Walton Fire Station

Development Feasibility Assessment

November 28, 2023

7437 W. Highway 388 | Panama City Beach, FL 32413 | 850.814.5021 | www.icaruses.com

1.0 Executive Summary

The proposed Walton Fire Station project site consists of 6.54 +/- acres, located on the north side of Highway 98, and east of Serenoa Road in Santa Rosa Beach, Walton County, Florida. The site is in Section 9, Township 3S, Range 18, and the approximate central coordinates are 30°20'8.451" N, 86°03'25.121" W. Please see **Figure 1 – Project Location Map.**

On October 31st, 2023, Icarus Ecological Services (Icarus) performed an onsite jurisdictional wetland delineation consistent with the Florida Wetlands Delineation Manual and criteria established under Chapter 62-340, F.A.C., to determine if any wetlands are located within the site, and if so to delineate the landward extent of state jurisdiction. It is our professional opinion that approximately 1.9 +/- acres of altered wetlands and 0.65 +/- high quality wetlands occur onsite per the United States Army Corps of Engineers (USACE) Regional General Permit SAJ – 86 and the Florida Department of Environmental Protection (FDEP) Ecosystem Management Agreement 1 definitions.

1.1 EXISTING SITE CONDITIONS

The proposed site is located within parcel 09-3S-18-16000-001-0000, owned by The St. Joe Company, and Florida Power and Light powerline easement parcel 09-3S-18-16000-001-0020. This site also occurs within the United States Army Corps of Engineers (USACE) Regional General Permit (RGP) SAJ – 86 and the Florida Department of Environmental Protection (FDEP) Ecosystem Management Agreement (EMA) 1.

The project site is currently undeveloped and is zoned as Timberland. The southern, linear portion of the site runs through both an unaltered cypress swamp and a dense hydric pine flatwoods planted in slash pine. The northern portion of the site contains prominent beds and rows and is planted in young slash pine. The site is almost surrounded by undeveloped land, with Highway 98 to the south and a cell phone tower to the east. An existing logging road and powerline easement run through the southern, linear portion of the site.

1.2 Elevations and Hydrology

The topography of the site is relatively flat, with elevations ranging from +39 ft. to +44ft. The topography slightly slopes down from both the north and south to the Cypress swamp community located in the

southern, linear portion of the site. A Topographic map is included as **Figure 6**.

1.3 Soils

The Soil Survey of Walton County, Florida (U.S.D.A., Soil Conservation Service, 2013) indicates the following soil types within the study site. An NRCS soils maps is included as **Figure 7**.

Leon sand, 0 to 2 percent slopes (21): A poorly drained flatwoods soil with smooth to convex slope from 0-2 percent. The surface layer is very dark gray sand about 9 inches thick. The subsurface layer is dark gray sand to a depth of about 18 inches. The water table ranges from between 10 to 40 inches below surface for more than 9 months per year and sits at less than 10 inches below surface for between 1 and 4 months of the year for most years. This soil has limited value for cultivation of crops due to the high water table and poor soil quality.

Rutledge fine sand, 0 to 2 percent slopes (27): A very poorly drained soil on level or slightly depressional areas along drainageways. Typically, the surface layer consists of 13 inches of black sand followed by 9 inches of very dark gray sand. Rutledge sand has a water table at or near the surface for 4 to 6 months during most years and is ponded for 4 to 6 months annually. This soil type tends to reflect wetland conditions.

Mandarin sand, 0 to 2 percent slopes (50): This somewhat poorly drained soil is on rising knolls of mesic uplands. Slopes are 0 to 2 percent. Typically, the surface layer is light sand throughout. This soil is created from sandy marine deposits. Mandarin has a water table at a depth of 18 to 42 inches throughout the year with no flooding or ponding. This soil type tends to occur in mesic to xeric uplands along marine terraces and is a non-hydric soil.

Hurricane sand, 0 to 5 percent slopes (57): A somewhat poorly drained soil that occurs on flats and rises on marine terraces. Typically, the surface layer is sand, approximately 55 inches thick. The depth to water table ranged from between 24 to 42 inches below surface. This soil type tends to reflect upland conditions and is farmland of local importance.

