



Intercession City - Gifford North 230kV Transmission
Line Project
Orange and Osceola Counties, Florida

Segment of the TLSA Certified Lake Agnes – Gifford 230kV
Transmission Line (TA 07-14A)
Satisfies Condition XXVIII. Environmental Resources

Environmental Resource Permit Application
February 25, 2013

Submitted to:

Florida Department of Environmental Protection
Central District



U.S. Army Corps of Engineers
Jacksonville Regulatory Division
Cocoa Permits Section



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SECTION A

FOR AGENCY USE ONLY	
ACOE Application #	DEP/WMD Application #
Date Application Received	Date Application Received
Proposed Project Lat.	Fee Received \$
Proposed Project Long.	Fee Receipt #

PART 1:

Are any of the activities described in this application proposed to occur in, on, or over wetlands or other surface waters?

☒ yes ☐ no

Is this application being filed by or on behalf of a government entity or drainage district? ☐ yes ☒ no

A. Type of Environmental Resource Permit Requested (check at least one). See Attachment 2 for thresholds and descriptions.

- ☐ Noticed General - include information requested in Section B.
- ☐ Standard General (Single Family Dwelling) - include information requested in Sections C and D.
- ☐ Standard General (all other Standard General projects) - include information requested in Sections C and E.
- ☐ Individual (Single Family Dwelling) - include information requested in Sections C and D.
- ☒ Individual (all other Individual projects) - include information requested in Sections C and E.
- ☐ Conceptual - include information requested in Sections C and E.
- ☐ Mitigation Bank Permit (construction) - include information requested in Sections C and F. (If the proposed mitigation bank involves the construction of a surface water management system requiring another permit defined above, check the appropriate box and submit the information requested by the applicable section.)
- ☐ Mitigation Bank (conceptual) - include information requested in Sections C and F.

B. Type of activity for which you are applying (check at least one)

- ☒ Construction or operation of a new system, other than a solid waste facility, including dredging or filling in, on or over wetlands and other surface waters.
- ☐ Construction, expansion or modification of a solid waste facility.
- ☐ Alteration or operation of an existing system which was not previously permitted by a WMD or DEP.
- ☐ Modification of a system previously permitted by a WMD or DEP.
 Provide previous permit numbers: _____

☐ Alteration of a system	☐ Extension of permit duration
☐ Abandonment of a system	☐ Construction of additional phases of a system
☐ Removal of a system	

C. Are you requesting authorization to use Sovereign Submerged Lands?

☐ yes ☒ no

(See Section G and Attachment 5 for more information before answering this question.)

D. For activities in, on, or over wetlands or other surface waters, check type of federal dredge and fill permit requested:

- | | | |
|--|---|----------------------------------|
| ☐ Individual | ☐ Programmatic General | ☐ General |
| ☒ Nationwide | ☐ Not Applicable | |

E. Are you claiming to qualify for an exemption? ☐ yes ☒ no

If yes, provide rule number if known. _____

FORM #: 62-343.900 (1)
 FORM TITLE: JOINT ENVIRONMENTAL RESOURCE
 PERMIT APPLICATION
 DATE: October 3, 1995
 Incorporated by Reference in subsection 62-343.070(2), F.A.C.

PART 3:	B. ENTITY TO RECEIVE PERMIT (IF OTHER THAN OWNER)
A. OWNER(S) OF LAND	
Name See Attachment A – Property Owners List	Name Wayne Richardson
Title and Company	Title and Company Permitting Specialist Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Address	Address P.O. Box 14042; PEF 903
City, State, Zip	City, State, Zip St. Petersburg, FL 33733
Telephone and Fax	Telephone and Fax Office: 727-820-5148, Cell: 727-330-0637, Fax: 727-820-5229
E-mail Address: (optional)	E-mail Address: (optional) wayne.richardson@pgnmail.com
C. AGENT AUTHORIZED TO SECURE PERMIT	D. CONSULTANT (IF DIFFERENT FROM AGENT)
Name	Name Lee Walton
Title and Company	Title and Company Senior Ecologist Flatwoods Consulting Group Inc.
Address	Address 10150 Highland Manor Drive, Suite 200
City, State, Zip	City, State, Zip Tampa, Florida 33610
Telephone and Fax	Telephone and Fax Office: (813) 600-5747 and Fax: (888) 600-0514
E-mail Address: (optional)	E-mail Address: (optional) lwalton@flatwoodsconsulting.com

PART 4: (Please provide metric equivalent for federally funded projects):

- A. Name of Project, including phase if applicable: Intercession City-Gifford North 230kV Transmission Line Project (Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line TA 07-14A)
- B. Is this application for part of a multi-phase project? ☐ Yes ☒ No
- C. Total applicant-owned area contiguous to the project?
28.1 ac.; 11.4 ha.
- D. Total area served by the system: N/A ac.; N/A ha.
- E. Impervious area for which a permit is sought: N/A ac.; N/A ha.
- F. Volume of water that the system is capable of impounding:
N/A ac. ft.; N/A m³
- G. What is the total area of work in, on, or over wetlands or other surface waters?
 Permanent Impact 0.0014 ac.; 0.0006 ha.; 61 sq. ft.; 5.7 sq. m.
 Tree Clearing Impact 5.85 ac.; 2.37 ha.; 254,826 sq. ft.; 23,674.1 sq. m.
- H. Total volume of material to be dredged: 0 yd³; 0 m³
- I. Number of new boat slips proposed: N/A wet slips; N/A dry slips

PART 5:

Project location (use additional sheets if needed):

County(ies) Osceola and Orange

Section(s) 21, 28 Township 24S Range 27E

Section(s) 4, 9, 16, 21, 22, 26, 27 Township 25S Range 27E

Section(s) Township Range

Land Grant name, if applicable: N/A

Tax Parcel Identification Number: See Attachment A

Street Address/Road or other location: The project right-of-way originates just north of Interstate 4 (I-4) and east of State Road 429 (SR429) at proposed transmission structure ICG-39 and continues north along SR429 to the Gifford Substation (0.75 mile north of Western Way) and terminates at transmission structure ICG-121

City, Zip Code, if applicable: _____

PART 6: Describe in general terms the proposed project, system, or activity.

Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to install or add a circuit on 83 transmission structures making up the new Intercession City - Gifford North 230kV Transmission Line. The Intercession City-Gifford North 230kV Transmission Line is a segment of the Florida Department of Environmental Protection (FDEP) TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A). This project is the Certified Facility detailed in Conditions of Certification (TA 07-14A) Section A: General Conditions I. Scope B. (2): a single circuit 230kV transmission line extending from the approximate area of the I-4/SR429 intersection to PEF's existing Gifford Substation in Orange County. The poles will be concrete or steel monopole structures that have a long life span. The wetlands along the transmission right-of-way are identified on the enclosed Wetland Maps and Site Plan Drawings and described in Table 1. A total of 11 wetlands and 18 surface waters have been identified in the right-of-way. A total of three (3) transmission structures will be placed in wetland areas for a total fill discharge of 0.0014 acre. The discharge is for the installation of the structures. No permanent access roads or fill pads are proposed. No additional discharge of dredged or permanent fill material is proposed; therefore, the project will have a minimal adverse effect on wetlands. Tree clearing will be conducted along the right-of-way for this new transmission corridor. The tree clearing is necessary to meet safety clearance requirements for the transmission corridor. A total of 5.85 acres of forested wetland will be converted to herbaceous wetlands to create a safe transmission corridor.

Overall, the applicant has designed the project to have a minimal adverse effect on the wetland resources. The proposed project will install new steel and concrete monopoles adjacent to road right-of-way and within an existing transmission corridor to minimize wetland impacts. Only 3 poles will be installed in wetlands. The structures will be accessed by the installation of temporary construction matting. Temporary construction matting will be installed to allow the contractor to mobilize and locate the equipment to set the foundation section of the pole. All drilling fluids used will be collected and reused or properly disposed offsite. No drilling fluid or side cast material will be allowed to enter wetlands. Any excess material resulting from drilling the foundation will be removed from the wetland area. Once construction is complete, the temporary matting will be removed. Sedimentation and erosion control will be installed and maintained during construction.

PART 7:

A. If there have been any pre-application meetings, including on-site meetings, with regulatory staff, please list the date(s), location(s), and names of key staff and project representatives.

Intercession City-Gifford North 230kV Transmission Line is a segment of the Florida Department of Environmental Protection (FDEP) TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A). Many regulatory staff meetings occurred during the TLSA process.

B. Please identify by number any MSSW/Wetland Resource/ERP/ACOE Permits pending, issued or denied for projects at the location, and any related enforcement actions.

Agency	Date	No.\Type of Application	Action Taken
<u>FDEP</u>	<u>1/15/2013</u>	<u>TLSA Conditions of Certification</u>	<u>Issued</u>
_____	_____	_____	_____
_____	_____	_____	_____

C. Note: The following information is required for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit or an authorization to use state owned submerged lands. Please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding application) and/or (for proprietary authorizations) is located within a 500 ft. radius of the applicant's land. Please attach a plan view showing the owner's names and adjoining property lines. Attach additional sheets if necessary.

- | | |
|--|----|
| 1. | 2. |
| See Attachment A: Property Owners List | |
| 3. | 4. |
| 5. | 6. |
| 7. | 8. |

PART 8:

A. By signing this application form, I am applying, or I am applying on behalf of the applicant, for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto, does not relieve me of any obligation for obtaining any other required federal, state, water management district or local permit prior to commencement of construction. I agree, or I agree on behalf of the applicant, to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a responsible operation entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Wayne Richardson

Typed/Printed Name of Applicant (If no Agent is used)
 or Agent (If one is so authorized below)

Typed/Printed Name of Co-Applicant

Wayne Richardson 2/21/2013
 Signature of Applicant/Agent Date Signature of Co-Applicant Date

(Corporate Title if applicable)

(Corporate Title if applicable)

AN AGENT MAY SIGN ABOVE ONLY IF THE APPLICANT COMPLETES THE FOLLOWING:

B. I hereby designate and authorize the agent listed above to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Typed/Printed Name of Applicant	Signature of Applicant	Date
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(Corporate Title if applicable)

Please note: The applicant's original signature (not a copy) is required above.

PERSON AUTHORIZING ACCESS TO THE PROPERTY MUST COMPLETE THE FOLLOWING:

C. I either own the property described in this application or I have legal authority to allow access to the property, and I consent, after receiving prior notification, to any site visit on the property by agents or personnel from the Department of Environmental Protection, the Water Management District and the U.S. Army Corps of Engineers necessary for the review and inspection of the proposed project specified in this application. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review and inspection. Further, I agree to provide entry to the project site for such agents or personnel to monitor permitted work if a permit is granted.

<u>Wayne Richardson</u>	<u>Wayne Richardson</u>	<u>2/21/2013</u>
Typed/Printed Name of Applicant	Signature of Applicant	Date

(Corporate Title if applicable)

SECTION C

Environmental Resource Permit Notice of Receipt of Application

Note: this form does not need to be submitted for noticed general permits.

This information is required in addition to that required in other sections of the application. Please submit five copies of this notice of receipt of application and all attachments with the other required information. Please submit all information on 8 1/2" x 11" paper.

Project Name: Intercession City-Gifford North 230kV Transmission Line
County: Orange and Osceola
Owner: Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Applicant: Wayne Richardson
Applicant's Address: P.O. Box 14042; PEF 903, St. Petersburg, FL 33733

1. Indicate the project boundaries on a USGS quadrangle map. Attach a location map showing the boundary of the proposed activity. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it. See Attached Quad and Location Maps
2. Provide the names of all wetlands, or other surface waters that would be dredged, filled, impounded, diverted, drained, or would receive discharge (either directly or indirectly), or would otherwise be impacted by the proposed activity, and specify if they are in an Outstanding Florida Water or Aquatic Preserve: See Attached Table 1: Wetland Impact and Description
3. Attach a depiction (plan and section views), which clearly shows the works or other facilities proposed to be constructed. Use multiple sheets, if necessary. Use a scale sufficient to show the location and type of works. See Attached Permit Drawings
4. Briefly describe the proposed project (such as "construct dock with boat shelter", "replace two existing culverts", "construct surface water management system to serve 150 acre residential development"): Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to install or add a circuit on 83 transmission structures making up the new Intercession City - Gifford North 230kV Transmission Line.
5. Specify the acreage of wetlands or other surface waters, if any, that are proposed to be filled, excavated, or otherwise disturbed or impacted by the proposed activity:

filled 0.0014 ac.; 0 excavated ac.;

other impacts 5.85 ac. of temporary tree cutting impact

6. Provide a brief statement describing any proposed mitigation for impacts to wetlands and other surface waters (attach additional sheets if necessary): Progress Energy Florida is proposing to purchase credits in the FDEP-approved Southport Ranch Mitigation Bank. The Southport Ranch Mitigation Bank is a FDEP and USACE-approved mitigation bank and has the correct type and quantity of credits available to offset the project impacts.

FOR AGENCY USE ONLY

Application Name: _____
Application Number: _____
Office where the application can be inspected: _____

Note to Notice recipient: The information in this notice has been submitted by the applicant, and has not been verified by the agency. It may be incorrect, incomplete or may be subject to change.

SECTION E

INFORMATION REQUESTED FOR STANDARD GENERAL, INDIVIDUAL AND CONCEPTUAL ENVIRONMENTAL RESOURCE PERMIT APPLICATIONS NOT RELATED TO A SINGLE FAMILY DWELLING UNIT

Please provide the information requested below if the proposed project requires either a standard general, individual, or conceptual approval environmental resource permit and is not related to an individual, single family dwelling unit, duplex or quadruplex. The information listed below represents the level of information that is usually required to evaluate an application. The level of information required for a specific project will vary depending on the nature and location of the site and the activity proposed. Conceptual approvals generally do not require the same level of detail as a construction permit. However, providing a greater level of detail will reduce the need to submit additional information at a later date. If an item does not apply to your project, proceed to the next item. Please submit all information that is required by the Department on either 8 1/2 in. X 11 in. paper or 11 in. X 17 in. paper. Larger drawings may be submitted to supplement but not replace these smaller drawings.

I. Site Information

- A. Provide a map(s) of the project area and vicinity delineating USDA/SCS soil types.

See Attached Soil Map

- B. Provide recent aerials, legible for photo interpretation with a scale of 1" = 400 ft, or more detailed, with project boundaries delineated on the aerial.

See Attached Aerial and Land Use Maps

- C. Identify the seasonal high water or mean high tide elevation and normal pool or mean low tide elevation for each on site wetland or surface water, including receiving waters into which runoff will be discharged. Include dates, datum, and methods used to determine these elevations.

N/A. No Seasonal High Water Elevations were established for the transmission line project. No treatment or attenuation of water will occur for this project.

- D. Identify the wet season high water tables at the locations representative of the entire project site. Include dates, datum, and methods used to determine these elevations.

N/A

II. Environmental Considerations

- A. Provide results of any wildlife surveys that have been conducted on the site, and provide any comments pertaining to the project from the Florida Game and Fresh Water Fish Commission and the U.S. Fish and Wildlife Service.

See Attached Listed Species Survey and Wildlife Management Plan

B. Provide a description of how water quantity, quality, hydroperiod, and habitat will be maintained in on-site wetlands and other surface waters that will be preserved or will remain undisturbed.

No impacts to water quantity, quality, and hydroperiod are anticipated to install new transmission poles. All work will occur with the designated transmission right-of-way.

C. Provide a narrative description of any proposed mitigation plans, including purpose, maintenance, monitoring, and construction sequence and techniques, and estimated costs.

Progress Energy Florida is proposing to purchase credits in the FDEP-approved Southport Ranch Mitigation Bank. The Southport Ranch Mitigation Bank is a FDEP and USACE-approved mitigation bank and has the correct type and quantity of credits available to offset the project impacts.

D. Describe how boundaries of wetlands or other surface waters were determined. If there has ever been a jurisdictional declaratory statement, a formal wetland determination, a formal determination, a validated informal determination, or a revalidated jurisdictional determination, provide the identifying number.

E. Impact Summary Tables:

1. For all projects, complete Tables 1, 2 and 3 as applicable.
2. For docking facilities or other structures constructed over wetlands or other surface waters, provide the information requested in Table 4.
3. For shoreline stabilization projects, provide the information requested in Table 5.

III. Plans

Provide clear, detailed plans for the system including specifications, plan (overhead) views, cross sections (with the locations of the cross sections shown on the corresponding plan view), and profile (longitudinal) views of the proposed project. The plans must be signed and sealed by a an appropriate registered professional as required by law. Plans must include a scale and a north arrow. These plans should show the following:

A. Project area boundary and total land area, including distances and orientation from roads or other land marks;

The total project area is 98 acres within the right-of-way. Please see attached permit drawings for project details.

B. Existing land use and land cover (acreage and percentages), and on-site natural communities, including wetlands and other surface waters, aquatic communities, and uplands. Use the Florida Land Use Cover & Classification System (FLUCCS)(Level 3) for projects proposed in the South Florida Water Management District, the St. Johns River Water Management District, and the Suwannee River Water Management District and use the National Wetlands Inventory (NWI) for projects proposed in the Southwest Florida Water Management District. Also identify each community with a unique identification number which must be consistent in all exhibits.

Please see attached Land Use Map

C. The existing topography extending at least 100 feet off the project area, and including adjacent wetlands and other surface waters. All topography shall include the location and a description of known benchmarks, referenced to NGVD. For systems waterward of the mean high water (MHW) or seasonal high water lines, show water depths, referenced to mean low water (MLW) in tidal areas or seasonal low water in non-tidal areas, and list the range between MHW and MLW. For docking facilities, indicate the distance to, location of, and depths of the nearest navigational channel and access routes to the channel.

D. If the project is in the known flood plain of a stream or other water course, identify the following: 1) the flood plain boundary and approximate flooding elevations; and 2) the 100-year flood elevation and floodplain boundary of any lake, stream or other watercourse located on or adjacent to the site;

E. The boundaries of wetlands and other surface waters within the project area. Distinguish those wetlands and other surface waters that have been delineated by any binding jurisdictional determination;

See attached Wetland Survey and Wetland Maps

F. Proposed land use, land cover and natural communities (acreage and percentages), including wetlands and other surface waters, undisturbed uplands, aquatic communities, impervious surfaces, and water management areas. Use the same classification system and community identification number used in III (B) above.

See attached Land Use Map. The existing land use will remain unchanged post-project

G. Proposed impacts to wetlands and other surface waters, and any proposed connections/outfalls to other surface waters or wetlands;

See attached Wetland Impact Table and Permit Drawings

H. Proposed buffer zones;

I. Pre- and post-development drainage patterns and basin boundaries showing the direction of flows, including any off-site runoff being routed through or around the system; and connections between wetlands and other surface waters;

J. Location of all water management areas with details of size, side slopes, and designed water depths;

K. Location and details of all water control structures, control elevations, any seasonal water level regulation schedules; and the location and description of benchmarks (minimum of one benchmark per structure);

L. Location, dimensions and elevations of all proposed structures, including docks, seawalls, utility lines, roads, and buildings;

Please see attached Permit Drawings

M. Location, size, and design capacity of the internal water management facilities;

N. Rights-of-way and easements for the system, including all on-site and off-site areas to be reserved for water management purposes, and rights-of-way and easements for the existing drainage system, if any;

O. Receiving waters or surface water management systems into which runoff from the developed site will be discharged;

P. Location and details of the erosion, sediment and turbidity control measures to be implemented during each phase of construction and all permanent control measures to be implemented in post-development conditions;

See attached Permit Drawings and Access Plan.

Q. Location, grading, design water levels, and planting details of all mitigation areas;

Mitigation will be to purchase credits in a mitigation bank

R. Site grading details, including perimeter site grading;

S. Disposal site for any excavated material, including temporary and permanent disposal sites;

Any remaining soil from the pole installation will be spread in upland areas within the project right-of-way

T. Dewatering plan details;

U. For marina facilities, locations of any sewage pumpout facilities, fueling facilities, boat repair and maintenance facilities, and fish cleaning stations;

V. Location and description of any nearby existing offsite features which might be affected by the proposed construction or development such as stormwater management ponds, buildings or other structures, wetlands or other surface waters.

W. For phased projects, provide a master development plan.

IV. Construction Schedule and Techniques

Provide a construction schedule, and a description of construction techniques, sequencing and equipment. This information should specifically include the following:

A. Method for installing any pilings or seawall slabs;

The initial work will involve the installation of silt fence around the project workspaces. Next, trees within the new transmission corridor will be cut and removed. Temporary construction matting will be installed in the wetlands to avoid rutting. Once the matting is in place, the foundation contractor will mobilize and auger a hole to set the new steel or concrete monopole. A drill rig, tanker, crane, flatbed trucks, concrete pumpers and trucks, and a backhoe will be used during this phase of construction. All drilling fluids will be collected and reused or properly disposed offsite. No drilling fluid will be allowed to enter wetlands. Any excess material resulting from installation of the steel or concrete monopoles will be spread in upland areas or will be removed from the site.

Once the monopoles are installed, the insulators will be attached and the crews will begin attaching the conductor on the new poles. Installation of new structures in wetlands will be accomplished by using temporary construction matting. Once the line is installed, the cleanup and restoration of the right-of-way will begin. This will include the removal of the temporary construction matting.

B. Schedule of implementation of temporary or permanent erosion and turbidity control measures;

C. For projects that involve dredging or excavation in wetlands or other surface waters, describe the method of excavation, and the type of material to be excavated;

D. For projects that involve fill in wetlands or other surface waters, describe the source and type of fill material to be used. For shoreline stabilization projects that involve the installation of riprap, state how these materials are to be placed, (i.e., individually or with heavy equipment) and whether the rocks will be underlain with filter cloth;

The total permanent impact is 0.0014-acre to install new structures. The only fill will be sealed concrete or steel utility structures.

E. If dewatering is required, detail the dewatering proposal including the methods that are proposed to contain the discharge, methods of isolating dewatering areas, and indicate the period dewatering structures will be in place (Note: a consumptive use or water use permit may be required);

F. Methods for transporting equipment and materials to and from the work site. If barges are required for access, provide the low water depths and draft of the fully loaded barge;

All materials will be carried overland with trucks.

G. Demolition plan for any existing structures to be removed; and

H. Identify the schedule and party responsible for completing monitoring, record drawings, and as-built certifications for the project when completed.

Progress Energy Florida is the responsible party.

V. Drainage Information

A. Provide pre-development and post-development drainage calculations, signed and sealed by an appropriate registered professional, as follows:

1. Runoff characteristics, including area, runoff curve number or runoff coefficient, and time of concentration for each drainage basin;
2. Water table elevations (normal and seasonal high) including aerial extent and magnitude of any proposed water table draw down;
3. Receiving water elevations (normal, wet season, design storm);
4. Design storms used including rainfall depth, duration, frequency, and distribution;
5. Runoff hydrograph(s) for each drainage basin, for all required design storm event(s);
6. Stage-storage computations for any area such as a reservoir, close basin, detention area, or channel, used in storage routing;

7. Stage-discharge computations for any storage areas at a selected control point, such as control structure or natural restriction;

8. Flood routings through on-site conveyance and storage areas;

9. Water surface profiles in the primary drainage system for each required design storm event(s);

10. Runoff peak rates and volumes discharged from the system for each required design storm event(s);

11. Tail water history and justification (time and elevation); and

12. Pump specifications and operating curves for range of possible operating conditions (if used in system).

B. Provide the results of any percolation tests, where appropriate, and soil borings that are representative of the actual site conditions;

C. Provide the acreage, and percentages of the total project, of the following:

1. Impervious surfaces, excluding wetlands;

0.0014 acre or 0.001%

2. Pervious surfaces (green areas, not including wetlands);

84.3 acres or 86%

3. Lakes, canals, retention areas, other open water areas; and

84.3 acres or 7%

4. Wetlands.

6.43 acres or 7%

D. Provide an engineering analysis of floodplain storage and conveyance (if applicable), including:

1. Hydraulic calculations for all proposed traversing works;

2. Backwater water surface profiles showing upstream impact of traversing works;

3. Location and volume of encroachment within regulated floodplain(s); and

4. Plan for compensating floodplain storage, if necessary, and calculations required for determining minimum building and road flood elevations.

E. Provide an analysis of the water quality treatment system including:

1. A description of the proposed stormwater treatment methodology that addresses the type of treatment, pollution abatement volumes, and recovery analysis; and

2. Construction plans and calculations that address stage-storage and design elevations, which demonstrate compliance with the appropriate water quality treatment criteria.

F. Provide a description of the engineering methodology, assumptions and references for the parameters listed above, and a copy of all such computations, engineering plans, and specifications used to analyze the system. If a computer program is used for the analysis, provide the name of the program, a description of the program, input and output data, two diskette copies, if available, and justification for model selection.

VI. Operation and Maintenance and Legal Documentation

A. Describe the overall maintenance and operation schedule for the proposed system.

B. Identify the entity that will be responsible for operating and maintaining the system in perpetuity if different than the permittee, a draft document enumerating the enforceable affirmative obligations on the entity to properly operate and maintain the system for its expected life, and documentation of the entity's financial responsibility for long-term maintenance. If the proposed operation and maintenance entity is not a property owner's association, provide proof of the existence of an entity, or the future acceptance of the system by an entity which will operate and maintain the system. If a property owner's association is the proposed operation and maintenance entity, provide copies of the articles of incorporation for the association and copies of the declaration, restrictive covenants, deed restrictions, or other operational documents that assign responsibility for the operation and maintenance of the system. Provide information ensuring the continued adequate access to the system for maintenance purposes. Before transfer of the system to the operating entity will be approved, the permittee must document that the transferee will be bound by all terms and conditions of the permit.

C. Provide copies of all proposed conservation easements, storm water management system easements, property owner's association documents, and plats for the property containing the proposed system.

D. Provide indication of how water and waste water service will be supplied. Letters of commitment from off-site suppliers must be included.

E. Provide a copy of the boundary survey and/or legal description and acreage of the total land area of contiguous property owned/controlled by the applicant.

VII. Water Use

A. Will the surface water system be used for water supply, including landscape irrigation, or recreation.

B. If a Consumptive Use or Water Use permit has been issued for the project, state the permit number.

C. If no Consumptive Use or Water Use permit has been issued for the project, indicate if such a permit will be required and when the application for a permit will be submitted.

D. Indicate how any existing wells located within the project site will be utilized or abandoned.

TABLE 1
 Project Impact Summary

WL & SW ID	WL & SW TYPE	WL & SW SIZE (ac.) ON SITE	WL & SW ACRES NOT IMPACTED	PERMANENT IMPACTS TO WL & SW		TEMPORARY IMPACTS TO WL & SW		MITIGATION ID
				IMPACT SIZE (acres)	IMPACT CODE	IMPACT SIZE (acres)	IMPACT CODE	
WL-26	617	0.08	0	0		0.08	C	Mit. Bank Credits
WL-27	630	1.80	0	0.0009	F	1.80	C	Mit. Bank Credits
WL-28	641	0.36	0.16	0		0.20	C	Mit. Bank Credits
WL-29	641	0.05	0.05	0				
WL-30	641	0.05	0.05	0				
WL-31	617	0.34	0	0		0.34	C	Mit. Bank Credits
WL-32	617	1.20	0	0		1.20	C	Mit. Bank Credits
WL-33	617	1.82	0	0		1.82	C	Mit. Bank Credits
WL-34	617	0.39	0	0		0.39	C	Mit. Bank Credits
WL-35	641	0.32	0.32	0				
WL-36	630	0.02	0	0		0.02	C	Mit. Bank Credits
SW-1	534	0.37	0.37	0				
SW-1A	534	0.08	0.08	0				
SW-2	534	1.84	1.84	0				
SW-3	534	0.04	0.04	0				
SW-4	534	0.06	0.06	0				
SW-5	534	1.13	1.13	0				
SW-6	534	0.56	0.56	0				
SW-7	534	0.27	0.27	0				

SW-8	534	0.26	0.26	0				
SW-9	534	0.48	0.48	0				
SW-10	534	0.07	0.07	0				
SW-12	534	0.78	0.78	0				
SW-13	534	0.99	0.99	0				
SW-14	534	0.26	0.2595	0.0005	F			Mit. Bank Credits
SW-15	534	0.06	0.06	0				
SW-16	512	0.01	0.01	0				
SW-17	512	0.01	0.01	0				
SW-18	512	0.01	0.01	0				
Summary		13.71	7.895	0.0014	F	5.85	C	

WL = Wetland; **SW** = Surface water; **ID** = Identification number, letter, etc.

Wetland Type: Use an established wetland classification system and, in the comments section below, indicate which classification system is being used.

Impact Code (Type): D = dredge; F = fill; H = change hydrology; S = shading; C = clearing; O = other. Indicate the final impact if more than one impact type is proposed in a given area. For example, show F only for an area that will first be demucked and then backfilled.

Note: Multiple entries per cell are not allowed, except in the "Mitigation ID" column. Any given acreage of wetland should be listed in one row only, such that the total of all rows equals the project total for a given category (column). For example, if Wetland No. 1 includes multiple wetland types and multiple impact codes are proposed in each type, then each proposed impact in each wetland type should be shown on a separate row, while the size of each wetland type found in Wetland No. 1 should be listed in only one row.

Comments: _____

TABLE 2
 ON-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVE		UPLAND PRESERVE		OTHER	
	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE
N/A												
PROJECT TOTALS:												

CODES (multiple entries per cell not allowed): Target Type or Type = target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

COMMENTS:

TABLE 3
 OFF-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVE		UPLAND PRESERVE		OTHER	
	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE
Southport Ranch Mitigation Bank											1.2	Credits
PROJECT TOTALS:											1.2	

CODES (multiple entries per cell not allowed):

Target Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)

OMB APPROVAL NO. 0710-0003
EXPIRES: 31 August 2012

Public reporting burden for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME: First - Wayne Middle - Last - Richardson Company - Florida Power Corporation d/b/a Progress Energy Florida, Inc. E-mail Address - wayne.richardson@pgnmail.com		8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) First - Middle - Last - Richardson Company - E-mail Address -	
6. APPLICANT'S ADDRESS: Address - P.O. Box 14042; PEF 903 City - St. Petersburg State - FL Zip - 33733 Country - USA		9. AGENT'S ADDRESS Address - City - State - Zip - Country -	
7. APPLICANT'S PHONE NOS. W/AREA CODE a. Residence b. Business c. Fax (727) 820-5148 (727) 820-5229		10. AGENT'S PHONE NOS. W/AREA CODE a. Residence b. Business c. Fax	

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE

DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions) Intercession City - Gifford North 230kV Transmission Line Project	
13. NAME OF WATERBODY, IF KNOWN (if applicable) N/A	14. PROJECT STREET ADDRESS (if applicable) Address See Attachment A City - State - Zip -
15. LOCATION OF PROJECT Latitude: °N Starting 28 17' 12.93" & Ending 28 23' 19.87" Longitude: °W Starting 81 35' 22.24" & Ending 81 37' 10.54"	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID See Attachment A Municipality Section - See Attachment A Township - Range -	

DIRECTIONS TO THE SITE

The Intercession City-Gifford 230kV Transmission Line originates just north of Interstate 4 (I-4) and east of State Road 429 (SR429) at proposed transmission structure ICG-39. The proposed line crosses to the west of SR429 and extends north to the existing Gifford Substation 0.75 mile north of Western Way to proposed transmission structure ICG-121.

10. Nature of Activity (Description of project, include all features)

Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to build a transmission line extending from proposed transmission structure ICG-39, just north of Interstate 4 (I-4) and east of State Road 429 (SR 429), extending to proposed structure ICG-121, terminating at the existing Gifford Substation. The project involves the installation or adding an additional circuit to 83 monopole structures. The new structures will be installed adjacent to road right-of-way or in existing transmission line right-of-way.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to build a transmission line between the Intercession City Substation and the Gifford Substation to increase reliability to their current customers. This is a segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A).

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The wetlands within the transmission right-of-way are identified on the enclosed aerals and described in Table 1. All of the wetlands are adjacent to road right-of-way. Eleven wetlands and 18 surface waters have been identified in the right-of-way. A total of 3 transmission structures will be installed in the wetland areas. The total fill discharge for the project is 0.0014 acre. Trees will be cut in wetland along the new right-of-way. The tree clearing impact is 5.85 acres.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
6.8 cubic yards of sealed concrete and steel casing	1	

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres 0.0014

Or

Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Overall, the applicant has designed the project to have a minimal adverse impact on wetland resources. The route is in or adjacent to road right-of-way. Temporary construction matting will be installed to allow the contractor to install the structures in wetlands. Sedimentation and erosion control will be installed and maintained during construction.

24. Is Any Portion of the Work Already Complete? Yes ☐ No ☒ IF YES, DESCRIBE THE COMPLETED WORK

Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address - See Attachment A

City -

State -

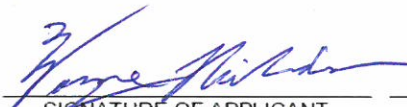
Zip -

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
FDEP	Individual Permit			Application in process	

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.


 SIGNATURE OF APPLICANT 2/21/2013
 DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$500 or imprisoned not more than five years or both.

**INTERCESSION CITY - GIFFORD NORTH 230kV TRANSMISSION LINE PROJECT
SEGMENT OF THE TLSA CERTIFIED LAKE AGNES – GIFFORD 230kV TRANSMISSION
LINE (TA 07-14A)
ORANGE AND OSCEOLA COUNTIES, FLORIDA
ENVIRONMENTAL NARRATIVE**

1.0 PROJECT LOCATION

The Intercession City - Gifford North 230kV Transmission Line Project (8.3 miles ±) is located in Sections 21 and 28, Township 24 South, and Range 27 East and Sections 4, 9, 16, 21, 22, 26, and 27, Township 25 South, Range 27 East (Quad Map). More specifically, the project originates just north of Interstate 4 (I-4) and east of State Road 429 (SR429) at proposed transmission structure ICG-39. The proposed line crosses to the west of SR429 and extends north along SR429 to the new Gifford Substation 0.75 mile north of Western Way to proposed transmission structure ICG-121 (Location Map).

2.0 PROJECT DESCRIPTION

Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to install or add a circuit on 83 transmission structures making up the new Intercession City - Gifford North 230kV Transmission Line. The Intercession City-Gifford North 230kV Transmission Line is a segment of the Florida Department of Environmental Protection (FDEP) TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A). This project is the Certified Facility detailed in Conditions of Certification (TA 07-14A) Section A: General Conditions I. Scope B. (2): a single circuit 230kV transmission line extending from the approximate area of the I-4/SR429 intersection to PEF's existing Gifford Substation in Orange County. The poles will be concrete or steel monopole structures that have a long life span. The wetlands along the transmission right-of-way are identified on the enclosed Wetland Maps and Site Plan Drawings and described in Table 1. A total of 11 wetlands and 18 surface waters have been identified in the right-of-way. A total of three (3) transmission structures will be placed in wetland areas for a total fill discharge of 0.0014 acre. The discharge is for the installation of the structures. No permanent access roads or fill pads are proposed. No additional discharge of dredged or permanent fill material is proposed; therefore, the project will have a minimal adverse effect on wetlands. Tree clearing will be conducted along the right-of-way for this new transmission corridor. The tree clearing is necessary to meet safety clearance requirements for the transmission corridor. A total of 5.85 acres of forested wetland will be converted to herbaceous wetlands to create a safe transmission corridor.

3.0 WETLAND DELINEATION

Wetland limits were determined in accordance with The Florida Wetlands Delineation Manual (Chapter 62-340, F.A.C.) suitable for submittal to the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual, 2008 Supplement.

The methods emphasize that wetland determinations are based on the identification of specific hydrologic requirements, including presence of hydric soils, a dominance of vegetation suited hydric (periodic, continuous, or saturated) soil conditions, and indications of hydrologic conditions such as inundation, moss collars, presence of muck soils, or other hydric indicators.

In addition to establishing the wetland boundaries, each wetland was evaluated to determine if it is within the Rivers and Harbors Act jurisdiction or Clean Water Act jurisdiction based on the 40 CFR 230.3 (2) definition of “*Waters of the United States*”. In addition, USACE Approved Wetland Determination Forms were completed for all wetlands within the Intercession City - Gifford North 230kV Transmission Line Project workspaces as per the direction of the USACE Regulatory Guidance Letter (RGL) No. 08-02 (Data Forms).

4.0 WETLAND DESCRIPTION

A total of 13.71 ± acres of jurisdictional area (11 Wetlands and 18 Surface Waters) are located within or adjacent to project workspaces (Wetland Map Book and Site Plan Drawings). A qualitative description of the wetlands is presented below and in Table 1. A representative photograph of each wetland is included in the attached Project Photo-document. The qualitative description of each wetland includes hydrologic indicators used to determine limits of the wetland and a discussion of the wetlands classification as USACE jurisdictional or non-jurisdictional.

Roadside Ditch (FLUCCS 512)

These herbaceous regularly mowed surface water ditches are characterized by a dominance of grasses and forbs including starrush white-top (*Rhynchospora colorata*), flatsedges (*Cyperus* spp.), frog fruit (*Phyla nodiflora*), coinwort (*Centella asiatica*), and smooth water hyssop (*Bacopa monnieri*). See Project Photo-document for representative photos of the surface water ditches within the project.

Reservoirs (FLUCCS 534)

This land use type describes several stormwater retention ponds (surface waters) bisected by the transmission corridor. These ponds are predominantly open water systems fringed by cattails (*Typha* sp.) and Carolina willow (*Salix caroliniana*) at the shallow littoral edge and occasionally fragrant water lily (*Nymphaea odorata*) in the deep zone. Observed indicators of wetland hydrology were inundation, presence of hydric soils, and dominance of hydrophytic vegetation. See Project Photo-document for representative photos of the surface water ponds within the project.

Mixed Wetland Hardwood (FLUCCS 617)

This land use describes a floodplain forest dominated by diverse species of hardwoods including blackgum (*Nyssa sylvatica*), red maple (*Acer rubrum*), sweetbay (*Magnolia virginiana*), and loblolly bay (*Gordonia lasianthus*). Saplings of the hardwood species present in the canopy are dense in areas of tree-fall gaps. The shrub stratum is generally sparse and clumped on hummocks within the wetland. Shrub species include buttonbush (*Cephalanthus occidentalis*), wax myrtle (*Myrica cerifera*), and fetterbush (*Lyonia lucida*). Herbaceous species are sparse due to the dense canopy cover and include

occasional concentrations of cinnamon fern (*Osmunda cinnamomea*), netted chain fern (*Woodwardia areolata*), lizard's tail (*Saururus cernuus*), and redroot (*Lachnanthes caroliniana*). Observed indicators of wetland hydrology were inundation, presence of hydric soils, and dominance of hydrophytic vegetation. See Project Photo-document for representative photos of these mixed hardwood wetlands within the project.

Wetland Forested Mixed (FLUCCS 630)

This land use describes a floodplain forest with a mix of cypress and slash pine and various hardwood species in the canopy. The canopy within the mixed hardwood and cypress wetland includes cypress (*Taxodium ascendens*), sweetbay, red maple, loblolly bay and occasional slash pines (*Pinus elliottii*). Shrubby species include wax myrtle, fetterbush and Carolina willow. Herbaceous species include redroot and Virginia chain-fern. Observed indicators of wetland hydrology were inundation, presence of hydric soils, and dominance of hydrophytic vegetation. See Project Photo-document for representative photos of hardwood and conifer mixed wetlands within the project.

Freshwater Marsh (FLUCCS 641)

This land use describes shallow freshwater marsh systems, typically dominated by sand cordgrass (*Spartina bakeri*), arrowhead (*Sagittaria lancifolia*), maidencane (*Panicum hemitomon*) and blue maidencane (*Amphicarpum muehlenbergianum*). Observed indicators of wetland hydrology were inundation, presence of hydric soils, and dominance of hydrophytic vegetation. See Project Photo-document for representative photos of marshes within the project.

5.0 WETLAND IMPACT DESCRIPTION

The following section discusses the proposed actions and sequencing of work proposed for the Intercession City - Gifford North 230kV Transmission Line Project.

The initial work will involve the installation of silt fence around the project workspaces. Next, trees within the new transmission corridor will be cut and removed. Temporary construction matting will be installed in the wetlands to avoid rutting. Once the matting is in place, the foundation contractor will mobilize and auger a hole to set the new steel or concrete monopole. A drill rig, tanker, crane, flatbed trucks, concrete pumpers and trucks, and a backhoe will be used during this phase of construction. All drilling fluids will be collected and reused or properly disposed offsite. No drilling fluid will be allowed to enter wetlands. Any excess material resulting from installation of the steel or concrete monopoles will be spread in upland areas or will be removed from the site.

Once the monopoles are installed, the insulators will be attached and the crews will begin attaching the conductor on the new poles. Installation of new structures in wetlands will be accomplished by using temporary construction matting. Once the line is installed, the cleanup and restoration of the right-of-way will begin. This will include the removal of the temporary construction matting.

The proposed project includes permanent impacts to one wetland and one surface water for the installation of 3 transmission structures. The total permanent impact is 0.0014 acre to install these

structures. New poles are proposed to be installed in Wetland WL-27 and Surface Water SW-14. The poles located in wetland WL-33 are existing structures and will have a new circuit installed. Tree clearing (5.85 acres) will occur in eight forested wetlands, WL-26, WL-27, WL-28, WL-31, WL-32, WL-33, WL-34 and WL-36. These forested wetlands within the transmission corridor will be converted to shrub and herbaceous wetlands. Temporary construction matting will be installed to access the poles along the right-of-way.

6.0 LISTED SPECIES

Flatwoods Consulting Group conducted a survey for listed species of wildlife and plants on the Intercession City - Gifford North 230kV Transmission Line Project in January 2013. The purpose of these surveys was to identify presence and relative abundance of species considered Endangered, Threatened, or of Special Concern by the U.S. Fish and Wildlife Service (FWS) under 50 CFR 11-12 or the Florida Fish and Wildlife Conservation Commission (FWC) under Chapter 68A-27 F.A.C. The surveys were in accordance with the FWC Florida Wildlife Conservation Guide. One state (FWC) listed species, the gopher tortoise, was observed in the Intercession City - Gifford North 230kV Transmission Line Project workspaces (See Listed Species Survey and Management Plan and Protected Species Table 2). The project will not impact gopher tortoises. The applicant has applied for a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project and will relocate all gopher tortoises out of harm's way prior to project construction. Some burrows may be avoided and protected in place if project construction is more than 25-feet from the burrow entrance (FWC Gopher Tortoise Permitting Guidelines revised September 2012).

No suitable sand skink habitat occurs on the transmission corridor because the project is located in FDOT road right-of-way (SR429 and I-4). Please note that portions of the proposed corridor are within the sand skink and blue-tailed mole skink consultation area, have suitable soil types (Tavares, Chandler, Satellite and Pomello) and are greater than 82 feet above sea level as outlined in the Peninsular Florida Species Conservation and Consultation Guide for Sand Skinks and Blue-tailed Mole Skinks April 2011 (revised February 2012). Much of the corridor is within FDOT right-of-way and is covered by the Western Beltway Incidental Take Permit issued to the Florida Department of Transportation – Turnpike District July 25, 2002 (FWS Application Number 200105086 IP-TB). This permit included impacts to sand skinks and blue-tailed mole skinks and provided the appropriate mitigation. For portions of the proposed transmission corridor not covered by the Western Beltway Incidental Take Permit, standard cover board surveys were conducted in March-April 2012 (Sand Skink Coverboard Map in Listed Species Survey and Management Plan). No sand skinks, blue-tailed mole skinks, or sand skink tracts were observed in the project right-of-way during the pedestrian surveys or during the March-April 2012 coverboard survey (Listed Species Survey and Management Plan). The habitat on this portion of the proposed transmission corridor is mostly dense Bahia grass adjacent to I-4 and is not desirable for sand skinks.

Additionally, we mapped the FNAI, FWC and FWS wildlife observations within one mile of the project (Listed Species Map in Listed Species Survey and Management Plan). The listed species shown on the FNAI/FWC Map do not occur within the project right-of-way. These species were documented prior to the construction of SR429 and no longer occur within the project right-of-way. According to the 1999 FWC wading bird colony database, there is one wading bird colony active during the 1999 survey,

located within five miles of the project area. Atlas 612132 is located approximately 4.5 miles east of the proposed transmission corridor. Wading bird nesting and foraging habitat should not be impacted by the project.

According to the FWS wood stork colony database, the project falls within one wood stork core foraging area (CFA). The Lake Russell wood stork colony is located approximately 15.3 miles south of the proposed structure ICG-39 in the central Florida district (Listed Species Map in Listed Species Survey and Management Plan). The project is not within the Primary Zone (within 1500 feet) or the Secondary Zone (1501 – 2500 feet) of any of these wood stork colonies. Wood stork nesting and foraging habitat should not be impacted by the project. According to the determination key for peninsular and central Florida (Orange County) and South Florida (Osceola County), the project is not likely to adversely affect wood storks as long as the permanent wetland impacts to suitable foraging habitat (SFH) will be less than 0.5 acre. SFH is described as any area containing patches of relatively open (< 25% aquatic vegetation), calm water and having a permanent or seasonal water depth between 2 and 15 inches. The permanent impact to wetlands is 0.0014 acre.

One known active bald eagle nest occurs within one mile of the transmission corridor according to the FWC Eagle Nest Locator, which is current through the 2011-2012 nesting season (Listed Species Map in Listed Species Survey and Management Plan). Eagle Nest OS193 is located approximately 0.7-mile west of proposed structure ICG-85. The project will likely have no effect on eagles. In accordance with the FWC Bald Eagle Management Plan (2008) and the FWS National Bald Eagle Management Guidelines, approvals regarding bald eagles will not be required because the project is more than 660 feet from bald eagle nest OS193.

7.0 AVOIDANCE AND MINIMIZATION

Overall, the applicant has designed the project to have a minimal adverse effect on the wetland resources. The proposed project will install new steel and concrete monopoles adjacent to road right-of-way and within an existing transmission corridor to minimize wetland impacts. Only 3 poles will be installed in wetlands. Originally the project was proposed using permanent access roads and fill pads in all wetland areas to avoid the safety concern with construction operations on the side of two high traffic and high speed roads (I-4 and SR 429). In order to reduce wetland impacts the applicant has agreed to remove the access roads and fill pads and instead use traffic calming measures to safely complete the project while working in road right-of-way. In addition, the structures will be accessed by the installation of temporary construction matting. Temporary construction matting will be installed to allow the contractor to mobilize and locate the equipment to set the foundation section of the pole. All drilling fluids used will be collected and reused or properly disposed offsite. No drilling fluid or side cast material will be allowed to enter wetlands. Any excess material resulting from drilling the foundation will be removed from the wetland area. Once construction is complete, the temporary matting will be removed. Detailed wetland descriptions, the number of structures to impact each wetland, and the amount of impact to each wetland are provided in Table 1. Sedimentation and erosion control will be installed and maintained during construction.

8.0 MITIGATION

A Unified Mitigation Assessment Method (UMAM) analysis was conducted for the project (see attached UMAM sheets). A UMAM functional loss score was calculated for each tree clearing wetland impact (clearing in forested wetlands) and each permanent wetland impact (utility structure installation). The total UMAM functional loss score is -1.16 for the 5.85 acres of tree clearing impacts and 0.0014-acre of permanent impacts. To compensate for the wetland loss, Progress Energy Florida is proposing to purchase credits in the FDEP-approved Southport Ranch Mitigation Bank. The Southport Ranch Mitigation Bank is a FDEP and USACE-approved mitigation bank and has the correct type and quantity of credits available to offset the project impacts. The UMAM functional gain from purchasing credits is 1.2. The functional gain of 1.2 compensates for the loss of -1.16. Details of the mitigation are included in the Mitigation Plan within this submittal.

9.0 STATE HISTORICAL PRESERVATION OFFICE (SHPO)

Southeastern Archaeological Research, Inc. conducted a cultural resources desktop assessment of the project in February 2013. The cultural resource assessment was sent to the SHPO. SHPO provided their concurrence that no cultural resources listed in the National Register of Historic Places (NRHP) are contained within the corridor and there is a low probability that cultural resources eligible for listing in the NRHP would be located within the corridor. Furthermore, SHPO concurs that no further cultural resource work is recommended.

TABLE 1: WETLAND DESCRIPTION AND IMPACT SUMMARY**Florida Power Corporation d/b/a Progress Energy Florida, Inc.****Intercession City - Gifford North 230kV Transmission Line Rebuild
Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A)****Orange and Osceola County, Florida**

Wetland ID	FLUCCS¹ Code	USACE Jurisdictional²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL³ or SW⁴	Wetland Descriptions
WL-26	617	Yes	0.08	0	0.08	0	WL	This hardwood wetland has a canopy dominated by sweetbay (<i>Magnolia virginiana</i>), red maple (<i>Acer rubrum</i>), sweetgum (<i>Liquidambar styraciflua</i>) and swampbay (<i>Persea palustris</i>). Shrubby species include fetterbush (<i>Lyonia lucida</i>) and Carolina willow (<i>Salix caroliniana</i>). Herbaceous species include cinnamon fern (<i>Osmunda cinnamomea</i>) and Virginia chain-fern (<i>Woodwardia virginica</i>).
WL-27	630	Yes	1.80	2	1.80	0.0009	WL	This mixed hardwood and cypress wetland has a canopy dominated by cypress (<i>Taxodium ascendens</i>), sweetbay, red maple, loblolly bay (<i>Gordonia lasianthus</i>) and occasional slash pines (<i>Pinus elliotii</i>). Shrubby species include wax myrtle (<i>Myrica cerifera</i>), fetterbush and Carolina willow. Herbaceous species include redroot (<i>Lachnanthes caroliniana</i>) and Virginia chain-fern.

Wetland ID	FLUCCS ¹ Code	USACE Jurisdictional ²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL ³ or SW ⁴	Wetland Descriptions
WL-28	641	No	0.36	0	0.20	0	WL	This shallow marsh is dominated by sand cordgrass (<i>Spartina bakeri</i>), arrowhead (<i>Sagittaria lancifolia</i>), maidencane (<i>Panicum hemitomon</i>) and blue maidencane (<i>Amphicarpum muehlenbergianum</i>).
WL-29	641	Yes	0.05	0	0	0	WL	This shallow marsh is dominated by sand cordgrass, arrowhead, maidencane and blue maidencane.
WL-30	641	No	0.05	0	0	0	WL	This shallow marsh is dominated by sand cordgrass, arrowhead, maidencane and blue maidencane.
WL-31	617	Yes	0.34	0	0.34	0	WL	This hardwood wetland has sweetbay, red maple and sweetgum in the canopy. Shrubby species include fetterbush, buttonbush (<i>Cephalanthus occidentalis</i>), and Carolina willow. Herbaceous species include lizard's tail (<i>Saururus cernuus</i>) and Virginia chain-fern.
WL-32	617	Yes	1.20	0	1.20	0	WL	This hardwood wetland has a canopy dominated by sweetbay, red maple, sweetgum, loblolly bay, and swampbay. Shrubby species include fetterbush, buttonbush, and Carolina willow. Herbaceous species include lizard's tail, cinnamon fern, and Virginia chain-fern.
WL-33	617	Yes	1.82	0	1.82	0	WL	This hardwood wetland has sweetbay, red maple, sweetgum, loblolly bay, and swampbay. Shrubby species include fetterbush, buttonbush, and Carolina willow. Herbaceous species include cinnamon fern and Virginia chain-fern.

Wetland ID	FLUCCS ¹ Code	USACE Jurisdictional ²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL ³ or SW ⁴	Wetland Descriptions
WL-34	617	Yes	0.39	0	0.39	0	WL	This hardwood wetland has sweetbay, red maple, sweetgum, loblolly bay, and swampbay. Shrubby species include fetterbush, buttonbush, and Carolina willow. Herbaceous species include cinnamon fern and Virginia chain-fern.
WL-35	641	No	0.32	0	0	0	WL	This deep marsh is dominated by sand cordgrass, arrowhead, maidencane and St. John's wort (<i>Hypericum fasciculatum</i>). Small cypress trees are present in the wetland.
WL-36	630	No	0.02	0	0.02	0	WL	This mixed hardwood and cypress wetland has cypress, sweetbay, red maple, loblolly bay and occasional slash pines in the canopy. Shrubby species include wax myrtle, fetterbush and Carolina willow. Herbaceous species include redroot and Virginia chain-fern.
SW-1	534	Yes	0.37	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails (<i>Typha</i> sp.) and Carolina willow.
SW-1A	534	Yes	0.08	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and Carolina willow.

Wetland ID	FLUCCS ¹ Code	USACE Jurisdictional ²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL ³ or SW ⁴	Wetland Descriptions
SW-2	534	Yes	1.84	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond dominated by cattails and Carolina willow. Cypress trees have been planted on the pond edge.
SW-3	534	No	0.04	0	0	0	SW	This stormwater retention pond is associated with a residential development. The pond is open water.
SW-4	534	Yes	0.06	0	0	0	SW	This stormwater retention pond is associated with a residential development. The pond is open water.
SW-5	534	Yes	1.13	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and water-lily (<i>Nymphaea odorata</i>).
SW-6	534	Yes	0.56	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and water-lily.
SW-7	534	Yes	0.27	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails.
SW-8	534	Yes	0.26	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails.

Wetland ID	FLUCCS ¹ Code	USACE Jurisdictional ²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL ³ or SW ⁴	Wetland Descriptions
SW-9	534	Yes	0.48	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails.
SW-10	534	Yes	0.07	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and Carolina willow.
SW-12	534	Yes	0.78	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and Carolina willow.
SW-13	534	Yes	0.99	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails and Carolina willow.
SW-14	534	Yes	0.26	1	0	0.0005	SW	This stormwater treatment pond is associated with SR429. The pond dominated by cattails.
SW-15	534	Yes	0.06	0	0	0	SW	This stormwater treatment pond is associated with SR429. The pond is mainly open water with a littoral zone dominated by cattails.
SW-16	512	No	0.01	0	0	0	SW	This roadside ditch is an herbaceous stormwater conveyance. The ditch has coinwort (<i>Centella asiatica</i>), various species of sedge (<i>Cyperus</i> spp.) and pathrush (<i>Eleocharis baldwinii</i>).

Wetland ID	FLUCCS¹ Code	USACE Jurisdictional²	Size (Acres)	Proposed Structures	Tree Clearing (Acres)	Permanent Impact (Acres)	WL³ or SW⁴	Wetland Descriptions
SW-17	512	No	0.01	0	0	0	SW	This roadside ditch is an herbaceous stormwater conveyance. The ditch has coinwort, various species of sedge and pathrush.
SW-18	512	Yes	0.01	0	0	0	SW	This roadside ditch is an herbaceous stormwater conveyance. The ditch has coinwort, various species of sedge, and pathrush.
Totals			13.71	3	5.85	0.0014		

Table 2
Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Intercession City - Gifford North 230kV Transmission Line Project
Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A)

Protected Plants and Animals Potentially Occurring on the Transmission Line Right-of-Way
Orange and Osceola Counties, Florida

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
AMPHIBIANS					
<i>Rana capito</i> Gopher frog	Dry, sandy uplands, chiefly sandhill and scrub that include isolated wetlands or seasonal ponds.	S - Year round B - October-April	Moderate: some suitable habitat present	---	SSC
BIRDS					
<i>Ajaia ajaja</i> Roseate spoonbill	Primarily nests in mixed-species colonies on coastal islands Occasionally nests in willow heads at freshwater sites. Forages in shallow water including marine tidal flats and ponds, and freshwater sloughs and marshes.	S - Year round B - March-July	Low: Little suitable habitat present	---	SSC
<i>Ammodramus savannarum floridanus</i> Florida grasshopper sparrow	Requires large areas of frequently burned dry prairie habitat, with patchy open areas sufficient for foraging. May persist in pasture lands that have not been intensively managed so as to remove all vegetation clumps.	S – 1 April- 15 June B – March-July	Low: No suitable habitat present	E	E
<i>Aphelocoma coerulescens</i> Florida scrub-jay	Inhabits fire dominated, low-growing, oak scrub habitat found on well-drained sandy soils. May persist in areas with sparser oaks or scrub areas that are overgrown.	S - March-October B - March-July	Low: No suitable habitat present	T	T
<i>Aramus guarauna</i> Limpkin	Found foraging along the banks of slow moving freshwater streams or rivers, in swamps, marshes, and along lakeshores. Nesting sites include mounds of aquatic vegetation and marsh grasses among cypress knees and high in trees.	S - Year round B - February-July	Moderate for foraging, low for nesting	---	SSC
<i>Athene cunicularia floridana</i> Florida burrowing owl	Natural habitats include dry prairie and sandhill. Makes extensive use of ruderal areas such as pastures, airports, ball fields, parks, school grounds, university campuses, road right-of-ways, and vacant spaces in residential areas.	S - Year round B - March-June	Moderate: Little suitable habitat present	---	SSC

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Caracara cheriway</i> Crested caracara	Open country, including dry prairie and pasture lands with cabbage palm, cabbage palm/live oak hammocks, and shallow ponds and sloughs.	S - January-April B - December-June	Low: Little suitable habitat present	T	T
<i>Egretta caerulea</i> Little blue heron	Shallow freshwater, brackish water, and saltwater habitats.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Egretta thula</i> Snowy egret	Ponds, streams, marshes, and pastures.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Egretta tricolor</i> Tricolored heron	Forages in a variety of permanently and seasonally flooded wetlands, ditches, and lakes. Inland nesting colonies typically found in Carolina willow dominated wetlands.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Eudocimus albus</i> White ibis	Freshwater, brackish water, and saltwater habitats.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Falco sparverius paulus</i> Southeastern American kestrel	Found in open pine habitats, woodland edges, dry prairies, and pastures.	S - April-August B - April-August	Moderate: Suitable habitat present	---	T
<i>Grus canadensis pratensis</i> Florida sandhill crane	Prairies, freshwater marshes, and pasture lands. Avoids forests and deep marshes but uses transition zones and edges between these and prairies or pasture lands.	S - January-June B - December-June	Moderate for foraging, nesting unlikely	---	T
<i>Haliaeetus leucocephalus</i> Bald eagle	Areas close to the coast, bays, rivers, lakes, or other bodies of water. Typically nests in live mature pines and cypress trees.	S - Year round B - October-May	Moderate for foraging, nesting unlikely	---	---
<i>Mycteria americana</i> Wood stork	Forages in shallow water in freshwater marshes, swamps, lagoons, ponds, tidal creeks, flooded pastures, and ditches. Nests in colonies in cypress swamps.	S - Year round B - March-August	High for foraging, nesting unlikely	E	E
<i>Picoides borealis</i> Red-cockaded woodpecker	Open pine woodlands with mature to over-mature pine trees and a diversity of grass, forbs, and shrub species.	S - Year round B - April-July	Low: No suitable nesting habitat	E	SSC

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Rostrhamus sociabilis plumbeus</i> Everglade snail kite	Large open freshwater marshes and lakes with shallow water, less than four feet deep, and a low density of emergent vegetation.	S - December-July B - January-May	Low: Little suitable habitat present	E	E
<i>Sterna antillarum</i> Least tern	Coastal areas throughout Florida, including beaches, lagoons, bays, and estuaries. Increasingly use artificial nesting sites, including gravel rooftops, dredge spoil islands or other dredged material deposits, construction sites, causeways, and mining lands.	S - April-September B - April-September	Low: No suitable nesting habitat	---	T
MAMMALS					
<i>Podomys floridanus</i> Florida mouse	Xeric upland communities with sandy soils, including scrub, sandhill, and ruderal sites where they inhabit burrows of the gopher tortoise.	S - Year round B - July-February	Moderate: Some suitable habitat present	---	SSC
<i>Puma concolor coryi</i> Florida panther	Requires extensive blocks of mostly forested communities. Large wetlands that are generally inaccessible to humans are important for diurnal refuge.	S - Year round B - December-March	Low: suitable habitat present	E	E
<i>Sciurus niger shermani</i> Sherman's fox squirrel	Sandhill, pine flatwoods, and pastures and other open, ruderal habitats with scattered pines and oaks. Depends on a variety of oak trees for seasonal food and nest material.	S - Year round B - December-February & May-June	Moderate: Suitable habitat adjacent	---	SSC
<i>Ursus americanus floridanus</i> Florida black bear	A wide variety of forested communities is needed to support the varied seasonal diet of black bears. Forested wetlands are particularly important for diurnal cover. Baygalls (bayheads) are important for cover and dens.	S - Year round B - June-August	Low: Little suitable habitat present	---	T
REPTILES					
<i>Drymarchon corais couperi</i> Eastern indigo snake	Broad range of habitats from scrub and sandhill to wet prairies, forested wetlands, and mangrove swamps. Often seeks refuge in gopher tortoise burrows in sandy uplands, but also forages in mesic and hydric habitats.	S - Year round B - November-April	Moderate: Suitable habitat present	T	T
<i>Gopherus polyphemus</i> Gopher tortoise	Found in dry upland habitats, including sandhills, scrub, xeric oak hammock, and dry prairie flatwoods; also commonly uses disturbed habitats such as pastures, old fields, abandoned citrus groves, and road shoulders.	S - Year round B - March-October	High: Observed	---	T

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Alligator mississippiensis</i> American alligator	Permanent bodies of fresh water, including marshes, swamps, lakes, and rivers. Occasionally wanders into brackish and salt water but rarely remains there.	S - Year round B - April-August	Moderate: Suitable habitat present	T(SA)	SSC
<i>Neoseps reynoldsi</i> Sand skink	Principally rosemary scrub, but also in sand pine and oak scrubs, scrubby flatwoods, turkey oak ridge within scrub, and even along edges of citrus groves occupying former scrub.	S – March-15 May B – February - June	Moderate: Suitable habitat present	T	T
<i>Eumeces egregius lividus</i> Blue-tailed mole skink	Well-drained sandy uplands usually with an abundance of scattered shrubs and lichens. Favors rosemary, oak, and sand pine scrubs; occasional in turkey oak barrens, sandhill, and xeric hammock.	S – March-15 May B – February - June	Moderate: Suitable habitat present	T	T
<i>Pituophis melanoleucus mugitus</i> Florida pine snake	Found in sandhill and former sandhill, including old fields and pastures, but also sand pine scrub and scrubby flatwoods with open canopies and dry sandy soils. Often coexists with pocket gophers and gopher tortoises.	S - Year round B - April-February	Moderate: Suitable habitat present	---	SSC
PLANTS					
<i>Bonamia grandiflora</i> Florida bonamia	Openings or disturbed areas in white sand scrub on central Florida ridges, with scrub oaks, sand pine, and lichens.	S - Year round F - May-August	Low: Little suitable habitat present	T	E
<i>Chionanthus pygmaeus</i> Pygmy fringe tree	Scrub, sandhill, and xeric hammock, primarily on the Lake Wales Ridge. May form thickets with evergreen scrub oaks and shrubs.	S - Year round F - April-June	Low: Little suitable habitat present	E	E
<i>Clitoria fragrans</i> Scrub pigeon wing	Turkey oak barrens with wire grass, bluejack and turkey oak; also scrub and scrubby high pine.	S – May-June F - May-June	Low: Little suitable habitat present	T	E
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i> Scrub buckwheat	Sandhill, oak-hickory scrub on yellow sands, high pineland between scrub and sandhill, turkey oak barrens.	S – May-October F – May-October	Low: Little suitable habitat present	T	E
<i>Lupinus aridorum</i> Scrub lupine	Openings in sand pine and rosemary scrub.	S - Year round F – March-May	Low: Little suitable habitat present	E	E

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Nolina brittonia</i> Britton's beargrass	Scrub, sandhill, scrubby flatwoods, and xeric hammock.	S - Year round F – March-May	Low: Little suitable habitat present	E	E
<i>Paronychia chartacea</i> Papery nailwort	Occurs in Lake Wales Ridge scrub.	S – June-December F – July - November	Low: Little suitable habitat present	T	E
<i>Polygala lewtonii</i> Lewton's polygala	Oak scrub, sandhill, and transition zones between high pine and turkey oak barrens.	S – February-April F – February-April	Low: Little suitable habitat present	E	E
<i>Polygonella myriophylla</i> Sandlace	Open, sandy areas within scrub, mostly on white sands.	S - Year round F – Tear round	Low: Little suitable habitat present	E	E
<i>Warea amplexifolia</i> Clasping warea	Sandhill with longleaf pine and wiregrass.	S –April-October F – September-October	Low: Little suitable habitat present	E	E
<i>Deeringothamnus pulchellus</i> Beautiful Pawpaw	Open slash pine or longleaf pine flatwoods with wiregrass and dwarf live oak in the understory.	S - March-April F - March-April	Low: Little suitable habitat present	E	E

1 - S - Survey Window, B -Breeding Season, F - Flowering Season

2 - E = Endangered, T = Threatened, SSC = Species of Special Concern, T (SA) = Similarity of Appearance to a Threatened Taxon

3 - U.S. Fish and Wildlife Service

4 - Florida Fish and Wildlife Conservation Commission

Table Source: Florida Wildlife Conservation Guide, Florida's Breeding Bird Atlas, Florida Natural Areas Inventory, and FWS Species by County List

ATTACHMENT A PROPERTY OWNERS LIST

**Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Intercession City - Gifford North 230kV Transmission Line Rebuild
Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A)**

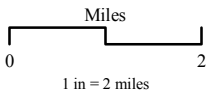
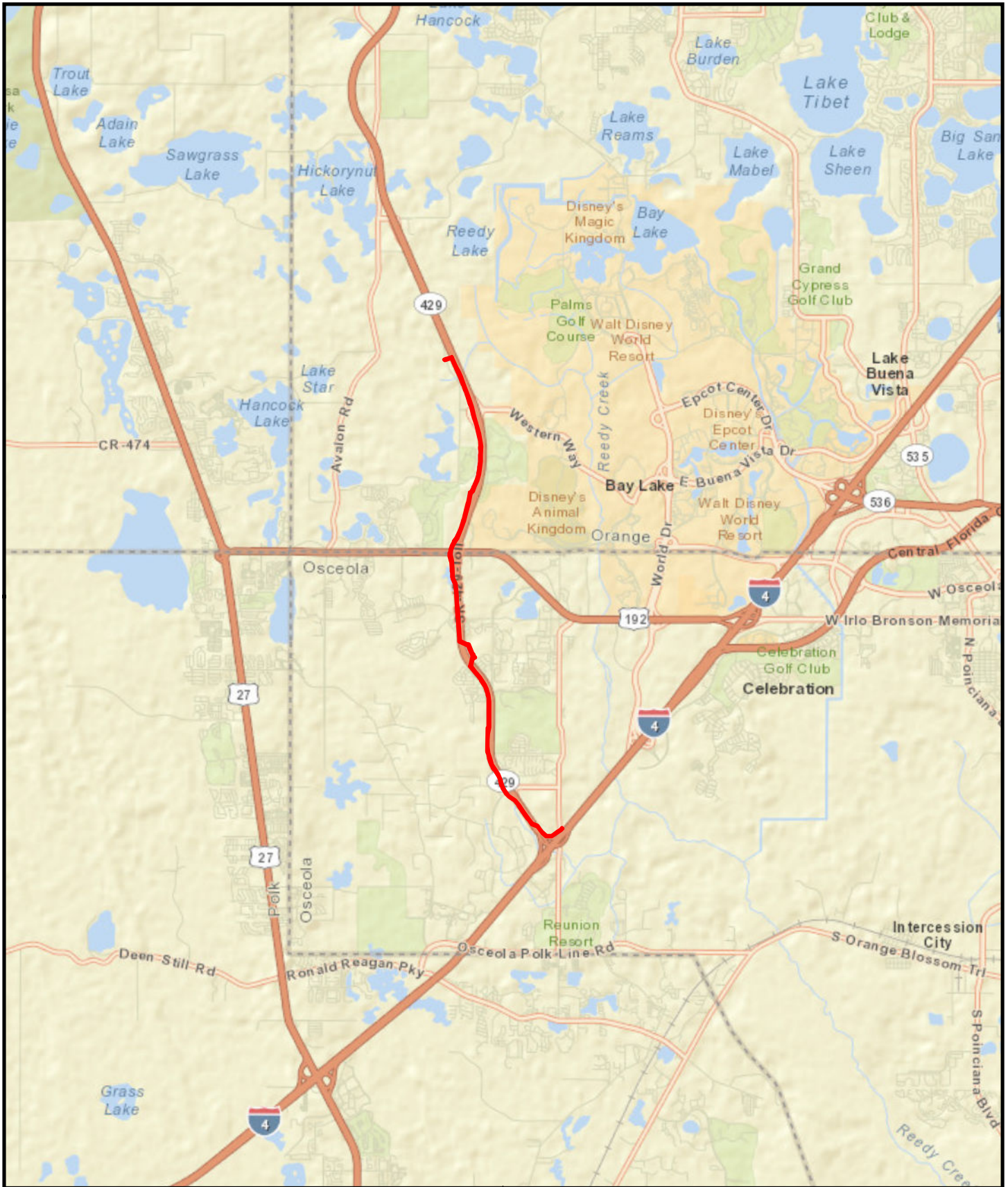
Orange and Osceola County, Florida

Parcel #	Owner Name Address City, State Zip	Sec-Twn-Rge
33-24-27-0000-00-021	DOT/STATE OF FLORIDA-TURNPIKE ENTERPRISE PO BOX 613069 MILE POST 263 BLDG 5315 OCOE, FL 34761	33-24S-27E
33-24-27-0000-00-019	ORANGE LAKE COUNTRY CLUB INC 8505 W IRLO BRONSON MEMORIAL HWY KISSIMMEE, FL 34747-8217	33-24S-27E
28-24-27-0000-00-013	ORANGE LAKE COUNTRY CLUB INC 8505 W IRLO BRONSON MEMORIAL HWY KISSIMMEE, FL 34747-8217	28-24S-27E
16-24-27-0000-00-004	REEDY CREEK IMP DIST PO BOX 10170 LAKE BUENA VISTA, FL 32830-017	16-24S-27E
21-24-27-0000-00-037	REEDY CREEK IMP DIST PO BOX 10170 LAKE BUENA VISTA, FL 32830-017	21-24S-27E
21-24-27-0000-10-001	REDDY CREEK IMP DIST C/O PROGRESS ENERGY SERVICES CO LLC ATT: MARVA M TAYLOR 100 CENTRAL AVE CX1D ST PETERSBURG, FL 33701-3324	21-24S-27E
21-24-27-0000-00-032	REEDY CREEK IMP DIST PO BOX 10170 LAKE BUENA VISTA, FL 32830-017	21-24S-27E
21-24-27-0000-00-008	FLAMINGO CROSSINGS LLC PO BOX 22154 ORLANDO, FL 32830-2154	21-24S-27E
21-24-27-0000-00-012	FLAMINGO CROSSINGS LLC PO BOX 22154 ORLANDO, FL 32830-2154	21-24S-27E
21-24-27-0000-00-033	REEDY CREEK IMP DIST PO BOX 10170 LAKE BUENA VISTA, FL 32830-017	21-24S-27E
042527000000300000	CENTRAL FLA INVESTMENTS INC C/O JOYCE MORRIS 5601 WINDHOVER DR ORLANDO, FL 32819-7914	4-25s-27e

