

FEDERAL HIGHWAY ADMINISTRATION  
FLORIDA DIVISION

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**ADMINISTRATIVE ACTION**  
**INDIVIDUAL SECTION 4(f) EVALUATION**

U.S. Department of Transportation,  
Federal Highway Administration  
and  
Florida Department of Transportation, District Five  
in cooperation with the  
Orlando-Orange County Expressway Authority

Financial Management Number(s): 238275 1 22 01 and 240200 1 22 01  
Federal Aid Project Number(s): TCSP 025 U and TCSP 024 U

**WEKIVA PARKWAY (SR 429)/SR 46 REALIGNMENT**  
**Orange, Lake, and Seminole Counties, Florida**

**Wekiva Parkway (SR 429)**

From US 441 (SR 500)/John Land Apopka Expressway (SR 429/SR 414) Interchange, Orange County  
to SR 417/I-4 (SR 400) Interchange, Seminole County

**SR 46 Realignment**

From US 441 (SR 500)/SR 46 Interchange, Lake County  
to Wekiva Parkway (SR 429), Orange County

Wekiva Parkway: Construction of a new four-lane/six-lane limited access tolled expressway to complete the Western Beltway (SR 429) around the metropolitan Orlando area from Apopka in Orange County to Sanford in Seminole County. The approximate length is 20.9 miles. The project includes a new systems interchange with the SR 46 Realignment and a modification of the existing systems interchange at SR 417/I-4; three new local access interchanges at Kelly Park Road, Neighborhood Lakes and International Parkway; major structures at the systems interchanges and four environmental/wildlife bridges. Realignment of CR 46A in Lake County is included as part of the Wekiva Parkway project. The approximate length of the CR 46A Realignment is 2.7 miles. The realignment is proposed as a two-lane, expandable to four-lane, rural facility.

SR 46 Realignment: Reconstruction of the existing SR 46 facility in Lake County and Mount Dora to provide six-lane divided controlled-access from US 441 to east of Round Lake Road. The project includes reconstruction of the existing US 441/SR 46 interchange with associated major structures. The realignment of SR 46 from east of Round Lake Road to a new systems interchange with Wekiva Parkway near the Orange/Lake County line is proposed as a limited access tolled expressway. The approximate length of the SR 46 Realignment is 4.8 miles.

Submitted pursuant to 49 U.S.C. 303.

Based upon considerations herein, there is no feasible and prudent alternative to the use of land from the Bock House and Strite House properties and the proposed action includes all possible planning to minimize harm to the Bock House and Strite House properties resulting from such use.

5 / 11 / 12  
Date

for Buddy Currell  
Division Administrator  
Federal Highway Administration

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# 1.0 Proposed Action

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## 1.1 Project Description

The Wekiva Parkway (SR 429) is proposed as a limited access expressway that will complete the Western Beltway (SR 429), a regional transportation corridor around the Orlando metropolitan area, linking SR 400 (I-4) in Osceola County to SR 400 (I-4) in Seminole County. The project is located in Orange, Lake, and Seminole Counties, Florida. Portions of the project are located within the jurisdictions of the City of Apopka in Orange County, the City of Mount Dora in Lake County, and the City of Sanford in Seminole County. A partial realignment of SR 46 in Lake County is integrated with the Wekiva Parkway (SR 429) project.

The Wekiva Parkway (SR 429)/SR 46 Realignment PD&E Study addresses the following proposed project components:

- **The Wekiva Parkway (SR 429)**, a four-lane divided and six-lane divided limited access facility, which would begin in Orange County at the planned terminus of the John Land Apopka Expressway at US 441 (SR 500) just west of CR 437 and extend to the north/northeast into Lake County, turning east and crossing the Wekiva River into Seminole County and terminating at I-4. The approximate length of the Wekiva Parkway (SR 429) is 20.94 miles, with 8.16 miles in Orange County, 7.37 miles in Lake County and 5.41 miles in Seminole County.
- **SR 46 Reconstruction and Realignment** which would begin at the SR 46/US 441 interchange in Lake County and extend along the existing SR 46 corridor to the east, then turning southeast on a new alignment and entering Orange County with a systems interchange connection at the Wekiva Parkway (SR 429). It is expected that the SR 46 improvements would provide six-lane divided controlled access along the existing alignment from US 441 to east of Round Lake Road, while the remaining alignment to the southeast would transition to a four-lane (expandable to six-lane) limited access expressway. The approximate length of the SR 46 Reconstruction and Realignment is 4.79 miles, with 4.01 miles in Lake County and 0.78 miles in Orange County.
- **CR 46A Realignment**, a two-lane rural (expandable to four-lane rural) roadway, which would begin on existing CR 46A in east Lake County and extend to the south on a new alignment and tie into existing SR 46 with an access connection to the Wekiva Parkway (SR 429). The approximate length of the CR 46A realignment is 2.72 miles.
- **Wekiva Parkway (SR 429) Access Improvements** would be required in Lake County between the realignment of CR 46A and the Wekiva River to allow access to the private property along existing SR 46. It is proposed that the Wekiva Parkway (SR 429) and a parallel non-tolled service road would carry all traffic crossing between Seminole and Lake Counties, and provisions for access would be required for adjacent properties in this area of Lake County and Seminole County.

## 1.2 Background

The Wekiva River Basin is a very unique environmental resource within Florida. The implications of this resource are best understood with an examination of the Wekiva-Ocala Greenway shown on **Exhibit 1-1**. The Greenway is anchored on the north side by the Ocala National Forest which incorporates 450 square miles of conservation and recreation lands in Central Florida. The State of Florida has proactively focused on establishing a permanent ecological link between the Ocala National Forest and the Wekiva River Basin. The size and diversity of this environmental resource ranks it as a top priority natural system in the State of Florida second only to the Everglades in south Florida.

Some of the characteristics of the Wekiva-Ocala Greenway, and more specifically the Wekiva Basin, that prompt the priority focus include:

- Wide variety of flora and fauna supported by a diverse, yet integrated habitat,
- Extensive habitat connectivity which supports a variety of wildlife most notably larger mammal species including deer and the Florida Black Bear,
- Numerous springs and seepage slopes which are fed from adjacent high recharge areas within the basin.

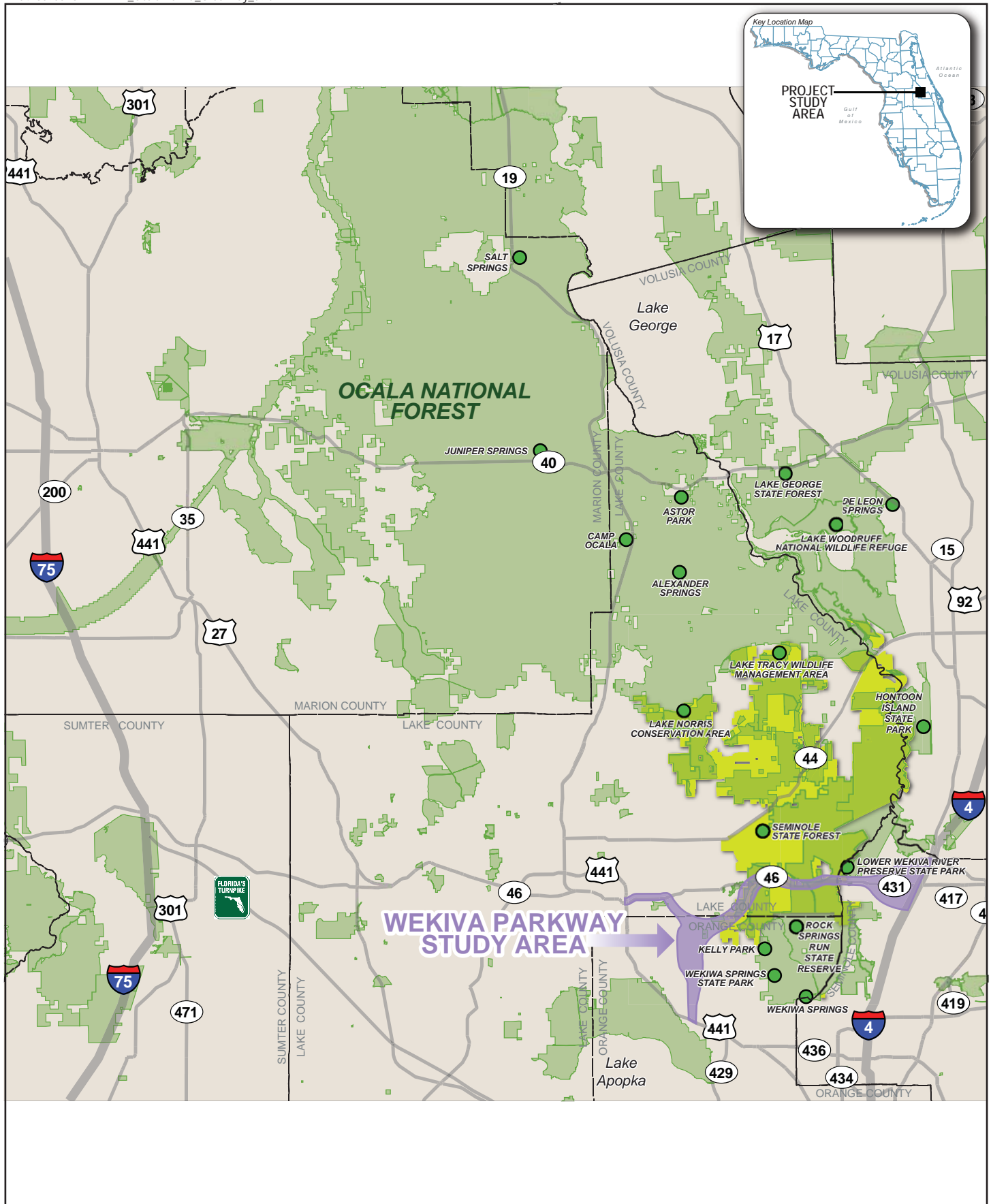
Over the past 25 years, there had been numerous discussions and various actions taken regarding the need to complete the beltway on the northwest side of the Orlando metropolitan area while protecting the Wekiva River and its springshed. Area governmental agencies, municipalities, and environmentalists have generally agreed on the needs for transportation improvements, but could not reach a consensus on various issues including alignment and environmental protections.

As time elapsed the situation grew more critical due to growing traffic on SR 46 which increasingly served as a barrier to the southern reaches of the Wekiva Basin and in essence caused increasing habitat fragmentation. **Exhibit 1-2** provides a USGS Quadrangle Map that graphically illustrates this issue.

The problems with SR 46 and the desire to complete the beltway system gained increased attention in the 2001/2002 timeframe due to several factors including increasing accidents and fatalities on SR 46, continued vehicle-wildlife conflicts, and growing congestion on I-4. Transportation officials with the Florida Department of Transportation (FDOT) and the Orlando-Orange County Expressway Authority (OOCEA) recognized that a collaborative process would be required to develop potential solutions for the transportation problems. In light of this, the transportation officials reached out to affected State agencies and environmental special interests in 2002 in an effort to define how to move forward.

At a meeting in 2002, the discussions emphasized several key points regarding the Wekiva Basin including:

- The Wekiva River Basin is an important environmental resource in Florida second only to the Everglades,
- The unique characteristics of this resource require special technical considerations, and
- Complete and integrated considerations of cultural, natural and social issues are required to define potential solutions that address transportation needs while balancing the protection of this resource.

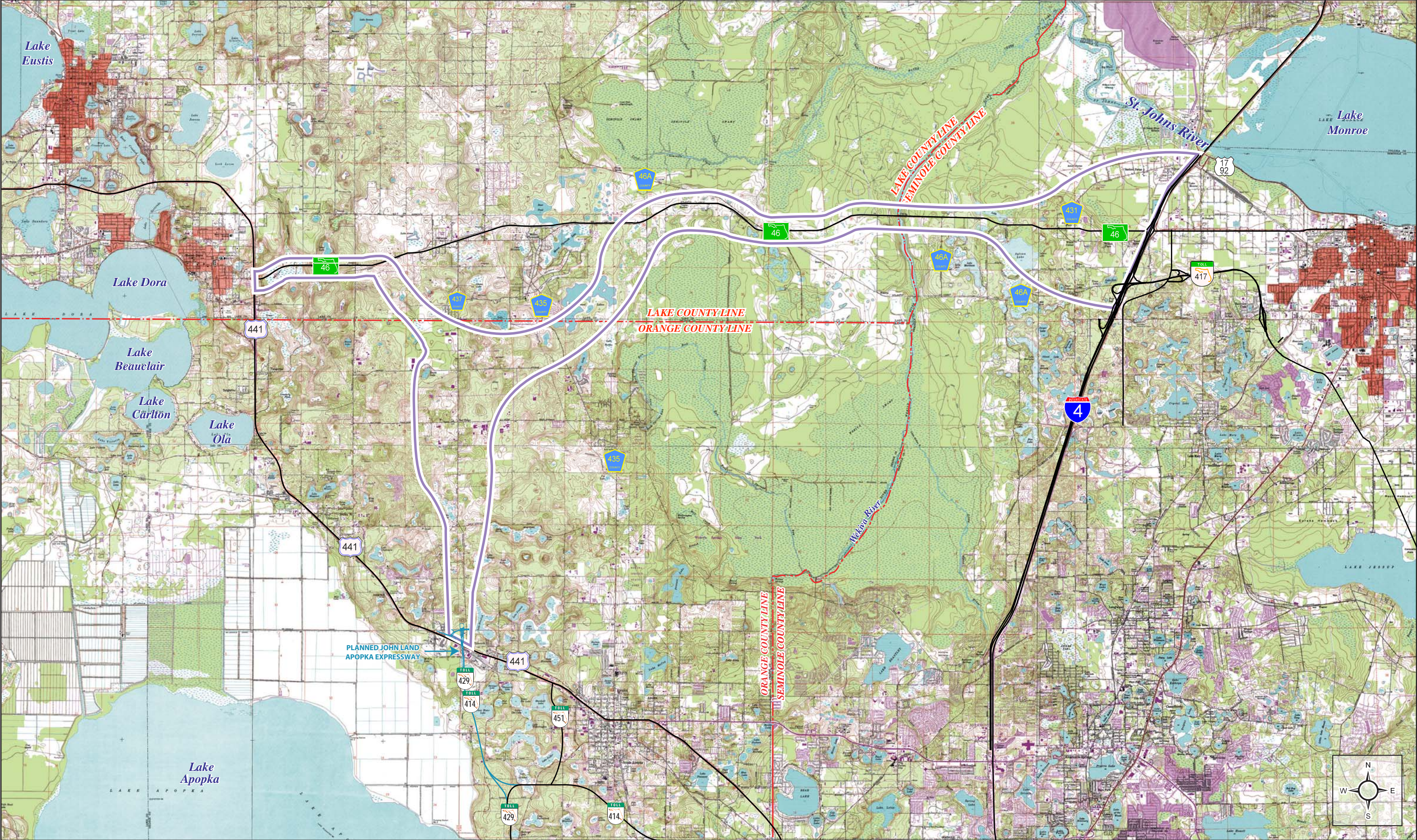


# LEGEND

- Wekiva-Ocala Greenway
- Planned Public Lands
- Other Public Lands
- Wekiva Parkway Study Area

## Exhibit 1-1. Wekiva-Ocala Greenway





**LEGEND**  
— Wekiva Parkway Study Area

Source:  
USGS Quadrangle Maps  
3811 Casselberry  
3812 Forest City  
3813 Apopka  
3814 Astatula  
3911 Sanford  
3912 Sanford SW  
3913 Sorrento  
3914 Eustis

**Exhibit 1-2**  
**USGS Quadrangle Map**



The outcome of that meeting resulted in coordination with the Governor's office on these important issues, and the Governor issued a series of Executive Orders that resulted in the State of Florida undertaking an unprecedented technical and stakeholder process for the Wekiva River Basin Area with specific emphasis on defining the following:

- The Purpose and Need for the Wekiva Parkway (including the final segment of the Orlando metropolitan beltway system) in light of the sensitive natural systems associated with the Wekiva River Basin and the larger Wekiva-Ocala Greenway,
- The dynamic implications of transportation and land use changes in the Wekiva River Basin and their resultant impact to the natural system function, and
- A range of alternatives that responds to the purpose and need based on technical evaluations of this unique resource.

It should be noted that the timing of these actions was prior to full implementation of FDOT's Efficient Transportation Decision Making (ETDM) process and prior to guidance emanating from the Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) legislation. That said, the process closely mirrored these new processes and requirements with particular emphasis on opportunity for input at formative stages of the project and subsequent project development advancement.

