affidavit\8060_SURVEYORS_AFFIDAVIT-3-28-16.doc

Exhibit "A"

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF LEE, LYING IN SECTION 30, TOWNSHIP 46 SOUTH, RANGE 27 EAST, BEING ALL OF SAID SECTION 30 LESS THAT PORTION OF CORKSCREW ROAD RIGHT-OF-WAY AS DESCRIBED IN 2013000243597 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, BEING FURTHER BOUND AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION; THENCE S 89°06'41" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.31 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SAID SECTION; THENCE S 89°16'08" W ALONG THE SOUTH LINE OF SAID FRACTION FOR 2,639.51 FEET TO THE SOUTHWEST CORNER OF SAID FRACTION; THENCE N 00°46'24" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,641.04 FEET TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER OF SAID SECTION; THENCE N 00°46'48" W ALONG THE WEST LINE OF SAID FRACTION FOR 2,630.85 FEET TO AN INTERSECTION WITH THE SOUTH LINE OF SAID CORKSCREW ROAD RIGHT-OF-WAY; THENCE N 89°23'00" E ALONG SAID SOUTH LINE FOR 2,632.21 FEET; THENCE N 89°32'37" E ALONG SAID SOUTH LINE FOR 2,639.04 FEET TO AN INTERSECTION WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION; THENCE S 00°55'25" E ALONG SAID EAST LINE FOR 2,599.16 FEET TO THE NORTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE S 00°47'50" E ALONG THE EAST LINE OF SAID FRACTION FOR 2,647.57 FEET TO THE **POINT OF BEGINNING.**

EXHIBIT "B"
SPECIAL WARRANTY DEED

INSTR # 2013000243597, Doc Type D, Pages 4, Recorded 10/25/2013 at 02:58 PM, Linda Doggett, Lee County Clerk of Circuit Court, Deed Doc. D $33600.00 Rec. Fee $35.50 Deputy Clerk CFELTMAN

This instrument prepared by:
Frank H. Fee, III, Esquire
Fee, DeRoss & Fee, P.L.
426 Avenue A
Fort Pierce, FL 34950

/

SPECIAL WARRANTY DEED

THIS INDENTURE is made this 18th day of October, 2013, between **RLF CORKSCREW HOLDINGS, LLC**, a Colorado limited liability company, whose address is 1530 16th Street, Suite 300, Denver, CO 80202 (hereinafter referred to as "Grantor") and **PEPPERLAND, LLC**, a North Carolina limited liability company, whose address is 107 Enterprise Court, Oxford, North Carolina 27565, (hereinafter referred to as "Grantee") ("Grantor" and "Grantee" to include their respective heirs, successors, executors, administrators, legal representatives and assigns where the context requires or permits).

WITNESSETH:

GRANTOR, in consideration of the sum of ONE HUNDRED ($100.00) DOLLARS and other valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and does hereby grant, bargain, sell, alien, convey and confirm unto Grantee the following described tracts or parcels of land, and including all easements and easement rights appurtenant to the same (the "Land"):

SEE THE DESCRIPTION ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE AS EXHIBIT "A"

This conveyance is made subject to the lien of general real estate taxes on the Land for the year 2013 and subsequent years, which Grantee assumes and agrees to pay, and other matters of record and apparent, including, but not limited to the following:

1. Lee County Ordinance No. 76-14 relating to garbage and solid waste collection and assessments recorded in Official Records Book 2189, Page 3281, of the Public Records of Lee County, Florida.

2. All oil, gas and mineral rights conveyed in that Oil, Gas and Mineral Deed from Barron Collier, III; Lamar Gable; Frances G. Villere; Phyllis G. Alden; Donna G. Keller; and Katherine G. Sproul, Juliet A. Sproul and Jennifer S. Sullivan, as Trustees, to Barron Collier Resources, Ltd., a Florida limited partnership, recorded in Instrument No. 2008000252521, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes.

3. All oil, gas and mineral rights reserved in deed from Consolidated Naval Stores Company to Malvin Englander, Trustee, recorded in Deed Book 262, Page 361, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes; as assigned

to Consolidated-Tomoka Land Co., a Delaware corporation in Warranty Deed recorded in Official Records Book 553, Page 114; as affected by Notice Pursuant to Section 704.05 and 712, Florida Statutes recorded in Official Records Book 1093, Page 493; Clarification of Oil, Gas and Mineral Reservations recorded June 2, 2000 in Official Records Book 3262, Page 3882; and as conveyed to Indigo Group Inc., a Florida corporation, in that Warranty Deed recorded December 8, 2004 in Official Records Book 4516, Page 2118, all recording references of the Public Records of Lee County, Florida.

4. All oil, gas and mineral rights contained in Oil, Gas and Mineral Lease from A. Donald Bass and Louise N. Bass, husband and wife, to Tribal Oil Corporation recorded in Official Records Book 1115, Page 2158, the right of surface entry having been terminated by operation of the Florida Marketable Record Title Act, Chapter 712, Florida Statutes; as assigned to Total Leonard, Inc. in that Assignment of Oil, Gas and Mineral Leases recorded in Official Records Book 1120, Page 2038; and further assigned to GS Oil & Gas Co. in Assignment recorded in Official Records Book 1156, Page 1538, all recording references of the Public Records of Lee County, Florida.

5. Easement in favor of Lee County Electric Cooperative, Inc. recorded in Official Records Book 2167, Page 1885, of the Public Records of Lee County, Florida.

6. Covenant of Unified Control recorded July 14, 2000 in Official Records Book 3279, Page 4835, of the Public Records of Lee County, Florida.

7. All matters (including Agreement Regarding Earnout Payments and Royalty Agreement) contained in Quit Claim Deed from Schwab Materials, Inc. to RLF Corkscrew Holdings, LLC, recorded June 4, 2010 in Official Records at Instrument No. 2010000140126, Doc Type D, Pages 75 et seq., of the Public Records of Lee County, Florida.

TOGETHER WITH all minerals rights owned by Grantor, subject to the foregoing matters set forth herein.

TO HAVE AND TO HOLD the Land, with the appurtenances, estate, title and interest thereto belonging to said Grantee, its successors and assigns, forever. Grantor covenants that it is lawfully seized and possessed of said property in fee simple subject to those matters set forth herein; has a good and lawful right to convey the same, and that it is free and unencumbered subject to those matters set forth herein.

AND GRANTOR WILL WARRANT and forever defend the right and title to the Land unto Grantee against the claims of all persons whomsoever claiming by, through or under Grantor but no further or otherwise.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed in its company name, by its duly authorized officer, the day and year first above written.

RLF CORKSCREW HOLDINGS, LLC,
a Colorado limited liability company

By: RESOURCE LAND FUND IV, LLC,
a Colorado limited liability company,
its Managing Member

By: Aaron Patsch
Its: Authorized Representative

State of Colorado)
)
County of Denver)

Personally appeared before me, the undersigned authority, a Notary Public in and for said County and State, **Aaron Patsch**, with whom I am personally acquainted, or proven to me on the basis of satisfactory evidence, and who, acknowledged that he executed the foregoing instrument for the purposes therein contained, and who further acknowledged that he is the **Authorized Representative of Resource Land Fund IV, LLC, a Colorado limited liability company, the Managing Member of RLF Corkscrew Holdings, LLC, a Colorado limited liability company,** and that he executed the within and foregoing instrument as Authorized Representative, being authorized to do so.

WITNESS my hand and seal of office this 11th day of October, 2013.

SUSAN JEND
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID # 20134071214
MY COMMISSION EXPIRES NOVEMBER 07, 2016

Susan Jend
Notary Public

My commission expires: Nov. 7, 2016

Exhibit A

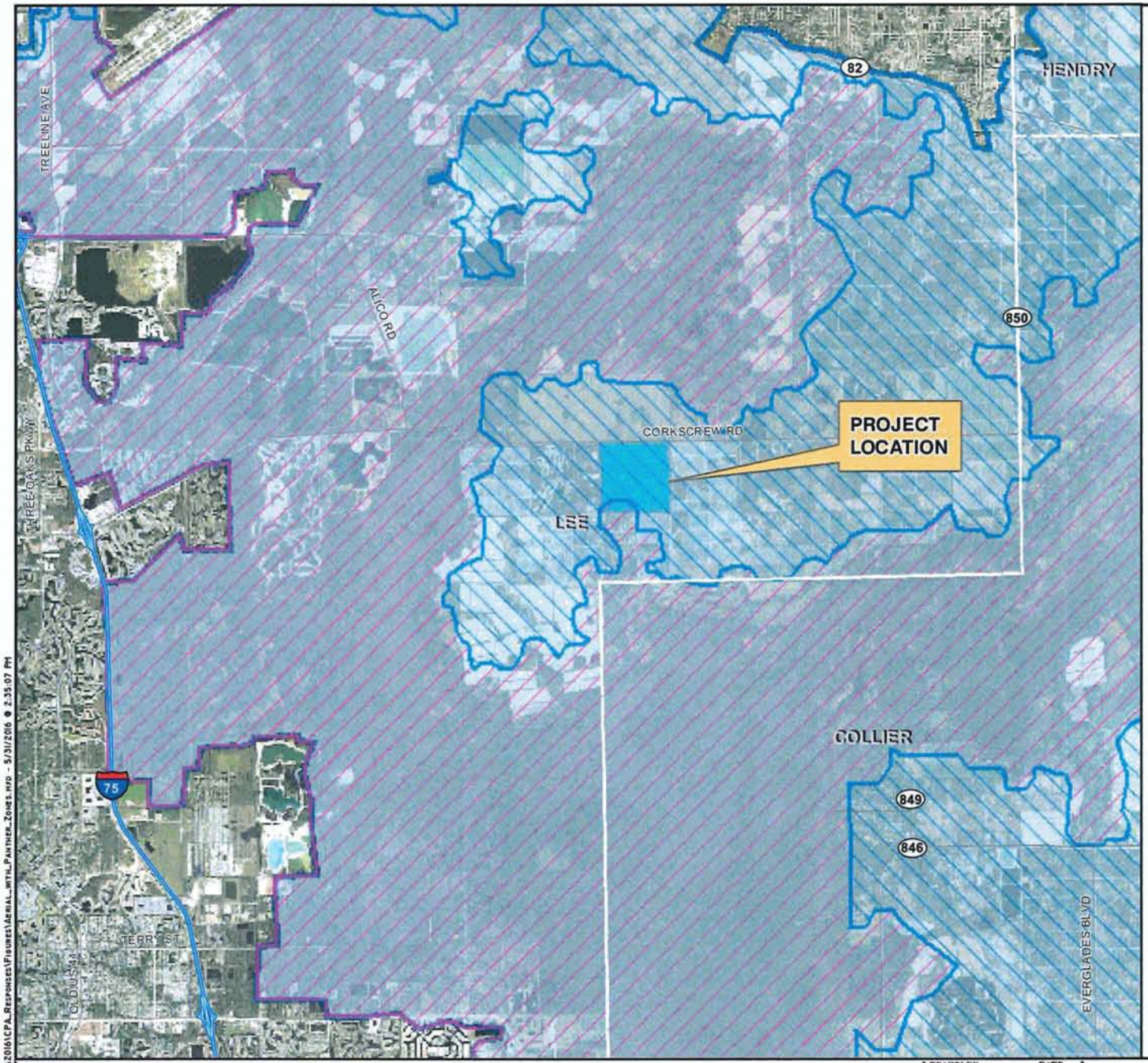
All of Section 30, Township 46 South, Range 27 East, Lee County, Florida.

Less and Excepting:

A parcel or tract of land being that portion of Corkscrew Road Right-of-Way lying in Section 30, Township 46 South, Range 27 East, Lee County, Florida, being described as follows:

Commencing at the Point of Beginning at the Northwest corner of aforesaid Section 30; thence run North 89°02'00" East along the North line of said Section 30 for 2632.32 feet to the Northeast corner of the Northwest quarter (NW 1/4) of said Section 30; thence run North 89°01'54" East along said North line for 2639.17 feet to the Northeast corner of said Section 30; thence run South 00°55'27" East along the East line of said Section 30 for 50.00 feet to a point on the Southerly maintained right-of-way line of Corkscrew Road (100 feet in width); thence run South 89°32'31" West along said right-of-way line for 2639.24 feet to a point on the East line of the Northwest quarter (NW 1/4) of said Section 30; thence run South 89°23'19" West along said right-of-way line for 2632.40 feet to a point on the West line of said Section 30; thence North 00°46'40" West along said West line for 10.24 feet to the Point of Beginning.

PIN: 30-46-27-00-00001.0000



LEGEND

- Pepperland Ranch

Panther Zones

- Primary Zone
- Secondary Zone

N
W E
S

0 1 2

Miles

NOTE:

AERIAL PHOTOGRAPHS WERE ACQUIRED FROM THE USDA-FSA AERIAL PHOTOGRAPHY FIELD OFFICE AND WERE FLOWN IN THE YEAR 2013.

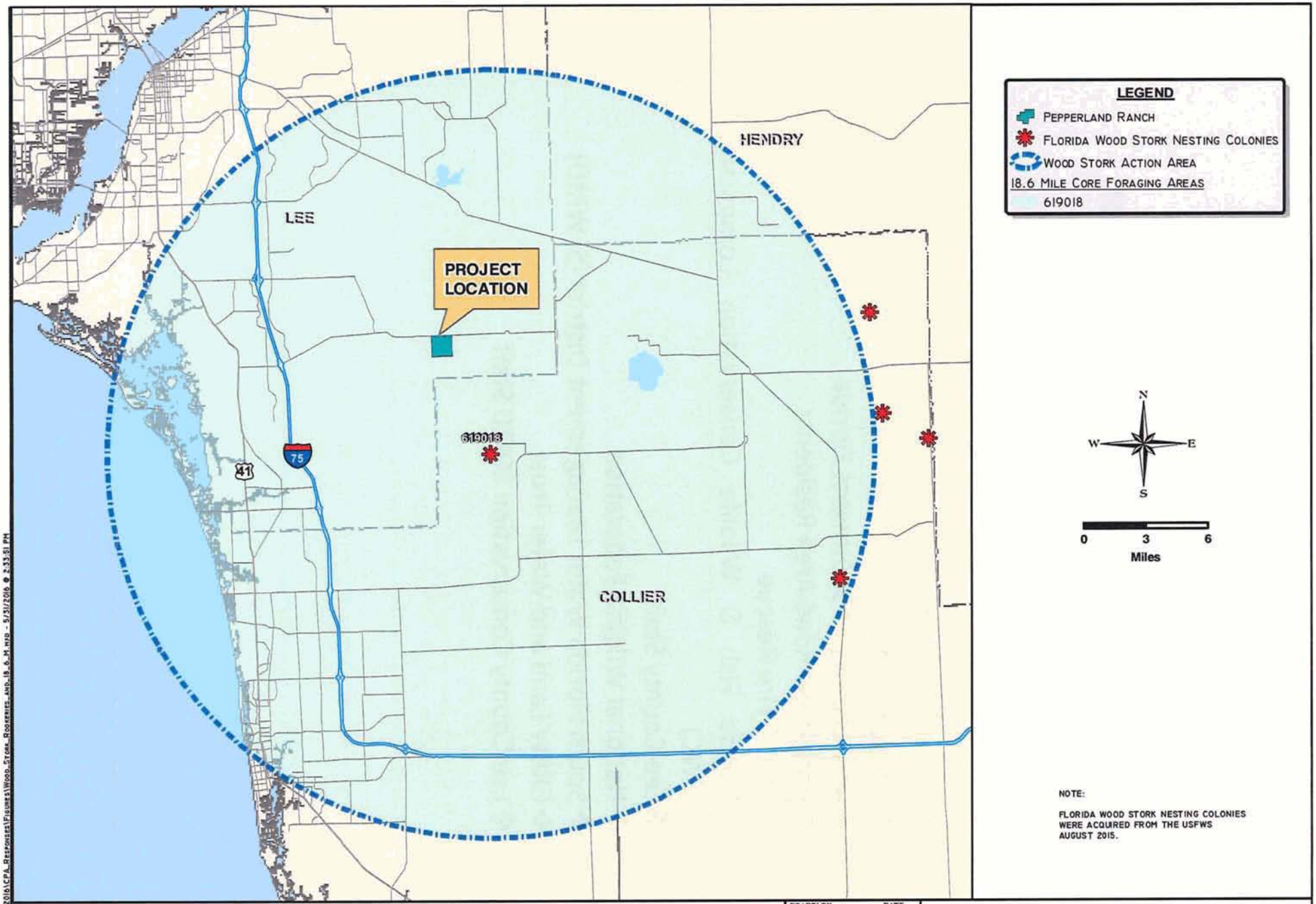
PRIMARY AND SECONDARY ZONES WERE ACQUIRED FROM (KAUTZ ET AL. 2006).

J:\2015\15cr2389\GIS\2016\CPA_Responses\Figures\Aerial_with_Panther_Zones.mxd - 5/31/2016 @ 2:35:07 PM

AERIAL WITH PANTHER PRIMARY AND SECONDARY ZONES
PEPPERLAND RANCH

DRAWN BY	DATE
T.S.	3/10/16
REVIEWED BY	DATE
S.J.	3/10/16
REVISED	DATE

Consulting Ecologists
PASSARELLA & ASSOCIATES INC



J:\2015\15ecz2389\GIS\2016\CPA_Responses\Figures\Wood_Stork_Rookeries_and_18_6_M.mxd - 5/31/2016 @ 2:33:51 PM

FLORIDA WOOD STORK NESTING COLONIES
AND 18.6 MILE CORE FORAGING AREAS
PEPPERLAND RANCH

DRAWN BY	DATE
H.H.	3/28/16
REVIEWED BY	DATE
S.J.	3/28/16
REVISED	DATE

PASSARELLA & ASSOCIATES INC.

PEPPERLAND RANCH RPD

DCI2016-00003

COMMUNITY AND AGENCY OUTREACH

As of June 2, 2016

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

III. RESUBMITTAL DATED 09/09/2016 (RECEIVED 09/12/2016)

A. ITEMS REMOVED SINCE SUPERSEDED

I. REVISED SURFACE WATER AND GROUNDWATER MONITORING PLAN

BANKS ENGINEERING

Professional Engineers, Planners & Land Surveyors

September 9, 2016

Brandon D. Dunn
Lee County Development Services
1500 Monroe Street
Fort Myers, Florida 33901

Reference: **PEPPERLAND RANCH**
CPA2016-00003

Dear Mr. Dunn:

This letter is written in response to your review comments dated June 30, 2016. With this letter we are submitting the additional information you requested.
Attached please find six (6) copies of the following submittal items:

1) Revised Lake Management Plan
2) Revised Stormwater Planning Report
3) Revised Surface Water and Groundwater Monitoring Plan SUPERSEDED
4) Indigenous Vegetation Preservation and Restoration Plan
5) Draft Conservation Easement

The applicant has redesigned the proposed development footprint to address staff's comment that "*...Policy 33.3.4(2)(a), requires restoration and accommodation of existing and historic regional flowways both where they currently exist or previously existed.*" The proposed wetland restoration areas/flowway restoration corridor within the proposed conservation easement have been redesigned to follow the 1953 aerial, hydric soils and historic flowway connections as shown on page 1.17 of the Dover, Kohl & Partners, July 2008 report titled, Prospects for Southeast Lee County, Planning for the Density Reduction/Groundwater Resource Area (DR/GR) which is included in the attached Stormwater Planning Report (see Figure 1). The new site design relocated the proposed wetland restoration areas/flowway restoration corridor onsite to follow the historical location through the center of the site from northeast to southwest between the two proposed relocated development pods. The wetland restoration areas/flowway restoration corridor will contain intermittent drawdown pools to aid with recharge and provide foraging habitat for wading birds, as demonstrated on attached Indigenous Vegetation Preservation and Restoration Plan. Stormwater runoff will be directed to specifically designed and designated storm water pre-treatment areas and will not be directly diverted or placed into the proposed lakes.

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

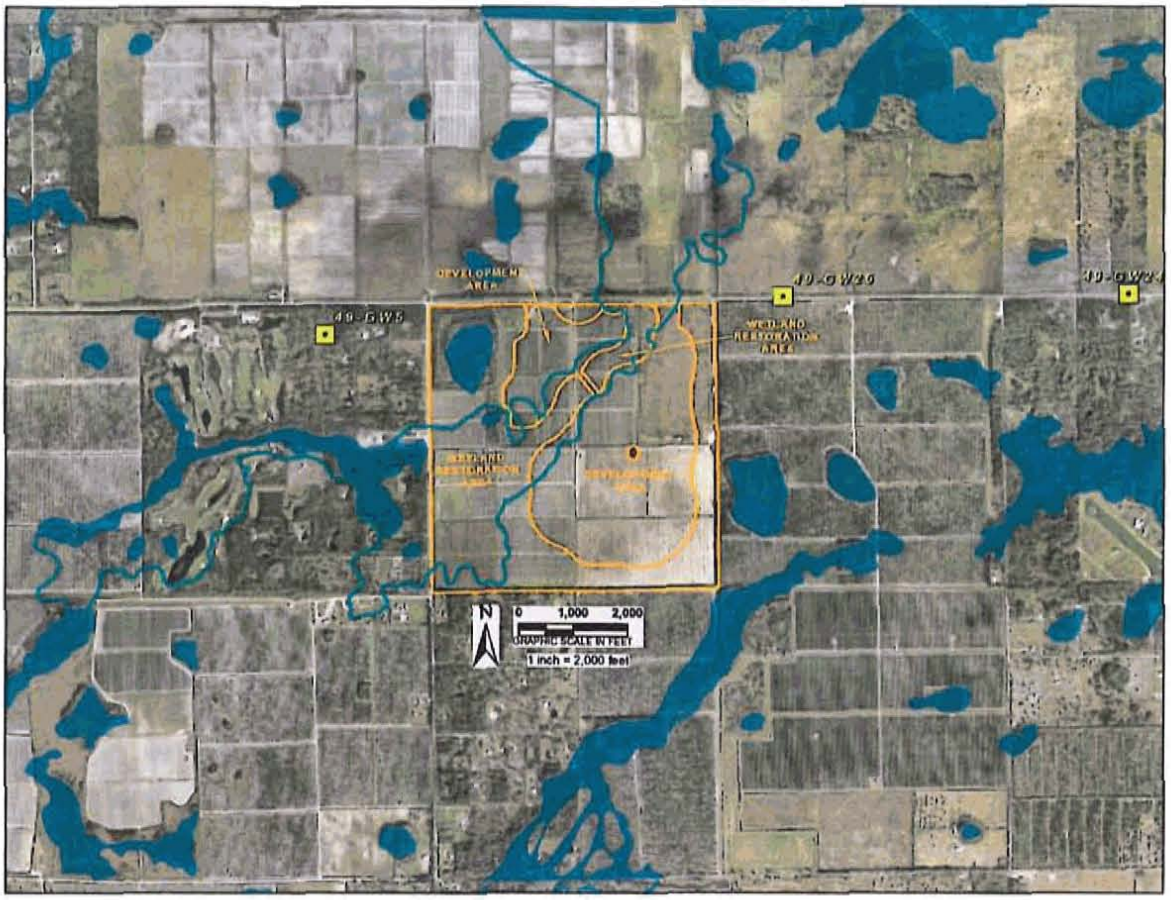


FIGURE 1

In March of 2010 the DR/GR Priority Restoration overlay in Policy 33.2.2 identified the subject property as Tier 1; one with the highest priority of 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. There are two areas, consisting of approximately 6 sections of land each, that are in Tier 1: along I-75 south of Corkscrew Road and along Corkscrew Road east of intersection with Alico. To the north across Corkscrew Rd., The Place, a/k/a Corkscrew Farms, was recently approved with environmental enhancements and restoration activities along with development parcels. The subject property provides the next critical connection moving south towards Panther Island Mitigation Bank and the CREW lands a/k/a Flint Pen Strand (refer to Figure 2).

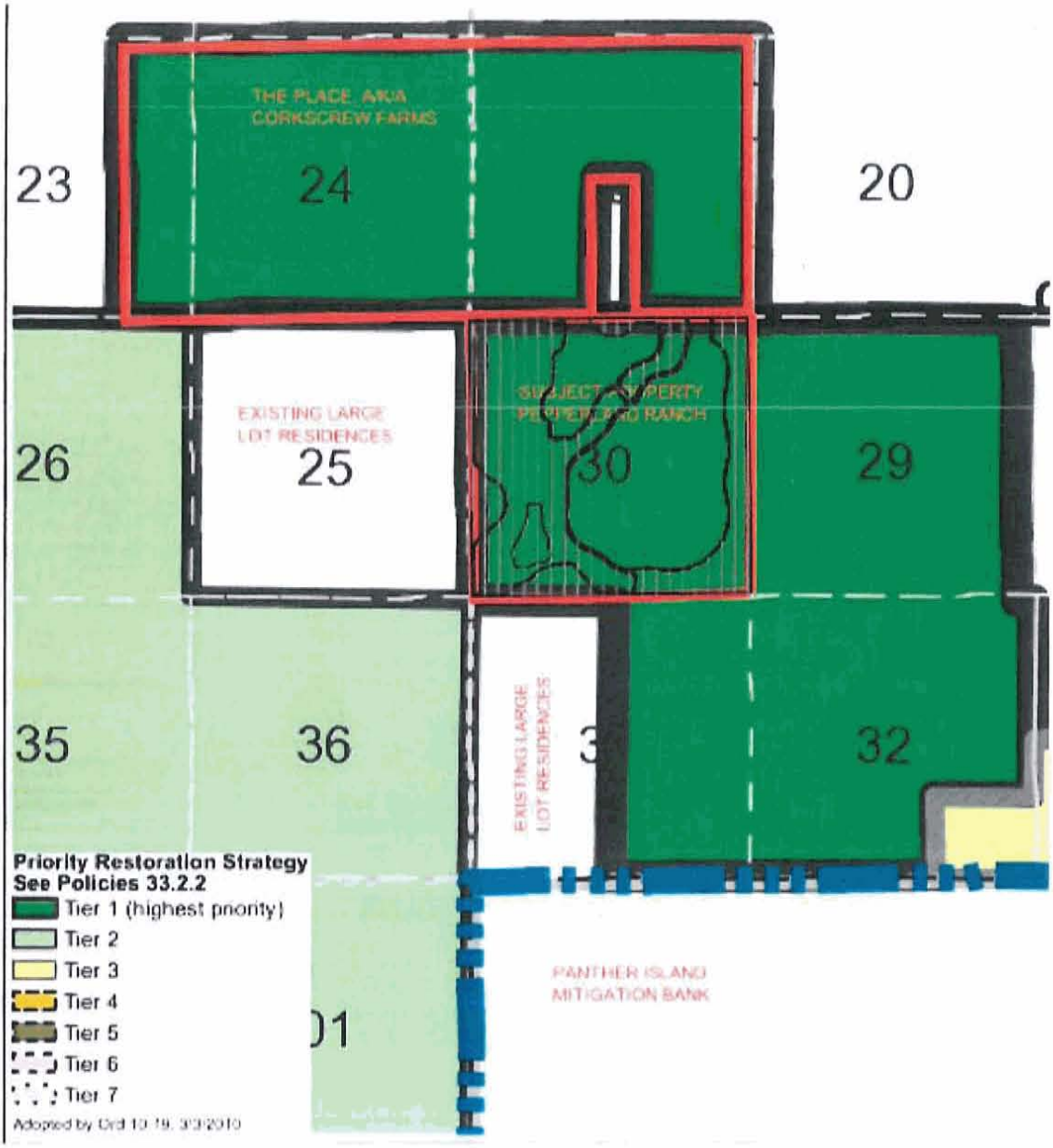


FIGURE 2

The Pepperland Ranch property is targeted by Lee Plan Policy 33.3.4.1.a. for inclusion into the Environmental Enhancement and Preservation Communities Overlay. The property has been highly impacted from years of commercial agricultural activities and is zoned IPD for potential use as a dirt mine. The project will permanently eliminate the possibility of the approved onsite mining activities and associate truck trips on Corkscrew Road. The project will also eliminate potential blasting impacts to the residential neighborhoods adjacent to the site.

