



ecospatial ANALYSTS

December 7, 2024

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Project Address: MILDRED CT, COCOA, FL 32927
Project Area 0.18 acres + 1.25-acres
Brevard Co Parcel ID: 23-35-35-02-*-A, 23-35-35-00-77
Tax Accounts: 2322697; 2314528
Parcel Description: VERONICA ESTATES PHASE ONE TRACT A FUTURE DEVELOPMENT and S 1/2 OF SW 1/4 OF NE 1/4 OF SW 1/4 OF NE 1/4 AS DES IN ORB 1622 PG 243

Subject: Environmental Report for Wetlands and Protected Species

Ecospatial Analysts, Inc. conducted an environmental assessment and wetland determination on the above-referenced properties on October 24, 2024. The property is two vacant parcels located in Cocoa, Brevard Co., Florida (Figure 1 and 2). The parcels were bounded by Mildred Ct to the east, vacant land that is designated as a Conservation Easement owned by Brevard Co. and single-family residences to the north and south (Figure 3).

PURPOSE The purpose of the environmental field site review was to identify wetlands and rare, threatened or endangered species habitat that may influence proposed site development.

LANDCOVER Landcover (Figure 4) was mapped using the Florida Land Use Cover and Forms Classification System (FLUCFCS) (1999) within the Brevard County Parcel boundary as obtained from the Florida Department of Revenue Geographic Information System (GIS) data. The landcover within the property consisted of two landcover types (Table 1).

Table 1. Land cover type and approximate acreage found with the parcel.

Landcover Description (FLUCFCS Code)	Area (acres)
Hardwood - Coniferous Mixed (434)	0.687
Wetland Forested Mixed (630)	0.753
Total Approximate Area *	1.440

* total area from Brevard County GIS Parcel data

Uplands on the parcel consisted of ± 0.687 -acres of Hardwood - Coniferous Mixed (FLUCFCS 434). The Hardwood - Coniferous Mixed was dominated by a scattered canopy of pines (*Pinus* spp.), live oak (*Quercus virginiana*), laurel oaks (*Q. laurifolia*), with a midstory comprised mostly of saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), rusty staggerbush (*L. ferruginea*), muscadine (*Vitis*

rotundifolia) and greenbriar (*Smilax* spp.). Patches of ground cover included bushy bluestem (*Andropogon glomeratus*), blackberry (*Rhus* spp.) and other common herbs and vines.

Wetlands included Wetland Forested Mixed (FLUCFCS 630). The forested wetlands were dominated by slash pine, laurel oaks, red maple (*Acer rubrum*), loblolly bay (*Gordonia lasianthus*), Carolina ash (*Fraxinus caroliniana*), hackberry (*Celtis laevigata*), wax myrtle (*Morella cerifera*) and groundsel tree (*Baccharis halimifolia*). Groundcovers consisted of blackberry (*Rhus* spp.), cinnamon fern (*Osmundastrum cinnamomeum*), Virginia chain fern (*Woodwardia virginica*) and swamp fern (*Telmatoblechnum serrulatum*).

Soil profiles confirmed the presence of hydric soils within the wetland area. Wetland soils were light grey colored, stripped mineral matrix along the wetland line. To the west there were locations of low topography that had a higher organic in which the surface one to two inches were grey colored, with greater than 70% of the sand grains coated with organic material. Upland soils were light grey colored, mineral with less than 30% of the grains coated in organic material.

WETLANDS The investigation concluded one jurisdictional wetland, Wetland 1 (W1; ± 0.753 -acres) (Chapter 62- 340 of the Florida Administrative Code (F.A.C.)) occurred the parcel (Figure 5). The presences of wetland vegetation, hydric soils and hydrological indicators make this wetland area jurisdictional.

The wetland flag locations represented in Figure 5 were collected in the field with a Trimble GeoXT GPS. Data were imported into a geodatabase in ArcGIS. The wetland was delineated with one line (W1-1 to W1-4) of neon orange surveyor flagging tape consecutively numbered along their boundary. For purposes of surveying, W1-1 should be tied due north to its intersection with the parcel boundary. W1-4 should be tied due south to its intersection with the parcel boundary.

