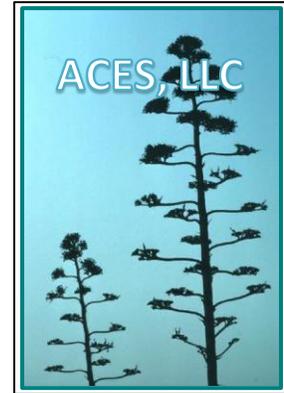


**Andrew Conklin Environmental Services, LLC**  
Integrating Successful Development and Environmental Integrity

P.O. Box 500407, Malabar, Florida, 32950  
Phone: (321)848-1143 Email: [acesllc7@gmail.com](mailto:acesllc7@gmail.com)



May 26, 2020

Mr. Harry Perrette  
225 Manor Drive  
Merritt Island, Florida 32952

Re: Parcel No. 23-36-22-00-20, N. Courtenay Parkway, Merritt Island  
ACES File No. 2049

Dear Mr. Perrette,

Andrew Conklin Environmental Services, LLC (ACES) has completed a review of environmental issues associated with the above-referenced  $\pm 3.66$ -acre property, located in Section 22, Township 23 South, Range 36 East, Brevard County, Florida. Figure 1 depicts the location of the subject site, and Figure 2 is a recent aerial photograph of the site depicting current conditions thereon.

On May 15, 2020, ACES inspected the property for the presence of wetlands, surface waters, protected species, and indications of protected species habitat. The purpose of our study was to estimate the current extent of wetlands and protected species habitat on the site. To assess the presence and extent of wetlands, we implemented the jurisdictional wetland identification methodologies of the St. Johns River Water Management District (SJRWMD) and the U.S. Army Corps of Engineers (ACOE), which incorporate an analysis of on-site vegetation, soils, and hydrology to determine the presence or absence of state-jurisdictional wetlands. Where jurisdictional wetlands were found to exist, ACES identified their boundaries on a recent aerial photograph of the site. The likelihood of protected species habitation was determined by identifying the various vegetative communities, habitat types, and species indicators currently present on the site, and referencing these against standards and indicators used by the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS). Following is a presentation of our findings.

### **Soil Types**

The USDA Natural Resource Conservation Service (NRCS) identifies three different soil types on the property (see Figure 3). Soil maps are used by the environmental regulatory agencies as a general guideline to determine the likelihood of wetland and upland conditions on reviewed properties; soils more commonly associated with wetland conditions potentially indicate areas of lower elevation and greater surface hydrology, whereas soil types that are more commonly associated with uplands are expected to exhibit fewer or no wetland characteristics. Potentially hydric (i.e., wetland) soil types are listed in the *Hydric Soils of Florida Handbook* (Victor W. Carlisle, et al., 2000). It should be noted that the soil types listed by NRCS are based on a 1974 soil survey of Brevard County by the USDA Soil Conservation Service, and no comprehensive soil survey of the county has been completed since 1974. As such, it is not uncommon for there to be some inconsistencies between historically-mapped soil types and current on-site soil conditions. ACES sampled soil types throughout the subject property by

excavating 6-inch diameter, 12-inch deep cylindrical plugs from the surface, and assessing the soil profiles and characteristics of each plug. Following are brief descriptions of the soil types that are mapped on the subject site, compared to our observations of current soil conditions.

Copeland-Bradenton-Wabasso Complex, Limestone Substratum – NRCS Code No. 16: This complex consists of several nearly level, very poorly drained soils on low flats. In most years, the water table is within a depth of 10 inches for more than six months. In dry seasons it is between 10 and 30 inches. This soil is flooded for seven days to a month once in five to 20 years. According to the *Hydric Soils of Florida Handbook*, this soil is hydric in about 78 percent of the areas in which it is mapped.

This variable soil type is mapped along the western boundary of the site, nearest Kangaroo Lane. Soils in this area are hydric, being composed of muck and mucky-textured sand associated with a ditch and adjacent wetlands.

Immokalee Sand, 0 to 2 Percent Slopes – NRCS Code No. 28: This is a nearly level, poorly drained sandy soil in broad areas in the flatwoods, on low ridges between sloughs, and in low, narrow areas between sand ridges and lakes/ponds. In most years the water table is within a depth of 10 inches for 1 to 2 months. It is between 10 and 40 inches more than half the time, and during short, dry periods it is below 40 inches. It is not listed as a hydric soil by the *Hydric Soils of Florida Handbook*.

This upland soil type dominates the site, being mapped across all but the western site boundary and the southwest property corner. Soils tested throughout the mapped polygon are composed of non-hydric loamy fine sand imbedded with small sandy organic bodies.

Pomello Sand – NRCS Code No. 49: This is a nearly level, moderately well drained sandy soil on broad low ridges and low knolls. The water table is 30 to 40 inches below the surface for 2 to 4 months in most years and between 40 and 60 inches for more than 6 months. During dry periods, it is below 60 inches for short periods. This soil type is not listed in the *Hydric Soils of Florida Handbook*.

This upland soil type is mapped in a lobe that extends onto the site from the south, occupying most of the southwest site corner. Soils in this area were observed to be slightly elevated and non-hydric, which is consistent with the mapped soil type.

It is our professional assessment that the NRCS-mapped soils show reasonable correspondence with current site conditions, with non-hydric soils dominating the property and hydric soils being present only along the western site boundary.