The property was included as a possible addition to the overlay because the property has been identified as a high priority restoration area that has the potential to improve, preserve, and restore regional surface and groundwater resources and indigenous wildlife habitats. The project has been designed to meet the requirements of the Overlay as outlined in Lee Plan Policy 33.3.4.2 The proposed rezoning and plan amendment for the Pepperland Ranch project will protect, conserve, enhance and restore natural resources on the property such as flow-

ways, wetland and upland preserves and wildlife habitats, as well as providing other distinct and measurable regional benefits. These benefits are consistent with, and further the overall goals of the Density Reduction/ Groundwater Resource land use category.

The Pepperland Ranch project is proposing to utilize 286.77± acres of the overall 637.5+/- acres of the property for a clustered residential development. The remaining 350.73± acres (or approximately 55%) of the Pepperland Ranch property will be restored and put in a conservation easement to be used for water resources, wetland and upland preserves and wildlife habitat.

Regional benefits include water resource and wildlife enhancements adjacent to other lands that are already restored or proposed to be restored. The project will provide a missing link between conservation lands to the north (Imperial Marsh Preserve and the proposed restoration lands for Corkscrew Farms development) and conservation lands to the south (Panther Island Mitigation Bank and CREW a/k/a Flint Pen Strand). The Pepperland Ranch proposal results in substantial additional permanently preserved open space in the DR/GR land use category. The project will eliminate agricultural activities including the application of fertilizers and pesticides as part of the farm operations. The project will eliminate onsite agricultural ditches and re-establish and restore uplands and wetlands/flowway restoration corridor and provide wildlife habitat. The project will eliminate the possibility of individual potable water wells and septic tanks and drainfields as the project will be serviced by centralized public water and sanitary sewer services.

The project increases the amount of land available for water recharge functions consistent with the intent of the DR/GR. The proposal will eliminate agricultural utilization of the aquifers for crop irrigation and will result in the following reductions to currently permitted agricultural allocations:

- A reduction of over 70% in irrigated acreage
- A reduction of over 60% in annual average allocations
- A reduction of over 80% in maximum monthly allocations (during the dry season)

The project is designed to preserve the opportunity to take additional surface water flow from lands located immediately north of Corkscrew Road by either the existing culvert crossing at the northeast corner of the subject property or alternate measures provided by Lee County. The Pepperland Ranch restored wetlands/flowway has been designed to mimic a freshwater marsh habitat and transmit water through the site allowing for water treatment prior to any offsite discharge. Pepperland Ranch will utilize a combination of dry pretreatment and wet detention systems with created marshes in order to treat stormwater runoff to maintain or improve surface water runoff from the property and reduce nutrient loading. Pepperland Ranch incorporates a series of water control basins with control elevations tied to the vegetation and necessary hydrological factors to maintain water levels in the existing and proposed wetland restoration areas/flowway restoration corridor. Pepperland Ranch includes increased basin storage that can accommodate additional surface water flows to enter the site from Corkscrew Road if Lee County so desires in the future.

The project is designed with additional water storage capacity and will have reduced discharges at the project outfall which is located in the southwest corner of the site. This is a benefit to the single family homes located to the south of the project and assures there are no adverse downstream impacts.

The Pepperland Ranch proposal preserves the opportunity to provide additional flowway connections in the future to the remaining Tier 1 or Tier 2 properties. These future connections could be done as part of a Lee County project, private project, and/or public/private partnership. The project represents a unique opportunity to provide these regional benefits.

Regional Benefits can be summarized as follows:

1. No onsite mining and associated activities such as truck traffic & blasting;
2. Eliminates AG use, reduce use of pesticides, herbicides & fertilizers;
3. Restores upland and wetland areas/flowway restoration corridor;
4. Preserves and restores wetlands/uplands and enhances by exotic removal; restores wildlife habitats including creation of wood stork habitat/foraging habitat for wading birds;
5. Preserves opportunity to provide additional wetland restoration/flowway connections to adjacent properties;
6. Increases the amount of land available for water recharge, while reducing impacts on groundwater resources;
7. Reduces water utilization, project will use over 60% less water than current AG use;
8. AG fields & ditches will be removed & the land re-graded to restore wetland areas/historic flowway and surface hydrology;
9. Provides additional wildlife connections & corridors from conservation lands to the north, south, east and west of the property.
10. Preserve areas & restored wildlife habitats will increase the biological diversity of wildlife using Pepperland Ranch;
11. Increases the species of native vegetation on the property;
12. Connects to public water & sewer services eliminating individual private wells & septic systems which will provide further protection of the area's public water wellfields;
13. Increases basin storage that will potentially allow additional surface water flows to enter the property from Corkscrew Road;
14. Accommodates water treatment of any additional surface water flow that enters the property prior to any offsite discharge;
15. The project water management system is designed to reduce discharges at the existing outfall, which is located in the southwest corner of the property. Reduced discharges will be a benefit to the single family homes located to the south of the property;
16. Preserves future opportunities for further wildlife corridor connections in addition to wetland restoration/flowway connections;
17. Project results in a more compatible use with adjacent single-family homes.
18. Provides Enhanced Lake Management Plan to reduce nitrogen and phosphorus loading;
19. Install monitoring wells and coordination of ground and surface water monitoring and monitoring wells with Lee County Natural Resources;
20. Requires centralized irrigation system controlled by homeowner's association with complete control of duration and timing;
21. Includes central management of fertilizers and pesticides with prohibition of application by individual homeowners;
22. Restores 55% of site in conservation easement with restoration without 20/20 or tax dollars. (In 2012 the property north of this proposed project was reviewed as a 20/20 nomination (#496) at $52,902/acre, which is comparable since this property is also tier 1 and agricultural. Given the subject property at that price, 55% of 637.5 acres (350.63 acres) , the conservation value is an estimated $18,548,763.75;
23. Florida Friendly plants with low irrigation requirements will be utilized in common elements.
24. Wildlife management & co-existence plans will be implemented;

25. Generates Impact fees in the estimated amount of $6,194.88 x 700 = $4,336,416.00.
26. Places portions of subject property within Wellfield Protection Zone 1 into proposed conservation easement as indigenous upland restoration.

The applicant understands that additional discussions need to occur with County Staff concerning the project and additional regional benefits and possible enhancements such as the provision of additional water level data. The applicant is willing to collaborate with County Staff on this Environmental Enhancement and Preservation Community.

Presented below are responses to each review comment.

Lee Plan Consistency Concerns:

Comment 1: Policy 4.1.1 states that "development designs will be evaluated to ensure that land uses and structures are well integrated, properly orientated, and functionally related to the topographic and natural features of the site..." The proposed site design identified in the Lake Management Plan does not appear to be consistent with this policy based on the soil types and historic flowways identified within the application materials. Please demonstrate consistency.

Response: **The proposed wetland restoration areas/flowway restoration corridor within the proposed conservation easement have been redesigned, as described above. The proposed wetland restoration area/flow-way restoration corridor has been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods.**

Comment 2: The application materials do not demonstrate how the project is being designed to provide significant regional hydrological and wildlife connections. Policy 33.3.4(2)(a), requires restoration and accommodation of existing and historic regional flowways both where they currently exist or previously existed. The site plan included in the Surface Water and Groundwater Monitoring Plan and the Lake Management Plan does not demonstrate and illustrate that the subject property can provide the required regional benefits to be eligible to be included within the Environmental Enhancement and Preservation Communities overlay.

Response: **The proposed wetland restoration areas/flowway restoration corridor within the proposed conservation easement have been redesigned, as described above. The proposed wetland restoration area/flow-way restoration corridor has been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods.**

Please see attached revised Surface Water and Groundwater Monitoring Plan and Revised Lake Management Plan.

Comment 3: Policy 107.2.13 promotes optimal conditions rather than minimum conditions for the natural system as the basis for sound planning. Again, the site plan included in the application materials does not promote optimal conditions for the natural system. The historic flowways are not being incorporated into overall design

making it unclear how the project is consistent with Policy 33.3.4 and eligible for inclusion in the Environmental Enhancement and Preservation Communities.

Response: **The proposed wetland restoration areas/flowway restoration corridor within the proposed conservation easement have been redesigned, as described above. The proposed wetland restoration area/flow-way restoration corridor has been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods.**

Natural Resources Concerns:

Comment 1: It is not clear how the proposed drainage patterns are designed. Please use flow arrows to show proposed drainage patterns. Provide a narrative of the proposed drainage pattern concept. It appears that the perimeter lake design is not helping to increase the hydroperiods at the vicinity and therefore, not meeting the goals of the restoration. Please clarify.

Response: **The deep water portion of the restoration area has been eliminated. Please see the attached revised Stormwater Planning Report and restoration plans.**

Comment 2: Please note, based on the information provided in the stormwater Planning Report dated 5/29/16 by Banks Engineering and information provided in Dover Kohl Report July 2008 (specifically page 4-11), the County may require the applicant to provide a flowways easement.

Response: **The applicant acknowledges this comment and has incorporated language in the resubmittal of the proposed development agreement that states, *"Prior to approval of the Project by the Board of County Commissioners, the applicant will be required to enter into a "Flow-way Agreement" with the County. The intent of this "Flow-way Agreement" is to provide a perpetual easement and other provisions necessary for the purpose of preservation and re-establishment of historic flow-ways." A proposed form of Deed of Conservation Easement providing for a flowways easement is attached.***

Comment 3: The drainage condition along the Six L's Farm Road has been very poor. Discharge the runoff into the 'roadside swale south along the Six L's Farm Road" will most likely exacerbate this already poor drainage condition. Note that the "roadside swale" is intermittent at best and/or its capacity has been substantially reduced by lack of maintenance for a prolonged time. Please provide alternatives or assurances for avoiding adverse drainage impacts in perpetuity.

Response: **Although the eastern ditch bank of 6L Farm Road is overgrown with exotic vegetation, the conveyance ditch is functional and serves as the outfall for the Pepperland project and for the rural residential areas east of the road. The Pepperland project has a valid SFWMD permit and operating farm system that discharges to the 6L Farm road ditch. Our survey information and analysis of the roadside conveyance system indicates there is capacity for the Pepperland project.**

As part of the Pepperland project, the discharge rate will be reduced to well below the allowable and historic discharge rate so as not to cause any adverse impacts downstream. More water will be retained in the onsite restoration areas to help improve the onsite hydrology and help restore historic hydroperiods. These large restoration areas provide additional polishing of the runoff and nutrient uptake, and provide additional storage capacity to help protect downstream areas.

The Pepperland stormwater system will meet or exceed the standards for quality and quantity treatment of stormwater as outlined and regulated by SFWMD and Lee County. Part of the Development Order process includes providing assurances that adverse impacts to surrounding properties will not result from the development of the project.

Comment 4: There is a concern that the proposed design would overly drain the existing wetlands. The stormwater planning report states that there is a general sloping of the groundwater table from north to south, thus resulting in proposed control elevations of 25', 24', and 23'. The proposed 20' deep perimeter canal that is ultimately controlled by the proposed weir in the southwest corner at elevation 23'. This would seem to control the whole site at elevation 23'. Please address the following concerns:

a) The proposed perimeter "flow-way restoration" would seem to function more like a canal rather than a flow-way. This is not a restoration of a "natural" and "historic" flow-way. Please demonstrate restoration and accommodation of the natural and historic flow-ways.

Response: **The perimeter deep water portion of the restoration area has been eliminated. The proposed flow-ways have been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods. Please see the attached revised Stormwater Planning Report and restoration plans.**

b) With these two canal-like systems (approximately 160' wide and 20' deep) and proposed head drop of up to 2.0' from north to south, how will adjacent indigenous wetlands be prevented from over-draining and the wetland restoration area receive the required water to remain a viable community?

Response: **The perimeter deep water portion of the restoration area has been eliminated. The proposed wetland restoration area/flow-way restoration corridor has been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods. Please see the attached revised Storwmwater Planning Report and restoration plans.**

c) How is this design consistent with Lee Plan Policy 33.3.4?

Response: **The proposed wetland restoration areas/flowway restoration corridor within the proposed conservation easement have been redesigned, as described**

above. The proposed wetland restoration area/flow-way restoration corridor has been redesigned to follow the hydric soils and historical location through the center of the site from northeast to southwest, between the two proposed development pods.

Comment 5: The stormwater runoff must be directed to specifically designed and designated stormwater treatment areas; it must not be directly diverted or placed into the proposed lakes. Staff determined the previous response to this comment is not sufficient. In particular, please respond to the underlined sentence above.

Response: **Pretreatment areas will be provided throughout the project so that stormwater runoff is first directed to the pretreatment areas before flowing into the lakes. These areas will be planted with native grasses and the littoral areas in the lakes will be placed in proximity to the pretreatment areas to create larger vegetated areas. Rear yard runoff is also collected and not allowed to drain directly into the proposed onsite lakes. This provides additional opportunity for infiltration and nutrient uptake and reduction. This information has been included in the attached revised Stormwater Planning Report.**

Comment 6: What actions/measures will be taken to interconnect the historical flowways from north of Corkscrew Rd. to the project site and continue to CREW lands to the south? This is of regional significance, and is necessary for inclusion in the Environmental Enhancement and Preservation Communities overlay.

Response: **The project to the north known as The Place at Corkscrew/Corkscrew Farms has recorded a conservation easement with provisions to preserve, enhance, restore, or create wetland and upland areas consistent with a management plan. The applicant will be providing a similar easement for the proposed onsite conservation easement as shown on Figure 2 above. The proposed onsite conservation easement preserves the opportunity to provide additional flowway connections in the future to the remaining Tier 1 or Tier 2 properties. These future connections could be done as part of a Lee County project, private project, and/or public/private partnership. The project represents a unique opportunity to provide these regional benefits.**

Comment 7: There is a proposal to use onsite Surficial aquifer wells as an irrigation source replenishment, is the applicant proposing a centralized irrigation system for everyone's use which can only be controlled by a Landscape professional employed by the HOA?

Response: **The project will incorporate a centralized irrigation system and will prohibit individual residences or communities from installing wells or intake pipes into lakes. The irrigation system will be managed by the HOA, and the system will be controlled by an appropriate professional contracted or employed by the HOA. The project will obtain a Water Use Permit for Landscape Irrigation from the South Florida Water Management District. Prohibitions and restrictions related to the operation and interference of the centralized irrigation system by residents of the community, and prohibitions against installation of private wells or private irrigation systems by residents, will be included in the Declaration for Pepperland.**

Comment 8: With the applicant proposing to replace irrigation water from the Water-able aquifer wells, in review of the Master Grading & Drainage Plan it appears that the drainage flow-way will constantly drain the proposed onsite lakes therefore requiring additional groundwater to maintain levels in the lakes. Please clarify.

Response: The perimeter lake system has been eliminated in the revised conservation area. Wetlands Restoration areas of the revised development plan are not expected to result in measurable drainage influence to onsite lakes.

Comment 9: 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:

a) Erosion control and bank stabilization including any proposed boat slips,

Response: A revised Lake Management Plan is attached. This plan includes measures for erosion control and bank stabilization. Boat slips will not be allowed on lakes.

b) Lake maintenance requirements and deep lake management for lakes exceeding 12 feet BLS.

Response: A revised Lake Management Plan is attached. This plan includes measures required for deep lakes that exceed a depth of 12 feet below grade.

c) Water quality Monitoring Plan which will document the specifics of the surface water and groundwater monitoring networks

Response: A revised Surface Water and Groundwater Monitoring Plan is attached that outlines proposed monitoring networks.

D. SURFACE WATER AND GROUNDWATER MONITORING PLAN

1. After five years a request may be made to DNRM for a reduction in monitoring.

3. Are the recorded water levels taken at one point during the day or is it a daily average? Please provide information as to what is recorded.

E. QUALITY ASSURANCE

Please explain why the field blank should not be a "field cleaned equipment blank". Please review FAC 62-160 and FDEP SOP on Field operations on the requirements of field duplicates.

TABLE 3

- Add percent dissolved oxygen saturation and chlorophyll a (corrected) to surface water sites.
- Calculate and report Total Nitrogen (TN)
- Add Practical Quantification Limits (PQL) for all appropriate parameters.

- Results will also be provided to DNRM in an approved comma delimited electronic format.
- In the last paragraph on page 12 you might want to change to reported DNRM within 30 days after receipt of laboratory results.

Response: **A revised Surface Water and Groundwater Monitoring Plan is attached. The plan addresses the requests above regarding monitoring frequency and type, quality assurance, edits to Table 3, and reporting requirements and deadlines.**

If you have any questions or I may be of further assistance, please feel free to contact me at our Fort Myers office.

Sincerely,
BANKS ENGINEERING

Stacy Ellis Hewitt, AICP
Director of Planning

LAKE MANAGEMENT PLAN (CPA2016-00003)

PEPPERLAND RANCH LEE COUNTY, FLORIDA



PREPARED FOR:

BCF Management Group LLC
Consultants in Land Management

BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

REVISED SEPTEMBER 2016

Water Science Associates
13620 Metropolis Avenue, Suite 110
Fort Myers, Florida 33912
O 239.204.5300 F 866.398.2426
www.waterscienceassociates.com

LAKE MANAGEMENT PLAN (CPA2016-00003)

PEPPERLAND RANCH LEE COUNTY, FLORIDA



Water Science Associates

PREPARED FOR:

BCF Management Group LLC
Consultants in Land Management

BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

REVISED SEPTEMBER 2016

Brian K. Barnes
Principal Scientist

Kirk Martin, P.G.
Principal Hydrogeologist

TABLE OF CONTENTS

BACKGROUND **1**

1. PROJECT LOCATION 1
2. PROJECT DESCRIPTION 2
3. PURPOSE 4

LAKE MANAGEMENT PLAN **5**

1. INTRODUCTION 5
2. EXOTIC AND NUISANCE PLANTS 5
3. LITTORAL VEGETATION 5
4. STORMWATER TREATMENT 6
5. FERTILIZER, PESTICIDE, HERBICIDE, AND FUNGICIDE APPLICATIONS 6
6. EROSION CONTROL AND BANK STABILIZATION 8
7. PROTECTION OF PUBLIC WELLS 9
8. IRRIGATION WATER SUPPLY 12
9. BOATING USE 12
10. EDUCATIONAL MATERIALS 12
11. DEEP LAKE MANAGEMENT PLAN 13
12. WATER LEVEL AND WATER QUALITY MONITORING 13

FIGURES

FIGURE 1. LOCATION OF THE PROJECT SITE
FIGURE 2. CROSS SECTION OF TYPICAL LAKE (FROM BANKS ENGINEERING, INC)
FIGURE 3. PROPOSED DEVELOPMENT FOOTPRINT
FIGURE 4. WELLFIELD PROTECTION ZONES

BACKGROUND

1. PROJECT LOCATION

The proposed Pepperland Ranch development is located in Lee County, Florida, approximately eight miles east of Interstate 75, on the south side of Corkscrew Road, within Section 30, Township 46 South, Range 27 East. The Pepperland Ranch site lies within the Estero Bay Watershed and has historically been used for agriculture. The Pepperland Ranch property is currently zoned as a fill dirt mine under Industrial Planned Development (IPD) resolution Z-89-081A. This proposed residential project would remove the potential of future fill mining at the project site. In addition, a significant portion of the project will include restoration areas to facilitate regional hydrologic connectivity, improve surface water flow, groundwater levels, and groundwater recharge, and to provide wildlife habitat. Refer to Figure 1 for a map showing the location of the project site.

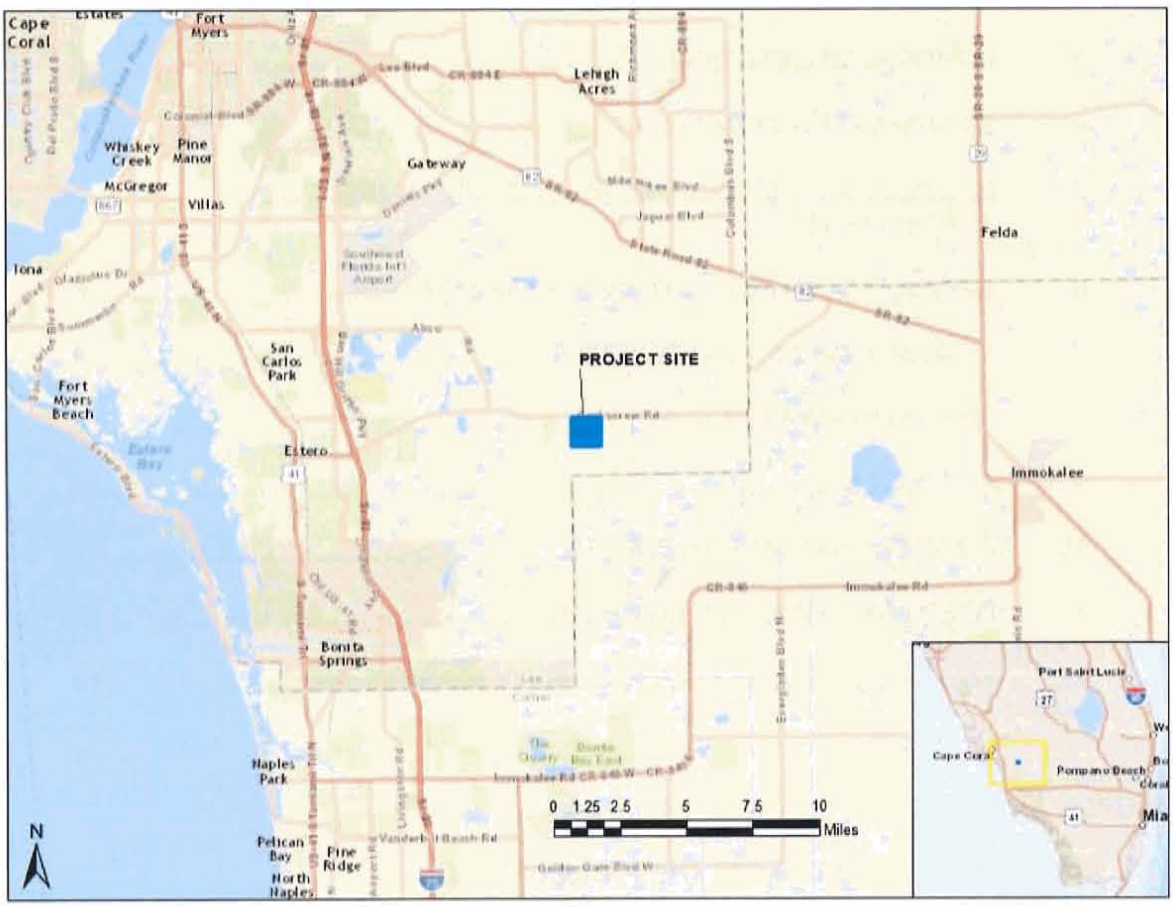


Figure 1. Location of the Project Site

2. PROJECT DESCRIPTION

The Pepperland Ranch project is a proposed 700-unit residential development comprising approximately 637.5 acres. The project will include approximately 55% of the property in preserves, wetland restoration areas, and protected areas. The development footprint will comprise approximately 287 acres. The project will include residential tracts, stormwater management lakes, common areas, and restored wetland restoration areas, wetland preserves, and upland preserves associated with the residential development. The overall project design has been developed to improve onsite and regional hydrology by recreating historic wetland restoration areas through the property where they are known to have existed as well as providing for future offsite connectivity to adjacent properties at multiple points along the project site boundary. Preserves and wetland restoration areas incorporated into the overall project design will facilitate regional hydrologic improvements by accommodating future stormwater inflows from north of Corkscrew Road and providing pass through to either the southeastern or southwestern portion of the Pepperland Ranch property.

The stormwater lakes are proposed to be excavated to a maximum depth of 20 feet below land surface (refer to Figure 2 for a typical lake cross section). The project will include 13 stormwater management lakes with a total lake area of approximately 39 acres. Figure 3 provides a map showing the proposed development footprint. A post-construction bathymetric survey, sealed by a Professional Surveyor and Mapper, will be provided for all lakes at the time of the Development Order.

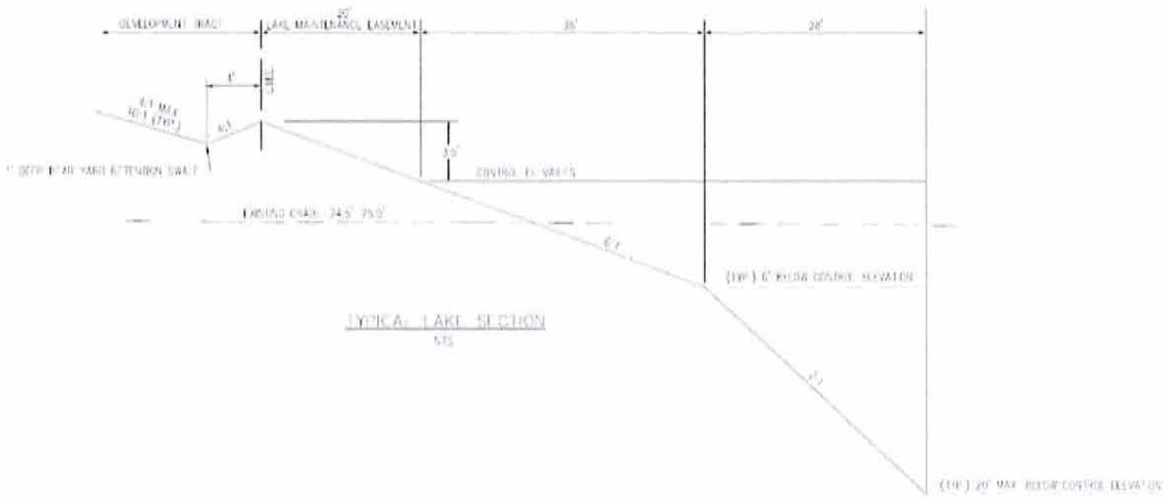


Figure 2. Cross Section of Typical Lake (from Banks Engineering, Inc)

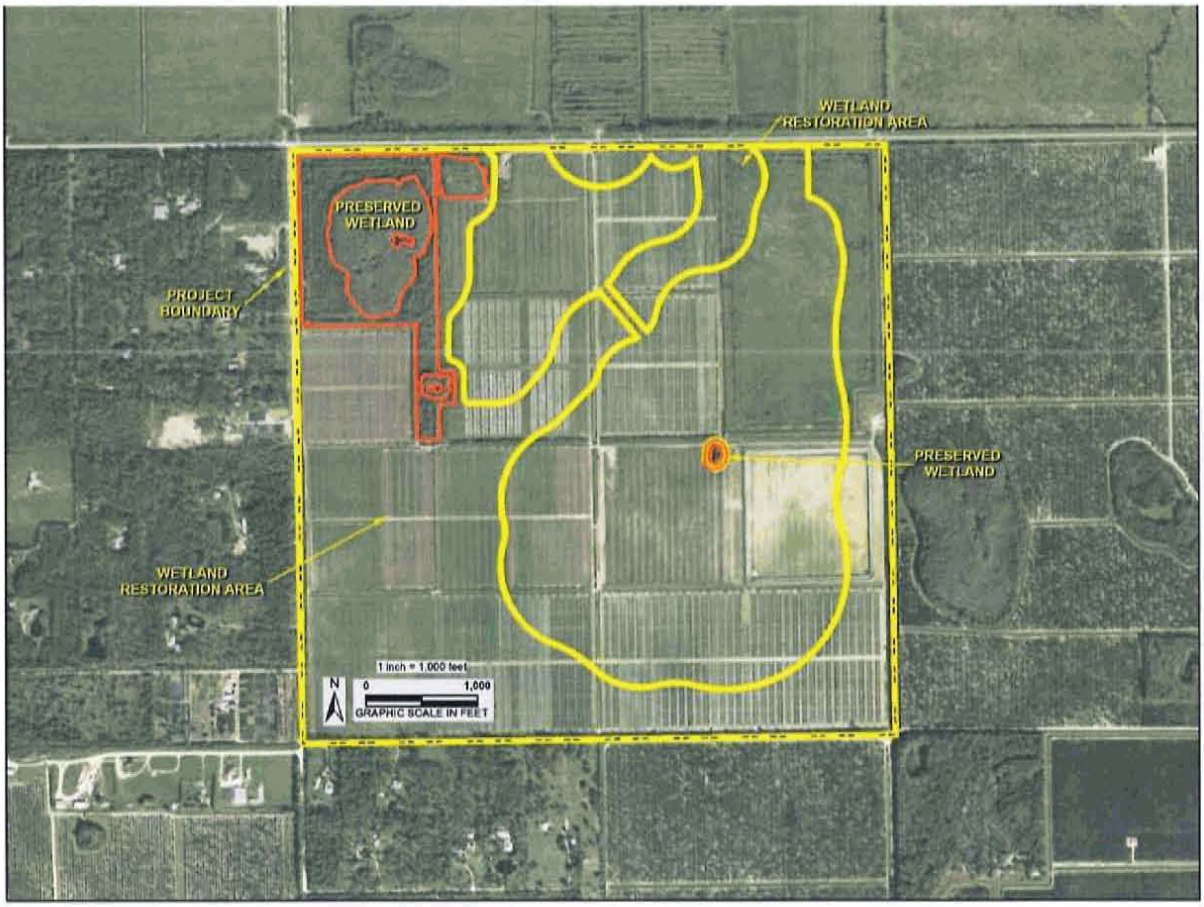


Figure 3. Proposed Development Footprint

3. PURPOSE

The purpose of this Lake Management Plan is to provide policies and protocols for long-term management of the lake system that will maintain the health and productivity of the lake system. Provision of the plan include maintenance of lake shore stability and vegetation, protection of lake water quality, provision for irrigation water supply and recreational activities, protection of public water supplies, and provision of a water level and water quality monitoring program. It is anticipated that this lake management plan will be incorporated into homeowners' association covenants to provide for proper lake management at the project site.

