DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. BOX 4970
JACKSONVILLE, FLORIDA 32232

January 17, 2017

REPLY TO

Regulatory Division
North Permits Branch
Jacksonville Permits Section
SAJ-2016-01845 (JD-SCW)
JURISDICTIONAL VERIFICATION

Larmac Development, LLC
Mr. Larry Nichols
752 Blanding Boulevard, Suite 110
Orange Park, Florida 32073

Dear Mr. Nichols:

Reference is made to information submitted to the U.S. Army Corps of Engineers (Corps) regarding the potential extent of Federal jurisdiction near the intersection of CR 218 and Henley Road, in Section 28, Township 5 South, Range 25 East, Green Cove Springs, Clay County, Florida. The evaluation of this jurisdictional determination involved many factors and may have included a field visit, review of aerial photographs, geological quad sheets, county soils maps, and site specific information provided by you. A copy of the approved jurisdictional determination form and depiction of the geographic extent of Federal jurisdiction are enclosed. A Department of the Army permit may be required for work in areas identified as waters of the United States.

This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the South Atlantic Division Office at the following address: If you object to this determination, you may request an administrative appeal under Corps' regulations at 33 CFR Part 331. If you request to appeal this determination, you must submit a completed RFA form to the South Atlantic Division Office at the following address:

Mr. Jason Steele
South Atlantic Division
U.S. Army Corps of Engineers
CESAD-CM-CO-R, Room 9M15
60 Forsyth St., SW.
Atlanta, Georgia 30303-8801.

Mr. Steele can be reached by telephone number at 404-562-5137, or by facsimile at 404-562-5138.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division office within 60 days of the date of the RFA. Should you decide to submit an RFA form, it must be received at the above address by **March 18, 2017**. It is not necessary to submit a RFA form to the Division Office if you do not object to the determination in this letter.

The determination shown on the enclosed information represents the upland/wetland boundary for purposes of determining the Corps jurisdictional line. As depicted on the enclosed drawings, the property encompasses waters of the United States, which are subject to regulation by the Corps; and, waters of the United States, which are not subject to regulation by the Corps. Please be advised that the jurisdictional determination shown is based on the Corps of Engineers Wetlands Delineation Manual (1987) or current regional supplement, and is valid for a period no longer than 5 years from the date of this letter unless new information warrants a revision of the determination before the expiration date. If, after the 5-year period, the Corps has not specifically revalidated this jurisdictional determination, it shall automatically expire. Any reliance upon this jurisdictional determination beyond the expiration date may lead to possible violation of current Federal laws and/or regulations. You may request revalidation of the jurisdictional determination prior to the expiration date. Any revalidation or updating will be considered under the method of jurisdictional determination and other applicable regulations in use at the time of the request. Additionally, this determination has been based on information provided by you or your agent; should we determine that the information was incomplete or erroneous this delineation would be invalid.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

You are cautioned that work performed below the mean high water line or ordinary high water line in waters of the United States; and/or, the discharge of dredged or fill material into any areas identified on the enclosed information as within Federal jurisdiction, without a Department of the Army permit could subject you to enforcement action. Receipt of a permit from the Department of Environmental Protection or the

Water Management District does not obviate the requirement for obtaining a Department of the Army permit.

The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to visit http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey and complete our automated Customer Service Survey. Your input is appreciated – favorable or otherwise. Please be aware this Internet address is case sensitive and should be entered as it appears above.

Thank you for your cooperation with our permit program. If you have any questions concerning this matter please contact Shannon White by mail at the letterhead address, by electronic mail at shannon.c.white@ usace.army.mil, or by telephone at 904-232-1681.

Sincerely,

Shannon White

FOR
Donald W. Kinard
Chief, Regulatory Division

Enclosures

Copy Furnished:

Means Engineering, Inc., 1414 Kingsley Avenue, Suite 3B, Orange Park, FL 32073

Heilman & Associates, Inc., 2605 Second Street South, Jacksonville Beach, FL 32250

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Larmac Development, LLC	File Number: SAJ-2016-01845	Date: 1/18/2017
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- *ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- *ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- *ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.*
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision you may contact:	If you have questions regarding the appeal process you may contact:
Project Manager as noted in letter	Jason W. Steele Administrative Appeals Review Officer USACE – South Atlantic Division 60 Forsyth Street SW, Room 10M15 Atlanta, Georgia 30303-8801 (404) 562-5137

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

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): 11/30/2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:Jacksonville District; Royal Pointe; SAJ-2016-01845

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: FL County/parish/borough: Clay City: Middleburg
Center coordinates of site (lat/long in degree decimal format): Lat. 30.029267° **Pick List**, Long. -81.803612° **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody: Bradley Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): Lower St. Johns River Subbasin (HUC 03080103), Palmo Cove-St. Johns watershed (0308010313) and Twelvemile Swamp-Turnbull Creek subwatershed (HUC 030801031203)
☒ 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: 11/29/2016
☐ Field Determination. Date(s):

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 waters[2] (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: 840 linear feet: width (ft) and/or acres.
Wetlands: 13.45 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: **The review area is located near the intersetion of CR-218 and Henley Road (parcel 28-05-25-010110-007-01) and is approximately 38.3 acres in size. The subject wetland is 0.36 acre in size and is a forested, freshwater depressional wetland. The subject wetland is surrounded by xeric oak uplands. The subject wetland does not have surficial hydrologic connection to relatively permanent waters, non-relatively permanent waters, or traditionally**

[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.

navigable waters. The wetland within the review area is not abutting or adjacent to any non-relatively permanent waters, relatively permanent waters, or traditionally navigable waters. The wetland review area has no substantial nexus to interstate or foreign commerce.

