



February 14, 2021

Ms. Pat Garagozlo  
KAT-CAM LLC  
3903 Postridge Trail  
Melbourne, FL 32934  
Phone: (321) 698-5702  
Email: patricia.garagozlo@gmail.com

Project Address: N. Courtenay Pkwy, Merritt Island, FL 32953  
Project Area:  $\pm 0.59$  acres  
Brevard Parcel ID: 24-36-02-00-269  
Brevard Tax ID: 2410506  
Parcel Description: PART OF W 1/2 OF NW 1/4 W OF RD AS DES IN ORB 252 PG 455

Subject: Letter of Determination for Wetlands and Protected Species for Brevard County Natural Resources Management Department

Dear Ms. Garagozlo;  
Ecospatial Analysts, Inc. conducted an environmental assessment and wetland determination on the above-referenced property ( $\pm 0.59$ -acres) on February 6, 2021. The property is a vacant parcel located in Merritt Island, Brevard Co., Florida (Figure 1). The parcel was bordered by North Courtenay Parkway to the east, vacant land to the north and west and commercial business to the south. A stormwater ditch and a utility corridor occurred between the parcel and N Courtenay Parkway. The parcel boundary is also shown on an aerial image in Figure 2 and a 7.5-minute USGS topological quad in Figure 3.

**PURPOSE** The purpose of the survey was to identify wetlands and rare, threatened and endangered species habitat that may affect parcel 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 three landcover types (Table 1) totaling an area of 0.580-acres (slightly smaller than the acreage reported by the Brevard County tax accessor's office).

Table 1. Landcover types and approximate acreages found with the parcel.

FLUCFCS Code	FLUCFCS Description	Area (acres)*
425	Live Oak and Hardwoods	0.528
743	Spoil Area (743)	0.014
510	Ditch – remanent (510)	0.038
	<b>Approximate Total</b>	<b>0.580</b>

\*GIS parcel boundary from Brevard Co does not seemed to be georeferenced accurately. Boundary has been shifted to represent field findings.

The parcel was dominated by Live Oak and HARDwoods (FLUCFCS 425;  $\pm 0.528$ ) and Spoil Areas (FLUCFCS 743;  $\pm 0.014$ ). The parcel was dominated by live oaks (*Quercus virginiana*) with some other trees, shrubs and vines which included cabbage palm (*Sabal palmetto*), Brazilian peppers (*Schinus terebinthifolia*), air potato (*Dioscorea bulbifera*), muscadine (*Vitus rotundifolia*), sparse (*Pinus elliotii*), a few saw palmettos (*Sereona repens*) and strangler fig (*Ficus aurea*).

One isolated surface water feature (Ditch FLUCFCS 510; 0.038-acres) occurred on the parcel. This feature was a remanent, upland-cut stormwater ditch which is no longer functioning as such. The ditch terminates at the south parcel boundary and offsite at the north boundary of the adjacent parcel to the north. The bottom of the ditch was dense swamp fern (*Telmatoblechnum serrulatum*).

The west edge of the ditch was a Spoil Area (FLUCFCS 743; 0.014-acres) that appeared to be soil from the ditch piled alongside.

**WETLANDS** The investigation concluded one jurisdictional surface water wetland (Chapter 62- 340 of the Florida Administrative Code (F.A.C.)) occurred on the parcel as an isolated section of an abandoned stormwater ditch (Figure 5). The ditch is considered a surface water feature that was excavated. For purposes of surveying, the boundary of the surface water was identified with seven, neon-orange surveyors flags labeled consecutively "2/6/21 ECOS W1-1" to W1-10. Wetland flags W1-1 and W1-10 should be tied due south to their intersection with the parcel boundary. The wetland boundary along the north side of the parcel should be tied at the wetland line intersection with the parcel boundary. The Ditch was flagged at the top of its bank to its north and south termination.

