

# Final Wetland Evaluation Report

## Florida Department of Transportation - District VII

### County Line Road (C.R. 578) Project Development and Environment Study From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)

*Work Program Item Segment Number: 257298 I  
Federal-Aid Program Number: 7822 001 S  
Pasco and Hernando Counties, Florida*

*The proposed project involves improving County Line Road (C.R. 578) to a multi-lane facility from U.S. 19 (S.R. 55) to east of U.S. 41 (S.R. 45) in Pasco and Hernando Counties, a distance of approximately 19.3 kilometers (12.0 miles). The project includes a segment of roadway along a new alignment. This segment is referred to as the Ayers Road Extension and extends from the interchange of C.R. 578 and the Suncoast Parkway to east of U.S. 41, a distance of approximately 5.6 kilometers (3.5 miles).*



**January 2003**

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***URS Corporation Southern***

***January 2003***

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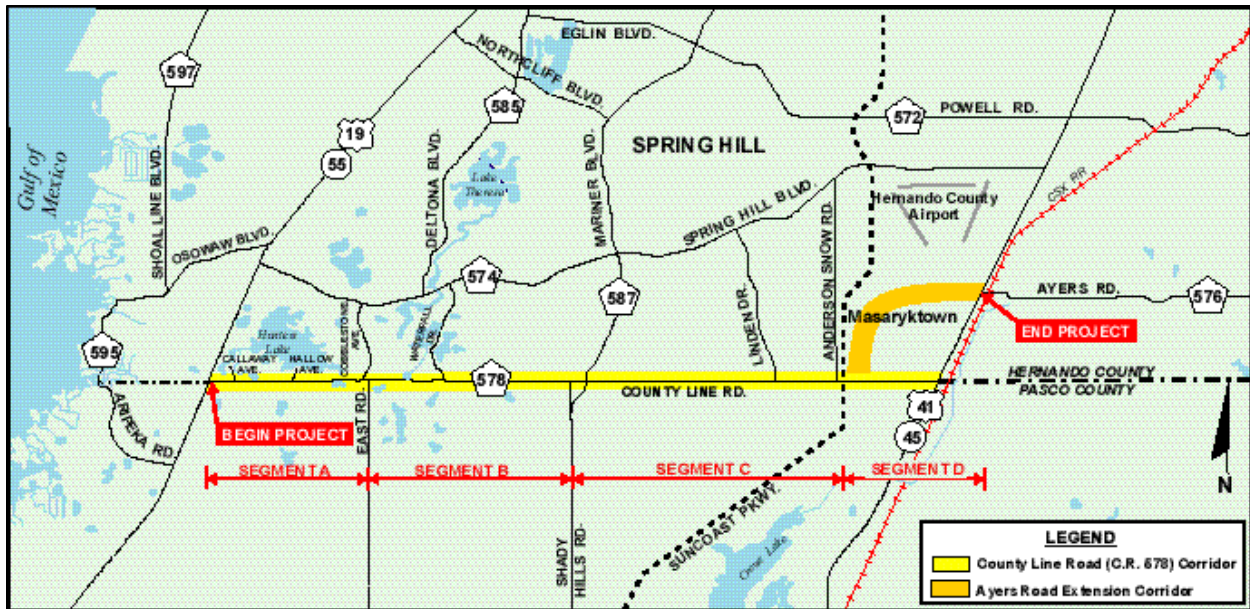
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# Section 1.0

## INTRODUCTION

The Florida Department of Transportation (FDOT) in partnership with Pasco and Hernando Counties has conducted a Project Development and Environment (PD&E) Study to evaluate capacity improvement alternatives for County Line Road (C.R. 578) in Pasco and Hernando Counties, as shown in Figure 2-1. The proposed project involves improving C.R. 578 from a primarily two-lane roadway to a multi-lane facility from the vicinity of U.S. 19 (S.R. 55) to the vicinity of U.S. 41 (S.R. 45), a distance of approximately 12.0 miles (mi) [19.3 kilometers (km)]. A segment of roadway on new alignment, referred to as the Ayers Road Extension, is being proposed from the C.R. 578/Suncoast Parkway interchange to the vicinity of U.S. 41 and Ayers Road (C.R. 576), a distance of approximately 3.5 mi (5.6 km). The Ayers Road Extension provides for a continuous travel route between U.S. 19 and C.R. 581 and it also would improve access to the Hernando County Airport with a new connection to the airport.

FIGURE 1-1  
PROJECT LOCATION MAP



### 1.1 PURPOSE

The objective of the PD&E Study is to provide documented environmental and engineering analyses that will assist the FDOT and the Federal Highway Administration (FHWA) in reaching a decision on the location and conceptual design for improvements to C.R. 578. This Study will also comply with the requirements of the National Environmental Policy Act (NEPA) and other Federal laws to qualify the proposed project for Federal-aid funding.

The purpose of this report is to document and describe existing wetland communities found within the proposed project study area and to assess any impacts to these communities, which may occur as a result of the construction and operation of the improvements for C.R. 578.

## **1.2 PROJECT DESCRIPTION**

The C.R. 578 corridor is an east/west facility with a functional classification of a major collector. The project is located within Sections 1 through 6 of Township 24 South, Range 17 East and Sections 1 through 6 of Township 24 South, Range 18 East in Pasco County, and Sections 31 through 36 of Township 23 South, Range 17 East; Sections 25, 26, 31 through 36 of Township 23 South, Range 18 East; and Section 30 of Township 23 South, Range 19 East in Hernando County.

C.R. 578 is currently a two-lane rural roadway from U.S. 19 to Callaway Avenue and from Hallow Avenue to U.S. 41. From the vicinity of Callaway Avenue to Hallow Avenue, C.R. 578 has been expanded to a four-lane divided suburban facility with an open drainage system. In addition, for 0.5 mi (0.8 km) west and east of the interchange at the Suncoast Parkway, C.R. 578 has been expanded to a four-lane divided facility. The existing posted speed limit along C.R. 578 ranges from 40 to 55 miles per hour (mph) (60 to 90 kilometers per hour (km/h)). The existing right-of-way (ROW) width ranges from 50 feet (ft) (15.24 meters (m)) to 170 ft (51.82 m) except at the Suncoast Parkway interchange where the ROW width is 254 ft (77.42 m).

Primary land uses along C.R. 578 include numerous residential subdivisions, individual residence, commercial development, the Spring Hill Regional Hospital, the Suncoast Elementary School, the Hernando County Airport, and numerous religious facilities.

## *Section 2.0*

# ***NEED FOR IMPROVEMENT***

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The need for improvements along the C.R. 578 corridor is based primarily on the following conditions:

- Current substandard traffic operations;
- Future traffic demands along the C.R. 578 corridor, and the projected future socioeconomic growth in northwest Pasco and southwest Hernando counties;
- Inadequate driver sight distances;
- Inadequate capacity as a designated evacuation route;
- Need for adequate pedestrian facilities;
- Assistance in improving access to the Hernando County Airport; and
- Providing a continuous route between U.S. 19 and C.R. 581.

The 2025 Average Annual Daily Traffic (AADT) volumes that were developed from the use of the 2020 Tampa Bay Regional Planning Model (TBRPM) using the revised land use data for the Pasco County indicate that a four-lane roadway will be required for C.R. 578 from U.S. 19 to U.S. 41 to provide acceptable levels of service.

### ***2.1 CONSISTENCY WITH TRANSPORTATION PLANS***

The portion of the project from East Road to the Suncoast Parkway is included in the *Pasco County Metropolitan Planning Organization's (MPO's) 2025 Long Range Transportation Plan (LRTP)*<sup>4</sup> as a four-lane divided facility. The portion of the project from U.S. 19 to the Suncoast Parkway is included in the *Hernando County MPO's 2025 LRTP*<sup>5</sup> and is recommended to be improved to a four-lane divided facility. The proposed new roadway alignment, Ayers Road Extension, from the interchange of C.R. 578 and Suncoast Parkway to the vicinity of U.S. 41 and Ayers Road is also identified in the *Hernando County 2025 LRTP*<sup>5</sup> as a four-lane divided facility.

In addition, the *Hernando County 2025 LRTP*<sup>5</sup> has designated a portion of C.R. 578, from east of the Suncoast Parkway to U.S. 41, as a constrained facility. This constraint is based on the existing scenic and aesthetic characteristics associated with this canopied roadway segment. No multi-lane improvements are considered for this segment.



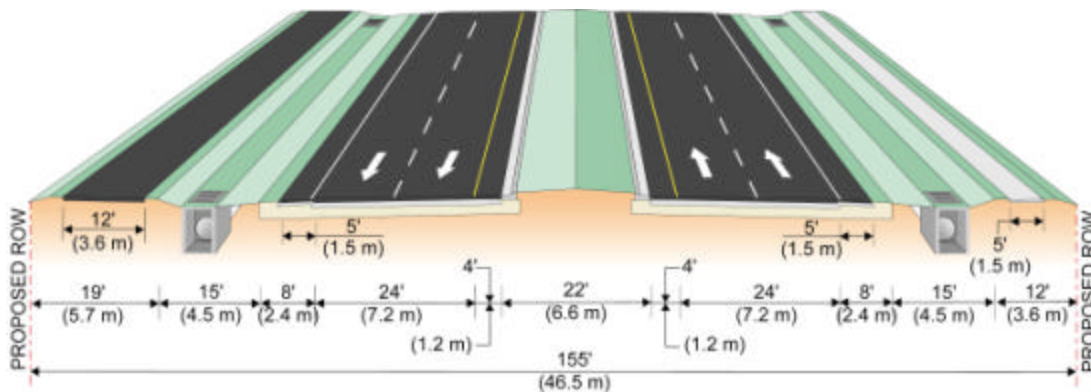


- Hamlet Circle to Fountain Court      Within existing right-of-way (ROW)
- Fountain Court to Kelley Road      South Alignment
- Kelly Road to Suncoast Parkway      North Alignment
- Suncoast Parkway to U.S. 41  
  (Ayers Road Extension)      New Alignment

Ayers Road Extension (Alignment S-5) begins east of the Suncoast Parkway and travels north to east and connects to U.S. 41 at Ayers Road.

The typical section proposed, and approved by Pasco and Hernando Counties, is a four-lane divided suburban facility with a 30 ft (9.0 m) median of which 22 ft (6.6 m) is raised, two 12 ft (3.6 m) travel lanes in each direction, 8 ft (2.4 m) outside shoulders with 5ft (1.5 m) of the shoulder paved, and 15 ft (4.5 m) drainage swales. A 12 ft (3.6 m) multi-use facility on the north side of the roadway and a 5 ft (1.5 m) sidewalk on the south side of the roadway are recommended. The design speed for this typical section is 55 mph (90 km/h). This typical section will require a minimum of approximately 155 ft (46.5 m) of ROW, as shown in Figure 3-1.

**FIGURE 3-1  
SUBURBAN TYPICAL SECTION**



# *Section 4.0*

## ***WETLAND INVENTORY***

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The C.R. 578 project area, which includes the Ayers Road Extension, was reviewed to identify, quantify, and map wetland communities which are located within or adjacent to the proposed project boundaries. A project study corridor was established to encompass a broad area of study, which includes all practical design alignments and pond sites for this project. The study corridor for C.R. 578 was based on the existing two-lane roadway with proposed widening improvements to a four-lane roadway to either side of C.R. 578. Because of the long linear nature of this roadway practical improvements are limited to a 600-ft (183.0 m) wide corridor centered on the centerline of the existing roadway. The Ayers Road Extension study corridor was based on a starting location east of the Suncoast Parkway at C.R. 578 and ending at Ayers Road and U.S. 41.

Pursuant to Presidential Executive Order 11990 entitled “Protection of Wetlands“, the United States Department of Transportation has developed a policy, (USDOT Order 5660.1A), Preservation of the Nations Wetlands, dated August 24, 1978, which requires all federally funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy the FDOT has assessed wetlands, which may be affected by proposed roadway improvements.

### ***4.1 METHODOLOGY***

In order to determine the approximate locations and boundaries of existing wetland communities within the project study area, available site-specific data was collected and reviewed. The following information was collected and analyzed:

- U.S. Department of Agricultural, Natural Resources Conservation Service (NRCS), Pasco County Soil Survey 1985.
- U.S. Department of Agricultural, Natural Resources Conservation Service (NRCS), Hernando County Soil Survey 1977.
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Maps (NWI); Aripeka, Port Richey NE, Masaryktown maps.
- U.S. Geological Survey (USGS), Topographic Quadrangle maps, 7.5 minute series; Aripeka, Port Richey NE, Masaryktown maps;
- Florida Department of Transportation Florida Land Use, Cover and Forms Classification System, (third ed.) 1999.
- U.S. Fish and Wildlife Service (USFWS) Classification of Wetlands and Deepwater Habitats of the United States, 1979.
- Aerial Photographs of the Project Area at 1 inch (in) to 200 ft scale.

Using the above referenced information, the approximate boundaries of wetland communities were mapped on black and white aerials. Each wetland community was then classified using the Florida Department of Transportation Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT 1999) and the U.S. Fish and Wildlife Service (USFWS) Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et.al. 1979).

On October 18, 19, and 20, 1999 a field review of the study area was conducted by an environmental scientist familiar with Florida wetland communities. The purpose of the review was to verify and/or refine preliminary wetland boundaries and classification codes established through in office literature reviews and photo interpretation. During field investigations each wetland within the project study corridor was walked and visually inspected. Many of the wetlands were found to be small isolated pond systems, which allowed for a complete perimeter survey. Attention was given to identifying plant species composition for each wetland and adjacent upland habitats. Exotic plant infestations, shifts in historical plant communities, and any other disturbances, such as soil subsidence, cattle, off-road vehicle disturbances, canals, power lines, etc. were noted. Attention was also given to identifying wildlife and signs of wildlife usage at each wetland and adjacent upland habitat.

## **4.2 EXISTING WETLAND COMMUNITIES**

Based on the work effort, twelve (12) wetland areas consisting of three (3) wetland community types were identified within the study corridor. The location of each wetland is shown on Figure 4-1. Table 4-1 lists the wetlands and the wetland type and classification. Photographs and descriptions of each wetland are provided in Appendix A. The locations and approximate boundaries of each wetland within the study corridor are shown in Appendix B. The three wetland community types identified in the study corridor are described below.

### **4.2.1 OPEN WATER LAKE OR POND**

**FLUCFCS - 522, 523, and 524 (Lakes) and 534 (Reservoir)**

**USFWS - PUB/SS/EMFx (Palustrine, Unconsolidated Bottom, Scrub-Shrub and Emergent, Semi-Permanently Flooded, Excavated)**

The lake and pond community type was the most common wetland type identified within the study corridor. Eight of the twelve wetlands identified are this community type (Wetlands 1, 2, 4, 5, 6, 8, 11, and 12). All the natural systems identified have been greatly influenced by residential and commercial development. The placement of retaining walls, dredged channels, and natural slope filling are the most evident disturbances. Fluctuating water levels were observed at all the lake and pond systems within the study corridor.

FIGURE 4-1  
WETLAND LOCATIONS



**TABLE 4-1  
WETLAND TYPE AND DESCRIPTIONS**

<b>Wetland Identification</b>	<b>Wetland Type</b>	<b>FLUCFCS Code*</b>	<b>FLUCFCS Description</b>	<b>USFWS Code**</b>	<b>USFWS Description</b>
1	Lake/Marsh	523	Lake, >10 ac & <100 ac (>4 ha & <40 ha)	PUB/EMFx	Palustrine, Unconsolidated Bottom and Emergent, Semi-permanently Flooded, Excavated
2	Lake/Marsh	522	Lake, >100 ac & <500 ac (>40 ha & <202 ha)	PUB/EMFx	Palustrine, Unconsolidated Bottom and Emergent, Semi-permanently Flooded, Excavated
3	Marsh	641	Freshwater Marsh	PUB/EMFx	Palustrine, Unconsolidated Bottom and Emergent, Semi-permanently Flooded, Excavated
4	Marsh (Storm Pond)	534	Reservoir, <10 ac (<4 ha)	PEM/SS1Fx	Palustrine, Emergent and Scrub-Shrub, Broad-Leaved Deciduous, Semi-Permanently Flooded, Excavated
5	Lake	523	Lake, >10 acres & <100 acres (>4 ha & <4 ha)	PUBF	Palustrine, Unconsolidated Bottom, Semi-Permanently Flooded
6	Lake/Marsh	523	Lake, >10 ac & <100 ac (>4 ha & <40 ha)	PUB/EMFx	Palustrine, Unconsolidated Bottom and Emergent, Semi-permanently Flooded, Excavated
7	Marsh	641	Freshwater Marsh	PUB/EMF	Palustrine, Unconsolidated Bottom and Emergent, Semi-Permanently Flooded
8	Marsh	534	Reservoir, <10 ac (<4 ha)	PEMFx	Palustrine, Emergent, Semi-Permanently Flooded, Excavated
9	Forest	610	Wetland Hardwood Forest	PFO1C	Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded
10	Marsh	641	Freshwater Marsh	PEMFx	Palustrine, Emergent, Semi-Permanently Flooded, Excavated
11	Lake	524	Lake, <10 ac (<4 ha)	PABH	Palustrine, Aquatic Bed, Permanently Flooded
12	Lake	524	Lake, <10 ac (<4 ha)	PABH	Palustrine, Aquatic Bed, Permanently Flooded

\*FLUCFCS =Based on Florida Land Use Cover Forms Classification System, third ed. 1999.