Parcel #	Owner Name Address City, State Zip	Sec-Twn-Rge
16-25-27-5603-0001-0A10	WYNDHAM PALMS MASTER COMM ASSOC INC 2300 WYNDHAM PALMS WAY KISSIMMEE, FL 34747	20-01S-04W
0925273434000100C0	OSCEOLA COUNTY 1 COURTHOUSE SQ STE 4200 KISSIMMEE, FL 34741	9-25S-27E
2225273160000C0010	FOURTH QUARTER PROP XLIV LLC 45 ANSLEY DR NEWNAN, GA 30263-7107	22-25S-27E
342527401200040010	RWEST HOLDINGS LLC TWO JAMES CENTER 1021 EAST CARY ST 18TH FLOOR RICHMOND, VA 23219	34-25S-27E
212527330200010070	TORRES GAMALIEL 1908 HONOUR RD APT 2 ORLANDO, FL 32839-1563	21-25S-27E
2725273160000A0031	FLORIDA GAS TRANSMISSION CO ATTN: PROPERTY TAX DEPT PO BOX 4967 HOUSTON, TX 77210-4967	27-25S-27E
212527330200010040	STATE OF FL DOT 605 SUWANNEE ST TALLAHASSEE, FL 32399	21-25S-27E
2225273160000B0010	FOURTH QUARTER PROP XLIV LLC 45 ANSLEY DR NEWNAN, GA 30263-7107	22-25S-27E
2725273160000A0085	PERDUE GEORGE E III PO BOX 147 BONAIRE, GA 31005	27-25S-27E
212527330200010030	MCKENZIE ALEXIS MCKENZIE EDWIN 7960 HAPPY TRAILS KISSIMMEE, FL 34747	21-25S-27E
2125273302000100A0	HAPPY TRAILS PROPERTY OWNERS ASSOCIATION 8297 CHAMPIONS GATE BLVD #127 CHAMPIONS GATE, FL 33896	21-25S-27E
212527330200010060	C/O LEROY DIANE STATE OF FLA DOT MILE POST 263 BLDG 5315 PO BOX 613069 OCOE, FL 34761-3069	21-25S-27E
212527330200010085	STATE OF FLA DOT MILE POST 263 BLDG 5315 PO BOX 613069 OCOE, FL 34761-3069	21-25s-27e

Parcel #	Owner Name Address City, State Zip	Sec-Twn-Rge
2725273160000A0030	REDUS LAKE WILSON LLC 800 N MAGNOLIA AVE STE 704 ORLANDO, FL 32803	27-25S-27E
2725273160000A0090	PERDUE GEORGE E III PO BOX 147 BONAIRE, GA 31005	27-25S-27E
212527330200010080	CRAMP DAVID W III CRAMP SHARON 1091 PINEVIEW TR KISSIMMEE, FL 34747	21-25S-27E
212527330200010050	DHOLAKIA ANIL P O BOX 1824 FRANKLIN, NC 28734	21-25S-27E
0925273435000100B0	OSCEOLA COUNTY 1 COURTHOUSE SQ STE 4200 KISSIMMEE, FL 34741	9-25S-27E
0925273434000100B0	OSCEOLA COUNTY 1 COURTHOUSE SQ STE 4200 KISSIMMEE, FL 34741	9-25S-27E
1625273160000A0010	TOHOPEKALIGA WATER AUTHORITY 951 MARTIN LUTHER KING BLVD KISSIMMEE, FL 34741	16-25S-27E
162527000000300000	LOPEZ MUNOZ GUSTAVO LOPEZ MUNOZ MARIA ROSA P 4810 ALHAMBRA CIRCLE CORAL GABLES, FL 33146	16-25S-27E
1625275600000100B0	WYNDHAM PALMS MASTER COMM ASSOC INC 2300 WYNDHAM PALMS WAY KISSIMMEE, FL 34747-1955	16-25S-27E
1625275600000100Q0	WYNDHAM PALMS MASTER COMM ASSOC INC 2300 WYNDHAM PALMS WAY KISSIMMEE, FL 34747-1955	16-25S-27E
0925273436000100A0	OSCEOLA COUNTY 1 COURTHOUSE SQ STE 4200 KISSIMMEE, FL 34741	9-25S-27E
0925274457000100C0	STATE OF FLORIDA DOT MILE POST 263 BLDG 5315 OCOE, FL 34761	9-25S-27E
0925274457000100B0	OAK ISLAND HARBOR COMMUNITY OWNERS ASSOCIATION INC C/O SENTRY MGMT INC 2180 W SR 434 STE 5000 LONGWOOD, FL 32779	9-25S-27E
092527000000100000	WOODBERRY FAMILY LIMITED LIABILITY PARTNERSHIP 900 CROOKED OAK CT LONGWOOD, FL 32779	9-25S-27E

Parcel #	Owner Name Address City, State Zip	Sec-Twn-Rge
0925273053000100B0	OSCEOLA COUNTY 1 COURTHOUSE SQ STE 4200 KISSIMMEE, FL 34741	9-25S-27E
0925274449000100A0	STATE OF FLA DOT 605 SUWANNEE ST TALLAHASSEE, FL 32399-0450	9-25S-27E
0925273053000100A0	EMERALD ISL RESORT VILLAS HOA INC 518 SUMMER PLACE LOOP CLERMONT, FL 34711	9-25S-27E
0925273062000100N0	EMERALD ISLAND RESORT MASTER ASSOC INC 2751 EMERALD ISLAND BLVD KISSIMMEE, FL 34747	9-25S-27E
042527000000250000	STATE OF FLA DOT 719 S WOODLAND BLVD DELAND, FL 32720	4-25S-27E
042527000000200000	300 ON 530 TRUST C/O FOWLER JAMES A TR 28 W CENTRAL BLVD ORLANDO, FL 32801-2466	4-25S-27E



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

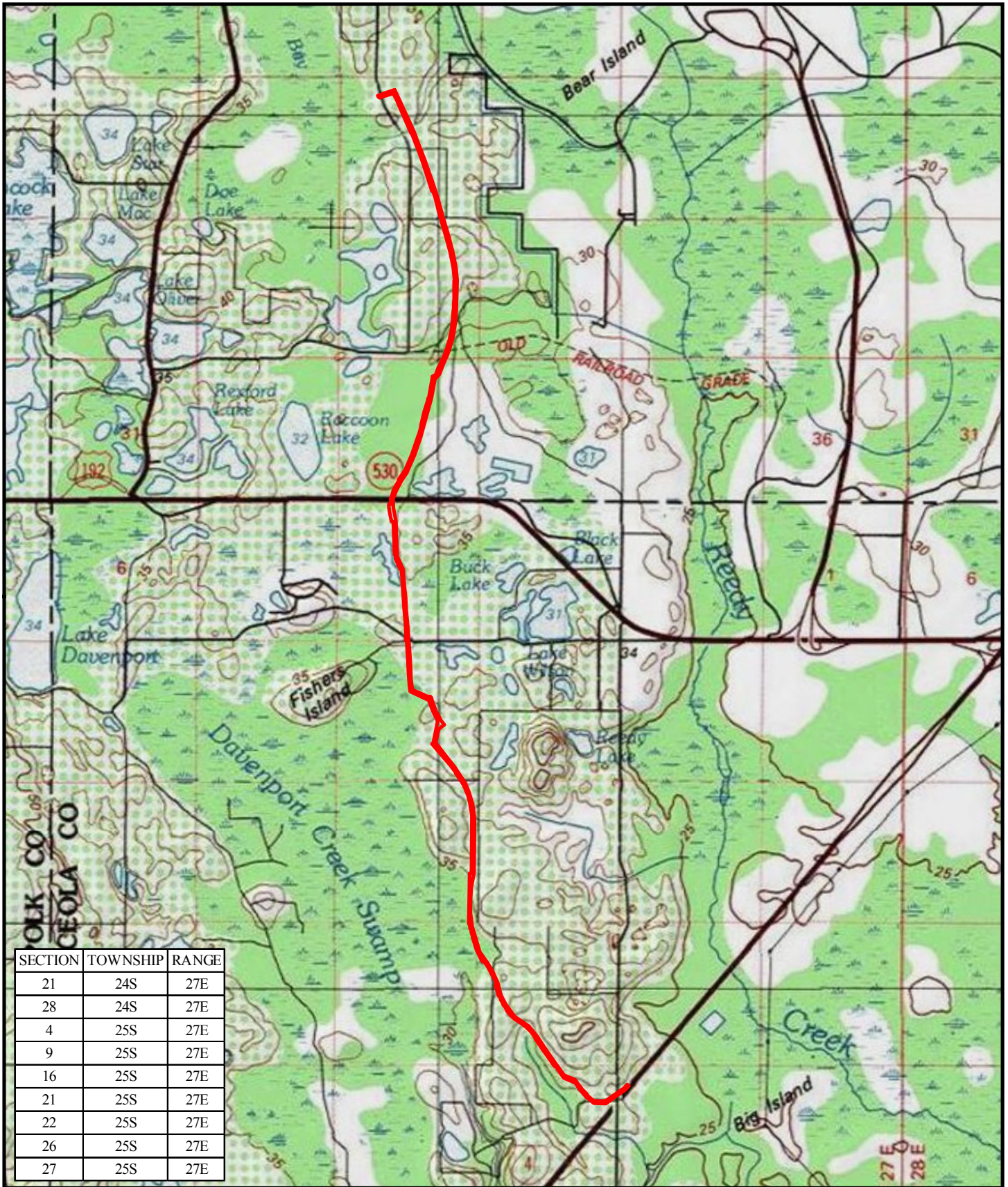


Transmission Corridor

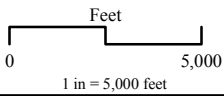


**LOCATION
MAP**

Source: ESRI World Streetmap



SECTION	TOWNSHIP	RANGE
21	24S	27E
28	24S	27E
4	25S	27E
9	25S	27E
16	25S	27E
21	25S	27E
22	25S	27E
26	25S	27E
27	25S	27E



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

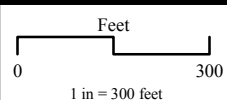
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

 **Transmission Corridor**



**QUAD
MAP**

Source: USGS Topo Quad



**INTERSECTION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
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Transmission Corridor
★ **Structures**

Feet
 0 ————— 300
 1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
 230kV TRANSMISSION LINE
 PROGRESS ENERGY FLORIDA**

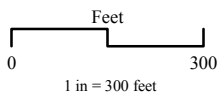
**OSCEOLA & ORANGE
 COUNTIES, FLORIDA**



**AERIAL
 MAP
 2 of 18**

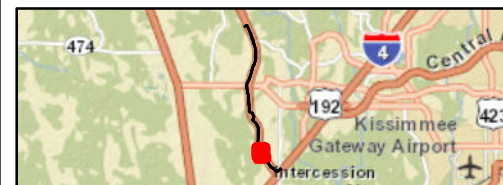


Feet 0 300 1 in = 300 feet	INTERCESSION CITY-GIFFORD NORTH 230kV TRANSMISSION LINE PROGRESS ENERGY FLORIDA	Source: USGS Topo Quad	N W E S
FLATWOODS Consulting Group	OSCEOLA & ORANGE COUNTIES, FLORIDA		AERIAL MAP 3 of 18

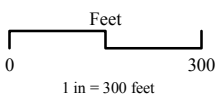


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
4 of 18**

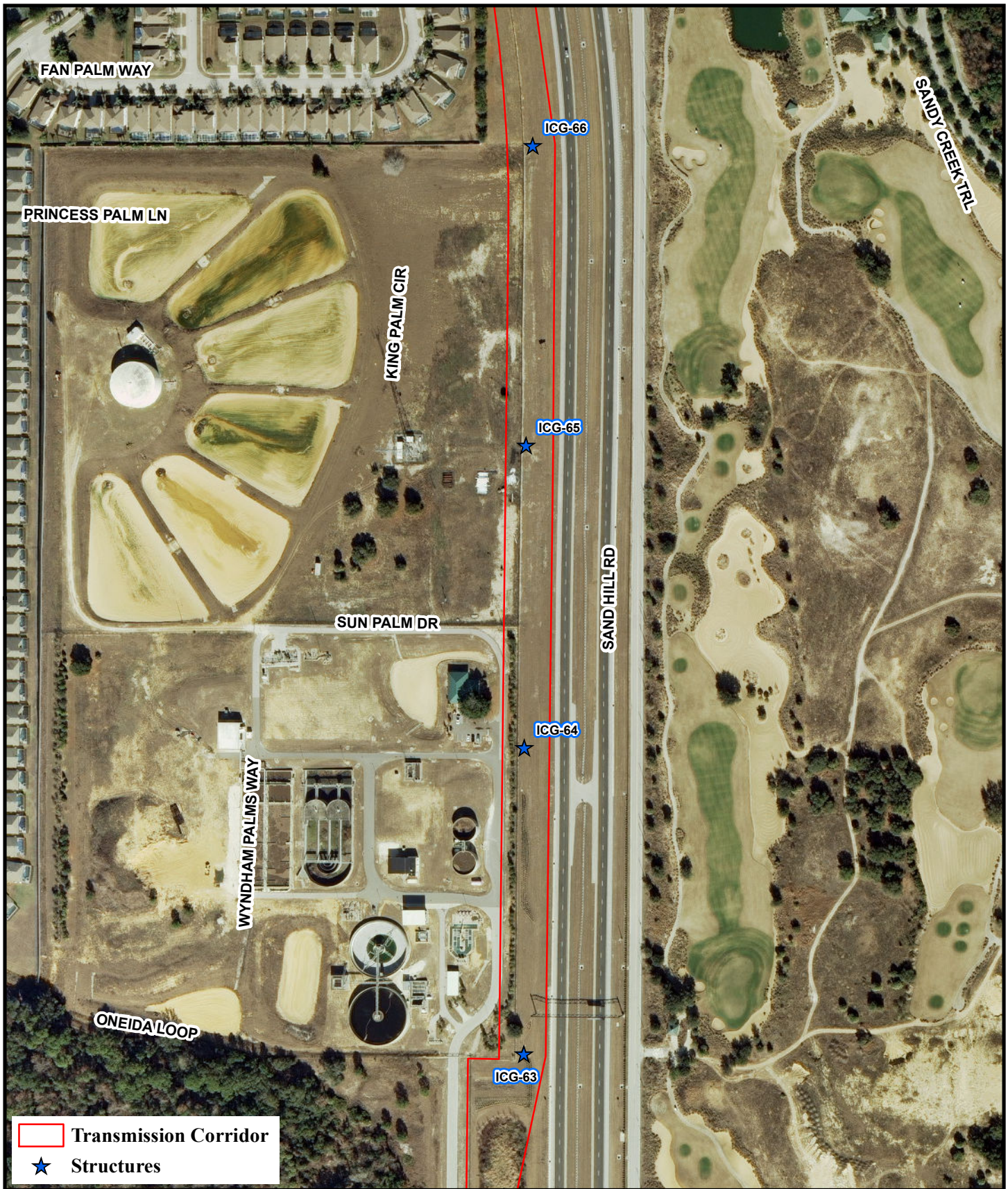


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

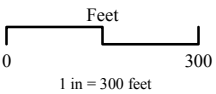
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
5 of 18**



Transmission Corridor
★ Structures



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

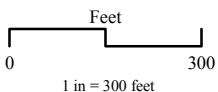
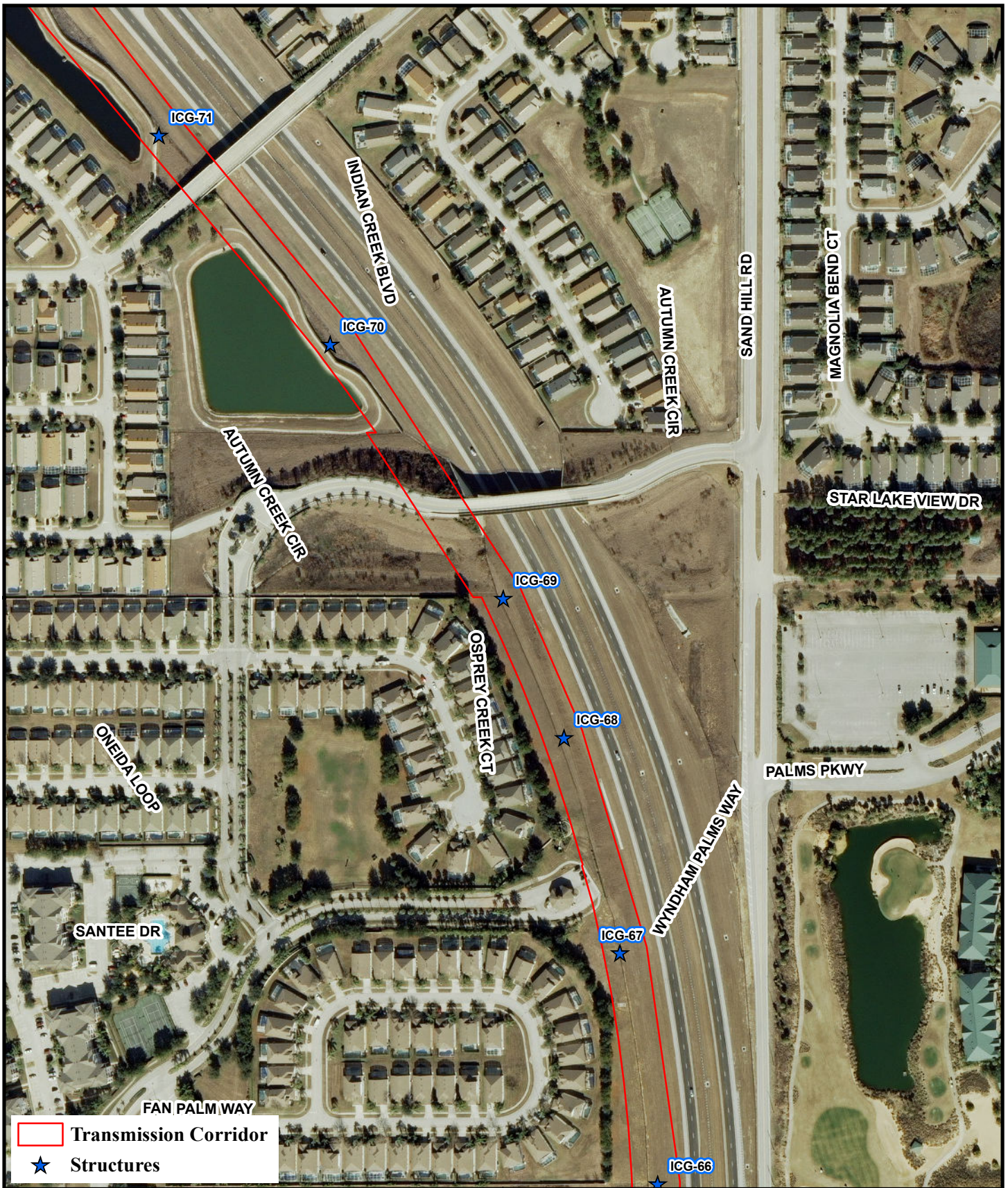
OSCEOLA & ORANGE
COUNTIES, FLORIDA



Source: USGS Topo Quad



AERIAL
MAP
6 of 18

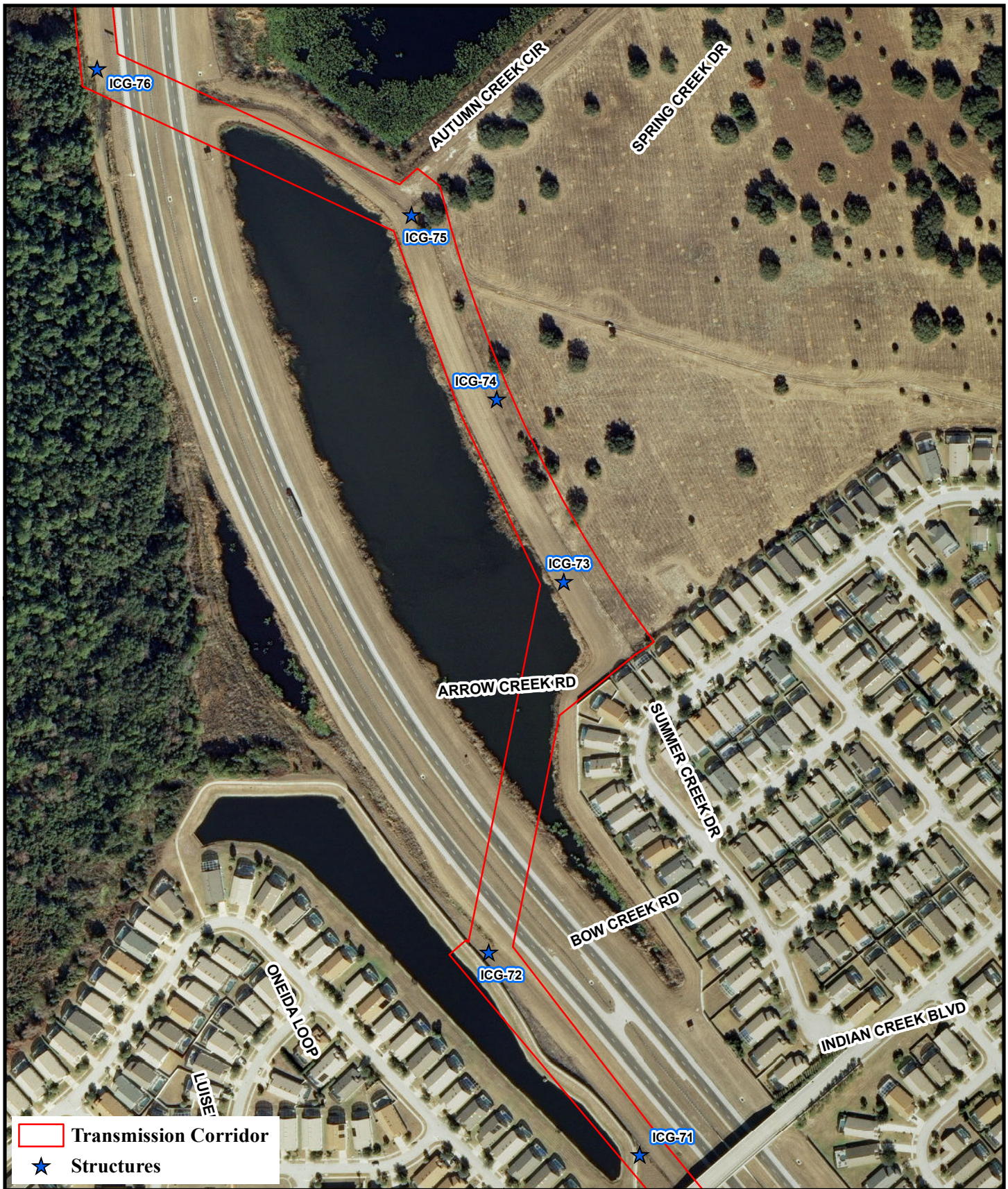


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
7 of 18**



Transmission Corridor
★ **Structures**

Feet
 0 ————— 300
 1 in = 300 feet



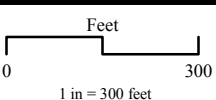
INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



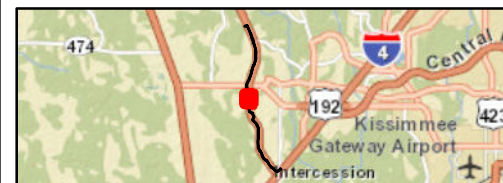
AERIAL
MAP
8 of 18



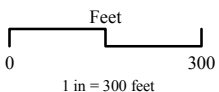


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

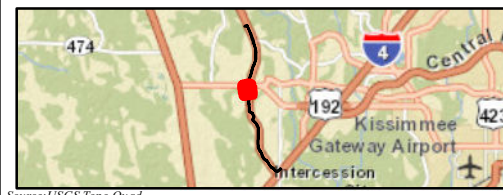


**AERIAL
MAP
10 of 18**

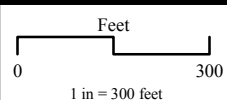
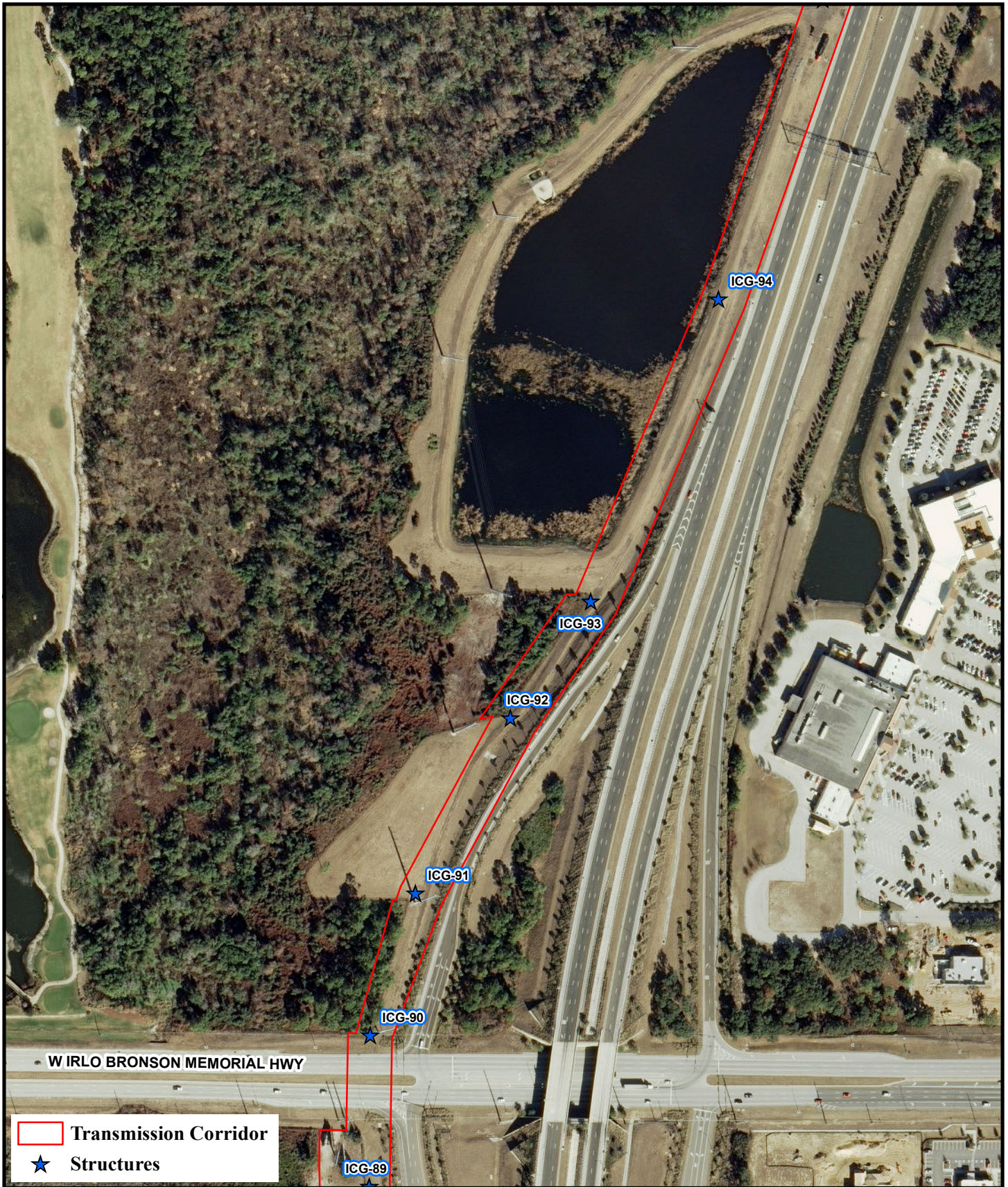


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
11 of 18**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

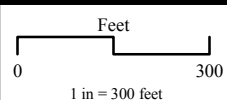
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**AERIAL
MAP
12 of 18**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

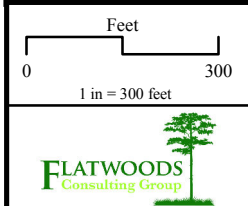
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad

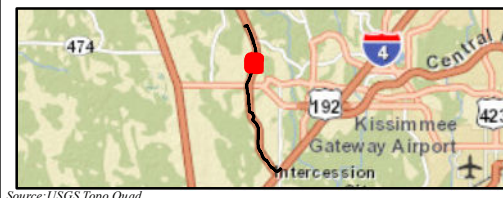


**AERIAL
MAP
13 of 18**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**AERIAL
MAP
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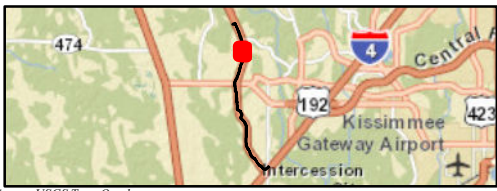
Transmission Corridor
★ **Structures**

Feet
 0 ————— 300
 1 in = 300 feet



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



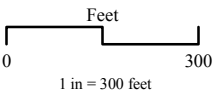
Source: USGS Topo Quad



AERIAL
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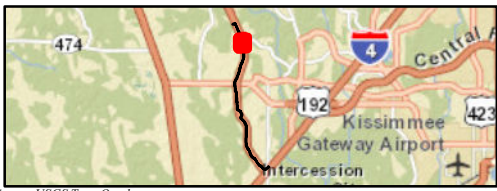


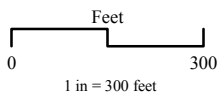
Transmission Corridor
★ **Structures**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**





**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**AERIAL
MAP
17 of 18**



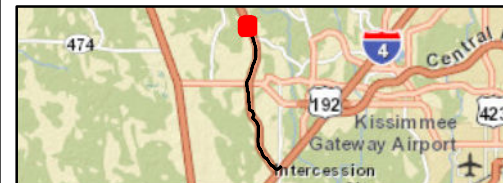
 **Transmission Corridor**
 **Structures**

Feet
 0 ————— 300
 1 in = 300 feet



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

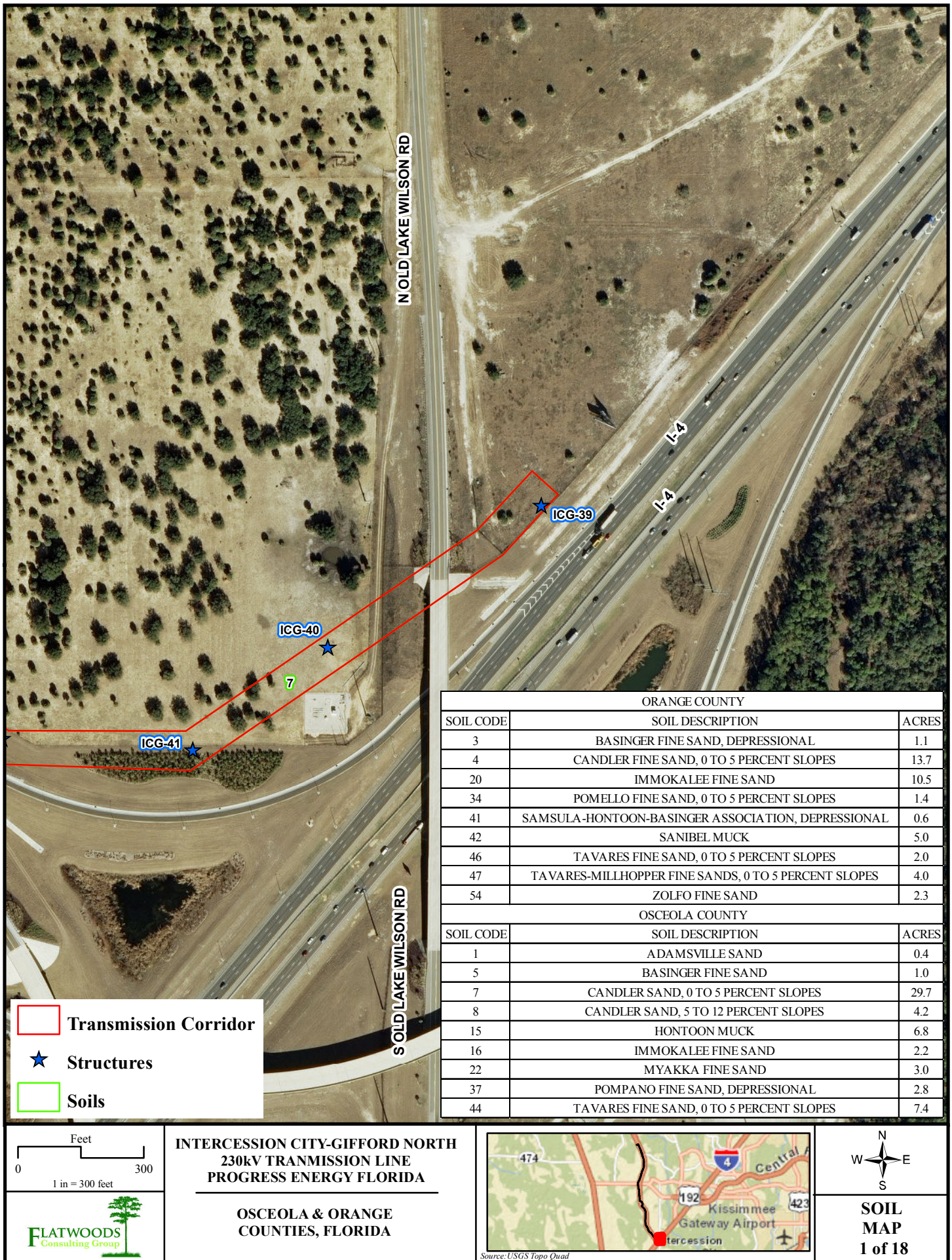
OSCEOLA & ORANGE
COUNTIES, FLORIDA

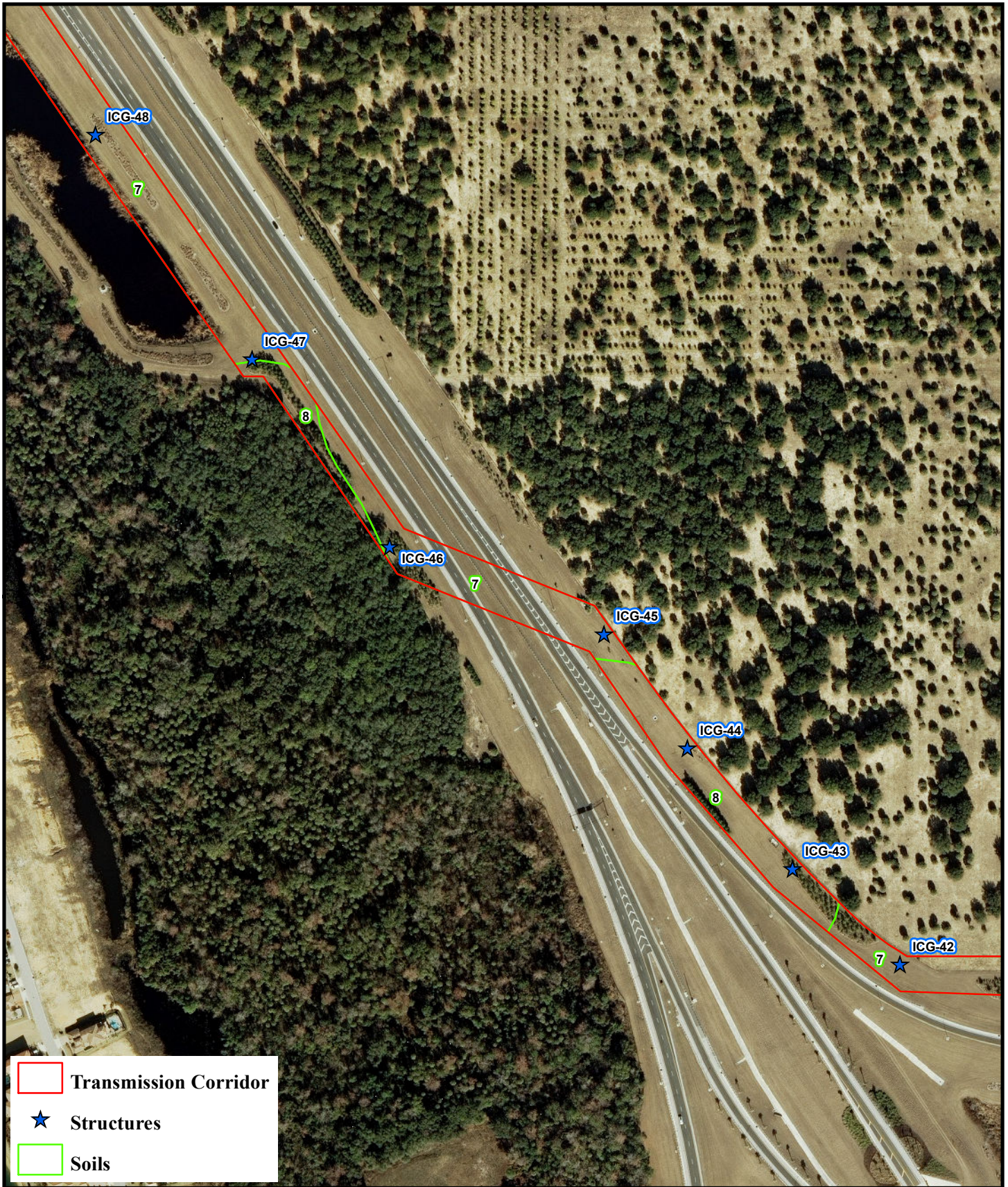


Source: USGS Topo Quad



AERIAL
MAP
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- Transmission Corridor
- ★ Structures
- Soils

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
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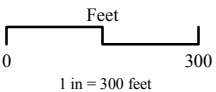


Transmission Corridor

★

Structures

Soils



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



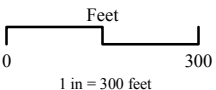
Source: USGS Topo Quad



**SOIL
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Soils



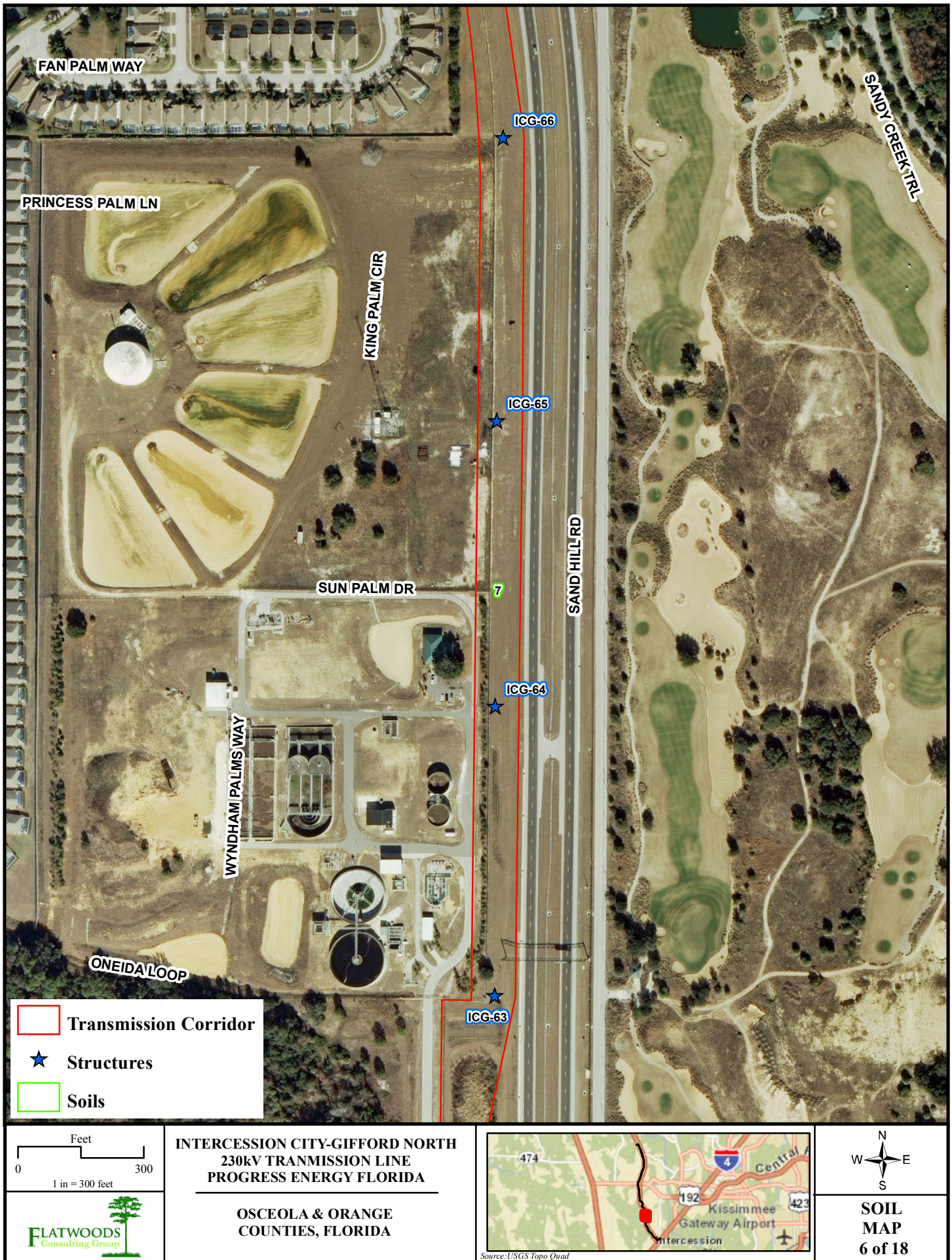
**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

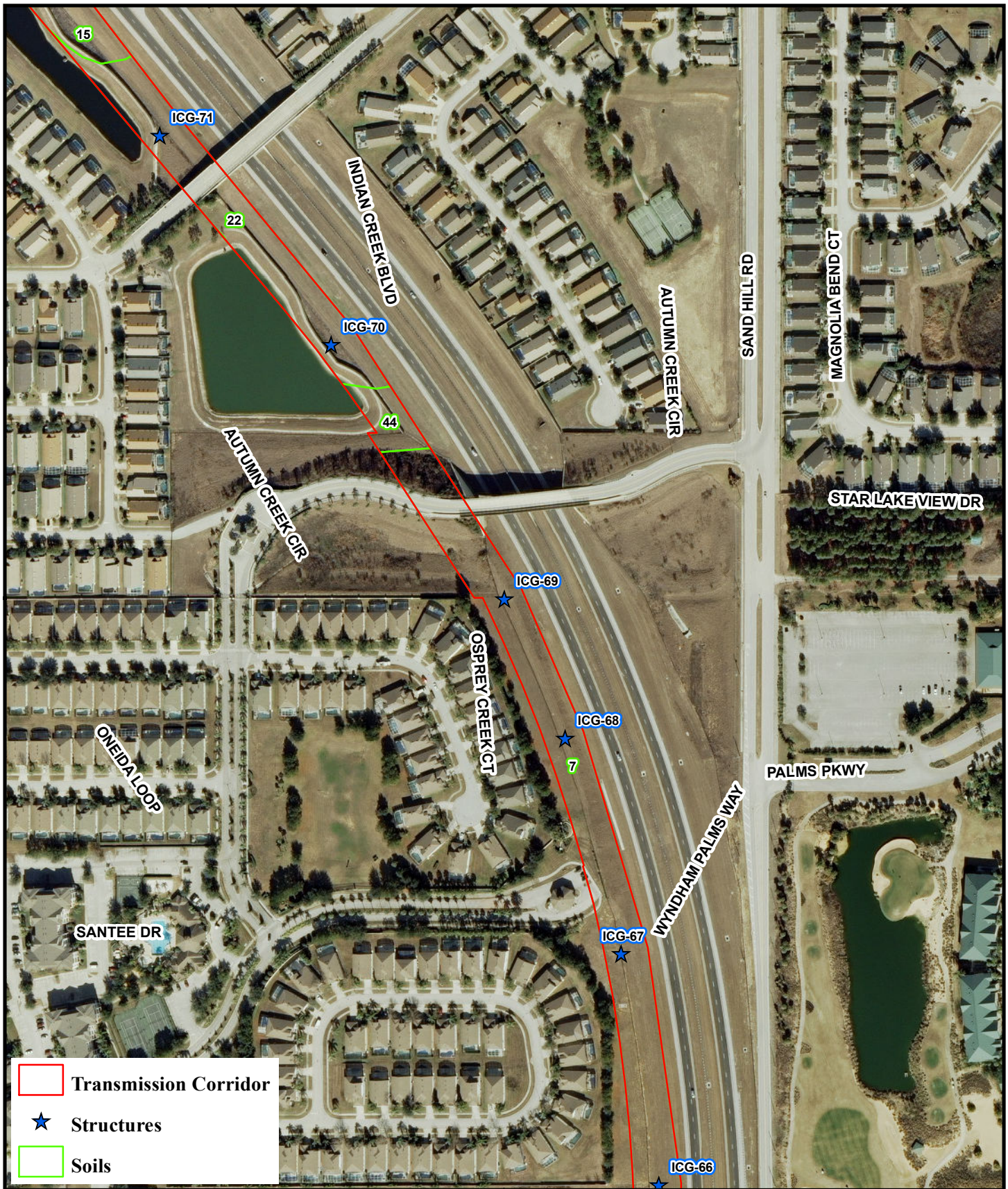
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
4 of 18**





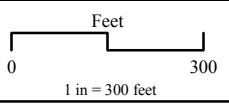


Transmission Corridor

★

Structures

Soils

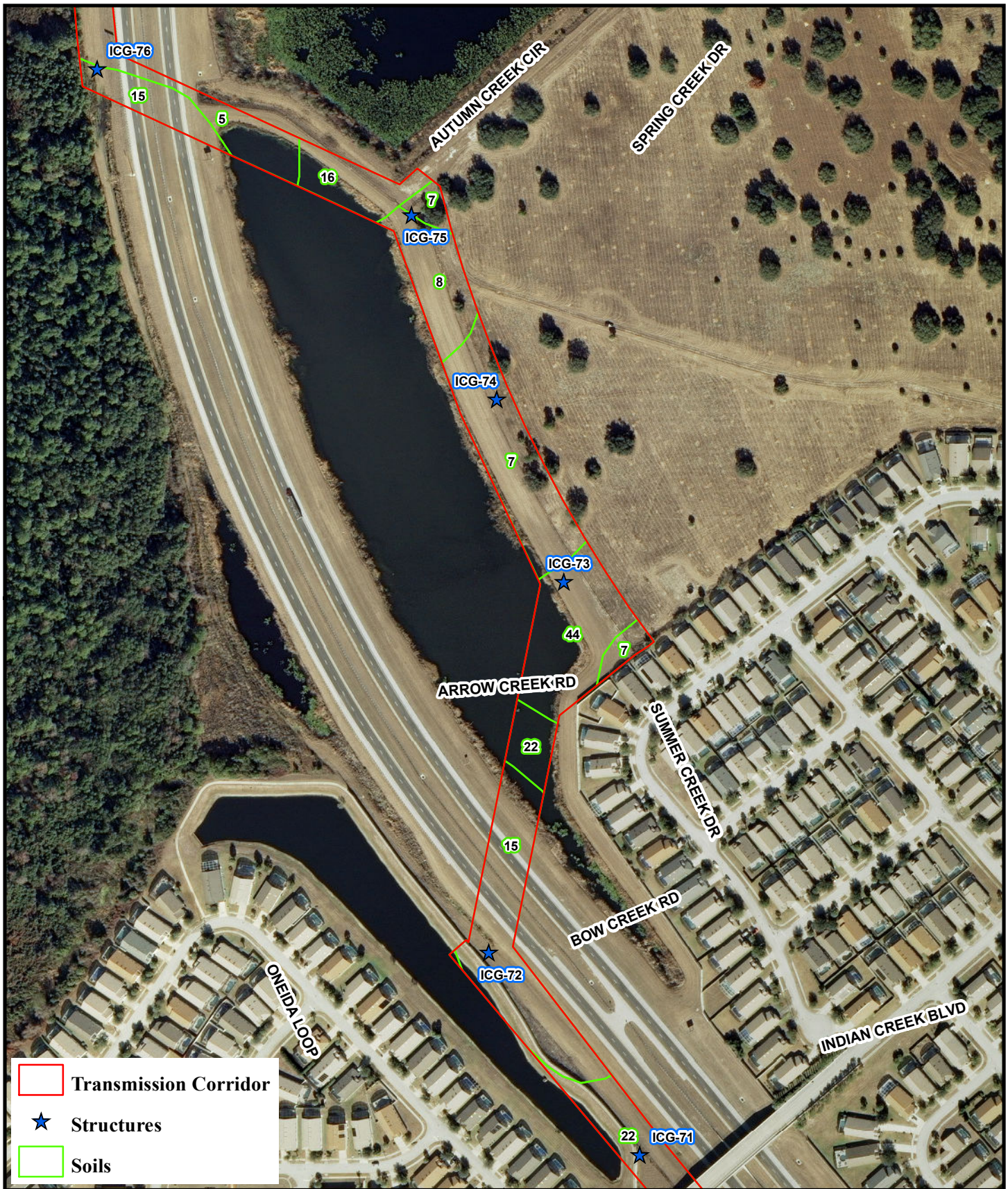


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
7 of 18**



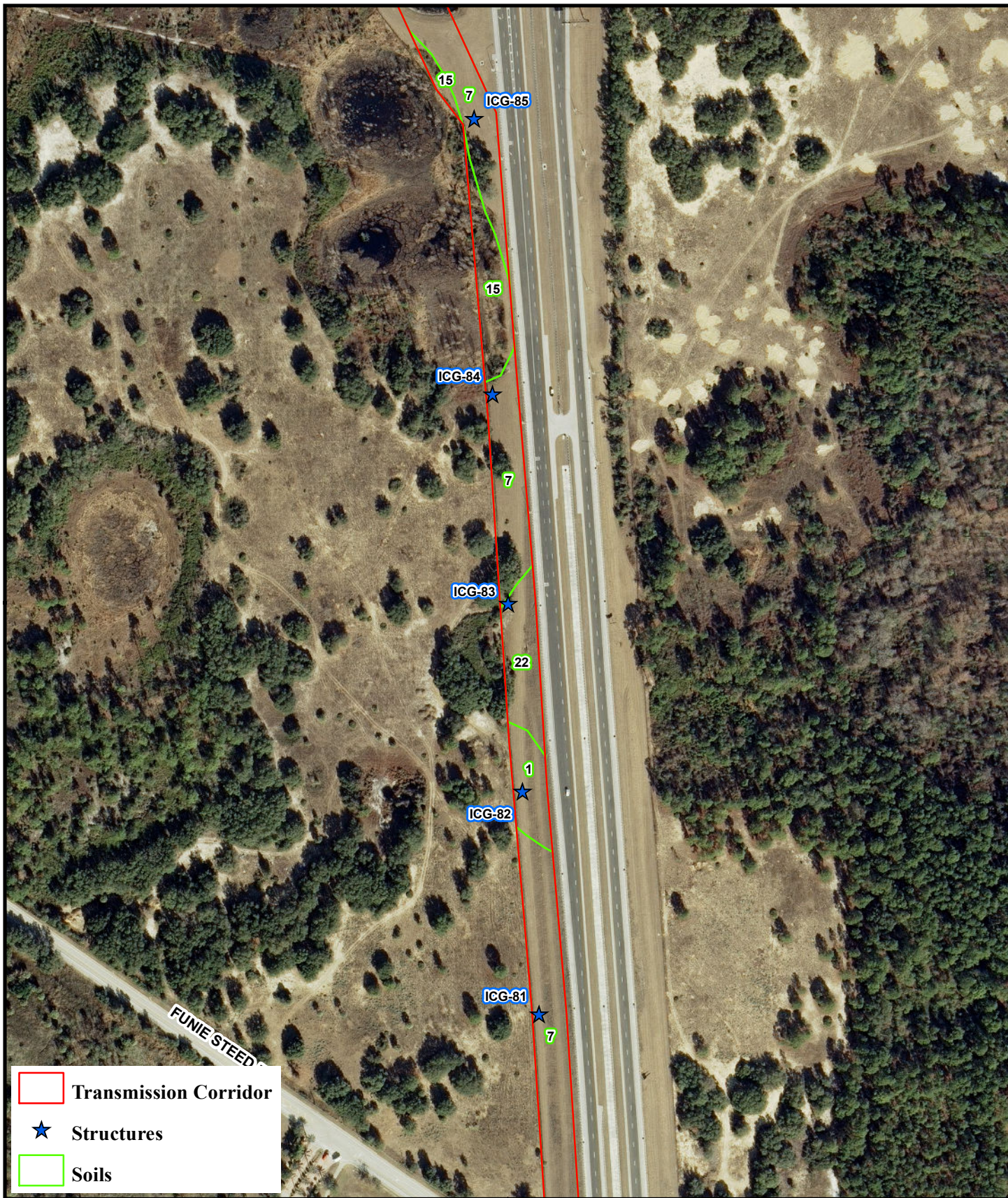
INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



SOIL
MAP
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**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

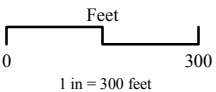
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
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- Transmission Corridor
- ★ Structures
- Soils



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

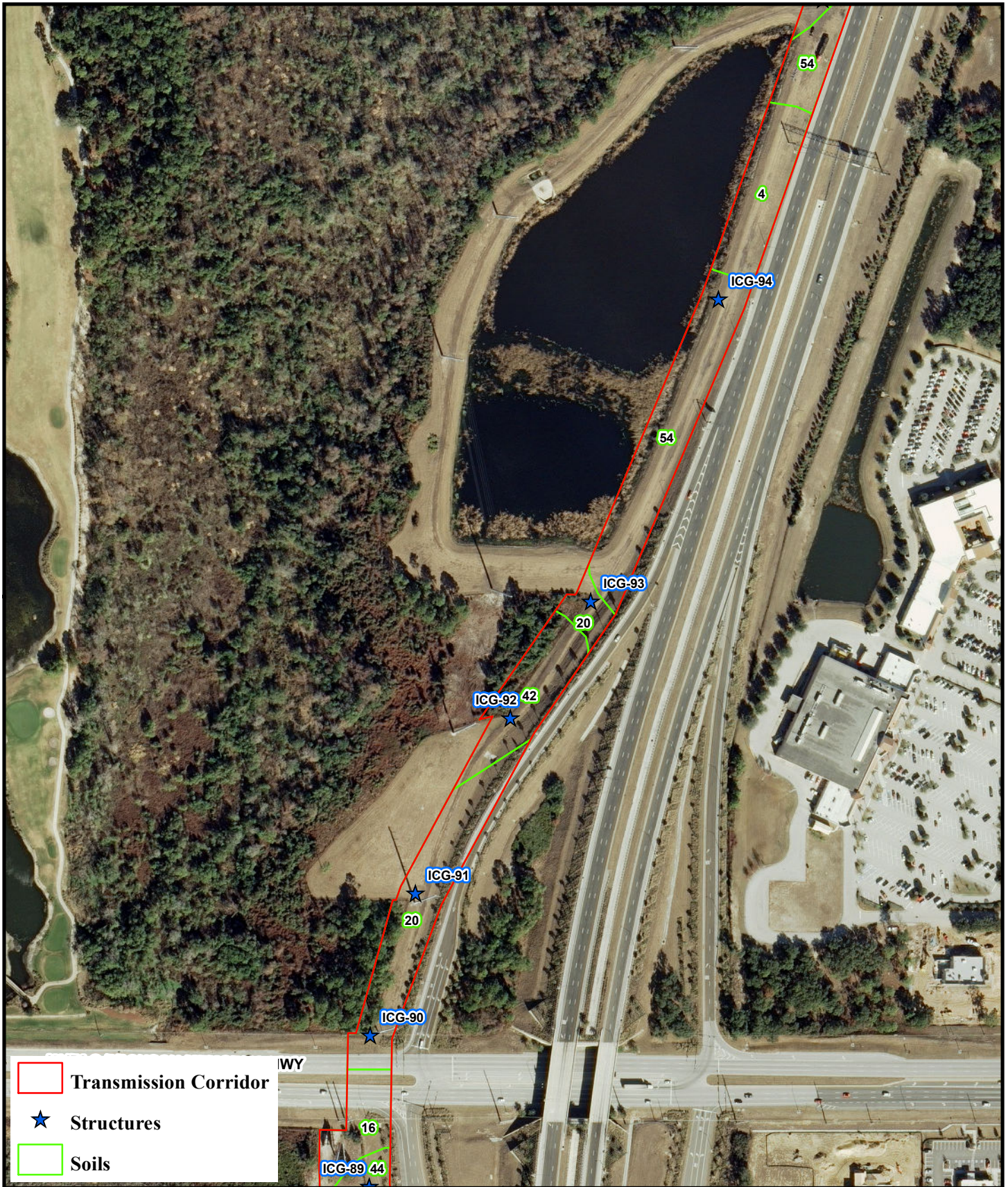
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
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- Transmission Corridor
- ★ Structures
- 16 Soils

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
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**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

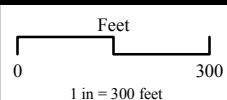


**SOIL
MAP
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Transmission Corridor
★ **Structures**
 Soils



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

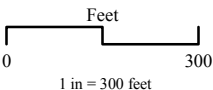
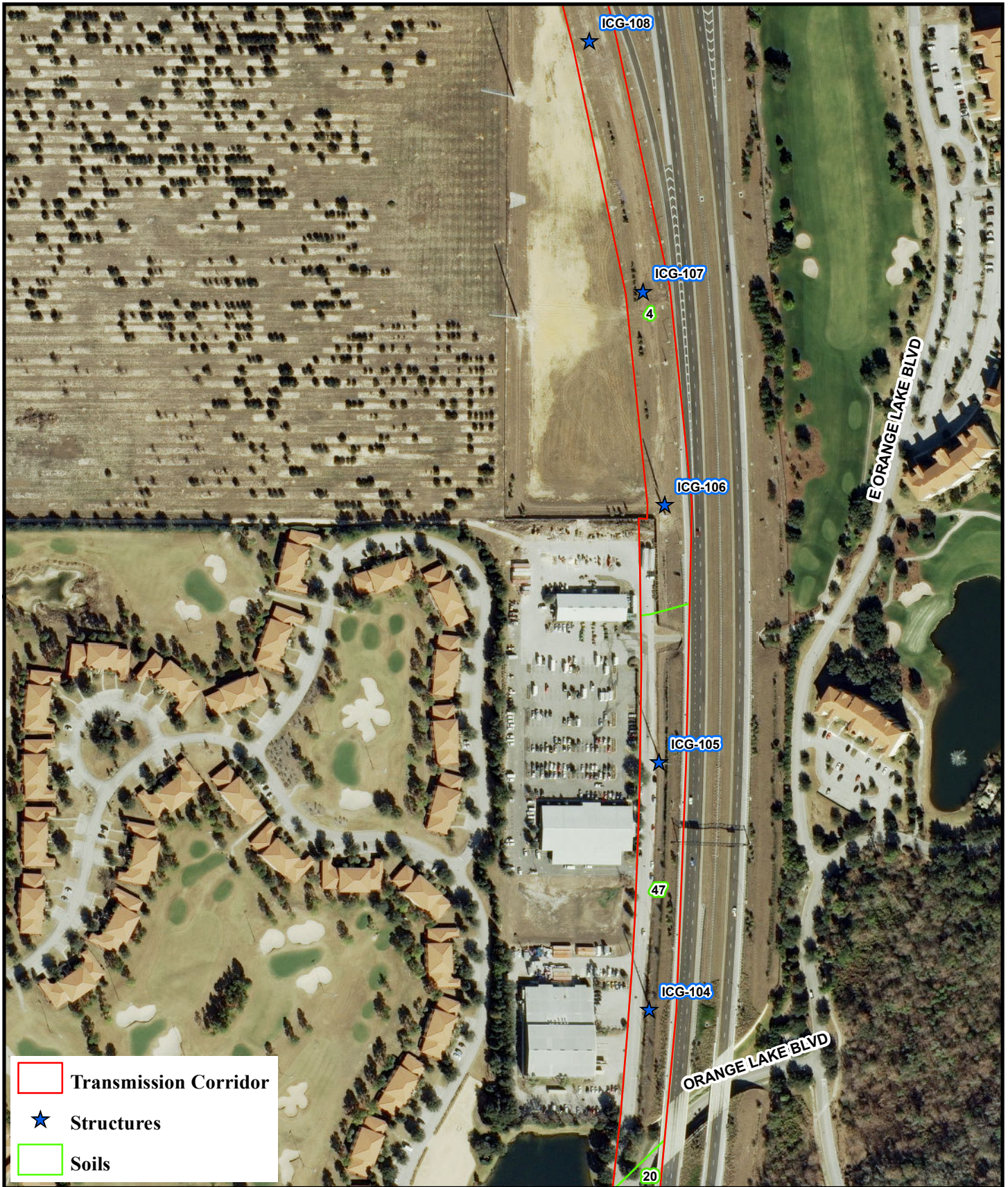
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad

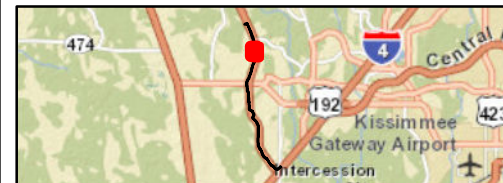


**SOIL
MAP
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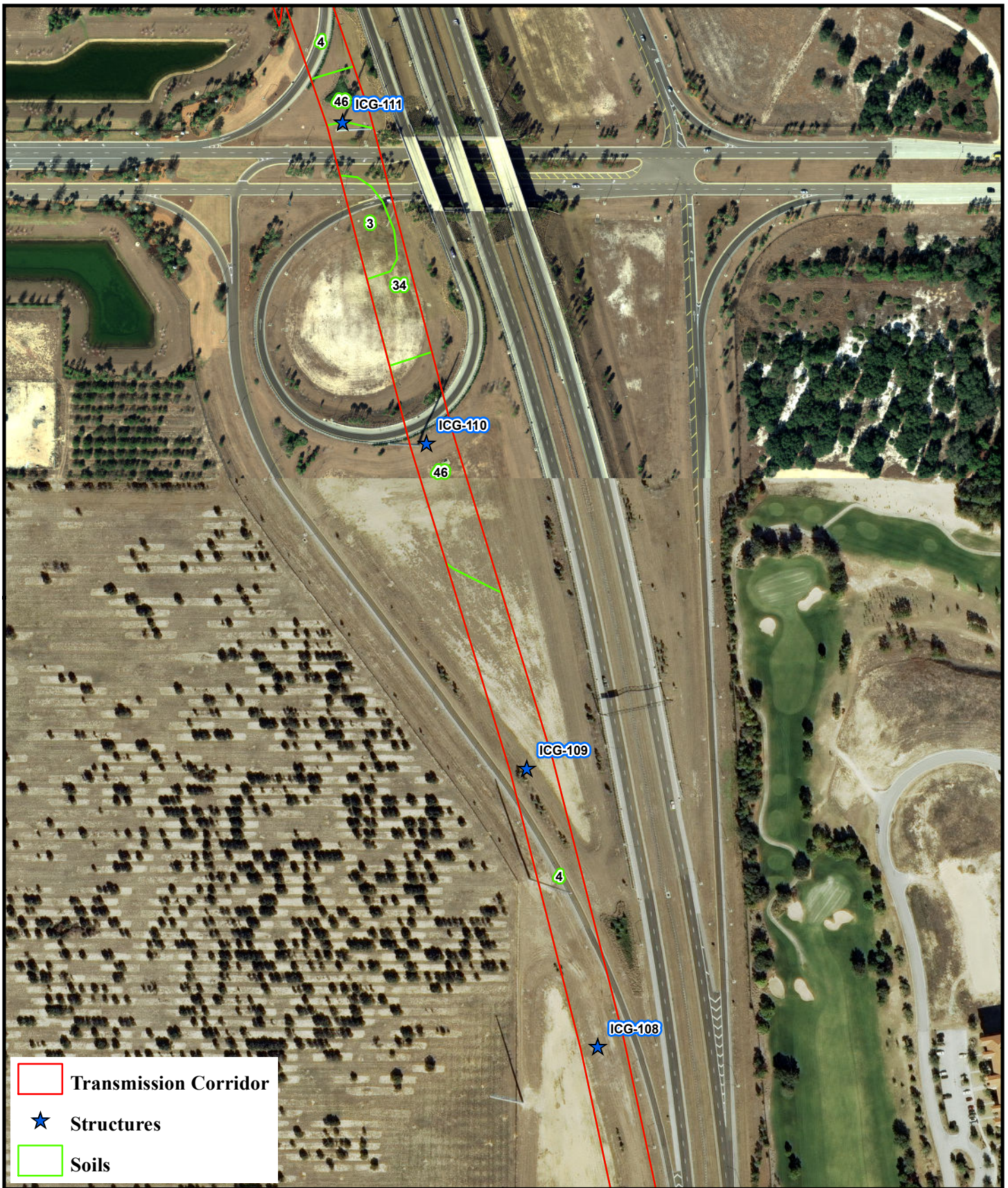


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

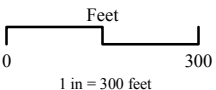
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
15 of 18**



- Transmission Corridor
- ★ Structures
- Soils



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

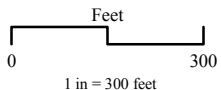
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
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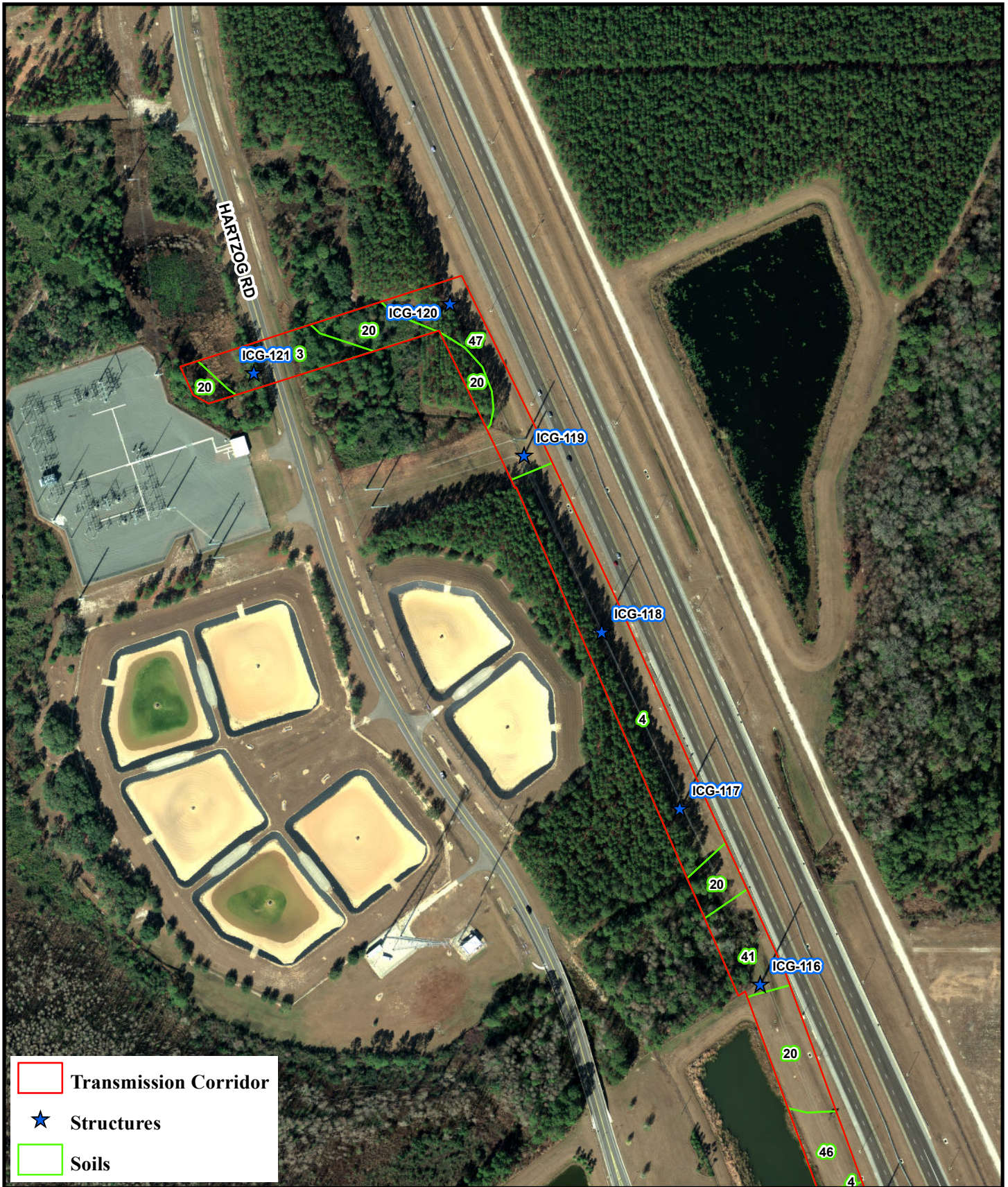


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
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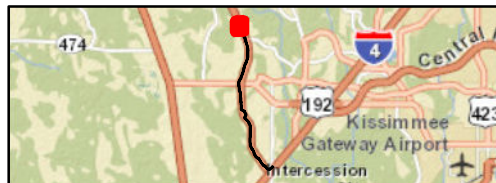
- Transmission Corridor
- ★ Structures
- Soils