In summary, the State of Florida formed a Wekiva Basin Area Task Force and a Wekiva Basin Coordinating Committee that were chartered to undertake a holistic evaluation of the Wekiva Basin Area and to prepare recommendations on guiding principles and directions for the various components involved in the evaluation.

The Task Force and Coordinating Committee included representatives from State/Regional agencies (including FDOT and OOCEA), elected officials in the general basin area, special interest groups, property owners, and business interests. Each meeting included time for public comment and input.

Furthermore, the meetings involved technical and expert presentations on the various issues under consideration including transportation needs, wildlife habitat protection, land use, water quantity supplies, water quality issues with focus on the numerous springs in the area, protection of rural settlements, and conservation land needs.

The proceedings resulted in a series of objective and scientific analyses tailored to the unique characteristics of the Wekiva Basin Area. The transportation analyses included considerations and review of the purpose and need for transportation improvement within the general area.

## 1.3 Purpose and Need

The deliberations of the Task Force and Coordinating Committee referenced previously involved technical assessments to support development of a purpose and need for the project. The technical components of this effort were led by FDOT and OOCEA officials in a manner consistent with the National Environmental Policy Act (NEPA). Also, opportunity for input on the purpose and need by all stakeholders and the public was offered at every meeting of the Task Force and Coordinating Committee.

The following provides the stated purpose and need for the Wekiva Parkway.

- **Complete the Western Beltway (SR 429) around metropolitan Orlando**

The proposed Wekiva Parkway, extending approximately 21 miles from near the current terminus of SR 429 at US 441 in Apopka in Orange County to I-4 near Sanford in Seminole County, would complete the Western Beltway (SR 429) around metropolitan Orlando; it is the only segment of the entire eastern and western beltway system from I-4 in Osceola County through Orange County to I-4 in Seminole County that remains to be completed. Construction of the Wekiva Parkway would follow completion of the SR 429/SR 414 John Land Apopka Expressway in northwest Orange County. Traffic projections indicate the proposed Wekiva Parkway would provide relief to congested I-4, SR 46, US 441 and other heavily traveled roads in northwest Orange County, east Lake County and west Seminole County, as well as provide a continuous beltway and systems connection for regional travelers.

A map of the regional transportation network, which also depicts the Wekiva Parkway study area, is shown in **Exhibit 1-3**. Improvements to these facilities are identified in the FDOT Strategic Intermodal System (SIS) 2030 Unfunded Needs Plan for highway improvements needed by 2015 and 2030. SR 429 (the Western Beltway) is a designated SIS facility. In March 2007, the Wekiva Parkway was added to the Florida Intrastate Highway System, which is a prerequisite for the addition of a highway to the SIS. Florida's SIS is a transportation network consisting of statewide and regionally significant transportation facilities and services. The SIS was established to focus limited state resources on transportation facilities that are critical to Florida's economy and quality of life. The SIS integrates individual facilities, services, modes of transportation and linkages into a single, integrated transportation network.

- **Provide a higher capacity east-west travel facility in east Lake County and west Seminole County**

Most of the existing roadways within the study area consist primarily of local and collector roads. SR 46, the only east-west connection between Lake County and Seminole County within the study area, is a two-lane rural roadway which was constructed prior to current design standards. The majority of SR 46 through Lake and Seminole Counties consists of two 12-foot travel lanes with varying shoulder widths.

A safer, higher capacity east-west travel facility is needed. Many roads in the study area are currently operating at conditions below level of service "C". However, for SR 46 in east Lake County and west Seminole County in a portion the study area, the existing level of service is "F", with annual average daily traffic of 23,700.

These level of service conditions, especially for SR 46, are projected to worsen significantly under the No Build scenario. Growth in residential population and employment opportunities has contributed to an increasing travel demand in northwest Orange County, north and east Lake County, and west Seminole County. Population and employment projections indicate that travel demand will continue to increase in the area for the foreseeable future. In the 2032 design year for the proposed Wekiva Parkway project, the projected No-Build condition for SR 46 over a nine mile section in the study area in east



Lake County and west Seminole County is a further deteriorated level of service “F”, with annual average daily traffic of 37,440. That would be a 58% increase in traffic on a facility that is currently operating at level of service “F”.

The proposed project is a needed link between urbanized areas. Modes of transportation within the Wekiva Parkway study area are generally limited to personal vehicles and vehicles for hire. There are currently no public bus service routes within the study area. Much of the study area traverses rural residential and conservation lands; however, the corridor connects the urbanized areas of Apopka in Orange County, Mount Dora in Lake County, and Sanford in Seminole County. The proposed Wekiva Parkway project would meet increased travel demand from population growth in an environmentally sensitive and compatible manner.

- **Improve safety to reduce vehicle crash fatalities**

Many of the study area roadways are two-lane local and arterial roads that do not meet the current design standards for safety and capacity. That is a major contributing factor in the high crash and fatality rates, especially for SR 46 through Lake and Seminole Counties. According to FDOT Crash Data Reports from 2000 to 2004, there were 27 fatalities resulting from vehicle crashes on the 18.5 mile segment of SR 46 from US 441 near Mount Dora in Lake County to I-4 near Sanford in Seminole County. FDOT data indicates that in 2004 alone there were 10 fatalities and 117 injuries resulting from 95 vehicle crashes on that section of SR 46.

Public awareness of this safety issue has been raised through media attention, such as an *Orlando Sentinel* article on September 28, 2005 which described SR 46 in Lake County as “Central Florida’s Deadliest Road”. The *Sentinel* stated that, according to their analysis of regional crash data from FDOT and the Florida Highway Patrol, on a per mile basis the section of SR 46 through Lake County is the most dangerous roadway in Central Florida, and the section of SR 46 through Seminole County was described as the region’s second most dangerous roadway. While such media reports are not the basis for decision-making, they have heightened public interest in the need for a safer travel facility in east Lake County and west Seminole County.

As traffic volumes grow on these unimproved local roadways, it is reasonable to expect that a similar increase in traffic incidents would continue to occur. The proposed Wekiva Parkway and the widened and realigned sections of SR 46 would be designed and constructed in accordance with all current standards and would be available to those regional motorists desiring to bypass local traffic. A modern facility, coupled with the opportunity for segregation of trip types, would help to reduce the potential for traffic incidents and fatalities when compared to existing conditions.

- **Develop a transportation facility that minimizes impacts to the Wekiva River Basin Area resources and that specifically improves wildlife habitat connectivity between conservation lands and reduces vehicle-wildlife conflicts**

The recognition of the importance of the Wekiva River Basin Area, its habitat, wildlife, conservation and recreation values, the associated spring systems, and the connection to the

Ocala National Forest elevates the protection of this resource to a primary component of the purpose and need for the Wekiva Parkway.

There are numerous publicly held conservation and recreation lands within the study area, including Rock Springs at Kelly Park, Wekiwa Springs State Park, Rock Springs Run State Reserve, Seminole State Forest, and Lower Wekiva River Preserve State Park. Vast areas of floodplains and wetlands, including the Wekiva Swamp south of SR 46 and the Seminole Swamp north of SR 46, are located west of the Wekiva River.

The natural environment includes the Wekiva River Basin ecosystem, springshed, and an expansive wildlife habitat area that connects to the Ocala National Forest. Given the significance of springs in the Wekiva Basin, special consideration was given to the high recharge areas primarily in northwest Orange County recognizing those recharge areas are an integral component of the area springshed and the ultimate continued function of the spring systems. The Wekiva River and its tributaries Rock Springs Run, Seminole Creek, and Black Water Creek are included in the designations of the Wekiva River Aquatic Preserve, Outstanding Florida Water, and State and National Wild & Scenic River.

Due to the expansive wildlife habitat area, an additional safety concern in the study area is vehicle-wildlife conflict. Since much of the study area consists of sparsely populated rural residential areas and large tracts of state conservation land, there have historically been many conflicts between vehicles and wildlife on roadways, particularly SR 46 in east Lake County. Over the past 20 years, more than 50 black bears have been killed by collisions with vehicles on the six mile segment of SR 46 just west of the Wekiva River adjacent to state conservation lands. From 1994 to 2005 on that same section of SR 46, 23 black bears were killed by vehicles. The proposed Wekiva Parkway project incorporates three long wildlife bridges on both the mainline and parallel service road totaling approximately 7,710 feet in length to enhance wildlife habitat connectivity between state conservation lands, which would greatly reduce the number of vehicle-wildlife conflicts.

## 1.4 Study Area

The analysis to define the study area for the Wekiva Parkway was performed by the FDOT and OOCEA using land suitability mapping (LSM). The LSM incorporated the traditional factors of constraints and opportunities including regulatory constraints such as wetlands, floodplains, public parks and recreations areas (Section 4(f)), archaeological and historic sites (Section 106 and Section 4(f)), as well as threatened and endangered species (Section 7). Other constraints associated with cultural, natural and social environment components were also mapped.

The driving principle in developing the study area was to define a range of reasonable alternatives for the Wekiva Parkway in light of the project's purpose and need. The screening included added focus on a couple of issues that are unique to the specific areas and resources. For instance, given the preponderance of springs in the Wekiva River Basin special considerations were given to avoid impacts to high recharge areas primarily in Northwest Orange County recognizing the recharge areas are an integral component to the area springshed and the ultimate continued function of the spring systems. In addition, the City of Apopka is known as the "Indoor Foliage Capital" given its extensive number of



small and large commercial plant nurseries. Consequently, impacts to plant nurseries were specifically identified to gain a sense of the potential impacts to this important economic component in the area.

The assessments for the study area were presented to the Task Force and Coordinating Committee for input. Other stakeholders and the public were offered numerous opportunities to provide comment and input to the purpose and need and the study area evaluations. The deliberations on the study area focused on meeting the transportation needs and providing protection to the Wekiva River Basin area. The geographic location of the study area was culled based on two factors:

- 1) Consistency with the Purpose and Need,
- 2) Exclude areas that would involve higher levels of impacts while providing less potential benefits.

**Exhibit 1-4** provides a composite constraints map that formed the basis for the study area. Specific areas of note include the extensive coverage of public recreation lands, expansive wetlands adjacent to the Wekiva River, large tracts of high recharge areas, and several neighborhoods and communities. Additional mapping and discussion of the development of the study area is included in **Appendix A**.

## 1.5 Alternatives Considered

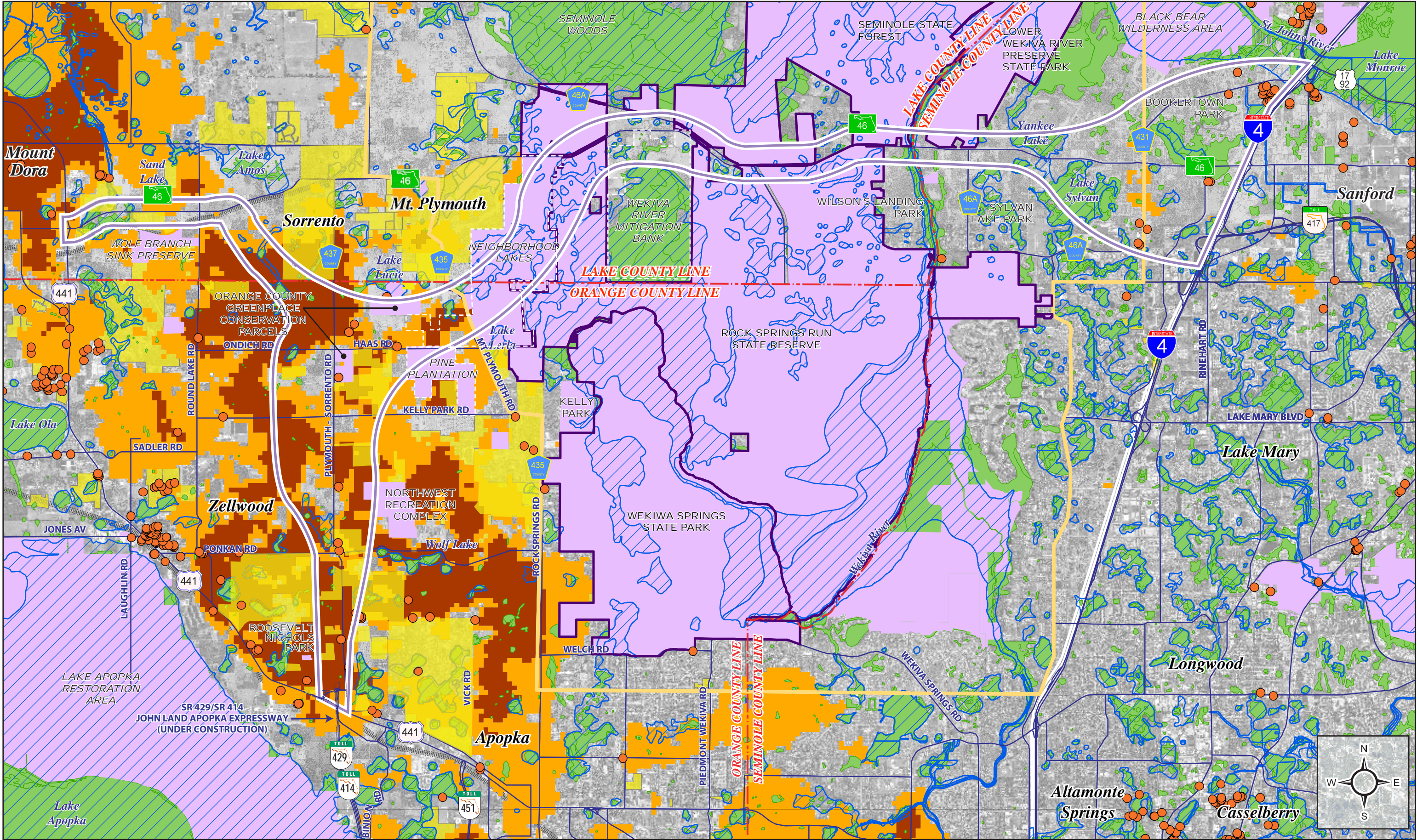
A multi-step process was used to develop project alternatives. The goal was to identify the alternatives that should be carried forward for more detailed analysis and evaluation, and to allow opportunity for public and agency input throughout the study. This process started with the study area which provides the boundary within which reasonable alternatives are expected given the project purpose and need. A large number of alternatives were developed initially that were assessed in respect to meeting the purpose and need. This was of particular importance in consideration of the stated purpose and need for the project to improve safety to reduce the high vehicle crash fatality rate in a portion of the study area, to minimize impacts to the fragile Wekiva River Basin ecosystem and other natural resources, to enhance wildlife habitat connectivity, and to reduce vehicle-wildlife conflicts. If an alternative did not meet the purpose and need, it was eliminated as being unreasonable. Second, alternatives were comparatively assessed to determine anticipated impact and benefits. If an alternative showed greater impact with no additional benefits as compared to other alternatives, it was eliminated as being unreasonable as well.

The following summarizes the multi-step process and the alternatives considered for the Wekiva Parkway. Additional discussion on Avoidance Alternatives is included in Section 4.0 of this document. Section 6.0 provides an overview of stakeholder coordination efforts during the alternatives analysis process.

### 1.5.1 No Build Alternative

The No Build Alternative assumes that the proposed project is not implemented within the study area. Only those projects for which funding is committed in the Expressway Authority's 2030 Expressway Master Plan, METROPLAN ORLANDO's 2025 Long Range





LEGEND

- Wekiva Parkway Study Area
- Public Conservation/Park & Recreation Lands

- Existing and Planned Neighborhoods (Orange and Lake Counties)
- Wekiva River Protection Area
- Wetland

- Potential Historic Sites
- Recharge Rate 12- 20 in/yr
- Recharge Rate > 20 in/yr

- Floodplains
- State Park Boundary

Exhibit 1-4  
Composite Constraints Map



Transportation Plan Update, and the Lake-Sumter MPO 2025 Long Range Transportation Plan are assumed to be provided to meet the transportation need. The results of the No Build Alternative analysis form the basis of the comparative analysis with the viable Build Alternatives presented later in this section.

The benefits of the No Build Alternative include the absence of long term impacts such as residential displacements and natural environmental intrusion, as well as short term impacts associated with actual construction of a major new expressway.

However, long term benefits associated with serving future traffic demand and improved safety will not be realized with the No Build Alternative. Also, improved wildlife habitat connectivity in east Lake County and reduced vehicle-wildlife conflicts will not be achieved. Some of the existing roadways within the project study area are currently operating at less than desirable service levels, and operating/safety conditions are projected to worsen in the future as congestion would increase under the No Build Alternative. Nearly all roadways in the study area would be operating at level of service E or F conditions in 2032 under the No Build Alternative. The *SR 429 Wekiva Parkway/SR 46 Realignment PD&E Study Traffic Report* states “the No Build Alternative does not meet the transportation needs within the study area. This alternative does not relieve traffic congestion along SR 46 or along US 441.” The No Build Alternative would not meet the stated Purpose and Need for the project.