### **Community Types**

Using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) as a guideline, ACES categorized the different natural communities and land uses on the subject site according to FLUCFCS designations and code numbers. Figure 4 depicts the different FLUCFCS communities on the property. The major FLUCFCS categories on the site are:

Pine Flatwoods – FLUCFCS Code No 411: This forested upland community exists over most of the site, occupying approximately 2.96 acres. It consists of a canopy of slash pine, with

components of Darlington's oak, cabbage palm, and Brazilian pepper. The midstory is dominated by saw palmetto, which is patchy in the north, becoming more consolidated in broad swaths as one progresses southward. Other midstory species include deerberry, rusty lyonia, and wax myrtle. The ground cover includes southern fox grape, catbriar, shiny blueberry, and brackenfern. Underlying soils consist of non-hydric loamy fine sand imbedded with small sandy organic bodies. No wetland hydrologic indicators were observed.

Upland Scrub, Pine and Hardwoods – FLUCFCS Code No. 435: This partially-forested upland community along most of the eastern site boundary in a very narrow strip that occupies a total of approximately 0.33 acres. Vegetation consists of some slash pines along the eastern boundary of the community, a midstory of myrtle oak, sand live oak, hog plum, winged sumac, saw palmetto, and wax myrtle, and a ground cover of southern fox grape, Johnson grass, catbriar, and broomsedge. Underlying soils consist of non-hydric fine sand, and no wetland hydrologic indicators are present.

Streams and Waterways – FLUCFCS Code No. 510: This category is applied to the man-made north/south ditch that exists along the western property line, immediately east of the Kangaroo Lane right-of-way. The ditch is approximately 15 feet wide and two to three feet deep, with at least a foot of standing water present on the date of our inspection. It is vegetated by red maple, primrose willow, Brazilian pepper, and cabbage palm. Where it is flanked by wetlands, the ditch is considered part of the wetland system through which it runs; where it is cut through uplands, it is categorized as "surface waters," not wetlands.

Wetland Hardwood Forests – FLUCFCS Code No. 610: This wetland community extends along most of the western property line, covering about 0.37 acres (which includes the area occupied by the ditch). It contains a canopy of red maple, Brazilian pepper, and cabbage palm over a midstory of wax myrtle and Florida dogwood, and a ground cover of swamp fern, royal fern, Virginia chain fern, southern fox grape, and climbing hempweed. Soils are hydric, being composed of mucky-textured sand. High-water marks indicate that standing water of up to 18 inches above grade is present in this community on a seasonal basis.

Thus, the site contains a total of approximately 3.29 acres of uplands and 0.37 acres of wetlands. The wetlands fall under the jurisdiction of SJRWMD, ACOE, and the Brevard County Natural Resources Management Office (NRMO). If impacts are proposed to wetlands, the appropriate permits must be obtained from these agencies. Following is a discussion of potential wetland permitting and mitigation issues for this site.

### **Wetland Considerations**

All topographical alteration or construction within wetlands is prohibited without the appropriate permits from SJRWMD, ACOE, and NRMO. Any time an applicant proposes to conduct work within wetlands, it must first be demonstrated that there is no way to accomplish the development goals without impacting wetlands. Because on-site wetlands are at the rear of the property, do not conflict with site access, and constitute only about 10 percent of the site, the wetland regulatory agencies will require that site improvements utilize on-site uplands as much as possible before they will be receptive to any plans to impact on-site wetlands.

SJRWMD and ACOE both require that all proposed wetland impacts be justified by the permittee, who is responsible for demonstrating that all reasonable efforts have been made to design the project in a

way that avoids or minimizes wetland impacts. Simply put, all proposed wetland impacts must clearly be demonstrated as unavoidable. Although SJRWMD's rules allow applicants to impact all wetlands provided they conduct mitigation that is "regionally significant" (i.e., the purchasing of mitigation bank credits), ACOE does not provide that flexibility. Furthermore, ACOE does not accept any mitigation that does not meet the strict standards of a wetland mitigation bank, essentially forcing all applicants to purchase credit at a federally approved mitigation bank for any wetland impacts the Corps deems acceptable. Finally, ACOE requires that all applicants proposing more than 0.10 acre of impacts to ACOE wetlands provide an "alternatives analysis", which is a documented analysis of all potential properties in the area that could accommodate the proposed project without incurring wetland impacts, along with an explanation of why the particular site chosen was the only alternative that was practical for the project.

If commercial or industrial development is being considered, NRMO may also impose certain restrictions on wetland permitting. On commercial or industrial sites, wetland impacts can only occur if justifiable (as described above), and usually only if the project site is on a "Mitigation Qualified Roadway" (MQR), which is any road in the county that is recognized as an established or critical commercial thoroughfare. North Courtenay Parkway is flanked by a wide range of land uses (residential, commercial, institutional, agricultural, etc.), but its long-term utilization as the only commercial corridor in north Merritt Island is expected to qualify it as an MQR.