PROTECTED SPECIES Most of the uplands on the site was low quality, habitat for the protected gopher tortoise (*Gopherus polyphemus*). No potentially occupied gopher tortoise (*Gopherus polyphemus*) burrows were located on the parcel (Figure 5) during the site review. Gopher tortoises are a Florida-designated threatened species and shall be afforded the protective provisions specified in Chapter 68A-27 Florida Administrative Code (F.A.C.). Burrows shall be protected by a 25-foot buffer in which no construction activity can be conducted or the relocation of the tortoises can be permitted through Florida Fish and Wildlife Conservation Commission. The land owner is responsible for any and all violations of Chapter 68A-27.

The parcel is also potential habitat for the Eastern indigo snake (*Drymarchon couperi*). The Eastern indigo snake is protected as a Threatened species by the Federal Endangered Species Act and as a Florida-designated threatened species by (Chapter 68A-27 F.A.C.). No Eastern indigo snakes were seen on the parcel. Protection of the tortoises' burrows will protect the Eastern indigo snakes. If Eastern indigo snakes are seen on the parcel, they should be left alone.

The trees on the parcel may be used by birds. Raptors, or birds of prey, and the majority of other birds in the United States are protected by the Migratory Bird Treaty Act, 16 U.S.C. 703 (MBTA). If these birds are found in the area they should also be left alone.

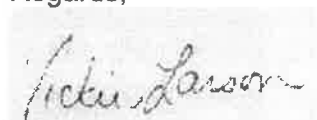
SOILS Three soil series occurred within the property (Figure 6); Immokalee sand, 0 to 2 percent slopes, Basinger sand, 0 to 2 percent slopes and Ancloste sand. The soil characteristics derived from soil profiles were somewhat consistent to the soil descriptions within the Soil Survey of Brevard Co. (<http://websoilsurvey.nrcs.usda.gov/>); however, the boundaries of the soils series edges were not consistent. Only the west a portion of the Bassinger sand on these this lot showed hydric soil conditons.

REFERENCES

Florida Land Use, Cover and Forms Classification System (FLUCFCS). January 1999, Third Edition. Department of Transportation Surveying and Mapping Section. 95 pp.).

