

Date: 06/03/2016

Fax: (225) 751-2010  
www.leo-llc.com

ATTN: **Allara Mills Gutcher, AICP**  
Planning and Community Development Director  
Gadsden County  
ph: 850.875.8663

Gadsden County BOCC  
Planning and Community Development Department  
Post Office Box 1799  
Quincy, FL 32353-1799

## **SITE ID: 12039-004**

This report contains the engineering and environmental desktop due diligence reports and assessments for site 12039-004 in accordance with the contract's stated deliverables. Those deliverable items defined as:

Deliverable Item 2: Desktop Engineering Assessment (CSRS, Inc):

- Acquire the professional opinion as to favorable site conditions and/or development challenges for light to heavy industrial sites. Opinions shall include but are not limited to: transportation access; infrastructure configuration; rail spur assessments; flood risks and cut/fill burden; soils suitability; and rough-order-of-magnitude cost ranges for readying site development.
  - o A report on favorable site conditions and/or challenges for light to heavy industrial sites.

Deliverable Item 3: Desktop Environmental Assessment (C-K Associates):

- Acquire the professional opinion as to favorable site conditions and/or development challenges as it relates to potential wetlands extent, type/quality of wetlands observed, mitigation options, cursory T&E review, cursory cultural review, other known environmental permitting, and rough-order-of-magnitude cost ranges for mitigation and permitting.
  - o A report on favorable site conditions and/or challenges as it relates to environmental features and development impacts.

This site was selected for consideration by the project team (LEO, CSRS, CK) in coordination with the Gadsden County Florida Planning and Community Development Director, Allara Gutcher, and the Gadsden County Economic Development Council Director, Beth Kirkland.

Sincerely,

**Chris Ventre, PLA, ASLA | Director, Planning and Design**

LEO, LLC – Lafayette Office | 211 E Devalcourt Street | Lafayette, LA

T. 337.945.6755 email: [chris.ventre@leo-llc.com](mailto:chris.ventre@leo-llc.com)

LEO, LLC – Corporate Office | 17170 Perkins Road | Baton Rouge, LA

T. 225.753.0325 [www.leo-llc.com](http://www.leo-llc.com)

Desktop Engineering Assessment

**Gadsden Site 12039-004**

Gadsden County, Florida

**Initial Submittal**

May 23, 2016



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Exhibit 3	Map Three - Flood Zone, Soil Data, and Contours



## **Gadsden County Site Selection Desktop Engineering Assessment - Site 12039-004**

### **I. Existing Site Conditions**

#### **A. Land Use**

- Land use is governed at the county level. Gadsden County has developed a Comprehensive Plan defining existing and future land uses.
- Existing land use is agricultural (Timber III). The land use of adjoining parcels is defined as agricultural (Timber II).
- According to the Gadsden County Future Land Use map, the future land use is Agricultural 3. The intent of this category is to provide areas for agriculture uses and residences associated with such use. No more than one dwelling unit per 20 acres.
- In order to position the site for an economic development user, the entire 564.3 acres of the site will require a reclassification of the land use to an appropriate industrial category.

#### **B. Transportation**

- The site is located approximately four miles north of the Town of Greensboro, Florida with visibility and frontage along Interstate 10 and is accessible from Highway 268 (Hardaway Highway).
- The site is located 5.6 road miles from the eastbound Interstate 10 interchange. In order to access the eastbound I-10 interchange, vehicles must travel south 1.6 miles on two-lane Cochran Road (Highway 268A) to two-lane Flat Creek Road, then travel east 2.8 miles to Bassett Road. Head south for 0.3 miles until reaching Florida Highway 12 West, continue along FL-12 for 0.8 miles until reaching the I-10 interchange. The site is located 9.6 road miles from the westbound Interstate 10 interchange. In order to access the westbound I-10 interchange, vehicles must travel northwest 6.9 miles on two-lane Hardaway Highway to Bonnie Hill Road, then travel south for 1.5 miles. Continue traveling south on Flat Creek Road for 1.2 miles until reaching the I-10 interchange.
- According to the Florida Department of Transportation, the maximum gross weight for commercial trucks is 80,000 pounds. Reconnaissance of the route from the site to Interstate 10 did not indicate any segments of roadway with weight limits less than the maximum gross weight of 80,000 pounds, thus making the site conducive for industrial traffic with little to no required local road pavement section upgrades. Road widening or intersection improvements may be required based on specific traffic generation and access criteria.
- The northeast property boundary of the site is adjacent to an Apalachicola Northern short line railroad track. The rail provider has not been contacted to confirm connectivity or operational feasibility of a rail spur to the main line track.



### **C. Utilities**

- Potable Water
  - According to correspondence with local utility officials a Talquin Electric Co-op main water line is located approximately 7,980 feet east from the site. The diameter of this line was not provided.
  - In order to provide potable water to the site, an approximately 7,980 feet water line extension will need to be constructed along Hardaway Highway.
  - Further due diligence will need to be completed to determine if the existing water system can provide capacity to an industrial prospect.
- Wastewater
  - According to correspondence with local utility officials, the site has no existing wastewater infrastructure at or near the site.
  - In order to treat wastewater for this area, a project specific wastewater treatment facility would need to be constructed on site.
  - Pending a further detailed analysis, treated wastewater may be discharged to Flat Creek, which runs along the southeastern boundary of the site. Flat Creek is a blue line stream and is subject to discharge restrictions in accordance with Florida Department of Environmental Protection regulations.
- Electric
  - According to correspondence with local utility officials, a 3-phase electric line runs adjacent to the site along Highway 268.
- Natural Gas
  - Off-site Improvements: Not applicable. Natural gas is not available.
  - On-site Improvements: Not applicable. Natural gas is not available.
- Telecom
  - According to correspondence with local utility officials and visual reconnaissance, a copper telecom line operated by TDS Telecom runs along the east side of the property, adjacent to Highway 268.
  - Copper cable may be able to service an industrial prospect; however, copper cable generally has less bandwidth than fiber optic cable. In order to provide the highest level of service, telecom infrastructure will need to be upgraded to fiber optic at this site.