Feet
0 300
1 in = 300 feet

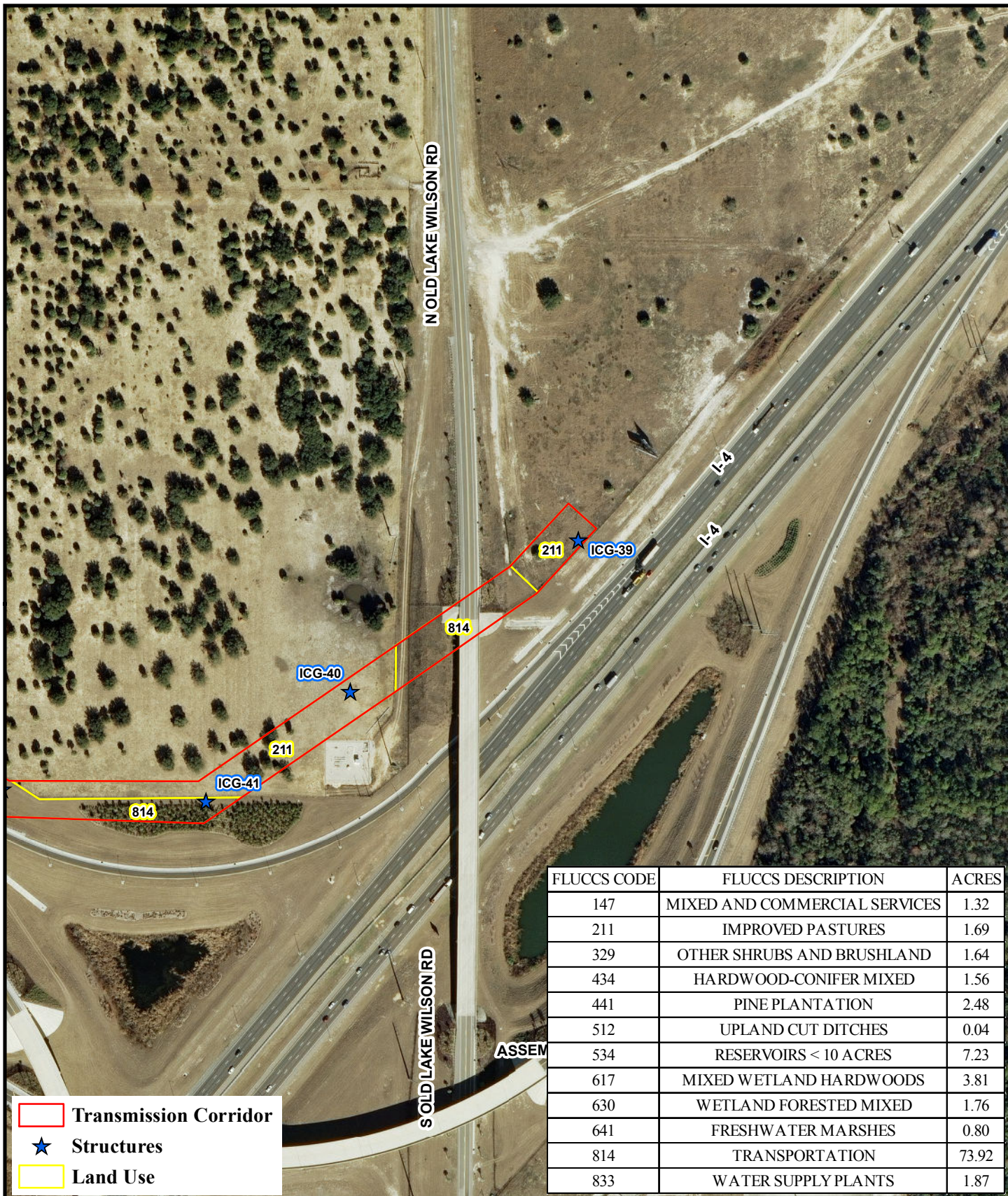


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

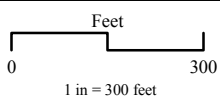
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
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FLUCCS CODE	FLUCCS DESCRIPTION	ACRES
147	MIXED AND COMMERCIAL SERVICES	1.32
211	IMPROVED PASTURES	1.69
329	OTHER SHRUBS AND BRUSHLAND	1.64
434	HARDWOOD-CONIFER MIXED	1.56
441	PINE PLANTATION	2.48
512	UPLAND CUT DITCHES	0.04
534	RESERVOIRS < 10 ACRES	7.23
617	MIXED WETLAND HARDWOODS	3.81
630	WETLAND FORESTED MIXED	1.76
641	FRESHWATER MARSHES	0.80
814	TRANSPORTATION	73.92
833	WATER SUPPLY PLANTS	1.87



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

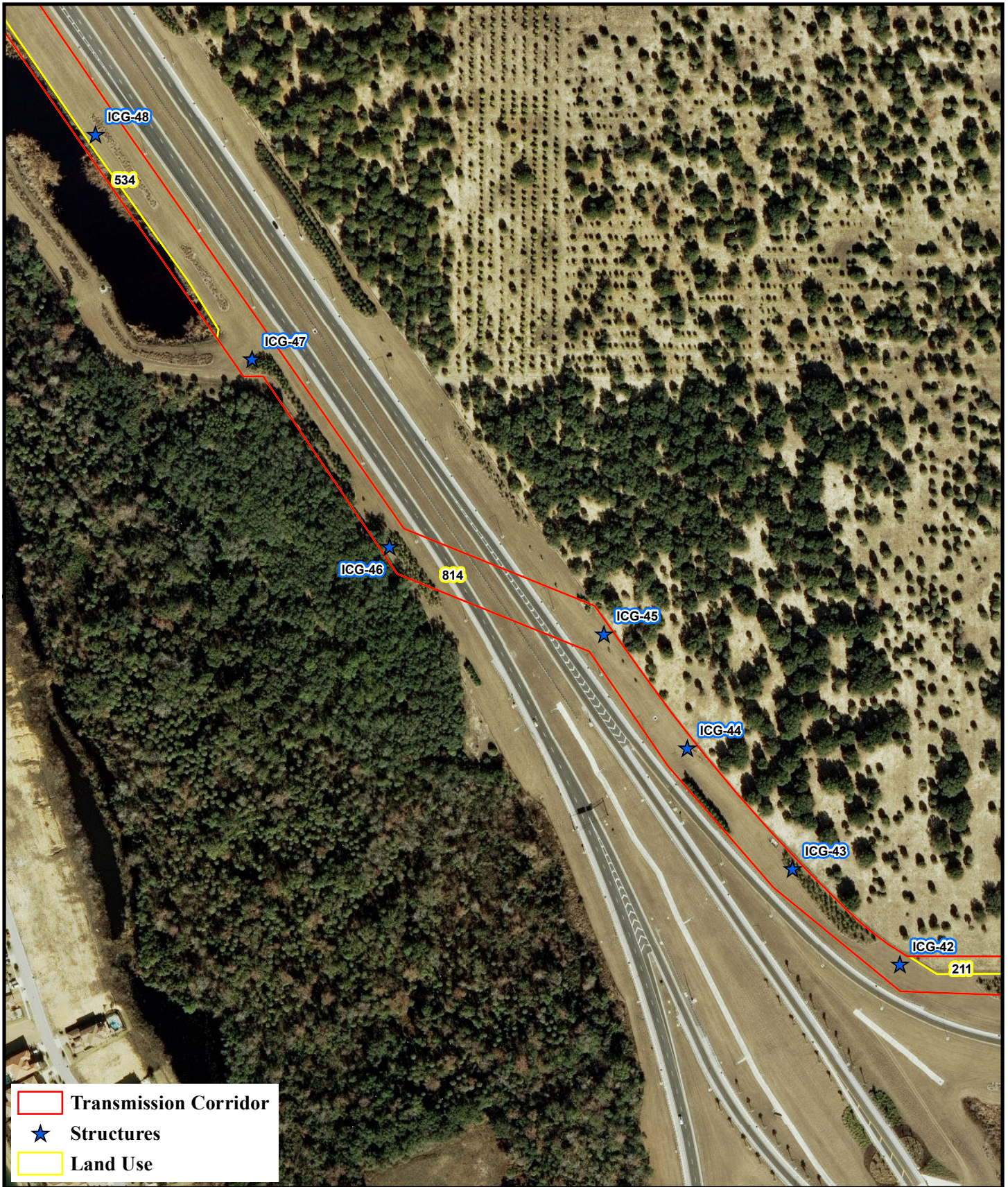
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**LAND USE
MAP
1 of 18**



- Transmission Corridor
- ★ Structures
- Land Use

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

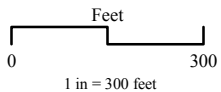
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
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	Transmission Corridor
	Structures
	Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



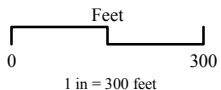
Source: USGS Topo Quad



**LAND USE
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

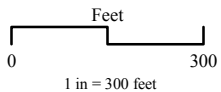
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
4 of 18**



	Transmission Corridor
	Structures
	Land Use

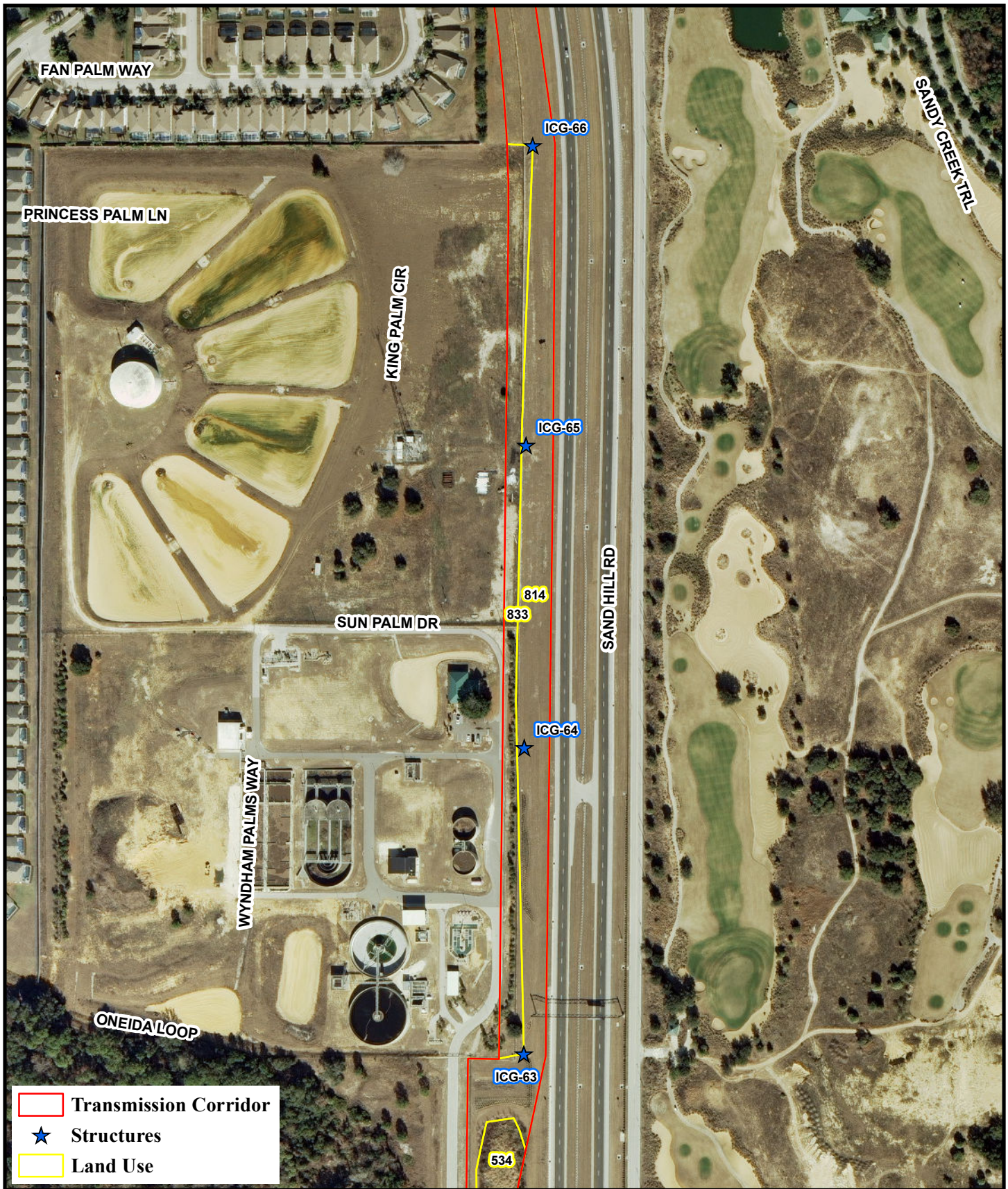


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

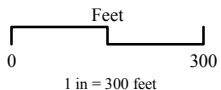
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
5 of 18**



- Transmission Corridor
- ★ Structures
- Land Use

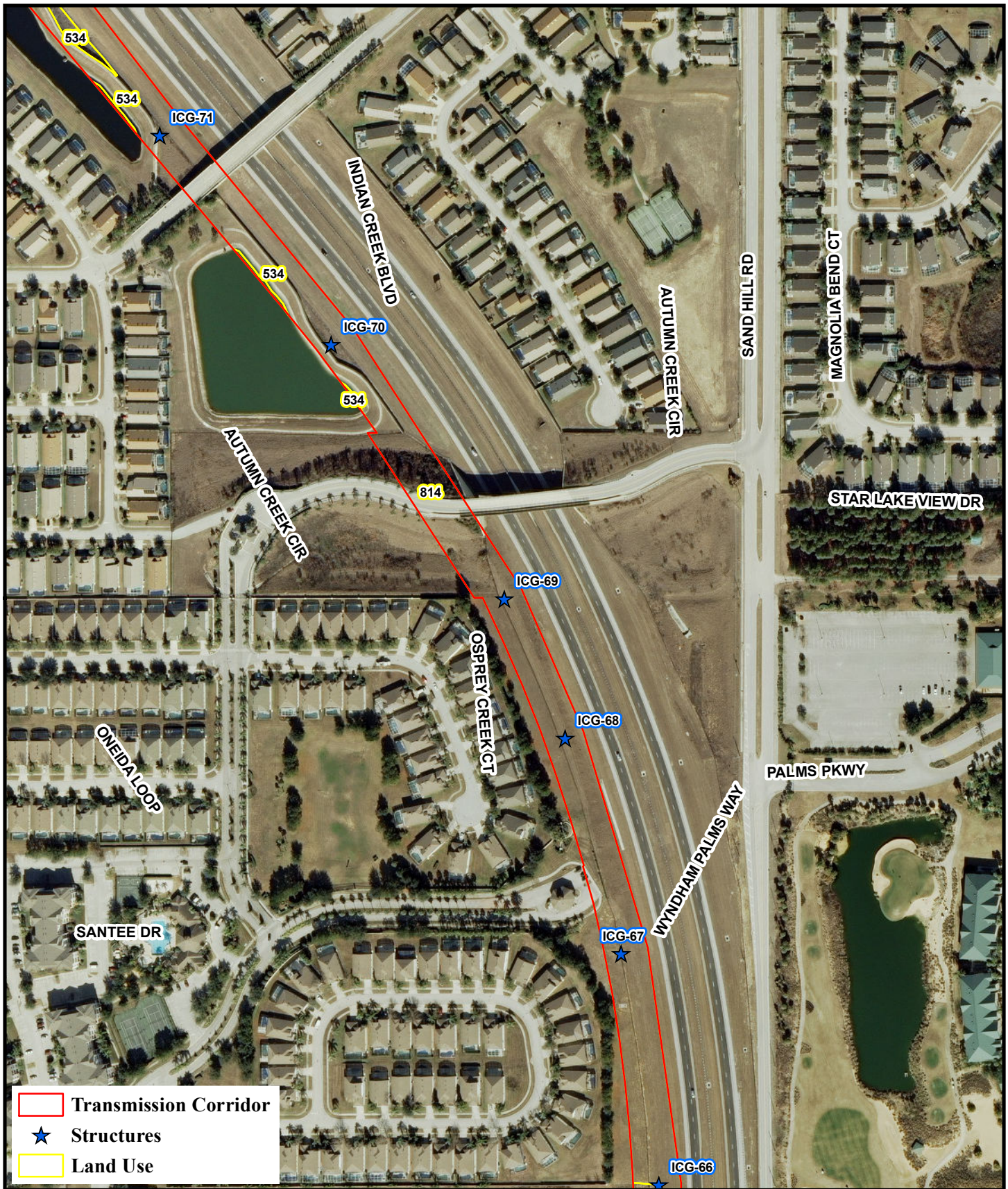


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



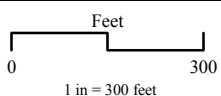
**LAND USE
MAP
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Transmission Corridor

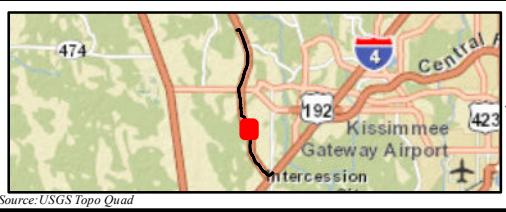
Structures

Land Use



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA

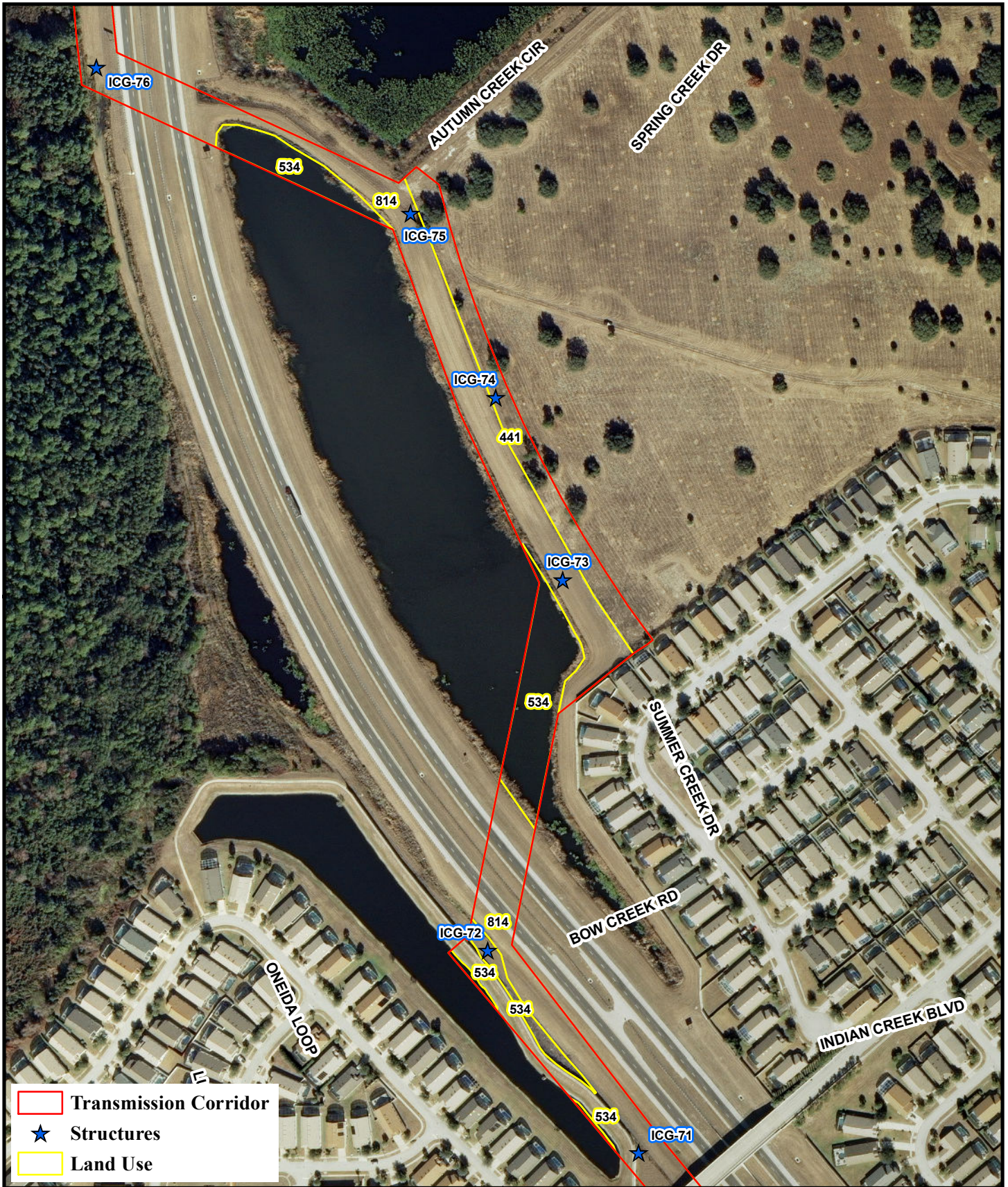


LAND USE
MAP
7 of 18

North Arrow

N
W E
S





- Transmission Corridor
- ★ Structures
- Land Use

Feet
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1 in = 300 feet



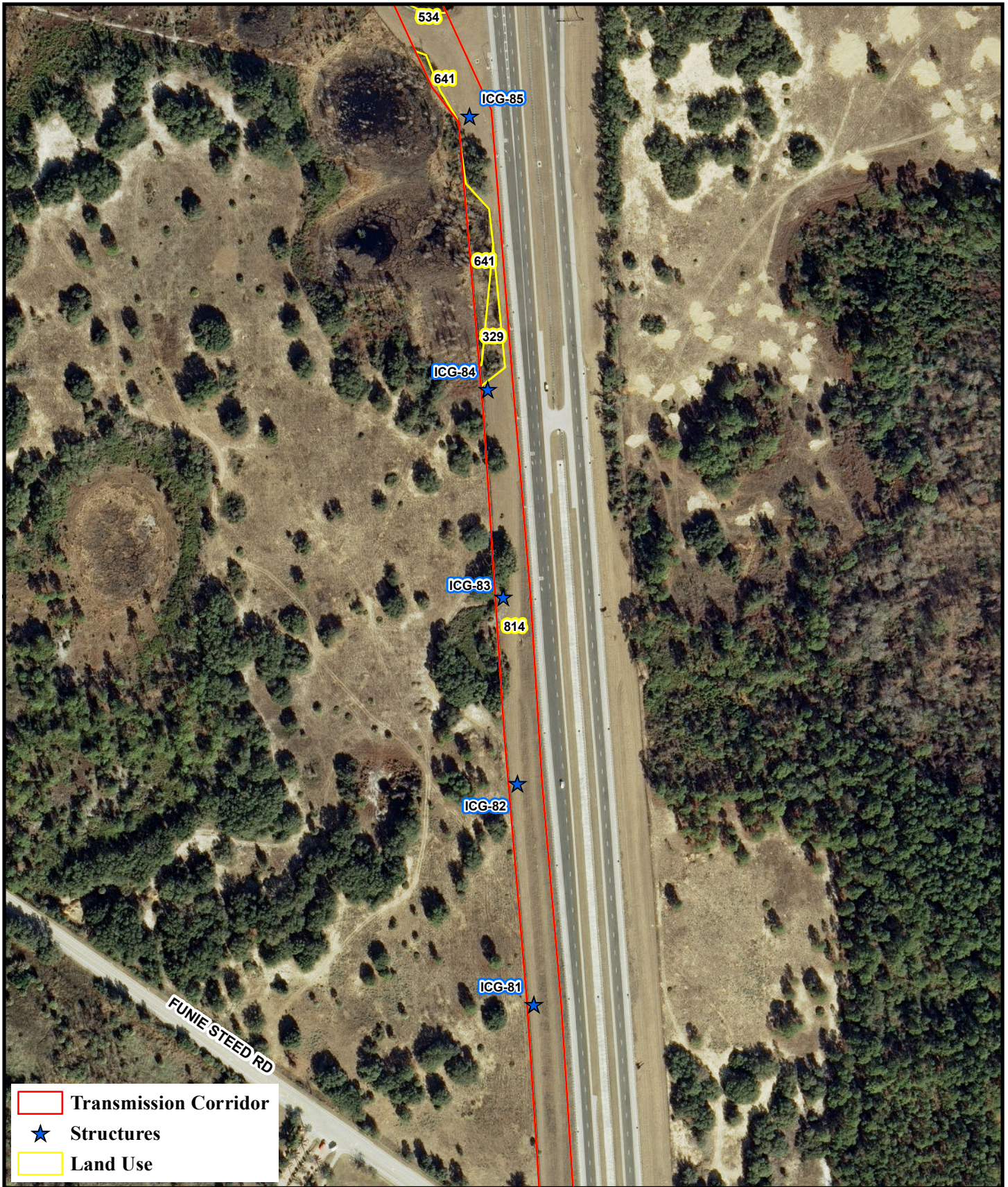
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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

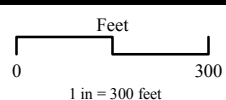


**LAND USE
MAP
8 of 18**





- Transmission Corridor
- ★ Structures
- Land Use

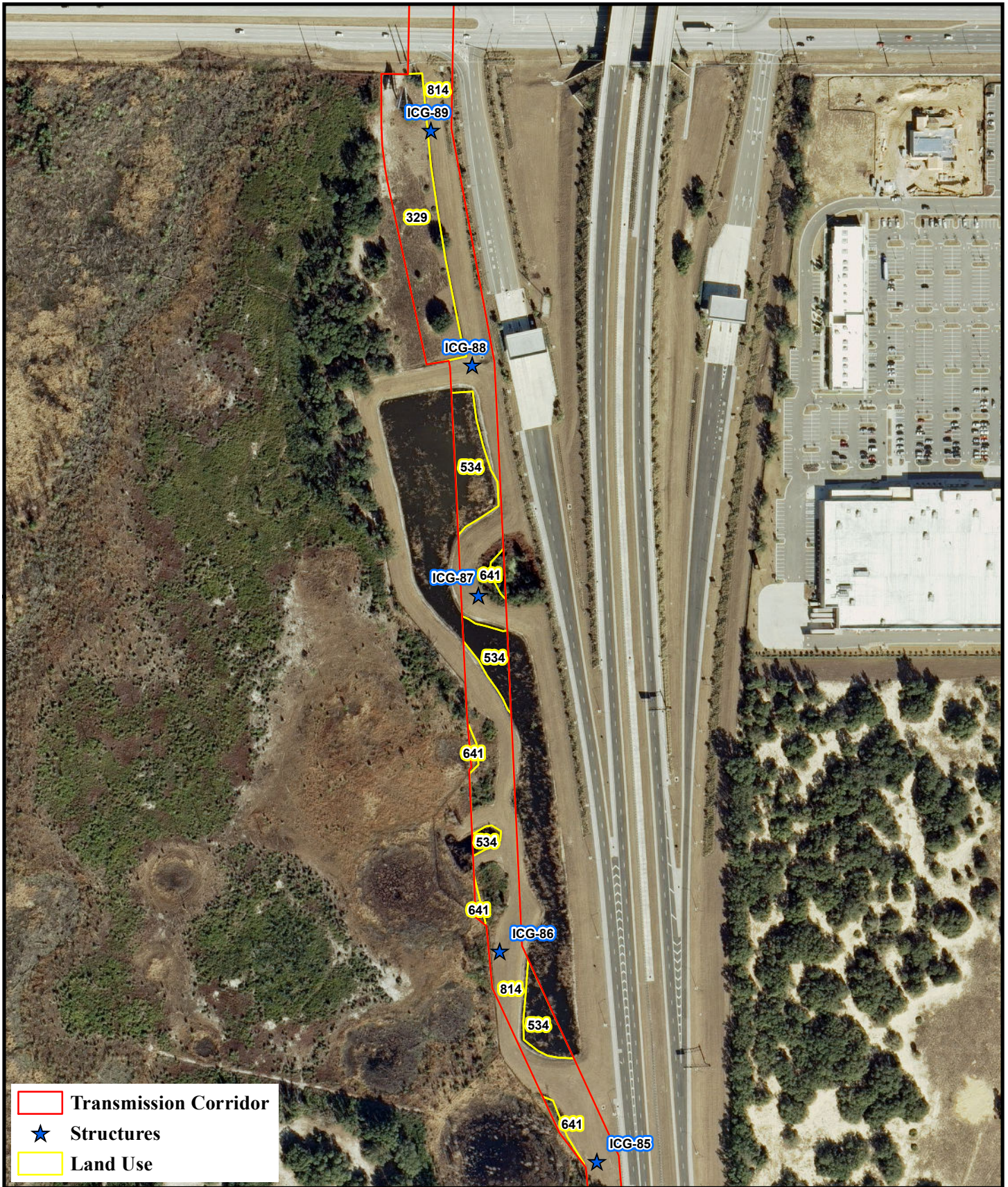


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
10 of 18**



- Transmission Corridor
- ★ Structures
- Land Use

Feet
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1 in = 300 feet

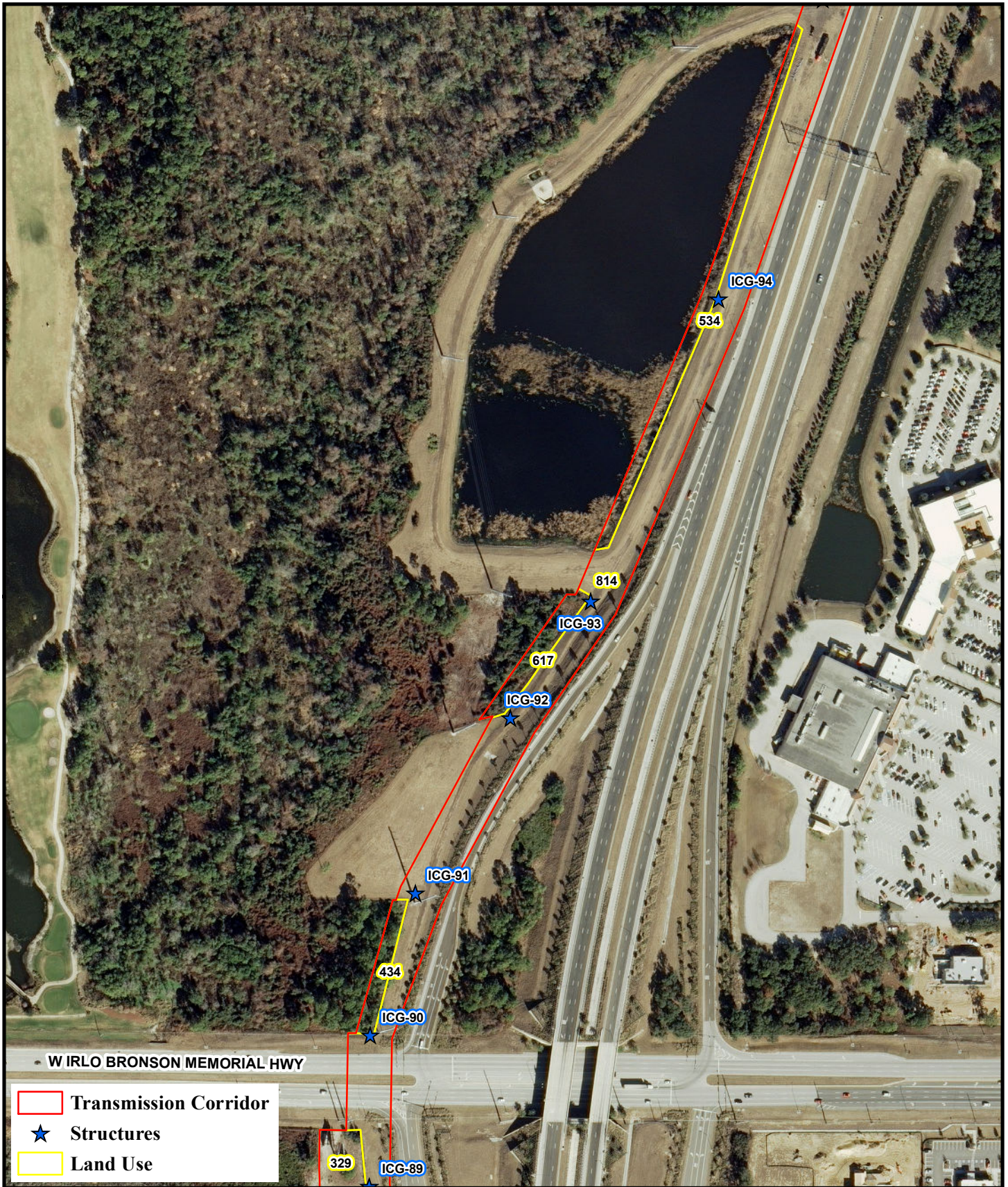


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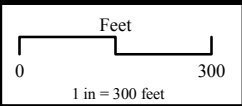
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COUNTIES, FLORIDA**



**LAND USE
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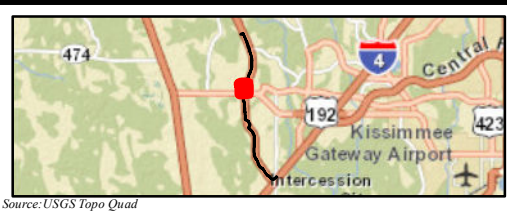


Transmission Corridor
★ **Structures**
 Land Use



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



LAND USE
MAP
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- Transmission Corridor
- ★ Structures
- Land Use

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

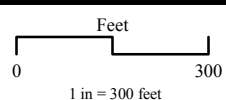
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Source: USGS Topo Quad

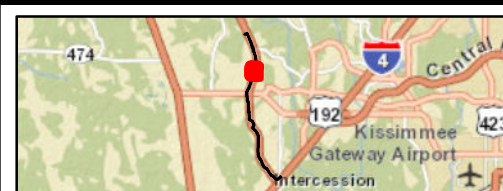


**LAND USE
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**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
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Transmission Corridor
★ Structures
 Land Use

Feet
 0 300
 1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
 230kV TRANSMISSION LINE
 PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
 COUNTIES, FLORIDA**



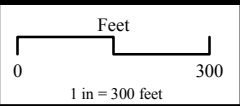
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**LAND USE
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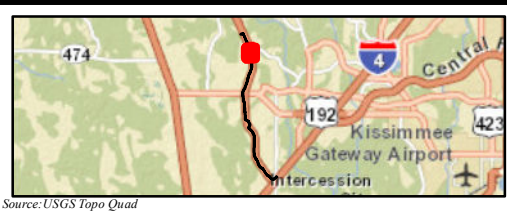


Transmission Corridor
★ **Structures**
 Land Use



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



LAND USE
MAP
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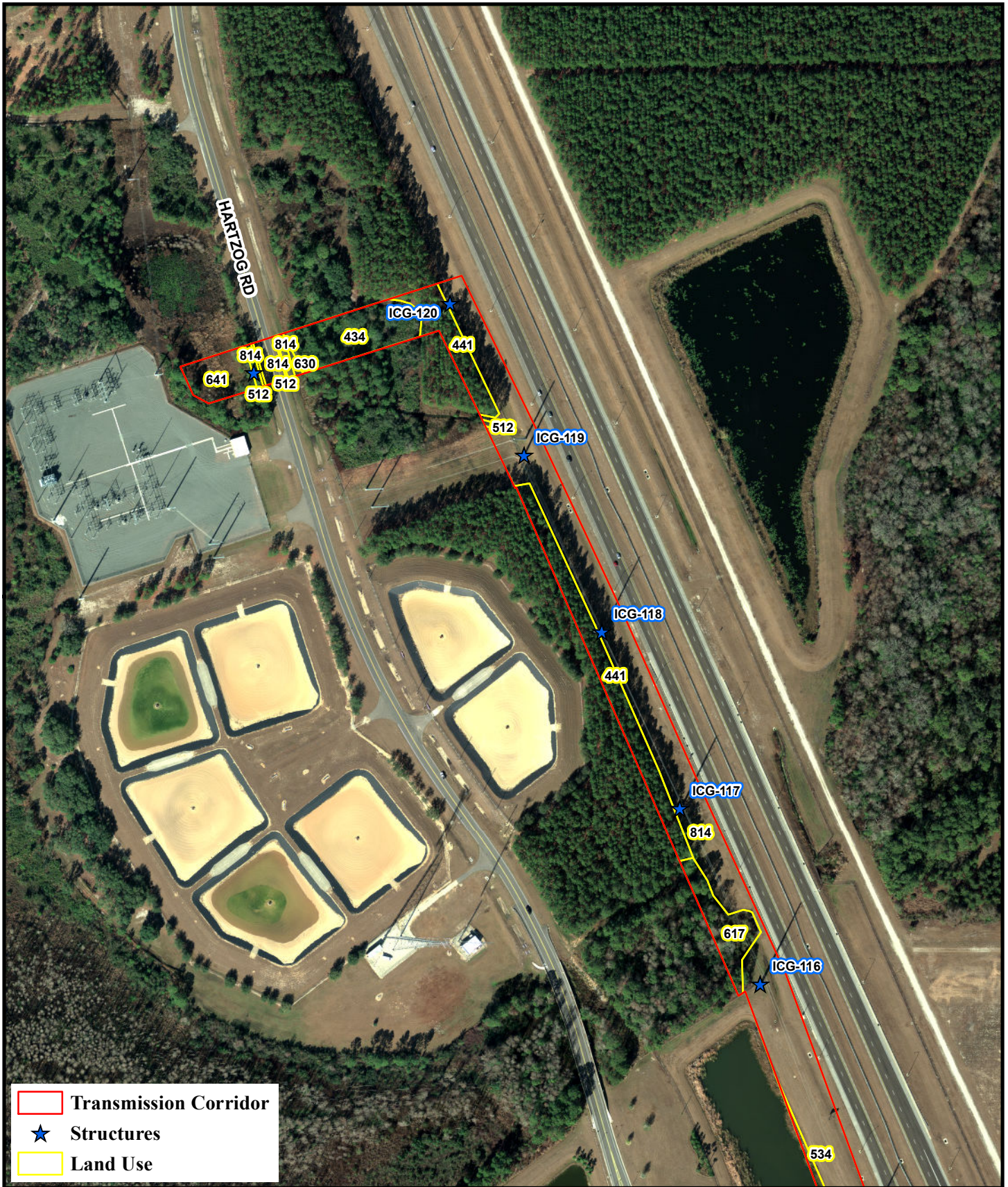
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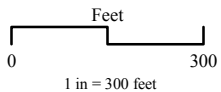
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**LAND USE
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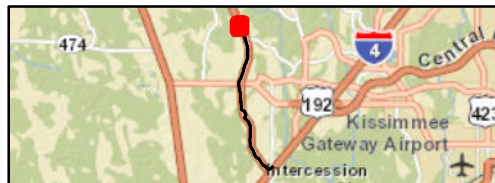


Transmission Corridor
★ **Structures**
 Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

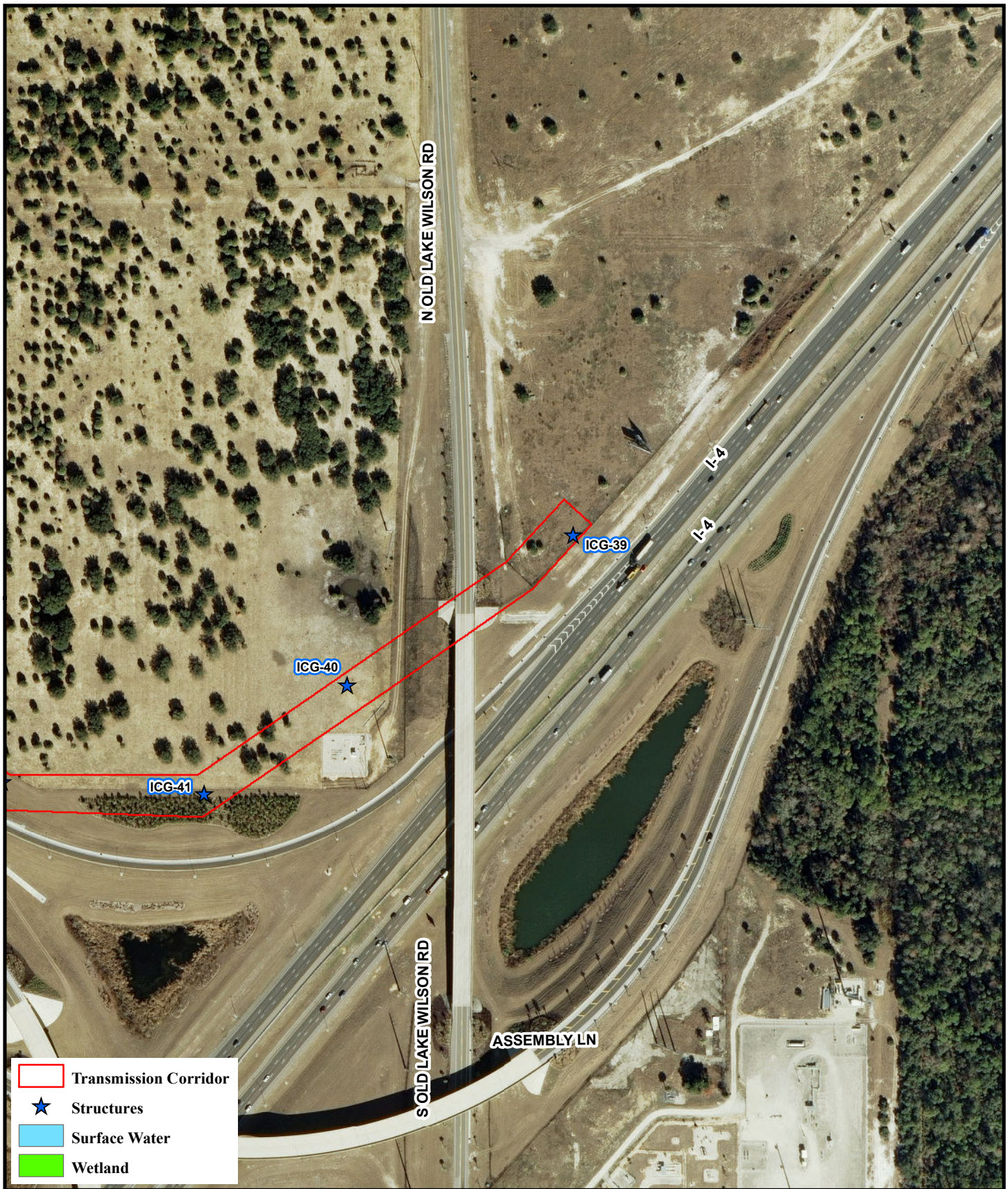
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COUNTIES, FLORIDA**



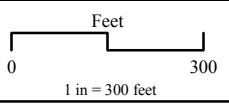
Source: USGS Topo Quad



**LAND USE
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	Transmission Corridor
	Structures
	Surface Water
	Wetland

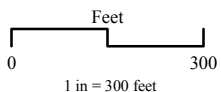
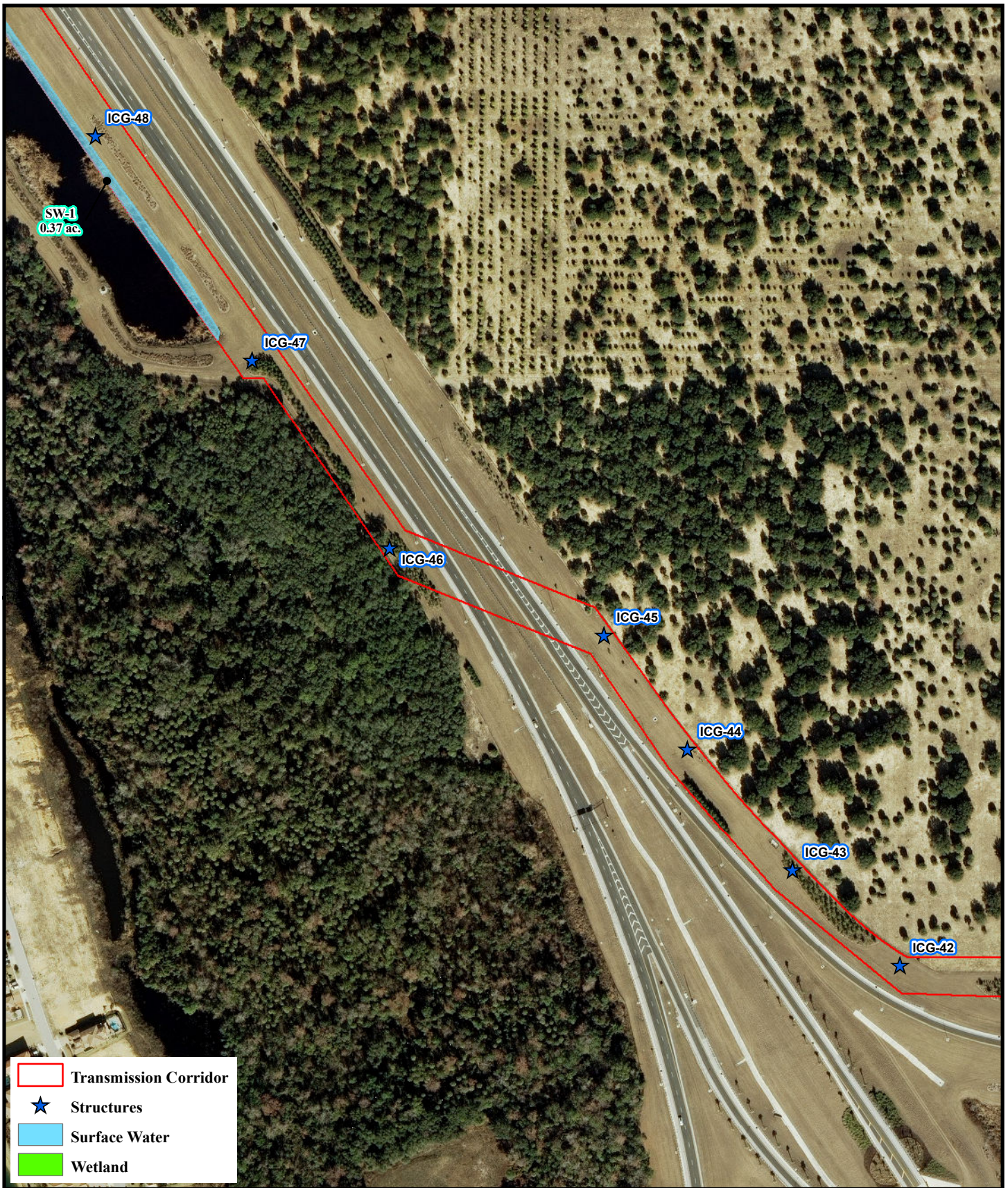


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
1 of 18**

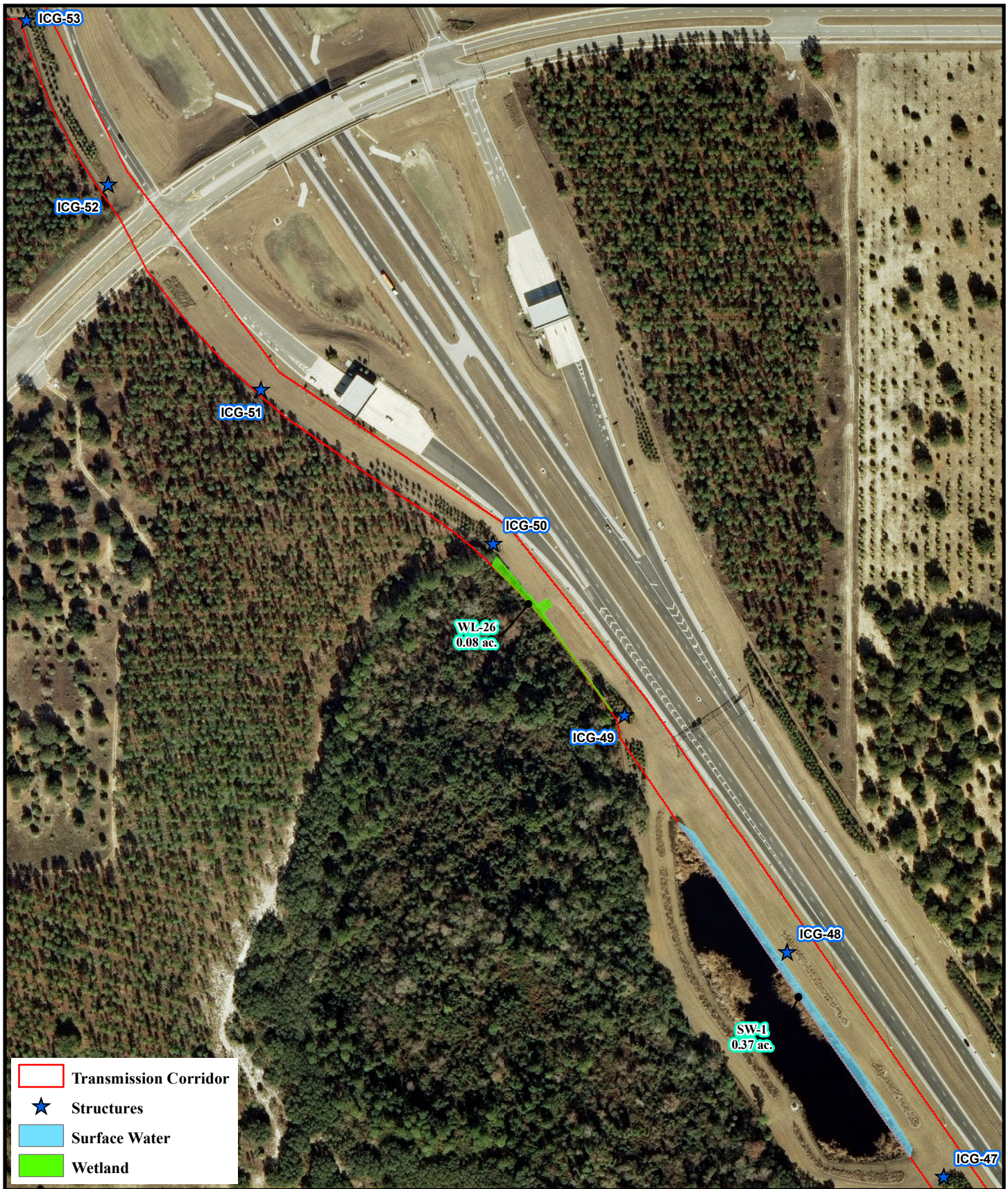


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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

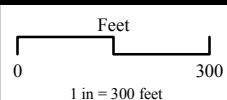
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
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- Transmission Corridor
- ★ Structures
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



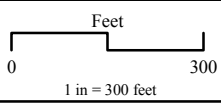
Source: USGS Topo Quad



**WETLAND
MAP
3 of 18**



	Transmission Corridor
	Structures
	Surface Water
	Wetland

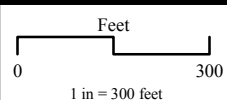


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
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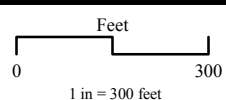
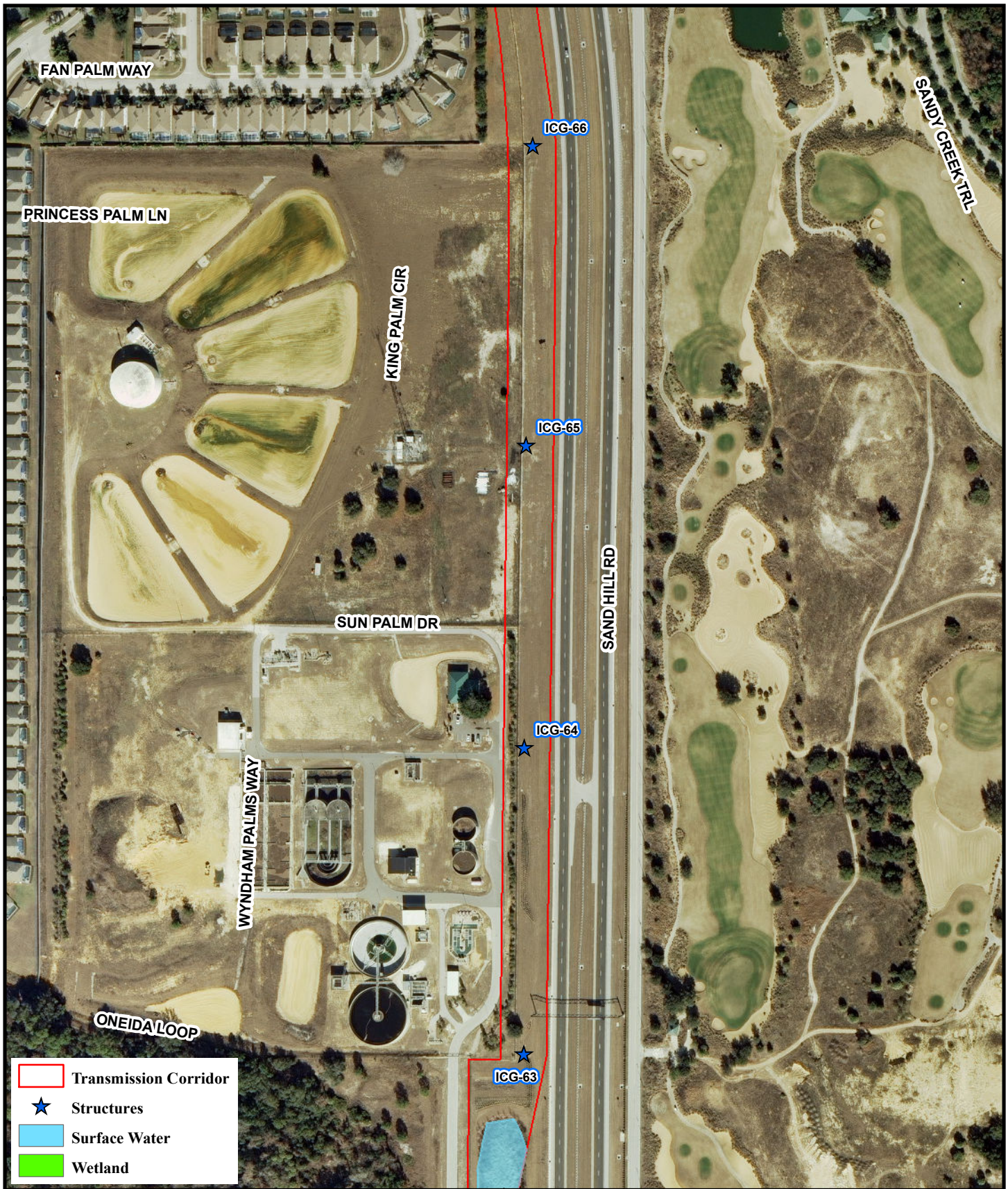


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
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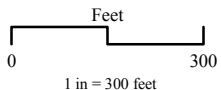
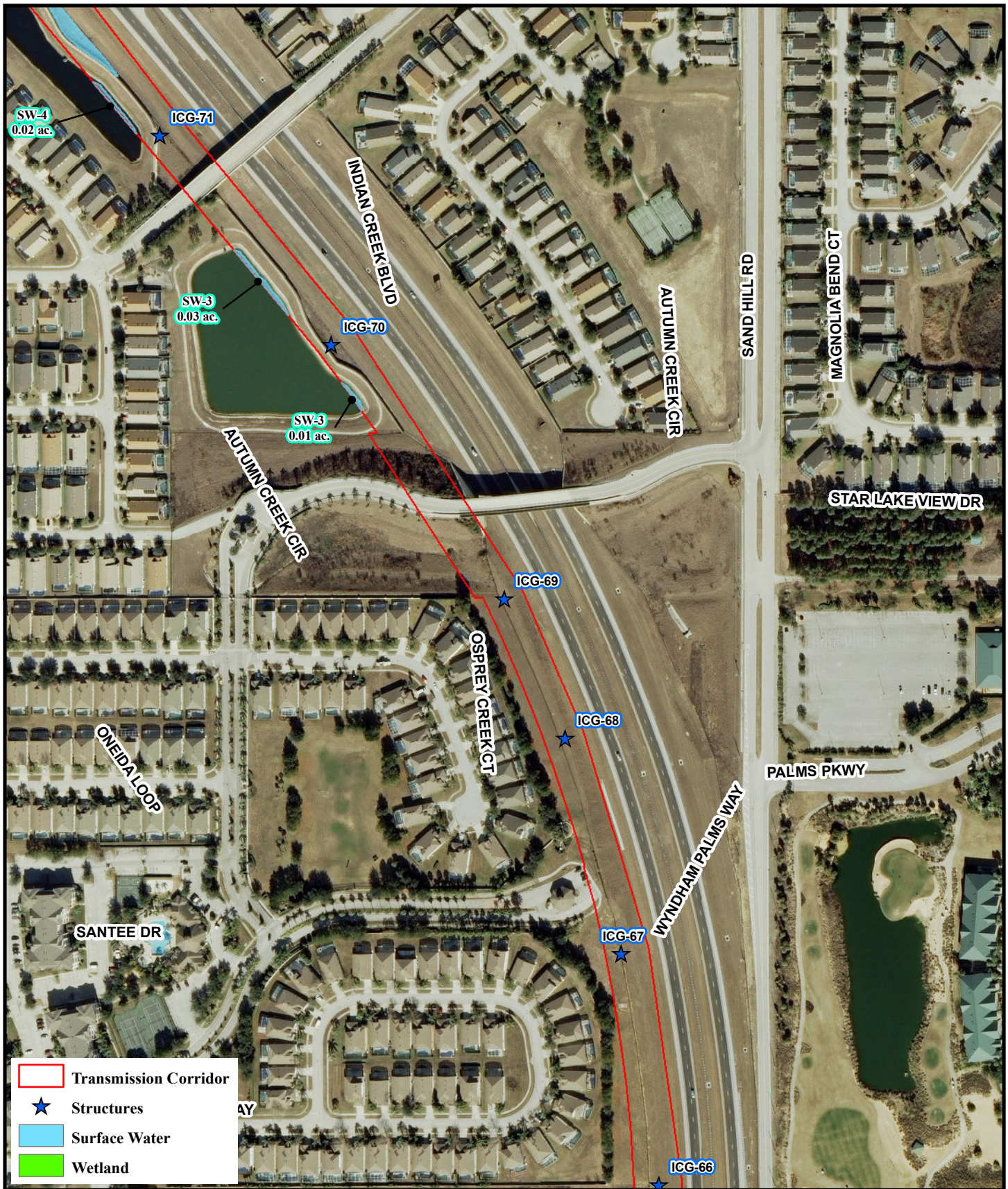


**INTERCESSION CITY-GIFFORD
230KV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
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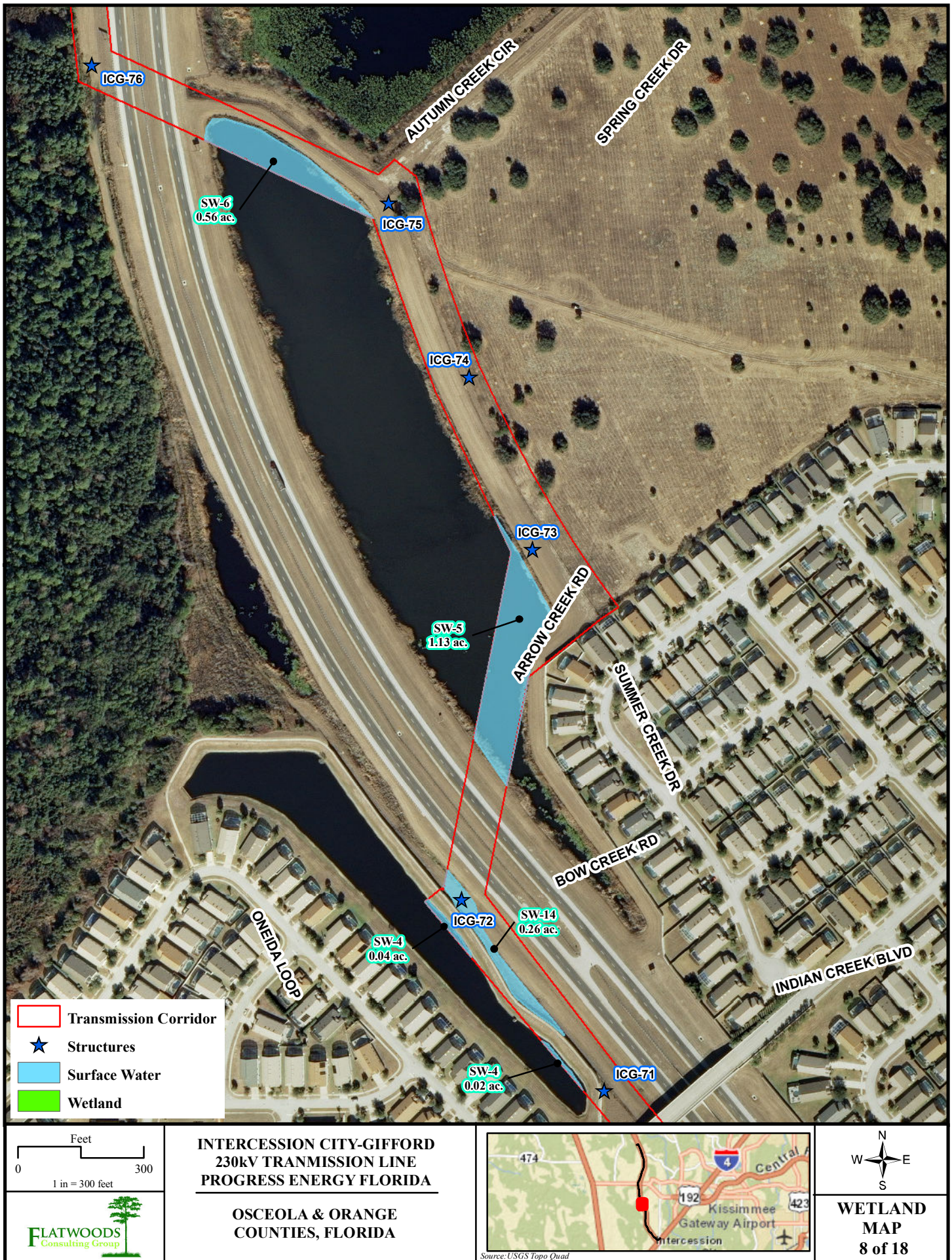


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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

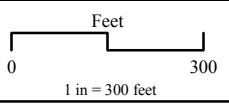


**WETLAND
MAP
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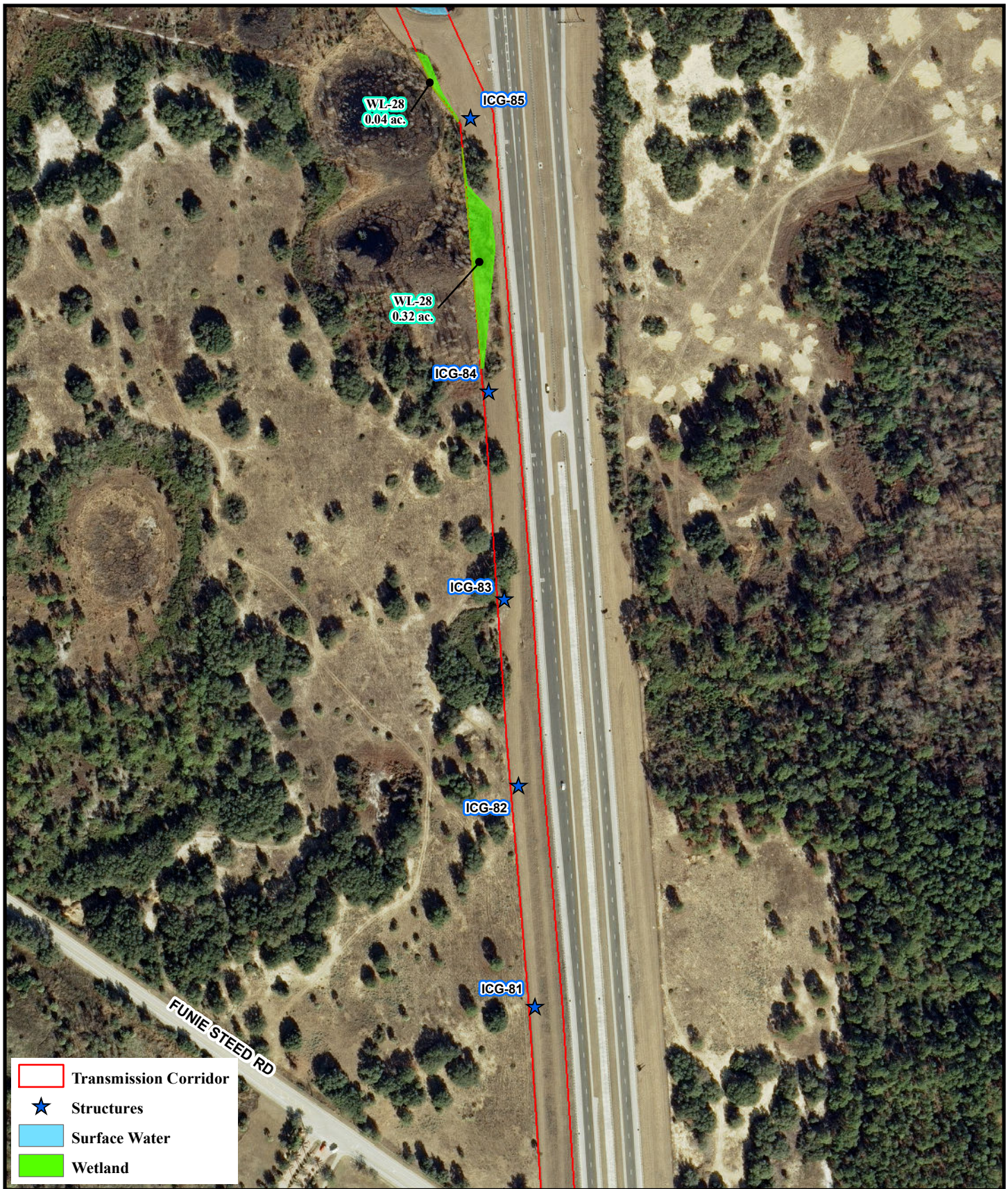
	Transmission Corridor
	Structures
	Surface Water
	Wetland



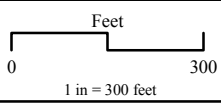
**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**





- Transmission Corridor
- ★ Structures
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
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- Transmission Corridor
- ★ Structures
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad

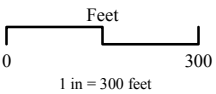


**WETLAND
MAP
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- Transmission Corridor
- ★ Structures
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

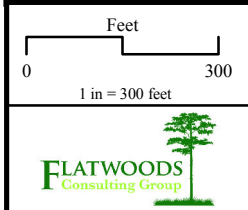
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COUNTIES, FLORIDA**



Source: USGS Topo Quad

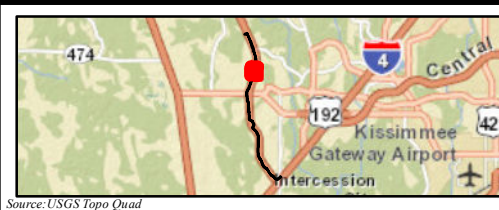


**WETLAND
MAP
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**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
14 of 18**



Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**WETLAND
MAP
15 of 18**



- Transmission Corridor
- Structures
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet

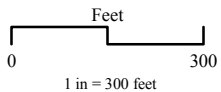


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
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**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

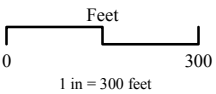
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**WETLAND
MAP
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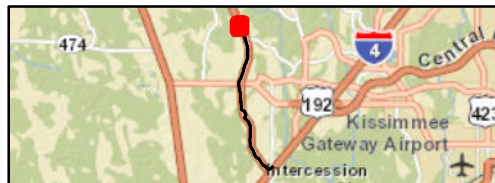


- Transmission Corridor
- ★ Structures
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**WETLAND
MAP
18 of 18**

**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE (±8.3 MILES)
OSCEOLA AND ORANGE COUNTIES, FLORIDA
LISTED SPECIES SURVEY AND MANAGEMENT PLAN**

**SEGMENT OF LAKE AGNES-GIFFORD
230kV TRANSMISSION LINE (TA 07-14A)
SUBMITTED IN ACCORDANCE WITH
SECTION B: SPECIFIC CONDITION V. A. (1, 2 & 3)**

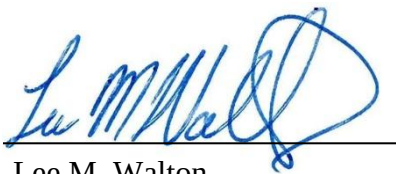
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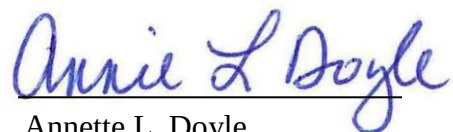
Mr. Wayne Richardson
Transmission Engineering
Permitting Specialist, Siting & Permitting
Progress Energy Florida, Inc.
P.O. Box 14042; PEF 903
St. Petersburg, FL 33733

February 4, 2013

Prepared by:

A handwritten signature in blue ink, appearing to read 'Lee M. Walton', written over a horizontal line.

Lee M. Walton
Senior Ecologist/Principal

A handwritten signature in blue ink, appearing to read 'Annie L. Doyle', written over a horizontal line.

Annette L. Doyle
Ecologist

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1.0 INTRODUCTION

Flatwoods Consulting Group Inc. (Flatwoods) was retained by Progress Energy Florida, Inc. (PEF) to conduct a listed species survey on the Intercession City-Gifford North 230kV Transmission Line which is a segment of the Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A). The Listed Species Survey and Management Plan was prepared in accordance with the Florida Department of Environmental Protection (FDEP) Conditions of Certification (TA 07-14A) for the Lake Agnes-Gifford 230kV Transmission Line Section B: Specific Condition V. A. (1, 2 & 3) modified on January 15, 2013. This project is the Certified Facility detailed in Conditions of Certification (TA 07-14A) Section A: General Conditions I. Scope B. (2): a single circuit 230kV transmission line extending from the approximate area of the I-4/SR429 intersection to PEF's existing Gifford Substation in Orange County. The purpose of this survey was to identify the presence and relative abundance of species considered Endangered, Threatened, or of Special Concern by the Florida Fish and Wildlife Conservation Commission (FWC) under Chapter 68A-27 F.A.C and species considered Endangered and Threatened by the U.S. Fish and Wildlife Service (FWS) under Title 50 Code of Federal Regulation (CFR) 11-12. The following Listed Species Survey and Management Plan details the survey effort, documents any observations and potential occurrence of listed species on the project right-of-way, and discusses the steps to avoid, minimize, mitigate, or otherwise appropriately address impacts to each species present with the project right-of-way.