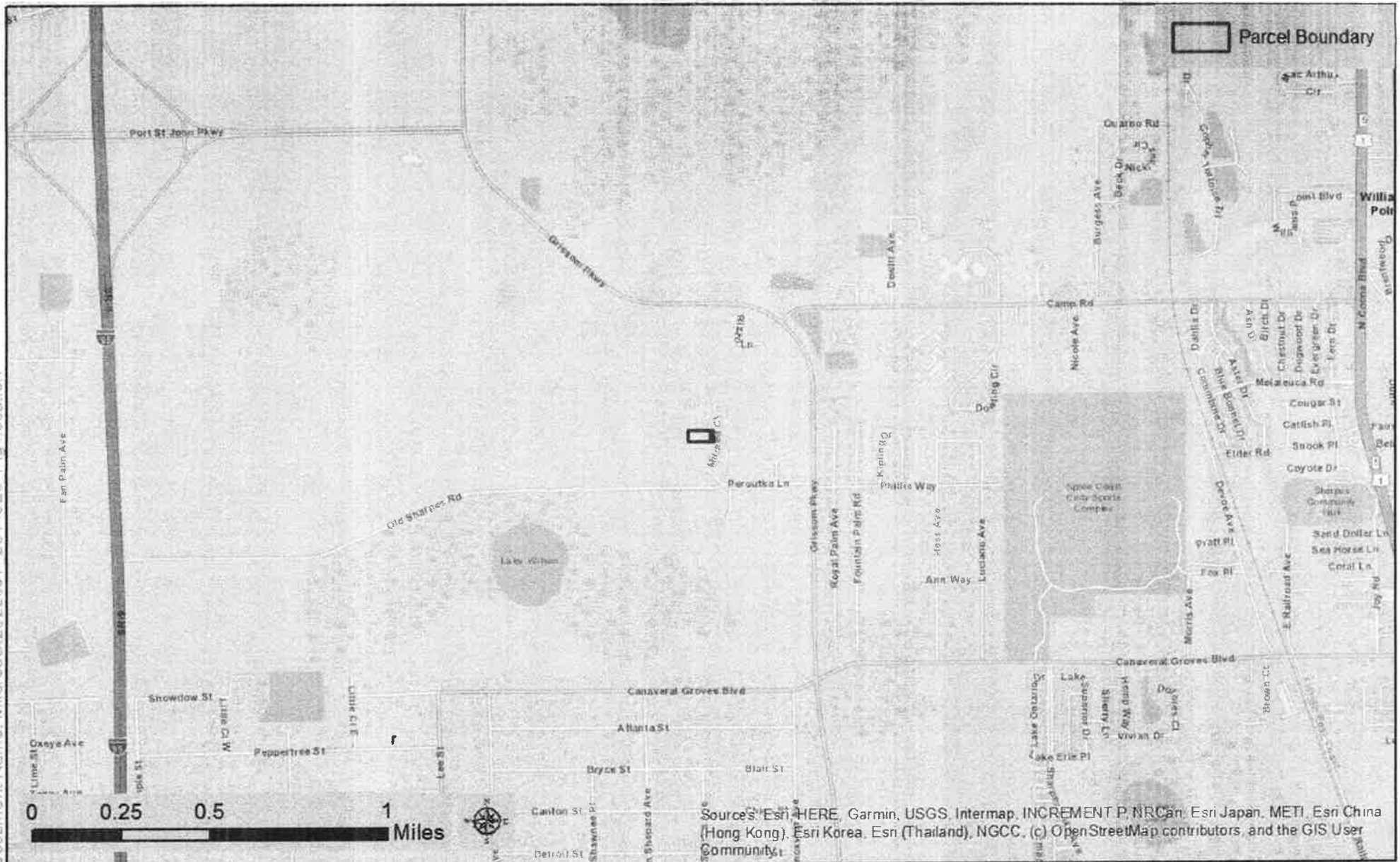
Please contact me, by email to vlarson@ecospatialanalysts.com or phone to 321.403.5147, if you have any questions regarding the information provided or other environmental questions related to this parcel.

Regards,



(electronically submitted)

