

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 15 December 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: JACKSONVILLE DISTRICT, SILVERLEAF, SAJ-2004-4731

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: St. Johns City: St. Augustine
Center coordinates of site (lat/long in degree decimal format): Lat. 30.0108 °, Long. -81.5412 °
Name of nearest waterbody: Trout Creek, Molasses Branch, and Big Island Swamp
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Trout Creek
Name of watershed or Hydrologic Unit Code (HUC): Lower St. Johns River Watershed

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date:
 Field Determination. Date(s): March 2004-December 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: +/- 4017 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **190.9 acres of on-site wetlands are hydrologically isolated and have no connection to Waters of the US. These systems are, on average, are several hundred feet from the wetlands contiguous to the RPWs; and, hence farther from the onsite RPWs. These systems receive precipitation and nominal surface flow from contiguous agricultural pasture or silviculture tracts during precipitation events. However, there is insufficient data to support a factual determination of subsurface flow into or from these systems; and, based on previous site inspections and an evaluation of mapped soils, these systems likely drain vertically directly into the deep groundwater table. These wetland areas, which are**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

entirely surrounded by managed agriculture and silviculture lands, provide minimal habitat value and do not support the immigration or emmigration of fauna, with the possible exception of migratory birds.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: ~21,817 acres

Drainage area: ~7,400 acres

Average annual rainfall: ~52 inches

Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **1 (or less)** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries: N/A

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵: Onsite RPWs flow directly into TNWs
Tributary stream order, if known: 2

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):

Average width: +/- 15 feet
Average depth: 1-4 feet
Average side slopes: **4:1 (or greater)**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover: 65
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable.

Presence of run/riffle/pool complexes. Explain: Stable.

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): 0.5 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime:

Other information on duration and volume:

Surface flow includes overland sheet flow in wider areas of the RPW and confined flow in channelized downstream areas.

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: RPWs have typical NE Florida tannin coloring

Identify specific pollutants, if known: potential pollutants from agricultural field runoff

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): Black water stream.
- Wetland fringe. Characteristics: Floodplain and headwater freshwater forested wetlands.
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: Typical freshwater species present.
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: Wildlife usage is normal for forested wetlands within Northeast Florida.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: ~3,826 acres total
Wetland type: Wetland Forested Mixed
Wetland quality: Medium to high

Project wetlands cross or serve as state boundaries: N/A

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Water flows through RPWs during rain events.

Surface flow is: **Overland sheetflow**

Characteristics: Surface flow occurs during rain events.

Subsurface flow: **Unknown**. Explain findings: .

Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain: .
 - Ecological connection. Explain: .
 - Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **1-2** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Tannin stained.

Identify specific pollutants, if known: Potential pollutants include runoff from agricultural fields

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width): .
- Vegetation type/percent cover. Explain: 65%, vegetation typical of NE Florida forested wetlands.
- Habitat for:
 - Federally Listed species. Explain findings: .
 - Fish/spawn areas. Explain findings: Typical freshwater species present .
 - Other environmentally-sensitive species. Explain findings: .
 - Aquatic/wildlife diversity. Explain findings: Wildlife usage is normal for forested wetlands within Northeast Florida.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **30 (or more)**

Approximately (3,826) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Yes	3826.1		

Summarize overall biological, chemical and physical functions being performed: The numerous large wetland systems contiguous to the onsite RPWs are interconnected and, in general, function as one large system (reference the enclosed graphics). These wetlands provide a variety of biological (habitat, foraging, cover), chemical (stormwater filtration and retention), and physical (stormwater/floodwater retention) functions. These functions significantly affect the overall quality of water reaching the TNW (downstream segments of the RPWs, which become TNWs; and, the St. Johns River, which ultimately receives flow from the onsite systems).

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Significant nexus present through hydrology via ditches and culverts, wetlands only disconnected by trail roads.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Downstream sections of onsite RPWs have more perennial flow due to additional hydrologic contributions from other systems and properties; site inspections corroborated these situations.
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Site inspections of upstream sections of the RPWs confirmed multiple significant flow events that have been characterized as "seasonal", at a minimum.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: unknown due to expansive location and inaccessibility
- Other non-wetland waters:
Identify type(s) of waters:

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet' width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Site inspections confirmed that onsite wetlands directly abut the onsite RPWs.
 - Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Site inspections confirmed that onsite wetlands directly abut the onsite RPWs.

Provide acreage estimates for jurisdictional wetlands in the review area: **3826.1** acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 190.9 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

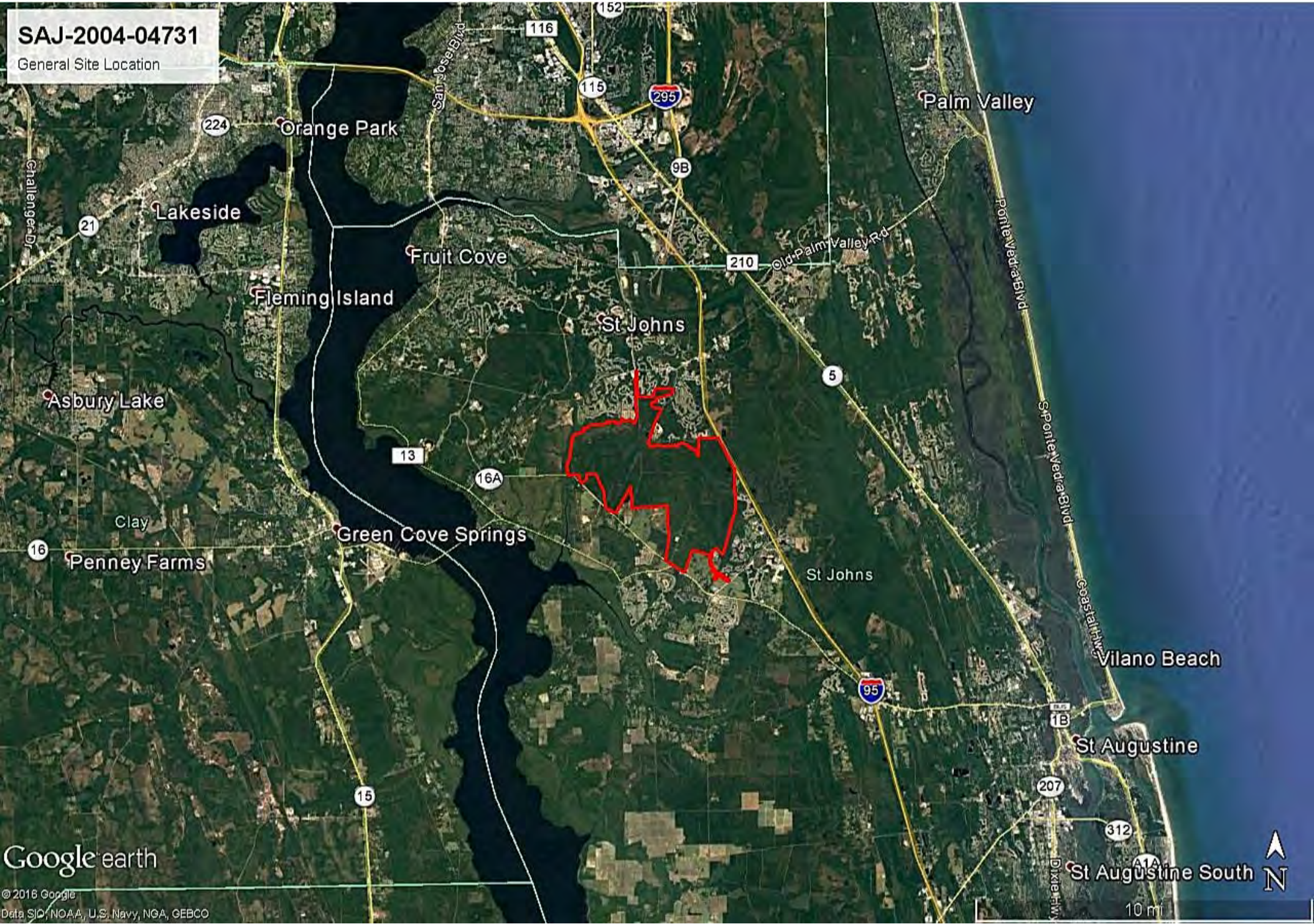
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1 inch = 2000 feet, Eastport.
- USDA Natural Resources Conservation Service Soil Survey. Citation: United States Department of Agriculture Soil Conservation Service, Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Accessed 2/10/2016. <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/>.
- National wetlands inventory map(s).
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): GoogleEarth®; Microsoft Bing®; St. Johns River Water Management District or Other (Name & Date): Ground-level provided by agent
- Previous determination(s). File no. and date of response letter: SAJ-2004-04731 (completed prior to SWANCC implementation)
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: . In total, +/-4,017 acres of wetlands were identified on the subject property. Within that total, +/-3,826.1 acres have been determined to be jurisdictional and +/-190.1 acres have been determined to be non-jurisdictional as established by the January 2001 Supreme Court decision in the Solid Waste Agency of Northern Cook County (SWANCC) case. The wetlands determined to be jurisdictional include relatively permanent waters (RPW) that flow directly into traditional navigable waters (TNW) and wetlands directly abutting RPW's that flow directly or indirectly into TNW's.

