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Environmental Assessment

For

1974 State Road 16

ZC 24100

May 20, 2024

Prepared For:

Mr. Jack Wiles

CFO

Atlantic Marine

520 Dunlawton Avenue

Port Orange, Florida 32127

Prepared By:

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1.0 PROJECT INFORMATION

The project site is located at 1974 State Road 16 in the City of St. Augustine, St. Johns County, Florida, in Section 9, Township 7 South, and Range 29 East (**Location Map**). The project site is approximately 4.4 acres and bound by undeveloped forests to the north and west, Ag-Pro Commercial Services to the east, Charles Usinas Memorial Highway (SR 16) to the south (**Aerial Map**). The latitude and longitude coordinates for the approximate center of the project are 29° 54' 55.51"N, 81° 23' 43.32"W (WGS84/NAD83) as determined on the USGS DeLand Quad (**Quadrangle Map**).

The applicant for this project is:

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The environmental scientist for this project is:

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The subject project site is located on State Road 16 in St. Augustine, Florida, consisting of approximately 4.4 acres. Changes in ownership or project limits of the proposed site are subject to additional services. The proposed project is to re-zone the property as a pre-purchase.

Zev Cohen & Associates, Inc. (ZCA) Environmental Department staff has conducted an Environmental Assessment (EA) of the subject property with an associated site visit on 11/2/23. ZCA reviewed previous environmental reports for the subject property, characterized habitat types, verified the presence and extent of wetlands, assessed wetland impacts and mitigation, and surveyed and documented the potential of occurrence of federal and state protected species. This EA report includes survey methodology, results, and supplementary materials.

2.0 SOILS

A review of the soil types present was conducted to characterize the existing conditions on the subject property. The soil review used soils surveys conducted by the United States Department of Agriculture (USDA) Natural Resources Conservation Services (NRCS). Data are presented in accordance to Official Soil Series Descriptions (**Soils Map**).

3 – Myakka Fine Sand: This nearly level, poorly drained soil occurs in flatwoods and formed in marine deposits of sandy material. Typically, the surface layer is black and dark gray fine sand about 8 inches thick with a subsurface layer of gray to light gray fine sand about 15 inches thick. The seasonal high water table is at a depth of less than 10 inches for 1 to 4 months in most years. It is at a depth of more than 40 inches during dry seasons. Available water capacity of very low in the surface and subsurface layers. Permeability of rapid in the surface and subsurface, moderate to moderately rapid in the subsoil.

40 – Pottsburg Fine Sand: This is a poorly drained, nearly level soil in flatwoods. The surface layer is typically black fine sand about 5 inches thick. The subsurface layer is fine sand, which extends to depths of 60 inches with the upper 7 inches being grayish brown sand, light gray in the next 19 inches, and then white sand below. The seasonal high water table is at a depth of less than 10 inches for 2 to 4 months in most years during the wet season. It is at a depth of 10 to 40 inches for about 8 months in most years and recedes to a depth of more than 40 inches during long dry periods. Available water capacity is very low to low in the surface and subsurface with rapid permeability.

3.0 LAND USE AND VEGETATIVE COMMUNITY

The proposed project area consists of forested uplands, an auto repair shop, single-family home, and hardwood wetlands (**Habitat Map**). Land use of the subject property was classified according to the Florida Department of Transportation (FDOT) (1999) *Florida Land Use, Cover and Forms Classification System* (FLUCFCS).

110 – Residential, Low Density (0.27 ac) – This area is situated in the front of the property adjacent to the auto repair shop.

143 – Professional Services (0.89 ac) – This area is situated in the front of the property and extends further back into the site to provide additional parking for vehicles. This area includes an auto repair shop, paved and gravel parking, and a small field utilized to store

cars. The canopy is mostly open with a few laurel oak (*Quercus laurifolia*) and sweet gum (*Liquidambar styraciflua*). There is no subcanopy, but the ground cover does consist of St. Augustine grass (*Stenophrum secundatum*), Bermuda grass (*Cynodon dactylon*), and Bahia grass (*Paspalum notatum*).

