

August 2, 2016

Mr. Don Griffey, P.E.  
Griffey Engineering, Inc.  
406 North Center Street  
Eustis, Florida 32726



ENVIRONMENTAL  
PLANNING  
DESIGN &  
PERMITTING

PROJECT: CR 437 Improvement  
RE: NRCS Prime & Important Farmland Consultation

Dear Mr. Griffey:

Modica & Associates, Inc. reviewed the above referenced project site located on and adjacent to County Road 437 in Sections 7, 18, 19, 30, Township 19 South, and Range 28 East and Sections 25 and 36, Township 19 South, and Range 28 East in Lake County, Florida, for the purpose of preliminarily determining potential impacts of the proposed project on prime and important farmland as identified by the Natural Resource Conservation Service (NRCS).

The United States Department of Agriculture (USDA), NRCS was contacted in an effort to identify Prime, Unique, Statewide, Local or Important Farmland within the County Road 437 Improvement project area. Correspondence received from NRCS dated August 1, 2016 indicated that there are delineations of Important Farmland soils within the project site. The correspondence from NRCS is enclosed for your records.

Although not required unless federal funding will be used for the project, the NRCS also completed Form AD-1006 *Farmland Conversion Impact Rating* for the project. This form can be filed in Lake County's records, and can be used in the event that federal funding is accessed for the project.

Please contact me if you have any questions or require further information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Elaine Imbruglia", is written over a light blue circular stamp.

Elaine Imbruglia  
President

Enclosure

*Via Email: rick.a.robbins@fl.usda.gov*

July 25, 2016

Mr. Rick Robbins  
United States Department of Agriculture  
Natural Resources Conservation Service  
2614 NW 43<sup>rd</sup> Street  
Gainesville, FL 32606



ENVIRONMENTAL  
PLANNING  
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PERMITTING

**PROJ: County Road 437 Widening Project  
Sections 7, 18, 19, 30, and 31; Township 19 South;  
Range 28 East; and Sections 25 and 36; Township 19 South; Range 27  
East  
Lake County, Florida**

**RE: Request for Consultation Regarding Prime and Important Farmland**

Dear Mr. Robbins:

Lake County is performing a preliminary engineering and environmental analysis to assess potential impacts associated with the widening of County Road 437. The 88 +/- acre proposed project corridor predominantly consists of a paved two-lane road and associated maintained right-of-way. Portions of the project include adjoining private properties that are majority pasture. The enclosed figures and photographs depict existing site conditions within the footprint of the proposed project.

To facilitate the impact analysis, we herein request a NRCS assessment of the project's effect on Prime, Unique, Statewide, Local or Important Farmland.

We would greatly appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact either myself or Elaine Imbruglia at 352-394-2000 or [eca@modica.cc](mailto:eca@modica.cc).