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 waterbody[4] 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: 20992 **acres**
Drainage area: 20992 **acres**
Average annual rainfall: 51 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 **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **2-5** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: 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 TNW[5]: Bradley Creek flows northward to Black Creek.
Tributary stream order, if known: .

(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: 30 feet
Average depth: 6 feet
Average side slopes: **3:1 .**

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: The tributary has stable banks and is in a natural condition.
Presence of run/riffle/pool complexes. Explain: N/A.
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): >5 %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **20 (or greater)**
Describe flow regime: Bradley Creek is a perennial stream.
Other information on duration and volume: .

Surface flow is: **Discrete and confined**. Characteristics: Flow typically remains within the stream channel; however, the stream channel overflows during storm events..

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (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:

[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.
[7] Ibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

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

☐ Riparian corridor. Characteristics (type, average width): .
☒ Wetland fringe. Characteristics: Forested floodplain swamp borders Bradley Creek on both sides.
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings: The floodwater storage and nutrient/pollutant filtration functions of the RPW (Bradley Creek) and wetlands within the review area are important to maintain the water quality and the aquatic flora and fauna of TNW (Black Creek). The uplands and wetlands within review area provides habitat and foraging opportunities for a variety of invertebrates, birds, reptiles, amphibians and mammals.

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:13.45 acres
Wetland type. Explain: Forested freshwater swamp wetland.
Wetland quality. Explain: High qualiaty forested freshwater swamp.
Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:
Flow is: **Perennial flow**. Explain: .

Surface flow is**: Overland sheetflow**
Characteristics: During rain events, water sheetflows from abutting wetlands into the RPW (Bradley Creek).

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 **Pick List** river miles from TNW.
Project waters are **2-5** 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: Water is clear and tannin stained.
Identify specific pollutants, if known: Due to the rural and residential development review area, nutrients from agriculture and septic systems likely contribute pollutants to the wetlands within the review area.

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

☐ Riparian buffer. Characteristics (type, average width): .
☐ Vegetation type/percent cover. Explain: .
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings:The floodwater storage and nutrient/pollutant filtration functions of the RPW (Bradley Creek) and wetlands within the review area are important to maintain the water quality and the aquatic flora and fauna of TNW (Black Creek). The uplands and wetlands within review area provides habitat and foraging opportunities for a variety of invertebrates, birds, reptiles, amphibians and mammals.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**
All wetland(s) being considered in the cumulative analysis: **1**
Approximately (13.45) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Y	13.45		

Summarize overall biological, chemical and physical functions being performed: The wetlands directly abutting the RPW provide floodwater storage and nutrient/polluntant filtration functions which are important to maintain the water quality and the aquatic flora and fauna of the RPW and TNW.

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: .

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: The National Hydrologic Dataset classifies Bradley Creek as a perennial creek.
☐ 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: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: **3468** linear feet **30**width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs[8] 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: **See Attachements to the JD form.**

☐ 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: .

Provide acreage estimates for jurisdictional wetlands in the review area: **13.45** 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 jurisidictional. 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: .

[8]See 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.*

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

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: 0.36 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.

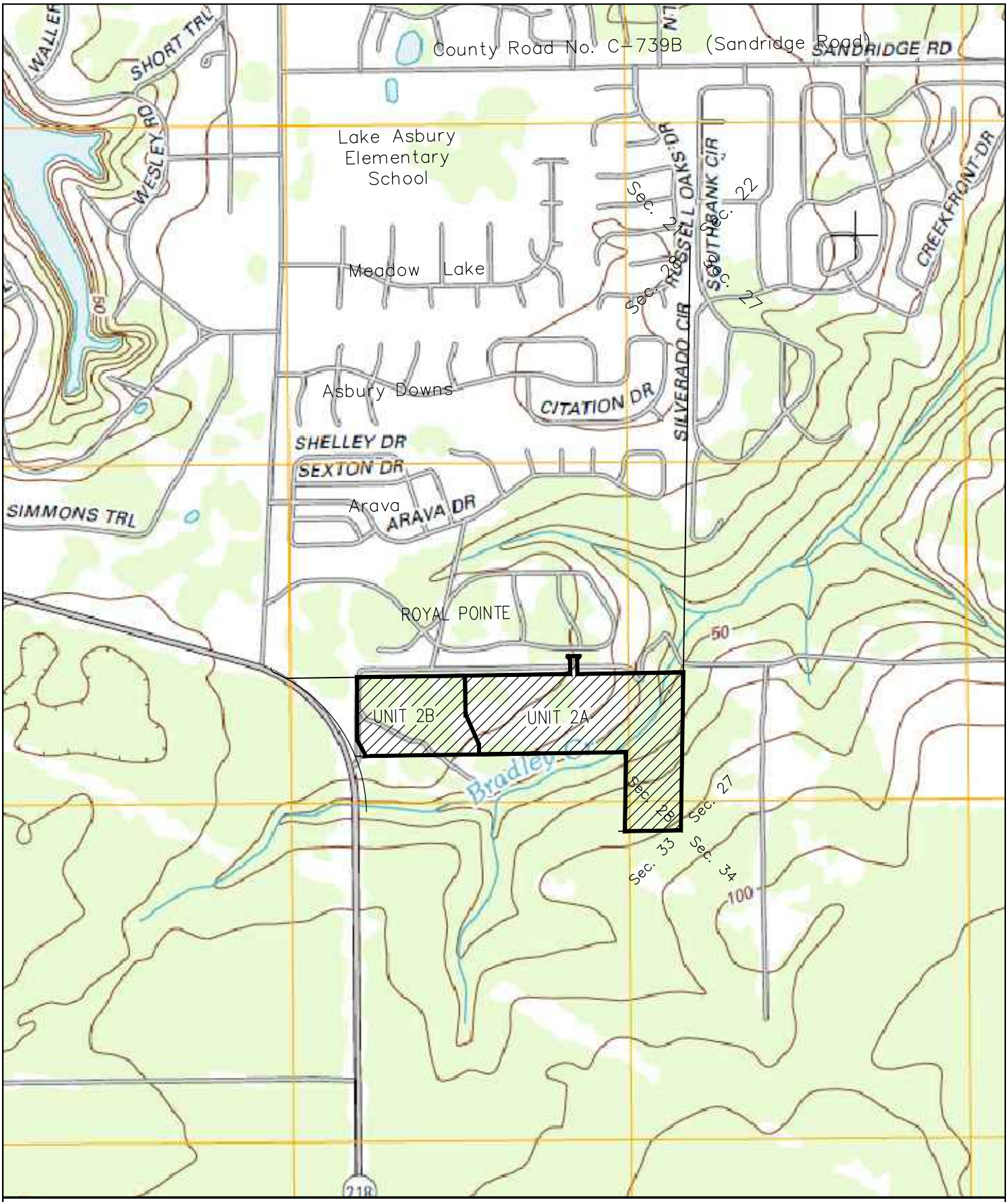
SECTION IV: DATA SOURCES.