190 – Open Land (0.44 ac) – This habitat is towards the rear of the property and is utilized for storage of boats, RVs, and other vehicles. There is no canopy or subcanopy, but the ground cover consists of St. Augustine grass, Bermuda grass, and Bahia grass.

434 – Harwood - Conifer Mixed Upland (2.25 ac) – This habitat makes up a majority of the property. The canopy consists of laurel oak, sweet gum, slash pine (*Pinus elliottii*), water oak (*Quercus nigra*), red maple (*Acer rubrum*), red cedar (*Juniperus virginiana*), cabbage palm (*Sabal palmetto*), loblolly bay (*Gordonia lasianthus*), and Camphor tree (*Cinnamomum camphora*). The subcanopy consists of laurel oak, sweet gum, yaupon holly (*Ilex vomitoria*), gallberry (*Ilex glabra*), Southern magnolia (*Magnolia grandiflora*), red cedar, Camphor, and Chinaberry (*Melia azedarach*). The ground cover consisted of saw palmetto (*Serenoa repens*), muscadine grape (*Vitis rotundifolia*), catbrier (*Smilax spp.*), St. Augustine grass, Bahia grass, fetterbush (*Lyonia lucida*), blackberry (*Rubus spp.*), bracken fern (*Pteridium aquilinum*), and broomsedge (*Andropogon virginicus*).

610 – Hardwood wetland (0.48 ac) – This habitat is situated on the right side of the property as it extends offsite to the rear property. The canopy consists of sweet gum, water oak, red maple, loblolly bay, and sweet bay magnolia (*Magnolia virginiana*). The subcanopy consists of sweet gum, red maple, laurel oak, water oak, swamp bay (*Persea palustris*), wax myrtle (*Myrica cerifera*), and Chinese tallow (*Triadica sebifera*). The ground cover consists of Virginia chain fern (*Woodwardia virginica*), royal fern (*Osmunda regalis*), muscadine grape, catbrier, saw palmetto, and cinnamon fern (*Osmundastrum cinnamomeum*).

510 – Streams and Waterways (0.1 ac) – This habitat is situated on the left side and runs from the back left to the front on the left-hand side of the property. The canopy cover consists of sweet gum, water oak, red maple, loblolly bay, and sweet bay magnolia. The subcanopy consists of sweet gum, red maple, laurel oak, water oak, swamp bay, wax myrtle, and Chinese tallow. The ground cover consists of Virginia chain fern, royal fern, muscadine grape, catbrier, saw palmetto, and cinnamon fern.

4.0 WETLANDS AND OTHER SURFACE WATERS

Criteria used to determine the presence of wetlands and surface waters and delineate their boundaries were in accordance with Chapter 62-340 F.A.C. and the 1987 *Corps of Engineers Wetlands Delineation Manual*. A total of **0.48** acres of forested wetlands and **0.1** acres of surface waters were delineated in the field by ZCA staff scientists (**Wetlands & Surface Water Map**).

These wetlands are subject to change and will need to be reviewed the St. Johns River Water Management District (SJRWMD) and approved. These wetlands will need to also be reviewed by the US Army Corps of Engineers (USACE) for the federal Section 404 Program to determine if any federal wetland permitting will be required. It appears that the wetlands onsite would be considered Section 404 and jurisdictional to the USACE.

Should any wetland impacts be proposed in the future an Environmental Resource Permit (ERP) with the SJRWMD and federal permitting with the USACE, as a General Permit (GP), Individual Permit (IP), or Nationwide Permit (NWP), will be required. Any impacts will need to be offset through the purchase of offsite mitigation bank credits. There are five (5) banks that service this drainage basin: St. Marks Pond Mitigation Bank, Brick Road Mitigation Bank, Lower St. Johns Mitigation Bank, Star 4, and Sunnyside Mitigation Bank.

