

Cresswind

Manatee County Preliminary Site Plan

Environmental Report

April 2017

Prepared for:

KOLTER HOMES, LLC.
4807 PGA Blvd.
Palm Beach Gardens, FL 33418

Prepared by:

E Co Consultants, Inc.
1523 8th Avenue West
Suite B
Palmetto, FL 34221
941.722.0901 fax 941.722.4931



INTRODUCTION:

This '*Environmental Report*' is a preliminary environmental assessment of the '*Cresswind*' property (refer to attached maps for property limits) which is located in Sections 11 and 12, Township 35S, Range 19E, Manatee County, Florida. Currently, the subject parcel is undeveloped agricultural lands containing a mix of sod farm operations, fallow crop land, pine/oak mix channelized headwater tributary of Mill Creek, upland cut agricultural drainage swales, scrub/shrub wetlands, forested wetlands, and freshwater marsh habitats.

On-site jurisdictional wetlands and surface waters were delineated and flagged by E Co Consultants, Inc. (E Co) Fall 2016. These boundaries are scheduled for field verification by the Southwest Florida Water Management District (SWFWMD) as part of a pending 'Petition for Formal Determination of Wetlands and Other Surface Waters' application (Petition Application No.742286).

Wetlands, surface waters, and upland habitats located on this parcel and within 500 feet of this parcel are categorized below using the Florida Department of Transportation '*Florida Land Use, Cover and Forms Classification System*' (FLUCCS). Included with this document is a '*FLUCCS Habitat Map*', a '*NRCS Soils Map*', and a '*Wetland /Other Surface Water (OSW) Map*' prepared by E Co.

WETLAND and OTHER SURFACE WATER HABITATS:

FLUCCS Code 510 – Streams and Waterways

Vegetation: Several agricultural ditches are located throughout the property which are used to manage water tables and irrigation requirements for agricultural purposes within the subject Cresswind project area. These agricultural ditches located throughout the project area consist of cattails (*Typha spp.*), primrose willow (*Ludwigia peruviana*), softrush (*Juncus effusus*), Brazilian pepper (*Schinus terebinthifolius*), and/or other miscellaneous grasses and sedges.

Impacts: The ditched areas function as drainage features draining and lowering water tables.

Hydrology: These upland cut drainage features have an intermittent hydrology, subject to rainfall, fluctuations in water table, and the receiving surface water runoff which drains to them.

Wildlife: The drainage ditches and drainage features have very limited wildlife utilization potential, however most likely have limited support for wading birds and small population of common small mammals, amphibians and reptiles.

FLUCCS Code: 534 - Reservoir Less than 10 Acres

- Vegetation:** Limited vegetation exist around this upland cut cattle pond. Duck weed (*Lemna*) may be found at the surface of the pond during the summer.
- Impacts:** The surrounding waters edge is continuously impacted from cattle.
- Hydrology:** The water level of this surface water fluctuates with the groundwater levels seasonally.
- Wildlife:** This small upland cut surface water is utilized by cattle and may support a small population of common reptiles and amphibians.

FLUCCS Code: 630 – Wetland Forested Mix

- Vegetation:** A tributary of Mill Creek meanders through the subject 'Cresswind' property, and flows from east to west. The bottom of the channel is sandy, with steeper side banks at the western most limits. The steeper side banks of the channelized creek system are vegetated predominately with saw palmetto (*Serenoa repens*), cabbage palm (*Sabal palmetto*), laurel oak (*Quercus laurifolia*), and live oak (*Quercus virginiana*). In areas where side banks are less steep, species include red maple (*Acer rubrum*), black gum (*Nyssa sylvatica*), popash (*Fraxinus caroliniana*), laurel oak, water oak (*Quercus nigra*), swamp bay (*Persea palustris*), cabbage palm, American elm (*Ulmus americana*), saw palmetto, lizard's tail (*Saururus cernuus*), and netted chain fern (*Woodwardia* spp.).
- Impacts:** The creek channel is generally intact in different sections. Several historical agricultural crossings are present, with some agricultural drainage outfalls draining to the Mill Creek tributary and some channelization was observed.
- Hydrology:** The creek appears to maintain a shallow base flow with higher intermittent flows received in response to rain events.
- Wildlife:** A venomous Water Moccasin (a.k.a, Cottonmouth, *Agkistrodon piscivorus*) was observed utilizing the creek channel during E Co site visits. The creek corridor is most likely utilized for wildlife movement. It is anticipated that the creek supports a small population of common fishes, reptiles, and amphibians.