### **D. Flood Zone and Topography**

- According to FEMA Firm Panels 12039C0050C, 12039C0075C, 12039C0200C, and 12039C0225C, effective on 02/04/2009, approximately 2.61 acres of the site is in Flood Zone A and 561.69 acres of the site is in Flood Zone X. Flood Zone A includes areas subject to inundation by the 1-percent-annual-chance flood event with no base



flood elevations determined. Flood Zone X includes the areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Area and higher than the elevation of the 0.2-percent-annual-chance flood. No additional fill is anticipated to meet floodplain construction standards.

- The elevations on site range from 305 feet in the northeast portion of the site to 210 feet in the southern portion of the site with an average elevation of 285 feet ±. The average slope of the site is approximately 2%.
- Although the site is at minimal flood risk, adequate hydraulic analysis should be conducted to reduce flood damage and ensure proper drainage on-site.
- The central and northeastern portions of the site are relatively flat and would serve as an ideal location for a potential industrial prospect.

### **E. Soils**

- According to the National Resources Conservation Service soil map, 70.4% of the soils on the site are classified as well drained, and 29.6% of the soils on the site are classified as somewhat poorly drained, poorly drained, or very poorly drained.

## **II. Development Considerations**

### **A. Transportation**

- Off-site Improvements: Access to the site may include the construction of turning lanes on Hwy 268.
- On-site Improvements: Construction of a minimum two-lane access drive will be required to access the central portions of the site.

### **B. Utilities**

- Potable Water
  - Off-site Improvements: Extend water line 7,980 feet to site.
  - On-site Improvements: Extend water line from road to site pad location.
- Wastewater
  - Off-site Improvements: None applicable
  - On-site Improvements: Construct wastewater treatment facility and discharge line to Flat Creek.
- Electric
  - Off-site Improvements: None anticipated.
  - On-site Improvements: Tie-in to existing electric lines and run service to site pad location.



- Natural Gas
  - Off-site Improvements: Natural gas is not available. Substantial extension required.
  - On-site Improvements: Natural gas is not available. Substantial extension required.
- Telecom
  - Off-site Improvements: Upgrading the existing infrastructure to fiber optic cable will provide the highest level of service.
  - On-site Improvements: Extend telecom line from road to site pad location.

### **C. Topography and Grading**

- On-site Improvements: Assuming a 25-acre site pad is graded to less than one percent slope, the site will require approximately 105,400 cubic yards of cut/fill. This calculation is a conceptual desktop estimate based on LiDAR contours and must be reevaluated with a detailed site survey and analysis.

**Gadsden Site ID: 12039-004**  
**Preliminary Rough Order of Magnitude (ROM) Cost Estimate**  
**Job No. 215184**

Item No.	Description	Unit	Est. Quantity	Unit Price	Extension
<b>Transportation</b>					
1	On-site Road Improvements <sub>4</sub>	L.F.	3,800	\$ 250.00 to \$ 400.00	\$ 950,000.00 to \$ 1,520,000.00
2	Off-site Road Improvements <sub>5</sub>	Lump	1	\$ 100,000.00 to \$ 1,000,000.00	\$ 100,000.00 to \$ 1,000,000.00
<b>Subtotal:</b>					<b>\$1,050,000.00 to \$ 2,520,000.00</b>
<b>Utilities</b>					
1	Water				
a	Off-site Improvements	L.F.	7,980	\$ 25.00 to \$ 100.00	\$ 199,500.00 to \$ 798,000.00
b	On-site Improvements <sub>4</sub>	L.F.	1,000	\$ 25.00 to \$ 100.00	\$ 25,000.00 to \$ 100,000.00
2	Sewer				
a	Off-site Improvements <sub>8</sub>	Lump	N/A	- to -	- to -
b	On-site Improvements	Lump	1	\$ 950,000.00 to \$ 2,000,000.00	\$ 950,000.00 to \$ 2,000,000.00
3	Natural Gas				
a	Off-site Improvements	L.F.	N/A	- to -	- to -
b	On-site Improvements	L.F.	N/A	- to -	- to -
<b>Subtotal:</b>					<b>\$1,174,500.00 to \$ 2,898,000.00</b>
<b>Site Grading</b>					
1	Earthwork <sub>6</sub>	CY	105,400	\$ 5.00 to \$ 25.00	\$ 527,000.00 to \$ 2,635,000.00
<b>Subtotal:</b>					<b>\$527,000.00 to \$ 2,635,000.00</b>
<b>Rail</b>					
1	Off-site Rail Improvements <sub>9</sub>	L.F.	1,900	\$ 300.00 to \$ 400.00	\$ 570,000.00 to \$ 760,000.00
<b>Subtotal:</b>					<b>\$ 570,000.00 to \$ 760,000.00</b>
<b>Total:</b>					<b>\$3,321,500.00 to \$8,813,000.00</b>
<b>20% Contingency <sub>1</sub>:</b>					<b>x 1.20</b>
<b>Rough Order of Magnitude (ROM):</b>					<b>\$ 3,990,000.00 to \$ 10,580,000.00</b>

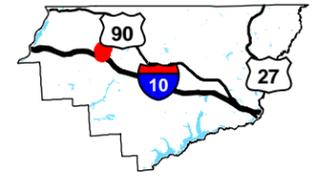
**Footnotes:**

- 1.) Does not include costs for engineering, permitting, or general project management.
- 2.) This cost estimate was prepared with the best information available at the time of analysis.
- 3.) Actual costs can vary based on availability of material, site conditions, and labor.
- 4.) Assumes item is constructed to the center of the site.
- 5.) Off-site road improvements assume the construction of a deceleration lane and a left-turn lane.
- 6.) ROM cut and fill for 25-AC site pad
- 7.) Electrical and Telecom services upgrade costs are not shown may be covered by the respective utility company.
- 8.) Improvement costs assume a wastewater treatment capacity of 250,000 GPD.
- 9.) Feasibility of rail has not been verified with rail provider.