Pamlico Muck (64): A very poorly drained soil commonly located in depressional areas. The water table sits directly at the ground surface and is frequently ponded. The surface layer tends to consist of muck,

followed by sand. This is a hydric soil and is commonly associated with wetlands.

1.4 Vegetative Community Types

The upland and wetlands within the study site can be characterized by 7 generalized communities per *Florida Land Use Cover and Forms Classification System* [(FLUCCS) Florida Department of Transportation (FDOT), State Topographic Bureau, Thematic Mapping Section, 1999)]. A map detailing the consistency of the onsite habitat is included with this report (**Figure 3**).

Upland:

Coniferous Plantation (FLUCCS 441)-

This community's canopy consists of planted slash pine (*Pinus elliottii*) and large black titi (*Cliftonia monophylla*). The shrub and groundcover layers consist of young, planted slash pine (*Pinus elliottii*), swamp titi (*Cyrilla racemiflora*), black titi (*Cliftonia monophylla*), gallberry (*Ilex glabra*), broomsedge bluestem (*Andropogon virginicus*), St. Andrew's cross (*Hypericum hypericoides*), bracken fern (*Pteridium aquilinum*), saw palmetto (*Serenoa repens*), and reindeer moss (*Cladonia sp.*).

Roads and ROW (FLUCCS 814)-

The land use consists of an existing dirt logging road that bisects the southern, linear portion of the project site, and the Highway 98 Right of Way.

Powerline (FLUCCS 832)-

This land use is the upland portion of the powerline easement owned by Florida Power and Light. Plant species found in this community include saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), bracken fern (*Pteridum aquilinum*), blazing star (*Liatris sp.*), and broomsedge bluestem (*Andropogon virginicus*).

Altered Wetland:

Coniferous Plantation – Hydric (FLUCCS 441H)

This community is a wetland that has been altered due to silviculture activities. The canopy consists of planted slash pine (*Pinus elliottii*). The shrub and groundcover layers consist of young, planted slash pine (*Pinus elliottii*), black titi (*Clfftonia monophylla*), peelbark St. John's wort (*Hypericum fasciculatum*), yellow-eyed grasses (*Xyris spp.*), and broomsedge bluestem (*Andropogon virginicus*). Various species of greenbrier (*Smilax spp.*) were also present.

Powerline Hydric (FLUCCS 832H)-

This land use is the wetland portion of the powerline easement owned by Florida Power and Light. Plant species found in this community include peelbark St. Johns wort (*Hypercium fasciculatum*), Asiatic pennywort (*Centella asiatica*), tall swamp panic grass (*Dichanthellium scabriusculum*), dogfennel (*Eupatorium capillifolium*), orange milkwort (*Polygala lutea*), yellow-eyed grass (*Xyris sp.*), and beaksedge (*Rhynchospora sp.*).

High Quality Wetland:

Cypress (FLUCCS 621)-

This community is made up of predominantly pond cypress (*Taxodium ascendens*). Other plants species that are present include tupelo (*Nyssa sp.*), black titi (*Cliftonia monophylla*), bay (Magnolia virginiana), and a few naturally occurring slash pine (*Pinus elliottii*).

Mixed Forested Wetlands (FLUCCS 630)-

This community has a canopy that consists of black titi (*Cliftonia monophylla*), bay (*Magnolia virginiana*), and sparse slash pine (*Pinus elliottii*). Shrub and groundcover species include black titi (*Cliftonia monophylla*), and shining fetterbush (Lyonia lucida). A few species of greenbrier (*Smilax sp.*) were also present.

2.0 JURISDICTIONAL WETLAND DELINEATION

Jurisdictional wetlands were delineated onsite per the State of Florida methodology prescribed in Chapter 62-340, F.A.C. – See attached Wetland Delineation map (**Figure 4**), FEMA Floodzone map (**Figure 5**) and Topographic map (**Figure 6**). It was found that 1.9 +/- acres of altered wetland, 0.65 +/- acres of high quality wetlands, and 3.99 +/- acres of upland occur on this site per the United States Army Corps of Engineers (USACE) Regional General Permit SAJ – 86 and the Florida Department of Environmental Protection (FDEP) Ecosystem Management Agreement 1 definitions.