UPLAND HABITATS:

FLUCCS Code 211 – Improved Pastures

Majority of the subject property is primarily made up of improved pastures that consists of an active cattle operation. Vegetation consists of bahia grass (*Paspalum notatum*).

FLUCFCS Code 434 – Hardwood – Coniferous Mixed

Areas of slash pine (*Pinus elliottii*) and oak are present along the north and south sides of the tributary of Mill Creek in the which meanders through the subject Cresswind property. These areas contain a mixture of live oak (*Quercus virginiana*) and slash pine (*Pinus elliotti*). Understory vegetation in these

areas is comprised of saw palmetto, cabbage palm, wild coffee (*Psychotria nervosa*), and beautyberry (*Callicarpa americana*).

WETLAND and OTHER SURFACE WATER HABITATS Impacts:

No wetland impacts are proposed within the project boundary. A total of 1.91 acres of upland cut surface waters and small cattle pond will be impacted with the associated development.

OFF-SITE WETLAND and OFF-SITE UPLAND HABITATS:

North

The southern boundary includes citrus operations (221), fallow crop land (261), pine – oak mixed upland habitats (414), and the continuation of the tributary to Mill Creek (510).

West

To the west of this property is low density residential (110), fallow crop land (261) and the continuation of the tributary to Mill Creek (510).

South

The southern boundary includes fallow crop land (261), pine – oak mixed upland habitats (414), and the continuation of the tributary to Mill Creek (510).

East

To the east are citrus operations (221), fallow crop land (261), pine – oak mixed upland habitats (414), agricultural ditches (510), vegetated non-forested wetlands (640), and Uihlein Road (8144).

PROTECTED SPECIES:

E Co Consultants, Inc. (E Co) visited the above referenced site in April 2017 and prior to that, several other times during October, November and December 2016 for the purpose of identifying potential listed species that may occupy the subject parcels. E Co Senior Scientists completed vehicular and pedestrian transects throughout the site during the noted site review. Prior to conducting preliminary assessments for listed species, E Co reviewed online databases including the Florida Natural Areas Inventory (FNAI) and Florida Fish and Wildlife Conservation Commission's (FWC) bald eagle (*Haliaeetus leucocephalus*) nest locator for documented listed species presence relative to the proposed project location. The database search revealed no documented utilization within the project area, nor in areas directly adjacent or within federal/state setback distances to the project area by listed species. Species of particular interest on this site could consist of nesting bald eagles, Florida scrub-jays (*Aphelocoma coerulescens*), eastern indigo snakes (*Drymarchon couperi*), and gopher tortoises (*Gopherus polyphemus*). The onsite habitats located on these parcels are categorized on the attached maps using the FLUCCS.

Gopher Tortoise (*Gopherus polyphemus*)

E Co Senior Scientists did not observe any potentially occupied gopher tortoise, listed as 'Threatened' by both federal and state agencies, or gopher tortoise burrows during the recent site assessment within

the Cresswind property. Potentially suitable uplands may exist onsite where gopher tortoise could exist, however this species was not found to exist or occupy the subject property. Ninety (90) days prior to construction and land clearing within the respective property, E Co recommends a 100 percent survey of suitable habitat to be conducted. If any potentially occupied gopher tortoise burrows are identified, a gopher tortoise relocation permit from FWC should be obtained to remove all gopher tortoises within the project area and relocate the gopher tortoises to a FWC-approved recipient site.