\*\*USFWS = Based on U.S. Fish and Wildlife Service Classification of Wetlands and Deepwater Habitats of the United States, 1979.

Wetland 1 is a man made lake identified as Planter Lake. Wax myrtle (*Myrica cerifera*) and an occasional dahoon holly (*Illex cassine*) are scattered around this lakes upland border. Broomsedge (*Andropogon virginicus*), bristle grass (*Setaria geniculata*), cattail (*Typha sp*), soft rush (*Juncus effusus*), duck potato (*Sagittari spp.*), and water lily (*Nymphaea spp.*) are found at lower elevations. Wetland 1 is located adjacent to the north side of C.R. 578 between Hamlet Circle and Dartmouth Avenue.

Wetland 2 is a natural lake identified as Hunter’s Lake, which has been channelized and dredged to enhance water front living areas. Torpedo grass (*Panicum repens*) is the dominant vegetation found growing around the margin of the lake. Wetland 2 is located adjacent to the north side of C.R. 578 between Ruskin Avenue and Hallow Avenue.

Wetland 4 is a man-made storm water treatment pond located at the northeast corner of Wetland 3. Storm water from C.R. 578 is treated and then released into Wetland 3 (described below).

Wetland 5 is a natural lake/pond system located within a high-density mobile home park, East Lake Landings. The lake has been excavated around the outer edges to provide water front house lots. Wetland 5 is located on the south side of C.R. 578 west of Landings Boulevard.

Wetland 6 is a series of three natural ponds connected to each other by man-made canals. Two of the three ponds are identified with names, the northern being Landmark Lake, and the southern being Fargo Lake. The water levels have been altered resulting in exposed pond margins and non-functional channelized pond connections. Smartweed (*Polygonum spp.*) and maidencane (*Panicum hemitomon*) are the dominant vegetation found within the exposed pond margins. Wetland 6 is located adjacent to the north side of C.R. 578 between Fargo Court and Truce Circle.

Wetland 8 is a recently created wetland mitigation site with steep side slopes. Wetland 8 is located adjacent to the south side of C.R. 578 between Winding Oaks Boulevard and Kelly Road.

Wetland 11 and Wetland 12 are old sinkhole lakes approximately 500 ft (152.4 m) in diameter and 30 ft (9.1 m) deep. Runoff from the surrounding pasture has caused extensive eutrophication to take place in these lakes. Wetland 11 is located in Masaryktown approximately 800 ft (243.8 m) north of Palacky Street in a cattle pasture and Wetland 12 is located in Masaryktown approximately 1,000 ft (304.8 m) northwest of the Jackson Street and Palacky Street intersection.

#### 4.2.2 MARSH WETLAND

##### **FLUCFCS - 641 (Freshwater Marsh)**

##### **USFWS – PUB/EMFx (Palustrine, Unconsolidated Bottom and Emergent Vegetation, Semi-Permanently Flooded, Excavated)**

The marsh wetland community was the second most common wetland community type identified within the study corridor. This wetland type was found in Wetlands 3, 7, and 10. Herbaceous species commonly found in this community include cattail, soft rush, torpedo grass, maidencane, broomsedge (*Andropogon spp.*), and dog fennel (*Eupatorium capillifolium*).

Wetland 3 is a natural pond system that has been excavated and enlarged to provide wetland mitigation areas. The pond is identified as Major Shear Pond. This wetland community contains a small open water area, remnant of the natural system, surrounded by willow trees (*Salix caroliniana*), cattails, and a created wetland mitigation area. The created system has a highly variable water table and contains a significant amount of undesirable exotic vegetation. Wetland 3 is located on the south side of C.R. 578 between Teebs Boulevard and Rolling Oak Drive.

Wetland 7 appears to be a sinkhole less than 1 acre (ac) (0.405 hectares (ha)) in size. Dog fennel (*Eupatorium spp.*) and maidencane are found at the pond bottom when water levels are low. This wetland is located adjacent to the south side of C.R. 578 and between Lansford Drive and Autumn Lake Boulevard.

Wetland 10 is a man-made pond, apparently once used by cattle. This wetland is covered entirely by cattails. Wetland 10 is located adjacent to a private residence approximately 500 ft (152.4 m) south of Hanklan Road in Masaryktown.

#### **4.2.3 FORESTED WETLAND**

##### **FLUCFCS - 610 (Wetland Hardwood Forest)**

##### **USFWS - PFOIC (Palustrine, Forested, Broad-leaved Deciduous, Seasonally Flooded)**

The forested wetland community was the least identified wetland community type within the project study corridor. Only one forested wetland (Wetland 9) was found to exist within the project study corridor. Carolina willow (*Salix caroliniana*) and persimmon (*Diospyros virginiana*) are the dominant vegetation found in this wetland with large live oak (*Quercus virginiana*) trees, greater than 36 in (91.4 centimeters (cm)), on the side slopes surrounding the wetland. Wetland 9 is located adjacent to the south side of C.R. 578 approximately 500 ft (152.4 m) west of Shady Hills Road.

### **4.3 WETLAND RAPID ASSESSMENT PROCEDURE**

Wetland Rapid Assessment Procedure (WRAP) is a matrix developed to assist in the regulatory evaluation of wetland areas. It establishes a numerical ranking for individual ecological and anthropogenic factors that effect wetlands and is used to evaluate wetland conditions. The objectives of the WRAP matrix are to establish a simple accurate, consistent and timely regulatory tool; track trends over time; and to offer guidance for environmental site plan development. The variables measured by WRAP include the following:

- Wildlife Utilization
- Wetland Overstory/Shrub Canopy
- Wetland Vegetative Ground Cover
- Adjacent Upland Support Buffer
- Field Indicators of Wetland Hydrology
- Water Quality Input and Treatment Systems

To perform the WRAP analysis, each wetland area is evaluated with the WRAP matrix and a value (0 to 3, with 0 being lowest and 3 being highest) is determined for the existing condition. The analysis is repeated for each wetland assuming the proposed project was constructed by predicting what each variable's value would be under the proposed condition. The change in value from the existing to proposed conditions reveals the wetland value lost/gained and determines the quantity of mitigation that is needed/provided.

#### **4.3.1 WRAP RESULTS**

A WRAP analysis was performed on each wetland identified within the study corridor. Table 4-2 shows the WRAP matrix and wetland value for each of the wetlands in the study area. For the 12 wetlands evaluated, the WRAP scores ranged from the lowest score of 0.21 for Wetland 4, a stormwater retention pond, to the highest value of 0.59 for Wetland 7, a small lake/marsh wetland less than 1 ac (0.405 ha) in size.

WRAP scores greater than 0.8, in the high quality range, were not assigned to any of the wetlands within the project study corridor. Only one wetland, Wetland 7, was evaluated to have a WRAP score in the 0.5 to 0.79, moderate quality range. The moderate quality rating of Wetland 7 was attributed to the limited amount of disturbances common to all the other wetland sites. Development around this wetland has been limited. Wetland Groundcover and Water Quality Input and Treatment variable scores were evaluated to be higher for this wetland as a result of the limited amount of disturbance.

WRAP scores less than 0.5, in the poor quality range, were assigned to the remaining 11 wetlands. Wetlands assigned WRAP scores less than 0.5 are highly disturbed and have limited wetland functions. The major factors contributing to the lowest WRAP scores were lack of adequate buffer, exotic plant infestation, and hydrological disturbances.

##### **4.3.1.2 Wildlife Utilization**

The wildlife utilization variable values ranges from low scores for wetlands with minimal evidence of wildlife, such as a stormwater pond (e.g., Wetland 4) to high scores for large lake systems (e.g., Wetland 2) evidence of wildlife utilization and adequate protective cover.

##### **4.3.1.3 Wetland Canopy**

The Wetland Canopy variable values were not applicable (NA) for all but one wetland within the project study corridor. The NA designation is evaluated for wetlands that lack a 20 percent or greater aerial canopy cover. Wetland 9 was the only wetland evaluated to have a Wetland Canopy value. Wetland 9 was evaluated to have a Wetland Canopy variable value of 1.5, somewhat desirable but lacking significant characteristic to be considered high quality canopy.



#### 4.3.1.4 Wetland Groundcover

The Wetland Groundcover variable values for all but Wetland 7 were low. Low scores were influenced by, the presence of exotic/nuisance vegetation, lack of desirable vegetation, and inappropriate transitional species within the wetland limits. Wetland 7 was evaluated to have the highest Groundcover variable value, 2.00, due to the absence of exotic vegetation and minimal disturbance.

**TABLE 4-2  
WRAP SUMMARY**

Wetland Identification	Wetland Type	Wildlife Utilization	Wetland Canopy	Wetland Groundcover	Habitat Support Buffer	Field Hydrology	Water Quality Input and Treatment	WRAP Score
1	Lake/Marsh	1.50	NA	1.50	0.75	2.00	0.81	0.44
2	Lake/Marsh	2.00	NA	0.00	0.37	1.00	0.81	0.28
3	Marsh	1.50	NA	1.50	0.35	1.00	1.81	0.41
4	Marsh (Storm Pond)	0.50	NA	0.50	0.37	0.50	1.25	0.21
5	Lake	1.00	NA	NA	0.50	1.50	0.50	0.29
6	Lake/Marsh	1.50	NA	1.50	0.32	1.50	0.20	0.33
7	Marsh	1.50	NA	2.00	1.20	1.50	2.60	0.59
8	Marsh	0.50	NA	1.50	1.12	0.50	2.25	0.39
9	Forest	0.50	1.50	1.50	0.75	1.00	0.81	0.34
10	Marsh	1.00	NA	0.50	1.25	1.50	1.38	0.38
11	Lake	1.00	NA	NA	2.00	0.50	0.50	0.33
12	Lake	1.00	NA	NA	2.00	0.50	0.50	0.33

#### 4.3.1.5 Habitat Support Buffer

The numerous residential subdivisions and commercial developments within the project study corridor had a reducing effect on Habitat Support Buffer values on all wetland WRAP scores. Many of the transitional habitats have been filled and landscaped, which contributed to lower Habitat Support Buffer values.

#### 4.3.1.6 Field Hydrology

The hydrology in most of the wetlands within the project area appeared inappropriate to maintain healthy functional wetlands. The large network of canals, lake margin fill, and rerouting of historic surface water has altered the hydrology to some degree for most of the wetlands within the project study corridor. Field Hydrology values evaluated for wetlands within the project study corridor were determined to be only marginally adequate to maintain healthy wetland systems. Wetland 1 was the only wetland evaluated to have a moderately adequate hydrology capable of sustaining a healthy wetland system.

#### 4.3.1.7 Water Quality Input and Treatment

The numerous residential subdivision, commercial developments, and roadway proximity within the project study corridor were the main factors affecting the Water Quality Input and Treatment. Wetlands 7 and 8 were the only wetlands considered to have good Water Quality Input and Treatment variable values.

## ***Section 5.0***

# ***AFFECTED WETLANDS***

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The proposed alignments for C.R. 578 have been analyzed to determine and quantify what, if any, wetlands would be affected from the proposed project. The preferred alternative (Alignment S-8) includes improvements to the existing roadway from U.S. 19 to the Suncoast Parkway and new roadway alignment (Alignments S-8 and S-5) from the Suncoast Parkway Interchange to U.S. 41 and Ayers Road, referred to as the Ayers Road Extension. Alignment S-5 is an alternative alignment for the Ayers Road Extension, which was developed to minimize encroachment on an existing archaeological site.

### ***5.1 AFFECTED WETLANDS***

Twelve (12) wetlands have been identified in the study corridor for this project. Table 5-1 identifies the wetlands affected by the two alternative alignments. Alignment S-8 will affect four (4) wetlands, totaling 1.51 ac (0.61 ha). All four (4) wetlands are along the existing roadway from U.S. 19 to U.S. 41. No wetlands will be affected by the Ayers Road Extension for Alignment S-8 or S-5.

### ***5.2 AFFECTED WETLANDS WRAP ANALYSIS***

A WRAP analysis was performed on each wetland within the C.R. 578 Study Area. Table 5-2 shows the WRAP value and functional units lost for each of the affected wetlands. For purposes of this analysis, all affected wetland areas were assumed to be complete fill with all WRAP components for the area receiving scores of zero.

The 1.51 ac (0.61 ha) of wetlands affected by Alignment S-8 results in a loss of 0.64 wetland functional units. All of the wetlands affected by Alignment S-8 are the result of the improvements to the existing roadway. No wetlands are affected by the Ayers Road Extension for Alignment S-8 or S-5.

### ***5.3 WETLAND MITIGATION***

FDOT will utilize wetland mitigation through Senate Bill 1986, (F.S. Chapter 373.4137 Mitigation Requirements). This Chapter states in part that, "... mitigation for the impact of transportation projects proposed by the Department of Transportation can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. It is the intent of the Legislature that mitigation to offset the adverse effects of these transportation projects be funded by the Department of Transportation and be carried out by the Department of Environmental Protection and the water management districts..." As a result of this bill, FDOT will provide funding to the Southwest Florida Water Management District (SWFWMD) for the construction of new wetlands of equal or better function and value.

**TABLE 5-1  
AFFECTED WETLANDS**

Wetland Identification	Wetland Type	FLUCFCS Code	USFWS Code	Affected Wetlands [ac (ha)]	
				S-8	S-5
1	Lake/Marsh	523	PUB/EMF <sub>x</sub>	---	
2	Lake/Marsh	522	PUB/EMF <sub>x</sub>	---	
3	Marsh	641	PUB/EMF <sub>x</sub>	0.13 (0.05)	
4	Marsh (Storm Pond)	534	PEM/SS1F <sub>x</sub>	0.17 (0.07)	
5	Lake	523	PUBF	---	
6	Lake/Marsh	523	PUB/EMF <sub>x</sub>	---	
7	Marsh	641	PUB/EMF	0.35 (0.14)	
8	Marsh	534	PEMF <sub>x</sub>	0.86 (0.35)	
9	Forest	610	PFO1C	---	
10	Marsh	534	PEMF <sub>x</sub>	---	---
11	Lake	524	PABH	---	---
12	Lake	524	PABH	---	---
Total				1.51 (0.61)	0.0

**TABLE 5-2  
AFFECTED WETLANDS WRAP ANALYSIS**

Wetland ID	Wetland Type	WRAP Score	S-8		S-5	
			Affected Wetlands [ac (ha)]	Functional Units Lost	Affected Wetlands [ac (ha)]	Functional Units Lost
1	Lake/Marsh	0.44	---	---		
2	Lake/Marsh	0.28	---	---		
3	Marsh	0.41	0.13 (0.05)	0.05		
4	Marsh (Storm Pond)	0.21	0.17 (0.07)	0.04		
5	Lake	0.29	---	---		
6	Lake/Marsh	0.33	---	---		
7	Marsh	0.59	0.35 (0.14)	0.21		
8	Marsh	0.39	0.86 (0.35)	0.34		
9	Forest	0.34	---	---		
10	Marsh	0.38	---	---	---	---
11	Lake	0.33	---	---	---	---
12	Lake	0.33	---	---	---	---
Total				0.64		0.0

## *Section 6.0*

# ***PERMITTING AND REVIEW AGENCIES***

---

Several agencies regulate wetlands within the project area. These agencies include the U.S. Army Corps of Engineers (USCOE) and SWFWMD. Other agencies, including the USFWS, the U.S. Environmental Protection Agency (USEPA), the National Marine Fisheries Service (NMFS), Florida Department of Environmental Protection (FDEP), and the Florida Fish and Wildlife Conservation Commission (FFWCC), review and comment on wetland permit applications. It is currently anticipated that the following permits will be required for this project:

<u>Permit</u>	<u>Issuing Agency</u>
Environmental Resource Permit (ERP)	SWFWMD
Section 404 Dredge and Fill Permit	USCOE
National Pollutant Discharge Elimination System Permit	FDEP

The complexity of the permitting process will depend greatly on the degree of the impact to jurisdictional areas. With the USCOE, an individual permit will be required. An individual permit will require compliance with the 404(b)(1) guidelines, including verification that all impacts have first been avoided to the greatest extent possible, that unavoidable impacts have been minimized to the greatest extent possible, and lastly that unavoidable impacts have been mitigated in the form of wetlands creation, restoration, and/or enhancement.