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: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):Google Earth 11/29/2016.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .


Legend
SAJ-2016-01845
Review Area
Latitude: 30.029267°
Longitude: -81.803612°
Arthur Moore Dr
W Simmons Trail
Henley Rd
Shelley Dr
Sexton Dr
Arava Dr
Salina Ct
Citation Dr
Silverado Cir
Royal Pointe Dr
739
218
Little Dairy Rd
REFERENCE LAYERS
NFHL Data Available
FIRM Panel Boundary
LOMR Boundary
SPECIAL FLOOD HAZARD AREAS
1% Annual Chance Flood Hazard
Zone A, AE, A99, AO, AH, AR, V, VE
Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard
Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee Zone X
NO SCREEN
Areas Outside the 0.2% Annual Chance Floodplain Zone X
Areas of Undetermined Flood Hazard Zone D
CROSS SECTIONS & BFES
Cross Sections with 1% Annual Chance Water Surface Elevation
Coastal Transect
Coastal Transect Baseline
Profile Baseline
Base Flood Elevation
SUPPORTING INFORMATION
Limit of Study
Jurisdictional Boundary
N
2000 ft
Google earth
© 2016 Google


Legend
SAJ-2016-01845
23
21
Blanding Blvd
Fleming Island
Fleming Island
Black Creek (TNW)
Middleburg
Little Jessie Island
15
Jessie Island
13
Asbury Lake
Bradley Creek (RPW)
Review Area
Latitude: 30.029267°
Longitude: -81.803612°
17
Google earth
© 2016 Google
N
2 mi



SCALE: 1"= 2000'

2000' 1000' 0' 2000'