SAJ-2004-04731

General Site Location



Orange Park

Lakeside

Asbury Lake

Penney Farms

Google earth

© 2016 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Palm Valley

Fruit Cove

St Johns

Green Cove Springs

St Johns

Vilano Beach

St Augustine

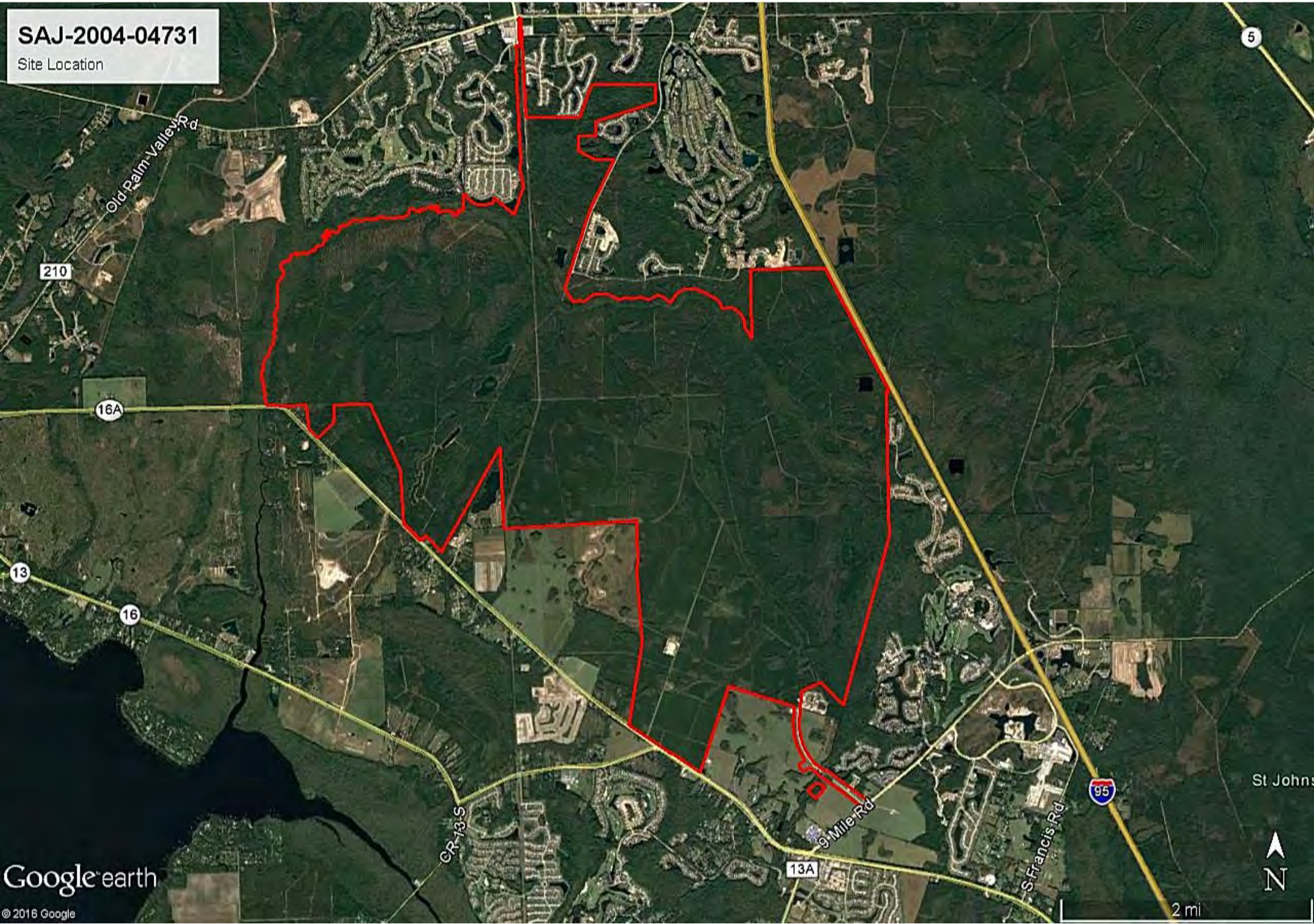
St Augustine South

10 mi



SAJ-2004-04731

Site Location



Google earth

© 2016 Google

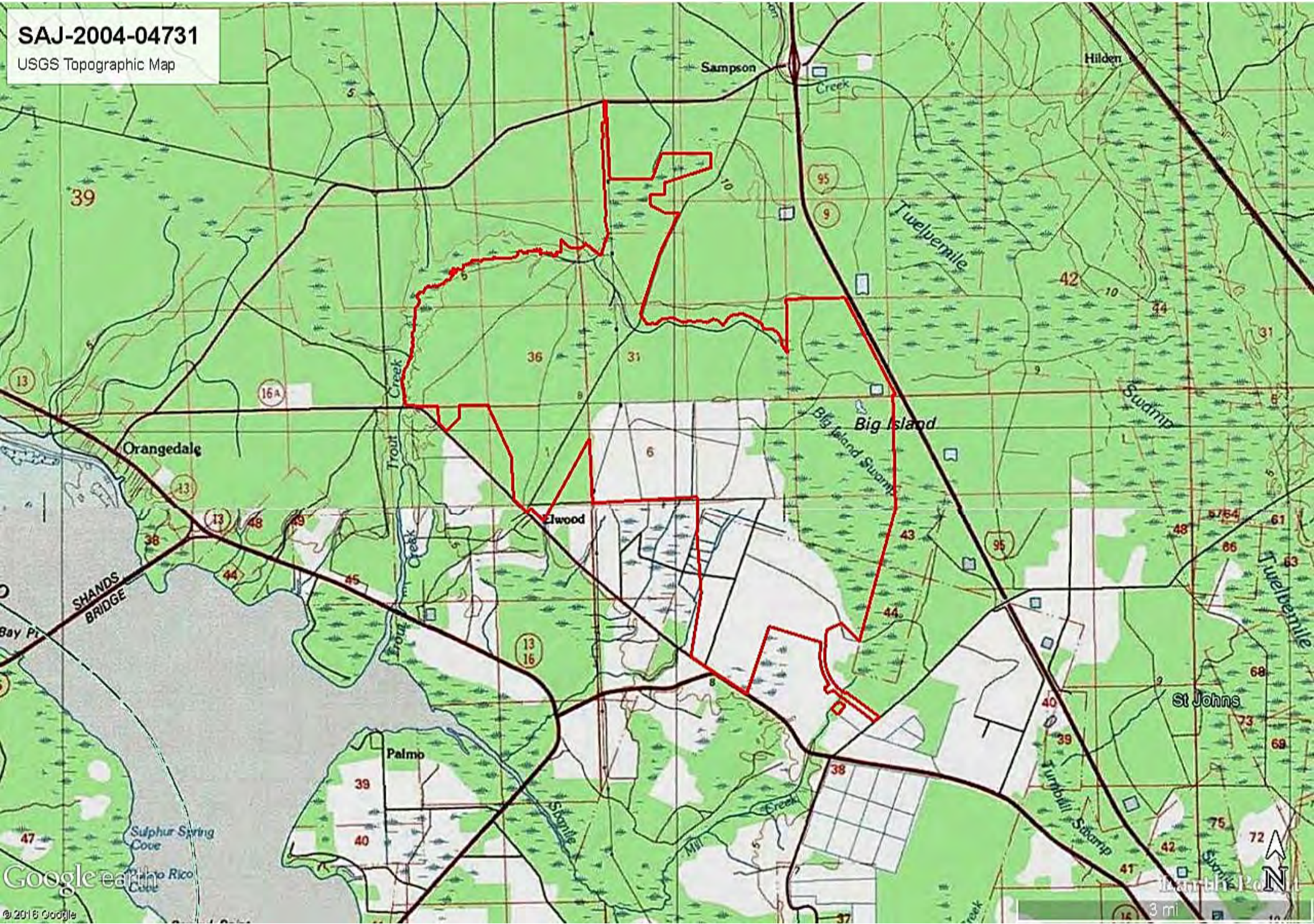
St Johns



2 mi

SAJ-2004-04731

USGS Topographic Map



Google Earth

© 2016 Google

3 mi



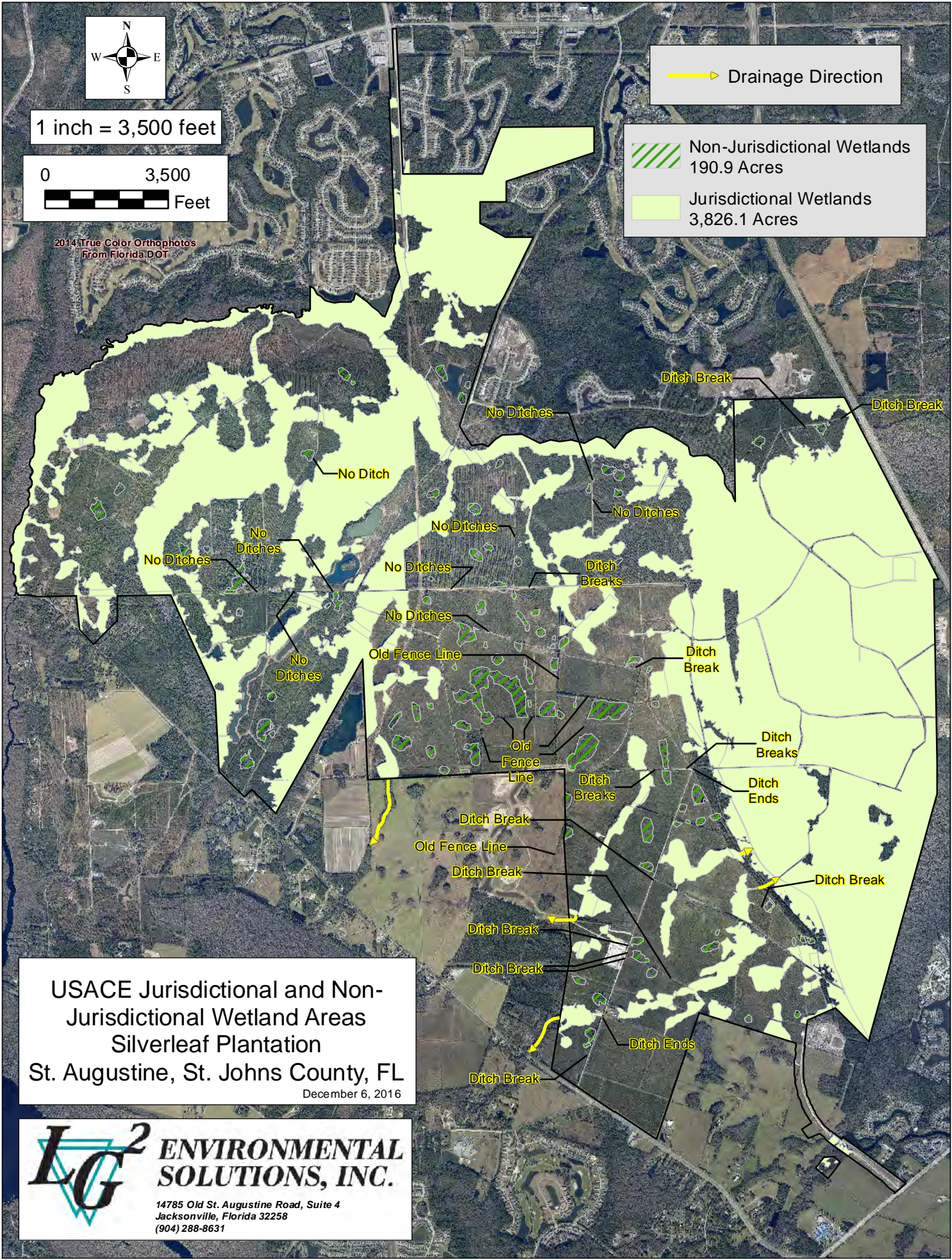
1 inch = 3,500 feet



→ Drainage Direction

- Non-Jurisdictional Wetlands
190.9 Acres
- Jurisdictional Wetlands
3,826.1 Acres

2014 True Color Orthophotos
From Florida DOT

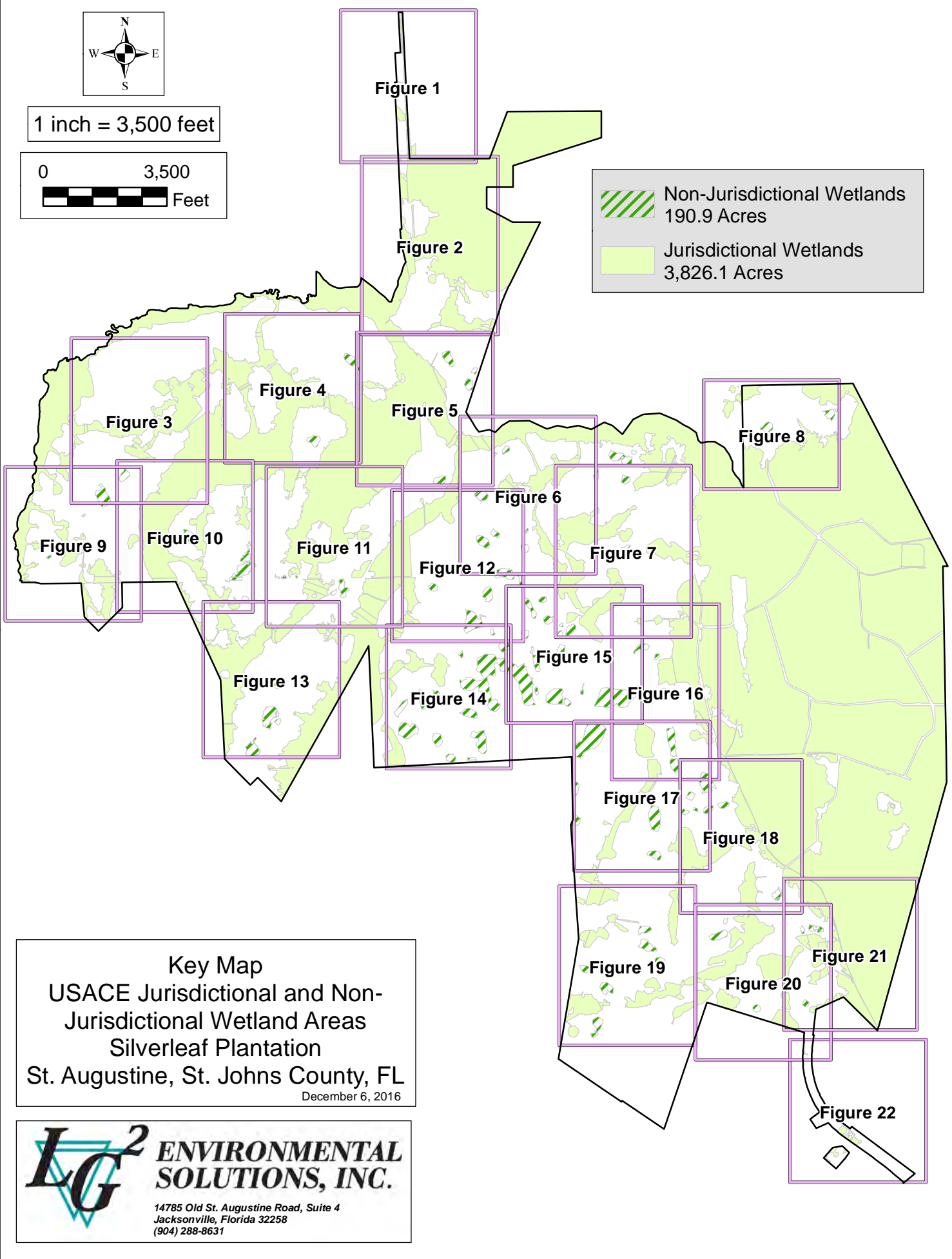
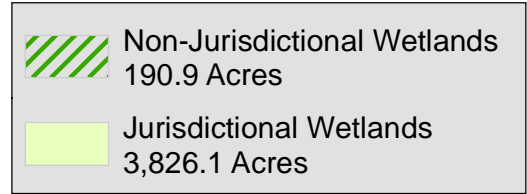
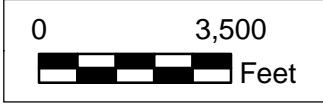


USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Augustine, St. Johns County, FL
December 6, 2016

LG² ENVIRONMENTAL SOLUTIONS, INC.
14785 Old St. Augustine Road, Suite 4
Jacksonville, Florida 32258
(904) 288-8631

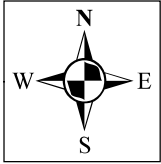


1 inch = 3,500 feet

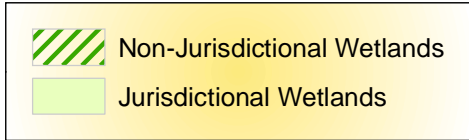
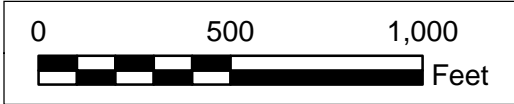


Key Map
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Augustine, St. Johns County, FL
December 6, 2016

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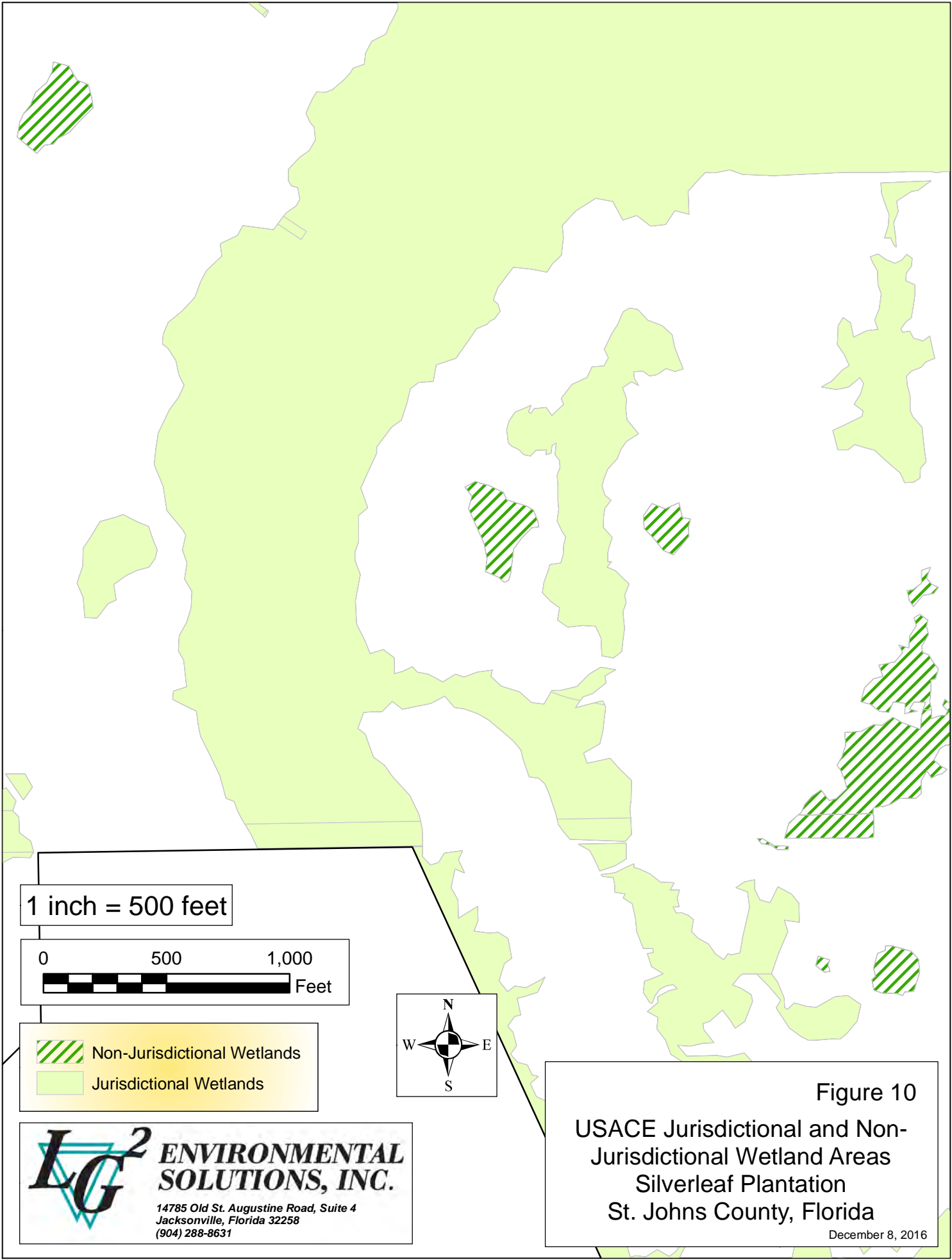


1 inch = 500 feet





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Figure 1
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016



1 inch = 500 feet

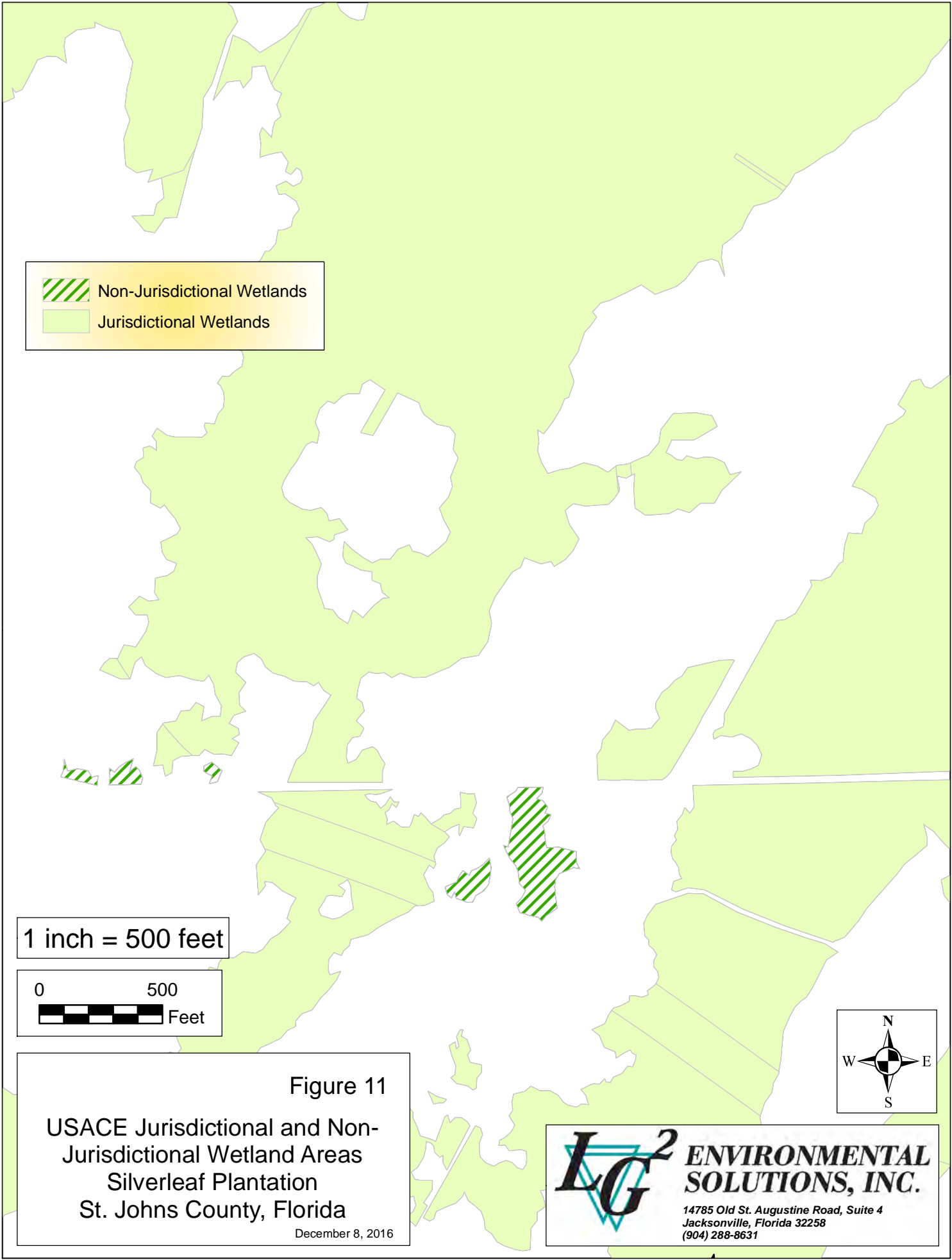




-  Non-Jurisdictional Wetlands
-  Jurisdictional Wetlands



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Figure 10
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016



	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands

1 inch = 500 feet

0	500
	
Feet	

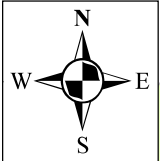
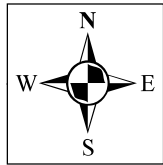


Figure 11
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016

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SOLUTIONS, INC.**
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Jacksonville, Florida 32258
(904) 288-8631



1 inch = 500 feet

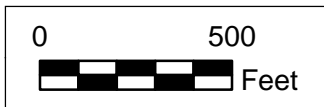
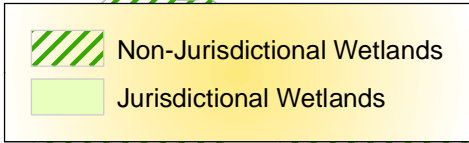