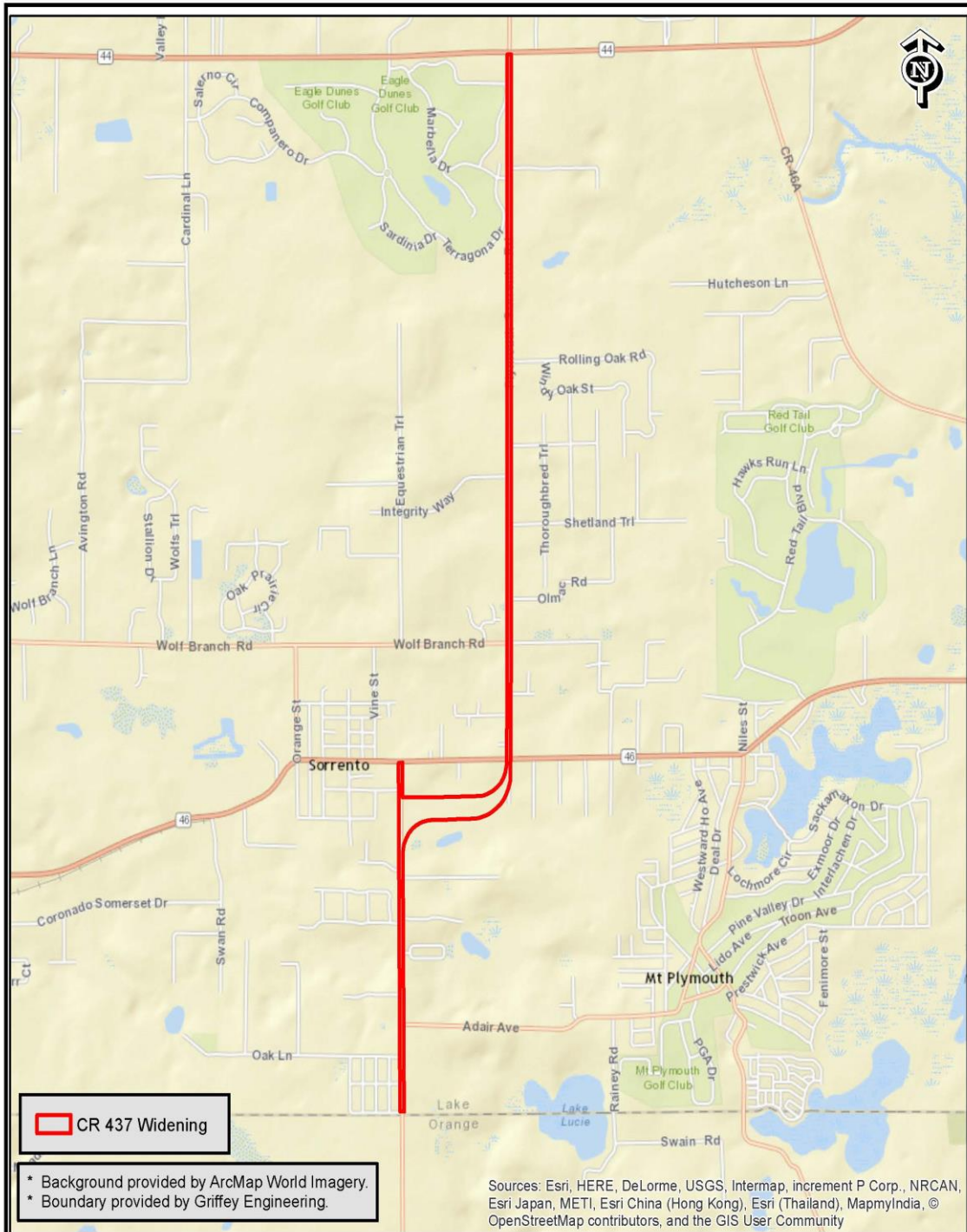
July 25, 2016  
Page 2 of 6

Sincerely,

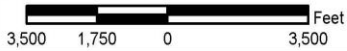
*Ashley Miller*

Ashley Miller

Ecologist

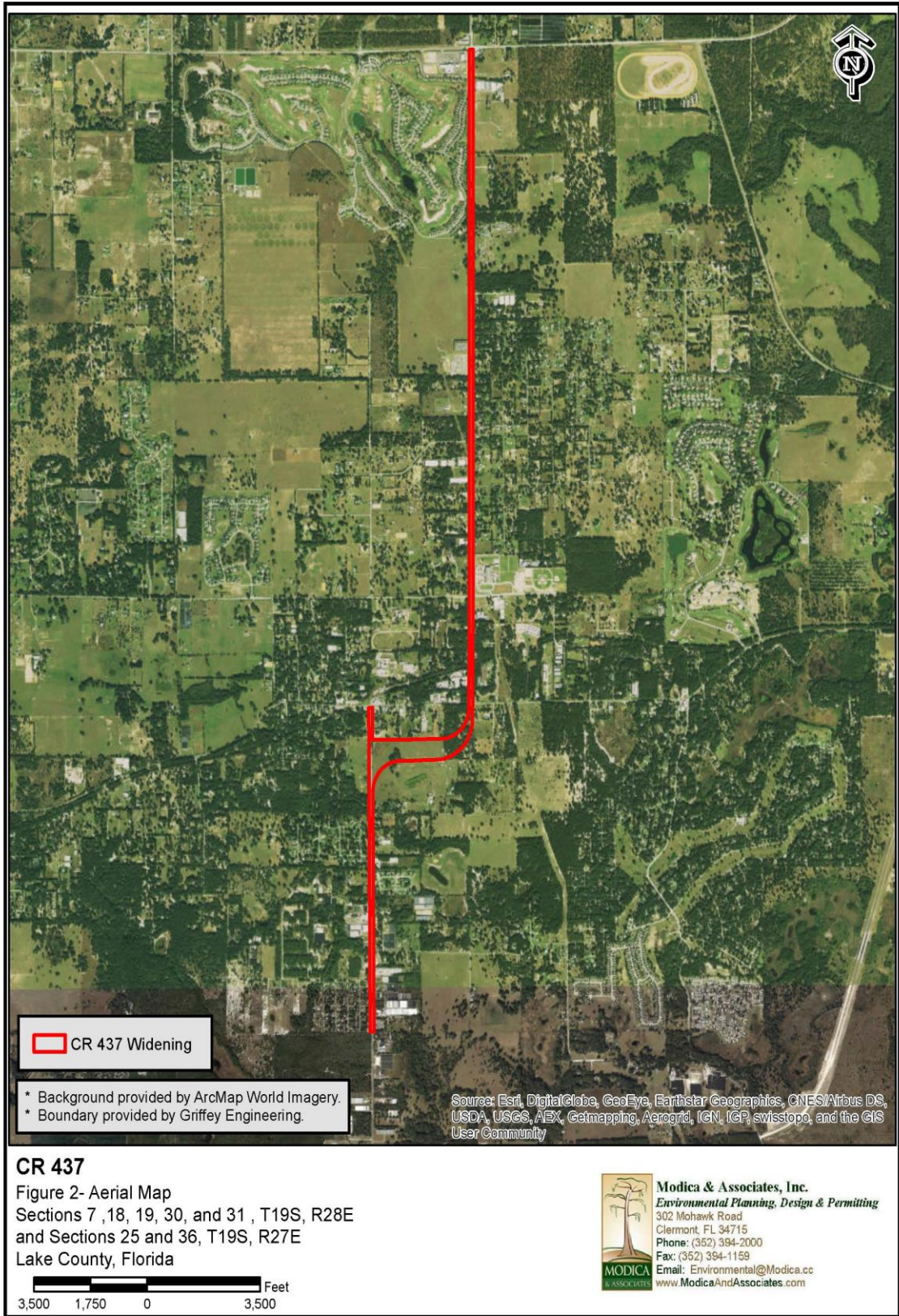


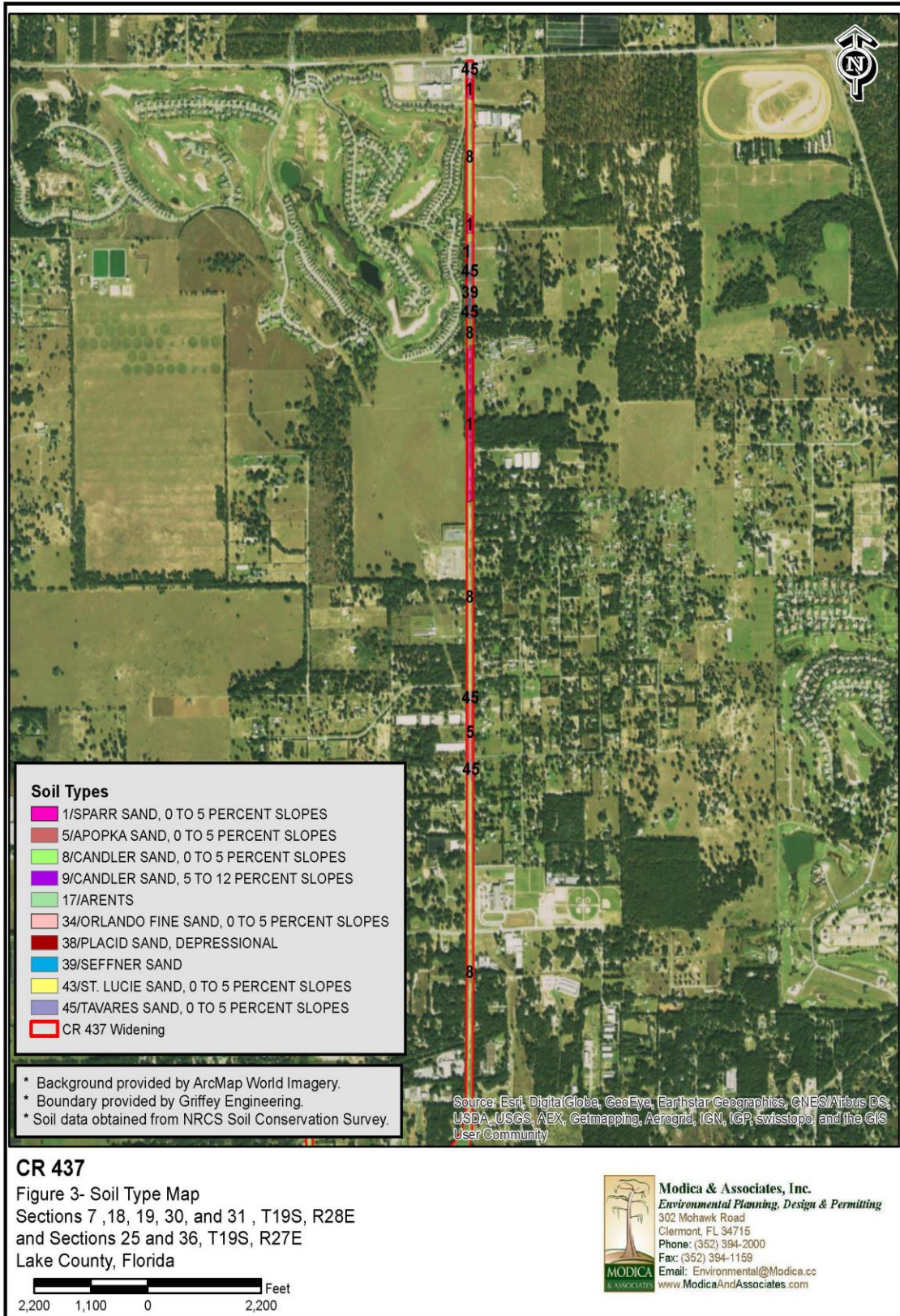
**CR 437**  
 Figure 1- Location Map  
 Sections 7, 18, 19, 30, and 31, T19S, R28E  
 and Sections 25 and 36, T19S, R27E  
 Lake County, Florida

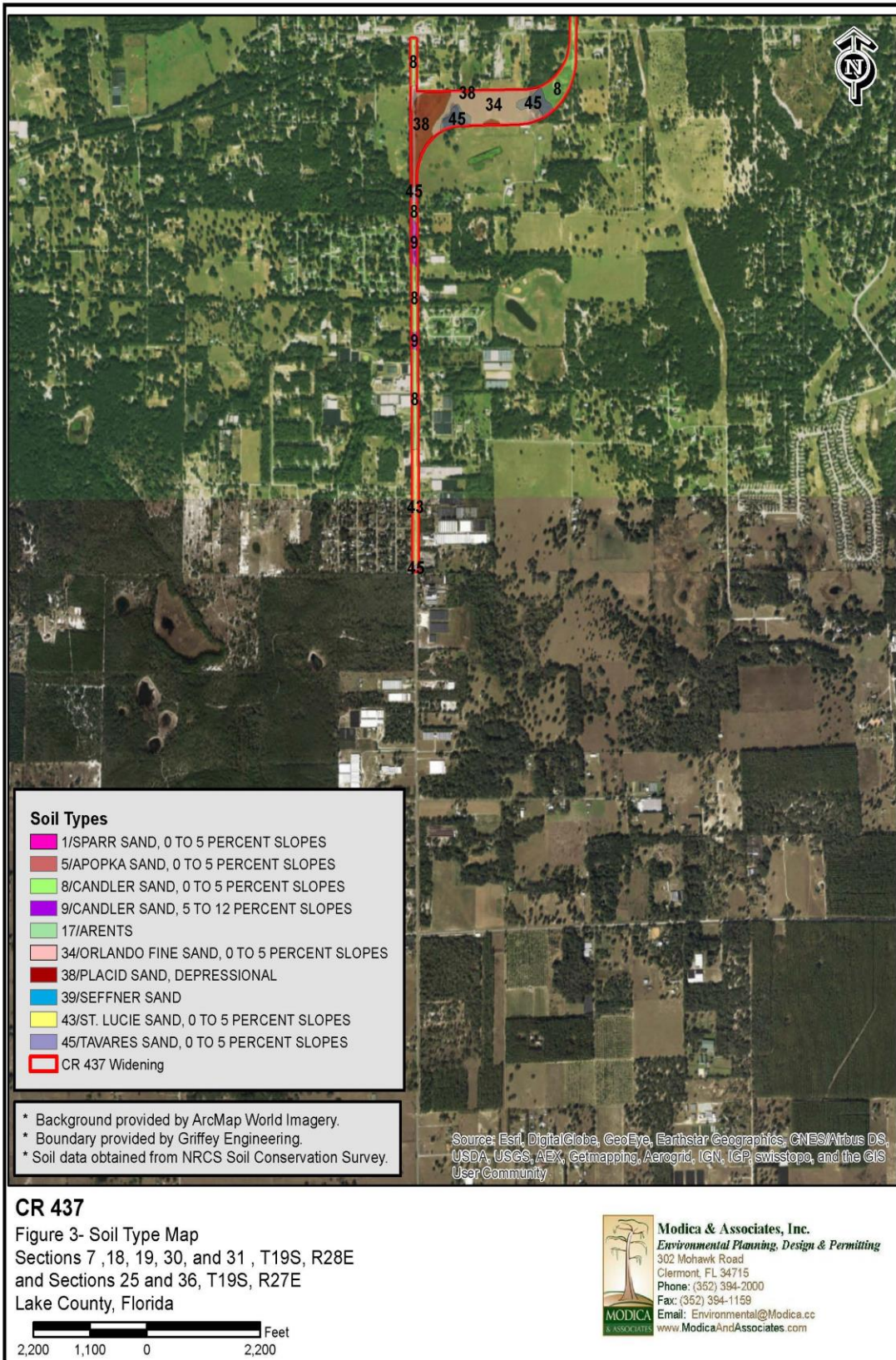


**Modica & Associates, Inc.**  
 Environmental Planning, Design & Permitting  
 302 Mohawk Road  
 Clermont, FL 34715  
 Phone: (352) 394-2000  
 Fax: (352) 394-1159  
 Email: Environmental@Modica.cc  
 www.ModicaAndAssociates.com











Natural Resources Conservation Service  
Florida State Office  
2614 NW 43rd Street  
Gainesville, FL 32606

PH 352-338-9500  
FX 352-338-9574  
www.fl.nrcs.usda.gov

August 1<sup>st</sup>, 2016

Ashley Miller  
Modica and Associates, Inc.  
Environmental Planning, Design, and Permitting  
302 Mohawk Road  
Clermont, FL 34715

**Important Farmland Assessment for the County Road 437 project in Lake County, Florida**

This letter is in response to your request on the Prime, Unique, or Locally Important Farmland assessment as part of the FPPA requirements for the County Road 437 project in Lake County, Florida. Enclosed are the Important Farmlands map and Farmland Conversion Impact Rating forms (AD-1006) for the project area.

Briefly, the USDA-NRCS is responsible for monitoring the conversion of Prime, Unique, or Locally Important Farmland to urban uses. We have determined that there are delineations of Important Farmland soils within the scope of this project. Please refer to the AD-1006 for acreages.

| Map Unit Symbol | Map Unit Name                        | Farmland Class                |
|-----------------|--------------------------------------|-------------------------------|
| 1               | Sparr sand, 0 to 5 percent slopes    | Farmland of Unique Importance |
| 5               | Apopka sand, 0 to 5 percent slopes   | Farmland of Unique Importance |
| 8               | Candler sand, 0 to 5 percent slopes  | Farmland of Unique Importance |
| 9               | Candler sand, 5 to 12 percent slopes | Farmland of Unique Importance |
| 45              | Tavares sand, 0 to 5 percent slopes  | Farmland of Unique Importance |

Parts I through V have been completed on the AD-1006. Parts VI and VII should be completed by either FHWA or FLDOT.

If you have any questions, please feel free to contact me.