SWFWMD requires an ERP when construction of any project results in the creation of a water management system or in impacts to waters of the State or isolated wetlands. As with USCOE permits, the complexity associated with the ERP permitting process will depend on the size of the project and/or the extent of wetland impacts. A Standard General or Individual permit will be required with mitigation for wetland impacts.

Any project that will result in the clearing of five or more acres of land will require a National Pollution Discharge Elimination System (NPDES) permit from FDEP. In association with this permit, a Stormwater Pollution Prevention Plan (SWPPP), which will be implemented during the construction of the project, will also be required. The primary functions of the NPDES requirements are to insure that sediment and erosion during construction of the project is controlled. These permits typically utilize Best Management Practices (BMPs) to insure compliance.

Depending on the types of permits needed from the regulatory agencies, the permitting process can range from 30 to 240 days.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

## ***Section 7.0***

# ***REFERENCES***

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***APPENDIX A***  
***WETLAND DESCRIPTIONS***

---



### WETLAND 1

**FLUCFCS  
USFWS**

**523 (Lake, >10 ac & <100 ac (>4 ha & <40 ha))  
PUB/EMFx (Palustrine, Unconsolidated Bottom and Emergent  
Vegetation, Semi-Permanently Flooded, Excavated)**

Wetland 1 is a man made lake identified as Planter Lake. This lake is surrounded on 3 sides by residential development, C.R. 578 borders the fourth side. The water level of this lake is highly variable as evidenced by transitional vegetation occurring at the waters edge. Wax myrtle (*Myrica cerifera*) and an occasional dahoon holly (*Ilex cassine*) are scattered around this lake's upland border. Broomsedge (*Andropogon virginicus*) and bristle grass (*Setaria geniculata*) are found at lower elevations, which experience seasonal inundation conditions. Cattail (*Typha* spp.), soft rush (*Juncus effusus*), duck potato (*Sagittaria* spp.), and water lily (*Nymphaea* spp.) are found at lower elevations, which remain inundated for extended periods. Wetland 1 is located adjacent to the north side of C.R. 578 between Hamlet Circle and Dartmouth Avenue.



## WETLAND 2

**FLUCFCS  
USFWS**

**522 (Lake, >100 ac & <500 ac (>40 ha & <202 ha))  
PUB/EMFx (Palustrine, Unconsolidated Bottom and Emergent  
Vegetation, Semi-Permanently Flooded, Excavated)**

Wetland 2 is a natural lake that has been channelized and dredged to enhance water front living areas. This lake is identified as Hunter's Lake. Residential development surrounds this lake on all sides. The water level of this lake is highly variable. Torpedo grass (*Panicum repens*) is the dominant vegetation found growing around the lake's margin. Storm water pipes were identified at one of the lakes edges adjacent to C.R. 578. Wetland 2 is located adjacent to the north side of C.R. 578 between Ruskin Avenue and Hallow Avenue.





### WETLAND 3

**FLUCFCS  
USFWS**

**641 (Freshwater Marsh)  
PUB/EMFx (Palustrine, Unconsolidated Bottom and Emergent  
Vegetation, Semi-Permanently Flooded, Excavated)**

Wetland 3 is a natural pond system that has been excavated and enlarged to provide wetland mitigation areas. The pond is identified as Major Shear Pond. This wetland community contains a small open water area, remnant of the natural system, surrounded by willow trees (*Salix caroliniana*), cattails, and a created wetland mitigation area. The created wetland is well established with desirable and undesirable wetland vegetation. The created system has a highly variable water table and contains a significant amount of undesirable exotic vegetation. Wetland 3 is located on the south side of C.R. 578 between Teebs Boulevard and Rolling Oak Drive. This wetland receives stormwater runoff from a large control structure located at its northeast corner.



#### **WETLAND 4**

**FLUCFCS  
USFWS**

**534 (Reservoir, <10 ac (<4 ha))  
PEM/SS1Fx (Palustrine, Emergent and Scrub-Shrub, Broad-Leaved  
Deciduous, Semi-Permanently Flooded, Excavated)**

Wetland 4 is a man made storm water treatment pond located at the northeast corner of Wetland 3. Stormwater from C.R. 578 is treated and then released into Wetland 3, Major Shear Pond.



### **WETLAND 5**

**FLUCFCS 523 (Lake, >10 ac & <100 ac (>4 ha & <40 ha)**

**USFWS PUBF (Palustrine, Unconsolidated Bottom, Semi-Permanently Flooded)**

Wetland 5 is a natural lake/pond system located within a high-density mobile home park, East Lake Landings. The lake has been excavated around the outer edges to provide waterfront house lots. This system is located entirely within the East Lake Landings mobile home park. A large fence is located at the north end of the lake blocking a view and access from the C.R. 578 right-of-way. Wetland 5 is located on the south side of C.R. 578 west of Landings Boulevard.



## WETLAND 6

**FLUCFCS  
USFWS**

**523 (Lake, >10 ac & <100 ac (>4 ha & <40 ha))  
PUB/EMFx (Palustrine, Unconsolidated Bottom and Emergent  
Vegetation, Semi-Permanently Flooded, Excavated)**

Wetland 6 is a series of three natural ponds connected to each other by man-made canals. Two of the three ponds are identified with names, the northern being Landmark Lake, and the southern being Fargo Lake. The third pond is not named. Residential development surrounds this wetland system. The water levels have been altered resulting in exposed pond margins and non-functional channelized pond connections. Smartweed (*Polygonum* spp.) and maidencane (*Panicum hemitomon*) are the dominant vegetation found within the exposed pond margins. Wetland 6 is located adjacent to the north side of C.R. 578 between Fargo Court and Truce Circle.



#### **WETLAND 7**

**FLUCFCS  
USFWS**

**641 (Freshwater Marsh)  
PUB/EMF (Palustrine, Unconsolidated Bottom and Emergent  
Vegetation, Semi-Permanently Flooded)**

Wetland 7 appears to be a sink hole less than 1 ac (0.405 ha) in size. The water level fluctuates greatly in this wetland. Dog fennel (*Eupatorium capilifolium*) and maidencane are found at the pond bottom when water levels are low. This wetland is located adjacent to the south side of C.R. 578 and between Lansford Drive and Autumn Lake Boulevard. A small area of unimproved open land is located on the south and east sides of this wetland.



### **WETLAND 8**

**FLUCFCS  
USFWS**

**534 (Reservoir, <10 ac (<4 ha))  
PEMFx (Palustrine, Emergent Vegetation, Semi-Permanently  
Flooded, Excavated)**

Wetland 8 is a recently created irregularly inundated wetland mitigation site. Wetland 8 is steep sided and enclosed by fencing. Residential development surrounds the wetland on two sides and a small plant nursery and C.R. 578 surround the remaining two sides. Wetland 8 is located adjacent to the south side of C.R. 578 between Winding Oaks Boulevard and Kelly Road.



### WETLAND 9

**FLUCFCS**  
**USFWS**

**610 (Wetland Hardwood Forest)**  
**PFO1C (Palustrine, Forested, Broad-Leaved Deciduous, Seasonally Flooded)**

Wetland 9 is positioned at the bottom of an apparent old sinkhole or borrow pit. Historic live oak trees (*Quercus virginiana*), greater than 36 in (91.4 cm) in diameter, are located on the slopes surrounding this wetland. Carolina willow (*Salix caroliniana*) and persimmon (*Diospyros virginiana*) trees are the dominant vegetation found in this wetland. Off-road vehicles have severely eroded the slopes surrounding this wetland. Wetland 9 is located adjacent to the south side of C.R. 578 approximately 500 ft (152.4 m) west of Shady Hills Road.



### **WETLAND 10**

**FLUCFCS  
USFWS**

**641 (Freshwater Marsh)  
PEMFx (Palustrine, Emergent Vegetation, Semi-Permanently  
Flooded, Excavated)**

Wetland 10 is a man-made pond, apparently once used by cattle. This wetland is covered entirely by cattails. Wetland 10 is located adjacent to a private residence approximately 500 ft (152.4 m) south of Hanklan Road in Masaryktown.





### **WETLAND 11**

**FLUCFCS  
USFWS**

**524 (Lake , <10 ac (<4 ha))  
PABH (Palustrine, Aquatic Bed, Permanently Flooded)**

Wetland 11 is an old sinkhole approximately 500 ft (152.4 m) in diameter and 30 ft (9.1 m) deep. This wetland is approximately 2 ac (0.810 ha) in size. Runoff from the surrounding pasture has caused extensive eutrophication to take place. Wetland 11 is located in Masaryktown approximately 800 ft (243.8 m) north of Palacky Street in a cattle pasture.



## **WETLAND 12**

**FLUCFCS  
USFWS**

**524 (Lake, <10 ac (<4 ha))  
PABH (Palustrine, Aquatic Bed, Permanently Flooded)**

Wetland 12 is an old sinkhole approximately 500 ft (152.4 m) in diameter and 30 ft (9.1 m) deep. This wetland is approximately 2 ac (0.810 ha) in size. Runoff from the surrounding pasture has caused extensive eutrophication to take place. Wetland 12 is located in Masaryktown approximately 1,000 ft (304.8 m) northwest of the Jackson Street and Palacky Street intersection.

***APPENDIX B***  
***PROJECT AERIALS***

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STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

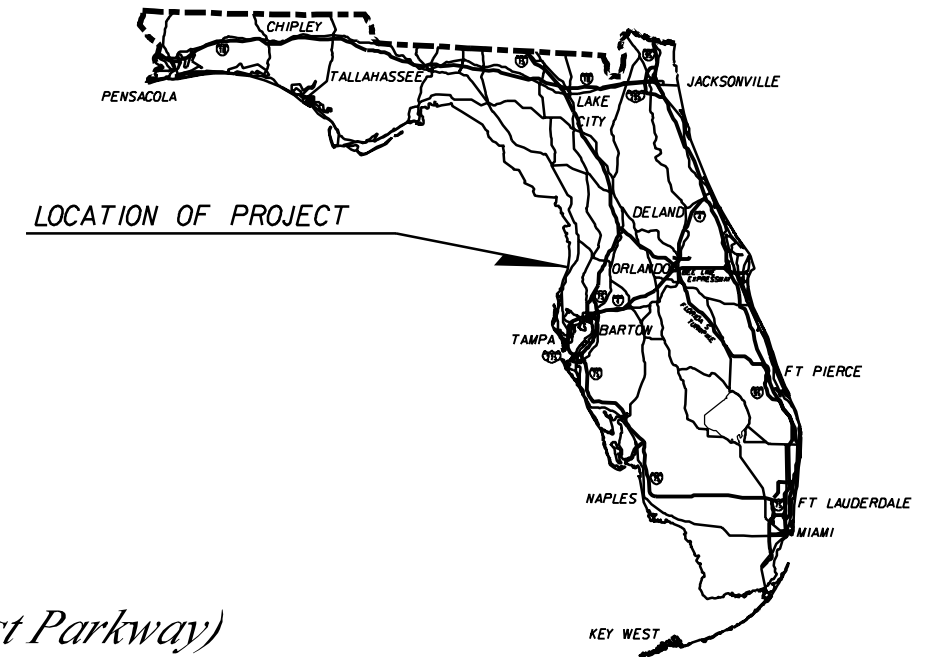
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FEDERAL-AID PROGRAM NUMBER 7822 001 S  
PASCO AND HERNANDO COUNTIES

COUNTY ROAD NO. 578

From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)

*ALIGNMENT S-8 (C.R. 578 From U.S. 19 (S.R. 55) to Suncoast Parkway)*  
*ALIGNMENT S-5 (Ayers Road Extension From Suncoast Parkway to U.S. 41 (S.R. 45))*

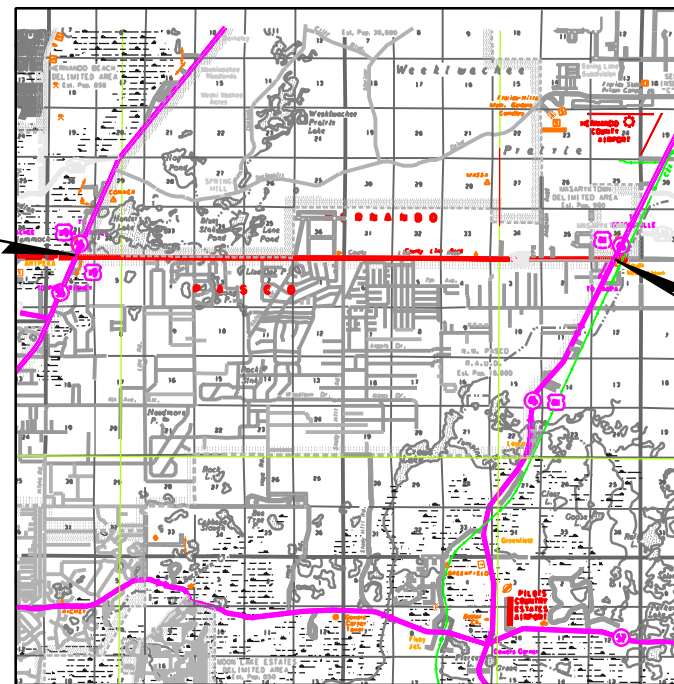


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KEY SHEET OF EACH COMPONENT

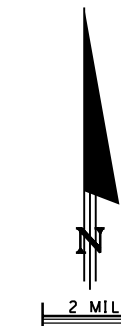
INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	TYPICAL SECTIONS/LEGEND
3	PROJECT LAYOUT
4 - 28	ROADWAY PLAN SHEETS
4 - 20	ROADWAY PROFILE SHEETS
1 - 198	CROSS SECTION SHEETS

BEGIN PROJECT  
STA. 84+05.96



END PROJECT  
STA. 721+84.90



PLANS PREPARED BY:



URS Corporation Southern  
7650 West Courtney  
Campbell Causeway  
Tampa, FL 33607-1462  
No. 00000002

GOVERNING STANDARDS AND SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION,  
ROADWAY AND TRAFFIC DESIGN STANDARDS  
DATED JANUARY 2000, AND  
STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE  
CONSTRUCTION DATED 1999,  
AS AMENDED BY CONTRACT DOCUMENTS.

LENGTH OF PROJECT		
	LIN. FT.	MILES
ROADWAY		
BRIDGES (W.B.)		
NET LENGTH OF PROJ.		
EXCEPTIONS		
GROSS LENGTH OF PROJ.		