3.0 LISTED SPECIES REVIEW

3.1 Listed Wildlife Species in Vicinity

Icarus Ecological Service ecologists conducted a preliminary overview and literature review for listed plant

and animal species that could potentially occur within the vicinity of the project area. A review of sensitive species that could potentially occur in the area, according to U.S. Fish and Wildlife Service's Information for Planning and Consultation Report (USFWS IPaC), was completed in October 2023. Currently, there are 6 listed fauna species that could potentially occur within the project area or vicinity, as outlined below.

Table 1. **Potential Listed Species in Geographic Area**

Scientific Name	Name	Status	Comments
Laterallus jamaicensis	Eastern Black Rail	FT	Species not observed onsite
Macrochelys temminckii	Alligator Snapping Turtle	PT	Species not observed onsite
Drymarchon couperi	Eastern Indigo Snake	FT	Species not observed onsite
Gopherus polyphemus	Gopher Tortoise	ST	Species not observed onsite
Ambystoma bishopi	Reticulated Flatwoods Salamander	FE	Species not observed onsite
Danaus plexippus	Monarch Butterfly	C	Species not observed onsite

Abbreviations- FT: Federally Threatened, FE: Federally Endangered, ST: State Threatened, C: Candidate for Federal Listing, PT: Proposed Threatened.

- **Eastern Black Rail, (*Laterallus jamaicensis*), Federally Threatened**

A tiny marsh bird, no bigger than a sparrow. Extremely secretive, it walks or runs through the marsh, and is rarely seen in flight. In very dense cover, it may get around by using the runways made by mice. The distinctive short song of the Black Rail is given mostly late at night, so the bird may go unnoticed in some areas. Fairly common at a few coastal points, its status inland in the east is rather mysterious. **Suitable habitat not present; project will have no effect on this species.**

- **Alligator Snapping Turtle (*Macrochelys temminckii*), Potentially Threatened**

The alligator snapping turtle is the largest freshwater turtle species in North America. Their preferred habitats include fresh and brackish areas of stagnant or slow-moving water, rivers, lakes and backwater swamps within the panhandle and Big Bend region of Florida. Alligator snapping turtles nest in sandy soils adjacent to their home waters. A large wetland area exists within the project area; however, this species was not observed onsite. **Suitable habitat present; project is not likely to adversely affect this species.**

- **Eastern Indigo Snake, (*Drymarchon couperi*), Federally Threatened**

The indigo snake occupies a wide variety of habitats in the Florida Panhandle, including scrub, mixed hardwood hammocks and disturbed uplands. Upland occurrences of rare Eastern indigo snakes are often in association with commensal gopher tortoise burrows, which are used for forage and refuge from both cold weather and mid-day Florida heat. The absence of gopher tortoise burrows onsite indicate it is unlikely that the species exists in the project area. The project is not expected to impact this species, and if they are present, indigo snakes are likely to move to adjacent lands, avoiding any direct impacts. **Suitable habitat not present; project will have no effect on this species.**

- **Gopher Tortoise, (*Gopherus polyphemus*), State Threatened**

Gopher tortoises typically occur in areas of well drained, sandy soils, with pine or mixed pine/turkey oak canopy and open understory with a grass, herbaceous and non-woody forb groundcover and adequate sunlight penetration for nesting areas (USFWS GT). No active, inactive, or abandoned gopher tortoise burrows were located onsite during pedestrian transect surveys on October 31, 2023. Surveys were conducted by a professional ecologists surveying transects through all areas of suitable habitat. **Limited suitable habitat present; project is not likely to adversely affect.**

- **Reticulated Flatwood Salamander, (*Ambystoma bishopi*), Federally Endangered**

Reticulated flatwoods salamanders are moderately-sized, slender salamanders with relatively short, pointed snouts and stout tails. Their heads are small and approximately equal in width to the neck and shoulder region. They weigh 1-12g. Their bodies are black to chocolate-black with fine, irregular, light gray lines or specks that form a reticulate or cross-banded pattern across the back in adults and a scattered and "lichen-like" pattern in recently metamorphosed individuals. Melanistic, uniformly black individuals have been reported. The underside is dark gray to black with a scattering of gray spots or flecks**. Figure 8 – Bald Eagle Nest and Flatwood Salamander Distance Map** shows that the nearest potential flatwood salamander pond is located 2.84 miles northeast of the project site. **Suitable habitat not present; project will have no effect on this species.**