In addition to direct wetland impacts (dredging or filling within wetlands), an applicant must also consider the extent of secondary wetland impacts, which are assessed by SJRWMD. Secondary wetland impacts are those potentially adverse effects to wetlands that occur due to the proximity of human activities (i.e., noise, traffic, pollution, lighting, human intrusion, pets, yard waste, etc.). To protect against secondary impacts, SJRWMD encourages applicants to preserve a naturally vegetated upland buffer around all portions of wetlands that are to remain undisturbed. The buffer must be at least 15 feet wide, with a minimum average width of at least 25 feet. In all areas where the minimum buffer cannot be provided, SJRWMD will assess secondary impacts extending into the adjacent wetlands. The extent of secondary impacts is determined on a case-by-case basis; for forested wetlands, it is typically determined by extending a 100-foot radius into the affected wetland from each point where an adequate upland buffer cannot be provided. Although this may result in a large area of assessed secondary wetland impacts, such impacts are considered to be significantly less adverse than direct impacts. Thus, although secondary wetland impacts do add to the amount of mitigation that an applicant must provide to satisfy SJRWMD, they are typically only a small percentage of the whole.

Wetland impacts and wetland mitigation are evaluated using the Uniform Mitigation Assessment Method (UMAM). UMAM is a method of assessing and calculating environmental losses (Functional Loss, or FL) and environmental gains (Functional Gain, or FG). Wetlands proposed for impact are assigned a specific FL via a set of standardized evaluations and calculations; whatever the total FL is for a particular project, the proposed mitigation (assessed in units of FG) must be equal or greater than the FL. For this site, the wetlands are of low quality, mainly due to surrounding land uses, fragmentation of natural habitat, and drainage of the wetland by the adjacent ditch. We expect on-site wetlands to be assigned an FL of about 0.50. When applied to the area of wetlands (+/-0.37 acres), the total potential FL for this site is estimated at 0.185.

Currently, the subject site falls into the service area of only one mitigation bank, NeoVerde Mitigation Bank. NeoVerde also is located within the same SJRWMD drainage basin as the subject site (Basin No. 21), which is important because SJRWMD requires applicants to provide wetland mitigation within the

same basin as their projects are located in. Currently, NeoVerde is charging \$200,000 for each unit of FG to satisfy SJRWMD. NeoVerde does not sell in units of less than 0.10 FG. Therefore, based on the above estimate of 0.185 units of FL for this site, 0.20 units of FG would need to be purchased at NeoVerde to satisfy SJRWMD, at a cost of approximately \$40,000.

Unfortunately, NeoVerde is currently sold out of their federal wetland credits. This means that there are currently no mitigation bank credits available to satisfy ACOE's permitting requirements; until there are, alternative means of wetland mitigation would need to be explored to address federal wetland regulatory concerns.

In addition to the cost of wetland mitigation, there are other consulting costs associated with the quantification and qualification of wetlands on the site. Delineation and flagging of wetlands, pre-application consultation with agency representatives, wetland permit application development, on-site jurisdictional confirmation with SJRWMD and ACOE staff, and other ancillary costs and fees are expected to amount to between \$6,000 and \$7,000.

The time associated with wetland permitting is expected to be between three to four months for SJRWMD. Permitting through ACOE occurs concurrently, but can take longer to complete than state permitting, since ACOE requires more documentation, is not subject to minimum time frames in their review process, and will have to review mitigation alternatives that are not as streamlined as a mitigation bank credit purchase. Furthermore, ACOE requires that SJRWMD permit the project first before ACOE can issue its own permit (the SJRWMD permit serves to certify to ACOE that water quality issues have been properly addressed). The county permitting process can be initiated concurrently with the state and federal processes but will not be completed until both SJRWMD and ACOE permits are acquired.

Considering all the above concerns (particularly the current lack of federal wetland mitigation bank credits serving Merritt Island), we recommend considering site plans that will avoid all direct wetland impacts. If a 25-foot wide naturally-vegetated upland buffer can be maintained between the wetland and the edge of the development footprint, then SJRWMD will not assess secondary wetland impacts. If the site development requirements must encroach into the upland buffer, only SJRWMD will assess secondary wetland impacts (NRMO and ACOE will not); if this occurs, the purchase of 0.10 credit (the minimum amount allowed for purchase, at a cost of \$20,000) at NeoVerde Mitigation Bank will be enough to offset secondary wetland impacts.

### **Protected Species**

On the date of our site assessment, ACES examined the property for any indications of habitation by protected wildlife species. This included inspecting the property for direct visual and auditory evidence of protected species themselves, as well as assessing the site for the presence of secondary indicators, such as burrows, nests, nesting cavities, scat, tracks, trails, rookeries, etc. We also used on-line mapping resources from Brevard County, USFWS, and FWC to identify the known location of certain protected species populations, such as Florida scrub-jays and bald eagles. Following is a discussion identifying the extent to which protected species are thought to be using the site, and the procedures by which such concerns can be addressed during the project permitting process.

Gopher Tortoises: Gopher tortoises are protected as a Threatened species by the Florida Fish and Wildlife Conservation Commission (FWC). Gopher tortoises require habitat that includes well-drained sandy soils for burrowing, open sunlit areas for nesting, and adequate herbaceous

forage. On this property, portions of the upland communities exhibit these characteristics to some degree, although open sunlit areas and sufficient herbaceous forage are minimal.

Although we did not conduct a formal gopher tortoise survey, ACES observed some evidence of gopher tortoise occupation during our site inspection. The location of one potentially-occupied tortoise burrow and one abandoned gopher tortoise burrow that we happened to observe on our survey date is shown on Figure 4. Based on the habitat conditions we observed within on-site uplands, our preliminary estimate is that there are probably between 2 and 4 gopher tortoises on the site, using fewer than 10 burrows.