1.1 Study Area

The study area (referred to as project right-of-way) for the Intercession City-Gifford North 230kV Transmission Line is a 8.3-mile segment of the 27.5-mile certified Lake Agnes-Gifford 230kV Transmission Line. The Intercession City-Gifford North 230kV Transmission Line occurs in Sections 21 and 28, Township 24 South, Range 27 East and Sections 4, 9, 16, 21, 22, 26 and 27, Township 25 South, and Range 27 East in Osceola and Orange Counties, Florida (Quad Map). The Intercession City-Gifford North 230kV Transmission Line is within the boundary of the certified corridor. The project right-of-way originates just north of Interstate 4 (I-4) and east of State Road 429 (SR429) at proposed transmission structure ICG-39 and continues north along SR429 to the new Gifford Substation (0.75 mile north of Western Way) and terminates at transmission structure ICG-121 (Location Map). Specifically, the project right-of-way crosses over North Old Lake Wilson Road and runs along the northern side of I-4 before turning north along the eastern side of SR429 within the Florida Department of Transportation (FDOT) right-of-way. The project right-of-way continues north on the eastern side of SR429 for approximately 0.2-mile before crossing to the west side of SR429. The project right-of-way continues north within the FDOT right-of-way along the western side of SR429 for approximately 2.7-miles before crossing to the east side of SR429. The project right-of-way crosses over and is on the eastern boundary of a FDOT stormwater pond before crossing west over SR429. The project right-of-way continues north on the western side of SR429 for approximately 4.5-miles before turning west and heading 0.1-mile to the Gifford Substation. The project corridor mainly occurs in or adjacent to road right-of-way and is typically 100 feet wide.

2.0 TEAM QUALIFICATIONS

As an introduction, Flatwoods is a Florida-based business specializing in wildlife and wetland ecology. We have a staff of wildlife biologists, including Certified Wildlife Biologists, skilled in evaluation and conservation of federal and state threatened and endangered (listed) species, as well as non-listed species. Our ecologists are trained to determine the presence or likelihood of listed plant and wildlife resources. The lead ecologists (Lee Walton and Annie Doyle) that conducted the survey are both Certified Wildlife Biologists by The Wildlife Society and each have over 15 years of experience conducting listed species surveys and designing wildlife management plans to avoid, minimize and mitigate project impacts.

3.0 METHODOLOGY

The following sections describe the methods used by Flatwoods to detect the potential presence and relative abundance of listed wildlife and plants within the project right-of-way.

3.1 Preliminary Review

Information on the potential presence of listed species was collected through literature and data review. Flatwoods reviewed information from the FWS, the FWC, the Florida Natural Areas Inventory (FNAI), the South Florida Water Management District (SFWMD), and the Florida Department of Environmental Protection (FDEP) geographic information system (GIS) databases regarding the occurrence of listed species and protected habitats.

To further identify which federally and state listed plant and animal species have the potential to occur within the project right-of-way, upland and wetland vegetative communities were assessed to determine their plant species composition, approximate boundaries, and general condition and quality. To establish the approximate locations and boundaries of existing upland and wetland communities within the project right-of-way, available site-specific data were collected and reviewed using the following resources and methods (see References for complete source information):

- Infrared and true color aerial imagery of the project area
- U.S. Department of Agriculture (USDA)/Natural Resource Conservation Service (NRCS) Soil Survey of Orange and Osceola Counties, Florida
- U.S. Geological Survey (USGS) Topographic Quadrangle maps
- FWS Critical Habitat Portal
- FNAI Biodiversity Matrix
- Florida Department of Transportation (FDOT) Florida Land Use, Cover, and Forms Classification System (FLUCFCS)
- SFWMD FLUCFCS mapping

3.2 Survey Methods

3.2.1 Standard Listed Species Survey

Flatwoods conducted a listed species survey within the project right-of-way in accordance with the FWC Florida Wildlife Conservation Guide and FWS protocols. Flatwoods paid special attention to listed species that have the potential to occur within the project right-of-way including but not limited to the wood stork (*Mycteria americana*), bald eagle (*Haliaeetus leucocephalus*), eastern indigo snake (*Drymarchon corais couperi*), Florida sandhill crane (*Grus canadensis pratensis*), gopher tortoise (*Gopherus polyphemus*), southeastern American kestrel (*Falco sparverius paulus*), gopher frog (*Rana capito*), Florida burrowing owl (*Athene cunicularia floridana*), limpkin (*Aramus guarana*), little blue heron (*Egretta caerulea*), roseate spoonbill (*Ajaja ajaja*), snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), white ibis (*Eudocimus albus*), and Sherman's fox squirrel (*Sciurus niger shermani*).

Pedestrian surveys for listed species were conducted on January 22-25, 2013. During these surveys all habitats within the project right-of-way were canvassed for listed species. Any observations of listed species, as well as physical features that may indicate the presence of these species, such as tracks, scat, nests, burrows, and nest cavities in trees or poles, are mapped on color aerial prints of the project right-of-way. Direct observations of listed species are recorded using a sub-meter global positioning system (GPS), and their locations are shown on a Listed Species Survey Map.

3.2.2 Listed Plant Survey

Flatwoods completed a survey in all suitable habitats within the project right-of-way for plant species listed by the FWS and Florida Department of Agriculture and Consumer Services (FDACS) as Threatened or Endangered. Any observations of listed plant species were recorded using a sub-meter GPS.

3.2.3 Wading Bird Survey

Flatwoods surveyed for wading bird colonies within 0.5-mile of the project right-of-way as required by Section B: Specific Condition V. A. 2b. Flatwoods also noted any suitable wading bird nesting habitat near the project right-of-way. Observations of wading bird colonies were recorded using a sub-meter global positioning system (GPS).

3.2.4 Gopher Tortoise Survey

Flatwoods conducted a 100 percent survey to locate all gopher tortoise (*Gopherus polyphemus*) burrows and estimate the density of gopher tortoises on the project right-of-way. The tortoise survey was conducted in accordance with the FWC methods as outlined in the Gopher Tortoise Permitting Guidelines April 2008 (revised September 2012). An Authorized Gopher Tortoise Agent supervised the gopher tortoise survey. Burrows that

are considered potentially occupied (active or inactive but not abandoned) were flagged in the field and recorded using a sub-meter GPS. Their locations are shown on a Listed Species Survey Map.

4.0 RESULTS

4.1 Soil Descriptions

Based on the USDA/NRCS Soil Surveys for Orange County (1989) and Osceola County (1979, Supplement 2011), 18 soil types are mapped within the project right-of-way (Soil Map Book). Six of the 18 soil types are classified as hydric according to the *NRCS Web Soil Survey* and or *Hydric Soils of Florida Handbook*. Listed below are the soil types found within the project right-of-way, their corresponding NRCS reference number for soils of Orange and Osceola Counties, Florida, and general descriptions of their characteristics.

Orange County Soils

(3) Basinger Fine Sand, Depressional – This soil is nearly level and very poorly drained and occurs in depressions and sloughs along the edges of freshwater marshes and swamps. Typically, this soil has a surface layer of black fine sand approximately 7 inches thick. The subsurface layer, to a depth of 32 inches, is gray fine sand. The subsoil, to a depth of 47 inches, is dark brown and light brownish gray fine sand. In 90 percent of areas mapped as Basinger Fine Sand, Depressional, Basinger soils and similar soils make up 73 to 99 percent of the mapped areas. Undrained areas are ponded for 6 to 9 months or more each year. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(4) Candler Fine Sand, 0 to 5 Percent Slopes – This soil is nearly level to gently sloping and excessively drained and occurs on uplands. Typically, this soil has a surface layer of very dark grayish brown fine sand about 5 inches thick. In 95 percent of areas mapped as Candler Fine Sand, 0 to 5 percent slopes, Candler soil and similar soils make up 81 to 97 percent of the mapped areas. A seasonal high water table is a depth of more than 80 inches below the soil surface with permeability rapid in the surface in subsurface layers and rapid to moderately rapid in the subsoil. The available water capacity is very low in the surface and subsurface layers and low in the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(20) Immokalee Fine Sand – This soil is nearly level and poorly drained and occurs on broad flatwoods. The slopes are smooth and range from 0 to 2 percent. Typically, this soil has a surface layer of black fine sand approximately 5 inches thick. In 70 percent of areas mapped as Immokalee Fine Sand, Immokalee soils and similar soils make up 85 to 99 percent of the mapped areas. In most years a seasonal high water table is within 10 inches of the soil surface for 1 to 3 months and it recedes to a depth of 10 to 40 inches for more than 6 months. The permeability is rapid in the surface and subsurface layers and within the substratum, and it is moderate in the subsoil. The available water capacity is very low in the surface and subsurface layers and in the substratum and low in the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(34) Pomello Fine Sand, 0 to 5 Percent Slopes – This soil type is nearly level to gently sloping and moderately well drained and occurs on knolls and low ridges on flatwoods. Typically, this soil has a surface layer of gray fine sand approximately 3 inches thick. In 80 percent of areas mapped as Pomello Fine Sand, 0 to 5 percent slopes, Pomello soil and similar soils make up 78 to 94 percent of the mapped areas. In most years a seasonal high water table is at a depth of 24 to 40 inches below the soil surface for 1 to 4 months of the year and recedes to a depth of 40 to 60 inches during dry periods. The permeability is very rapid in the surface and subsurface layers, moderately rapid in the subsoil, and rapid in the substratum. The available water capacity is very low in the surface, subsurface and substratum, and medium in the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(41) Samsula-Hontoon-Basinger Association, Depressional – The soils in this map unit are nearly level and very poorly drained. These soils occur in freshwater swamps, depressions, sloughs, and broad, poorly defined drainageways. Generally, Samsula soil is in the exterior areas of freshwater swamps and depressions that have a thinner accumulation of organic material. Hontoon soils are generally found in the interior areas of freshwater swamps and depressions that have a thicker layer of organic materials. Basinger soils are generally located along the outer rims of depressions and sloughs and poorly defined drainageways adjacent to freshwater swamps. Undrained areas are usually ponded for 6 to 9 months or more each year. Typically, the surface layer of Samsula soil is black and dark reddish brown muck about 34 inches thick. The upper part of the surface layer of Hontoon soil is black muck about 16 inches thick. The surface is a layer of Basinger soils about 6 inches thick. In 90 percent of the areas of this map unit, Samsula-Hontoon-Basinger Association, Depressional, and similar soils make up 84 to 99 percent of the mapped areas. Permeability is rapid in Samsula and Hontoon soils and very rapid in Basinger soils. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(42) Sanibel Muck – The soils in this map unit are nearly level and very poorly drained, occurring in depressions, freshwater swamps and marshes, and poorly defined drainageways. Undrained areas are usually ponded for 6 to 9 months or more each year with concave slopes that range from 0 to 1 percent. Typically, this soil type has an organic surface layer of black muck about 11 inches thick. In 80 percent of areas mapped as Sanibel Muck, Sanibel soil and other similar soils make up 81 to 95 percent of the mapped areas. The water table fluctuates from 0 to 10 inches of the soil surface for 2 to 6 months. The permeability is rapid throughout and the available water capacity is very high in the organic material and is medium to low in the underlying sandy material. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(46) Tavares Fine Sand, 0 to 5 Percent Slopes – This soil is nearly level to gently sloping and moderately well drained and occurs on low ridges and knolls on the uplands. Typically, this soil has a surface layer of very dark gray fine sand about 6 inches thick. In 90 percent of areas mapped as Tavares Fine Sand, Tavares soil and similar soils make up 78 to 92 percent of the mapped areas. In most years, a seasonal high water table is at a depth 40 to 80 inches below the soil surface for more than 6 months, and it recedes to a depth of more than 80 inches during extended dry periods. The permeability is very rapid throughout. The available water capacity is very low. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(47) Tavares-Millhopper Fine Sands, 0 to 5 Percent Slopes – The soils in this map unit are nearly level to gently sloping and moderately well drained and occur on low ridges and knolls on the uplands on the flatwoods. Typically, the surface layer of Tavares and Millhopper soils is dark grayish brown fine sand about 6 inches thick. In 90 percent of the mapped areas for this soil unit, Tavares-Millhopper Fine Sands, 0 to 5 percent, and similar soils make up 94 to 98 percent of the mapped areas. A seasonal high water table is at a depth of 40 to 72 inches below the soil surface for more than 6 months and recedes to a depth of more than 80 inches during extended dry periods in Tavares soil. A seasonal high water table is at a depth 40 to 60 inches below the soil surface in Millhopper soil for 1 to 4 months and recedes to a depth 60 to 72 inches for 2 to 4 months. Permeability is very rapid in Tavares soil and rapid in Millhopper soil surface and subsurface layers. The available water capacity in Tavares soil is very low. The available water capacity in Millhopper soil is low in the surface and subsurface layers and medium in the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(54) Zolfo Fine Sand – This soil is nearly level and somewhat poorly drained. It is found in broad, slightly higher positions adjacent to the flatwoods. The slopes are smooth to convex and range from 0 to 2 percent. In 90 percent of the areas mapped as Zolfo fine sand, Zolfo Fine Sand and similar soils make up 77 to 93 percent of the mapped areas. Typically, this soil has a surface layer of dark grayish brown fine sand approximately 5 inches thick. In most years a seasonal high water table is at a depth of 24 to 40 inches below the soil surface for 2 to 6 months and at a depth of 10 to 24 inches during periods of heavy rainfall. The permeability is rapid in the surface and subsurface layers and moderate in the subsoil. Available water capacity is low in the surface and subsurface soil layers and medium in the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

Osceola County Soils

(1) Adamsville Sand – This soil is somewhat poorly drained, nearly level on narrow ridges adjacent to and slightly higher than sloughs, marshes, and lakes, and on low knolls in the flatwoods. Slopes range from 0 to 2 percent. Typically, the surface layer is dark gray sand about four inches thick. Included with this soil in mapping are small areas of Narcoossee, Tavares, Parkwood, and Riviera soils, and small kitchen middens. The water table is at a depth of 20 to 40 inches below the soil surface for to 2 to 6 months annually. Permeability is rapid throughout. This soil has a very low or low available water capacity. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(5) Basinger Fine Sand – This is a poorly drained, nearly level soil in low, broad flats and sloughs in the flatwoods. Typically, the surface layer is about 4 inches of black fine sand over 3 inches of dark gray fine sand that contains gray mottles. Included with this soil in mapping are small areas of Placid, Pompano, and Smyrna soils. Also included are small areas of similar soils overlain by 5 to 9 inches of peat or muck. This soil has a water table at a depth of less than 10 inches below the soil surface for 2 to 6 months during most years and at a depth of 10 to 30 inches in the dry season for most years. Permeability is rapid throughout. Available water capacity, natural fertility, and organic matter content are very low to low. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(7) Candler Sand, 0 to 5 Percent Slopes – This is an excessively drained, nearly level to gently sloping soil on uplands. Typically, the surface layer is dark grayish brown sand about 3 inches thick. Included with this soil in mapping are small areas of Pomello, Cassia, and Tavares and small areas of Candler soils having slopes of 5 to 12 percent. This soil has a water table at a depth of greater than 72 inches below the soil surface. Permeability is very rapid in the upper 62 inches and low below that depth. Available water capacity is very low in the upper 62 inches and low below that depth. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(8) Candler Sand, 5 to 12 Percent Slopes – This is an excessively drained, sloping to strongly sloping soil on uplands. Typically, the surface layer is a dark grayish brown sand about 7 inches thick. It is underlain by approximately 52 inches of sand. Included with this soil map unit are small areas of Candler sand having slopes of 0 to 5 percent. Included soils make up no more than 10 percent of any mapped area. The water table is at a depth of more than 72 inches below the soil surface. Permeability is very rapid in the upper 59 inches and rapid below. Organic matter content and natural fertility are very low. Available water capacity is very low in the upper 59 inches and rapid below that depth. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(15) Hontoon Muck – This is a very poorly drained, nearly level organic soil in depressional areas and in freshwater marshes and swamps. Slopes are less than 1 percent. Typically, the surface layer is a dark reddish brown muck about 5 inches thick. The next layer is black muck about 24 inches thick. Included with this soil in mapping are small areas Samsula, Kaliga, and Placid soils. Included soils make up about 20 percent of any mapped area. Under natural conditions, the water table is within a depth of 10 inches of the surface or above the surface except during extended dry periods. Permeability is rapid throughout and available water capacity is very high throughout. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(16) Immokalee Fine Sand – This a poorly drained, nearly level soil in broad flatwoods areas. Typically, the surface layer is 7 inches of very dark gray fine sand. Included with this soil mapping are small areas of Ankona, Basinger, Myakka, Pomello, and Smyrna soils. Also included are small areas of similar soils in which the subsoil is below a depth of 50 inches or in which texture is course sand. The water table is at a depth of 10 inches for 2 months in most years and within a depth of 10 to 40 inches for 8 months or more in most years. Permeability is rapid in the surface and subsurface layers, moderate to moderately rapid in the subsoil, and rapid below. Available water capacity is low in the surface layer, very low in the subsurface layer, medium in the subsoil, and very low in the substratum. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(22) Myakka Fine Sand – This is a poorly drained, nearly level soil in broad flatwoods with slopes ranging from 0 to 2 percent. Typically, Myakka soils have a surface layer of very dark gray sand about 7 inches thick. Included with this soil in mapping are small areas of Smyrna, Immokalee, Ona, Cassia, EauGallie, and Pomello soils. Included soils make up about 20 percent of any mapped area. The water table is at a depth of less than 10 inches below the soil surface for 1 to 4 months in most years and at a depth of more than 40 inches during very dry seasons.

Permeability is rapid in the surface and subsurface layers, moderate to moderately rapid in the subsoil, and rapid in the substratum. Available water capacity is very low above the subsoil, medium in the subsoil, and very low below the subsoil. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

(37) Pompano Fine Sand, Depressional – This is a poorly drained, nearly level soil in depressions and drainageways. Slopes are less than 1 percent. Typically, the surface layer is fine sand about 11 inches thick. It is black in the upper 5 inches and dark gray in the lower 6 inches. Included with this soil in mapping are small areas of Basinger, Malabar, Placid, and Riviera soils. Included soils generally make up less than 10 percent of any mapped area. This soil is covered with standing water for 6 to 12 months. Permeability is very rapid throughout. Available water capacity is very low. According to the *Hydric Soils of Florida Handbook* this is a hydric soil.

(44) Tavares Fine Sand, 0 to 5 Percent Slopes – This is a moderately well drained, nearly level to gently sloping soil on low ridges in the flatwoods. Typically, the surface layer is dark grayish brown fine sand about 6 inches thick. Included with this soil in mapping are small areas of Adamsville and Candler soils. Also included are small areas of poorly drained soils that have a layer of fine sand weakly cemented with organic matter at a depth of 20 to 40 inches. Small areas of similar soil which has a layer of pinkish gray to dark gray sand at a depth of 70 to 80 inches are also included. Included soils make up less than 15 percent of any mapped area. The soil has a water table at a depth of 40 to 60 inches below the soil surface for more than 6 months in most years. The water table recedes to a depth of more than 60 inches during extended dry periods. Permeability is very rapid throughout and very low available water capacity to a depth of more than 80 inches. This is not a hydric soil according to the *Hydric Soils of Florida Handbook*.

4.2 Existing Upland and Wetland Communities

The habitats within the project right-of-way (98.12 Acres) have been classified based on the FLUCFCS at the third degree of detail as required by Section B: Specific Condition V. A. 2d. (Land Use Map Book). The Land Use Map Book and land use descriptions represent current conditions and include an estimate of the acreage and percent cover of each existing vegetation community. The land use descriptions include a wildlife-based habitat classification scheme using the Descriptions of Vegetation and Land Cover Types (FWC 2004). The project right-of-way is primarily within FDOT SR429 right-of-way. The project right-of-way has 84.48 acres of uplands which is 86.1% of the total project right-of-way (Table 1). Hardwood-Conifer Mixed habitat is the only upland habitat that is not listed as an Altered Landcover Type according to FNAI (2010). This habitat makes up 1.6% of the total project right-of-way. There are 13.65 acres of surface water and wetlands in the project right-of-way (Table 1). Surface waters (7.27 acres) make up over 50% of the total wetland acreage in the project right-of-way. Representative photographs of the land use types are shown in the Appendix: Photo Location Map and Photo Document.

Upland Land Use Types

Mixed Commercial and Services - FLUCFCS 147 (1.32 Acres: 1.3% of Project Right-of-way)

This portion of the project right-of-way bisects the paved parking lot for the Orange Lake Country Club. The area is paved and no vegetation exists. This habitat type is categorized as Urban 41. High Impact Urban according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is listed as Developed which is an Altered Landcover Type according to FNAI (2010).

Improved Pastures - FLUCFCS 211 (1.69 Acres: 1.7% of Project Right-of-way)

Areas classified with this land use are planted with pasture grasses, mainly Bahia grass (*Paspalum notatum*). Occasional live oak (*Quercus virginiana*) and prickly-pear cactus (*Opuntia humifusa*) occur within these areas. These areas are actively grazed by cattle. This habitat type is categorized as Agriculture 31. Improved Pasture according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is listed as Agriculture which is an Altered Landcover Type according to FNAI (2010). Photo 1 shows this habitat type (Appendix: Photo Location Map and Photo Document).

Other Shrubs and Brush - FLUCFCS 329 (1.64 Acres: 1.7% of Project Right-of-way)

This upland area within the project right-of-way is characterized by a dominance of wax myrtle (*Myrica cerifera*) with sparse sand cordgrass (*Spartina bakeri*). These areas were historically in agriculture and currently are within the FDOT SR429 road right-of-way. This habitat type is categorized as Urban 42. Low Impact Urban according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is Abandoned Pasture which is an Altered Landcover Type according to FNAI (2010).

Hardwood-Conifer Mixed - FLUCFCS 434 (1.56 Acres: 1.6% of Project Right-of-way)

Portions of the project right-of-way occur within forested uplands adjacent to SR429. These areas are characterized by a canopy with both slash pine (*Pinus elliottii*) and longleaf pine (*Pinus palustris*) and live oak. Occasional patches of saw palmetto (*Serenoa repens*) and wiregrass (*Aristida stricta* var. *beyrichiana*) occur. This habitat type is categorized as Mesic Uplands 9. Pinelands according to the Descriptions of Vegetation and Land Cover Types (FWC 2004). Photo 13 shows this habitat type (Appendix: Photo Location Map and Photo Document).

Coniferous Plantations - FLUCFCS 441 (2.48 Acres: 2.5% of Project Right-of-way)

Portions of the project right-of-way occur within planted pine. The planted slash pine in the northern portion of the project right-of-way (between proposed structures ICG-117 - ICG-120) is 15-20 years old and the understory is sparse and is comprised of a thick layer of pine needles. The planted slash pine in the central portion of the project right-of-way (between proposed

structures ICG-73 - ICG-75) is young pine trees (2-3 years old). The understory is Bahia grass, beggarticks (*Bidens alba*), lantana (*Lantana camara*) and bare ground. This habitat type is categorized as Mesic Uplands 9. Pinelands according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is listed as Pine Plantation which is an Altered Landcover Type according to FNAI (2010). Photo 9 shows this habitat type (Appendix: Photo Location Map and Photo Document).

Transportation - FLUCFCS 814 (73.92 Acres: 75.3% of Project Right-of-way)

This land use is paved roadways and road right-of-way. It is the dominant land use within the project right-of-way. Vegetation in the non-paved portions of this land use category is regularly maintained Bahia grass. The FDOT SR429 road right-of-way has landscaped areas (beds) throughout. Plantings include sand cordgrass, fakahatchee grass (*Tripsacum dactyloides*), slash pine, and live oak. This habitat type is categorized as Urban 42. Low Impact Urban according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is considered Developed which is an Altered Landcover Type according to FNAI (2010). Photos 2, 4, 10, 19, 20, 30, and 40 show the FDOT right-of-way (Appendix: Photo Location Map and Photo Document). Photos 5, 12, and 14 show the FDOT landscaped buffer areas (Appendix: Photo Location Map and Photo Document).

Water Supply Plants - FLUCFCS 833 (1.87 Acres: 1.9% of Project Right-of-way)

This land use is a portion of the Orange County Water Treatment Plant. Vegetation is regularly maintained Bahia grass. This habitat type is categorized as Urban 42. Low Impact Urban according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is considered Developed which is an Altered Landcover Type according to FNAI (2010).

Wetland Land Use Types

Upland Cut Ditches - FLUCFCS 512 (0.04 Acre: 0.01% of Project Right-of-way)

There are a few roadside ditches within the project right-of-way. These roadside ditches are herbaceous stormwater conveyances. They are characterized by a dominance of coinwort (*Centella asiatica*), various species of sedge (*Cyperus* spp.), and pathrush (*Eleocharis baldwinii*). This habitat type is categorized as Urban 42. Low Impact Urban according to the Descriptions of Vegetation and Land Cover Types (FWC 2004) and is considered Canal/Ditch which is an Altered Landcover Type according to FNAI (2010). Photos 54 and 55 depict upland cut roadside ditches, SW-16 and SW-17 (Appendix: Photo Location Map and Photo Document).

Reservoirs, Less Than 10 Acres - FLUCFCS 534 (7.23 Acres: 7.4% of Project Right-of-way)

There are many stormwater treatment and stormwater retention ponds within the project right-of-way. These ponds are associated with SR429 and adjacent residential developments. The ponds are typically open water with littoral zones dominated by cattails (*Typha* sp.) and Carolina

willow (*Salix caroliniana*). The open water sections of some ponds have water-lily (*Nymphaea odorata*). This habitat type is categorized as Aquatic 27. Open Water according to the Descriptions of Vegetation and Land Cover Types (FWC 2004). FNAI (2010) considers these Impoundments/Artificial Ponds which is an Altered Landcover Type. Photos 3, 18, 22, 23, 26, 27, 28, 29, 33, and 35 are representative examples of this habitat type (Appendix: Photo Location Map and Photo Document).

Mixed Wetland Hardwoods - FLUCFCS 617 (3.81 Acres: 3.9% of Project Right-of-way)

This land use describes edges of hardwood dominated wetlands that fall within the project right-of-way. Tree species include sweetbay (*Magnolia virginiana*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), loblolly bay (*Gordonia lasianthus*), and swampbay (*Persea palustris*). Shrubby species within these areas includes fetterbush (*Lyonia lucida*), buttonbush (*Cephalanthus occidentalis*), and Carolina willow. Herbaceous species include lizard's tail (*Cernuus saururus*), cinnamon fern (*Osmunda cinnamomea*), and Virginia chain-fern (*Woodwardia virginica*). This habitat type is categorized as Palustrine (Freshwater Wetlands) 20. Hardwood Swamp according to the Descriptions of Vegetation and Land Cover Types (FWC 2004). Photos 6, 7, and 8 depict WL-26, which is a characteristic wetland of this habitat type (Appendix: Photo Location Map and Photo Document).

Wetland Forested Mixed - FLUCFCS 630 (1.76 Acres: 1.8% of Project Right-of-way)

This land use describes edges of mixed hardwood and cypress (*Taxodium ascendens*) wetlands within the project right-of-way. Hardwood species include sweetbay, red maple, and loblolly bay. Occasionally, slash pines also occur within these wetlands. Shrubby species observed in these areas includes wax myrtle, fetterbush and Carolina willow. Herbaceous species observed included redroot (*Lachnanthes caroliniana*) and Virginia chain-fern. This habitat type is categorized as Palustrine (Freshwater Wetlands) 19. Mixed Wetland Forest according to the Descriptions of Vegetation and Land Cover Types (FWC 2004). Photos 15, 16 and 17 depict WL-27, which is characteristic of this habitat type (Appendix: Photo Location Map and Photo Document).

Freshwater Marsh - FLUCFCS 641 (0.80 Acre: 0.8% of Project Right-of-way)

Portions of herbaceous marshes occur in the project right-of-way. They are characterized by a dominance of sand cordgrass, arrowhead (*Sagittaria lancifolia*), and blue maidencane (*Amphicarpum muhlenbergianum*). This habitat type is categorized as Palustrine (Freshwater Wetlands) 12. Freshwater marsh and Wet Prairie according to the Descriptions of Vegetation and Land Cover Types (FWC 2004). Photos 34 and 36 show WL-29 and Photos 55 and 56 show WL-35, which are characteristic of this habitat type (Appendix: Photo Location Map and Photo Document).

Table 1 Land Use (FLUCFCS) and Percentage of Habitat Coverage Within the Project Right-of-Way

FLUCFCS Code	FLUCFCS Description	Acres	Percent Coverage
147	Mixed and Commercial Services	1.32	1.3%
211	Improved Pastures	1.69	1.7%
329	Other Shrubs and Brushland	1.64	1.7%
434	Hardwood-Conifer Mixed	1.56	1.6%
441	Pine Plantation	2.48	2.5%
512	Upland Cut Ditches	0.04	0.05%
534	Reservoirs < 10 Acres	7.23	7.4%
617	Mixed Wetland Hardwoods	3.81	3.9%
630	Wetland Forested Mixed	1.76	1.8%
641	Freshwater Marshes	0.80	0.8%
814	Transportation	73.92	75.3%
833	Water Supply Plants	1.87	1.9%
Total		98.12	100%

4.3 Survey Results

One listed species, the gopher tortoise (55 burrows), was observed within the project right-of-way (Listed Species Survey Map Book). However, based on the project's available habitats and location, other listed species (animals and plants) have the potential to occur. Table 2 describes the potentially occurring species' habitat preferences, preferred survey window (breeding season or flowering time), their likelihood of occurrence and whether or not they were observed on the project right-of-way, and their FWS and FWC listing status. The species that have a moderate or high probability of occurrence on the project right-of-way are discussed in the sections below.

4.3.1 Gopher Frog

Gopher frog (*Rana capito*) is listed as a Species of Special Concern by the FWC and not listed by the FWS. Gopher frogs in Florida use gopher tortoise burrows as refuges and are considered a gopher tortoise commensal species. Their preferred habitat is Longleaf Pine-Turkey Oak sandhills, but they are also found in pine flatwoods, sand pine scrub, and xeric hammocks. Gopher frogs prefer to breed in seasonally-flooded grassy ponds and cypress wetlands that lack fish. Fish prey on gopher frogs as tadpoles, which may account for their preference for fishless breeding habitats such as temporary ponds. Gopher frogs are largely nocturnal, but may be seen during the day at the mouths of tortoise burrows. Their diet consists of invertebrates and anurans, including toads. Tadpoles feed on plant matter and detritus. They are rarely found more than a mile away from breeding habitat. Flatwoods personnel did not directly observe gopher frogs on the site; however, suitable habitat for gopher frogs does exist within the project right-of-way. Furthermore, FNAI reported a gopher frog near the project right-of-way (FNAI/FWC Map).

Protection Measures: The FWC includes gopher frogs as a commensal species with gopher tortoises and authorizes incidental relocation of gopher frogs in their gopher tortoise relocation permits as long as they are in accordance with Appendix 9. Interim FWC Policy on the Relocation of Priority Commensals (Gopher Tortoise Permitting Guidelines April 2008 revised September 2012). PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project. If gopher frogs are discovered during the relocation, they will be released on-site or allowed to escape unharmed to suitable habitat that will remain within the project right-of-way.

4.3.2 Limpkin

Limpkin (*Aramus guarauna*) is listed as a Species of Special Concern by the FWC and not listed by the FWS. This medium-sized, long-legged water bird with a down-curved bill adapted for eating apple snails has dark brown feathers flecked in white, giving them a spotted appearance. This species is found foraging along open freshwater marshes, swamp forests, and the shores of rivers, lakes, and ponds. Limpkins create a nesting platform composed of sticks, vines, leaves, moss, grass, and other types of vegetation. Nests are built in any of a variety of sites, from the surface of floating vegetation to tree

limbs 40 feet above the ground. No limpkins were observed during the listed species survey. The limpkin may utilize the wetlands within the project right-of-way for foraging; however, their utilization of these wetlands for roosting or nesting is unlikely. According to the 1999 FWC wading bird colony database, no wading bird colonies active in the 1990's survey occur within one mile of the project right-of-way. No communal roosts or rookeries were observed on the site or within the vicinity of the corridor.

Protection Measures: The project will likely have no effect on limpkin because nests and foraging habitats will not be impacted.

4.3.3 Florida Burrowing Owl

The Florida burrowing owl (*Athene cunicularia floridana*) is listed as a Species of Special Concern by the FWC and not listed by the FWS. The burrowing owl spends most of its time on the ground, where its sandy brown plumage provides camouflage from potential predators. One of Florida's smallest owls, it averages nine inches in height with a wingspan of 21 inches. Burrowing owls typically dwell in burrows excavated in dry, well drained pasturelands, on spoil piles, and grassy open spaces. No Florida burrowing owls or burrowing owl burrows were observed within the project right-of-way. The only suitable habitat within project right-of-way is immediately adjacent to SR429.

Protection Measures: The project will likely have no effect on burrowing owls because burrows and foraging habitats will not be impacted.

4.3.4 Little Blue Heron

This medium-sized, slate-blue wading bird is listed as a Species of Special Concern by the FWC and not listed by the FWS. The little blue heron (*Egretta caerulea*) prefers both fresh and saltwater habitats such as fresh and saltwater mudflats and marshes, coastal beaches, mangrove swamps, cypress swamps, hardwood swamps, wet prairies, cypress wetlands, bay swamps, and ditches. Suitable foraging habitat exists on the site; however no little blue herons were observed during the listed species survey either flying over the project right-of-way or foraging within the project right-of-way. The utilization of the site for roosting or nesting, however, is unlikely because of the lack of preferred nesting habitat. No communal roosts or rookeries were observed along the project right-of-way or within 0.5-mile of the project right-of-way (See Wading Bird Colony Survey Map). According to the 1999 FWC wading bird colony database, no wading bird colonies active in the 1990's survey occur within one mile of the project right-of-way. The closest reported active wading bird colony (Atlas Number 612132) according to the 1999 FWC wading bird colony database is 4.5 miles southeast of the project right-of-way (FNAI/FWC Map).

Protection Measures: The project will likely have no effect on wading birds because nests and foraging habitats will not be impacted.

4.3.5 Snowy Egret

This medium-sized, all white wading bird is listed as a Species of Special Concern by the FWC and not listed by the FWS. The snowy egret (*Egretta thula*) prefers both fresh and saltwater habitats such as fresh and saltwater mudflats and marshes, coastal beaches, mangrove swamps, cypress swamps, hardwood swamps, wet prairies, cypress wetlands, bay swamps, ditches, inland waterways, and urban and agricultural environments. Suitable foraging habitat exists on the site, although no snowy egrets were observed during the listed species survey either flying over the project right-of-way or foraging in the wetlands. The utilization of the corridor for roosting or nesting, however, is unlikely because of the lack of preferred nesting habitat. No communal roosts or rookeries were observed along the project right-of-way or within 0.5-mile of the project right-of-way (See Wading Bird Colony Survey Map). According to the 1999 FWC wading bird colony database, no wading bird colonies active in the 1990's survey occur within one mile of the project right-of-way. The closest reported active wading bird colony (Atlas Number 612132) according to the 1999 FWC wading bird colony database is 4.5 miles southeast of the project right-of-way (FNAI/FWC Map).

Protection Measures: The project will likely have no effect on wading birds because nests and foraging habitats will not be impacted.

4.3.6 Tricolored Heron

This medium-sized, two-toned wading bird is listed as a Species of Special Concern by the FWC and not listed by the FWS. The tricolored heron (*Egretta tricolor*) prefers both fresh and saltwater habitats, such as fresh and saltwater mudflats and marshes, coastal beaches, mangrove swamps, cypress swamps, hardwood swamps, wet prairies, cypress wetlands, bay swamps, ditches, inland waterways, and urban and agricultural environments. Tricolored herons were not observed during the listed species survey either flying over the project right-of-way or foraging in wetlands adjacent to or within the project right-of-way. Their utilization of the project right-of-way for roosting or nesting is unlikely because of the lack of preferred habitat. No communal roosts or rookeries were observed along the project right-of-way or within 0.5-mile of the project right-of-way (See Wading Bird Colony Survey Map). According to the 1999 FWC wading bird colony database, no wading bird colonies active in the 1990's survey occur within one mile of the project right-of-way. The closest reported active wading bird colony (Atlas Number 612132) according to the 1999 FWC wading bird colony database is 4.5 miles southeast of the project right-of-way (FNAI/FWC Map).

Protection Measures: The project will likely have no effect on wading birds because nests and foraging habitats will not be impacted.

4.3.7 White Ibis

This medium-sized, all white wading bird with a downward-curving bill is listed as a Species of Special Concern by the FWC and not listed by the FWS. The white ibis (*Eudocimus albus*) prefers both fresh and estuarine habitats, such as freshwater marshes, mangrove swamps, shallow lakes, wet prairies, and cypress and hardwood swamps. White ibises were not observed during the listed species survey either flying over the project right-of-way or foraging in wetlands adjacent to or within the project right-of-way. Their utilization of the project right-of-way for roosting or nesting is unlikely because of the lack of preferred habitat. No communal roosts or rookeries were observed along the project right-of-way or within 0.5-mile of the project right-of-way (See Wading Bird Colony Survey Map). According to the 1999 FWC wading bird colony database, no wading bird colonies active in the 1990's survey occur within one mile of the project right-of-way. The closest reported active wading bird colony (Atlas Number 612132) according to the 1999 FWC wading bird colony database is 4.5 miles southeast of the project right-of-way (FNAI/FWC Map).

Protection Measures: The project will likely have no effect on wading birds because nests and foraging habitats will not be impacted.

4.3.8 Southeastern American Kestrel

The southeastern American kestrel (*Falco sparverius paulus*) is listed as Threatened by the FWC and not listed by the FWS. It is a resident subspecies of the American kestrel (*Falco sparverius*). Kestrels observed in Florida during the breeding season (April-August) are assumed to be resident southeastern American kestrels. They are found in upland habitats, including sandhills, flatwoods, pastures, sand pine scrub, and prairies. As cavity nesters and sit and wait predators, they require suitable cavity trees and perches in their territories as well as open ground cover to see and capture their prey. Typical prey items include insects, lizards, small rodents, and small birds. No kestrels or cavity trees were observed; however, there is suitable foraging habitat within the project right-of-way immediately adjacent to SR429.

Protection Measures: The project will likely have no effect on kestrels because nests and foraging habitats will not be impacted.

4.3.9 Florida Sandhill Crane

The Florida sandhill crane (*Grus canadensis pratensis*) is listed as Threatened by the FWC and not listed by the FWS. Florida sandhill cranes are long-legged, long-necked, gray birds with a patch of bald, red skin on top of their heads. Florida sandhill cranes are omnivorous, eating a variety of plant and animal matter. Habitats preferred by sandhill cranes include prairies, freshwater marshes, and pasture lands and they typically avoid forests and deep marshes but uses transition zones and edges between these and prairies or pasture lands. Their nest is a mound of herbaceous plant material in shallow water or

on the ground in marshy areas and they often favor wetlands dominated by pickerelweed and maidencane. Florida sandhill cranes were not observed during listed species survey either flying over or foraging in the project right-of-way and the likelihood of their utilization of the project right-of-way for nesting is unlikely due to small fringes of herbaceous marshes that occur in the project right-of-way.

Protection Measures: The project will likely have no effect on sandhill cranes because nesting and foraging habitats will not be impacted.

4.3.10 Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) was removed from listing under the Endangered Species Act in 2007 but is currently protected under the Bald and Golden Eagle Protection Act. The FWC also removed the bald eagle from listing in April 2008, but currently they are protected by a species-specific rule under the FWC Bald Eagle Management Plan approved April 9, 2008. Bald Eagles are dark brown with a white head and tail. Males and females are identical in plumage coloration. The beak, feet, and eyes are bright yellow. The plumage of immature eagles is brown and speckled with white until their fifth year. Bald eagles use forested habitats for nesting and roosting and expanses of shallow fresh or salt water for foraging. They obtain food by direct capture, scavenging, and stealing food from other animals, especially osprey. Flatwoods personnel did not locate any bald eagle nests in the project right-of-way. One known bald eagle nest occurs within one mile of the project right-of-way according to the FWC Eagle Nest Locator, which is current through the 2011-2012 nesting season (FNAI/FWC Map). Nest OS193 is located 3,900 feet from proposed pole ICG-86 (FNAI/FWC Map). According to the FWC data this nest was active in 2012.

Protection Measures: The project will likely have no effect on eagles. In accordance with the FWC Bald Eagle Management Plan (2008) and the FWS National Bald Eagle Management Guidelines, approvals regarding bald eagles will not be required because the project is more than 660 feet from bald eagle nest OS193.

4.3.11 Wood Stork

This large, white wading bird is listed as an endangered species on both the FWC and FWS. The wood stork (*Mycteria americana*) occurs in both fresh and saltwater habitats. Habitats such as fresh and saltwater marshes, tidal flats, wet prairies, cypress swamps, and drainage ditches are preferred by the wood stork. Within south Florida, the wood stork is known to utilize a 18.6 mile radius core foraging area (CFA). According to the FWS 2010 Wood Stork Florida Nesting Colonies Maps, the project falls within one CFA. The closest wood stork colony (Lake Russell) is located over 15 miles to the southeast of the project right-of-way (FNAI/FWC Map). The project is not within the Primary Zone (within 1500 feet) or the Secondary Zone (1501 – 2500 feet) of this wood stork colony. Wood storks were not observed during the listed species survey either flying overhead or foraging in wetlands and their utilization of the project right-of-way for roosting or

nesting is unlikely because of the lack of preferred nesting habitat (See Wading Bird Colony Survey Map).

Protection Measures: The project will likely have no effect on wood storks because nesting and foraging habitats will not be impacted. According to the determination key for peninsular and central Florida (Orange County) and South Florida (Osceola County), the project is not likely to adversely affect wood storks as long as the permanent wetland impacts to suitable foraging habitat (SFH) will be less than 0.5 acre. SFH is described as any area containing patches of relatively open (< 25% aquatic vegetation), calm water and having a permanent or seasonal water depth between 2 and 15 inches.

4.3.12 Florida Mouse

The Florida mouse (*Peromyscus floridanus*) is listed by the FWC as a Species of Special Concern and not listed by the FWS. Florida mouse are typically found in xeric upland communities with sandy soils, including scrub, sandhill, and ruderal sites where they inhabit burrows of the gopher tortoise. Flatwoods personnel did not directly observe the Florida mouse; however, suitable habitat and numerous gopher tortoise burrows occur within the project right-of-way. Furthermore, FNAI reported a Florida mouse near the project right-of-way (FNAI/FWC Map) prior to the construction of SR429.

Protection Measures: The FWC includes Florida mouse as a commensal species with gopher tortoises and authorizes incidental relocation of Florida mouse in their gopher tortoise relocation permits as long as they are in accordance with Appendix 9. Interim FWC Policy on the Relocation of Priority Commensals (Gopher Tortoise Permitting Guidelines April 2008 revised September 2012). PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project. If Florida mice are discovered during the relocation, they will be released on-site or allowed to escape unharmed to suitable habitat that will remain within the project right-of-way.

4.3.13 Sherman's Fox Squirrel

Sherman's fox squirrel (*Sciurus niger shermani*) is listed as a Species of Special Concern by the FWC and not listed by the FWS. Sherman's fox squirrels typically inhabit fire maintained longleaf pine and turkey oak sandhill, pine flatwoods, and pastures with scattered pine and oak trees. They depend on a variety of oak trees for seasonal food and nest substrate. The Sherman's fox squirrel was not observed and little suitable habitat exists within the project right-of-way. Although suitable habitat exists, the presence of fox squirrels is unlikely.

Protection Measures: The project will likely have no effect on fox squirrels because nesting and foraging habitats will not be impacted.

4.3.14 Eastern Indigo Snake

The eastern indigo snake (*Drymarchon corais couperi*) is listed as Threatened by the FWC and the FWS. The indigo snake is a large, black, non-venomous snake. They are thick-bodied and muscular, with a glossy black body that in the sunlight appears iridescent blue. The chin and throat are reddish or white, and this color may extend down the body ventrally. The belly is cloudy orange to blue-gray. They are found within scrub, sandhill, and scrubby flatwoods habitats where they occur in or near gopher tortoise burrows. Flatwoods personnel did not directly observe the eastern indigo snake during the survey; however, because of the presence of suitable habitat and gopher tortoise burrows it is possible that eastern indigo snakes occur in the project right-of-way. Furthermore, FNAI reported an indigo snake near the project right-of-way (FNAI/FWC Map) prior to the construction of SR429.

Protection Measures: The project will not likely adversely affect indigo snakes because the permanent impacts to suitable habitat will be small and all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow. PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project. If indigo snakes are discovered during the relocation, no work will commence until the snake has vacated the vicinity. For your information, PEF implements an eastern indigo snake protection program in accordance with the FWS *Standard Protection Measures for the Eastern Indigo Snake* (FWS 2004) for construction projects. The protection program includes distributing educational pamphlets (Appendix B) to all personnel prior to any clearing activities. In addition, PEF installs informational signs (Appendix C) in highly visible locations throughout the construction worksite prior to commencement of construction activities.

For your information, most of the project occurs within the FDOT SR429 right-of-way. FDOT obtained incidental take permits from the FWS (200105086 IP-TB) and FWC (WX02142) for the construction of SR429. These permits included impacts to indigo snakes and provided the appropriate mitigation.

4.3.15 Gopher Tortoise

The gopher tortoise is listed as Threatened by the FWC and not listed by the FWS. Gopher tortoises are terrestrial turtles averaging 9 to 11 inches in length. They are typically found in sandhill, pine flatwoods, scrub, dry prairie, coastal dunes, and other well-drained, open habitats. Gopher tortoises dig half-moon-shaped burrows that average 15 feet long and 7 feet deep. Flatwoods personnel located 55 potentially occupied gopher tortoise burrows within the project right-of-way (Listed Species Survey Map).

Protection Measures: The project will not impact gopher tortoises. PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project and relocate all gopher tortoises out of harm's way prior to project construction. Some burrows may be avoided and protected in place if project

construction is more than 25-feet from the burrow entrance (FWC Gopher Tortoise Permitting Guidelines revised September 2012).

4.3.16 American Alligator

The American alligator (*Alligator mississippiensis*) is listed as having a similarity of appearance to a threatened taxon by the FWS and is listed as a Species of Special Concern by the FWC. The American alligator is a large, semi-aquatic, armored reptile that is related to crocodiles. Their body ranges from 6 - 14 feet long. Almost black in color, they have prominent eyes and nostrils with coarse scales over the entire body. They have a large, long head with visible upper teeth along the edge of the jaws. Front feet have 5 toes, while rear feet have 4 toes that are webbed. American alligators are found in permanent bodies of fresh water, including marshes, swamps, lakes, and rivers. They occasionally wander into brackish and salt water but rarely remain there. No American alligators were observed within the project right-of-way. It is likely that they use the stormwater pond in the project right-of-way for foraging.

Protection Measures: The project will likely have no effect on alligators because nesting and foraging habitats will not be impacted.

4.3.17 Sand Skink

The sand skink is listed as Threatened by FWS and FWC. The sand skink is a small, fossorial lizard that occurs on the sandy ridges of interior central Florida from Marion County south to Highlands County. The sand skink reaches a maximum length of about 5 inches and the body is shiny and grayish-white in color. It spends the majority of its time below the surface where it burrows through loose sand in search of food, shelter, and mates. Sand skinks feed on a variety of hard and soft-bodied arthropods that occur below the ground surface (e.g. beetle larvae and termites). No Critical Habitat has been designated for the sand skink. No sand skinks or sand skink tracts were observed in the project right-of-way during the pedestrian surveys or during the March-April 2012 coverboard survey (Sand Skink Survey Map). The sand skink observations shown on the FNAI/FWC Map do not occur within the project right-of-way. These species were documented prior to the construction of SR429 and no longer occur within the project right-of-way.

For your information, most of the project occurs within the FDOT SR429 right-of-way. FDOT obtained incidental take permits from the FWS (200105086 IP-TB) and FWC (WX02142) for the construction of SR429. These permits included impacts to sand skinks and provided the appropriate mitigation. The coverboard survey was conducted because a small portion of the project right-of-way was not included in the FDOT SR429 FWS and FWC permits. This area is within the FWS sand skink consultation area, has suitable soil types (Tavares, Chandler, Satellite and Pomello) and is greater than 82 feet above sea level as outlined in the Peninsular Florida Species Conservation and Consultation Guide for Sand Skinks and Blue-tailed Mole Skinks April 2011 (revised

February 2012). The habitat on the site is mostly dense bahia grass adjacent to I-4 and is not desirable for sand skinks.

Protection Measures: The project will not likely adversely affect sand skinks because sand skinks likely do not occur within the project right-of-way.

4.3.18 Blue-tailed mole Skink

The blue-tailed mole skink (*Eumeces egregius lividus*) is listed as Threatened by FWS and FWC. The blue-tailed mole skink is a small, slender, brownish lizard with smooth, shiny scales with a blue tail that may become pinkish with age. Adults grow to 5 in. (127 mm) total length. They are found on well-drained sandy uplands on the Lake Wales Ridge in Polk, Highlands, and western Osceola Counties above 100 feet in sea level. They favor rosemary, oak, and sand pine scrubs, turkey oak barrens, sandhill, and xeric hammock with loose sand (for burrowing) and patches of sparse to no groundcover or canopy. No Critical Habitat has been designated for the blue-tailed mole skinks. No blue-tailed mole skinks were observed in the project right-of-way during the pedestrian surveys or during the March-April 2012 coverboard survey (Sand Skink Survey Map).

For your information, most of the project occurs within the FDOT SR429 right-of-way. FDOT obtained incidental take permits from the FWS (200105086 IP-TB) and FWC (WX02142) for the construction of SR429. These permits included impacts to sand skinks and provided the appropriate mitigation. The coverboard survey was conducted because a small portion of the project right-of-way was not included in the FDOT SR429 FWS and FWC permits. This area is within the FWS sand skink consultation area, has suitable soil types (Tavares, Chandler, Satellite and Pomello) and is greater than 82 feet above sea level as outlined in the Peninsular Florida Species Conservation and Consultation Guide for Sand Skinks and Blue-tailed Mole Skinks April 2011 (revised February 2012). The habitat on the site is mostly dense bahia grass adjacent to I-4 and is not desirable for blue-tailed mole skinks.

Protection Measures: The project will not likely adversely affect blue-tailed mole skinks because blue-tailed mole skinks likely do not occur within the project right-of-way.

4.3.19 Florida Pine Snake

The Florida pine snake (*Pituophis melanoleucus mugitus*) is listed as a Species of Special Concern by the FWC and not listed by the FWS. The Florida pine snake is a large, stocky, tan or rusty colored snake with an indistinct pattern of large blotches on a lighter background. They have a muscular body, with keeled scales with a relatively small head, somewhat pointed snout, and four prefrontal scales. These snakes may hiss loudly and vibrate their tail when encountered. They are found in sandhill and former sandhill, including old fields and pastures, but also sand pine scrub and scrubby flatwoods with

open canopies and dry sandy soils. They often coexist with pocket gophers and gopher tortoises. Flatwoods personnel did not observe the Florida pine snake during the survey.

Protection Measures: The FWC includes Florida pine snake as a commensal species with gopher tortoises and authorizes incidental relocation of Florida pine snake in their gopher tortoise relocation permits as long as they are in accordance with Appendix 9. Interim FWC Policy on the Relocation of Priority Commensals (Gopher Tortoise Permitting Guidelines April 2008 revised September 2012). PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project. If Florida pine snakes are discovered during the relocation, they will be released on-site or allowed to escape unharmed to suitable habitat that will remain within the project right-of-way.

4.3.20 Listed Plants

Flatwoods surveyed for listed plants within the project right-of-way. None of the listed plants known to occur within Osceola and Orange Counties were observed within the project right-of-way. Most of the project right-of-way is in the FDOT SR429 road right-of-way and it is unlikely that listed plants occur in these disturbed and regularly mowed areas. The listed plants shown on the FNAI/FWC Map do not occur within the project right-of-way. These species were documented prior to the construction of SR429 and no longer occur within the project right-of-way.

Protection Measures: The project will not likely adversely affect listed plants because they likely do not occur within the project right-of-way.

Table 2 Protected Plants and Animals Potentially Occurring on the Project Right-of-Way

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
AMPHIBIANS					
<i>Rana capito</i> Gopher frog	Dry, sandy uplands, chiefly sandhill and scrub that include isolated wetlands or seasonal ponds.	S - Year round B - October-April	Moderate: some suitable habitat present	---	SSC
BIRDS					
<i>Ajaia ajaja</i> Roseate spoonbill	Primarily nests in mixed-species colonies on coastal islands Occasionally nests in willow heads at freshwater sites. Forages in shallow water including marine tidal flats and ponds, and freshwater sloughs and marshes.	S - Year round B - March-July	Low: Little suitable habitat present	---	SSC
<i>Ammodramus savannarum floridanus</i> Florida grasshopper sparrow	Requires large areas of frequently burned dry prairie habitat, with patchy open areas sufficient for foraging. May persist in pasture lands that have not been intensively managed so as to remove all vegetation clumps.	S – 1 April- 15 June B – March-July	Low: No suitable habitat present	E	E
<i>Aphelocoma coerulescens</i> Florida scrub-jay	Inhabits fire dominated, low-growing, oak scrub habitat found on well-drained sandy soils. May persist in areas with sparser oaks or scrub areas that are overgrown.	S - March-October B - March-July	Low: No suitable habitat present	T	T
<i>Aramus guarauna</i> Limpkin	Found foraging along the banks of slow moving freshwater streams or rivers, in swamps, marshes, and along lakeshores. Nesting sites include mounds of aquatic vegetation and marsh grasses among cypress knees and high in trees.	S - Year round B - February-July	Moderate for foraging, low for nesting	---	SSC
<i>Athene cunicularia floridana</i> Florida burrowing owl	Natural habitats include dry prairie and sandhill. Makes extensive use of ruderal areas such as pastures, airports, ball fields, parks, school grounds, university campuses, road right-of-ways, and vacant spaces in residential areas.	S - Year round B - March-June	Moderate: Little suitable habitat present	---	SSC
<i>Caracara cheriway</i> Crested caracara	Open country, including dry prairie and pasture lands with cabbage palm, cabbage palm/live oak hammocks, and shallow ponds and sloughs.	S - January-April B - December-June	Low: Little suitable habitat present	T	T
<i>Egretta caerulea</i> Little blue heron	Shallow freshwater, brackish water, and saltwater habitats.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Egretta thula</i> Snowy egret	Ponds, streams, marshes, and pastures.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Egretta tricolor</i> Tricolored heron	Forages in a variety of permanently and seasonally flooded wetlands, ditches, and lakes. Inland nesting colonies typically found in Carolina willow dominated wetlands.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Eudocimus albus</i> White ibis	Freshwater, brackish water, and saltwater habitats.	S - Year round B - March-July	High for foraging, nesting unlikely	---	SSC
<i>Falco sparverius paulus</i> Southeastern American kestrel	Found in open pine habitats, woodland edges, dry prairies, and pastures.	S - April-August B - April-August	Moderate: Suitable habitat present	---	T
<i>Grus canadensis pratensis</i> Florida sandhill crane	Prairies, freshwater marshes, and pasture lands. Avoids forests and deep marshes but uses transition zones and edges between these and prairies or pasture lands.	S - January-June B - December-June	Moderate for foraging, nesting unlikely	---	T
<i>Haliaeetus leucocephalus</i> Bald eagle	Areas close to the coast, bays, rivers, lakes, or other bodies of water. Typically nests in live mature pines and cypress trees.	S - Year round B - October-May	Moderate for foraging, nesting unlikely	---	---
<i>Mycteria americana</i> Wood stork	Forages in shallow water in freshwater marshes, swamps, lagoons, ponds, tidal creeks, flooded pastures, and ditches. Nests in colonies in cypress swamps.	S - Year round B - March-August	High for foraging, nesting unlikely	E	E
<i>Picoides borealis</i> Red-cockaded woodpecker	Open pine woodlands with mature to over-mature pine trees and a diversity of grass, forbs, and shrub species.	S - Year round B - April-July	Low: No suitable nesting habitat	E	SSC
<i>Rostrhamus sociabilis plumbeus</i> Everglade snail kite	Large open freshwater marshes and lakes with shallow water, less than four feet deep, and a low density of emergent vegetation.	S - December-July B - January-May	Low: Little suitable habitat present	E	E
<i>Sterna antillarum</i> Least tern	Coastal areas throughout Florida, including beaches, lagoons, bays, and estuaries. Increasingly use artificial nesting sites, including gravel rooftops, dredge spoil islands or other dredged material deposits, construction sites, causeways, and mining lands.	S - April-September B - April-September	Low: No suitable nesting habitat	---	T

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
MAMMALS					
<i>Podomys floridanus</i> Florida mouse	Xeric upland communities with sandy soils, including scrub, sandhill, and ruderal sites where they inhabit burrows of the gopher tortoise.	S - Year round B - July-February	Moderate: Some suitable habitat present	---	SSC
<i>Puma concolor coryi</i> Florida panther	Requires extensive blocks of mostly forested communities. Large wetlands that are generally inaccessible to humans are important for diurnal refuge.	S - Year round B – December-March	Low: suitable habitat present	E	E
<i>Sciurus niger shermani</i> Sherman’s fox squirrel	Sandhill, pine flatwoods, and pastures and other open, ruderal habitats with scattered pines and oaks. Depends on a variety of oak trees for seasonal food and nest material.	S - Year round B - December-February & May-June	Moderate: Suitable habitat adjacent	---	SSC
<i>Ursus americanus floridanus</i> Florida black bear	A wide variety of forested communities is needed to support the varied seasonal diet of black bears. Forested wetlands are particularly important for diurnal cover. Baygalls (bayheads) are important for cover and dens.	S - Year round B - June-August	Low: Little suitable habitat present	---	T
REPTILES					
<i>Drymarchon corais couperi</i> Eastern indigo snake	Broad range of habitats from scrub and sandhill to wet prairies, forested wetlands, and mangrove swamps. Often seeks refuge in gopher tortoise burrows in sandy uplands, but also forages in mesic and hydric habitats.	S - Year round B - November-April	Moderate: Suitable habitat present	T	T
<i>Gopherus polyphemus</i> Gopher tortoise	Found in dry upland habitats, including sandhills, scrub, xeric oak hammock, and dry prairie flatwoods; also commonly uses disturbed habitats such as pastures, old fields, abandoned citrus groves, and road shoulders.	S - Year round B - March-October	High: Observed	---	T
<i>Alligator mississippiensis</i> American alligator	Permanent bodies of fresh water, including marshes, swamps, lakes, and rivers. Occasionally wanders into brackish and salt water but rarely remains there.	S - Year round B - April-August	Moderate: Suitable habitat present	T(SA)	SSC
<i>Neoseps reynoldsi</i> Sand skink	Principally rosemary scrub, but also in sand pine and oak scrubs, scrubby flatwoods, turkey oak ridge within scrub, and even along edges of citrus groves occupying former scrub.	S – March-15 May B – February - June	Moderate: Suitable habitat present	T	T

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Eumeces egregius lividus</i> Blue-tailed mole skink	Well-drained sandy uplands usually with an abundance of scattered shrubs and lichens. Favors rosemary, oak, and sand pine scrubs; occasional in turkey oak barrens, sandhill, and xeric hammock.	S – March-15 May B – February - June	Moderate: Suitable habitat present	T	T
<i>Pituophis melanoleucus mugitus</i> Florida pine snake	Found in sandhill and former sandhill, including old fields and pastures, but also sand pine scrub and scrubby flatwoods with open canopies and dry sandy soils. Often coexists with pocket gophers and gopher tortoises.	S - Year round B - April-February	Moderate: Suitable habitat present	---	SSC
PLANTS					
<i>Bonamia grandiflora</i> Florida bonamia	Openings or disturbed areas in white sand scrub on central Florida ridges, with scrub oaks, sand pine, and lichens.	S - Year round F - May-August	Low: Little suitable habitat present	T	E
<i>Chionanthus pygmaeus</i> Pygmy fringe tree	Scrub, sandhill, and xeric hammock, primarily on the Lake Wales Ridge. May form thickets with evergreen scrub oaks and shrubs.	S - Year round F - April-June	Low: Little suitable habitat present	E	E
<i>Clitoria fragrans</i> Scrub pigeon wing	Turkey oak barrens with wire grass, bluejack and turkey oak; also scrub and scrubby high pine.	S – May-June F - May-June	Low: Little suitable habitat present	T	E
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i> Scrub buckwheat	Sandhill, oak-hickory scrub on yellow sands, high pineland between scrub and sandhill, turkey oak barrens.	S – May-October F – May-October	Low: Little suitable habitat present	T	E
<i>Lupinus aridorum</i> Scrub lupine	Openings in sand pine and rosemary scrub.	S - Year round F – March-May	Low: Little suitable habitat present	E	E
<i>Nolina brittonia</i> Britton's beargrass	Scrub, sandhill, scrubby flatwoods, and xeric hammock.	S - Year round F – March-May	Low: Little suitable habitat present	E	E
<i>Paronychia chartacea</i> Papery nailwort	Occurs in Lake Wales Ridge scrub.	S – June-December F – July - November	Low: Little suitable habitat present	T	E
<i>Polygala lewtonii</i> Lewton's polygala	Oak scrub, sandhill, and transition zones between high pine and turkey oak barrens.	S – February-April F – February-April	Low: Little suitable habitat present	E	E

Species	Habitat of Occurrence	Preferred Survey Window ¹	Likelihood of Occurrence	Status ²	
				FWS ³	FWC ⁴
<i>Polygonella myriophylla</i> Sandlace	Open, sandy areas within scrub, mostly on white sands.	S - Year round F – Tear round	Low: Little suitable habitat present	E	E
<i>Warea amplexifolia</i> Clasping warea	Sandhill with longleaf pine and wiregrass.	S –April-October F – September-October	Low: Little suitable habitat present	E	E
<i>Deeringothamnus pulchellus</i> Beautiful Pawpaw	Open slash pine or longleaf pine flatwoods with wiregrass and dwarf live oak in the understory.	S - March-April F - March-April	Low: Little suitable habitat present	E	E

1 - S - Survey Window, B -Breeding Season, F - Flowering Season

2 - E = Endangered, T = Threatened, SSC = Species of Special Concern, T (SA) = Similarity of Appearance to a Threatened Taxon

3 - U.S. Fish and Wildlife Service

4 - Florida Fish and Wildlife Conservation Commission

Table Source: Florida Wildlife Conservation Guide, Florida's Breeding Bird Atlas, Florida Natural Areas Inventory, and FWS Species by County List

4.4 Protected Waters

The project right-of-way was evaluated for the potential occurrence of Critical Habitat as defined by the Endangered Species Act of 1973, as amended, and 50 CFR and other publically protected lands. The FWS regulates the adverse modification of the biological or physical constituent elements essential to the conservation of the listed species within the Critical Habitat. No federally designated Critical Habitat or protected lands (publically owned or managed properties) exist within the project right-of-way (Protected Habitats Map). None of the wetlands or surface waters within the project right-of-way are Outstanding Florida Waters as defined by 62-302.700 F.A.C.

5.0 SUMMARY

Based on research and field investigations, it was determined that a total of 19 federally or state protected animals have the potential to occur within the project right-of-way. Of these listed species, one amphibian, ten birds, two mammals, and six reptiles, were assigned a moderate or high probability of occurrence, and are likely to occur within or near the project right-of-way (Table 2). One listed species, gopher tortoise, was directly observed within the project right-of-way.

Summary of Protection Measures: The project will not impact listed species. No nests were observed within the project right-of-way. PEF intends to obtain a FWC Gopher Tortoise Temporary Exclusion Permit for Major Linear Utility Corridors for the project and relocate gopher tortoises out of harm's way prior to project construction. Some burrows may be avoided and protected in place if project construction is more than 25-feet from the burrow entrance (FWC Gopher Tortoise Permitting Guidelines revised September 2012). Gopher tortoise burrow commensals (gopher frog, Florida mouse, and Florida pine snake) will be protected during project construction. The FWC includes commensal species with gopher tortoises and authorizes incidental relocation of these priority commensals in their gopher tortoise relocation permits as long as they are in accordance with Appendix 9. Interim FWC Policy on the Relocation of Priority Commensals (Gopher Tortoise Permitting Guidelines April 2008 revised September 2012). If priority commensals are discovered during the relocation, they will be released on-site or allowed to escape unharmed to suitable habitat that will remain within the project right-of-way. The project will not likely adversely affect indigo snakes because the permanent impacts to suitable habitat will be small and all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow. If indigo snakes are discovered during the gopher tortoise relocation, no work will commence until the snake has vacated the vicinity. Lastly, PEF will adhere to the FWS *Standard Protection Measures for the Eastern Indigo Snake* (FWS 2004) during project site preparation and project construction.

The following table (Table 3) lists the species with a moderate or high probability of occurrence on the project right-of-way and the FWS and FWC permitting required for each species.

