Environmental Narrative

Concession – 17-Acre Parcel

January 2020
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1 Environmental Narrative

1.1 Project Overview

This document provides the environmental summary for the Concession 17-Acre Parcel. The site is located in Section 30, Township 35 South, and Range East in Manatee County, Florida (Figure 1). The site is south of State Road 70, west of Lorraine Road and east of Lindrick Lane and the Concession Golf Course Community (Figures 2).

1.2 Environmental Overview

Historically, the project area was operated as agricultural lands for cattle ranching. Currently the property is a vacant property adjacent to residential development and residential infrastructure. No wetlands were located within the site. A single “other surface waters” feature, an upland cut drainage ditch, is present along the southern boundary of the parcel. The upland vegetation and habitat throughout the site is homogenous and typical of pine flatwoods habitats.

1.3 Habitat Assessment

Existing landuse/landcover within the project area was mapped (Figure 3) pursuant to the Florida Land Use, Cover, and Forms Classification System (FLUCFCS) published by the Florida Department of Transportation, State Topographic Bureau (1999). Below is a list and brief description of natural communities and land uses within the project area. Figure 4 depicts the soil-mapping unit pursuant to the Soil Survey of Manatee County, Florida (1983).

Pine Flatwoods (15.66 acres; FLUCFCS 411)

This mapping unit is the predominant land use type for the parcel. This habitat is characterized by a slash and longleaf pine (Pinus elliottii and P. Palustris) canopy over story at greater than 60 percent total cover. Occasional tress within the canopy include laurel oak (Quercus laurifolia) and live oak (Quercus virginiana). The understory is comprised of shrubby species, predominantly saw palmetto (Serenoa repens), gallberry (Ilex glabra), and wax myrtle (Morella cerifera). A variety of grasses and forbs occur within the herbaceous understory and include flattop goldenrod (Euthamia graminifolia), wiregrass (Aristida stricta), gopher apple (Geobalanus oblongifolius), and bushy bluestem (Andropogon virginicus). Vines are thick in some portions of the site and include greenbriar (Smilax bona-nox), muscadine (Vitis rotundifolia), and Carolina jessamine (Gelsemium sempervirens).
Stream and Waterways (0.93 acres; FLUCCS 510)
This is an upland cut drainage ditch with steep side slopes. It was delineated at the top of the bank. Dominant Vegetation on the ditch banks includes Brazilian pepper (*Schinus terebinthifolius*), wax myrtle (*Myrica cerifera*) and laurel oak.

Transportation (0.43 acre; FLUCCS 810)
The habitat within this mapping unit is comprised of land adjacent to the access road and stormwater ponds. Vegetation consists of Bahia grass (*Paspalum notatum*) and is regularly mowed and maintained.

1.4 Listed Species
Cardno conducted field surveys to determine the presence or probable absence of listed species within or near the site. The listed species survey specifically targeted those listed species known or believed to occur in Manatee County in habitats similar to those found within the site. All habitats within the Project Site were surveyed in accordance with general methodologies found in the Florida Wildlife Conservation Guide as developed by the U.S. Fish and Wildlife Service (FWS), Florida Fish and Wildlife Conservation Commission (FWC), and Florida Natural Areas Inventory (FNAI). These surveys document the occurrence and relative abundance of species considered Endangered, Threatened, or of Special Concern by either the FWC, under Chapter 68A-27.003-005 F.A.C., or the USFWS under 50 CFR 17.11-12. As many listed wildlife species are cryptic, thus limiting direct observation, special attention was given to auditory and physical features that may indicate the presence of these species including calls, tracks, scat, nests, burrows, and cavity trees.

As part of the listed species field survey, a Cardno FWC Authorized Gopher Tortoise Agent conducted a maximum of 25 percent gopher tortoise (*Gopherus polyphemus*) survey of the site in all potentially suitable habitats for use of the property by gopher tortoises. The tortoise survey was conducted in accordance with the FWC Gopher Tortoise Permitting Guidelines (April 2008 – Revised January 2017).

Gopher Tortoise
The gopher tortoise is listed by the FWC as a Threatened species. Gopher tortoises occupy upland habitat throughout Florida including pine flatwoods and cropland and pastureland. Cardno ecologists canvassed 25 percent of the suitable habitat within the site and gopher tortoise burrows were not found. Transect widths were 30 feet and were determined by visibility, a function of the density and height of the existing vegetation. No gopher tortoise or gopher tortoise burrows were observed within the site. Transects traversed through the site are shown on the Listed Species Map (Figure 5).

Eastern Indigo Snake (*Drymarchon couperi*)
The eastern indigo snake, a federally-threatened species, uses a wide variety of habitats in peninsular Florida and may be expected to occupy almost any tract that contains potentially suitable habitats. The FWS recommends implementation of *Standard Protection Measures for the Eastern Indigo Snake* to minimize potential impacts to the snakes during development, site clearing, and construction.
Bald Eagle (*Haliaeetus leucocephalus*)

While no longer listed under the U.S. Endangered Species Act (FWS) or the Florida Endangered and Threatened Species rules (FWC), bald eagles remain protected by both the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

In November 2017, FWC staff completed the Species Action Plan for the bald eagle. A non-regulatory conservation plan, the Species Action Plan outlines actions necessary to continue to maintain a stable or increasing population of bald eagles in Florida. No bald eagles or bald eagle nests were located within 5-miles of the site.

1.5 Summary

Cardno ecologists conducted an extensive site inspection and surveyed all habitats within the Site. Upland habitat on the property consists of pine flatwoods. Wetlands and other surface waters are limited to a single upland-cut ditch on the south boundary of the property. A survey for all listed species that are known to have the potential to occur in Manatee County was also conducted. During this survey effort, no listed species were observed utilizing the Project Site. No bald eagle, southeastern American kestrel individuals or nesting habitat was observed within the Project Site or surrounding area.

Based on the quality of the habitats present, the historic uses of the property, and the results of previously completed species specific surveys, it is our professional opinion that there are no listed wildlife species regulatory constraints to development of the Project Site.
Concession – 17-Acre Parcel

FIGURES
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Legend

- Project Boundary - 17.02 ac. ±
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**Legend**

- Project Boundary - 17.02 ac. ±
- 411 - PINE FLATWOODS - 15.66 ac. ±
- 510 - DITCH - 0.93 ac. ±
- 810 - TRANSPORTATION - 0.43 ac. ±
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Legend

- Project Boundary - 17.02 ac. ±
- 30 - MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES - 17.02 ac. ±
Figure 5. Gopher Tortoise Survey Map
Concession One
Manatee County, Florida

Legend
- Project Boundary - 17.02 ac. ±
- Gopher Tortoise Transects

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About Cardno
Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno’s team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm
At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field. Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.