Regards,

*Rick*  
**Rick Robbins**  
**USDA-NRCS**  
**Soil Scientist**  
**Gainesville, Florida**  
**w/ AD-1006, and map attachments**





United States  
Department of  
Agriculture

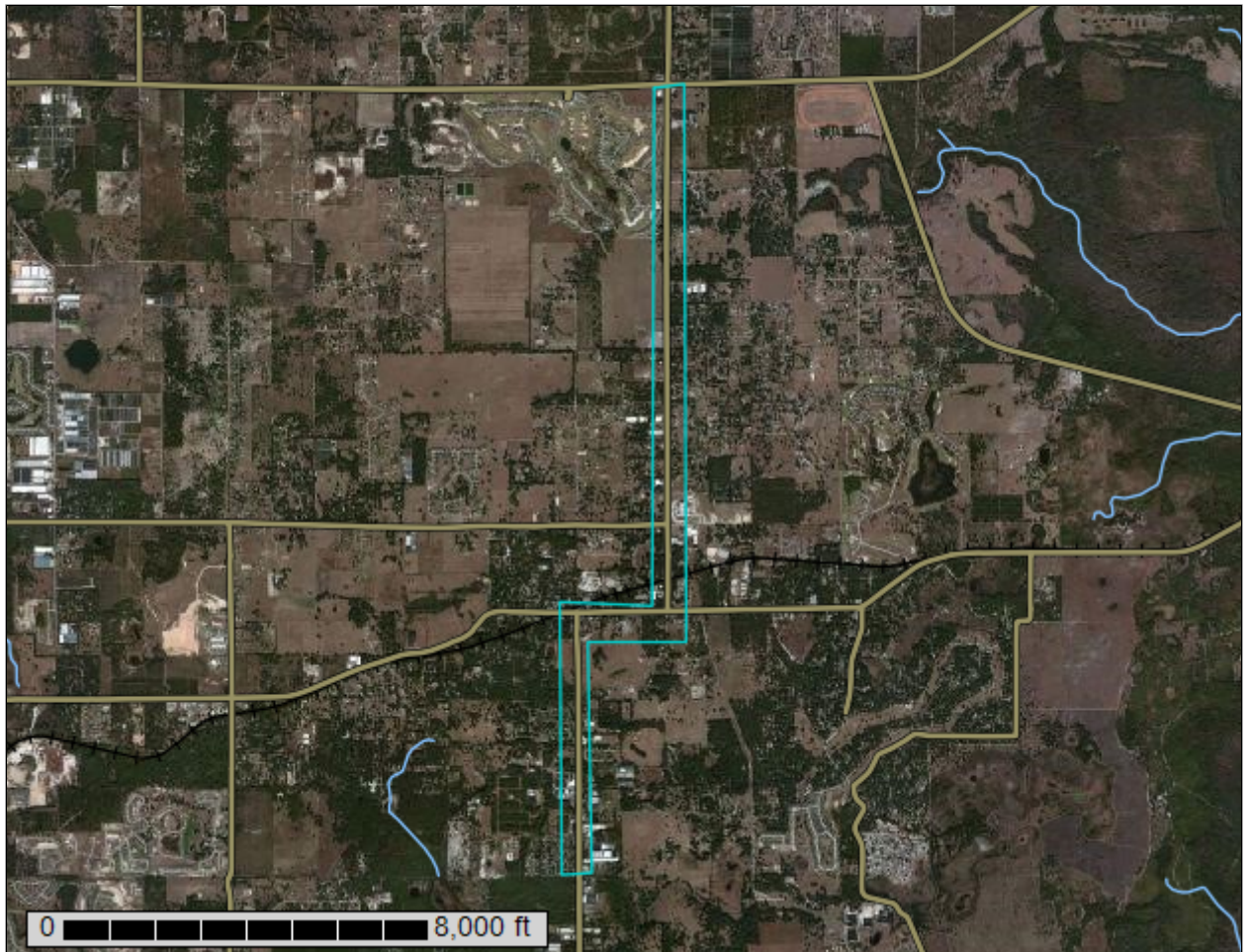
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Lake County Area, Florida**

## County Road 437 Widening



July 27, 2016

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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# Soil Map

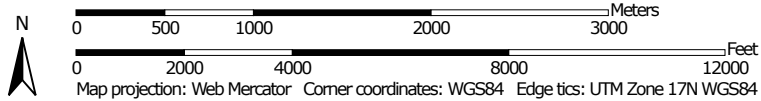
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map




Map Scale: 1:42,600 if printed on A portrait (8.5" x 11") sheet.





### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County Area, Florida  
 Survey Area Data: Version 14, Nov 19, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 8, 2010—Jan 3, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Lake County Area, Florida (FL607)  |  |              |                |
|------------------------------------|--|--------------|----------------|
| Map Unit Symbol                    | Map Unit Name                                    | Acres in AOI | Percent of AOI |
| 1                                  | Sparr sand, 0 to 5 percent slopes                | 58.8         | 10.0%          |
| 2                                  | Sparr sand, 5 to 12 percent slopes               | 1.5          | 0.3%           |
| 5                                  | Apopka sand, 0 to 5 percent slopes               | 9.4          | 1.6%           |
| 8                                  | Candler sand, 0 to 5 percent slopes              | 351.5        | 59.6%          |
| 9                                  | Candler sand, 5 to 12 percent slopes             | 31.7         | 5.4%           |
| 17                                 | Arents   | 0.0          | 0.0%           |
| 24                                 | Kendrick sand, 0 to 5 percent slopes             | 0.9          | 0.2%           |
| 28                                 | Myakka-Myakka, wet, sands, 0 to 2 percent slopes | 0.6          | 0.1%           |
| 34                                 | Orlando fine sand, 0 to 5 percent slopes         | 24.5         | 4.2%           |
| 35                                 | Paola sand, 0 to 5 percent slopes                | 1.3          | 0.2%           |
| 38                                 | Placid sand, depressional                        | 28.1         | 4.8%           |
| 39                                 | Seffner sand                                     | 10.2         | 1.7%           |
| 41                                 | Pomello sand, 0 to 5 percent slopes              | 2.0          | 0.3%           |
| 43                                 | St. Lucie sand, 0 to 5 percent slopes            | 34.2         | 5.8%           |
| 45                                 | Tavares sand, 0 to 5 percent slopes              | 35.5         | 6.0%           |
| <b>Totals for Area of Interest</b> |  | <b>590.1</b> | <b>100.0%</b>  |

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas



## Custom Soil Resource Report

for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of

## Custom Soil Resource Report

the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Lake County Area, Florida

### 1—Sparr sand, 0 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2w0q9  
*Elevation:* 40 to 150 feet  
*Mean annual precipitation:* 44 to 56 inches  
*Mean annual air temperature:* 68 to 77 degrees F  
*Frost-free period:* 290 to 365 days  
*Farmland classification:* Farmland of unique importance

#### Map Unit Composition

*Sparr and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Sparr

##### Setting

*Landform:* Knolls on marine terraces, rises on marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Interfluve, tread, rise  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Convex, linear  
*Parent material:* Sandy marine deposits and/or loamy marine deposits

##### Typical profile

*A - 0 to 8 inches:* sand  
*E - 8 to 57 inches:* sand  
*Bt - 57 to 80 inches:* sandy clay loam

##### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* About 18 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Upland Hardwood Hammock (R154XY008FL),  
Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

## Minor Components

### Apopka

*Percent of map unit:* 5 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, interfluve, tread

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Upland Hardwood Hammock (R154XY008FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Candler

*Percent of map unit:* 5 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, interfluve, tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Tavares

*Percent of map unit:* 5 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces, flats on marine terraces

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Interfluve, base slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

## 2—Sparr sand, 5 to 12 percent slopes

### Map Unit Setting

*National map unit symbol:* 1qt5v

*Elevation:* 20 to 150 feet

*Mean annual precipitation:* 46 to 54 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 340 to 365 days

*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Sparr and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Custom Soil Resource Report

### Description of Sparr

#### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 6 inches:* sand

*E - 6 to 45 inches:* sand

*Bt - 45 to 80 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 5 to 12 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)

*Depth to water table:* About 12 to 42 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4s

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Upland Hardwood Hammock (R154XY008FL),  
Sandy soils on strongly sloping to steep side slopes of mesic uplands  
(G154XB123FL)

### Minor Components

#### Tavares

*Percent of map unit:* 10 percent

*Landform:* Ridges on marine terraces, flats on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

## 5—Apopka sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2w0q6  
*Elevation:* 40 to 150 feet  
*Mean annual precipitation:* 44 to 56 inches  
*Mean annual air temperature:* 66 to 77 degrees F  
*Frost-free period:* 248 to 365 days  
*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Apopka and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Apopka

#### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope, interfluve, tread  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Convex, linear  
*Parent material:* Eolian deposits and/or sandy and loamy marine deposits

#### Typical profile

*A - 0 to 6 inches:* sand  
*E - 6 to 55 inches:* sand  
*Bt - 55 to 80 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A

## Custom Soil Resource Report

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Upland Hardwood Hammock (R154XY008FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Minor Components

#### Sparr

*Percent of map unit:* 6 percent

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve, rise

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Upland Hardwood Hammock (R154XY008FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

#### Candler

*Percent of map unit:* 5 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, interfluve, tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)

#### Jumper

*Percent of map unit:* 5 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Interfluve, talf

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Sandy over loamy soils on rises and knolls of mesic uplands (G154XB231FL)

#### Jonesville

*Percent of map unit:* 4 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Shallow or moderately deep, sandy or loamy soils on rises and ridges of mesic uplands (G154XB521FL)

## 8—Candler sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t3z1

*Elevation:* 10 to 260 feet

*Mean annual precipitation:* 47 to 56 inches

## Custom Soil Resource Report

*Mean annual air temperature:* 68 to 77 degrees F  
*Frost-free period:* 280 to 365 days  
*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Candler and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Candler

#### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope, interfluve, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Eolian deposits and/or sandy and loamy marine deposits

#### Typical profile

*A - 0 to 6 inches:* sand  
*E - 6 to 63 inches:* sand  
*E and Bt - 63 to 80 inches:* sand

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)

### Minor Components

#### Tavares

*Percent of map unit:* 5 percent  
*Landform:* Ridges on marine terraces  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Concave, convex  
*Across-slope shape:* Linear



## Custom Soil Resource Report

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

### **Millhopper**

*Percent of map unit:* 5 percent

*Landform:* Ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

## **9—Candler sand, 5 to 12 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2w0q4

*Elevation:* 30 to 160 feet

*Mean annual precipitation:* 44 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 290 to 365 days

*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Candler and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Candler**

#### **Setting**

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, interfluve, tread

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex

*Parent material:* Eolian deposits and/or sandy and loamy marine deposits

#### **Typical profile**

*A - 0 to 5 inches:* sand

*E - 5 to 67 inches:* sand

*E and Bt - 67 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 5 to 12 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95  
to 19.98 in/hr)

*Depth to water table:* More than 80 inches

## Custom Soil Resource Report

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Very low (about 2.5 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Sand Pine Scrub (R154XY001FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on strongly sloping to steep side slopes of xeric uplands (G154XB113FL)

### **Minor Components**

#### **Apopka**

*Percent of map unit:* 6 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve, side slope

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Sandy soils on strongly sloping to steep side slopes of xeric uplands (G154XB113FL)