Eastern Indigo Snake (*Drymarchon couperi*)

The eastern indigo snake, designated as 'Threatened' by both federal and state agencies, can be found in a wide variety of habitat types. Although this species seems to be strongly associated with high, dry, well-drained soils, it also frequents streams and swamps. In drier communities, where habitat use coincides, these indigo snakes occasionally utilize gopher tortoise burrows for shelter. There were no eastern indigo snakes observed during E Co's field assessment, and given the lack of ideal gopher tortoise habitat there is a low potential for this species to occur on-site. However, the project should implement the U.S. Fish and Wildlife Service's (FWS) 'Standard Protection Measures for the Eastern Indigo Snake' (revised August 12, 2013). Protection Measures to be implemented on the project should include education of clearing and construction crews regarding identification of eastern indigo snakes and measures that should be taken if snakes are discovered during land clearing activities.

Bald Eagle (*Haliaeetus leucocephalus*)

The FWC's bald eagle nest locator database was reviewed to see if any active nests exist within the subject property and/or close to the property that may affect future anticipated construction activities. Two (2) bald eagle nests mapped by the FWC nearest the vicinity of the Cresswind property include: Nest ID Nos. MN011 (~8,458 feet east of property), MN015 (~9,490 feet south/southwest of property). None of these nests occur within the limits of the Cresswind property. In addition, none of these FWC documented nests have protection zones within the project area. Therefore in conclusion, the Cresswind property is not located within any primary or secondary bald eagle nest protection zone, and this species is not anticipated to constrain development of the property.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

These parcels were reviewed for habitats that may support the Florida Scrub-Jay, listed as 'Threatened' by both federal and state agencies, which are known to exist in areas of Manatee County. There were/was no scrub-jay family(ies) observed on-site or adjacent to the property area. The closest FWC 'Wildlife-Scrub Jay Habitat' nearest the Cresswind property is approximately 1.15 miles north/northeast due west of the Manatee River dam overlying predominately USDA-NRCS soil series #19 Duette fine sand (an 'A' Hydrologic Group soil series), and #42 Pomello fine sand (a 'C' Hydrologic Group soil series). The predominant soil series at the Cresswind property is #30 Myakka fine sand (a 'B/D' Hydrologic Group soil series). Florida Scrub-Jay have extremely specific habitat requirements and are endemic to well-drained to excessively well drained sandy soils, much like the offsite Duette and Pomello soils previously referenced, and unlike poorly drained soils such as the Myakka soil located predominately on the Cresswind property. Additionally, Florida Scrub-Jay habitat requirements include relict oak-dominated scrub, or xeric oak scrub, which is essential habitat to the Florida Scrub-Jay and which this property does not inhabit. There were no Florida Scrub-Jay observed, nor is there any specific suitable habitat for this species within the Cresswind property.