- **Monarch Butterfly, (*Danaus plexippus*), Candidate**

Adult monarch butterflies have bright orange wings surrounded by a black border and veins. Adult Monarchs feed on the nectar of many flowering plants but lay their eggs primarily on the leaves of milkweed plants in the genus Asclepias. As no milkweed was identified during surveys, no suitable

monarch habitat is known to exist on site. **Suitable habitat not present; project will have no effect on this species.**

- **Bald Eagle, (*Haliaeetus leucocephalus*), Federally Protected**

Florida is home to one of the densest populations of nesting bald eagles in the continental United States. Bald eagles are no longer considered an imperiled species, having been removed from the Endangered Species List in August of 2007, but the species is still protected by the state and federal governments via Florida Administrative Code 68A-16.002, Migratory Bird Treaty Act and BGEPA (Bald and Golden Eagle Protection Act), all of which prohibit take or disturbance of bald eagles. Bald eagles typically build large nests in mature canopy trees (typically slash or longleaf pine or cypress) near the water's edge, from which they have an unobstructed view of the surroundings.

No eagle nests were found onsite, and Florida Fish and Wildlife Conservation Commission's Eagle Nest Dataset shows the nearest nest is 2.27 miles southeast of the site. Please see **Figure 8 – Bald Eagle Nest and Flatwood Salamander Distance Map**. **Species not observed onsite; project will have no effect on this species.**

5.0 REGULATORY CONSIDERATIONS

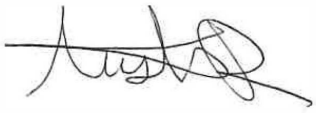
Jurisdictional wetlands occur on site, and if it is determined that wetland impacts will be necessary, then a State and Federal regulatory authorization may be required. Per the Ecosystem Management Agreement between FDEP and The St. Joe Company, all projects requiring Environmental Resource Permit authorization within the EMA boundary will include St. Joe as the applicant or co-applicant.

Local Codes

The site contains jurisdictional wetlands that will require a 25-foot buffer, per Walton County Land Development Code (LDC) Chapter 4, section 4.01.03. This site also occurs within RGP SAJ – 86/EMA 1, which requires a 30-foot minimum, 50-foot average buffer for high quality wetlands. Portions of the site occur within the US 98/331 Scenic corridor. We recommend a check with the Walton County LDC's to see how the scenic corridor, RGP SAJ – 86/EMA 1, and any other ordinances may affect the property and future development plans.

We thank you for the opportunity to provide environmental services for your project. If you have any questions regarding this report, please call Austin Roberts at 603-204-4095.

Sincerely,



Austin Roberts
Project Ecologist

Figure 1 - Project Location Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida

0 0.250.5 1 1.5 2 2.5 Miles

ICARUS
ecological services inc.

Maps Prepared By:
Icarus Ecological Services, Inc.
7437 W. Hwy 388
Panama City Beach, FL 32413
Project #: 23-171