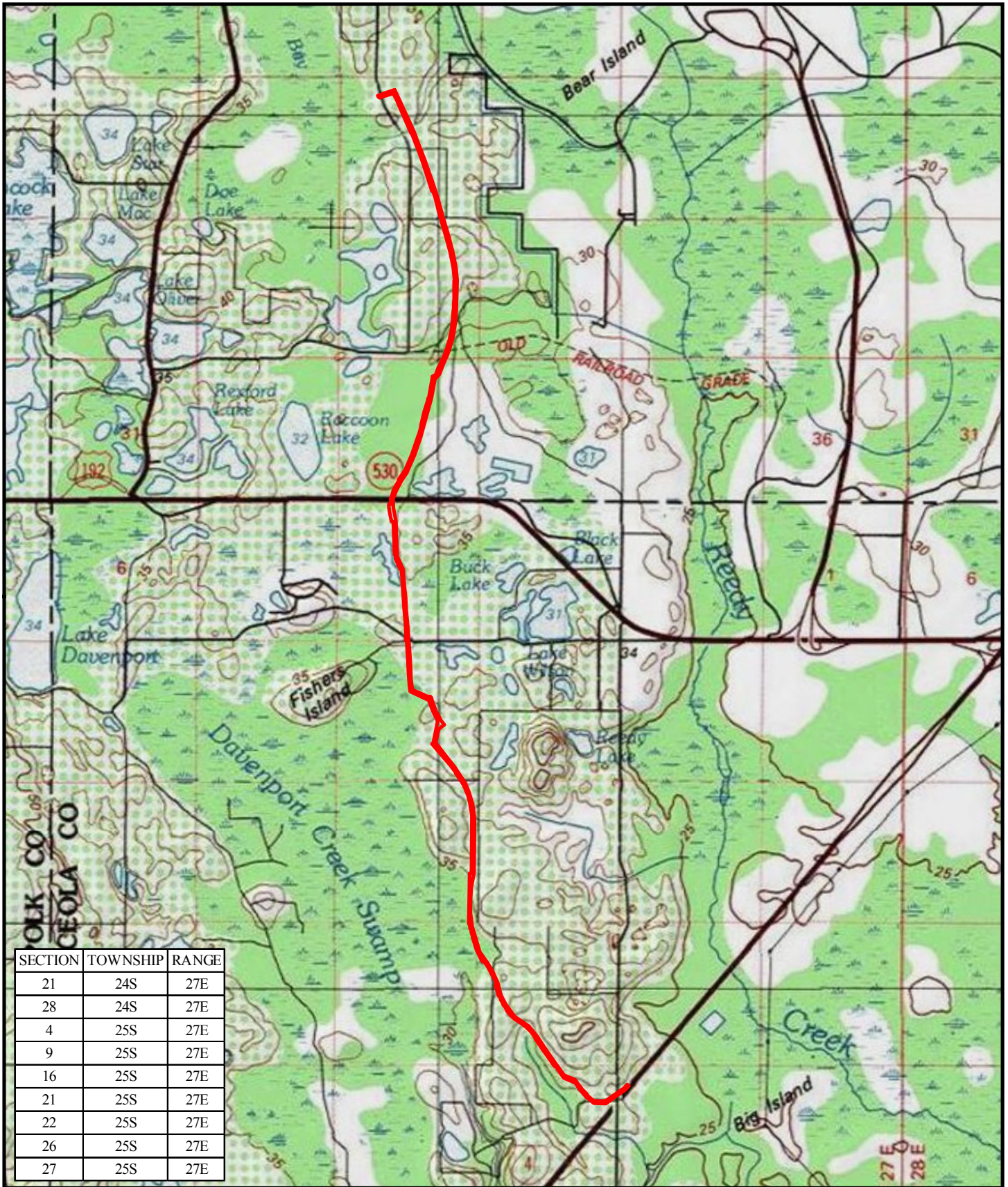
Table 3 Protected Species Impact Determination and Permitting Requirements

Species	Impact Determination	FWS Permit Requirement	FWC Permit Requirement
Gopher Frog	Will not affect with relocation	N/A	Covered under Gopher Tortoise Relocation Permit
Limpkin	Will not affect	N/A	None
Burrowing owl	Will not affect	N/A	None
Little blue heron	Will not affect	N/A	None
Snowy egret	Will not affect	N/A	None
Tricolored heron	Will not affect	N/A	None
White ibis	Will not affect	N/A	None
Florida sandhill crane	Will not affect	N/A	None
Southeastern American kestrel	Will not affect	N/A	None
Bald eagle	Will not affect	None	None
Wood stork	Not likely to adversely affect	None	None
Florida mouse	Will not affect with relocation	N/A	Covered under Gopher Tortoise Relocation Permit
Sherman's fox squirrel	Will not affect	N/A	None
Eastern indigo snake	Not likely to adversely affect	None	None
Gopher tortoise	Will not affect with relocation	N/A	Gopher Tortoise Relocation Permit
American alligator	Will not affect	None	None
Sand skink	Not likely to adversely affect	None	None
Blue-tailed mole skink	Not likely to adversely affect	None	None
Florida pine snake	Will not affect with relocation	N/A	Covered under Gopher Tortoise Relocation Permit

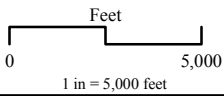
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SECTION	TOWNSHIP	RANGE
21	24S	27E
28	24S	27E
4	25S	27E
9	25S	27E
16	25S	27E
21	25S	27E
22	25S	27E
26	25S	27E
27	25S	27E



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

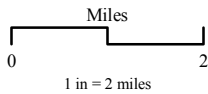
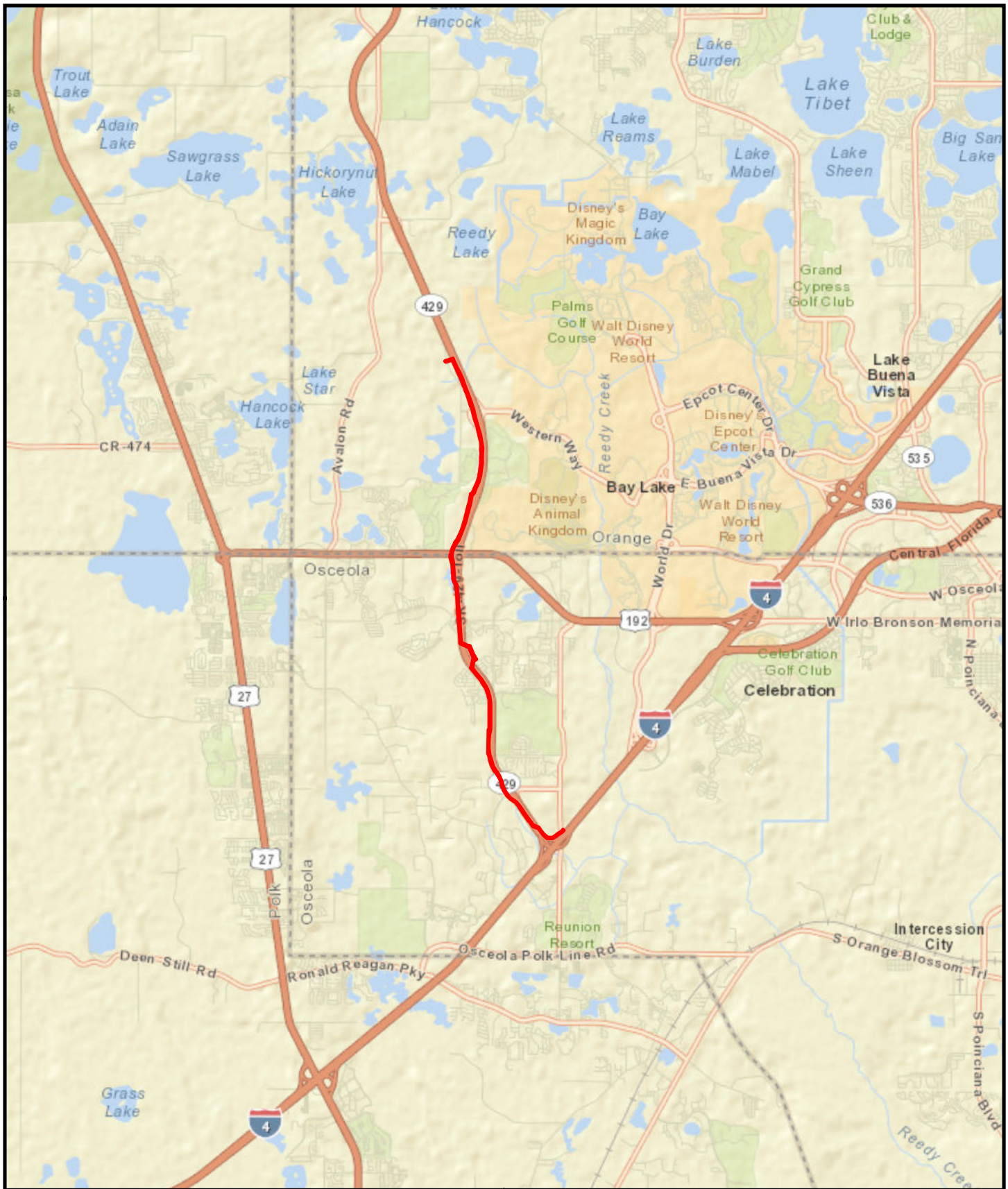
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

 **Transmission Corridor**



**QUAD
MAP**

Source: USGS Topo Quad



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

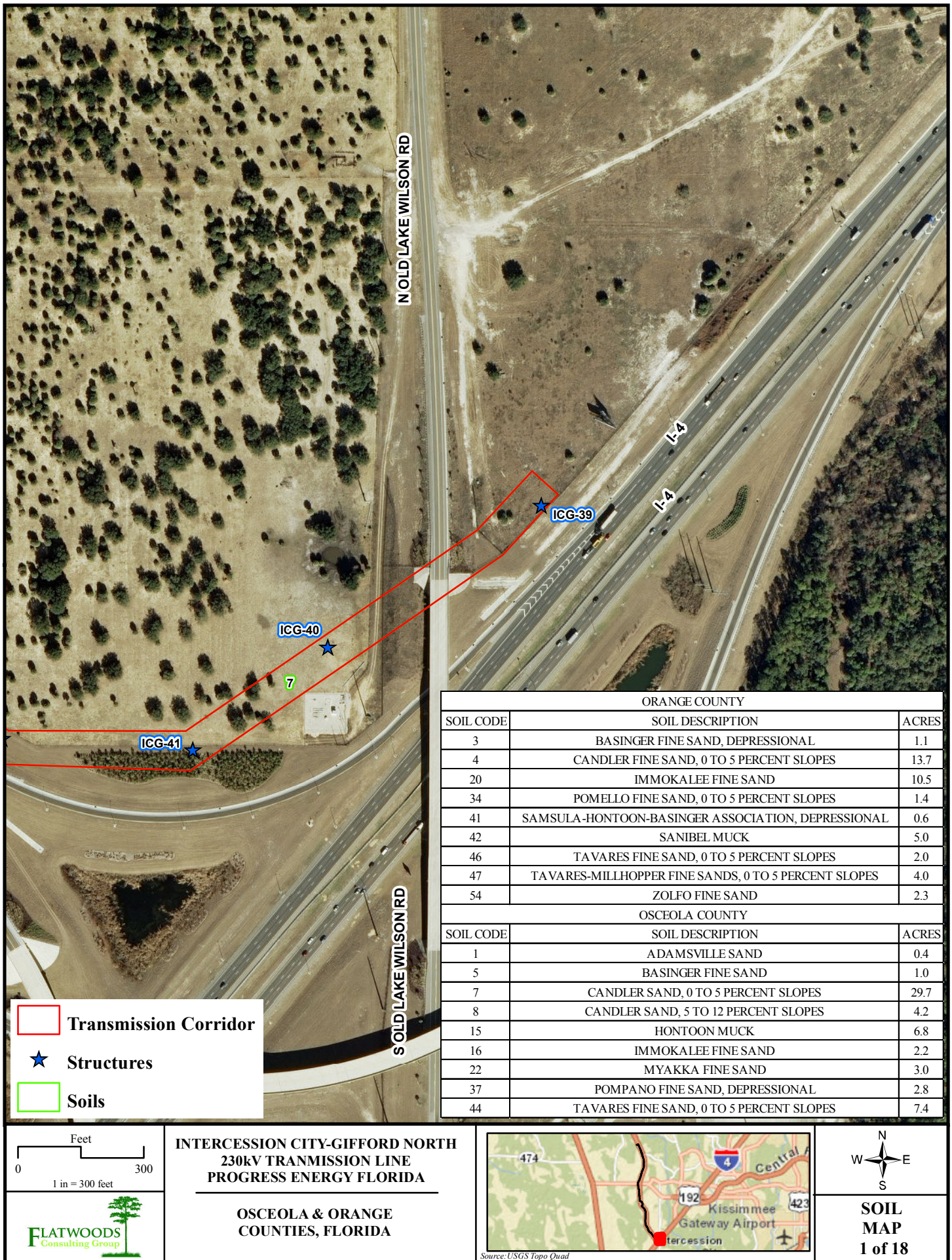


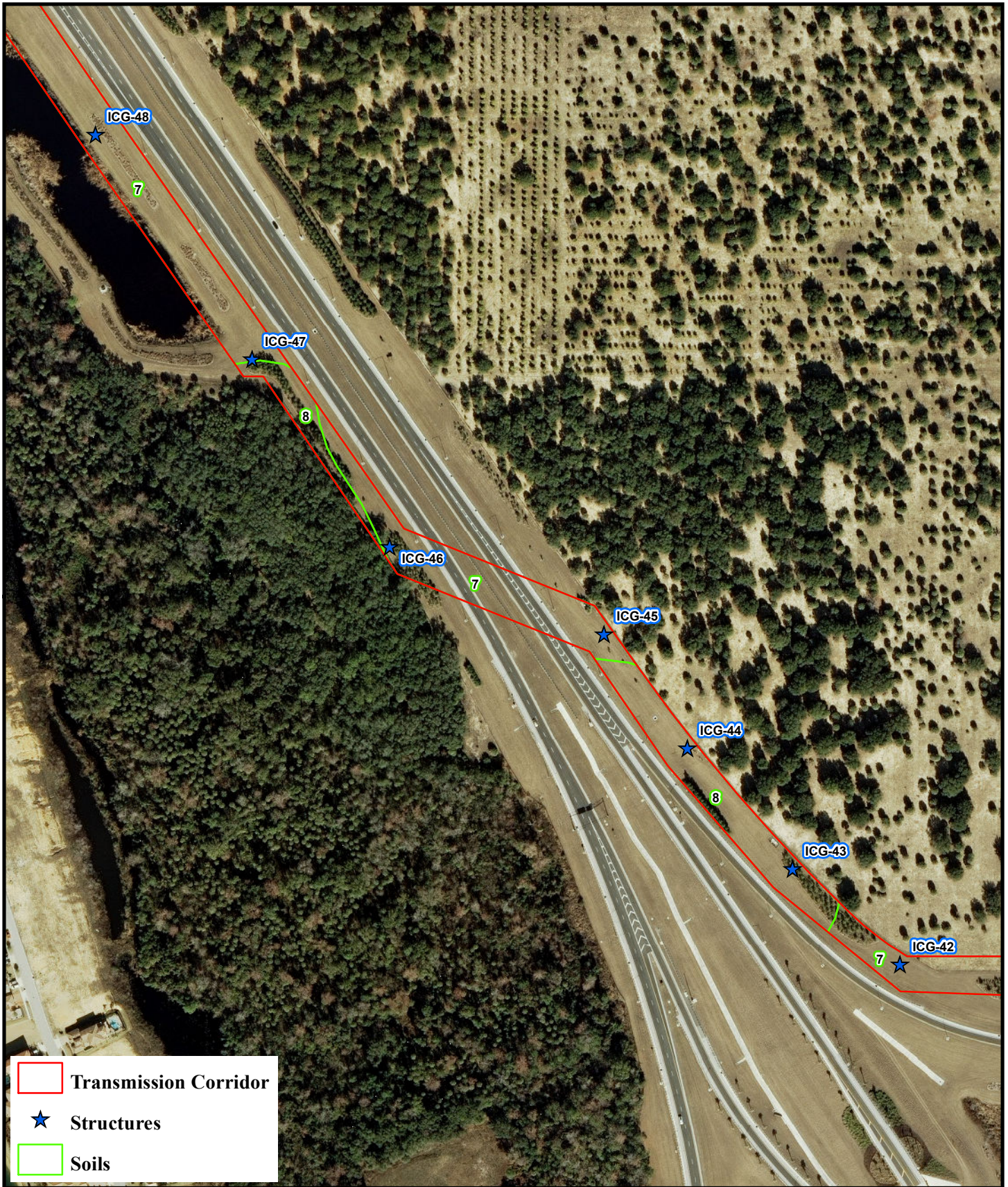
Transmission Corridor



**LOCATION
MAP**

Source: ESRI World Streetmap





- Transmission Corridor
- ★ Structures
- Soils

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



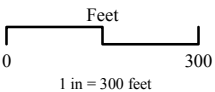
Source: USGS Topo Quad



**SOIL
MAP
2 of 18**



- Transmission Corridor
- ★ Structures
- Soils



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Soils

Feet
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1 in = 300 feet



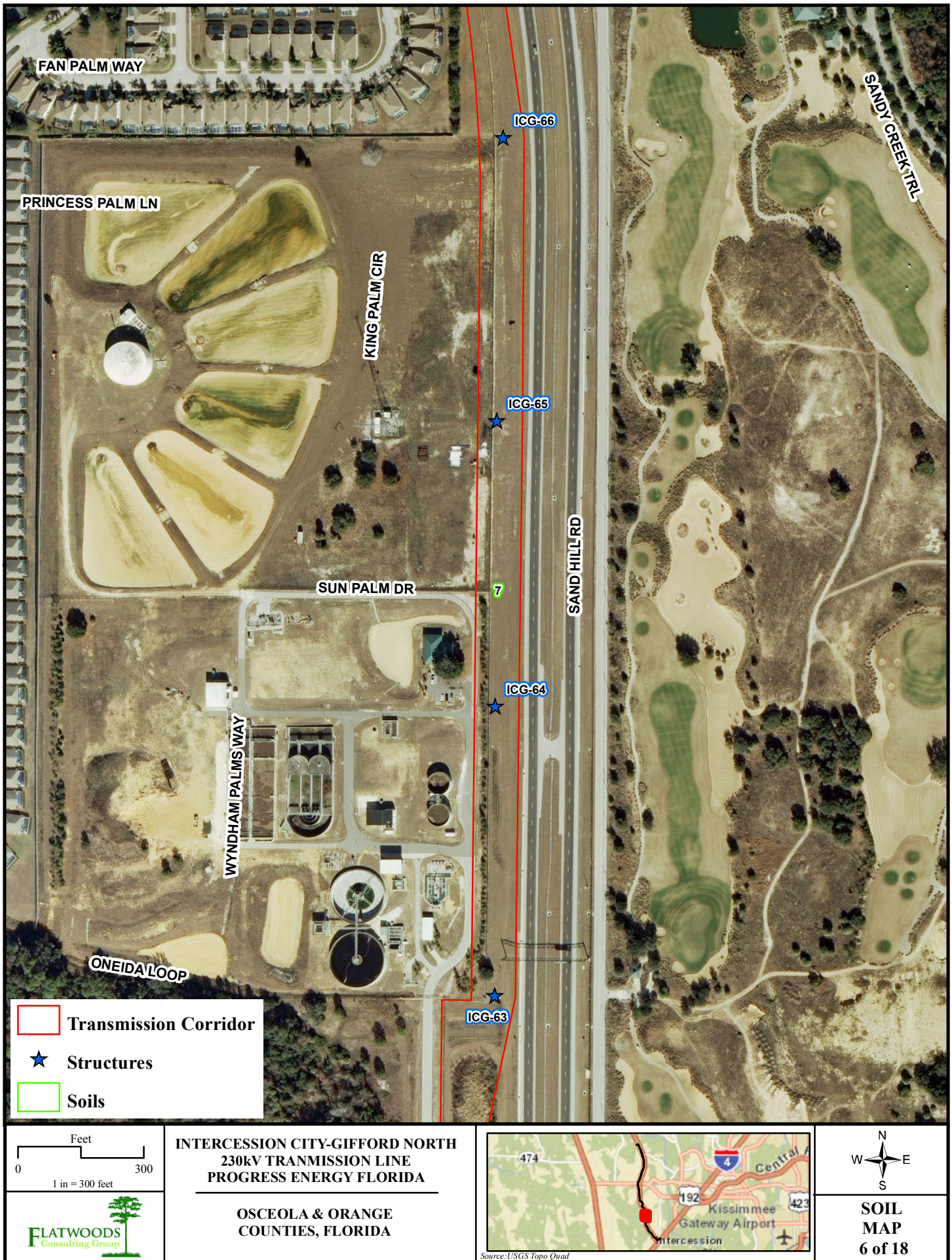
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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

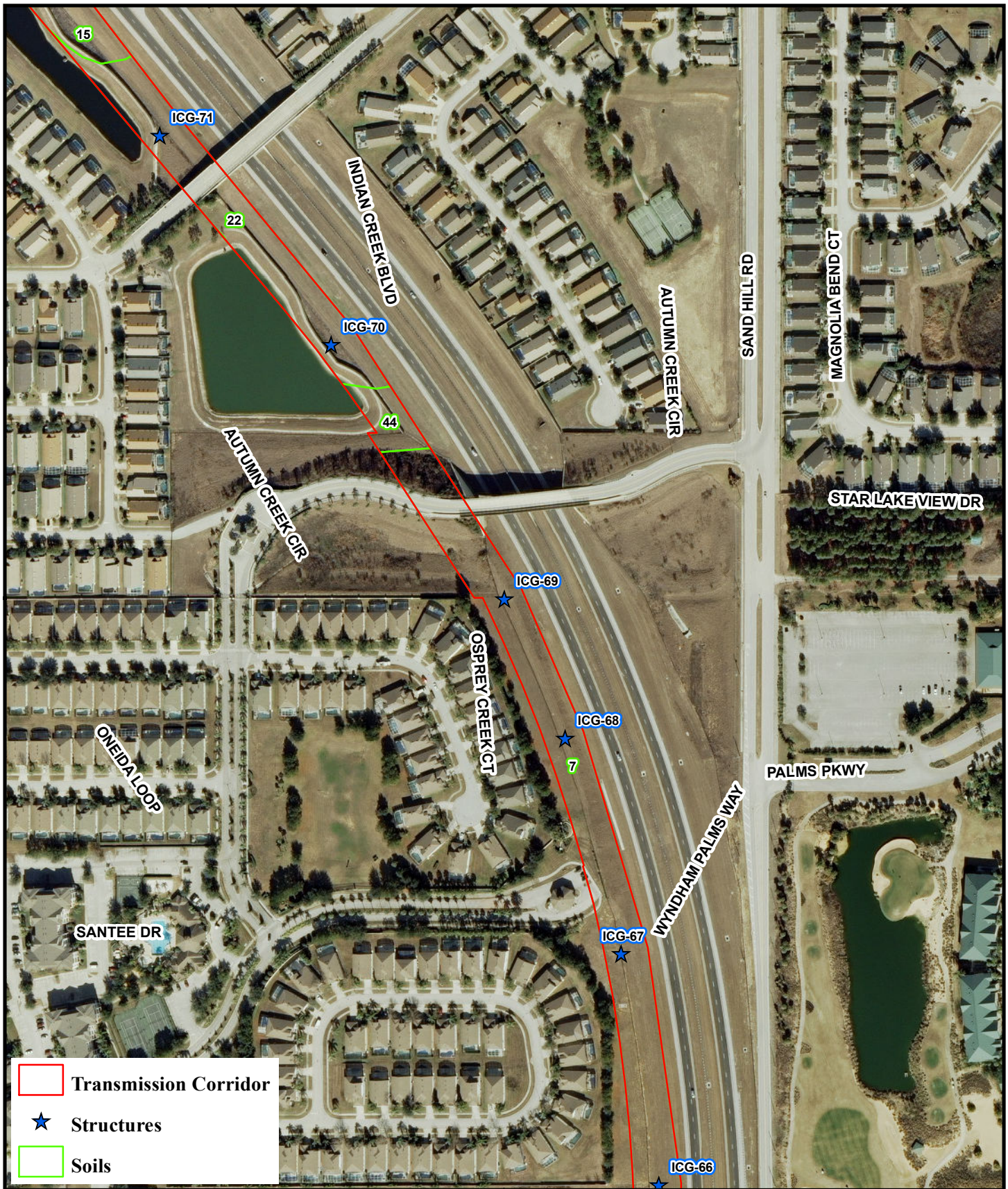
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
4 of 18**







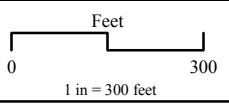
Transmission Corridor

★

Structures

7

Soils

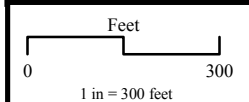
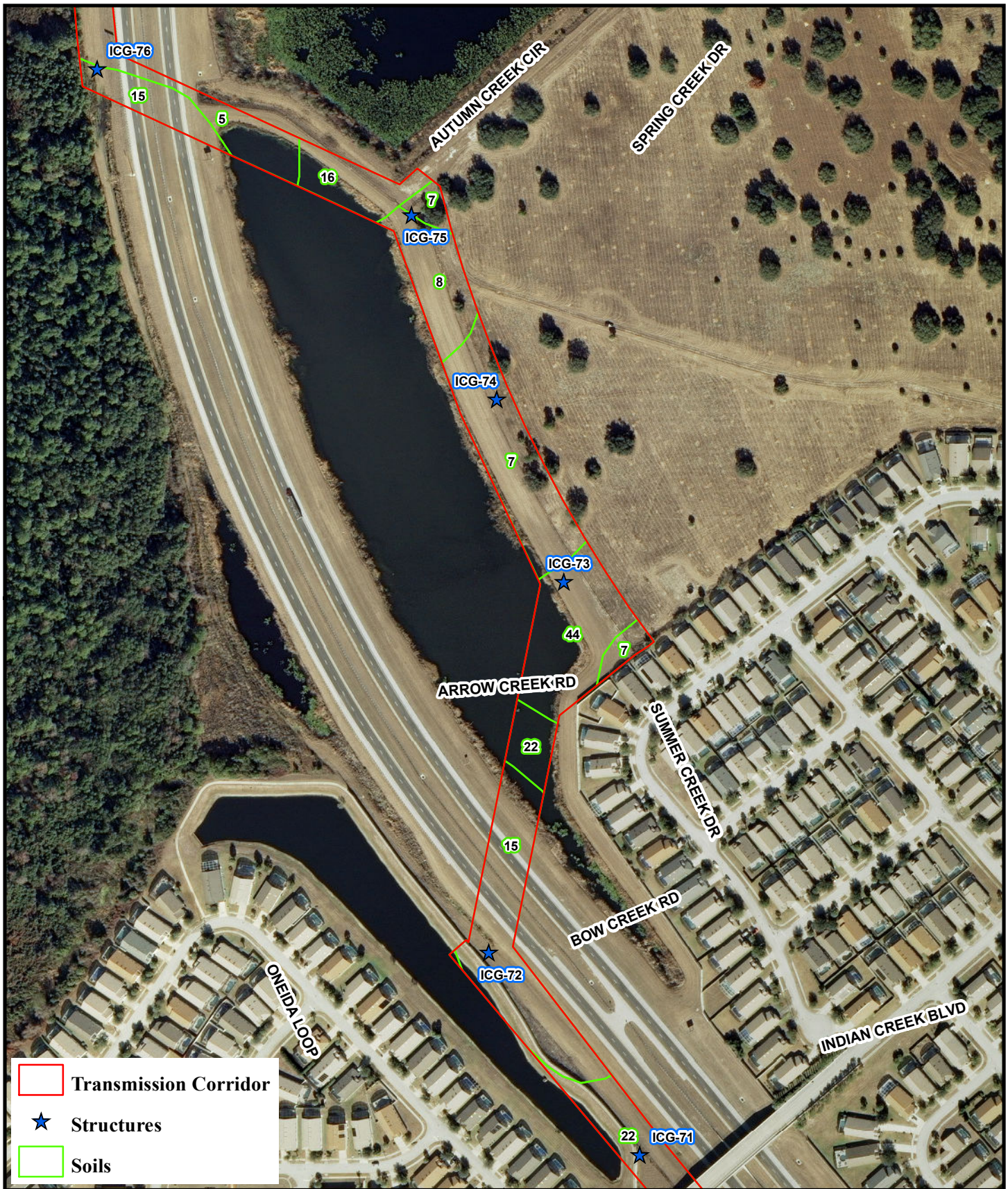


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
7 of 18**



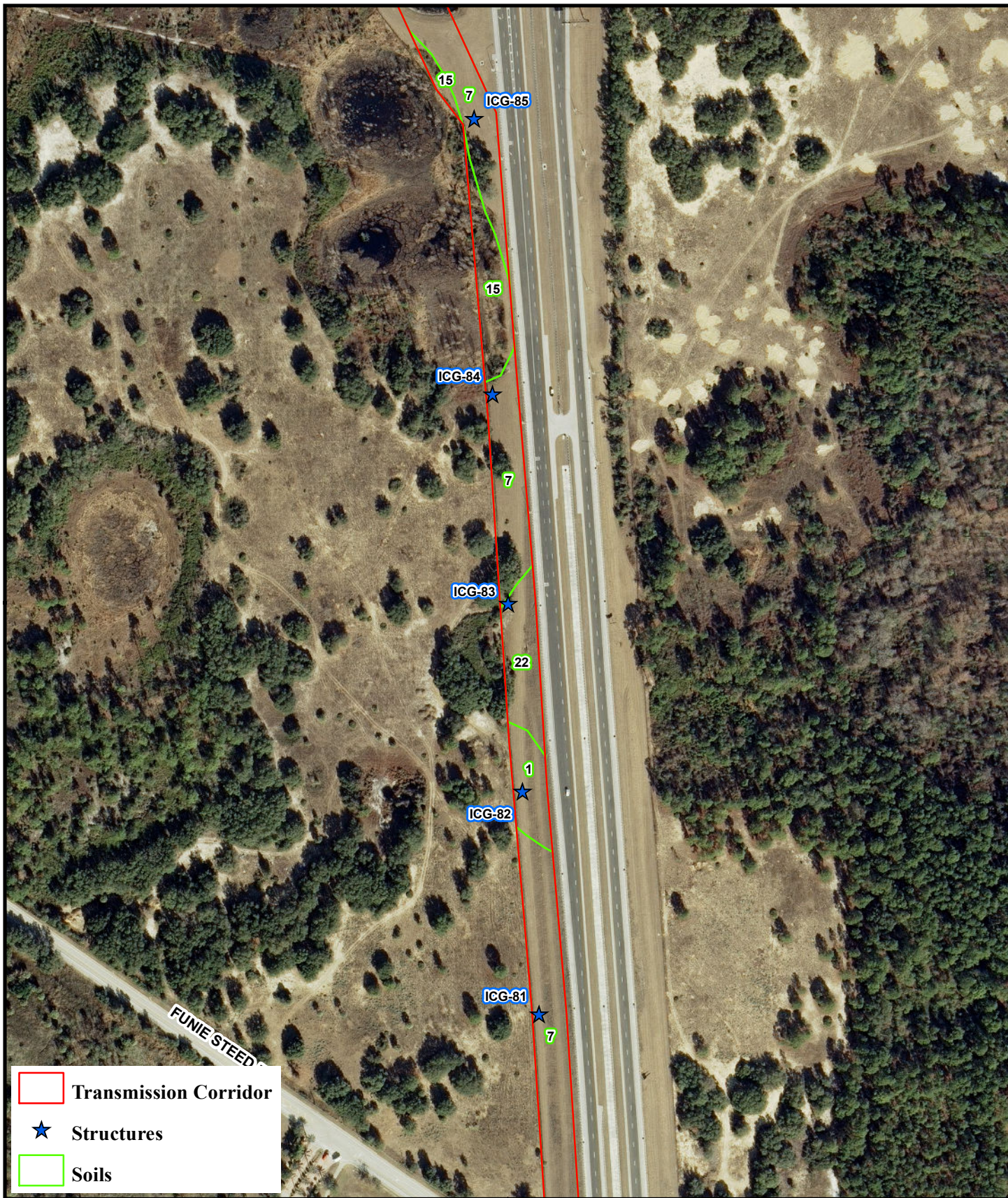
INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



SOIL
MAP
8 of 18





**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

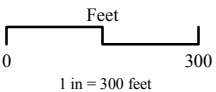
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
10 of 18**



- Transmission Corridor
- ★ Structures
- Soils

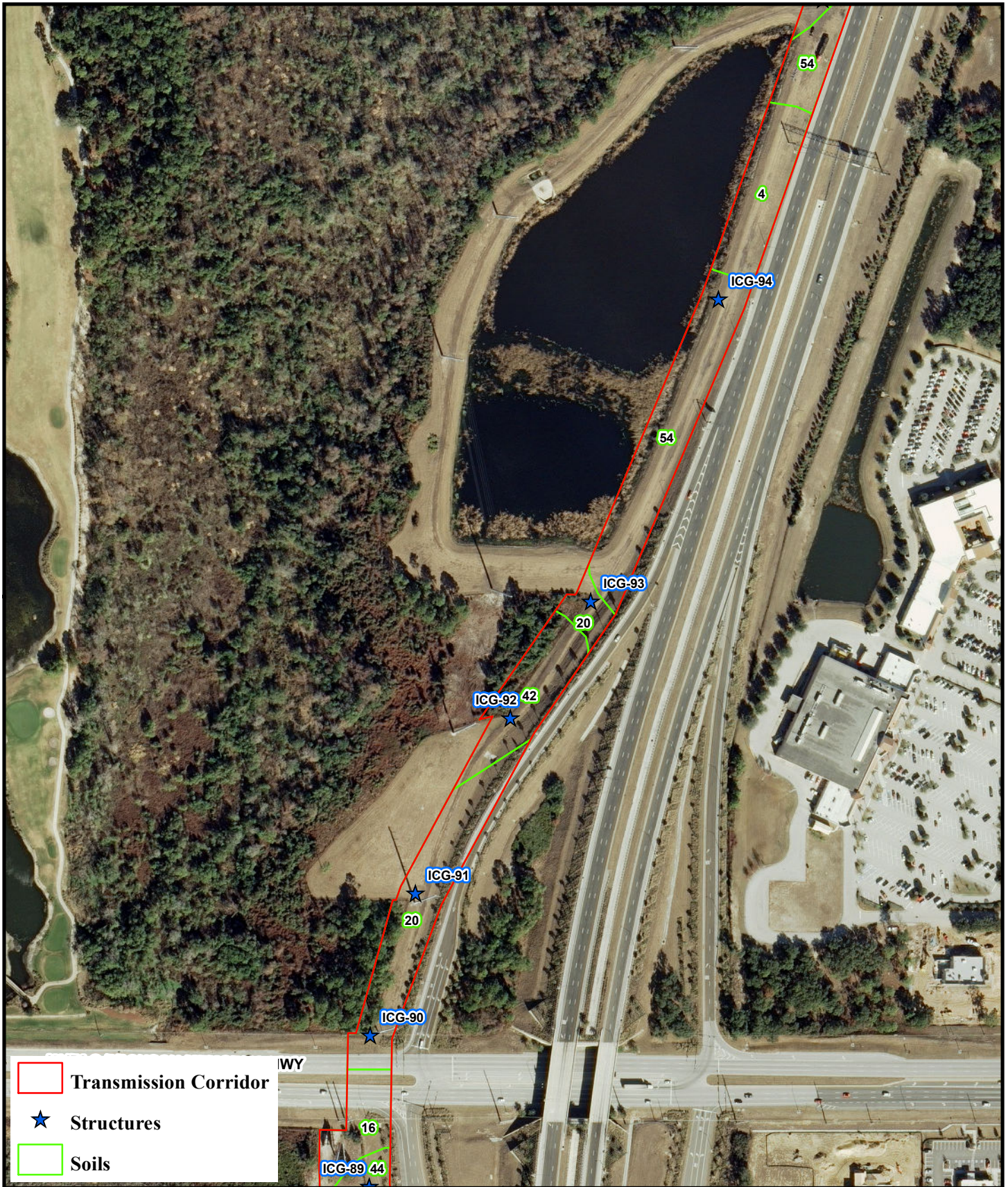


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
11 of 18**

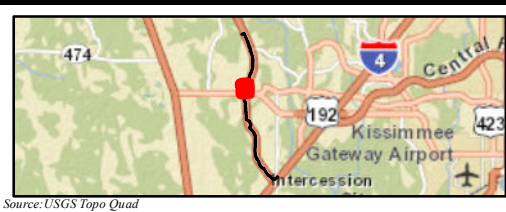


Feet
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1 in = 300 feet

FLATWOODS
Consulting Group

**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

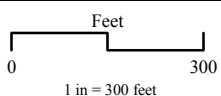


N
W E
S

**SOIL
MAP
12 of 18**



 **Transmission Corridor**
 **Structures**
 **Soils**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

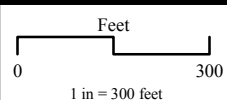
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
13 of 18**

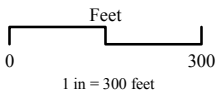
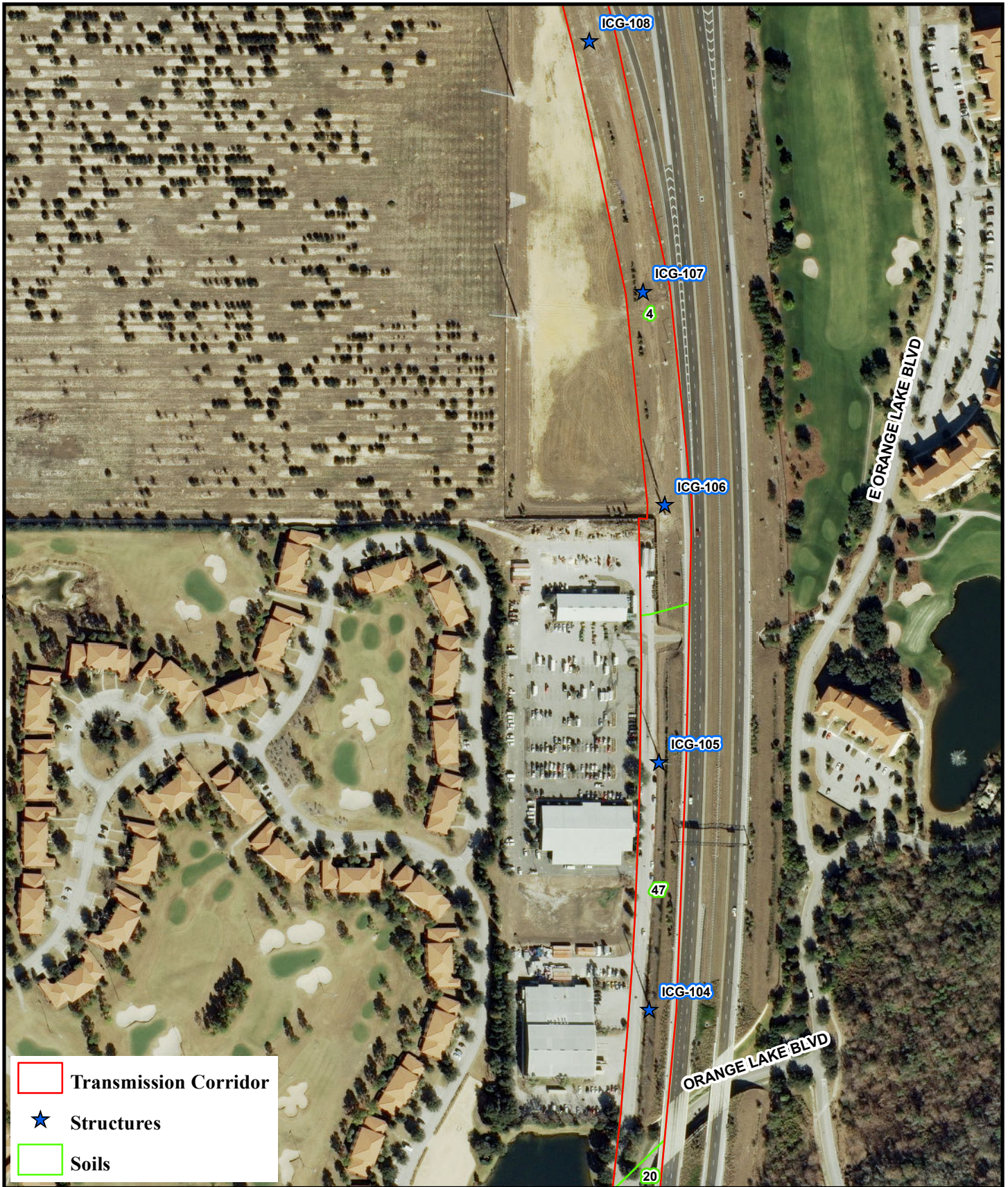


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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

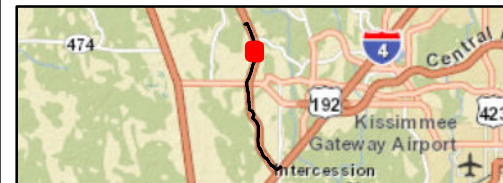


**SOIL
MAP
14 of 18**

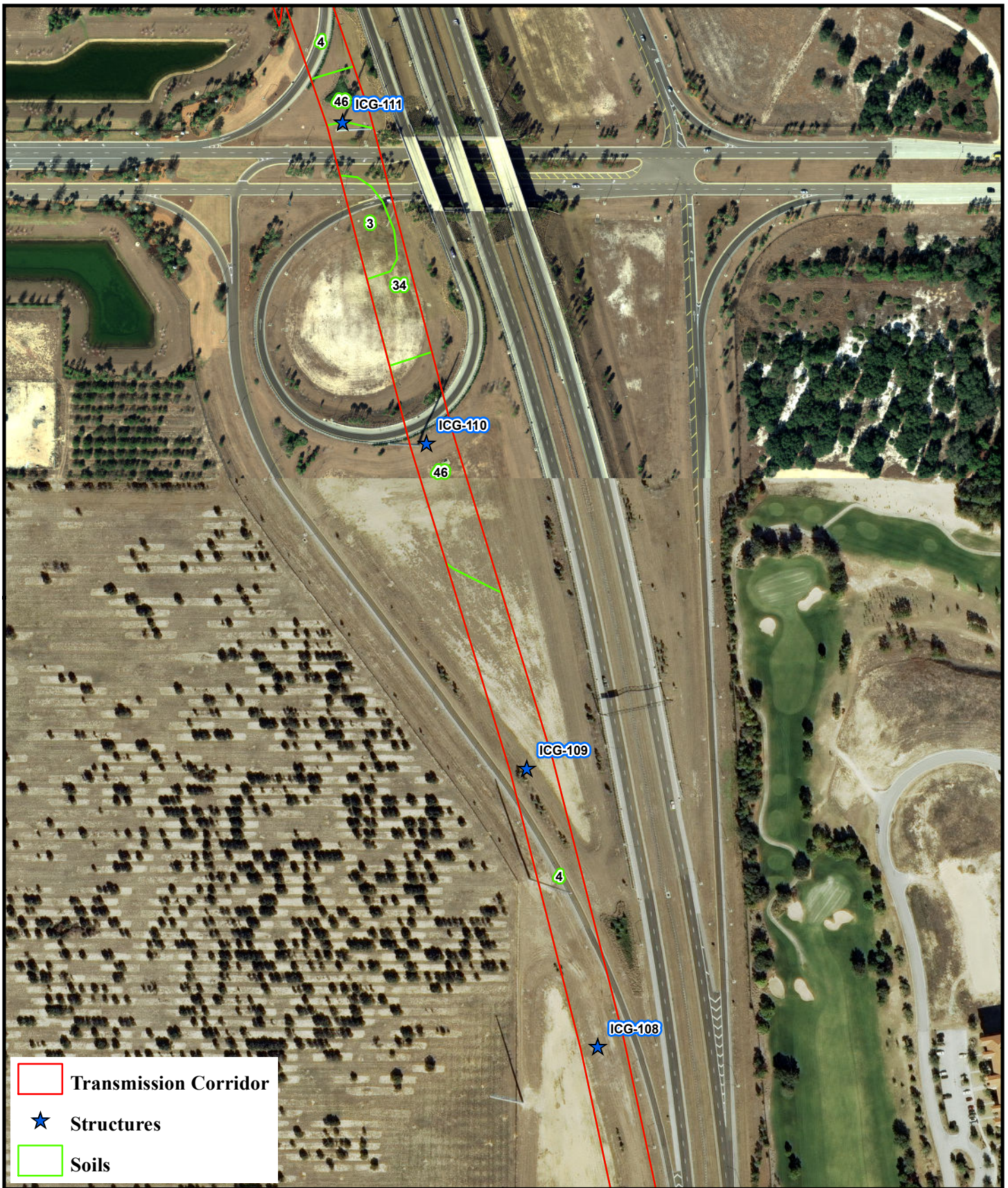


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
15 of 18**



- Transmission Corridor
- ★ Structures
- Soils

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

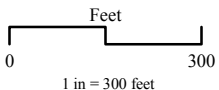
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
16 of 18**

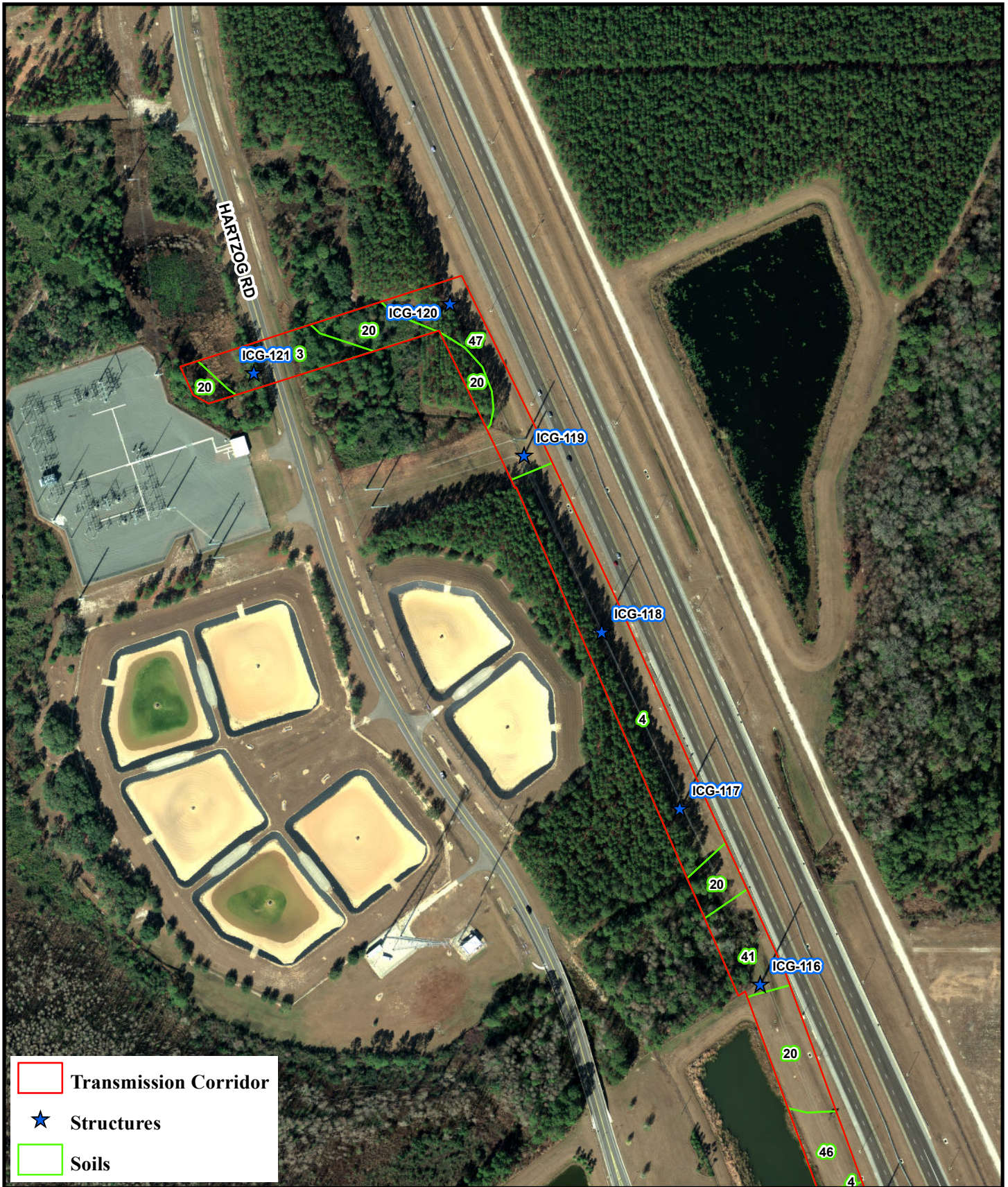


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**SOIL
MAP
17 of 18**



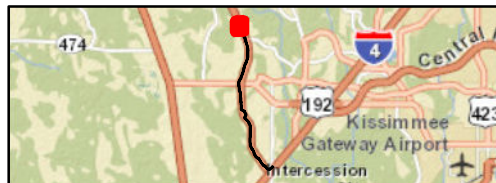
- Transmission Corridor
- ★ Structures
- Soils

Feet
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1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

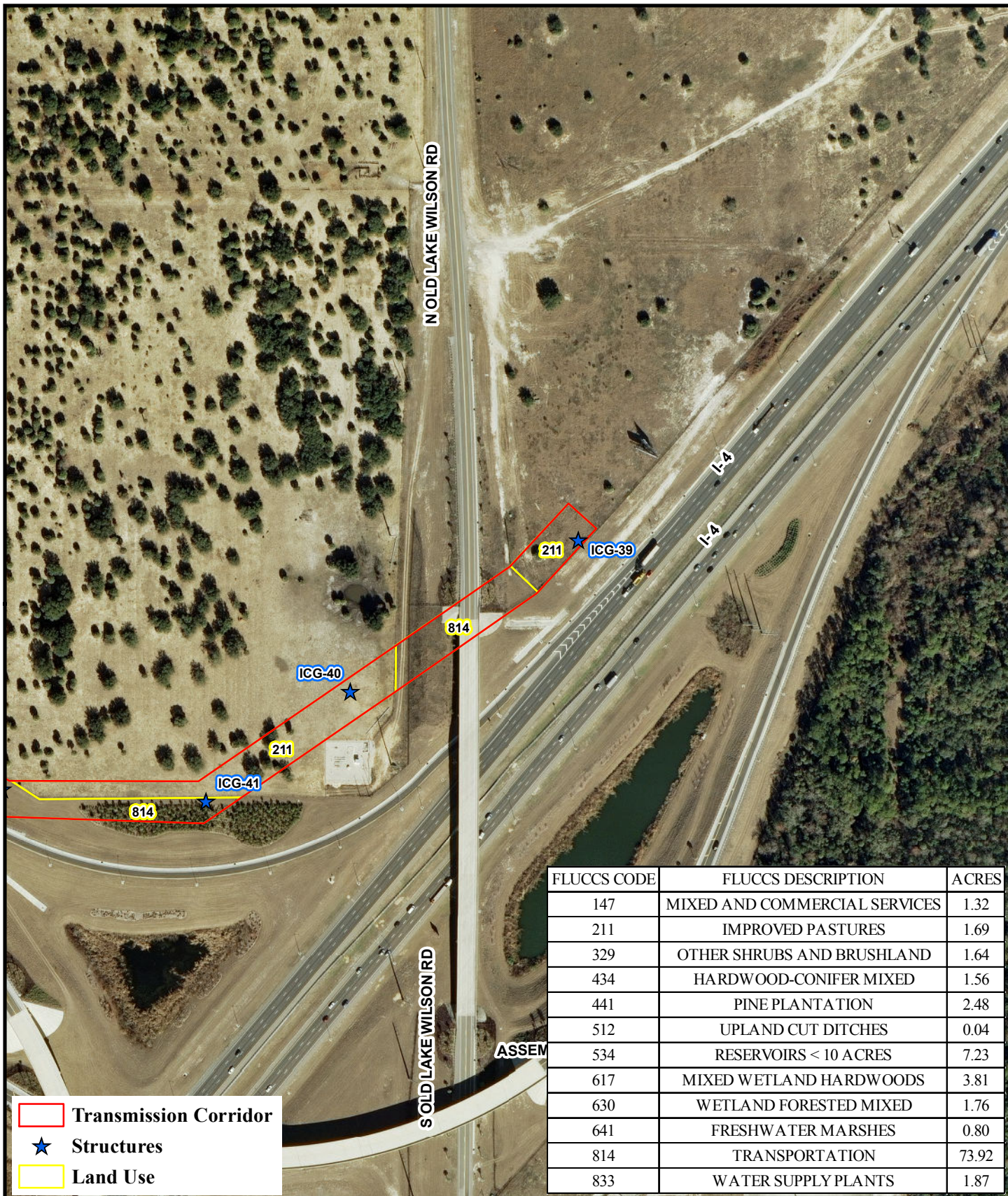
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**SOIL
MAP
18 of 18**



FLUCCS CODE	FLUCCS DESCRIPTION	ACRES
147	MIXED AND COMMERCIAL SERVICES	1.32
211	IMPROVED PASTURES	1.69
329	OTHER SHRUBS AND BRUSHLAND	1.64
434	HARDWOOD-CONIFER MIXED	1.56
441	PINE PLANTATION	2.48
512	UPLAND CUT DITCHES	0.04
534	RESERVOIRS < 10 ACRES	7.23
617	MIXED WETLAND HARDWOODS	3.81
630	WETLAND FORESTED MIXED	1.76
641	FRESHWATER MARSHES	0.80
814	TRANSPORTATION	73.92
833	WATER SUPPLY PLANTS	1.87

Feet
0 300
1 in = 300 feet

**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

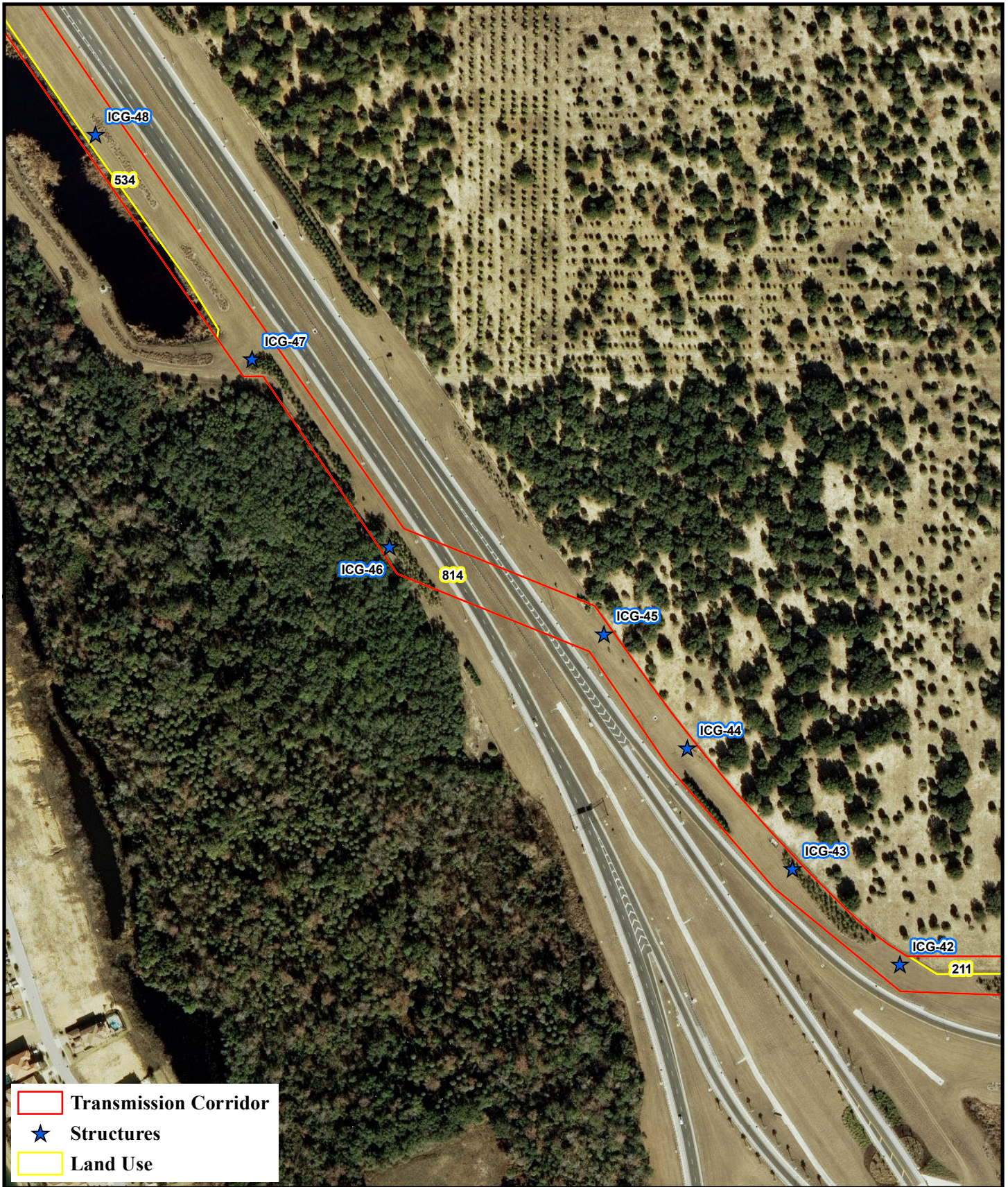
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**LAND USE
MAP
1 of 18**

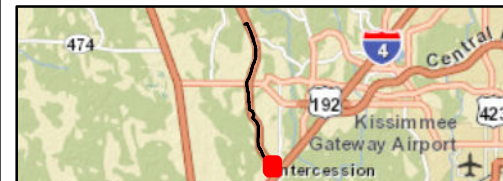


- Transmission Corridor
- ★ Structures
- Land Use

Feet
0 300
1 in = 300 feet

**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



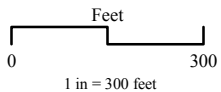
Source: USGS Topo Quad



**LAND USE
MAP
2 of 18**



	Transmission Corridor
	Structures
	Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

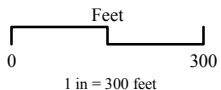
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

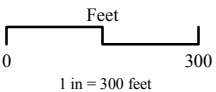
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
4 of 18**



Transmission Corridor
★ **Structures**
 Land Use

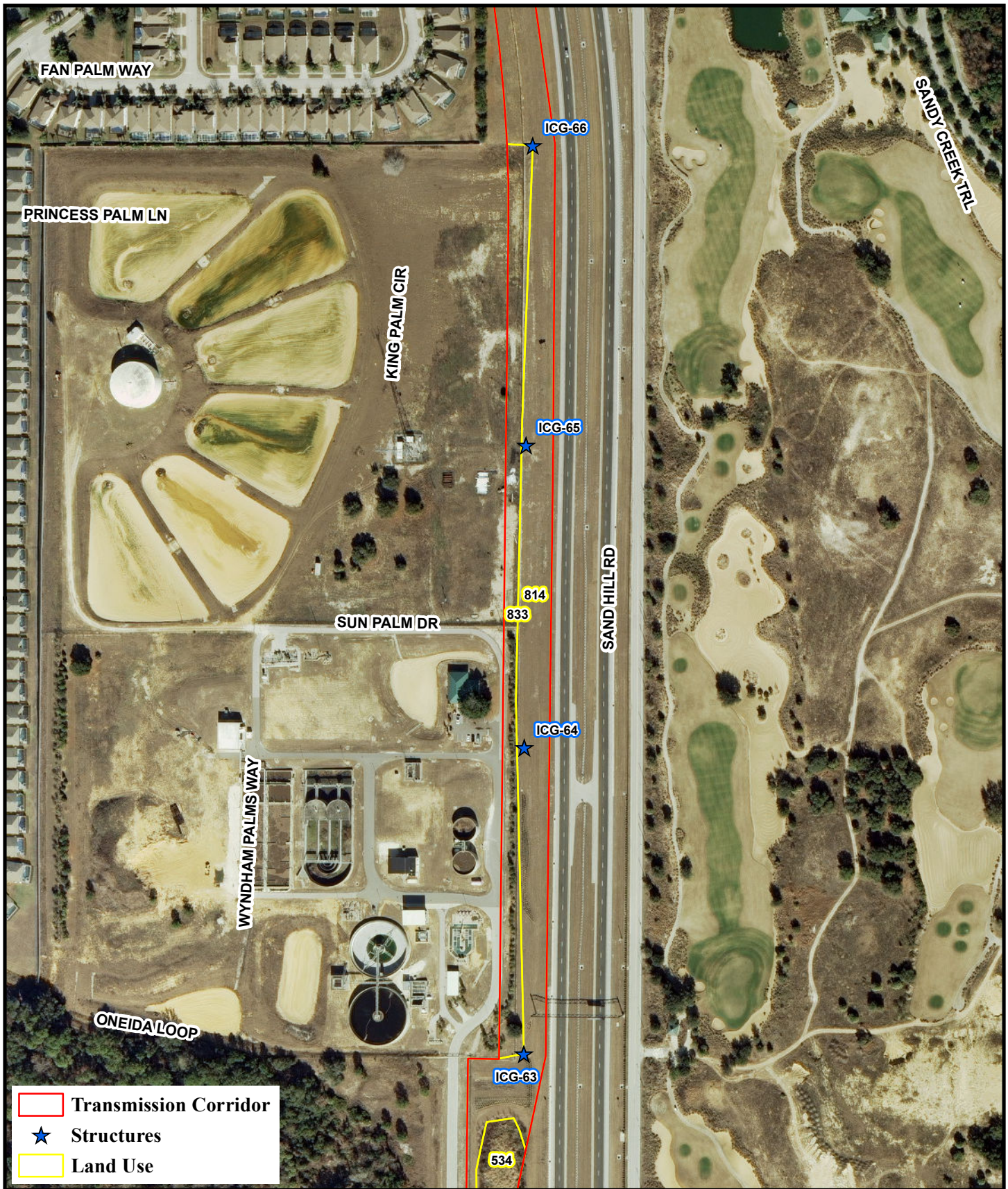


INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

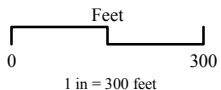
OSCEOLA & ORANGE
COUNTIES, FLORIDA



LAND USE
MAP
5 of 18



Transmission Corridor
★ Structures
 Land Use

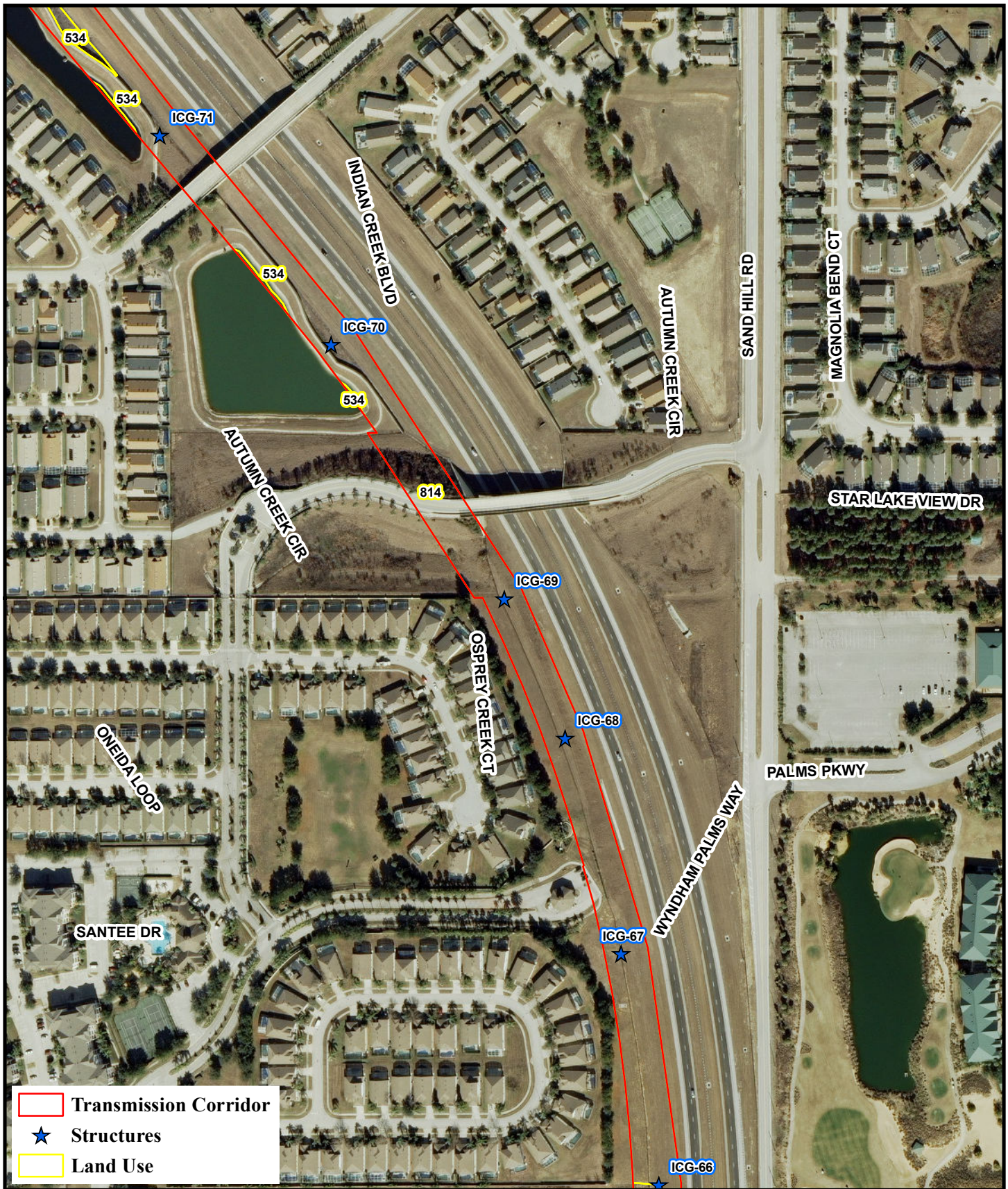


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

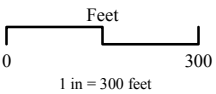
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
6 of 18**

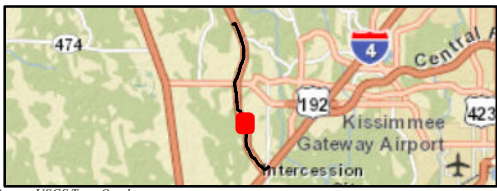


- Transmission Corridor
- ★ Structures
- Land Use

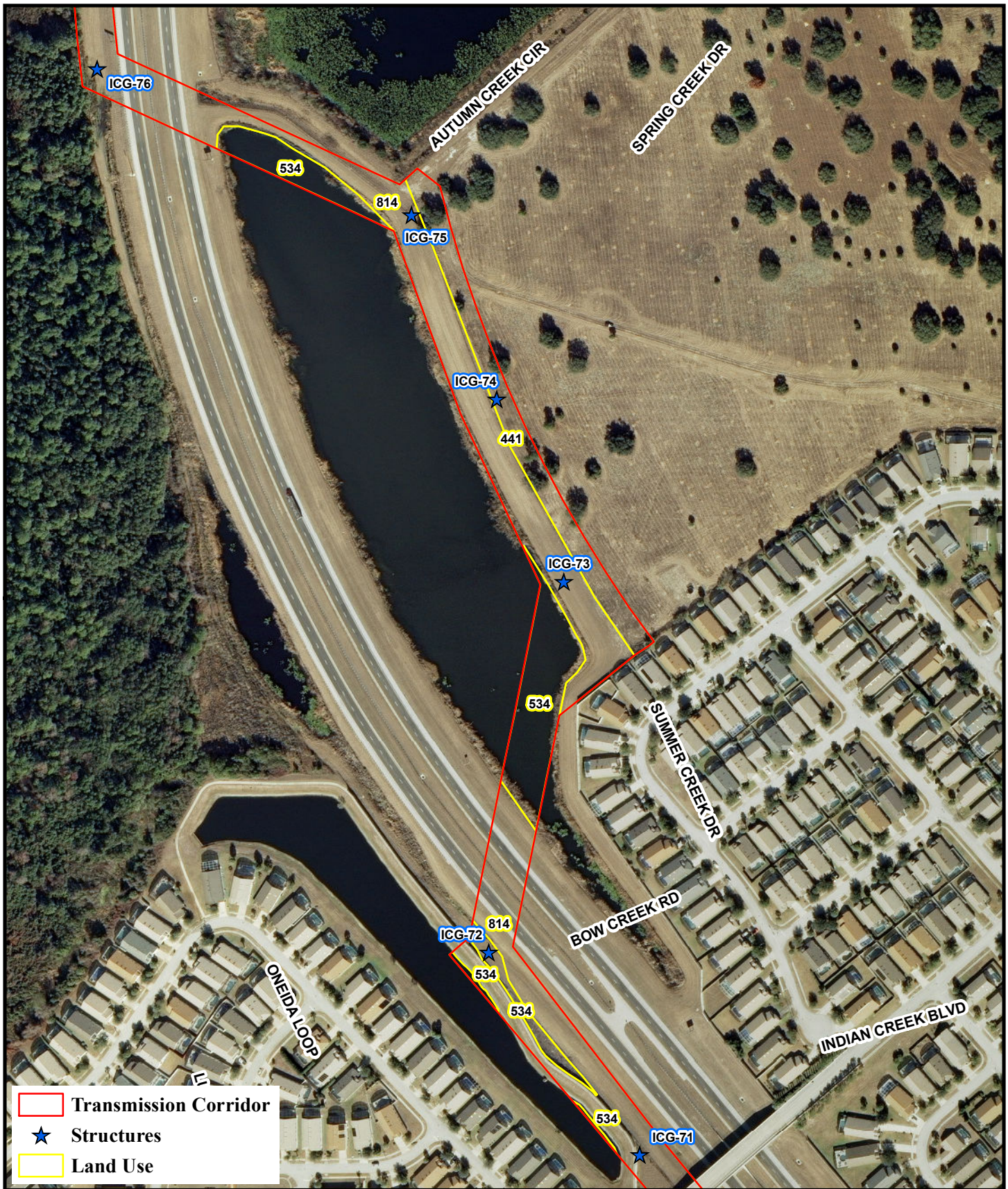


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
7 of 18**



- Transmission Corridor
- ★ Structures
- Land Use

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

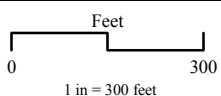


**LAND USE
MAP
8 of 18**



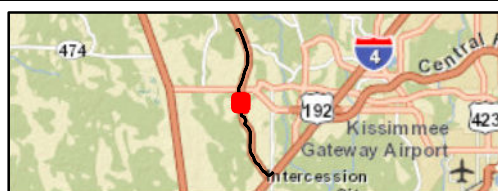


- Transmission Corridor
- ★ Structures
- Land Use

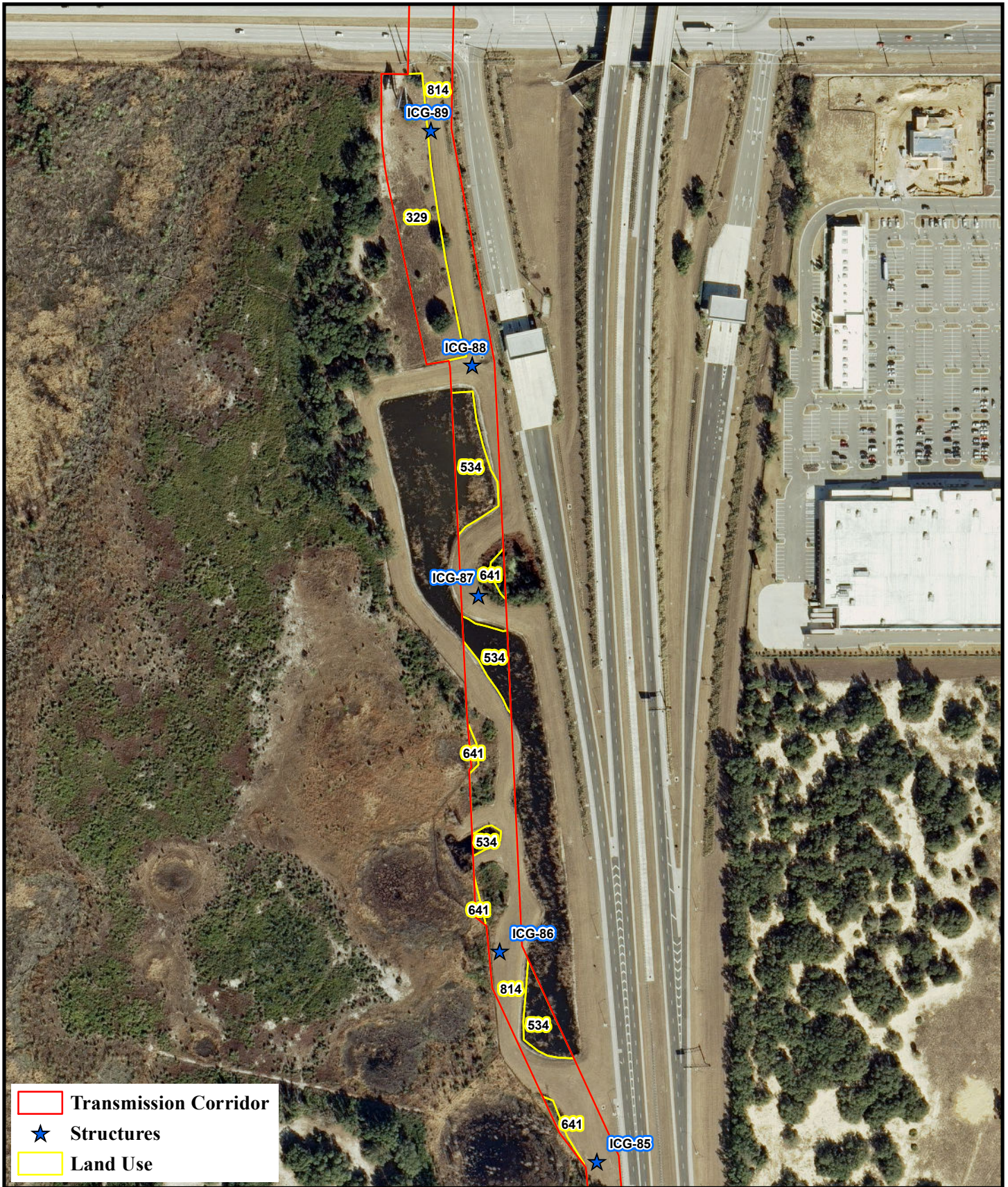


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

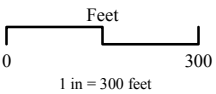
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
10 of 18**