This plan is provided in response to Lee County Staff comments to Comprehensive Plan Amendment submittals under CPA2016-00003. The Lake Management Plan includes general measures and Best Management Practices (BMPs) to be employed so that exotic vegetation is controlled, fertilizer and pesticide applications are properly applied, lake banks are maintained, desirable littoral plants flourish, and water quality is enhanced within the project lakes to meet the Land Development Code in perpetuity. This Lake Management Plan may be further refined during the Development Order process.

LAKE MANAGEMENT PLAN

1. INTRODUCTION

In response to the comments received from Lee County Division of Natural Resources, the following items are proposed as the Lake Management Plan. It is expected that the details of this maintenance plan will be further refined through the forthcoming Development Order process for the Pepperland Ranch development. A copy of the final plan that is completed during the Development Order process will be recorded in the public record in compliance with Section 10-329(d)(5) of the Land Development Code. Homeowners' Association (HOA) Declaration Documents will establish responsibility for the maintenance of the surface water management system including all lake and littoral areas, interconnects, wetland restoration areas, and control systems as well as provide for prohibitions to individual homeowner control of applications of irrigation water and fertilizers and pesticides.

2. EXOTIC AND NUISANCE PLANTS

The HOA is responsible for the removal (in perpetuity) and control of exotic and nuisance plants as defined by the Lee County Land Development Code (LDC), 10-329. Exotic and nuisance plants will be managed through a maintenance contract with a licensed contractor to provide such services. Two visits per year with the purpose of exotic removal will be conducted. After the initial clearing of the development tracts, exotics are to be maintained/removed through hand clearing or appropriate herbicide treatments by a licensed applicator and in accordance with manufacturer specifications, and all applicable local, state and/or federal guidelines and requirements. Herbicides shall be labeled for use in water areas and are not to be detrimental to littoral plantings.

3. LITTORAL VEGETATION

Required littoral vegetation must remain in a healthy and vigorous state in perpetuity in all the lakes within the project. Any littoral plants approved as part of the Development Order that die must be replaced so that the total number and type of littoral plants remain in accordance with the Development Order and the LDC requirements. The use of trimming, mowing, and herbicides to remove desirable littoral plants is prohibited. Any trimming or removal of vegetation within littoral areas by Contractors performing landscape or lake maintenance work to promote the survival and viability of littoral vegetation must be performed by hand or by approved herbicides and methods. Appropriate native lake littoral plantings are expected to grow in their natural state. A planting plan for littorals will be provided at the time of the Development Order. Inspections of littoral plantings to verify the survival of required plants and replanting of littoral vegetation when required must be in accordance with County requirements.

Additionally, Submerged Aquatic Vegetation (SAV) serve as important lake vegetation in achieving a healthy and balanced ecology. These provide an essential oxygen source through photosynthesis and oxygen release into the water column. Any treatment plans for controlling vegetation within SAV by Contractors must be approved in advance by the HOA and performed by approved methods.

4. STORMWATER TREATMENT

Stormwater quality treatment will be provided within the development through a system of wet and dry detention areas. Pretreatment of stormwater runoff will be provided prior to discharge to stormwater management lakes. The intent of the stormwater system is to include stormwater management lakes within the developable area of the project to provide water quantity attenuation and water quality treatment of stormwater in accordance with Lee County and South Florida Water Management District (SFWMD) requirements. After treatment, water from the stormwater management system will be discharged to the internal wetland restoration areas and surrounding preserve areas to aid in restoring the natural hydrology of the project site that currently exists as active farm fields. It is important to note that the lakes will be discharging into 352-acre restored preserve area where additional water quality treatment and storage will be provided prior to discharge offsite. The project's stormwater system will meet or exceed the standards for quality and quantity treatment of stormwater as outlined and regulated by the SFWMD and Lee County. Treated stormwater discharge from the lake system to the surrounding 352-acre preserve will provide for additional water quality treatment as well as providing hydrologic restoration prior to any outfalls offsite. Discharge structures associated with the flow into and out of the lakes will follow routine inspection to confirm proper operations.

The stormwater management system will be permitted by the SFWMD during the Environmental Resource Permitting (ERP) process. Should modifications be necessary during the Development Order process, the ERP will be modified with the SFWMD.

5. FERTILIZER, PESTICIDE, HERBICIDE, AND FUNGICIDE APPLICATIONS

The Pepperland Ranch Community through a HOA or other controlling entity will provide centralized control of landscaping maintenance including application of fertilizers, pesticides, herbicides, or fungicides to landscaped areas within the Pepperland Ranch Community. The HOA Declaration Documents include, in part, the following language:

- *No Owner shall apply fertilizers, pesticides (e.g., insecticides, nematicides, etc.), herbicides or fungicide to their lawns or other landscape areas within their Yard, Lot or Parcel or any portion of the Common Areas.*

- *The HOA shall employ only licensed and qualified person(s) to conduct the maintenance, repairs and replacement of landscaping in the Common Areas and, if an obligation of Association, in the Yards of Lots/Parcels in accordance with best management practices and any applicable federal, state or local law, ordinance, rule or regulation. To the extent practicable, Association shall use Florida Friendly Plantings that have low irrigation, fertilizer, pesticide, herbicide and fungicide requirements in the Common Areas. All Builders are encouraged to install Florida Friendly Plantings on individual Yards of Lots/Parcels.*

Fertilizer applications will be in compliance with Lee County Fertilizer Ordinance 08-08. The following provisions will be followed.

- Any person(s) applying commercial fertilizer to an urban landscape must receive a limited certification for urban landscape commercial fertilizer application in compliance with Florida Statue 482.1562 prior to application of any and all fertilizers. The limited certification provides a means of documenting and ensuring compliance with best management practices for commercial fertilizer application to urban landscapes.
- Fertilizers containing nitrogen and/or phosphorus will not be applied from June 1st to September 30th and will not exceed application limits provided in the Lee County Fertilizer Ordinance.
- Grass clippings and/or vegetative material shall not be washed, swept or blown into stormwater drains, ditches, conveyances, water bodies, roadways or other impervious surface.
- Fertilizer shall not be applied within 10 feet of the top of bank from any lake, designated wetland or wetland defined by the rules of the Florida Department of Environmental Protection (Chapter 62-340 F.A.C.). These practices are not expected to apply to newly established landscaping or reclaimed water that may be used onsite.
- Fertilizer may not be applied, spilled or otherwise deposited on any impervious surfaces. Any fertilizer applied, spilled or deposited on any impervious surface must be immediately and completely removed.
- Spreader deflector shields are required when fertilizing by use of any broadcast or rotary spreaders.
- A low maintenance zone is recommended adjacent to an on the sloped portion of lake banks. The vegetation within the low maintenance zone is encourage to be maintained higher than surrounding areas to allow the vegetation to help absorb and filter nutrients from runoff.

All applications of pesticides, herbicides and/or fungicides shall be applied by a licensed contractor and applied in accordance with all manufacturer specifications, applicable local, state and/or federal guidelines, and other requirements 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. 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. Individual lot owners shall be prohibited from applying pesticides, herbicides and/or fungicides to their lots.

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 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 stormwater 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:

- Must be consistent with the USDA-NRCS Soil Rating for Selecting Pesticides.
- Must have the minimum potential for leaching into groundwater or loss from runoff.
- Products must be FDEP and/or EPA-approved.
- The half-life of products may not exceed seventy (70) days.

6. EROSION CONTROL AND BANK STABILIZATION

The Pepperland Ranch Community will have 13 stormwater management lakes. Lake banks within the project are designed to minimize the potential for erosion due to overland flow of stormwater runoff, wave action, and natural seasonal fluctuation of water levels. The lake banks will be designed at a 6:1 slope and stabilized by sod. No temporary or permanent boat slips and/or docks may be built within the lake management areas as discussed in Section 9 of the Lake Management Plan.

Lake banks will be inspected annually to identify areas of erosion. If erosion is 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 cross-section stability may be necessary.

Where applicable, roof drains and gutter outfall will be directed in a manner that limits velocity and directs runoff into the stormwater management lakes 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.

The Master Concept Plan includes a 20 feet easement along the lake bank separate from the abutting lots to provide access to the lake bank and littoral vegetation for maintenance purposes. The specific parameters (vegetation type, spacing, etc.) of the littoral plantings and lake bank maintenance shall be provided at the time of Development Order. It is expected that littoral plantings will be provided along the bank of the lake for stabilization purposes and a planting plan will be submitted as part of the Development Order process. Should additional shoreline stabilization determined to be necessary, a plan will be developed and submitted for review at the time of Development Order.

7. PROTECTION OF PUBLIC WELLS

The Pepperland Ranch project site falls partially within the Wellfield Protection Area of the Lee County Utilities Corkscrew Wellfield. Six existing public water supply wells are located within easements on the north side of Corkscrew Road adjacent to the northern boundary of the project site. The presence of these wells places portions of the project site within Zones 1 through 4 of the established protection zones from the Lee County Wellfield Protection Ordinance (Ordinance No. 07-35). Refer to Figures 4 for the locations of the wellfield protection zones relative to the project site.

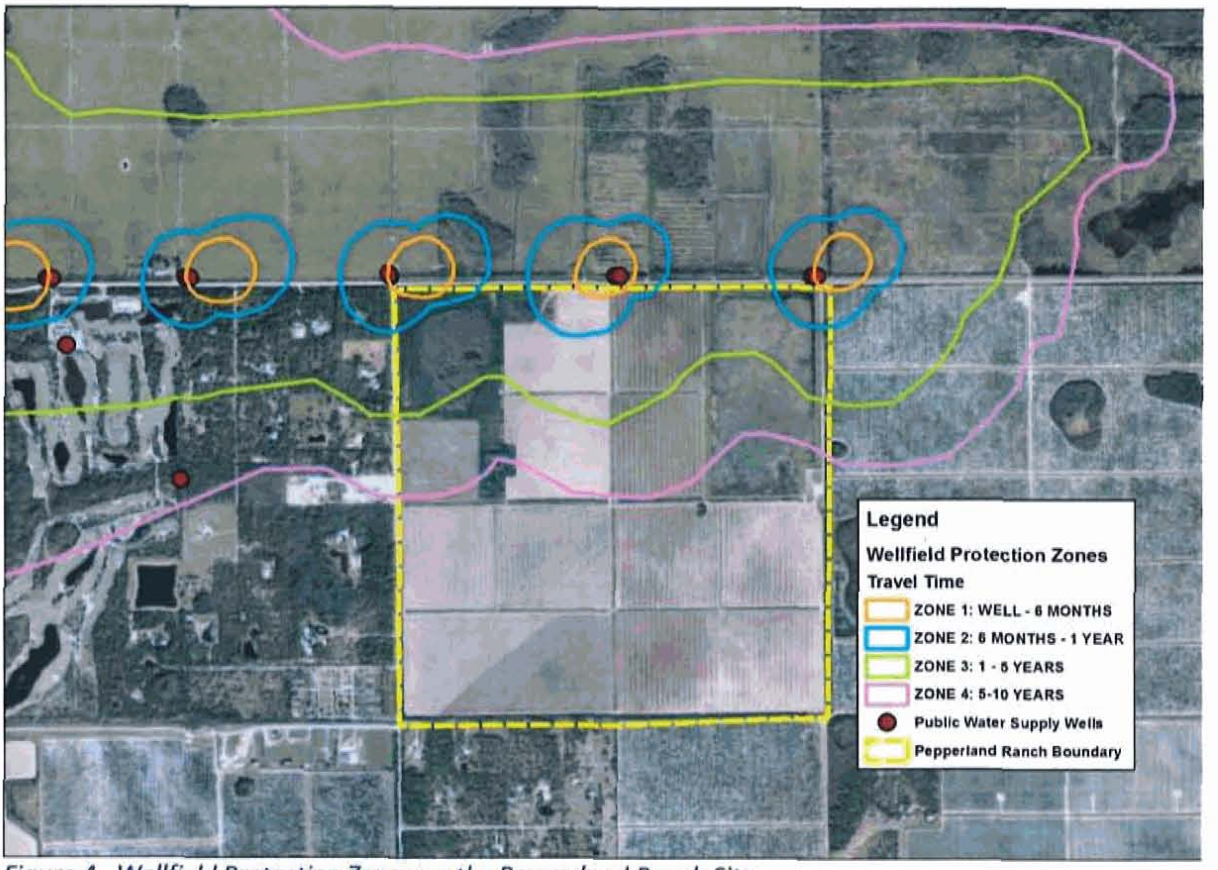


Figure 4. Wellfield Protection Zones on the Pepperland Ranch Site

Wellfield protection zones are commonly created with the use of groundwater flow modeling to assess the time it may take for a potential contaminant to arrive at a public supply wellfield. The "protection zones" correspond to the modeled location were a potential contaminant could travel to a well location within the given "travel time." The closer a facility is to the wellfield (shorter travel distance) the more restrictions are typically applied to potential land uses. The protection zones defined by various lengths of travel time are as follows:

Zone 1: Between the well and the 6-month travel time line
Zone 2: Between the 6-month and 1-year travel time lines
Zone 3: Between the 1-year and 5-year travel time lines
Zone 4: Between the 5-year and 10-year travel time lines.

Because portions of the project lakes are located within the Zones 1 through 4 of the established protection zones of the Lee County drinking water wells, every precaution will be taken to preserve the quality of surface and groundwater within the property. The Pepperland Ranch development will meet the following prohibitions and regulations as outlined in the Lee County Wellfield Protection Ordinance (Ordinance No. 07-35).

Prohibitions within Zones 1 to 4 include the following:

a. The use, handling, production or storage of regulated substances associated with land uses or activities regulated by this article in quantities greater than those set forth in section 14-208. ***ZONES 1 to 4***

b. Wastewater effluent disposal, except for public access reuse of reclaimed water and land application under the conditions set forth and as-defined in F.A.C. chapter 62-610, part III. Where public access reuse is permitted, the chloride content must be no greater than 500 milligrams per liter. ***ZONES 1 to 3***

c. Liquid waste disposal. ***ZONES 1 to 3***

d. Solid waste disposal. ***ZONES 1 and 2***

e. Earth mining within a 500-foot radius of an existing wellhead. ***ZONE 1***

Regulations within Zone 1 include:

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, use or production of regulated substances in quantities greater than those set forth in section 14-208 are prohibited within protection zone 1 unless an operating permit for the prohibited activity, issued on or before September 1, 1989, remains viable.

b. The owners of any sanitary sewer, force main, gravity sewer or lateral must notify the division of any break in the sewer lines within 24 hours of discovery. The purpose of this requirement is to allow the division to monitor repairs to the line and any necessary cleanup activities.

c. Stormwater or surface water discharges within this protection zone must conform to existing SFWMD and Florida Department of Environmental Protection rules.

Regulations within Zone 2 include:

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, use or production of regulated substances in quantities greater than those set forth in section 14-208 are prohibited within protection zone 2 unless an operating permit for the prohibited activity, issued on or before September 1, 1989, remains viable, or an administrative exemption is granted under section 14-208 to allow issuance of an operating permit under section 14-244.

b. Stormwater or surface water discharges within this protection zone must conform to existing SFWMD and Florida Department of Environmental Protection rules.

Regulations within Zone 3 include the following:

a. Except as provided in section 14-209, all land uses or activities involving the storage, handling, use or production of regulated substances occurring within protection zone 3 must be conducted in accordance with a valid operating permit issued pursuant to section 14-244.

b. All operating permits must be renewed annually and will be subject to the conditions set forth in section 14-244.

c. Stormwater or surface water discharged within this protection zone must conform to existing SFWMD and Florida Department of Environmental Protection rules.

Regulations within Zone 4 include the following:

a. Except as provided in section 14-209, land uses or activities involving the storage, handling, production or use of regulated substances in protection zone 4 must be conducted in accordance with a valid operating permit issued pursuant to section 14-244.

b. All operating permits must be renewed annually and will be subject to the conditions set forth in section 14-244.

c. Stormwater or surface water discharged within this protection zone must conform to existing SFWMD and Florida Department of Environmental Protection rules.

Protective restrictions within Zone 2 through 4 include progressively fewer restrictions than Zone 1 as distance increases from the protected wells. Pepperland Ranch project will fully comply with the strictest protective measures for each of the wellfield protection zones.

The HOA Declaration Documents includes, in part, the following language:

- *No fuel or hazardous material storage shall be permitted within Pepperland Ranch, except in quantities as may be necessary or reasonably for use in connection with swimming pools, spas, barbecues, fireplaces, emergency generators or similar devices and as otherwise permitted by this Declaration. All permitted fuel and hazardous materials shall be stored inside a garage or other non-living structure and in sealed and approved containers.*

The community will connect to central water and sewer facilities eliminating risks related to liquid and solid waste disposal. Irrigation water will maintain a chloride concentration below allowable limits. No earth mining is proposed within 500 feet of any Lee County Utilities wellheads. Any breaks in sewer distribution lines will be reported to the Lee County Division of Natural Resources within 24 hours of discovery as required by Section 14-214 of the Land Development Code.

Stormwater and/or surface water discharges will conform to SFWMD and Florida Department of Environmental Protection rules and regulations.

8. IRRIGATION WATER SUPPLY

The HOA Declaration Documents applicable to all owners, HOA, or other governing entities for the project will provide for central control of irrigation water supply and use throughout the development to ensure compliance with all applicable regulations and conditions of the community water use permit. Furthermore, covenant documents will prohibit the use of individual irrigation wells or surface water intakes in the community. Irrigation use at the Pepperland Ranch project will be permitted by the SFWMD and subject to SFWMD rules, criteria, and permit limiting conditions.

9. BOATING USE

The northern portion of the Pepperland Ranch Community lies within a Wellhead Protection Zone. In order to maintain water quality within the project lake system, the community will place limits on boating activities in onsite lakes, to include:

- No motorized boats or fuel storage
- No mechanical repair facilities
- No automated bilge discharge pumps
- No temporary or permanent boat slips and/or docks
- A spill response plan will be developed during the Development Order process
- A boater's education program will be developed during the Development Order process addressing potential boating pollution sources and best management practices.

10. EDUCATIONAL MATERIALS

Educational materials will be developed and provided to all residents describing the benefits of littoral vegetation, lake maintenance, and water quality. A narrative summary explaining the benefits of littoral plantings including the requirements that the littoral plantings within the lakes shall remain in perpetuity, will be provided through educational pamphlets and/or a newsletter to the residents of the subdivision. Educational materials may also be distributed through an educational presentation given annually in conduction with HOA meetings. Lake experts may be invited to the HOA meetings annually to provide further education for the lake system operation and maintenance requirements that may address the changes over time and educate residents on the various trends in the lakes. Educational materials will also include lake use prohibitions, such as motorized boat traffic, removing or trimming littoral vegetation, and prohibition of intake pipes in lakes for irrigation use. The materials will explain to the individual property owners their responsibilities with respect to compliance with bank slope and littoral area management plans. Educational materials may take the form of signs and brochures and will be refined during the Development Order process. Educational materials distributed to residents will include a summary of fertilizer and pesticide best management practices.

Additionally, the lake educational materials will include information specifying that the development is located in proximity to Lee County Wellfields, and express the importance related to the prevention of introduction of hazardous materials into the lakes.

11. DEEP LAKE MANAGEMENT PLAN

The project will include 13 stormwater management lakes with a total lake area of 38.9 acres. The stormwater lakes are proposed to be excavated between 12 and 20 feet below land surface; no lakes will extend below 20 feet in depth. The Water Table Aquifer extends to over 100 feet below grade at the project site, so lake excavations will not penetrate multiple aquifers.

For all lakes deeper than 12 feet, The Deep Lake Management Plan will include the installation of destratification systems and planted native shade trees. The lake management techniques, including the operation of the destratification system, as specified in the Deep Lake Management Plan, will be maintained for the life of the lake(s).

Destratification systems will be installed in lakes deeper than 12 feet to aid in the prevention of low dissolved oxygen levels and promote the breakdown of the stratified water layers. Systems may include fountains, bubblers, or other measures to meet dissolved oxygen levels as required by State Water Quality Standards. The specific destratification systems will be proposed during the Development Order process.

Due to the fact that warmer temperatures and nutrient runoff can play a negative role within the lake system, native shade trees will be planted around the perimeter of the lakes to decrease surface water temperatures. In addition to the requirements of lakes less than 12 feet deep for lake and littoral plantings, lakes deeper than 12 feet will have more native shade trees planted around the perimeter, calculated at one tree per 100 feet of lake shoreline as required by Section 10-420 of the Land Development Code.

12. WATER LEVEL AND WATER QUALITY MONITORING

A sampling plan entitled "*Surface Water and Groundwater Monitoring Plan, Pepperland Ranch, Lee County, Florida*" (Revised September 2016) is submitted under separate cover. This plan includes semi-annual water quality testing and download of electronic water level measurements. Refer to the monitoring plan for locations of sampling sites, and surface water and groundwater level recording stations. The monitoring plan may be further refined during the Development Order process.

STORMWATER PLANNING REPORT

09-08-16
CPA2016-00003

PREPARED FOR:

Pepperland Ranch

Pepperland, LLC
107 Enterprise Court
Oxford, NC 27565

PREPARED BY:

BANKS ENGINEERING
Professional Engineers, Planners & Land Surveyors

10511 Six Mile Cypress Parkway, Suite 101
Fort Myers, Florida 33966

TABLE OF CONTENTS

SECTION A	INTRODUCTION.....	3
SECTION B	PERMITTING HISTORY.....	5
SECTION C	PROJECT STORMWATER NARRATIVE.....	6
SECTION D	CONCLUSIONS.....	14

FIGURES

FIGURE 1	CORKSCREW LAKES BORROW PIT
FIGURE 2	HARVEY BROTHERS CORKSCREW FARM
FIGURE 3	SCHWAB 640 BORROW PIT-LDO2001-00070
FIGURE 4	ESTERO BAY WATERSHED MAP
FIGURE 5	HISTORIC FLOWWAYS MAP
FIGURE 6	EXISTING RESIDENTIAL DEVELOPMENT MAP
FIGURE 7	EXISTING CONDITIONS FLOWWAYS
FIGURE 8	HISTORIC HYDROPATTERN MAP
FIGURE 9	CURRENT HYDROPATTERN MAP
FIGURE 10	ON-SITE AND ADJACENT PROPOSED FLOWWAYS MAP
FIGURE 11	FEMA FIRM MAP

EXHIBITS

EXHIBIT A	SFWMD ERP 36-002292-S
EXHIBIT B	PROSPECTS FOR SE LEE COUNTY, PLANNING FOR THE DR/GR-07/08 EXCERPTS
EXHIBIT C	ECOLOGICAL MEMORANDUM OF THE DR/GR-07/08 EXCERPTS

SECTION A: INTRODUCTION

The ***Pepperland Ranch*** development is located in Lee County, Florida, approximately 2 ¾ miles east of Alico Road, at the southeast intersection of Corkscrew Road and Six Ls Farm Road, specifically all of Section 30, Township 46 South, Range 27 East. According to the Lee County GIS, the project area is located within the Cocohatchee River Basin. The site has historically been used for agriculture and planned for aggregate mining. Agricultural production on the site began in the 1950's and continues today. Aggregate mining operations were approved on the site in the 1980's but never transitioned to an active mining operation. The proposed ***Pepperland Ranch*** project will be on the south side of Corkscrew Road. The proposed ***Pepperland Ranch*** project will provide significant wetland and upland restoration areas and two compact residential development areas with internal lakes and will be comprised of residential tracts surrounding these lakes, common areas associated with the residential development, as well as, an amenity area within the development.

The purpose of this report is to provide analysis of the stormwater characteristics for the proposed development to satisfy Goals, Policies, and Objectives of the "Lee Plan 2013 Codification, as Amended through September 2013" (Lee Plan) and the Lee County Land Development Code (LDC). The following are the Goals, Policies, and Objectives of the Lee Plan and LDC regulations that are addressed:

Goals, Policies, and Objectives:

GOAL 115: WATER QUALITY AND WASTEWATER. To ensure that water quality is maintained or improved for the protection of the environment and people of Lee County.

OBJECTIVE 115.1: Maintain high water quality, meeting or exceeding state and federal water quality standards.

POLICY 115.1.1: Sources of water pollution will be identified, controlled, and eliminated wherever feasible.

POLICY 115.1.2: New development and additions to existing development must not degrade surface and ground water quality. (Amended by Ordinance No. 00-22)

POLICY 115.1.3: The design, construction, and maintenance of artificial drainage systems must provide for retention or detention areas and vegetated swale systems that minimize nutrient loading and pollution of freshwater and estuarine systems. (Amended by Ordinance No. 00-22)

POLICY 115.1.4: Developments which have the potential of lowering existing water quality below state and federal water quality standards will provide standardized appropriate monitoring data. (Amended by Ordinance No. 00-22)

Land Development Code:

LDC Section 34-373: (b) *Additional required information for all major planned development zoning*. PRFPDs must also comply with the additional requirements contained in section 34-941. Compact PDs must also comply with the additional requirements contained in chapter 32.

(1) A written description of the surface water management plan that includes:
   a. The runoff characteristics of the property in its existing state;
   b. In general terms, the drainage concept proposed, including the outfall to canals or natural water bodies including how drainage flow from adjacent properties will be maintained;
   c. The retention features (including existing natural features) that will be incorporated into the drainage system and the legal mechanism which will guarantee their maintenance;
   d. How existing natural features will be preserved. Include an estimate of the ranges of existing and post development water table elevations, where appropriate;
   e. If the property is subject to seasonal inundation or subject to inundation by a stream swollen by the rains of a 100-year storm event, indicate the measures that will be taken to mitigate the effects of expectable flooding.