## 1.5.2 Build Alternatives

### 1.5.2.1 SR 46 Widening Only

The first Build Alternative to be analyzed was the least cost, least impact option – that is, widening the existing two lane SR 46 to four lanes from US 441 in Lake County to Orange Boulevard just west of I-4 in Seminole County (a distance of about 17 miles), along with those projects for which funding is committed in the Expressway Authority’s 2030 Expressway Master Plan, METROPLAN ORLANDO’s 2025 Long Range Transportation Plan Update, and the Lake-Sumter MPO 2025 Long Range Transportation Plan. However, after analysis of this concept, the *SR 429 Wekiva Parkway/SR 46 Realignment PD&E Study Traffic Report* states “this Build Alternative does not meet the transportation needs within the study area. Any additional capacity along the SR 46 corridor added with the widening of SR 46 is consumed by the latent demand for east-west travel within the corridor. Thus, even with the widening, SR 46 would continue to operate at level of service F.” This alternative also does not relieve congestion along US 441. Also, improved wildlife habitat connectivity in east Lake County and reduced vehicle-wildlife conflicts would not be achieved. This Build Alternative would not meet the stated Purpose and Need for the project.

### 1.5.2.2 Initial Alternatives

In order to identify concepts which would be more effective in meeting travel demand than merely widening SR 46, initial alternatives were developed for four general areas within the study area:

- Orange County from the planned SR 429/SR 414 John Land Apopka Expressway/US 441 interchange north to the Lake County line;
- Lake County from US 441 to the Orange County line (referred to as Lake County West);

- Lake County from the Orange County line to the Seminole County line (referred to as Lake County East) and
- Seminole County from the Lake County line to I-4.

Numerous initial alignments were developed in each county based upon the project constraint data. A comparative analysis was performed on the initial alternatives to establish potential impacts and preliminary costs along with corresponding impact analysis spreadsheets. During the process of developing the initial alternatives, extensive project coordination was undertaken with local and state government agencies, advisory groups, and other entities. Those meetings and/or presentations provided study updates, specific information, and opportunities for feedback on the initial alternatives. After development of the initial alternatives and refinement of them based on the feedback received at many of those meetings, a series of three public workshops were held in November 2005 to present the initial alternatives to the public for review and comment. The public comments on the initial alternatives were analyzed by county and utilized by the project team in the evaluation and assessment of alternatives.

### 1.5.2.3 Viable Alternatives

After the first public workshops and meetings with local and state governmental agencies and other stakeholders on the initial alternatives, the project team began the process of alternatives evaluation and refinement. The concepts and impact assessments developed in the initial alternatives phase of the study served as the basis for commencing the identification of potential viable alternatives. The initial alternatives presented at the public workshops in November of 2005 were analyzed and evaluated in greater detail, their impacts were assessed more thoroughly, and they were scrutinized for negative and positive aspects. This resulted in the elimination or modification of some alternatives and the further evaluation of others as potential viable alternatives. A specific work plan with sequential steps was followed in the process of identifying viable alternatives.

During the process of identifying the viable alternatives, extensive project coordination continued with local and state government agencies, advisory groups, and other entities. Those meetings and/or presentations provided study updates, specific information, and opportunities for feedback on the viable alternatives. After identification of the viable alternatives and refinement of them based on the feedback received at many of those meetings, a series of three public workshops were held in July/August of 2006 to present the viable alternatives to the public for review and comment. The public comments on the viable alternatives were analyzed by county and utilized by the project team in further evaluation and assessment of the alternatives. After the public workshops, the project team began attending a series of meetings with homeowners associations, property owners, and others to discuss possible refinements to the viable alternatives in certain areas.

Subsequent meetings with stakeholders were held and additional refinements to the Viable Alternatives were made. The alternatives selected for further evaluation were initially identified in April 2007, and after additional meetings with the various stakeholders, refinements were made through the end of 2008. This included two Section 106 impact minimization alternatives that were developed and evaluated at the request of the State Historic Preservation Office.

A public workshop in the Lake County East study area was held in December of 2009 to present the service road concept which provides a two-lane, two-way road parallel to the Wekiva Parkway to accommodate non-tolled local trips. That portion of the overall study area is not within the area of focus of this document.

#### 1.5.2.4 Locally Recommended Alternative

After FHWA approval of the draft *Environmental Assessment* for public availability on August 20, 2010, the Locally Recommended Alternative (see **Exhibit 1-5**) was presented as the Wekiva Parkway (SR 429)/SR 46 Realignment Proposed Build Alternative at three Public Hearing sessions held in October of 2010. The Proposed Build Alternative presented at the Public Hearing sessions was selected as the Locally Preferred Alternative at duly noticed public meetings/hearings held by the Seminole County Expressway Authority Board on November 9, 2010, the Lake County Board of County Commissioners on December 7, 2010, and the Orlando-Orange County Expressway Authority Board on December 14, 2010.

## 1.6 Section 4(f) Evaluations

### 1.6.1 Individual

This *Individual Section 4(f) Evaluation* is for two historic resources in Orange County as described in Section 2.0.

### 1.6.2 Programmatic

A *Programmatic Section 4(f) Evaluation of Public Lands* (March 2012) for Rock Springs Run State Reserve, Seminole State Forest, and Lower Wekiva River Preserve State Park and a *Wild and Scenic River Addendum to the Programmatic Section 4(f) Evaluation* (March 2012) for the Wekiva River in Lake and Seminole Counties are provided in separate documents. A brief summary of the coordination activities undertaken for the programmatic evaluation is provided in Section 6.0.





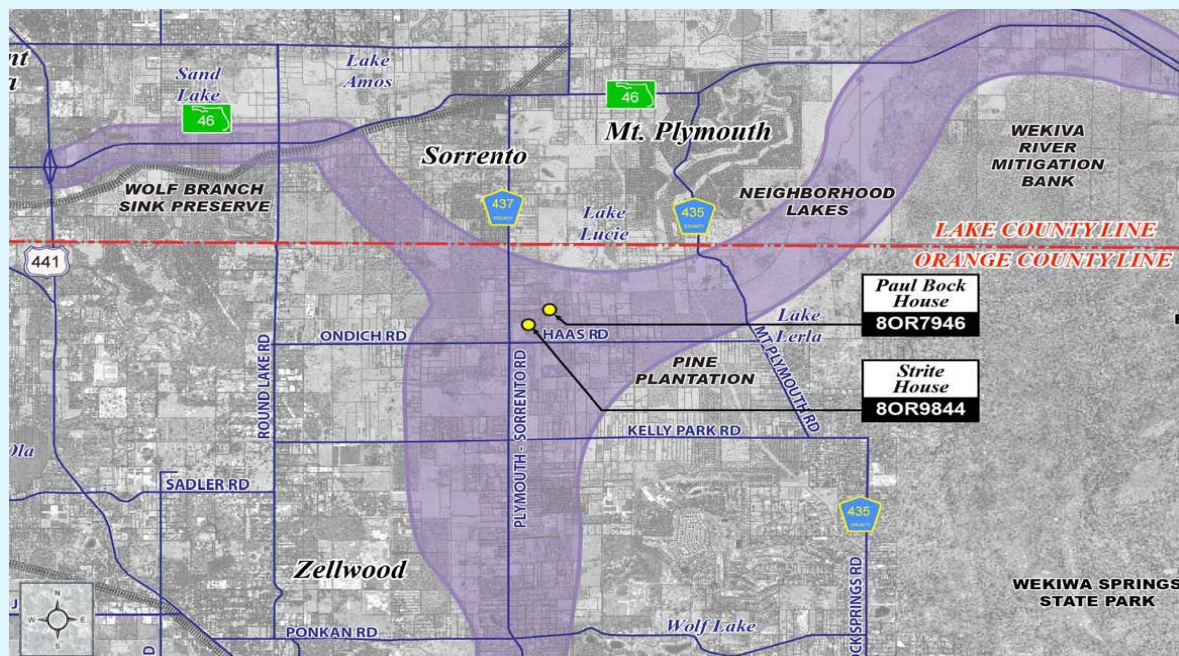


## 2.0 Section 4(f) Properties

A *Cultural Resource Assessment Survey (CRAS)* and a *CRAS Addendum* were completed for the Wekiva Parkway PD&E Study in accordance with the provisions of the National Historic Preservation Act of 1966, as amended, as implemented by 36 CFR Part 800 and related federal and state regulations. The assessments were performed to locate, identify, and assess any historical resources identified within the Area of Potential Effect (APE) and to assess the significance and eligibility of those resources for potential listing in the National Register of Historic Places (NRHP) according to the criteria set forth in 36 CFR Section 60.4.

Based on the results of the *CRAS* assessments, two historic resources within the project APE in Orange County, the Bock House and the Strite House, were considered by the State Historic Preservation Office (SHPO) to be eligible for listing in the NRHP. The Federal Highway Administration (FHWA), in consultation with the SHPO, subsequently determined those resources to be eligible for listing in the NRHP. Copies of related correspondence between the SHPO and FHWA are provided in **Appendix B**. The locations within the study area of those two Section 4(f) resources are shown in **Exhibit 2-1**.

EXHIBIT 2-1  
Location of Section 4(f) Properties

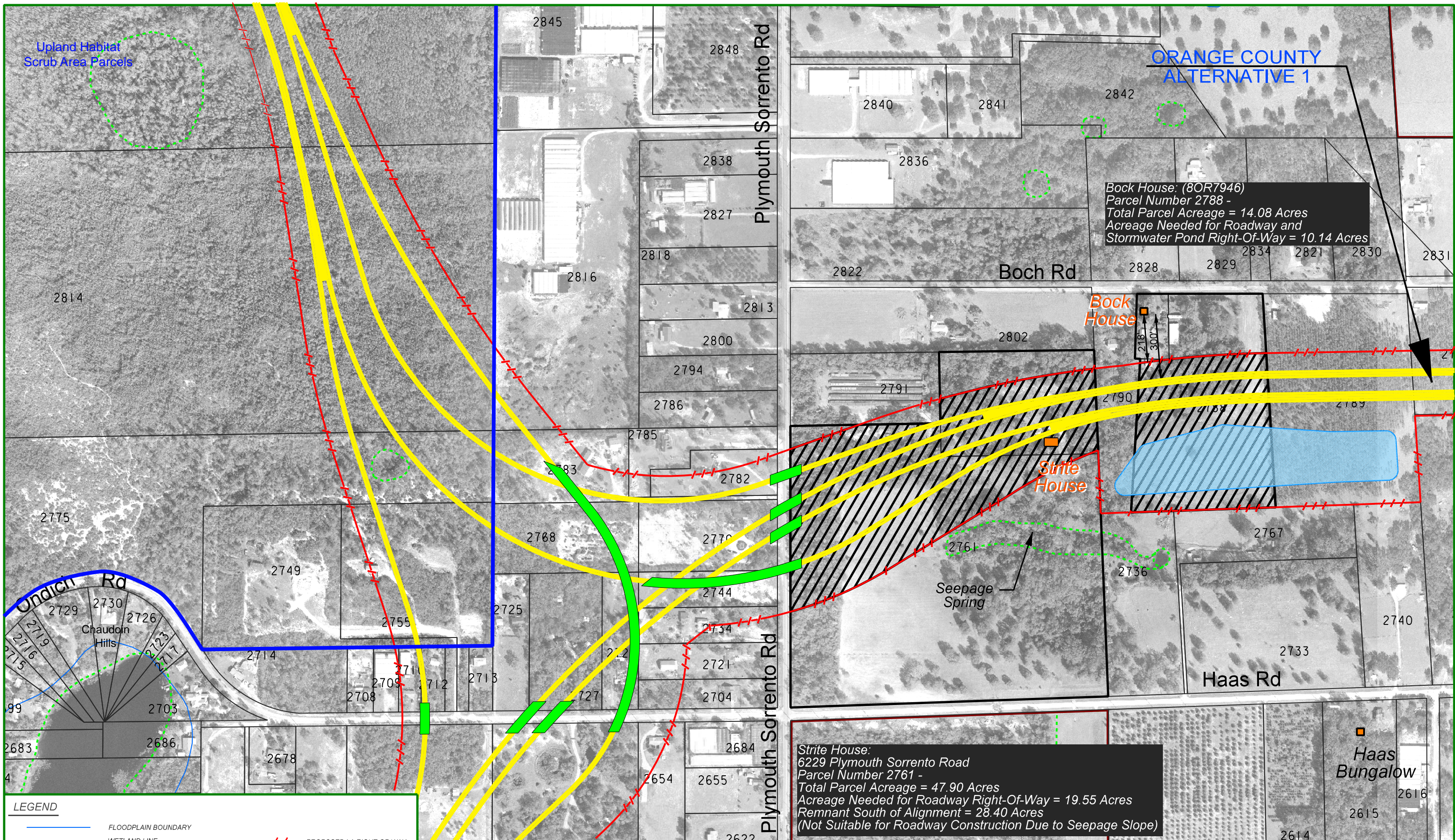


Orange County Alternative 1 (hereinafter referred to as “Alternative 1”) would have direct use impacts on the Bock House and the Strite House properties; this portion of the evaluation describes the two Section 4(f) properties that would have direct use by Alternative 1. A description of the properties is provided in **Table 2-1. Exhibit 2-2** identifies the relationship of Alternative 1 to the properties.

**Table 2-1: Descriptions of Section 4(f) Properties**

<b>Information Category</b>	<b>Bock House</b>	<b>Strite House</b>
a) Detailed Map identifying relationship of Alternative 1 to Section 4(f) properties	See Exhibit 2-2	See Exhibit 2-2
b) Size and location of the affected Section 4(f) properties	14.08 acres; see Appendix C for maps, sketches and photographs	47.90 acres; see Appendix C for maps, sketches and photographs
c) Ownership and type of Section 4(f) properties	Private ownership; historic	Private ownership; historic
d) Function of or available activities on the properties	Private property, no public activities	Private property, no public activities
e) Description and location of all existing and planned facilities	See Appendix C for existing; no known planned facilities	See Appendix C for existing; no known planned facilities
f) Access and usage	Private access is pedestrian or vehicular from local road; there is no public usage allowed	Private access is pedestrian or vehicular from local road; there is no public usage allowed
g) Relationship to other similarly used lands in the vicinity	Private ownership with no relationship to other similarly used lands in the vicinity	Private ownership with no relationship to other similarly used lands in the vicinity
h) Applicable clauses affecting the ownership, such as lease, easement, covenants, restrictions, or conditions, including forfeiture	Fee Simple/Private Ownership	Fee Simple/Private Ownership
i) Unusual characteristics of the Section 4(f) properties that either reduce or enhance the value of all or part of the properties	Estimated construction date circa 1900; house is in disrepair and is uninhabited; contributing structures: main house and garage/tenants' quarters (see Section 2.1 and Appendix C).	Estimated construction date circa 1910; contributing structures: main house, garage, water tower and swimming pool (see Section 2.2 and Appendix C).





ORANGE COUNTY  
ALTERNATIVE 1

Bock House: (80R7946)  
Parcel Number 2788 -  
Total Parcel Acreage = 14.08 Acres  
Acreage Needed for Roadway and  
Stormwater Pond Right-Of-Way = 10.14 Acres

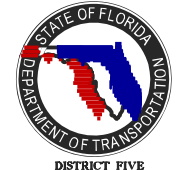
Bock House

Strite House

Seepage Spring

Haas Bungalow

Strite House:  
6229 Plymouth Sorrento Road  
Parcel Number 2761 -  
Total Parcel Acreage = 47.90 Acres  
Acreage Needed for Roadway Right-Of-Way = 19.55 Acres  
Remnant South of Alignment = 28.40 Acres  
(Not Suitable for Roadway Construction Due to Seepage Slope)

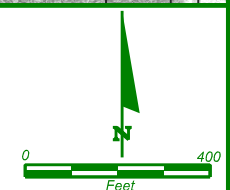


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**WEKIVA PARKWAY**  
Project Development and Environment Study  
Orange, Lake & Seminole Counties

ORANGE COUNTY  
Alternative 1

EXHIBIT 2-2





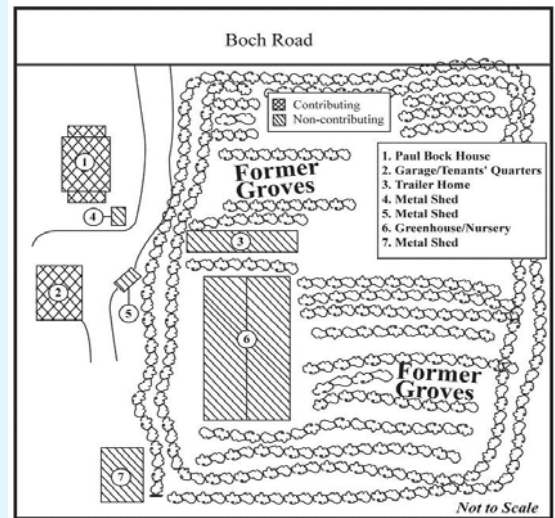
## 2.1 Bock House (8OR7946)

The Bock House (circa 1900) is located at 2626 Boch Road in Apopka, Florida. The total parcel size is approximately 14 acres. The Bock House property currently contains the main house and six outbuildings located behind it. These outbuildings include a historic garage/tenants' quarters, three non-historic metal sheds, a modern trailer home, and a modern greenhouse. A site plan of the Bock property (shown right), current representative photographs (one shown below) and aerial photographs (current and historical) are provided in **Appendix C**.

