



September 8, 2025

Marc O'Rourke  
Landmarc Building/Development, Inc.  
7530 Barnsbury  
West Bloomfield, MI 48324  
[marc@landmarcbuilding.com](mailto:marc@landmarcbuilding.com)  
**Re: 5501 Orange Avenue**

Dear Mr. O'Rourke,

Haley Ward, Inc. has completed this Environmental Assessment (EA) for the above-mentioned property. The purpose of this evaluation was to conduct a review of the above listed parcel by means of site visit, review of available aerial photography, listed species review, review of soil resources, and review of environmental regulation pertaining to this parcel.

The following report details the findings of our on-site and desktop investigations of the properties as they pertain to the City of Fort Pierce regulations.

Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,  
**Haley Ward, Inc.**

A handwritten signature in black ink, appearing to read "Tyler Dunbar", is written over a white background.

Tyler Dunbar, M.S.  
Project Scientist



# HALEY WARD<sup>®</sup>

## ENVIRONMENTAL ASSESSMENT

Parcel ID	Acreage	Land Use
2407-211-0001-000-0	8.47	0000 – Vacant Residential
2407-212-0001-000-3	19.45	0000 – Vacant Residential
2407-231-0000-000-5	18.36	1000 – Vacant Commercial
2407-241-0001-000-3	10.37	0000 – Vacant Residential

4918/5501 Orange Ave  
Fort Pierce, FL 34947  
Date: September 8, 2025  
Project # 25-144

**Prepared For:**

Marc O'Rourke  
Landmarc Building/Development, Inc.  
7530 Barnsbury  
West Bloomfield, MI 48324  
[morourke@landmarcavedon.com](mailto:morourke@landmarcavedon.com)

**Prepared By:**

Haley Ward, Inc.  
10250 SW Village Parkway  
Port St Lucie, Florida 34987  
(772) 223-5200



**INTRODUCTION:**

The subject property evaluated as part of this Environmental Assessment consists of approximately 56.65 acres (Parcel ID #s):

2407-211-0001-000-0
2407-212-0001-000-3
2407-231-0000-000-5
2407-241-0001-000-3

The parcels are located at 4918/5220 Orange Avenue in the City of Fort Pierce, Florida. The property is also located at Township 35 South, Range 40 East, and Section 9. According to the St. Lucie County Property Appraiser, the subject property has a current land use code of the subject property has a Future Land Use Designation of Mixed-Use Development (MXD) and would be designated as Vacant Commercial - 1000 and Vacant Residential - 0000.

This Environmental Assessment (EA) was completed for the supporting information associated with a building permit or land development application. Haley Ward staff visited the property on September 4, 2025, to ascertain the status and composition of any critical habitats, such as wetlands and native uplands that may be onsite.

**VEGETATION:**

It is the opinion of Haley Ward that there is no native upland habitat located on site due to the presence of construction sitework and evidence of demolished structures.

The following vegetation was found on site:

<b>Common Name</b>	<b>Scientific Name</b>
<b>Caesar Weed**</b>	<i>Urena lobata</i>
<b>Cabbage Palm</b>	<i>Sabal palmetto</i>
<b>Tropical Soda Apple**</b>	<i>Solanum viarum</i>
<b>Laurel Oak</b>	<i>Quercus laurifolia</i>
<b>Balsam Apple**</b>	<i>Momordica balsamina</i>
<b>Brazilian Pepper**</b>	<i>Schinus terebinthifolia</i>
<b>Cogon Grass**</b>	<i>Imperata cylindrica</i>

\*Nuisance vegetation

\*\*Exotic vegetation



### WETLAND DELINEATION:

According to aerial photographs and site visits, it appears that one wetland estimated to be half an acre or less in size was identified onsite. A state wetland jurisdictional determination will need to be conducted to determine the exact boundaries of the wetlands located on site and whether mitigation is required.

### WILDLIFE EVALUATION:

Haley Ward conducted a pedestrian survey throughout the property to investigate for the presence of any plant or animal listed species.

No gopher tortoises or any other state or federally listed plant/animal species were observed at the time of the site visit.