SECTION B: PERMITTING HISTORY

South Florida Water Management District

The proposed ***Pepperland Ranch*** project lies within the boundary of the previously permitted Corkscrew Lakes Borrow Pit (see Figure 1) which received a SFWMD ERP (No. 36-02292-S) in 1992 for a borrow pit. The ERP was amended in 1994 for Harvey Brothers Corkscrew Farm (see Figure 2 on next page). There have been permit transfers and letter modifications to the permit since 1994 and this is still an active permit. The proposed ***Pepperland Ranch*** project area is approximately 637.5 acres. The existing SFWMD permit established the average wet season water levels (control elevations).

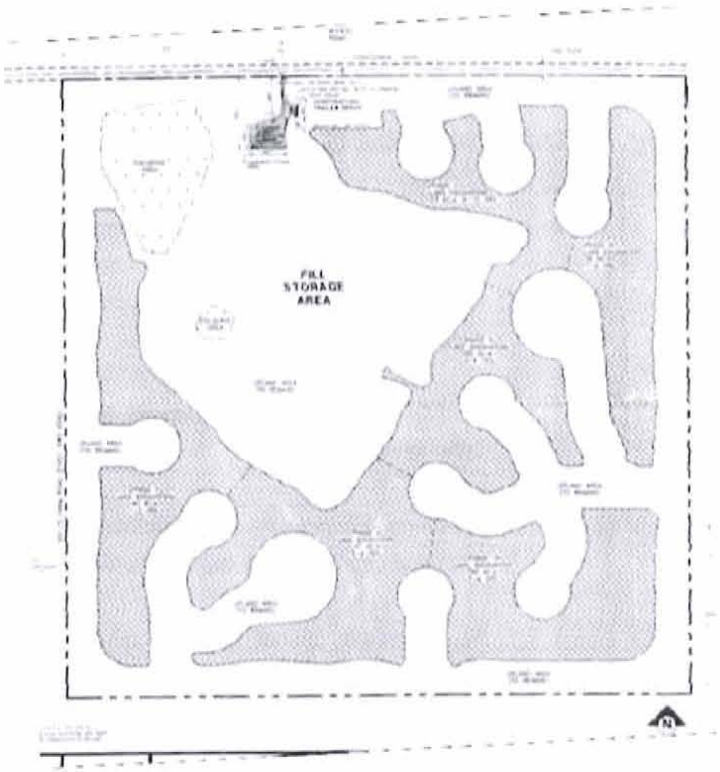


Figure 1. Corkscrew Lakes Borrow Pit

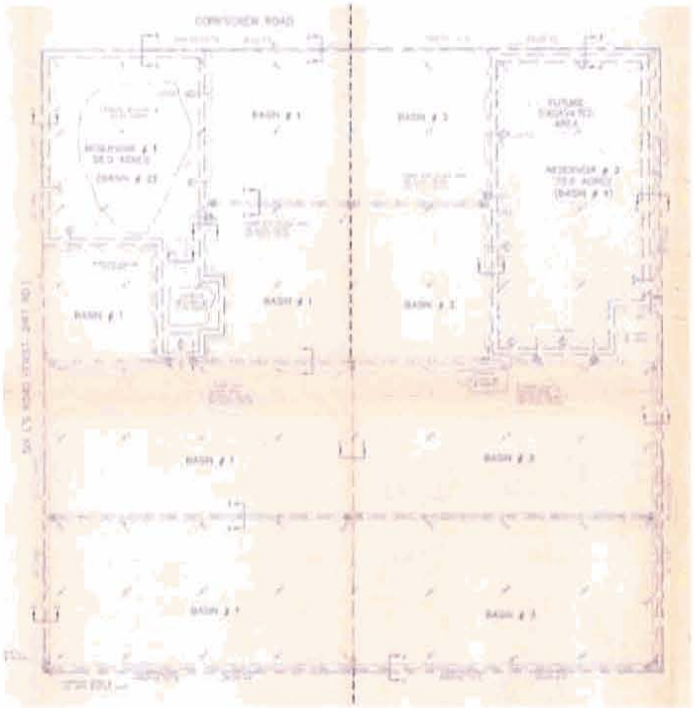


Figure 2. Harvey Brothers Corkscrew Farm

Lee County Development Order

Limited Review Development Order (LDO) LDO2001-00070 was approved by Lee County in 2002 for excavation of Phase I only of the Schwab 640 Borrow Pit (See Figure 3).

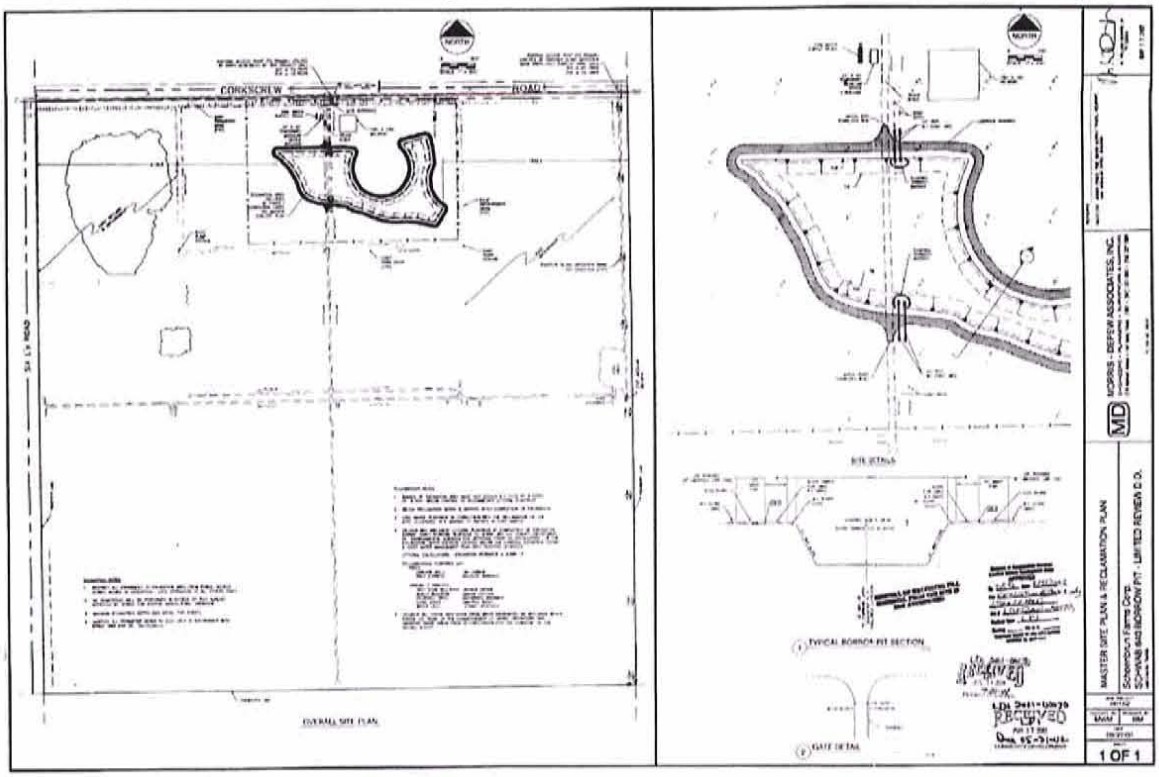


Figure 3. Schwab 640 Borrow Pit-LDO2001-00070

SECTION C: PROJECT STORMWATER NARRATIVE

The proposed ***Pepperland Ranch*** project area is approximately 637.5 acres and is located within the Corkscrew Swamp Watershed (see Figure 4).

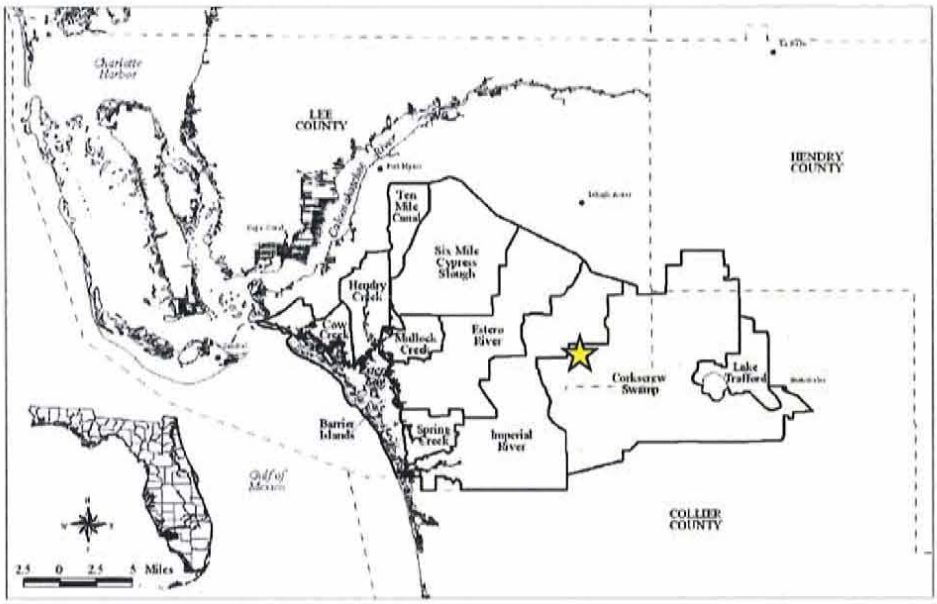


Figure 4. Estero Bay Watershed & Associated Secondary Basins Map

The north branch of the Corkscrew Swamp Watershed encompasses the project, situated across the project site in a north to south direction. This wetland system is a tributary to the north branch of the Corkscrew Swamp and is the historic outfall for the project site as well as a tributary for off-site areas. Currently, the historic outfall is hydraulically blocked by existing roadways serving rural residential lots and farm berms and ditches.

The project design and layout of the proposed onsite wetland restoration areas/flowway was established, in part, by consulting the following 2008 reports:

- Dover, Kohl & Partners, July 2008 report titled, Prospects for Southeast Lee County, Planning for the Density Reduction/Groundwater Resource Area (DR/GR) (excerpts attached as composite Exhibit "B")
    - Page 1.17 of the above referenced report, demonstrates the hypothesized and estimated historic flowway connections prior to development or agriculture. Below is a figure showing the subject property in relation to these estimated historic flowways. See attached and Figure 5 below.

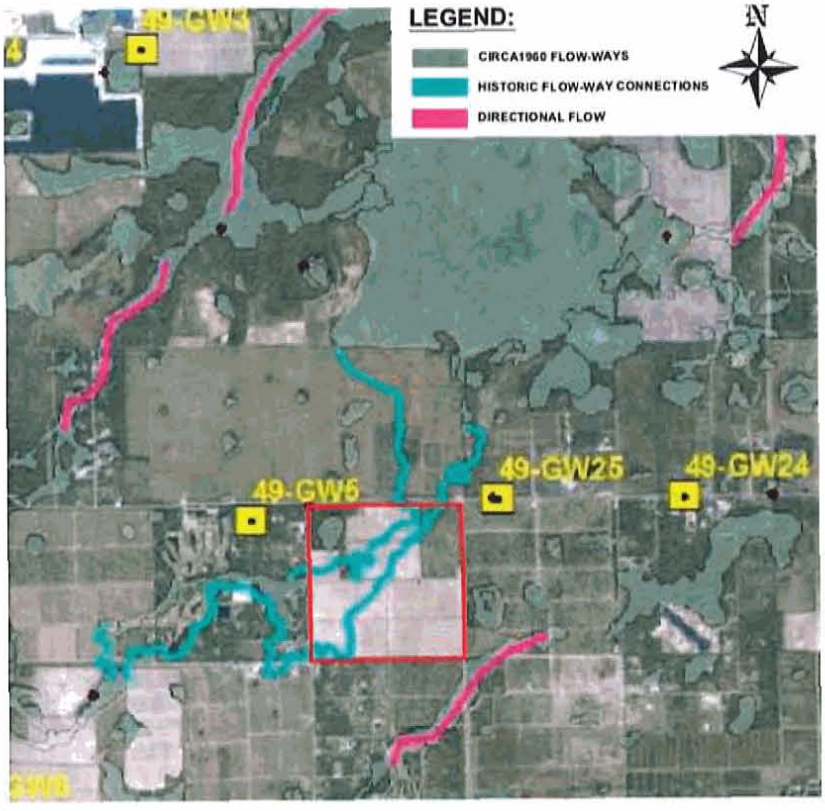


Figure 5. Historic Flowways Map

- Page 4.4 demonstrates the existing residential development to the west and south of the subject property that demonstrates challenges in connecting the flowway in its estimated historic location. See attached and Figure 6 below.

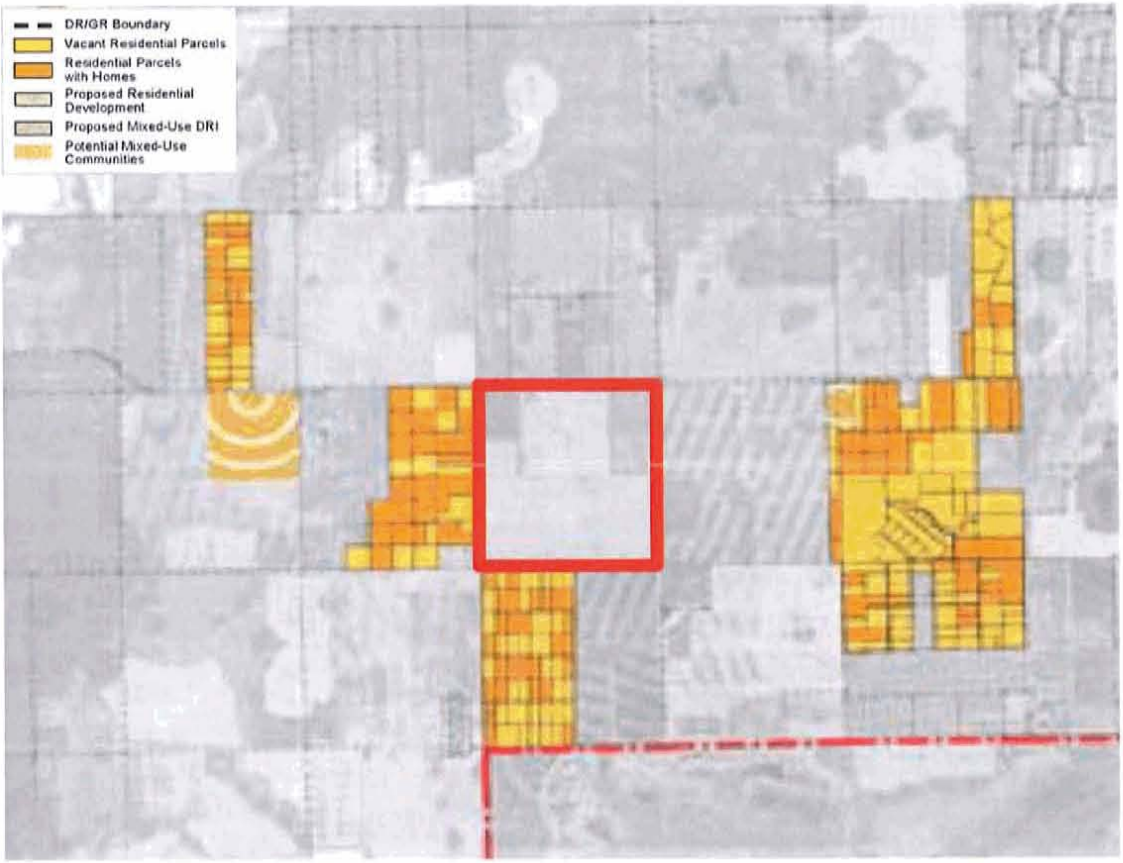


Figure 6. Existing Residential Development Map

- On page 4.11 of this report illustrations are provided showing the approximate existing conditions in the DR/GR area and the full implementation of an ambitious, long-range restoration strategy. Due to the existing development, the existing and proposed restoration flowways are demonstrated passing the subject property in a southern direction instead of the historic southwest direction. See attached and Figure 7 below. Discussion under the images states, in part, "...These strategies would take generations to accomplish and would require intensive cooperation with landowners and ultimate acquisition of vast tracts from willing sellers." The innovative 2014 amendment to the DG/GR portion of the Lee Plan adding the Environmental Enhancement and Preservation Communities overlay has provided an opportunity to accomplish an avenue for landowners to accomplish the restoration goals in a much more timely manner.

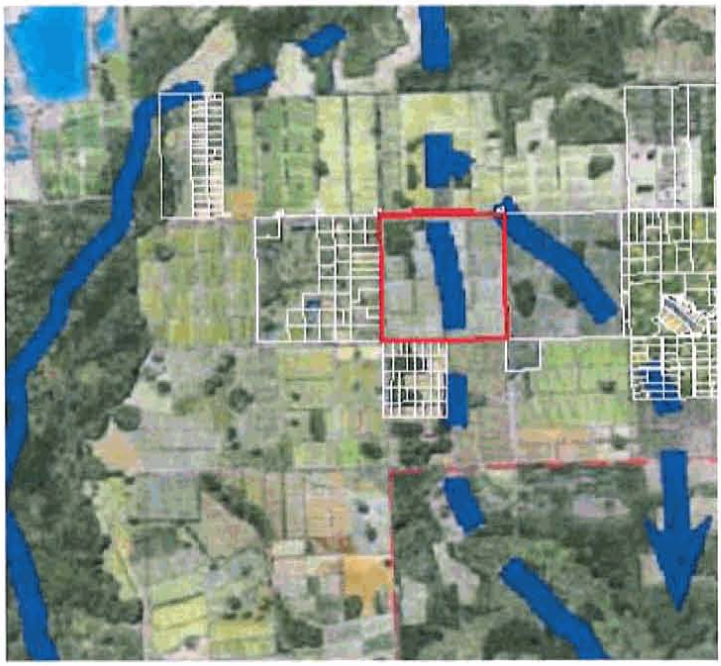


Figure 7. Existing Conditions Flowways

- Kevin L. Erwin Consulting Ecologist, Inc., July 2008 Ecological Memorandum of The Density Reduction/Groundwater Resource Area (DR/GR) (excerpts attached as composite Exhibit "C")
    - Figure 8 below shows the property boundary on the Historic Hydropattern Map attached.

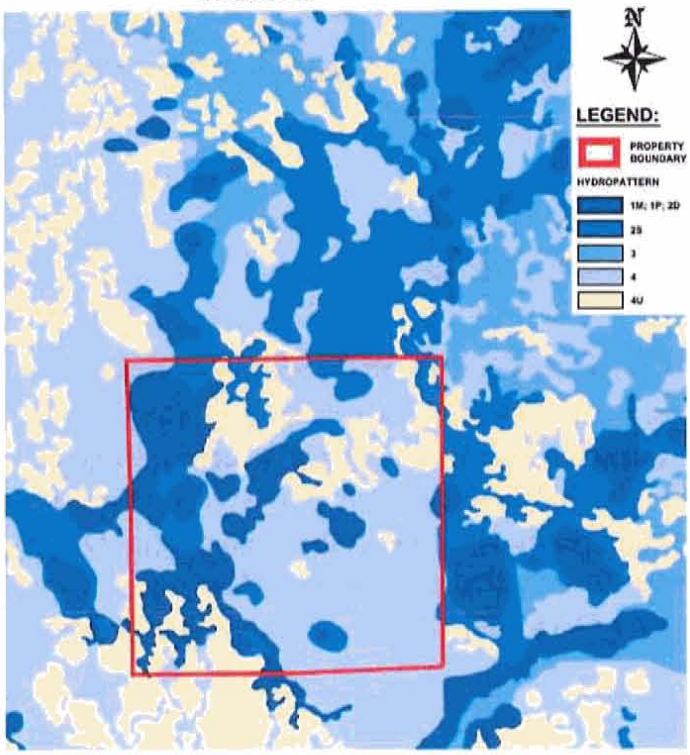


Figure 8. Historic HydropatternMap

- These flows have been impacted by agricultural operations and residential development, as demonstrated by the Current Hydropatterns from 2008 demonstrated in Figure 9 below and the attached excerpt.

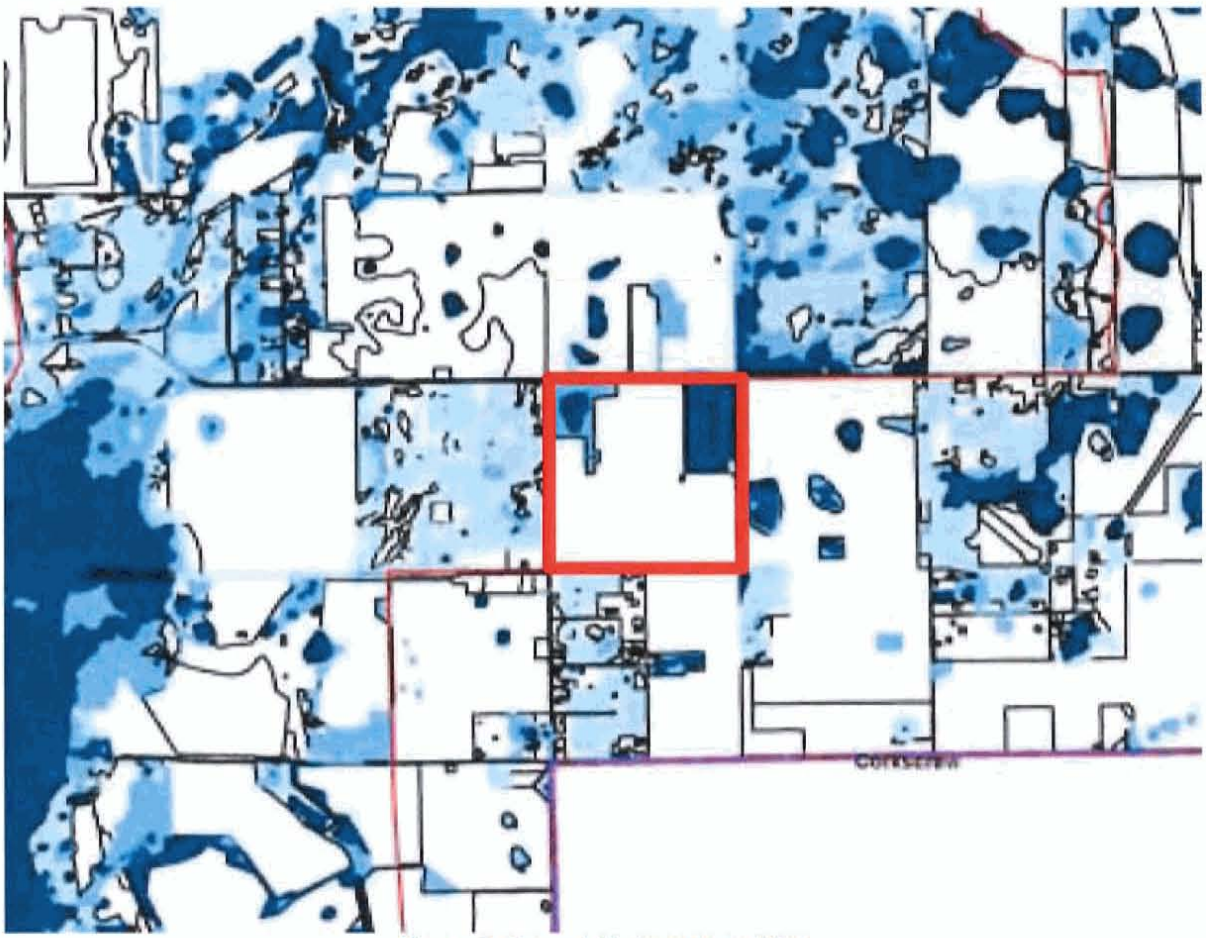


Figure 9. Current Hydropattern Map

Utilizing these overlays, the Corkscrew Farms project across the street began the layout of the new proposed wetland restoration/flowway connection on property identified as top priority, with the Pepperland Ranch property connecting the next top priority piece. Corkscrew Farms established flowways that connect and flow in a southwest direction. There is also an existing 29"x45" culvert crossing Corkscrew Road at the northeast corner of the subject property. The Pepperland Ranch proposed wetland restoration areas/flowway preserves the onsite wetlands and restores historic wetland systems following the historic location of the wetlands/flowway.

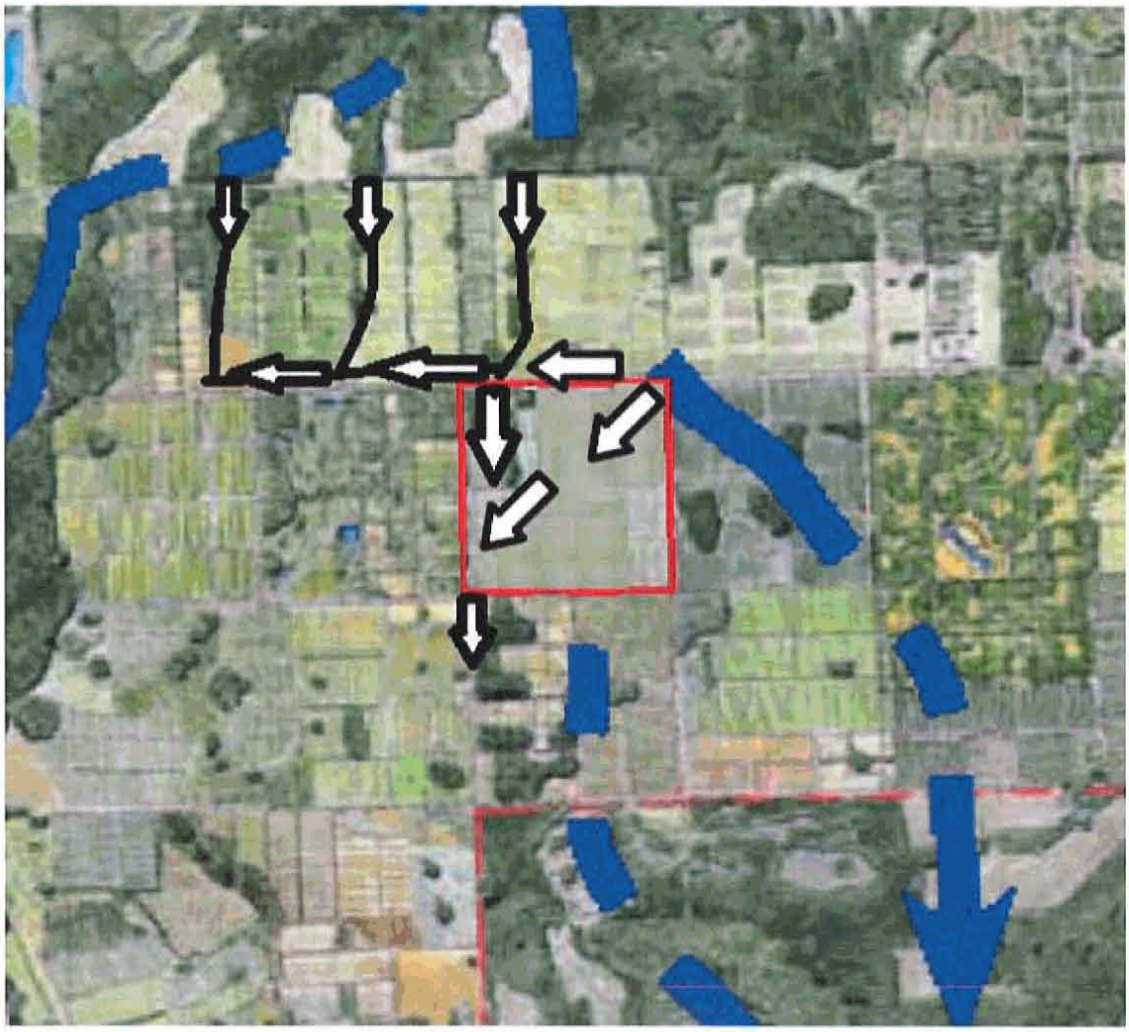


Figure 10. On-site and Adjacent Proposed Flowways Map

The existing surface hydrology of the ***Pepperland Ranch*** project is comprised of active farm furrows and internal swales which route water to the crops. The water table is manipulated during the farming process to maintain the optimum moisture. The farm has a perimeter berm and ditch and also includes water storage areas in the northeast and northwest corners of the property. Water is pumped to these area at different times during the farm operation. The farm outfalls to the roadway ditch on 6 L's Farm Road. This ditch discharges south and ultimately to Corkscrew Swamp.