*Photograph of the Bock House with overgrown vegetation*



*Bock Property Site Plan with Location of Contributing Structures*



The property has been privately owned and occupied by the Bock family since 1951. The only visible modifications to the exterior of the house are the enclosed front and back porches. The Bock House conveys its original historic appearance and maintains much historic physical integrity. The historic garage/tenants' quarters located behind the main house is considered

contributing. This building has a wood frame structural system covered in wood shingles.

Citrus was the staple crop on the property throughout the historic period of significance, and thus the former groves are an integral part of the Bock House's property and significance. The rural/agricultural land that surrounds the Bock House and property, as well as the isolation derived from its surroundings, is an important part of the setting, and contributes to the significance of the resource.

Associated with one of the earliest settlers to the area, this house is believed to be the oldest residence in the Bay Ridge area according to the 1995 *Survey of Historic Architectural Resources of Orange County* prepared by Historic Property Associates. Despite its decline in physical condition and the addition of several non-historic outbuildings on the property, the Bock House still conveys the historic character of an early Cracker farmstead. The property on which the Bock House is located has recently been subdivided into two parcels. It is unknown if the subdividing of the larger parcel may have been done for tax, rezoning or selling purposes. The previously referenced **Exhibit 2-2** identifies the relationship of Alternative 1 to the Bock House and property. **Table 2-1**, as previously presented, provides further information on this property.

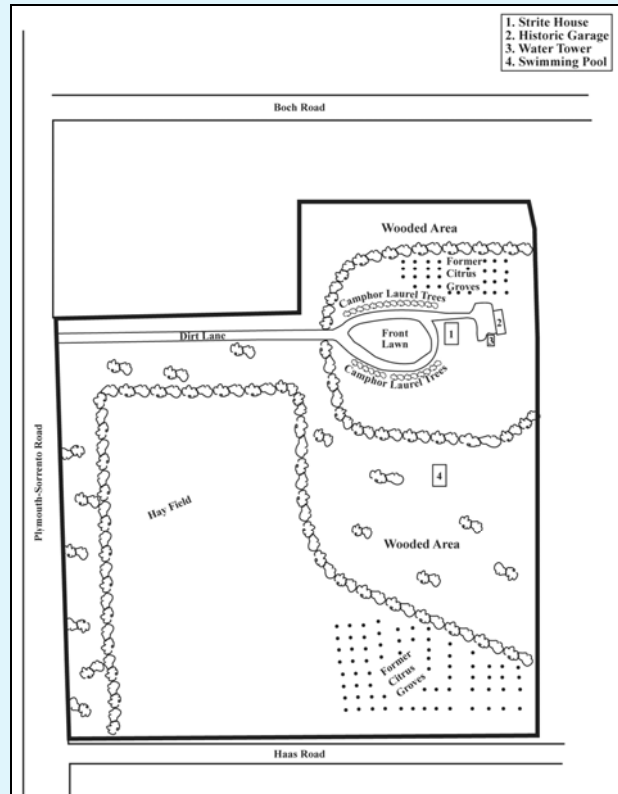


## 2.2 Strite House (80R9844)

The Strite House (circa 1910) is located at 6229 Plymouth Sorrento Road in Apopka. The total size of the parcel upon which the house is located is approximately 48 acres. Structures on the Strite property include the main house, a historic garage, historic water tower, and historic swimming pool. A site plan of the Strite property (shown right), current representative photographs (one shown below) and aerial photographs (current and historical) are provided in **Appendix C**.

The property is bordered by Plymouth Sorrento Road on the west and Haas Road on the south. Existing property access is provided through driveways on both Haas Road and Plymouth Sorrento Road. However, the main entrance to the Strite House is provided through the driveway off Plymouth Sorrento Road.

*Strite Property Site Plan with Location of Contributing Structures*



*Photograph of the Strite House, Water Tower and Garage (from left to right)*



The Strite House is known as a Florida “Cracker” house, exhibiting an interpretation of the Georgian form. Although the interior was inaccessible, the exterior shape and bay configuration of the house resembles the later Cracker style interpretation of the Georgian form, and the circa 1910 construction date of the Strite House is also consistent with the early twentieth century construction period attributed to that form of construction.

The massing, roof shape, exterior siding, decorative features, and majority of the windows have all remained unchanged since its construction date. The historic replacement of the original front porch is the only visible alteration to the exterior of the house, and the loss of physical integrity due to this modification is minimal.

The historic setting and landscape of the house also remains intact. The house is set far back from the road, and the surrounding property is still used for agriculture. Few non-historic buildings or developments are present in vicinity of the property, and overall the area appears much as it did historically. Although the citrus groves that surrounded the house in the early to mid-twentieth century are now gone, the land is now used for growing hay. The historic ancillary structures such as the garage, water tower, and swimming pool are still present on the property with few alterations. Much of the designed historic landscape on the property such as the circular drive, front lawn, and planted Camphor trees, are also still present.

The Strite House is a rare surviving example of Cracker architecture in what was formerly known as the Bay Ridge area of northern Orange County, Florida. The house exhibits the deterioration of some elements, but nearly all of the historic, character-defining features are retained. The overall property still reflects its historic use and appearance, and conveys the character of a historic farm. Due to these factors, the Strite House is considered significant in the area of Architecture as an excellent example of a turn-of-the-century Cracker farmstead. The historic garage, water tower, pool, and agricultural fields are considered contributing features to the property, which has recently been subdivided into two parcels. The Strite House and other contributing structures are located on a single parcel. It is unknown if the subdividing of the larger parcel may have been done for tax, rezoning or selling purposes.

**Exhibit 2-2**, previously shown, identifies the relationship of Alternative 1 to the Strite House and property. **Table 2-1**, also previously presented, provides further information on this property.

## 3.0 Impacts on the Section 4(f) Properties

### 3.1 Impacts on Bock House Property

Alternative 1 in relationship to the Bock property is shown in **Exhibit 3-1**. Although Alternative 1 requires direct use of approximately 10 acres of the Bock property, no contributing structures would be displaced. The location of the Bock House and the ancillary structures on the parcel are shown on the illustration below.

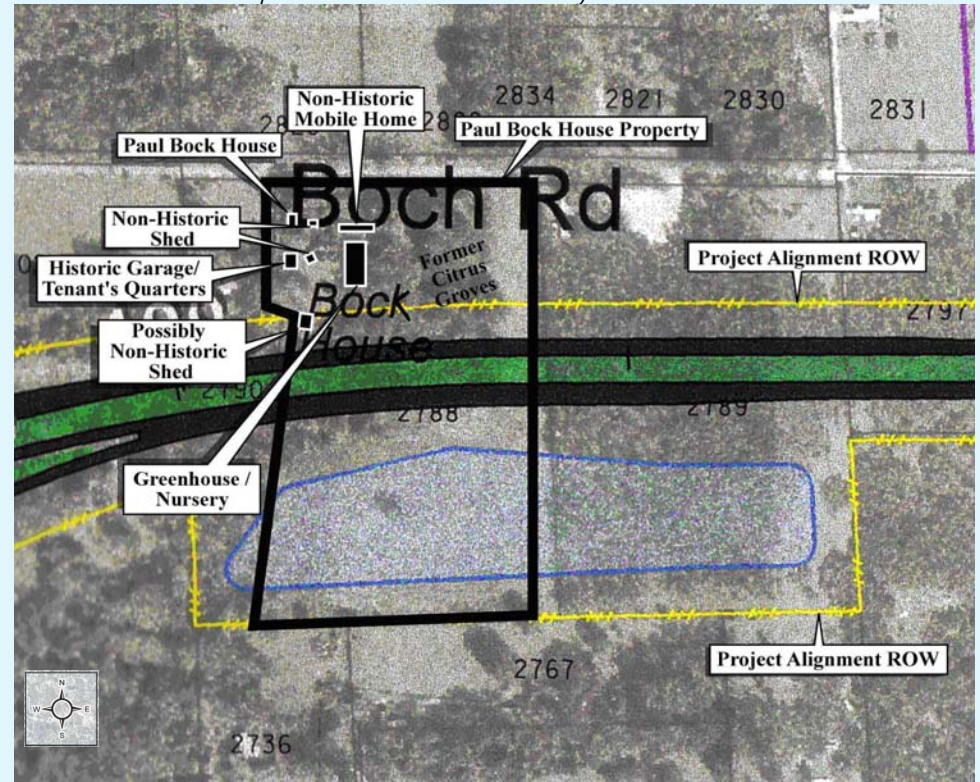
As shown on Exhibit 3-1, the Alternative 1 mainline would pass south of the Bock House. The house would be approximately 300 feet from the edge of travelway and approximately 218 feet from the right-of-way fence. The total size of the parcel upon which the house is located is approximately 14 acres. Approximately 10 acres from the southern portion of the parcel would be needed for roadway and pond right-of-way. This would leave approximately 4 acres of the parcel with the house. The existing direct access to Boch Road would not be affected by the project.

While the acquisition for Alternative 1 right-of-way would not directly impact the main Bock House, it would require removal of a non-historic outbuilding (a metal shed) and construction on land that formerly comprised the associated citrus groves. Although the land is no longer harvested for citrus, and other trees and vegetation have intermixed with them, some of the citrus trees are still present. The portion of the property to be acquired for pond

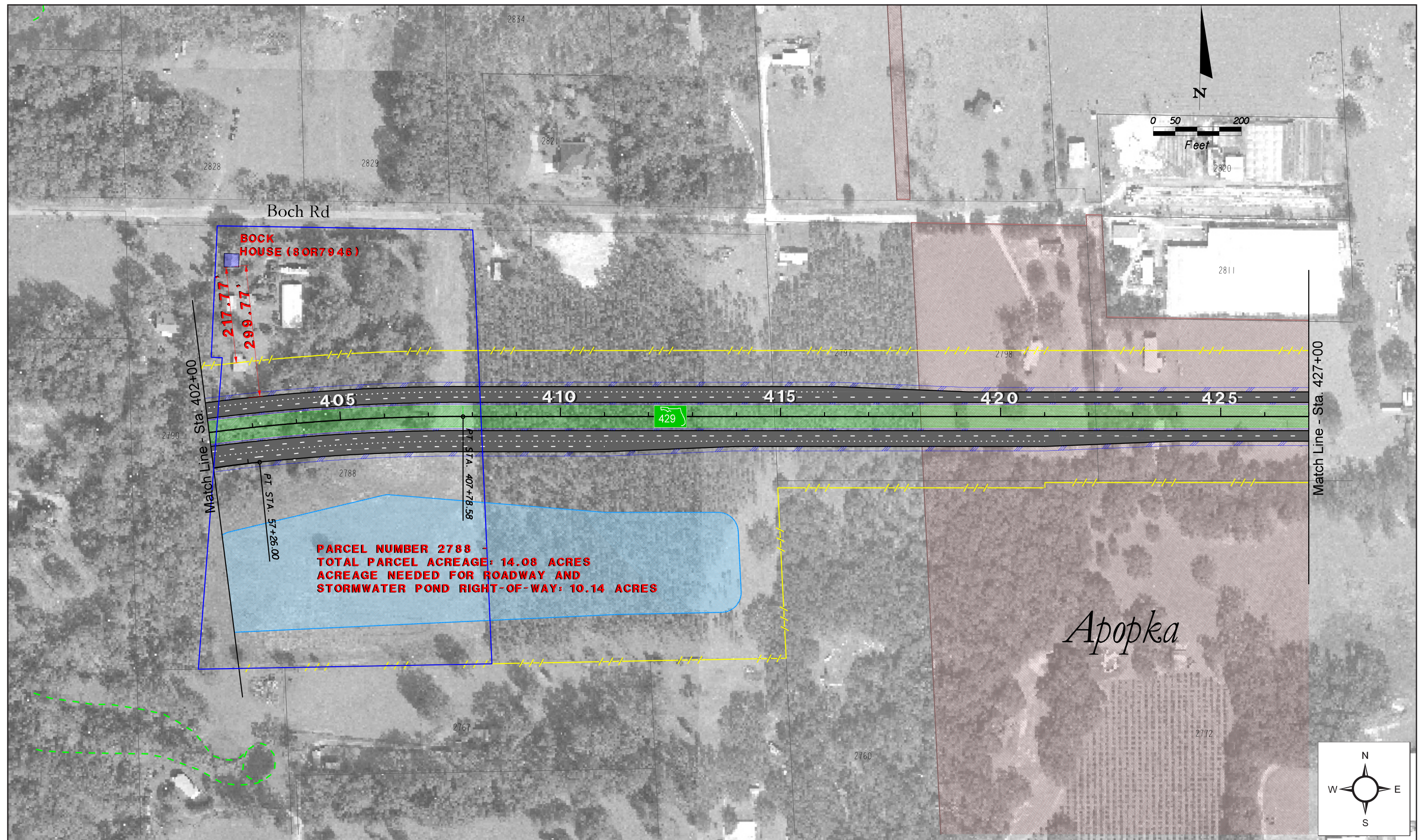
right-of-way consists of open field that historically was an open field. No contributing structures would be displaced and no residents would be displaced on this site by Alternative 1.

Alternative 1 introduces a new roadway facility with stormwater ponds through a rural area and will result in increased noise and visual effects. The traffic noise level with Alternative 1 is

*Alternative 1 in relationship to the Bock House and Ancillary Structures*







<b>LEGEND</b>					
	Parcel Lines		Proposed Right of Way		Potential Pond
	Proposed L/A Right of Way		City Limits		Wetland Boundary
	New/Reconstructed Pavement		Bridge Replacement or Widening	255 Parcel Codes	

**Exhibit 3-1**  
**Potential Impacts to Historic Resources**  
**Bock House**



predicted to increase from the projected existing level of 42.7 dB(A) to an estimated 61.2 dB(A) in 2032 (the project design year) at the Bock House location. This projected increase would not exceed either the FHWA noise abatement criteria of 67 dB(A) for residential areas/Section 4(f) sites or the FDOT approach criteria of 66 dB(A), but it would exceed the FDOT substantial increase criteria of 15 dB(A) above existing levels, resulting in an impact. As stated in the FDOT noise analysis guidance, for a noise barrier to be feasible it must achieve a 5 dB(A) reduction at a minimum of two impacted receptors. As the Bock House is a single residence located in a sparsely populated rural area, a noise barrier at this location would not meet the FDOT feasibility criteria. As a result, no further analysis is warranted.

In the vicinity of the Bock House, the Alternative 1 profile would be approximately 16 feet to 25 feet above the existing ground elevation. Aesthetic treatments may be implemented in the design of the roadway to decrease the visual intrusiveness of the proposed improvement. Although visual impacts are a subjective matter, the viewshed from the historic resource would be affected by Alternative 1.