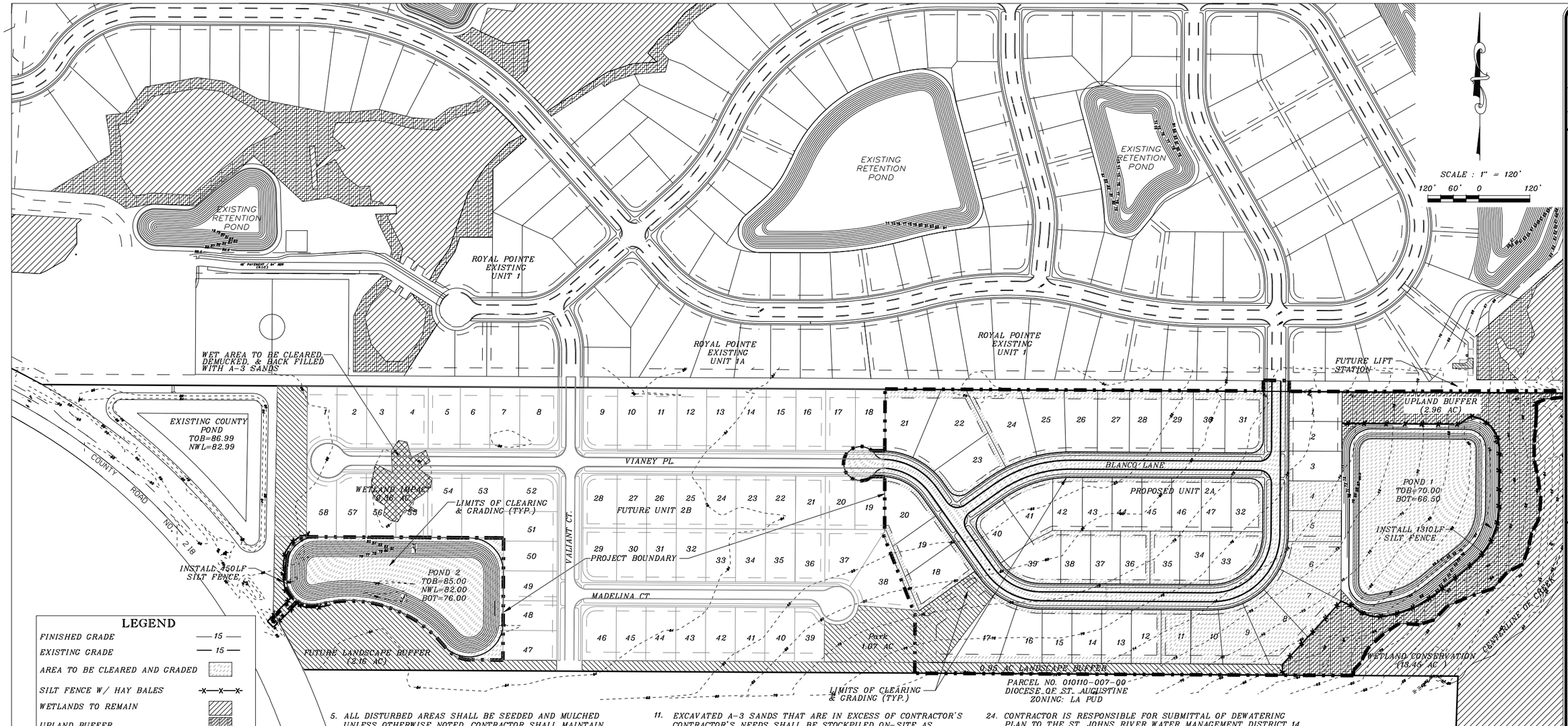
N

MEANS Engineering, Inc

CIVIL ENGINEERING AND ENVIRONMENTAL SERVICES

1414 KINGSLEY AVE, SUITE 3 • ORANGE PARK, FL 32073 • (904) 264-9902

QUAD MAP – ROYAL POINTE UNIT 2



LEGEND

- FINISHED GRADE — 15 —
- EXISTING GRADE — 15 —
- AREA TO BE CLEARED AND GRADED
- SILT FENCE W/ HAY BALES -x—x—x-
- WETLANDS TO REMAIN
- UPLAND BUFFER
- WETLAND IMPACT
- WETLAND RESTORATION

GENERAL GRADING NOTES

1. EXISTING BOUNDARY CONDITIONS AND JURISDICTIONAL WETLANDS ARE BASED ON SURVEYS PREPARED BY, EILAND & ASSOCIATES, 615 BLANDING BLVD. 32065
2. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION, THE ENGINEER AND THE RESPONSIBLE UTILITY COMPANY SHALL BE NOTIFIED IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIR OF ANY UTILITIES DAMAGED DURING CONSTRUCTION.
3. ALL SWALES SHALL BE SODDED UNLESS OTHERWISE NOTED.
4. TOPOGRAPHIC INFORMATION PROVIDED WITHIN THESE CONSTRUCTION PLANS ARE BASED ON A SURVEY PERFORMED BY EILAND & ASSOCIATES, ADDRESS ABOVE, DATED AUGUST 27, 2015. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ELEVATIONS AS NECESSARY DURING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF DEVIATIONS.
5. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MAINTAIN NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED. CONTRACTOR SHALL NOT DISTURB EXISTING TREES AND VEGETATION WITHIN SUB-DIVISION LOTS AND CONSERVATION EASEMENT UNLESS SO DIRECTED. ALL SLOPES GREATER THAN 4:1 SHALL BE SODDED.
6. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND TAKE WHATEVER MEANS NECESSARY TO PREVENT THE EROSION OF SOIL AND DEPOSITION OF SEDIMENT ON ADJACENT AND DOWNSTREAM PROPERTIES. CONTRACTOR SHALL IMPLEMENT AND PROVIDE SUITABLE EROSION CONTROL MEASURES, I.E. SEDIMENTATION BARRIERS, HAY BALES, SILTATION CURTAINS. STRAW, MULCH, OR OTHER SUITABLE MATERIAL SHALL BE PLACED ON GROUND IN AREAS WHERE CONSTRUC-TION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. ALL EROSION CONTROL DEVICES MUST BE INSTALLED PRIOR TO CONSTRUCTION.
7. ELEVATIONS ARE REFERENCED TO N.G.V.D.
8. STAKING OF CONSERVATION EASEMENT LIMITS WILL BE PERFORMED BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OTHER SURVEYING AND STAKING.
9. TEMPORARY CULVERTS SHALL BE PLACED IN ALL SWALES AS NECESSARY TO ALLOW CONSTRUCTION ACCESS TO CONSTRUCTION AREAS.
10. TREES WHICH ARE TO REMAIN SHALL BE MARKED IN THE FIELD AND SHALL BE PROTECTED DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH RECOGNIZED STANDARDS OF THE INDUSTRY. TEMPORARY FENCING,BARRICADES OR GUARDS TO PROTECT TREES AND OTHER PLANTS SHALL BE UTILIZED. THE CONTRACTOR WILL NOT STORE CONSTRUCTION MATERIALS, DEBRIS OR EXCAVATED MATERIAL WITHIN THE TREE DRIP LINE AND SHALL RESTRICT FOOT TRAFFIC TO PREVENT EXCESSIVE COMPACTION OF SOIL OVER ROOT SYSTEMS.
11. EXCAVATED A-3 SANDS THAT ARE IN EXCESS OF CONTRACTOR'S CONTRACTOR'S NEEDS SHALL BE STOCKPILED ON-SITE AS DIRECTED BY OWNER AND/OR THE ENGINEER.
12. ALL ROAD CROSSINGS WILL REQUIRE DENSITY TESTS AT 1.0' LIFTS.
13. ALL DISTURBED AREAS WITHIN THE COUNTY RIGHT-OF-WAY WILL BE SODDED.
14. A CONSTRUCTION SIGN MUST BE POSTED PRIOR TO CONSTRUCTION.
15. THE CURB WILL BE CHECKED FOR FLOW DESIGN BEFORE FINAL COMPLETION OF THE PROJECT.
16. ALL CONTRACTOR INSTALLED SIDEWALKS MUST BE INSTALLED PRIOR TO THE FINAL INSPECTION.
17. ALL PIPE JOINTS SHALL BE WRAPPED WITH FABRIC, IN ACCORDANCE WITH FDOT INDEX 280.
18. ALL CONCRETE PIPE SHALL BE "STANDARD" REINFORCED CONCRETE PIPE (SRCP).
19. ALL PUMP DISCHARGE IS TO BE FREE FROM TURBIDITY AND SEDIMENT.
20. SILT BARRIERS WILL BE CONSTRUCTED IN THE AREAS WHERE WATER IS PUMPED OR DIVERTED.
21. TWO SETS OF SIGNED AND SEALED AS-BUILTS ARE TO BE SUBMITTED, THREE DAYS PRIOR TO FINAL INSPECTION WITH A COPY PROVIDED ON DISK, IN AUTOCAD FORMAT.
22. CLAY COUNTY REQUIRES 24 HOUR NOTICE ON ALL TESTINGS AND MEETINGS.
23. CONSTRUCTION WARNING SIGNS ARE TO BE POST MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE.
24. CONTRACTOR IS RESPONSIBLE FOR SUBMITTAL OF DEWATERING PLAN TO THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
25. CONTRACTOR IS RESPONSIBLE FOR SUBMITTAL OF NPDES PERMIT COVERAGE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
26. CONTRACTOR SHALL INSTALL SILT FENCE AND SYNTHETIC HAY BALES BEFORE COMMENCEMENT OF CONSTRUCTION.
27. INLETS AND MITERED END SECTIONS TO BE SURROUNDED TWO ROWS OF SOD.