5.0 PROTECTED SPECIES

Prior to visiting the site, a background literature search was also conducted to compile a list of state and federally protected animal and plant species that could occur on-site. The three primary sources of literature reviewed include the Florida Fish and Wildlife Conservation Commission's (FWC) *Florida's Endangered Species, Threatened Species, And Species of Special Concern*, the United States Fish and Wildlife Service's (USFWS) Threatened and Endangered Species System (TESS) database, and the Florida Department of Agriculture and Consumer Services (FDACS), Division of Plant Industry's (DPI) *Notes on Florida's Endangered and Threatened Plants*. Additional information was gathered from the Florida Natural Areas Inventory (FNAI) *Field Guides to the Rare Animals/Plants of Florida*, and the Florida Committee on Rare and Endangered Plants and Animals (FCREPA) *Rare and Endangered Biota of Florida Series: Volumes 1-5*, ZCA's *Protected Species Database*, including the *Florida Scrub-Jay Database* (a Zev Cohen proprietary database comprised of data acquired from several agencies, direct observations, and scientific journals), and the Audubon's Florida EagleWatch Locator web site.

5.1 Protected Wildlife Species

The state and federally protected animal species with the potential to occur on the project site are listed in Table 5.1.1, below. The estimated likelihood of occurrence of each species is noted in the table and those species with at least a moderate likelihood of occurrence are discussed following the table.

Figure 5.1.1. Federally and Florida state protected wildlife species with the potential to occur on the subject property, in Volusia County, Florida.

		Agency Listing		
Species Name	Common Name	FWC/USFWS	Likelihood of Occurrence	Habitat
<i>Amphelocoma coerulescens</i>	Florida scrub-jay	FT	Low	Scrub, Xeric
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	ST	Low	Open wetlands, prairies
<i>Drymarchon corais couperi</i>	Eastern indigo snake	FT	Low	Wide variety of habitats
<i>Egretta caerulea</i>	Little blue heron	ST	Low	Shallow water bodies in FL
<i>Falco sparverius paulus</i>	Southeastern American kestrel	ST	Low	Open habitats with scattered trees
<i>Gopherus polyphemus</i>	Gopher tortoise	ST	Low	Sandhills, scrub, flatwoods
<i>Haliaeetus leucocephalus</i>	Bald eagle	BE	Low	Common adjacent to water
<i>Laterallus jamaicensis</i>	Eastern Black Rail	FPT	Low	Salt, brackish, and fresh wetlands
<i>Mycteria americana</i>	Wood stork	FT	Low	Shallow open waters
<i>Picoides borealis</i>	Red-cockaded woodpecker	FE	Low	Mature pine forests with regular burn
<i>Perimyotis subflavus</i>	Tricolored Bat	FPT	Low	Hardwood forests, pine forests, caves,
<i>Pituophis melanoleucus</i>	Florida pine snake	ST	Low	Upland areas adjacent to wetlands

FE= Federally Endangered; FT= Federally Threatened; FPT= Federally Proposed Threatened; BE= Bald and Golden Eagle Protection Act; ST= State Threatened; SSC= Species of Special Concern.

Gopher tortoise (*Gopherus Polyphemus*) – The gopher tortoise is a state-designated Threatened Species and is being considered for federal protection due to habitat loss associated with development. Gopher tortoises require uplands that have a high enough elevation to allow for the construction of underground burrows that would not be below the groundwater table. While no burrows were observed during the initial site inspection there is a chance one could occur. This site will require a 100% gopher tortoise survey for the property within 90 days prior to construction to be conducted by an Authorized Gopher Tortoise Agent. Associated permitting with FWC may be required.

Bald Eagle (*Haliaeetus leucocephalus*) – In 2007, the USFWS removed the Bald Eagle from the list of federally endangered and threatened species. They were additionally removed from the FWC's imperiled species list in 2008. Bald Eagles are no longer protected under the Endangered Species Act, however, they are still protected under the Bald and Golden Eagle Protection Act. This act restricts development adjacent to known Bald Eagle nests.