# Map One - General Site Overview

Site Exhibit for  
12039-004 Site  
Gadsden County, FL

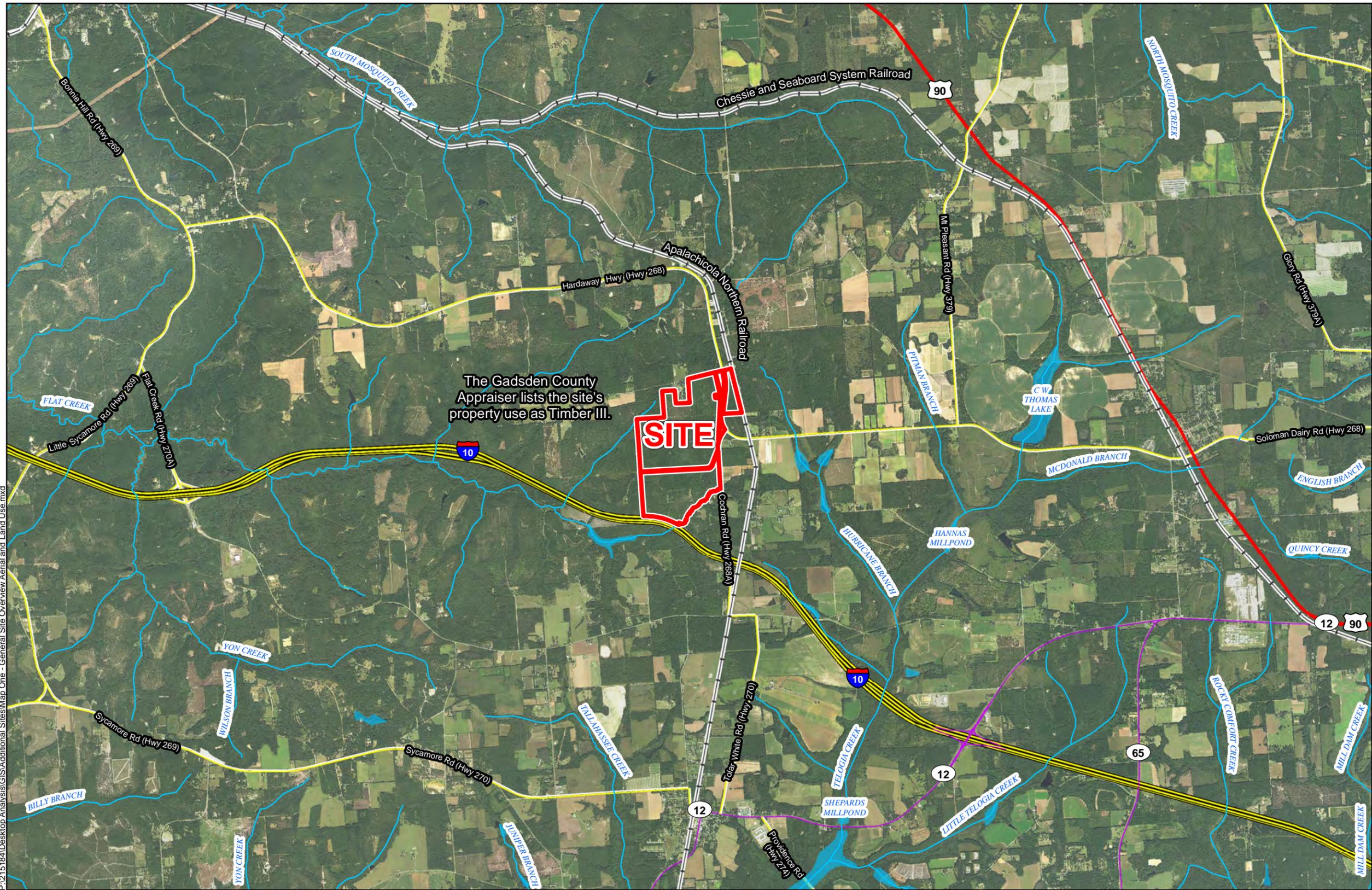
Enterprise Florida



Gadsden County

### LEGEND

- Site Boundary (564.3 Ac. +/-)
- Existing Roadway**
- Freeway or Other Major Road
- Other Major Road
- Local Connecting Road
- Important Local Road
- Railroad
- Stream
- Waterbody



The Gadsden County Appraiser lists the site's property use as Timber III.

**SITE**

P:\215184\Desktop\Analysis\GIS\Additional Sites\Map One - General Site Overview Aerial and Land Use.mxd

- General Notes:
1. The information presented herein is for planning purposes only. Further detailed due diligence MUST be completed prior to making decisions regarding the site.
  2. No attempt has been made by CSRS, Inc. to verify site boundary, title, actual legal ownership, deed restrictions, servitudes, easements, or other burdens on the property, other than that furnished by the client or his representative.
  3. Transportation data from ESRI Online Basemaps.
  4. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.
  5. The Gadsden County Appraiser lists the site's property use as Timber III.