Legend

Approximate Project Boundary

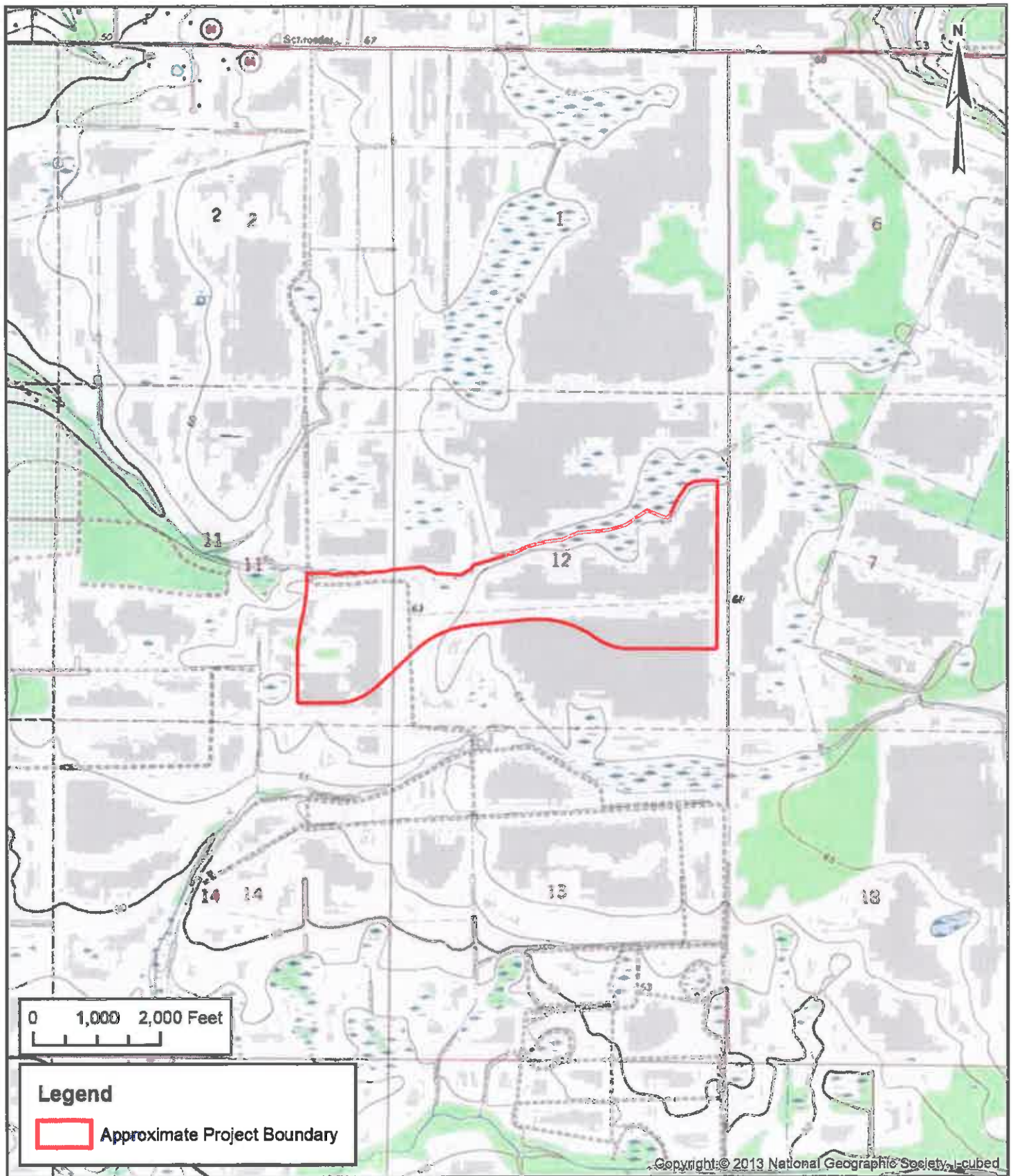
Client: Kolter Homes

Project: Cresswind

Title: Location Map

ECO
CONSULTANTS INCORPORATED
1523 8th Avenue West, Suite B
Palmetto, FL 34221
Telephone: 941.722.0901
Fax: 941.722.4931
Website: www.ecoconsultants.net

Sec: 11,12 Twp: 35S Rng: 19E
 Scale: 1" = 2,000'
 Date Drawn: 4/26/2017
 Drawn by: MJ
 Source: World Street Maps
 Sheet: 1 of 1