According to the Audubon Florida EagleWatch Public Nest App, the closest bald eagle nest (NESTID: SJ020) is approximately 2.25 miles north. Please note that the location provided by this website is provided only to allow the user to view the general location of a nest and to confirm that an appropriate area of interest was targeted by the user's search. Development adjacent to known bald eagle nests is restricted under the Bald and Golden Eagle Protection Act. Because no nests occur within 660' of the site, development of the site will not be constrained by the bald eagle.

5.2 Wildlife Survey

A preliminary site review was conducted to assess the potential presence of protected wildlife species on the subject property. While no federally or state protected species were found to occur on the project site, a gopher tortoise may occur. A 100% gopher tortoise survey will be required for the property within 90 days prior to construction to be conducted by an Authorized Gopher Tortoise Agent. A Gopher Tortoise Relocation Permit may be required based upon the survey results. Any tortoise burrows identified during the survey will require excavation and relocation of tortoises to an Authorized Gopher Tortoise Recipient Site.

6.0 SUMMARY

Zev Cohen and Associates, Inc. has conducted a site review on the proposed project site for the purposes of determining the presence or potential presence of wetlands and state and federally protected wildlife. A total of **0.48** acres of wetlands and 0.1 acres of surface waters occurs on site. These wetlands and surface waters are subject to change during SJRWMD and USACE site inspections.

The wetlands onsite are considered to be 404 jurisdictional and will require permitting with the USACE along with the SJRWMD. Should any impacts to the wetlands be proposed, offsite wetland mitigation credits will be required from a regionally significant mitigation bank that services the area.

A wildlife survey was conducted to evaluate the potential presence of state and federally protected wildlife species. There were no listed species found to occur on the subject property.

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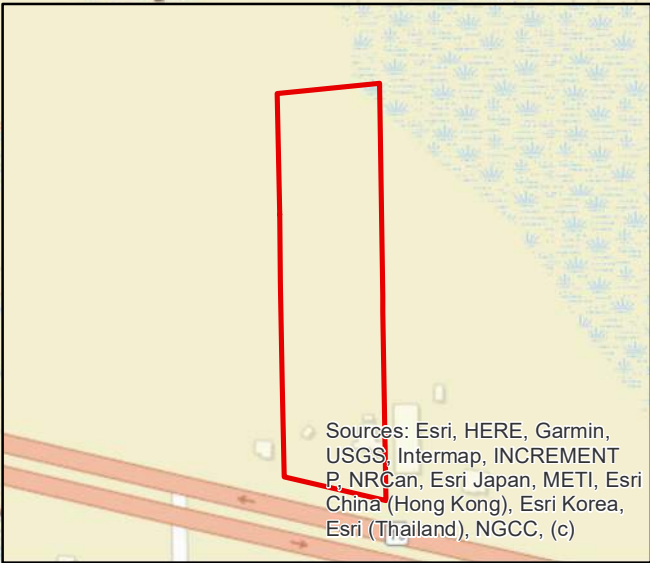
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Appendix A

Boundary



Project Location



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c)

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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(Environmental Services)\Location Map.mxd

9,700 4,850 0 9,700 Feet

Location Map 1974 State Road 16 St. Augustine, FL

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& ASSOCIATES INC
300 Interchange Blvd
Ormond Beach, FL 32174
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Boundary