SITE DATA

ROYAL POINTE UNIT 2 SUBDIVISION
OWNER: LARMAC DEVELOPMENT, LLC
ENGINEER: MEANS ENGINEERING, INC
SURVEYOR: EILAND AND ASSOCIATES
TOTAL PROJECT AREA: ±57.2 AC
PROJECT ADDRESS: VIANEY PLACE
PROPERTY ID NO: 0101110-007-01
FLOOD ZONE: X (MAP NO. 12019C0170E)

UTILITIES
WATER/SEWER: CCUA
ELECTRICAL: CLAY ELECTRIC COOPERATIVE

PROPOSED ZONING
EXISTING: LAMP MPC PUD
PROPOSED: LAMP MPC PUD

PROPOSED LAND USE
EXISTING: LAMP MPC
PROPOSED: LAMP MPC

BUFFER CALCULATIONS
TOTAL PROJECT AREA = 57.21 AC
ON-SITE WETLANDS = 13.45 AC
DEVELOPABLE LAND = 43.75 AC

UPLANDS PRESERVE REQ'D (15%) = 6.56 AC
UPLANDS PRESERVED PROPOSED = 7.13 AC

UPLAND BUFFER REQUIRED (BRADLEY CREEK):
100 FOOT WIDTH AVERAGE
50 FOOT WIDTH MINIMUM

AREA OF UPLAND BUFFER: 2.96 AC
LINEAR FOOTAGE OF BUFFER: 894 LF
AVERAGE WIDTH OF BUFFER: 144 FT

SETBACKS:
FRONT: 20 FT
REAR: 20 FT
SIDES: 7.5 FT

ROYAL POINTE SUBDIVISION UNIT 2A & FUTURE UNIT 2B

FOR: LARMAC DEVELOPMENT, INC
CLAY COUNTY, FL

CLEARING AND EROSION CONTROL PLAN

STM	DATE	REVISIONS

MEANS Engineering, Inc
CA#28146
CIVIL ENGINEERS • LAND PLANNERS
ENVIRONMENTAL SERVICES
1414 KINGSLEY AVE, SUITE 3 • ORANGE PARK, FL 32073 • (904) 264-9902