Copyright © 2013 National Geographic Society, i-cubed

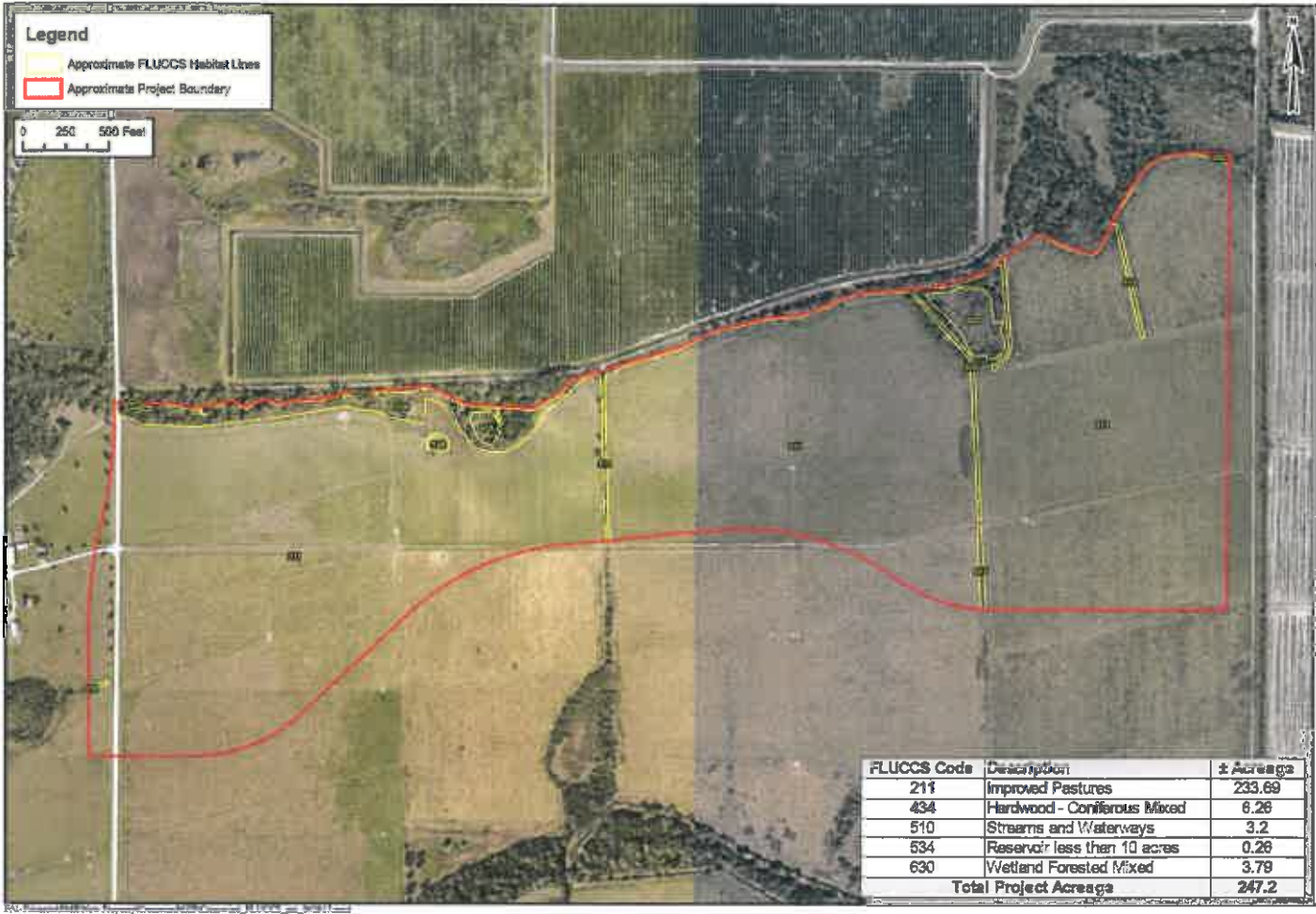
Client: Kolter Homes

Project: Cresswind

Title: USGS Quad Map

ECO
 CONSULTANTS INCORPORATED
 1523 8th Avenue West, Suite B
 Palmetto, FL 34221
 Telephone: 941.722.0901
 Fax: 941.722.4931
 Website: www.ecoconsultants.net