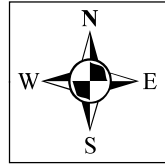
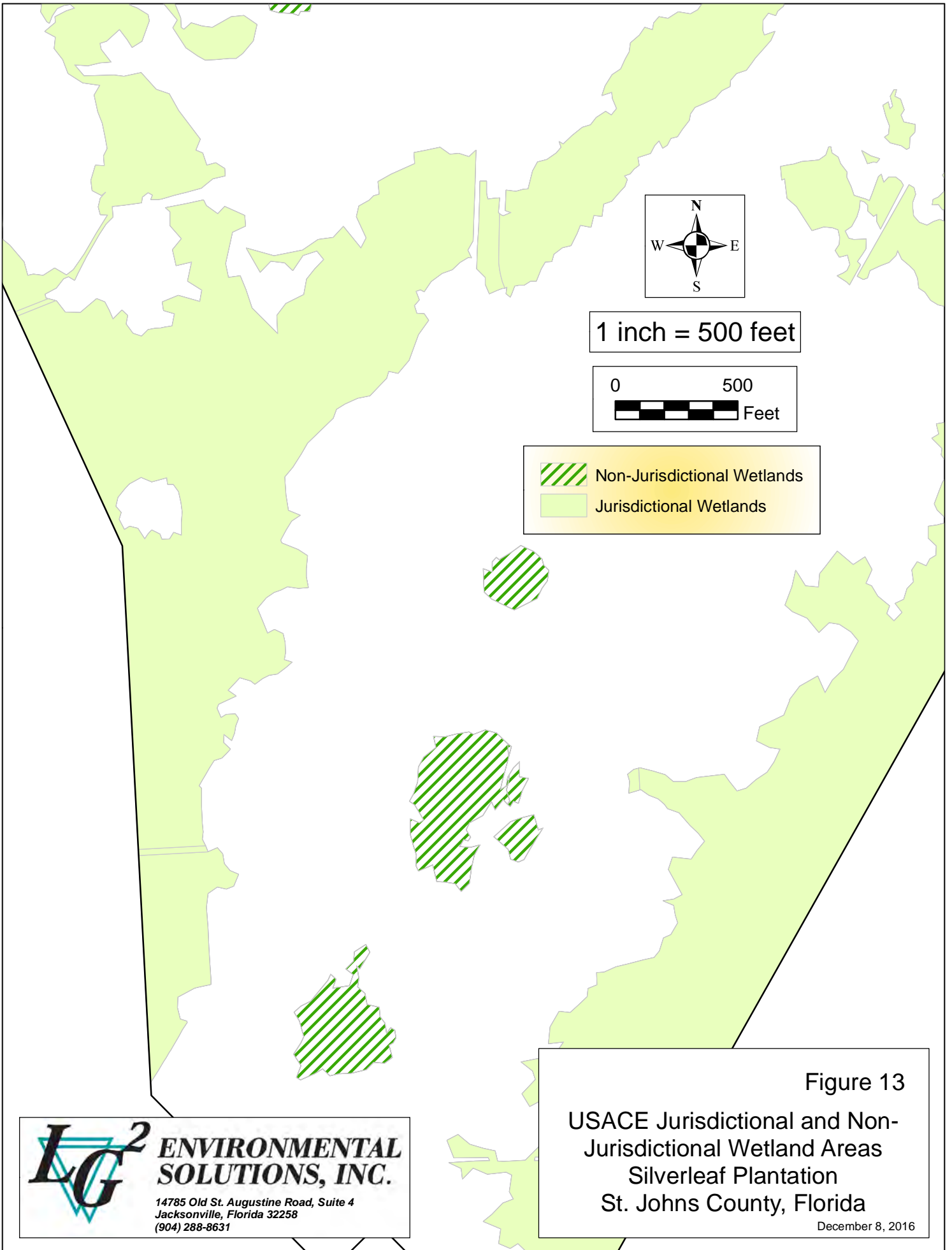


Figure 12
**USACE Jurisdictional and Non-
Jurisdictional Wetland Areas**
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016



 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands



1 inch = 500 feet





 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands

Figure 13
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016

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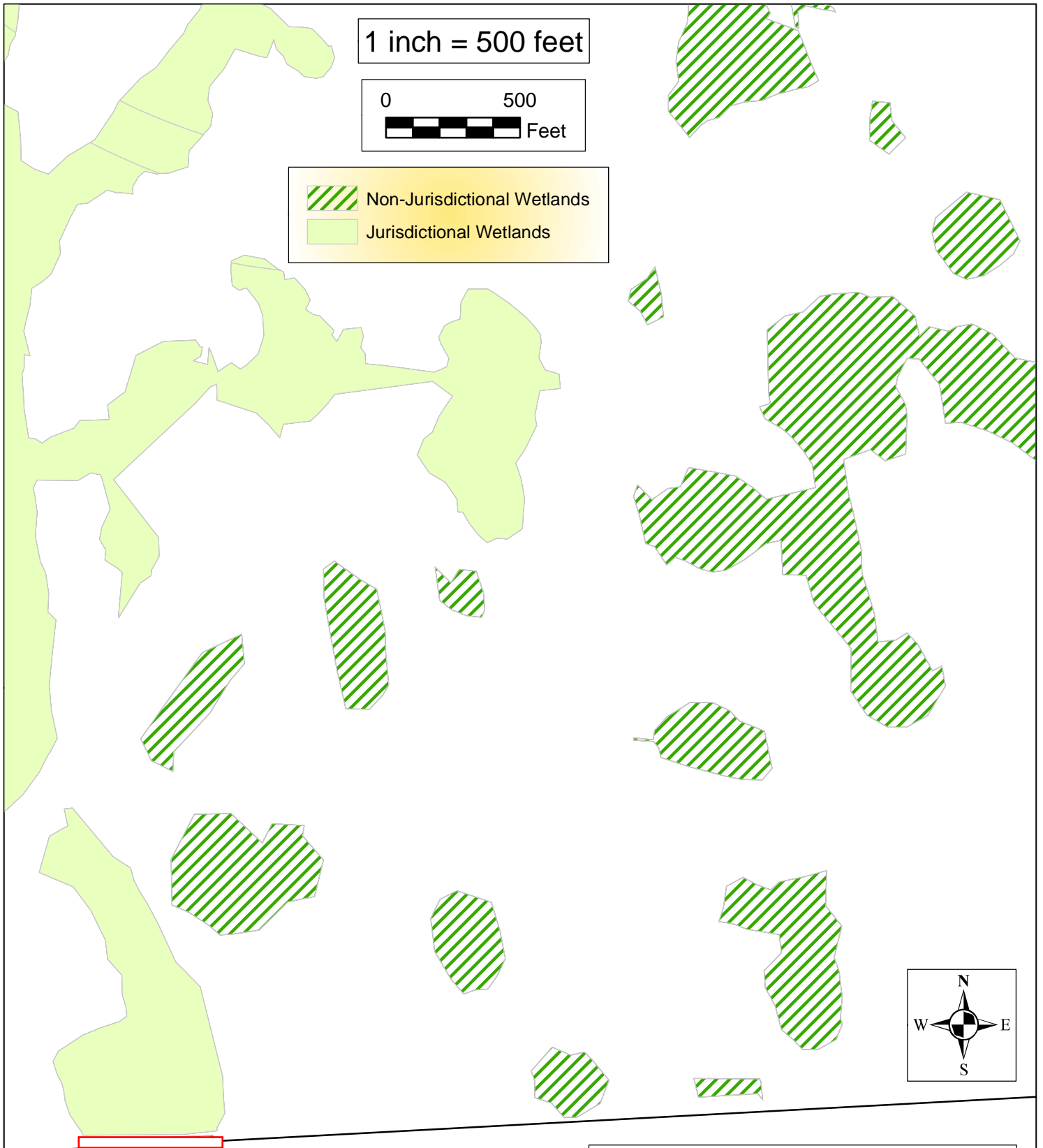
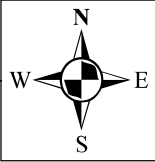
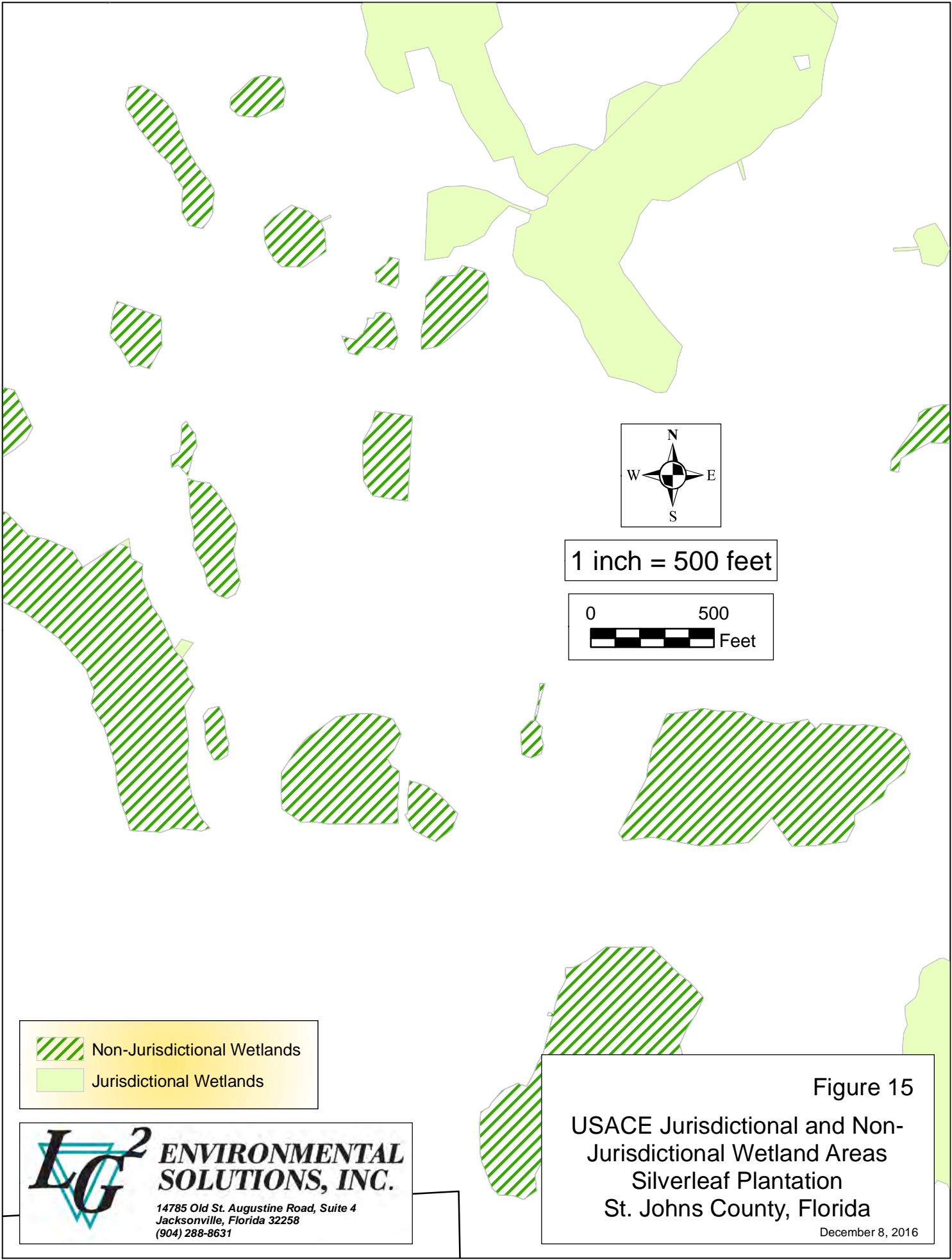
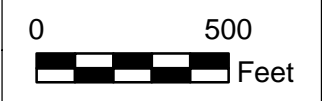