The existing SFWMD permit farm permit (see Exhibit A) established the average wet season water levels (control elevations) for the project. The permitted control elevation is 24.8' for the

entire site. This matches the control elevation of the Corkscrew Growers project across Corkscrew Rd and to the west.

Groundwater withdrawals for potable and irrigation have occurred in the region for decades which has artificially influenced the water table elevation in the region. Water level data in surrounding well facilities was compiled by WSA who prepared maps showing the wet season ground water contours in the region. This mapping showed a gradual lowering of the water table towards the southwest. This information along with onsite groundwater monitoring was considered in establishing the onsite control elevations. Vegetative indicators (buttressing on the cypress trees) were marked at 3 locations across the site by Passarella and Associates. Elevations of the buttressing were obtained and considered in establishing the control elevation for the onsite stormwater management system..

The elevation of the vegetative indicators suggest that the historic wet season water table is approximately elevation 25.5' in the remaining onsite wetlands. This was used as the control elevation for the northern portion of the project. A control elevation of 24.5' was used for the southwestern basins, mimicking the gradual lowering of the water table previously described.

Water quality and quantity treatment will be provided for the development in the onsite lakes. Control structures will be sized to limit discharge from the residential development at a rate not to exceed the allowable discharge rate specified by Lee County for the Cocohatchee River Basin. The project's stormwater system will meet or exceed the standards for quality and quantity treatment of stormwater as outlined and regulated by SFWMD and Lee County. After treatment, runoff will be discharged to the onsite wetland restoration areas as sheet flow to help improve the onsite hydrology. Additional polishing of the runoff and nutrient uptake will occur in these large restoration further reducing downstream nutrient loading. Offsite discharge from the restoration area is from an outfall weir control structure at the project's south western boundary to regulate the overall volume of water leaving the site. The offsite discharge will be limited to below historic volumes.

Pretreatment areas are provided throughout the project so that stormwater runoff is first directed to the pretreatment areas before flowing into the lakes. These areas will be planted with native grasses and the littoral areas in the lakes will be placed in proximity to the pretreatment areas to create larger vegetated areas. Rear yard runoff is also collected and not allowed to drain directly into the proposed onsite lakes. This provides additional opportunity for infiltration and nutrient uptake and reduction.

The Pepperland Ranch stormwater management system preserves the opportunity to provide additional flowway connections in the future to the remaining high priority restoration (Tier 1) properties. The project represents a unique opportunity to provide these regional benefits. The onsite wetland restoration areas will provide increased basin storage and will have the ability to help restore historic flowways compared to the current farm operation conditions. The restoration areas are also designed to have additional conveyance capacity should historic floways be restored downsteam. These future connections could be done as part of a Lee County project, private project, and/or public/private partnership.

The proposed ***Pepperland Ranch*** project does not fall within an identified flood zone per FEMA (see Figure 12). The ***Pepperland Ranch*** stormwater management system will include restoration of historic basin storage and historic flowways to the south. These restoration areas will provide increased basin storage compared to the current farm operation and maintain all offsite flows.

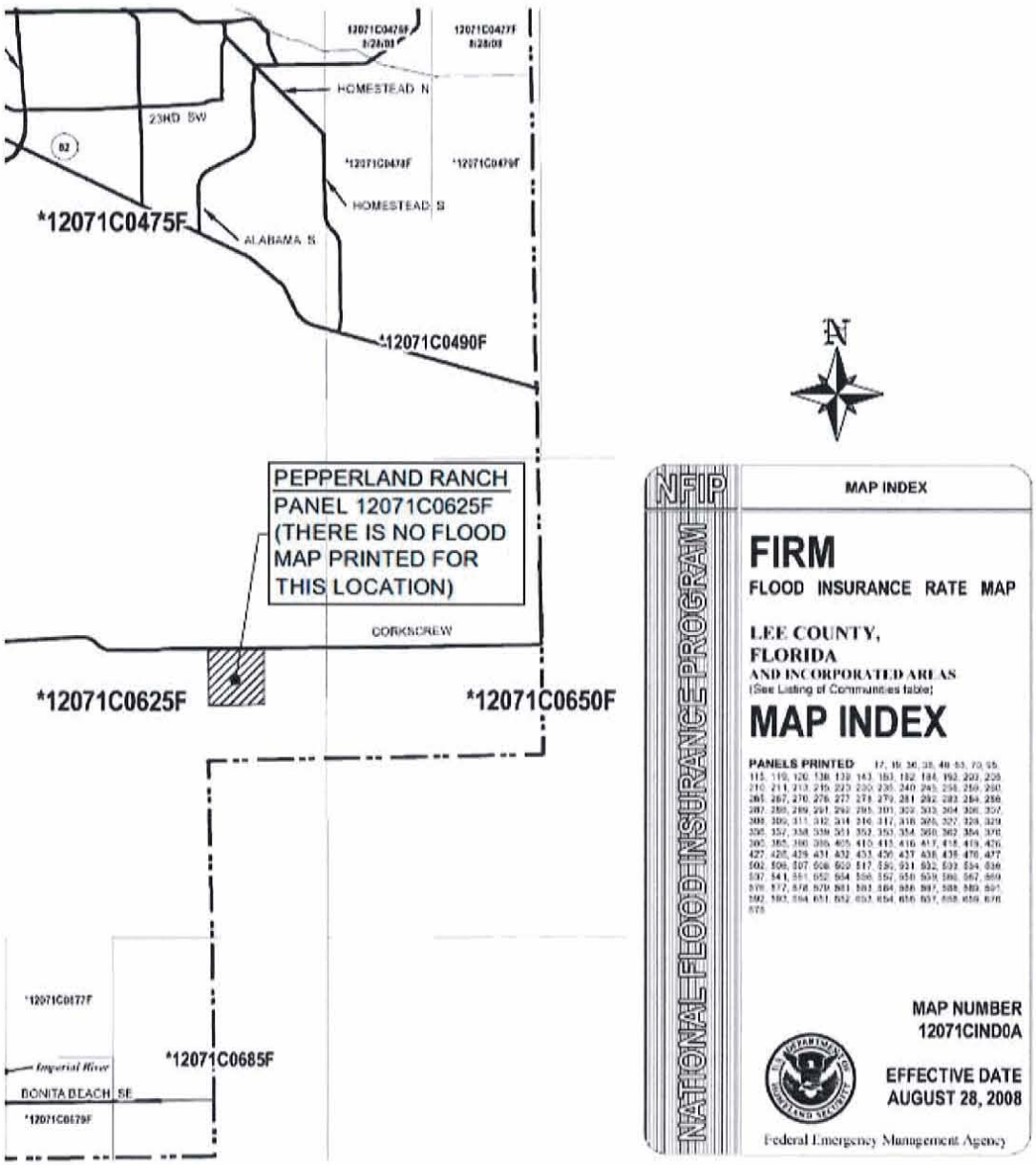


Figure 11. FEMA Firm Map

SECTION D: CONCLUSIONS

This report is an evaluation of information and data related to the characteristics and potential impacts of the ***Pepperland Ranch*** development specifically relating to the stormwater aspects of the project. The project area is approximately 637.5 acres and is located within the Corkscrew Swamp Watershed. The property has an existing SFWMD permit for a previously proposed development that approved many stormwater elements, such as; allowable post development discharge, control elevation and historical floodplain/flow-way areas. SFWMD is

the agency that has regulatory authority in regards to stormwater quality and quantity. The proposed development will have to obtain a permit modification to fully address any stormwater quality and quantity concerns for the project.

The review of permitting history and data collected in regards to the stormwater aspects of the ***Pepperland Ranch*** development has resulted in the following conclusions:

- The proposed project will meet or exceed state and federal water quality standards (Objective 115.1 of the LeePlan).

- The proposed project will utilize a wet detention system with pretreatment areas and wetland restoration areas in order to treat stormwater runoff to maintain or improve surface water runoff from the property and reduce nutrient loading (Policy 115.1.2 and Policy 115.1.3).

- The proposed project will utilize stepped control elevations per the onsite and hydrologic indicators in order to improve hydration to the existing wetlands and reestablish historic flow ways.

- The proposed project provides increased basin storage and helps to reestablish historic storage and flowways.

- The proposed project utilizes the existing features and remaining vegetation on the property and incorporates them into the stormwater system restoration where possible.

EXHIBIT A

SFWMD ERP 36-002292-S

South Florida Water Management District

Certification For Stormwater Discharge

Form #0113
Rev 7/91

SURFACE WATER MANAGEMENT PERMIT NO. 36-02292-S
(NON-ASSIGNABLE)

DATE ISSUED: AUGUST 13, 1992

AUTHORIZING: CONSTRUCTION AND OPERATION OF A WATER MANAGEMENT SYSTEM SERVING 640 ACRES OF INDUSTRIAL LANDS DISCHARGING VIA EXISTING ROADWAY DITCH AND OVERLAND FLOW TO CORKSCREW SWAMP.

LOCATED IN: LEE COUNTY, SECTION 30 TWP. 46S RGE. 27E

ISSUED TO: SECTION 30 LIMITED PARTNERSHIP
(CORKSCREW LAKES BORROW PIT)
3605 ANTON FARMS ROAD
BALTIMORE, MD 21208

This Permit is issued pursuant to Application for Permit No. 920408-1 dated April 2, 19 92 . Permittee agrees to hold and save the South Florida Water Management District and its successors harmless from any and all damages, claims or liabilities which may arise by reason of the construction, operation, maintenance or use of any work or structure involved in the Permit. Said Application, including all plans and specifications attached thereto, as addressed by the Staff Report, is by reference made a part hereof.

This Permit may be revoked or modified at anytime pursuant to the appropriate provisions of Chapter 373, Florida Statutes.

This Permit does not convey to Permittee any property rights or privileges other than those specified herein, nor relieve the Permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by Permittee hereunder shall remain the property of the Permittee.

Within thirty (30) days after the completion of the construction of any work or structure relative to this Permit, the Permittee shall file with the District a written statement of completion on the appropriate form provided by the Board.

SPECIAL CONDITIONS ARE AS FOLLOWS:

SEE SHEETS 2, 3 & 4 OF 6 - 18 SPECIAL CONDITIONS.
SEE SHEETS 5 & 6 OF 6 - 12 LIMITING CONDITIONS.

FILED WITH THE CLERK OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

ON Original signed by:
BY Vern Kaiser
DEPUTY CLERK

SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

Original signed by
TONY BURNS

By _____
Assistant Secretary

SPECIAL CONDITIONS

1 . DISCHARGE FACILITIES:

1-4.5' WIDE BROAD CRESTED WEIR WITH CREST AT ELEV. 26.2' NGVD.
5 LF OF 2' DIA. RCP CULVERT.

RECEIVING BODY : EXISTING ROADWAY DITCH

CONTROL ELEV : 26.2' NGVD.

2 . THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION, SHOALING OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.

3 . MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.

4 . THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT ADDITIONAL WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.

5 . LAKE SIDE SLOPES SHALL BE 6:1 (HORIZONTAL:VERTICAL) TO A DEPTH OF TWO FEET BELOW THE CONTROL ELEVATION. SIDE SLOPES SHALL BE NURTURED OR PLANTED FROM 2 FEET BELOW TO 1 FOOT ABOVE CONTROL ELEVATION TO INSURE VEGETATIVE GROWTH.

6 . PRIOR TO THE INITIATION OF ANY WITHDRAWAL OF WATER (IRRIGATION, DEWATERING, PUBLIC WATER SUPPLY, ETC.), IT WILL BE NECESSARY TO APPLY FOR A WATER USE PERMIT. THE PERMITTEE IS CAUTIONED THAT A MINIMUM OF 90 DAYS IS REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION. THE PERMITTEE IS CAUTIONED THAT THE ISSUANCE OF A SURFACE WATER MANAGEMENT PERMIT SHALL NOT BE CONSTRUED TO BE A GUARANTEE THAT WATER WILL BE AVAILABLE.

7 . FACILITIES OTHER THAN THOSE STATED HEREIN SHALL NOT BE CONSTRUCTED WITHOUT AN APPROVED MODIFICATION OF THIS PERMIT.

8 . A BENCHMARK SHALL BE PROVIDED IN THE VICINITY OF THE CONTROL STRUCTURE AND A DESCRIPTION PROVIDED TO THE DISTRICT WHEN CERTIFYING CONSTRUCTION COMPLETION OF THE DRAINAGE FACILITIES.

9 . PRIOR TO SEPTEMBER 12, 1992, THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT SHALL BE NOTIFIED BY THE PERMITTEE OR AUTHORIZED AGENT (VIA THE SUPPLIED CONSTRUCTION COMMENCEMENT NOTICE OR EQUIVALENT) OF THE ACTUAL OR ANTICIPATED CONSTRUCTION START DATE AND THE EXPECTED COMPLETION DATE/ DURATION.

10. WHEN THE DURATION OF CONSTRUCTION EXCEEDS ONE YEAR, CONSTRUCTION STATUS

REPORTS SHALL BE SUBMITTED TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT ON AN ANNUAL BASIS (VIA THE SUPPLIED ANNUAL STATUS REPORT OR EQUIVALENT) BEGINNING ONE YEAR AFTER THE INITIAL COMMENCEMENT OF CONSTRUCTION DATE.

11. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE OR AUTHORIZED AGENT SHALL NOTIFY THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT OF THAT COMPLETION DATE AND SUBMIT CERTIFICATION BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT (VIA THE SUPPLIED CONSTRUCTION COMPLETION/CONSTRUCTION CERTIFICATION OR EQUIVALENT). SUCH CERTIFICATION MAY CONSIST OF WORDING IN PARAGRAPH 3.1.7 "CONSTRUCTION COMPLETION CERTIFICATION" OF THE CURRENT BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT. IF THE CERTIFICATION LANGUAGE USED IS DIFFERENT FROM THE SUGGESTED LANGUAGE, A SET OF RECORD DRAWINGS CONSISTING OF ELEVATIONS, LOCATIONS AND DIMENSIONS OF COMPONENTS OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL ALSO BE SUBMITTED.

12. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF THE PERMITTEE. PRIOR TO TRANSFER OF TITLE FOR ANY PORTION OF THE PROJECT TO A THIRD PARTY, MODIFICATION OF THE PERMIT WILL BE REQUIRED TO VERIFY CONTINUED COMPLIANCE WITH LIMITING CONDITION NO. 8.

13. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE PERIMETER OF THE PROTECTED WETLANDS AND BUFFER ZONES SHALL BE STAKED AND ROPED TO PREVENT ENCROACHMENT INTO THE WETLANDS. THE PERMITTEE SHALL NOTIFY THE SFWMD'S ENVIRONMENTAL COMPLIANCE STAFF IN WRITING UPON COMPLETION OF ROPING AND STAKING AND SCHEDULE AN INSPECTION OF THIS WORK. THE ROPING AND STAKING SHALL BE SUBJECT TO SFWMD STAFF APPROVAL. THE PERMITTEE SHALL MODIFY THE STAKING AND ROPING IF SFWMD STAFF DETERMINES IT IS INSUFFICIENT OR IS NOT IN CONFORMANCE WITH THE INTENT OF THIS PERMIT. STAKING AND ROPING SHALL REMAIN IN PLACE UNTIL ALL ADJACENT CONSTRUCTION ACTIVITIES ARE COMPLETE.

14. THE SFWMD RESERVES THE RIGHT TO REQUIRE REMEDIAL MEASURES TO BE TAKEN BY THE PERMITTEE IF WETLAND AND/OR UPLAND MONITORING OR OTHER INFORMATION DEMONSTRATES THAT ADVERSE IMPACTS TO PROTECTED, CONSERVED, INCORPORATED OR MITIGATED WETLANDS OR UPLANDS HAVE OCCURRED DUE TO PROJECT RELATED ACTIVITIES.

15. ANY FUTURE CHANGES IN LAND USE OR TREATMENT OF WETLANDS AND/OR UPLAND BUFFER/COMPENSATION AREAS MAY REQUIRE A SURFACE WATER MANAGEMENT PERMIT MODIFICATION AND ADDITIONAL ENVIRONMENTAL REVIEW BY DISTRICT STAFF. PRIOR TO THE PERMITTEE INSTITUTING ANY FUTURE CHANGES NOT AUTHORIZED BY THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE SFWMD OF SUCH INTENTIONS FOR A DETERMINATION OF ANY NECESSARY PERMIT MODIFICATIONS.

16. THE WETLAND CONSERVATION AREAS AND UPLAND BUFFER ZONES AND/OR UPLAND PRESEVATION AREAS SHOWN ON EXHIBIT(S) 2 MAY IN NO WAY BE ALTERED FROM THEIR NATURAL STATE. ACTIVITIES PROHIBITED WITHIN THE CONSERVATION AREAS INCLUDE, BUT ARE NOT LIMITED TO: CONSTRUCTION OR PLACING OF BUILDINGS ON OR ABOVE THE GROUND; DUMPING OR PLACING SOIL OR OTHER SUBSTANCES SUCH AS

TRASH; REMOVAL OR DESTRUCTION OF TREES, SHRUBS, OR OTHER VEGETATION - WITH THE EXCEPTION OF EXOTIC/NUISANCE VEGETATION REMOVAL; EXCAVATION, DREDGING, OR REMOVAL OF SOIL MATERIAL; DIKING OR FENCING; AND ANY OTHER ACTIVITIES DETRIMENTAL TO DRAINAGE, FLOOD CONTROL, WATER CONSERVATION, EROSION CONTROL, OR FISH AND WILDLIFE HABITAT CONSERVATION OR PRESERVATION.

17. THE PROJECT WAS DESIGNED AS A 640 ACRE BORROW PIT/ MINING OPERATION, WITH APPROXIMATELY 228 ACRES BEING EXCAVATED. PRIOR TO ANY CONSTRUCTION OTHER THAN SPECIFIED IN THIS PERMIT, WILL REQUIRE A MODIFICATION TO THE PERMIT AND A RE-ANALYSIS OF THE SURFACE WATER MANAGEMENT SYSTEM.

18. THE OUTFALL DITCH FOR THIS PROJECT STRADDLES THE WEST PROPERTY LINE, THE ADJACENT OWNER, COULD BLOCK THE DITCH UPON FUTURE DEVELOPMENT OF HIS PROJECT. THE DEVELOPER COMMITS TO RELOCATE THIS N-S DITCH TOTALLY ON THEIR SITE IF NECESSARY TO MAINTAIN FLOW TO CORKSCREW ROAD.

LIMITING CONDITIONS

1. THE PERMITTEE SHALL PROSECUTE THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.

2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE SHALL BE SUBMITTED TO THE DISTRICT AS REQUIRED. PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 17-302. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA AS REQUIRED, ON VOLUMES OF WATER DISCHARGED INCLUDING TOTAL VOLUME DISCHARGED, DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.

3. THE PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LOCAL SUBDIVISION REGULATIONS AND OTHER LOCAL REQUIREMENTS. IN ADDITION, THE PERMITTEE SHALL OBTAIN ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS PRIOR TO THE START OF ANY CONSTRUCTION OR ALTERATION OF WORKS AUTHORIZED BY THIS PERMIT.

4. THE OPERATION PHASE OF THIS PERMIT SHALL NOT BECOME EFFECTIVE UNTIL A FLORIDA REGISTERED PROFESSIONAL ENGINEER CERTIFIES THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN APPROVED BY THE DISTRICT. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL SUBMIT THE CERTIFICATION AND NOTIFY THE DISTRICT THAT THE FACILITIES ARE READY FOR INSPECTION AND APPROVAL. UPON APPROVAL OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE ENTITY APPROVED BY THE DISTRICT.

5. ALL ROADS SHALL BE SET AT OR ABOVE ELEVATIONS REQUIRED BY THE APPLICABLE LOCAL GOVERNMENT FLOOD CRITERIA.

6. ALL BUILDING FLOORS SHALL BE SET AT OR ABOVE ELEVATIONS ACCEPTABLE TO THE APPLICABLE LOCAL GOVERNMENT.

7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT. NO ROADWAY OR BUILDING CONSTRUCTION SHALL COMMENCE ON-SITE UNTIL COMPLETION OF THE PERMITTED DISCHARGE STRUCTURE AND DETENTION AREAS. WATER DISCHARGED FROM THE PROJECT SHALL BE THROUGH STRUCTURES HAVING A MECHANISM SUITABLE FOR REGULATING UPSTREAM WATER STAGES. STAGES MAY BE SUBJECT TO OPERATING SCHEDULES SATISFACTORY TO THE DISTRICT.

8. NO CONSTRUCTION AUTHORIZED HEREIN SHALL COMMENCE UNTIL A RESPONSIBLE ENTITY ACCEPTABLE TO THE DISTRICT HAS BEEN ESTABLISHED AND HAS AGREED TO

OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN. UPON RECEIPT OF WRITTEN EVIDENCE OF THE SATISFACTION OF THIS CONDITION, THE DISTRICT WILL ISSUE AN AUTHORIZATION TO COMMENCE CONSTRUCTION.

9 . THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.

10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.

11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. IT IS ALSO THE REPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE IMPACTS DO NOT OCCUR DURING CONSTRUCTION.

12. PRIOR TO DEWATERING, PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL. INFORMATION SHALL INCLUDE AS A MINIMUM: PUMP SIZES, LOCATIONS AND HOURS OF OPERATION FOR EACH PUMP. IF OFF-SITE DISCHARGE IS PROPOSED, OR OFF-SITE ADVERSE IMPACTS ARE EVIDENT, AN INDIVIDUAL WATER USE PERMIT MAY BE REQUIRED. THE PERMITTEE IS CAUTIONED THAT SEVERAL MONTHS MAY BE REQUIRED FOR CONSIDERATION OF THE WATER USE PERMIT APPLICATION.

EXHIBIT B

PROSPECTS FOR SOUTHEAST LEE COUNTY, PLANNING FOR THE DENSITY REDUCTION/GROUNDWATER RESOURCE AREA (DR/GR)

DOVER, KOHL & PARTNERS, JULY 2008 REPORT

EXCERPTS

PROSPECTS FOR SOUTHEAST LEE COUNTY

PLANNING FOR THE DENSITY REDUCTION / GROUNDWATER RESOURCE AREA (DR/GR)



DOVER, KOHL & PARTNERS
town planning

Lee County, Florida

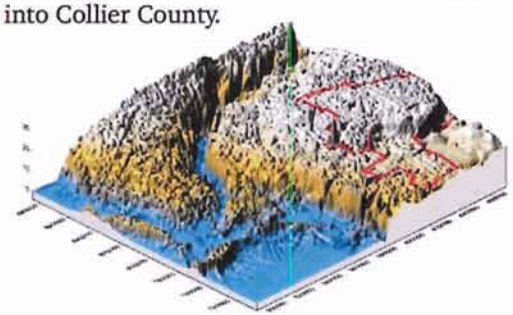
Submitted July 2008

Major Flowways

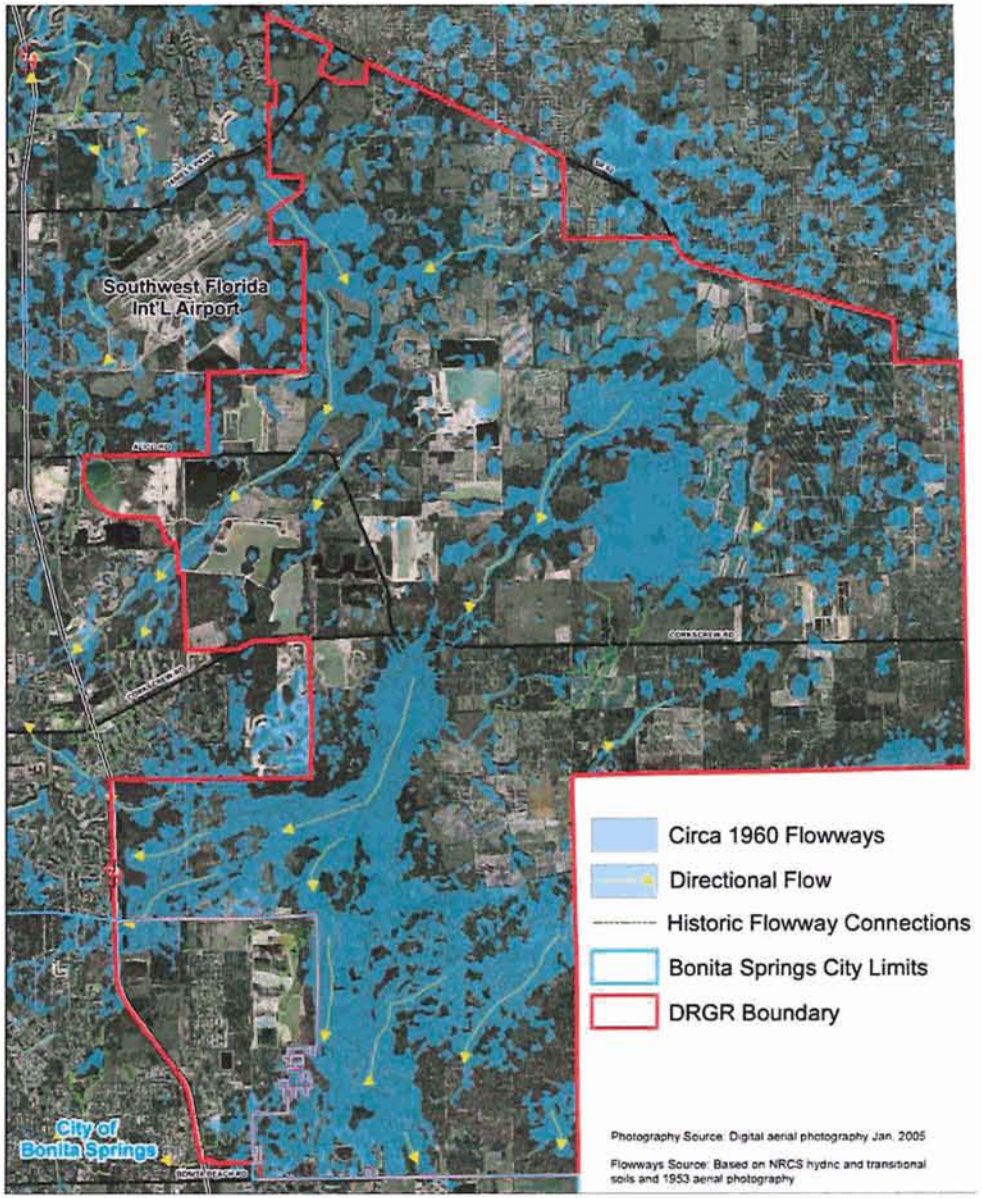
Major flowways in the DR/GR were delineated using aerial photographs and early surveys from the Soil Conservation Service. The adjoining map was prepared by county staff to estimate the extent of flowways around 1960 and to hypothesize where historic flowways have been lost to development or agriculture.

Surface water and shallow groundwater within the DR/GR feeds the wetlands and sloughs that provide habitat for plant and animal species. Surface water recharges the groundwater of the DR/GR's shallow aquifers. When water flows across the land's surface and through shallow wetlands and sloughs, contaminants including sediments and nutrients are removed, lessening the impact of human activities on aquifers and coastal waters into which these lands drain.