FWC requires that all tortoises that are likely to be displaced by proposed development be identified through a formal survey, and safely relocated under an off-site gopher tortoise conservation permit from FWC prior to site clearing. In order to determine the number of tortoises that will be affected by site development, it will be necessary to complete a formal tortoise survey over all potentially suitable habitat that is proposed for development on this site. Costs associated with tortoise permitting include the 100% survey and mapping of all tortoise habitat (approx. \$1,600), developing and submitting the tortoise relocation application to FWC (\$500.00), and excavating all potentially-occupied burrows on the site with a backhoe (assuming 8 burrows, the projected cost is \$2,850). In addition, FWC will charge an application fee based on the estimated number of tortoises to be moved (assuming 4 tortoises, the fee will be \$217), and the property receiving the relocated tortoises (which must be permitted by FWC to do so) charges \$1,400 per tortoise to cover long-term management costs (again, assuming 4 tortoises, that cost would be \$5,600). So, under a hypothetical 8 burrows excavated and 4 tortoises relocated, the total cost would be approximately \$10,767 (actual cost could be more or less depending on the results of the tortoise survey and relocation).

Timing of the tortoise permitting process is linked to the expected project start date. FWC requires that the survey data be no more than 90 days old prior to excavating tortoises under the authority of a permit. Furthermore, FWC requires that an applicant provide documentation from local government confirming that the proposed project that will necessitate tortoise relocation is imminent; without this documentation, the permit is unlikely to be issued. Therefore, the tortoise survey is recommended to take place no more than two months prior to the anticipated project start date. Once application is made, most tortoise permits can be acquired within two to three weeks (assuming all required documentation is provided). After the permit is issued, relocation can occur as long as predicted weather temperatures do not drop below 50 degrees Fahrenheit for 72 hours after the relocation is completed.

Eastern Indigo Snake (*Drymarchon corais couperi*): This federally-listed threatened species can occupy virtually all native Florida habitats, including flatwoods, upland scrub, and wetlands, typically ranging over very large areas and frequently utilizing gopher tortoise burrows for shelter. No signs of this species were observed during our site inspection. Barring the direct sighting of this species, no special permit for potential impacts to it is expected to be necessary to acquire.

Wading Birds: Some protected wading birds may occasionally be present within the wetlands for foraging purposes. These currently include the tricolored heron and greenback heron. There is no rookery habitat on the site to support nesting of any of these species, and neither

of these species were observed on the site during our inspection. Although it is possible that these species may be present from time to time in the wetland on a transitory foraging basis, such behavior is opportunistic, and not indicative of critical reliance on any on-site natural resources. Therefore, no special permits for potential impacts to these species are expected to be required.

Wood Stork (*Mycteria americana*): Wood stork nesting habitat is not present on the site. However, the on-site wetlands do provide some foraging habitat for this federally-listed endangered species. Federal rules require that when a project falls under federal jurisdiction, the potential for federally-endangered species must be assessed. In the case of the wood stork, the mere potential of wood stork foraging behavior within affected wetlands is enough to impose regulatory oversight, as long as: a) the affected wetland contains Suitable Foraging Habitat (SFH) for wood storks (the on-site wetlands do); b) the affected wetlands falls within the Core Foraging Area (CFA) of at least one known wood stork rookery (on-site wetlands fall within the CFA of several wood stork rookeries); and c) more than 0.5 acres of CFA are proposed for impact (this is NOT the case for this project). Since less than 0.5 acres of CFA are present on the site, we do not expect that any special permitting or mitigation requirements for wood storks will apply for this project.

Bald Eagle (*Haliaeetus leucocephalus*): No recorded bald eagle nests exist within at least 0.6 miles of the subject site, and no eagle nests or eagle activity were observed on the site. Therefore, it is not expected that potential impacts to this species will need to be addressed prior to site development.

Florida Scrub-Jay (*Aphelocoma coerulescens*): Florida scrub-jays are protected as Threatened by USFWS and FWC. Scrub-jays prefer upland scrub habitat (a minimum of 12 acres per scrub-jay family) characterized by oak scrub with at least 10 percent cover of scrub oak species, open sandy areas for caching of acorns, and areas which are predominantly free of tall trees, which hawks typically use as cover prior to preying on scrub-jays. The subject site does not have a sufficient area of scrub oak habitat, is very densely vegetated with very few open sandy areas, and contains numerous tall pines. As such, the suitability of scrub-jay habitat on the site is exceedingly low. During our site inspection, we neither saw nor heard any evidence of scrub-jays on the site. At this time of year, scrub-jays tend to be quite active and vocal, since they are typically breeding or raising young; the lack of evidence of scrub-jays on the site is therefore consistent with the poor habitat suitability that this site provides for the species.

