



January 10, 2019
Ms. Patricia Erario
Mims, Florida

RE: Preliminary Site Inspection
4740 Highway A1A, Mims, Florida totaling 1.5-Acres
Tax ID: 2001826

Dear Ms. Erario:

The following is a summary of Toland Environmental Consulting's (TEC) preliminary site inspection of a parcels of land totaling 1.50-acres located at 4740 Highway A1A in Mims, Florida whose tax identification number is 2001826.

The purpose of the preliminary site inspection was to identify environmental resources on the property and to evaluate whether consideration needs to be made during the acquisition or conceptual design process to address environmental restrictions on the property's development. To prepare this ecological assessment, TEC reviewed natural resource maps including: GIS database coverages of the Brevard County Soil Survey, the National Wetland Inventory, U.S.G.S. Topographic Quadrangle Maps, the 2008 Brevard County Florida Scrub- Jay Occupancy Map, the FWC's Bald Eagle Nest Site Locator Map and other listed species databases.

In addition, on January 10, 2019 TEC ground-truthed, delineated and described the natural communities present onsite with reference to the Florida Natural Areas Inventory's (FNAI) "Guide to Natural Communities in Florida, 2010 Edition" and Florida Department of Transportation's (FDOT) Florida Land Use, Cover and Forms Classification System (FLUCCS) 1999 Edition. The study area is classified by FNAI as Developed (FLUCCS 110/Residential Low Density (Figure 1). The property is bordered on all sides by low density development. The property is a small campground area consisting of individual cabins and open space. The canopy remains in a natural state with a mixture of slash pine (*Pinus elliottii*) and live oak (*Quercus virginiana*) while the understory is maintained in low growing grasses. A small patch of remnant scrub remains near the turn area of the incoming driveway. This area is comprised of heavily overgrown scrub oak (*Quercus inopina*), saw palmetto (*Serenoa repens*), and wiregrass (*Aristida stricta*). Due to long-term fire suppression, the scrub habitat has succeeded into a brushland habitat that has filled the openings and allowed the scrub oaks to grow higher than 6 feet in height. These types of transitioning scrub habitat tend to be poor for scrub-jays and have resulted in population loss in territories on the Atlantic coast when patches of scrub oak are taller than 1.7 meters or shorter than 1.2 meters (Breininger, D.R. and G.M. Carter. 2003. Territory quality transitions and source-sink dynamics in a Florida scrub-jay population. Ecological Applications 13:516-529).

None of the study area has the appropriate soils, signs of hydrology, or vegetation in the amounts and combinations needed to classify it as wetlands according to the definitions found in Chapter 62-340, Florida Administrative Code and Section 404 of the Clean Water Act (33 U.S.C. 1344). In addition, the study area is not mapped as wetlands on the National Wetland Inventory or by the St. Johns River Water Management District. Finally, the study area does not lie within 25-feet of offsite wetland system (Figure 1).

In order of relative abundance, the onsite soils are classified by the National Resources Conservation Service (NRCS) in order of relative abundance as Myakka sand, 0 to 2 percent slopes, Tomoka muck, drained and Anclote sand. Myakka sand, 0-2 percent slopes is a soil series that is considered to be non-

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hydric in Brevard County while the Tomoka muck drained and Anclote sands are classified as hydric soils by the Hydric Soils of Florida Handbook, fourth edition published in 2007 by the Florida Association of Environmental Soil Scientists. Hydric soils form under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile. Hydric soils are usually associated with wetlands while non-hydric soils are generally associated with upland habitats.

Mowed uplands and transitioning scrub habitats could potentially support federally or state species listed as endangered, threatened, or species of special concern including gopher tortoises (*Gopherus polyphemus*), Florida scrub-jays (*Aphelocoma coerulescens*) and eastern indigo snakes (*Drymarchon corais couperi*) and bald eagles (*Haliaeetus leucocephalus*).

As an authorized gopher tortoise agent for the Florida Fish and Wild Conservation Commission (FWC) to survey for gopher tortoises, TEC surveyed 100 percent of all suitable gopher tortoise habitats on the property using the surveying protocols outlined in FWC's Gopher Tortoise Permitting Guidelines as last updated in January 2017. TEC's census established burrow activity levels and their GPS their locations. TEC did not identify any gopher tortoise burrows or their sign during TEC's field inspections. This is attributed to the lack of sufficient understory plants that tortoises traditional forage upon including wiregrass, dwarf wild blueberry (*Vaccinium myrsinites*), prickly pear cactus (*Opuntia humifusa*), blackberries (*Rubus spp.*), paw-paws (*Asimina obovata*) and other seasonal fruits which support gopher tortoise populations.

In addition, a small portion of the southeast corner of the study area is located within a Florida scrub-jay occupancy polygon as mapped by the US Fish and Wildlife Service (USFWS) in 2008 (Figure 3). TEC's review of the site indicate that no appropriate habitat remains onsite to support scrub-jays due to long-term fire suppression.

If you have any questions or require additional information regarding this initial site inspection, please contact me on my office phone at 321-242-7173 or by e-mail at teclisa@cfl.rr.com.