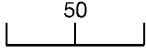




FDOT PROJECT MANAGER : MIKE SEIFERT, PLS, PE

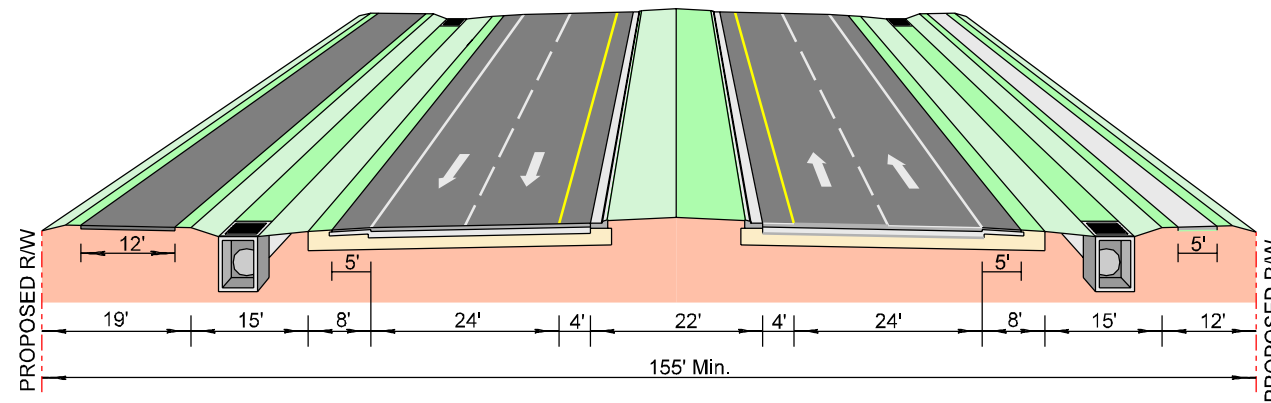
CONCEPT PLANS  
ENGINEER OF RECORD: LISA D. HEIMBURG, P.E.

P.E. NO. 47231


FISCAL YEAR	SHEET NO.
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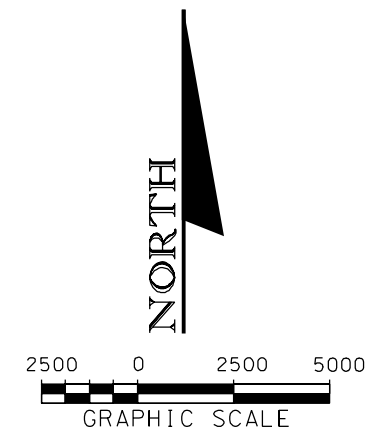
# LEGEND

-  EXISTING RIGHT-OF-WAY
-  EXISTING L/A RIGHT-OF-WAY
-  PROPOSED RIGHT-OF-WAY
-  PROPERTY LINES
-  FLUCFCS
-  CENTERLINE OF CONSTRUCTION
-  WETLAND BOUNDARY
- SPECIES HABITAT:**
-  GOPHER TORTOISE
-  FOX SQUIRREL
-  PROPOSED POND SITE



**SUBURBAN TYPICAL SECTION**  
From U.S. 19 to U.S. 41 (S.R. 45)

REVISIONS						 URS Corporation Southern 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 No. 00000002	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			COUNTY LINE ROAD (C.R. 578) PROJECT DEVELOPMENT & ENVIRONMENT STUDY From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45) WETLAND ID AND LOCATION	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		2
09/13/99		DATE OF FLIGHT					C.R. 578	PASCO & HERNANDO	257298 / 22 01		

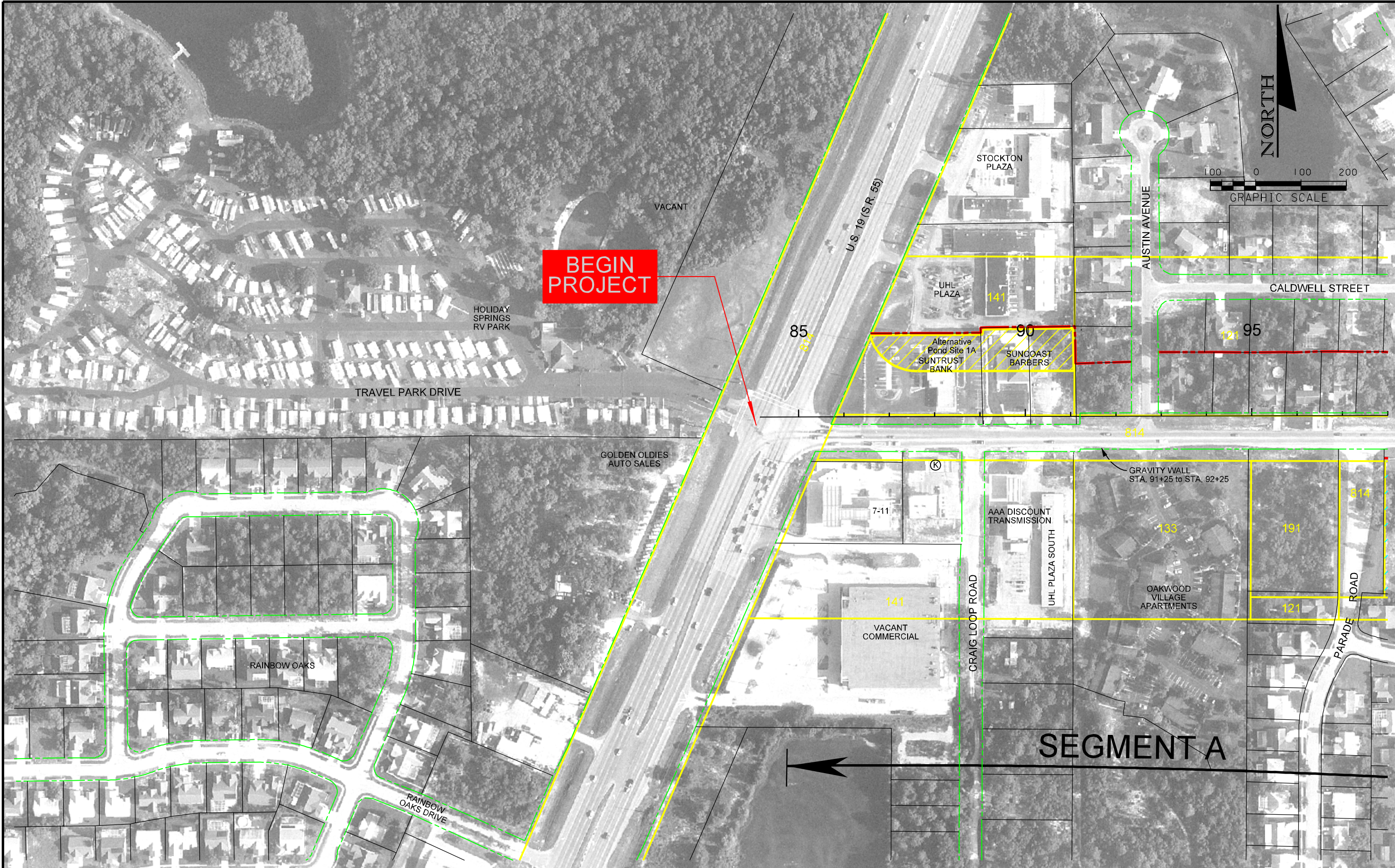


**Note:**

- Segment A - U.S. 19 to East Road
- Segment B - East Road to Mariner Boulevard
- Segment C - Mariner Boulevard to Suncoast Parkway
- Segment D - Suncoast Parkway to U.S. 41

## PROJECT LAYOUT SHEETS

REVISIONS						 URS Corporation Southern 7650 West Courtney Campbell Causeway Tampa, FL 33607-1462 No. 00000002	<b>STATE OF FLORIDA</b> <b>DEPARTMENT OF TRANSPORTATION</b>			COUNTY LINE ROAD (C.R. 578) PROJECT DEVELOPMENT & ENVIRONMENT STUDY From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45) WETLAND ID AND LOCATION	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		3
09/13/99		DATE OF FLIGHT					C.R.578	PASCO & HERNANDO	257298 1 22 01		



**BEGIN PROJECT**

**SEGMENT A**

**REVISIONS**

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			



URS Corporation Southern  
7650 West Courtney  
Campbell Causeway  
Tampa, FL 33607-1462  
No. 00000002

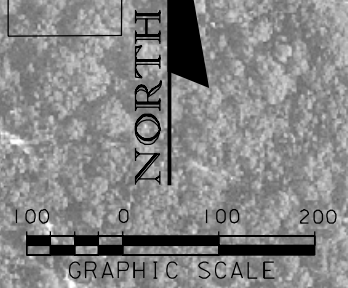
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DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
WETLAND ID AND LOCATION (S-8)

SHEET NO.

4



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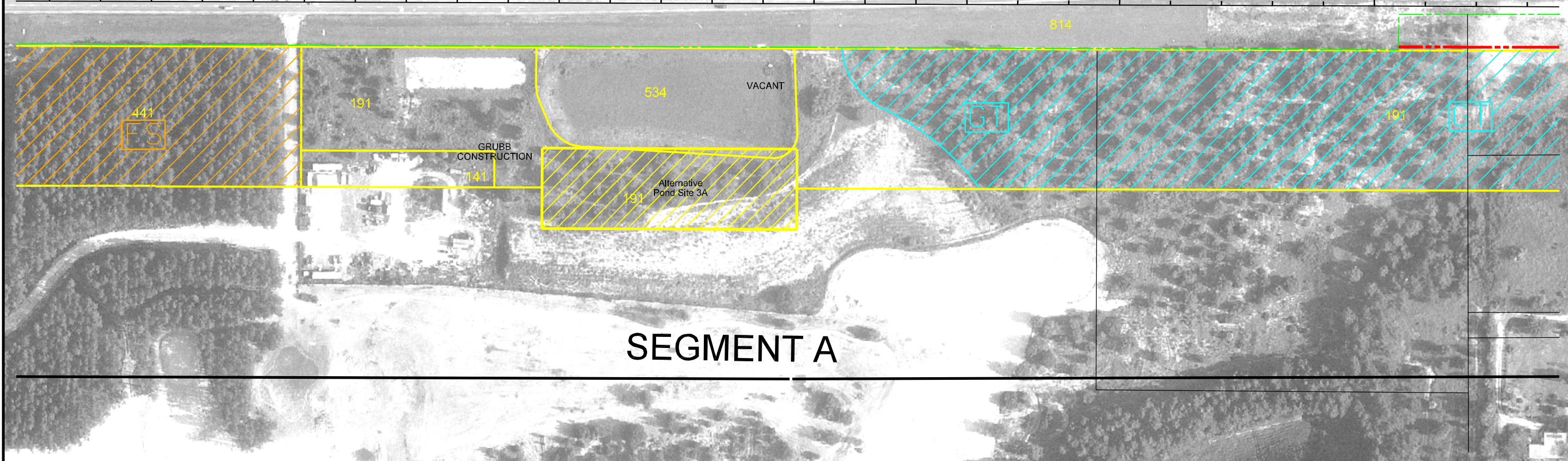
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 URS Corporation Southern  
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 Campbell Causeway  
 Tampa, FL 33607-1462  
 No. 00000002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
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**SEGMENT A**

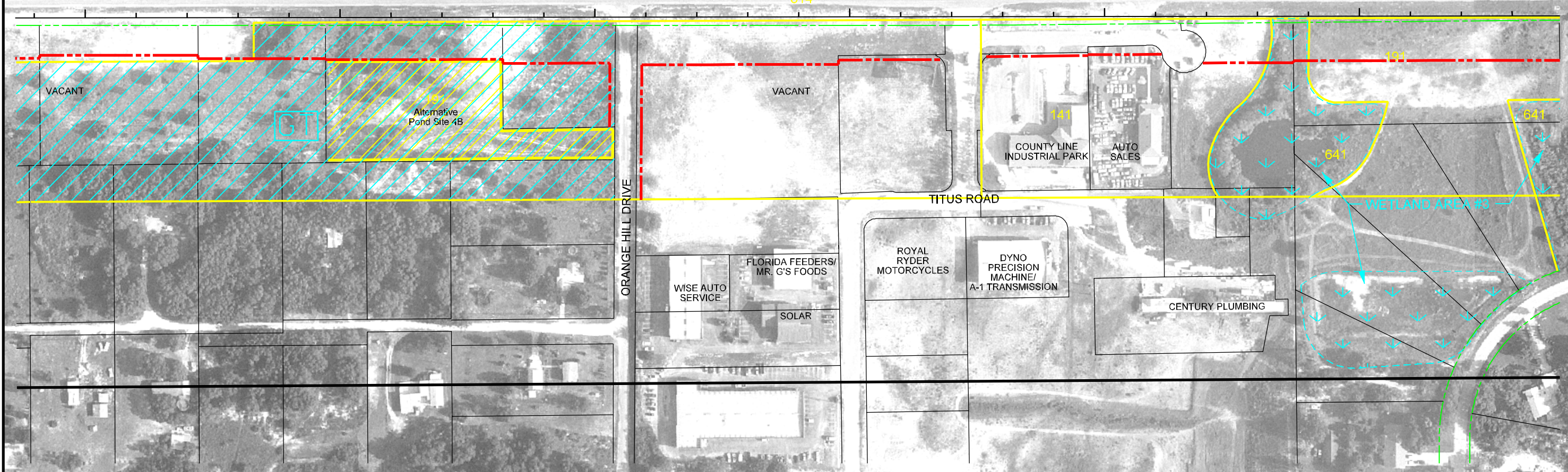
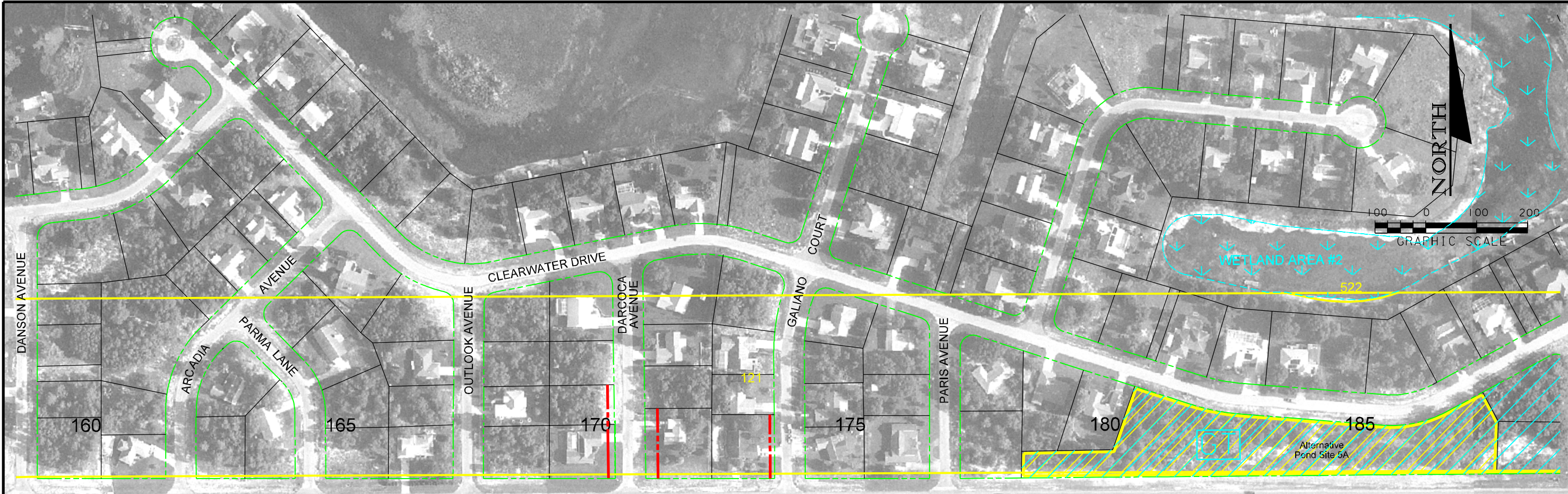
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 Tampa, FL 33607-1462  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
6