Figure 14
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016



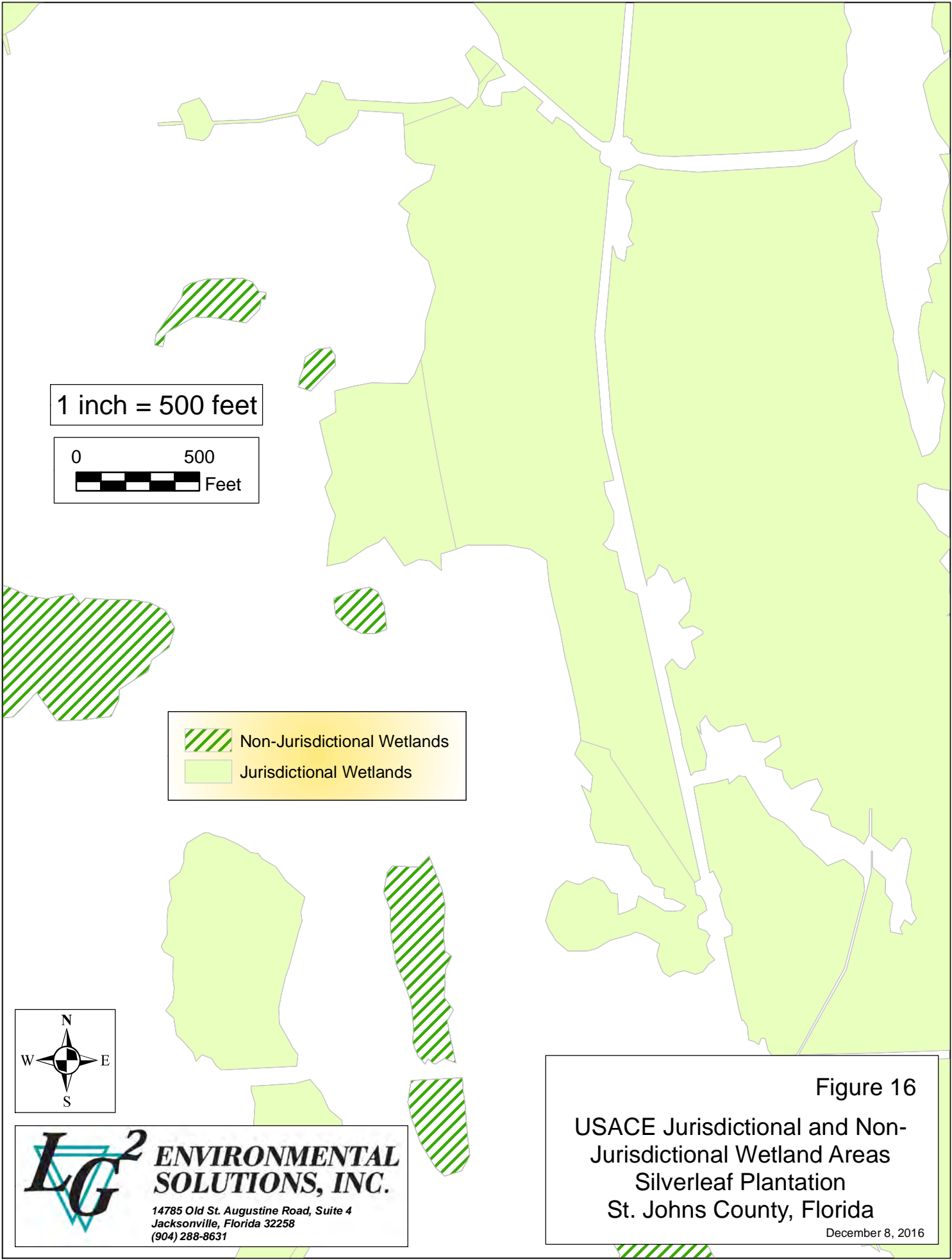
1 inch = 500 feet



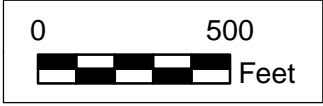
	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands



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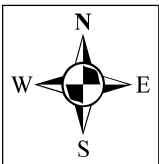
Figure 15
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016



1 inch = 500 feet



	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands



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Figure 16
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016

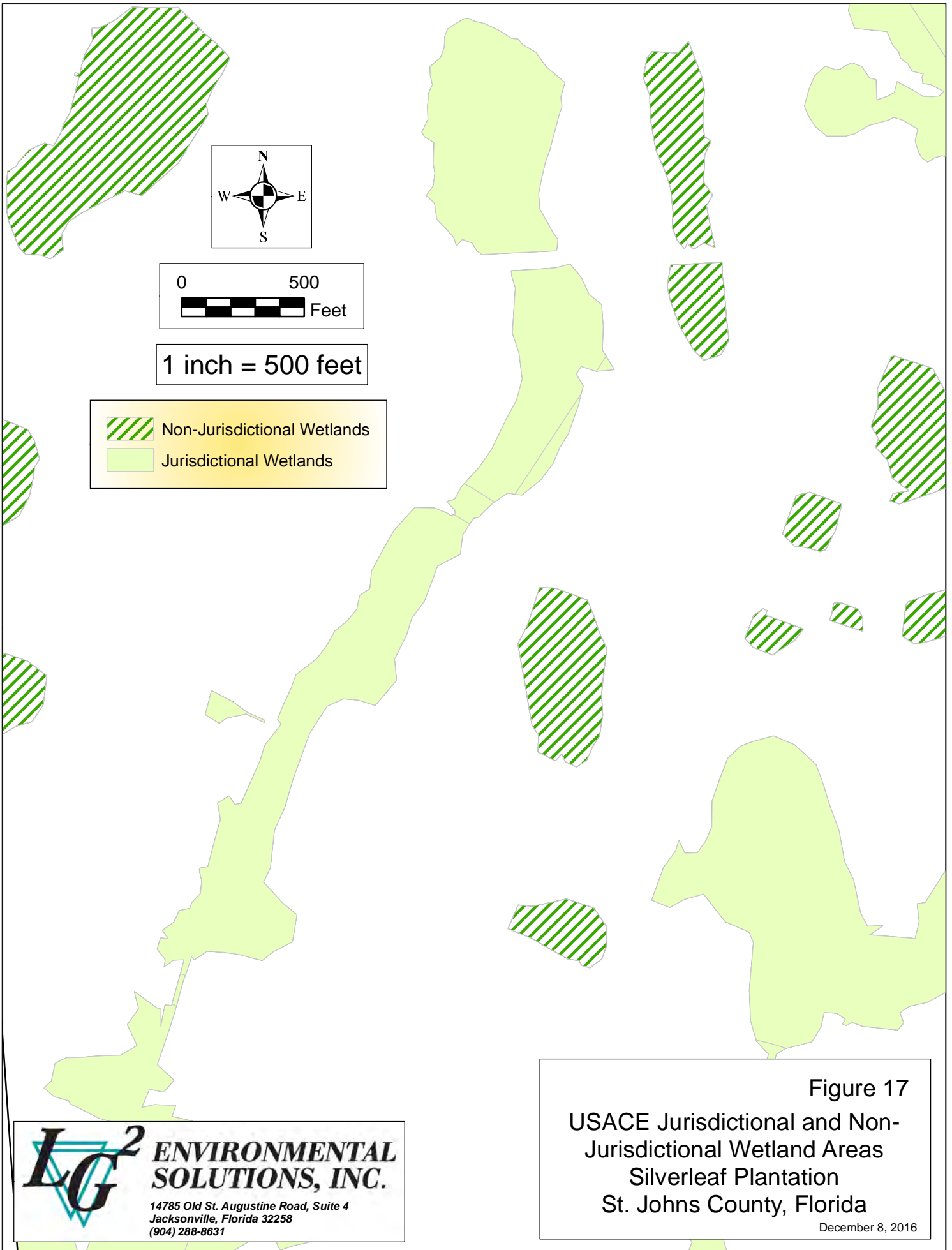


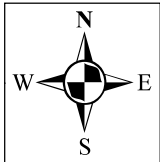


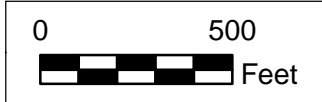
Figure 18
USACE Jurisdictional and Non-
Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida

December 8, 2016

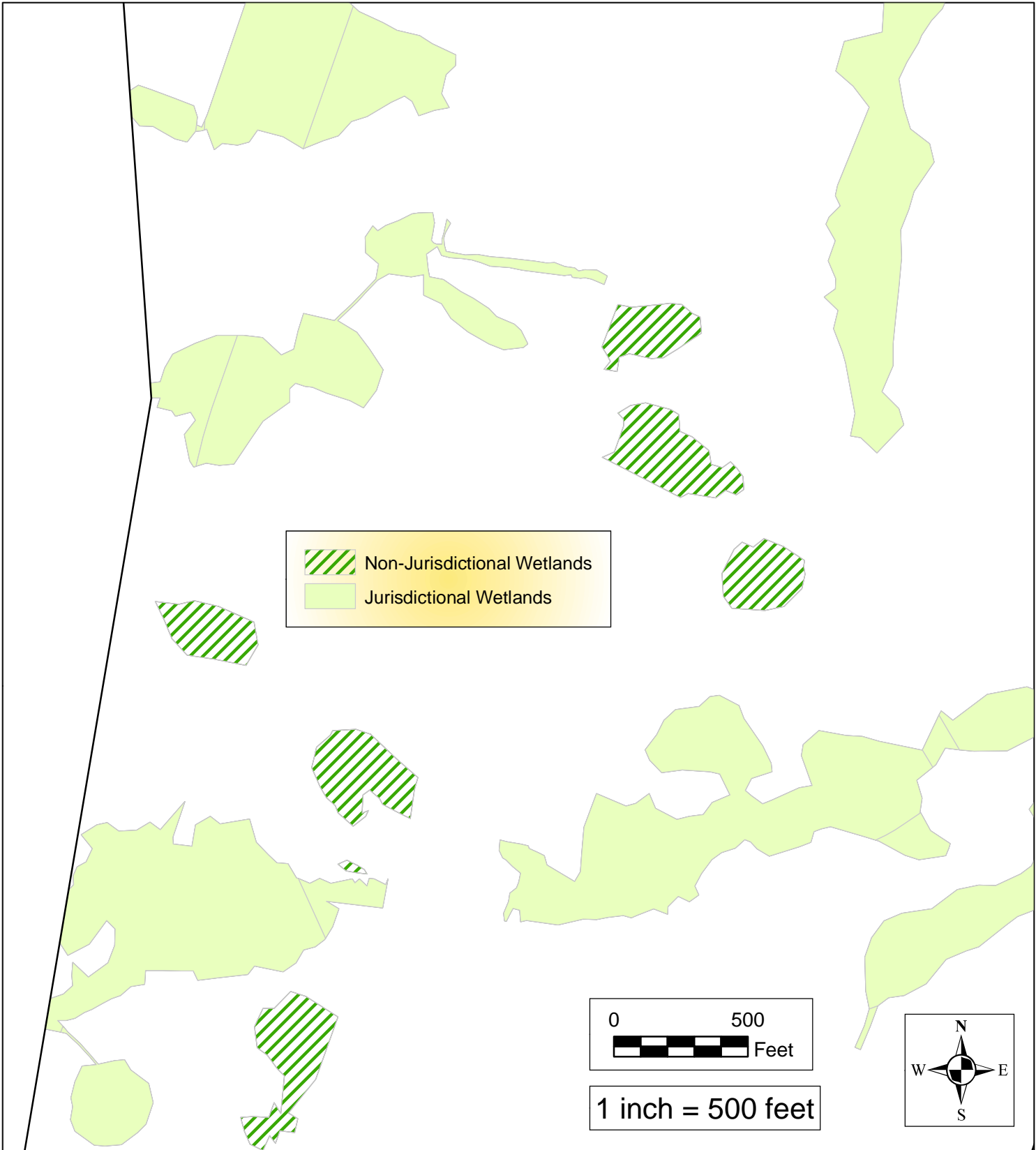
 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands





1 inch = 500 feet



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	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands

0	500
	
Feet	

1 inch = 500 feet

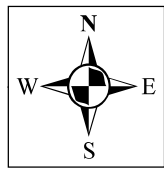


Figure 19

USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida

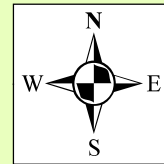
December 8, 2016

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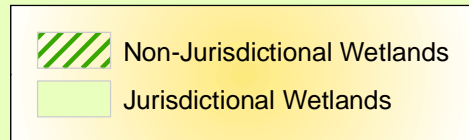
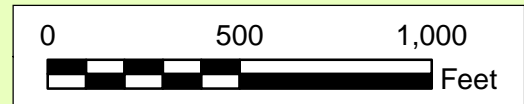
Figure 2