As an additional record source, we looked at scrub-jay territorial maps available on the Brevard County Natural Resources Management Office (NRMO) website. These maps include data provided by FWS showing the estimated historical extent of scrub-jays in the area. The site and vicinity are mapped within a +/-330-acre historical scrub-jay territorial polygon, which was mapped circa 1984, when there was far less developed land in the area. Currently, the area within the mapped polygon is dominated by streets, single-family homes, fallow groves, cleared land, and Brazilian pepper forest. Our analysis of aerial photos of the site and vicinity shows the nearest potential scrub-jay habitat approximately 0.5 miles to the northwest of the site. Based on our on-site observations, the poor suitability of scrub-jay habitat on the property, the exceedingly outdated nature of the NRMO scrub-jay territorial maps, and our physical and aerial review of vicinity conditions, it is our professional opinion that scrub-jays are not present on the site. As such, permits and mitigation for potential impacts to this

species are not expected to be required.

Osprey (*Pandion haliaetus*): Ospreys are protected as a Species of Special Concern by FWC. Ospreys nest in dead pine trees, light poles, or artificial nesting platforms, usually within a few miles of open water. Ospreys can breed any time of year in Florida, but in central Florida the breeding season typically begins in February or March and can run through May or June.

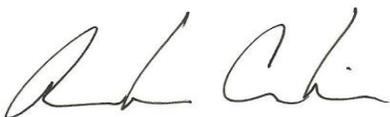
An active osprey nest is present just east of the northeast corner of the property, atop a power pole on a man-made nest platform (see Figure 4). Two adult ospreys were observed to be using the nest at the time of our survey, and were exhibiting breeding behavior (at least one bird always in the nest, and both birds persistently vocalizing while humans were in the vicinity).

Relocation of the osprey nest is not a likely option, mainly since it is off-site, but also because the work would have to be done entirely by FPL, since it is atop an active power pole. For this project, clearing and construction should be timed outside of breeding season (February through June, typically). Since ospreys do not have a strict breeding season, the status of the nest must be assessed prior to the start of clearing and construction. If breeding behavior is not noted, clearing and construction can proceed. If breeding behavior is noted, clearing and construction will either need to wait until the young have fledged, or the nest will need to be monitored daily to make sure construction activities do not disturb or interrupt normal breeding behavior.