#### **Kendrick**

*Percent of map unit:* 5 percent

*Landform:* Ridges on marine terraces

*Landform position (three-dimensional):* Interfluve, side slope

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy over loamy soils on knolls and ridges of mesic uplands (G154XB211FL)

#### **Adamsville**

*Percent of map unit:* 3 percent

*Landform:* Knolls on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve, talf

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

#### **Pompano**

*Percent of map unit:* 1 percent

*Landform:* Flats on marine terraces

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread, talf

*Down-slope shape:* Linear

*Across-slope shape:* Convex, linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

## 17—Arents

### Map Unit Setting

*National map unit symbol:* 1qt6b  
*Mean annual precipitation:* 46 to 54 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 340 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Arents and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Arents

#### Setting

*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Altered marine deposits

#### Typical profile

*C - 0 to 80 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 1.98 in/hr)  
*Depth to water table:* About 30 to 60 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 7.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Hydrologic Soil Group:* B  
*Other vegetative classification:* Forage suitability group not assigned  
(G154XB999FL)

## 24—Kendrick sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1nrvx  
*Elevation:* 40 to 150 feet  
*Mean annual precipitation:* 46 to 54 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 340 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Kendrick and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Kendrick

#### Setting

*Landform:* Ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy and loamy marine and fluvial deposits

#### Typical profile

*A - 0 to 5 inches:* sand  
*E - 5 to 32 inches:* sand  
*Bt - 32 to 75 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy over loamy soils on knolls and ridges of mesic uplands (G154XB211FL)

## Minor Components

### Apopka

*Percent of map unit:* 10 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve, side slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

## 28—Myakka-Myakka, wet, sands, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tw1

*Elevation:* 10 to 130 feet

*Mean annual precipitation:* 43 to 62 inches

*Mean annual air temperature:* 64 to 75 degrees F

*Frost-free period:* 280 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Myakka and similar soils:* 75 percent

*Myakka, wet, and similar soils:* 15 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Myakka

#### Setting

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Tread, talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 6 inches:* sand

*E - 6 to 20 inches:* sand

*Bh - 20 to 36 inches:* sand

*C - 36 to 80 inches:* sand

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 5.95 in/hr)

*Depth to water table:* About 6 to 18 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### Description of Myakka, Wet

#### Setting

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 6 inches:* sand  
*E - 6 to 20 inches:* sand  
*Bh - 20 to 36 inches:* sand  
*C - 36 to 80 inches:* sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### Minor Components

#### Basinger

*Percent of map unit:* 5 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Convex, linear

## Custom Soil Resource Report

*Across-slope shape:* Linear, concave  
*Ecological site:* South Florida Flatwoods (R155XY003FL)

### **Eaugallie**

*Percent of map unit:* 4 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* South Florida Flatwoods (R155XY003FL)

### **Placid, depressional**

*Percent of map unit:* 1 percent  
*Landform:* Depressions on marine terraces  
*Landform position (two-dimensional):* Toeslope, footslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, convex  
*Across-slope shape:* Concave, linear  
*Ecological site:* Freshwater Marshes and Ponds (R155XY010FL)

## **34—Orlando fine sand, 0 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1nrw7  
*Elevation:* 40 to 150 feet  
*Mean annual precipitation:* 46 to 54 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 340 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Orlando and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Orlando**

#### **Setting**

*Landform:* Ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits over fluviomarine deposits

#### **Typical profile**

*A - 0 to 30 inches:* fine sand  
*C - 30 to 80 inches:* fine sand

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 4.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Minor Components

#### Kendrick

*Percent of map unit:* 10 percent

*Landform:* Ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy over loamy soils on knolls and ridges of mesic uplands (G154XB211FL)

## 35—Paola sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tzwj

*Elevation:* 0 to 100 feet

*Mean annual precipitation:* 44 to 60 inches

*Mean annual air temperature:* 68 to 77 degrees F

*Frost-free period:* 340 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Paola and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*



## Description of Paola

### Setting

*Landform:* Ridges on marine terraces, hills on marine terraces  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Interfluve, side slope, riser  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

### Typical profile

*A - 0 to 6 inches:* sand  
*E - 6 to 55 inches:* sand  
*B/E - 55 to 80 inches:* sand

### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 50.02 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sand Pine Scrub (R155XY001FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)

## Minor Components

### Apopka

*Percent of map unit:* 6 percent  
*Landform:* Ridges on marine terraces, hills on marine terraces  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Interfluve, side slope, riser  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Astatula

*Percent of map unit:* 5 percent  
*Landform:* Ridges on marine terraces, hills on marine terraces  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Interfluve, side slope, riser  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear

## Custom Soil Resource Report

*Other vegetative classification:* Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)

### **Pomello**

*Percent of map unit:* 4 percent

*Landform:* Ridges on marine terraces, hills on marine terraces

*Landform position (two-dimensional):* Summit, backslope

*Landform position (three-dimensional):* Interfluve, side slope, riser

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Ecological site:* Sand Pine Scrub (R155XY001FL)

*Other vegetative classification:* Sand Pine Scrub (R155XY001FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

## **38—Placid sand, depressional**

### **Map Unit Setting**

*National map unit symbol:* 1nrwc

*Elevation:* 10 to 60 feet

*Mean annual precipitation:* 46 to 54 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 340 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Placid, depressional, and similar soils:* 70 percent

*Minor components:* 30 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Placid, Depressional**

#### **Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 18 inches:* sand

*C - 18 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* Frequent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Moderate (about 6.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Slough (R154XY011FL), Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL)

### Minor Components

#### Myakka, hydric

*Percent of map unit:* 20 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R154XY003FL), Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

#### Seffner

*Percent of map unit:* 10 percent

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve, talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

## 39—Seffner sand

### Map Unit Setting

*National map unit symbol:* 1qt71

*Mean annual precipitation:* 46 to 54 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 340 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Seffner and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Seffner

#### Setting

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve, talf

## Custom Soil Resource Report

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

### Typical profile

*A11 - 0 to 6 inches:* sand  
*A12 - 6 to 19 inches:* sand  
*C - 19 to 80 inches:* sand

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

### Minor Components

#### Felda

*Percent of map unit:* 10 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Slough (R154XY011FL), Sandy over loamy soils on stream terraces, flood plains, or in depressions (G154XB245FL)

## 41—Pomello sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1nrwg  
*Elevation:* 20 to 120 feet  
*Mean annual precipitation:* 46 to 54 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 340 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Pomello and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Pomello

#### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 3 inches:* sand

*E - 3 to 39 inches:* sand

*Bh - 39 to 57 inches:* sand

*C - 57 to 80 inches:* sand

#### Properties and qualities

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 24 to 42 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Sand Pine Scrub (R154XY001FL), Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

### Minor Components

#### St. lucie

*Percent of map unit:* 5 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sand Pine Scrub (R154XY001FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

#### Immokalee, non-hydric

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

## Custom Soil Resource Report

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R154XY003FL), Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)

### **Tavares**

*Percent of map unit:* 5 percent

*Landform:* Ridges on marine terraces, flats on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

## **43—St. Lucie sand, 0 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1nrwj

*Mean annual precipitation:* 46 to 54 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 340 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*St. lucie and similar soils:* 80 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of St. Lucie**

#### **Setting**

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Eolian or sandy marine deposits

#### **Typical profile**

*A - 0 to 4 inches:* sand

*C - 4 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 50.02 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

## Custom Soil Resource Report

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Sand Pine Scrub (R154XY001FL), Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

### Minor Components

#### Pomello

*Percent of map unit:* 20 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sand Pine Scrub (R154XY001FL), Sandy soils on rises and knolls of mesic uplands (G154XB131FL)

## 45—Tavares sand, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2v173

*Elevation:* 0 to 180 feet

*Mean annual precipitation:* 44 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 300 to 365 days

*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Tavares and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Tavares

#### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces, flats on marine terraces

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Interfluve, base slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Eolian or sandy marine deposits

#### Typical profile

*A - 0 to 7 inches:* sand

*C - 7 to 80 inches:* sand

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 50.02 in/hr)  
*Depth to water table:* About 42 to 72 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 1.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

### Minor Components

#### Apopka

*Percent of map unit:* 6 percent  
*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (two-dimensional):* Shoulder, summit, footslope  
*Landform position (three-dimensional):* Nose slope, side slope, crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)

#### Candler

*Percent of map unit:* 4 percent  
*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope, interfluve, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Other vegetative classification:* Longleaf Pine-Turkey Oak Hills (R154XY002FL),  
Longleaf Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and  
dunes of xeric uplands (G154XB111FL), Sandy soils on ridges and dunes of  
xeric uplands (G155XB111FL)

#### Adamsville

*Percent of map unit:* 3 percent  
*Landform:* Knolls on flatwoods, rises on flatwoods  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, rise, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Upland Hardwood Hammock (R154XY008FL),  
Upland Hardwood Hammock (R155XY008FL), Sandy soils on rises and knolls  
of mesic uplands (G155XB131FL)



## Custom Soil Resource Report

### **Zolfo**

*Percent of map unit:* 2 percent

*Landform:* Flats on marine terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands  
(G154XB131FL)

# **Soil Information for All Uses**

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## **Suitabilities and Limitations for Use**