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

**URS**  
 URS Corporation Southern  
 7650 West Courtney  
 Campbell Causeway  
 Tampa, FL 33607-1462  
 No. 00000002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
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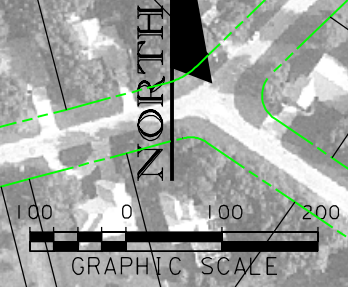
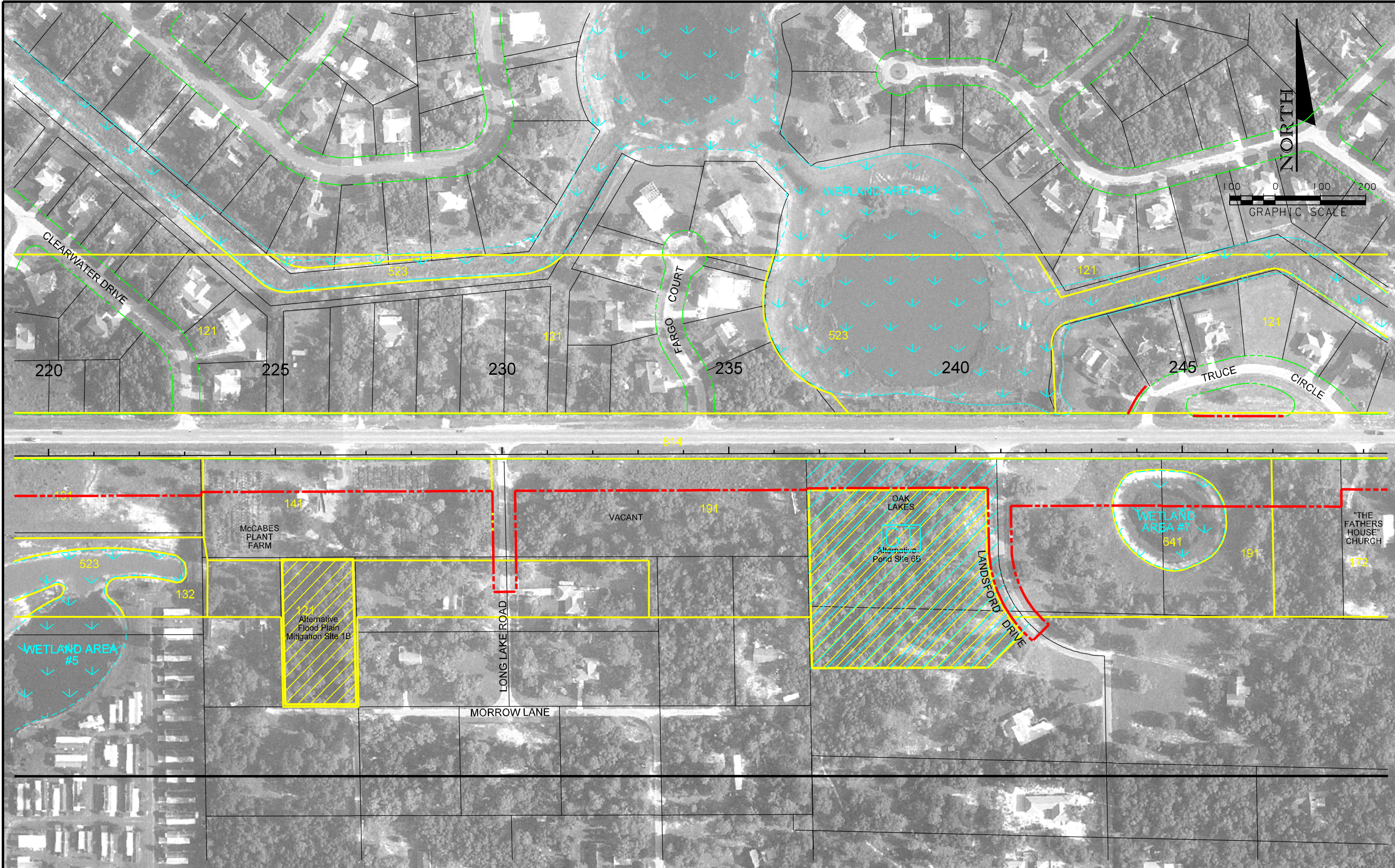
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**URS**  
 URS Corporation Southern  
 7650 West Courtney  
 Campbell Causeway  
 Tampa, FL 33607-1462  
 No. 00000002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
8



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

**URS**  
 URS Corporation Southern  
 7650 West Courtney  
 Campbell Causeway  
 Tampa, FL 33607-1462  
 No. 00000002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
9



# SEGMENT B

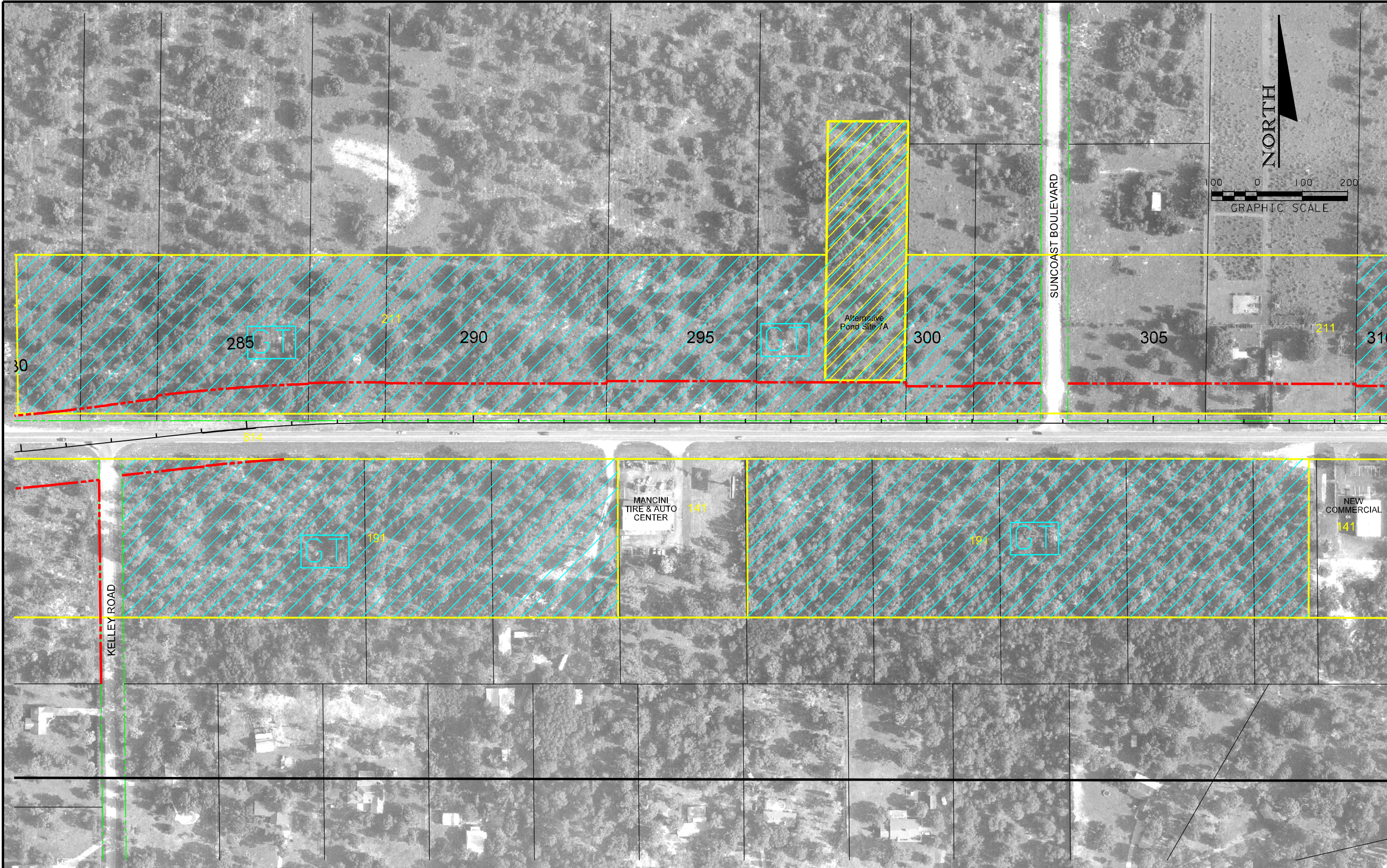
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
09/13/99		DATE OF FLIGHT			

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 URS Corporation Southern  
 7650 West Courtney  
 Campbell Causeway  
 Tampa, FL 33607-1462  
 No. 00000002

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

SHEET NO.  
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REVISIONS

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09/13/99		DATE OF FLIGHT			

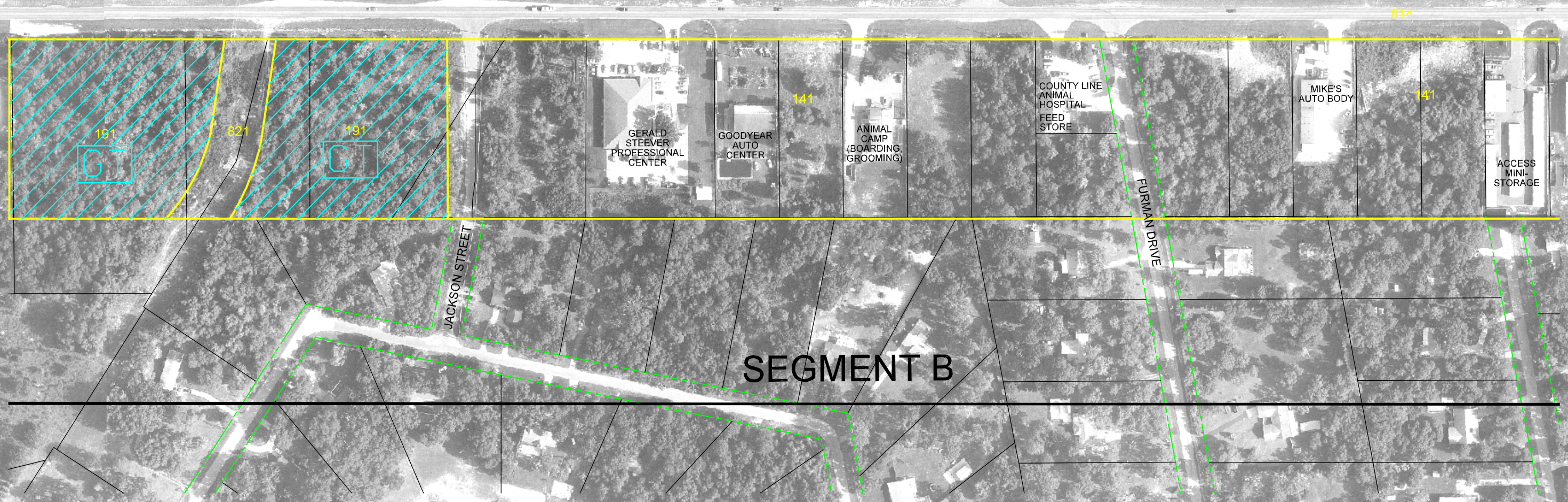
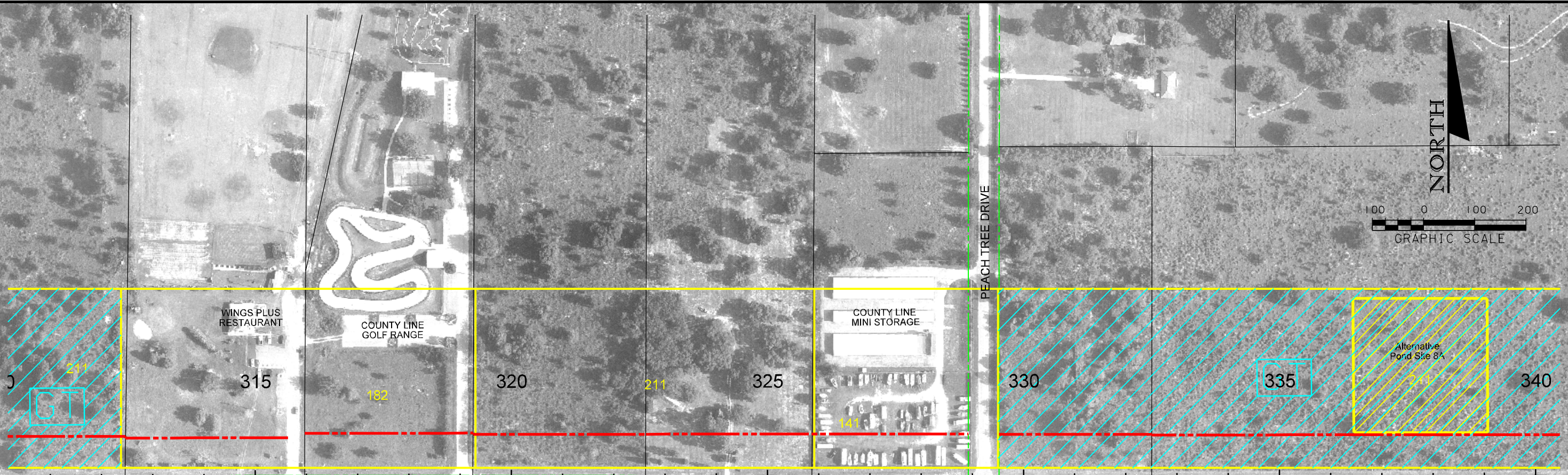
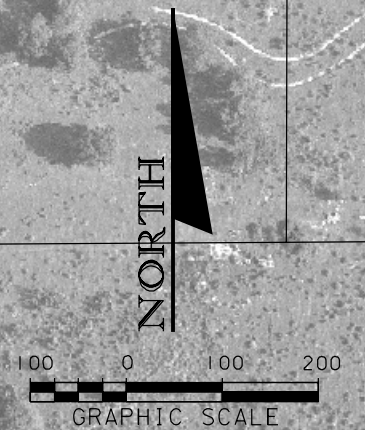


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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
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SEGMENT B