Historically, surface water flowed from the northeast to the south into the Corkscrew Swamp and to the southwest into the Estero River and the Imperial River. These flows are part of a larger water migration which occurs in the 345-square mile Estero Bay watershed, which starts along the ridge where SR 82 has been built and extends south into Collier County.



The diagram above indicates relative ground elevations (diagram provided by Greg F. Rawl, P.G.). Southeast DR/GR areas are outlined in red. Because there is little topographic change within the DR/GR, small changes, even roads, ditches, and culverts, can dramatically affect the flow of water. The vertical elevations in the diagram above have been greatly exaggerated to highlight subtle but important changes in elevation. What appears in this diagram as a deep bowl at the far right is the Corkscrew Swamp, which lies just beyond the Lee County boundary.



Flowway map supplied by county staff.

Residential and Commercial Development

DR/GR land has been subject to a residential density cap of one unit per ten acres since 1990. This cap was intended to stop sprawl at typical suburban densities of one to three units per acre. Since this cap was imposed, almost no land has been developed at the new density level, although one small subdivision has been constructed and one large development order has been approved.

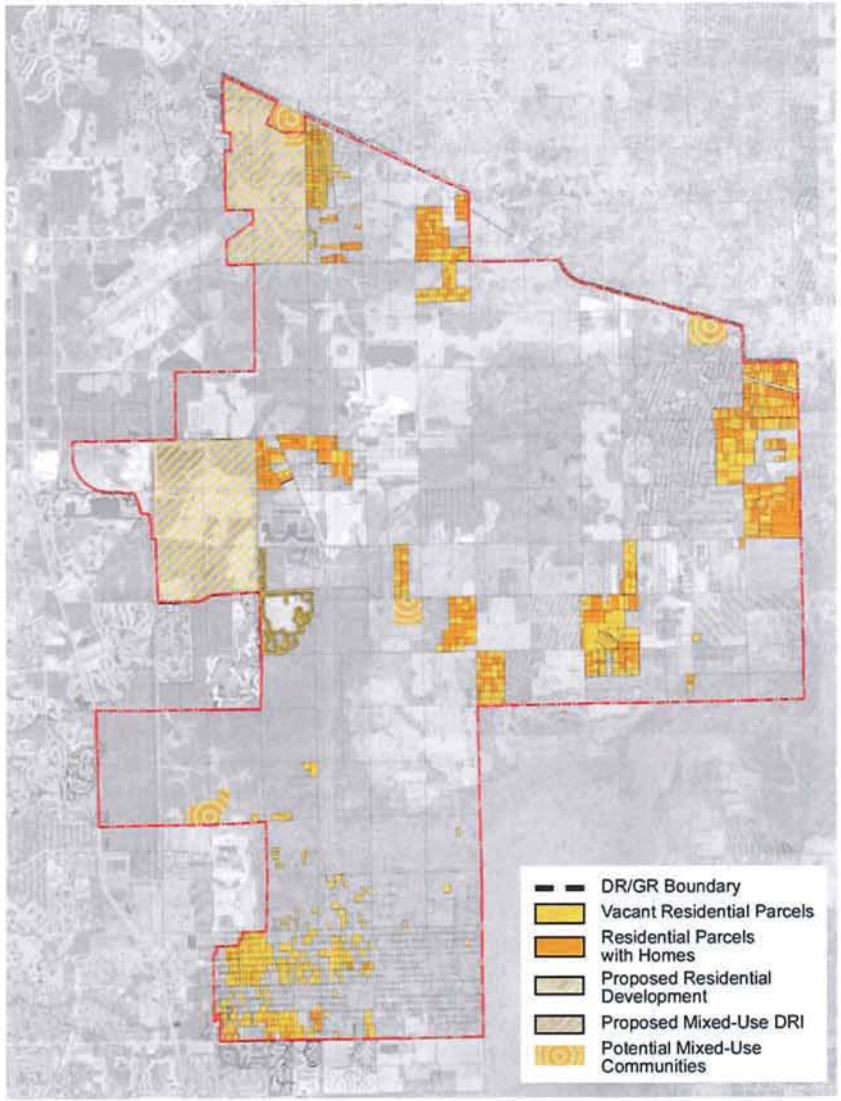
Today the DR/GR area contains 1,582 residential parcels; only 437 currently have homes (see Appendix A). Most of these parcels are 5 to 10 acres in size and located in rural subdivisions created in the 1970s. The vacancy rate suggests there is little demand for more parcels of this size, at least at current land and development costs. The current density cap should be implemented so that clustering is expected rather than just allowable and that allowable densities can be transferred to non-contiguous parcels, even to parcels outside the DR/GR whenever possible.

Current development trends often place a ribbon of residential lots around former mining pits. The county's regulations seem to encourage this; the pits are treated as if the land that has been removed is still there. The scenarios proposed in this chapter all assume that the county will stop granting development rights to land that no longer exists.

The current Lee Plan's "Future Land Use Map" can accommodate about 1,430,000 people, a number that exceeds the expected population in 2030 by 46% (see Appendix A). Attempts to further increase the amount of developable land in Lee County or to increase overall densities in the DR/GR area should be expected to be met with strong resistance by the state.

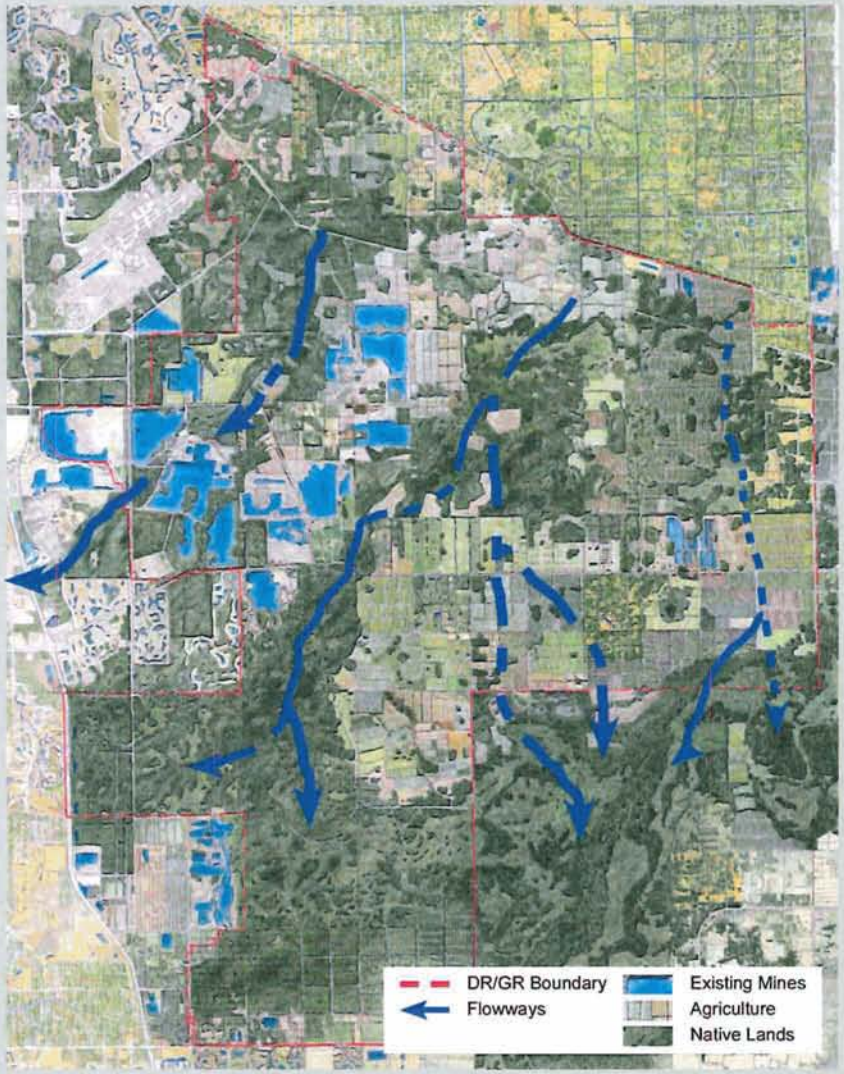
Nonetheless, there are situations where density increases may still be acceptable or even desirable in order to further the planning principles set forth in state law and in the Lee Plan.

For instance, carefully crafted density bonuses can help carry out important public policy without additional regulations or financial incentives. Nominal density bonuses could incentivize transfer of development rights from remote uplands in the DR/GR area to potential mixed-use communities such as those suggested on the map, or to non-DR/GR land such as Lehigh Acres or the Lee Plan's new Mixed-Use Overlay.

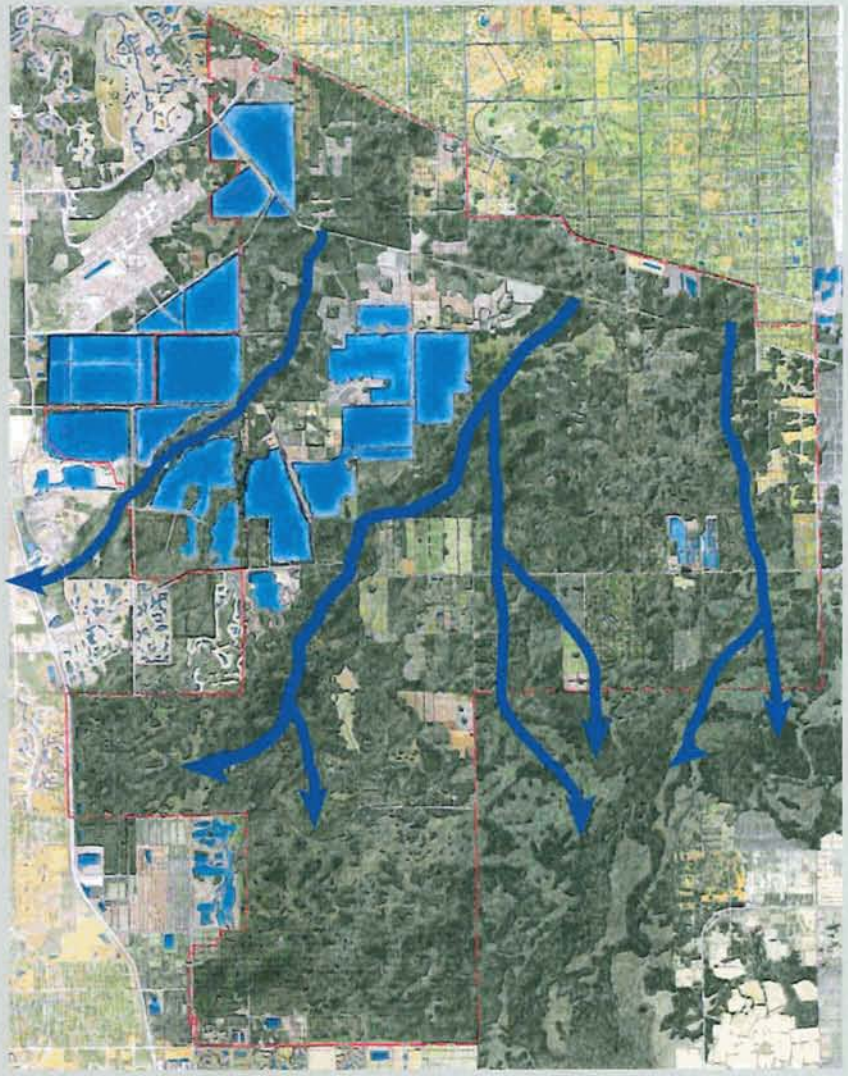


Existing residential parcels, proposed residential developments, and potential locations for new mixed-use communities that concentrate existing development rights into compact neighborhoods.

FLOWWAY RESTORATION STRATEGY



Approximate existing conditions in the DR/GR area.



The full implementation of an ambitious, long-range restoration strategy.

The illustration on the right shows the fullest implementation of the restoration strategies described on the following pages. Mining would be concentrated in the traditional mining corridor. Already-protected lands would be fully restored and reconnected to original surface water flows. Other historical linkages would be re-established, allowing even greater restoration of historic water flows. Flowways east of the mining corridor would receive a higher degree of protection than those to the west, but an extreme effort would be made to restore flows to the Estero River despite the present hydrologic impacts. These strategies would take generations to accomplish and would require intensive cooperation with landowners and ultimate acquisition of vast tracts from willing sellers.

EXHIBIT C

KEVIN L. ERWIN CONSULTING ECOLOGIST, INC., JULY 2008

ECOLOGICAL MEMORANDUM OF THE DENSITY REDUCTION/GROUNDWATER RESOURCE AREA (DR/GR)

EXCERPTS

Ecological Memorandum

Of

The Density Reduction/Groundwater Resource Area (DR/GR)

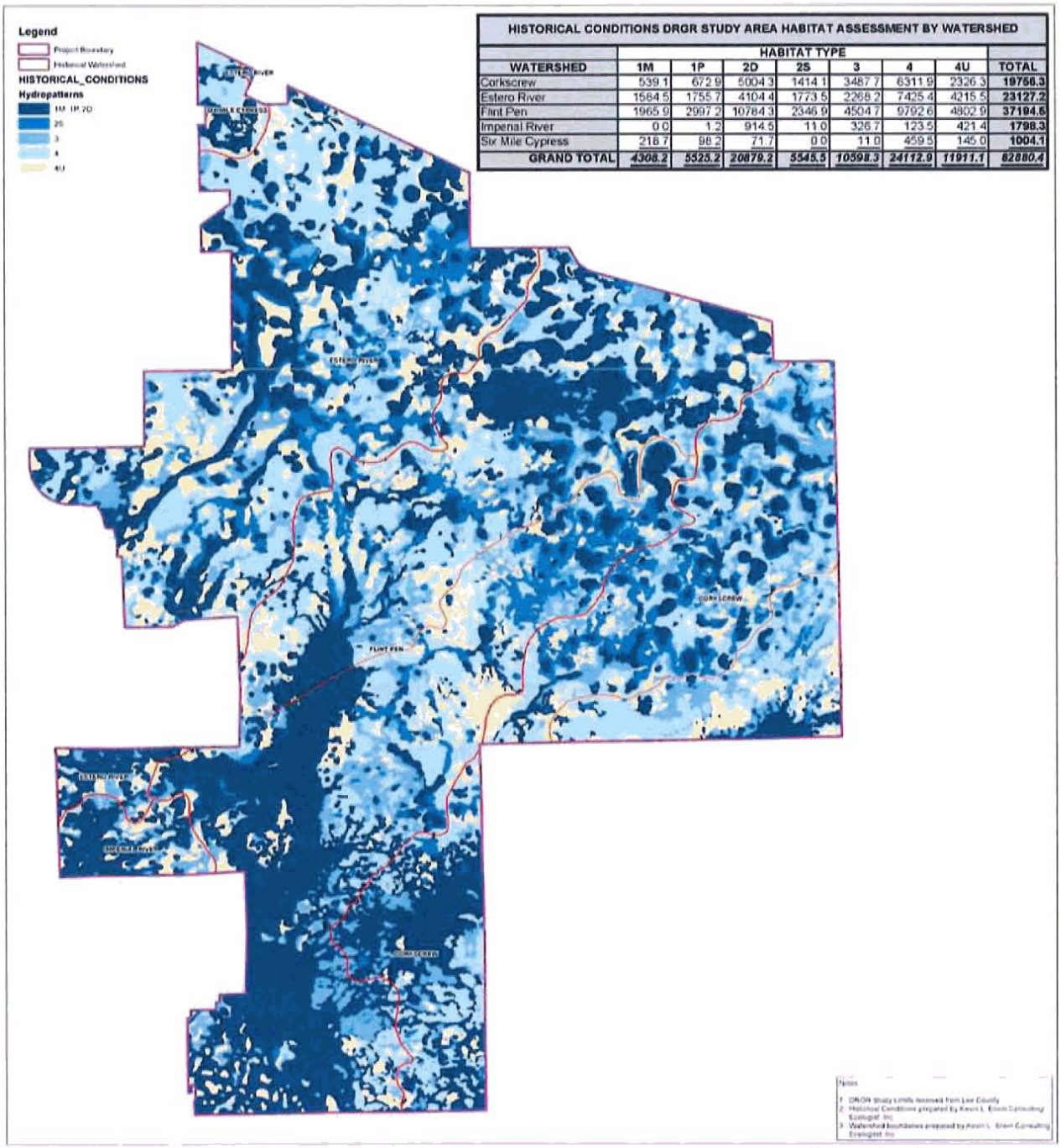
Prepared for:

Dover, Kohl & Partners

July 2008

Prepared by

Kevin L. Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Fort Myers, FL 33901



HISTORICAL CONDITIONS DRGR STUDY AREA HABITAT ASSESSMENT BY WATERSHED								
	HABITAT TYPE							
WATERSHED	1M	1P	2D	2S	3	4	4U	TOTAL
Corkscrew	539.1	672.9	5004.3	1414.1	3487.7	6311.9	2326.3	**19756.3**
Estero River	1584.5	1755.7	4104.4	1773.5	2268.2	7425.4	4215.5	**23127.2**
Flint Pen	1965.9	2997.2	10784.3	2346.9	4504.7	9792.6	4802.9	**37194.5**
Imperial River	0.0	1.2	914.5	11.0	326.7	123.5	421.4	**1798.3**
Six Mile Cypress	218.7	98.2	71.7	0.0	11.0	459.5	145.0	**1004.1**
GRAND TOTAL	***4308.2***	***5525.2***	***20879.2***	***5545.5***	***10598.3***	***24112.9***	***11911.1***	***82880.4***

Notes
1. DRGR Study Limits received from Lee County
2. Historical Conditions prepared by Kevin L. Erwin Consulting Ecologist, Inc.
3. Watershed boundaries prepared by Kevin L. Erwin Consulting Ecologist, Inc.

DRGR Study Area Historical Hydropatterns

KEVIN L. ERWIN CONSULTING ECOLOGIST

2077 Bayside Parkway Ft. Myers, Florida 33901 (239) 337-1505

Date 7-7-08	File Historical Hydropatterns	Project No. DEFOR101
Revision Date		
Comments		

Figure 1

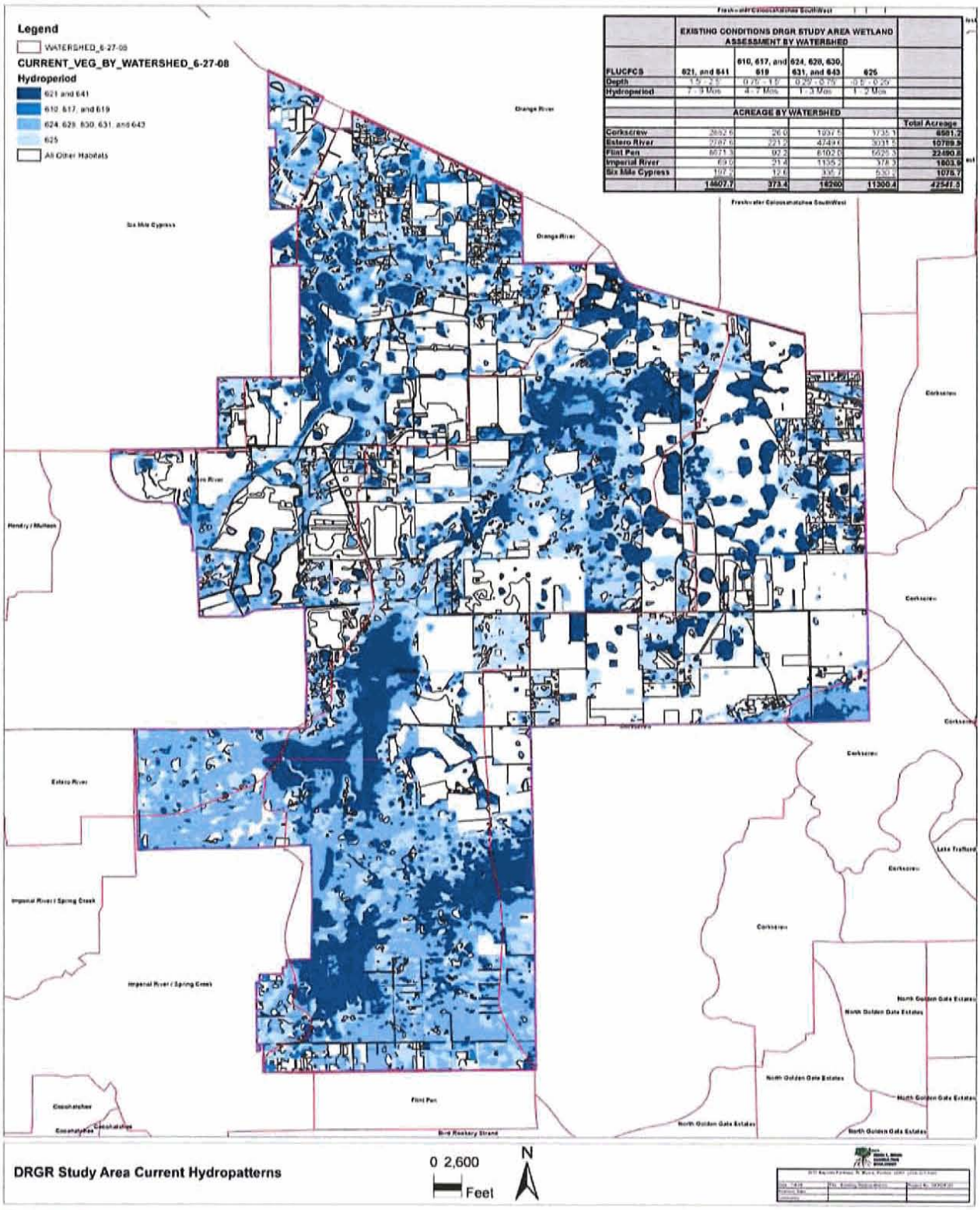
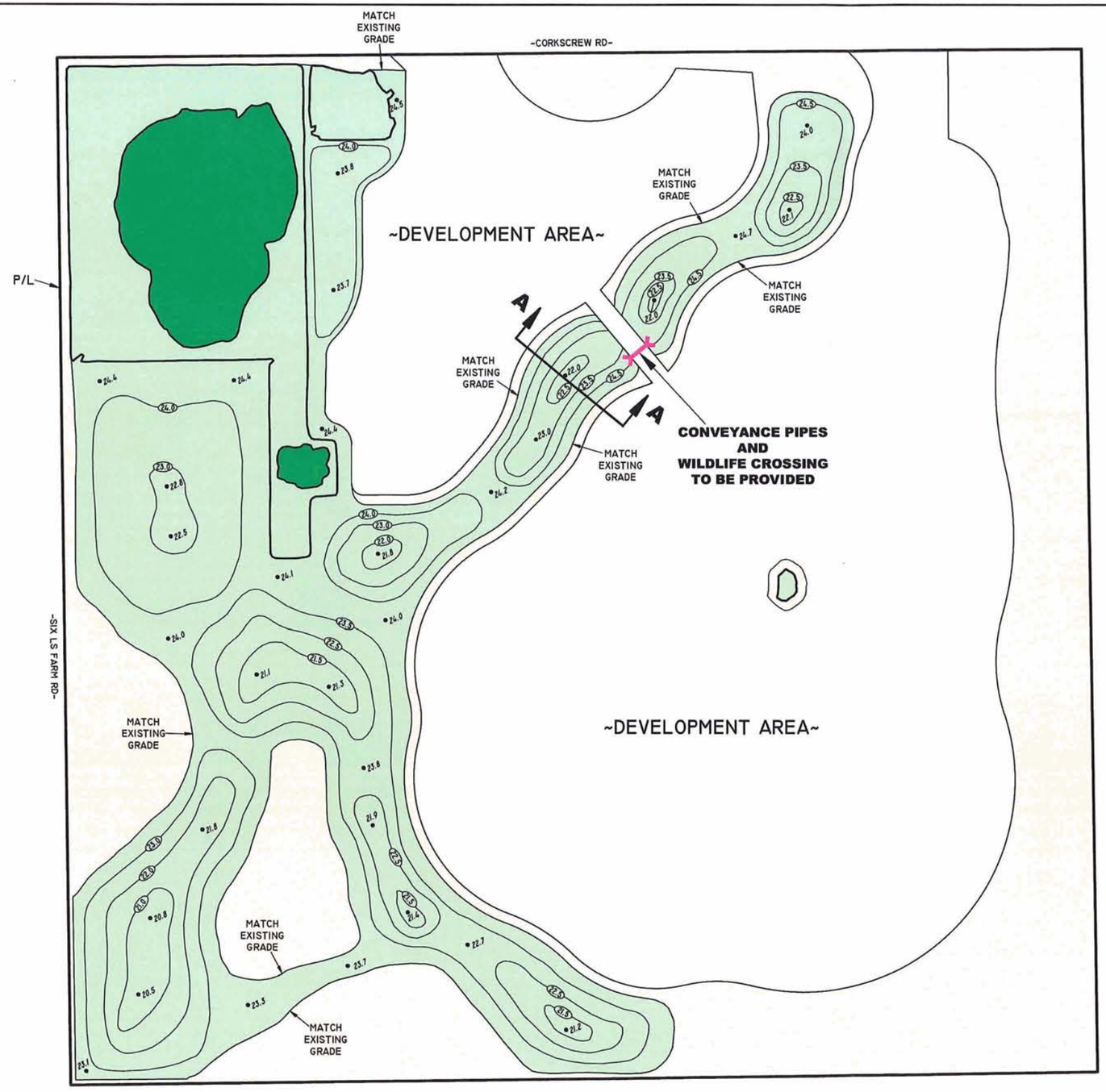

Legend
WATERSHED_6-27-08
CURRENT_VEG_BY_WATERSHED_6-27-08
Hydroperiod
621 and 641
610, 617, and 619
624, 628, 630, 631, and 643
625
All Other Habitats
EXISTING CONDITIONS DRGR STUDY AREA WETLAND ASSESSMENT BY WATERSHED
FLUCFCS
621, and 641
610, 617, and 619
624, 628, 630, 631, and 643
625
Depth
Hydroperiod
ACREAGE BY WATERSHED
Total Acreage
Corkscrew 2832.6 26.0 1937.5 1735.1 6531.2
Estero River 2287.6 221.5 4744.1 3031.7 10789.9
Flint Pen 8671.3 97.2 6102.0 7625.3 22495.8
Imperial River 63.0 21.4 1135.2 378.2 1803.9
Six Mile Cypress 107.2 12.6 330.5 530.5 1078.7
14607.7 373.4 16250 11300.4 42547.5
Orange River
Six Mile Cypress
Hendry / Multiple
Estero River
Imperial River / Spring Creek
Flint Pen
Bird Rookery Strand
Corkscrew
Lake Trafford
North Golden Gate Estates
DRGR Study Area Current Hydropatterns
0 2,600
Feet
N

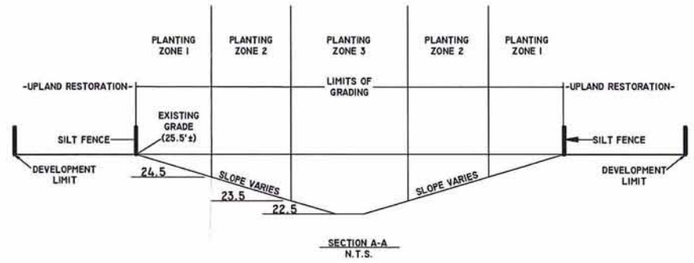
Figure 4



N.T.S.

LEGEND:

- INDIGENOUS WETLAND PRESERVATION AND ENHANCEMENT (20.41 Ac.±)
- INDIGENOUS WETLAND RESTORATION (179.83 Ac.±)
- INDIGENOUS UPLAND RESTORATION (150.49 Ac.±)
- 25.5 TOPOGRAPHIC ELEVATION (NAVD)
- SURVEYED WETLAND LINE



SECTION A-A
N.T.S.