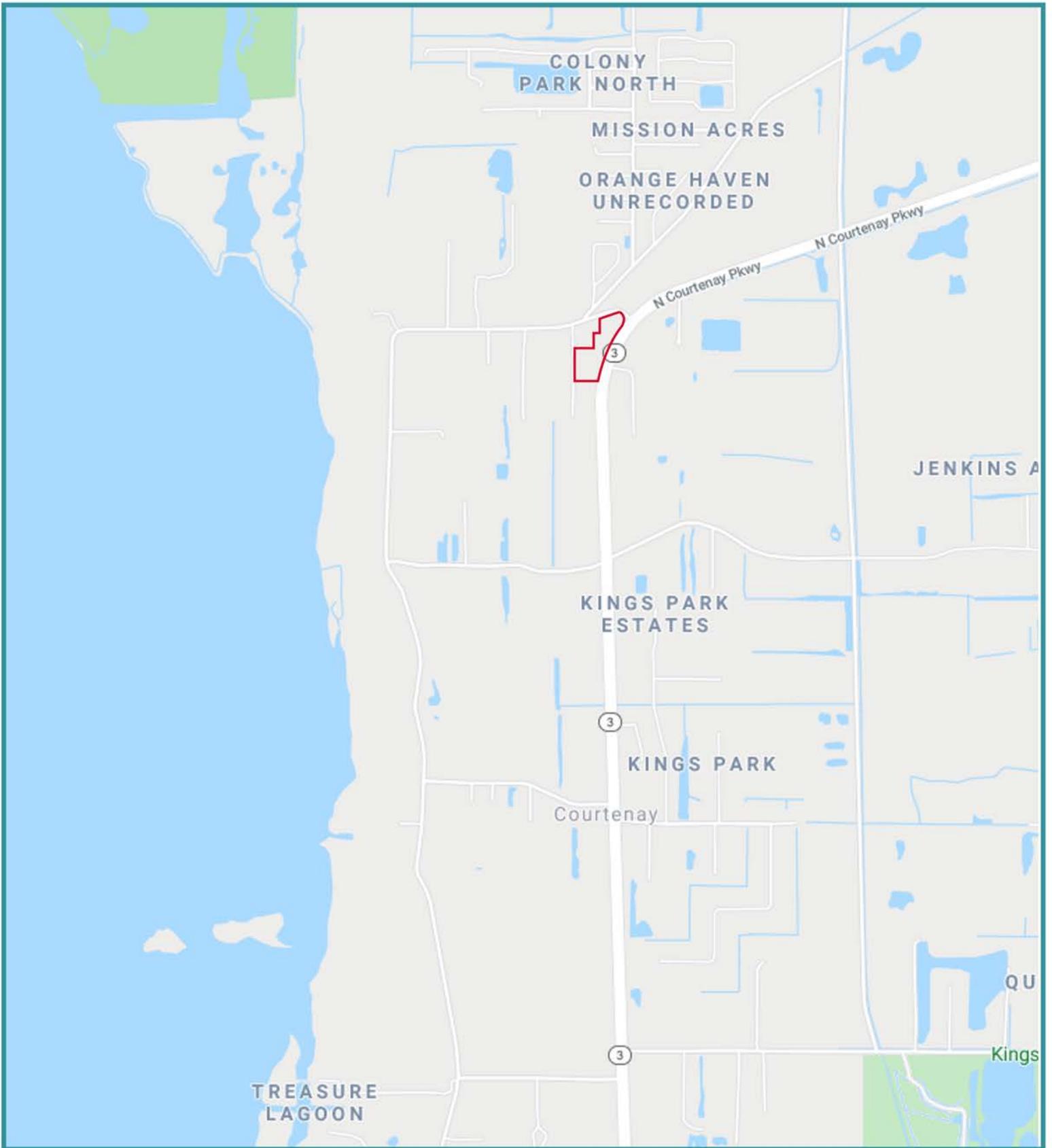
### **Summary and Conclusion**

ACES has completed an environmental assessment of Parcel 23-36-22-00-20 on North Courtenay Parkway, Merritt Island. It is our determination that approximately 3.29 acres of uplands and 0.37 acres of wetlands are present on the site. Because there are currently no federal wetland mitigation bank credits available for Merritt Island, we recommend assessing site designs that avoid direct wetland impacts, if possible. If a 25-foot upland buffer cannot be sustained around the wetland, SJRWMD will assess secondary wetland impacts, which can be offset via the purchase of 0.10 SJRWMD credit at NeoVerde Mitigation Bank for \$20,000. In addition, we recommend conducting a formal gopher tortoise survey of the property to determine the extent to which this species occupies the site. Our preliminary estimate is that probably no more than 4 tortoises currently reside on the property, using up to 8 burrows. If this is the case, the estimated total cost to relocate tortoises off-site is about \$10,800 (a tortoise survey will confirm the number of burrows on the site and allow us to more specifically estimate total permitting costs). An active osprey nest is located just off-site to the northeast, and will need to be assessed and/or monitored if site development activities coincide with osprey breeding behavior. ACES is committed to working with you through all aspects of the environmental permitting and mitigation processes for this project, and will provide a proposal for all remaining environmental services upon request. Upon your review of this report, should you have any questions or need any additional information, please do not hesitate to contact us.