### SOIL COMPOSITION:

Based on a review of the USDA Web Soil the site is composed of:

**Riviera fine sand-** This nearly level soil is poorly drained and has a surficial layer of dark gray sand about four inches thick. The water table is typically at less than 10 inches for two to four months of the year. The soil is well suited for pasture and hay crops. Natural vegetation includes slash pine, cabbage palm, wax myrtle, blue maidencane, broom sedge, pineland threeawn, cord grass, panicums and a variety of sedges. Riviera Fine Sands are loamy, silicious, nearly level and poorly drained soils that are formed in beds of sandy and loamy marine sediments. These soils are on broad, low flats and in depressional areas. The water table is within a depth of 10 inches for 2 to 4 months in most years and between a depth of 10 and 30 inches for most of the rest of the year.

**Winder loamy sand-** is poorly drained, nearly level soil found in hammocks and along drainage ways. The surface layer typically is black loamy sand that is 6 inches thick. The water table is within a depth of 10 inches of the surface for 2 to 4 months and between a depth of 10 to 40 inches for most of the rest of the year. The natural vegetation associated with this soil type includes cabbage palm, willow oak, scattered long leaf and slash pine and an understory of wax myrtle and saw palmetto. This soil has high potential for dwellings without basements, small commercial buildings, local roads and streets.

### SITE HISTORY:

After reviewing available aerial images on Google Earth, and the St. Lucie County Property Appraiser, the subject parcel appears to have remained undeveloped since 2004. Prior to 2004 the subject property was a full-scale agricultural operation, consisting of row-crops, likely Citrus. The most recent sale listed on the St. Lucie County Property Appraiser took place in December 2005. This property lies in the North St. Lucie River Water Control District which can be seen on Permit# 56-00658-S with SFWMD.



### **CITY OF FORT PIERCE REGULATIONS:**

The following lists the City of Fort Pierce Ordinances that apply to the subject property. As part of the local approval process, the applicant will be required to comply with the following items.

#### **4.4.2 Policy:**

*Compliance with approved permits with other local governments, state, federal and private plans and programs for conservation of natural resources shall be required prior to receiving development approval.*

Any proposed environmental impacts will need to be permitted with the governing agency prior to development approval.

#### **4.4.5 Policy:**

*The City shall require site plan review of all proposed development or redevelopment to prevent unnecessary destruction or inappropriate use of existing natural resources and natural sites. Site development shall limit the ecological and environmental impacts of design and shall include a site analysis to include the following natural factors:*

- A. Existing drainage pattern.
- B. Geology.
- C. Topography.
- D. Hydrography (streams, lakes, swamps).
- E. Vegetation.
- F. Wildlife and habitat.
- G. Climate factors (solar orientation, seasonal winds, humidity, precipitation).
- H. Soil (type, suitability, bearing capacity).

A site analysis study may be required by the City of Fort Pierce, which reports in detail the parameters outlined above. Further investigation into the environmental requirements of this site plan review is necessary prior to application submittal as the requirements of this site analysis are dependent on the proposed plan and site impacts.

#### **Sec. 123-66 - Tree Protection and Mitigation:**

*(b) Any native tree at least 14 inches in diameter at breast height (DBH), except for palms which have a minimum clear trunk of ten feet, shall be preserved and protected in accordance with this article, unless the tree is determined to be a safety hazard, prevents the reasonable development of a site, is causing damage to structures or more desirable trees around it, is infected with disease or is infested with insects. A land clearing applicant shall demonstrate why the tree should not be protected or why it is not feasible to develop without removing the tree.*

Trees meeting the protection criteria as stated above were observed onsite. If these trees are impacted throughout the development process, then a tree survey will be required to identify protected trees to formulate a tree mitigation plan.