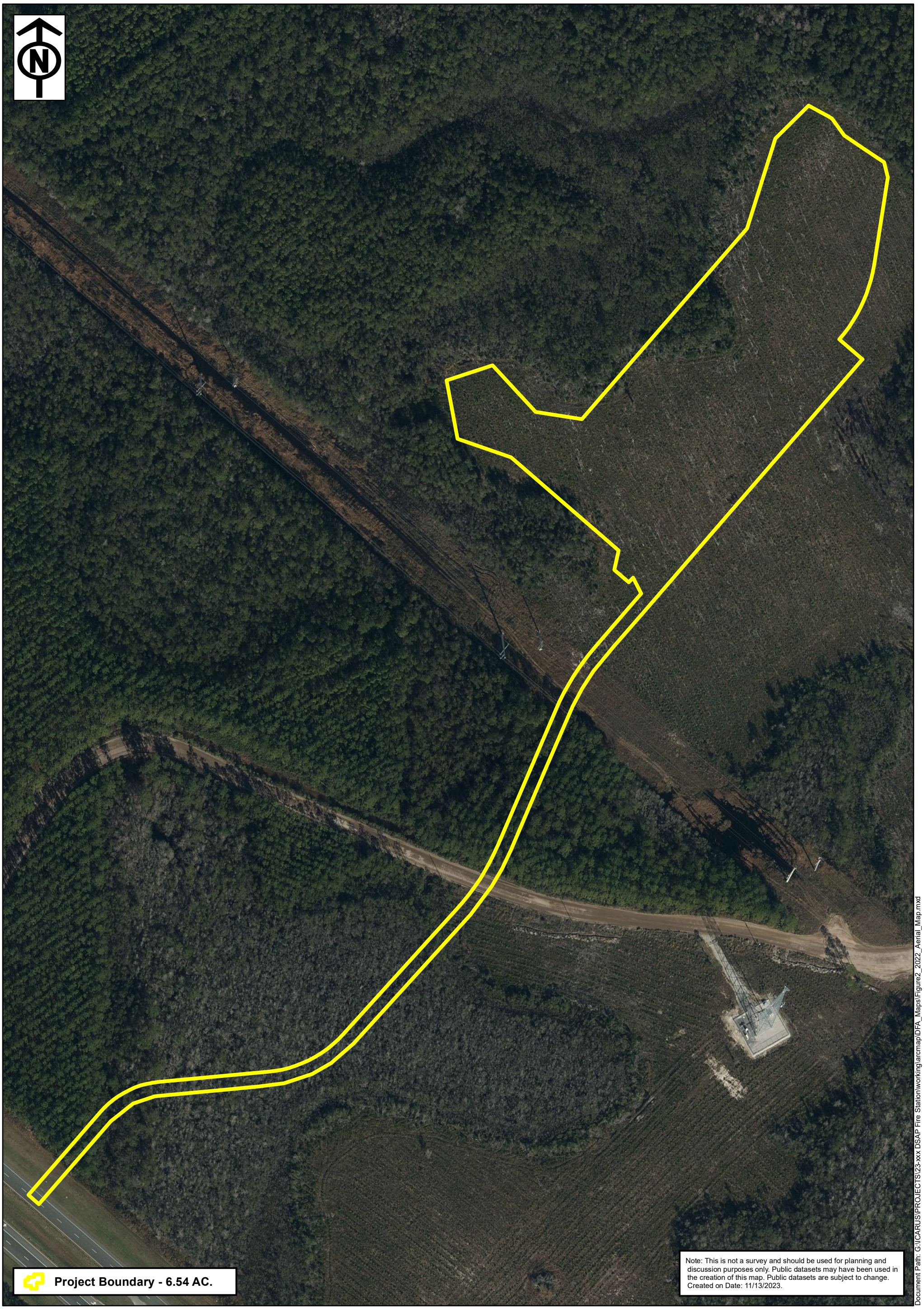


Figure 2 - 2022 Aerial Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 75 150 300 450 600 Feet