Vickie L. Larson
President

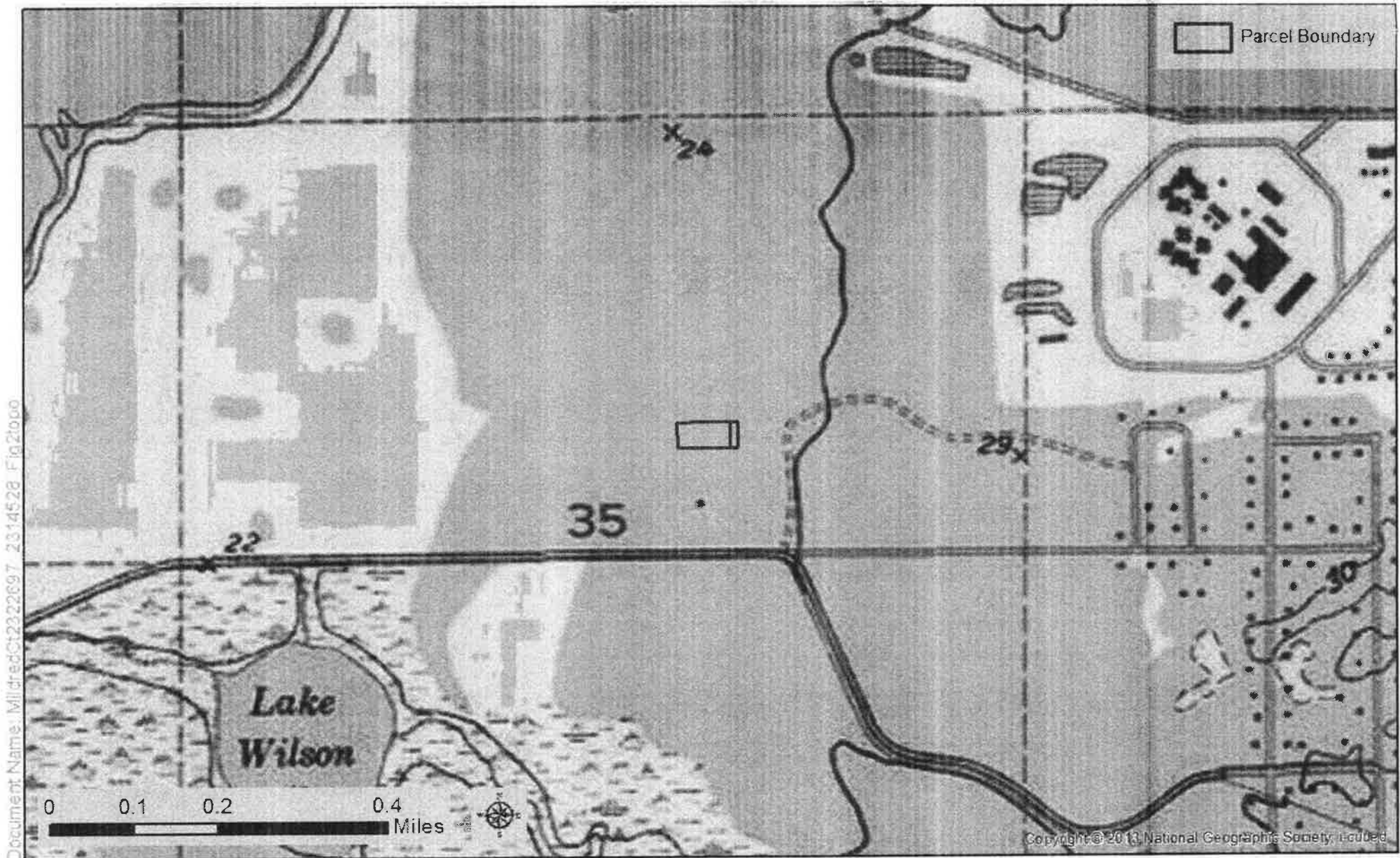


Date: 12/8/2024

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ANALYSTS
881 Barton Blvd Suite 145
Rockledge, FL 32955
321.403.5147

Title: Location (1.43 acre)
Address: Mildred Ct, Cocoa, FL 32927
Parcel ID: 23-35-35-02-* -A, 23-35-35-00-77
Source: ESRI Streets
Notes: Locations approximate, Reported areas include both parcels.
Site visit 10/24/24

Figure
No.
1



Date: 12/8/2024



881 Barton Blvd Suite 145
Rockledge, FL 32955
321.403.5147

Title: USGS 7.5 minute quad Topography (1.43 acre)