Sincerely,

Lisa J. Toland

Lisa J. Toland, President



Figure 3: USFWS 2008 Scrub-Jay Occupancy Polygon Map

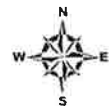


Legend

-  Study Area
-  Scrub-jay 2008

Prepared by Toland Environmental Consulting Using 2015 Aerial Photography

0 45 90 180 Feet



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Figure 2: NRCS Soil Map



Legend

Prepared by Toland Environmental Consulting Using 2015 Aerial Photography

-  Study Area
-  Myakka sand, 0-2 percent slopes
-  Tomoka muck, drained
-  Anclote sand

0 100 200 400 Feet

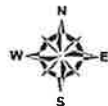
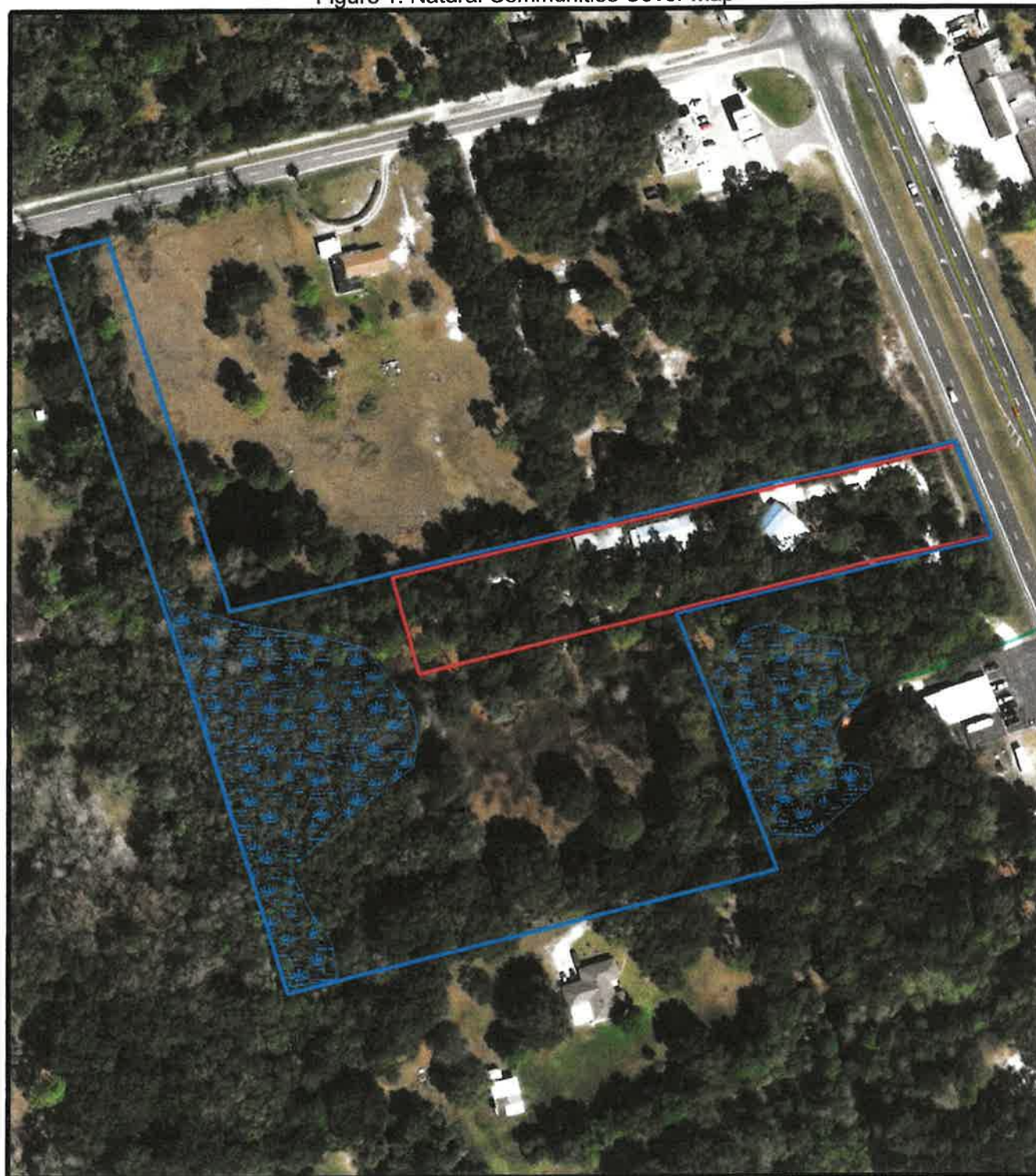


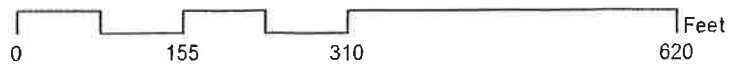
Figure 1: Natural Communities Cover Map



Prepared by Toland Environmental Consulting Using 2015 Aerial Photography

Legend

-  Property
-  Study Area
-  Wetlands



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