1 inch = 150 feet

ICARUS
ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

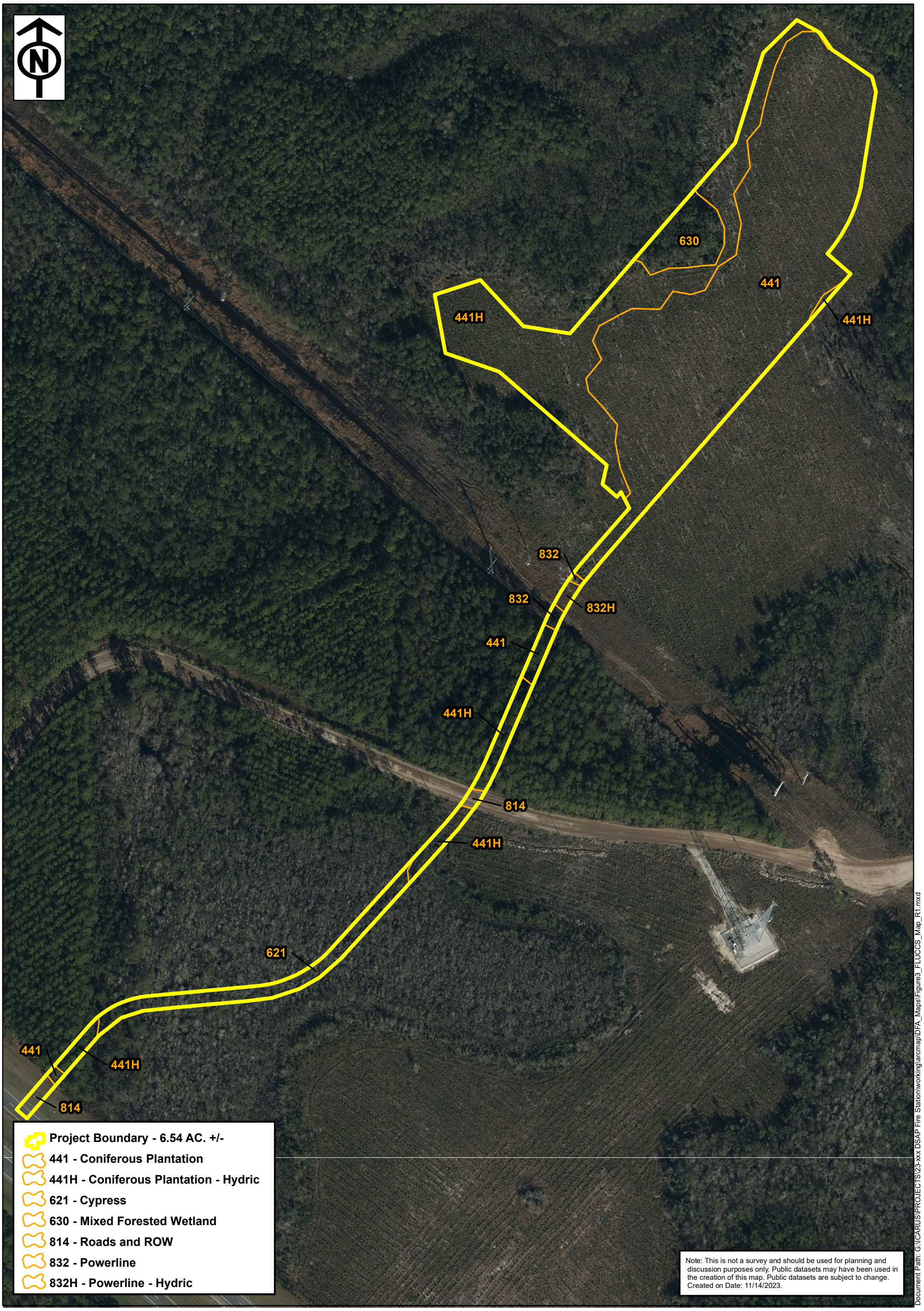


Figure 3 - FLUCCS Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 75 150 300 450 600 Feet

1 inch = 150 feet

ICARUS
ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

Project Boundary - 6.54 AC.
High Quality Wetland - 0.65 AC.
Altered Wetland - 1.9 AC.
Upland - 3.99 AC.

Note: This is not a survey and should be used for planning and discussion purposes only. Public datasets may have been used in the creation of this map. Public datasets are subject to change. Created on Date: 11/13/2023.

Document Path: G:\ICARUS\PROJECTS\23-xxx DSAP Fire Station\working\arcmap\DFA_Maps\Figure4_Wetland_Delineation_Map.mxd

Figure 4 - Wetland Delineation Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 75 150 300 450 600 Feet