**INITIAL SUBMITTAL**  
**05/23/2016**



Scale 1:60,000  
0 3,200 6,400 Feet

**ENTERPRISE FLORIDA**  
**LEO**  
*Land Use - Water Consulting LLC*

Date:	5/23/2016
Project Number:	215184
Drawn By:	AMB
Checked By:	JAY

**CSRS**  
IMAGINE SHAPE DELIVER

6767 Perkins Road Suite 200 Baton Rouge, LA 70808  
Telephone: 225 769-0546 Fax: 225 767-0060  
www.csrsllc.com

# Map Two - Utilities Exhibit

Site Exhibit for  
12039-004 Site  
Gadsden County, FL

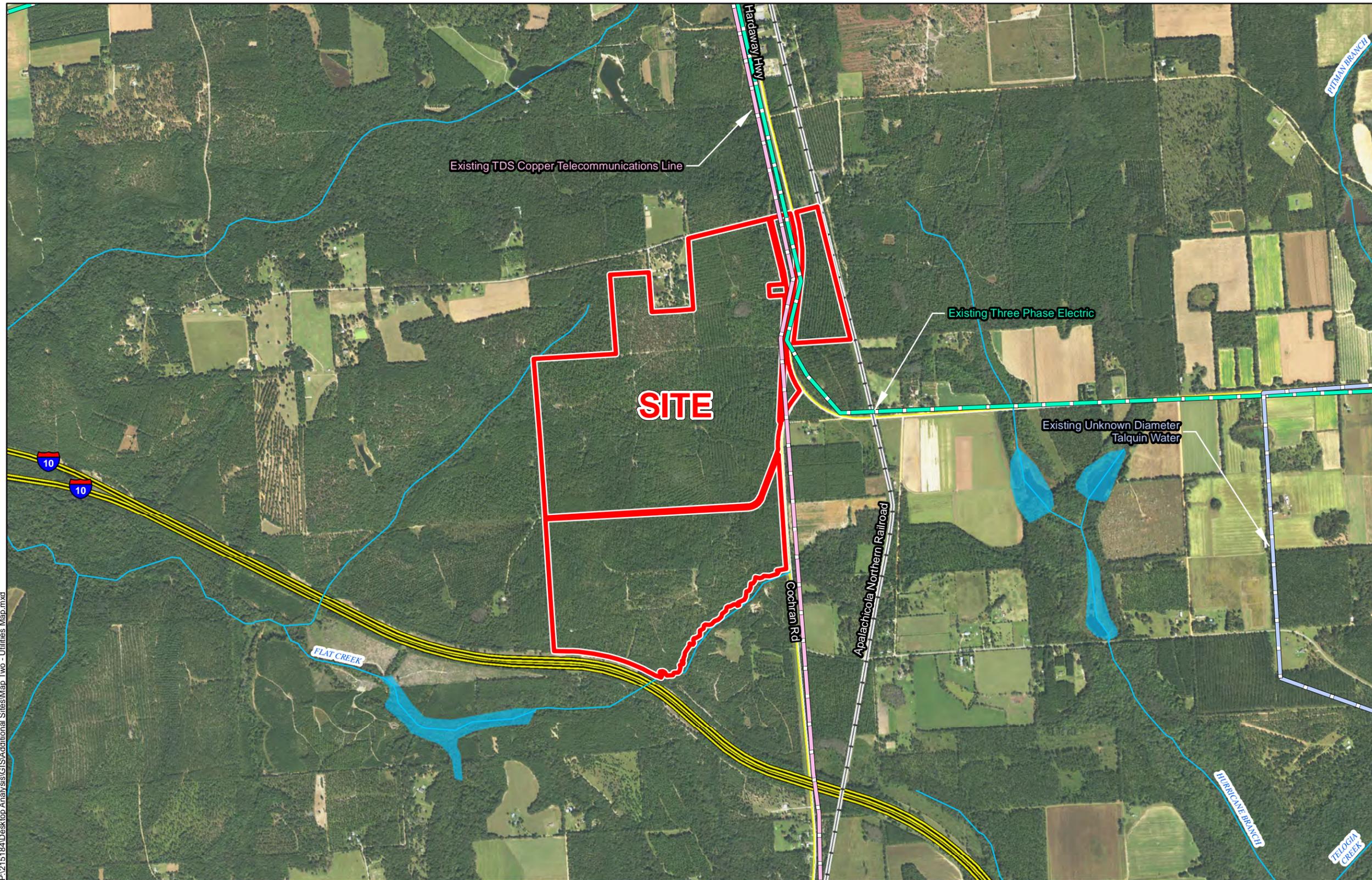
Enterprise Florida



Gadsden County

### LEGEND

- Site Boundary (564.3 Ac. +/-)
- Existing Telecommunications**
- TDS - Copper
- Existing Electric**
- Existing Three Phase Electric Line
- Existing Water**
- Existing Talquin Water
- Existing Roadway**
- Freeway or Other Major Road
- Important Local Road
- Railroad
- Stream
- Waterbody



P:\215184\Desktop Analysis\GIS\Additional Sites\Map Two - Utilities Map.mxd

**General Notes:**

1. No attempt has been made by CSRS, Inc. to verify site boundary, title, actual legal ownership, deed restrictions, servitudes, easements, or other burdens on the property, other than that furnished by the client or his representative.
2. Transportation data from ESRI Online basemaps.
3. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.
4. Utility information from visual inspection and/or the individual utility operators. Exact field location has not been determined by survey. The lines shown are an approximate representation only and may have been offset for depiction purposes.