PROJECT DATE:	7/1/15
SCALE:	NTS
DRAWN BY:	TM
CHECKED BY:	TM
DRAWING NAME:	15001

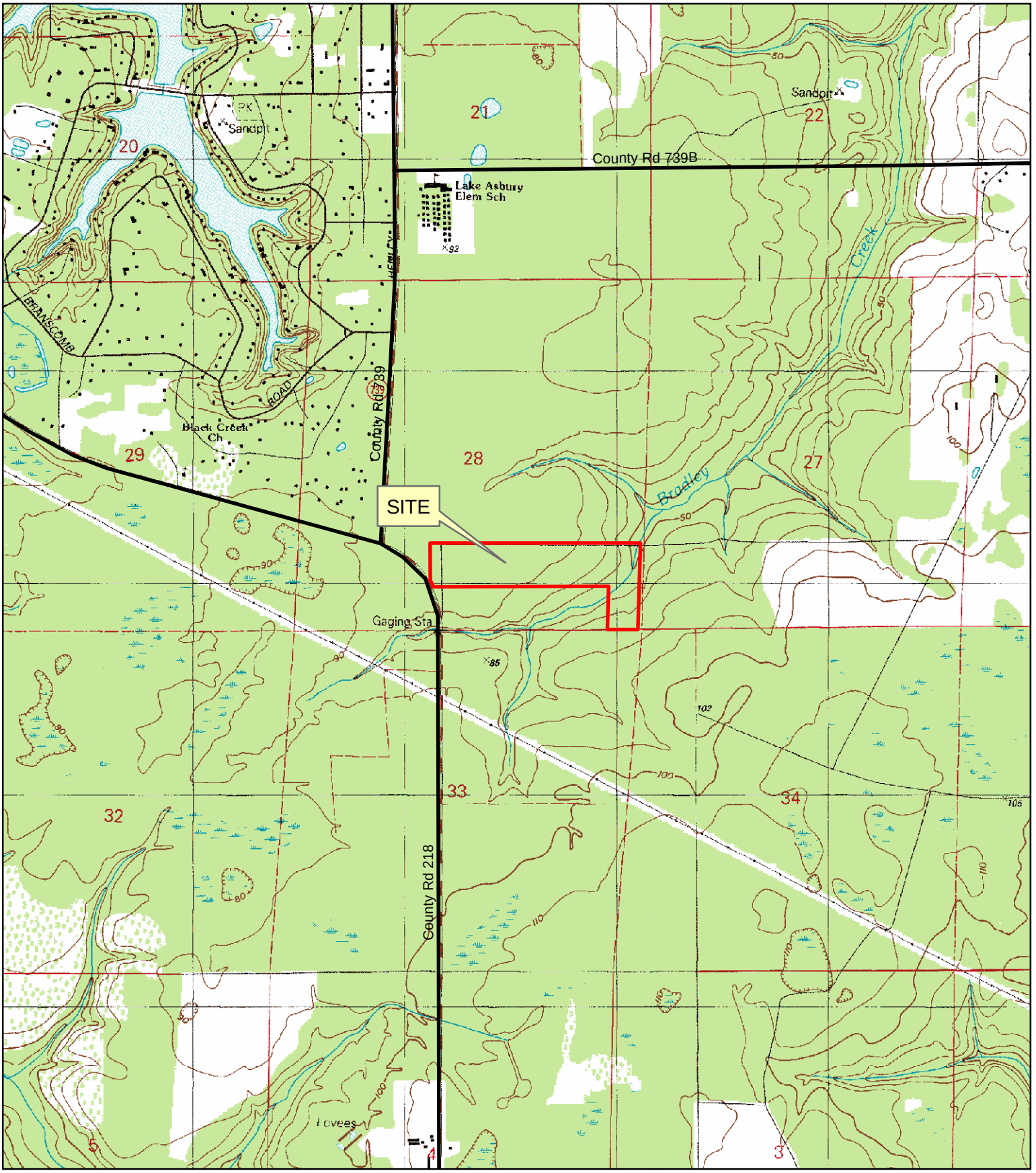
APPROVED BY:

Date:

W. Earl Means, PE
FL Registration No. 51566

REG. No:	
JOB NUMBER:	15001
COPY DATE:	

SHEET
200



Notes: Boundaries and areas are approximate. To be used for planning purposes only.

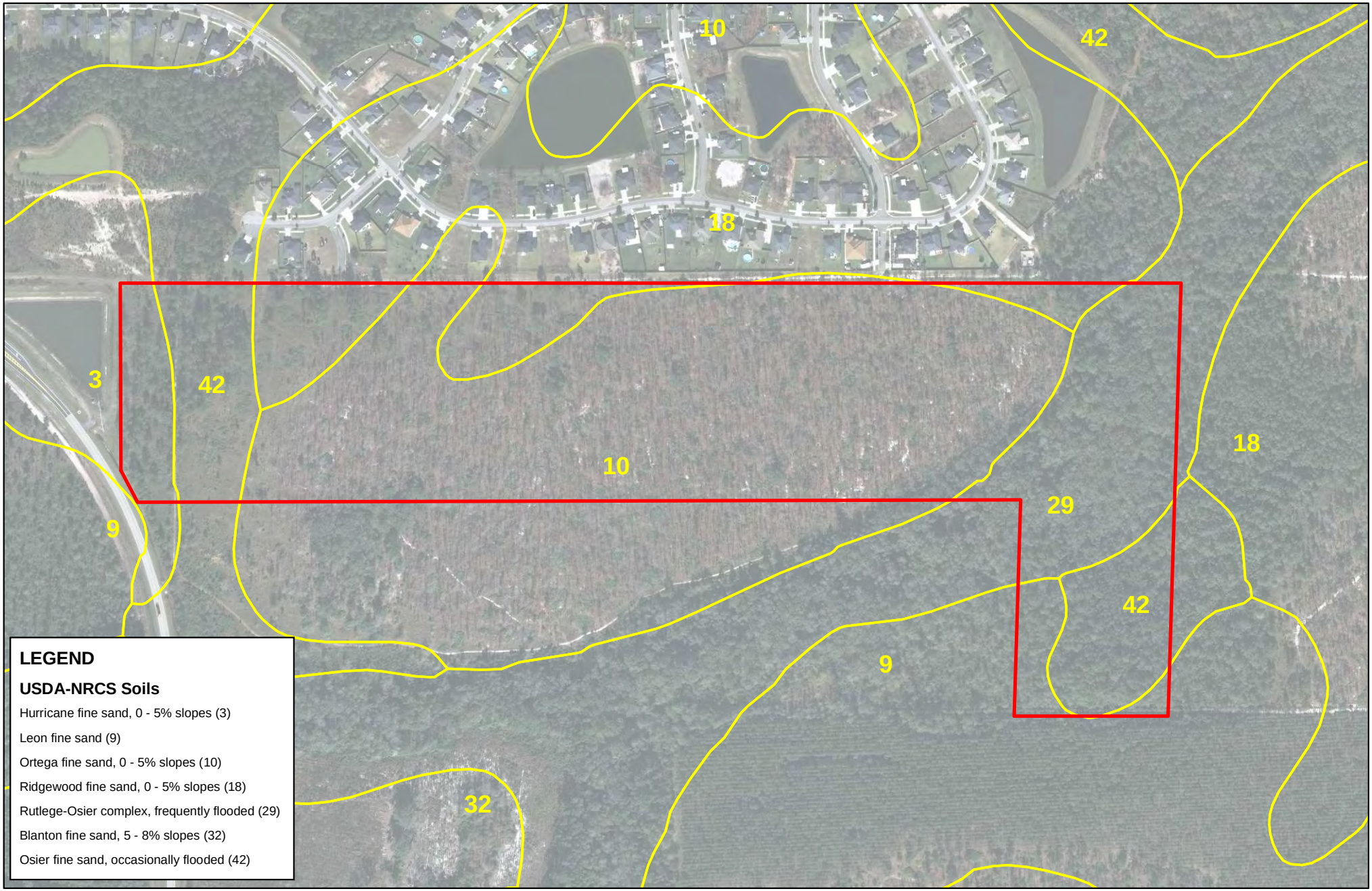
Location: Section 28, Township 5S, Range 25E.
Lat. 30.02923°N/Long. 81.80082°W