Sec: 11,12 Twp: 35S Rng: 19E
Scale: 1" = 2,000'
Date Drawn: 4/26/2017
Drawn by: MJ
Source: USGS Topo Maps
Sheet: 1 of 1



Legend
 Approximate FLUCCS Habitat Lines
 Approximate Project Boundary

0 250 500 Feet

| FLUCCS Code | Description | ± Acres |
|----------------------------|------------------------------|--------------|
| 211 | Improved Pastures | 233.69 |
| 434 | Hardwood - Coniferous Mixed | 6.28 |
| 510 | Streams and Waterways | 3.2 |
| 534 | Reservoir less than 10 acres | 0.28 |
| 630 | Wetland Forested Mixed | 3.79 |
| Total Project Acres | | 247.2 |

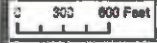
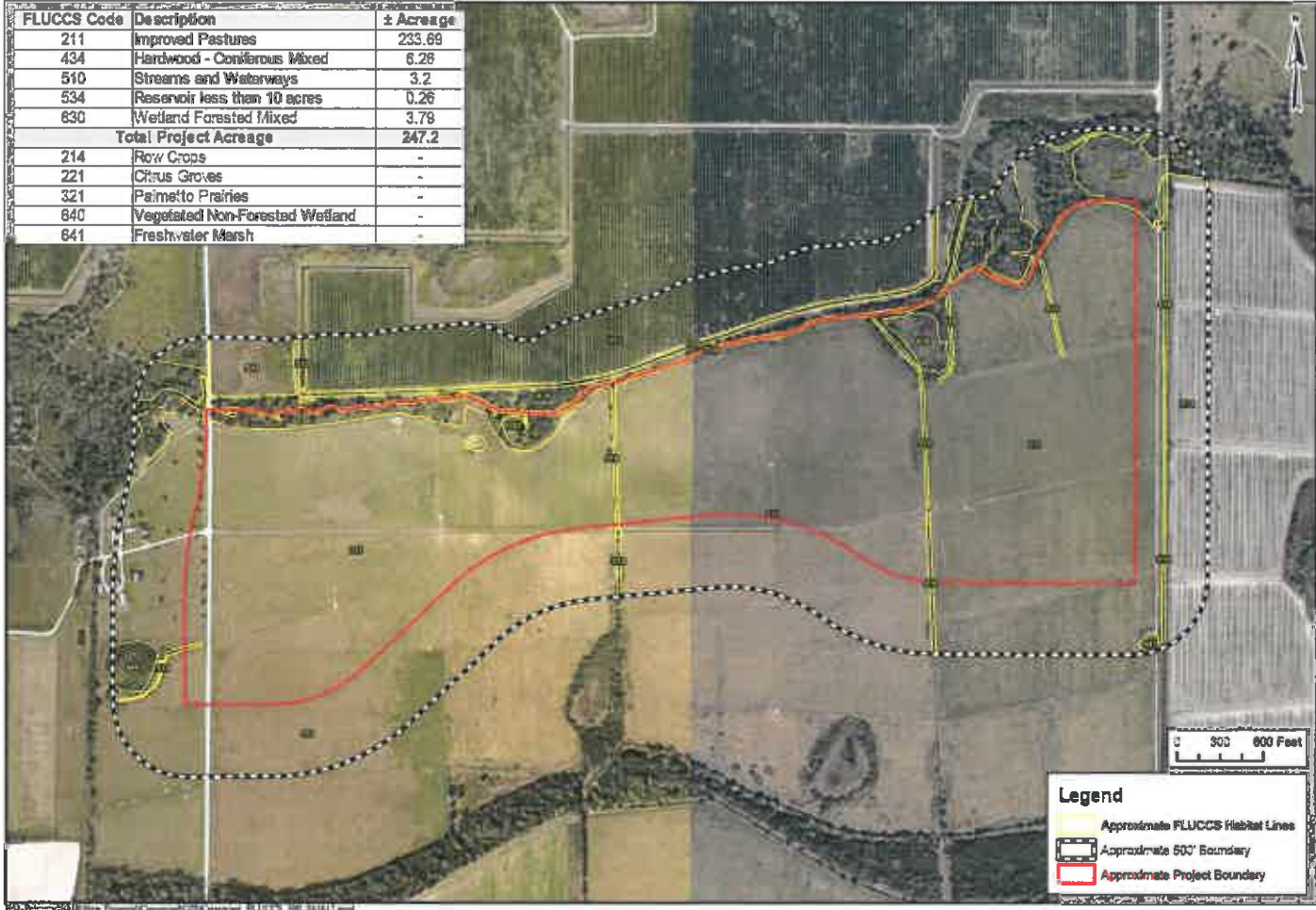
Client: Kollar Homes
 Project: Oremstead
 Title: FLUCCS Habitat Map