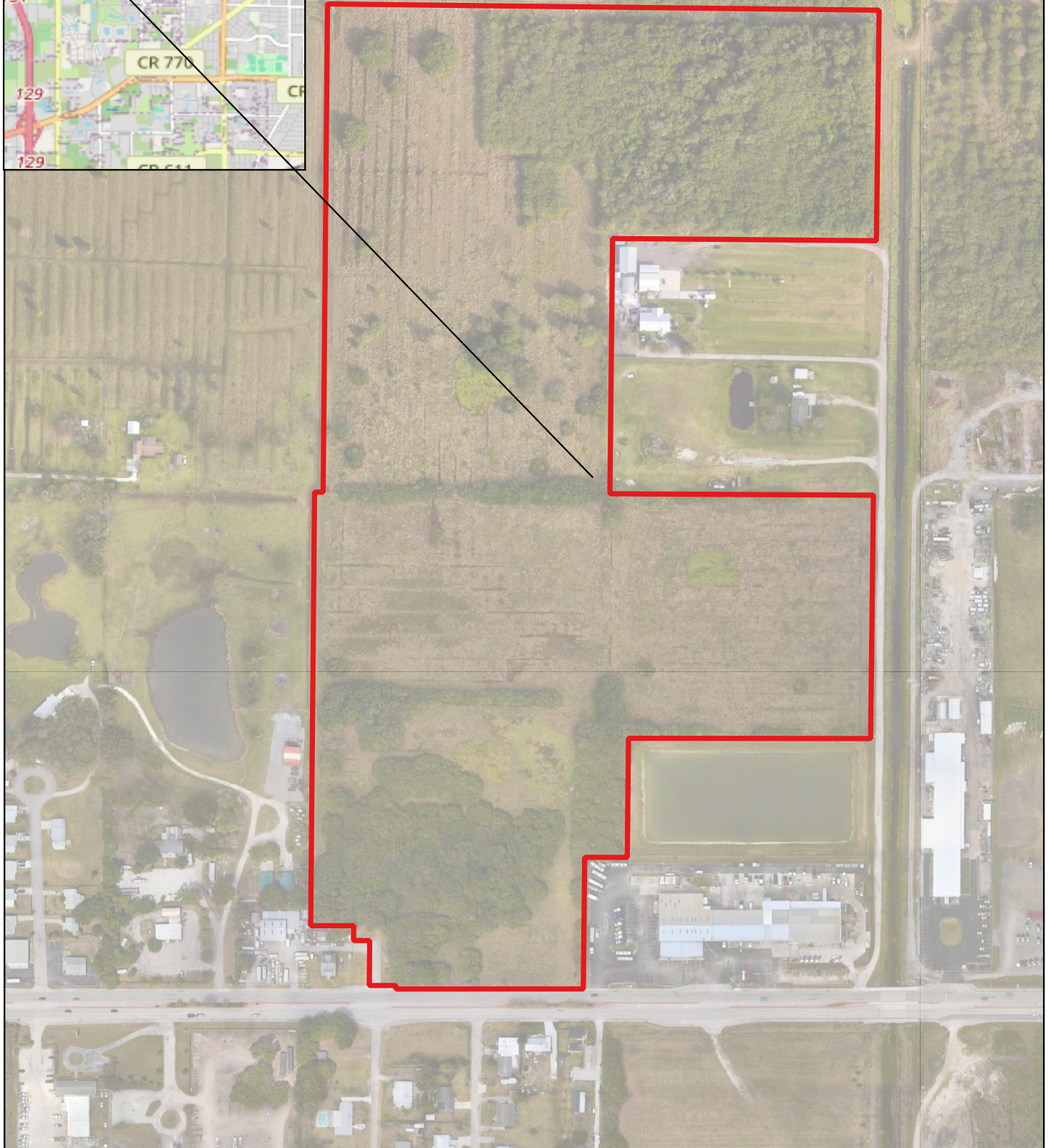
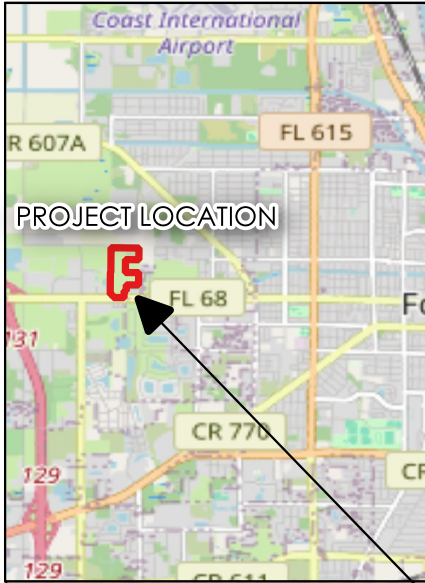
### SUMMARY:

It is the professional opinion of Haley Ward that there is no native upland habitat located on site, which is identified as FLUCCS Code 212 – Improved Pasture. The site consists of 56.65 acres designated with a Future Land Use of Residential Urban (RU), as well as Residential Single Family-2 (RS-2), and southern parcels zoned as Commercial, General (CG).

It is our professional opinion that there one wetland estimated to be half an acre or less in size was identified onsite.

No gopher tortoises, burrows, or habitat were observed on site. In addition, no sandhill cranes or their nests were identified on site. Furthermore, no other state-listed species were observed.