1 inch = 150 feet

ICARUS
ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

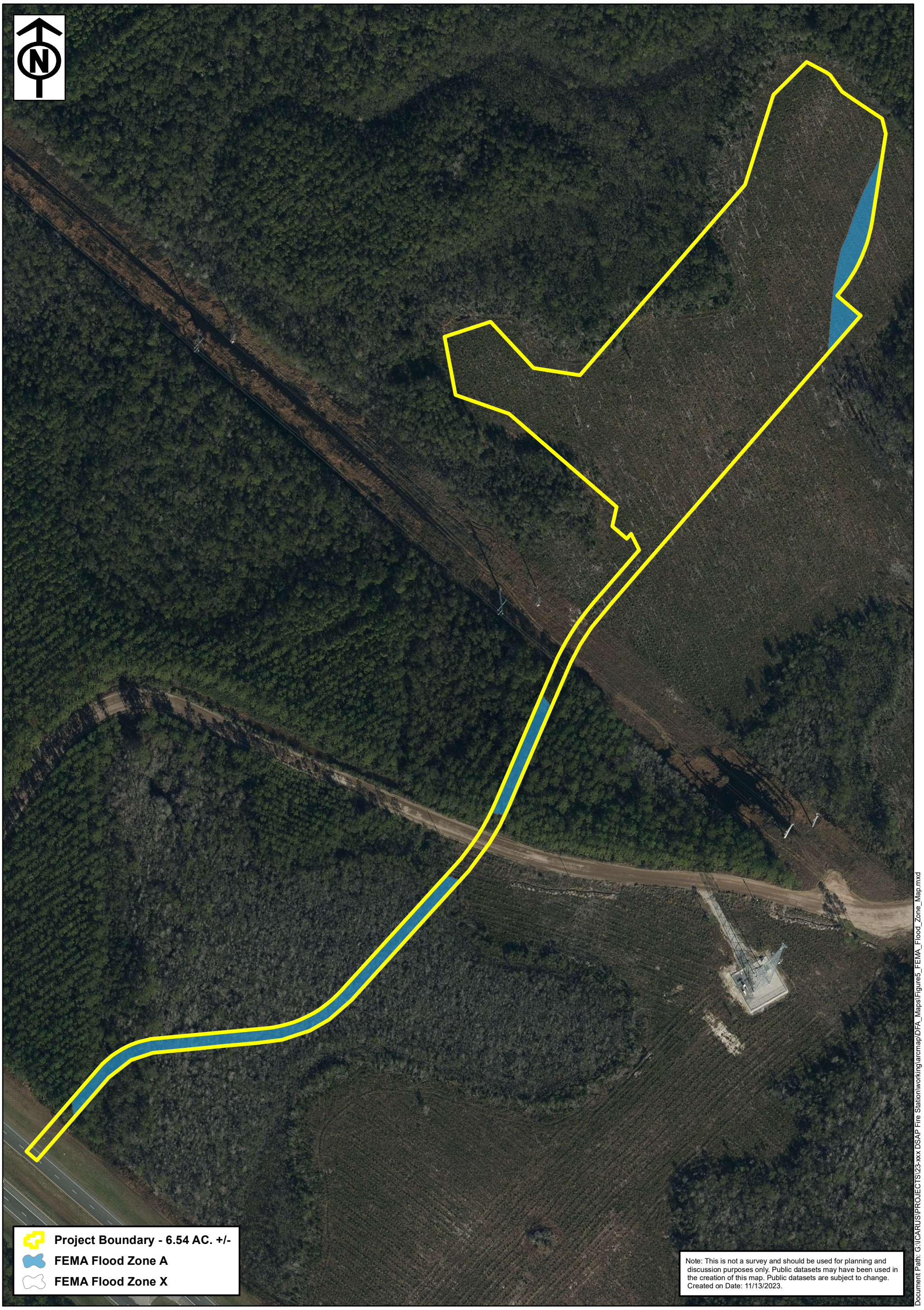


Figure 5 - FEMA Flood Zone Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 100 200 400 600 800 Feet

1 inch = 150 feet

ICARUS
ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

Project Boundary - 6.54 AC.

1FT Contours (Lidar Derived NWFWMD 2018)

Note: This is not a survey and should be used for planning and discussion purposes only. Public datasets may have been used in the creation of this map. Public datasets are subject to change. Created on Date: 11/15/2023.

Document Path: G:\ICARUS\PROJECTS\23-xxx DSAP Fire Station\working\arcmap\DFA_Maps\Figure6_Topo_Map_R1.mxd

Figure 6 - Topographic Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 75 150 300 450 600 Feet