WETLAND RESTORATION CROSS-SECTION

NOTES:

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

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

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

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

REVISIONS	DATE

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

13620 Metropolis Avenue
Suite 200
Fort Myers, Florida 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

PEPPERLAND RANCH
INDIGENOUS VEGETATION PRESERVATION AND RESTORATION PLAN

DRAWING No. 15BCF2389
SHEET No.

J:\2015\15bcf2389\2016\LEE COUNTY INDIGENOUS PRESERVE MANAGEMENT PLAN\INDIG VEG PRESERVATION AND RESTORATION WITH NO SITE PLAN 9-2-16.DWG TAB: A-2 COLOR SEP 09, 2016 - 3:09PM PLOTTED BY: DONB

DEED OF CONSERVATION EASEMENT

Return recorded document to:

_____
_____
_____

THIS DEED OF CONSERVATION EASEMENT is given this _____ day of_____ , 20___, by_____
_____
("Grantor") whose address is _____
to _____("Grantee") with third party enforcement rights to the South Florida Water Management District ("District"). As used herein, the term Grantor shall include any and all heirs, successors or assigns of the Grantor, and all subsequent owners of the "Property" (as hereinafter defined) and the term "Grantee" shall include any successor or assignee of Grantee.

WITNESSETH

WHEREAS, the Grantor is the owner of certain lands situated in _____ County, Florida, and more specifically described in Exhibit "A" attached hereto and incorporated herein ("Property"); and

WHEREAS, the Grantor desires to construct _____ ("Project") at a site in _____ County, which is subject to the regulatory jurisdiction of Lee County, Florida; and

WHEREAS, Lee County, Florida, Development Order No. _____ ("Permit") authorizes certain activities which affect surface waters in or of the State of Florida; and

WHEREAS, this Permit requires that the Grantor preserve, enhance, restore and/or mitigate wetlands and/or uplands under Lee County's jurisdiction; and

WHEREAS, the Grantor has developed and proposed as part of the Permit conditions a conservation tract and maintenance buffer involving preservation of certain wetland and/or upland systems on the Property; and

WHEREAS, the Grantor, in consideration of the consent granted by the Permit, is agreeable to granting and securing to the Grantee a perpetual Conservation Easement as defined in Section 704.06, Florida Statutes, over the area described on Exhibit "B" ("Conservation Easement") which includes third party enforcement rights for the District.

NOW, THEREFORE, in consideration of the issuance of the Permit to construct and operate the permitted activity, and as an inducement to Lee County in issuing the Permit, together with other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, Grantor hereby grants, creates, and establishes a perpetual Conservation Easement for and in favor of the Grantee upon the property described on Exhibit "B" which shall run with the land and be binding upon the Grantor, and shall remain in full force and effect forever.

The scope, nature, and character of this Conservation Easement shall be as follows:

1. Recitals. The recitals hereinabove set forth are true and correct and are hereby incorporated into and made a part of this Conservation Easement.

2. Purpose. It is the purpose of this Conservation Easement to retain land or water areas in their natural, vegetative, hydrologic, scenic, open, agricultural or wooded condition and to retain such areas as suitable habitat for fish, plants or wildlife. Those wetland and/or upland areas included in the Conservation Easement which are to be enhanced or created pursuant to the Permit shall be retained and maintained in the enhanced or created conditions required by the Permit.

To carry out this purpose, the following rights are conveyed to Grantee and the District by this easement:

a. To enter upon the Property at reasonable times with any necessary equipment or vehicles to enforce the rights herein granted in a manner that will not unreasonably interfere with the use and quiet enjoyment of the Property by Grantor at the time of such entry; and

b. To enjoin any activity on or use of the Property that is inconsistent with this Conservation Easement and to enforce the restoration of such areas or features of the Conservation Easement that may be damaged by any inconsistent activity or use.

3. Prohibited Uses. Except for restoration, creation, enhancement, maintenance and monitoring activities, or surface water management improvements, or other activities described herein that are permitted or required by the Permit, the following activities are prohibited in or on the Conservation Easement:

a. Construction or placing of buildings, roads, signs, billboards or other advertising, utilities, or other structures on or above the ground;

b. Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;

c. Removal or destruction of trees, shrubs, or other vegetation, except for the removal of exotic or nuisance vegetation in accordance with approved maintenance plan from Lee County, Florida, and/or the District;

d. Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface;

e. Surface use except for purposes that permit the land or water area to remain in its natural or enhanced condition;

f. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation including, but not limited to, ditching, diking and fencing, other than fencing required by the Permit;

g. Acts or uses detrimental to such aforementioned retention of land or water areas;

h. Acts or uses which are detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.

4. Passive Recreational Facilities. Grantor reserves all rights as owner of the Property, including the right to engage in uses of the Property that are not prohibited herein and that are not inconsistent with any Lee County rule, criteria, the Permit and the intent and purposes of this Conservation Easement. Passive recreational uses that are not contrary to the purpose of this Conservation Easement may be permitted upon written approval by the District.

a. The Grantor may conduct limited land clearing for the purpose of constructing such pervious facilities as docks, bridges, boardwalks or mulched walking trails. Grantor shall submit plans for the construction of the proposed facilities to Lee County for review and written approval prior to construction.

b. The construction and use of the approved passive recreational facilities shall be subject to the following conditions:

i. Grantor shall minimize and avoid, to the fullest extent possible, impact to any wetland or upland buffer areas within the Conservation Easement Area and shall avoid materially diverting the direction of the natural surface water flow in such area;

ii. Such facilities and improvements shall be constructed and maintained utilizing Best Management Practices;

iii. Adequate containers for litter disposal shall be situated adjacent to such facilities and improvements and periodic inspections shall be instituted by the maintenance entity, to clean any litter from the area surrounding the facilities and improvements;

iv. This Conservation Easement shall not constitute permit authorization for the construction and operation of the passive recreational facilities. Any such work shall be subject to all applicable federal, state, Lee County or local permitting requirements.

5. No Dedication. No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.

6. Grantee's and District's Liability. Neither Grantee nor the District shall be responsible for any costs or liabilities related to the operation, upkeep or maintenance of the Property.

7. Property Taxes. Grantor shall keep the payment of taxes and assessments on the Easement Parcel current and shall not allow any lien on the Easement Parcel superior to this Easement. In the event Grantor fails to extinguish or obtain a subordination of such lien, in addition to any other remedy, the Grantee may, but shall not be obligated to, elect to pay the lien on behalf of the Grantor and Grantor shall reimburse Grantee for the amount paid by Grantee, together with Grantee's reasonable attorney's fees and costs, with interest at the maximum rate allowed by law, no later than thirty days after such payment. In the event Grantor does not so reimburse the Grantee, the debt owed to Grantee shall constitute a lien against the Easement Parcel which shall automatically relate back to the recording date of this Easement. Grantee may foreclose this lien on the Easement Parcel in the manner provided for mortgages on real property.

8. Third Party Enforcement Rights. The District shall have third party enforcement rights of the terms, provisions and restrictions of this Conservation Easement. Enforcement of the terms, provisions and restrictions shall be at the discretion of the Grantee, or the District, and any forbearance on behalf of the Grantee or the District to exercise its rights hereunder in the event of any breach hereof by Grantor, shall not be deemed or construed to be a waiver of Grantee's or District's rights hereunder.

9. Assignment. Grantee will hold this Conservation Easement exclusively for conservation purposes. Grantee will not assign its rights and obligations under this Conservation Easement except to another organization or entity qualified to hold such interests under the applicable state laws. No assignment shall be made unless prior written approval is given by the District.

10. Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this Conservation Easement shall not be affected thereby, as long as the purpose of the Conservation Easement is preserved.

11. Terms, Conditions, Restrictions, Purpose. The terms, conditions, restrictions and purpose of this Conservation Easement shall be inserted by Grantor in any subsequent deed or other legal instrument by which Grantor divests itself of any interest in the Conservation Easement. Any future holder of the Grantor's interest in the Property shall be notified in writing by Grantor of this Conservation Easement and the third party enforcement rights of the District.

12. Written Notice. All notices, consents, approvals or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

13. Modifications. Any amendments or modifications to the terms, conditions, restrictions, or purpose of this Conservation Easement, or any release or termination thereof, shall be subject to prior review and written approval by the Grantee. Grantee shall be provided no less than 90 days advanced notice in the manner described herein of any such proposed amendment, modification, termination or release. This Conservation Easement may be amended, altered, released

or revoked only by written agreement between the parties hereto and the District or their heirs, assigns or successors-in-interest, which shall be filed in the public records in Lee County.

TO HAVE AND TO HOLD unto Grantee forever. The covenants, terms, conditions, restrictions and purposes imposed with this Conservation Easement shall be binding upon Grantor, and shall continue as a servitude running in perpetuity with the Property.

Grantor hereby covenants with said Grantee that Grantor is lawfully seized of said Property in fee simple; that the Conservation Easement is free and clear of all encumbrances that are inconsistent with the terms of this Conservation Easement; and all mortgages and liens on the Conservation Easement area, if any, have been subordinated to this Conservation Easement; that Grantor has good right and lawful authority to convey this Conservation Easement; and that it hereby fully warrants and defends the title to the Conservation Easement hereby conveyed against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has hereunto set its authorized hand this _____ day of _____, 20__.

_____, a(n) _____

By: _____
(Signature)

Name: _____
(Print)

Title: _____

Signed, sealed and delivered in our presence as witnesses:

By: _____ By: _____
(Signature) (Signature)

Name: _____ Name: _____
(Print) (Print)

STATE OF FLORIDA
) ss:
COUNTY OF _____

On this _____ day of _____, 20_____ before me, the undersigned notary public, personally appeared _____, the person who subscribed to the foregoing instrument, as the _____ (title), of _____ (corporation), a(n) _____, and acknowledged that he/she executed the same on behalf of said corporation and the he/she was duly authorized to do so. He/She is personally known to me or has produced a (state) driver's license as identification.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

NOTARY PUBLIC, STATE OF FLORIDA

_____
(Signature)

Name: _____
(Print)

My Commission Expires: _____

MORTGAGEE JOINDER, CONSENT AND SUBORDINATION

For Ten Dollars ($10.00) and other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, _____, the owner and holder of a mortgage dated , in the original principal amount of $, given by _____ ("Grantor") to _____ ("Mortgagee"), encumbering the real property described on Exhibit "A" attached hereto ("Property"), which is recorded in Official Records Book _____, at Page _____ (Instrument No. _____), (together with that certain Assignment of Leases and Rents recorded in Official Records Book_____ , at Page _____ and those certain UCC-1 Financing Statement(s) recorded in Official Records Book _____, at Page _____), all of the Public Records of Lee County, Florida (said mortgage, assignment of leases and rents, and UCC-1 Financing Statements, as modified, are hereinafter referred to as the "Mortgage"), hereby joins in, consents to and subordinates the lien of its Mortgage, as it has been, and as it may be, modified, amended and assigned from time to time, to the foregoing Conservation Easement, executed by _____, in favor of the Lee County, Florida, applicable to the Conservation Easement, as said Conservation Easement may be modified, amended and assigned from time to time, with the intent that the Mortgage shall be subject and subordinate to the Conservation Easement.

IN WITNESS WHEREOF, this Mortgagee Joinder, Consent and Subordination is made this _____ day of _____, 20____.

By: _____ _____
(Signature) (Mortgagee)

Name: _____
(Print)

Title: _____

WITNESSES:

By: _____ By: _____
(Signature) (Signature)

Name: _____ Name: _____
(Print) (Print)

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____day of _____,20____,by _____,as _____ of _____ (Mortgagee), _____ , on behalf of the _____. He/She is personally known to me or has produced a driver's license as identification.

NOTARY PUBLIC, STATE OF FLORIDA

_____
(Signature)

Name: _____
(Print)

My Commission Expires: _____

EXHIBIT A

[DESCRIPTION OF PROPERTY]

EXHIBIT B

[LEGAL DESCRIPTION AND SKETCH OF CONSERVATION AREA]

IV. ELECTRONIC RESUBMITTAL DATED 09/30/2016

From: Dave Underhill [mailto:DUnderhill@BanksEng.com]
Sent: Friday, September 30, 2016 10:14 AM
To: Karuna-Muni, Anura
Subject: FW: pepperland

Pursuant to the existing SFWMD ERP permit the Six Ls Farm Road ditch is the historic outfall for the project. With that and further to your question yesterday, we have analyzed the 6L Farm Road ditch as part of our SFWMD submittal. This included stormwater modeling of the residential areas south of the project. The current permitted discharge rate for the Pepperland Ag operation is 31 cfs (for the standard 25yr, 3 day storm event). The current SFWMD allowable discharge rate based on the allowable rate for the Cocohatchee River basin is 25 cfs. The proposed peak discharge rate for Pepperland Ranch in our SFWMD application is approximately 9 cfs which is well below the allowable or permitted rate.

While the existing ditch is within the Pepperland Ranch property for the first mile south of Corkscrew Rd, pursuant to the existing SFWMD permit, we are obligated to continue to maintain the ditch south of the project as necessary to sustain the historic outfall. The Pepperland Ranch project will agree to maintain the outfall on the east side of Six Ls Farm Road from Corkscrew Rd to the south terminus, where it connects to the wetland system. This maintenance of the ditch will be an obligation of the Master HOA, and or property owner.

David R. Underhill, Jr., P.E.

Vice President

BANKS ENGINEERING

10511 Six Mile Cypress Parkway

Fort Myers, Florida 33966

Phone: (239) 939-5490

Fax: (239) 939-2523

Cell: (239) 940-8687

Brian Barnes

From: Brian Barnes
Sent: Friday, September 30, 2016 12:34 PM
To: 'Werst, Lee'
Cc: Karuna-Muni, Anura; Kibbey, Keith; Lee, Samuel; BRIAN FARRAR, Land Management Consultant
Subject: RE: Pepperland Ranch Waterlevel monitoring
Attachments: WSA_CPA_Pepperland Ranch_SW-GW Monitoring Plan_Rev2_09302016.pdf; WSA_DCI_Pepperland Ranch_SW-GW Monitoring Plan_Rev2_09302016.pdf

Lee
Attached are the revised Surface Water and Groundwater Monitoring Plans for the CPA and DCI. These incorporate the requested changes.

Please let me know if you have any questions or need anything else.
Thanks
Brian

Brian K. Barnes
Water Science *Associates*
13620 Metropolis Avenue, Suite 110
Fort Myers, Florida 33912
239.204.5302 - Direct
239.240.6035 - Cell
brian@wsaconsult.com
Website

From: Werst, Lee [mailto:LWerst@leegov.com]
Sent: Thursday, September 29, 2016 8:18 AM
To: Brian Barnes <brian@wsaconsult.com>
Cc: Karuna-Muni, Anura <AKaruna-Muni@leegov.com>; Kibbey, Keith <KKibbey@leegov.com>; Lee, Samuel <SLee@leegov.com>
Subject: RE: Pepperland Ranch Waterlevel monitoring

Thank you Brian!

Lee E. Werst Jr.
Hydrogeologist Groundwater Unit Supervisor
Natural Resources Division
1500 Monroe Street
Fort Myers, Fl 33901
239 533-8136

From: Brian Barnes [mailto:brian@wsaconsult.com]
Sent: Thursday, September 29, 2016 7:33 AM
To: Werst, Lee
Cc: Karuna-Muni, Anura; Kibbey, Keith; Lee, Samuel
Subject: RE: Pepperland Ranch Waterlevel monitoring

Lee
I have yours and Keith's comments and am working with Sanders Labs to try to get the information Keith requested into the plan. I anticipate having revised plans (CPA and DCI) to your team before close of business tomorrow.

Our goal is to avoid an additional RAI for these items.

Thanks
Brian

Brian K. Barnes
Water Science *Associates*
13620 Metropolis Avenue, Suite 110
Fort Myers, Florida 33912
239.204.5302 - Direct
239.240.6035 - Cell
brian@wsaconsult.com
Website

From: Werst, Lee [mailto:LWerst@leegov.com]
Sent: Tuesday, September 27, 2016 11:27 AM
To: Brian Barnes <brian@wsaconsult.com>
Cc: Karuna-Muni, Anura <AKaruna-Muni@leegov.com>; Kibbey, Keith <KKibbey@leegov.com>; Lee, Samuel <SLee@leegov.com>
Subject: Pepperland Ranch Waterlevel monitoring

Hey Brian,

Besides the every 6 hours on a water level measurement from your transducers, can we also propose Data be submitted Quarterly for the first 5 years and then at the end of the 5th year meet with Natural Resources for a possible reduction on submittal, and data be provided in excel format along with the summary which is typically provided in .pdf form?

And Keith will be providing you with his comments soon as well.

Lee E. Werst Jr.
Hydrogeologist Groundwater Unit Supervisor
Natural Resources Division
1500 Monroe Street
Fort Myers, Fl 33901
239 533-8136

Please note: Florida has a very broad public records law. Most written communications to or from County Employees and officials regarding County business are public records available to the public and media upon request. Your email communication may be subject to public disclosure.

Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

Surface Water and Groundwater Monitoring Plan (CPA2016-00003)

Pepperland Ranch
Lee County, Florida



PREPARED FOR:

BCF Management Group LLC
Consultants in Land Management

BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

REVISED SEPTEMBER 2016

Water Science Associates
13620 Metropolis Avenue, Suite 110
Fort Myers, Florida 33912
O 239.204.5300 F 866.398.2426
www.waterscienceassociates.com

Surface Water and Groundwater Monitoring Plan (CPA2016-00003)

Pepperland Ranch
Lee County, Florida



Water Science Associates

PREPARED FOR:

BCF Management Group LLC
Consultants in Land Management

BCF Management Group, LLC
22190 Fairmount Court
Estero, Florida 33928

REVISED SEPTEMBER 2016

Brian K. Barnes
Principal Scientist

W. Kirk Martin, P.G.
Principal Scientist

TABLE OF CONTENTS

A. INTRODUCTION 1

1. PROJECT LOCATION 1
2. PROJECT DESCRIPTION 2
3. PURPOSE 3

B. BACKGROUND 4

C. RESULTS OF PHASE I ENVRIONMENTAL SITE ASSESSMENT 6

D. SURFACE WATER AND GROUNDWATER MONITORING PLAN 8

1. INTRODUCTION 8
2. PROPOSED SAMPLING LOCATIONS 8
3. WATER LEVEL MONITORING 9
4. WATER QUALITY MONITORING 9

E. QUALITY ASSURANCE 11

F. DATA ANALYSIS AND REPORTING 12

G. CONTINGENCIES AND CORRECTIVE ACTIONS 13

FIGURES

FIGURE 1. LOCATION OF THE PEPPERLAND RANCH PROJECT
FIGURE 2. PROPOSED DEVELOPMENT FOOTPRINT
FIGURE 3. EXISTING CONDITIONS AND LOCATION OF WELLS AND PUMPS
FIGURE 4. SEMI-ANNUAL MONITORING LOCATIONS

TABLES

TABLE 1. SUMMARY OF WELL DETAILS (DECEMBER 15, 2015)
TABLE 2. SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS
TABLE 3. SUMMARY OF WATER QUALITY PARAMETERS

EXHIBIT

EXHIBIT A: EXCERPTS OF "PHASE I ENVIRONMENTAL SITE ASSESSMENT, PEPPERLAND, 18500 CORKSCREW ROAD, LEE CO., FL" (MAY 27, 2016) PREPARED BY TDC CONSULTING GROUP

A. INTRODUCTION

1. PROJECT LOCATION

The proposed Pepperland Ranch development is located in Lee County, Florida, approximately eight miles east of Interstate 75, on the south side of Corkscrew Road, within Section 30, Township 46 South, Range 27 East. The Pepperland Ranch site lies within the Estero Bay Watershed and has historically been used for agriculture. The Pepperland Ranch property is currently zoned as a fill dirt mine under Industrial Planned Development (IPD) resolution Z-89-081A. This proposed residential project would remove the potential of future fill mining at the project site. In addition, a significant portion of the project will include restoration areas to improve surface water flow, groundwater levels, groundwater recharge, and wildlife habitat. Refer to Figure 1 for a map showing the regional location of the project site.

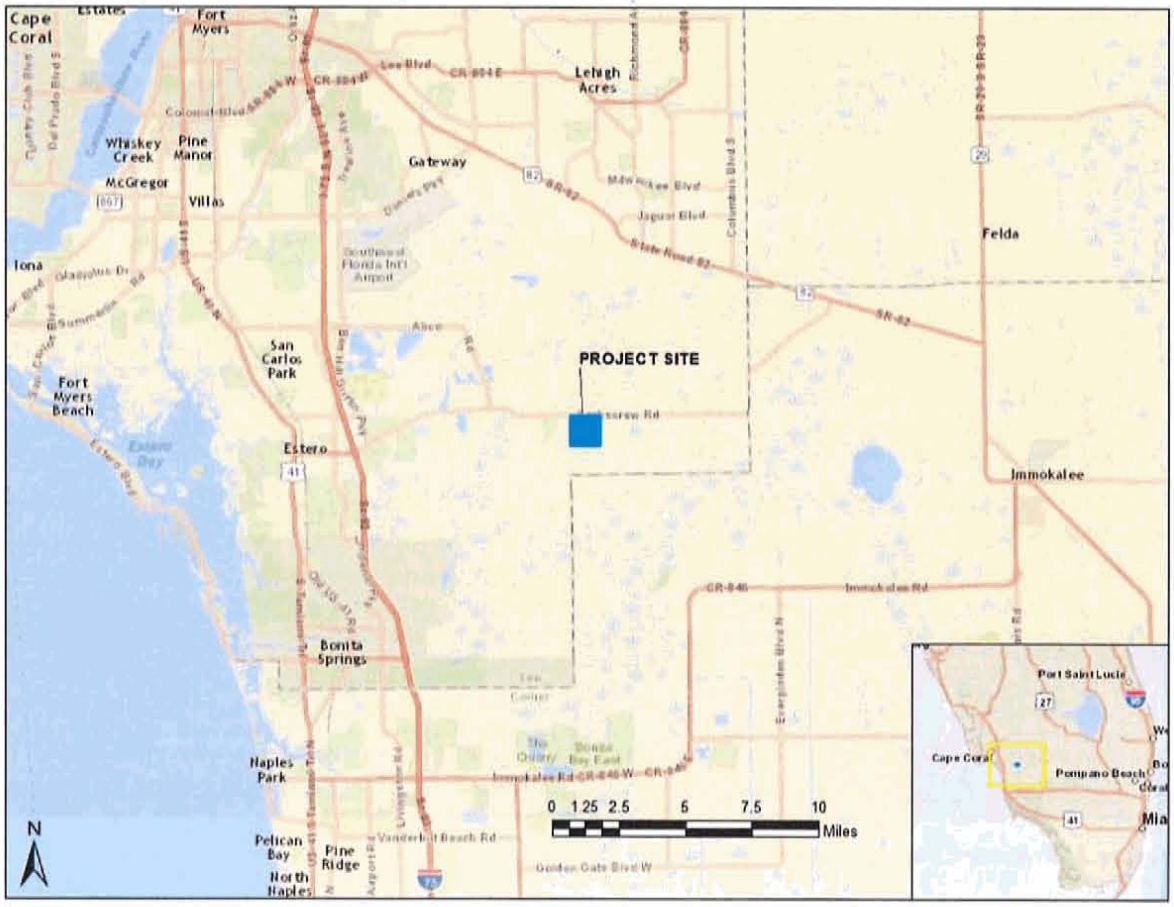


Figure 1. Location of the Pepperland Ranch Project

2. PROJECT DESCRIPTION

The Pepperland Ranch project is a proposed 700± unit residential development comprising approximately 637.5 acres. The project will include approximately 55% of the property as preserves, wetlands restoration areas, and protected areas. The development footprint will comprise approximately 287 acres. The project will include internal stormwater management lakes. Wetlands restoration areas located outside the development footprint will be designed to aid in accommodating future stormwater runoff from north of Corkscrew Road and directing the water to the southeastern or southwestern portion of the Pepperland Ranch property. The proposed development footprint is shown on Figure 2.

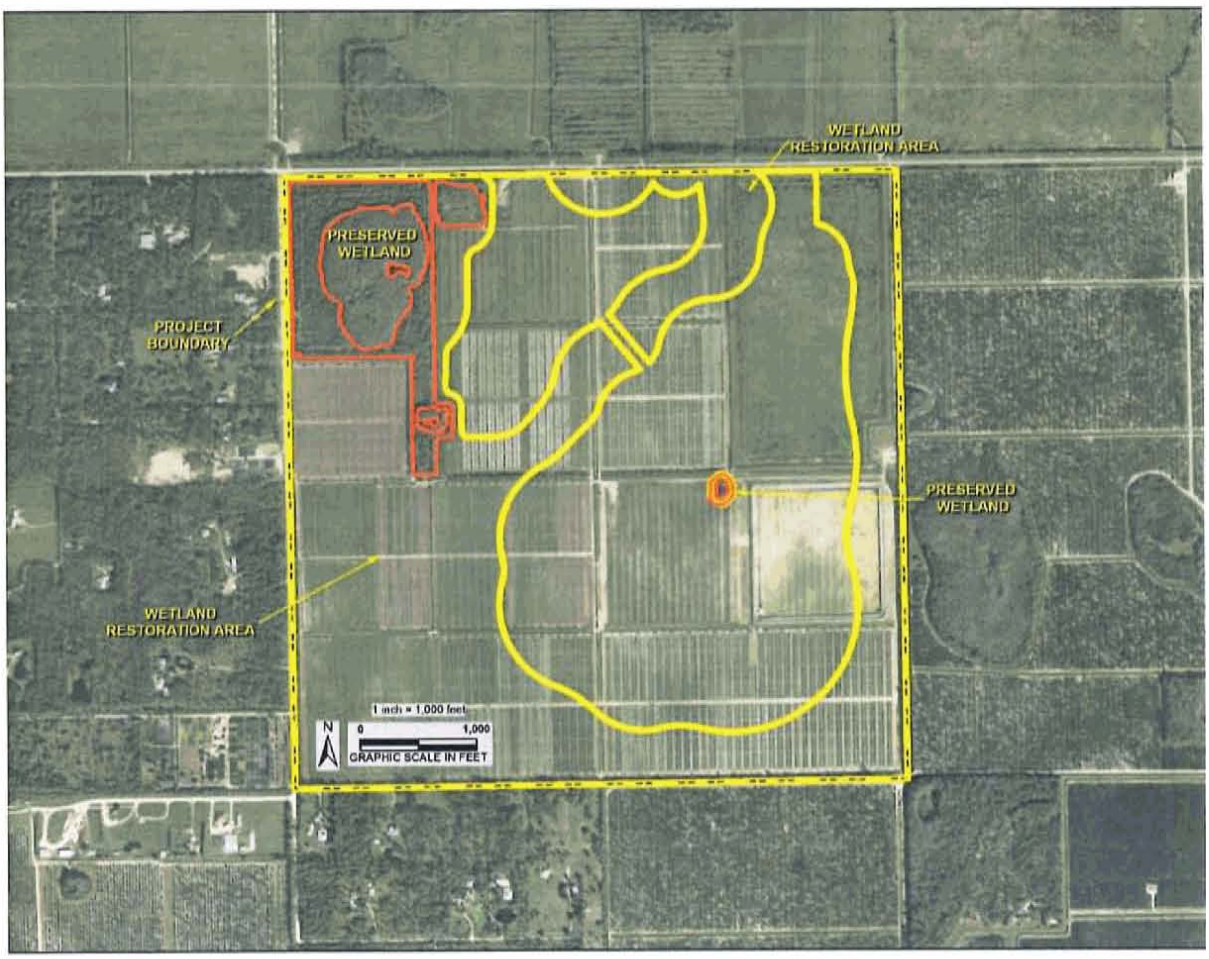


Figure 2. Proposed Development Footprint

3. PURPOSE

This Revised Surface Water and Groundwater Monitoring Plan is being initiated to establish baseline and monitor ongoing water quality conditions at the project site and to quantify any potential adverse impacts as a result of the proposed residential development. The Surface Water and Groundwater Monitoring Plan includes plans for sampling locations, frequency, reporting and evaluations of the water level and water quality within the Pepperland Ranch project site.