# Landmarc - West Orange Townhomes

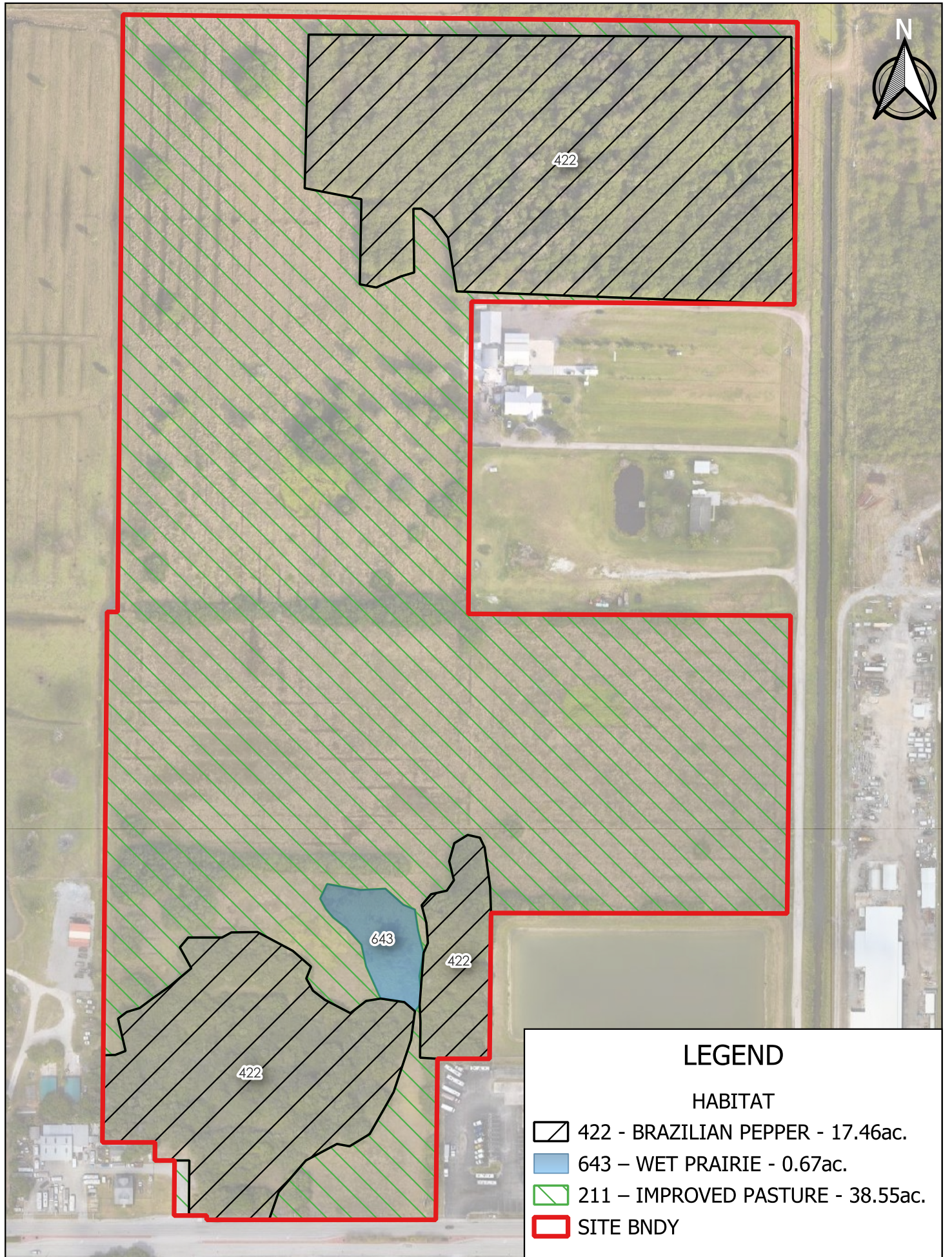


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15 September 2025

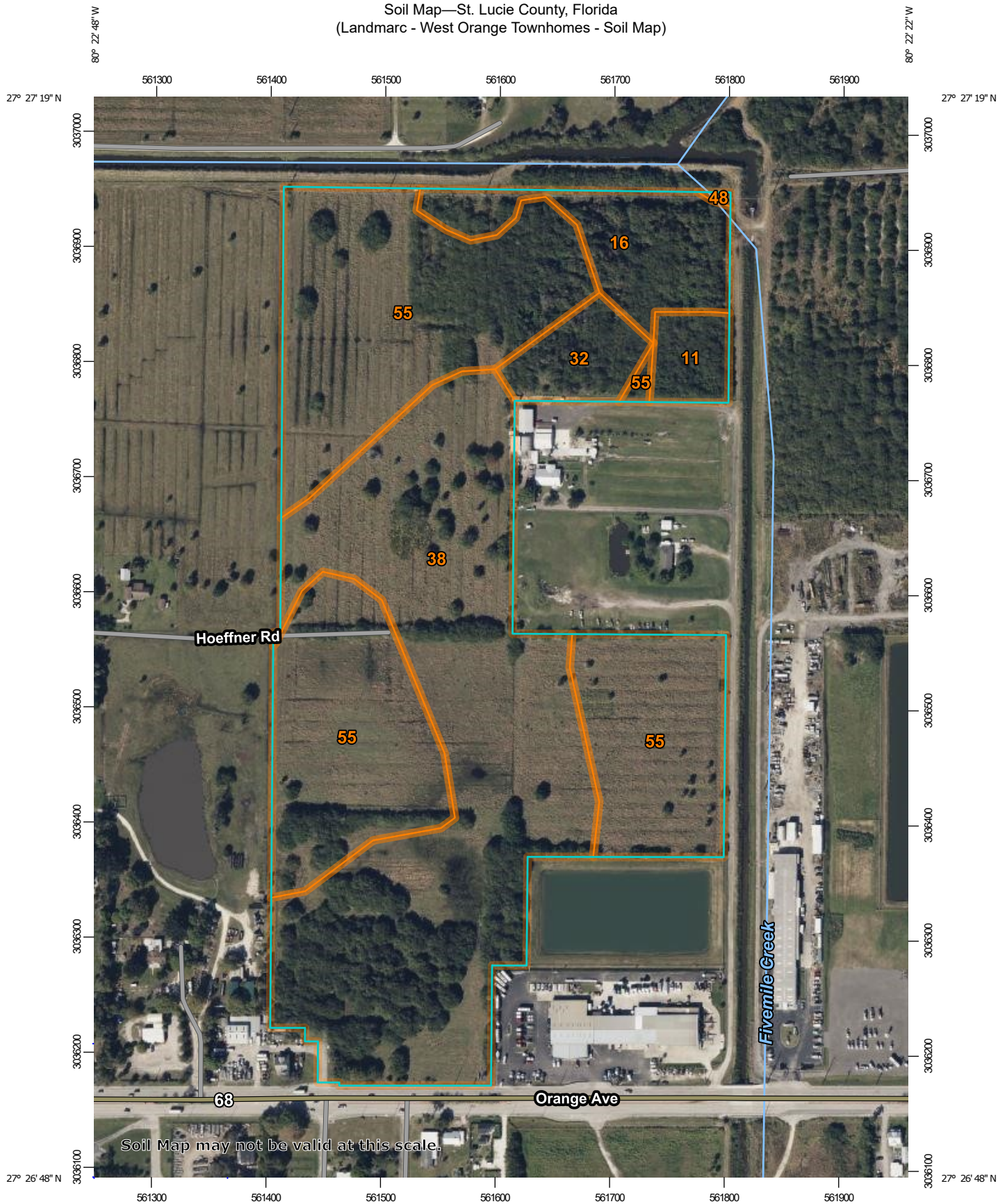
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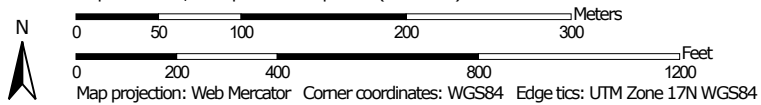
# West Orange Townhomes - Habitat Map



Soil Map—St. Lucie County, Florida  
(Landmarc - West Orange Townhomes - Soil Map)




Map Scale: 1:4,580 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 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
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: St. Lucie County, Florida  
Survey Area Data: Version 18, Aug 23, 2024

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

Date(s) aerial images were photographed: Jan 18, 2022—Jan 30, 2022

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11	Chobee loamy sand, frequently ponded, 0 to 1 percent slopes	1.3	2.3%
16	Hilolo loamy sand, 0 to 2 percent slopes	4.2	7.4%
32	Pineda sand, 0 to 2 percent slopes	2.0	3.5%
38	Riviera fine sand, 0 to 2 percent slopes	24.2	42.8%
48	Wabasso sand, 0 to 2 percent slopes	0.1	0.1%
55	Winder loamy sand	24.9	44.0%
<b>Totals for Area of Interest</b>		<b>56.7</b>	<b>100.0%</b>