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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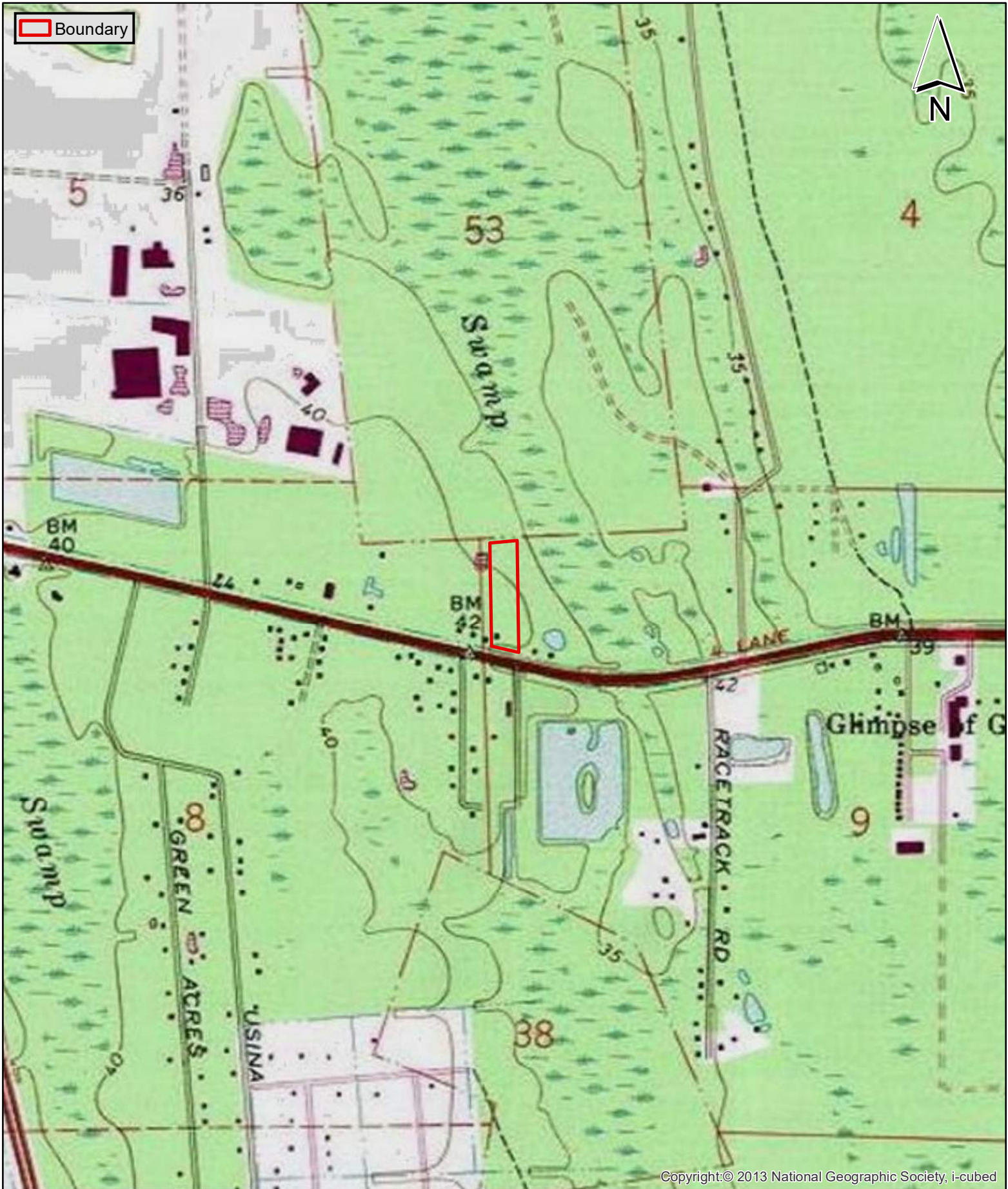
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150 75 0 150 Feet

Aerial Map 1974 State Road 16 St. Augustine, FL



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1,000 500 0 1,000 Feet

Quadrangle Map 1974 State Road 16 St. Augustine, FL



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Boundary

St. Johns Soils

3 - Myakka Fine Sand

40 - Pottsburg Fine Sand

42 - Bluff Sandy clay loam, frequently flooded



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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150 Feet