Sincerely,



Andrew Conklin – President, ACES, LLC



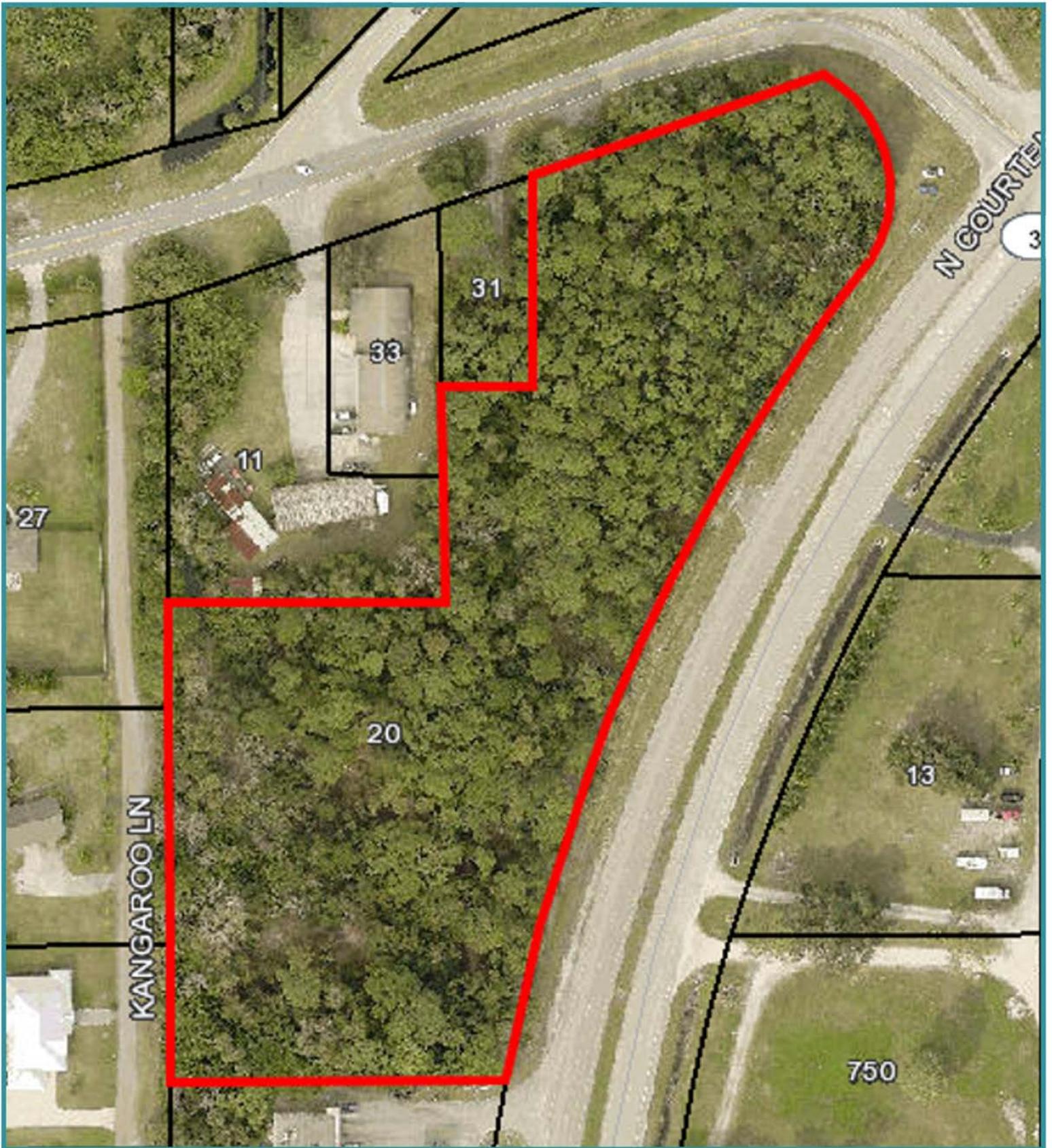
Source - Google Maps



**Figure 1 - Location Map**  
ACES File No. 2049 - Parcel 20, N. Courtenay Pkwy.

 - Property Boundary

PO Box 500407, Malabar, FL 32950 Phone: (321) 848-1143 Email: [acesllc7@gmail.com](mailto:acesllc7@gmail.com)



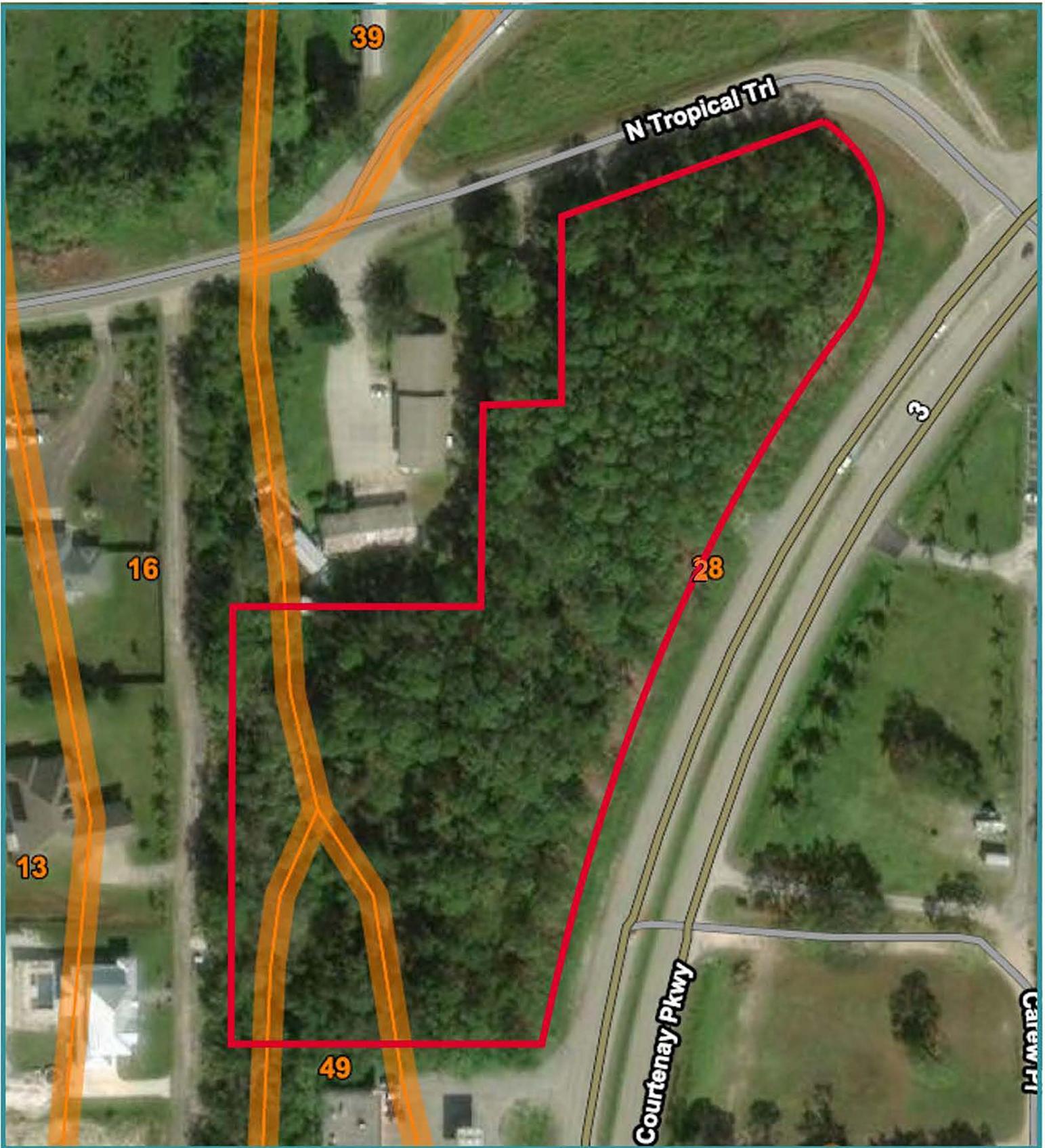
Source - Brevard County Property Appraiser



**Figure 2 - Aerial Site Photograph**  
ACES File No. 2049 - Parcel 20, N. Courtenay Pkwy.

 - Property Boundary

PO Box 500407, Malabar, FL 32950 Phone: (321) 848-1143 Email: [acesllc7@gmail.com](mailto:acesllc7@gmail.com)



Source - USDA Natural Resources Conservation Service (NRCS)



### Figure 3 - NRCS Soils Map

ACES File No. 2049 - Parcel 20, N. Courtenay Pkwy.