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

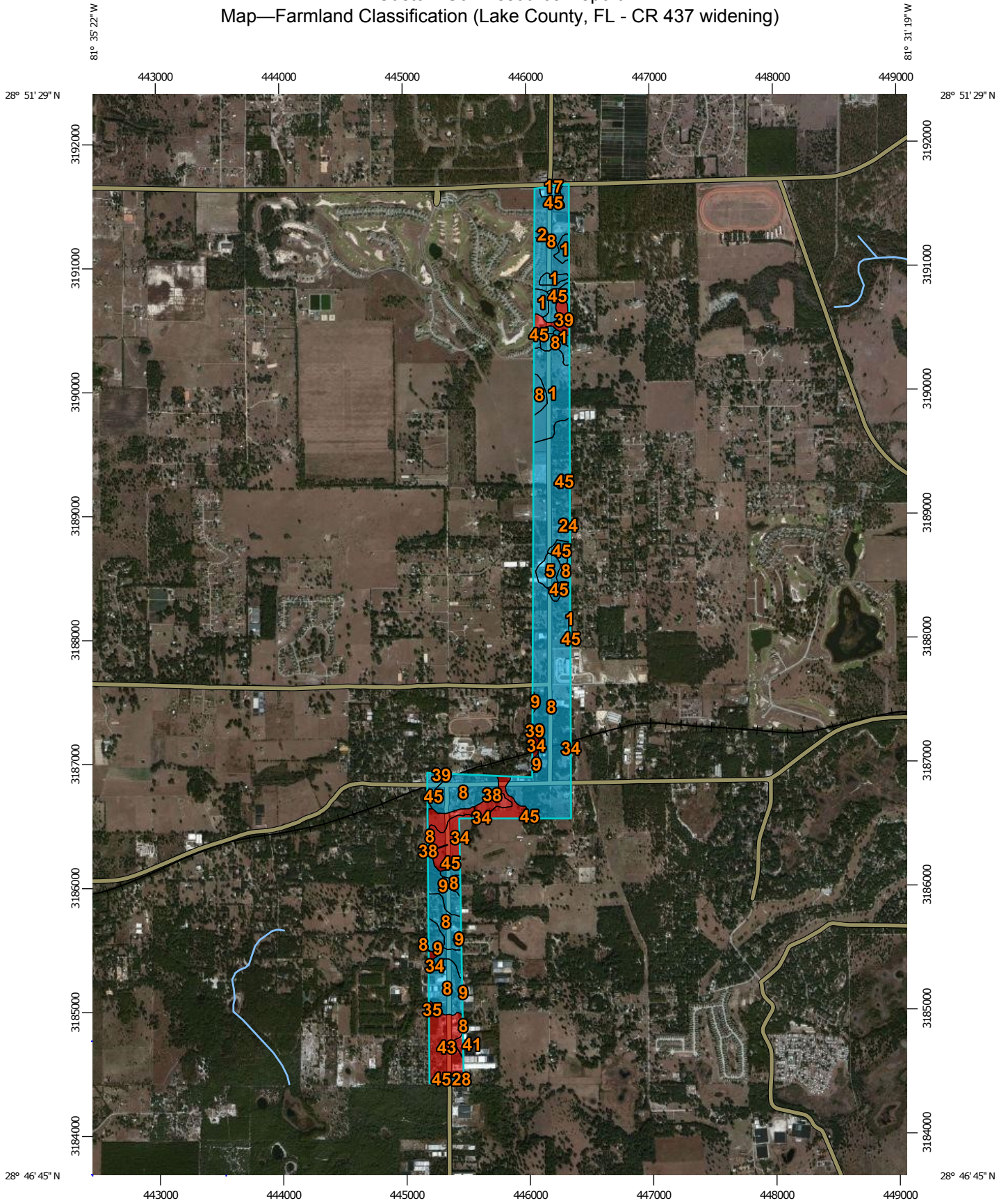
## **Land Classifications**

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

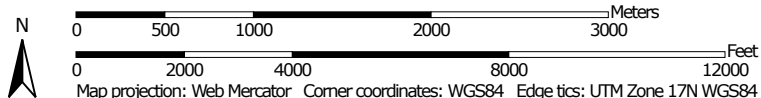
## **Farmland Classification (Lake County, FL - CR 437 widening)**

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Custom Soil Resource Report  
 Map—Farmland Classification (Lake County, FL - CR 437 widening)




Map Scale: 1:42,600 if printed on A portrait (8.5" x 11") sheet.



# Custom Soil Resource Report









## MAP LEGEND








### Area of Interest (AOI)

 Area of Interest (AOI)




### Soils








#### Soil Rating Polygons






-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available







#### Soil Rating Lines










-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained

-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available








#### Soil Rating Points

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

#### Water Features

## MAP INFORMATION

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County Area, Florida  
Survey Area Data: Version 14, Nov 19, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 8, 2010—Jan 3, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**Table—Farmland Classification (Lake County, FL - CR 437 widening)**

| <b>Farmland Classification— Summary by Map Unit — Lake County Area, Florida (FL607)</b> |  |                               |                     |                       |
|---|--|-------------------------------|---------------------|-----------------------|
| <b>Map unit symbol</b>  | <b>Map unit name</b>                             | <b>Rating</b>                 | <b>Acres in AOI</b> | <b>Percent of AOI</b> |
| 1   | Sparr sand, 0 to 5 percent slopes                | Farmland of unique importance | 58.8                | 10.0%                 |
| 2   | Sparr sand, 5 to 12 percent slopes               | Farmland of unique importance | 1.5                 | 0.3%                  |
| 5   | Apopka sand, 0 to 5 percent slopes               | Farmland of unique importance | 9.4                 | 1.6%                  |
| 8   | Candler sand, 0 to 5 percent slopes              | Farmland of unique importance | 351.5               | 59.6%                 |
| 9   | Candler sand, 5 to 12 percent slopes             | Farmland of unique importance | 31.7                | 5.4%                  |
| 17  | Arents   | Not prime farmland            | 0.0                 | 0.0%                  |
| 24  | Kendrick sand, 0 to 5 percent slopes             | Not prime farmland            | 0.9                 | 0.2%                  |
| 28  | Myakka-Myakka, wet, sands, 0 to 2 percent slopes | Not prime farmland            | 0.6                 | 0.1%                  |
| 34  | Orlando fine sand, 0 to 5 percent slopes         | Not prime farmland            | 24.5                | 4.2%                  |
| 35  | Paola sand, 0 to 5 percent slopes                | Not prime farmland            | 1.3                 | 0.2%                  |
| 38  | Placid sand, depressional                        | Not prime farmland            | 28.1                | 4.8%                  |
| 39  | Seffner sand                                     | Not prime farmland            | 10.2                | 1.7%                  |
| 41  | Pomello sand, 0 to 5 percent slopes              | Not prime farmland            | 2.0                 | 0.3%                  |
| 43  | St. Lucie sand, 0 to 5 percent slopes            | Not prime farmland            | 34.2                | 5.8%                  |
| 45  | Tavares sand, 0 to 5 percent slopes              | Farmland of unique importance | 35.5                | 6.0%                  |
| <b>Totals for Area of Interest</b>  |  |                               | <b>590.1</b>        | <b>100.0%</b>         |

**Rating Options—Farmland Classification (Lake County, FL - CR 437 widening)**

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower

# FARMLAND CONVERSION IMPACT RATING

|  |                                 |
|--|---------------------------------|
| <b>PART I</b> <i>(To be completed by Federal Agency)</i> | Date Of Land Evaluation Request |
| Name Of Project  | Federal Agency Involved         |
| Proposed Land Use  | County And State                |

|  |   |                                       |   |
|--|---|---------------------------------------|---|
| <b>PART II</b> <i>(To be completed by NRCS)</i>  |   | Date Request Received By NRCS         |   |
| Does the site contain prime, unique, statewide or local important farmland?<br><i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i> | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>           | Average Farm Size                                 |
| Major Crop(s)  | Farmable Land In Govt. Jurisdiction<br>Acres: % | Acres Irrigated                       | Amount Of Farmland As Defined in FPPA<br>Acres: % |
| Name Of Land Evaluation System Used  | Name Of Local Site Assessment System            | Date Land Evaluation Returned By NRCS |   |

|  |                         |        |        |        |
|--|-------------------------|--------|--------|--------|
| <b>PART III</b> <i>(To be completed by Federal Agency)</i> | Alternative Site Rating |        |        |        |
|  | Site A                  | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly                    |                         |        |        |        |
| B. Total Acres To Be Converted Indirectly                  |                         |        |        |        |
| C. Total Acres In Site                                     |                         |        |        |        |

|  |  |  |  |  |
|--|--|--|--|--|
| <b>PART IV</b> <i>(To be completed by NRCS)</i> Land Evaluation Information        |  |  |  |  |
| A. Total Acres Prime And Unique Farmland   |  |  |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |  |  |  |  |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted            |  |  |  |  |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value |  |  |  |  |

|  |  |  |  |  |
|--|--|--|--|--|
| <b>PART V</b> <i>(To be completed by NRCS)</i> Land Evaluation Criterion<br>Relative Value Of Farmland To Be Converted <i>(Scale of 0 to 100 Points)</i> |  |  |  |  |
|--|--|--|--|--|

|   |                |  |  |  |  |
|---|----------------|--|--|--|--|
| <b>PART VI</b> <i>(To be completed by Federal Agency)</i><br>Site Assessment Criteria <i>(These criteria are explained in 7 CFR 658.5(b))</i> | Maximum Points |  |  |  |  |
| 1. Area In Nonurban Use   |                |  |  |  |  |
| 2. Perimeter In Nonurban Use  |                |  |  |  |  |
| 3. Percent Of Site Being Farmed   |                |  |  |  |  |
| 4. Protection Provided By State And Local Government  |                |  |  |  |  |
| 5. Distance From Urban Builtup Area   |                |  |  |  |  |
| 6. Distance To Urban Support Services   |                |  |  |  |  |
| 7. Size Of Present Farm Unit Compared To Average  |                |  |  |  |  |
| 8. Creation Of Nonfarmable Farmland   |                |  |  |  |  |
| 9. Availability Of Farm Support Services  |                |  |  |  |  |
| 10. On-Farm Investments   |                |  |  |  |  |
| 11. Effects Of Conversion On Farm Support Services  |                |  |  |  |  |
| 12. Compatibility With Existing Agricultural Use  |                |  |  |  |  |
| <b>TOTAL SITE ASSESSMENT POINTS</b>   | <b>160</b>     |  |  |  |  |

|  |            |  |  |  |  |
|--|------------|--|--|--|--|
| <b>PART VII</b> <i>(To be completed by Federal Agency)</i>                   |            |  |  |  |  |
| Relative Value Of Farmland <i>(From Part V)</i>                              | 100        |  |  |  |  |
| Total Site Assessment <i>(From Part VI above or a local site assessment)</i> | 160        |  |  |  |  |
| <b>TOTAL POINTS</b> <i>(Total of above 2 lines)</i>                          | <b>260</b> |  |  |  |  |

|                |                   |   |
|----------------|-------------------|---|
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used?<br>Yes <input type="checkbox"/> No <input type="checkbox"/> |
|----------------|-------------------|---|

Reason For Selection:

## STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 – Originator will send copies A, B and C together with maps indicating locations of site(s), to the Natural Resources Conservation Service (NRCS) local field office and retain copy D for their files. (Note: NRCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the NRCS State Conservationist in each state).

Step 3 – NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 – In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 – NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

## INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

**Part I:** In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

**Part III:** In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

**Part VI:** Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will, be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

**Part VII:** In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

Total points assigned Site A =  $\frac{180}{200} \times 160 = 144$  points for Site "A."

Maximum points possible      200



## **Site Assessment Scoring for the Twelve Factors Used in FPPA**

The Site Assessment criteria used in the Farmland Protection Policy Act (FPPA) rule are designed to assess important factors other than the agricultural value of the land when determining which alternative sites should receive the highest level of protection from conversion to non agricultural uses.