Soil profiling was conducted throughout the parcel to confirm the absence of hydric soils. Hydric soils that were grey colored mineral stripped matrix were identified only at the base of the Ditch. Upland soils on the parcel were light grey colored, mineral organic with less than 20% of the sand grains coated.

**SOILS** One soil series, Immokalee fine sand, occurred within the property (Figure 6). The soil characteristics derived from soil profiles were consistent to the soil descriptions for this soil within the Soil Survey of Brevard Co. (Huckle et al. 1974; [https://www.nrcs.usda.gov/Internet/FSE MANUSCRIPTS/florida/FL009/0/Brevard.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/florida/FL009/0/Brevard.pdf)). Soils on the parcel were light grey colored, mineral organic with less than 20% of the sand grains coated with organic material.

**PROTECTED SPECIES** No rare, threatened or endangered species were seen on the parcel or expected to occur there. No impacts to protected species are anticipated with developing this parcel.

## REFERENCES

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

Huckle et al. 1974, Soil Survey of Brevard County, Soil Conservation Service, U.S. Department of Agriculture, 130 pp.

USDA NRCS. 2002 Field Indicators of Hydric Soils in the United States, version 5.0. G.W. Hurt, P.M. Whited and R.F. Pringle (eds). USDA, NRCS in cooperation with the National Technical Committee for Hydric soils, Fort Worth, TX.

Please contact me if you have any questions regarding the information provided or other environmental questions related to this proposed single-family residence.

Regards,



(electronically submitted)  
Vickie L. Larson  
President



Date: 2/14/2021



**ecospatial**  
**ANALYSTS**

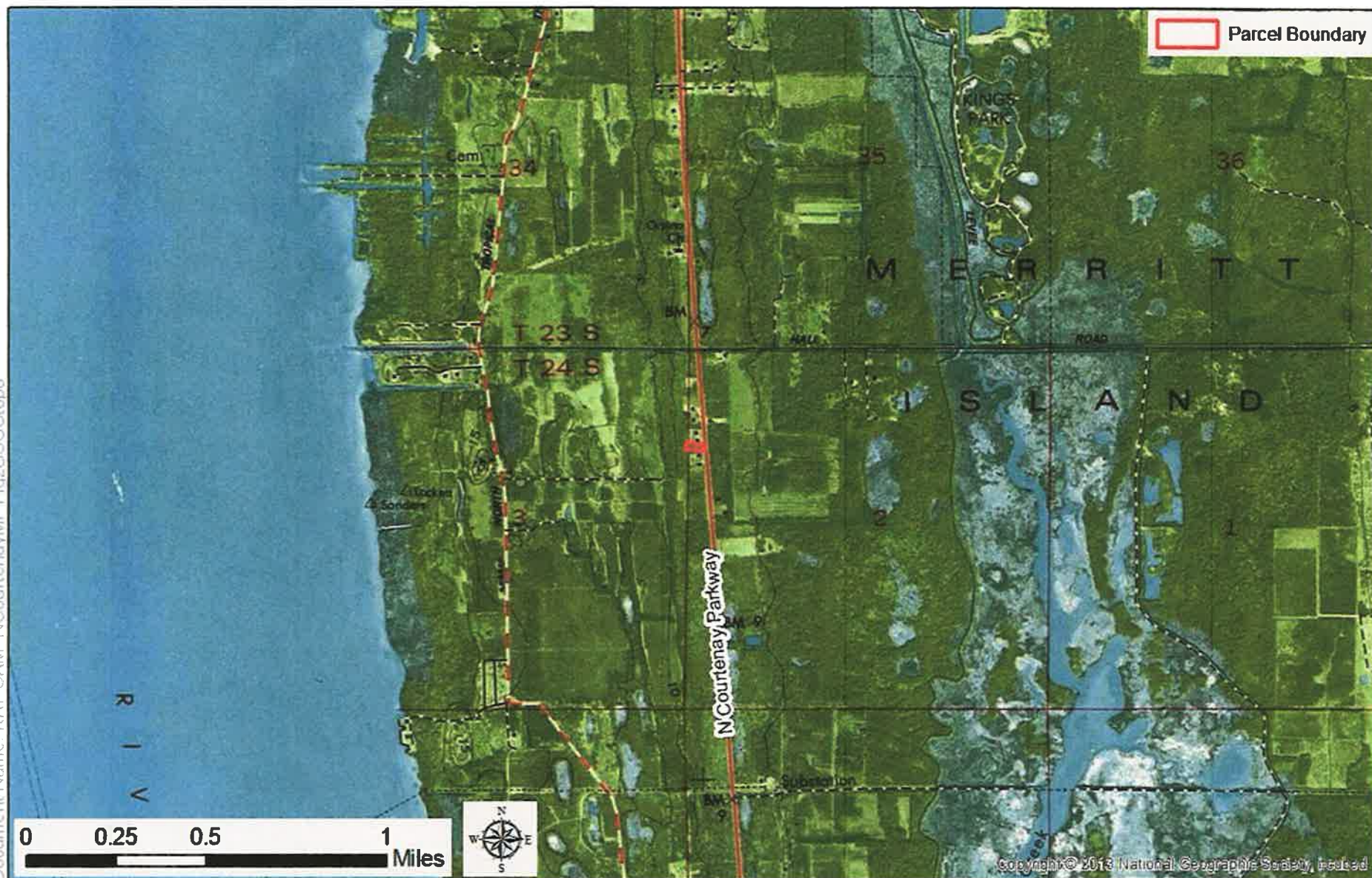
3245 N. Courtenay Pkwy Ste 37  
Merritt Island, FL 32953  
321.403.5147