Heilman & Associates, Inc.
2605 Second Street South
Jacksonville Beach, FL 32250
Ph. (904) 372-0489

Royal Pointe Unit 2. Location Map.

Sources: USGS (1996).

Project: Royal Pointe Unit 2
Exhibit No.: 1
Date: 05-13-15
File Name: Lake Asbury\Location Map.mxd



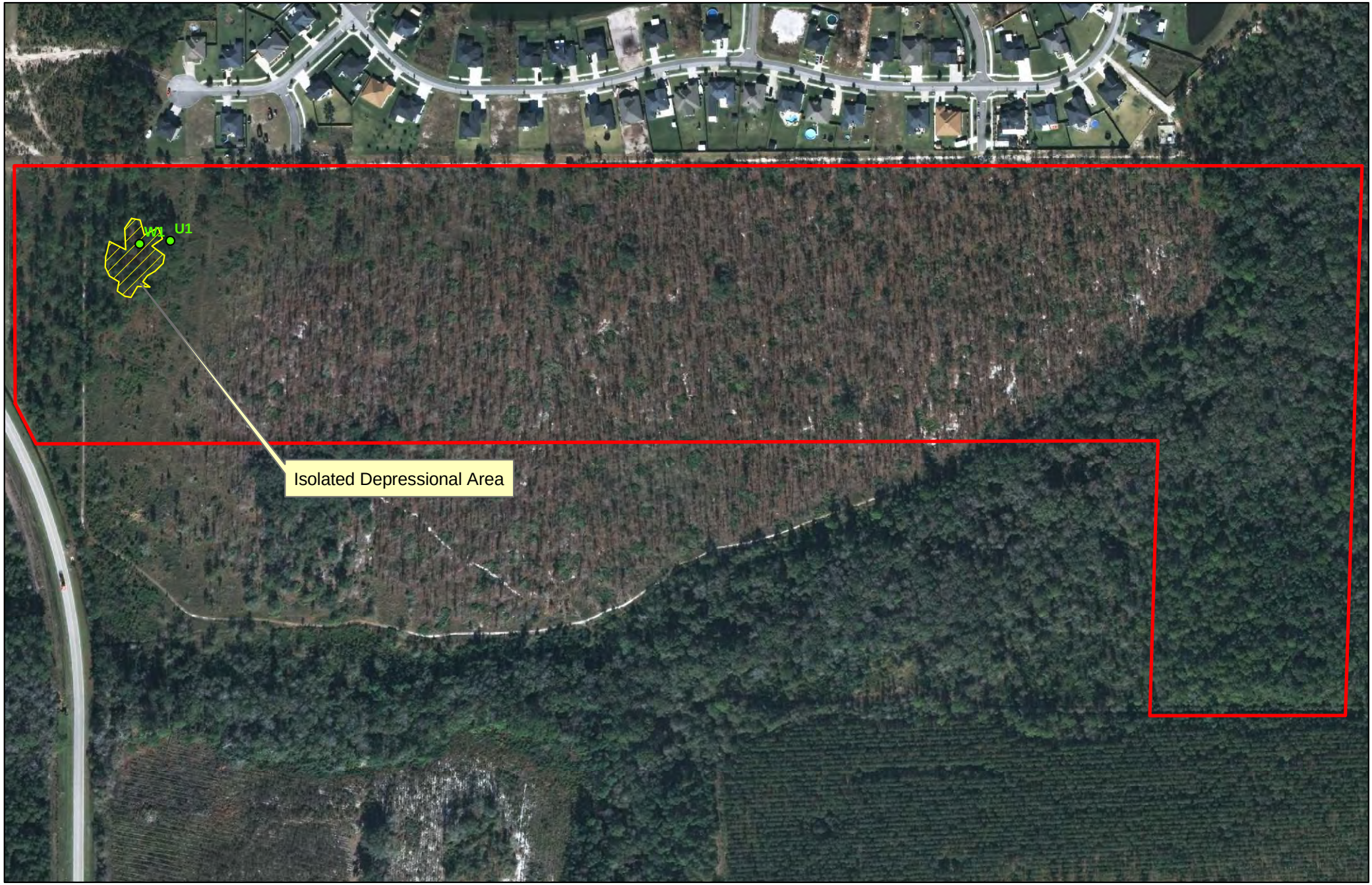
Notes: Boundaries and areas are approximate. To be used for planning purposes only. Aerial photograph shown is dated 2014 from Florida Deptartment of Transportation source data.