1 inch = 150 feet

ICARUS ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

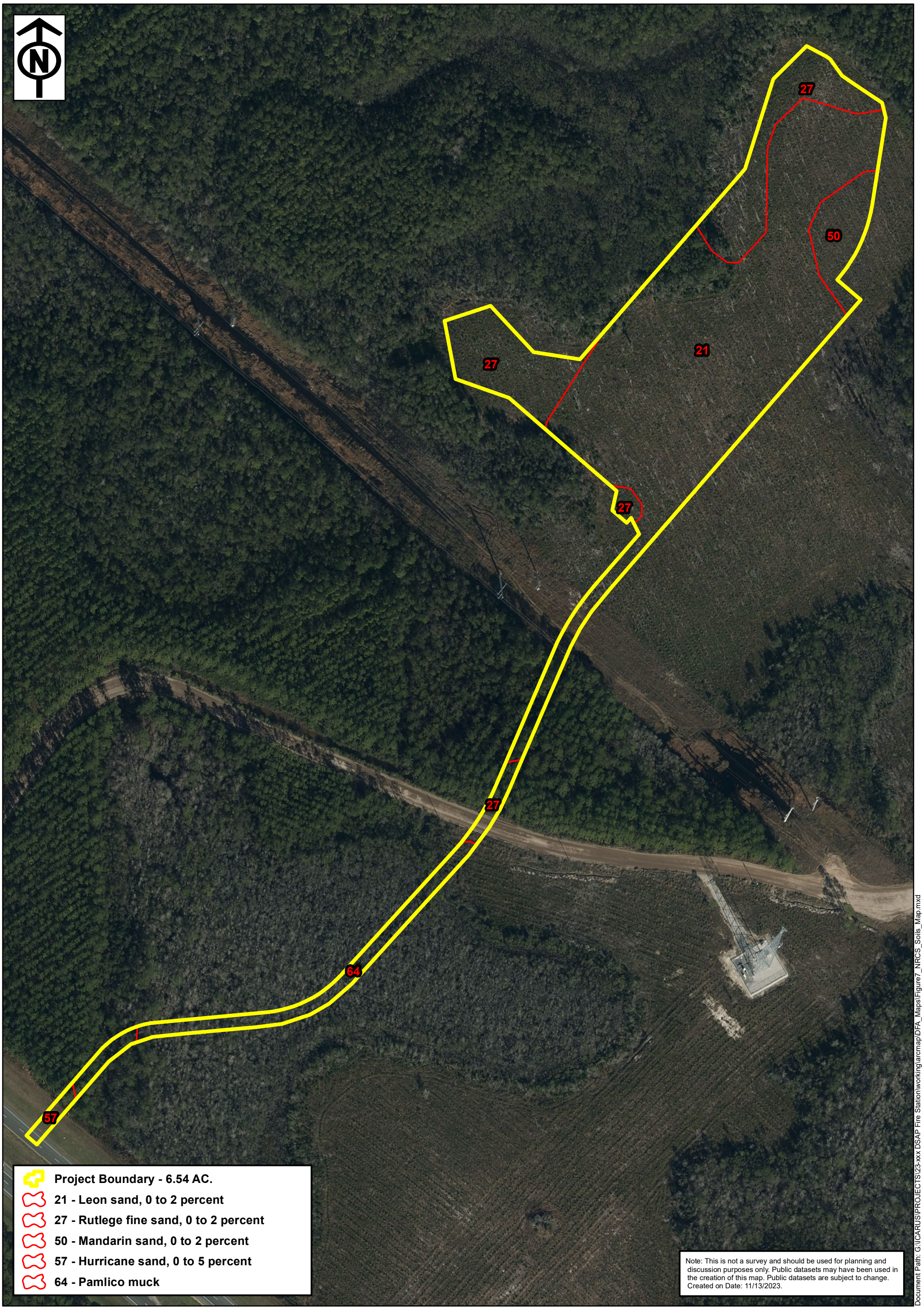


Figure 7 - NRCS Soils Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: 2022 RGB (FDOT)

0 75 150 300 450 600 Feet

1 inch = 150 feet

ICARUS
ecological services inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
8639 Ranchwood Lane
St. Augustine, FL 32092
904.307.9911

Project #: 23-171

Figure 8 - Bald Eagle Nest and Flatwood Salamander Distance Map

Walton DSAP Fire Station
TRS: T3S, R18W Sec. 9
County: Walton
State: Florida
Imagery: ESRI World Imagery (2020)

0 1,500 3,000 6,000 9,000 12,000 Feet

1 inch = 3,000 feet

N

ICARUS ecological services Inc.
Maps Prepared By:
Icarus Ecological Services, Inc.
7437 W. Hwy 388
Panama City Beach, FL 32413
Project #: 23-171