**Title:** Location (0.59-acres)  
**Address:** N. Courtenay Pkwy, Merritt Island, FL 32953  
**Parcel ID:** 24-36-02-00-269  
**Tax Account:** 2410506  
**Source:** ESRI Basemap Imagery  
**Notes:** Locations approximate. Site visit 2/6/21

**Figure**  
**No.**

**1**





Date: 2/14/2021



**ecospatial**  
**ANALYSTS**

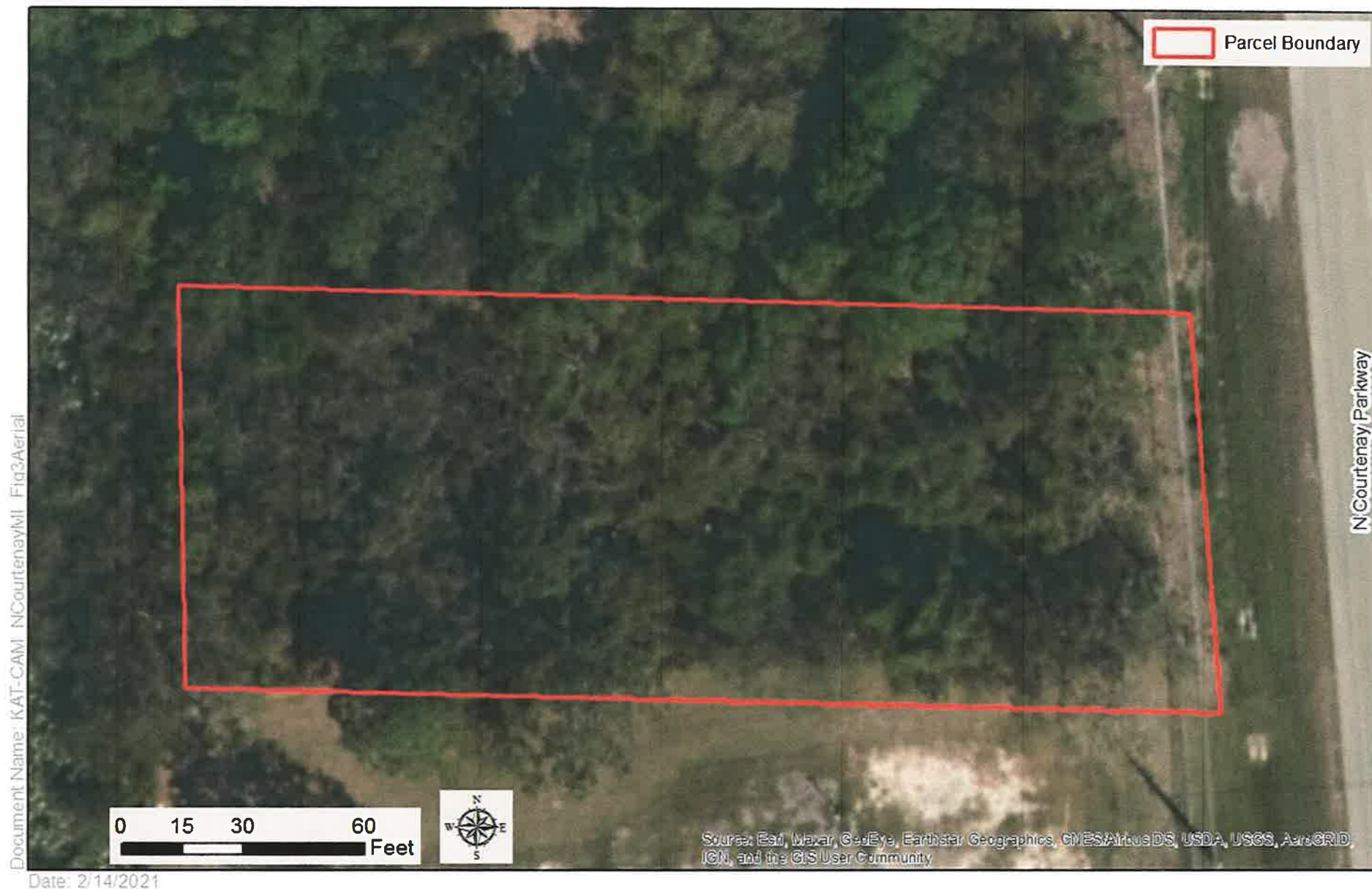
3245 N. Courtenay Pkwy Ste 37  
Merritt Island, FL 32953  
321.403.5147

Title: USGS 7.5 minute Quad Topography (0.59-acres)  
Address: N. Courtenay Pkwy, Merritt Island, FL 32953  
Parcel ID: 24-36-02-00-269  
Tax Account: 2410506  
Source: ESRI Basemap Imagery  
Notes: Locations approximate. Site visit 2/6/21

Figure  
No.