REVISIONS

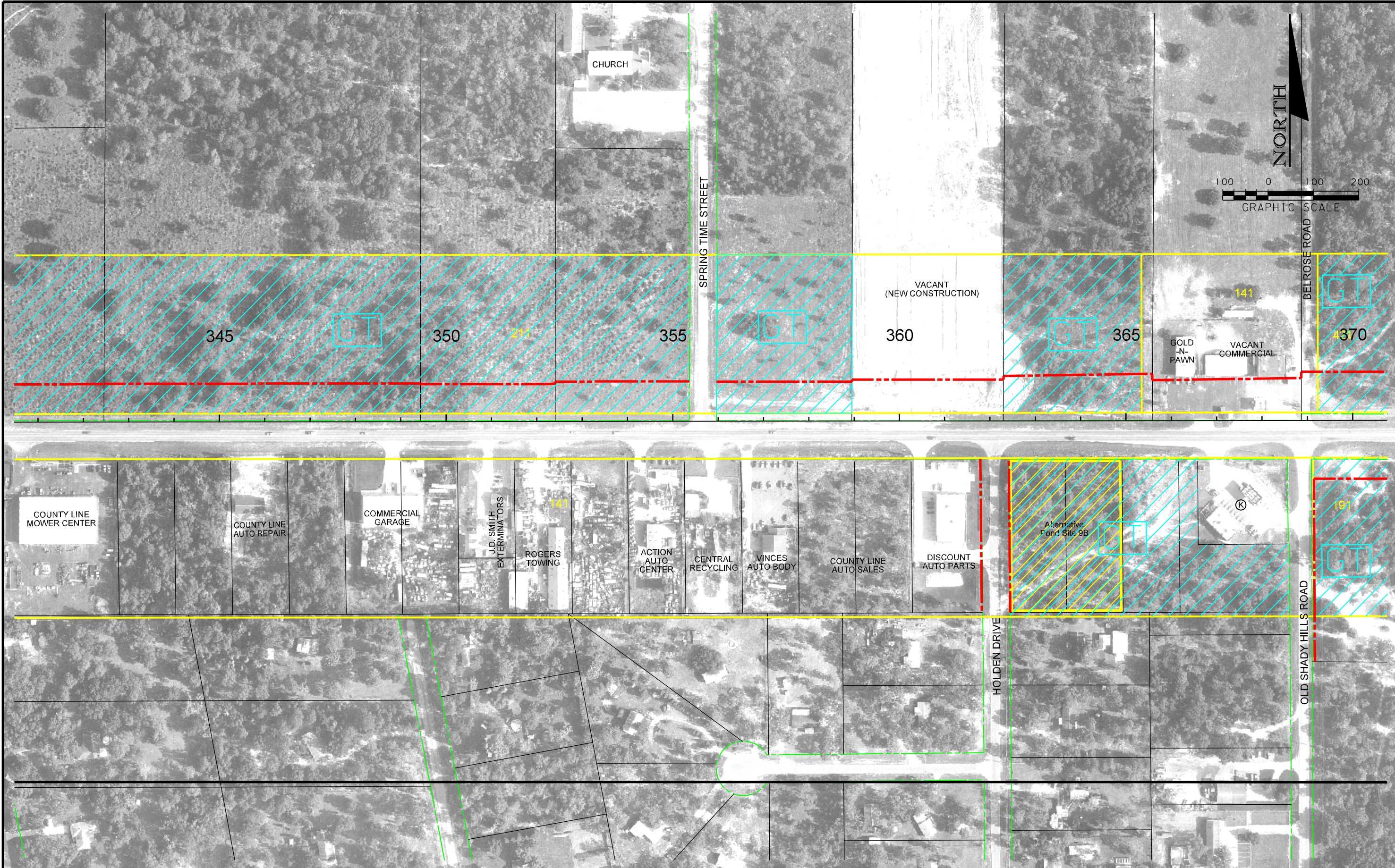
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COUNTY LINE ROAD (C.R. 578)  
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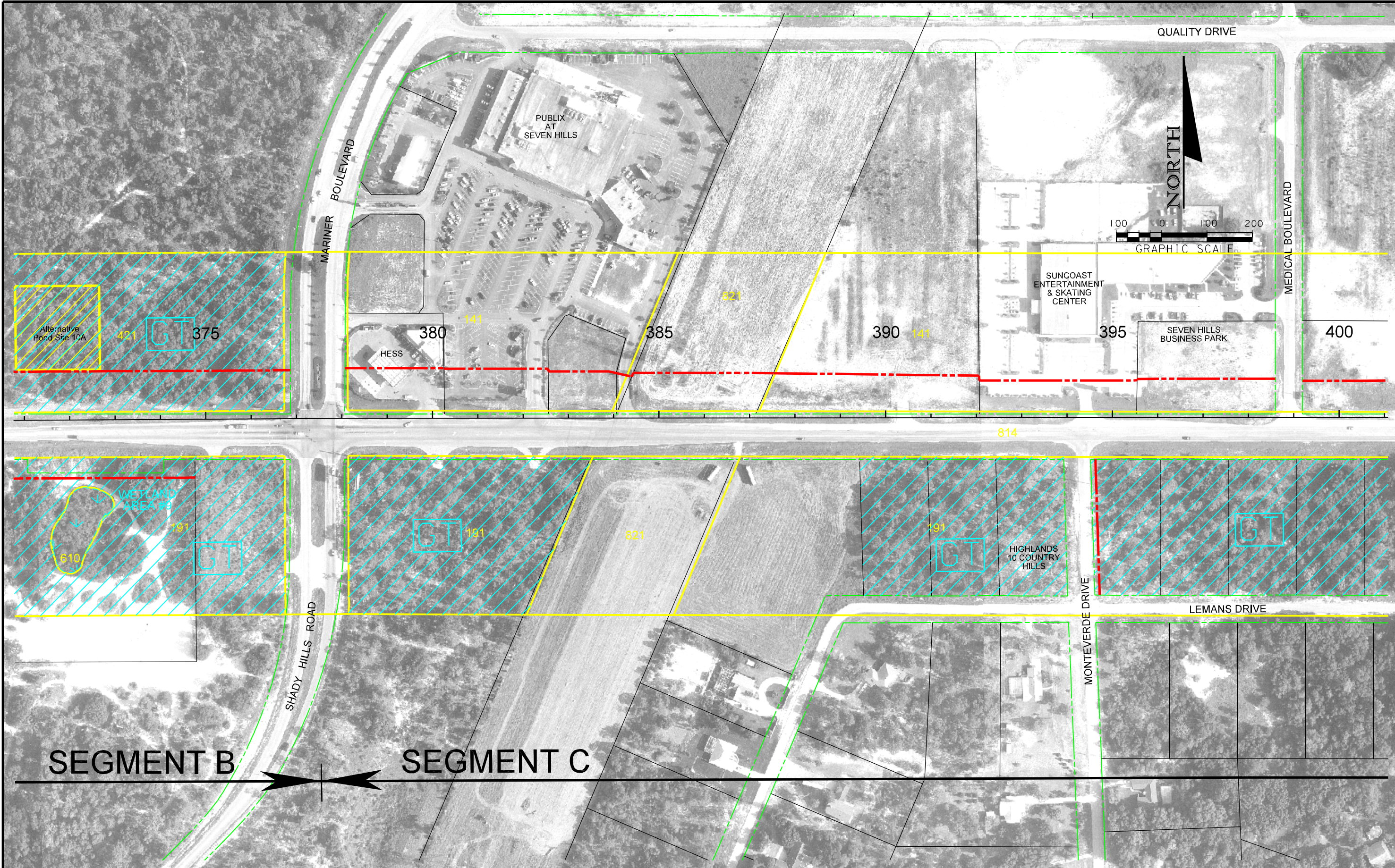
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SEGMENT B

SEGMENT C

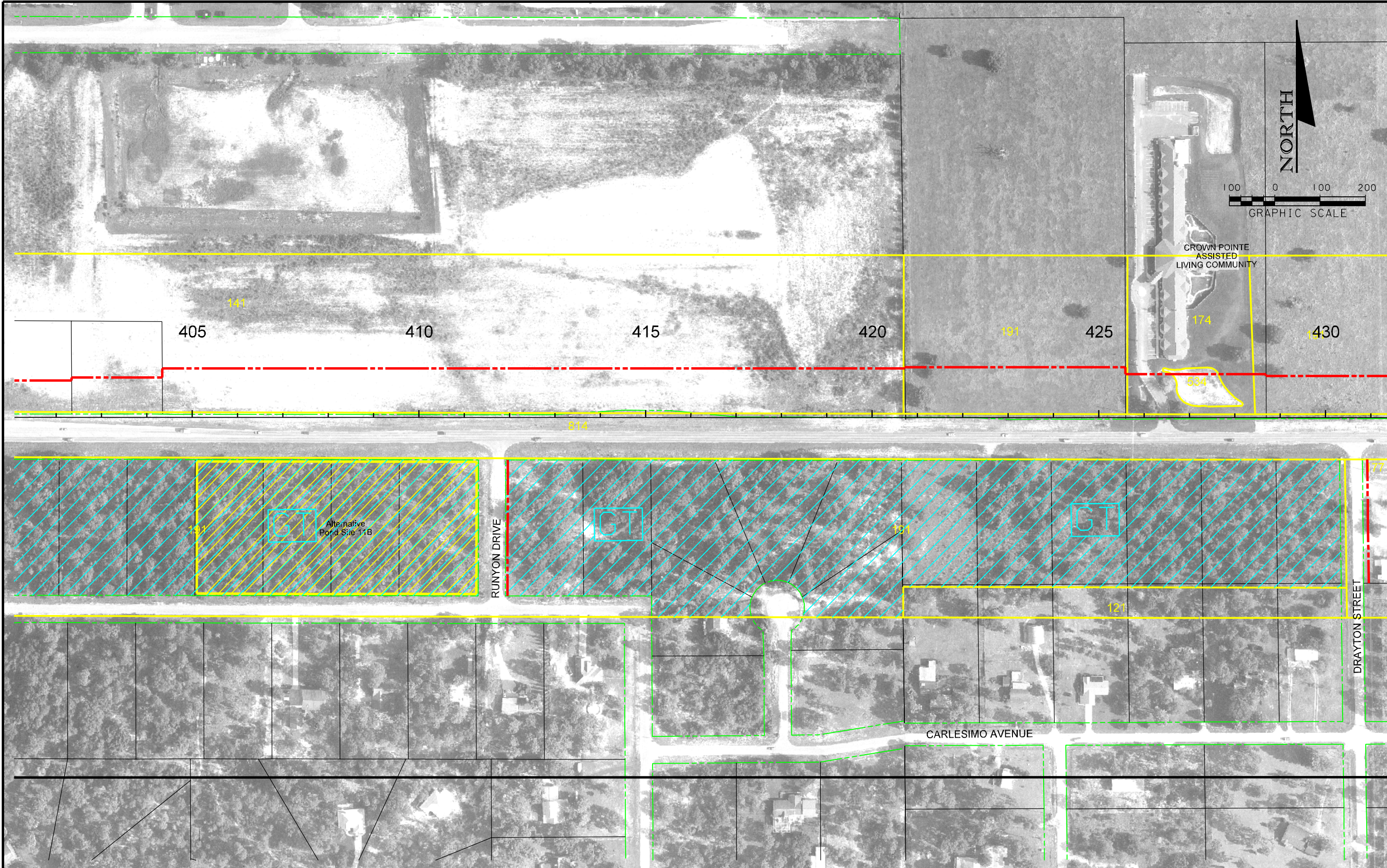
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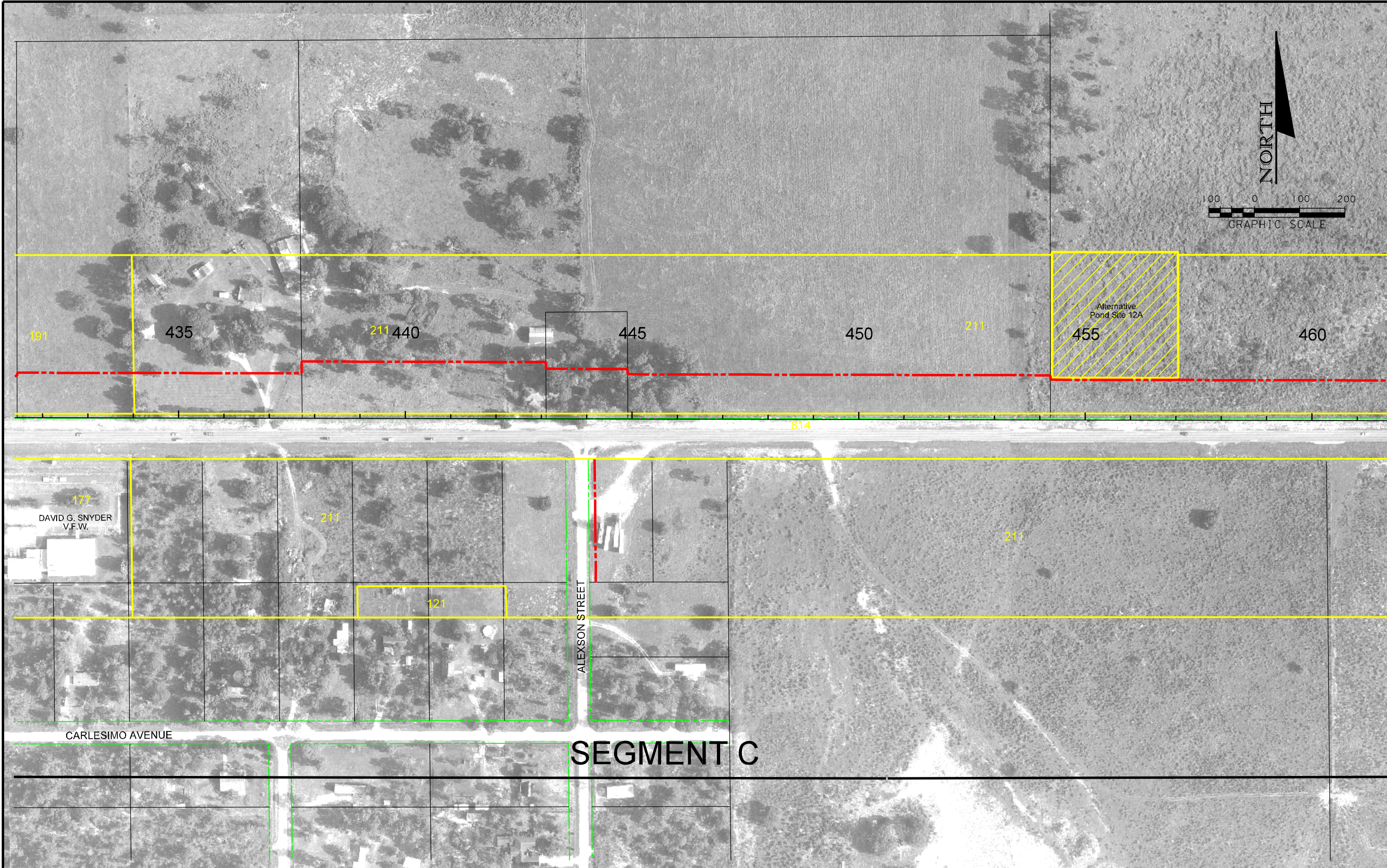
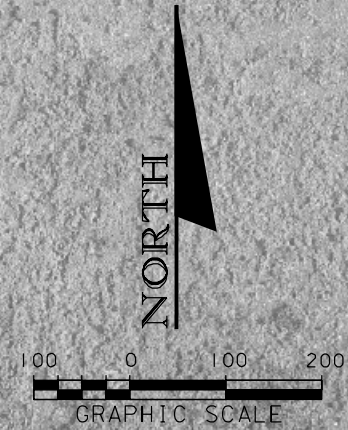
STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298 1 22 01