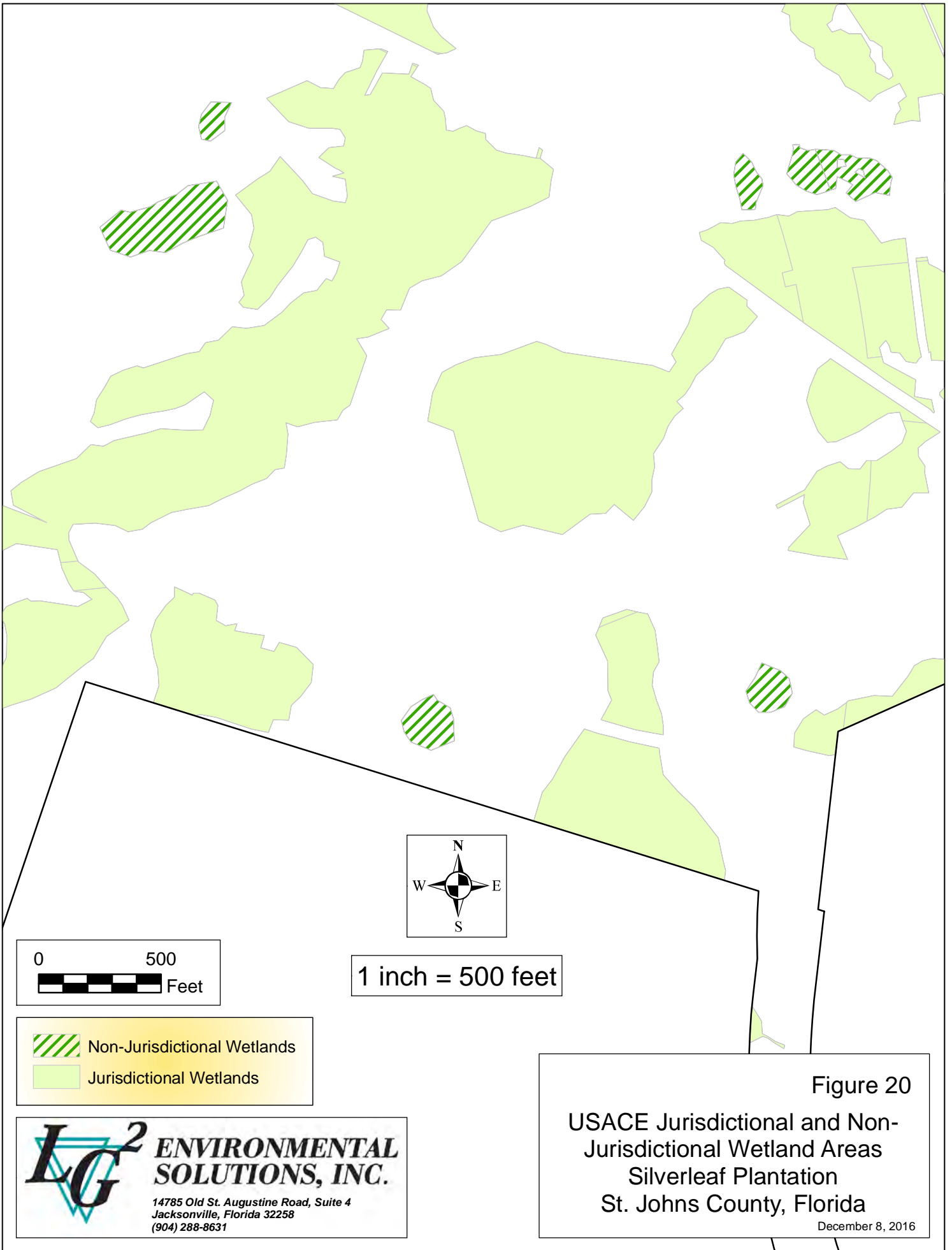
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida

December 8, 2016

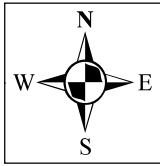




1 inch = 500 feet







1 inch = 500 feet

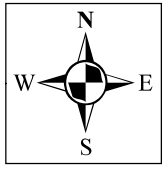
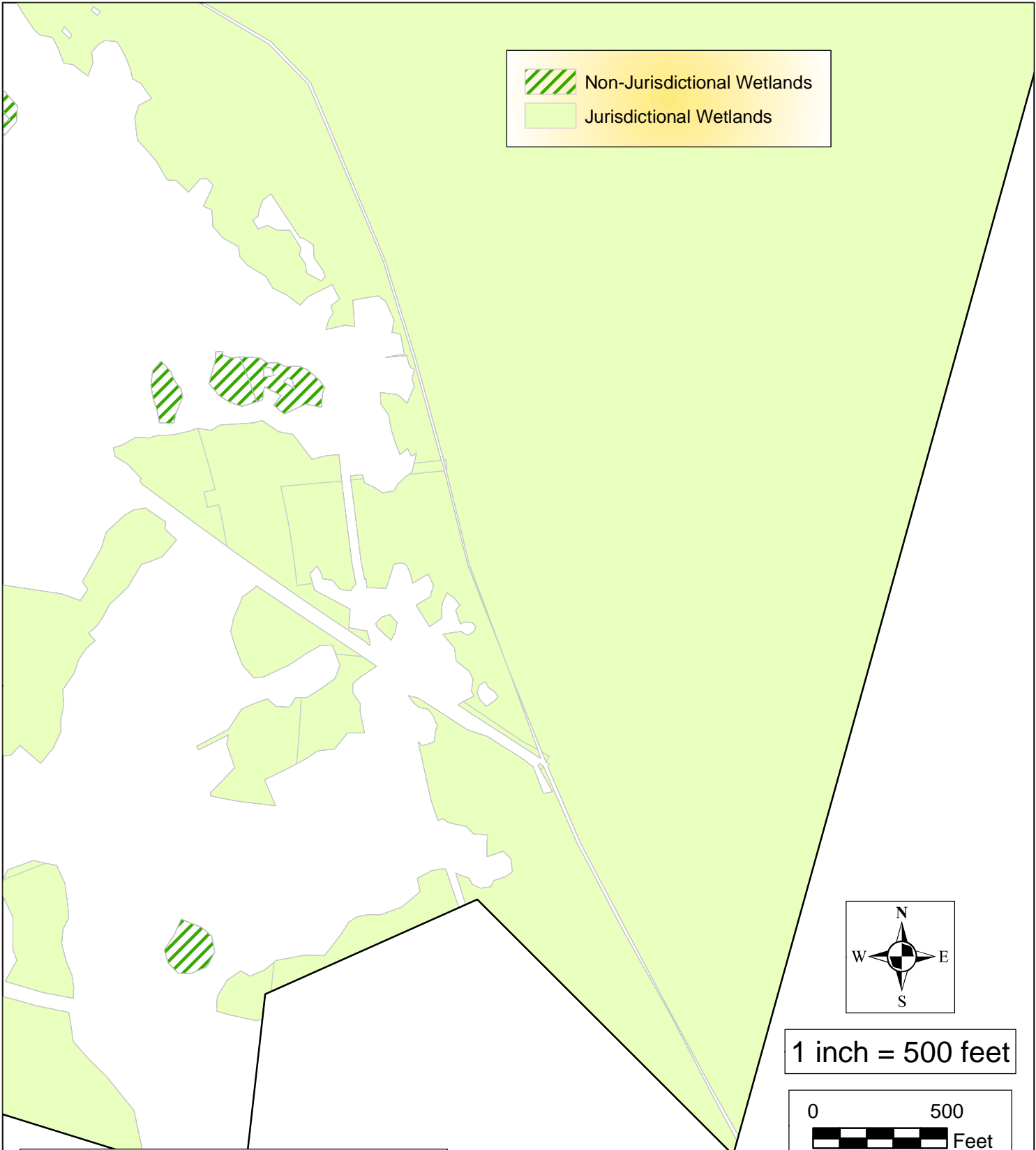


 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands


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Figure 20
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016

	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands



1 inch = 500 feet

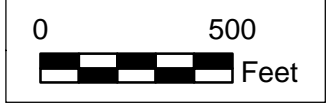


Figure 21

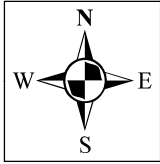
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida

December 8, 2016

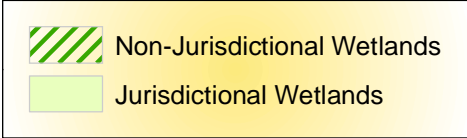
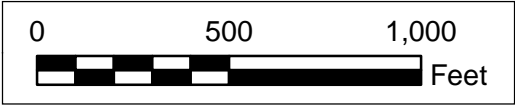


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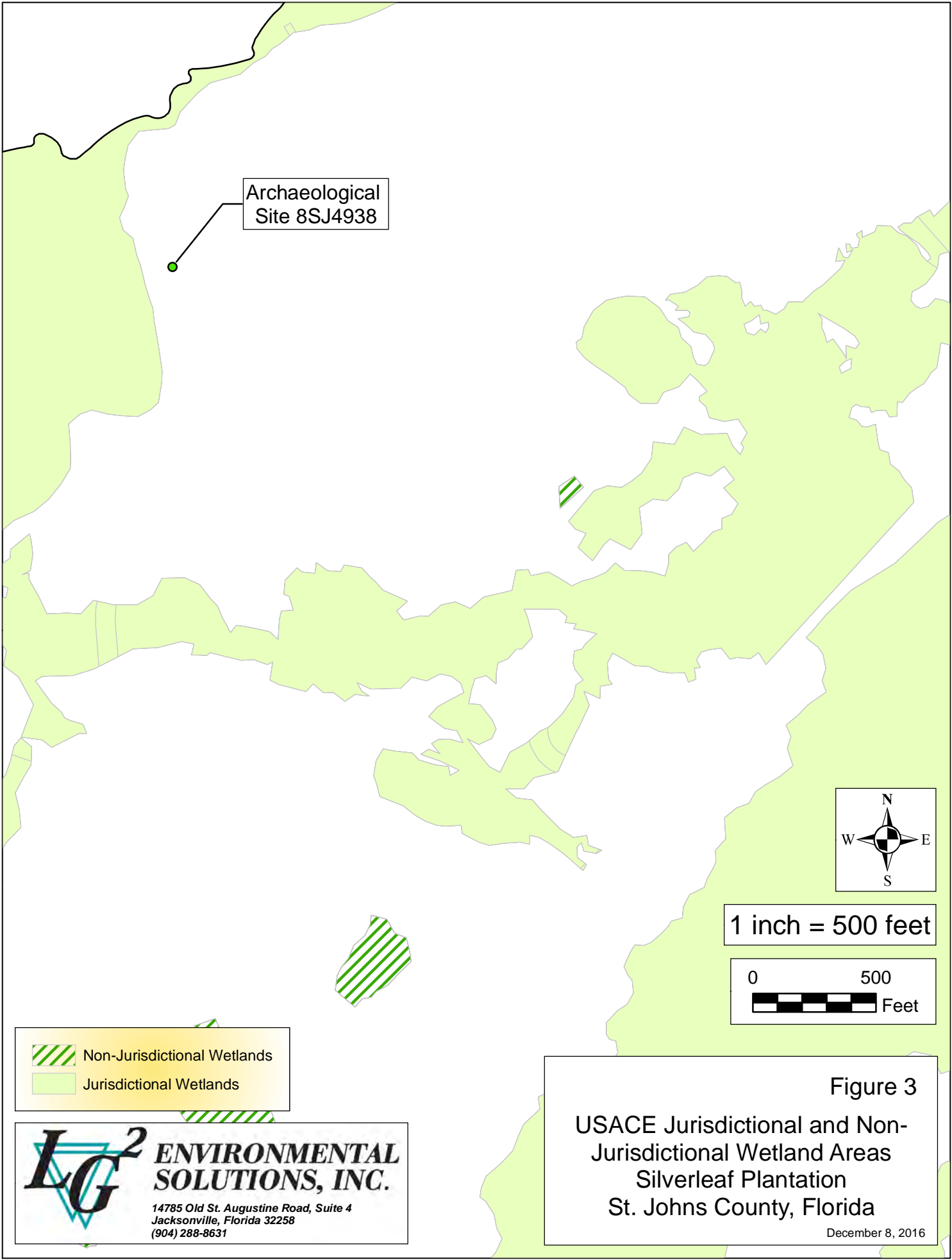