**INITIAL SUBMITTAL**  
**05/23/2016**



Scale 1:20,000  
0 1,000 2,000 Feet

**ENTERPRISE FLORIDA**  
**LEO**  
*Land Use - Water Consulting LLC*

Date: 5/23/2016  
Project Number: 215184  
Drawn By: AMB  
Checked By: JAY

**CSRS**  
IMAGINE SHAPE DELIVER  
6767 Perkins Road Suite 200 Baton Rouge, LA 70808  
Telephone: 225 769-0546 Fax: 225 767-0060  
www.csronline.com

# Map Three - Flood Zone, Soil Data, and Contours

Site Exhibit for  
12039-004 Site  
Gadsden County, FL

Enterprise Florida

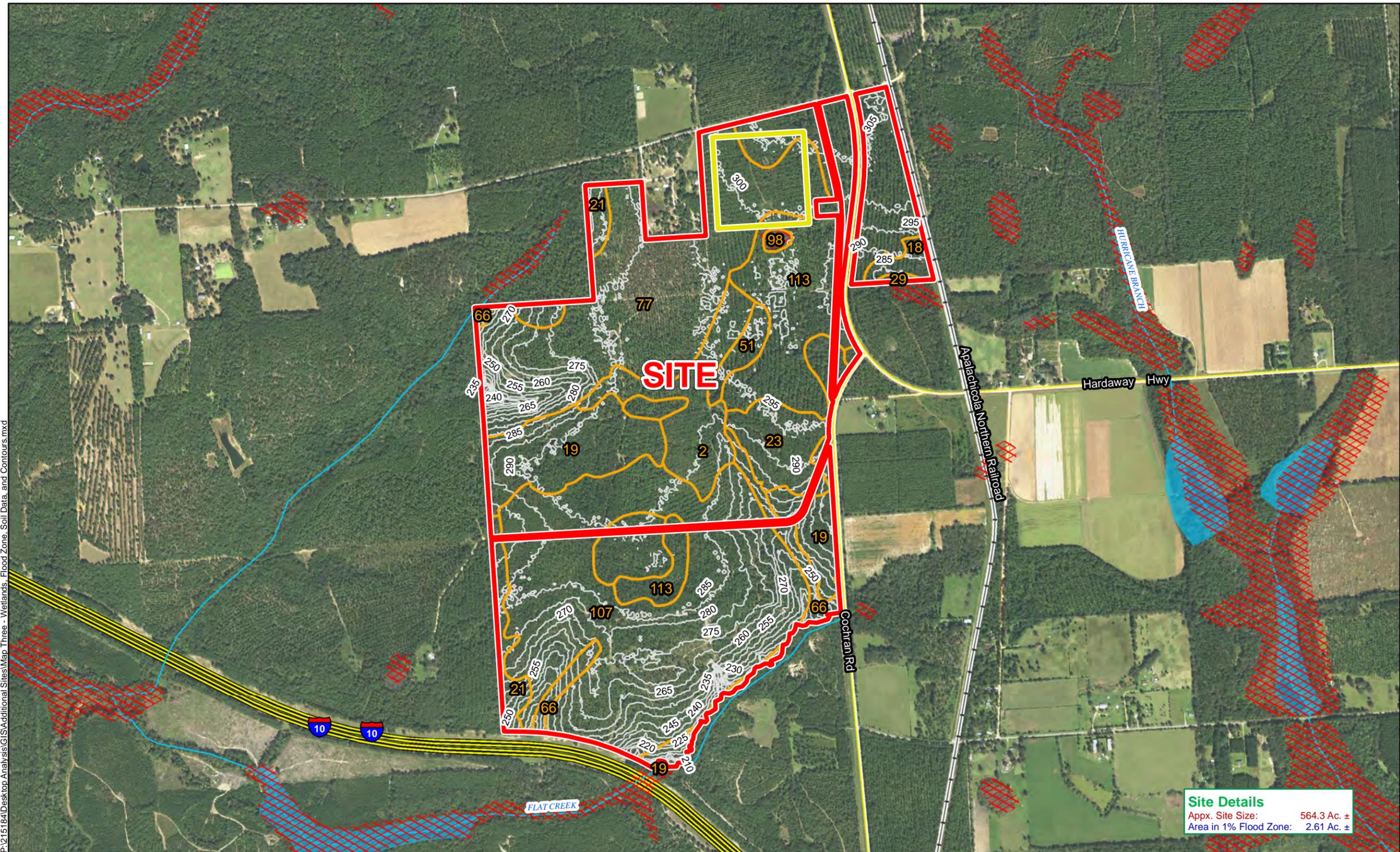


Gadsden County

LEGEND

- Site Boundary (564.3 Ac. +/-)
- Sample 25 Acre Site Pad
- Flood Zone**
- X A (100-year with no Base Flood Elevation)
- X (area outside of 100-year)
- Ground Elevation Contours
- Soil Type**
- 107 : Fuquay-Bonifay Complex, 0 To 5 Percent Slopes (Well Drained)
- 113 : Leefield Fine Sand, 0 To 5 Percent Slopes (Somewhat Poorly Drained)
- 18 : Dothan-Fuquay Complex, 0 To 2 Percent Slopes (Well Drained)
- 19 : Dothan-Fuquay Complex, 2 To 5 Percent Slopes (Well Drained)
- 2 : Albany-Blanton Complex, 0 To 5 Percent Slopes (Somewhat Poorly Drained)
- 21 : Dothan-Fuquay-Cowarts Complex, 8 To 15 Percent Slopes (Well Drained)
- 23 : Fuquay-Lucy-Orangeburg Complex, 0 To 5 Percent Slopes (Well Drained)
- 29 : Grady Fine Sandy Loam, Depressional (Poorly Drained)
- 51 : Plummer Sand, 0 To 5 Percent Slopes (Poorly Drained)
- 66 : Pickney, Dorovan, and Bibb Soils, Frequently Flooded (Very Poorly Drained)
- 77 : Bonifay-Fuquay Complex, 0 To 5 Percent Slopes (Well Drained)
- 98 : Rutledge And Plummer Soils, Depressional (Very Poorly Drained)
- Existing Roadway**
- Freeway or Other Major Road
- Important Local Road
- Railroad
- Stream
- Waterbody