Twelve factors are used for Site Assessment and ten factors for corridor-type sites. Each factor is listed in an outline form, without detailed definitions or guidelines to follow in the rating process. The purpose of this document is to expand the definitions of use of each of the twelve Site Assessment factors so that all persons can have a clear understanding as to what each factor is intended to evaluate and how points are assigned for given conditions.

In each of the 12 factors a number rating system is used to determine which sites deserve the most protection from conversion to non-farm uses. The higher the number value given to a proposed site, the more protection it will receive. The maximum scores are 10, 15 and 20 points, depending upon the relative importance of each particular question. If a question significantly relates to why a parcel of land should not be converted, the question has a maximum possible protection value of 20, whereas a question which does not have such a significant impact upon whether a site would be converted, would have fewer maximum points possible, for example 10.

The following guidelines should be used in rating the twelve Site Assessment criteria:

### **1. How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?**

|                       |                |
|-----------------------|----------------|
| More than 90 percent: | 15 points      |
| 90-20 percent:        | 14 to 1 points |
| Less than 20 percent: | 0 points       |

This factor is designed to evaluate the extent to which the area within one mile of the proposed site is non-urban area. For purposes of this rule, "non-urban" should include:

- Agricultural land (crop-fruit trees, nuts, oilseed)
- Range land
- Forest land
- Golf Courses
- Non paved parks and recreational areas
- Mining sites
- Farm Storage
- Lakes, ponds and other water bodies
- Rural roads, and through roads without houses or buildings
- Open space
- Wetlands
- Fish production
- Pasture or hayland

Urban uses include:

- Houses (other than farm houses)
- Apartment buildings
- Commercial buildings
- Industrial buildings
- Paved recreational areas (i.e. tennis courts)
- Streets in areas with 30 structures per 40 acres
- Gas stations

- Equipment, supply stores
- Off-farm storage
- Processing plants
- Shopping malls
- Utilities/Services
- Medical buildings

In rating this factor, an area one-mile from the outer edge of the proposed site should be outlined on a current photo; the areas that are urban should be outlined. For rural houses and other buildings with unknown sizes, use 1 and 1/3 acres per structure. For roads with houses on only one side, use one half of road for urban and one half for non-urban.

The purpose of this rating process is to insure that the most valuable and viable farmlands are protected from development projects sponsored by the Federal Government. With this goal in mind, factor S1 suggests that the more agricultural lands surrounding the parcel boundary in question, the more protection from development this site should receive. Accordingly, a site with a large quantity of non-urban land surrounding it will receive a greater number of points for protection from development. Thus, where more than 90 percent of the area around the proposed site (do not include the proposed site in this assessment) is non-urban, assign 15 points. Where 20 percent or less is non-urban, assign 0 points. Where the area lies between 20 and 90 percent non-urban, assign appropriate points from 14 to 1, as noted below.

| <b>Percent Non-Urban Land<br/>within 1 mile</b> | <b>Points</b> |
|---|---------------|
| 90 percent or greater                           | 15            |
| 85 to 89 percent                                | 14            |
| 80 to 84 percent                                | 13            |
| 75 to 79 percent                                | 12            |
| 70 to 74 percent                                | 11            |
| 65 to 69 percent                                | 10            |
| 60 to 64 percent                                | 9             |
| 55 to 59 percent                                | 8             |
| 50 to 54 percent                                | 7             |
| 45 to 49 percent                                | 6             |
| 40 to 44 percent                                | 5             |
| 35 to 39 percent                                | 4             |
| 30 to 24 percent                                | 3             |
| 25 to 29 percent                                | 2             |
| 21 to 24 percent                                | 1             |
| 20 percent or less                              | 0             |

**2. How much of the perimeter of the site borders on land in non-urban use?**

|                       |                 |
|-----------------------|-----------------|
| More than 90 percent: | 10 points       |
| 90 to 20 percent:     | 9 to 1 point(s) |
| Less than 20 percent: | 0 points        |

This factor is designed to evaluate the extent to which the land adjacent to the proposed site is non-urban use. Where factor #1 evaluates the general location of the proposed site, this factor evaluates the immediate perimeter of the site. The definition of urban and non-urban uses in factor #1 should be used for this factor.

In rating the second factor, measure the perimeter of the site that is in non-urban and urban use. Where more than 90 percent of the perimeter is in non-urban use, score this factor 10 points. Where less than 20 percent, assign 0 points. If a road is next to the perimeter, class the area according to the

use on the other side of the road for that area. Use 1 and 1/3 acre per structure if not otherwise known. Where 20 to 90 percent of the perimeter is non-urban, assign points as noted below:

| <b>Percentage of Perimeter<br/>Bordering Land</b> | <b>Points</b> |
|---|---------------|
| 90 percent or greater                             | 10            |
| 82 to 89 percent                                  | 9             |
| 74 to 81 percent                                  | 8             |
| 65 to 73 percent                                  | 7             |
| 58 to 65 percent                                  | 6             |
| 50 to 57 percent                                  | 5             |
| 42 to 49 percent                                  | 4             |
| 34 to 41 percent                                  | 3             |
| 27 to 33 percent                                  | 2             |
| 21 to 26 percent                                  | 1             |
| 20 percent or Less                                | 0             |

**3. How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last ten years?**

|                       |                  |
|-----------------------|------------------|
| More than 90 percent: | 20 points        |
| 90 to 20 percent:     | 19 to 1 point(s) |
| Less than 20 percent: | 0 points         |

This factor is designed to evaluate the extent to which the proposed conversion site has been used or managed for agricultural purposes in the past 10 years.

Land is being farmed when it is used or managed for food or fiber, to include timber products, fruit, nuts, grapes, grain, forage, oil seed, fish and meat, poultry and dairy products.

Land that has been left to grow up to native vegetation without management or harvest will be considered as abandoned and therefore not farmed. The proposed conversion site should be evaluated and rated according to the percent, of the site farmed.

If more than 90 percent of the site has been farmed 5 of the last 10 years score the site as follows:

| <b>Percentage of Site Farmed</b> | <b>Points</b> |
|----------------------------------|---------------|
| 90 percent or greater            | 20            |
| 86 to 89 percent                 | 19            |
| 82 to 85 percent                 | 18            |
| 78 to 81 percent                 | 17            |
| 74 to 77 percent                 | 16            |
| 70 to 73 percent                 | 15            |
| 66 to 69 percent                 | 14            |
| 62 to 65 percent                 | 13            |
| 58 to 61 percent                 | 12            |
| 54 to 57 percent                 | 11            |
| 50 to 53 percent                 | 10            |
| 46 to 49 percent                 | 9             |
| 42 to 45 percent                 | 8             |
| 38 to 41 percent                 | 7             |
| 35 to 37 percent                 | 6             |
| 32 to 34 percent                 | 5             |
| 29 to 31 percent                 | 4             |
| 26 to 28 percent                 | 3             |

|                                  |   |
|----------------------------------|---|
| 23 to 25 percent                 | 2 |
| 20 to 22 percent percent or Less | 1 |
| Less than 20 percent             | 0 |

**4. Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?**

|                        |           |
|------------------------|-----------|
| Site is protected:     | 20 points |
| Site is not protected: | 0 points  |

This factor is designed to evaluate the extent to which state and local government and private programs have made efforts to protect this site from conversion.

**State and local policies and programs to protect farmland include:**

**State Policies and Programs to Protect Farmland**

1. Tax Relief:

A. Differential Assessment: Agricultural lands are taxed on their agricultural use value, rather than at market value. As a result, farmers pay fewer taxes on their land, which helps keep them in business, and therefore helps to insure that the farmland will not be converted to nonagricultural uses.

1. Preferential Assessment for Property Tax: Landowners with parcels of land used for agriculture are given the privilege of differential assessment.
2. Deferred Taxation for Property Tax: Landowners are deterred from converting their land to nonfarm uses, because if they do so, they must pay back taxes at market value.
3. Restrictive Agreement for Property Tax: Landowners who want to receive Differential Assessment must agree to keep their land in - eligible use.

B. Income Tax Credits

Circuit Breaker Tax Credits: Authorize an eligible owner of farmland to apply some or all of the property taxes on his or her farmland and farm structures as a tax credit against the owner's state income tax.

C. Estate and Inheritance Tax Benefits

Farm Use Valuation for Death Tax: Exemption of state tax liability to eligible farm estates.

2. "Right to farm" laws:

Prohibits local governments from enacting laws which will place restrictions upon normally accepted farming practices, for example, the generation of noise, odor or dust.

3. Agricultural Districting:

Wherein farmers voluntarily organize districts of agricultural land to be legally recognized geographic areas. These farmers receive benefits, such as protection from annexation, in exchange for keeping land within the district for a given number of years.

4. Land Use Controls: Agricultural Zoning.

Types of Agricultural Zoning Ordinances include:

- A. Exclusive: In which the agricultural zone is restricted to only farm-related dwellings, with, for example, a minimum of 40 acres per dwelling unit.
- B. Non-Exclusive: In which non-farm dwellings are allowed, but the density remains low, such as 20 acres per dwelling unit.

Additional Zoning techniques include:

- A. Sliding Scale: This method looks at zoning according to the total size of the parcel owned. For example, the number of dwelling units per a given number of acres may change from county to county according to the existing land acreage to dwelling unit ratio of surrounding parcels of land within the specific area.
- B. Point System or Numerical Approach: Approaches land use permits on a case by case basis.  
  
LESA: The LESA system (Land Evaluation-Site Assessment) is used as a tool to help assess options for land use on an evaluation of productivity weighed against commitment to urban development.
- C. Conditional Use: Based upon the evaluation on a case by case basis by the Board of Zoning Adjustment. Also may include the method of using special land use permits.

5. Development Rights:

- A. Purchase of Development Rights (PDR): Where development rights are purchased by Government action.

Buffer Zoning Districts: Buffer Zoning Districts are an example of land purchased by Government action. This land is included in zoning ordinances in order to preserve and protect agricultural lands from non-farm land uses encroaching upon them.

- B. Transfer of Development Rights (TDR): Development rights are transferable for use in other locations designated as receiving areas. TDR is considered a locally based action (not state), because it requires a voluntary decision on the part of the individual landowners.

6. Governor's Executive Order: Policy made by the Governor, stating the importance of agriculture, and the preservation of agricultural lands. The Governor orders the state agencies to avoid the unnecessary conversion of important farmland to nonagricultural uses.