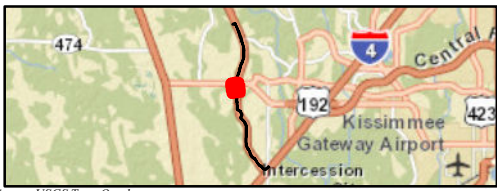


- Transmission Corridor
- ★ Structures
- Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**LAND USE
MAP
11 of 18**





- Transmission Corridor
- ★ Structures
- Land Use

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

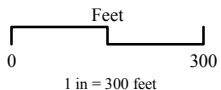
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
13 of 18**



- Transmission Corridor
- ★ Structures
- Land Use



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**LAND USE
MAP
14 of 18**



Transmission Corridor
★ Structures
 Land Use

Feet
 0 300
 1 in = 300 feet



INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

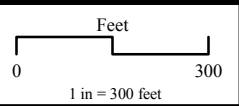
OSCEOLA & ORANGE
COUNTIES, FLORIDA



LAND USE
MAP
15 of 18

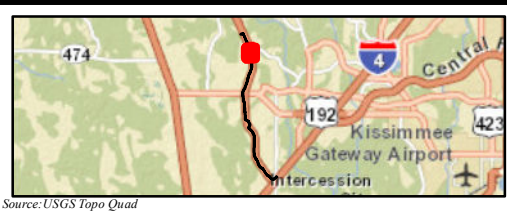


Transmission Corridor
★ **Structures**
 Land Use

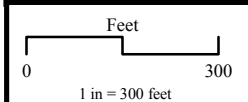


INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA

OSCEOLA & ORANGE
COUNTIES, FLORIDA



LAND USE
MAP
16 of 18

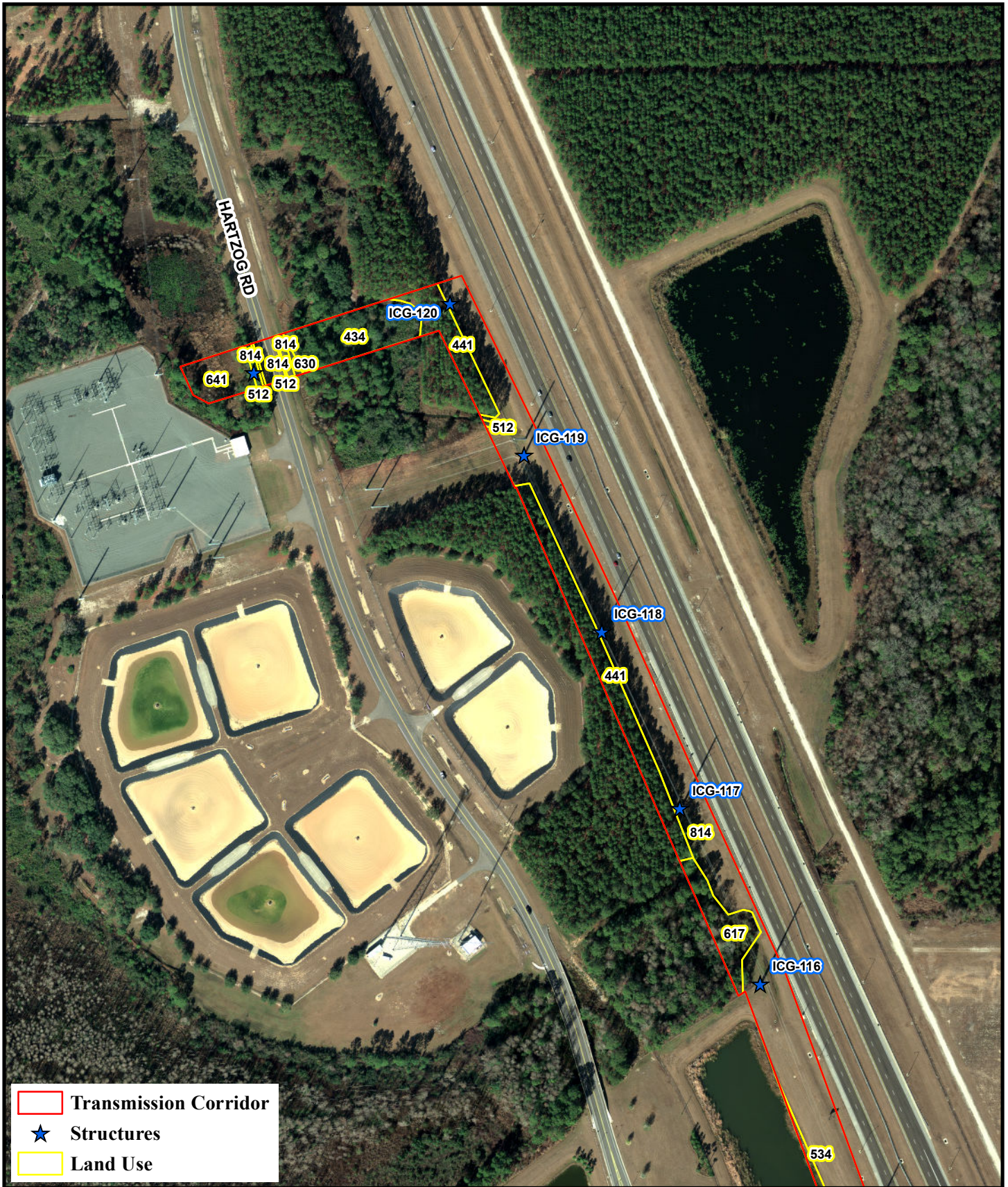


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

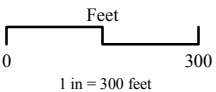
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
17 of 18**



- Transmission Corridor
- ★ Structures
- Land Use

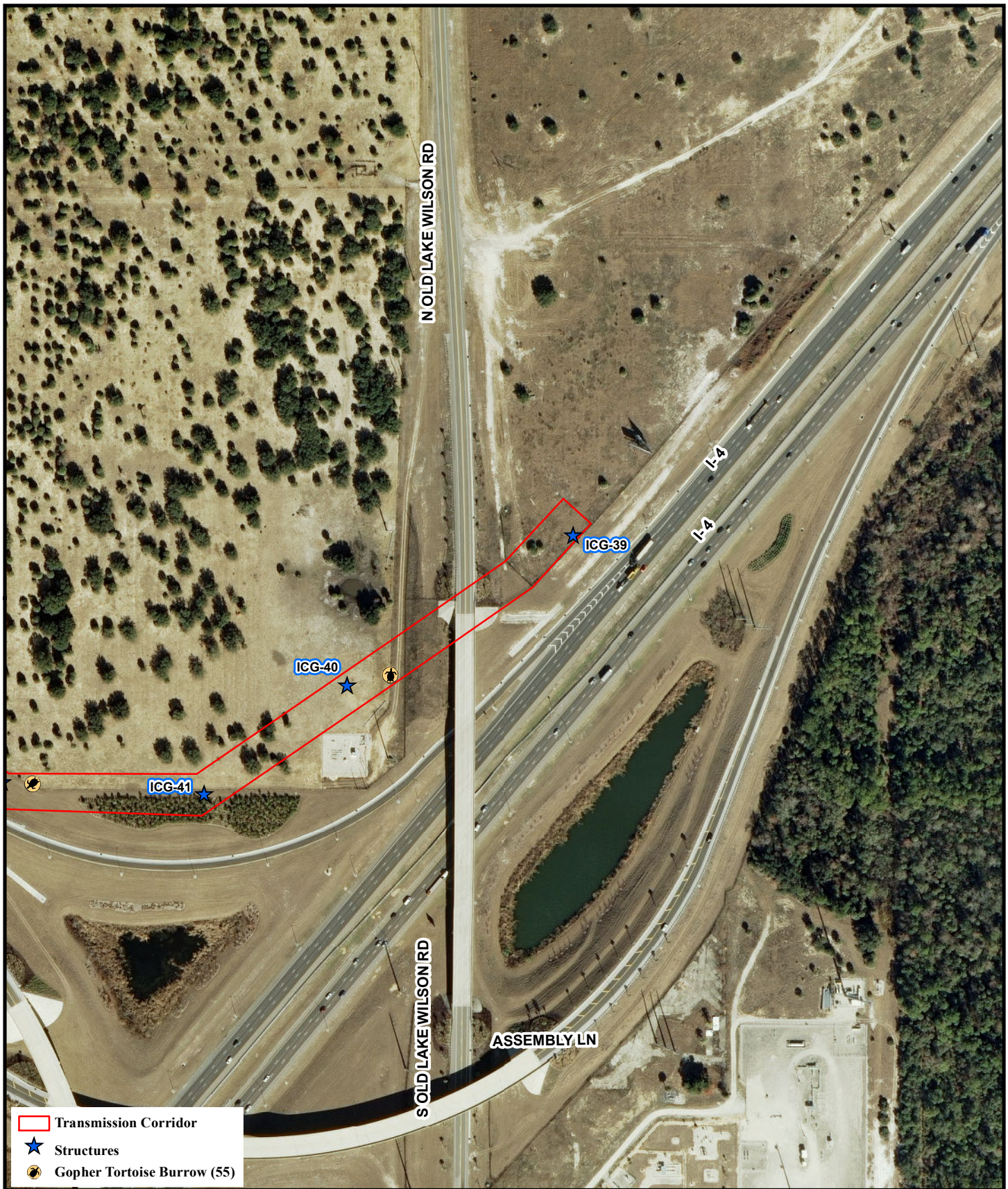


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

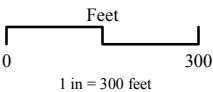
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LAND USE
MAP
18 of 18**



- Transmission Corridor
- ★ Structures
- 🐹 Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad

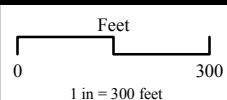


**LISTED
SPECIES
SURVEY
MAP 1 of 18**





- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

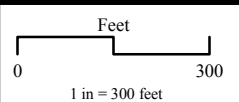
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 2 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

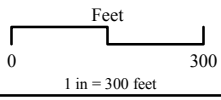
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 3 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)

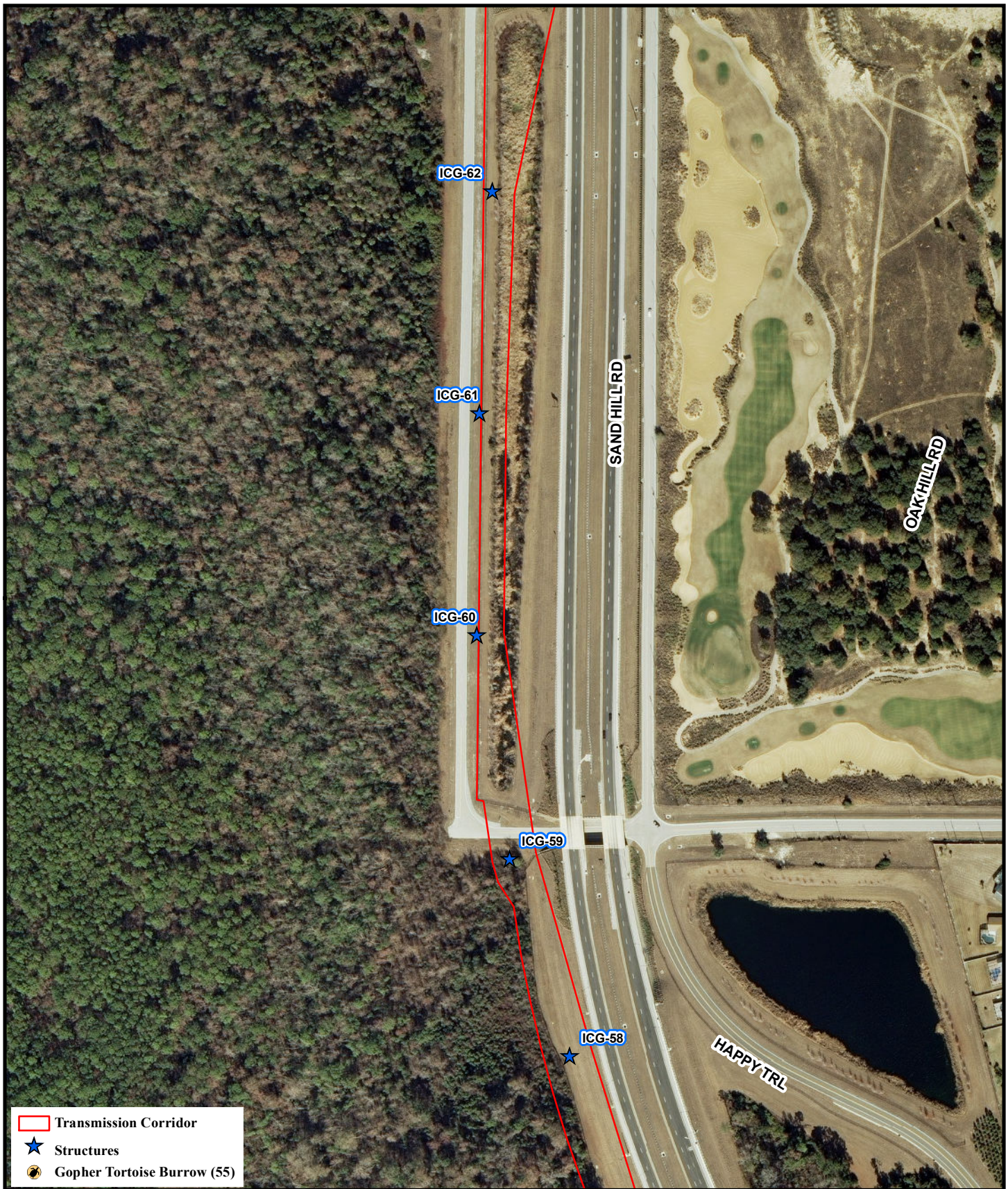


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

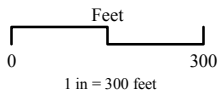
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 4 of 18**



- Transmission Corridor
- ★ Structures
- 🐹 Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

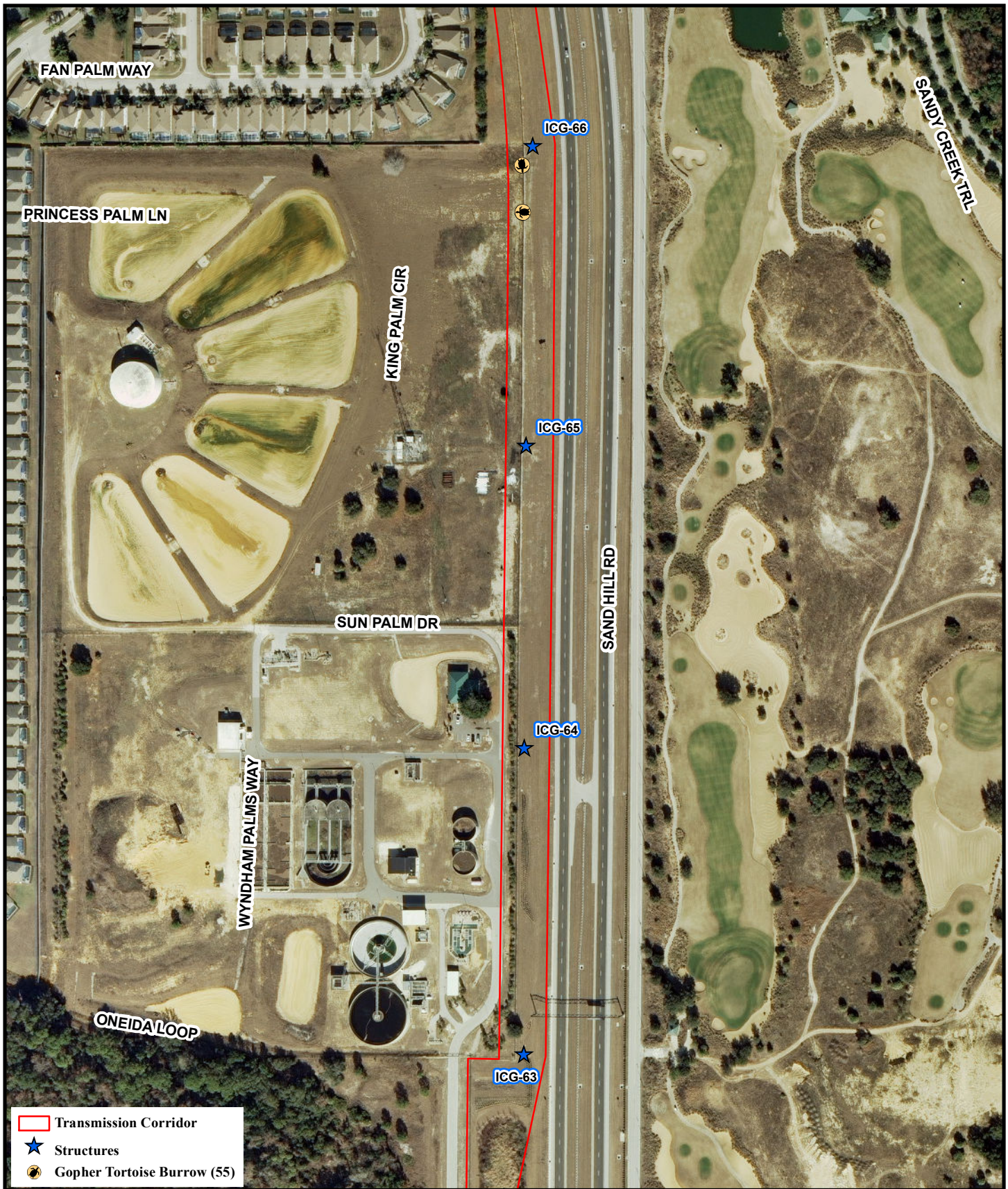
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



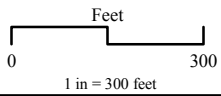
Source: USGS Topo Quad



**LISTED
SPECIES
SURVEY
MAP 5 of 18**

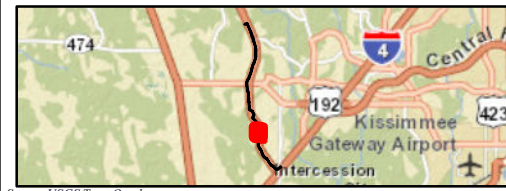


- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)

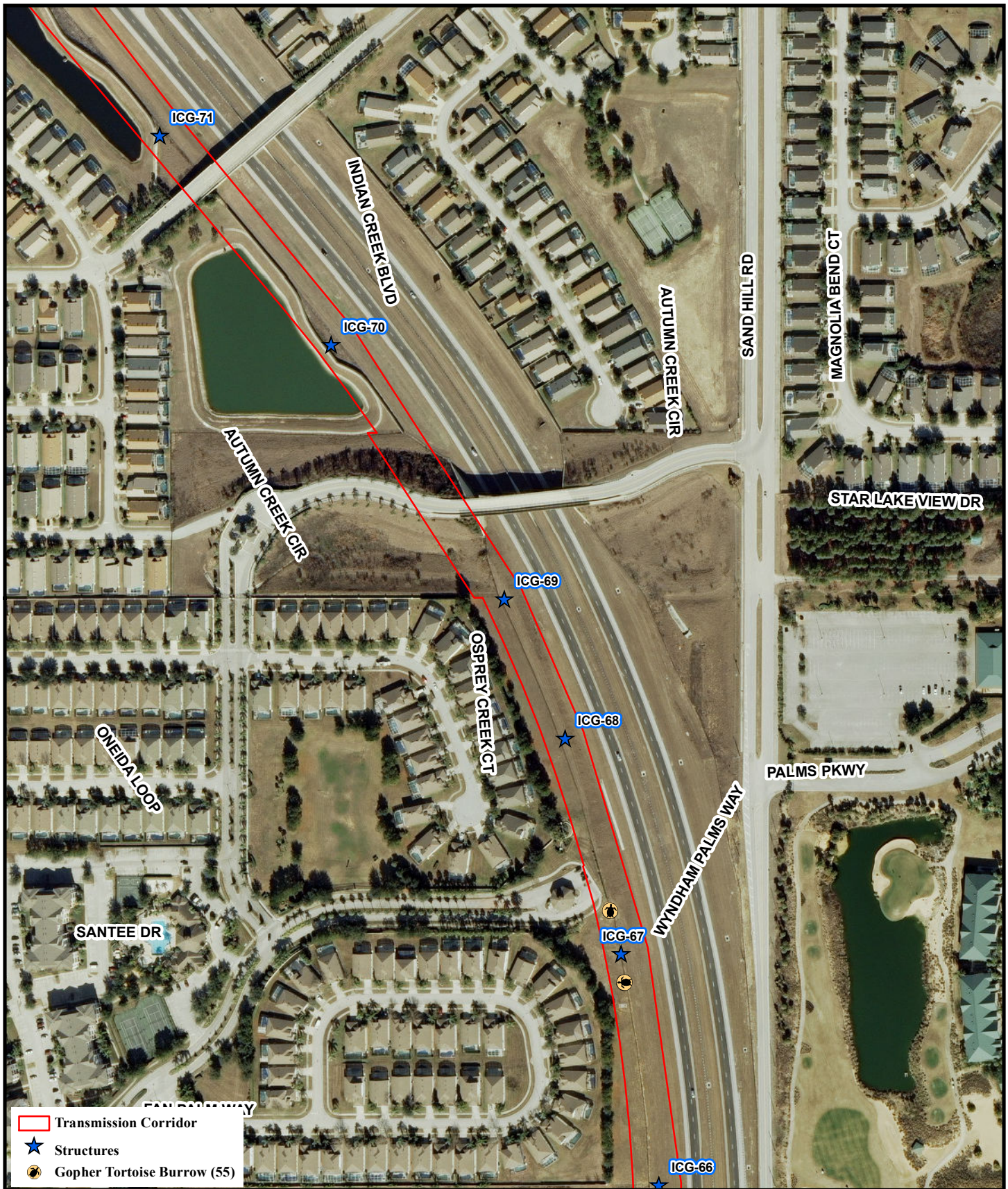


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

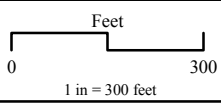
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 6 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)

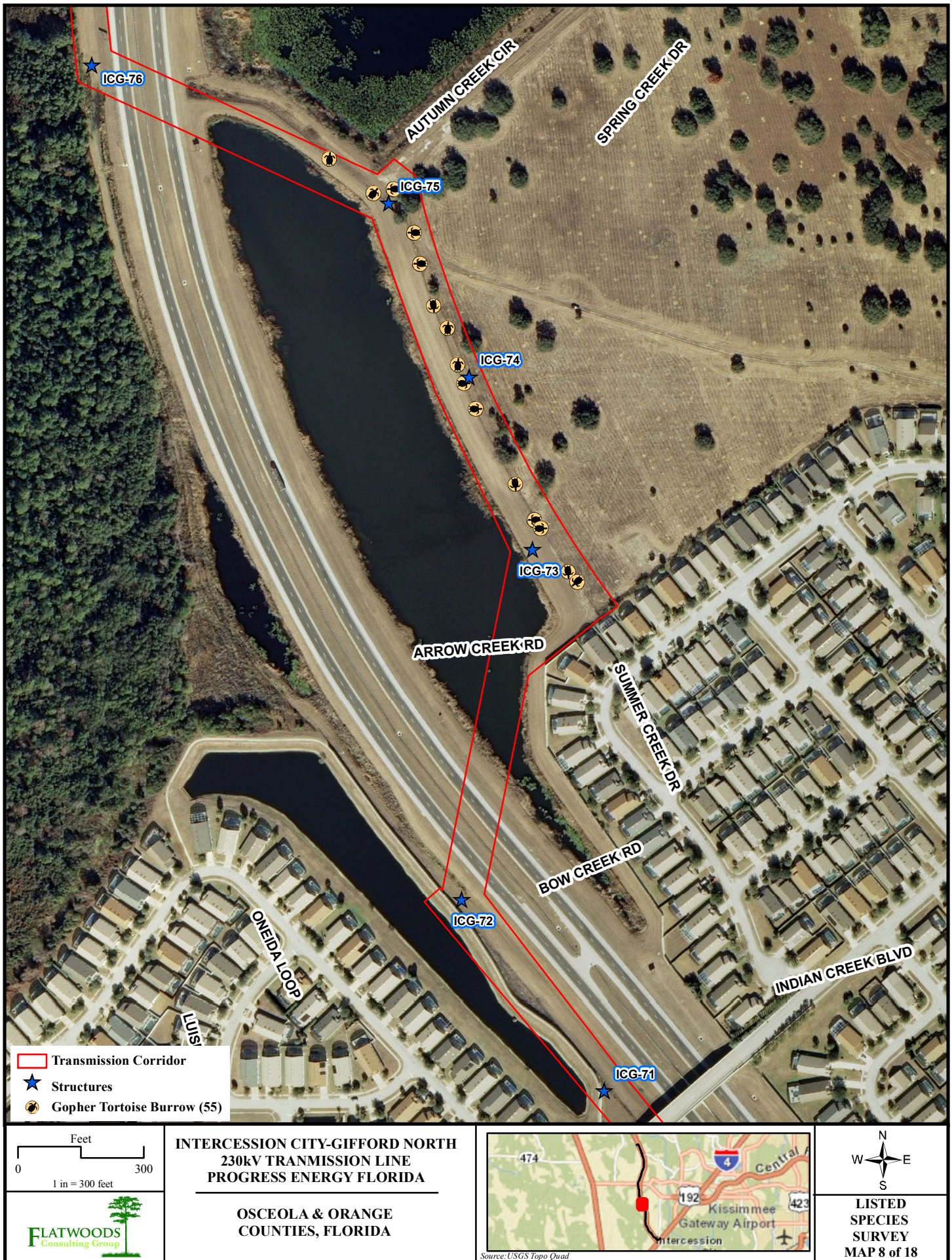


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

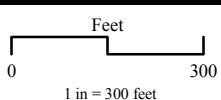
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 7 of 18**







**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

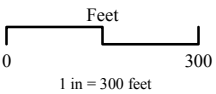
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 10 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

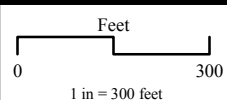
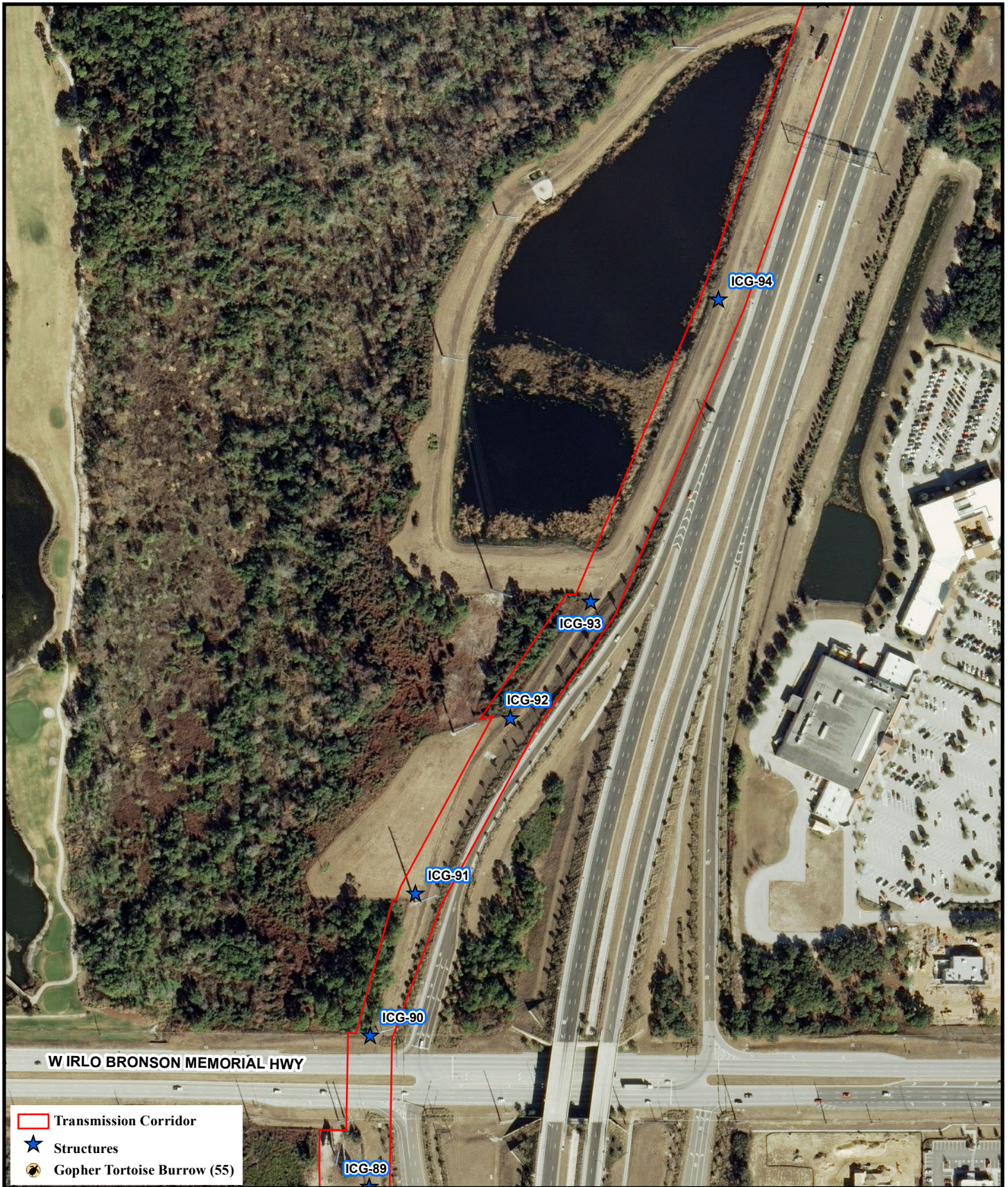
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**LISTED
SPECIES
SURVEY
MAP 11 of 18**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

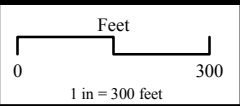
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 12 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

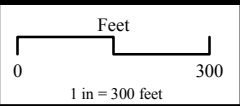
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 13 of 18**

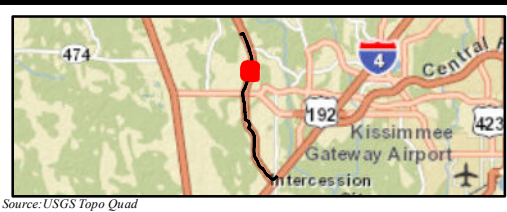


- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)

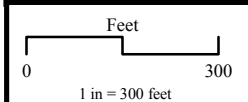


**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

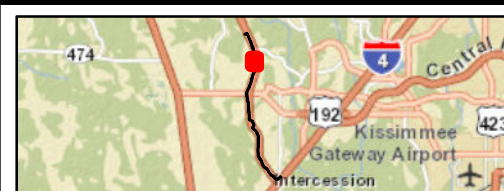


**LISTED
SPECIES
SURVEY
MAP 14 of 18**



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

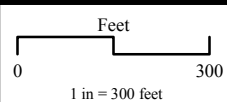
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 15 of 18**

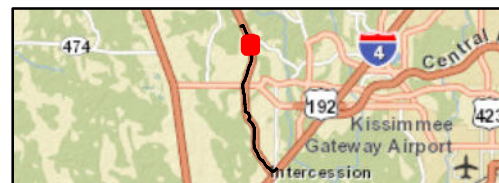


- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

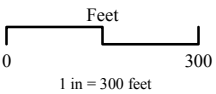
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 16 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

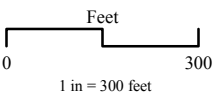
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**LISTED
SPECIES
SURVEY
MAP 17 of 18**



- Transmission Corridor
- ★ Structures
- Gopher Tortoise Burrow (55)

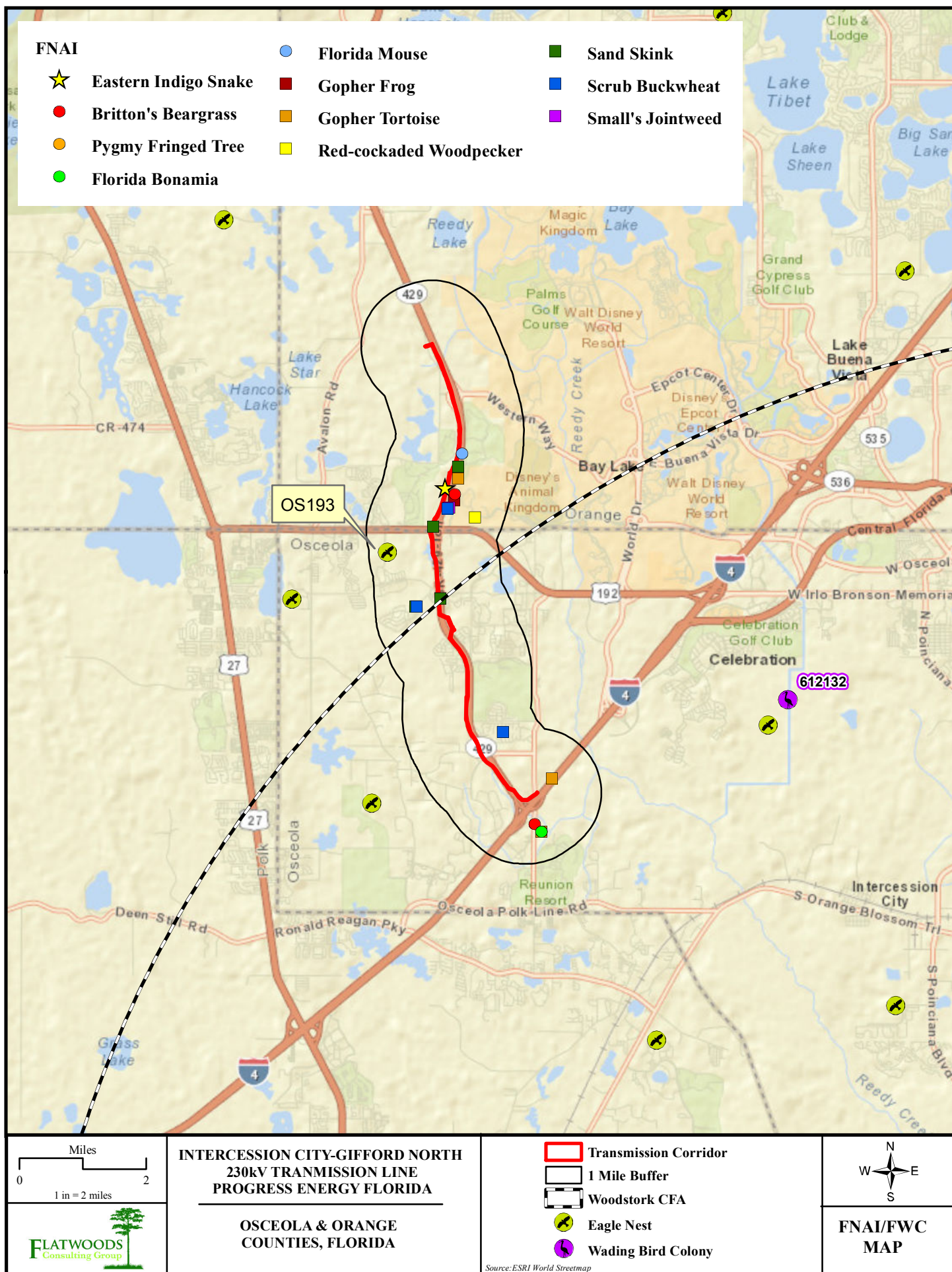


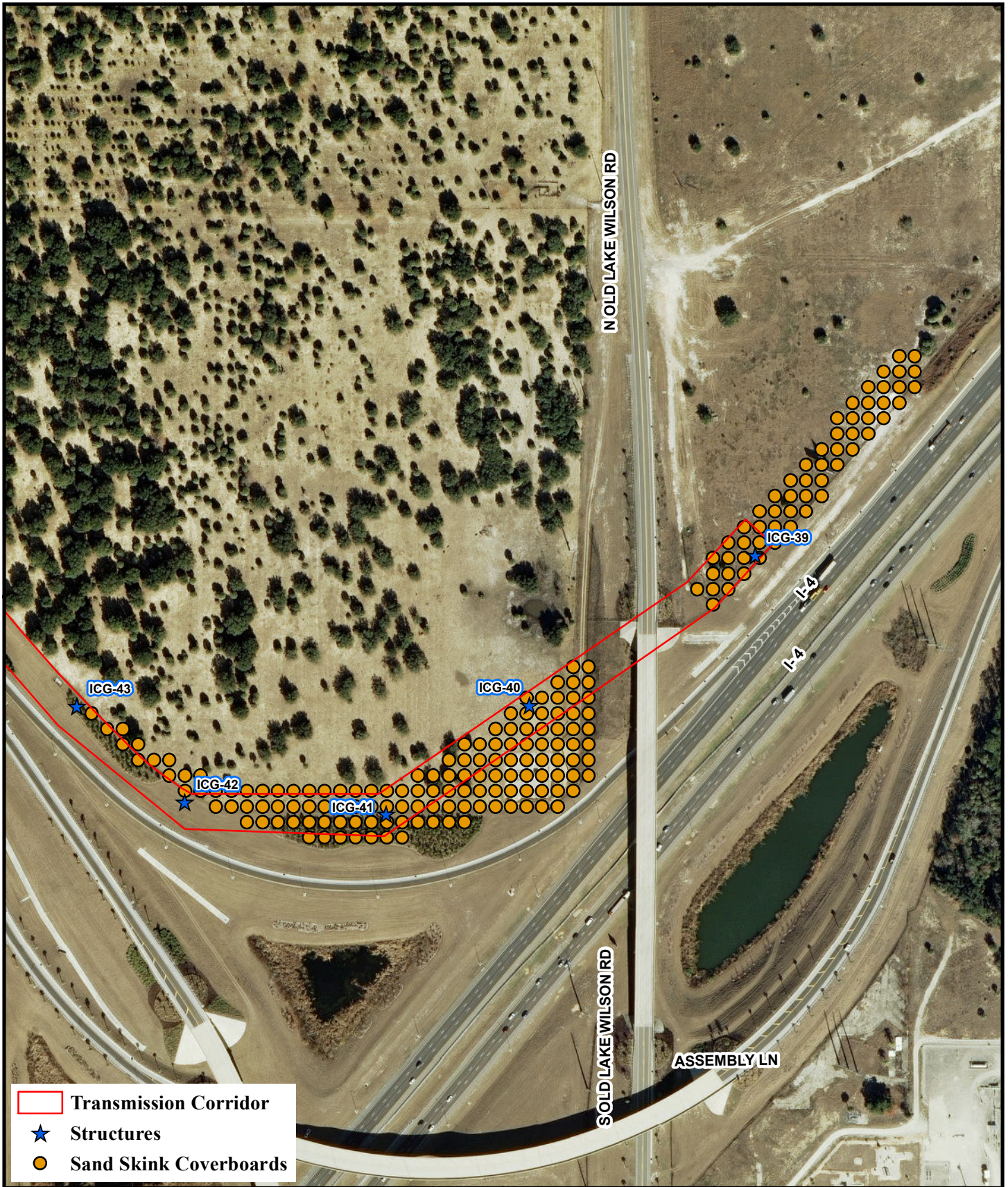
**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

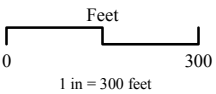


**LISTED
SPECIES
SURVEY
MAP 18 of 18**





- Transmission Corridor
- ★ Structures
- Sand Skink Coverboards



**INTERCESSION CITY-GIFFORD NORTH
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

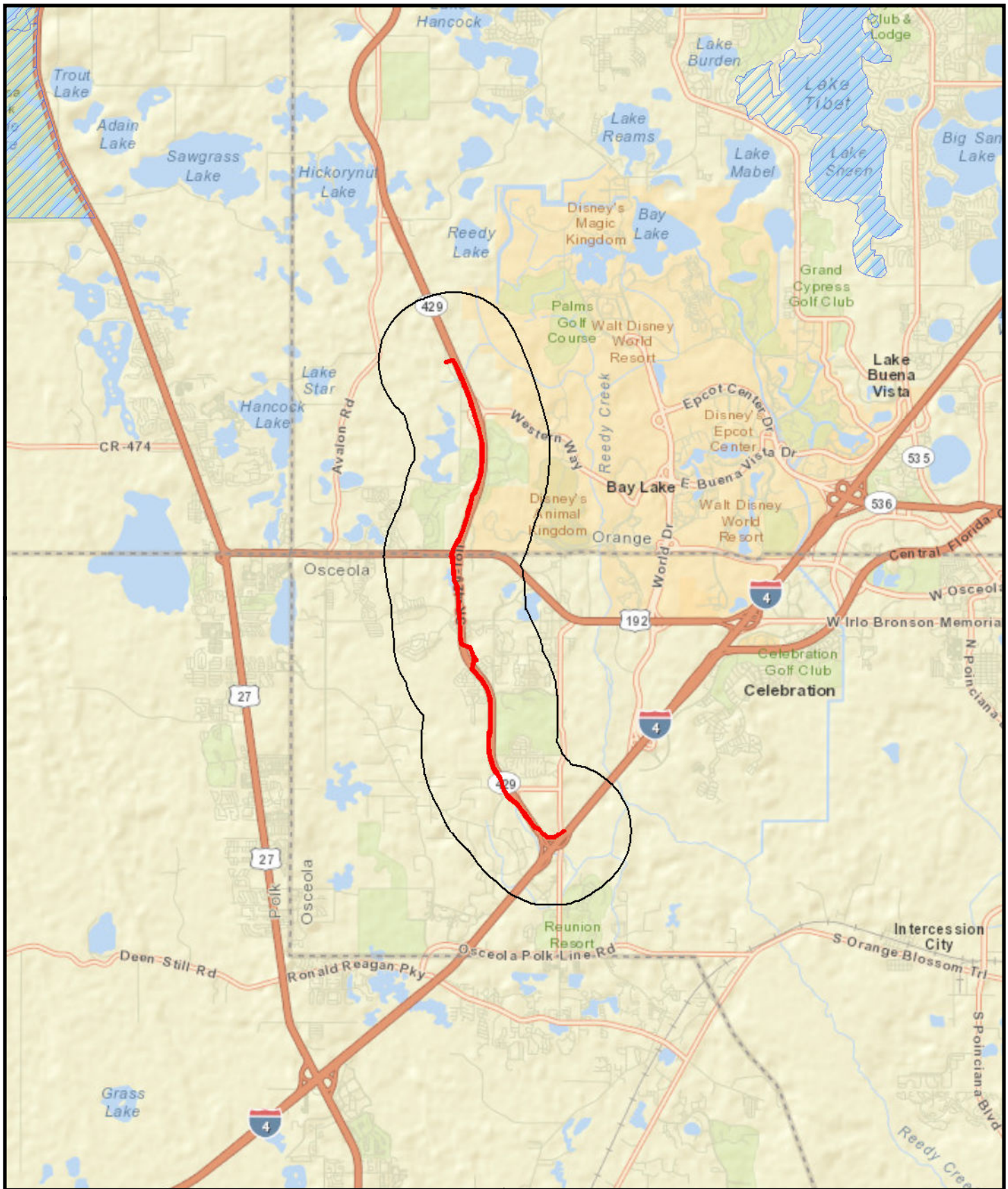
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



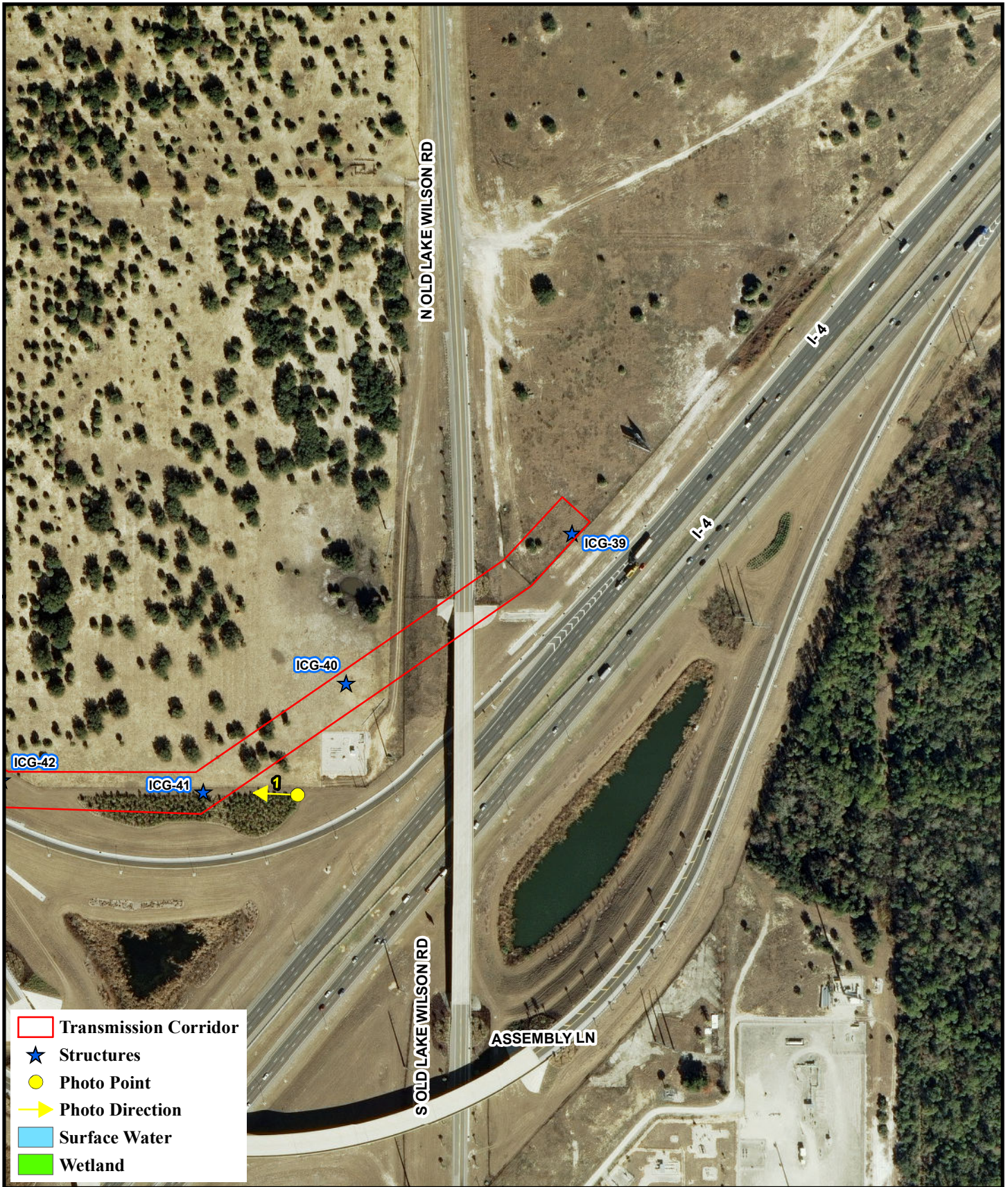
Source: USGS Topo Quad



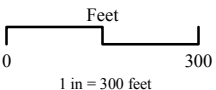
**SAND SKINK
SURVEY
MAP**



Miles 0 2 1 in = 2 miles	INTERCESSION CITY-GIFFORD NORTH 230kV TRANSMISSION LINE PROGRESS ENERGY FLORIDA	Transmission Corridor Outstanding Florida Waters 1 Mile Buffer	N W E S
	OSCEOLA & ORANGE COUNTIES, FLORIDA	Source: ESRI World Streetmap	PROTECTED WATERS MAP



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

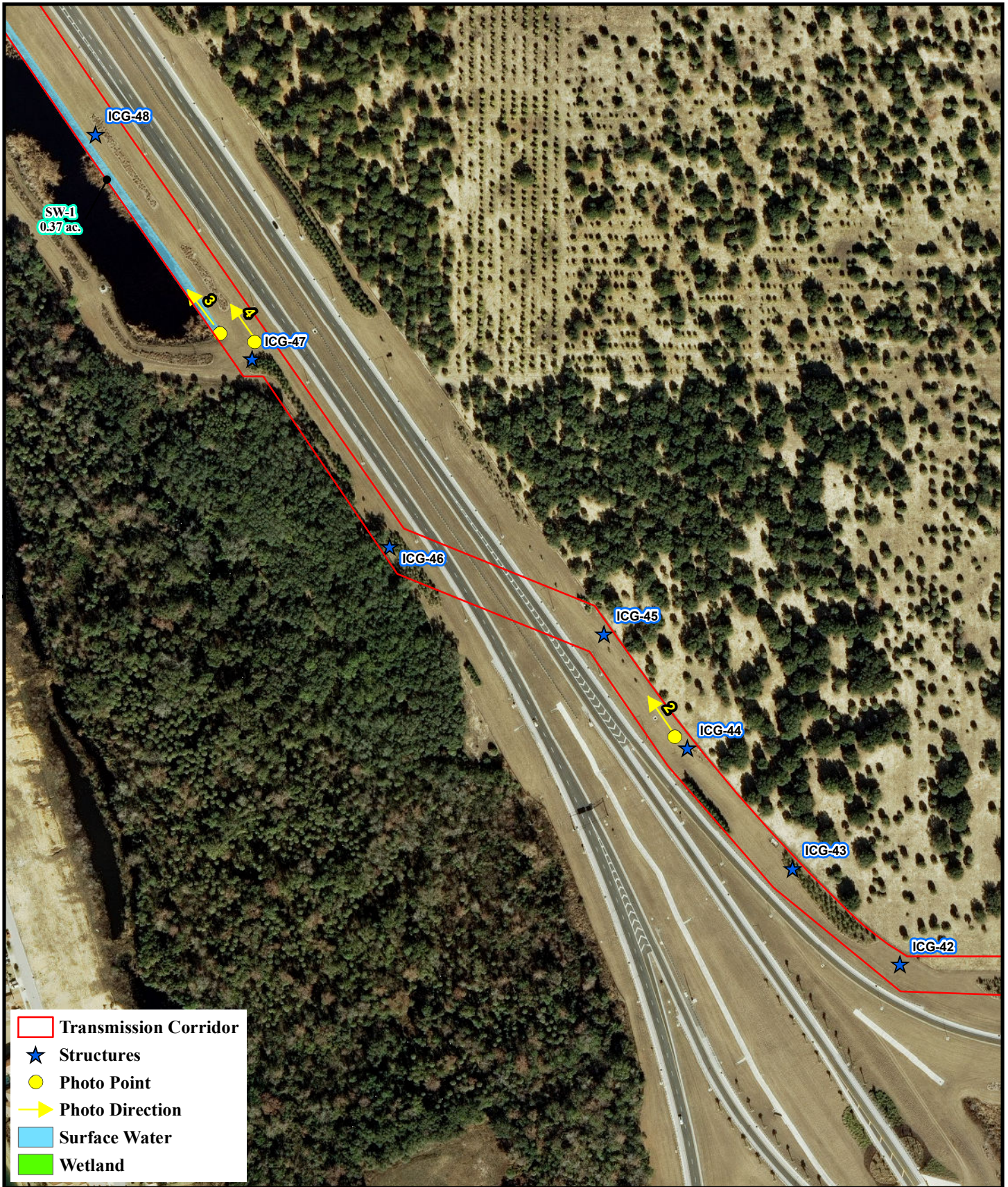
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
1 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet

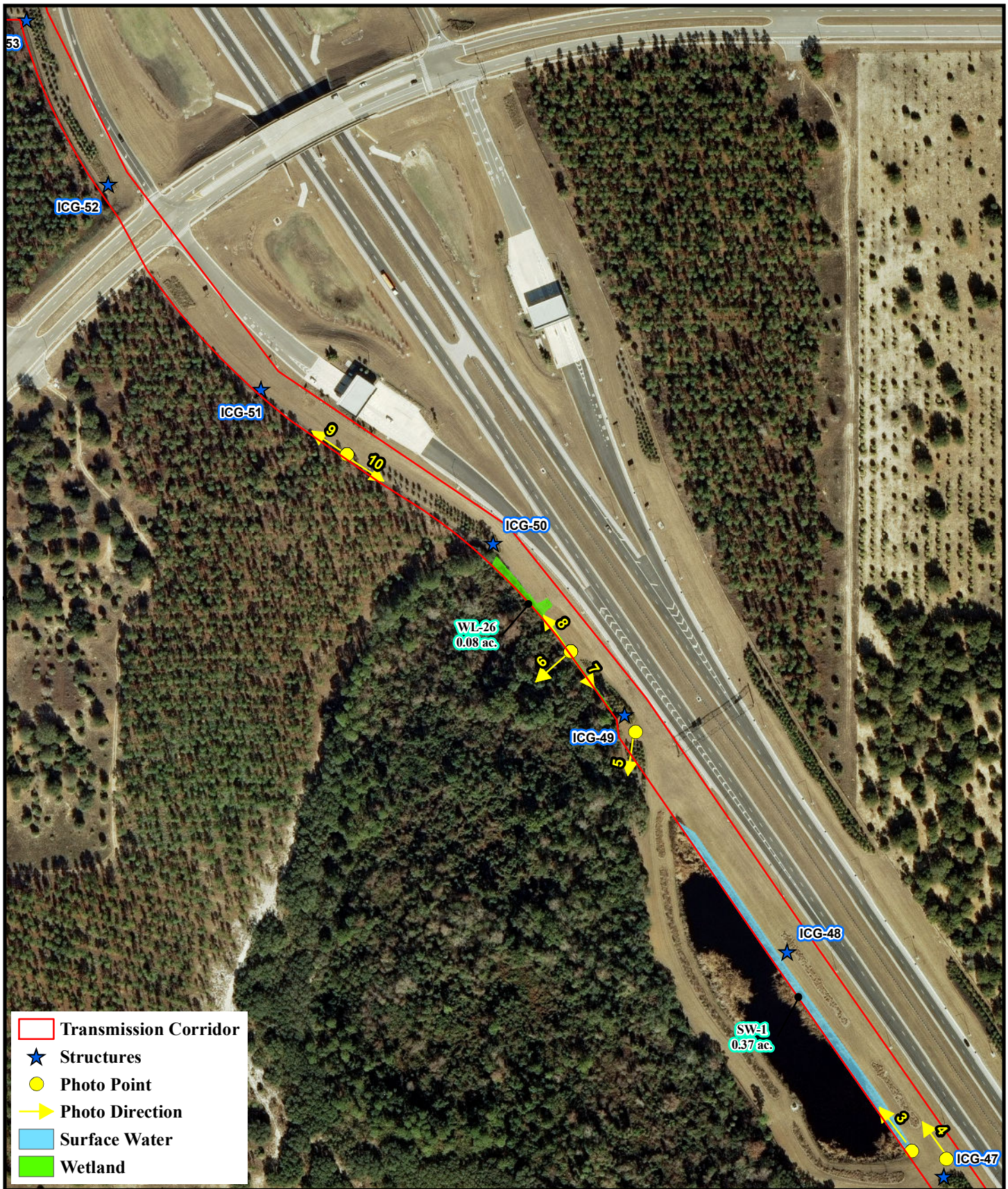


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

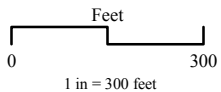
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
2 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

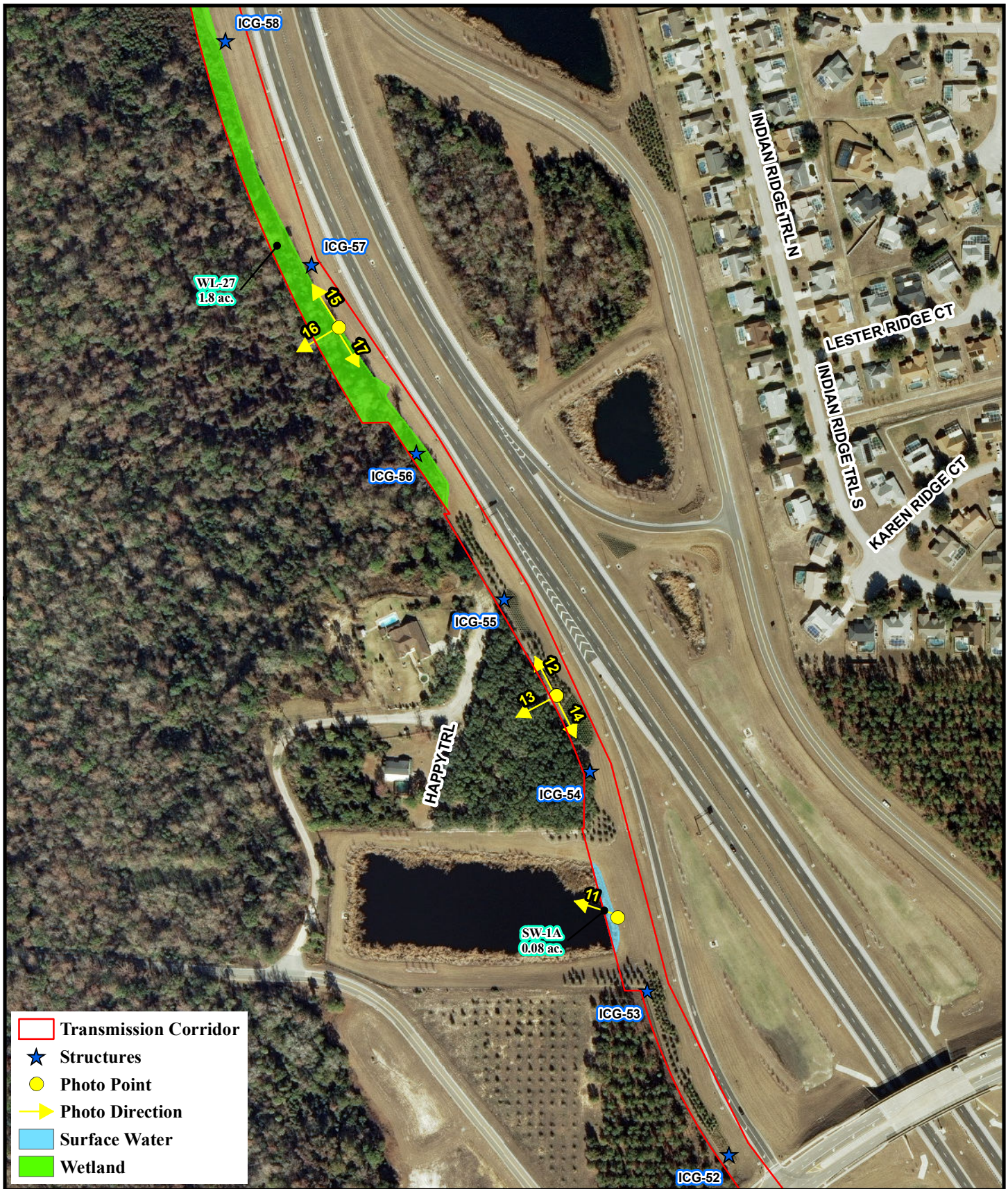
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet

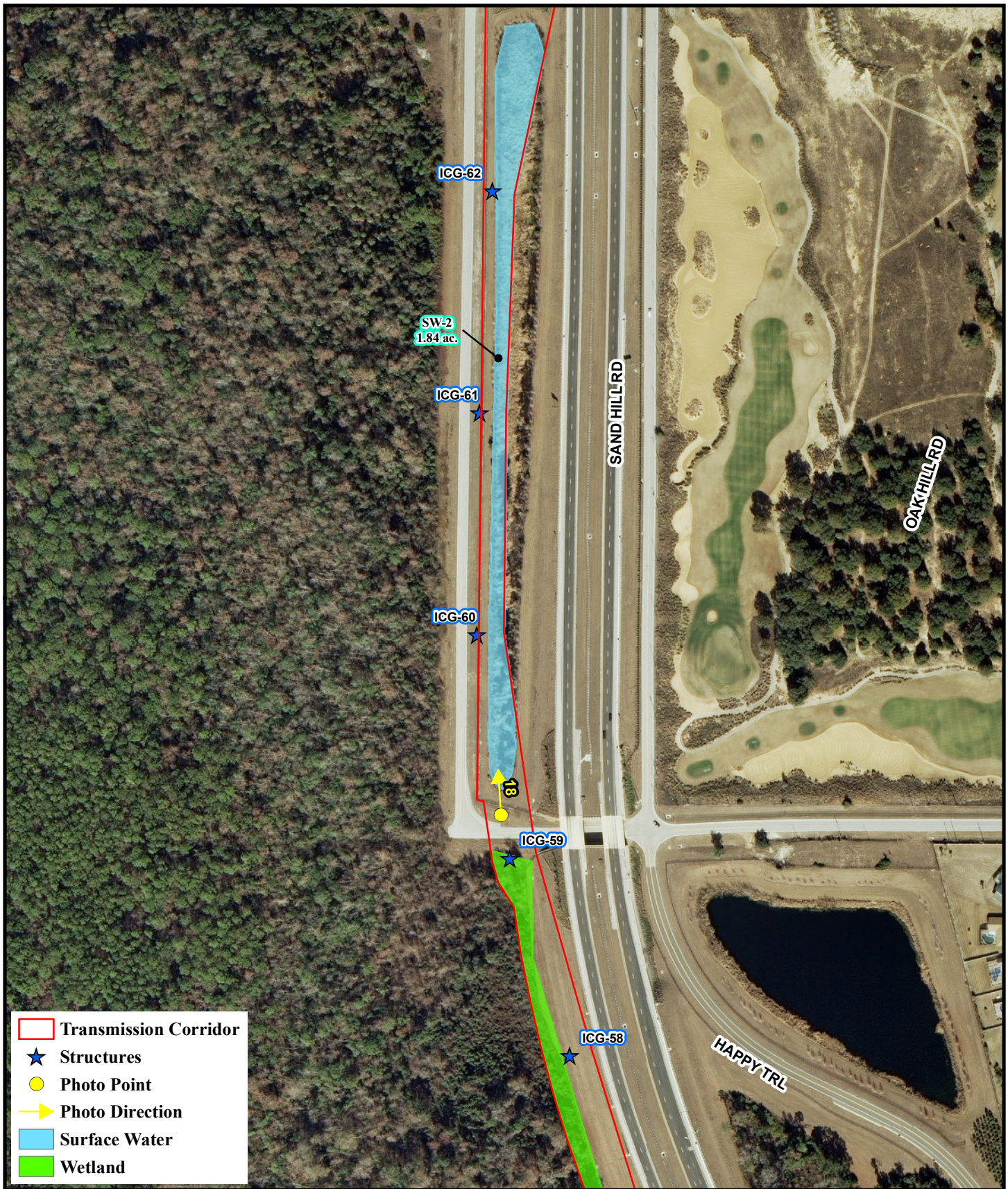


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

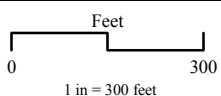
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
4 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

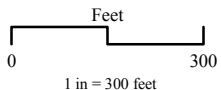
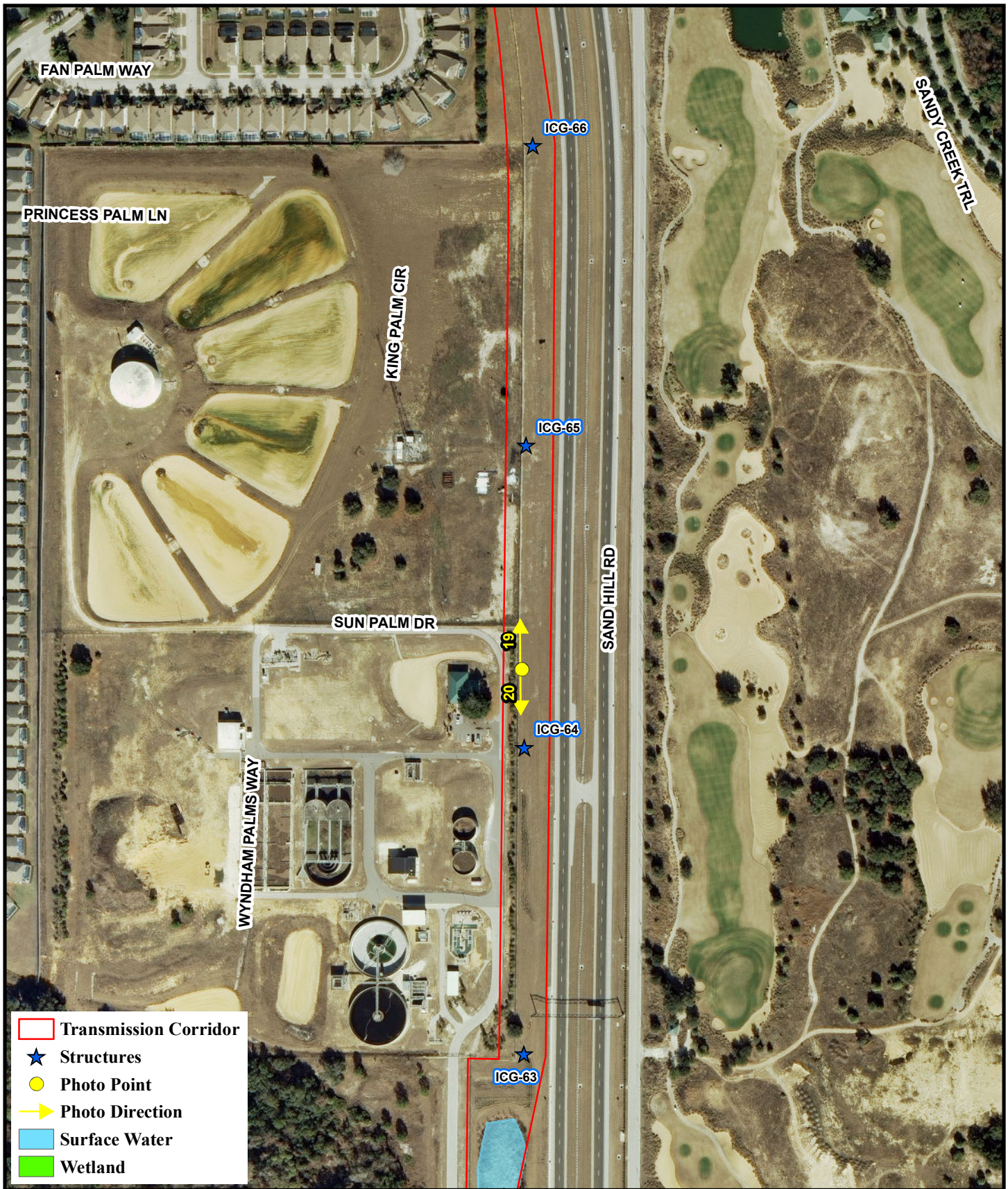
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad

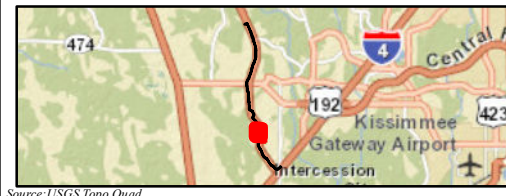


**PHOTO
LOCATION
MAP
5 of 18**

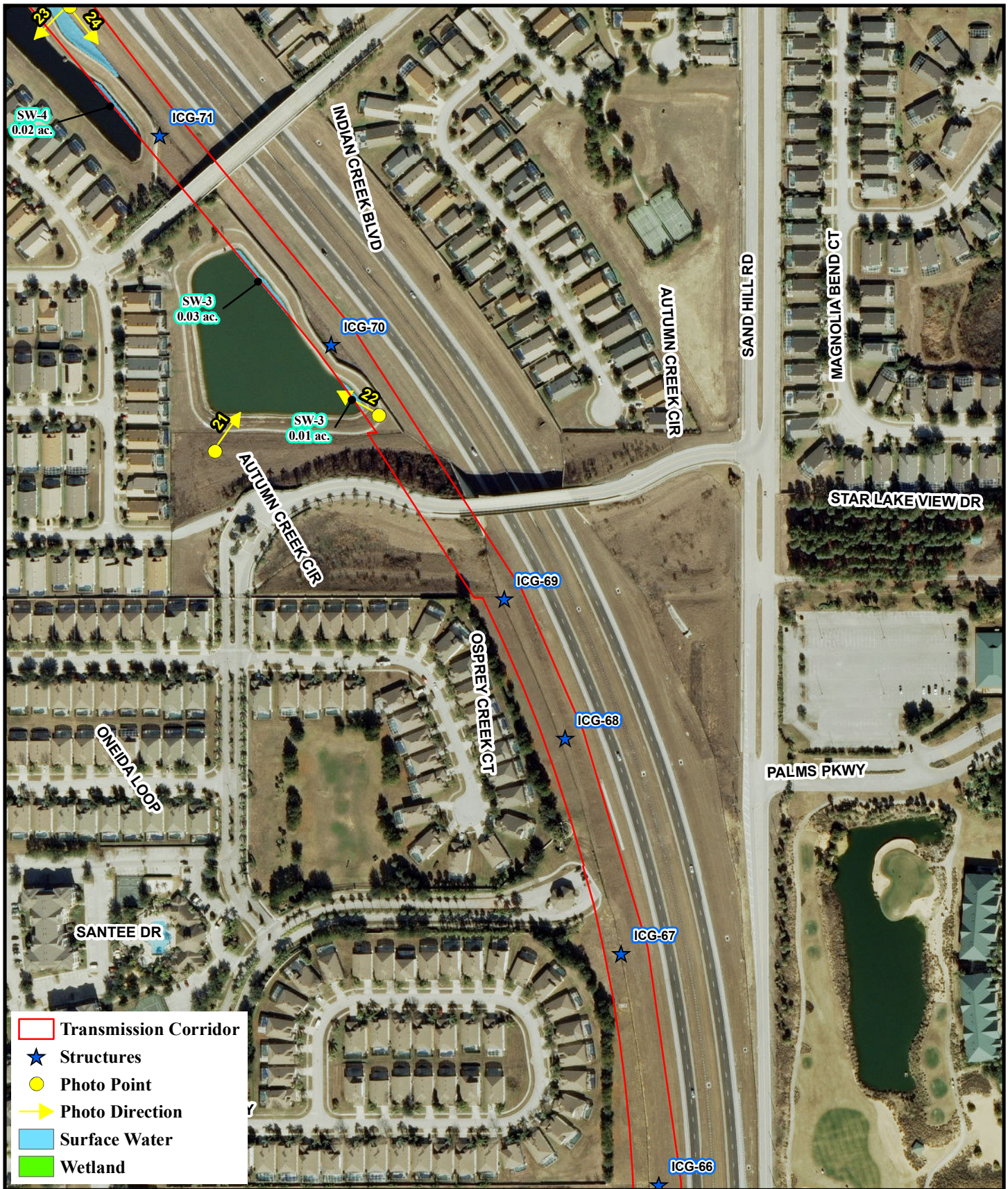


**INTERCESSION CITY-GIFFORD
230KV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

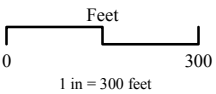
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
6 of 18**