COUNTY LINE ROAD (C.R. 578)  
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From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
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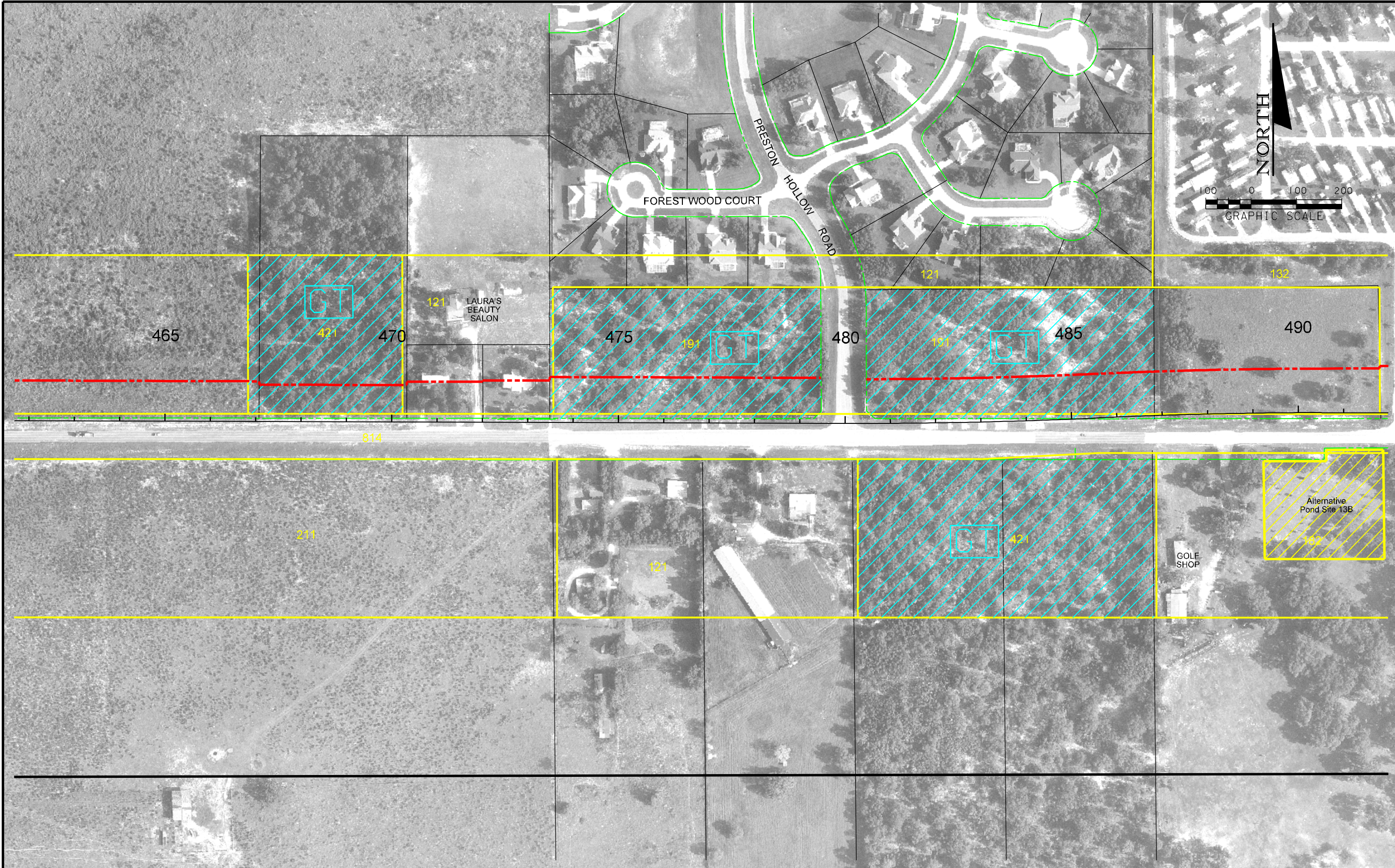
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REVISIONS					
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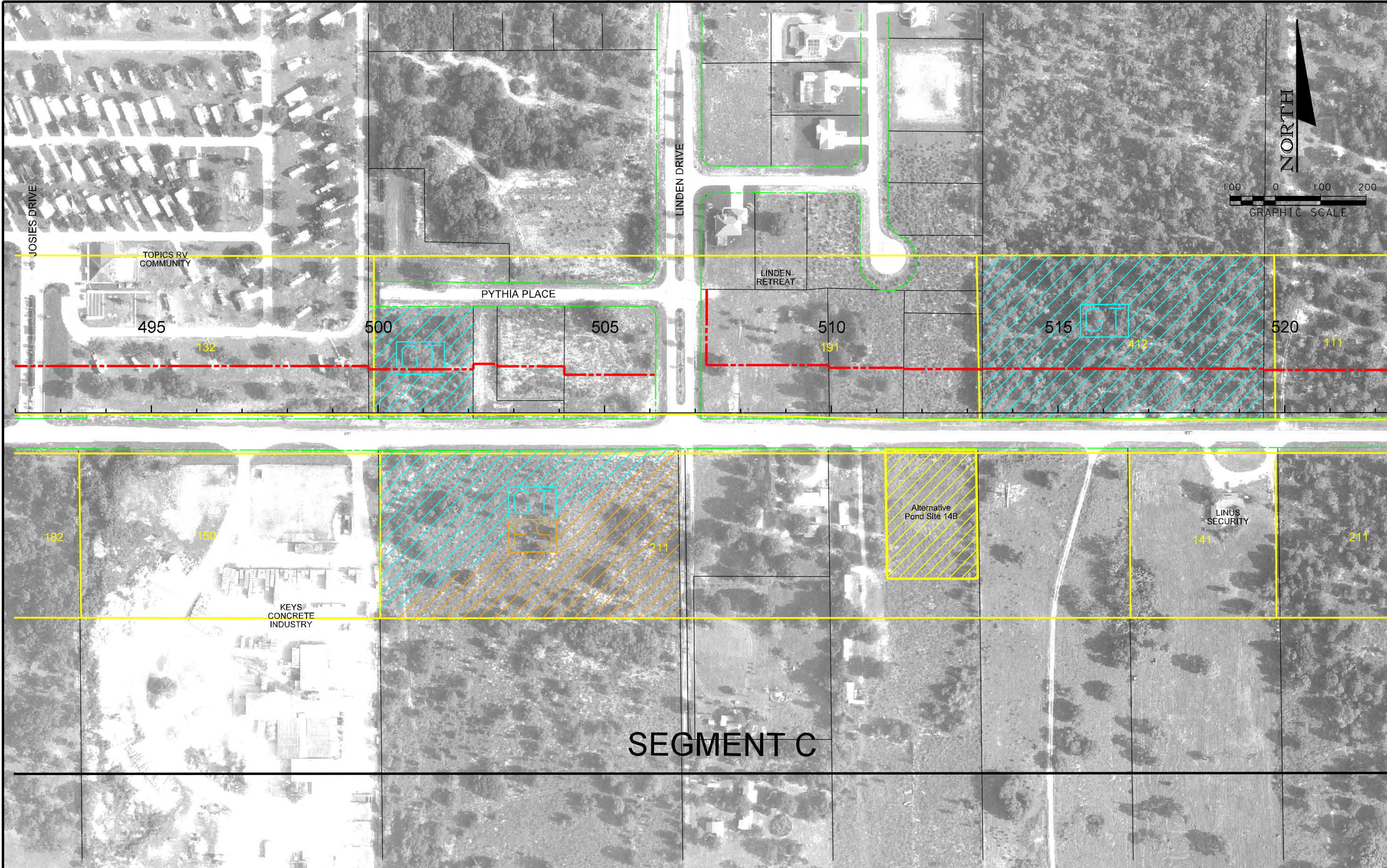
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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-8)

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SEGMENT C

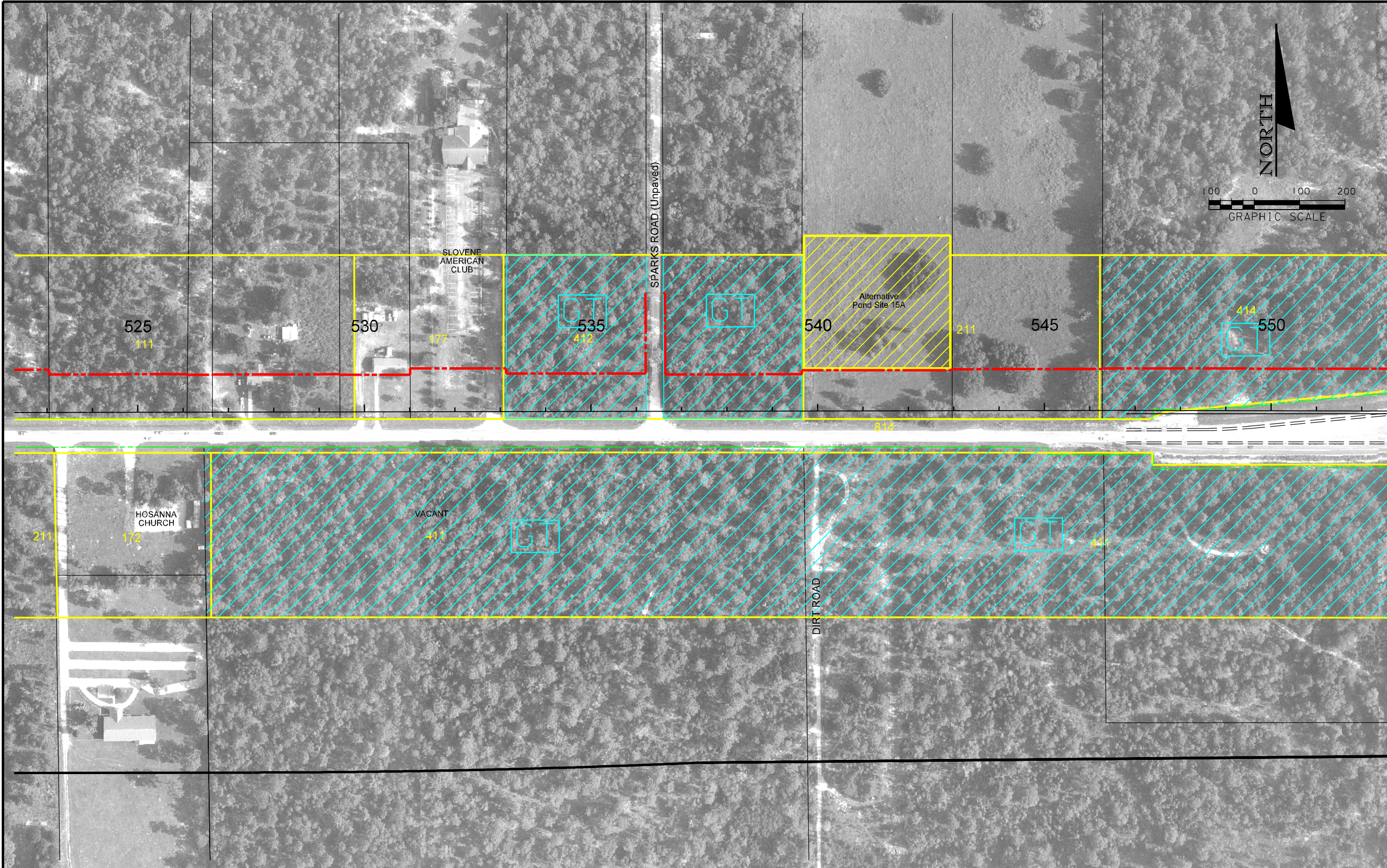
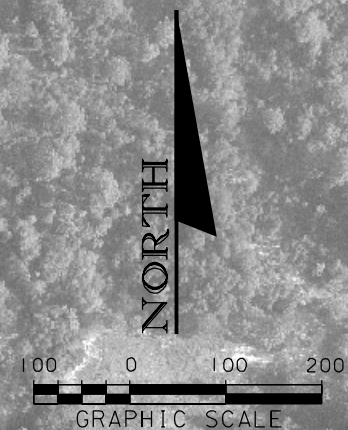
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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COUNTY LINE ROAD (C.R. 578)  
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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
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18



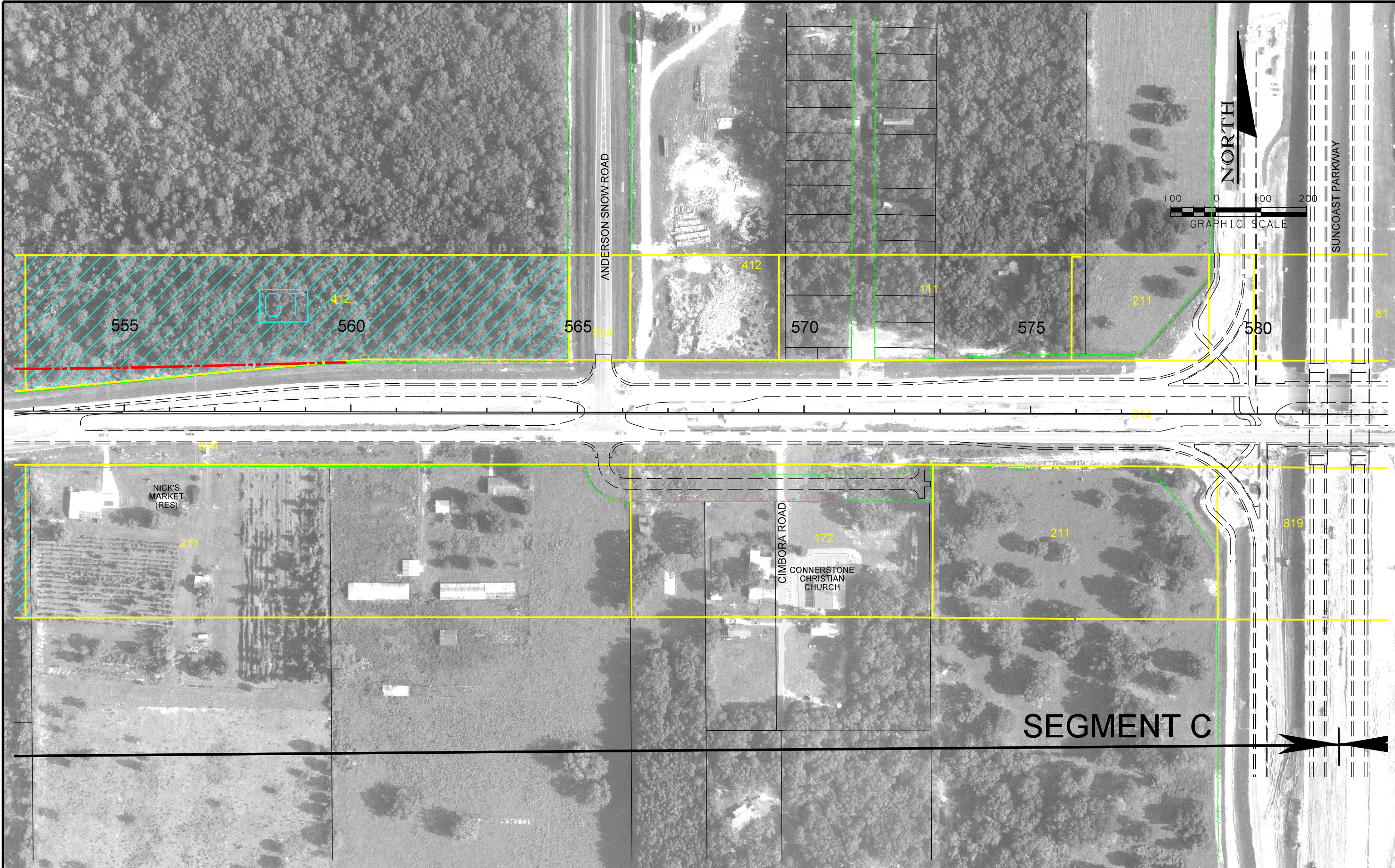
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
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19



REVISIONS

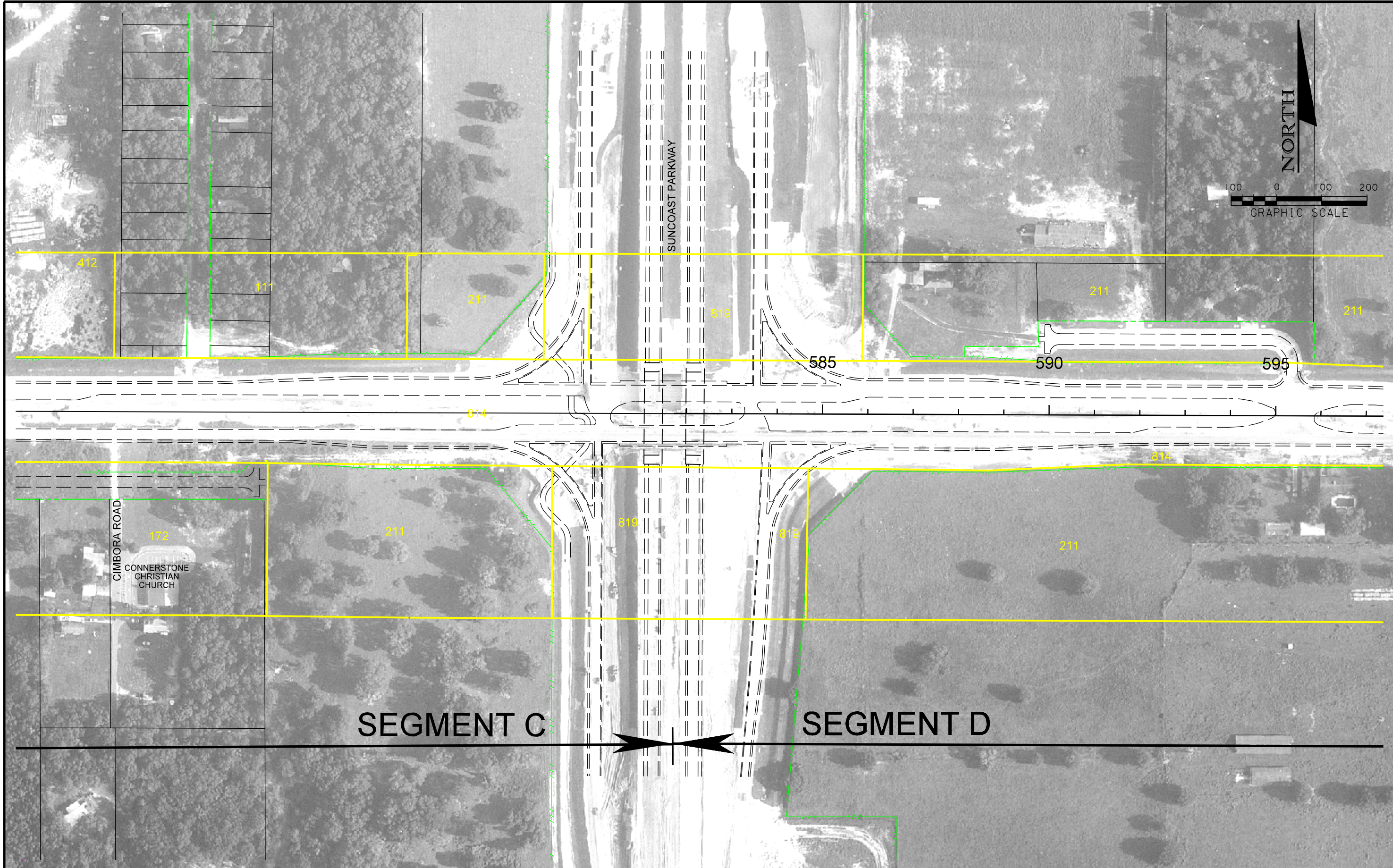
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SEGMENT C

SEGMENT D

REVISIONS					
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 7650 West Courtney  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R.578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R 55) to U.S. 41 (S.R. 45)  
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SHEET NO.  
21





REVISIONS					
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09/13/99		DATE OF FLIGHT			