7. Voluntary State Programs:

- A. California's Program of Restrictive Agreements and Differential Assessments: The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows cities, counties and individual landowners to form agricultural preserves and enter into contracts for 10 or more years to insure that these parcels of land remain strictly for agricultural use. Since 1972 the Act has extended eligibility to recreational and open space lands such as scenic highway corridors, salt ponds and wildlife preserves. These contractually restricted lands may be taxed differentially for their real value. One hundred-acre districts constitute the minimum land size eligible.

Suggestion: An improved version of the Act would state that if the land is converted after the contract expires, the landowner must pay the difference in the taxes between market value for the land and the agricultural tax value which he or she had been

paying under the Act. This measure would help to insure that farmland would not be converted after the 10 year period ends.

- B. Maryland Agricultural Land Preservation Program: Agricultural landowners within agricultural districts have the opportunity to sell their development rights to the Maryland Land Preservation Foundation under the agreement that these landowners will not subdivide or develop their land for an initial period of five years. After five years the landowner may terminate the agreement with one year notice.

As is stated above under the California Williamson Act, the landowner should pay the back taxes on the property if he or she decides to convert the land after the contract expires, in order to discourage such conversions.

- C. Wisconsin Income Tax Incentive Program: The Wisconsin Farmland Preservation Program of December 1977 encourages local jurisdictions in Wisconsin to adopt agricultural preservation plans or exclusive agricultural district zoning ordinances in exchange for credit against state income tax and exemption from special utility assessment. Eligible candidates include local governments and landowners with at least 35 acres of land per dwelling unit in agricultural use and gross farm profits of at least \$6,000 per year, or \$18,000 over three years.

#### 8. Mandatory State Programs:

- A. The Environmental Control Act in the state of Vermont was adopted in 1970 by the Vermont State Legislature. The Act established an environmental board with 9 members (appointed by the Governor) to implement a planning process and a permit system to screen most subdivisions and development proposals according to specific criteria stated in the law. The planning process consists of an interim and a final Land Capability and Development Plan, the latter of which acts as a policy plan to control development. The policies are written in order to:
- prevent air and water pollution;
  - protect scenic or natural beauty, historic sites and rare and irreplaceable natural areas; and
  - consider the impacts of growth and reduction of development on areas of primary agricultural soils.
- B. The California State Coastal Commission: In 1976 the Coastal Act was passed to establish a permanent Coastal Commission with permit and planning authority. The purpose of the Coastal Commission was and is to protect the sensitive coastal zone environment and its resources, while accommodating the social and economic needs of the state. The Commission has the power to regulate development in the coastal zones by issuing permits on a case by case basis until local agencies can develop their own coastal plans, which must be certified by the Coastal Commission.
- C. Hawaii's Program of State Zoning: In 1961, the Hawaii State Legislature established Act 187, the Land Use Law, to protect the farmland and the welfare of the local people of Hawaii by planning to avoid "unnecessary urbanization". The Law made all state lands into four districts: agricultural, conservation, rural and urban. The Governor appointed members to a State Land Use Commission, whose duties were to uphold the Law and form the boundaries of the four districts. In addition to state zoning, the Land Use Law introduced a program of Differential Assessment, wherein agricultural landowners paid taxes on their land for its agricultural use value, rather than its market value.
- D. The Oregon Land Use Act of 1973: This act established the Land Conservation and Development Commission (LCDC) to provide statewide planning goals and guidelines.

Under this Act, Oregon cities and counties are each required to draw up a comprehensive plan, consistent with statewide planning goals. Agricultural land preservation is high on the list of state goals to be followed locally.

If the proposed site is subject to or has used one or more of the above farmland protection programs or policies, score the site 20 points. If none of the above policies or programs apply to this site, score 0 points.

**5. How close is the site to an urban built-up area?**

|  |           |
|--|-----------|
| The site is 2 miles or more from an urban built-up area                          | 15 points |
| The site is more than 1 mile but less than 2 miles from an urban built-up area   | 10 points |
| The site is less than 1 mile from, but is not adjacent to an urban built-up area | 5 points  |
| The site is adjacent to an urban built-up area                                   | 0 points  |

This factor is designed to evaluate the extent to which the proposed site is located next to an existing urban area. The urban built-up area must be 2500 population. The measurement from the built-up area should be made from the point at which the density is 30 structures per 40 acres and with no open or non-urban land existing between the major built-up areas and this point. Suburbs adjacent to cities or urban built-up areas should be considered as part of that urban area.

For greater accuracy, use the following chart to determine how much protection the site should receive according to its distance from an urban area. See chart below:

| <b>Distance From Perimeter of Site to Urban Area</b> | <b>Points</b> |
|--|---------------|
| More than 10,560 feet                                | 15            |
| 9,860 to 10,559 feet                                 | 14            |
| 9,160 to 9,859 feet                                  | 13            |
| 8,460 to 9,159 feet                                  | 12            |
| 7,760 to 8,459 feet                                  | 11            |
| 7,060 to 7,759 feet                                  | 10            |
| 6,360 to 7,059 feet                                  | 9             |
| 5,660 to 6,359 feet                                  | 8             |
| 4,960 to 5,659 feet                                  | 7             |
| 4,260 to 4,959 feet                                  | 6             |
| 3,560 to 4,259 feet                                  | 5             |
| 2,860 to 3,559 feet                                  | 4             |
| 2,160 to 2,859 feet                                  | 3             |
| 1,460 to 2,159 feet                                  | 2             |
| 760 to 1,459 feet                                    | 1             |
| Less than 760 feet (adjacent)                        | 0             |

**6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?**

|  |           |
|--|-----------|
| None of the services exist nearer than 3 miles from the site                 | 15 points |
| Some of the services exist more than one but less than 3 miles from the site | 10 points |
| All of the services exist within 1/2 mile of the site                        | 0 points  |

This question determines how much infrastructure (water, sewer, etc.) is in place which could facilitate nonagricultural development. The fewer facilities in place, the more difficult it is to develop an area. Thus, if a proposed site is further away from these services (more than 3 miles distance away), the site should be awarded the highest number of points (15). As the distance of the parcel of land to services decreases, the number of points awarded declines as well. So, when the site is equal to or further than 1 mile but less than 3 miles away from services, it should be given 10 points. Accordingly, if this distance is 1/2 mile to less than 1 mile, award 5 points; and if the distance from land to services is less than 1/2 mile, award 0 points.

Distance to public facilities should be measured from the perimeter of the parcel in question to the nearest site(s) where necessary facilities are located. If there is more than one distance (i.e. from site to water and from site to sewer), use the average distance (add all distances and then divide by the number of different distances to get the average).

Facilities which could promote nonagricultural use include:

- Water lines
- Sewer lines
- Power lines
- Gas lines
- Circulation (roads)
- Fire and police protection
- Schools

**7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)**

|   |               |
|---|---------------|
| As large or larger:   | 10 points     |
| Below average: Deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more is below average | 9 to 0 points |

This factor is designed to determine how much protection the site should receive, according to its size in relation to the average size of farming units within the county. The larger the parcel of land, the more agricultural use value the land possesses, and vice versa. Thus, if the farm unit is as large or larger than the county average, it receives the maximum number of points (10). The smaller the parcel of land compared to the county average, the fewer number of points given. Please see below:

| Parcel Size in Relation to Average County Size | Points |
|--|--------|
| Same size or larger than average (100 percent) | 10     |
| 95 percent of average                          | 9      |
| 90 percent of average                          | 8      |
| 85 percent of average                          | 7      |
| 80 percent of average                          | 6      |
| 75 percent of average                          | 5      |
| 70 percent of average                          | 4      |
| 65 percent of average                          | 3      |
| 60 percent of average                          | 2      |
| 55 percent of average                          | 1      |
| 50 percent or below county average             | 0      |



State and local Natural Resources Conservation Service offices will have the average farm size information, provided by the latest available Census of Agriculture data

**8. If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?**

|  |                 |
|--|-----------------|
| Acreage equal to more than 25 percent of acres directly converted by the project         | 10 points       |
| Acreage equal to between 25 and 5 percent of the acres directly converted by the project | 9 to 1 point(s) |
| Acreage equal to less than 5 percent of the acres directly converted by the project      | 0 points        |

This factor tackles the question of how the proposed development will affect the rest of the land on the farm. The site which deserves the most protection from conversion will receive the greatest number of points, and vice versa. For example, if the project is small, such as an extension on a house, the rest of the agricultural land would remain farmable, and thus a lower number of points is given to the site. Whereas if a large-scale highway is planned, a greater portion of the land (not including the site) will become non-farmable, since access to the farmland will be blocked; and thus, the site should receive the highest number of points (10) as protection from conversion.

**Conversion uses of the Site Which Would Make the Rest of the Land Non-Farmable by Interfering with Land Patterns**

Conversions which make the rest of the property nonfarmable include any development which blocks accessibility to the rest of the site. Examples are highways, railroads, dams or development along the front of a site restricting access to the rest of the property.

The point scoring is as follows:

| <b>Amount of Land Not Including the Site Which Will Become Non-Farmable</b> | <b>Points</b> |
|---|---------------|
| 25 percent or greater   | 10            |
| 23 - 24 percent   | 9             |
| 21 - 22 percent   | 8             |
| 19 - 20 percent   | 7             |
| 17 - 18 percent   | 6             |
| 15 - 16 percent   | 5             |
| 13 - 14 percent   | 4             |
| 11 - 12 percent   | 3             |
| 9 - 11 percent  | 2             |
| 6 - 8 percent   | 1             |
| 5 percent or less   | 0             |

**9. Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?**

|                                      |                 |
|--------------------------------------|-----------------|
| All required services are available  | 5 points        |
| Some required services are available | 4 to 1 point(s) |
| No required services are available   | 0 points        |

This factor is used to assess whether there are adequate support facilities, activities and industry to keep the farming business in business. The more support facilities available to the agricultural

landowner, the more feasible it is for him or her to stay in production. In addition, agricultural support facilities are compatible with farmland. This fact is important, because some land uses are not compatible; for example, development next to farmland can be dangerous to the welfare of the agricultural land, as a result of pressure from the neighbors who often do not appreciate the noise, smells and dust intrinsic to farmland. Thus, when all required agricultural support services are available, the maximum number of points (5) are awarded. When some services are available, 4 to 1 point(s) are awarded; and consequently, when no services are available, no points are given. See below:

| <b>Percent of Services Available</b> | <b>Points</b> |
|--------------------------------------|---------------|
| 100 percent                          | 5             |
| 75 to 99 percent                     | 4             |
| 50 to 74 percent                     | 3             |
| 25 to 49 percent                     | 2             |
| 1 to 24 percent                      | 1             |
| No services                          | 0             |