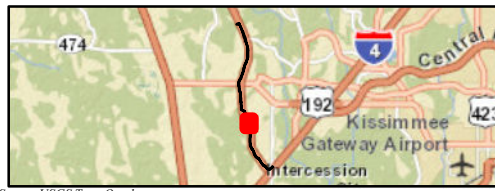


- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

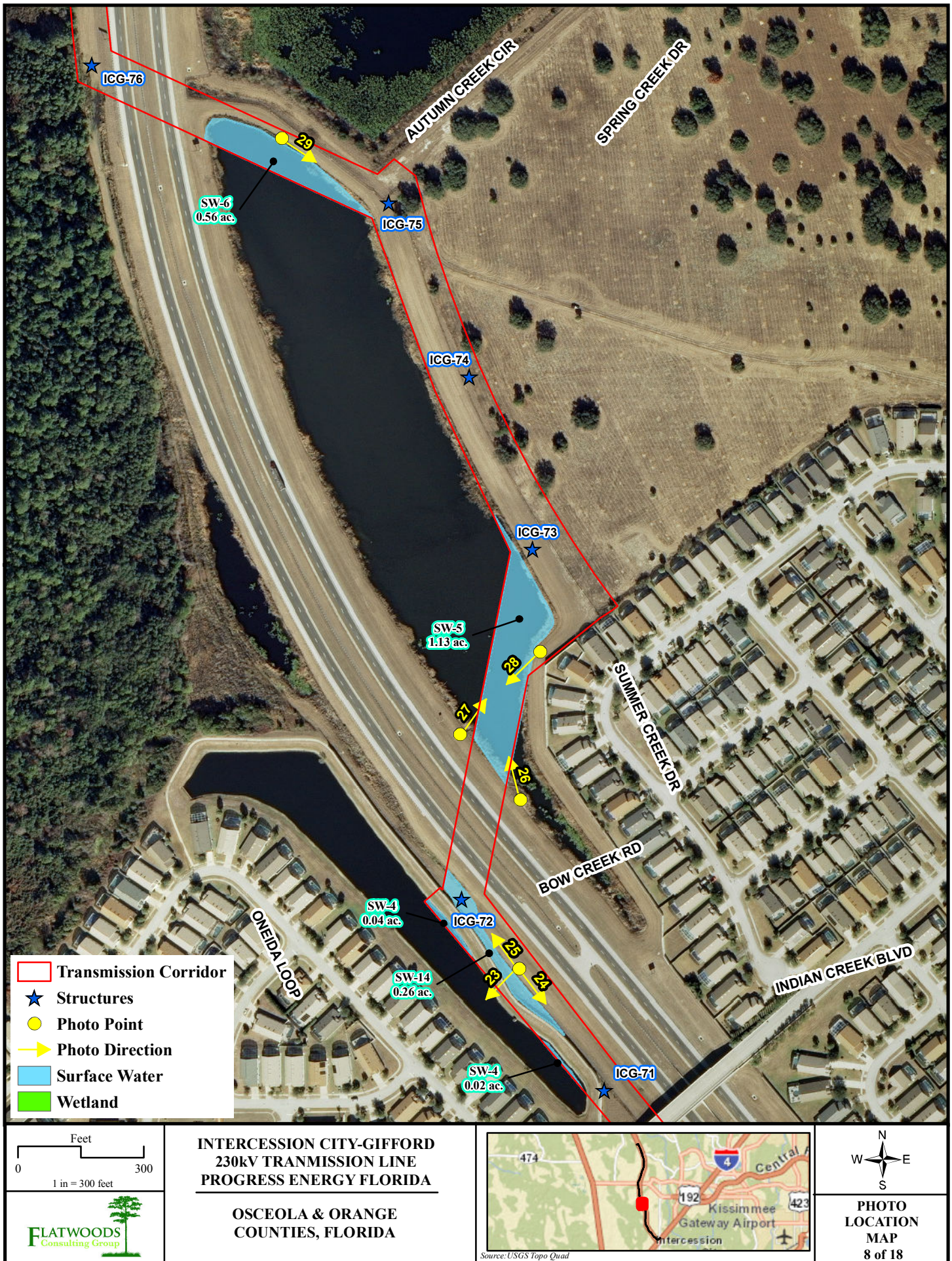


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

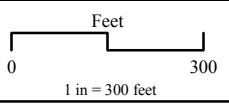


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7 of 18**





- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

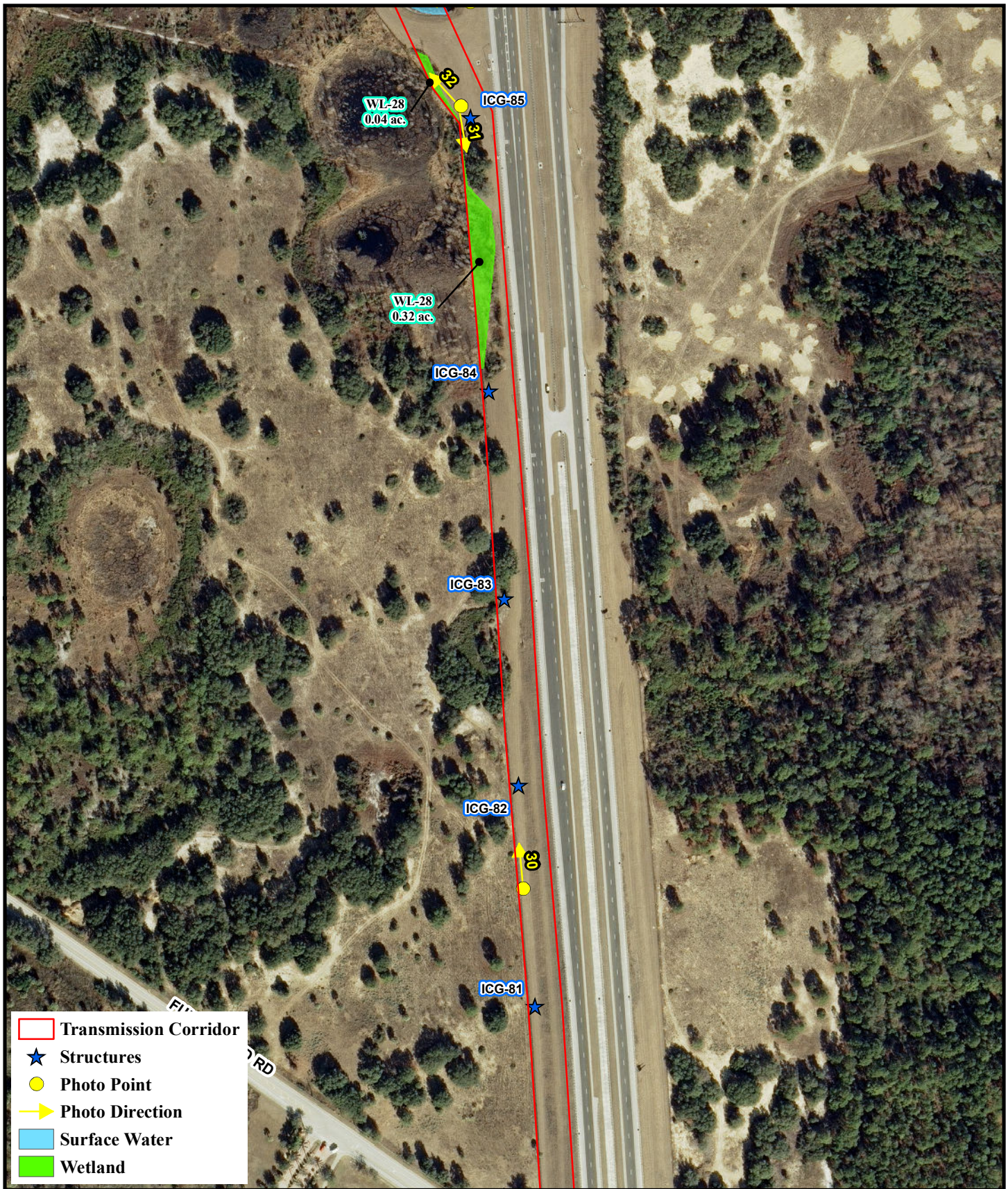


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

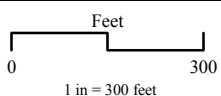
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



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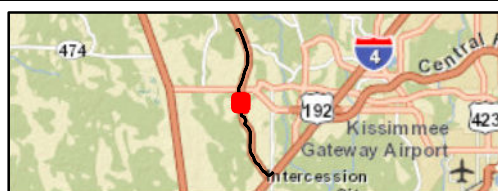


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- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
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- Transmission Corridor
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- ➔ Photo Direction
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- Wetland

Feet
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1 in = 300 feet



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

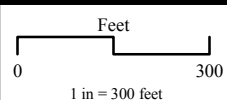
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



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**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

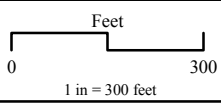
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



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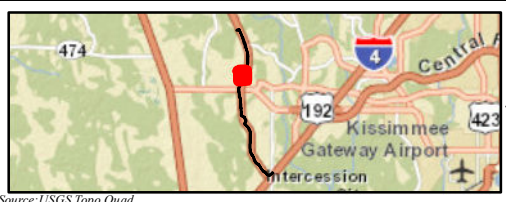


- Transmission Corridor
- ★ Structures
- Photo Point
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- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



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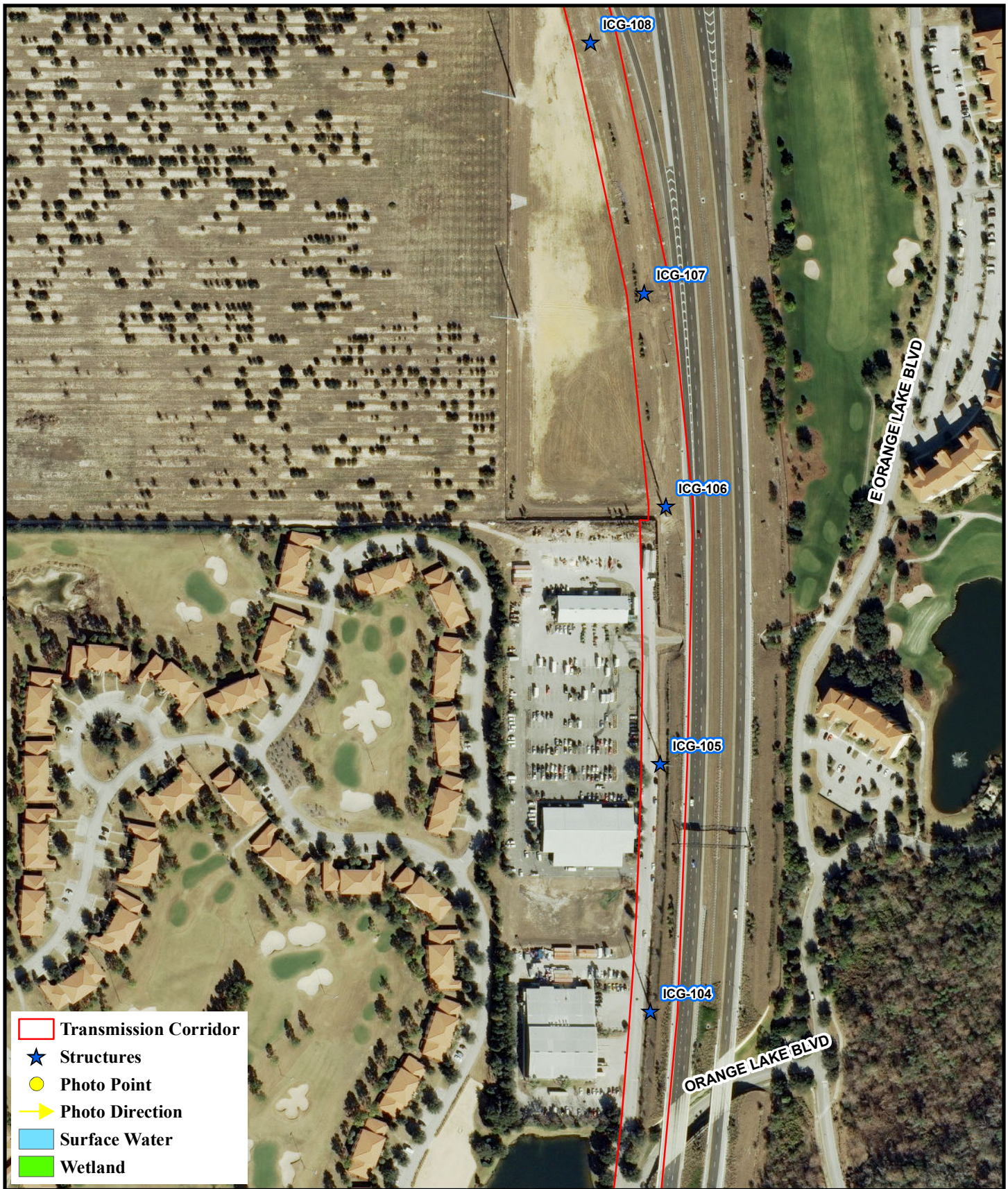


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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

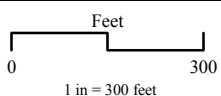
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COUNTIES, FLORIDA**



**PHOTO
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- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

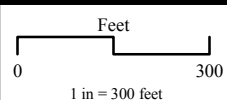
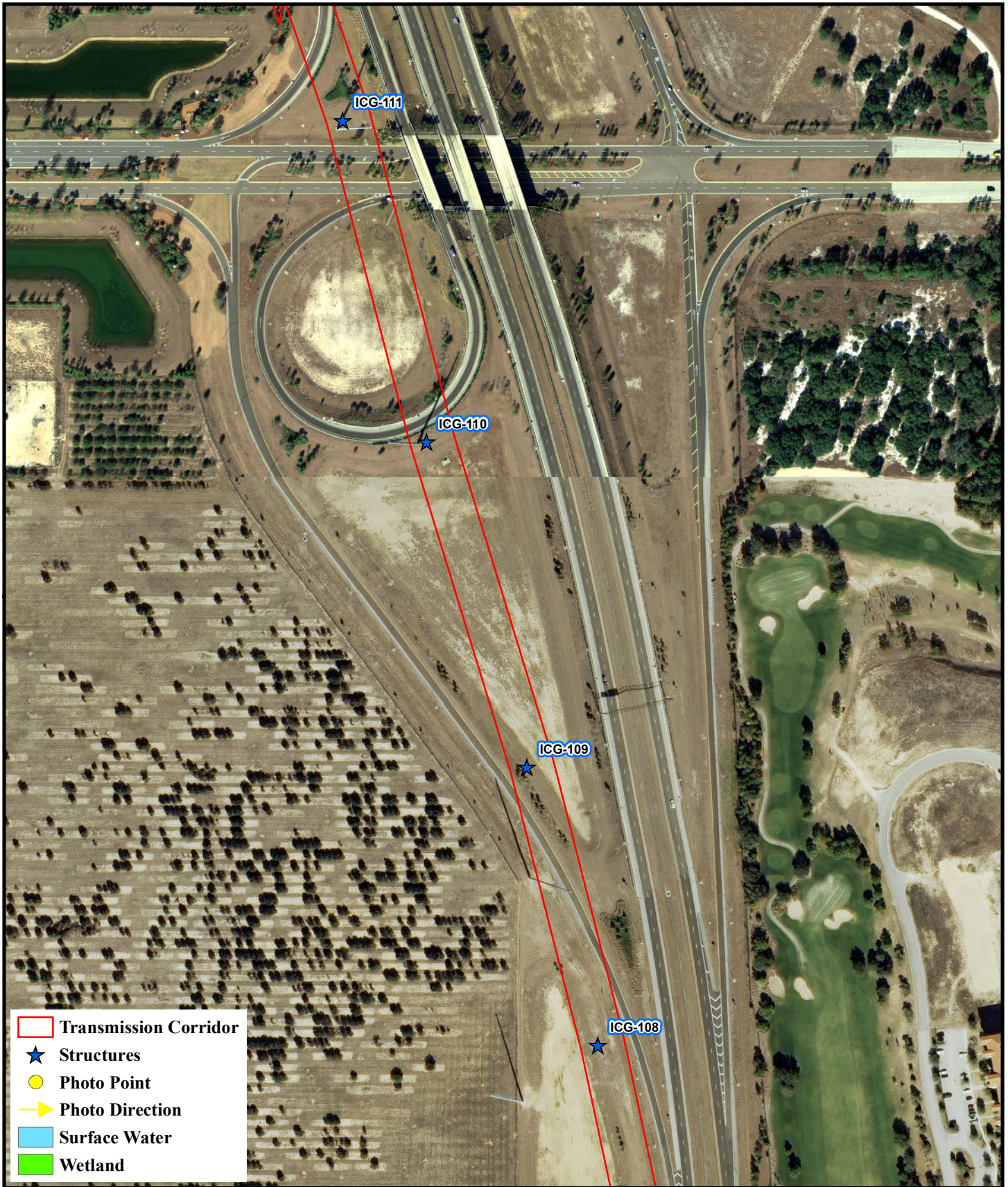


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230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

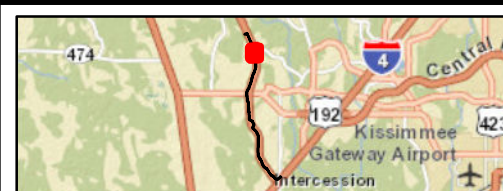


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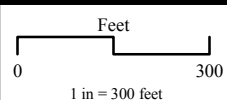


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



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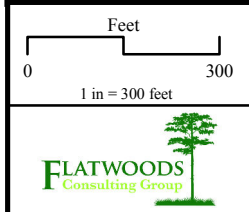
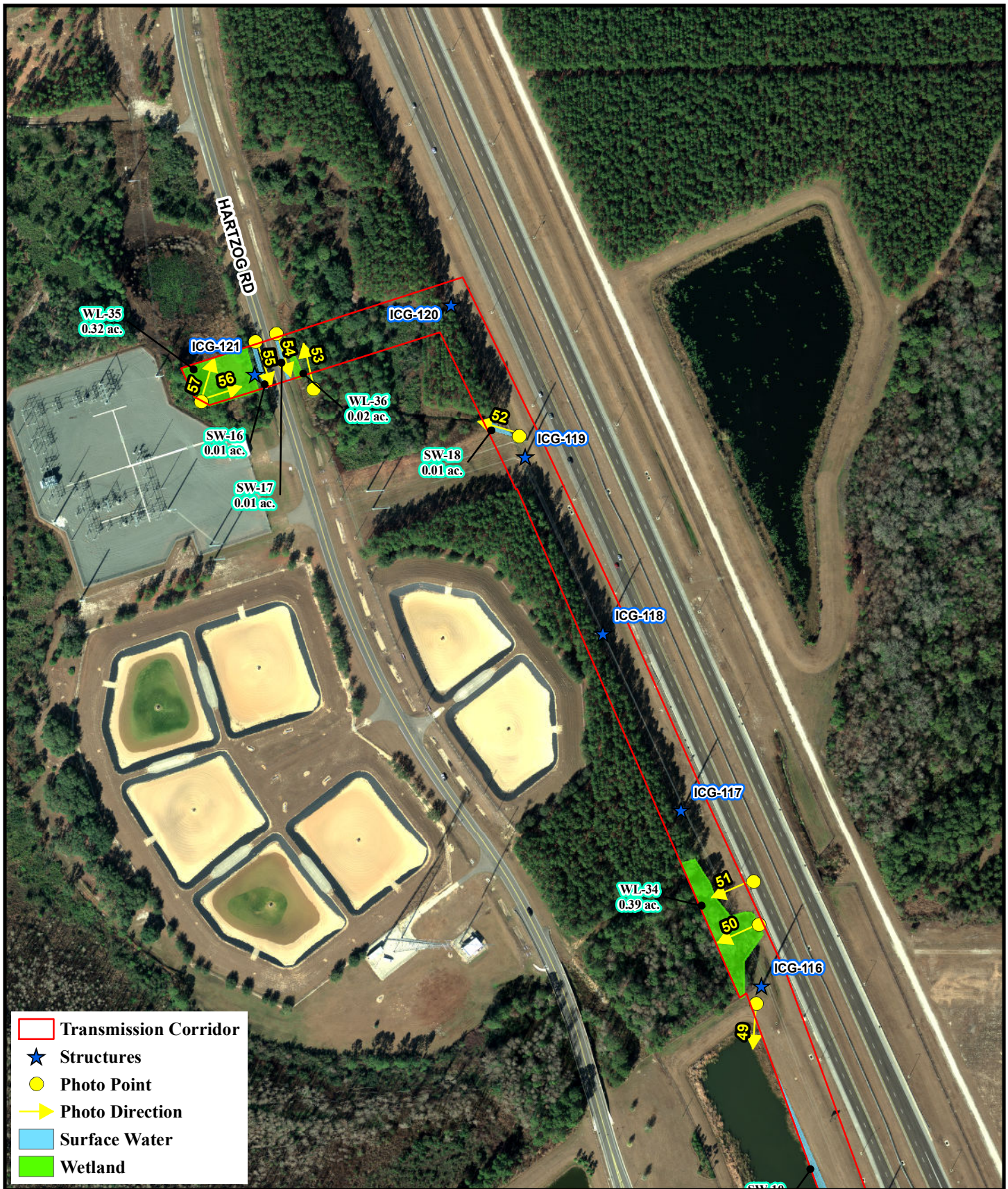


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

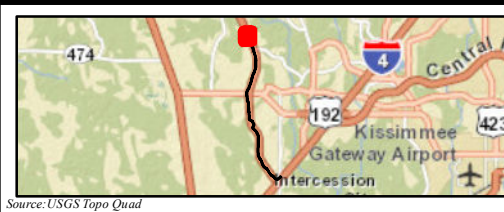


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**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
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Photo Point 1 - Project right-of-way near proposed structure ICG-41. South of the fence is FDOT road right-of-way and north of the fence is cattle pasture.



Photo Point 2 - Project right-of-way near proposed structure ICG-44. FDOT SR429 road right-of-way.



Photo Point 3 - Surface Water SW-1, Stormwater retention pond, view to the north.



Photo Point 4 - View of the SR429 right-of-way from proposed structure ICG-47 looking north.



Photo Point 5 - FDOT SR429 landscaped area near proposed structure ICG-49, view to the south.



Photo Point 6 - Wetland WL-26, view to the west.



Photo Point 7 – View to the south along the FDOT right-of-way. Wetland WL-26 is west of FDOT fence.



Photo Point 8 – Wetland WL-26, view to the north.



Photo Point 9 – Planted pine area looking north, west of FDOT right-of-way, near proposed structure ICG-51.



Photo Point 10 – View of upland area, looking south on the project right-of-way, south of proposed structure ICG-51.



Photo Point 11 – Surface Water SW-1A, stormwater retention pond just north of proposed structure ICG-53.



Photo Point 12 – View of FDOT landscape buffer, looking north. Planted live oak and sand cordgrass. Located north of proposed structure ICG-54.



Photo Point 13 – View of hardwood-conifer mixed habitat looking west.
Located north of proposed structure ICG-54.



Photo Point 14 – View of FDOT landscape buffer, looking south. Planted live
oak and Walter's viburnum. North of proposed structure ICG-54.



Photo Point 15 – Wetland WL-27, view to the north.



Photo Point 16 – Wetland WL-27, view to the west.



Photo Point 17 – Wetland WL-27, view to the south.



Photo Point 18 – Surface Water SW-2, stormwater retention pond, view to the north.



Photo Point 19 – View of FDOT right-of-way, looking north, in front of the Water treatment plant.



Photo Point 20 – View of FDOT right-of-way, looking south, in front of the Water treatment plant.



Photo Point 21 – Surface Water SW-3, non-vegetated retention pond, view to the north.



Photo Point 22 – Surface Water SW-3, view to the northeast from southeast corner of retention pond.



Photo Point 23 – Surface Water SW-14, looking west, northwest.



Photo Point 24 – Surface Water SW-14, view to the south facing Indian Creek Blvd.



Photo Point 25 – Surface Water SW-14, view to the north.



Photo Point 26 – Surface Water SW-5, view to the north.



Photo Point 27 – Surface Water SW-5, view to the east, northeast.



Photo Point 28 – Surface Water SW-5, view to the west.



Photo Point 29 – Surface Water SW-6, looking southeast.



Photo Point 30 – View of upland area, looking north from proposed structure ICG-81.



Photo Point 31 – View of upland area within corridor, looking south from proposed structure ICG-85.



Photo Point 32 – Wetland WL-28, view to the northeast.



Photo Point 33 – Surface Water SW-7, view to the west.



Photo Point 34 – Wetland WL-29, view to the north.



Photo Point 35 – Surface Water SW-15, view to the west.



Photo Point 36 – Wetland WL-29, view to the west.



Photo Point 37 – Surface Water SW-8, View from proposed structure ICG-87, looking south.



Photo Point 38 – Wetland WL-30, view to the west.



Photo Point 39 – Surface Water SW-9, view to the west.



Photo Point 40 – View looking north from proposed structure ICG-91.



Photo Point 41 – Wetland WL-31, view to the northwest from proposed structure ICG 92.



Photo Point 42 – Surface Water SW-12, view looking south at proposed structure ICG-94.



Photo Point 43 – Wetland WL-32, view to the west.



Photo Point 44 – Wetland WL-32, view looking south.



Photo Point 45 – Wetland WL-32, view looking north.



Photo Point 46 – Surface Water SW-13, looking southwest.



Photo Point 47 – Surface Water SW-13, looking north.



Photo Point 48 – Wetland WL-33, view to the west.



Photo Point 49 – Surface Water SW-10, view to the southwest.



Photo Point 50 – Wetland WL-34, looking west from box-culvert.



Photo Point 51 – Wetland WL-34, view to the west.



Photo Point 52 – Surface Water SW-18, looking northwest.



Photo Point 53 – Wetland WL-36, looking north.



Photo Point 54 – Surface Water SW-17, looking south.



Photo Point 55 – Surface Water SW-16, looking south.



Photo Point 56 – Wetland WL-35, looking east.



Photo Point 57 – Wetland WL-35, looking northeast.

THREATS AND LEGAL PROTECTION:

The Eastern Indigo Snake is listed as a threatened species by both the U.S. Fish and Wildlife Service (50 CFR 17.11) and the Florida Fish and Wildlife Conservation Commission (68A-27.004 Florida Administrative Code). The primary cause of decline of Indigo Snake populations is destruction and fragmentation of the habitat it occupies. Indigo Snakes were also once heavily collected for the pet trade, but protection under the Endangered Species Act has largely eliminated the threat.

The 'Taking' of Indigo Snakes is prohibited by the Endangered Species Act, as amended, without a permit from the US Fish and Wildlife Service. The USFWS defines 'Take' as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Penalties for violation of the Endangered Species Act are a maximum fine of \$25,000 for civil violations and a maximum fine of \$50,000 and/or imprisonment for up to one year for criminal violations, if convicted. Penalties for violations of Florida Law prohibiting the 'Take' of Indigo Snakes are maximum fines of \$500 and/or 60 days imprisonment for the first offense. Stiffer penalties are imposed for additional violations.



Photo by Jackie Guzy

Watch Out For **INDIGO SNAKES**



Progress Energy

Wayne Richardson

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Email: wayne.richardson@pgnmail.com

www.progress-energy.com.com



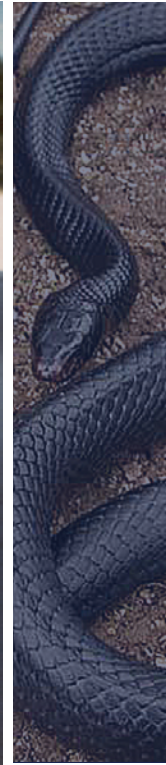
Progress Energy

Indigo Snakes

IF YOU SEE AN INDIGO SNAKE in the area that is being cleared, is under construction, or where the snake may be in danger:

1. Stop work immediately until the snake has safely left the area.
2. Report the snake immediately to your Supervisor, and,
3. Contact the site environmental biologist or Wayne Richardson with Progress Energy at 727-330-0637 to report the observation. Progress Energy will request information about where and when the snake was observed and forward the information to the Fish and Wildlife Service and other agencies, as appropriate.

DESCRIPTION: Indigo Snakes may grow large (over 8 feet in length), are heavily bodied and are glossy black. Indigo Snakes frequently have red or orange coloration under the chin. When approached or disturbed, this snake typically is not aggressive and will attempt to crawl away from the disturbance. Indigo Snakes rarely bite but should not be captured or handled without authorization



from the U.S. Fish and Wildlife Service or Florida Fish and Wildlife Conservation Commission.

SIMILAR SNAKES: The only other solid black snake occurring in Florida is the Black Racer, typically much smaller and thinner than an Indigo Snake. The chin of the Black Racer is white, as compared to the dark or reddish chin of the Indigo Snake. Black Racers will bite repeatedly if restrained.

LIFE HISTORY: Indigo Snakes may occur in almost any type of natural habitat. During the summer months, they are frequently found near wet areas. Indigo Snakes frequently take refuge in gopher tortoise burrows, particularly during the winter months. The



Killing, harming, catching, or molesting Indigo Snakes is prohibited by the federal Endangered Species Act and is punishable by fines and/or imprisonment. If convicted.

snakes also spend the winter in other underground retreats, such as stump holes.

Indigo Snakes eat a wide variety of prey, including frogs, toads, rodents, birds and other snakes (including rattlesnakes). Prey is overpowered and generally eaten alive. Indigo Snakes do not constrict their prey to kill it the way many other snakes do.

Female Indigo Snakes lay their eggs during May or June in a gopher tortoise burrow or some other type of area where the eggs will stay warm and moist. The eggs hatch after approximately 60 days. Hatching Indigo Snakes are similar to adults in appearance and are about 2 feet long.



Eastern Indigo Snake



Eastern Indigo Snake



Black Racer

Eastern Indigo Snake

Description

The eastern indigo snake (*Drymarchon corais couperi*) is a large (up to 8 feet in length), black, non-venomous snake. They are thick-bodied, muscular snakes, with a glossy black body that in the sunlight appears iridescent blue. Many specimens of indigo snakes have reddish chins and throats. The belly is cloudy orange to blue-gray.

Female indigo snakes lay their eggs during May or June. The eggs hatch after approximately 60 days. Hatchling indigo snakes are similar to adults in appearance and are about 2 feet long.

Similar Snakes

The black racer is often confused with the indigo snake. Unlike indigo snakes, black racers are slender and have a white chin.

Protection

The Eastern Indigo Snake is listed as Threatened by the U.S. Fish and Wildlife Service (FWS) under 50CFR11-12 and the Florida Fish and Wildlife Conservation Commission (FWC) under Chapter 68-27 F.A.C.

If you see an Indigo Snake in or near the work area:

1. Do not touch, handle, injure, harm harass or kill this species
2. Stop work immediately and allow the snake to move away on its own before resuming work.
3. Contact the Progress Energy Environmental Services Department to report observation:
Wayne Richardson (727) 820-5148
Bill Linton (727) 820-5142
Tonya Corder (727) 820-5607

Penalties for violations of the Endangered Species Act can result in fines of up to \$50,000 and/or up to one year in prison.

Upon locating a dead, injured, or sick eastern indigo snake, please notify the Progress Energy Environmental Services Department. Progress Energy is required to notify the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission within 24 hours.

UMAM Functional Gain vs. Functional Loss Summary

Intercession City – Gifford North 230kV Transmission Line Project

Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A)

	Acres	Functional Loss	Function Gain
Permanent Impact	0.0014	0.0009	
Tree Cutting Impact	5.85	1.16	
Mitigation Bank Credits			1.2
Excess Project Functional Lift			0.04

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Mitigation	
FLUCCs Code: 617		Further Classification:		Impact or Mitigation Site? Mitigation	Assessment Area Size (ac): 1.2000
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Within Reedy Creek basin.					
Assessment Area Description:					
Significant Nearby Features:				Uniqueness (considering the relative rarity in relation to the regional landscape.) None	
Functions:				Mitigation for previous permit/other historic use: No	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)				Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
Additional relevant factors:					
Assessment conducted by: ALD					
Assessment date(s): 18-Feb-2013					

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line		Application Number	Assessment Area Name or Number Mitigation
Impact or Mitigation Mitigation	Assessment conducted by: MTP/LMW		Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with	Without mitigation:	
	With mitigation: Purchase credits in an approved mitigation bank	
	0	10
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with	Without mitigation:	
	With mitigation: Purchase credits in an approved mitigation bank	
	0	10
.500(7)(c) Community Structure w/o pres or current with	Without mitigation:	
	With mitigation: Purchase credits in an approved mitigation bank	
	0	10

Score = sum of above scores/30 (if uplands, divide by 20)	
0.0000	1.0000

Delta = [with-current]:
1.0000

If preservation as mitigation,
Preservation adjustment factor = 0.1000
Adjusted mitigation delta =

If mitigation,
Time lag (t-factor) = 1
Risk factor = 1

For impact assessment areas	
Area Size (ac) =	1.2
FL= delta x acres =	N/A

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	1.0000
FG = RFG x acres =	1.20*

* FG is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland SW-14 Permanent Impact	
FLUCCs Code: 510		Further Classification: Roadside Ditch		Impact or Mitigation Site? Impact	Assessment Area Size (ac): 0.0005
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland SW-14 is part of a series of roadside ditches, stormwater ponds, and swales associated with the Western Beltway (SR 429).					
Assessment Area Description: Roadside stormwater conveyance characterized by a dominance of cattails, primrose willow, and smartweed.					
Significant Nearby Features: Western Beltway (SR 429)			Uniqueness (considering the relative rarity in relation to the regional landscape.) These types of surface water features are common along SR 429.		
Functions: Wading bird foraging and amphibian breeding. Flood conveyance and storage.			Mitigation for previous permit/other historic use: No		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading bird foraging and amphibian breeding.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area): Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.) American coot, Great blue heron, ring neck duck,					
Additional relevant factors: None					
Assessment conducted by: ALD				Assessment date(s): 15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland SW-14 Permanent Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 5 0	Roadside ditch, adjacent Western Beltway (SR 429). Habitat availability outside AA is fair, fails to provide support for some species of wildlife or provides minimal support for many species in Pt. I. Wildlife access to/from AA is substantially limited, by distance or barriers. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 5 0	System will continue to be a stormwater conveyance for runoff from the impervious surface of the Western Beltway (SR 429). Water levels and flow moderately higher/lower than appropriate considering natural variation. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements. Vegetation shows strong signs of hydrologic stress.
.500(7)(c) Community Structure w/o pres or current with 5 0	One transmission structure will be placed within the roadside ditch system. Land Management Practices resulted in partial removal/alteration of natural structures, add some artificial features. Reduction in extent of topo features.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.5000	0.0000

Delta = [with-current]:
-0.5000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.0005
FL= delta x acres =	-0.0003 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: WL-27 Permanent Impact	
FLUCCs Code: 630		Further Classification: Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 0.0009					
Basin/Watershed Name/Number: Reedy Creek Basin		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-27 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This wetland system is characterized by a dominance of cypress and hardwood tree species including sweetbay, blackgum, red maple, loblolly bay, and occasional slash pine. Shrubby species in the understory include wax myrtle, fetterbush, and Carolina willow. Herbaceous species include redroot and Virginia chain-fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-27 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		No			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
None					
Additional relevant factors:					
No					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number WL-27 Permanent Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current 7 with 0	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. Impact for the installation of 2 transmission structures. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Wildlife access to/from AA is substantially limited, by distance or barriers. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current 7 with 0	Hydrologic flow to assessment area may be altered by adjacent SR 429. Impact for the installation of 2 transmission structures. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current 7 with 0	System supports desirable hydrophytic vegetation typical of a mixed forested wetland. Impact for the installation of 2 transmission structures. Majority of plant covers is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.0000

Delta = [with-current]:
-0.7000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.0009
FL= delta x acres =	-0.0006*

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-26 Tree Cutting Impact	
FLUCCs Code: 617		Further Classification: Mixed Wetland Hardwood		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 0.0800					
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-26 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This mixed hardwood forest has sweet bay, red maple, sweetgum, and swampbay. Shrubby species include fatterbush and Carolina willow. Herbaceous species within the forested portion include cinnamon fern and Virginia chain-fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-26 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		None			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
None					
Additional relevant factors:					
None					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-26 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed hardwood forest. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.08
FL= delta x acres =	-0.0160 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-27 Tree Cutting Impact	
FLUCCs Code: 630		Further Classification: Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 1.8000					
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-27 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This wetland system is characterized by a dominance of cypress and hardwood tree species including sweetbay, blackgum, red maple, loblolly bay, and occasional slash pine. Shrubby species in the understory include wax myrtle, fetterbush, and Carolina willow. Herbaceous species include redroot and Virginia chain-fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-27 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		No			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
None					
Additional relevant factors:					
None					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-27 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current 7 with 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current 7 with 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current 7 with 3	System supports desirable hydrophytic vegetation typical of a mixed forested wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	1.8
FL= delta x acres =	-0.3600*

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: WL-28 Tree Cutting Impact	
FLUCCs Code: 641		Further Classification: Freshwater Marsh		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 0.2000					
Basin/Watershed Name/Number: Reedy Creek Basin		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-28 is a small edge of a larger herbaceous wetland ringed with cypress trees. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This shallow marsh is dominated by sand cordgrass, arrowhead, maidencane and blue maidencane. There is a ring of cypress trees at the wetland edge.					
Significant Nearby Features: Western Beltway (SR 429)		Uniqueness (considering the relative rarity in relation to the regional landscape.) Wetland WL-28 is marsh wetland. These types of wetlands are common in the region.			
Functions: Wading bird foraging and amphibian breeding. Flood conveyance and storage.		Mitigation for previous permit/other historic use: No			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading bird foraging and amphibian breeding.		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area): Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.) None					
Additional relevant factors: None					
Assessment conducted by: ALD				Assessment date(s): 15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number WL-28 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees on the wetland edge will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. Trees on the wetland edge will be cut to allow for safe transmission line clearance. Much of the plant community composition is characterized by species tolerant of and associated with moderate water quality degradation/alterations in inundation/saturation (freq, depth, duration). Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 4	System supports desirable hydrophytic vegetation typical of a mixed forested wetland. Trees on the wetland edge will be cut to allow for safe transmission line clearance. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5333

Delta = [with-current]:
-0.1667

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.2
FL= delta x acres =	-0.0333 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-31 Tree Cutting Impact	
FLUCCs Code: 617		Further Classification: Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	Assessment Area Size (ac): 0.3400
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-31 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This mixed hardwood wetland is characterized by a dominance of sweetbay, red maple, and sweetgum. Shrubby species in the understory include fetterbush, buttonbush, and Carolina willow. Herbaceous species include lizard's tail and Virginia chain fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-31 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		No			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
None					
Additional relevant factors:					
None					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-31 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed hardwood forest. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.34
FL= delta x acres =	-0.0680 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-32 Tree Cutting Impact	
FLUCCs Code: 617		Further Classification: Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	Assessment Area Size (ac): 1.2000
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-32 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This mixed hardwood system is characterized by a dominance of sweetbay, red maple, sweetgum, loblolly bay, and swamp bay. Shrubby species include fetterbush, buttonbush, and Carolina willow. Herbaceous species include lizard's tail, cinnamon fern, and Virginia chain-fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features: Western Beltway (SR 429)			Uniqueness (considering the relative rarity in relation to the regional landscape.) Wetland WL-32 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.		
Functions: Wading bird foraging and amphibian breeding. Flood conveyance and storage.			Mitigation for previous permit/other historic use: No		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading bird foraging and amphibian breeding.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area): Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.) None					
Additional relevant factors: None					
Assessment conducted by: ALD				Assessment date(s): 15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-32 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed hardwood forest. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	1.2
FL= delta x acres =	-0.2400*

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-33 Tree Cutting Impact	
FLUCCs Code: 617		Further Classification: Mixed Wetland Hardwoods		Impact or Mitigation Site? Impact	Assessment Area Size (ac): 1.8200
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-33 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This hardwood wetland is characterized by a dominance of sweetbay, red maple, sweetgum, loblolly bay, and swampbay. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features: Western Beltway (SR 429)			Uniqueness (considering the relative rarity in relation to the regional landscape.) Wetland WL-33 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.		
Functions: Wading bird foraging and amphibian breeding. Flood conveyance and storage.			Mitigation for previous permit/other historic use: WL-33 is under a Conservation Easement used as mitigation for Orange Lake Country Club 18 Hole Golf Course ERP 48-00618-S.		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Wading bird foraging and amphibian breeding.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area): Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.) None					
Additional relevant factors: None					
Assessment conducted by: ALD				Assessment date(s): 15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-33 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area is likely altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed forested wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	1.82
FL= delta x acres =	-0.3640 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-34 Tree Cutting Impact	
FLUCCs Code: 617		Further Classification: Mixed Wetland Hardwood		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 0.3900					
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-34 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429)					
Assessment Area Description: This mixed hardwood forest has cypress, sweet bay, red maple, loblolly bay. Herbaceous wetland vegetation includes cinnamon fern and swamp fern. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-34 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		None			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
None					
Additional relevant factors:					
None					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-34 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed hardwood wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.39
FL= delta x acres =	-0.0780 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

PART I - Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name: PEF ICGN Transmission Line		Application Number:		Assessment Area Name or Number: Wetland WL-36 Tree Cutting Impact	
FLUCCs Code: 630		Further Classification: Wetland Forested Mixed		Impact or Mitigation Site? Impact	
Assessment Area Size (ac): 0.0200					
Basin/Watershed Name/Number: Reedy Creek		Affected Waterbody (Class): Class III		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)	
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Wetland WL-36 is a small edge of a larger forested wetland. The wetland edge is adjacent to the Western Beltway (SR 429).					
Assessment Area Description: This mixed hardwood and cypress wetland is characterized by a dominance of cypress, sweetbay, red maple, loblolly bay, and occasional slash pine. Portions of the historic wetland boundary have been removed with the construction of the DOT right-of-way for State Road 429. These areas are frequently mowed and dominated by Bahia grass and various species of rushes and sedges.					
Significant Nearby Features:		Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Western Beltway (SR 429)		Wetland WL-36 is part of a larger mixed hardwood wetland. These types of wetlands are common in the region.			
Functions:		Mitigation for previous permit/other historic use:			
Wading bird foraging and amphibian breeding. Flood conveyance and storage.		No			
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)		Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area):			
Wading bird foraging and amphibian breeding.		Possible foraging habitat for various State listed (SSC) wading birds and Federally listed (FWS) wood stork.			
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)					
Red-shouldered hawk					
Additional relevant factors:					
None					
Assessment conducted by:				Assessment date(s):	
ALD				15-Feb-2013	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name PEF ICGN Transmission Line	Application Number	Assessment Area Name or Number Wetland WL-36 Tree Cutting Impact
Impact or Mitigation Impact	Assessment conducted by: ALD	Assessment Date: 15-Feb-2013

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type if wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(7)(a) Location and Landscape Support w/o pres or current with 7 6	Wetland adjacent to Western Beltway (SR 429). This high speed beltway reduces the wildlife value of wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Habitat availability outside AA optimal for most but not all species of wildlife in Pt. I. Cover of invasive/exotic spp. is minimal, minimal adverse effect on functions of AA. Hydrologic/flow impediments limit AA from providing benefits downstream, such benefits provided rarely or at greatly reduced levels compared to optimal conditions. Discharges from AA provide minimal benefits to downstream areas, which could be altered if quality/quantity were altered. Area Land Uses have significant adverse impacts on wildlife.
.500(7)(b) Water Environment (n/a for uplands) w/o pres or current with 7 6	Hydrologic flow to assessment area may be altered by adjacent SR 429. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line clearance. Direct observation of standing water indicates moderate water quality degradation such as discoloration, turbidity, or oil sheen. Vegetation shows some signs of hydrologic stress. Presence/evidence of use by animal species w/specific hydrologic requirements is much less than expected/more generalized requirements.
.500(7)(c) Community Structure w/o pres or current with 7 3	System supports desirable hydrophytic vegetation typical of a mixed forested wetland. No permanent impact to wetland is proposed. Trees within the wetland assessment area will be cut to allow for safe transmission line. Wetland will remain herbaceous. Majority of plant cover is desirable plant species in all strata. Minimal cover by invasive/exotic plant species. Evidence of near normal regeneration/recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	
0.7000	0.5000

Delta = [with-current]:
-0.2000

If preservation as mitigation,	
Preservation adjustment factor =	N/A
Adjusted mitigation delta =	N/A

If mitigation,	
Time lag (t-factor) =	N/A
Risk factor =	N/A

For impact assessment areas	
Area Size (ac) =	0.02
FL= delta x acres =	-0.0040 *

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	N/A

* FL is rounded to 2 decimal places. Intermediate calculations are not rounded, but are displayed to 4 decimal places.

**INTERCESSION CITY - GIFFORD NORTH 230kV TRANSMISSION LINE PROJECT
SEGMENT OF THE TLSA CERTIFIED LAKE AGNES – GIFFORD 230kV TRANSMISSION
LINE (TA 07-14A)
ORANGE AND OSCEOLA COUNTIES, FLORIDA
MITIGATION PLAN**

1.0 PROJECT LOCATION

The Intercession City - Gifford North 230kV Transmission Line Project (8.3 miles ±) is located in Sections 21 and 28, Township 24 South, and Range 27 East and Sections 4, 9, 16, 21, 22, 26, and 27, Township 25 South, Range 27 East (Quad Map). More specifically, the project originates just north of Interstate 4 (I-4) and east of State Road 429 (SR429) at proposed transmission structure ICG-39. The proposed line crosses to the west of SR429 and extends north along SR429 to the new Gifford Substation 0.75 mile north of Western Way to proposed transmission structure ICG-121 (Location Map).

2.0 PROJECT DESCRIPTION

Florida Power Corporation d/b/a Progress Energy Florida, Inc. is proposing to install or add a circuit on 83 transmission structures making up the new Intercession City - Gifford North 230kV Transmission Line. The Intercession City-Gifford North 230kV Transmission Line is a segment of the Florida Department of Environmental Protection (FDEP) TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A). This project is the Certified Facility detailed in Conditions of Certification (TA 07-14A) Section A: General Conditions I. Scope B. (2): a single circuit 230kV transmission line extending from the approximate area of the I-4/SR429 intersection to PEF's existing Gifford Substation in Orange County. The poles will be concrete or steel monopole structures that have a long life span. A total of 11 wetlands and 18 surface waters have been identified in the right-of-way. A total of three (3) transmission structures will be placed in wetland areas for a total fill discharge of 0.0014 acre. The discharge is for the installation of the structures. No permanent access roads or fill pads are proposed. No additional discharge of dredged or permanent fill material is proposed; therefore, the project will have a minimal adverse effect on wetlands. Tree clearing will be conducted along the right-of-way for this new transmission corridor. The tree clearing is necessary to meet safety clearance requirements for the transmission corridor. A total of 5.85 acres of forested wetland will be converted to herbaceous wetlands to create a safe transmission corridor.

3.0 AVOIDANCE AND MINIMIZATION

Overall, the applicant has designed the project to have a minimal adverse effect on the wetland resources. The proposed project will install new steel and concrete monopoles adjacent to road right-of-way and within an existing transmission corridor to minimize wetland impacts. Only 3 poles will be installed in wetlands. The structures will be accessed by the installation of temporary construction matting. Temporary construction matting will be installed to allow the contractor to mobilize and locate

the equipment to set the foundation section of the pole. All drilling fluids used will be collected and reused or properly disposed offsite. No drilling fluid or side cast material will be allowed to enter wetlands. Any excess material resulting from drilling the foundation will be removed from the wetland area. Once construction is complete, the temporary matting will be removed. Detailed wetland descriptions, the number of structures to impact each wetland, and the amount of impact to each wetland are provided in Table 1. Sedimentation and erosion control will be installed and maintained during construction.

4.0 MITIGATION

A Unified Mitigation Assessment Method (UMAM) analysis was conducted for the project (see attached UMAM sheets). A UMAM functional loss score was calculated for each tree clearing wetland impact (clearing in forested wetlands) and each permanent wetland impact (utility structure installation). The total UMAM functional loss score is -1.16 for the 5.85 acres of tree clearing impacts and 0.0014-acre of permanent impacts. To compensate for the wetland loss, Progress Energy Florida is proposing to purchase credits in the FDEP-approved Southport Ranch Mitigation Bank. The Southport Ranch Mitigation Bank is a FDEP and USACE-approved mitigation bank and has the correct type and quantity of credits available to offset the project impacts. The UMAM functional gain from purchasing credits is 1.2. The functional gain of 1.2 compensates for the loss of -1.16. A summary of the UMAM analysis is included in the table below.

UMAM Functional Gain vs. Functional Loss Summary

Intercession City – Gifford North 230kV Transmission Line Project
Segment of the TLSA Certified Lake Agnes-Gifford 230kV Transmission Line (TA 07-14A)

	Acres	Functional Loss	Function Gain
Permanent Impact	0.0014	0.0009	
Tree Cutting Impact	5.85	1.16	
Mitigation Bank Credits			1.2
Excess Project Functional Lift			0.04

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North 230KV City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 617-UP
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes ☐ No ☒	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____		
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

 Sampling Point: **617-UP**

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
			_____ = Total Cover	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling Stratum (Plot size: <u>30-feet</u>)																				
1. <u>None</u>		☐																		
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
			_____ = Total Cover																	
Shrub Stratum (Plot size: <u>30-feet</u>)																				
1. <u>None</u>		☐		Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
			_____ = Total Cover																	
Herb Stratum (Plot size: <u>30-feet</u>)																				
1. <u>Paspalum notatum</u>	<u>95</u>	☒	FACU	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.																
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
8. _____		☐																		
9. _____		☐																		
10. _____		☐																		
11. _____		☐																		
12. _____		☐																		
		95 = Total Cover																		
Woody Vine Stratum (Plot size: <u>30-feet</u>)																				
1. <u>None</u>		☐		Hydrophytic Vegetation Present? Yes ☐ No ☒																
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
			_____ = Total Cover																	

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 617-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12								Roadside Fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Mucky Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (LRR T, U)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 617-WL
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFF

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☒ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☒ No ☐ Depth (inches): <u>3-inches</u>	Wetland Hydrology Present? Yes ☒ No ☐	
Water Table Present?	Yes ☒ No ☐ Depth (inches): <u>3-inches</u>		
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

 Sampling Point: **617-WL**

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <i>Nyssa sylvatica</i>	10	☐	OBL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)														
2. <i>Acer rubrum</i>	15	☐	OBL															
3. <i>Gordonia lasianthus</i>	15	☐	FACW															
4. <i>Persea palustris</i>	15	☐	OBL															
5. <i>Liquidambar styraciflua</i>	15	☐	FAC+															
6. <i>Magnolia virginiana</i>	15	☐	FACW															
7. _____	_____	☐	_____															
85 = Total Cover																		
Sapling Stratum (Plot size: <u>30-feet</u>)																		
1. <i>Liquidambar styraciflua</i>	25	☐	FAC+	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> </table> Prevalence Index = B/A = _____	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____ (A)	_____ (B)
Total % Cover of:	Multiply by:																	
OBL species _____	x 1 = _____																	
FACW species _____	x 2 = _____																	
FAC species _____	x 3 = _____																	
FACU species _____	x 4 = _____																	
UPL species _____	x 5 = _____																	
Column Totals: _____ (A)	_____ (B)																	
2. <i>Acer rubrum</i>	25	☐	OBL															
3. _____	_____	☐	_____															
4. _____	_____	☐	_____															
5. _____	_____	☐	_____															
6. _____	_____	☐	_____															
7. _____	_____	☐	_____															
50 = Total Cover																		
Shrub Stratum (Plot size: <u>30-feet</u>)																		
1. <i>Lyonia lucida</i>	15	☐	FACW	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <i>Cephalanthus occidentalis</i>	5	☐	OBL															
3. <i>Salix caroliniana</i>	10	☐	OBL															
4. _____	_____	☐	_____															
5. _____	_____	☐	_____															
6. _____	_____	☐	_____															
7. _____	_____	☐	_____															
30 = Total Cover																		
Herb Stratum (Plot size: <u>30-feet</u>)																		
1. <i>Saururus cernuus</i>	10	☐	OBL	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.														
2. <i>Osmunda cinnamomea</i>	15	☐	OBL															
3. <i>Woodwardia virginica</i>	15	☐	OBL															
4. _____	_____	☐	_____															
5. _____	_____	☐	_____															
6. _____	_____	☐	_____															
7. _____	_____	☐	_____															
8. _____	_____	☐	_____															
9. _____	_____	☐	_____															
10. _____	_____	☐	_____															
11. _____	_____	☐	_____															
12. _____	_____	☐	_____															
40 = Total Cover																		
Woody Vine Stratum (Plot size: <u>30-feet</u>)																		
1. <i>Smilax laurifolia</i>	10	☐	FACW	Hydrophytic Vegetation Present? Yes ☒ No ☐														
2. _____	_____	☐	_____															
3. _____	_____	☐	_____															
4. _____	_____	☐	_____															
5. _____	_____	☐	_____															
10 = Total Cover																		

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 617-WL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	2.5/1 YR 7.5	100					Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☒ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
 (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North 230kV City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 630-UP
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes ☐ No ☒	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____		
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: 630-UP

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: <u>30-feet</u>)				
1. <u>Paspalum notatum</u>	<u>95</u>	☒	<u>FACU</u>	
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
8. _____		☐		
9. _____		☐		
10. _____		☐		
11. _____		☐		
12. _____		☐		
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
_____ = Total Cover				
Remarks: (If observed, list morphological adaptations below). 				Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: 630-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12								Roadside Fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
 (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 630-WL
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFF

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☒ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☒ No ☐ Depth (inches): <u>3-inches</u>	Wetland Hydrology Present? Yes ☒ No ☐	
Water Table Present?	Yes ☒ No ☐ Depth (inches): <u>3-inches</u>		
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

Sampling Point: 630-WL

Tree Stratum (Plot size: 30-feet)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>20</u>	☐	<u>OBL</u>
2. <u>Gordonia lasianthus</u>	<u>15</u>	☐	<u>FACW</u>
3. <u>Pinus elliotii</u>	<u>15</u>	☐	<u>FACW</u>
4. <u>Liquidambar styraciflua</u>	<u>15</u>	☐	<u>FAC+</u>
5. <u>Taxodium ascendens</u>	<u>15</u>	☐	<u>OBL</u>
6. _____	_____	☐	_____
7. _____	_____	☐	_____

80 = Total Cover

Sapling Stratum (Plot size: 30-feet)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Liquidambar styraciflua</u>	<u>10</u>	☐	<u>FAC+</u>
2. <u>Acer rubrum</u>	<u>10</u>	☐	<u>OBL</u>
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____

20 = Total Cover

Shrub Stratum (Plot size: 30-feet)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lyonia lucida</u>	<u>15</u>	☐	<u>FACW</u>
2. <u>Cephalanthus occidentalis</u>	<u>5</u>	☐	<u>OBL</u>
3. <u>Myrica cerifera</u>	<u>10</u>	☐	<u>FAC+</u>
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____

30 = Total Cover

Herb Stratum (Plot size: 30-feet)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lachnanthes caroliniana</u>	<u>20</u>	☐	<u>OBL</u>
2. <u>Osmunda cinnamomea</u>	<u>15</u>	☐	<u>OBL</u>
3. <u>Woodwardia virginica</u>	<u>15</u>	☐	<u>OBL</u>
4. _____	_____	☐	_____
5. _____	_____	☐	_____
6. _____	_____	☐	_____
7. _____	_____	☐	_____
8. _____	_____	☐	_____
9. _____	_____	☐	_____
10. _____	_____	☐	_____
11. _____	_____	☐	_____
12. _____	_____	☐	_____

45 = Total Cover

Woody Vine Stratum (Plot size: 30-feet)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Smilax laurifolia</u>	<u>10</u>	☐	<u>FACW</u>
2. _____	_____	☐	_____
3. _____	_____	☐	_____
4. _____	_____	☐	_____
5. _____	_____	☐	_____
	<u>10</u>		= Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
☐ Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present?

Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 630-WL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	2.5/1 YR 7.5	100					Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☒ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
 (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North 230kV City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 641-UP
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks:		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒ (includes capillary fringe)	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: **641-UP**

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: <u>30-feet</u>)				
1. <u>Paspalum notatum</u>	<u>95</u>	☒	<u>FACU</u>	
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
8. _____		☐		
9. _____		☐		
10. _____		☐		
11. _____		☐		
12. _____		☐		
		<u>95</u> = Total Cover		
Woody Vine Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
		_____ = Total Cover		
Remarks: (If observed, list morphological adaptations below).				

Hydrophytic Vegetation Present? Yes ☐ No ☒

Sampling Point: 641-UP

Sampling Point: 641-UP

Atlantic and Gulf Coastal Plain Region – Interim Version

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 641-WL
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland?	Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐		
Wetland Hydrology Present?	Yes ☒ No ☐		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☒ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes ☒ No ☐	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____		
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): <u>surface</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: 641-WL

Atlantic and Gulf Coastal Plain Region – Interim Version

SOIL

Sampling Point: 641-WL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	2.5/1 YR 7.5	100					Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☒ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Mucky Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☒ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (LRR T, U)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North 230kV City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 510-UP
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		
Remarks:			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes ☐ No ☒	
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____		
Saturation Present? (includes capillary fringe)	Yes ☐ No ☒ Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

 Sampling Point: **510-UP**

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
		_____ = Total Cover		Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: <u>30-feet</u>)				
1. <u>Paspalum notatum</u>	<u>95</u>	☒	<u>FACU</u>	
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
8. _____		☐		
9. _____		☐		
10. _____		☐		
11. _____		☐		
12. _____		☐		
		<u>95</u> = Total Cover		
Woody Vine Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
		_____ = Total Cover		
Hydrophytic Vegetation Present? Yes ☐ No ☒				
Remarks: (If observed, list morphological adaptations below). 				

SOIL

Sampling Point: 510-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12								Roadside Fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Mucky Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (LRR T, U)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 510-WL
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFF

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks:		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☒ No ☐
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☒ No ☐	Depth (inches): <u>surface</u> (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: 510-WL

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
		_____ = Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
Sapling Stratum (Plot size: <u>30-feet</u>)																				
1. <u>None</u>		☐																		
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
		_____ = Total Cover																		
Shrub Stratum (Plot size: <u>30-feet</u>)																				
1. <u>None</u>		☐																		
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
		_____ = Total Cover																		
Herb Stratum (Plot size: <u>30-feet</u>)																				
1. <u>Cyperus spp.</u>	20	☐	OBL																	
2. <u>Carex spp.</u>	20	☐	OBL																	
3. <u>Centella asiatica</u>	30	☐	OBL																	
4. _____		☐																		
5. _____		☐																		
6. _____		☐																		
7. _____		☐																		
8. _____		☐																		
9. _____		☐																		
10. _____		☐																		
11. _____		☐																		
12. _____		☐																		
		70 = Total Cover																		
Woody Vine Stratum (Plot size: <u>30-feet</u>)																				
1. _____		☐																		
2. _____		☐																		
3. _____		☐																		
4. _____		☐																		
5. _____		☐																		
		_____ = Total Cover																		
Remarks: (If observed, list morphological adaptations below).																				

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: 510-WL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	2.5/1 YR 7.5	100					Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☒ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North 230kV City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 540-UP
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? No Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	
Remarks:		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
		☐ FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes ☐ No ☒
Surface Water Present? Yes ☐ No ☒	Depth (inches): _____	
Water Table Present? Yes ☐ No ☒	Depth (inches): _____	
Saturation Present? Yes ☐ No ☒	Depth (inches): _____	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: 540-UP

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>		☐		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
_____ = Total Cover				Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: <u>30-feet</u>)				
1. <u>Paspalum notatum</u>	<u>95</u>	☒	<u>FACU</u>	
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
6. _____		☐		
7. _____		☐		
8. _____		☐		
9. _____		☐		
10. _____		☐		
11. _____		☐		
12. _____		☐		
<u>95</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30-feet</u>)				
1. <u>None</u>		☐		
2. _____		☐		
3. _____		☐		
4. _____		☐		
5. _____		☐		
_____ = Total Cover				
Remarks: (If observed, list morphological adaptations below).				

SOIL

Sampling Point: 540-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12								Roadside Fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Intercession City-Gifford North City/County: Orange and Osceola Sampling Date: 2/15/2013
 Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: 540-WL
 Investigator(s): ALD Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? NO Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	
Remarks:		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☒ Surface Water (A1)	☒ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Sparsely Vegetated Concave Surface (B8)
☒ Saturation (A3)	☐ Marl Deposits (B15) (LRR U)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
		☐ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Yes ☐ No ☒ Depth (inches): _____	Wetland Hydrology Present? Yes ☒ No ☐
Water Table Present?	Yes ☐ No ☒ Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ☒ No ☐ Depth (inches): <u>surface</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: 540-WL

Tree Stratum (Plot size: <u>30-feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. None		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
_____ = Total Cover			
Sapling Stratum (Plot size: <u>30-feet</u>)			
1. None		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
_____ = Total Cover			
Shrub Stratum (Plot size: <u>30-feet</u>)			
1. <i>Salix caroliniana</i>	20	☐	FACW
2. <i>Myrica cerifera</i>	10	☐	FAC+
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
_____ = Total Cover			
Herb Stratum (Plot size: <u>30-feet</u>)			
1. <i>Typha</i> sp.	60	☐	OBL
2. <i>Pontederia cordata</i>	15	☐	OBL
3.		☐	
4.		☐	
5.		☐	
6.		☐	
7.		☐	
8.		☐	
9.		☐	
10.		☐	
11.		☐	
12.		☐	
_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30-feet</u>)			
1. None		☐	
2.		☐	
3.		☐	
4.		☐	
5.		☐	
_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 540-WL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

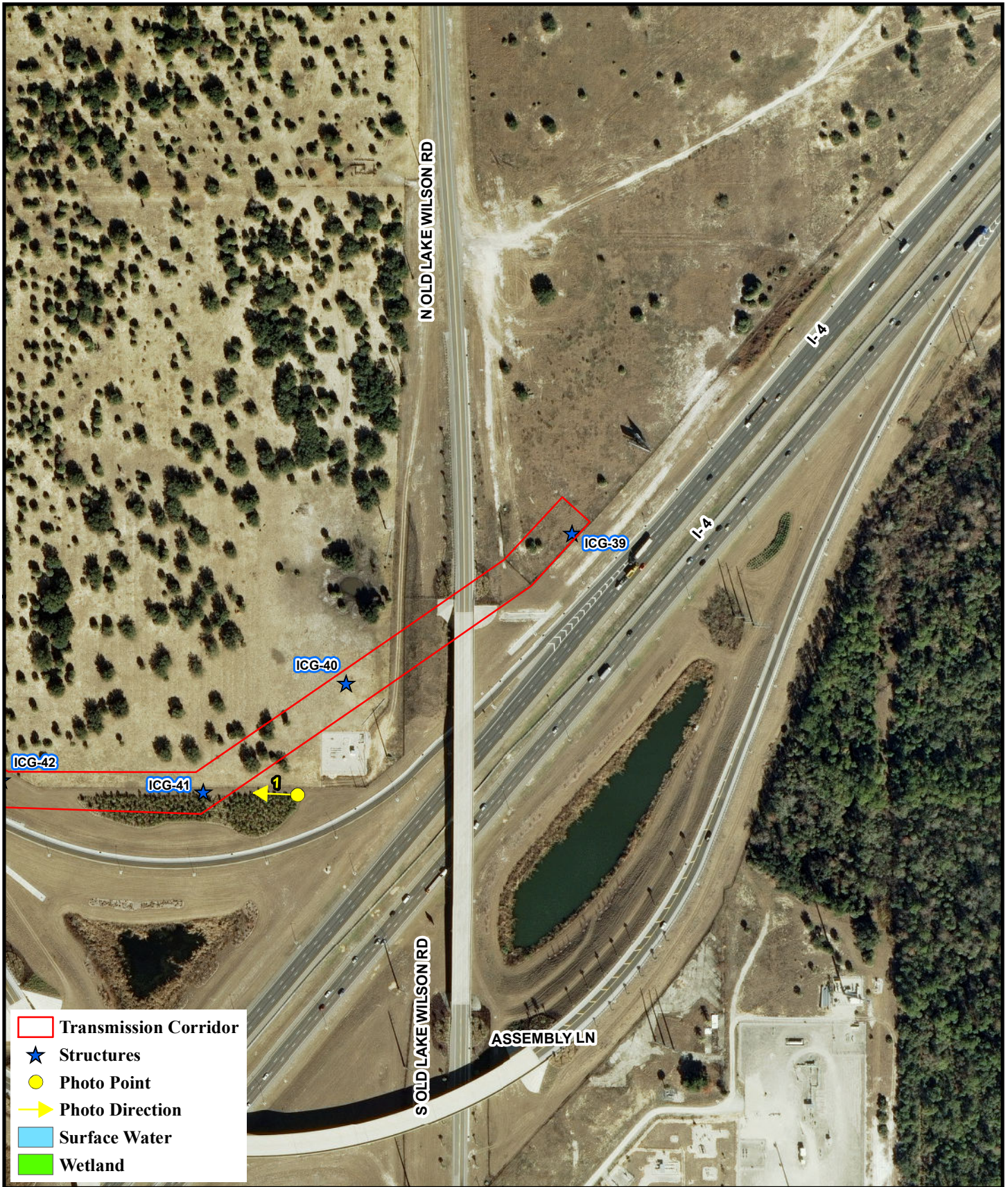
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Depth (inches): _____

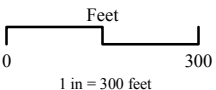
Hydric Soil Present? Yes ☒ No ☐

Remarks:

Inundated at time of survey.