**Site Details**  
Appx. Site Size: 564.3 Ac. ±  
Area in 1% Flood Zone: 2.61 Ac. ±



P:\215184\Desktop\Analysis\GIS\Additional Sites\Map Three - Wetlands, Flood Zone, Soil Data, and Contours.mxd

- General Notes:
1. The information presented herein is for planning purposes only. Further detailed due diligence MUST be completed prior to making decisions regarding the site.
  2. No attempt has been made by CSRS, Inc. to verify site boundary, title, actual legal ownership, deed restrictions, servitudes, easements, or other burdens on the property, other than that furnished by the client or his representative.
  3. Transportation data from ESRI Online Basemaps.
  4. 2015 aerial imagery from USDA-APFO National Agricultural Inventory Project (NAIP) and may not reflect current ground conditions.
  5. Effective flood data from FEMA Map Service Center dated July 06, 2015. This map is not an official FEMA Flood Insurance Rate Map (FIRM) and is not intended for insurance rating purposes and is for information only. Please contact your local floodplain administrator for more information or to view an official copy of the Flood Insurance Rate Map (FIRM).
  6. Soils data from USDA SSURGO website: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

**INITIAL SUBMITTAL**  
05/23/2016

FEMA FIRM Panel No 12039C0225C dated 02/04/2009  
FEMA FIRM Panel No 12039C0075C dated 02/04/2009  
FEMA FIRM Panel No 12039C0050C dated 02/04/2009  
FEMA FIRM Panel No 12039C0200C dated 02/04/2009

Scale 1:14,000  
0 750 1,500 Feet



Date: 5/19/2016  
Project Number: 215184  
Drawn By: AMB  
Checked By: JAY

**CSRS**  
IMAGINE SHAPE DELIVER  
6767 Perkins Road Suite 200 Baton Rouge, LA 70808  
Telephone: 225 769-0546 Fax: 225 767-0060  
[www.csrsonline.com](http://www.csrsonline.com)

May 13, 2016

LEO, LLC

**Attn: Mr. Victor Leotta**

17170 Perkins Road

Baton Rouge, Louisiana 70810

**Re: Gadsden County Florida Site Selection, Desktop Natural Resources Assessment  
Site 12039-004  
CK Project Number 13463**

Dear Mr. Leotta,

CK Associates (CK) is pleased to present the following results of a desktop natural resources assessment on an approximate 564-acre site located Gadsden County, Florida. The purpose of this assessment is to identify potential Waters of the US (including wetlands), potential suitable habitat and/or designated Critical Habitat for listed Threatened and Endangered species (T&E) and to evaluate potential compensatory mitigation for unavoidable impacts to wetlands.

## **Methodology**

### Wetlands

Habitats are considered to be wetlands when they exhibit the following three characteristics: 1) dominated by hydrophytic vegetation, 2) contain indicators of wetland hydrology and 3) are underlain by hydric soils. All three wetland characteristics must be present in order for habitat to be considered a wetland. In order to identify potential wetland areas for this desktop assessment, CK used the following information to determine the presence of hydrophytic vegetation, wetland hydrology and hydric soils within the project area.

- Hydrophytic Vegetation: recent and historical aerial photography, and National Wetlands Inventory (NWI) digital data.
- Wetland Hydrology: USGS Topo Maps, Light Detection and Ranging data (LiDAR), and signatures on aerial photographs
- Hydric Soils: NRCS Web Soil Survey and NRCS 2012 SSURGO dataset from the Florida Geographic Data Library (FGDL)

It is assumed that hydrophytic vegetation is present in areas where wetland signature was observed on aerial photography. Wetland hydrology was assumed present in low lying areas

identified from LiDAR data and the USGS Topo Maps, as well as areas where a wetland signature was present on aerial photography. The SSURGO dataset was used to determine the types of soils within the site and the location of hydric soils. Areas where all three wetland characteristics were present within the project area were identified as potential wetlands.

### Waters of the US

Waters of the US are aquatic areas that are either navigable or have a significant nexus to a navigable water. These areas are regulated by the United States Army Corps of Engineers (USACE). Navigable waters are “those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce” (33 CFR 329.4). Potential other waters of the U.S. were identified by a waterbody signature from recent and historical aerial photography, LiDAR, USGS Topo maps, and National Hydrology Dataset (NHD) flowline data.

### T&E Species

The US Fish and Wildlife Service (USFWS) uses the Information for Planning and Conservation (IPaC) online tool to assess potential project effect on sensitive resources and streamline the environmental review process. A trust resource report (see attached) was generated for Gadsden County which provides a list of T&E species known to occur within the county. To determine if T&E species are likely to occur on the site, habitat requirements for each listed T&E species was evaluated and cross referenced with those habitats that occur within the site. If potential suitable habitat was observed, these areas were delineated using aerial photographs, elevation data and soil data. The USFWS Critical Habitat Mapper was used to determine where designated Critical Habitat was located within Gadsden County.

### Compensatory Mitigation Costs

After avoidance and minimization efforts have been demonstrated, the USACE requires compensatory mitigation for unavoidable impact to wetlands. Compensatory mitigation can be acquired by purchasing mitigation credits through an approved mitigation bank, an In-Lieu Fee (ILF) program or a permittee responsible mitigation project. To determine potential mitigation costs, available mitigation banks and ILF programs were identified using the USACE RIBITS system. The watershed in which Site 12039-004 is located does not contain any approved mitigation banks at this time. An ILF program is currently available for projects within this watershed which is administered through the Northwest Florida Water Management District (NFWMD). Mitigation banks in adjacent watersheds and the NFWMD ILF program were contacted to determine potential mitigation costs.