1523 8th Avenue West, Suite 18
 Palmetto, FL 34221
 Telephone: 941.722.8991
 Fax: 941.722.4931
 Website: www.ecoconsultants.com

ECO
 CONSULTANTS

Sec: 11.02 Twp: 35S Rng: 19E
 Scale: 1" = 500'
 Date Drawn: 4/26/2017
 Drawn by: JAD
 Source: Maricopa County
 Sheet: 1 of 1

| FLUCCS Code | Description | ± Acreage |
|------------------------------|--------------------------------|--------------|
| 211 | Improved Pastures | 233.69 |
| 434 | Hardwood - Coniferous Mixed | 6.28 |
| 510 | Streams and Waterways | 3.2 |
| 534 | Reservoir less than 10 acres | 0.26 |
| 630 | Wetland Forested Mixed | 3.78 |
| Total Project Acreage | | 247.2 |
| 214 | Row Crops | - |
| 221 | Citrus Groves | - |
| 321 | Palm-to Prairies | - |
| 840 | Vegetated Non-Forested Wetland | - |
| 841 | Freshwater Marsh | - |



Legend

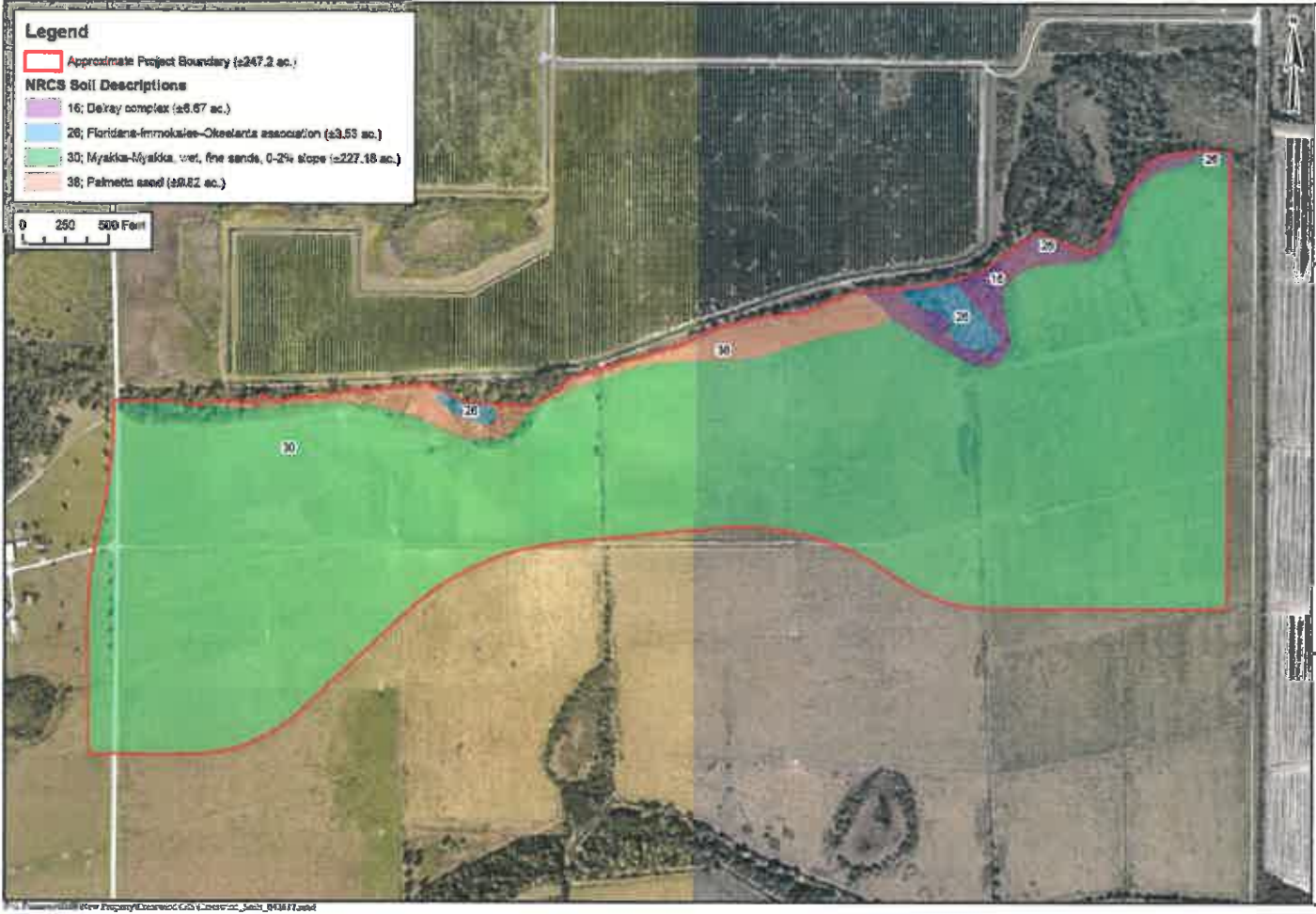
| | |
|--|----------------------------------|
| | Approximate FLUCCS Habitat Lines |
| | Approximate 500' Boundary |
| | Approximate Project Boundary |