2



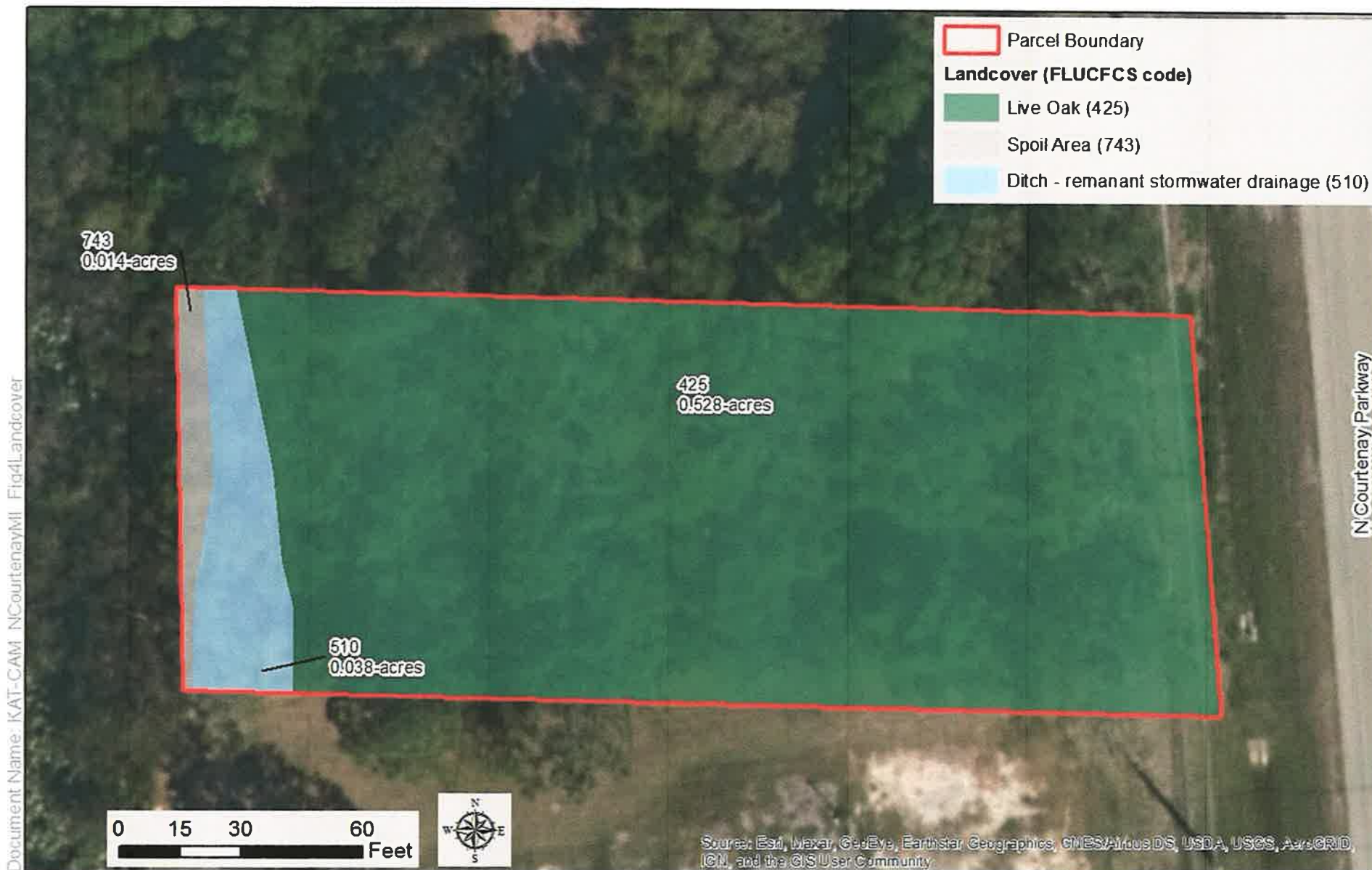


  
 3245 N. Courtenay Pkwy Ste 37  
 Merritt Island, FL 32953  
 321.403.5147

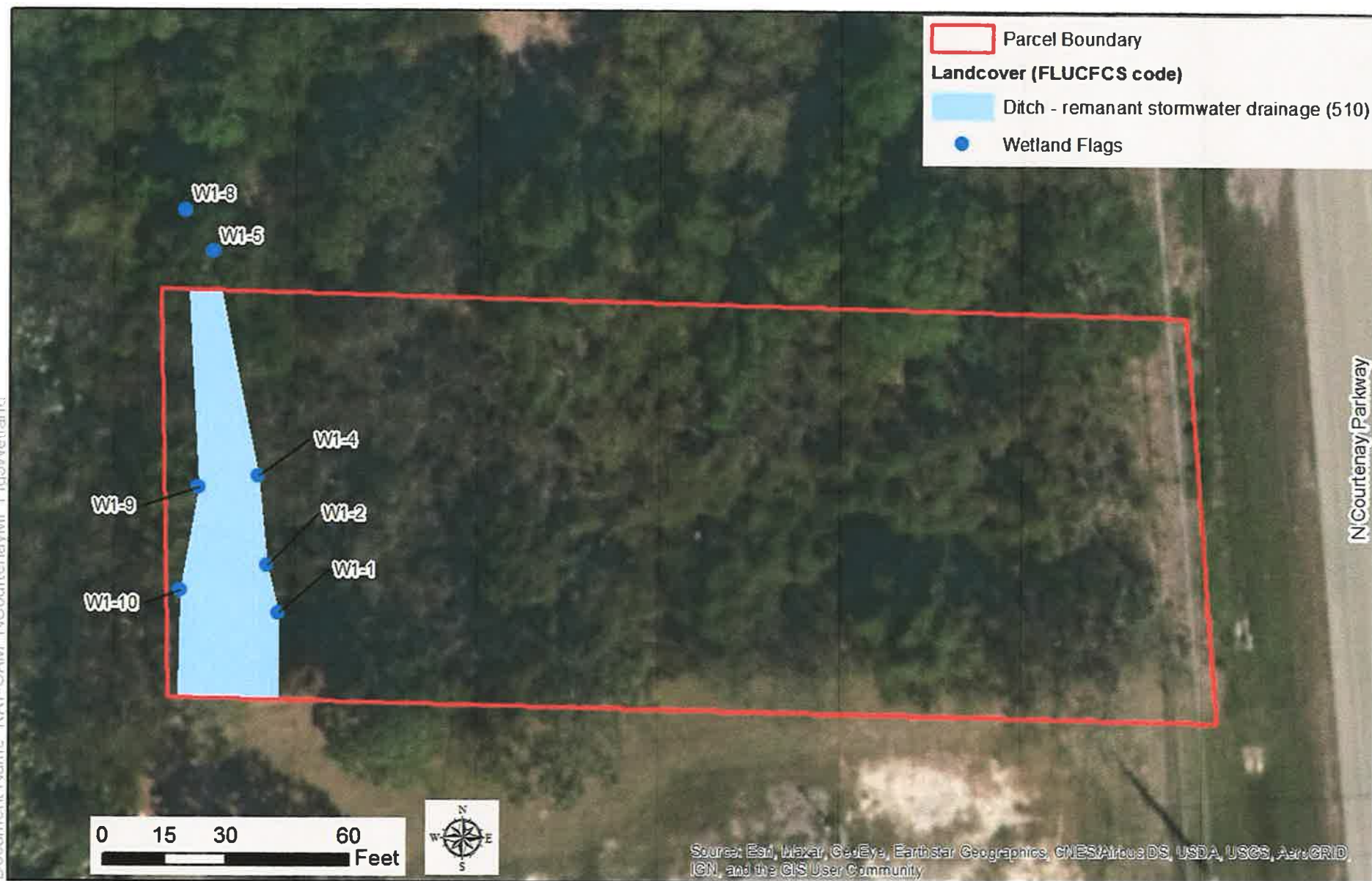
Title: Aerial Imagery (0.59-acres)  
 Address: N. Courtenay Pkwy, Merritt Island, FL 32953  
 Parcel ID: 24-36-02-00-269  
 Tax Account: 2410506  
 Source: ESRI Basemap Imagery  
 Notes: Locations approximate. Site visit 2/6/21

Figure  
No.

3







Date: 2/14/2021



**ecospatial**  
ANALYSTS

3245 N. Courtenay Pkwy Ste 37  
Merritt Island, FL 32953  
321.403.5147

Title: Wetlands (0.59-acres)  
Address: N. Courtenay Pkwy, Merritt Island, FL 32953  
Parcel ID: 24-36-02-00-269  
Tax Account: 2410506  
Source: ESRI Basemap Imagery  
Notes: Locations approximate. Site visit 2/6/21

Figure  
No.

5





Date: 2/14/2021



**ecospace**  
ANALYSTS

3245 N. Courtenay Pkwy Ste 37  
Merritt Island, FL 32953  
321.403.5147

Title: Soils (0.59-acres)  
Address: N. Courtenay Pkwy, Merritt Island, FL 32953  
Parcel ID: 24-36-02-00-269  
Tax Account: 2410506  
Source: ESRI Basemap Imagery  
Notes: Locations approximate. Site visit 2/6/21

Figure  
No.

6