### Water Resource Caution Areas

Water Management Districts in Florida are mandated by the Florida Statutes to ensure adequate supply of water and water resources for all citizens and natural features, provide protection and improvement of natural systems and water quality, and minimize harm to water resources. Water Management Districts have the regulatory authority for well construction, drilling, and abandonment decisions. For permitting and planning purposes Northwest Florida Water Management District Governing Board has designated areas where water supply and

quality are at a disadvantage compared to the current and future demand. In Water Resource Caution Areas special permitting rules apply for withdrawal of water from both ground and surface water resources for consumptive use permitting. These areas include coastal areas of Santa Rosa, Okaloosa and Walton counties and the upper Telogia Creek drainage basin in Gadsden County (Rule 40A-2.802 Florida Administrative Code). These are areas where fresh water resources are currently experiencing significant shortage of supply or will experience reduction in supply in the future due to natural or man-made causes, e.g. salt water intrusion, mineralization, upcoming of lower quality of water, contamination from human activity etc., (Section 40A-2.801 FAC). The Telogia Polygon was selected from the original dataset (contains areas outside of Gadsden County), and exported to a new dataset: Telogia\_WRCA by Karen Kebart June 9, 2015. This shapefile was used to determine if the site was located within the Telogia Creek WRCA.

## Results

### Wetlands

The NWI and aerial photographs show a small, potentially isolated, forested wetland on the northeastern portion of the site. Because there is no apparent connectivity or adjacency to other wetlands or Waters of the US, this area may not be considered jurisdictional by the USACE. No other wetland signature was identified on the site.

### Waters of the US

Topographic maps, LiDAR data, and NHD data do not indicate the presence of any stream types within the site.

### T&E

The IPaC Trust Resource Report indicated the following listed T&E species known to occur within Gadsden County, Florida:

- Red-cockaded Woodpecker (RCW) (*Picoides borealis*)
- Wood Stork (*Mycteria americana*)
- Fat Threeridge (*Amblema neislerii*)
- Gulf Moccasinshell (*Medionidus penicillatus*)
- Ochlockonee Moccasinshell (*Medionidus simpsonianus*)
- Oval Pigtoe (*Pleurobema pyriforme*)
- Purple Bankclimber (*Elliotoideus sloatianus*)
- Shinyrayed Pocketbook (*Lampsilis subangulata*)
- Atlantic Strugeon (*Asipenser oxyrinchus*)
- Eastern Indigo Snake (*Drymarchon corais couperi*)
- Gopher Tortoise (*Gopherus polyphemus*)

Final designated Critical Habitat for the Fat Threeridge, Gulf Moccasinshell, Ochlockonee Moccasinshell, Oval Pigtoe, Purple Bankclimber, Shinyrayed Pocketbook and Atlantic Sturgeon exists within Gadsden County. No Critical Habitat for these species occurs on the site.

The RCW requires pines at least 60-years old (preferring 80-100-year old trees which are infected with red heart fungus) (LDWF 2016). RCWs require a minimum stocking level of 3000 sq. ft. of pine basal area of trees 10 inches and greater diameter at breast height, on at least 75 acres for each RCW family group (LDWF 2016). Aerial photography indicated that no pine stands of this age class and density occur within the site; therefore, RCWs are not likely to occur on the site.

The wood stork is a colonial nesting bird that forages in low water areas such as swamps and marshes. The lack of open wetlands for foraging and forested wetlands for nesting suggest that the site does not contain suitable habitat for the wood stork.

The eastern indigo snakes' habitat selection varies seasonally. From December to April, eastern indigo snakes prefer sandhill habitats; from May to July the snakes shift from winter dens to summer territories; from August through November they are located more frequently in shady creek bottoms than during other seasons. They are most abundant in the sandhill scrub oak/pine communities in the Florida and Georgia. The forested areas underlain by sandy soils may be considered suitable habitat. Further investigation is recommended.

The gopher tortoise prefers deep, well-drained sandy soils with sparse tree canopy and abundant low growing vegetation. While soils within the site may be suitable for the gopher tortoise, most of the site is forested uplands. The forested uplands appear to have a dense overstory canopy, which suggests that gopher tortoise may not utilize these areas. Further investigation is recommended to determine if these upland areas would be suitable for the gopher tortoise.

#### Compensatory Mitigation

Currently, there are no compensatory mitigation banks that can service projects within the Gadsden County Hydrological Unit Code (HUC). CK contacted the NFWMD ILF program and was told that the program was for use in Department of Transportation and Development (DOTD) projects only. CK did contact various banks from adjacent HUCs and determined that mitigation costs for forested wetland impacts ranged from \$60,000 to \$100,000 per credit depending on the quality of habitat to be impacted. Emergent wetland mitigation was estimated to be \$45,000 to \$75,000 per credit.

#### Water Resource Caution Areas

The portion of Site 12039-004 east of Hardaway Road is located within the Telogia Creek WRCA. Special permitting water reuse studies may be required for any project proposed on this portion of the site.

#### **Summary**

Based on the results of this assessment, it is the opinion of CK that the site contains 3.4 acres of potential forested wetlands and no Waters of the US. The site may contain suitable habitat for the eastern indigo snake and gopher tortoise; however, CK recommends further field

investigation. Mitigation credit availability is sparse for projects within Gadsden County. It is anticipated that adjacent HUC banks could service Gadsden County projects for a “proximity fee” assessed by the USACE. At the time of this report, CK was unable to contact a USACE representative that could estimate a “proximity fee.” CK anticipates mitigation costs for projects in Gadsden County may cost \$45,000 to \$100,000 per credit depending on habitat type and quality.