Soils Map

1974 State Road 16

St. Augustine, FL

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Boundary

Habitat

110 - Residential, Low Density

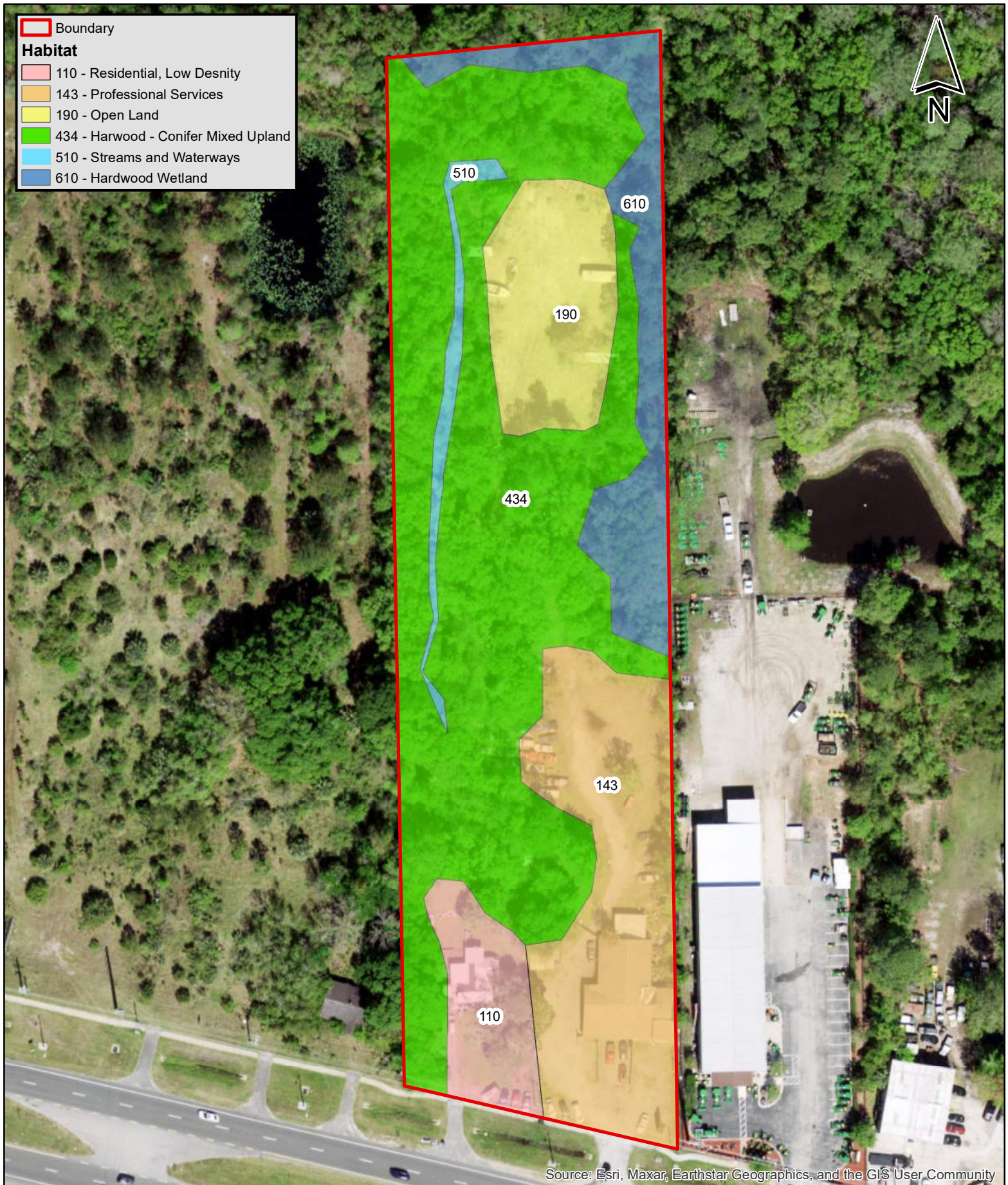
143 - Professional Services

190 - Open Land

434 - Hardwood - Conifer Mixed Upland

510 - Streams and Waterways

610 - Hardwood Wetland



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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(Environmental Services)\Habitat Map_2.mxd

100 50 0 100 Feet

Habitat Map 1974 State Road 16 St. Augustine, FL



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- Surface Water (0.1 ac)
- Boundary
- Wetlands (0.48 ac)



A wetland delineation was conducted by ZCA staff scientists on May 16, 2024. Wetland lines are subject to change with regulatory agency review.

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Info:

Wetland & Surface Water Map
1974 State Road 16
St. Augustine, FL

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(Environmental Services)\Wetland Map.mxd

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