1 inch = 500 feet



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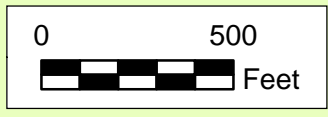
Figure 22
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016





Archaeological Site 8SJ4938



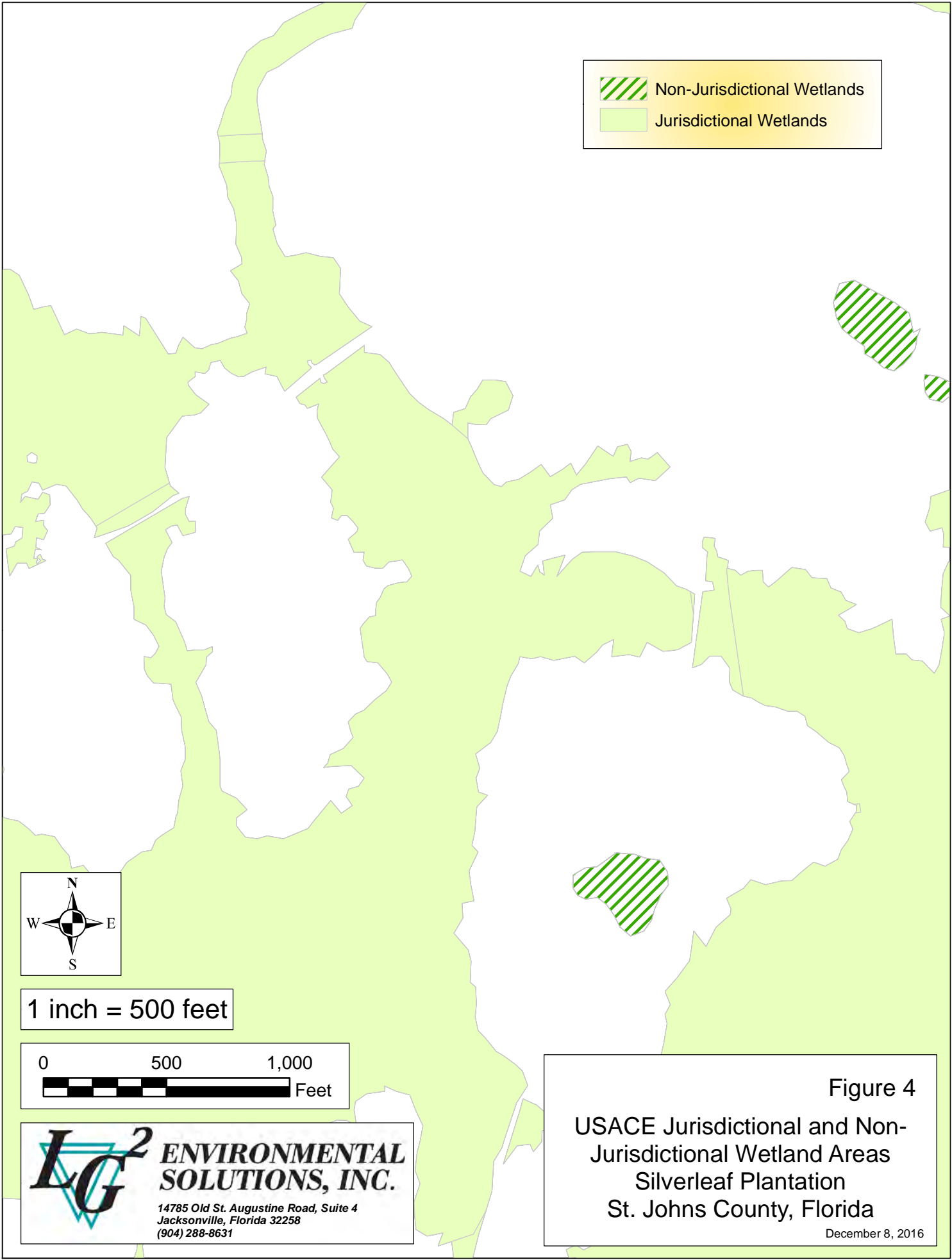
1 inch = 500 feet





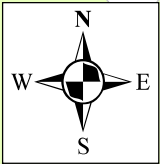
-  Non-Jurisdictional Wetlands
-  Jurisdictional Wetlands

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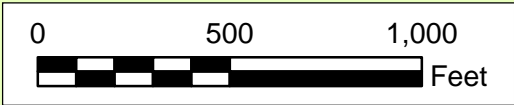
Figure 3
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016



 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands

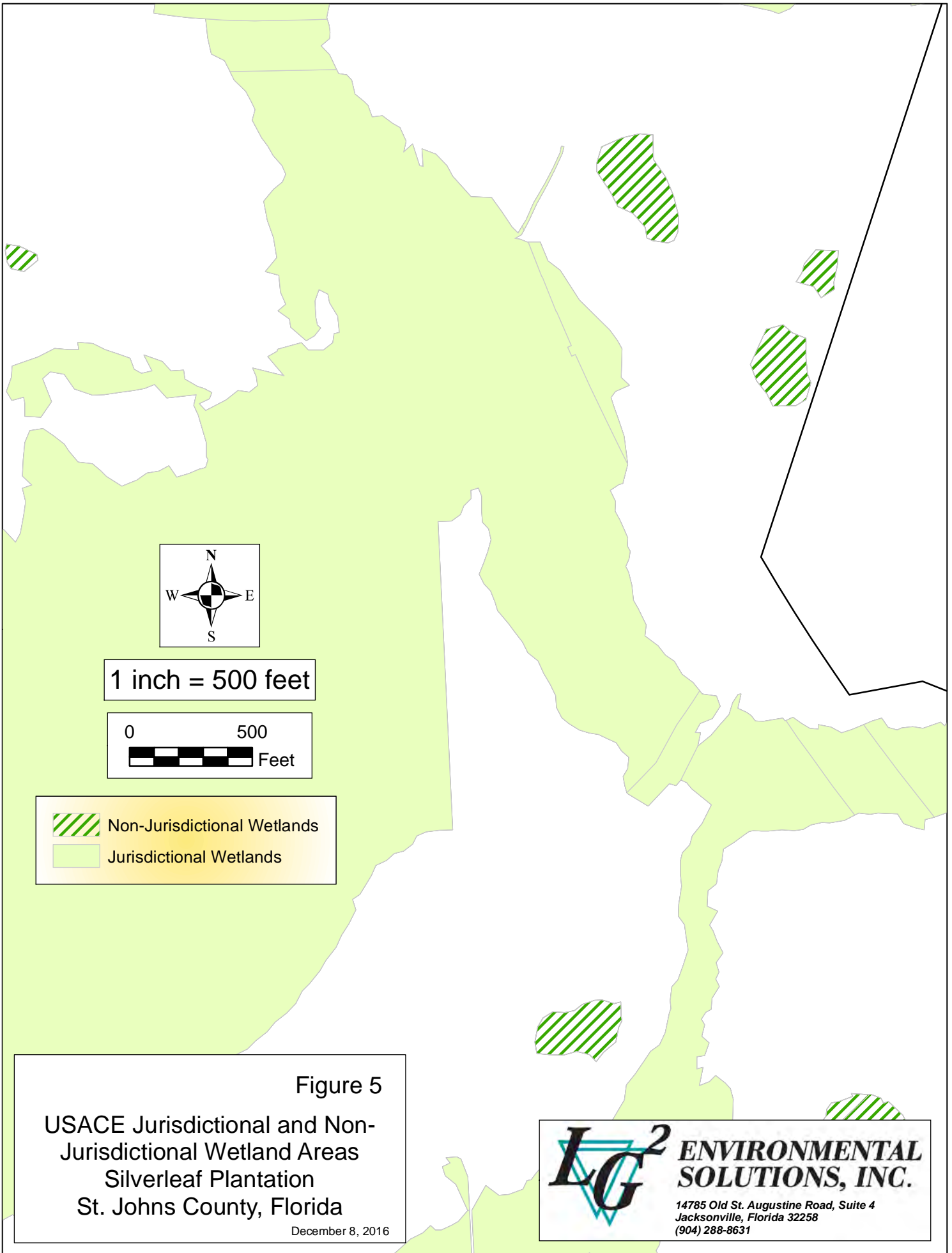


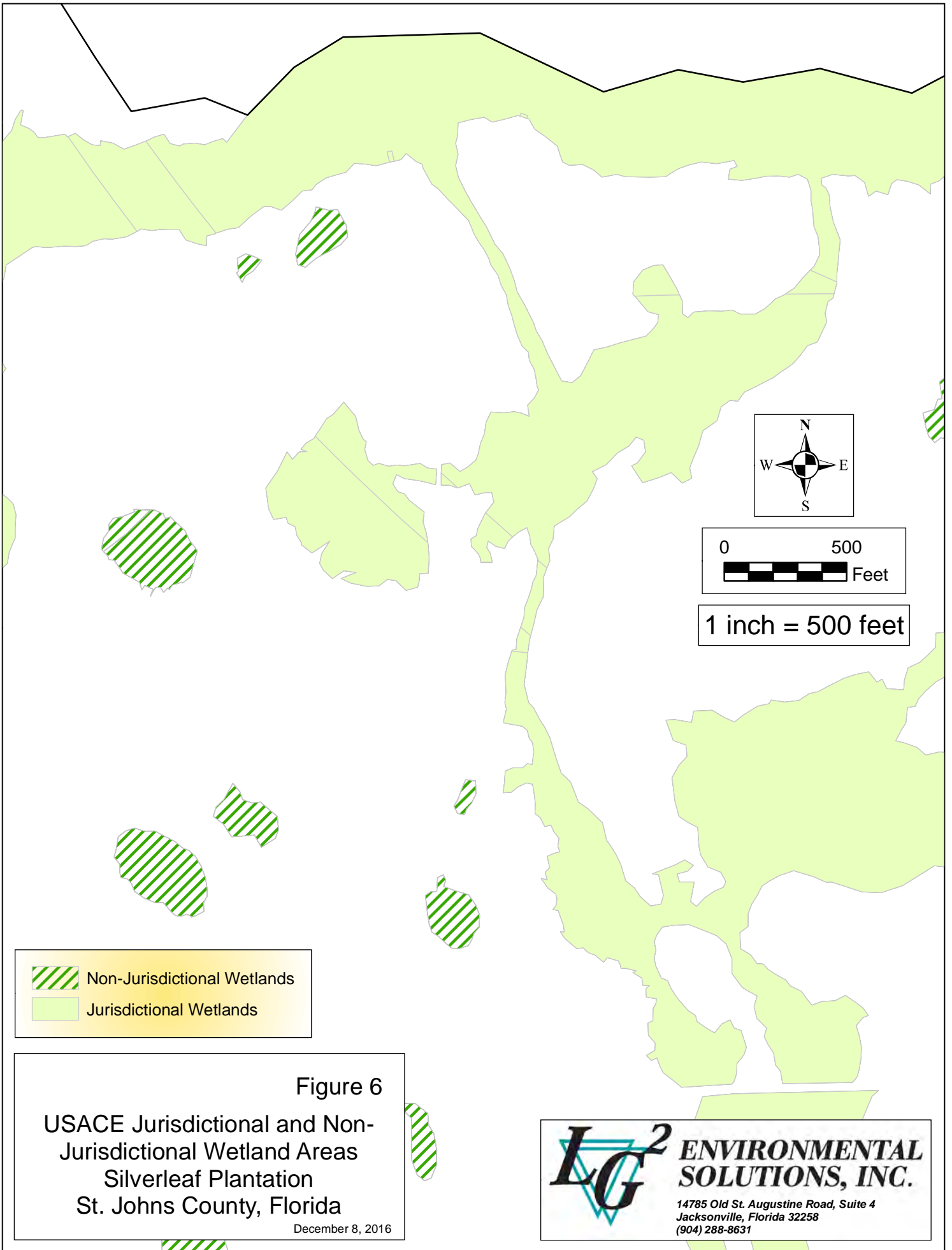
1 inch = 500 feet



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Figure 4
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016