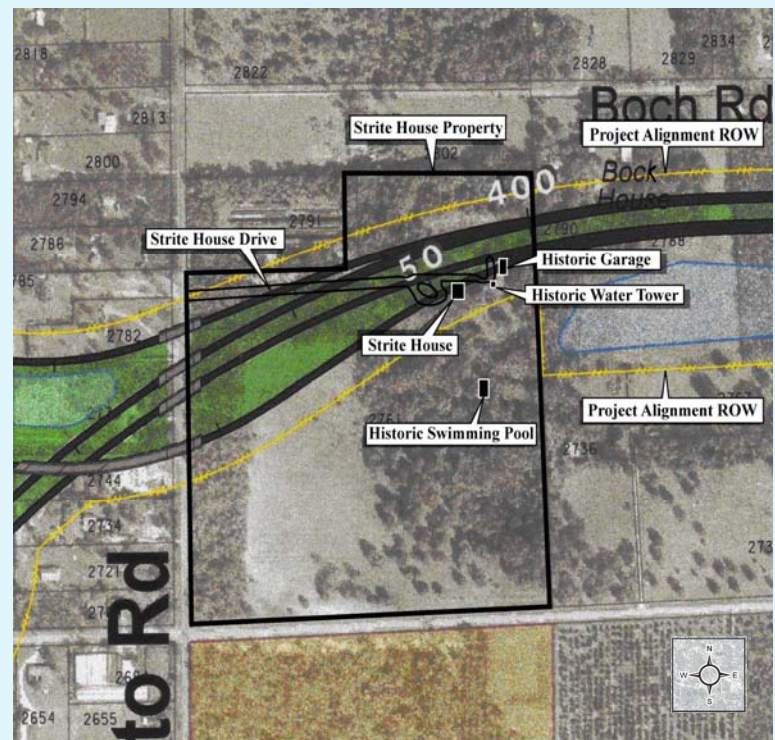
Based on the amount of property that would need to be acquired for the Alternative 1 improvements and the proximity of those improvements to the historic house, there would be an **adverse effect** on the Bock House. The historic connection and setting of the Bock House and surrounding property will be notably compromised by the Alternative 1 improvements. Access restrictions did not permit photographs of the open field at the rear of the property where most of the right-of-way acquisition would take place.

## 3.2 Impacts on Strite House Property

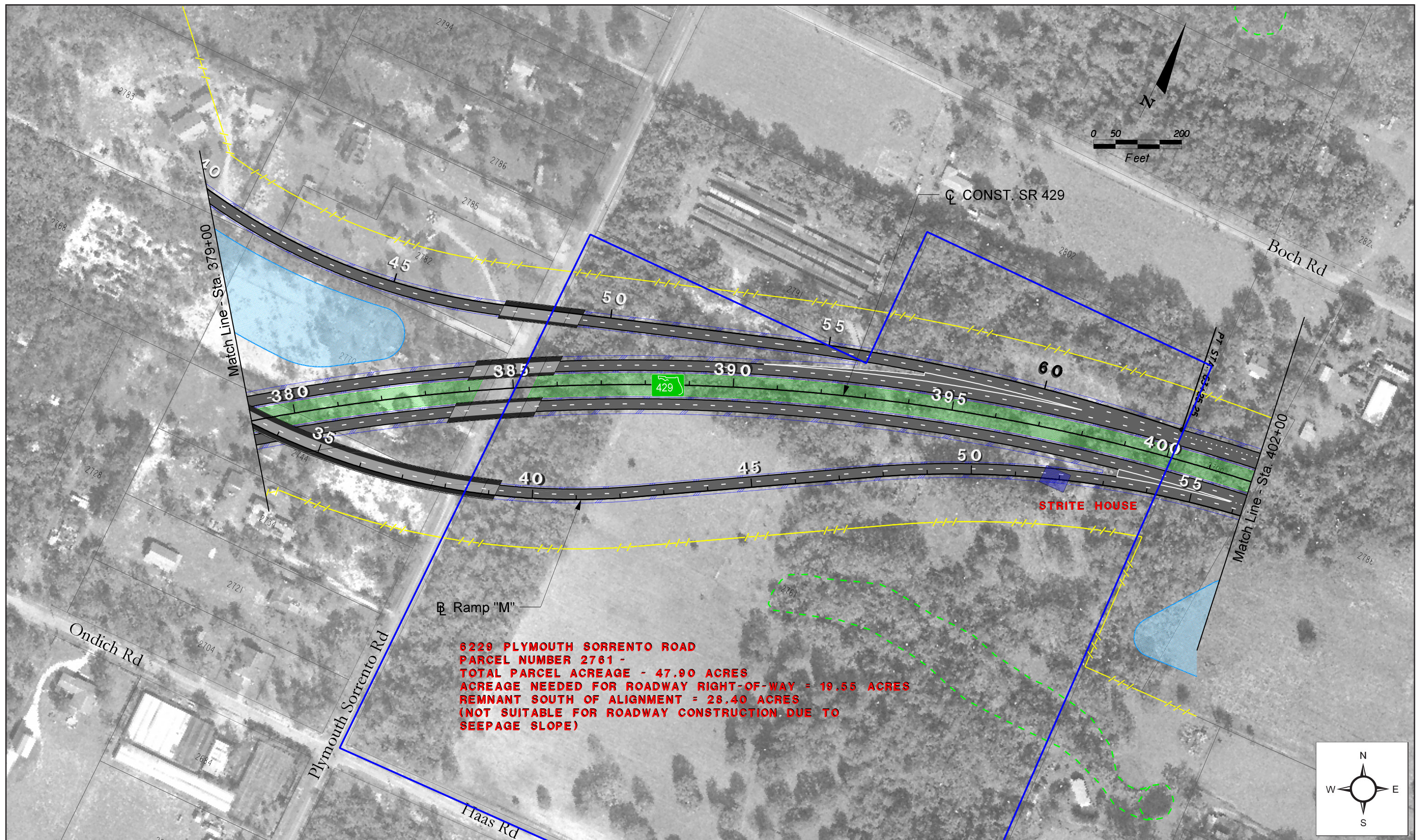
Alternative 1 in relationship to the Strite property is shown in **Exhibit 3-2**. Alternative 1 requires direct use of approximately 20 acres of the Strite property and would require relocation or removal of the Strite House. The location of the Strite House and the ancillary structures on the parcel are shown on the illustration to the right.

The total size of the parcel upon which the house is located is approximately 48 acres. Approximately 20 acres from the northern portion of the parcel would be needed for roadway right-of-way. The remaining 28 acres would maintain existing direct access to both Haas Road and Plymouth Sorrento Road. However, the existing driveway

*Alternative 1 in relationship to Strite House and Ancillary Structures*







**LEGEND**

- |                           |                       |                  |                                |  |
|---------------------------|-----------------------|------------------|--------------------------------|--|
| Parcel Lines              | Proposed Right of Way | Potential Pond   | New/Reconstructed Pavement     | Parcel Codes                                 |
| Proposed L/A Right of Way | City Limits           | Wetland Boundary | Bridge Replacement or Widening | L/A Right of Way/Existing Right of Way Limit |

**Exhibit 3-2  
Potential Impacts to Historic Resources  
Strite House**



from Plymouth Sorrento Road would need to be relocated to the southern portion of the property due to the right-of-way acquisition.

Substantial noise impacts are not anticipated with Alternative 1 as the potential relocation of the Strite House would involve on-site relocation of the house on the remaining 28 acres allowing sufficient room to relocate the residence a minimum of 500 feet from the proposed improvements to avoid substantial noise impacts.

In addition to relocation or removal of the Strite House, the portion of the property to be acquired for Alternative 1 right-of-way contains the historic garage and historic water tower which are considered to be contributing features. The acquisition would also impact the original driveway, historically designed front lawn, and land on which associated citrus groves were previously sited; however, citrus trees are no longer present. The historic swimming pool is located outside of the right-of-way acquisition area.

All of the features listed above, as included in the acquisition area, are considered contributing to the significance of the Strite House. The rural/agricultural land that surrounds the Strite House and property, and the isolation derived from its surroundings, are important aspects of the setting and, therefore, contribute to the significance of the resource. The historic integrity of the Strite House and surrounding property would be significantly compromised by direct effects from the Alternative 1 improvements. Based on the acquisition of the house, ancillary structures, landscape features, and the substantial property that would be required for project right-of-way, Alternative 1 would have an **adverse effect** on the Strite House.



## 4.0 Avoidance Alternative

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### 4.1 Avoidance Alternative Analysis

The alternatives development process for the Wekiva Parkway included a focus on avoidance of Section 4(f) resources. During the screening of the Initial Alternatives it was noted that several public parks, recreation facilities and conservation areas were located within or close to the project study area. Those potential Section 4(f) resources in Orange County include the Northwest Recreation Complex, Roosevelt Nichols Park and two Orange County “GreenPLACE” conservation parcels, as well as several potential historic sites. **Exhibit 4-1** shows the locations of those resources in relation to the Strite House and Bock House properties.

During the course of the Initial Alternatives evaluation, several potential alignments were eliminated due to their impacts to Section 4(f) properties and during this period the study team became aware of the two NRHP eligible historic sites discussed in previous sections. This prompted modifications of some of the Initial Alternatives to establish options to impacting any Section 4(f) resource.

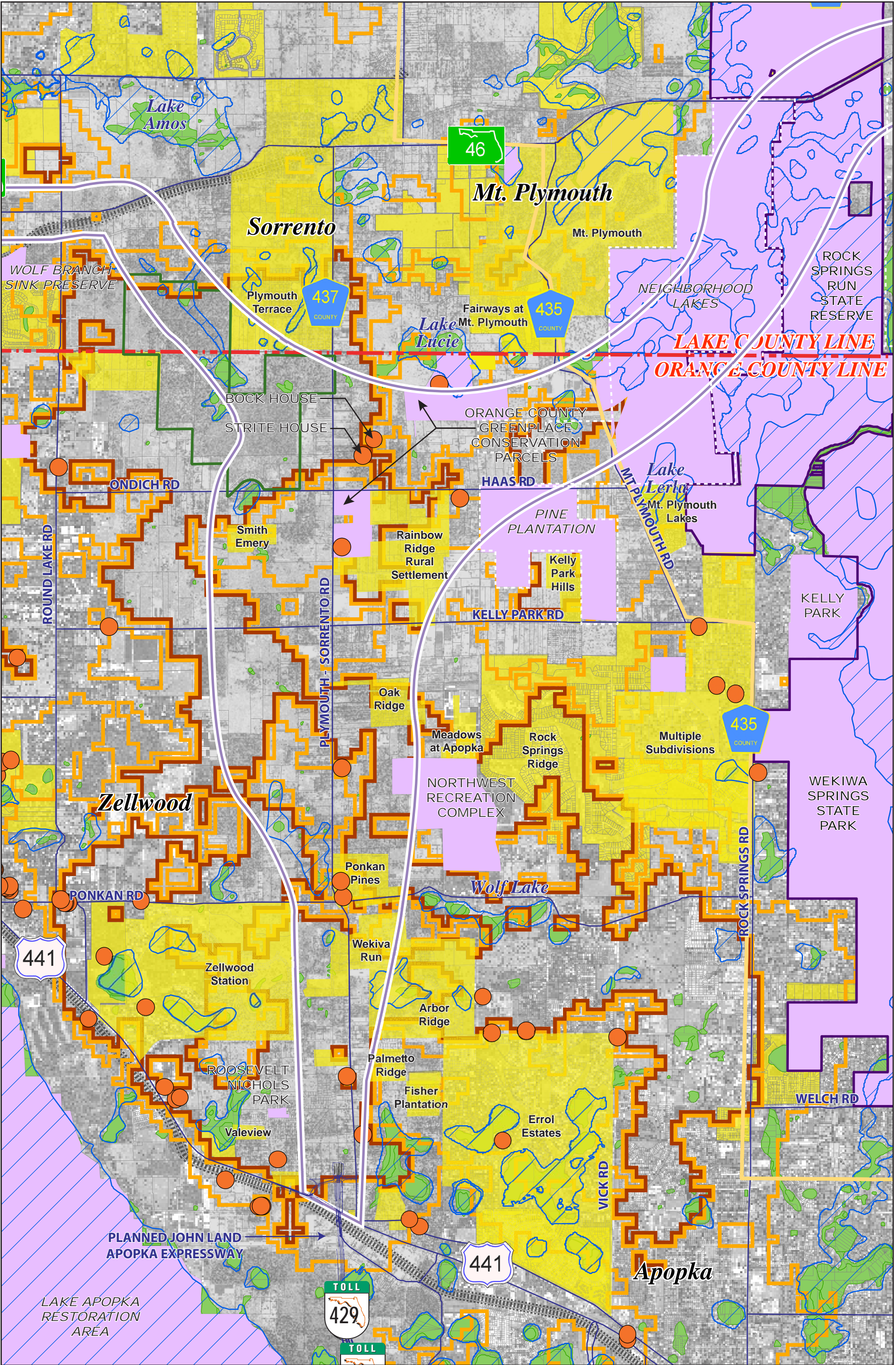
As part of the modifications of the Initial Alternatives, Orange County Alternative 1 was developed to avoid direct use impacts to the Northwest Recreation Complex, Roosevelt Nichols Park, and the Orange County “GreenPLACE” conservation parcels. In addition, Orange County Alternative 2 (hereinafter referred to as “Alternative 2”) was developed as a result of this effort to avoid direct use impacts to the Bock House and Strite House properties. Both Alternatives 1 and 2 were identified as Viable Alternatives during the screening process. **Exhibits 4-2 and 4-3** show the locations of Alternatives 1 and 2, respectively, in relation to the Bock House and the Strite House.

As depicted in **Exhibit 4-3**, Alternative 2 would have no use on either the Bock House property or the Strite House property. Alternative 2 would not use either of the two houses or properties because the alignment of Alternative 2 is both further west and further north than Alternative 1. Alternative 2 would result in increased traffic noise at the two Section 4(f) properties compared to the No Build condition (see Subsection 4.1.4 - Noise Impacts). Alternative 2 would be a “proximity” avoidance alternative which would require realignment and relocation of Boch Road and construction of additional associated bridging in order to achieve total avoidance of both Section 4(f) properties. Alternative 2 would have environmental, community disruption, social, and cost impacts which are summarized below. **Exhibits 4-4 and 4-5** show the locations of the comparative impacts for Alternatives 1 and 2, respectively, within the limits of the alignment variations between the two alternatives.

#### 4.1.1 Impacts on Florida Scrub Jay Habitat

In the area northwest of the Plymouth Sorrento Road/Ondich Road intersection, the alignment of the avoidance alternative (Alternative 2) is located west of Alternative 1, which would impact an additional 24.4 acres of Florida Scrub Jay habitat area. The upland scrub habitat is located west of Plymouth Sorrento Road and north of Ondich Road (the upland scrub habitat is shown on **Exhibits 4-4 and 4-5**). The Florida Scrub Jay is a Federal and State





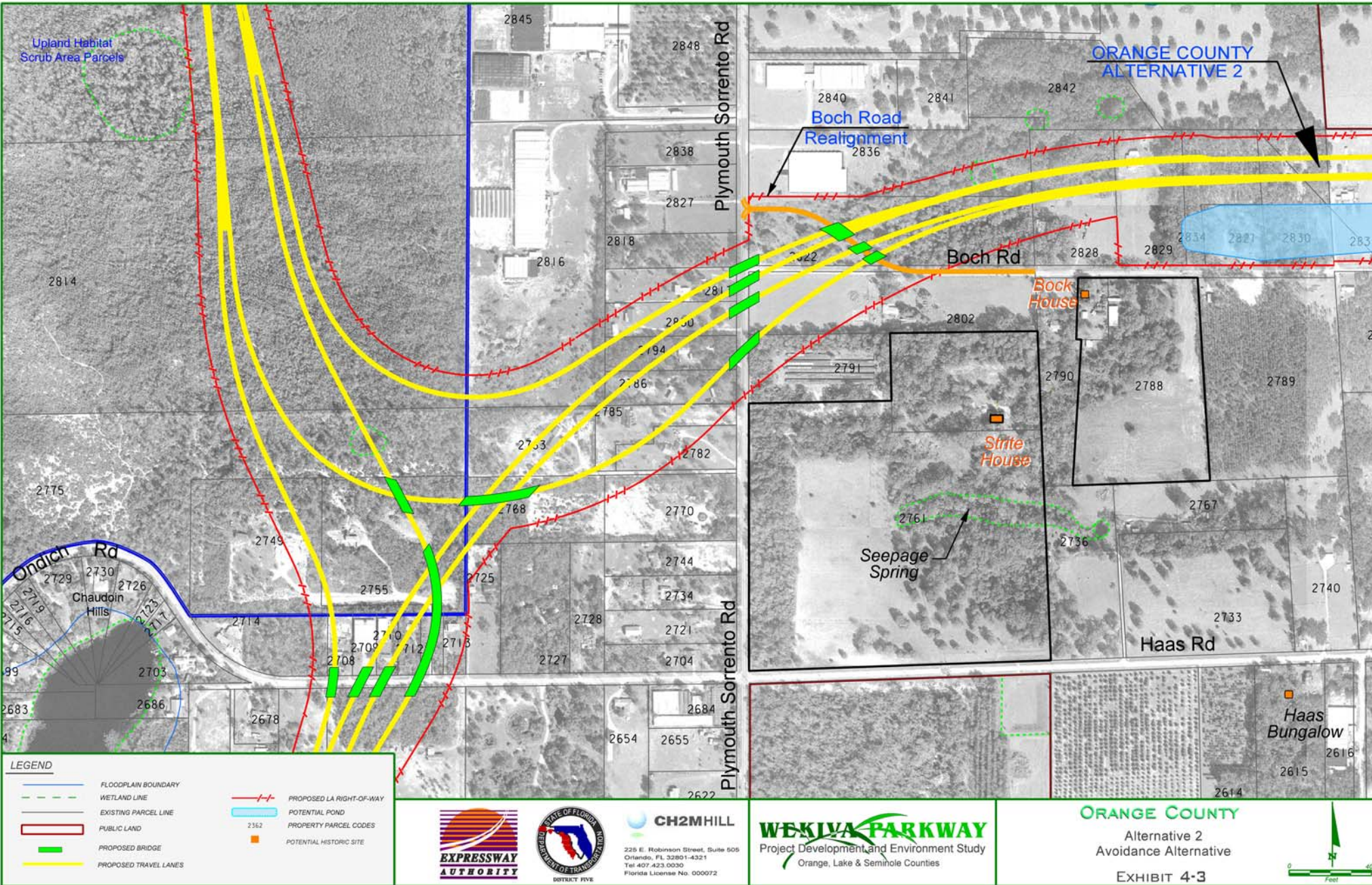
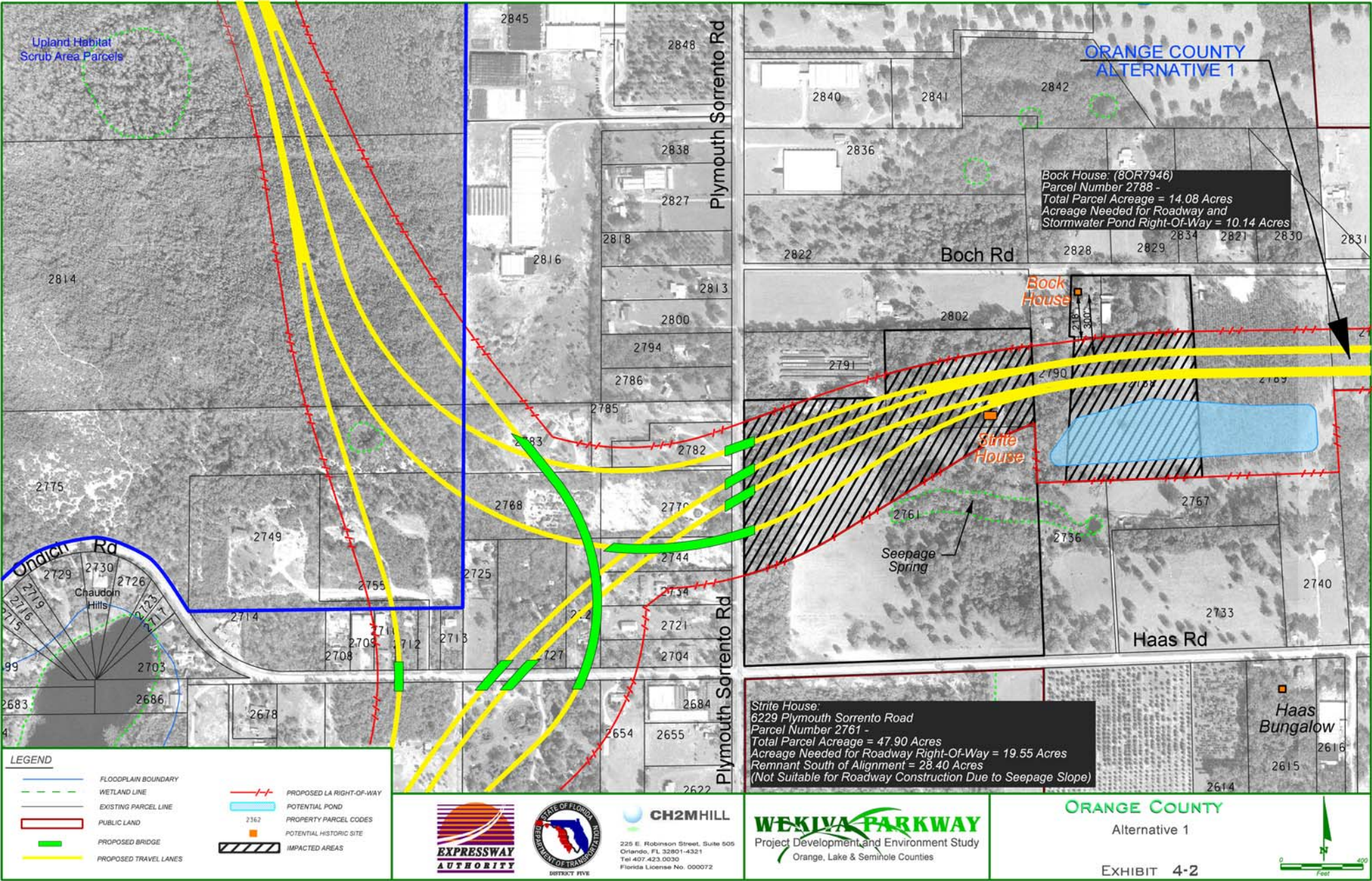
**LEGEND**

- Wekiva Parkway Study Area
- Public Conservation/Park & Recreation Lands
- State Park Boundary
- Floodplains
- Existing and Planned Neighborhoods
- Wekiva River Protection Area
- Wetland
- Potential Historic Sites
- Recharge Rate 12- 20 in/yr
- Recharge Rate > 20 in/yr
- Upland Habitat Scrub Parcels

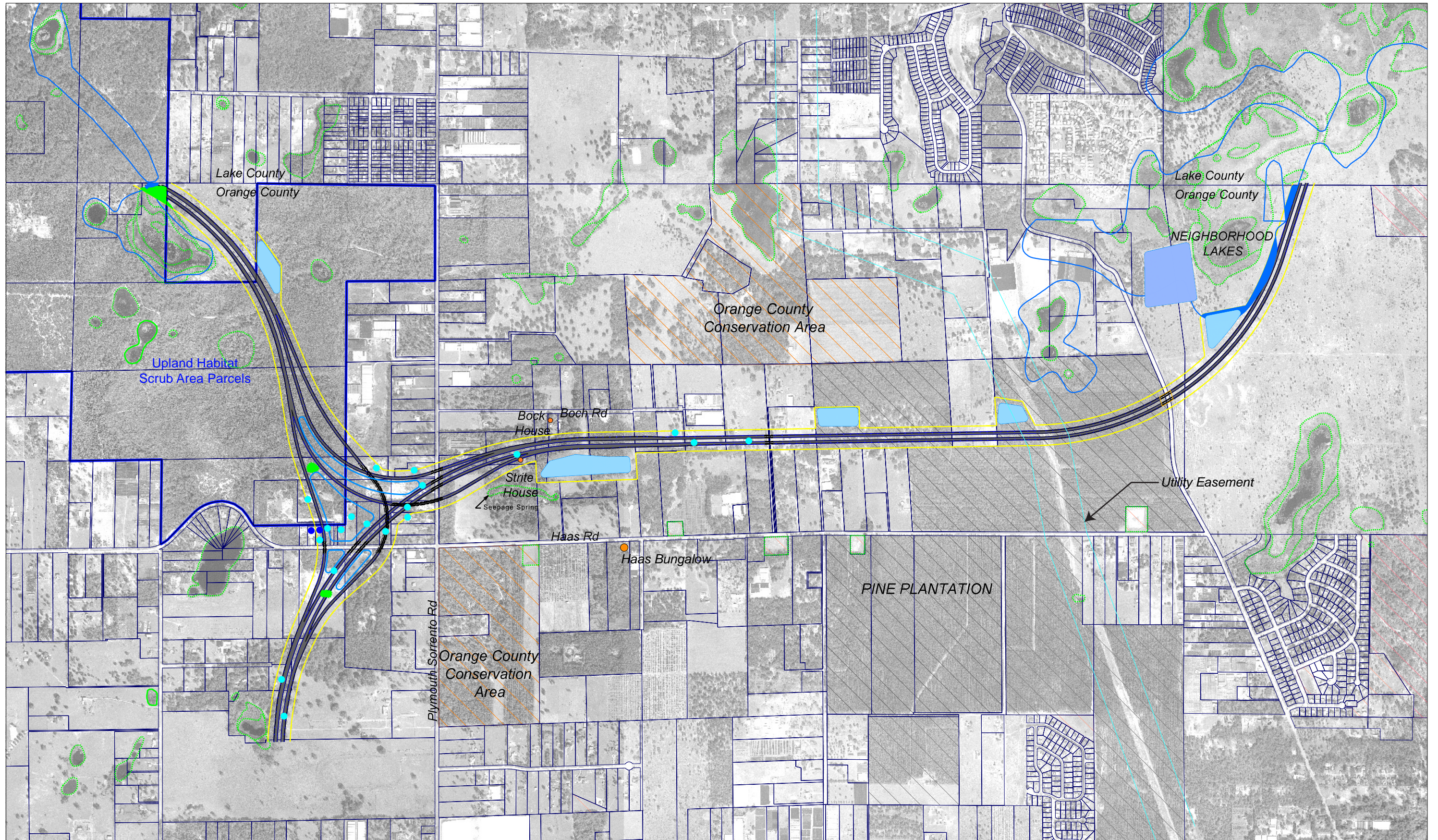
**Exhibit 4-1**  
**Composite Constraints Map**  
**Orange County**

**WEKIVA PARKWAY**  
Project Development and Environment Study



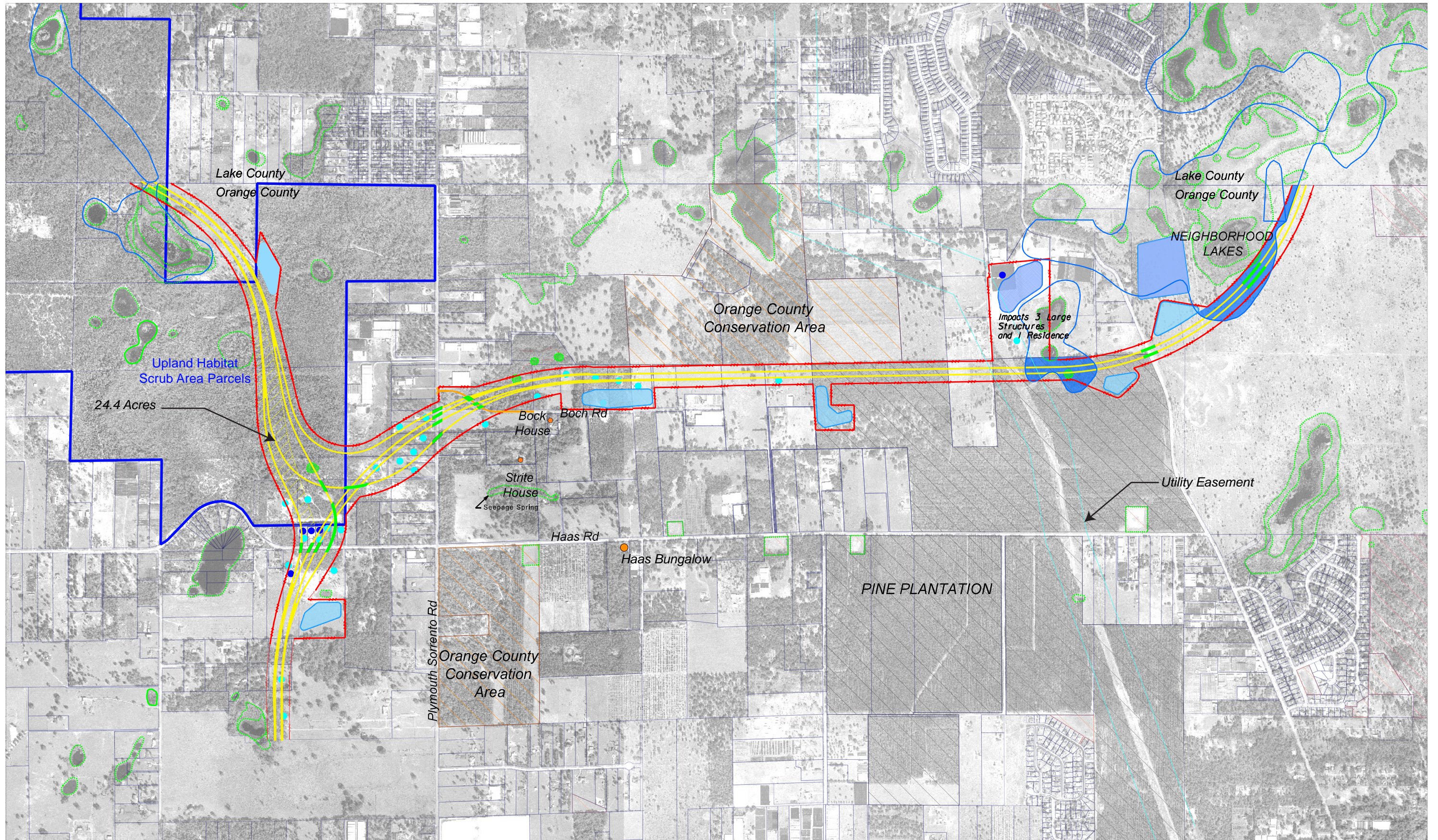






<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li><span style="color: cyan;">●</span> RESIDENTIAL DISPLACEMENTS</li> <li><span style="color: blue;">●</span> PLANT NURSERY DISPLACEMENTS</li> <li><span style="background-color: blue; width: 10px; height: 10px; display: inline-block;"></span> FLOODPLAIN IMPACT AREA</li> <li><span style="color: orange;">●</span> POTENTIAL HISTORIC SITE</li> <li><span style="background-color: green; width: 10px; height: 10px; display: inline-block;"></span> WETLAND IMPACT AREA</li> <li><span style="background-color: lightblue; width: 10px; height: 10px; display: inline-block;"></span> STORMWATER POND</li> <li><span style="background-color: lightblue; width: 10px; height: 10px; display: inline-block;"></span> FLOODPLAIN COMPENSATION POND</li> </ul>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>225 E. Robinson Street, Suite 505 Orlando, FL 32801-4321 Tel 407.423.0030 Florida License No. 000072</p>	<p><b>WEKIVA PARKWAY</b> Project Development and Environment Study Orange, Lake &amp; Seminole Counties</p>	<p style="text-align: center;"><b>ORANGE COUNTY</b> Alternative 1 Alternative 1 Impacts <b>EXHIBIT 4-4</b></p> <div style="text-align: right;">    </div>
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<b>LEGEND</b>								<b>ORANGE COUNTY</b>	
 RESIDENTIAL DISPLACEMENTS	 POTENTIAL HISTORIC SITE	 WETLAND IMPACT AREA	 STORMWATER POND	225 E. Robinson Street, Suite 505 Orlando, FL 32801-4321 Tel 407.423.0030 Florida License No. 000072		Project Development and Environment Study Orange, Lake & Seminole Counties		Alternative 2	
 PLANT NURSERY DISPLACEMENTS	 FLOODPLAIN COMPENSATION POND	 ADDITIONAL IMPACTS TO UPLAND HABITAT/SCRUB AREA PARCELS						Avoidance Alternative Impacts	
 FLOODPLAIN IMPACT AREA								EXHIBIT 4-5	
									
								1/4 Mile	



listed threatened species by both the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish and Wildlife Conservation Commission (FWC). The Alternative 1 alignment through this sensitive habitat area minimizes impacts as it is aligned further to the east and, thereby, maximizes the habitat potential for Florida Scrub Jays by providing the largest contiguous area feasible to the west of the roadway alignment. As requested by the USFWS and documented under “Measures to Minimize Projects Effects” in the *Endangered Species Biological Assessment* prepared for the Wekiva Parkway PD&E Study, the alignment was shifted to the east to avoid the area where scrub jays and nests were found.

#### 4.1.2 Floodplain Impacts

Since the alignment of Alternative 2 from the vicinity of the Plymouth Sorrento Road/Boch Road intersection on to the east is located north of Alternative 1, the avoidance alternative would impact an additional 14.1 acres of floodplain (see **Exhibit 4-5**). That would require mitigation through provision of compensating storage which necessitates acquisition of additional right-of-way. Absence of mitigation would result in flooding of areas adjacent to the floodplain impact. It is also important to note that within this floodplain, Alternative 2 impacts Hardwood-Conifer Mixed Forest and Freshwater Marsh which provide diverse species habitat.

#### 4.1.3 Community Disruption

In the vicinity of Boch Road, Alternative 2 would result in the displacement of seven additional residential dwellings – about 20% of the residences within a relatively small cluster of about 35 homes in a rural setting (see **Exhibit 4-5**). It would also displace three additional businesses. This community disruption is expected to generate a high degree of public controversy, based upon comments received at public workshops on the alternatives.

#### 4.1.4 Noise Impacts

For Alternative 2, increased noise levels at the Bock House and Strite House properties are anticipated compared to the No Build condition due to increased traffic. **Table 4-1** summarizes the projected noise levels for Alternative 2. The potential noise effects for Alternative 1 are summarized in Section 3.0 of this document.

As shown in Table 4-1, the projected noise levels for Alternative 2 do not exceed or approach the FHWA Noise Abatement Criteria as defined in Table 1, amended 23 CFR Part 772. The projected traffic noise levels for the Bock House (59.5 dB(A)) and the Strite House (58.2 dB(A)) are lower than the 67 dB(A) threshold for residential areas/Section 4(f) sites under FHWA noise abatement criteria and the 66 dB(A) FDOT approach criteria.

The traffic noise level for Alternative 2 is projected to result in an increase of 16.8 dB(A) at the Bock House and 8.7 dB(A) at the Strite House as compared to the No Build condition. Based on FDOT noise analysis guidelines, a projected increase in noise level of 15 dB(A) or greater would require consideration of noise abatement measures for the Bock House. However, as stated in the FDOT noise analysis guidance, for a noise barrier to be feasible it must achieve a 5 dB(A) reduction at a minimum of two impacted receptors. As the Bock House is a single residence located in a sparsely populated rural area, a noise barrier at this location would not meet the FDOT feasibility criteria. As a result, no further analysis is warranted.

**Table 4-1: Existing and Projected Noise Levels – Alternative 2 (Avoidance Alternative)**

<b>Evaluation Criteria</b>	<b>Bock House</b>	<b>Strite House</b>	<b>Exceeds or Approaches FHWA Noise Abatement Criteria<sup>1</sup> (Yes/No)</b>
Projected (2032 Build) noise level	59.5 dB(A)	58.2 dB(A)	No
Existing noise level	42.7 dB(A)	49.5 dB(A)	No
Projected (2032 No Build) noise level	42.7 dB(A)	49.5 dB(A)	No
Projected increase in noise level	16.8 dB(A) <sup>2</sup>	8.7 dB(A)	
Distance from edge of travel lanes	460 ft.	923 ft.	

Notes:

<sup>1</sup>FHWA Noise Abatement Criteria is 67.0 dB(A) for residential areas (Activity Category B) and for Section 4(f) sites (Activity Category C). Per FDOT guidelines, the approach criteria is 1.0 dB(A) less (66.0 dB(A)) for both categories.

<sup>2</sup> FDOT noise analysis guidelines require consideration of noise abatement measures when the projected noise level increases by 15.0 dB(A) or more as compared to the No Build condition. As stated in the FDOT noise analysis guidance, for a noise barrier to be feasible it must achieve a 5 dB(A) reduction at a minimum of two impacted receptors. As the Bock House is a single residence located in a sparsely populated rural area, a noise barrier at this location would not meet the FDOT feasibility criteria. As a result, no further analysis is warranted.

During the field review conducted for the *CRAS* and the *CRAS Addendum*, it was noted the Bock House appeared to be uninhabited due to overgrown vegetation. In subsequent discussions with the property owner's representative it was indicated that a portion of the house is in use. The Bock House property is designated as residential land use and the exterior activities are anticipated to be consistent with those in a residential home (e.g., gardening and family recreation). The increased projected noise levels are not anticipated to impair these residential activities. The Bock House property was determined to be NRHP eligible due to the early Cracker architecture of the structure, the historical association with early settlers in the area, and the property's characteristics of an early Cracker farmstead. These attributes are not anticipated to be affected by the projected noise level increases associated with Alternative 2. The projected noise level increase for the Strite House with Alternative 2 is below 15 dB(A) and, per FDOT criteria, does not require consideration of noise abatement. Based on this noise analysis, the proximity impacts due to noise are not anticipated to substantially impair the protected features, activities or attributes of either the Bock House or the Strite House.

#### 4.1.5 Increased Right-of-Way and Construction Costs

Preliminary estimates of project costs for this evaluation have three major components: right-of-way acquisition, residential/business displacements, and construction. Comparative cost estimates for Alternatives 1 and 2 were calculated in the area of variation between the two alignments from near Plymouth Sorrento Road on to the east toward the Orange County/Lake County line.

The estimated cost for right-of-way acquisition and residential/business displacements for Alternative 1 is \$9.6 million (2008 dollars). For Alternative 2, the estimated cost for right-of-way and residential/business displacements is \$14.0 million (2008 dollars). That is a delta



for right-of-way related costs of \$4.4 million for Alternative 2, which is a 46% increase over Alternative 1. This does not include costs that would have to be paid for business damages. Alternative 2 would require additional right-of-way to be acquired for the realignment of Boch Road and for floodplain impact compensating storage. As mentioned previously, seven additional residential dwellings and three additional businesses would be taken by Alternative 2.

For Alternative 1, the estimated construction cost is \$52.2 million (2008 dollars). The estimated cost for construction of Alternative 2 is \$66.2 million (2008 dollars). That is a cost delta for construction of \$14.0 million for Alternative 2, which is a 27% increase over Alternative 1. This additional cost is due to the required realignment and relocation of Boch Road and the associated additional bridge structures, and the creation of floodplain compensating storage areas.

In summary, the estimated total additional cost for Alternative 2 is \$18.4 million (i.e., \$61.8 million for Alternative 1 versus \$80.2 million for Alternative 2). That is a composite construction and right-of-way cost delta of 30% for the avoidance alternative.

#### **4.1.6 Individual and Composite Impacts of the Avoidance Alternative**

##### **4.1.6.1 Individual Impacts on Functionality**

###### **Impact on Florida Scrub Jay Habitat**

The Endangered Species Act of 1973, as amended, requires Federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. As shown on **Exhibit 4-5**, Alternative 2 is aligned further west than Alternative 1 and would likely have more negative effects on the habitat area due to the specific flight, feeding and nesting characteristics of the Florida Scrub Jay. That conclusion is based upon the opinion of biologists after site visits to the habitat area during the alternatives analysis; this included a site visit with the USFWS. As previously mentioned, the Alternative 1 alignment was shifted to the east as a measure to minimize project effects at the request of the USFWS. More detailed information is provided in the *Environmental Assessment* and in the *Endangered Species Biological Assessment* prepared for this PD&E Study.

For this analysis, further coordination with the USFWS regarding their concerns was undertaken since, in their concurrence letter on Alternative 1, the USFWS specifically addressed avoidance of this Florida Scrub Jay habitat area. Copies of the USFWS concurrence letter on Alternative 1 dated January 15, 2008, the FDOT request for opinion letter to USFWS on Alternative 2 dated March 31, 2009, and the USFWS response letter dated April 24, 2009 are provided in **Appendix B**.

In their concurrence letter of January 15, 2008, the USFWS stated that Alternative 1 “may affect, but is not likely to adversely affect, the Florida Scrub Jay”. The USFWS indicated in their opinion letter of April 24, 2009 that since Alternative 2 (the avoidance alternative) would be located west of Alternative 1, it may encroach on Florida Scrub Jay foraging opportunities. Additionally, the potential alignment shift also caused the USFWS to express concerns about increased roadside mortalities due to Florida Scrub Jay flight and feeding characteristics in roadside habitats. Since the Florida Scrub Jay is a threatened and declining

species, the USFWS stated that selection of Alternative 2 would require re-initiation of consultation under Section 7 of the Endangered Species Act.

In walking transects of the Florida Scrub Jay habitat area by study team ecologists in 2005 and 2006, a total of nine birds were observed in three separate portions of the habitat area west of the alignment alternatives. An active Scrub Jay nest was observed in 2006 in the sighting area which is closest to the alignment alternatives. Since Alternative 2 would be approximately 400 feet closer than Alternative 1 to that Scrub Jay sighting area (see **Exhibit 4-6**), and would require an additional 24.4 acres of habitat area, there is potential for severe impact to this threatened species which is endemic only to Florida and is protected under the Endangered Species Act. That protection requires Federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species.

### **Impact on Floodplains**

Protection of floodplains is required by Executive Order 11988, "Floodplain Management", USDOT Order 5650.2, "Floodplain Management and Protection", and Federal-Aid Policy Guide 23 CFR 650A. The intent of these regulations is to avoid or minimize highway encroachments within floodplains. Also, FHWA's Technical Advisory T6640.8A, "Guidance for Preparation and Processing of Environmental and Section 4(f) Documents" provides guidelines for assessing highway impacts on floodplains to comply with 23 CFR 771 and the regulations cited above. Therefore, seeking to avoid or minimize impacts to floodplains is a part of the alternatives analysis screening criteria. Alternative 1 would not impact the floodplain discussed below.

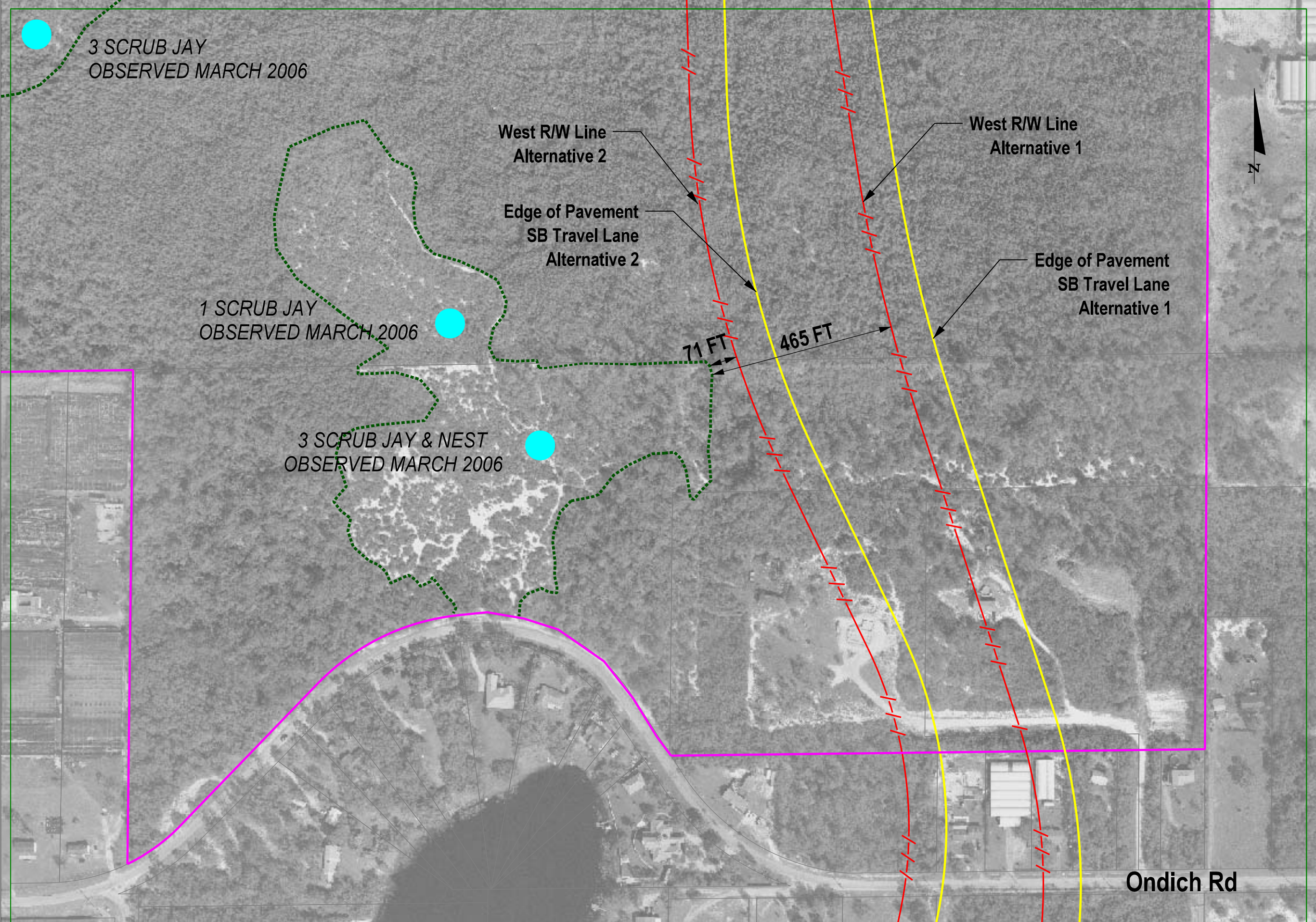
Alternative 2 (the avoidance alternative) would cause impacts to an additional 14.1 acres of designated floodplain. This would necessitate the creation of compensating storage areas for mitigation, which would require acquisition of additional right-of-way. Absence of mitigation would result in flooding of areas adjacent to the floodplain impact. A portion of the impacted floodplain area is classified as Hardwood-Conifer Mixed Forest, a natural association of trees that provides diverse habitat for wildlife. This mature growth condition and habitat could not be replicated in the created compensating storage areas. Alternative 2 also impacts Freshwater Marsh within the floodplain, so species that are both upland and wetland dependent would be affected. At this time, it is unknown what the required environmental mitigation would be to compensate for the loss of this forested floodplain. Also, a portion of the impacted floodplain has been designated as a conservation area by the Orange County Environmental Protection Division. It is unknown at this time what the environmental mitigation required to compensate for the loss of this designated conservation area might be.

#### **4.1.6.2 Composite Impacts**

The composite additional impacts of Alternative 2 are listed below.

- Environmental: 24.4 acres of additional impact to habitat area of the Florida Scrub Jay (a threatened species under the Endangered Species Act) with adverse affects requiring re-initiation of USFWS consultation, and 14.1 acres of impact to a designated floodplain which contains mature, natural forest;





— Boundary of the Upland Habitat/Scrub Area Parcels  
- - - Prime Scrub Jay Habitat



- Community Disruption: displacement of an additional 7 homes and 3 businesses, which is expected to generate public controversy. In addition, access to Boch Road would need to be altered with Alternative 2; and
- Cost: estimated cost delta of 30% (\$18.4 million) in additional right-of-way acquisition and construction costs for the Boch Road realignment/relocation and the associated additional bridges, as well as for the creation of floodplain compensating storage areas. This estimate does not include costs that would have to be paid for business damages, and does not include any additional mitigation compensation costs for impacts to the forested portion of the floodplain or to the designated conservation area in the floodplain.

A critical point for consideration in the cumulative impact associated with Alternative 2 is that the displacement of an additional seven homes and three businesses is a substantial number given the low density, rural nature of this part of the study area. That is about 20% of the homes in this residential cluster. These impacts will affect the community cohesion of the Boch Road area. The fragmentation of Scrub Jay habitat is also a concern for the viability of the species in this area.

Given that the historic resources impacted by Alternative 1 are in private ownership, the final disposition of these structures is uncertain regardless of decisions on the alignment of the Wekiva Parkway. The potential for future protection of the structures is purely speculative and avoidance of the structures with Alternative 2 would have added community effects, additional critical habitat impacts and significant additional costs.

#### 4.1.7 Summary Comparison of Impacts

A summary of the comparative impacts of Alternative 1 and Alternative 2 is presented on **Table 4-2**. Depictions of Alternatives 1 and 2 are shown in the previously presented **Exhibits 4-4** and **4-5**, respectively.



**Table 4-2: Summary of Alternative 1 and Alternative 2 Impact Comparison**

Evaluation Criteria		Alternatives	
		1	2 (Avoidance)
Social Environment	Bock House Land Area Required (acres)	10.2 acres	0
	Strite House Land Area Required (acres)	19.5 acres	0
	Historic Structures Affected	3 (Strite House, garage, water tower)	0
	Residential Displacements	19 (includes Strite House)	26
	Business Displacements (Plant/Foliage Nurseries)	2	5
	Total ROW Required (acres)	268	302
	Number of Impacted Parcels	49	54
Natural Environment	Floodplain Impact (acres)	5.4	19.5
	Wetlands Impact (acres)	2.0	3.0
	Potential for Severe Florida Scrub Jay Habitat Impact ( <i>species listed by USFWS &amp; FWC as Threatened under Endangered Species Act</i> )	Low (0 acres; west R/W line is approx. 465 ft. from prime habitat area boundary)	High (additional 24.4 acres; west R/W line is approx. 71 ft. from prime habitat area boundary)
Project Cost	Estimated Cost for Right-of-Way and Residential/Business* Displacements (in millions, 2008 dollars) *business damages not included	\$9.6	\$14.0
	Estimated Cost for Construction (in millions, 2008 dollars)	\$52.2	\$66.2
Community	Public Controversy due to Community Disruption	Low	High
	Comments – Bock House	No direct use of contributing structures	No direct use of contributing structures or property
	Comments – Strite House	Direct use of three contributing structures	No direct use of contributing structures or property

Note: No notable differences for air and water quality were determined between the alternatives.