Address: Mildred Ct, Cocoa, FL 32927

Parcel ID: 23-35-35-02-*-A, 23-35-35-00-77

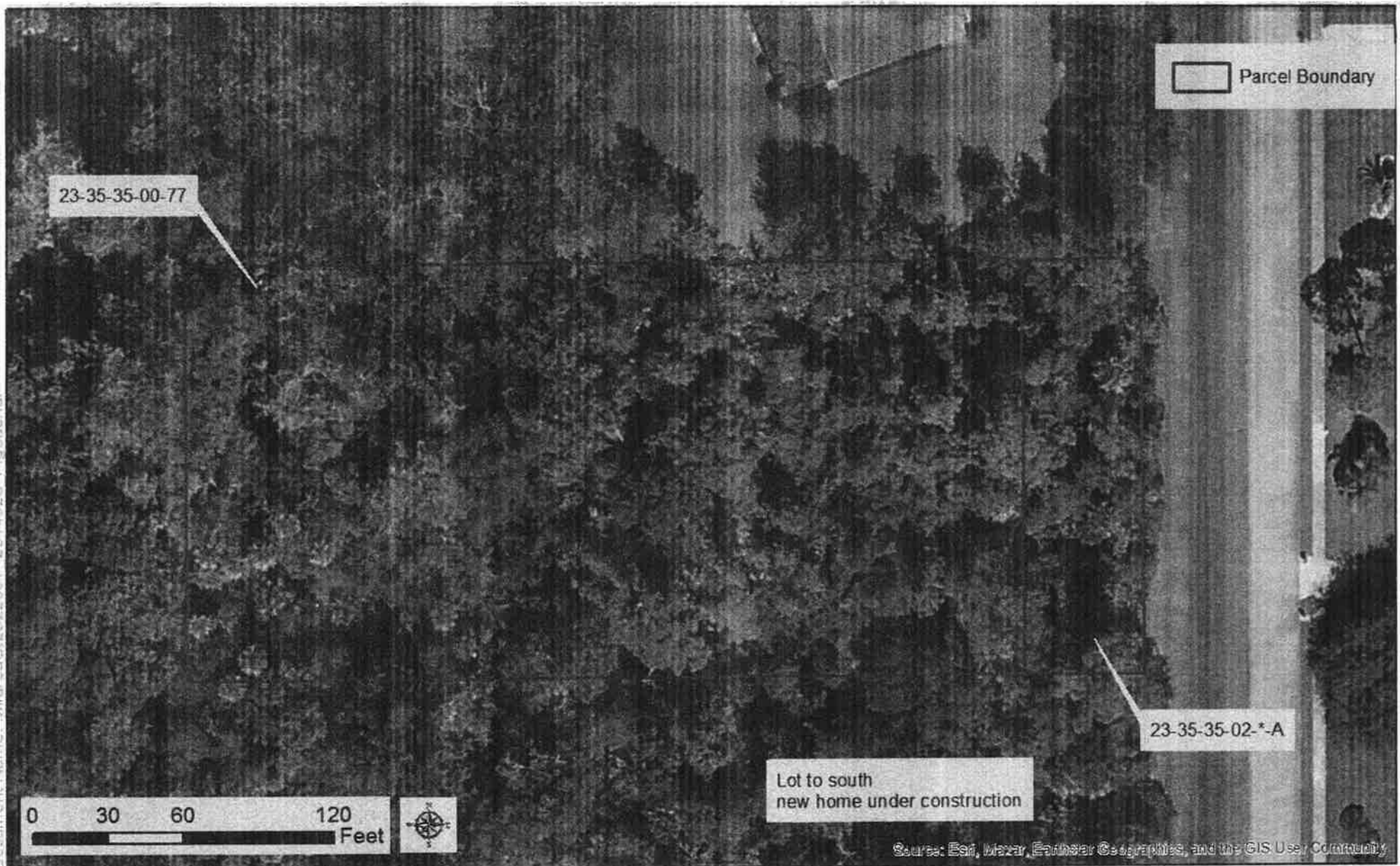
Source: ESRI USA Topography

Notes: Locations approximate, Reported areas include both parcels.

Site visit 10/24/24

Figure
No.

2



Date: 12/8/2024



881 Barton Blvd Suite 145
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Title: Aerial Imagery (1.43 acre)
Address: Mildred Ct, Cocoa, FL 32927
Parcel ID: 23-35-35-02-*A, 23-35-35-00-77
Source: ESRI Basemap Imagery
Notes: Locations approximate, Reported areas include both parcels.
Site visit 10/24/24

Figure
No.

3



Date 12/8/2024



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881 Barton Blvd Suite 145
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Title: Landcover (1.43 acre)
Address: Mildred Ct, Cocoa, FL 32927
Parcel ID: 23-35-35-02-*A, 23-35-35-00-77
Source: ESRI Basemap Imagery
Notes: Locations approximate, Reported areas include both parcels.
Site visit 10/24/24

Figure
No.

4



Date: 12/8/2024



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881 Barton Blvd Suite 145
Rockledge, FL 32955
321.403.5147

Title: Soils (1.43 acre)
Address: Mildred Ct, Cocoa, FL 32927
Parcel ID: 23-35-35-02-*A, 23-35-35-00-77
Source: ESRI Basemap Imagery
Notes: Locations approximate, Reported areas include both parcels.
Site visit 10/24/24

Figure
No.

6