Heilman & Associates, Inc.
2605 Second Street South
Jacksonville Beach, FL 32250
Ph. (904) 372-0489

Royal Pointe Unit 2. USDA-NRCS Soils Map.

Sources: FDOT (2014), USDA-NRCS (1989).

Project: Royal Pointe Unit 2
Exhibit No.: 2
Date: 05-13-15
File Name: Lake Asbury\Soils Map.mxd



Notes: Boundaries and areas are approximate. To be used for planning purposes only. Aerial photograph shown is dated 2014 from Florida Deptartment of Transportation source data.

0 150 300 600 900 Feet

Heilman & Associates, Inc.
2605 Second Street South
Jacksonville Beach, FL 32250
Ph. (904) 372-0489

Royal Pointe Unit 2. Aerial Photo (2014).
ACOE Data Points for Isolated Depressional Area

Sources: FDOT (2014), Means Engineering (2015).

Project: Royal Pointe Unit 2
Exhibit No.: 3
Date: 05-13-15
File Name: Lake Asbury\Aerial Photo.mxd

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Royal Pointe Unit 2 City/County: Clay Sampling Date: Apr 23, 2016

Applicant/Owner: Larmac Development, LLC State: Florida Sampling Point: U1

Investigator(s): Ross Heilman Section, Township, Range: S28, T5S, R25E

Landform (hillslope, terrace, etc.) hillslope Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR or MLRA): LRR U Lat: 30°1'46.5" N Long: 81°48'22.6" W Datum: NAD83

Soil Map Unit Name: Osier fine sand, occasionally flooded (42) NWI Classification: U

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Mixed pine/xeric oak upland forest.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point U1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris (Long-leaf pine)	10	Y	FAC
2. Pinus taeda (Loblolly pine)	10	Y	FAC
3. Quercus virginiana (Live oak)	10	Y	FACU
4.			
5.			
6.			
7.			
8.			
	30	= Total Cover	
50 % of total cover: 15		20 % of total cover: 6	

Sapling/Shrub Stratum (Plot size:)			
1. Serenoa repens (Saw-palmetto)	30	Y	FACU
2. Ilex glabra (Inkberry)	5		FAC
3.			
4.			
5.			
6.			
7.			
8.			
	35	= Total Cover	
17.5		20 % of total cover: 7	

Herb Stratum (Plot size:)			
1. Aristida stricta (Pineland three-awn)	10	Y	FAC
2. Pteridium aquilinum (Northern bracken fern)	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	= Total Cover	
50 % of total cover: 7.5		20 % of total cover: 3	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
50 % of total cover: 0		20 % of total cover: 0	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	X 2 =	0
FAC species	35	X 3 =	105
FACU species	45	X 4 =	180
UPL species	0	X 5 =	0
Column Totals:	80 (A)		285 (B)

Prevalence Index = B/A = 3.56

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: U1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR4/3				N/A	N/A	N/A	
6-12	10YR4/2				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P, T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Suface (S9) **(LRR S, T, U)**
- ___Loamy Gleyed Matrix (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Ochric (F11) **(MLRA 151)**
- ___Iron Manganese Masses (F12) **(LRR O, P, T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Ochric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___1 cm Muck (A9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12)
- ___Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** **X**

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Royal Pointe Unit 2 City/County: Clay Sampling Date: Apr 23, 2016

Applicant/Owner: Larmac Development, LLC State: Florida Sampling Point: W1

Investigator(s): Ross Heilman Section, Township, Range: S28, T5S, R25E

Landform (hillslope, terrace, etc.) hillslope Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR or MLRA): LRR U Lat: 30°1'46.4" N Long: 81°48'23.4" W Datum: NAD83

Soil Map Unit Name: Osier fine sand, occasionally flooded (42) NWI Classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	Yes X No ____
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____		

Remarks:
Isolated depressional area surrounded by uplands. No hydrologic connections were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point W1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus palustris (Long-leaf pine)	20	Y	FAC
2. Pinus taeda (Loblolly pine)	20	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	40	= Total Cover	

50 % of total cover: 20 20 % of total cover: 8

Sapling/Shrub Stratum (Plot size:)			
1. Ilex glabra (Inkberry)	5	Y	FAC
2. Serenoa repens (Saw-palmetto)	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	10	= Total Cover	

5 20 % of total cover: 2

Herb Stratum (Plot size:)			
1. Osmunda spectabilis (Royal fern)	2	Y	OBL
2. Osmundastrum cinnamomeum (Cinnamon fern)	2	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	4	= Total Cover	

50 % of total cover: 2 20 % of total cover: 0.8

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

50 % of total cover: 0 20 % of total cover: 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		X 2 =	
FAC species		X 3 =	
FACU species		X 4 =	
UPL species		X 5 =	
Column Totals:		(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Test is > 50%

___ 3 – Prevalence Test is ≤ 3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or probl matic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10Y3/1				N/A	N/A	N/A	
6-12	10YR4/2				N/A	N/A	N/A	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- X Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Suface (S9) **(LRR S, T, U)**
- ___ Loamy Gleyed Matrix (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** _____

Remarks: