PROJECT ENVIRONMENTAL IMPACT REPORT

FEASIBILITY / PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
Lake / Orange County Connector (US 27 to SR 429)
Lake and Orange Counties, Florida
CFX Project Number: 599-225

Prepared for
1. PROJECT DESCRIPTION AND PURPOSE AND NEED

A. Project Information

Project Name: Lake / Orange County Connector
Project Limits: From US 27 to SR 429
County: Lake and Orange
ETDM No.: N/A
CFX Project No.: 599-225
Project Manager: William Sloup, PE

The Central Florida Expressway Authority is conducting a Project Development and Environment (PD&E) Study of the Lake/Orange County Connector, a proposed roadway connecting US 27 and State Road (SR) 429 (Figure 1). The purpose of the Lake/Orange County Connector PD&E Study is to develop a proposed alternative that is technically sound, environmentally sensitive, and publicly acceptable. The primary objectives of this transportation improvement project are to: expand regional system linkage and connectivity in Lake and Orange counties; enhance mobility between US 27 and SR 429; and accommodate the expected increase in traffic due to population and employment growth within the study area, while being consistent with accepted local and regional plans.
This space left blank intentionally
Figure 1 Project Location
B. Proposed Improvements

A multiphase alternative development evaluation and selection process was employed to properly assess all alternatives considered for the proposed Lake / Orange County Connector. The “No Build” alternative assumes the retainment of existing conditions and was maintained as a viable option providing an effective baseline condition by which other project alternatives were compared.

The study area was divided into three segments that reflect predominant land uses, natural resources, etc. to facilitate the analysis. The segmental breakdown approach ensures that the generated corridor alternatives are more responsive to the needs of each segment rather than only to the generalized project needs.

In general, all build alternatives were the result of combinations of the three project segments as well as various interchange configurations at each access point. After a comprehensive evaluation process, one alternative was recommended as being the most effective option (Figures 2 and 3). A brief description of that alternative follows:

Segment 1, from US 27 (Begin Project) to Cook Road: Within Segment 1, the preferred alternative features a four-lane rural expressway typical section, with 330 feet of right-of-way, 12-foot travel lanes, 12-foot outside shoulders, an 88-foot divided median and a 94-foot border width. The section will feature grade separations in order to provide access to local facilities. The western interchange at US 27 provides direct connect ramps with free flow access to/from US 27. In order to avoid impacts to the abutting Lake Louisa State Park, a portion of US 27 will be slightly shifted to the east. Within this segment, the preferred alternative generally follows a northeast direction, thus avoiding impacts to Lakes Adain and Sawgrass.
Figure 2 Preferred Alternative

- Overpasses are provided to maintain access to local streets.
- Alternative avoids impacts to several existing lakes and proceeds northeasterly along the southern border of the CEMEX sand mine minimizing impacts to the mine operations.
- Western terminal interchange provides free flow access at US 27 and avoids impact to Lake Louisa State Park on the west side of US 27.
- A full interchange (diamond) with the proposed CR 455 Extension will provide local access to Schofield Road and future land uses in the area.
- A partial interchange to the proposed Valencia Parkway with access to and from the west will afford efficient access to the future Horizon West Campus and Schofield Road traffic.
- Eastern terminal interchange provides full access to SR 429 and avoids impacts to existing land fills and the Zanzibar PD.
Segment 2, from Cook Road to the Lake/Orange County Line: Within this segment, the preferred alternative continues with the same typical section previously described under Segment 1. The alignment generally shifts slightly southward just east of Cook Road in order to minimize impacts to the CEMEX Four Corners Sand Mine property. A full diamond interchange will be provided at the proposed CR 455 Extension facility to provide local access.

Segment 3, from the Lake/Orange County Line to the SR 429 and Schofield Road interchange (End Project): Within Segment 3, the preferred alternative continues the same typical section described under Segment 1. A partial interchange at the proposed Valencia Parkway will provide access to and from the west. At the SR 429 and Schofield Road interchange, direct connect ramps will provide access to/from both Northbound and Southbound SR 429.
C. Purpose and Need

The purpose of the Lake/Orange County Connector PD&E Study is to develop a proposed improvement strategy that is technically sound, environmentally sensitive and publicly acceptable. As with every PD&E Study, emphasis has been placed on the development, evaluation and documentation of detailed engineering and environmental studies including data collection, conceptual design, environmental analyses, project documentation and the preparation of a Preliminary Engineering Report (PER).

There are six project needs that serve as justification for the proposed improvements. These needs are: 1) Provide improved system connectivity/linkage; 2) Accommodate anticipated transportation demand; 3) Provide consistency with local and regional plans; 4) Support economic viability and job creation; 5) Support intermodal opportunities; and 6) Enhance evacuation and emergency service.

This space left blank intentionally
## 2. ENVIRONMENTAL ANALYSIS

<table>
<thead>
<tr>
<th>Issues/Resources</th>
<th><em>Substantial Impacts?</em></th>
<th><strong>Supporting Information</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>A. SOCIAL and ECONOMIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Social</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>2. Economic</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. Land Use Changes</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>4. Mobility</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>5. Aesthetic Effects</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>6. Relocation Potential</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>B. CULTURAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Historic Sites/District</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>2. Archaeological Sites</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>3. Recreation Areas</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>C. NATURAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Wetlands and OSW</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>2. Aquatic Preserves and Outstanding Florida Waters</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3. Water Quality and Stormwater</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>4. Wild and Scenic Rivers</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>5. Floodplains</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>6. Coastal Barrier Resources</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>7. Protected Species and Habitat</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>8. Essential Fish Habitat</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>D. PHYSICAL IMPACTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Highway Traffic Noise</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>2. Air Quality</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>3. Contamination</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>4. Utilities and Railroads</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>5. Construction</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>6. Bicycles and Pedestrians</td>
<td>[ ]</td>
<td>[✓]</td>
</tr>
<tr>
<td>7. Navigation</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

*Substantial Impacts?: Yes = Substantial Impact; No = No Substantial Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement

** Supporting information is documented in the referenced attachments
3. ANTICIPATED PERMITS

☑ Individual Dredge and Fill Permit- USACE
☐ Nationwide Permit- USACE
☐ Bridge Permit- USCG
☑ Environmental Resource Permit (SJRWMD and/or SFWMD) and potential dewatering Permits (SFWMD and/or SJRWMD)

4. ENGINEERING ANALYSIS

A multi-phase alternative development, evaluation and selection process was employed to properly assess all alternatives considered for the proposed improvements. Three different phases comprised the alternative selection process for the proposed project:

Phase 1 - Initial Evaluation

No Build Alternative

The only existing major east-west transportation facility (Schofield Road) within the project confines is inadequate not only in terms of future projected capacity needs but, more importantly, it would not provide the desirable redundancy in evacuation and emergency response potential nor the required additional regional connectivity between US 27 and SR 429 on the east. Adoption of this alternative would not solve many of the existing needs associated with the goals of this project. However, the "No Build" alternative was maintained as a viable option providing an effective baseline condition by which other project alternatives will be compared throughout the project alternative selection process.

Build Alternatives

Build Alternative options need to consider various major components of providing a new, multilane facility which include the selection of a preferred corridor in conjunction with the most efficient typical section and alignment options as well as access point locations and configurations. The following sections provide a detailed discussion concerning other critical system components of the Build Alternative options.
Phase 2 - Preliminary Conceptual Expressway Evaluation

This phase entailed the generation and evaluation of alternatives for the provision of an effective freeway connection within the previously selected corridor. Alternatives were generated for two (2) distinct system components: typical section options for the Lake/Orange County Connector mainline and interchange configuration options.

Segmental Determination and Generation

The first step in the evaluation of the mainline options was to divide the project into distinct segments. The segmental breakdown methodology ensures that alternatives are more responsive to the needs of each segment rather than only to the generalized project’s needs. Each segment has rather unique characteristics as well as potential differences in environmental, engineering and socio-economic features. In general terms, for example, Segment 1 (from the begin project to Cook Road) features several lakes, the project’s western terminal interchange at US 27 and Lake Louisa State Park abutting the segment on the west side of US 27. Segment 2 (from Cook Road to the Lake/Orange County line) is rural in nature and features the proposed CEMEX Four Corners Sand Mine, higher expected development growth and the proposed future extension of CR 455. Segment 3 (from the Lake/Orange County to the study’s eastern terminus at the SR 429/Schofield Road interchange) features the proposed Horizon West Town Center, Valencia College Horizon West Campus and the future Valencia Parkway Extension.

Expressway Extension Typical Sections

This task entailed the generation and preliminary evaluation of various mainline typical section options. In view of the fact that traffic projections indicate a relatively modest traffic demand, the potential use of two-lane options were also initially considered. However, the two-lane option would not fulfill the intended project needs, thus it was eliminated from further consideration.
Conceptual Interchange Configuration Evaluation

The main objective of this task was to screen out all non-viable (inferior) interchange configurations and thus identify at an early stage what configuration(s) would work best at each interchange location. Several additional interchange options were conceptually developed and preliminarily evaluated for fatal flaws from a traffic and geometric standpoint. Several options were eliminated due to serious operational and/or constructability concerns.

The interchange locations have been analyzed based on the traffic models with areas of higher congestion and demand to alleviate the traffic from the neighboring existing/future local streets. The proposed interchange locations are as follows:

- Segment 1: US 27/Lake/Orange County Connector Interchange (Begin Project)
- Segment 2: Lake/Orange County Connector/Proposed CR 455 Extension Interchange
- Segment 3: Lake/Orange County Connector/SR 429 Interchange (End Project)

Phase 3 - Horizontal Alignment Considerations

In order to evaluate different alternative roadway concepts, it is also necessary to take into account their horizontal alignment or relative position within the chosen corridor. Four different alignment alternatives were developed and evaluated. In summary according to the results obtained, Alternatives 3 and 4 are generally superior than Alternatives 1 and 2. The results of the evaluation show that Alternatives 3 and 4 are generally similar and the only difference between the two corridors occurs within Segment 1, thus additional factors must be considered for the selection of the preferred alternative. Alternative 3 received positive feedback from the public and major stakeholders. The Alternative 4 interchange with US 27 is slightly closer to the Lake Louisa State Park cabins and main entrance while the Alternative 3 interchange with US 27 is farther south. In addition, although much of the development in the area has not yet been approved, according to project stakeholders Alternative 3 would be most beneficial for future/planned developments in the area. Based on the feedback received from the public and major
stakeholders during public meetings as well as during the Environmental and Project Advisory Group meetings (see Section 8 for more details), Alternative 3 was determined to be generally superior to Alternative 4 and is thus selected as the preferred alternative.

5. COMMITMENTS

CFX commitments are listed below.

- To minimize adverse impacts to the eastern indigo snake, during construction, CFX will adhere to the USFWS Standard Protection Measures for the Eastern Indigo Snake.

- CFX will mitigate for any unavoidable impacts to wood stork Suitable Foraging Habitat (SFH) at an approved mitigation bank and in accordance with the USFWS Wood Stork Effect Determination Key (U.S. Army Corps of Engineers and USFWS 2008).

- A preconstruction gopher tortoise burrow survey and any resultant permitting will be conducted in accordance with Florida Fish and Wildlife Conservation Commission (FWC) protocols.

- CFX will mitigate for unavoidable impact to wetlands consistent with state and Federal standards.

- CFX will continue to coordinate with stakeholders and impacted property owners during final design regarding pond locations and potential design modifications.

- CFX will continue to coordinate with Lake and Orange Counties regarding final location and design of the future CR 455 and Valencia Parkway.

- CFX will coordinate with the Florida Department of Transportation (FDOT) in final design regarding joint use ponds for impacts to the existing FDOT stormwater ponds located along US 27 in the project study area.

- CFX will maintain the proposed alignment as south as possible to minimize impacts to the future mining operations of the CEMEX Four Corners Sand Mine.
• CFX will maintain previous access agreements for private property owners that were put in place when the SR 429 was constructed.

6. CFX SELECTED ALTERNATIVE

A brief description of the preferred alternative follows:

Segment 1, from US 27 (Begin Project) to Cook Road: Within Segment 1, the preferred alternative features a four-lane rural expressway typical section, with 330 feet of right-of-way, 12-foot travel lanes, 12-foot outside shoulders, an 88-foot divided median and a 94-foot border width. The section will feature grade separations in order to provide access to local facilities. The western interchange at US 27 provides direct connect ramps with free flow access to/from US 27. In order to avoid impacts to the abutting Lake Louisa State Park, a portion of US 27 will be slightly shifted to the east. Within this segment, the preferred alternative generally follows a northeast direction, thus avoiding impacts to lakes Adain and Sawgrass.

Segment 2, from Cook Road to the Lake/Orange County Line: Within this segment, the preferred alternative continues with the same typical section previously described under Segment 1. The alignment generally shifts slightly southward just east of Cook Road in order to minimize impacts to the CEMEX Four Corners Sand Mine property. A full diamond interchange will be provided at the proposed CR 455 Extension facility to provide local access.

Segment 3, from the Lake/Orange County Line to the SR 429 and Schofield Road interchange (End Project): Within Segment 3, the preferred alternative continues the same typical section described under Segment 1. A partial interchange at the proposed Valencia Parkway will provide access to and from the west. At the SR 429 with Schofield Road interchange, direct connect ramps will provide access to/from both Northbound and Southbound SR 429.
7. APPROVED FOR PUBLIC AVAILABILITY

[Signature]
Environmental or Project Development
Manager or Administrator

6/5/2019
Date

8. PUBLIC INVOLVEMENT

A public hearing was held on June 27, 2019 and the transcript is available.

9. APPROVAL OF FINAL DOCUMENT

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

The final PEIR reflects consideration of the PD&E Study and the public hearing.

[Signature]
CFX Designee

11/1/19
Date

10. SUPPORTING INFORMATION

For Supporting Information for each issue/resource please see Attachment 1, Environmental Analysis, as well as the Preliminary Engineering Report.
ATTACHMENT 1: ENVIRONMENTAL ANALYSIS
ATTACHMENT 1: ENVIRONMENTAL ANALYSIS
A. SOCIAL and ECONOMIC

1. Social

The 2010 Demographic Profile Data from the US Census Bureau shows the majority of the populations in Orange County (63.6 percent) and Lake County (82 percent) are identified as white. Major minority populations include African Americans, Asians, or “Multiple” and “Other” races. Demographics are similar in the study area, though the study area appears to contain proportionately fewer populations identified as “non-white” than does Orange County. There is limited potential for environmental justice concerns or impacts to underserved populations, community cohesion, or safety/emergency response due to the proposed project.

Community facilities and services in or adjacent to the study area include the Orange County National Golf Center and Lodge and Lake Louisa State Park. Lake Louisa is a navigable water body open to the public for recreational activity. There are no proposed direct impacts to the Orange County National Golf Center and Lodge or to Lake Louisa State Park. Social impacts were avoided and minimized as much as possible during the corridor and alternatives evaluations. This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status. No substantial impacts to the social environment are anticipated.

2. Economic

Agricultural nurseries, a golf course, planned residential developments, Lake Louisa State Park, and other businesses are located within or adjacent to the study area. The Four Corners Sand Mine and additional residential developments are approved or planned within the study area. The proposed project is anticipated to provide economic enhancements by creating additional transportation infrastructure that links employment and residential areas. For this reason, the project is anticipated to enhance economic conditions.
3. Land Use Changes

Much of the study area is undeveloped or agricultural with scattered water bodies and wetlands and some limited residential areas. Existing development is predominantly along US 27 and State Road (SR) 429. There are residential areas immediately south of the study area, near US 27 and SR 429, as well as to the east of SR 429, around Orange County National Golf Center and Lodge. Lake Louisa State Park is located west of US 27 and provides recreational opportunities to the public. The Four Corners Sand Mine is a mining operation proposed within the study area. Multiple developments are also planned within the study area and the surrounding region that include residential and commercial land uses. A conservation parcel known as the Schofield Tract is located immediately north of Schofield Road, two miles west of SR 429, and was purchased using Florida Forever Funds. Lake Louisa State Park, west of SR 27, was also purchased using Florida Forever Funds. Direct impacts to Lake Louisa State Park and the Schofield Tract were avoided and impacts to the Four Corners Sand Mine were minimized. Extensive coordination has occurred with project stakeholders including private land owners and developers in the area to ensure that the project provides opportunities and minimizes impacts for future development. Additionally, a Project Advisory Group was formed and convened three times and input obtained at the meetings was taken into consideration for development of the project alternatives. For these reasons, no substantial land use impacts are anticipated as a result of the proposed project.

4. Mobility

The project would provide an expressway option in the east-west direction linking US 27 and SR 429. This would accommodate additional anticipated development under the Wellness Way Area Plan in southern Lake County and the Horizon West Special Planning Area (including a future state college) in southwest Orange County. For these reasons, the project would enhance mobility.

5. Aesthetic Effects

Aesthetic impacts in and around developed portions of the study area, including Schofield Road, Five Mile Road, US 27, and SR 429, are anticipated to be minimal because
roadways are already present. Other portions of the study area are predominantly in a natural or agricultural setting, with citrus orchards, cattle pastures, small woodlands, and wetlands. Greater potential exists for aesthetic impacts to occur in these undeveloped areas; however, those impacts are anticipated to be minimal as well. Future planned development, including the Four Corners Sand Mine, residential developments, and utility infrastructure, are anticipated to further impact the undeveloped portions of the study area. For these reasons, no substantial impacts are anticipated as a result of the proposed project.

6. Relocation Potential

There are no anticipated residential or business relocations anticipated as part of this project. Temporary impacts to access for some adjacent properties are anticipated during construction and access will be maintained as much as possible. For these reasons, no involvement is anticipated with relocation.

B. CULTURAL

A Phase I Cultural Resource Assessment Survey (CRAS) was prepared by SEARCH Inc. for the proposed roadway alignment and included surveys for historic and archaeological sites. In addition to a CRAS of the proposed roadway improvements, a CRAS Addendum was also completed for 15 preferred pond locations.

1. Historic Sites/Districts

The architectural survey resulted in the identification and evaluation of eight historic resources within the Lake/Orange County Connector Area of Potential Effect, including one previously recorded resource and seven newly recorded resources. The previously recorded resource represents one historic structure (8LA02814). The newly recorded resources include one linear resource (8LA04779), one object (8OR11171), two structures (8LA04795 and 8LA04796), and three resource groups (8LA04717, 8LA04727, and 8LA04731). Additionally, during field reviews one previously recorded resource (8LA02129) was found to have been demolished.
Based on the results of the current survey for the roadway and ponds and due to a lack of historic associations, architectural significance, and/or historic integrity, all eight historic resources identified within the Lake/Orange Connector Area of Potential Effect are likely ineligible for the National Register of Historic Places (NRHP), individually or as contributing resources to a historic district. For these reasons, **no substantial** impacts to historic sites/districts are anticipated.

2. Archaeological Sites

An archaeological survey was conducted and involved 470 shovel tests within the existing and proposed right-of-way for the roadway and ponds. There were seven shovel tests that were positive for containing cultural materials. A total of 88 shovel tests were excavated within the two ponds requiring survey, all of which were negative for cultural material. As a result of the archaeological survey, two newly documented prehistoric archaeological sites, Killer Cattle (8LA04797) and Citrus Slope (8LA04829), and two archaeological occurrences (AO 1 and AO 2) were identified. Nine previously recorded archaeological sites are within or intersect the Lake/Orange County Connector Area of Potential Effect, including 8LA02204-8LA02207, 8LA02806-8LA02809 and 8LA02869. All of these sites except 8LA02869 are at least partially within the existing or proposed right-of-way. The State Historic Preservation Officer (SHPO) determined that all of the previously recorded archaeological sites are ineligible for listing in the National Register of Historic Places (NRHP).

No features, midden, or other clearly discernable intact deposits were documented during the archaeological investigation. Both of the newly recorded archaeological sites (8LA04797 and 8LA04829) exhibited a low density of cultural materials and a lack of diagnostic artifacts. These sites do not appear to contain archaeological deposits that have the potential to yield further information important in the prehistory or history of the region. In the opinion of SEARCH, 8LA04797 and 8LA04829 are ineligible for the NRHP. Archaeological occurrences are categorically ineligible for the NRHP. No further work is recommended for 8LA04797, 8LA04829, AO 1, or AO 2. For these reasons, **no substantial** impacts to archaeological sites are anticipated.
3. Recreation Areas

The project would not directly impact any public parks or publicly owned lands intended for recreational use. Lake Louisa State Park is located immediately west of US 27, by the western project terminus; however, this project will not encroach into the park and no substantial noise impacts are anticipated. For these reasons, no substantial impacts to recreational resources are anticipated.

C. NATURAL ENVIRONMENT

1. Wetlands and Other Surface Waters

As part of the documentation for this PD&E study, a Natural Resources Evaluation was developed that documents wetlands and Others Surface Waters as well as potential impacts from the project. Wetlands in the project area, as mapped by St. Johns River Water Management District (SJRWMD), include Wetland Forested Mixed (FLUCCS 6300; three locations within the project area), Freshwater Marsh (FLUCCS 6410; nine locations within the project area), and Mixed Scrub-Shrub Wetland (FLUCCS 6460; one location in project area). Lakes (FLUCCS 5200) and Surface Water Collection Basins (FLUCCS 8370) also occur in the project area and are considered Other Surface Waters (OSW). Wetlands and OSW in the project area as mapped by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) include Freshwater Emergent Wetlands, Freshwater Forested/Shrub Wetlands, Freshwater Ponds, and Lakes. Wetlands were assessed in the field and found to generally agree with SJRWMD and USFWS mapping.

It is anticipated that the preferred alternative would result in 64 acres of wetland impacts, 49 acres of impacts to wood stork (*Mycteria americana*) Suitable Foraging Habitat (SFH), and 71 acres of impacts to Other Surface Waters (OSW). There are four ponds proposed as part of this project which are located outside the footprint of the preferred alternative. Impacts by FLUCCS code for the preferred alternative and each of the four ponds are listed in Table 1.
Impacts to wetlands were avoided and minimized throughout the development of alternatives and there was no practicable alternative to construction in wetlands. Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. The potential wetland impacts from the project occur within the service areas of the Collany, Reedy Creek, Southport Ranch, Shingle Creek, Hammock Lakes, and the Lake Louisa and Green Swamp Mitigation Banks. Because wetland impacts were avoided, minimized and will be mitigated, the recommended alternative is expected to result in no substantial short-term or long-term adverse impacts to wetlands or OSW.

Table 1 Direct Impacts by FLUCCS codes

<table>
<thead>
<tr>
<th>Land Cover</th>
<th>FLUCCS CODE</th>
<th>Preferred Alternative (acres)</th>
<th>Pond 1A6 (acres)</th>
<th>Pond 2A (acres)</th>
<th>Pond 3A3 (acres)</th>
<th>Pond 4A3 (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Pastures</td>
<td>2110</td>
<td>131</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Field Crops</td>
<td>2150</td>
<td>19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Citrus Groves</td>
<td>2210</td>
<td>65</td>
<td>-</td>
<td>9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Horse Farms</td>
<td>2510</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Herbaceous (Dry Prairie)</td>
<td>3100</td>
<td>16</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Upland Hardwood Forests</td>
<td>4200</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Xeric Oak</td>
<td>4210</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pine Plantation</td>
<td>4410</td>
<td>35</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lakes</td>
<td>5200</td>
<td>18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hydric Pine Flatwoods</td>
<td>6250</td>
<td>0.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wetland Forested Mixed</td>
<td>6300</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Freshwater Marshes</td>
<td>6410</td>
<td>50</td>
<td>0.13</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mixed Scrub-Shrub Wetland</td>
<td>6460</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Solid Waste Disposal</td>
<td>8350</td>
<td>0.54</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Surface Water Collection Basins</td>
<td>8370</td>
<td>53</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>417.59</strong></td>
<td><strong>5.13</strong></td>
<td><strong>9</strong></td>
<td><strong>15</strong></td>
<td><strong>21</strong></td>
<td></td>
</tr>
</tbody>
</table>
2. Aquatic Preserves and Outstanding Florida Waters

The effects of the project on Aquatic Preserves and Outstanding Florida Waters (OFW) were considered as required under Part 2, Chapter 19 of the FDOT PD&E Manual. The project area does not include any aquatic preserves. All wetlands and surface waters within state parks are considered OFW. Lake Louisa State Park is immediately west of US 27 but outside the project footprint. There would be no direct impacts to Lake Louisa State Park and no discharge of stormwater into the park, so no involvement with Aquatic Preserves or OFW are anticipated.

3. Water Quality and Stormwater

A Water Quality Impact Evaluation Checklist was developed as part of this project. The project is a non-Federal action; therefore, concurrence from the US Environmental Protection Agency is not required according to the Safe Drinking Water Act. A Location Hydraulic Report (LHR) was completed for this project to identify existing cross-drains throughout the project corridor. A Pond Siting Report (PSR) was completed to identify and discuss the stormwater management. These reports utilized the National Flood Insurance Program maps to determine highway location encroachments and evaluated risks associated with the implementation of the project, impacts on natural and beneficial floodplain values, support of incompatible floodplain development, and measures to minimize floodplain impacts. Local, state, and federal water resources and floodplain management agencies were consulted to determine that the proposed project is consistent with existing floodplain management programs.

The Preferred Alternative’s stormwater management facilities have been developed in accordance with the water quality and quantity requirements of the St. Johns River Water Management District (SJRWMD) and South Florida Water Management District (SFWMD). Further coordination between the Central Florida Expressway Authority (CFX) and SJRWMD/SFWMD will continue during the upcoming final design, environmental permitting and construction phases. The Preferred Alternative and stormwater ponds are expected to result in no substantial impacts to water quality or stormwater.
4. Wild and Scenic Rivers

The proposed project would have **no involvement** with wild and scenic rivers.

5. Floodplains

The project will impact the 100-year floodplain in three different ways:

1) Longitudinal roadway impacts resulting from filling the floodplain areas.

2) Impacts due to proposed pond locations in floodplain.

3) Impacts due to proposed cross drains in floodplain.

The longitudinal impact due to the preferred alternative cannot be avoided. During the final design phase of the project, every effort should be taken to minimize floodplain and wetland impacts. Floodplain impacts could be compensated for by routing to swales at low profile locations, proposed stormwater ponds, and designated floodplain compensation ponds.

FEMA’s Flood Insurance Rate Maps (FIRM) (Appendix D) show that portions of the project lie within the 100-year floodplain areas Zone AE and Zone A. FEMA Map No. 12069C0675E and 12095C0375F provide flood information for the project. Estimated 100-yr floodplain elevations were determined from FEMA Maps and existing SJRWMD and SFWMD permits.

Floodplain impacts will be minimized by including floodplain compensation storage in the design of the proposed ponds. Total floodplain impacts due to the roadway fill for the entire proposed project corridor is 180.17 ac-ft. The total available compensation in all the proposed ponds is 193.99 ac-ft. Based on the preliminary evaluation the proposed project will provide more floodplain compensation than the impact. Therefore, a cup for cup compensation is provided by the project. Seven (7) floodplain compensation pond sites were identified in Basins 1, 3, and 4 for this project, within the preferred drainage pond alternatives. The preferred floodplain compensation sites include Ponds 1A1, 1A2, 1A3, 3A2, 3A3, 4C2, and 4C3. In addition to the seven (7) floodplain compensation ponds, a couple stormwater ponds located adjacent to...
floodplains will also provide floodplain compensation. The preferred combined floodplain compensation/drainage ponds sites include Ponds 2A and 3A1. At certain segments of the project, for example in Basin 4, the roadway profile is low enough to provide floodplain compensation in the swales; this option should be evaluated during the design phase to minimize offsite flood plain compensation areas. Please refer to Table 2 for a summary of floodplain impacts and compensation.

### Table 2 FEMA Floodplain Impact/Compensation Summary

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1A1</td>
<td>29.65</td>
<td>14.16</td>
<td>32.17</td>
</tr>
<tr>
<td></td>
<td>1A2</td>
<td></td>
<td>7.29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1A3</td>
<td></td>
<td>10.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1A4</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2A</td>
<td>4.51</td>
<td>7.73</td>
<td>7.73</td>
</tr>
<tr>
<td>3</td>
<td>3A1</td>
<td>68.45</td>
<td>18.66</td>
<td>73.72</td>
</tr>
<tr>
<td></td>
<td>3A2</td>
<td></td>
<td>11.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3A3</td>
<td></td>
<td>43.93</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4C1</td>
<td>77.57</td>
<td>0</td>
<td>80.37</td>
</tr>
<tr>
<td></td>
<td>4C2</td>
<td></td>
<td>3.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4C3</td>
<td></td>
<td>76.58</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5A1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>5A2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (ac-ft):</strong></td>
<td><strong>180.17</strong></td>
<td><strong>193.99</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, runoff within the corridor will be collected and conveyed to stormwater management facilities; therefore, reducing overall impacts to the remaining floodplain. The floodplain is in a medium density, semi-urbanized area and the encroachments are classified as “minimal”. Minimal encroachment of a floodplain occurs when there is floodplain involvement, but the impacts on human life, transportation facilities, and natural and beneficial floodplain values are not significant and can be resolved with minimal efforts. Normally, these minimal efforts to address the impacts will consist of applying the FDOT drainage design standards and following the SJRWMD and SFWMD procedures to achieve results that will not increase or significantly change the flood elevation and the
floodplain limits. The quantified flood impact volumes are based on limited information available during the PD&E study. A detailed evaluation should be completed during the final design. Based on the preliminary evaluation the project as currently proposed will provide more floodplain compensation than impacts. Therefore, a cup for cup compensation is provided by the project.

6. Coastal Barrier Resources

The proposed project would have no involvement with coastal barrier resources.

7. Protected Species and Habitat

A Natural Resources Evaluation was developed as part of this PD&E study and documented the potential impacts to protected species and their habitats. No adverse impacts to listed species are anticipated from the proposed project. Federally listed species which the project May Affect but is Not Likely to Adversely Affect include the American alligator, Audubon’s crested caracara, Britton’s beargrass, bluetail mole skink, Carter’s mustard, clasping werea, eastern diamondback rattlesnake, eastern indigo snake, Everglade snail kite, Lewton’s polygala, papery whitlow-wort, pygmy fringe tree, sand skink, scrub blazingstar, scrub plum, striped newt, and wood stork. A determination of No Effect was made for Florida bonamia, Florida scrub-jay, red-cockaded woodpecker, scrub buckwheat, scrub lupine, and short-leaved rosemary.

No Adverse Effects are Anticipated for the state listed burrowing owl, Florida pine snake, Florida sandhill crane, gopher tortoise, little blue heron, southeastern American kestrel, or tri-colored heron.

It is anticipated that the preferred alternative and stormwater ponds would result in 64 acres of wetland impacts, 71 acres of OSW impacts, 49 acres of impacts to wood stork SFH, and 332 acres of impacts to vegetated uplands (Table 3). The four proposed stormwater ponds that are outside the preferred alternative alignment (1A6, 2A, 3A3, 4A3) would result in 0.13 acre of impacts to wetlands and wood stork SFH as well as 50 acres of impacts to vegetated uplands. Direct impacts by FLUCCS code are shown in Table 1. The locations of unavoidable wetland and SFH impacts from the project occur within the
To avoid and minimize impacts during construction, CFX will adhere to the most recent version of the *USFWS Standard Protection Measures for the Eastern Indigo Snake*. CFX will mitigate for any unavoidable impacts to wood stork SFH at an approved mitigation bank and in accordance with the *USFWS Wood Stork Effect Determination Key* (U.S. Army Corps of Engineers and USFWS 2008). CFX will conduct a 100 percent gopher tortoise burrow survey in accordance with Florida Fish and Wildlife Conservation Commission rules and guidelines. For these reasons, **no substantial** impacts to protected species or their habitats are anticipated.

8. Essential Fish Habitat

The proposed project would have **no involvement** with Essential Fish Habitat.

D. PHYSICAL IMPACTS

1. Highway Traffic Noise

A traffic Noise Study Report was performed following Code of Federal Regulations Title 23 Part 772 (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, using methodology established by the FDOT in the *Project Development and Environment Manual*, Part 2, Chapter 18 (dated January 14, 2019). The purpose of the noise study was to identify noise-sensitive sites that would be

---

**Table 3 Summary of Direct Impacts**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Wetlands (acres)</th>
<th>OSW (acres)</th>
<th>Wood Stork SFH (acres)</th>
<th>Vegetated Uplands (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Build</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Preferred Alternative</td>
<td>64</td>
<td>71</td>
<td>49</td>
<td>282</td>
</tr>
<tr>
<td>Stormwater Ponds 1A6, 2A, 3A3, 4A3</td>
<td>0.13</td>
<td>-</td>
<td>0.13</td>
<td>50</td>
</tr>
</tbody>
</table>

---
impacted with the proposed project and evaluate abatement measures at impacted noise-sensitive sites.

Traffic noise levels were predicted for the noise-sensitive locations along the project corridor for the 2018 (existing) conditions, and for the 2045 (Design Year) No-build Alternative and Preferred Alternative. Approximately 51 residences, single-family homes, were identified as being sensitive to traffic noise along the proposed Lake/Orange County Connector within the limits of this project. Also, two non-residential special-use noise-sensitive sites, including a community pool and trail were identified along the project corridor. Design Year traffic noise levels at nearby residences are predicted to range from 52.3 to 69.8 dB(A). The Preferred Alternative noise levels at special land use sites are predicted to range from 52.3 dB(A) at the Zanzibar pool area to 56.7 dB(A) at the Zanzibar Wingspread Loop Trail during the Design Year. Noise impacts are predicted to occur at three residences. The three impacted residences are located in the Zanzibar residential community located just west of the eastbound Lake/Orange County Connector ramp to southbound SR 429. No other noise-sensitive sites within the project study area are predicted to experience traffic noise levels equal to or exceeding the Noise Abatement Criteria (NAC). None of the noise-sensitive sites are expected to experience a substantial noise level increase [i.e., greater than 15.0 dB(A) over existing levels] with the Preferred Alternative. For these reasons, no substantial impacts from noise are anticipated.

Noise barriers were considered for the three Zanzibar residences where Design Year traffic noise levels were predicted to equal or exceed the NAC. Since traffic management and alignment modifications were determined to not be viable abatement measures, noise barriers were determined to be the only potentially viable abatement measure that could be implemented for this project.

Five noise barrier concepts were evaluated for the three impacted noise-sensitive sites. Although the five noise barrier concepts met the noise reduction criterion of 7.0 dB(A), noise abatement was not considered cost reasonable ($42,000 per benefited receptor) in accordance with the policy used by CFX.
Based on the noise analysis performed to date, there are no apparent solutions available to mitigate the noise impacts at these locations. Therefore, noise barriers are not recommended for further consideration or construction.

2. Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to improve the Level of Service (LOS) on connecting roadways and reduce delay and congestion on all facilities within the study area. Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to the FDOT latest edition of *Standard Specifications for Road and Bridge Construction*. For these reasons, **no substantial** impacts to air quality are anticipated as a result of the proposed project.

3. Contamination

A Level I Contamination Screening Evaluation Report (CSER) has been prepared in accordance with the FDOT’s *PD&E Manual, Part 2, Chapter 20 (Contamination Impacts)*, updated January 14, 2019. The report identifies and evaluates known or potential contamination issues, presents recommendations concerning these issues, and discusses possible impacts to the proposed project in relation to the proposed project alternatives.

Information was obtained for the CSER from Florida Department of Environmental Protection and US Environmental Protection Agency databases as well as field investigations and reviews of historic and aerial photographs. A total of nine sites *(Table 4)* were identified with potential contamination concerns. After evaluation, one of those sites was assigned a risk rating of None, five sites were assigned a risk rating of Medium, and three sites were assigned a risk rating of High. All Medium- and High-Risk sites are recommended for additional assessment, including soil and groundwater testing, if right-
of-way acquisition or subsurface work (including construction of any structures or stormwater ponds) is proposed on or adjacent to them. Because of the database and field reviews as well as the planned additional assessment of Medium- and High-Risk sites, no substantial contamination impacts are anticipated.

4. Utilities and Railroads

Utility companies with known facilities within the proposed project limits were contacted via email informing them of the PD&E Study and requested that they mark one set of the base plans enclosed with their principal existing and proposed facilities. They were also requested to submit any general concerns and/or comments that would be useful in the evaluation process. See Table 5 for a list of utilities present within the project limits.

The majority of the existing/proposed overhead and buried utilities run along US 27 and Schofield Road. As a result of the construction of the preferred alternative, most utilities located within the major interchanges where reconstruction may occur (such as US 27 and SR 429/Schofield Road) will be impacted and will need to be relocated. The preferred alternative also encroaches onto the Duke Energy Transmission Lines/Poles that are located on the east of US 27. Due to this encroachment, there are approximately 36 transmission poles that are being impacted and may require relocation. There are also impacts to the AT&T Transmission buried cable conduit which runs along US 27 from South Bradshaw Road to approximately 0.5 mile south of Frank Jarrell Road. CFX will continue to coordinate the utility owners during Final Design and Construction.
<table>
<thead>
<tr>
<th>Site #</th>
<th>Facility Name</th>
<th>Address</th>
<th>Facility ID (FDEP/RCRA)</th>
<th>Databases</th>
<th>Concern</th>
<th>Owner</th>
<th>Contaminated Parcel Location Relative to Project Corridor</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lake Louisa State Park</td>
<td>7305 US 27</td>
<td>FLR000148049</td>
<td>RCRA</td>
<td>Hazardous Waste (small quantity generator)</td>
<td>State of Florida</td>
<td>Adjacent</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Arnold Groves Storage Tank</td>
<td>15625 Frank Jerrell Road</td>
<td>9100695</td>
<td>STCM</td>
<td>Petroleum</td>
<td>JJJR Properties LLC</td>
<td>560 feet south</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Sun Ridge Four MGMT Inc.</td>
<td>6535 Cook Road</td>
<td>9803085</td>
<td>STCM</td>
<td>Petroleum</td>
<td>Catherine E Ross Groves Inc</td>
<td>1,200 feet north</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Island Lake Storage Tank- Lake County Grove</td>
<td>Cook Road</td>
<td>9700467</td>
<td>STCM</td>
<td>Petroleum</td>
<td>Lake Louisa LLC</td>
<td>Co-located</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>Lake County Grove Storage Tank</td>
<td>732 Schofield Road</td>
<td>9201649</td>
<td>STCM</td>
<td>Petroleum</td>
<td>Davidson Harvest LLC et al</td>
<td>Co-located</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>Schofield Corporation of Orlando/545 Landfill</td>
<td>8050 Avalon Road</td>
<td>25291 / 9801128 / FLD984216531</td>
<td>FDEP Solid Waste / STCM / RCRA</td>
<td>Landfill</td>
<td>Schofield Corporation of Orlando Inc</td>
<td>Co-located</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>West Orange Environmental Resources C&amp;D</td>
<td>7706 Avalon Road</td>
<td>85524 / 25291</td>
<td>FDEP Solid Waste</td>
<td>Landfill</td>
<td>Oce West Orange LLC</td>
<td>Co-located</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>Braun Properties</td>
<td>8815 Avalon Road</td>
<td>FLD984216531</td>
<td>RCRA</td>
<td>Farm Chemicals</td>
<td>Undetermined</td>
<td>Co-located</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Former Agricultural Areas</td>
<td>Throughout Project Area</td>
<td>None</td>
<td>None</td>
<td>Farm Chemicals</td>
<td>Multiple</td>
<td>Co-located</td>
<td>Medium</td>
</tr>
</tbody>
</table>
### Table 5 Existing Utilities

<table>
<thead>
<tr>
<th>Utility</th>
<th>Utility Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T Corp/PEA</td>
<td>Telephone</td>
</tr>
<tr>
<td>AT&amp;T Florida</td>
<td>Telephone</td>
</tr>
<tr>
<td>Centurylink</td>
<td>Telephone</td>
</tr>
<tr>
<td>Centurylink</td>
<td>Telephone</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>Electric</td>
</tr>
<tr>
<td>Duke Energy</td>
<td>Electric</td>
</tr>
<tr>
<td>Lake Utilities Services, Inc.</td>
<td>Water</td>
</tr>
<tr>
<td>Level 3 Communications, LLC</td>
<td>Fiber Optic</td>
</tr>
<tr>
<td>Orange County Utilities</td>
<td>Water</td>
</tr>
<tr>
<td>Orlando Telephone Company, Inc.</td>
<td>Fiber and Telephone</td>
</tr>
<tr>
<td>Smart City Solutions</td>
<td></td>
</tr>
<tr>
<td>Bright House Networks Charter</td>
<td>Internet, Cable TV, Telephone</td>
</tr>
<tr>
<td>Sumter Electric Cooperative</td>
<td>Electric</td>
</tr>
<tr>
<td>Verizon Business</td>
<td>Telephone</td>
</tr>
<tr>
<td>Water Conserv II</td>
<td>Water</td>
</tr>
</tbody>
</table>

### 5. Construction

Construction activities for the proposed project will have short-term air, noise, vibration, water quality, traffic flow, and visual impacts for those residents and travelers within the immediate vicinity of the project. The air quality effect will be temporary and will primarily be in the form of emissions from diesel-powered construction equipment and dust from embankment and haul road areas. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials in accordance with the FDOT’s latest edition of *Standard Specifications for Road and Bridge Construction*.

During construction of the project, there is the potential for noise impacts to be substantially greater than those resulting from normal traffic operations because heavy equipment is typically used to build roadways. In addition, construction activities may result in vibration impacts. Therefore, early identification of potential noise/vibration-
sensitive sites along the project corridor is important in minimizing noise and vibration impacts. The project corridor does include residential, institutional, and commercial areas that may be affected by noise and vibration associated with construction activities. Construction noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the latest edition of the FDOT’s *Standard Specifications for Road and Bridge Construction*. Adherence to local construction noise and/or construction vibration ordinances by the contractor will also be required, where applicable.

Water quality effects resulting from erosion and sedimentation will be controlled in accordance with the FDOT’s latest edition of *Standard Specifications for Road and Bridge Construction* and through the use of Best Management Practices (BMPs). Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of access to local businesses and other pertinent information to the traveling public. All provisions of the FDOT’s latest edition of *Standard Specifications for Road and Bridge Construction* will be followed, so *no substantial* impacts from construction are anticipated as a result of the proposed project.

6. Bicycles and Pedestrians

Lake / Orange County Connector is proposed as a limited access facility; therefore, no bicycle nor pedestrian facility will be provided along the Lake / Orange County Connector. The proposed project will have no impacts on any existing bicycle or pedestrian facility. For these reasons, *no substantial* impacts to bicycles and pedestrians are anticipated as a result of the proposed project.

7. Navigation

There are no navigable waterways within the project corridor. As a result, the project is expected to have *no involvement* with navigation.
ADVANCE NOTIFICATION SUMMARY REPORT

Lake / Orange County Connector (US 27 to SR 429)
Feasibility / Project Development and Environment Study
Lake and Orange Counties, Florida

CFX Project Number: 599-225

SEPTEMBER 2018
An Advance Notification Package was prepared by the Central Florida Expressway Authority (CFX) as part of the Lake /Orange County Connector Feasibility / Project Development and Environment (PD&E) study. The Florida State Clearinghouse received the Advance Notification on June 20, 2018 and distributed it to the appropriate state agencies for review. The State Application Identifier (SAI) number assigned to this project by the Florida State Clearinghouse is FL201806228337. The Advance Notification was also distributed to appropriate non-state agencies and tribal nations. A copy of the Advance Notification Package is provided as Appendix A and contains a transmittal list of all recipients.

Comments to the Advance Notification were received from the National Forest Service, National Resources Conservation Service, Seminole Tribe of Florida, State Historic Preservation Officer, Federal Aviation Administration, and the U.S. Environmental Protection Agency. The complete comments to the Advance Notification are provided in Appendix B. Below is a summary of comments along with responses and contact information for the reviewing agency.

**Commenting Agency: National Forest Service**

John McKechnie  
Forest Engineer  
Forest Service  
National Forests in Florida  
325 John Knox Rd  
Tallahassee, FL 32303  
Office: 850-523-8522  
Mobile: 850-274-0470  
Fax: 850-523-8505  
Email: jmckechnie@fs.fed.us

**Comment Summary:**  
The National Forests in Florida has no comments. The proposed study does not affect any US Forest Service holdings.

**Response:**  
Thank you for your review and response.

**Commenting Agency: National Resources Conservation Service**

LeRoy Crockett  
Resource Soil Scientist  
Perry Paige Bldg. Suite 305N  
1740 S MLK Blvd  
Tallahassee, FL 32307  
Office: 850-412-7809  
Mobile: 352-262-0192
**Comment Summary:**
If you need a Farmland Protection Evaluation for this project please send request form and .shp files.

**Response:**
We anticipate the need for a Farmland Protection Evaluation and will coordinate with NRCS once project alternatives and .shp files are available.

**Commenting Agency: Seminole Tribe of Florida**
Victoria L. Menchaca, MA, Compliance Review Specialist
STOF-THPO, Compliance Review Section
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Office: 863-983-6549 ext. 12216
Email: victoriamenchaca@semtribe.com

**Comment Summary:**
The proposed undertaking does fall within in the STOF [Seminole Tribe of Florida] Area of Interest. We have reviewed the documents provided and would like to provide the following feedback. We would respectfully like to request that once specific alternative corridors are chosen that a Cultural Resources Assessment Survey be conducted and sent to us so that we may complete our review.

**Response:**
A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project and will be made available to the public for review and comment.

**Commenting Agency: State Historic Preservation Officer**
Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
and State Historic Preservation Officer
and
Ginny Jones
Transportation Compliance & Review Architectural Historian
500 South Bronough Street
Tallahassee, FL 32399
Office: 800-847-7278 (Main)
Office: 850-245-6333 (Direct)
Email: ginny.jones@dos.myflorida.com

**Comment Summary:**
Based on the nature of the project (new roadway) and the environmental conditions in the project area, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, *Florida Administrative Code,*
and should be forwarded to FHWA and our office upon completion. The report will help us complete the Section 106 review process and provide concurrence on federal findings of effect, and recommend any necessary avoidance or mitigation measures.

Response:
A Cultural Resources Assessment Survey is being prepared as part of the Section 106 review process for this project.

Commenting Agency: Federal Aviation Administration
   Bart Vernace, P.E.
   Manager
   FAA/Orlando Airports District Office
   8427 SouthPark Circle, Suite 524
   Orlando, FL 32819
   Office: 407-487-7220 (Main)
   Office: 407-487-7223 (Direct)
   Fax: (407) 487-7135
   Email: Bart.vernace@faa.gov

Comment Summary:
Please note that federal requirements that pertain to notifying the FAA of proposed construction and alteration on or nearby a public-use airport should be in accordance with FAR Part 77 Regulation. Any tall permanent structure or temporary equipment near an airport must conform to this regulation.

Response:
All tall, permanent structures or temporary equipment near any airports will conform with appropriate regulations, including FAR Part 77.

Commenting Agency: U.S. Environmental Protection Agency
   Roshanna White
   Life Scientist, NEPA Program Office
   U.S. Environmental Protection Agency, Region IV
   61 Forsyth Street SW
   Atlanta, GA 30303
   Office: 404-562-9035
   Email: white.roshanna@epa.gov

Comment Summary:
The eastern study area of the project lies partially within the Biscayne Aquifer boundaries (NEPAssist https://www.epa.gov/nepa/nepassist). The Biscayne Aquifer is a sole source aquifer and is considered a principal water source for South Florida residents, visitors, and businesses. The aquifer is highly permeable and vulnerable to contamination. The EPA recommends adherence to all federal, state, and local
government permits, ordinances, planning designs, construction codes, operation and maintenance requirements, and engineering for avoidance, minimization, and protection of the water source. Additionally, we recommend that avoidance and minimization of any identified jurisdictional waters of the U.S. be avoided during the development of alternatives to the extent practicable. During construction, please consider the vulnerability of the sole source aquifer and protect the drinking water delivered from this source. Also, follow all best management activities for erosion and sedimentation control. The project is a non-federal action. Therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. Please contact state and county environmental offices to address proper drainage and storm water design. If federal financial assistance does become a source of funding for this project, please contact Region 4, Ground Water and UIC Section, Mr. Khurram Rafi (rafi.khurram@epa.gov) or Larry Cole (cole.larry@epa.gov) for an aquifer impact determination letter.

Response:
Impacts to wetlands and jurisdictional waters of the US will be avoided and minimized as much as practicable. Minimization of impacts to the aquifer is also being considered during alternative development. Construction impacts will be minimized by implementing standard Best Management Practices for road construction.
Appendix A: Advance Notification
ADVANCE NOTIFICATION PACKAGE

Lake / Orange County Connector (US 27 to SR 429) Feasibility / Project Development and Environment Study Lake and Orange Counties, Florida

CFX Project Number: 599-225

June 2018
Table of Contents

LOCATION MAPS ............................................................................................................................. 1
FACT SHEET ..................................................................................................................................... 3
PROJECT PURPOSE AND NEED .................................................................................................... 4
  PURPOSE ........................................................................................................................................ 4
  NEED ........................................................................................................................................ 4
PROJECT DESCRIPTION ................................................................................................................ 8
PRELIMINARY ENVIRONMENTAL DISCUSSION ........................................................................... 8
  SOCIAL AND ECONOMIC ......................................................................................................... 8
  CULTURAL ................................................................................................................................... 10
  NATURAL ................................................................................................................................... 10
  PHYSICAL ................................................................................................................................... 12
ANTICIPATED PERMITS ............................................................................................................. 13
ANTICIPATED TECHNICAL STUDIES ........................................................................................... 13
TRANSMITTAL LIST ........................................................................................................................ 14

Figures

Figure 1: Regional Map ................................................................................................................... 1
Figure 2: Study Area Map ............................................................................................................... 2

Table

Table 1: Local Planning Consistency ............................................................................................... 7
LOCATION MAPS

See Figures 1 and 2 for maps of the region and study area.

Figure 1: Regional Map
Figure 2: Study Area Map
# FACT SHEET

**Project Name:** Lake / Orange County Connector  
**Project Limits:** The study area limits are generally described as: Porter Road on the north; SR 429 on the east; Old YMCA Road on the south; and US 27 on the west.  
**Counties:** Lake and Orange  
**Proposed Activity:** Assess the feasibility and viability of a Lake / Orange County connection as a toll road under the CFX Master Plan policy for new projects as a system expansion.  
**Responsible Agency:** Central Florida Expressway Authority (CFX)  
**Planning Organization:** CFX  
**Phase:** Programming Screen  
**Plan ID:** Not Available  
**Federal Involvement:** Applicable Federal Permits  
**Project Contact Information:**

<table>
<thead>
<tr>
<th><strong>Chief of Infrastructure</strong></th>
<th><strong>Consultant Project Manager</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph A. Berenis, P.E.</td>
<td>William Sloup, P.E.</td>
</tr>
<tr>
<td>Central Florida Expressway Authority</td>
<td>Metric Engineering</td>
</tr>
<tr>
<td>4974 ORL Tower Road</td>
<td>615 Crescent Executive Court, Suite 524</td>
</tr>
<tr>
<td>Orlando, FL 32807</td>
<td>Lake Mary, FL 32746</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:Joseph.Berenis@CFXway.com">Joseph.Berenis@CFXway.com</a></td>
<td>E-mail: <a href="mailto:William.Sloup@metriceng.com">William.Sloup@metriceng.com</a></td>
</tr>
</tbody>
</table>
PROJECT PURPOSE AND NEED
The purpose and need for a project provides the basis for developing, considering, evaluating, and eliminating alternatives while also shaping the alternatives and assisting with the identification of reasonable and feasible alternatives. The need aspect lays the foundation and basis of a proposed project while the purpose presents proposed solutions to the stated need.

PURPOSE
The primary objectives of this transportation improvement project are to expand regional system linkage and connectivity in Lake and Orange Counties; enhance mobility between SR 429 and US 27; and accommodate the expected increase in traffic due to population and employment growth within the study area, while being consistent with accepted local and regional plans. As such, the proposed improvements include the construction of a limited-access facility that provides a new east-west connection from SR 429 in west Orange County to US 27 in south Lake County.

NEED
There are six (6) project needs that serve as justification for the proposed improvements. These needs are: 1) Provide improved system connectivity / linkage; 2) Accommodate anticipated transportation demand; 3) Provide consistency with Local and Regional Plans; 4) Support economic viability and job creation; 5) Support intermodal opportunities; and 6) Enhance evacuation and emergency service. The following sections describe the needs in more detail.

System Connectivity / Linkage
System linkage is defined as linking two or more existing transportation facilities or types of modal facilities between geographic areas or regional traffic generators.

Figure 1 illustrates the existing roadway network within the vicinity of the proposed project. There are two major north-south facilities serving the project area, SR 429, a four-lane limited access rural toll road at the eastern project terminus and US 27, a four-lane divided rural arterial at the western project terminus. In the east-west direction, SR 50, a six-lane urban arterial facility located approximately 7 miles to the north, and US 192, a six-lane urban divided arterial located approximately 7 miles south, connect Lake County to the Orlando urban core. These existing east-west facilities not only serve through traffic but also provide significant local access thus limiting their ability to provide effective overall mobility.

At the present time, the east-west connectivity within the study area is deficient with Schofield Road, an unpaved 20-foot wide rural facility, providing the only connection between US 27 on the west and SR 429 on the east. A new limited-access, direct connection expressway facility would not only provide the much-needed connectivity in the area but would also significantly improve regional mobility and travel time.
A Preliminary Engineering Report (PER) was completed in 2016 for Wellness Way, a new four-lane divided arterial extending from US 27 and connecting to New Independence Parkway in the vicinity of SR 429. It should be noted that the 2007 SR 429 to US 27 Connector Concept Development and Evaluation Study prepared by the Central Florida Expressway Authority (CFX) (former Orlando-Orange County Expressway Authority (OOCEA)) stated that a network of east-west six-lane roadway arterials could also meet the capacity need of the study area. Wellness Way alone will not be sufficient to provide the necessary east-west linkage to meet the anticipated growth of the area as would a new limited-access, direct connection expressway facility.

Interchanges are proposed at US 27 in Lake County, SR 429 in Orange County, and the future extension of CR 455 in Lake County. Lake County’s Visionary Map shows a southerly extension of CR 455 from its current terminus to the future extension of Sawgrass Bay Blvd.

**Anticipated Transportation Demand**

According to the Central Florida Expressway Authority’s 2040 Master Plan, Lake County’s population is projected to increase by 56% (to 493,000 residents) and employment is projected to increase by 60% (to 212,700) by 2040. During the same time period, the population and employment growth within Orange County are expected to each increase by more than 50%. Two of the main areas of development generating additional population are the Wellness Way Area Plan (WWAP) in south Lake County and the Horizon West Special Planning Area (HWSPA) in southwestern Orange County. The WWAP includes more than 16,000 acres. Horizon West is a growing community of several villages occupying more than 20,000 acres and projected to house over 60,000 residents when completed. Horizon West also features the future site of a Valencia College satellite campus.

The January 2018 Bureau of Economic and Business Research (BEBR) population projections show from 2017 to 2045 a 54% growth in population is anticipated for both Lake and Orange counties.

The study area traverses all five of the WWAP Future Land Use Categories (FLUC); Town Center and Wellness Way 1, 2, 3 and 4. The planning horizon for the WWAP is projected to be 2040 with a build-out of 16,500 dwelling units and a projected employment of 36,000. CEMEX submitted an updated permit for the proposed Four Corners Sand Mine in August 2017. They propose to operate on 1,200 acres within the WWAP, on property divided by Schofield Road. The permit allows mining approximately 525 acres over a 22-year period.

The study area also falls within the Town Center and Village H (Hickory Nut) of Horizon West. The Town Center will be a regional employment center with a projected employment force of over 27,000 and home to a host of new developments including a satellite campus of Valencia College and Orlando Health Hospital. Overall, Horizon West has an anticipated build-out of 40,000 dwelling units and a projected commercial area of 9.5 million square feet.
An origin and destination (OD) study conducted by CDM Smith in 2017 for CFX revealed that much of the potential traffic for a new toll road would come from planned developments. Without a new facility in the year 2045, there is a potential for 34,000 daily trips traveling between US 27 and SR 429 in the vicinity of Schofield Road. With the proposed project as a tolled expressway, approximately 19,000 daily trips would be diverted from local roadways.

The proposed connector is anticipated to help accommodate the expected increase in traffic due to population and employment growth within the study area by expanding the limited access expressway system.

**Consistency with Local and Regional Plans**

Planning consistency of the proposed project is documented in various local comprehensive plans (see Table 1). A brief explanation of each follows.

**CFX 2040 Master Plan and Five-Year Work Plan:** The subject project is a major component of the Authority’s plan to provide additional capacity to address the area’s increasing projected population and employment growth. The Lake-Orange Connector would support the economic vitality of the WWAP and the HWSFA developments and is widely supported among local landowners and community leaders. The project is listed in the five-year work plan and funded for years 18/19 and 19/20 for Concept, Feasibility and Mobility Study. In 2007 OOCEA completed the SR 429 to US 27 Connector Concept Development and Evaluation Study which evaluated corridors for a new east-west limited access expressway in an area extending from SR 50 to the north to US 192 to the south. The study concluded that “if properties within and adjacent to the study area are developed in a manner consistent with the currently adopted comprehensive regional land use plans, there is a need for an additional east-west transportation facility in the study area.”

**Lake-Sumter MPO – 2040 LRTP:** The Lake-Sumter MPO provides a forum for cooperative decision making concerning transportation issues throughout the urbanized area of Lake and Sumter Counties. The latest draft list of priority projects (April 2018) shows that a new “east-west connection between US 27 in Lake County and SR 429 in Orange County” is listed as priority #20 under the Preliminary Engineering projects. In addition, the portion of the Lake/Orange Parkway project extending from US 27 to the Lake/Orange County line is included in the Lake-Sumter 2040 LRTP as a cost feasible element and as an Emerging Regional Significant Corridor.

**West Orange South Lake Transportation and Economic Development Task Force (WOSLTED):** This task force was initiated in 2000 with the goal of promoting transportation in the West Orange/South Lake (WOSL) region. In 2008, the task force started a planning process to ensure coordinated transportation and housing development which eventually resulted in a proposed system of new roadways and roadway improvements which included the provision of a proposed east-west connector from US 27 to SR 429. This connector has always been a main focus of this organization.
MetroPlan Orlando: MetroPlan Orlando is the metropolitan planning organization for the greater Orlando area. It coordinates and leads transportation planning efforts in Orange, Osceola, and Seminole counties. The subject project is listed on the 2040 LRTP Plan Development Cost Feasible projects (updated June 2017) as a fully funded project (including PD&E, Design, Right-of-Way and Construction by 2040).

### Table 1: Local Planning Consistency

<table>
<thead>
<tr>
<th>Agency</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Florida Expressway Authority (CFX)</td>
<td>Included in the 2040 Master Plan and the Five-Year Work Plan</td>
</tr>
<tr>
<td>Lake-Sumter MPO</td>
<td>Identified the proposed project in the 2040 LRTP Needs Plan</td>
</tr>
<tr>
<td>West Orange/South Lake Transportation and Economic Development Task Force</td>
<td>Identified a connection between US 27 to Orange County in its Transportation Plan</td>
</tr>
</tbody>
</table>

**Economic Viability and Job Creation**

The proposed facility is needed to further support the economic viability of the WWAP. This 16,000-acre service area has been recognized for many years as having significant potential for economic development in southeast Lake County. It is projected to be an economic engine for job creation in the region and is envisioned to strengthen its connectivity with other regional economic hubs. With an anticipated buildout of over 16,000 residential units, this important planned development is expected to generate over 26,800 jobs in the future.

The proposed connector will also directly benefit the economy and job creation potential of the Horizon West development by expediting the efficient delivery of goods and services in this developing area of West Orange County.

**Support Intermodal Opportunities**

The Horizon West Town Center is an intermodal and freight staging facility potentially providing access to trucks, rails, airports and/or ports. Its presence enhances the integration and connectivity of the multimodal transportation system. The proposed connector would link this freight staging facility with two major Strategic Intermodal System (SIS) highways (US 27 and SR 429) and thus connect Lake County via a network of limited-access facilities to the Orlando International Airport and Port Canaveral. In addition, the MetroPlan Orlando’s “Regional Freight and Goods Movement Facilities Profile” noted that there is “limited existing east-west highway
and rail connectivity within the region - which provides logistical challenges for some shippers”.

The proposed project will add a valuable east-west mobility link to the area’s transportation network.

**Evacuation and Emergency Services**

The East Central Florida Region has been identified by the National Oceanic and Atmospheric Administration (NOAA) as a high hurricane-vulnerable area within the United States and thus requires sufficient and efficient evacuation routes. There are no existing designated east-west evacuation routes within the immediate project area. Only SR 50, approximately 7 miles to the north, and US 192 (SR 530), approximately 7 miles to the south, provide effective east-west evacuation connection to important north-south SIS routes in the area (US 27 and SR 429). The provision of an additional high-speed, limited-access east-west facility will afford desirable redundancy of the highway network to accommodate diverted local and regional traffic during times of natural or man-made emergencies.

Another critical issue deals with potential delays of fire and emergency services. There are two fire stations just north and south of the study area along US 27 but their linkage to the east is ineffective due to the lack of a paved or limited-access facility connecting to SR 429, potentially resulting in additional delays. The proposed connector would facilitate prompt fire and emergency response.

**PROJECT DESCRIPTION**

This PD&E study will consider a new tolled connection between US 27 and SR 429 in the study area shown on Figure 1. The type, design, and location of any potential improvements will be developed and evaluated during the course of the PD&E study and are not known at this time. It is anticipated that a limited access east-west roadway with two lanes in each direction will be a considered build alternative. A no-build alternative will also be considered.

**PRELIMINARY ENVIRONMENTAL DISCUSSION**

A project study area (study area) for this Advance Notification was established and is shown on Figures 1 and 2. The study area limits are generally described as Porter Road on the north, SR 429 on the east, Old YMCA Road on the south, and US 27 on the west. The environment in the study area was analyzed using existing databases and GIS files as well as by using information provided by previous concept development and feasibility study reports.

**SOCIAL AND ECONOMIC**

**Land Use Changes**

Much of the study area is undeveloped or agricultural with scattered water bodies and wetlands and some limited residential areas. Existing development is predominantly along US 27 and SR 429. There are residential areas immediately south of the study area, near US 27 and SR 429, as well as to the east of SR 429, around Orange County National Golf Center and Lodge. Lake Louisa
State Park is located west of US 27 and provides recreational opportunities to the public. The Four Corners Sand Mine is a mining operation proposed within the study area. Multiple major residential developments are also planned within the study area and the surrounding region. A conservation parcel known as the Schofield Tract is located immediately north of Schofield Road, two miles west of SR 429, and was purchased using Florida Forever Funds. Lake Louisa State Park, west of SR 27, was also purchased using Florida Forever Funds.

**Social**
The 2010 Demographic Profile Data from the US Census Bureau shows the majority of the populations in Orange County (63.6 percent) and Lake County (82 percent) are identified as white. Major minority populations include African Americans, Asians, or “Multiple” and “Other” races. Demographics are similar in the study area, though the study area appears to contain proportionately fewer populations identified as “non-white” than does Orange County. There is limited potential for environmental justice concerns or impacts to underserved populations, community cohesion, or safety/emergency response due to the proposed project.

Community facilities and services in or adjacent to the study area include the Orange County National Golf Center and Lodge and Lake Louisa State Park. Lake Louisa is a navigable water body open to the public for recreational activity.

**Relocation Potential**
The proposed project would involve a new roadway corridor and, therefore, additional right-of-way will be required. Currently, the amount and location of required right-of-way is undetermined. The project study area has minimal residential land uses, accounting for less than 5 percent of the total study area.

**Farmlands**
Most of the study area contains soils classified as Farmlands of Unique Importance. Prime farmlands in the study area with associated St. Johns River Water Management District (SJRWMD) land use descriptions include improved and unimproved pastures, woodland pastures, field crops, tree crops, citrus groves, tree nurseries, and pine plantations. Due to the extent of agricultural lands in the study area, the potential exists for moderate impacts to Farmland Soils of Unique Importance.

**Aesthetic Effects**
Aesthetic impacts in and around developed portions of the study area, including Schofield Road, Five Mile Road, US 27, and SR 429, are anticipated to be minimal because roadways are already present. Other portions of the study area are predominantly in a natural or agricultural setting and may contain woodlands, pastures, crop fields, or wetlands. Greater potential exists for aesthetic impacts to occur in these undeveloped areas; however, those impacts are anticipated to be minimal as well. Future planned development, including the Four Corners Sand Mine, residential developments, and utility infrastructure, are anticipated to further impact the
undeveloped portions of the study area, so no significant aesthetic impacts are anticipated because of the proposed project.

**Economic**

Agricultural nurseries, a golf course, planned residential developments, Lake Louisa State Park, and other businesses are located within or adjacent to the study area. The Four Corners Sand Mine and additional residential developments are approved or planned within the study area. The proposed project is anticipated to provide economic enhancements by creating additional transportation infrastructure that links employment and residential areas.

**Mobility**

The project is anticipated to enhance regional mobility by providing an expressway option in the east-west direction linking US 27 and SR 429. This would accommodate additional anticipated development under the Wellness Way Area Plan in southern Lake County and the Horizon West Special Planning Area (including a future state college) in southwest Orange County.

**CULTURAL**

**Historic and Archaeological Sites**

A review of the Florida Master Site File and the corresponding GIS layers were used to determine the presence of any potentially significant historical or archeological resources in the region around the project. There are 20 previously recorded archaeological sites, and 16 previously recorded historic structures. Thirteen of these historic structures were no longer existing by 1945. Twenty of the remaining resources were found to be ineligible for listing in the National Register of Historic Places (NRHP).

**Recreation Areas**

Recreation areas within or adjacent to the project area include the Orange County National Golf Center and Lodge, the National Training Center, and the 4,500-acre Lake Louisa State Park. The Orange County National Golf Center and Lodge is a large golf facility, consisting of three separate golf courses and several smaller buildings for private events and instructional programs. The golf center is located along the eastern edge of the study area, east of SR 429. The National Training Center is a 300-acre sports, health, fitness, and education campus. It features a fitness center and aquatic center, track and field complex, cross-country course, multi-purpose athletic fields, and softball/baseball facility. The National Training Center is located approximately 7 miles north of the study area on SR 50.

**NATURAL**

**Wetlands**

Wetlands occur throughout the study area and include mixed wetland hardwoods, cypress, hydric pine flatwoods, freshwater marshes, wet prairies, emergent aquatic vegetation, and mixed scrub-shrub wetlands. The study area, particularly south and west of Schofield Road, contains many lakes and ponds that have freshwater marsh, emergent aquatic vegetation, or other wetlands along their margins. Wetlands also occur in association with Lake Louisa, west of US 27.
**Water Quality and Quantity**

The project occurs within the jurisdictions of both the South Florida Water Management District (SFWMD) and the SJRWMD. The study area overlies the Floridan Aquifer and contains multiple surface water bodies and lakes such as Trout Lake, Pike Lake, Adain Lake, Island Lake, and Lake Needham. According to the Florida Lake Watch Program, water quality status in Lake Louisa in the Ocklawaha River Watershed was ‘good’ as of July 2017. Previous impairments that resulted in failed water quality standards included dissolved oxygen. The project is in an aquifer recharge area and may contain sinkholes or recharge features.

**Floodplains**

Information regarding the location of floodplains was obtained using the Federal Emergency Management Agency’s Flood Insurance Rate Maps. Most of the study area is located within Floodzone X, which is outside the floodplain and considered moderate to low risk. Scattered regions designated as Floodzones A and AE are found throughout the project area are centered on wetlands or lakes. These floodzones are located within the 100-year floodplain and are considered high risk.

**Wildlife and Habitat**

Federally listed species with potential to occur in the study area include Audubon’s crested caracara (*Polyborus plancus audubonii*), Florida scrub-jay (*Aphelocoma coerulescens*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), sand skink (*Neoseps reynoldsii*), bluetail mole skink (*Eumeces egregius lividus*), eastern indigo snake (*Drymarchon corais couperi*), striped newt (*Notophthalmus perstriatus*, candidate for listing), Britton’s beargrass (*Nolina brittoniana*), Florida bonamia (*Bonamia grandiflora*), Florida blazing star (*Liatris ohlingerae*), scrub lupine (*Lupinus aridorum*), papery whitlow-wort (*Paronychia chartacea ssp. chartacea*), pygmy fringe tree (*Chiananthus pygmaeus*), Lewton’s polygala (*Polygala lewtonii*), scrub pigeon-wing (*Clitoria fragrans*), scrub plum (*Prunus geniculate*), short-leaved rosemary (*Conradina brevifolia*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Clasping warea (*Warea amplexifolia*), Carter’s warea (*Warea carteri*), and scrub wild buckwheat (*Eriogonum longifolium var. gnaphalifolium*). The project occurs on the northern limits of the US Fish and Wildlife Service consultation area for Audubon’s crested caracara. Carter’s warea is known to occur on the Schofield Tract, which was purchased using Florida Forever Funds and is intended to protect rare habitats.

State listed species that may occur in the study area include Florida burrowing owl (*Athene cunicularia floridana*), Florida pine snake (*Pituophis melanoleucus mugitus*), Florida mouse (*Podomys floridanus*), Florida sandhill crane (*Grus Canadensis pratensis*), gopher tortoise (*Gopherus Polyphemus*, candidate for Federal listing), gopher frog (*Lithobates capito*), little blue heron (*Egretta caerulea*) short-tailed snake (*Lampropeltis extenuata*), Sherman’s fox squirrel (*Sciurus niger shermani*), southeastern American kestrel (*Falco sparverius paulus*), and tricolored heron (*Egretta tricolor*). Bald eagles (*Haliaeetus leucocephalus*) are protected by the Bald and Golden Eagle Protection Act and may also occur in the study area. During a 2007 conceptual...
study, over 2,000 gopher tortoise burrows were identified within a portion of study area. There is high potential for gopher tortoise (and associated species which utilize burrows) to be located within the project impact area. A thorough survey will be required to identify burrows, develop a relocation plan, and obtain necessary relocation permits.

The highest quality wildlife habitat in the study area is associated with undeveloped areas, wetlands, and protected lands like the Schofield Tract. Smaller patches of wildlife habitat occur throughout the study area but are generally fragmented and surrounded by agricultural uses. Lake Louisa State Park contains high-quality wildlife habitat and is linked to other habitats to the southwest. The area southwest of Lake Louisa is known collectively as the Green Swamp and is important for wildlife and water quality.

Coastal and Marine
No coastal or marine resources occur within the study area and the project is not subject to Coastal Zone Consistency Review.

PHYSICAL

Noise
Residential and recreational areas within the study area are potentially sensitive to noise impacts and include lands mapped as Residential Low Density (FLUCCS 1100), Golf Courses (FLUCCS 1820), and Community Recreational Facilities/Parks (FLUCCS 1850). Most of these facilities are located near US 27 or SR 429 and likely experience existing roadway noise.

Air Quality
The study area is not located within any US Environmental Protection Agency (USEPA) Air Quality Maintenance Area or Non-Attainment Area. Therefore, the Clean Air Act Conformity requirements do not apply to this project at this time. Temporary impacts to air quality are anticipated during construction as a result of fugitive dust and exhaust emissions, but no permanent impacts to air quality are anticipated.

Contamination
Within the study area there are at least 14 storage tank contamination monitoring sites, three petroleum contamination monitoring sites, and three USEPA Resource Conservation and Recovery Act (RCRA) regulated facilities. The Florida Department of Environmental Protection (FDEP) Contamination Locator Map identifies one active petroleum cleanup site within the study area. Due to the presence of these facilities and the potential presence of unknown contamination risks, moderate involvement regarding contamination is anticipated.

Infrastructure
The study area contains at least two limited-use drinking water wells, four solid waste facilities, two wastewater facilities, 14 onsite sewage facilities, and 32 USEPA water quality data monitoring stations. The study area includes existing and proposed infrastructure for a City of Orlando-Orange County water conservation program called Water Conserv II.
**Navigation**

Lake Louisa is the only navigable waterway proximate to the study area. The project is not anticipated to directly impact Lake Louisa and no potential impacts to navigation are anticipated as a result of the proposed project.

**Special Designations**

Outstanding Florida Waters—Lake Louisa is the largest of the Clermont chain of lakes and is designated an Outstanding Florida Water (OFW).

Aquatic Preserves—There are no aquatic preserves in or around the study area, so no impacts from the proposed project are anticipated.

Scenic Highways—There are no scenic highways in or around the study area, so no impacts from the proposed project are anticipated.

Wild and Scenic Rivers—There are no Wild and Scenic Rivers in the study area, so no impacts from the proposed project are anticipated.

**ANTICIPATED PERMITS**

The proposed project has the potential to impact wetlands, which would necessitate a SJRWMD and SFWMD or FDEP Environmental Resource Permit as well as a Section 404 permit from the US Army Corps of Engineers. Coordination with FDEP for permitting jurisdiction may be necessary. A dewatering permit from the SJRWMD and SFWMD may also be necessary and a National Pollutant Discharge Elimination System (NPDES) permit from FDEP is anticipated. Federal Consistency Reviews will be conducted during the permit phase, as applicable. Mitigation is anticipated for unavoidable impacts to wetlands and wood stork suitable foraging habitat. Permitting for impacts to gopher tortoise through the Florida Fish and Wildlife Conservation Commission (FWC) is also anticipated.

**ANTICIPATED TECHNICAL STUDIES**

A Natural Resources Evaluation Report, a Cultural Resource Assessment Survey, a Noise Study Report, and a Contamination Screening Evaluation Report are anticipated and will be summarized in a Project Environmental Impact Report.
The AN will be distributed throughout the State of Florida system by the Florida State Clearinghouse, an office within the Florida Department of Environmental Protection that acts as the state’s single point of contact for review of transportation projects. Accordingly, the transmittal list below includes the Florida State Clearinghouse as the only state entity to receive this AN.

<table>
<thead>
<tr>
<th>Name</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris Stahl, Florida State Clearinghouse</td>
<td>Florida Department of Environmental Protection</td>
</tr>
<tr>
<td>Bart Vernace</td>
<td>Federal Aviation Administration</td>
</tr>
<tr>
<td>Richelle Gosman</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>Stan Mitchell</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>Andrew Kizlauskas</td>
<td>US Army Corps of Engineers</td>
</tr>
<tr>
<td>Lisa Lovvorn</td>
<td>US Army Corps of Engineers</td>
</tr>
<tr>
<td>Randy Turner</td>
<td>US Army Corps of Engineers</td>
</tr>
<tr>
<td>Randall Overton</td>
<td>US Coast Guard</td>
</tr>
<tr>
<td>Kim Gates</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>Ntale Kajumba</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>Alya Singh-White</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>Amanetta Somerville</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>Roshanna White</td>
<td>US Environmental Protection Agency</td>
</tr>
<tr>
<td>Zakia Williams</td>
<td>US Fish and Wildlife Service</td>
</tr>
<tr>
<td>John Mckenchnie</td>
<td>US Forest Service</td>
</tr>
<tr>
<td>Steven Schnetzler</td>
<td>US Forest Service</td>
</tr>
<tr>
<td>Jennifer Schull</td>
<td>National Marine Fisheries Service</td>
</tr>
<tr>
<td>Leroy Crockett</td>
<td>National Resources Conservation Service</td>
</tr>
<tr>
<td>Gary Huttmann</td>
<td>MetroPlan Orlando</td>
</tr>
<tr>
<td>Keith Caskey</td>
<td>MetroPlan Orlando</td>
</tr>
<tr>
<td>Nick Lepp</td>
<td>MetroPlan Orlando</td>
</tr>
<tr>
<td>Mike Woods</td>
<td>Lake Sumter MPO</td>
</tr>
<tr>
<td>George Gadiel</td>
<td>Lake County</td>
</tr>
<tr>
<td>Seth Lynch</td>
<td>Lake County</td>
</tr>
<tr>
<td>Maria Cahill</td>
<td>Orange County</td>
</tr>
<tr>
<td>Renzo Nastasi</td>
<td>Orange County</td>
</tr>
<tr>
<td>Alberto Vargas</td>
<td>Orange County</td>
</tr>
<tr>
<td>Annette Burkett</td>
<td>SFWMD</td>
</tr>
<tr>
<td>Mindy Parrott</td>
<td>SFWMD</td>
</tr>
<tr>
<td>Ken Lewis</td>
<td>SJRWMD</td>
</tr>
<tr>
<td>Lee Kissick</td>
<td>SJRWMD</td>
</tr>
<tr>
<td>Mark von Canal</td>
<td>SJRWMD</td>
</tr>
<tr>
<td>Name</td>
<td>Agency</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Barbara Hatchitt</td>
<td>SJRWMD</td>
</tr>
<tr>
<td>Mr. Billie Cyprus</td>
<td>Miccosuhee Tribe of Indians of Florida</td>
</tr>
<tr>
<td>Mr. Fred Dayhoff</td>
<td>Miccosuhee Tribe of Indians of Florida</td>
</tr>
<tr>
<td>Mr. James Floyd</td>
<td>Muscogee (Creek) Nation</td>
</tr>
<tr>
<td>Historic and Cultural Preservation Department</td>
<td>Muscogee (Creek) Nation</td>
</tr>
<tr>
<td>Stephanie A. Bryan</td>
<td>Poarch Band of Creek Indians</td>
</tr>
<tr>
<td>Carolyn White</td>
<td>Poarch Band of Creek Indians</td>
</tr>
<tr>
<td>Victoria Menchaca</td>
<td>Seminole Tribe of Florida</td>
</tr>
<tr>
<td>Paul N. Backhouse, Ph.D.</td>
<td>Seminole Tribe of Florida</td>
</tr>
<tr>
<td>Alison Swing</td>
<td>Seminole Tribe of Florida</td>
</tr>
<tr>
<td>Marcellus Osceola</td>
<td>Seminole Tribe of Florida</td>
</tr>
<tr>
<td>Mr. Leonard M. Harjo</td>
<td>Seminole Nation of Oklahoma</td>
</tr>
<tr>
<td>Jason Watts</td>
<td>FDOT Native American Coordinator</td>
</tr>
</tbody>
</table>
Dear Mr. Sloup:

The eastern study area of the project lies partially within the Biscayne Aquifer boundaries (NEPAssist https://www.epa.gov/nepa/nepassist). The Biscayne Aquifer is a sole source aquifer and is considered a principal water source for South Florida residents, visitors, and businesses. The aquifer is highly permeable and vulnerable to contamination. The EPA recommends adherence to all federal, state, and local government permits, ordinances, planning designs, construction codes, operation and maintenance requirements, and engineering for avoidance, minimization, and protection of the water source. Additionally, we recommend that avoidance and minimization of any identified jurisdictional waters of the U.S. be avoided during the development of alternatives to the extent practicable. During construction, please consider the vulnerability of the sole source aquifer and protect the drinking water delivered from this source. Also, follow all best management activities for erosion and sedimentation control.

The project is a non-federal action. Therefore, concurrence from the EPA is not required according to the Safe Drinking Water Act. Please contact state and county environmental offices to address proper drainage and storm water design. If federal financial assistance does become a source of funding for this project, please contact Region 4, Ground Water and UIC Section, Mr. Khurram Rafi (rafi.khurram@epa.gov) or Larry Cole (cole.larry@epa.gov) for an aquifer impact determination letter.

Sincerely,

Roshanna White │ Life Scientist │ NEPA Program Office
U.S. Environmental Protection Agency │ Region IV
61 Forsyth Street SW │ Atlanta, GA 30303
Voice: 404-562-9035 │ Email: white.roshanna@epa.gov
Seminole Tribe of Florida

From: Victoria Menchaca <VictoriaMenchaca@semtribe.com>
Sent: Friday, July 20, 2018 3:08 PM
To: William Sloup <william.sloup@metriceng.com>
Subject: Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27-SR429

July 20, 2018

William Sloup, P.E.
Metric Engineering
615 Crescent Executive Court, Ste 524
Lake Mary, FL 32746
Phone: 407-644-1898 x1114
Email: William.Sloup@metriceng.com

Subject: Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27-SR429
THPO #: 0031014

Dear Mr. Sloup,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) regarding the Central FL Expressway Authority Advance Notification Lake/Orange County Connector US27-SR429. The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents provided and would like to provide the following feedback. We would respectfully like to request that once specific alternative corridors are chosen that a Cultural Resources Assessment Survey be conducted and sent to us so that we may complete our review.

Thank you and feel free to contact us with any further questions.

Respectfully,
From: Crockett, Leroy - NRCS, Quincy, FL <Leroy.Crockett@fl.usda.gov>
Sent: Thursday, July 19, 2018 12:55 PM
To: William Sloup <william.sloup@metriceng.com>
Subject: RE: AN Package - Feasibility/Project Development & Environment Study for the Lake/Orange County Connector (US 27 to SR 429)

Just going through emails and following up.
If you need a Farmland Protection Evaluation for this project please send request form and shp files.

Sincerely

LeRoy Crockett
Resource Soil Scientist

Perry Paige Bld suite 305N
1740 S MLK Blvd
Tallahassee, FL 32307
Of: (850) 412-7809
Mb: (352) 262-0192

Watch the “Mighty Mini Microbe” trailer.
Mr. Sloup,

The National Forests in Florida has no comments. The proposed study does not affect any US Forest Service holdings.

Thank you

John McKechnie
Forest Engineer
Forest Service
National Forests In Florida
p: 850-523-8522
c: 850-274-0470
f: 850-523-8505
jmckechnie@fs.fed.us
325 John Knox Rd
Tallahassee, FL 32303
www.fs.fed.us
Caring for the land and serving people
Mr. Sloup:

Please note that federal requirements that pertain to notifying the FAA of proposed construction and alteration on or nearby a public-use airport should be in accordance with FAR Part 77 Regulation. Any tall permanent structure or temporary equipment near an airport must conform to this regulation.

Here are the instructions for submitting a FAA 7460-1 form, Notice of Proposed Construction or Alteration (Off-Airport) via OE/AAA:

A 7460-1, Notice of Proposed Construction or Alteration can be submitted to FAA by utilizing the link below to access our Obstruction Evaluation Airport Airspace Analysis (OE/AAA) program.
https://oeaaa.faa.gov/oeaaa/external/portal.jsp

You may use the "Notice Criteria Tool" to see if you are required to submit a 7460-1, Notice of Proposed Construction or Alteration to FAA. The "Notice Criteria Tool" is located on the left hand side of our main web page, but is also accessible by clicking the following link:

If you need to submit a 7460, you will have to register online and log in to the web based tool. Once on the main portal page, enter your contact information and then select "off airport proposal" option. Fill in the blanks and submit to FAA for review and approval.
Here is the “New User Registration” link:
https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

For any other information pertaining to off-airport airspace evaluations, please contact Mike Blaich, FAA Southern Region Off-Airport Airspace Specialist at 404-305-7081.

Bart Vernace, P.E.
Manager
FAA/Orlando Airports District Office
8427 SouthPark Circle, Suite 524
Orlando, FL 32819
(407) 487-7220 (Main), (407) 487-7223 (Direct)
(407) 487-7135 (FAX)
Bart.vernace@faa.gov
RE: DHR Project File No.: 2018-3297/Received by DHR: June 22, 2018
    Project: FHWA grant: Lake/Orange County Connector Study (US 27 to SR 429) Feasibility Study
    SAI#: FL201806228337
    Counties: Orange, Lake

Dear Mr. Stahl:

Our office reviewed the referenced project in accordance with Chapters 267.061 and 373.414, Florida Statutes, and implementing state regulations, for possible effects on historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), or otherwise of historical, architectural or archaeological value. This letter does not constitute a review under Section 106 of the National Historic Preservation Act.

The Central Florida Expressway Authority has been granted funds from the Federal Highway Administration (FHWA) to study a new Lake/Orange County Connector. Based on the nature of the project (new roadway) and the environmental conditions in the project area, we request that the project area be subjected to a professional cultural resources assessment survey. The resultant survey report should conform to the provisions of Chapter 1A-46, Florida Administrative Code, and should be forwarded to FHWA and our office upon completion. The report will help us complete the Section 106 review process and provide concurrence on federal findings of effect, and recommend any necessary avoidance or mitigation measures.

The Division of Historical Resources cannot endorse specific archaeological or historic preservation consultants. However, the American Cultural Resources Association maintains a listing of professional consultants at www.acra-crm.org, and the Register of Professional Archaeologists maintains a membership directory at www.rpanet.org. The Division encourages checking references and recent work history.
If you have any questions, please contact Ginny Jones, Transportation Compliance & Review Architectural Historian, by email ginny.jones@dos.myflorida.com, or by telephone at 850.245.6333 or 800.847.7278.

Sincerely,

Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
and State Historic Preservation Officer
June 4, 2019

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Dr. Adrianne Daggett, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Feasibility/Project Development and Environment (PD&E) Study
Lake/Orange County Connector Roadway and Ponds
Lake and Orange Counties, Florida

Dear Dr. Parsons,

Enclosed please find one copy of the report titled Cultural Resource Assessment Survey for the CFX Lake/Orange County Connector (US 27 to State Road 429) Feasibility/Project Development and Environment (PD&E) Study, Lake and Orange Counties, Florida. The Central Florida Expressway Authority (CFX) is assessing the feasibility and viability of a new toll road, termed the Lake/Orange County Connector, between State Road (SR) 429 and US 27, a distance of approximately 4.4 miles (7.1 kilometers) in Lake and Orange Counties, Florida. This report presents the findings of a Phase I CRAS conducted in support of the proposed toll road and associated ponds.

The project Area of Potential Effects (APE) for the roadway was defined to include the existing and proposed rights-of-way of SR 429 and US 27. For the new roadway, the APE was extended 100 meters (330 feet) from the construction footprint. For the portions of the project located along existing roads, the APE was extended to the back or side property lines of parcels adjacent to proposed new right-of-way, or a distance of no more than 100 meters (330 feet) from the maximum right-of-way line. The APE defined for the ponds includes the proposed pond footprints with the addition of a 30.5-meter (100-foot) buffer. The archaeological survey was conducted within the existing and proposed rights-of-way, plus the pond footprints. The architectural history survey was conducted within the entire APE.

This CRAS was conducted in accordance with the requirements set forth in the National Historic Preservation Act of 1966, as amended, and Chapter 267, Florida Statutes (F.S.). The investigations were carried out in conformity with Part 2, Chapter 8 (Archaeological and Historical Resources) of FDOT’s Project Development and Environment (PD&E) Manual, FDOT’s Cultural Resources Manual, and the standards contained in the Florida Division of Historical Resources (FDHR) Cultural Resource Management Standards and Operations Manual (FDHR 2003). In addition, this survey meets the specifications set forth in Chapter 1A-46, Florida Administrative Code.
Based on the results of this CRAS, it is the opinion of CFX that the proposed undertaking will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact William Sloup, PE., Project Manager, by email: William.Sloup@meirceng.com or by phone: 407-644-1898.

Sincerely,

[Signature]

Mr. Joseph A. Berenis, P.E.
Chief of Infrastructure
Central Florida Expressway Authority

Enclosure

The Florida State Historic Preservation Officer:

✓ finds the attached report complete and sufficient and ___ concurs/____ does not concur with the findings and recommendations contained in this cover letter and the enclosed report.

____ does not find the attached report complete and sufficient and requires additional information in order to provide an opinion on the potential effects of the proposed project on historic resources.

[Signature]
For: Timothy A. Parsons, Ph.D.
Director, Division of Historical Resources
& State Historic Preservation Officer

Date

2018-3297B
DHR No.

Please be sure to reference Chapter 872 of the Florida statutes, as it pertains to unexpected discoveries and procedures for handling human remains, in the CRAS report at all times.
June 19, 2019

Mr. Glenn Pressimone  
Director of Engineering  
Central Florida Expressway Authority (CFX)  
4974 ORL Tower Road  
Orlando, FL 32807  
Glenn.Pressimone@CFXway.com

Re: Lake-Orange Connector, Lake and Orange Counties, Natural Resources Evaluation Report, File Number 599-225

Dear Mr. Pressimone:

The Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the Natural Resources Evaluation Report (NRE) for the above-referenced project. The NRE was prepared as part of the Project Development and Environment Study for the proposed project. We provide the following comments and recommendations for your consideration in accordance with Chapter 379, Florida Statutes (F.S.), and Rule 68A-27, Florida Administrative Code (F.A.C.).

**Project Description**

The Lake-Orange Connector would be a new, divided four-lane toll road extending from US 27 east of Lake Louisa State Park in Lake County to SR 429 near Schofield Road in Orange County, a distance of approximately five miles. The typical section would have a 330-foot-wide right-of-way (ROW), allowing for future widening to the inside. Four stormwater management facilities located outside the ROW are currently proposed for this project. It is anticipated that the preferred alternative would result in 64 acres of wetland impacts, 71 acres of lake and pond impacts, and 332 acres of impacts to vegetated uplands. The wetlands are primarily freshwater marshes with small areas of forested wetlands, scrub-shrub wetlands, and hydric pine flatwoods. Uplands are dominated by improved pastures, citrus, and pine plantation with small areas of xeric oak, upland hardwood forest, and nonforested herbaceous upland.

**Potentially Affected Resources**

The NRE evaluated potential project impacts to 16 wildlife species classified under the Endangered Species Act as Federally Endangered (FE) or Threatened (FT), or by the State of Florida as Threatened (ST). Listed species were evaluated based on range and potential appropriate habitat or because the project is within a U.S. Fish and Wildlife Service (USFWS) Consultation Area. Included were: eastern indigo snake (*Drymarchon corais couperi*, FT), bluetail mole skink (*Eumeces egregius lividus*, FT), sand skink (*Neospeps reynoldsi*, FT), American alligator (*Alligator mississippiensis*, FT due to similarity of appearance to American crocodile), Audubon’s crested caracara (*Polyborus plancus auduboni*, FT), Everglade snail kite (*Rostrhamus sociabilis plumbeus*, FE), Florida scrub-jay (*Aphelocoma coerulescens*, FT), red-cockaded woodpecker (*Picoides
borealis, FE), wood stork (Mycteria americana, FT), gopher tortoise (Gopherus polyphemus, ST), Florida pine snake (Pituophis melanoleucus mugitus, ST), Florida burrowing owl (Athene cunicularia floridana, ST), Florida sandhill crane (Antigone canadensis pratensis, ST), southeastern American kestrel (Falco sparverius paulus, ST), little blue heron (Egretta caerulea, ST), and tricolored heron (Egretta tricolor, ST). Also evaluated were: the bald eagle (Haliaeetus leucocephalus), which was delisted by state and federal agencies, but remains protected under state rule in Section 68A-16.002, F.A.C., and by the federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d); the striped newt (Notophthalmus perstriatus), which is a federal candidate listed species; and the eastern diamondback rattlesnake (Crotalus adamanteus), which is petitioned for federal listing.

Comments and Recommendations

Due to the lack of both appropriate habitat and observation during on-site surveys, project biologists made a finding of “no effect” for the Florida scrub-jay and red-cockaded woodpecker. For the other federally listed, candidate, and petitioned species, the biologist’s findings were “may affect but is not likely to adversely affect”. The state-listed species were given a “no adverse effect anticipated” determination. With adherence to the project commitments as well as our additional recommendations, we agree with these determinations.

We support the project commitments for protected species, which include the following:

1. Impacts to suitable foraging habitat for the federally protected wood stork will be mitigated through the purchase of credits from a USFWS-approved mitigation bank in accordance with the USFWS Wood Stork Effect Determination Key (U.S. Army Corps of Engineers and USFWS 2008).

2. The Standard Protection Measures for the Eastern Indigo Snake will be followed during construction.

3. Gopher tortoises and occupied burrows were identified in and around the project corridor during field surveys in 2019. A comprehensive, 100 percent survey will be conducted prior to construction, and any discovered tortoises will be relocated per current FWC guidelines. For gopher tortoise survey methodology and permitting guidance, we recommend that Florida Department of Transportation refer to the FWC’s Gopher Tortoise Permitting Guidelines (Revised January 2017) at (http://www.myfwc.com/license/wildlife/gopher-tortoise-permits/).

4. Wetland impacts resulting from construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 33 U.S.C. §1344. Compensatory mitigation for this project will be completed using mitigation banks and any other mitigation options that satisfy state and federal requirements.
We recommend that the additional following measures be included in the project commitments:

1. Burrowing owls have been observed on the CEMEX mine site near the Lake-Orange Connector project site and FWC staff recommends the applicant survey areas of suitable habitat onsite prior to any clearing or construction to determine if burrowing owl burrows occur onsite. If burrowing owls are onsite, we recommend the following to reduce potential adverse effects:
   - Conducting activities greater than ten feet from a burrowing owl burrow year-round to reduce the likelihood of collapsing a burrow,
   - Conducting activities greater than 33 feet from a burrowing owl burrow during the nesting season (typically February 15 - July 10, though nesting may start earlier) to reduce the likelihood of disturbing nesting pairs, and
   - Staking and roping off the area around the burrow prior to activities.

2. Freshwater marshes within the project corridor may provide potential nesting habitat for the Florida sandhill crane. FWC staff recommends that nesting surveys for Florida sandhill cranes be conducted prior to construction activities and during the December through August breeding season. FWC staff notes that Florida sandhill cranes do not nest in the same location every year, so if construction occurs over several years, it may be necessary to determine if nesting is occurring each year. If there is evidence of nesting, we recommend that the nest site be buffered by 400 feet to avoid disturbance by human activities. If nesting is discovered after construction has begun or if maintaining the recommended buffer is not possible, we recommend that the applicant contact FWC staff identified below to discuss potential permitting needs. Additional information and guidance for conducting Florida sandhill crane surveys can be found in the Florida Sandhill Crane Species Conservation Measures and Permitting Guidelines (https://myfwc.com/media/11565/final-florida-sandhill-crane-species-guidelines-2016.pdf).

3. Southeastern American kestrels have been documented on the CEMEX mine site near the Lake-Orange Connector project site. FWC staff recommends that the applicant conduct kestrel surveys during their nesting season (April to August) within suitable habitat areas. Surveys from May to July are ideal to avoid confusion with the migratory subspecies of American kestrel (*Falco sparverius*). Survey guidelines, reporting criteria, and habitat needs for the southeastern American kestrel can be found at the following website: https://myfwc.com/media/18576/american_kestrel_technical_report_1993.pdf. If surveys encounter active nest cavities, we recommend avoiding project activities within 150 meters (492 feet) of the nest tree during the breeding season (mid-March to mid-June). If nesting is discovered after construction has begun or if maintaining the recommended buffer is not possible, we recommend that the applicant contact FWC staff identified below to discuss potential permitting needs. In areas of suitable kestrel habitat, we recommend retaining snags whenever possible.
Thank you for the opportunity to review the NRE for the Lake-Orange Connector project in Lake and Orange counties. For further assistance, please email our office at ConservationPlanningServices@MyFWC.com. For specific technical questions regarding the content of this letter, contact Brian Barnett at (772) 579-9746 or Brian.Barnett@MyFWC.com.

Sincerely,

Fritz Wettstein
Land Use Planning Program Administrator
Office of Conservation Planning Services

fw/bb
ENV 1-13-2
Lake-Orange County Connector US 27 to SR 429 NRE_39480_061919
1 PUBLIC HEARING
2 LAKE/ORANGE COUNTY CONNECTOR (US 27 TO SR 429)
3 FEASIBILITY/PROJECT DEVELOPMENT & ENVIRONMENT STUDY
4 JUNE 27, 2019
5 ________________________________________/
6 DATE:          JUNE 27, 2019
7 REPORTER:      VICTORIA GOMEZ
8 PLACE:         CLERMONT ARTS & RECREATION CENTER
9                3700 SOUTH HIGHWAY 27
10                CLERMONT, FLORIDA 34711
APPEARANCES

KATHY PUTNAM, PROGRAM MANAGER
QUEST CORPORATION OF AMERICA
1540 INTERNATIONAL PARKWAY
SUITE 210
LAKE MARY, FLORIDA 32746
TELEPHONE NO.: (866) 662-6273
FACSIMILE NO.: (813) 926-2962
E-MAIL: KATHY.PUTNAM@QCAUSA.COM

ALSO PRESENT:
GLENN PRESSIMONE - DIRECTOR OF ENGINEERING
WILL SLOUP - METRIC ENGINEERING, INC.
JONATHAN WILLIAMSON - DEWBERRY
INDEX

Page

4

PROCEEDINGS
MS. PUTNAM: Good evening. Thank you for being here tonight. The Central Florida Expressway Authority welcomes you to the public hearing for the Lake/Orange County Connector Feasibility Project Development and Environment Study or PD&E Study. My name is Kathy Putnam. I am the public involvement coordinator. I'm with Quest Corporation of America. This study is to determine if a limited access facility between U.S. 27 in South Lake County and State Road 429 in West Orange County is viable and fundable under CFX policies and procedures. This hearing is being held to provide you with an opportunity to comment on this project. You'll see a presentation tonight and then have an opportunity to make a comment. Here with us tonight are -- and I'm going to ask you to stand up when I call your name -- they will -- a couple of them will be sitting up on the stage after the presentation -- are Glenn Pressimone. Glenn, if you'll stand? He is the director of engineering with the Central Florida Expressway Authority. Next to him, we have Will Sloup -- Will -- with Metric Engineering. He is the project manager on the -- with Metric Engineering on this study. And we also have Jonathan
Williamson, who is the PD&E project manager for expansion projects with the Central Florida Expressway Authority. He is with Dewberry, which is the general engineering consultant for CFX. We'd also like to recognize some others who are here with us tonight. First, we have Lake County Commissioner, Sean Parks. Thank you for being here tonight. We have Lake County Commissioner, Tim Sullivan over here in the back. Hello. Thank you for being with us. We have Lake County Commissioner Wendy Breeden -- I know I -- yes, right back here -- thank you. Liz Andert, who is a town council member with the City of -- Town of Windermere. Thank you for being here. I know Alan Hays, the Lake County elections supervisor was here with us earlier and I don't --

UNIDENTIFIED SPEAKER: He stepped out.

MS. PUTNAM: He stepped -- okay. Didn't see him here right now. Diane Travis, Clermont City Council member. I know she was here earlier this evening. Amanda Geltz, who is representing Representative Anthony Sabatini. And is there any federal, state, county, city elected official who I may have missed who we should recognize? No? All right then. We're going to go ahead and begin the
presentation, and afterward, we'll have the public

comment period.

PRESENTATION: Public participation at this

hearing is encouraged and solicited without regard
to race, color, national origin, age, sex, religion,
disability or family status. Persons wishing to
express their concerns about Title VI may do so by
contacting CFX. The contact information is also
displayed at this hearing. We will now begin the
presentation. Tonight's presentation will discuss
the purpose of the hearing, the needs and goals of
this study, as well as the preferred alternative and
its potential impacts. You will then have an
opportunity to comment on the project. There are
three primary components to tonight's hearing.
First, the open house, which occurred prior to this
presentation where you were invited to view the
project, displays, and to speak directly with the
project team, and provide your comments in writing
or to the court reporter. Second, this
presentation, which will explain the project purpose
and need, study alternatives, the potential
beneficial and adverse social, economic, and
environmental impacts upon the community, and
anticipated costs. Third, the public hearing also
serves as an official forum providing an opportunity for members of the public to express their opinions regarding the project. A formal comment period will follow this presentation where you will have the opportunity to provide oral statements at the microphone, or you may provide your comments directly to the court reporter, or in writing. In addition to the court reporter in the gymnasium, a court reporter is available here in the theater to document comments. CFX follows a project to develop a process for new alignment expansion projects. At each step in the process, before construction commences, the project could be placed on hold to be revisited in the future. The exhibit shown on this slide is displayed at tonight's meeting for your closer review and indicates we are in the project development and environment, or PD&E study phase. A PD&E study has three main components: An engineering component, which consists of the development and analysis of potential design solutions, an environmental component, which evaluates potential impacts to the natural, social, and physical environments, and a public involvement component to inform and involve all interested parties in the development of the planned
transportation project. The Lake/Orange County Connector Feasibility PD&E Study will determine if a limited access facility between U.S. 27 in South Lake County and State Road 429 in West Orange County is viable and fundable in accordance with CFX policies and procedures. The study area limits are outlined in red and are generally described as Porter Road on the north, Avalon Road on the east, Old YMCA Road on the south, and U.S. 27 on the west. At the present time, the study area is largely undeveloped. The need for a transportation project arises from deficiencies, issues, or concerns that currently exist or are expected to occur within the study area. The six project needs that serve as justification for the proposed Lake/Orange County connector are: Improve connections between area roads, accommodate future transportation demand, provide consistency with local and regional plans, support economic viability and job creation, support intermodal opportunities, and enhance evacuation and emergency services. The study area falls within the Wellness Way Area Plan and the Horizon West Special Planning Area. The Wellness Way Area Plan has been recognized for many years as an area that has significant potential for economic development in
southeast Lake County. Horizon West is a fast-growing master plan community in Southwest Orange County. The proposed Lake/Orange County connector has gone through several steps in CFX's project development process. Studies were conducted in 2002, 2007, and 2017 to determine if a limited access tolled connection between U.S. 27 and State Road 429 was feasible. These studies are available for review upon request. This project is also identified in the CFX Visioning 2040 Master Plan, and in both the Lake and Orange County long-range transportation plans. A series of 800-foot wide corridors were initially developed and evaluated to determine how well the six previously identified project needs are satisfied. The corridors were evaluated based on engineering, socio-economic, and environmental criteria that were tailored to fit the characteristics of the study area. The results of the evaluation showed Corridors 12, 17, and 20 could each provide a viable solution. To allow for flexibility in the alternatives analysis phase, the recommended corridor encompassed the area that is bordered by Corridor 20 on the north and Corridor 17 on the south. Thus, alternatives were generated within the area shown in green. The proposed
A typical section consists of a 330-foot right-of-way width and would accommodate an initial four lanes. The proposed typical section also provides a median width of 106 feet to accommodate a future widening to eight lanes, including potential multi-use lanes in the median. Preliminary alternatives were developed using this proposed typical section. Four project alternatives were developed. Alternatives 1 and 2 are the northern routes, while Alternatives 3 and 4 are the southern routes. All alternatives end at the common location at State Road 429. Whereas, there are four potential tie-in locations on U.S. 27. New interchanges are proposed with U.S. 27, the future extension of County Road 455, the future Valencia Parkway, and State Road 429. The existing Schofield Road interchange with State Road 429 in Orange County will remain, but direct connect ramps will be added between State Road 429 and the proposed Lake/Orange County connector. The conceptual designs show U.S. 27 shifted slightly to the east. This is to accommodate the interchange with U.S. 27 while avoiding impacts to Lake Louisa State Park lands. The no-action or no-build alternative serves as the baseline for comparison against the four build alternatives. There is
always the possibility that the no-build alternative
could be chosen as the preferred alternative. The
project alternatives are on display at today's
meeting for your closer review. The development of
the preferred alternative was closely coordinated
with all project stakeholders and multiple meetings
have been held over the past several months with
each stakeholder, including an environmental
advisory group and project advisory group. Public
information meetings began in June 2018 and have
continued throughout the study process.
Representatives from CFX and the consultant team
were available at each meeting to discuss the
project and answer questions. The public
involvement effort for this project included three
scheduled public meetings, including tonight's
public hearing, three environmental advisory group
meetings, three project advisory group meetings, as
well as several meetings with project stakeholders.
All input received was considered during refinement
of the alternatives and the development of the
preferred alternative. The objective of the
alternatives evaluation is to compare the
performance of each viable alternative and to
quantify the potential impacts to the natural,
social, cultural, and physical environment. The evaluation summaries of the four alternatives in the comparative evaluation matrix is on display at the meeting. The results of the alternative evaluation indicate that Alternative 3 is the preferred alternative. The preferred alternative includes free-flow ramps to and from U.S. 27 and partially shifting U.S. 27 to the east in order to avoid impacts to the abutting Lake Louisa State Park. The preferred alternative generally follows a northeast direction, avoiding impacts to Lakes Adain and Sawgrass. A bridge may be needed through the existing wetlands between Lakes Adain and Sawgrass. The alignment continues east, minimizing impacts to the CEMEX Four Corners Sand Mine. An interchange will be provided at the proposed County Road 455 Extension facility to provide local access to Schofield Road. East of the Lake/Orange County line, a partial interchange at the proposed Valencia Parkway will provide access to and from the west. At the State Road 429 with Schofield Road interchange, direct connection ramps will provide access to and from both northbound and southbound State Road 429. Following identification of the preferred alternative, the study team conducted more
detailed analysis to refine potential impacts. Within the study area, eight historic resources and 11 archaeological sites were identified, but all were determined ineligible for listing on the National Register of Historic Places. No impacts to any historic resource or archaeological site are anticipated under the preferred alternative. Biologists performed desktop and field surveys and mapped wetlands throughout the project area. Under the preferred alternative, there would be approximately 64 acres of impacts to wetlands. Unavoidable impacts to wetlands will be mitigated. Because avoidance and minimization measures were implemented, no adverse impacts to listed species are anticipated. However, the preferred alternative would impact approximately 49 acres of wood storks' suitable foraging habitat, which will require mitigation. Additionally, gopher tortoise are present in the study area. Prior to construction, a complete survey of gopher tortoise burrows will be required along with associated permitting and relocation. All natural and human environmental resources and impacts are described and addressed in the project environmental impact report. As part of this project, right-of-way acquisition of private
properties will be required. A CFX right-of-way specialist is here this evening and will be happy to answer your questions and furnish you with copies of brochures that describe the CFX property acquisition process. A preliminary cost estimate that includes construction, right-of-way acquisition, mitigation, and other design and administrative fees has been prepared for this project. The total cost for implementation of the project is presently estimated at $469.6 million. The evaluation and analysis from the engineering and environmental studies conducted for this project were documented in a series of reports. These reports and preliminary plans showing the proposed improvements are available here tonight for anyone who wishes to examine them. Project information is also available for review on the study website located on the CFX homepage. The study website is continually updated with study documents and the materials presented at tonight's public hearing. You are able to navigate to the study website from the CFX homepage or you can use the shortened web address shown here.

**MS. PUTNAM:** So that is our presentation and with that, we have entered the public comment period of our public hearing tonight. Will and Glenn, if
you will make your way up to the table? We have not received any comment cards, but is there anybody here who has a speaker request card or who would like to make a comment at the microphone? All right. Let me make -- I just want to make sure.

There's nobody here who would like to make a public comment at the microphone, correct? Okay. Well, let me tell you just real quickly, there are many ways to make public comment other than coming tonight and speaking at the microphone. As you see, we have a study website that you can go onto. There is a comment form through the study website. There is a study e-mail address, lakeorangestudy@cfxway.com. If you have the fact sheet, everyone was given a fact sheet tonight. At the bottom of the back page of that fact sheet, there is all the information if you would like to get a comment in. We also have court reporters here tonight, so if you -- we will be here until 7:30. If you wanted to go back into the open house portion and verbally give your comments to one of the court reporters, write your comment, we would be happy to take it that way. We also have the laptops, the iPads, if you'd like -- if you feel better about typing in your comment.

The comment period for this study ends July 8, 2019,
so anything that needs to come in, if you write a longhand letter and mail it in, it needs to be postmarked July 8th in order to be included in part of the study. So seeing no public comment tonight, we are going to end. A couple things I need to say. Again, we will be back over in the open house portion if anybody here has any questions or would like to make a comment over in the open house portion of this evening's presentation. The verbatim transcript of this hearing's oral proceedings together with all written material received as part of the hearing record and all studies, displays, and information material provided at the hearing will be made part of the project decision-making process and will be available at the CFX office for your review upon request. Thank you very much for attending this public hearing and for providing your input into this project. It is now 6:55. I hereby officially close the public hearing for the Lake/Orange County Connector Feasibility Project Development and Environment Study. Thank you very much for being here tonight. Have a good evening.

(PUBLIC HEARING CONCLUDED AT 6:55 P.M.)
CERTIFICATE

STATE OF FLORIDA)
COUNTY OF ORANGE)

I, VICTORIA GOMEZ, Court Reporter and Notary Public for the State of Florida at Large, do hereby certify that I was authorized to and did report the foregoing proceeding, and that said transcript is a true record of the testimony given by the witness.

I FURTHER CERTIFY that I am not of counsel for, related to, or employed by any of the parties or attorneys involved herein, nor am I financially interested in said action.

Submitted on: July 11, 2019.

______________________________
VICTORIA GOMEZ
Court Reporter, Notary Public