1 inch = 500 feet



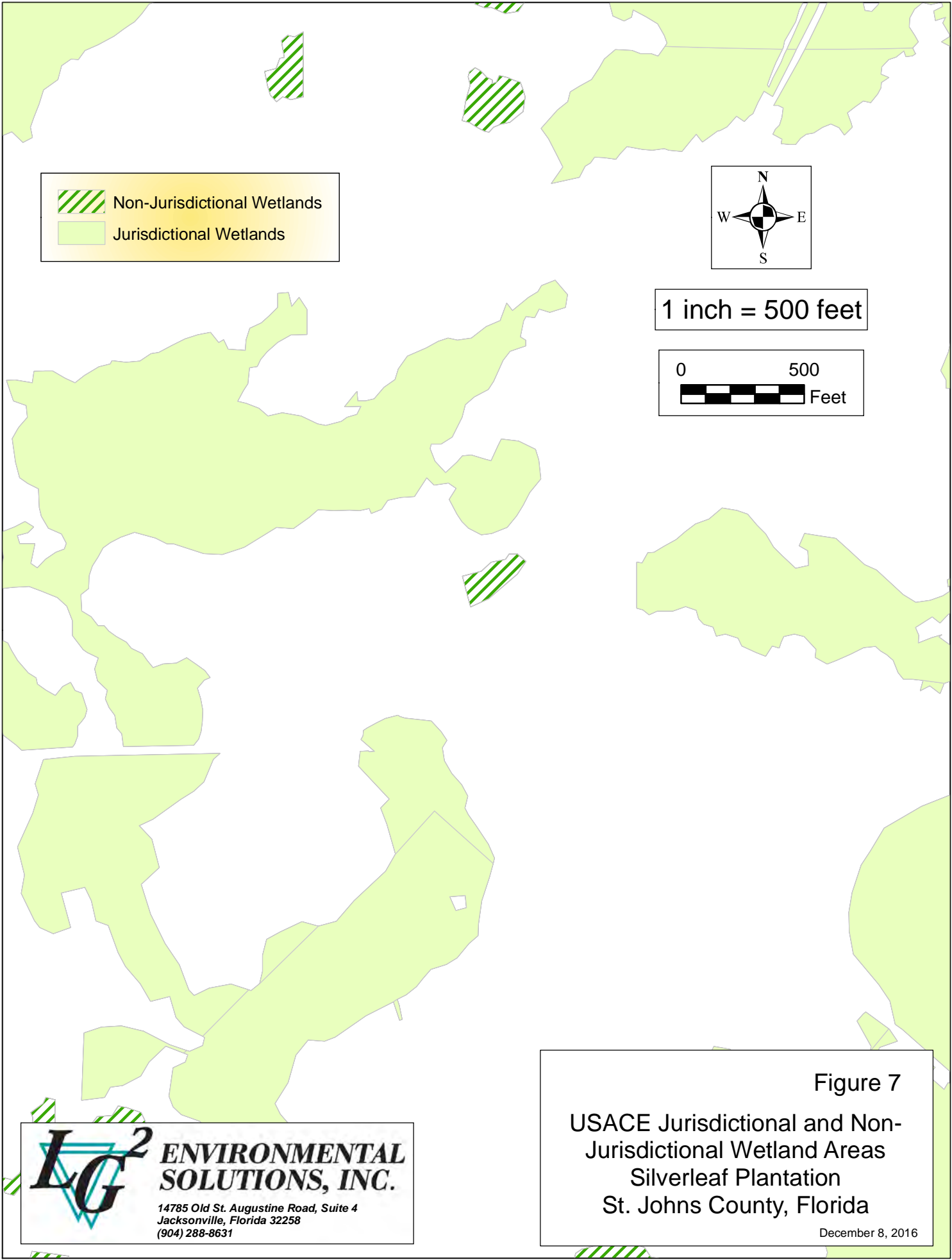


	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands

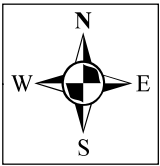
Figure 6

USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016

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	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands

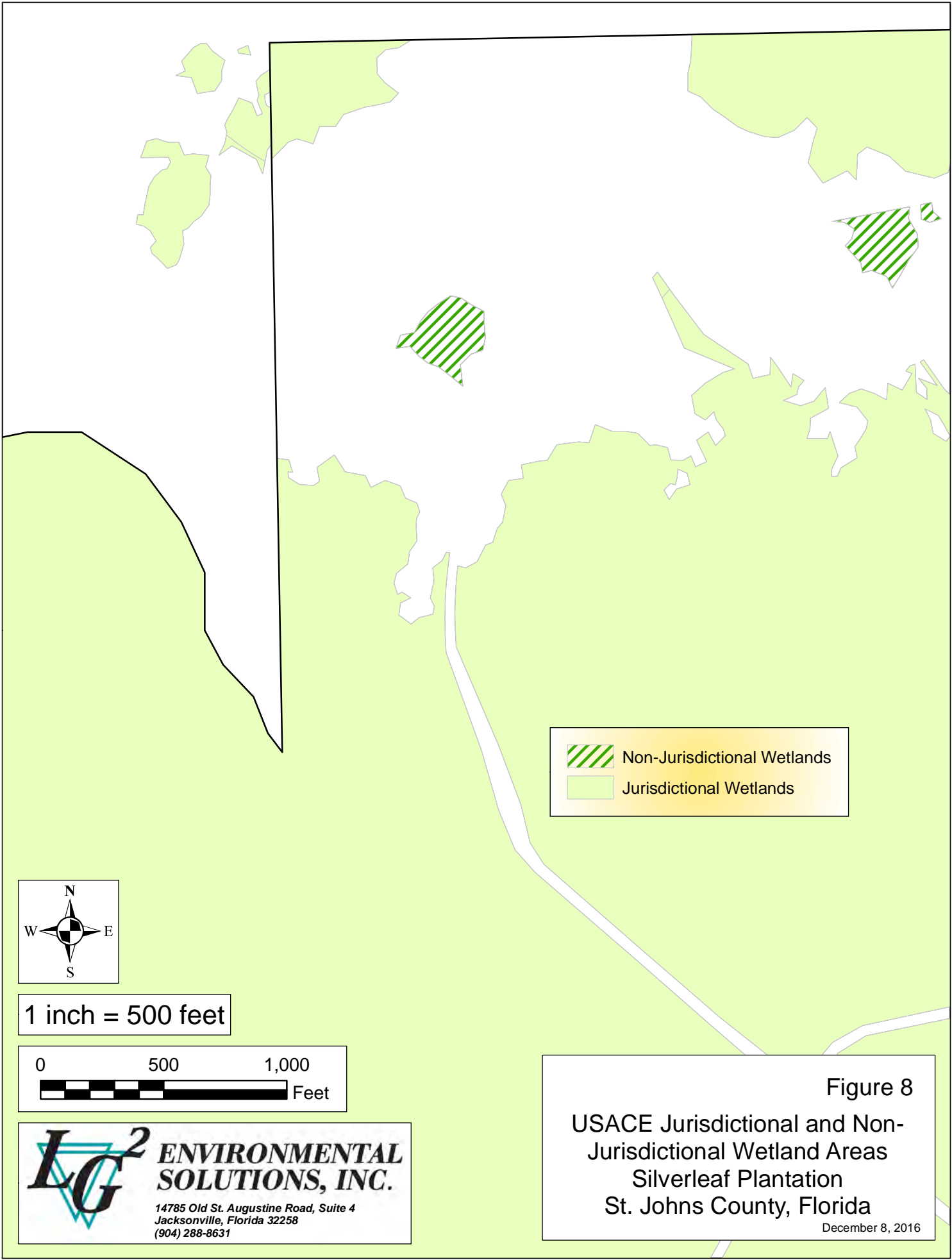




1 inch = 500 feet

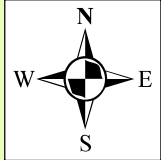


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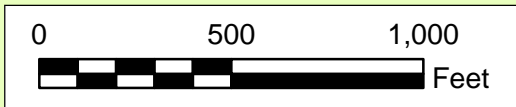
Figure 7
 USACE Jurisdictional and Non-Jurisdictional Wetland Areas
 Silverleaf Plantation
 St. Johns County, Florida
 December 8, 2016



	Non-Jurisdictional Wetlands
	Jurisdictional Wetlands



1 inch = 500 feet





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Figure 8
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016

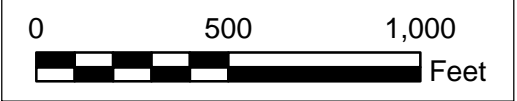
Archaeological Site 8SJ4941



 Non-Jurisdictional Wetlands
 Jurisdictional Wetlands



1 inch = 500 feet



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Figure 9
USACE Jurisdictional and Non-Jurisdictional Wetland Areas
Silverleaf Plantation
St. Johns County, Florida
December 8, 2016

December 7, 2016

Mark Evans
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL 32232

**Re: SilverLeaf Plantation
Permit No. SAJ-2004-4731 (SP-MRE)
Jurisdictional Determination**

Dear Mr. Evans:

On behalf of our client, White's Ford Timber and Investment Company LTD, LG² Environmental Solutions, Inc. (LG2ES) is applying for a Jurisdictional Determination for the above referenced property. In total, +/-4,017 acres of wetlands were identified on the subject property. Within that total, +/-3,826.1 acres have been determined to be jurisdictional and +/-190.1 acres have been determined to be non-jurisdictional as established by the January 2001 Supreme Court decision in the Solid Waste Agency of Norther Cook County (SWANCC) case. The wetlands determined to be jurisdictional include relatively permanent waters (RPW) that flow directly into traditional navigable waters (TNW) and wetlands directly abutting RPW's that flow directly or indirectly into TNW's.

Extensive field analysis was conducted to determine the jurisdiction of the isolated wetlands adjacent to trail roads due to the potential of roadside ditches hydrologically connecting the isolated wetlands to Waters of the US. Many of the trail roads do have adjacent small swales; however, the vast majority of them are small and shallow enough that they become non-jurisdictional, as defined by the USACE 1987 Wetland Delineation Manual with the Regional Supplement, as they transect through uplands. The following photos show examples of these "non-jurisdictional" swales.





There is one large trail road in the southern portion of the property with a large ditch on either side portions of the road. This road starts at the very southern boundary at State Road 16A and runs north-northeast until it takes an abrupt turn to the west and becomes similar to the trail roads described above. These ditches act more as retention than drainage features and there are several non-jurisdictional portions of the ditches, or “ditch breaks” that sever connection of the adjacent isolated wetlands to Waters of the US. The photos below show examples of these “ditch breaks”.







Please find the attached USACE JD Form and Figures. I trust that this information will meet with your satisfaction and be sufficient for you to complete your review of this determination. Should you have questions or need additional information, please contact me by telephone at (904) 626-1377.

Sincerely,
LG² Environmental Solutions, Inc.

A handwritten signature in black ink, appearing to read "B. Spahr".

Brian L. Spahr
Senior Project Manager

Attachments: Silverleaf Jurisdictional Form & Figures