The proposed Surface Water and Groundwater Monitoring Plan includes the following work elements:

- Background and baseline testing
- Locations of surface water and groundwater monitoring sites
- Water level monitoring plan
- Water quality monitoring plan
- Quality assurance measures
- Analysis and reporting
- Contingencies and corrective actions

B. BACKGROUND

The Pepperland Ranch project occupies an entire section of land, the majority of which is currently being used for agricultural production. The project site has been used for crop production and pasture for over 40 years. Review of historical aerial photography suggests that active agricultural activity began during the 1960's. The project maintains 13 wells that tap into the Water Table Aquifer with permitted total depths between 30 and 100 feet below land surface. Refer to Figure 3 which shows existing conditions at the project site and the location of wells. Lee County Utilities maintains public water supply wells that tap into the Water Table Aquifer along the north side of Corkscrew Road, and onsite well 30-6 is the well located nearest a Lee County Utilities potable water well.

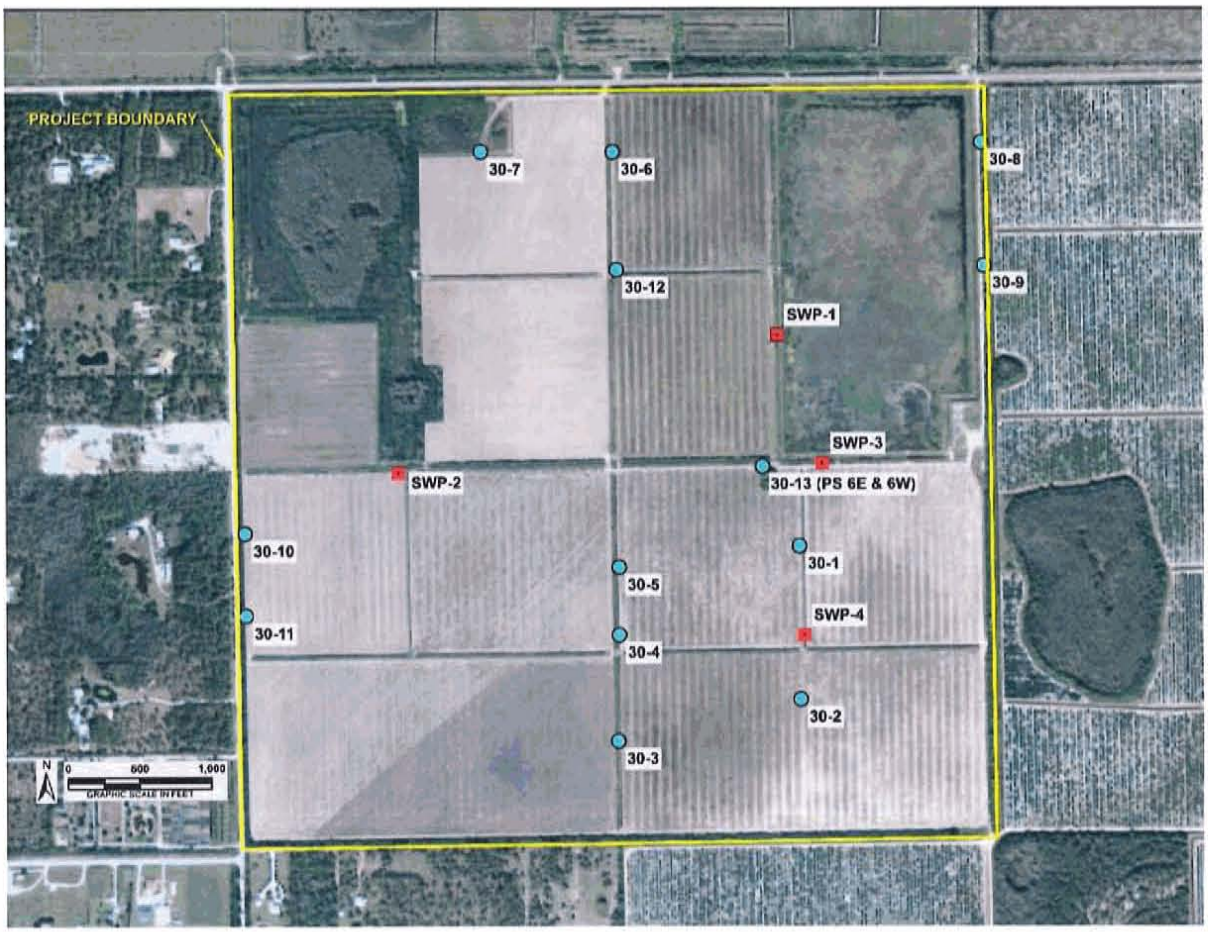


Figure 3. Existing Conditions and Location of Wells and Pumps

Water Science Associates personnel inspected the project site on December 15, 2015, to evaluate well use, and obtain well data. Inspection notes are summarized below and well information is provided in Table 1.

- 13 wells are permitted and all 13 were located and inspected
- 7 wells are connected to pumps
- 6 wells are disconnected and offline

- 5 wells were actively pumping
- At least 3 offline wells are filled in near the base of casing and are likely blocked (30-3, 30-8, and 30-10)
- Wellsite 30-5 is being used to mix chemicals
- and fill spray trucks
- 4 surface water pumps were observed

Table 1. Summary of Well Details (December 15, 2015)

Well Name	Status	Observed Pumping Rate (gpm)	Dissolved Chlorides (mg/l)	Casing Diameter (inches)	Measured Total Depth (ft. btoc**)	Permitted Casing Depth (ft. bls***)	Permitted Total Depth (ft. bls)
30-1	Pumping	950 gpm	27	8	NM	23	32
30-2	Offline, Disconnected	NM*	No Sample	8	NM	20	30
30-3	Offline, Disconnected	NM	33	8	41.4	25	42
30-4	Pumping	720 gpm	27	8	NM	25	40
30-5	Pumping	650 gpm	33	8	NM	25	60
30-6	Not Pumping, Connected	NM	No Sample	8	NM	25	60
30-7	Offline, Disconnected	NM	27	8	77.15	25	50
30-8	Offline, Disconnected	NM	24	8	32.2	30	55
30-9	Offline, Disconnected	NM	No Sample	8	NM	30	60
30-10	Offline, Disconnected	NM	82	8	33.52	25	40
30-11	Not Pumping, Connected	NM	No Sample	8	NM	30	50
30-12	Pumping	1500 gpm	27	12	NM	54	100
30-13W	Pumping	1200 gpm	27	12	NM	52	98

***NM - Not Measured, **btoc - Below Top of Casing, ***bls - below land surface**

C. RESULTS OF PHASE I ENVRIONMENTAL SITE ASSESSMENT

A Phase I Environmental Site Assessment (ESA) was prepared for the Pepperland Ranch project by TDC Consulting Group. The report, entitled ***"PHASE I ENVIRONMENTAL SITE ASSESSMENT, Pepperland, 18500 Corkscrew Road, Lee Co., FL"*** (May 27, 2016) was conducted in accordance with the ASTM International (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13 (the Standard), the All Appropriate Inquiries (AAI) Rule 40 CFR Part 312, TDC's proposal, and generally accepted industry standards.

Results of the report are provided below and the Executive Summary and Conclusions from the report are provided as Exhibit A.

"EXECUTIVE SUMMARY

TDC Consulting Group (TDC) performed a Phase I Environmental Site Assessment (ESA) of Pepperland, located at 18500 Corkscrew Road, in Estero, Lee County, Florida. The ESA was conducted in general accordance with ASTM Standard Practice E1527-13. This ESA does not include discussion of ASTM non-scope considerations.

A summary of our key findings is provided below:

- *The subject site consists of approximately 640 acres of land located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The majority of the site has been graded for agricultural use. An undeveloped natural area is present in the northwest corner of the site and a graded impoundment area is present in the northeast corner of the site.*

- *Based upon observations made during the site reconnaissance of the subject property and the supporting information gathered during the performance of this ESA, it is TDC's opinion that no on-site recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) are present. There was no evidence of the significant discharge of hazardous wastes or petroleum products on the subject site.*

- *Approximately 10 diesel fuel ASTs were located throughout the property for diesel irrigation pumps. One of the tanks is labeled for road usage and located within a secondary containment structure near the packing area on the east side of the site. No significant evidence of spills or releases was noted. It is likely that the actual number and location of on-site ASTs varies depending upon irrigation requirements.*

- *Based upon a review of regulatory agency databases, the subject site was identified in the regulatory database search. Troyer Brothers Florida (Troyer), located at 18500 Corkscrew Road was cross-listed on the aboveground storage tank (AST) and Financial Assurance databases. Troyer installed a 1,000-gallon diesel fuel AST in 1994, which was removed without incident in 1998.*

- *WHEW-RADIO TOWER, located at 21999 Carter Road, was listed on the Financial Assurance database and appears to have been erroneously plotted in the southwestern quadrant of the subject site. No evidence of a radio tower was observed on the property.*

- *Based upon a review of regulatory agency databases, off-site RECs were not identified. One Leaking Underground Storage Tank (LUST); one AST, and two Financial Assurance facilities were identified within their respective search radii. These listings were not considered to represent RECs for the site.*

- *TDC contacted the Fort Myers office of the Florida Department of Environmental Protection (FDEP), the Lee County Division of Natural Resources (DNR), and the Lee County Department of Community Development, Codes and Enforcement Section for information concerning hazardous materials incidents, reported violations, or complaints for the subject site. Lee County DNR does not maintain files over five years old; they are sent to the FDEP for scanning. AST registration was reviewed on the Oculus FDEP online portal. Responses from Lee County Community Development, Codes and Enforcement remained outstanding at the time of report completion. This item represents a data gap. Due to the information gathered from other sources, including the regulatory database report and on-line government websites, this data gap is not expected to alter the findings.*

- *Adjoining land use is a mixture of vacant land, agricultural and residential uses. A visual inspection of adjoining properties did not identify any evidence of RECs.*

- *Several business environmental risk items were identified in connection with the subject site:*

    - *Current and historical agricultural land use on the subject property has included the use of pesticides, herbicides, fertilizers, and petroleum products. Active irrigation pumps with diesel fuel ASTs are present. Although no physical or documentary evidence of significant impacts from such uses was identified during this assessment, this should not be construed to mean that the property is free of potentially localized impacts relating to current and historical agricultural uses.*

    - *Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest. Trash was overflowing from the large roll-off dumpster located near the eastern packing area. No evidence of hazardous material or petroleum product releases were observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk.*

CONCLUSION

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property."

D. SURFACE WATER AND GROUNDWATER MONITORING PLAN

1. INTRODUCTION

Surface water and groundwater elevations will be monitored on a quarterly basis and surface water and groundwater quality testing will be conducted on a semi-annual basis. Monitoring will begin prior to development and extend at least five years. Monitoring will include measurement of water level elevations and water quality testing of selected lakes and monitoring wells. After five years the permittee will meet with Lee County Division or Natural Resources (LCDNR) to propose modifications to parameters and frequency of monitoring.

2. PROPOSED SAMPLING LOCATIONS

Quarterly water level and semi-annual water quality monitoring will be implemented during the development of the project. Sample locations include well 30-6 (and a newly installed MW-4 to replace well 30-6 once construction begins), shallow water level monitoring wells MW-1 through MW-3, and staff gauges SG-1 to SG-3. Water levels will be obtained from all of these sampling points. Groundwater quality sampling will be conducted at well 30-6 (until replaced by MW-4). Surface water quality sampling will be conducted at staff gauges SG-1 and SG-3. In addition, a sampling site for water level and/or water quality monitoring will be included in the monitoring plan at the location of significant outfall from the site. This location will be determined by LCDNR staff after final design and during the Development Order process. Refer to Table 2 for monitoring well construction details and Figure 4 for locations of monitoring sites.

Table 2. Summary of Monitoring Well Construction Details

Well	Elevation of Top of Casing (feet NAVD)	Land Surface Elevation (feet NAVD)	Total Depth (feet below land surface)	Screen Length (feet)	Proposed or Existing
MW-1	30.60	27.4	7.4	5±	Existing
MW-2	28.53	26.6	7.1	5±	Existing
MW-3	28.73	26.8	5.4	5±	Existing
MW-4	TBD	TBD	20±	15±	Proposed

TBD = to be determined

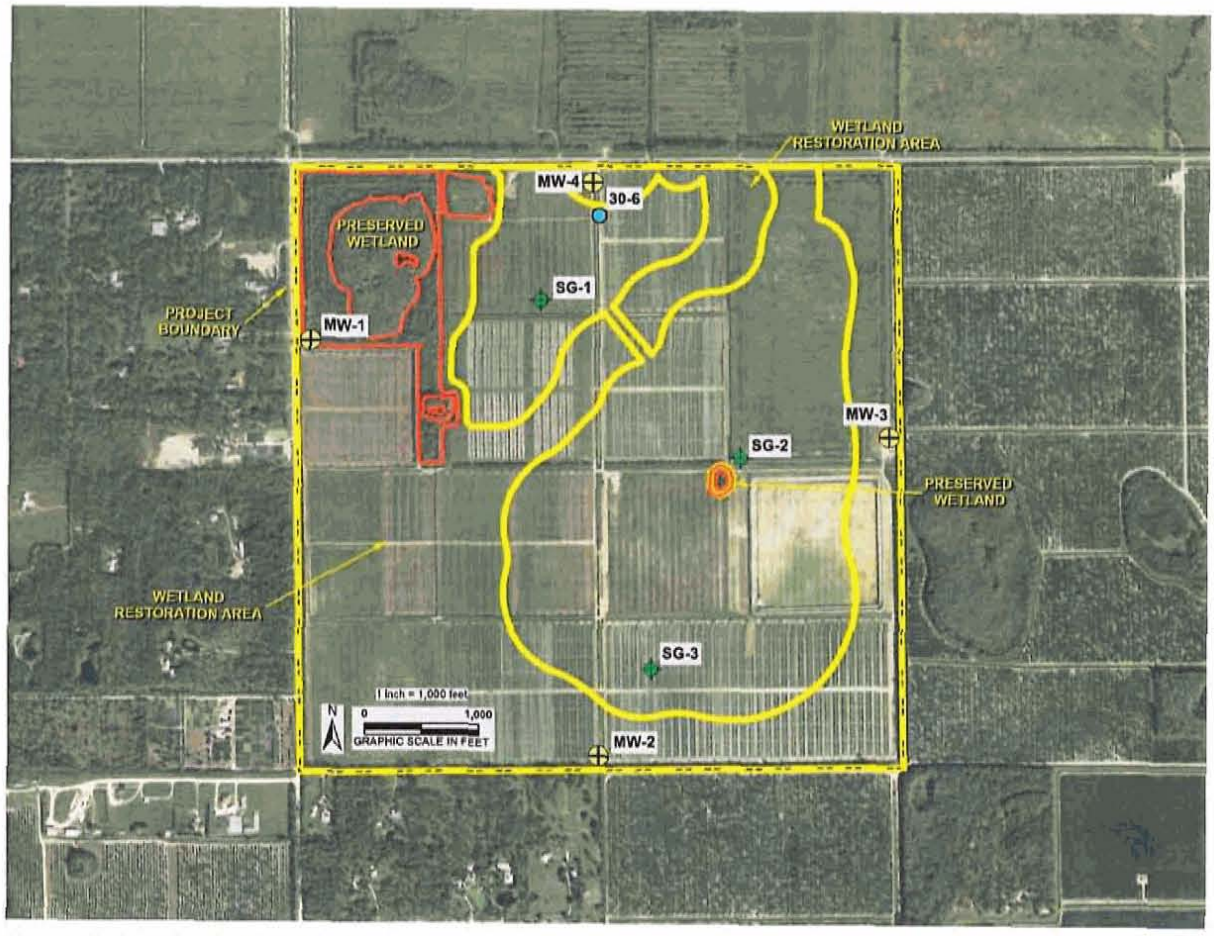


Figure 4. Monitoring Locations

3. WATER LEVEL MONITORING

Monitoring wells MW-1 through MW-3 are equipped with electronic water level recorders and will be programmed to record water levels every 6 hours (or four times daily). Monitoring well MW-4 and staff gauges SG-1 to SG-3 will be equipped with electronic water level recorders that will be programed to record water levels every 6 hours (or four times daily). The transducers record pressure that is then converted into feet of water and the corresponding water elevation. Recorders will be downloaded on a quarterly basis and hydrographs of water levels updated to reflect elevation in NAVD. Hydrographs will be presented to Lee County Division of Natural Resources on a quarterly basis in a Quarterly Monitoring Report. The submittal will also include water level data in Microsoft Excel format.

4. WATER QUALITY MONITORING

Groundwater from well 30-6 and subsequently monitoring well MW-4 and surface water from lakes at staff gauges SG-1 and SG-3 will be sampled on a semi-annual basis for selected nutrients and physical parameters. Parameters are summarized in Table 3 below.

Table 3. Summary of Water Quality Parameters

Parameter	Units	Precision (% RPD)*	Accuracy (% Recovery)*	MDL	PQL	Analysis Type
Total Kjeldahl Nitrogen (TKN)	mg/L as N	0-20%	90-110	0.05	0.2	Laboratory
Ammonia (un-ionized)	mg/L as N	0-20%	90-110	0.01	0.04	Laboratory
Nitrite+Nitrate as Nitrogen (NOX)	mg/L as N	0-20%	90-110	0.01	0.04	Laboratory
Nitrite	mg/L as N	0-20%	85-115	0.01	0.04	Laboratory
Nitrate	mg/L as N	0-25%	90-110	0.01	0.01	Laboratory
Total Nitrogen	mg/L as N	0-20%	90-110	0.1	0.1	Laboratory
Total Phosphorus	mg/L as P	0-20%	90-110	0.01	0.04	Laboratory
Florida PRO (TRPH)	mg/L	0-20%	54-120	0.061	0.1	Laboratory
Arsenic	mg/L	0-20%	70-130	0.0005	0.001	Laboratory
Copper	mg/L	0-20%	70-130	0.0005	0.001	Laboratory
Chlorophyll a (corrected)	mg/L	0-25%	85-115	1	1	Laboratory
Temperature	°C	FT 1000-1	FT 1000-1	0.1	0.1	Field
Specific Conductance	µmhos/cm	FT 1000-1	FT 1000-1	1	1	Field
pH	pH units	FT 1000-1	FT 1000-1	0.01	0.01	Field
Dissolved Oxygen (DO)	mg/L	FT 1000-1	FT 1000-1	0.01	0.01	Field
DO Percent Saturation	%	FT 1000-1	FT 1000-1	0.1	0.1	Field
Lake Stage	ft NGVD	0.01	NA	0.01	0.01	Field/Recorder
Water Table Aquifer Elevation	ft NGVD	0.01	NA	0.01	0.01	Field/Recorder

* Note that Precision and Accuracy may vary for individual laboratories. LCDNR will be notified if selected laboratory's values differ prior to using laboratory

Results of monitoring will be tabulated and presented to Lee County Division of Natural Resources on a semi-annual basis and included in the corresponding Quarterly Monitoring report. Water quality data will be included in the report for Quarters 1 and 3 or Quarters 2 and 4, depending when baseline testing begins. Water quality data will also be provided in a LCDNR approved comma delimited electronic format.

E. QUALITY ASSURANCE

Water samples will be collected and handled following protocols contained in Florida Department of Environmental Protection (FDEP) Quality Assurance Rule F.A.C. 62-160 and adopted as the "*Department of Environmental Protection Standard Operating Procedures for Field Activities DEP-SOP-001/01*" effective 7/30/2014 (or most current). Water Quality samples will be collected from both monitor well and the staff gauge monitoring stations. One field cleaned equipment blank will be collected during each sampling event for quality assurance purposes. Chain of custody forms and laboratory analysis reports will be provided in corresponding semi-annual reports.

Water samples will be tested by a certified laboratory under the National Environmental Laboratory Accreditation Program (NELAP) or The NELAC Institute using approved test methods and QA testing requirements (i.e. blanks, sample duplicates, surrogates, matrix spikes etc.) as contained in F.A.C 62-160 QA Rules.

F. DATA ANALYSIS AND REPORTING

Results of laboratory analyses of water samples will be submitted to the LCDNR in an approved comma delimited electronic format within 30 days of receipt of results from the laboratory. Results of water sampling will be compared to applicable target levels, if listed. Parameters that do not have numeric target levels will be evaluated for trends. The surface water and groundwater laboratory results will undergo statistical analyses. Statistical methods to be used include determination of standard deviations, linear regressions, and calculation of confidence intervals. Once a sufficient data population of laboratory results of sample analyses has been compiled, these statistical tools will be employed to assist in analyzing the data to identify trends and aid in identifying potential concerns.

Once sufficient data is obtained, a 95% confidence interval and a standard deviation value will be calculated and updated with each sampling event. If an analytical result falls outside either the 95% confidence interval, or two standard deviations from the mean, the data will be further evaluated to aid in determining potential anomalous data. Additionally, a linear regression analysis will be performed on each data set to signify trends in the data. If the r^2 value of the regression analysis falls below 0.6, further investigation will be performed to determine the cause of the variability in the results. If the variability is due to seasonal variations, the data will be segregated into seasonal sets, and linear regression analysis will be performed separately on each set, with the above parameters followed.

Water level data will be provided in each Quarterly Monitoring Report and water quality data will be provided in the corresponding Quarterly Monitoring Report. Water quality data will be included in the report for Quarters 1 and 3 or Quarters 2 and 4, depending when baseline testing begins. Results of each semi-annual water quality sampling event will be provided to LCDNR 30 days after sample results are received.

G. CONTINGENCIES AND CORRECTIVE ACTIONS

Should indications of water level or water quality concerns be identified by exceeding target levels or through statistical trend analyses, site conditions will be reviewed and assessed and if indicated, additional samples will be collected. Following any re-sampling event, the LCDNR will be notified of necessary corrective actions. Should potential areas of concern be identified, the Applicant will coordinate with the LCDNR to aid in identifying potential causes and potential needs to modify monitoring parameters, frequency, and/or reporting.

EXHIBIT A

EXCERPTS OF "*PHASE I ENVIRONMENTAL SITE ASSESSMENT, PEPPERLAND, 18500 CORKSCREW ROAD, LEE CO., FL*" (MAY 27, 2016) PREPARED BY TDC CONSULTING GROUP

TDC Consulting Group
5621 Strand Boulevard, Suite 307; Naples, Florida 34110
Phone: 239-254-9263 Fax: 239-254-9274

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Pepperland

18500 Corkscrew Road

Lee Co., FL

May 27, 2016
TDC Project No. 6300-0003

Prepared For:

PEPPERLAND LLC
c/o
BCF Management Group, LLC
22190 Fairmount Court
Estero, FL 33928

Prepared By:

TDC Consulting Group
5621 Strand Boulevard, Suite 307
Naples, FL 34110

TDC Consulting Group

5621 Strand Boulevard, Suite 307; Naples, Florida 34110
Phone: 239-254-9263 Fax: 239-254-9274

May 27, 2016

PEPPERLAND LLC
c/o
BCF Management Group, LLC
22190 Fairmount Court
Estero, FL 33928
Attn: Brian F. Farrar, President

Subject: Phase I Environmental Site Assessment
Pepperland
18500 Corkscrew Road
Lee Co., FL

Dear Mr. Farrar:

Attached is the Phase I Environmental Site Assessment (ESA) report for the above-referenced property. The ESA was conducted in accordance with the ASTM International (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* E1527-13 (the Standard), the All Appropriate Inquiries (AAI) Rule 40 CFR Part 312, TDC's proposal, and generally accepted industry standards.

This report was prepared solely for the use of PEPPERLAND LLC and BCF Management Group, LLC, (hereinafter "Client" or "User") and any party specifically referenced in Section 1.6 - User Reliance. No other party shall use or rely on this report or the findings herein, without the prior written consent of TDC. TDC appreciates this opportunity to provide our environmental consulting services to you. If you have any questions concerning this project, please contact me at (239)-254-9263.

Sincerely,

John J. Driscoll
Principal

Attachments

EXECUTIVE SUMMARY

TDC Consulting Group (TDC) performed a Phase I Environmental Site Assessment (ESA) of Pepperland, located at 18500 Corkscrew Road, in Estero, Lee County, Florida. The ESA was conducted in general accordance with ASTM Standard Practice E1527-13. This ESA does not include discussion of ASTM non-scope considerations.

A summary of our key findings is provided below:

- The subject site consists of approximately 640 acres of land located on the south side of Corkscrew Road, east of Six Ls Farm Road in Estero, Lee County, Florida. The majority of the site has been graded for agricultural use. An undeveloped natural area is present in the northwest corner of the site and a graded impoundment area is present in the northeast corner of the site.
- Based upon observations made during the site reconnaissance of the subject property and the supporting information gathered during the performance of this ESA, it is TDC's opinion that no on-site recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) are present. There was no evidence of the significant discharge of hazardous wastes or petroleum products on the subject site.
- Approximately 10 diesel fuel ASTs were located throughout the property for diesel irrigation pumps. One of the tanks is labeled for road usage and located within a secondary containment structure near the packing area on the east side of the site. No significant evidence of spills or releases was noted. It is likely that the actual number and location of on-site ASTs varies depending upon irrigation requirements
- Based upon a review of regulatory agency databases, the subject site was identified in the regulatory database search. Troyer Brothers Florida (Troyer), located at 18500 Corkscrew Road was cross-listed on the aboveground storage tank (AST) and Financial Assurance databases. Troyer installed a 1,000-gallon diesel fuel AST in 1994, which was removed without incident in 1998.
- WHEW-RADIO TOWER, located at 21999 Carter Road, was listed on the Financial Assurance database and appears to have been erroneously plotted in the southwestern quadrant of the subject site. No evidence of a radio tower was observed on the property.
- Based upon a review of regulatory agency databases, off-site RECs were not identified. One Leaking Underground Storage Tank (LUST); one AST, and two Financial Assurance facilities were identified within their respective search radii. These listings were not considered to represent RECs for the site.
- TDC contacted the Fort Myers office of the Florida Department of Environmental Protection (FDEP), the Lee County Division of Natural Resources (DNR), and the Lee County Department of Community Development, Codes and Enforcement Section for information concerning hazardous materials incidents, reported violations, or complaints for the subject site. Lee County DNR does not maintain files over five years old; they are sent to the FDEP for scanning. AST registration was reviewed on the Oculus FDEP online portal. Responses from Lee County Community Development, Codes and Enforcement remained outstanding at the time of report completion. This item represents a data gap. Due to the information gathered from other sources, including the regulatory database report and on-line government websites, this data gap is not expected to alter the findings.

- Adjoining land use is a mixture of vacant land, agricultural and residential uses. A visual inspection of adjoining properties did not identify any evidence of RECs.
- Several business environmental risk items were identified in connection with the subject site:
    - Current and historical agricultural land use on the subject property has included the use of pesticides, herbicides, fertilizers, and petroleum products. Active irrigation pumps with diesel fuel ASTs are present. Although no physical or documentary evidence of significant impacts from such uses was identified during this assessment, this should not be construed to mean that the property is free of potentially localized impacts relating to current and historical agricultural uses.
    - Scattered solid waste and other miscellaneous debris were observed at several areas of the property. Woody vegetative debris was noted in the undeveloped natural area located at the northwest corner of the site. Bundled planting stakes and associated debris were also noted in the northwest. Trash was overflowing from the large roll-off dumpster located near the eastern packing area. No evidence of hazardous material or petroleum product releases were observed in any of these areas. Thus these areas are not considered to be a REC, but are a Business Environmental Risk.

Conclusion

This assessment has revealed no evidence of RECs, CRECs, or HRECs in connection with the subject property.