Sec: 11.12 Twp: 3S Rge: 19E
 1" = 500'
 Date Drawn: 4/26/2017
 Drawn by: MJ
 Source: Monrovia County
 Sheet 1 of 1

1523 8th Avenue West, Suite 20
 Palmville, FL 34221
 Telephone: 904.722.0991
 Fax: 904.722.0931
 Website: www.ecoconsultants.net

ECO
 CONSULTANTS INCORPORATED

Client: Keller Homes
 Project: Oremfield
 Title: County FLUCCS Habitat Map



Legend

Approximate Project Boundary (±247.2 ac.)

NRCS Soil Descriptions

- 16; Delray complex (±6.67 ac.)
- 28; Florida-Immokalee-Okeelanta association (±3.53 ac.)
- 30; Myakka-Myakka, wet, fine sands, 0-2% slope (±227.18 ac.)
- 38; Palmetto sand (±9.82 ac.)

0 250 500 Feet

Sec: 1, 12 Twp: 35S R: 19E
 Scale: 1" = 500'
 Date Drawn: 4/26/2017
 Drawn by: MO
 Source: Manatee County, NRCS
 Sheet: 1 of 1

1523 8th Avenue West, Suite B
 Palmetto, FL 34221
 Telephone: 941.722.4981
 Fax: 941.722.4931
 Website: www.ecoconsultants.net



Client: Keller Hansen
 Project: Crosswind
 Title: NRCS Salts Map

C:\Users\moore\OneDrive\Documents\GIS\2017\04_Salts_Map\04_Salts_Map.mxd