 - Property Boundary

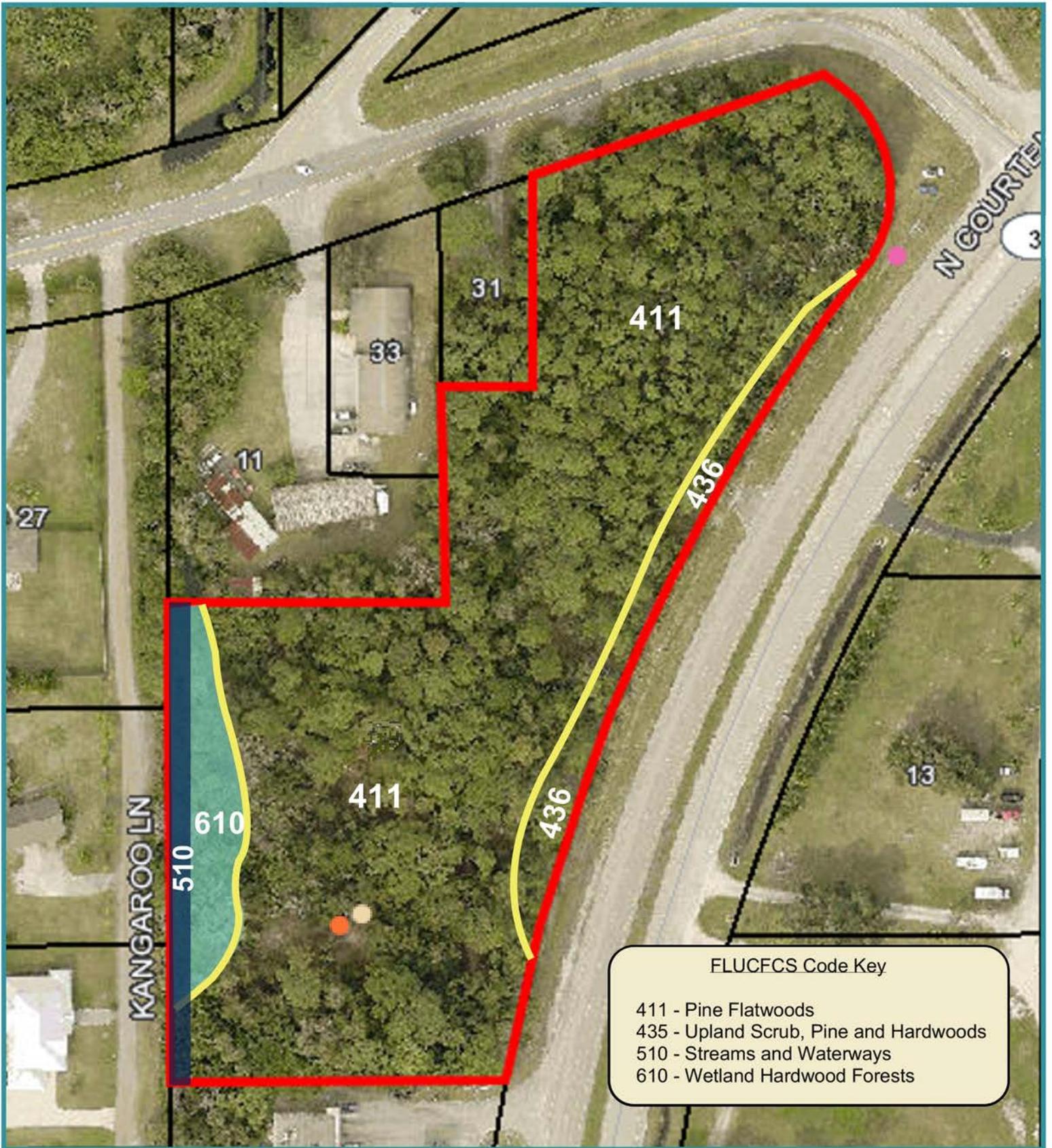
 - NRCS Soil Type Boundaries

16 - Copeland-Bradenton-Wabasso Complex, Limestone Substratum

28 - Immokalee Sand, 0 to 2 Percent Slopes

49 - Pomello Sand, 0 to 5 Percent Slopes

PO Box 500407, Malabar, FL 32950 Phone: (321) 848-1143 Email: [acesllc7@gmail.com](mailto:acesllc7@gmail.com)



**FLUCFCS Code Key**

- 411 - Pine Flatwoods
- 435 - Upland Scrub, Pine and Hardwoods
- 510 - Streams and Waterways
- 610 - Wetland Hardwood Forests

Source - Brevard County Property Appraiser  
 Codes referenced to the Florida Land Use Cover and Forms Classification System (FLUCFCS)



**Figure 4 - Environmental Survey Map**  
**ACES File No. 2049 - Parcel 20, N. Courtenay Pkwy.**

- Property Boundary
- FLUCFCS Community Boundaries
- On-Site Wetlands, +/-0.37 Acres
- Ditch
- Potentially-Occupied Gopher Tortoise Burrow
- Abandoned Gopher Tortoise Burrow
- Active Osprey Nest

PO Box 500407, Malabar, FL 32950 Phone: (321) 848-1143 Email: [acesllc7@gmail.com](mailto:acesllc7@gmail.com)