The wetland assessment is to be considered 75% accurate (100% accuracy would result from a wetland delineation and USACE verification) and is intended to be used for preliminary planning purposes only. This report does not constitute a jurisdictional determination, as the Jacksonville District of the USACE has the final authority and is responsible for issuing official jurisdictional determinations.

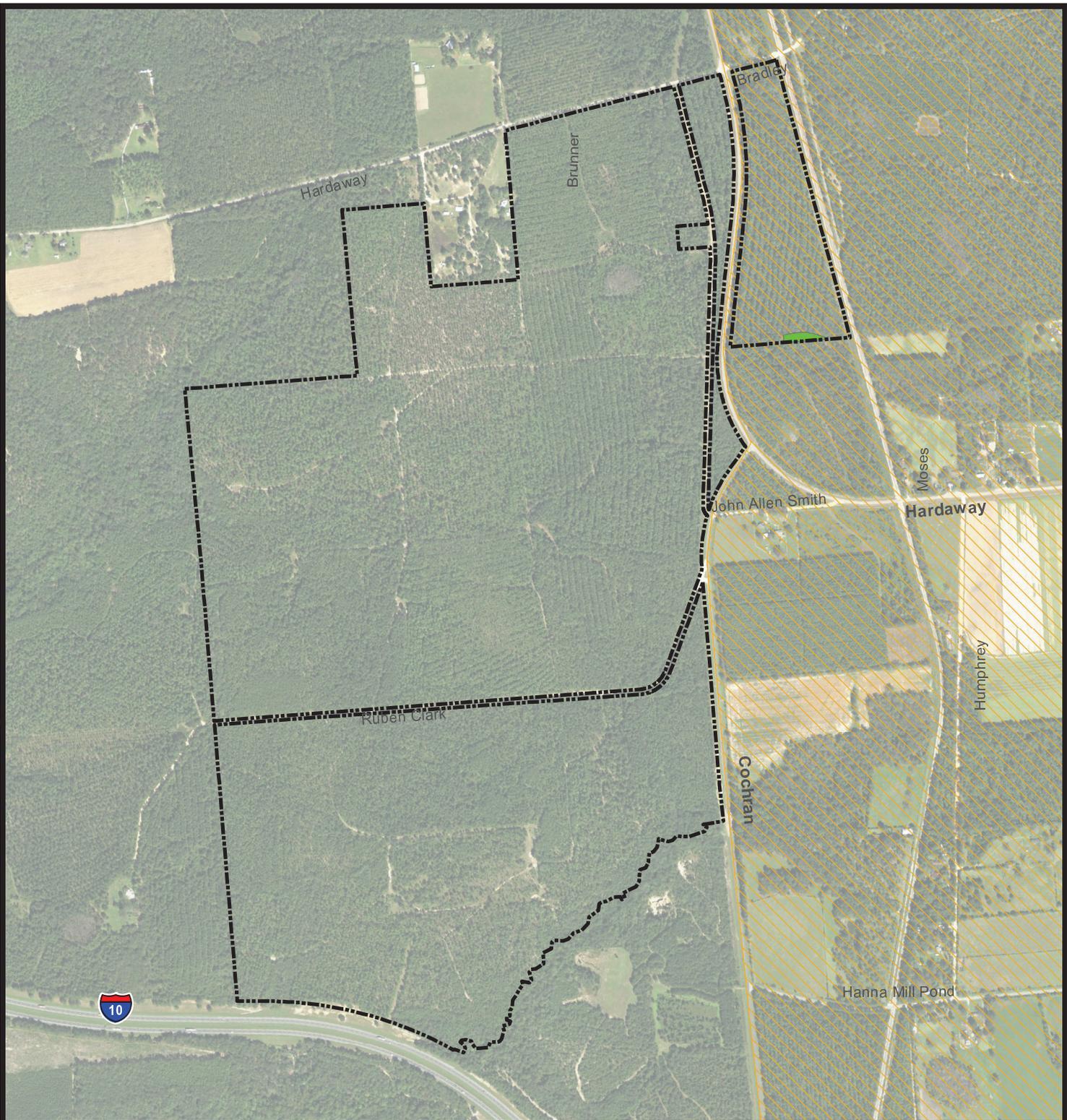
If you or any member of your staff have any questions or require additional information, please contact me at (225) 755-1000 or via e-mail at [brian.newman@c-ka.com](mailto:brian.newman@c-ka.com). CK appreciates the opportunity to be of service.

Sincerely,  
CK Associates

A handwritten signature in black ink that reads "Brian Newman". The signature is written in a cursive, flowing style.

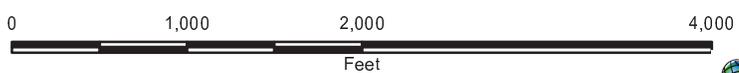
Brian Newman  
Ecological Scientist

**FIGURE 1 – POTENTIAL WETLANDS MAP**  
**IPaC Trust Resources Report**



**Legend**

-  Site 12039-004 (564 acres)
-  Forested Wetlands (3.4 acres)
-  Telogia Creek WRCA



**Reference**

1) Basemap from USDA 2105 NAIP Imagery Gadsden County Florida StreetMap USA



**LEO, LLC**  
 Baton Rouge, Louisiana  
 Gadsden County SSI  
 Site 12039-004

**Potential Wetlands Map**

Gadsden County, Florida



Drawn:	BLN/AM10.4
Checked:	CMP
Approved:	BLN
Date:	05/13/2016
Dwg. No.:	A13463-05

**FIGURE 1**