**10. Does the site have substantial and well-maintained on farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?**

|  |                  |
|--|------------------|
| High amount of on-farm investment      | 20 points        |
| Moderate amount of non-farm investment | 19 to 1 point(s) |
| No on-farm investments                 | 0 points         |

This factor assesses the quantity of agricultural facilities in place on the proposed site. If a significant agricultural infrastructure exists, the site should continue to be used for farming, and thus the parcel will receive the highest amount of points towards protection from conversion or development. If there is little on farm investment, the site will receive comparatively less protection. See-below:

| <b>Amount of On-farm Investment</b>                                 | <b>Points</b> |
|---|---------------|
| As much or more than necessary to maintain production (100 percent) | 20            |
| 95 to 99 percent  | 19            |
| 90 to 94 percent  | 18            |
| 85 to 89 percent  | 17            |
| 80 to 84 percent  | 16            |
| 75 to 79 percent  | 15            |
| 70 to 74 percent  | 14            |
| 65 to 69 percent  | 13            |
| 60 to 64 percent  | 12            |
| 55 to 59 percent  | 11            |
| 50 to 54 percent  | 10            |
| 45 to 49 percent  | 9             |
| 40 to 44 percent  | 8             |
| 35 to 39 percent  | 7             |
| 30 to 34 percent  | 6             |
| 25 to 29 percent  | 5             |
| 20 to 24 percent  | 4             |
| 15 to 19 percent  | 3             |
| 10 to 14 percent  | 2             |
| 5 to 9 percent  | 1             |
| 0 to 4 percent  | 0             |

**11. Would the project at this site, by converting farmland to nonagricultural use, reduce the support for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?**

|  |                 |
|--|-----------------|
| Substantial reduction in demand for support services if the site is converted    | 10 points       |
| Some reduction in demand for support services if the site is converted           | 9 to 1 point(s) |
| No significant reduction in demand for support services if the site is converted | 0 points        |

This factor determines whether there are other agriculturally related activities, businesses or jobs dependent upon the working of the pre-converted site in order for the others to remain in production. The more people and farming activities relying upon this land, the more protection it should receive from conversion. Thus, if a substantial reduction in demand for support services were to occur as a result of conversions, the proposed site would receive a high score of 10; some reduction in demand would receive 9 to 1 point(s), and no significant reduction in demand would receive no points.

Specific points are outlined as follows:

| <b>Amount of Reduction in Support Services if Site is Converted to Nonagricultural Use</b> | <b>Points</b> |
|--|---------------|
| Substantial reduction (100 percent)  | 10            |
| 90 to 99 percent   | 9             |
| 80 to 89 percent   | 8             |
| 70 to 79 percent   | 7             |
| 60 to 69 percent   | 6             |
| 50 to 59 percent   | 5             |
| 40 to 49 percent   | 4             |
| 30 to 39 percent   | 3             |
| 20 to 29 percent   | 2             |
| 10 to 19 percent   | 1             |
| No significant reduction (0 to 9 percent)  | 0             |

**12. Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of the surrounding farmland to nonagricultural use?**

|   |                 |
|---|-----------------|
| Proposed project is incompatible with existing agricultural use of surrounding farmland     | 10 points       |
| Proposed project is tolerable of existing agricultural use of surrounding farmland          | 9 to 1 point(s) |
| Proposed project is fully compatible with existing agricultural use of surrounding farmland | 0 points        |

Factor 12 determines whether conversion of the proposed agricultural site will eventually cause the conversion of neighboring farmland as a result of incompatibility of use of the first with the latter. The more incompatible the proposed conversion is with agriculture, the more protection this site receives from conversion. Therefore, if the proposed conversion is incompatible with agriculture, the site receives 10 points. If the project is tolerable with agriculture, it receives 9 to 1 points; and if the proposed conversion is compatible with agriculture, it receives 0 points.

## **CORRIDOR - TYPE SITE ASSESSMENT CRITERIA**

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The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information.

For Water and Waste Programs, corridor analyses are not applicable for distribution or collection networks. Analyses are applicable for transmission or trunk lines where placement of the lines are flexible.

(1) How much land is in nonurban use within a radius of 1.0 mile form where the project is intended?

- |                          |                       |
|--------------------------|-----------------------|
| (2) More than 90 percent | (3) 15 points         |
| (4) 90 to 20 percent     | (5) 14 to 1 point(s). |
| (6) Less than 20 percent | (7) 0 points          |

(2) How much of the perimeter of the site borders on land in nonurban use?

- |                          |                   |
|--------------------------|-------------------|
| (3) More than 90 percent | (4) 10 point(s)   |
| (5) 90 to 20 percent     | (6) 9 to 1 points |
| (7) less than 20 percent | (8) 0 points      |

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

- |                          |                      |
|--------------------------|----------------------|
| (4) More than 90 percent | (5) 20 points        |
| (6) 90 to 20 percent     | (7) 19 to 1 point(s) |
| (8) Less than 20 percent | (9) 0 points         |

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

- |                       |           |
|-----------------------|-----------|
| Site is protected     | 20 points |
| Site is not protected | 0 points  |

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

- |   |               |
|---|---------------|
| As large or larger  | 10 points     |
| Below average deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average | 9 to 0 points |

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

- |  |                  |
|--|------------------|
| Acreage equal to more than 25 percent of acres directly converted by the project         | 25 points        |
| Acreage equal to between 25 and 5 percent of the acres directly converted by the project | 1 to 24 point(s) |
| Acreage equal to less than 5 percent of the acres directly converted by the project      | 0 points         |

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

|                                      |                 |
|--------------------------------------|-----------------|
| All required services are available  | 5 points        |
| Some required services are available | 4 to 1 point(s) |
| No required services are available   | 0 points        |

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

|                                       |                  |
|---------------------------------------|------------------|
| High amount of on-farm investment     | 20 points        |
| Moderate amount of on-farm investment | 19 to 1 point(s) |
| No on-farm investment                 | 0 points         |

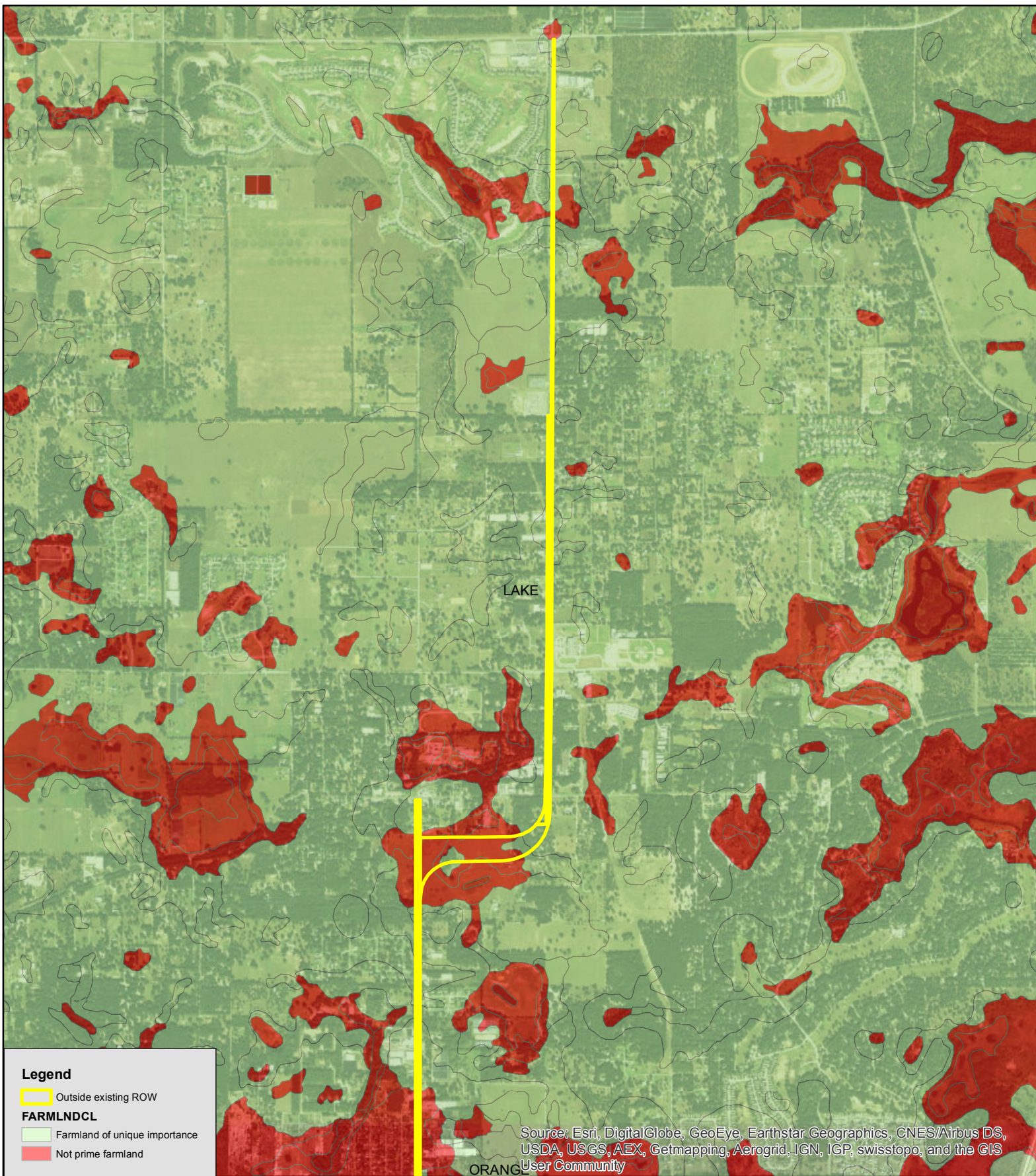
(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

|  |                  |
|--|------------------|
| Substantial reduction in demand for support services if the site is converted    | 25 points        |
| Some reduction in demand for support services if the site is converted           | 1 to 24 point(s) |
| No significant reduction in demand for support services if the site is converted | 0 points         |

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

|   |                 |
|---|-----------------|
| Proposed project is incompatible to existing agricultural use of surrounding farmland       | 10 points       |
| Proposed project is tolerable to existing agricultural use of surrounding farmland          | 9 to 1 point(s) |
| Proposed project is fully compatible with existing agricultural use of surrounding farmland | 0 points        |

# County Road 437 Project - Lake County, Florida



Survey Area: Lake County, Florida  
Survey Area Version Date: 01/13/2014; fully certified  
Orthoimagery: USDA-NRCS NCGC Mr. Sid Mosaic  
Map Created: 8/1/2016  
Rick Robbins, (Phone: 352.338.9536)  
USDA-NRCS, Gainesville, Florida

0 875 1,750 3,500 5,250 7,000 Feet