## 5.0 Measures to Minimize/Mitigate Harm

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Sections 3.0 and 4.0 of this *Individual Section 4(f) Evaluation* document the potential effects of Orange County Alternative 1 on the Bock House and the Strite House. The **adverse effects** on those two NRHP-eligible resources would be due to right-of-way acquisition. The right-of-way acquisition would affect the historic connection between the Bock House and its associated land as well as the integrity of the historic setting. It would also have a direct effect on the Strite House and contributing ancillary structures, as it would require the complete acquisition of the house and several contributing resources.

At the second Section 106 Cultural Resource Consultation meeting held on August 16, 2010, measures to minimize and/or mitigate effects to the two historic resources were identified, discussed and evaluated. In October of 2010, three public hearing sessions were held on the locally recommended Proposed Build Alternative, which includes Alternative 1 in Orange County. Consistent with the discussions at the second Section 106 Cultural Resource Consultation meeting, measures to minimize and/or mitigate adverse effects to the two historic resources have been addressed in a *Memorandum of Agreement* (MOA) dated June 2011 between FHWA and the SHPO. A copy of the executed MOA, signed by the FHWA Florida Division Administrator and the SHPO, with concurrence signatures by the FDOT District Five Secretary and the OOCEA Executive Director, is provided in the revised final *Section 106 Documentation and Determination of Effects Case Study Report* (November 2011). Listed below is a general summary of the measures addressed in the MOA.

### 5.1 Minimization/Mitigation of Harm to Bock House Property

Measures to minimize and/or mitigate effects to the Bock House Property include:

- Historic American Building Survey (HABS) standard photography and documentation,
- Repairs to the Bock House, and
- Landscape screening between the historic structures and the proposed roadway.

### 5.2 Minimization/Mitigation of Harm to Strite House Property

Measures to minimize and/or mitigate effects to the Strite House Property include:

- HABS standard photography and documentation,
- Relocate Strite House and contributing structures, if feasible, to south end of the Strite property,
- Exterior rehabilitation of relocated historic structures, and
- Landscape screening between the historic structures and the proposed roadway.

After coordination with all required consulting parties, the resolution of adverse effects has been documented in accordance with Section 106 and in compliance with the requirements mandated by Section 4(f) of the U.S. Department of Transportation Act (USDOT) of 1966 [Title 49, USC, Section 303] and [Title 23, USC, Section 138]; as amended.



# 6.0 Coordination

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## 6.1 Alternatives Analysis Process Coordination

The alternatives analysis process for this PD&E Study has provided opportunities for the involvement of participating agencies and the public, and has considered the input provided by these groups. Since the study began in 2005, over 220 meetings have been held with the public (particularly residents and landowners within the study area), federal, state and local agencies, environmental groups, and other stakeholders.

A multi-step alternatives evaluation was undertaken for the proposed Wekiva Parkway project. Through mid 2005, conceptual alignment alternatives within the entire study area were developed and reviewed with the various stakeholders. After extensive analysis under impact assessment criteria and multiple meetings with State and local agencies, numerous Initial Alternatives within the identified study area were presented for public feedback in workshops in November 2005. The initial alternatives Public Workshops were held on the dates and at the locations shown below:

- *November 9, 2005 – Orange County Public Workshop at Apopka High School*
- *November 10, 2005 – Lake County Public Workshop at Lake Receptions in Mount Dora*
- *November 14, 2005 – Seminole County Public Workshop at the Sanford Civic Center*

A total of 1,147 attendees signed in at the three workshops and 285 comment forms were submitted after the workshops. All public comments were reviewed and responded to in writing. Many of the comments expressed opinions in favor of or against specific alignment alternatives or interchange concepts.

With consideration of the input received, further development of the alternatives was undertaken. After more refinement, evaluation and numerous meetings with multiple stakeholders, the Viable Alternatives were presented for public comment in workshops in July/August 2006. The viable alternatives Public Workshops were held on the dates and at the locations shown below:

- *July 25, 2006 – Seminole County Public Workshop at the Sanford Civic Center*
- *July 26, 2006 – Orange County Public Workshop at Apopka High School*
- *August 1, 2006 – Lake County Public Workshop at Lake Receptions in Mount Dora*

A total of 1,201 attendees signed in at the workshops and 573 comment forms were submitted after the workshops. All public comments were reviewed and responded to in writing. Many of the comments expressed opinions in favor of or against specific alignment alternatives or interchange concepts/locations.

Subsequent meetings with stakeholders were held and additional refinements to the viable alternatives were made. The alternatives selected for further evaluation were initially identified in April 2007, and after additional meetings with the various stakeholders, refinements were made through the end of 2008.

A public workshop in the Lake County East study area was held in December of 2009 to present the service road concept which provides a two-lane, two-way road parallel to the Wekiva Parkway to accommodate non-tolled local trips. That portion of the overall study area is not within the area of focus of this *Individual Section 4(f) Evaluation*.

The overall Locally Recommended Alternative, including Alternative 1 in Orange County, was presented as the Wekiva Parkway (SR 429)/SR 46 Realignment Proposed Build Alternative at three Public Hearing sessions held on the dates and at the locations shown below:

- October 26, 2010 – Orange County, Public Hearing Session No. 1, at VFW Post No. 10147 (Apopka Community Center) in Apopka
- October 27, 2010 – Lake County, Public Hearing Session No. 2, at Lake Receptions in Mount Dora
- October 28, 2010 – Seminole County, Public Hearing Session No. 3, at the Civic Center in Sanford

The draft *Individual Section 4(f) Evaluation for Historic Resources* (April 2010) and the revised draft *Section 106 Documentation and Determination of Effects Case Study Report* (June 2010), along with other study documentation, were made available to the public as part of the Public Hearing process. A total of 1,327 attendees signed in at the three Public Hearing sessions and 232 comment forms were submitted at or after the sessions. All public comments were reviewed by the study team and responded to in writing.

There were no public comments received during or after the Public Hearing regarding the alternatives and/or effects to the Bock House and Strite House properties. Comments from the affected property owners and other stakeholders have been addressed during the course of the PD&E Study public involvement process and in the two Section 106 Consultation meetings held on April 21, 2008 and August 16, 2010. Subsequent to the Public Hearing comment period, the affected property owners have contacted the PD&E Study Team to inquire about the status of the project.

The Proposed Build Alternative presented at the Public Hearing sessions was selected as the Locally Preferred Alternative at duly noticed public meetings/hearings held by the Seminole County Expressway Authority Board on November 9, 2010, the Lake County Board of County Commissioners on December 7, 2010, and the Orlando-Orange County Expressway Authority Board on December 14, 2010.

Throughout the project development process, the project team has informed the public on the potential impacts to historic properties (there are no impacts to archaeological resources). Project team members were on-hand to answer questions at the Initial Alternatives Public Workshops, Viable Alternatives Public Workshops, Project Advisory Group (PAG) and Environmental Advisory Committee (EAC) meetings, and at the Public Hearing sessions. In addition, project team members have met several times with local, state, and federal agencies to discuss potential impacts to historic properties. The public involvement process is described in detail in the *Environmental Assessment* and in the *Comments and Coordination Package* prepared for this project.



## 6.2 Individual Section 4(f) and Section 106 Coordination

In accordance with the Section 106 consultation process, coordination with the SHPO was initiated by FHWA upon submittal of the draft *Cultural Resource Assessment Survey* in May 2007. A summary of the Section 106 coordination process is provided by copies of related correspondence in **Appendix B**. As a result of this coordination, both the Bock House and the Strite House were determined to be eligible for NRHP listing, and the improvements associated with Orange County Alternative 1 were determined to have adverse effects on those two historic resources. FHWA has engaged in on-going consultation with the SHPO as required by 36 CFR, Part 800 and regulations implementing Section 106 of the National Historic Preservation Act of 1966 (as amended) regarding the potential impacts of the proposed project and its alternatives on historic resources. Additionally, Section 106 consultation with the affected property owners, responsible agencies and other stakeholders has been undertaken to address and resolve issues concerning adverse effects.

In accordance with Section 106 and its public involvement requirements, an initial Cultural Resource Consultation meeting was held on April 21, 2008 with the affected parties and appropriate agencies and organizations. OCEA and FDOT conducted the meeting with a SHPO representative, the owners of the Strite House and Bock House properties, and other stakeholders, including local historians. During that meeting, the Section 106 process and possible avoidance alternatives, minimization alternatives and mitigation measures for the potential adverse effects associated with Alternative 1 were discussed.

Upon review of Alternative 1 and Alternative 2, the SHPO representative requested that two minimization alternatives be developed for the Bock and Strite House properties to compare the potential effects for each alternative. As requested at the consultation meeting, two Section 106 minimization alternatives (Alternatives 1A and 1B) were developed and evaluated. Alternative 1A is similar to Alternative 1 with an alignment shift further south to avoid impacts to the mature oak trees on the Bock property. Alternative 1B is similar to Alternative 1 with an alignment shift further south to avoid impacts to the mature oak trees on the Bock property and to avoid the Strite House.

Subsequent to that meeting, the potential effects to these two cultural resources were documented in the draft *Section 106 Documentation and Determination of Effects Case Study Report* (July 2008) prepared for the project. After review of that document, the SHPO concurred with the finding that Alternative 1 would have an adverse effect on both the Bock House and the Strite House, indicated that Alternative 2 should be considered, and requested further coordination in a letter to FHWA dated September 10, 2008 (copy of letter provided in **Appendix B**).

As requested by the SHPO in a project coordination conference call on March 9, 2010, local historians were contacted to obtain their opinion on the relative significance of the Bock House and Strite House properties. Local historian input was requested from both the Orange County Regional History Center and the Apopka Historical Society in March 2010. The representatives from both historical societies indicated they had no specific opinion on the significance of the Bock House and Strite House properties; however, the representatives indicated that they understood the SHPO considered the properties to be significant resources.



During project sponsor consultation with FHWA from September 2008 to April 2010, the potential effects to the two cultural resources were analyzed further and documented as part of the draft *Individual Section 4(f) Evaluation for Historic Resources* (April 2010). Portions of those additional analyses were included in the revised draft *Section 106 Documentation and Determination of Effects Case Study Report* (June 2010). The revised draft *Case Study Report* included the results of the analysis and evaluation of the effects of Alternative 1, two minimization alternatives (Alternatives 1A and 1B), and an avoidance alternative (Alternative 2). The SHPO reviewed the revised draft *Case Study Report* and provided comments on it to FHWA in a letter dated July 6, 2010 (copy of letter provided in **Appendix B**). Thereafter, a second Section 106 Cultural Resource Consultation meeting was held on August 16, 2010 with the affected parties and appropriate agencies and organizations, including SHPO, FHWA, the property owners, the Apopka Historical Society, and the Orange County Regional History Center. At that meeting, the proposed effects of Alternative 1 on the Strite House and Bock House historic resources, and potential measures to minimize and/or mitigate adverse effects, were identified, discussed and evaluated.

After FHWA approval of the draft *Environmental Assessment* for public availability on August 20, 2010, the Locally Recommended Alternative, which includes Orange County Alternative 1, was presented as the Proposed Build Alternative at three public hearing sessions held in October 2010 in Orange, Lake, and Seminole Counties.

### 6.2.1 SHPO Concurrence

Following the Public Hearing sessions and comment period, and after formal selection of the Locally Preferred Alternative, preparation began on a draft MOA (see Section 5.0) between FHWA and the SHPO to address minimization and/or mitigation of adverse effects to the two historic resources. FHWA, in cooperation with the project sponsors (OOCEA and FDOT), developed a draft MOA which contained minimization and/or mitigation measures that are consistent with those discussed at the second Section 106 Cultural Resource Consultation meeting. FHWA then transmitted the draft MOA to the SHPO for review and comment. On June 15, 2011, the SHPO staff advised FHWA that the draft MOA was acceptable. The final MOA document dated June 2011 was then circulated for review, approval and signature by the FHWA Florida Division Administrator and the SHPO, with concurrence signatures by the FDOT District Five Secretary and the OOCEA Executive Director. A copy of the executed MOA is provided in the revised final *Section 106 Documentation and Determination of Effects Case Study Report* (November 2011). The determination of sufficiency and concurrence form signed by the SHPO on October 18, 2011 after review of the final *Case Study Report* is provided in **Appendix D**.

### 6.2.2 U.S. Department of the Interior Coordination and Concurrence

49 USC 303(b) requires consultation with the U.S. Department of the Interior (DOI) on individual evaluations concerning the use of Section 4(f) lands. After receipt of the SHPO concurrence discussed above, FHWA coordinated with the DOI Office of Environmental Policy and Compliance, and provided to DOI the final draft *Individual Section 4(f) Evaluation* for review and comment, as well as a copy of the executed MOA. On February 22, 2012, the Director of the DOI Office of Environmental Policy and Compliance sent a concurrence letter to FHWA. With regard to this *Individual Section 4(f) Evaluation*, the letter states “the



Department concurs that there is no feasible and prudent alternative to the use of Section 4(f) properties, which consist of the Bock House and Strite House, and that all possible planning has been done to minimize harm to these properties". A copy of the DOI concurrence letter is provided in **Appendix E**.

### 6.3 Programmatic Section 4(f) Coordination

Since the alignment of the proposed Wekiva Parkway closely follows existing SR 46, and will replace portions of the existing road in the area where impacts to public lands would occur, a *Programmatic Section 4(f) Evaluation* (March 2012) was prepared. The impacted public lands – Rock Springs Run State Reserve, Seminole State Forest, and Lower Wekiva River Preserve State Park – are all owned by the State of Florida. In each case, the direct use impacts on the Section 4(f) lands would be less than one per cent of the total acreage. After extensive coordination with the Florida Department of Environmental Protection, Division of Recreation and Parks and the Florida Department of Agriculture and Consumer Services, Division of Forestry, full Section 4(f) concurrence was received from those agencies in writing in March 2010 and April 2010, respectively.

The proposed Wekiva Parkway improvements include SR 429 mainline bridges and a parallel service road bridge over the Wekiva River, which would replace and be in the same general location as the existing SR 46 bridge. Those proposed improvements have been addressed in a *Wild and Scenic River Addendum to the Programmatic Section 4(f) Evaluation* (March 2012). The Wekiva River, a federally designated Wild and Scenic River, is sovereign submerged land owned by the State of Florida. The new bridges would clear span a recreation segment of the river; potential Section 4(f) impacts, as well as improvements over existing conditions, were documented in the *Wild and Scenic River Addendum to the Programmatic Section 4(f) Evaluation* after extensive coordination and consultation with the U.S. Department of the Interior, National Park Service (NPS). NPS has management and oversight responsibility for the river, in concert with their Wekiva River System Advisory Management Committee. NPS provided full Section 4(f) concurrence in writing in October 2011; that concurrence is subject to an ultimate Section 7(a) Evaluation and Determination by NPS under the Wild and Scenic Rivers Act during the final design phase of the project.



## 7.0 Conclusions

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As discussed in Section 4 of this document, there are no feasible and prudent alternatives to the use of the Section 4(f) lands referred to as the Bock House and the Strite House properties. The supporting information demonstrates that the cost, social, economic and environmental impacts, and community disruption resulting from such alternatives reach extraordinary magnitudes. The DOI letter referenced in Section 6 provides concurrence with the conclusion that there is no feasible and prudent alternative to the use of these Section 4(f) properties.

As there are no feasible and prudent alternatives which avoid the use of these Section 4(f) lands, this *Individual Section 4(f) Evaluation* demonstrates that the Locally Preferred Alternative is a feasible and prudent alternative with the least harm on the Section 4(f) resources after considering mitigation of adverse effects to the Bock House and Strite House properties. Section 5 of this document discusses the basis for concluding that the proposed action includes all possible planning to minimize harm to the Section 4(f) properties. The DOI letter referenced in Section 6 provides concurrence with the conclusion that all possible planning has been done to minimize harm to these properties.

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the Bock House and Strite House properties and the proposed action includes all possible planning to minimize harm to the Bock House and Strite House properties resulting from such use.