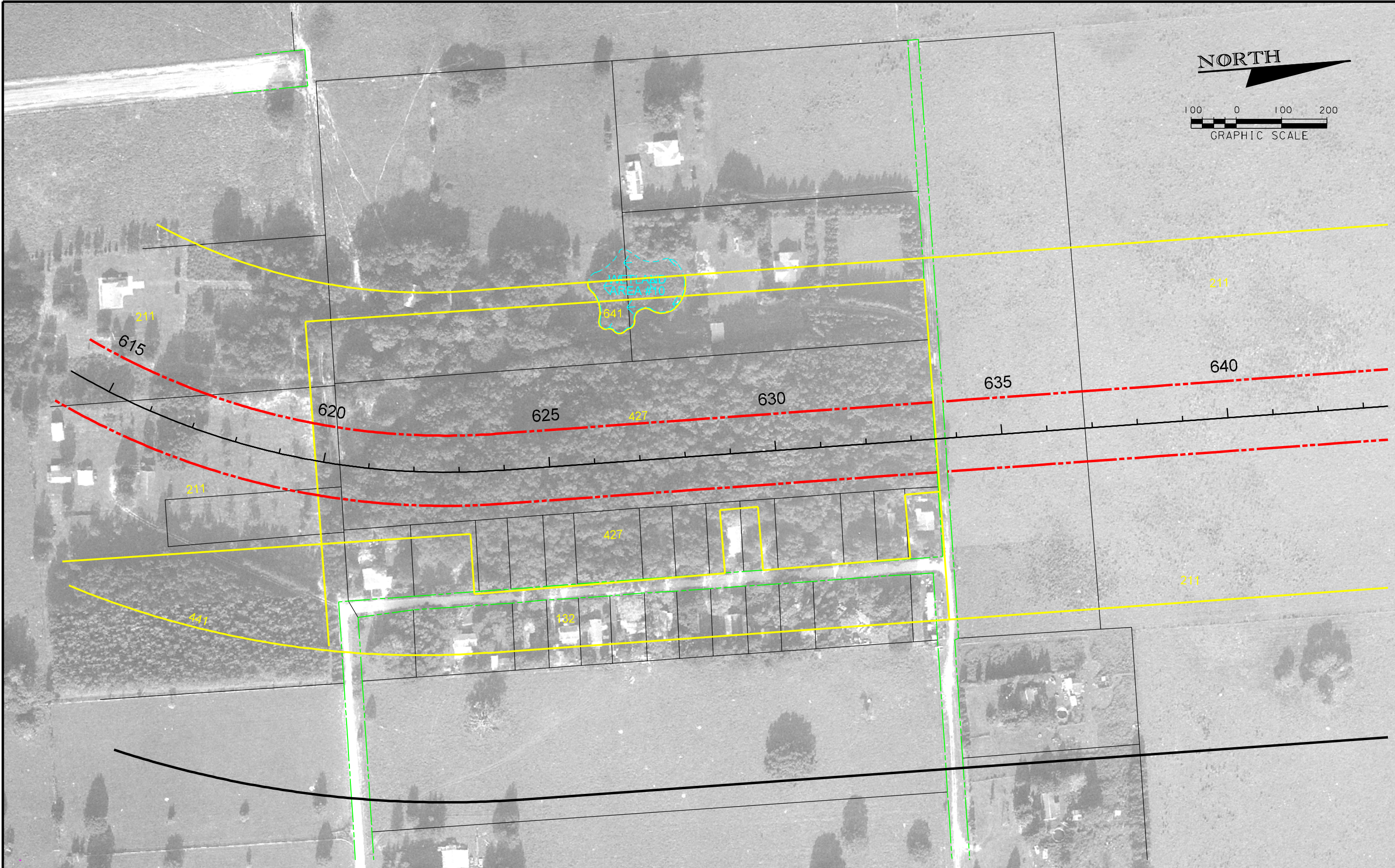
**URS**  
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 7650 West Courtney  
 Campbell Causeway  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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COUNTY LINE ROAD (C.R. 578)  
 PROJECT DEVELOPMENT & ENVIRONMENT STUDY  
 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-5 Ayers Road)

SHEET NO.  
22

**NORTH**



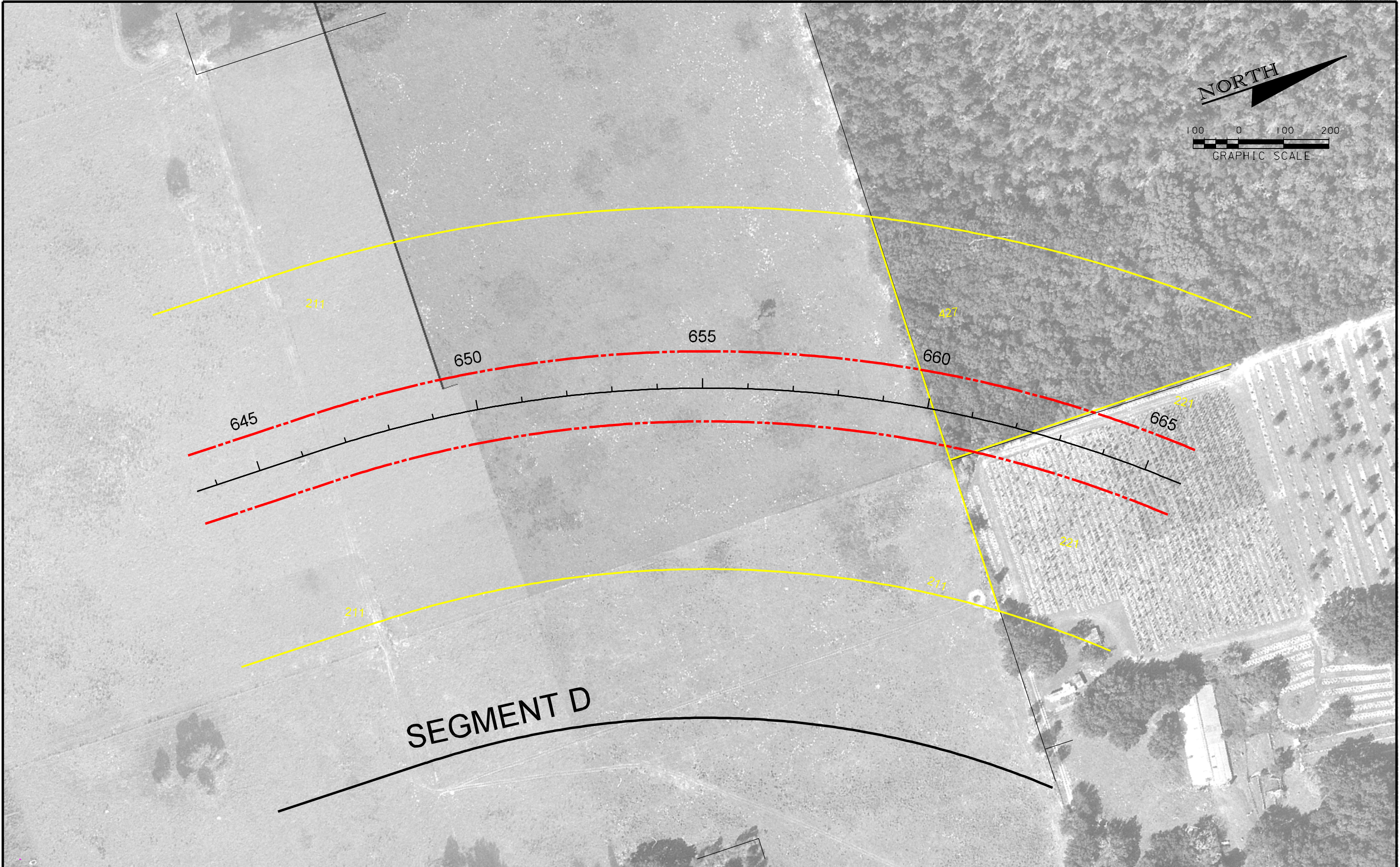
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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 URS Corporation Southern  
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COUNTY LINE ROAD (C.R. 578)  
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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
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23



**SEGMENT D**

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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COUNTY LINE ROAD (C.R. 578)  
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REVISIONS					
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09/13/99		DATE OF FLIGHT			



URS Corporation Southern  
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 Tampa, FL 33607-1462  
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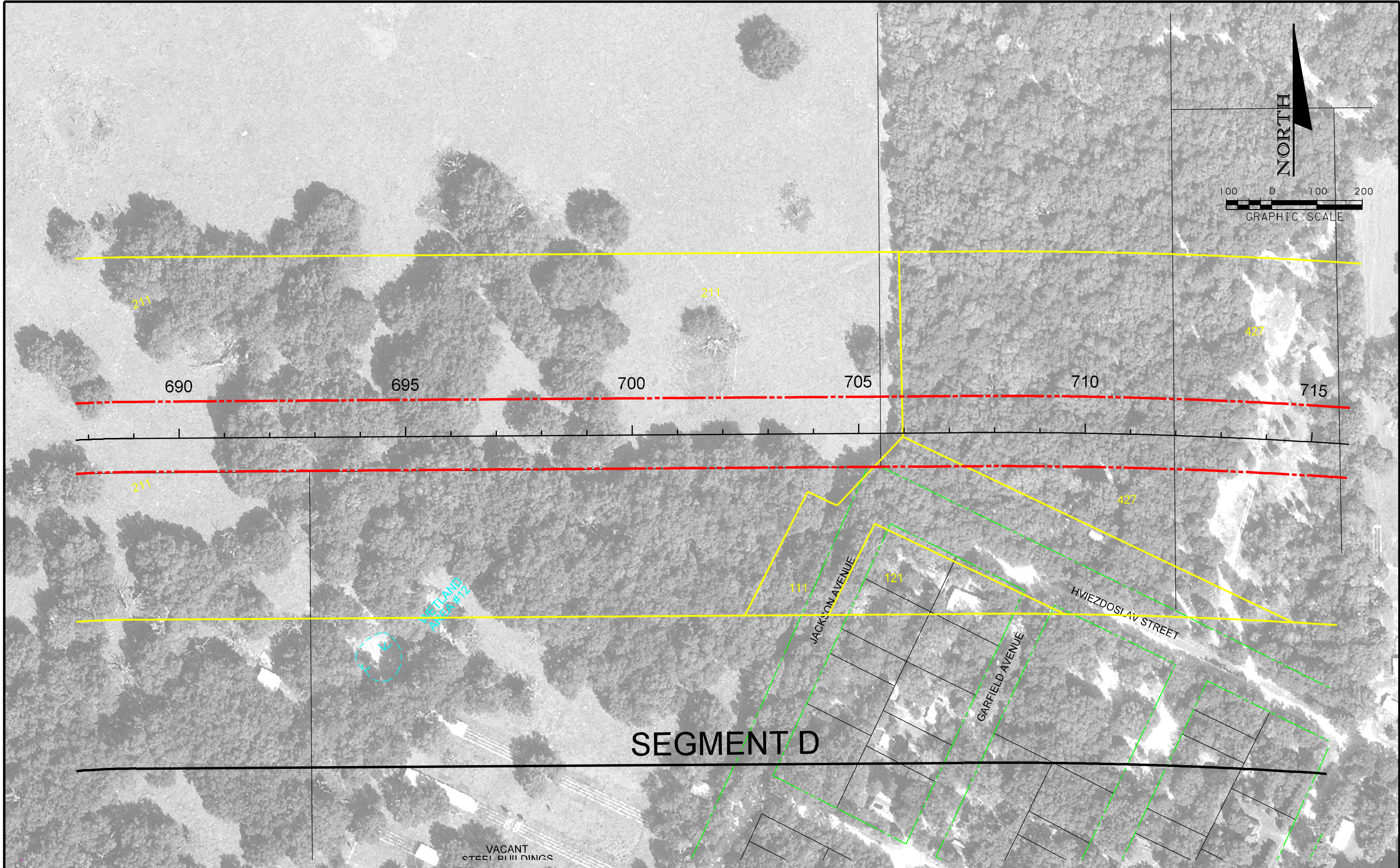
**STATE OF FLORIDA**  
**DEPARTMENT OF TRANSPORTATION**

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
C.R. 578	PASCO & HERNANDO	257298   22 01

COUNTY LINE ROAD (C.R. 578)  
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 From U.S. 19 (S.R. 55) to U.S. 41 (S.R. 45)  
 WETLAND ID AND LOCATION (S-5 Ayers Road)

SHEET NO.

25



**SEGMENT D**

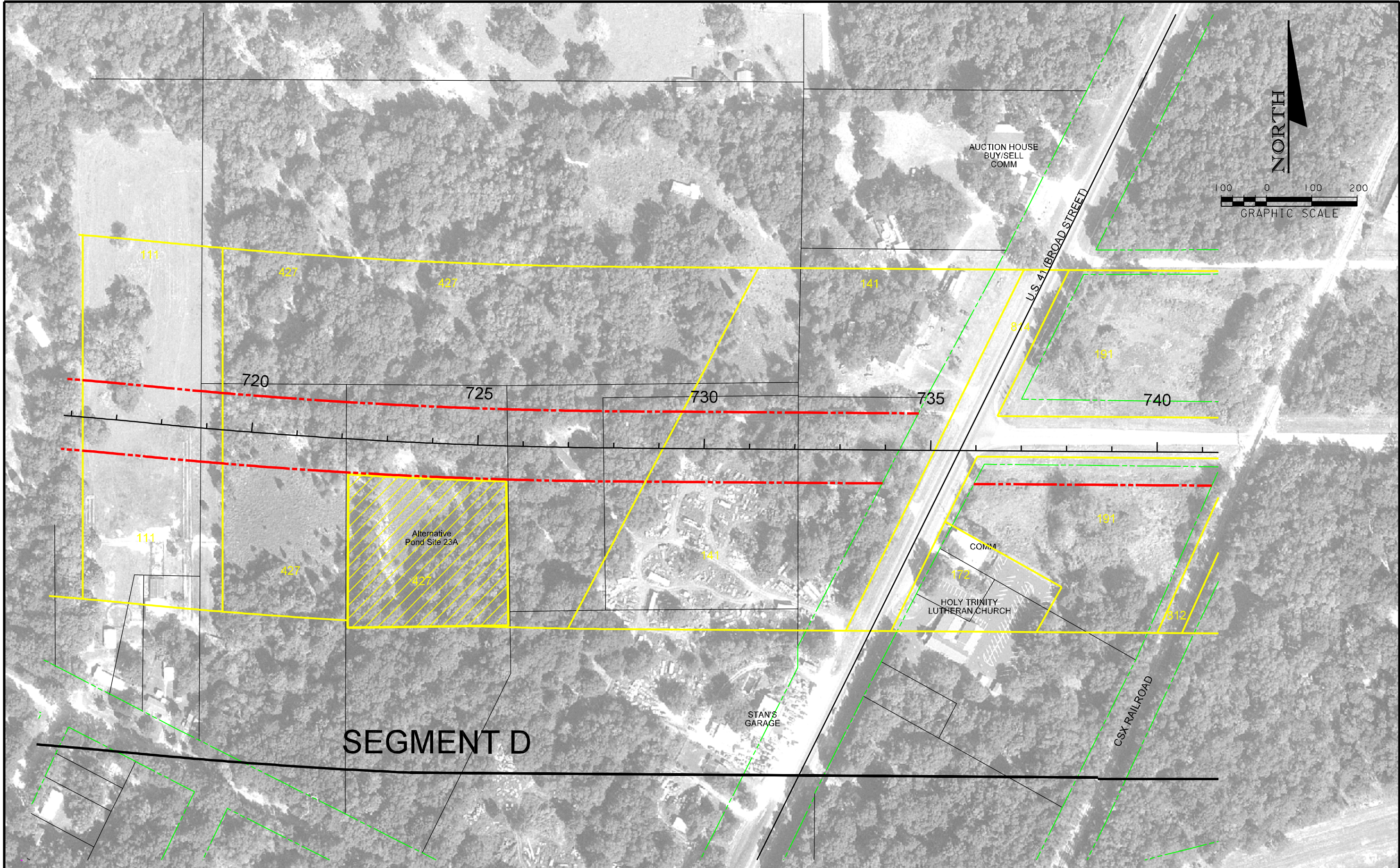
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SEGMENT D

END PROJECT

NORTH



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*County Line Road (C.R. 578)  
Project Development and Environment Study*