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

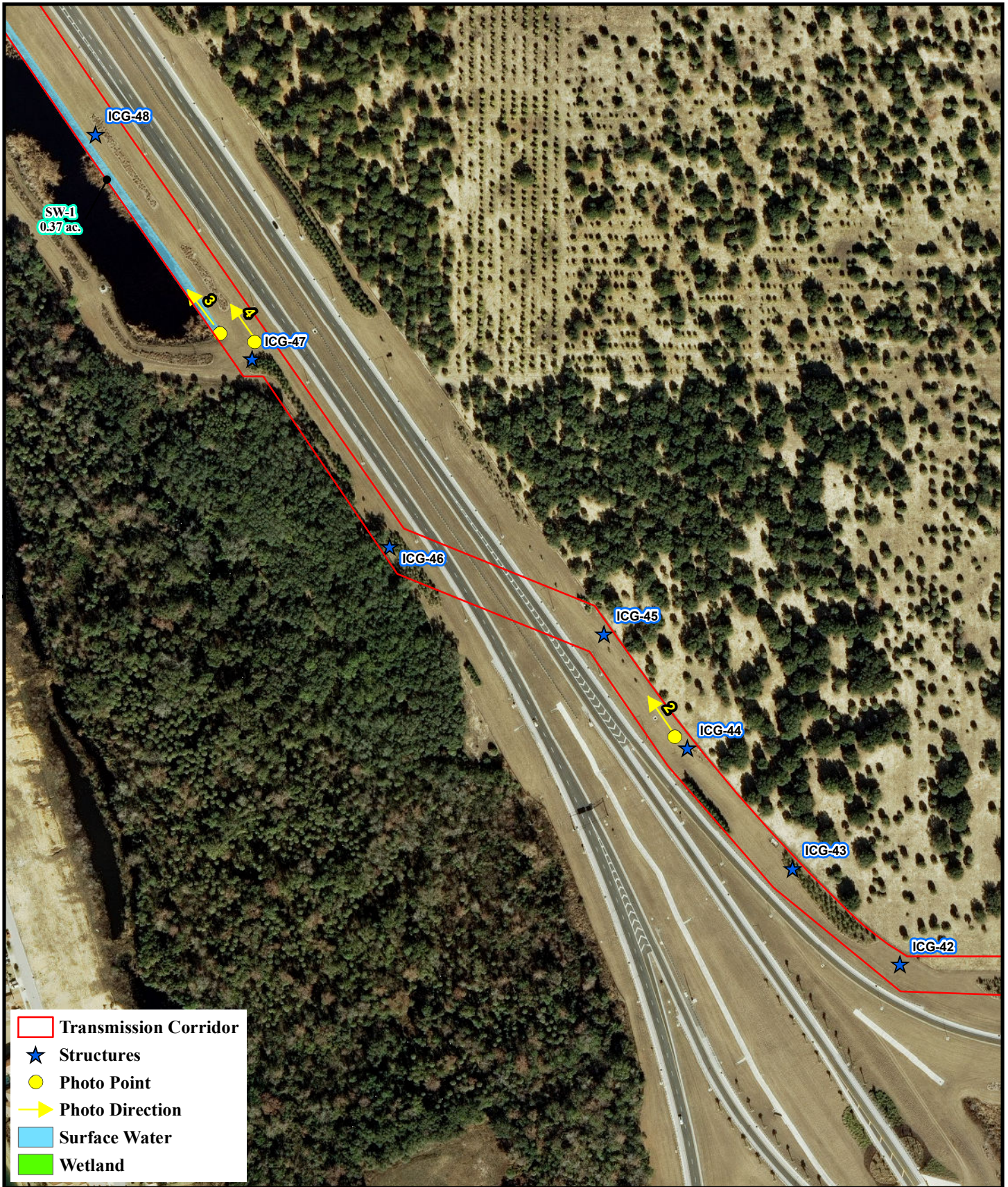
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
1 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet

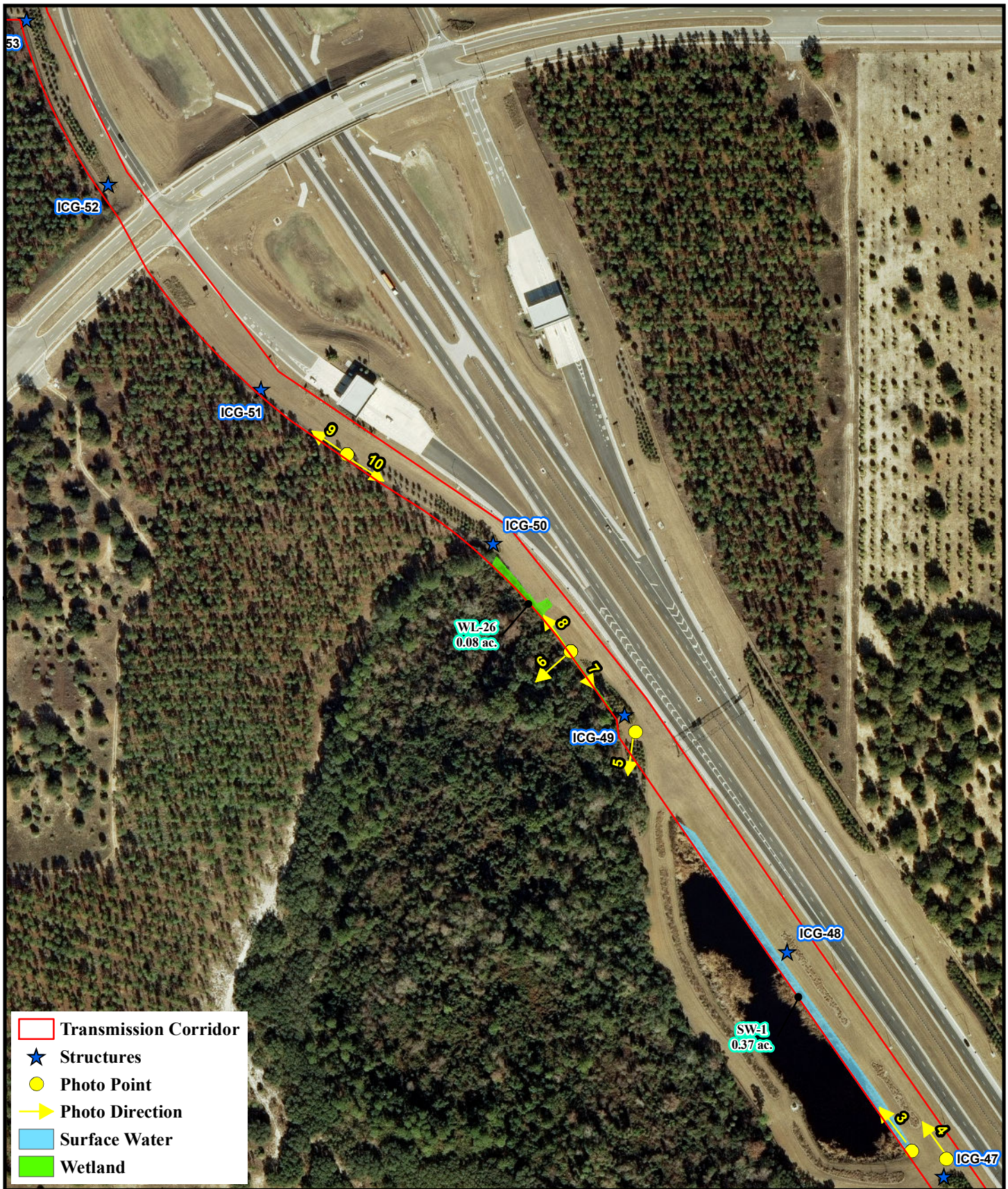


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

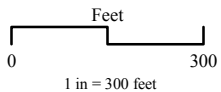
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
2 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

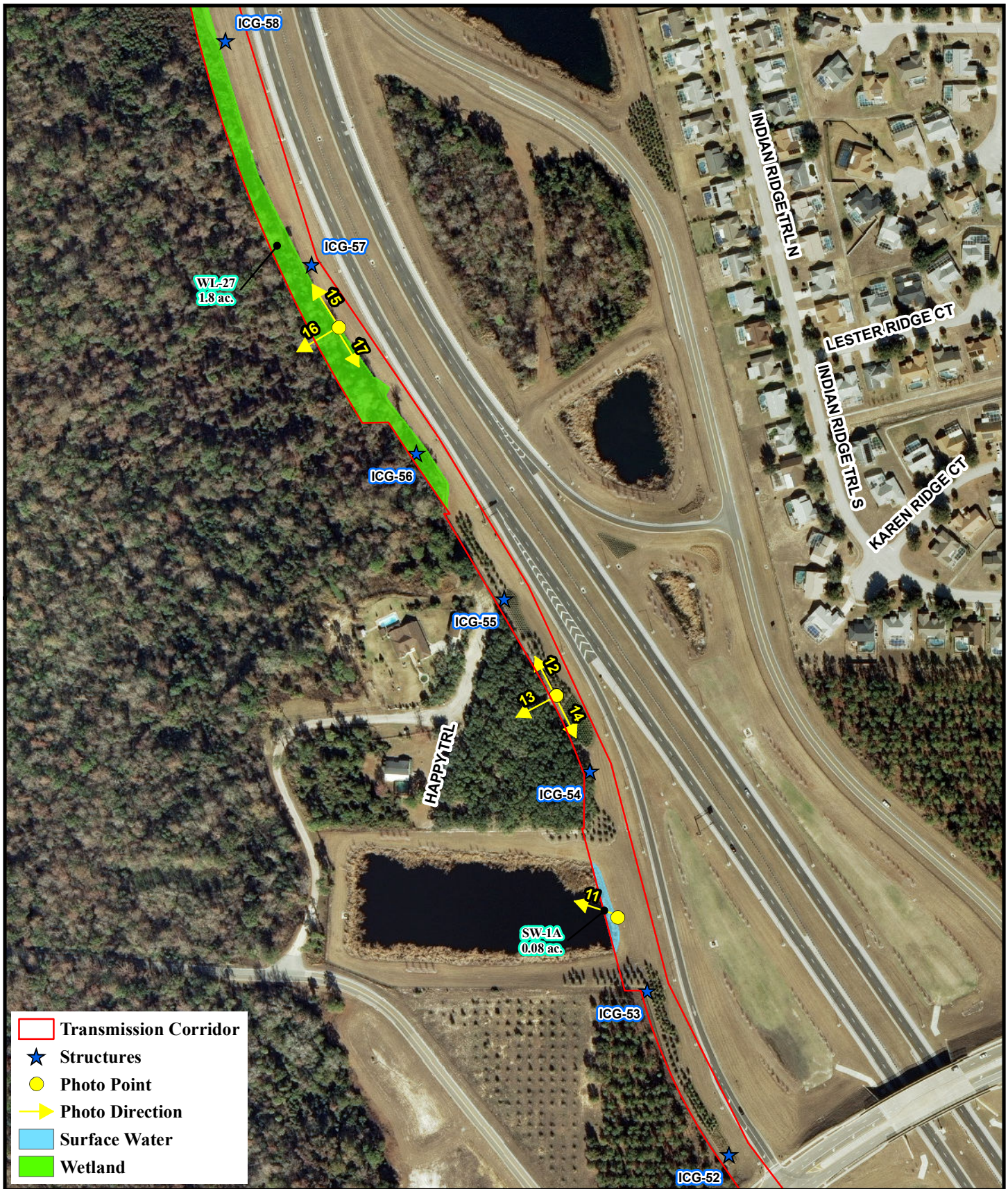


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
3 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

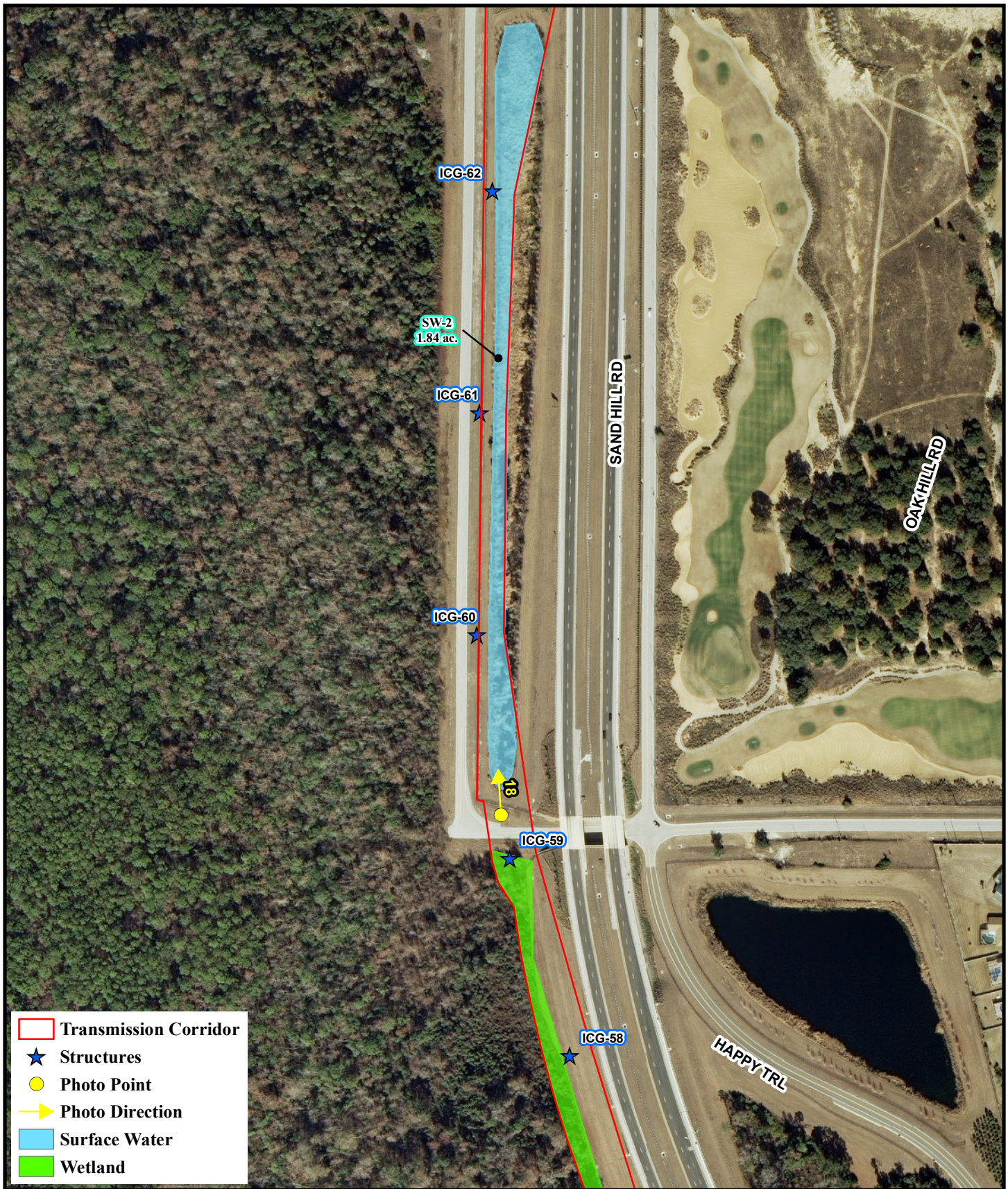
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
4 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet

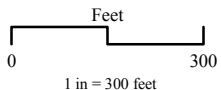
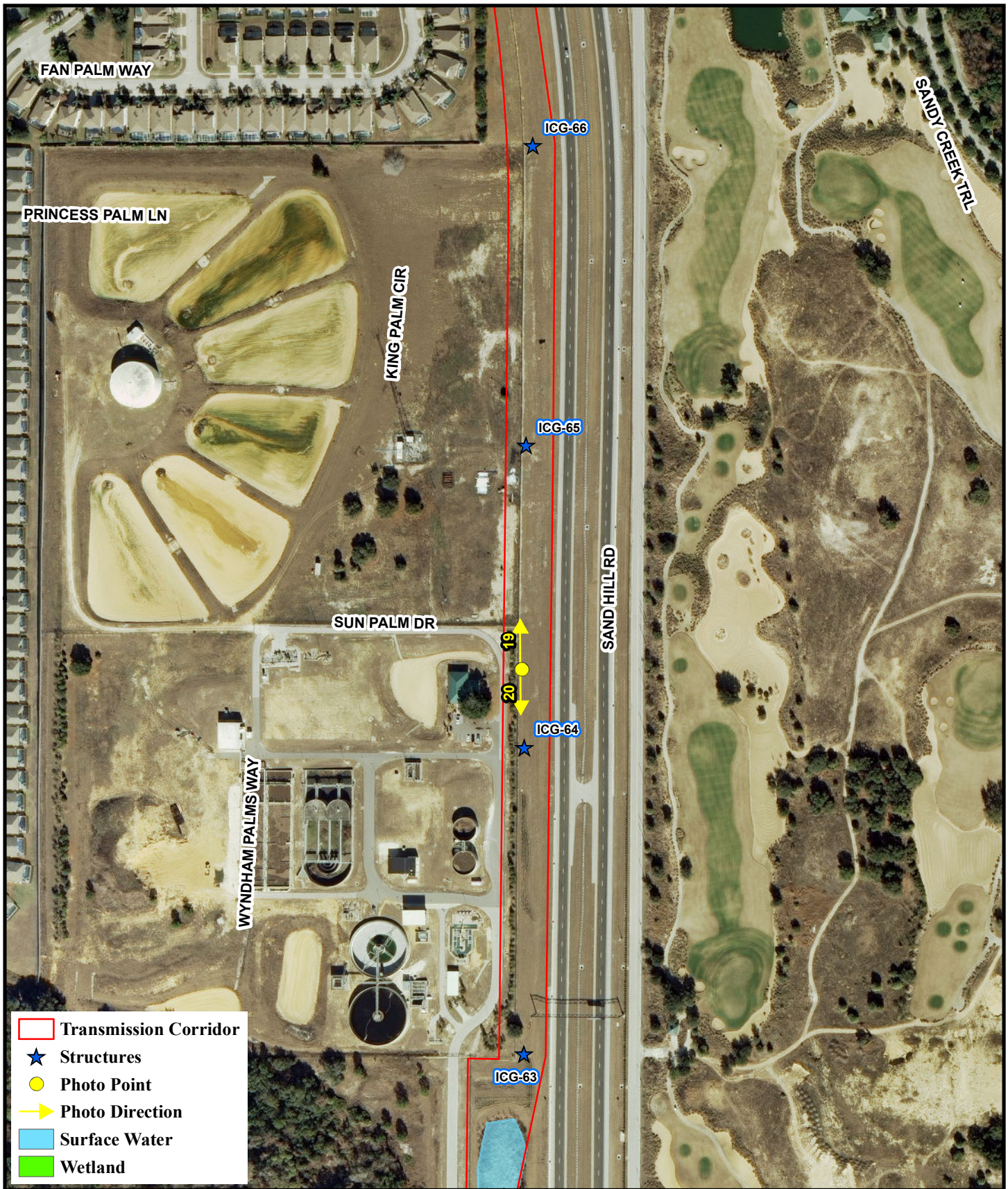


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
5 of 18**

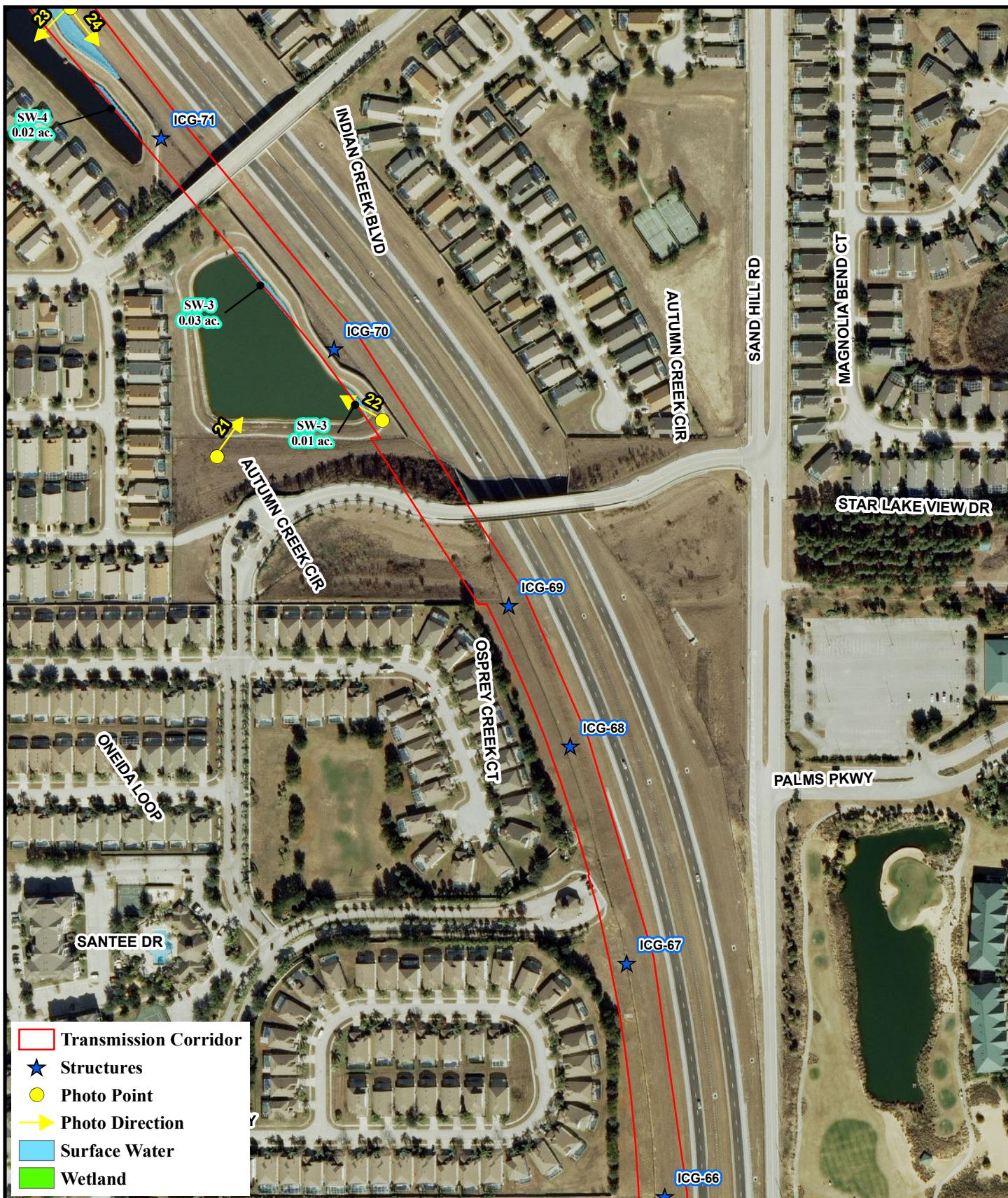


**INTERCESSION CITY-GIFFORD
230KV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
6 of 18**



Feet
0 300
1 in = 300 feet

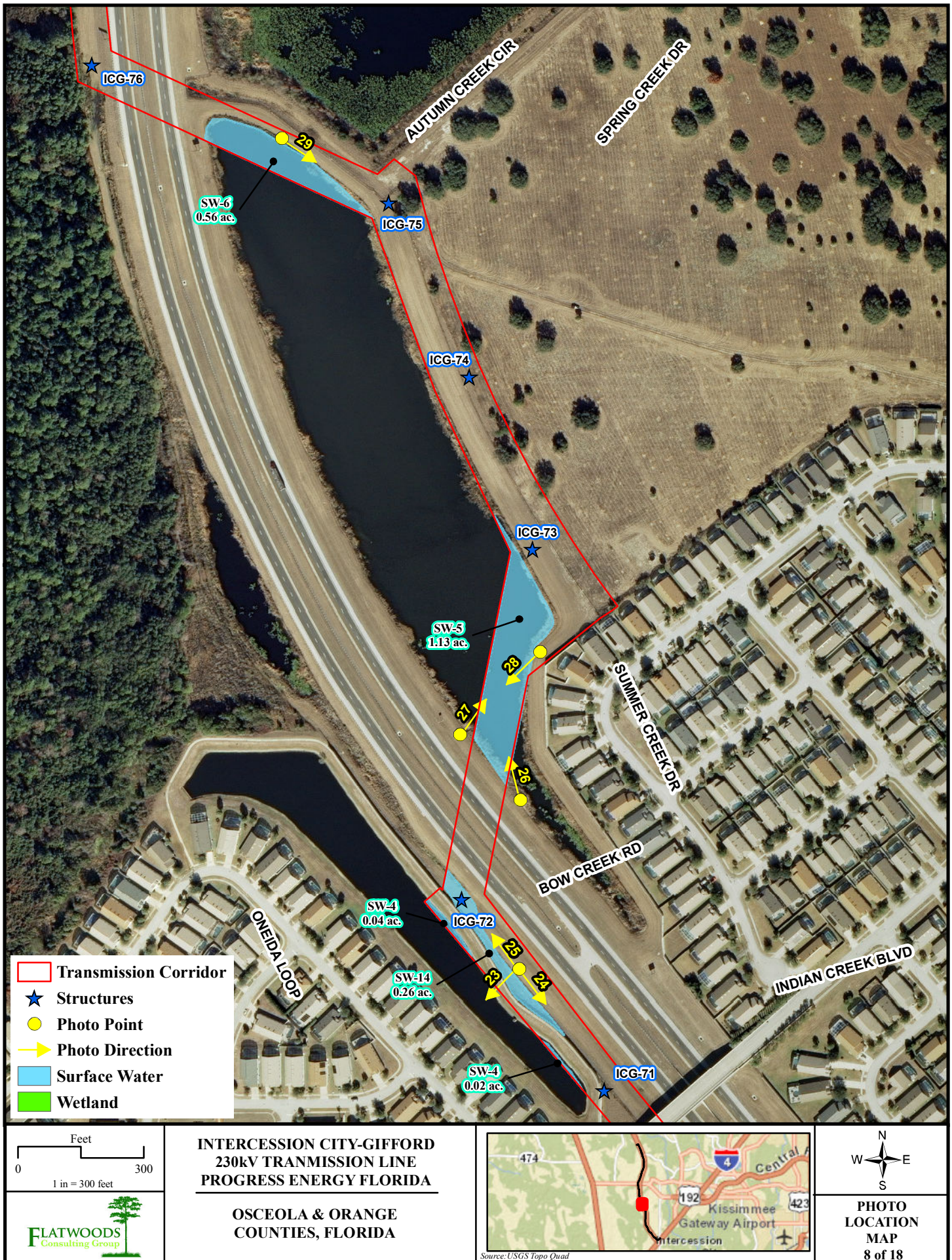


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

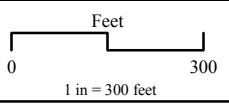


**PHOTO
LOCATION
MAP
7 of 18**





- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

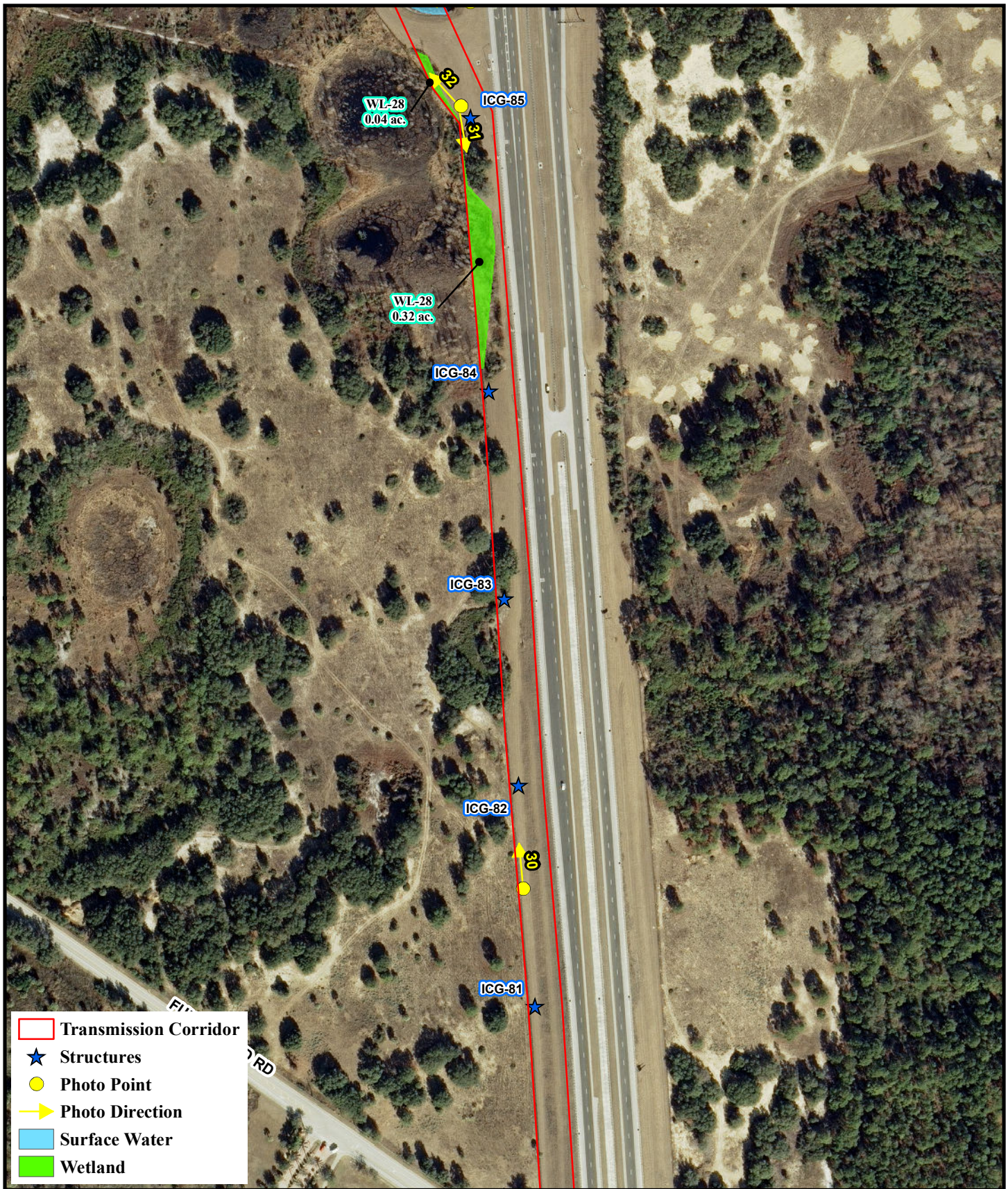
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



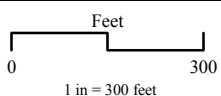
Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
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- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

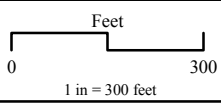
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
10 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
11 of 18**



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

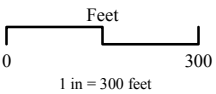
**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
12 of 18**



- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
13 of 18**

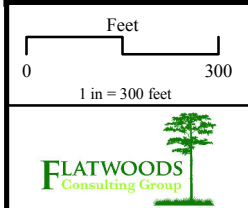
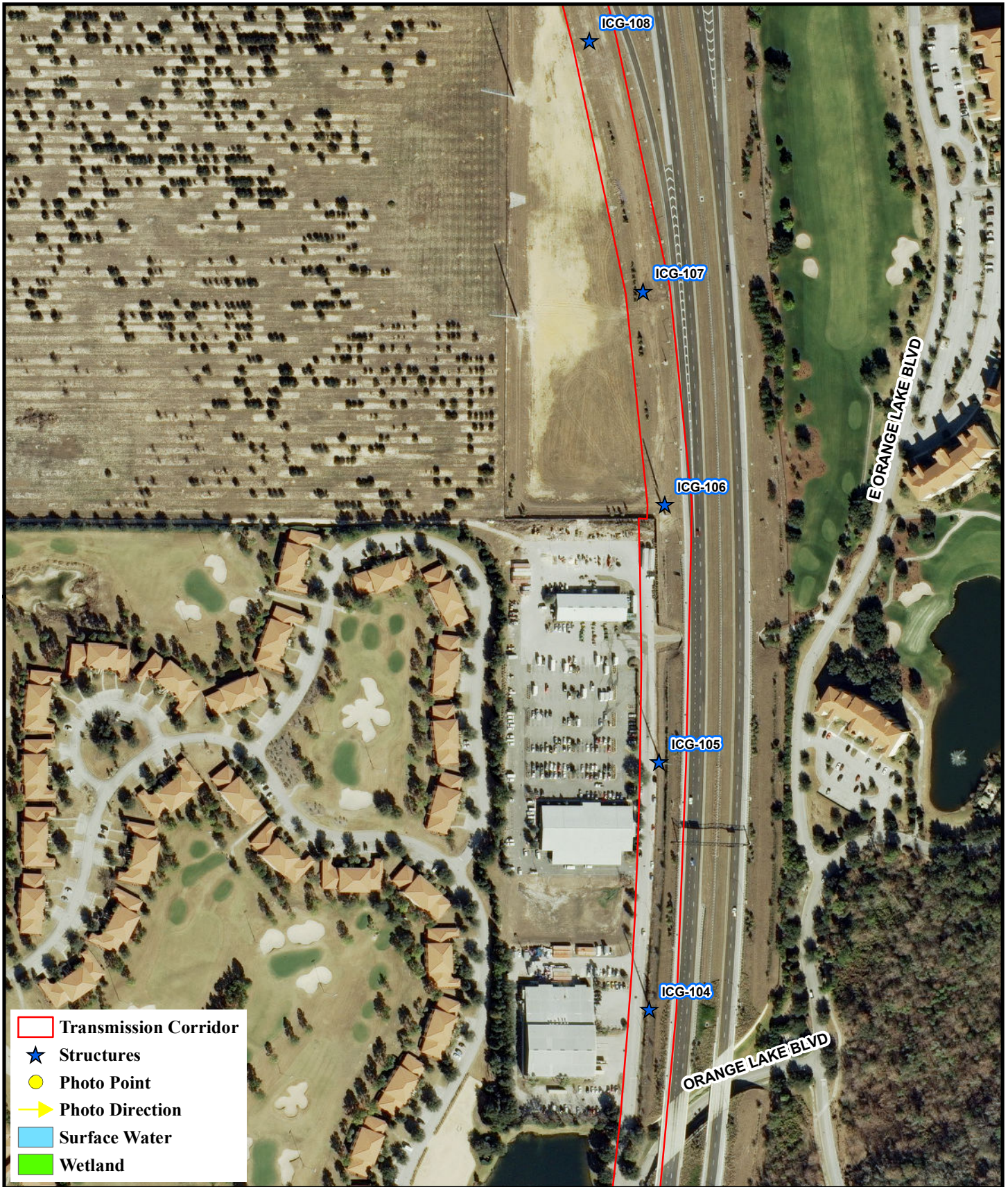


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

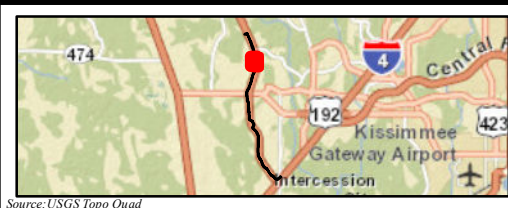


**PHOTO
LOCATION
MAP
14 of 18**

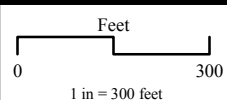
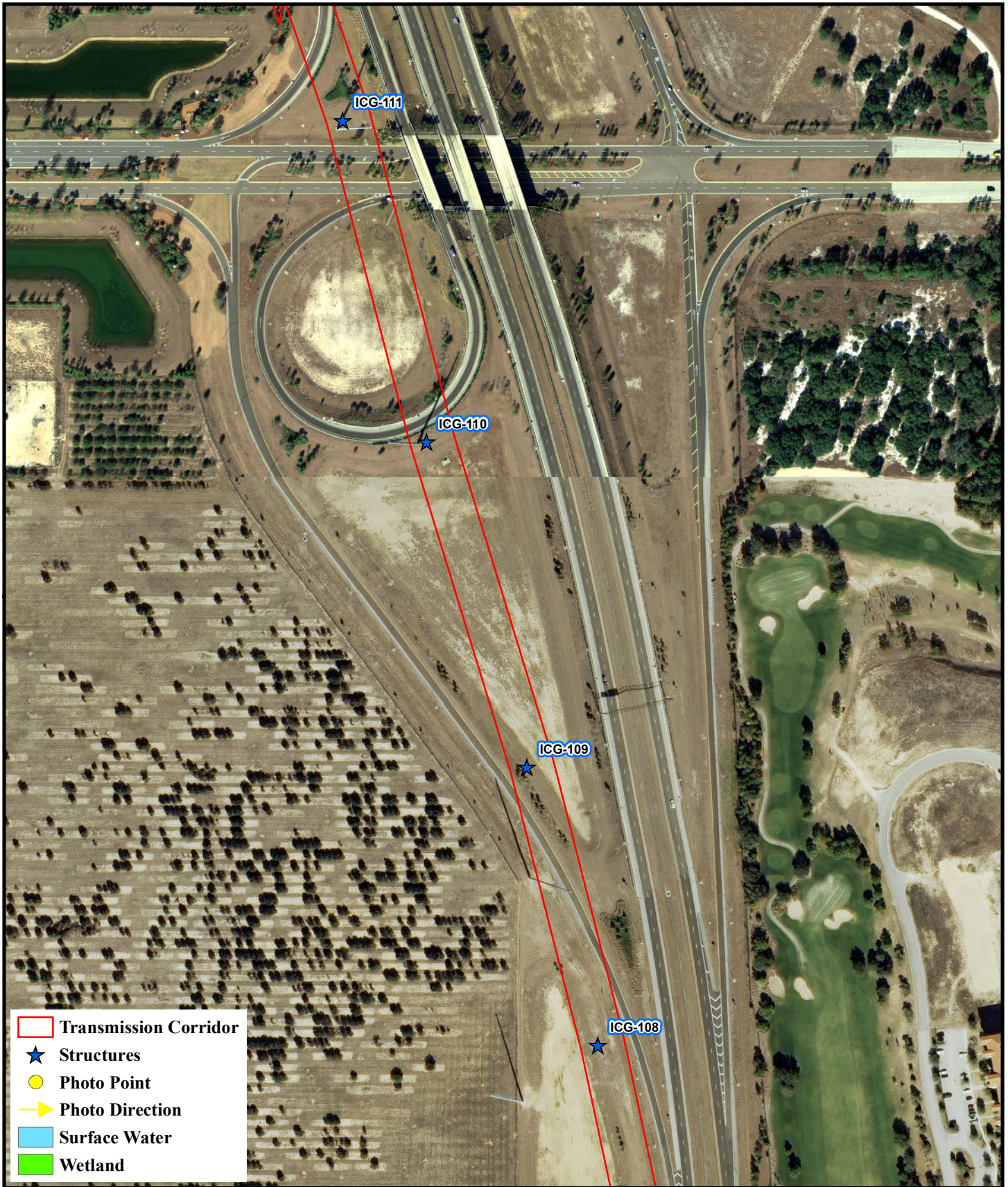


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**

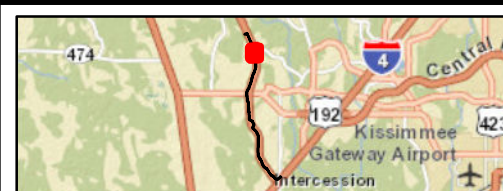


**PHOTO
LOCATION
MAP**
15 of 18

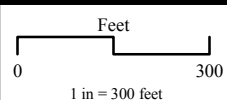


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
16 of 18**

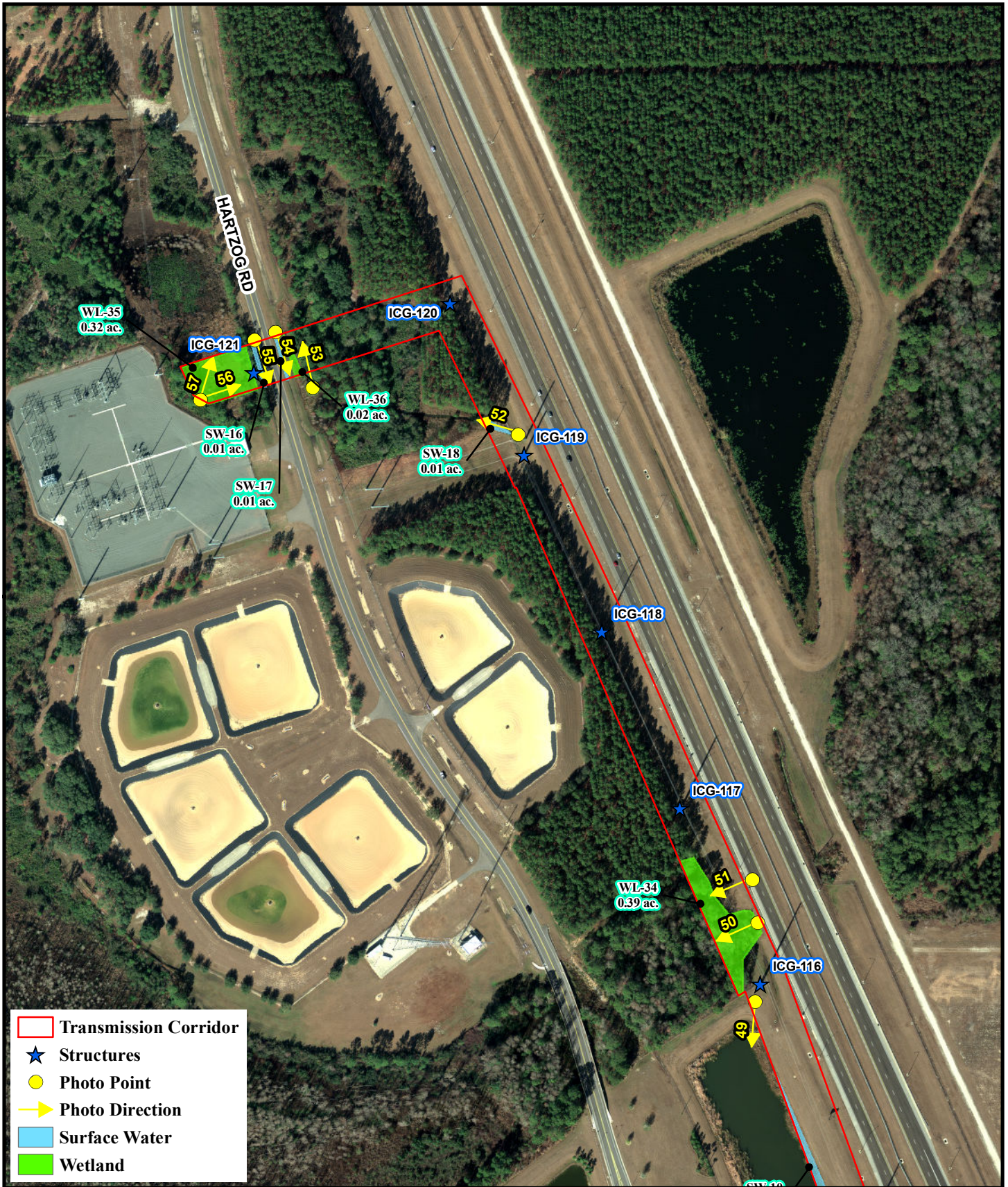


**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



**PHOTO
LOCATION
MAP
17 of 18**



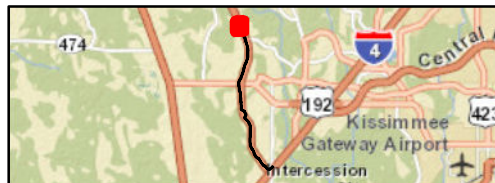
- Transmission Corridor
- ★ Structures
- Photo Point
- ➔ Photo Direction
- Surface Water
- Wetland

Feet
0 300
1 in = 300 feet



**INTERCESSION CITY-GIFFORD
230kV TRANSMISSION LINE
PROGRESS ENERGY FLORIDA**

**OSCEOLA & ORANGE
COUNTIES, FLORIDA**



Source: USGS Topo Quad



**PHOTO
LOCATION
MAP
18 of 18**



Photo Point 1 - Project right-of-way near proposed structure ICG-41. South of the fence is FDOT road right-of-way and north of the fence is cattle pasture.



Photo Point 2 - Project right-of-way near proposed structure ICG-44. FDOT SR429 road right-of-way.



Photo Point 3 - Surface Water SW-1, Stormwater retention pond, view to the north.



Photo Point 4 - View of the SR429 right-of-way from proposed structure ICG-47 looking north.



Photo Point 5 - FDOT SR429 landscaped area near proposed structure ICG-49, view to the south.



Photo Point 6 - Wetland WL-26, view to the west.



Photo Point 7 – View to the south along the FDOT right-of-way. Wetland WL-26 is west of FDOT fence.



Photo Point 8 – Wetland WL-26, view to the north.



Photo Point 9 – Planted pine area looking north, west of FDOT right-of-way, near proposed structure ICG-51.



Photo Point 10 – View of upland area, looking south on the project right-of-way, south of proposed structure ICG-51.



Photo Point 11 – Surface Water SW-1A, stormwater retention pond just north of proposed structure ICG-53.



Photo Point 12 – View of FDOT landscape buffer, looking north. Planted live oak and sand cordgrass. Located north of proposed structure ICG-54.



Photo Point 13 – View of hardwood-conifer mixed habitat looking west.
Located north of proposed structure ICG-54.



Photo Point 14 – View of FDOT landscape buffer, looking south. Planted live
oak and Walter's viburnum. North of proposed structure ICG-54.



Photo Point 15 – Wetland WL-27, view to the north.



Photo Point 16 – Wetland WL-27, view to the west.



Photo Point 17 – Wetland WL-27, view to the south.



Photo Point 18 – Surface Water SW-2, stormwater retention pond, view to the north.



Photo Point 19 – View of FDOT right-of-way, looking north, in front of the Water treatment plant.



Photo Point 20 – View of FDOT right-of-way, looking south, in front of the Water treatment plant.



Photo Point 21 – Surface Water SW-3, non-vegetated retention pond, view to the north.



Photo Point 22 – Surface Water SW-3, view to the northeast from southeast corner of retention pond.



Photo Point 23 – Surface Water SW-14, looking west, northwest.



Photo Point 24 – Surface Water SW-14, view to the south facing Indian Creek Blvd.



Photo Point 25 – Surface Water SW-14, view to the north.



Photo Point 26 – Surface Water SW-5, view to the north.



Photo Point 27 – Surface Water SW-5, view to the east, northeast.



Photo Point 28 – Surface Water SW-5, view to the west.



Photo Point 29 – Surface Water SW-6, looking southeast.



Photo Point 30 – View of upland area, looking north from proposed structure ICG-81.



Photo Point 31 – View of upland area within corridor, looking south from proposed structure ICG-85.



Photo Point 32 – Wetland WL-28, view to the northeast.



Photo Point 33 – Surface Water SW-7, view to the west.



Photo Point 34 – Wetland WL-29, view to the north.



Photo Point 35 – Surface Water SW-15, view to the west.



Photo Point 36 – Wetland WL-29, view to the west.



Photo Point 37 – Surface Water SW-8, View from proposed structure ICG-87, looking south.



Photo Point 38 – Wetland WL-30, view to the west.



Photo Point 39 – Surface Water SW-9, view to the west.



Photo Point 40 – View looking north from proposed structure ICG-91.



Photo Point 41 – Wetland WL-31, view to the northwest from proposed structure ICG 92.



Photo Point 42 – Surface Water SW-12, view looking south at proposed structure ICG-94.



Photo Point 43 – Wetland WL-32, view to the west.



Photo Point 44 – Wetland WL-32, view looking south.



Photo Point 45 – Wetland WL-32, view looking north.



Photo Point 46 – Surface Water SW-13, looking southwest.



Photo Point 47 – Surface Water SW-13, looking north.



Photo Point 48 – Wetland WL-33, view to the west.



Photo Point 49 – Surface Water SW-10, view to the southwest.



Photo Point 50 – Wetland WL-34, looking west from box-culvert.



Photo Point 51 – Wetland WL-34, view to the west.



Photo Point 52 – Surface Water SW-18, looking northwest.



Photo Point 53 – Wetland WL-36, looking north.



Photo Point 54 – Surface Water SW-17, looking south.



Photo Point 55 – Surface Water SW-16, looking south.



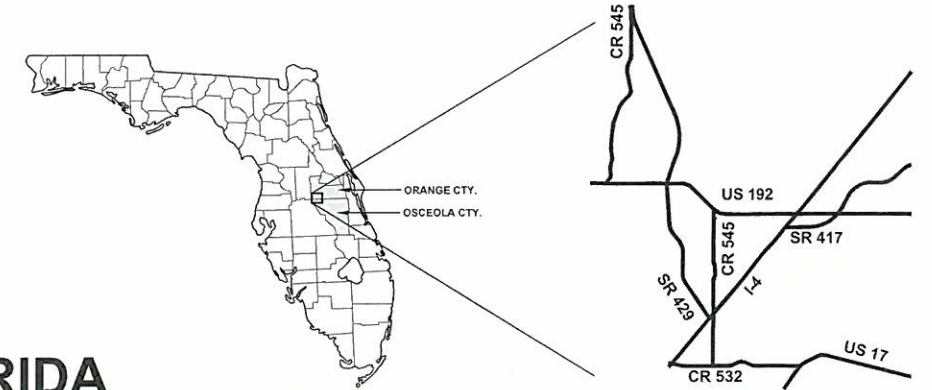
Photo Point 56 – Wetland WL-35, looking east.



Photo Point 57 – Wetland WL-35, looking northeast.



INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND SURVEY
OSCEOLA COUNTY & ORANGE COUNTY, FLORIDA

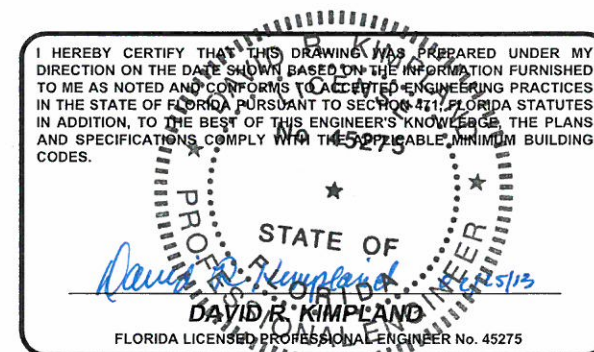


OVERALL LOCATION MAP
1" = 4000'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

6				
5				
4				
3				
2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM
NO.	DATE	DESCRIPTION	BY	CHK
REVISIONS				



02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA
RAR DRAWN	KRM TECH	
DRK CHECK	DRK ENGR	
1 OF 10 SHEET	DWG.	ICG-3015



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS
- SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY
DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED
TO ME AS NOTED AND CONFORMS TO ACCEPTED ENGINEERING PRACTICES
IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, FLORIDA STATUTES
IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS
AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING
CODES.

NO. 45275

STATE OF FLORIDA

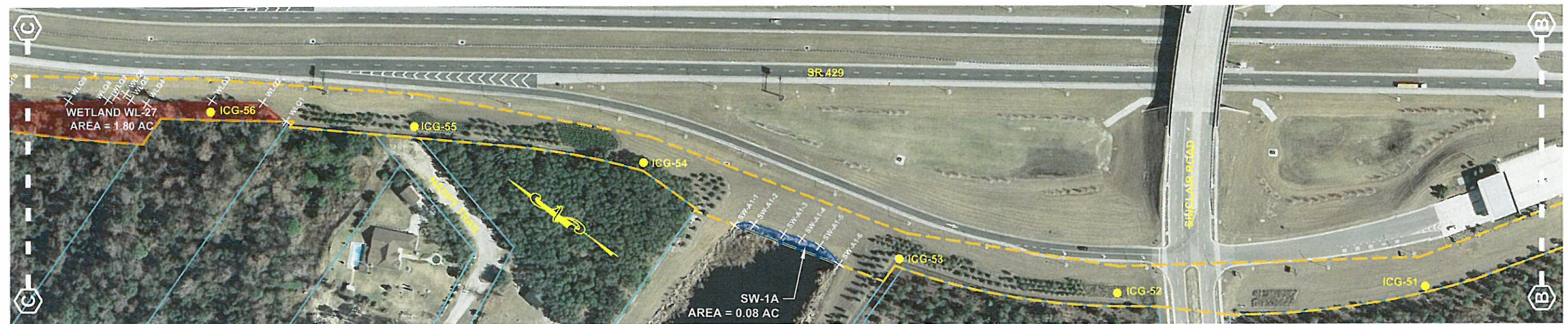
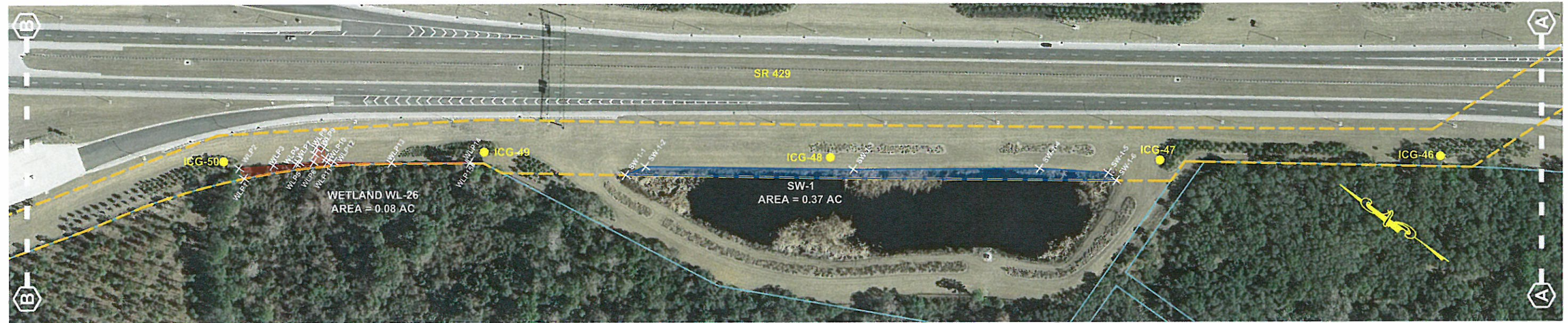
DAVID R. KIMPLAND

FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275

6				
5				
4				
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2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM
NO.	DATE	DESCRIPTION	BY	CHK
REVISIONS				

Progress Energy

02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230KV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA
RAR DRAWN	KRM TECH	
DRK CHECK	DRK ENGR	
2 OF 10 SHEET	DWG.	ICG-3015



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

NO.	DATE	DESCRIPTION	BY	CHK
6				
5				
4				
3				
2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM

REVISIONS

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS
- SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER

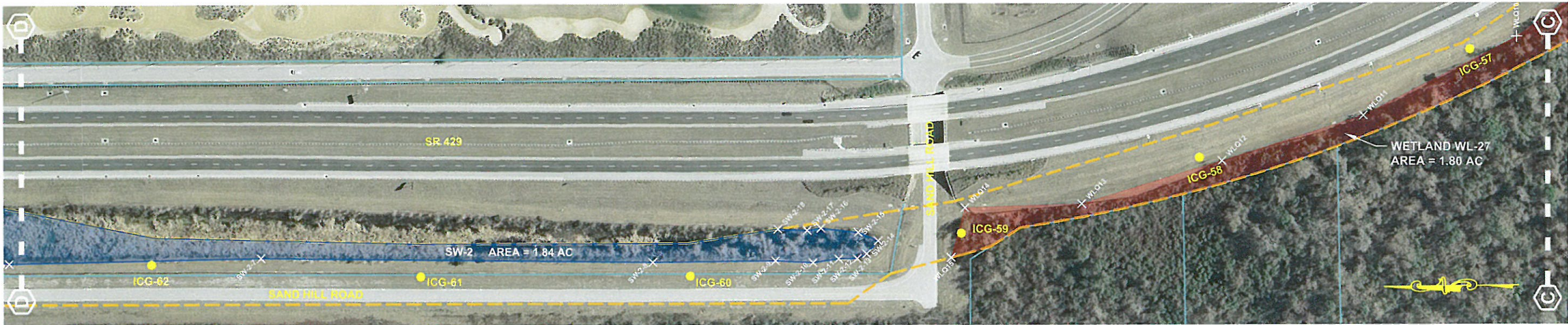
I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO ACCEPTED ENGINEERING PRACTICES IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, FLORIDA STATUTES IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

STATE OF FLORIDA
DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275



02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA
RAR DRAWN	KRM TECH	
DRK CHECK	DRK ENGR	
3 OF 10 SHEET	DWG.	

ICG-3015



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS
- SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY
DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED
TO ME AS NOTED AND CONFORMS TO ACCEPTED ENGINEERING PRACTICES
IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, FLORIDA STATUTES
IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS
AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING
CODES.

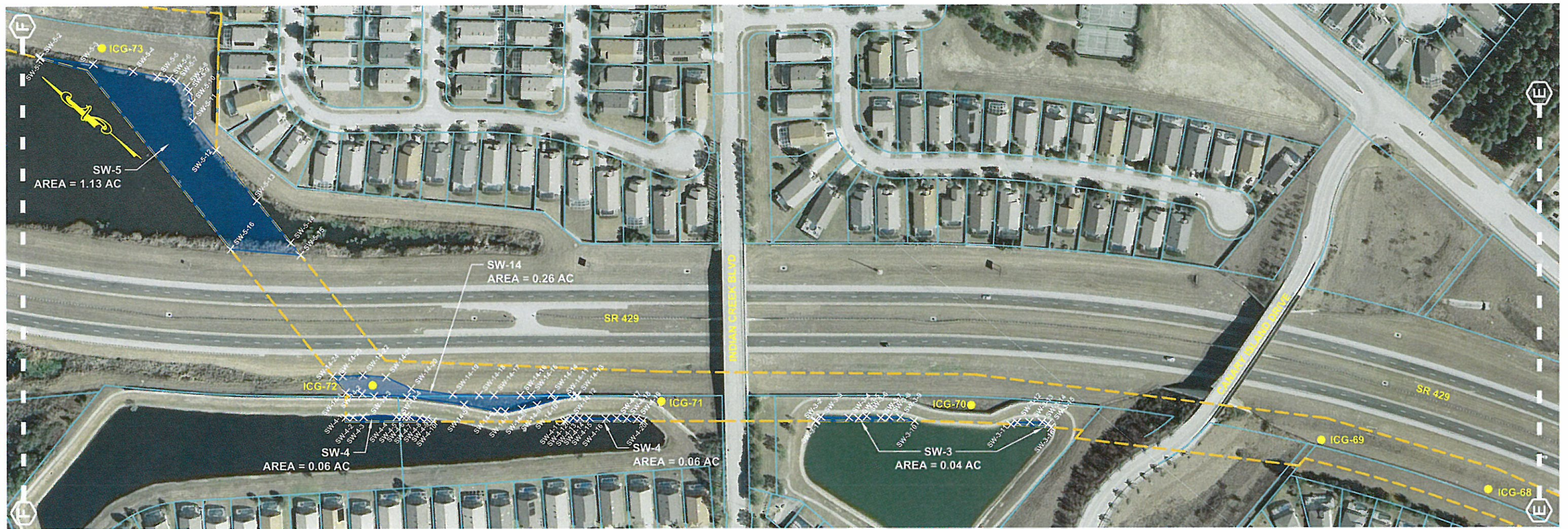
STATE OF
FLORIDA
DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275

NO.	DATE	DESCRIPTION	BY	CHK
6				
5				
4				
3				
2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM
REVISIONS				

PREPARED BY:
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. NO. 9447
813-909-1200

Progress Energy

02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA
RAR DRAWN	KRM TECH	
DRK CHECK	DRK ENGR	
4 OF 10 SHEET	DWG.	ICG-3015



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

NO.	DATE	DESCRIPTION	BY	CHK
6				
5				
4				
3				
2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM
NO.	DATE	DESCRIPTION	BY	CHK
REVISIONS				

LEGEND

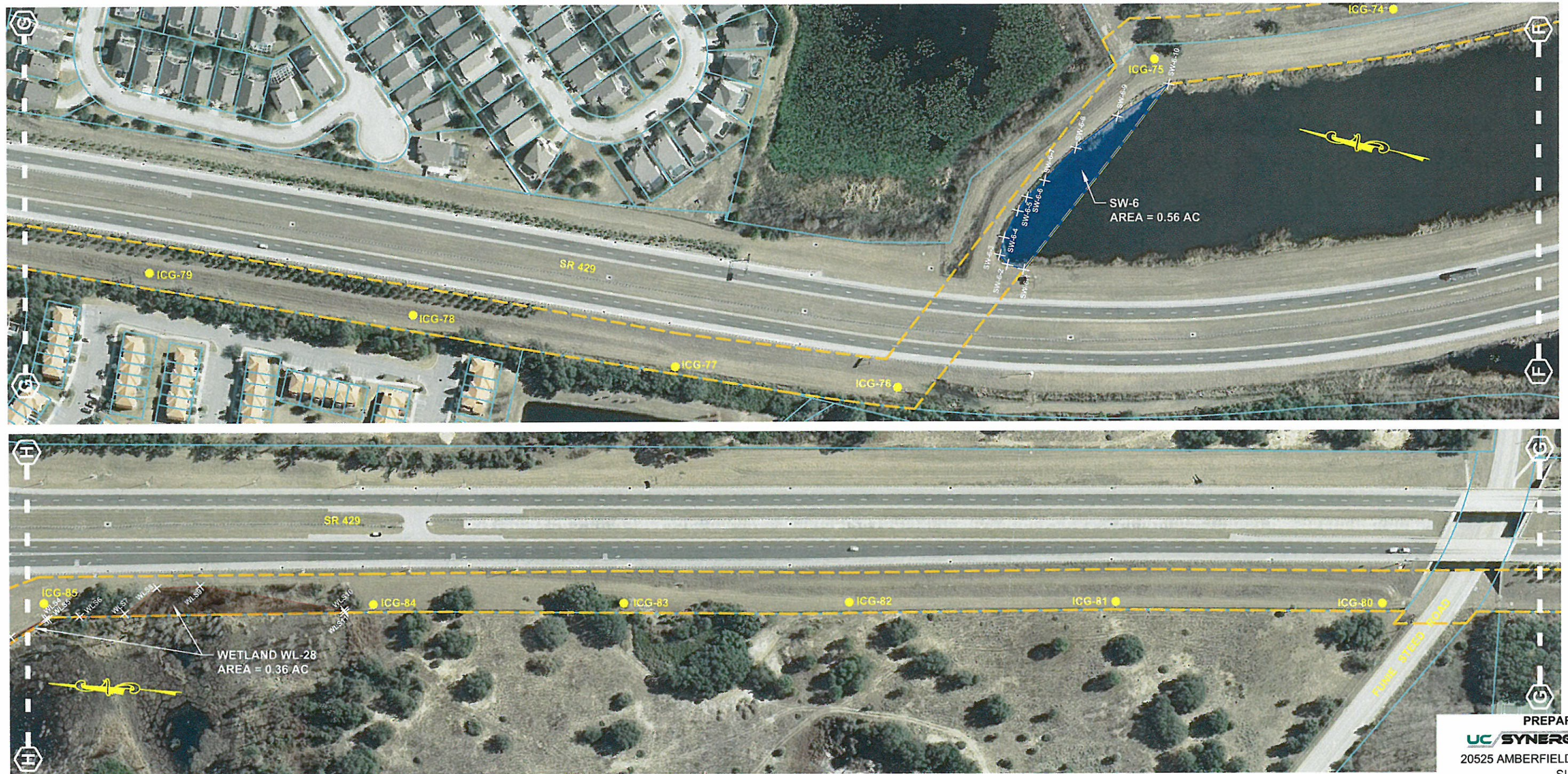
- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS
- SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER

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STATE OF
FLORIDA
DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275



02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA	
RAR DRAWN	KRM TECH		
DRK CHECK	DRK ENGR		
5 OF 10 SHEET	DWG.	ICG-3015	



WETLAND SURVEY - PLAN VIEW
1" = 200'

PREPARED BY:
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. NO. 9447
813-909-1200

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

6					
5					
4					
3					
2					
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM	
0	11/08/12	PRELIMINARY	LGG	KRM	
NO.	DATE	DESCRIPTION	BY	CHK	
REVISIONS					

LEGEND	
	EXISTING TRANSMISSION POLE (TO REMAIN)
	EXISTING TRANSMISSION POLE (TO BE REMOVED)
	PROPOSED STEEL TRANSMISSION POLE
	LIMITS OF CONSTRUCTION / R.O.W.
	WETLANDS
	SURFACE WATER
	WETLAND FLAG W/ IDENTIFIER

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DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED
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IN THE STATE OF FLORIDA PURSUANT TO SECTION 461, FLORIDA STATUTES
IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS
AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING
CODES.

STATE OF
FLORIDA
DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275



02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230KV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA	
RAR DRAWN	KRM TECH		
DRK CHECK	DRK ENGR		
6 OF 10 SHEET	DWG.	ICG-3015	



NOTES:

- WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

NO.	DATE	DESCRIPTION	BY	CHK
6				
5				
4				
3				
2				
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM
0	11/08/12	PRELIMINARY	LGG	KRM

REVISIONS

LEGEND

EXISTING TRANSMISSION POLE (TO REMAIN)

EXISTING TRANSMISSION POLE (TO BE REMOVED)

PROPOSED STEEL TRANSMISSION POLE

LIMITS OF CONSTRUCTION / R.O.W.

WETLANDS

SURFACE WATER

WETLAND FLAG W/ IDENTIFIER

WETLAND SURVEY - PLAN VIEW 1" = 200'

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO ACCEPTED ENGINEERING PRACTICES IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, FLORIDA STATUTES IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

STATE OF FLORIDA

DAVID R. KIMPLAND

FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275



02/21/13
DATE

V: NTS
H: 1"=200'
SCALE

RAR
DRAWN

KRM
TECH

DRK
CHECK

DRK
ENGR

7 OF 10
SHEET

DWG.

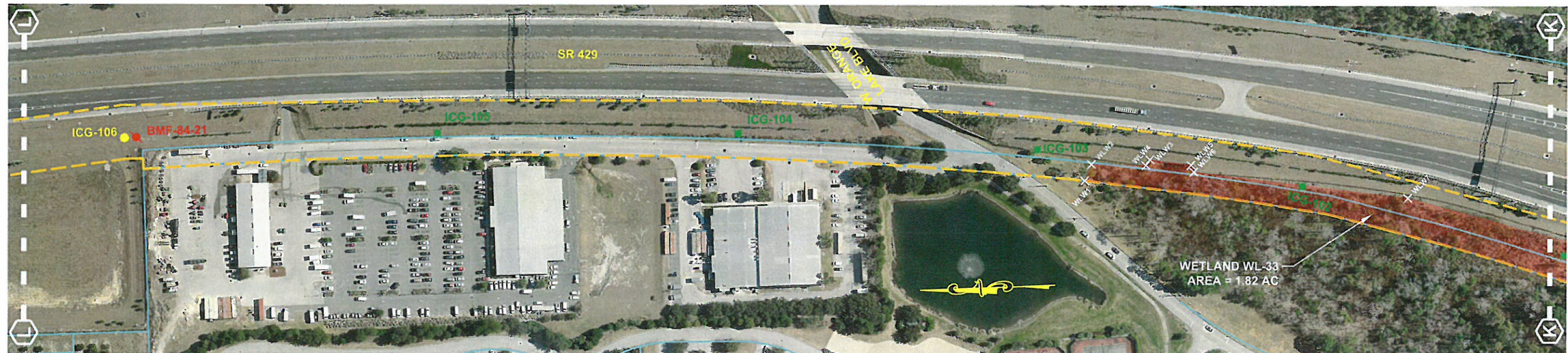
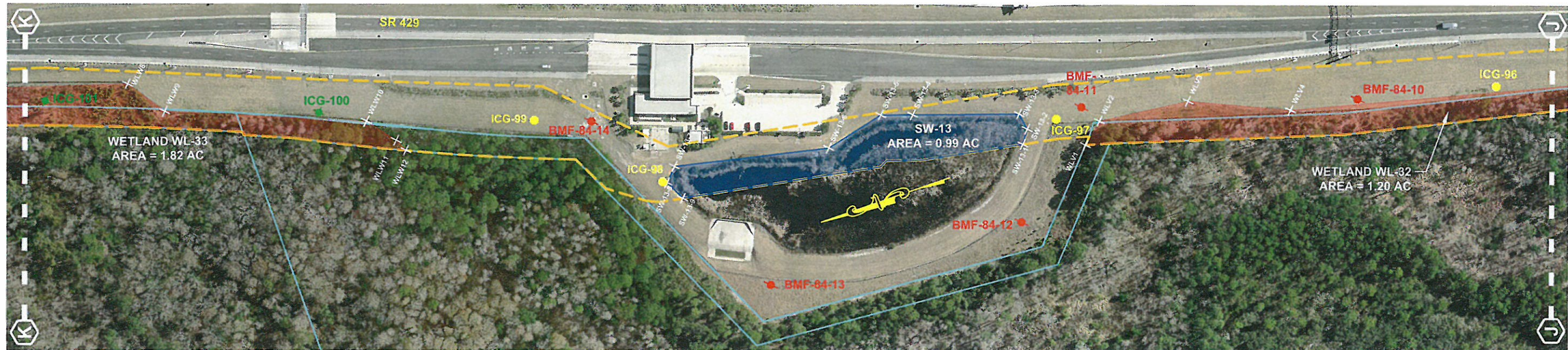
WETLAND SURVEY
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
OSCEOLA & ORANGE COUNTY
FLORIDA

ICG-3015

PREPARED BY:

UC SYNERGETIC

20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. NO. 9447
813-909-1200



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

6					
5					
4					
3					
2					
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM	
0	11/08/12	PRELIMINARY	LGG	KRM	
NO.	DATE	DESCRIPTION	BY	CHK	
REVISIONS					

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
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- WETLANDS
- SURFACE WATER
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No 45275

STATE OF FLORIDA

DAVID R. KIMPLAND

FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275

Progress Energy

02/21/13
DATE

V: NTS
H: 1"=200'
SCALE

RAR
DRAWN

KRM
TECH

DRK
CHECK

DRK
ENGR

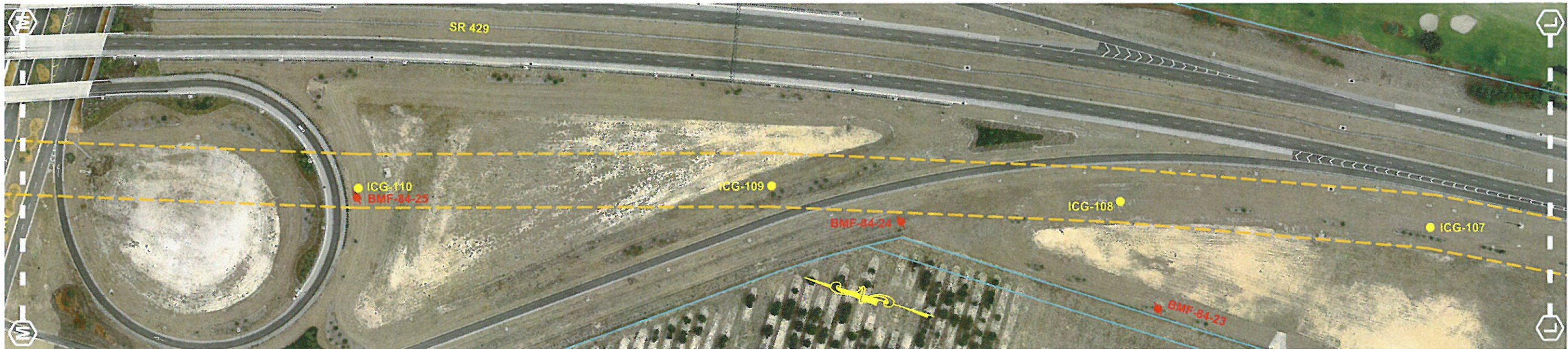
WETLAND SURVEY
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
OSCEOLA & ORANGE COUNTY
FLORIDA

8 OF 10
SHEET

DWG.

ICG-3015

PREPARED BY:
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. NO. 9447
813-909-1200



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

6					
5					
4					
3					
2					
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM	
0	11/08/12	PRELIMINARY	LGG	KRM	
NO.	DATE	DESCRIPTION	BY	CHK	
REVISIONS					

LEGEND

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- EXISTING TRANSMISSION POLE (TO BE REMOVED)
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- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS
- SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER

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IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS
AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING
CODES.

NO. 45275

STATE OF
FLORIDA

DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275

Progress Energy

02/21/13
DATE

V: NTS
H: 1"=200'
SCALE

RAR
DRAWN

KRM
TECH

DRK
CHECK

DRK
ENGR

9 OF 10
SHEET

WETLAND SURVEY
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
OSCEOLA & ORANGE COUNTY
FLORIDA

DWG. ICG-3015



WETLAND SURVEY - PLAN VIEW
1" = 200'

NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY
FLATWOODS CONSULTANTS JANUARY, 2013

6					
5					
4					
3					
2					
1	02/21/13	SUBMITTAL DRAWING	RAR	KRM	
0	11/08/12	PRELIMINARY	LGG	KRM	
NO.	DATE	DESCRIPTION	BY	CHK	
REVISIONS					



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AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING
CODES.

STATE OF
FLORIDA
DAVID R. KIMPLAND
FLORIDA LICENSED PROFESSIONAL ENGINEER No. 45275



02/21/13 DATE	V: NTS H: 1"=200' SCALE	WETLAND SURVEY INTERCESSION CITY - GIFFORD 230KV TRANSMISSION LINE OSCEOLA & ORANGE COUNTY FLORIDA	
RAR DRAWN	KRM TECH		
DRK CHECK	DRK ENGR		
10 OF 10 SHEET	DWG.	ICG-3015	

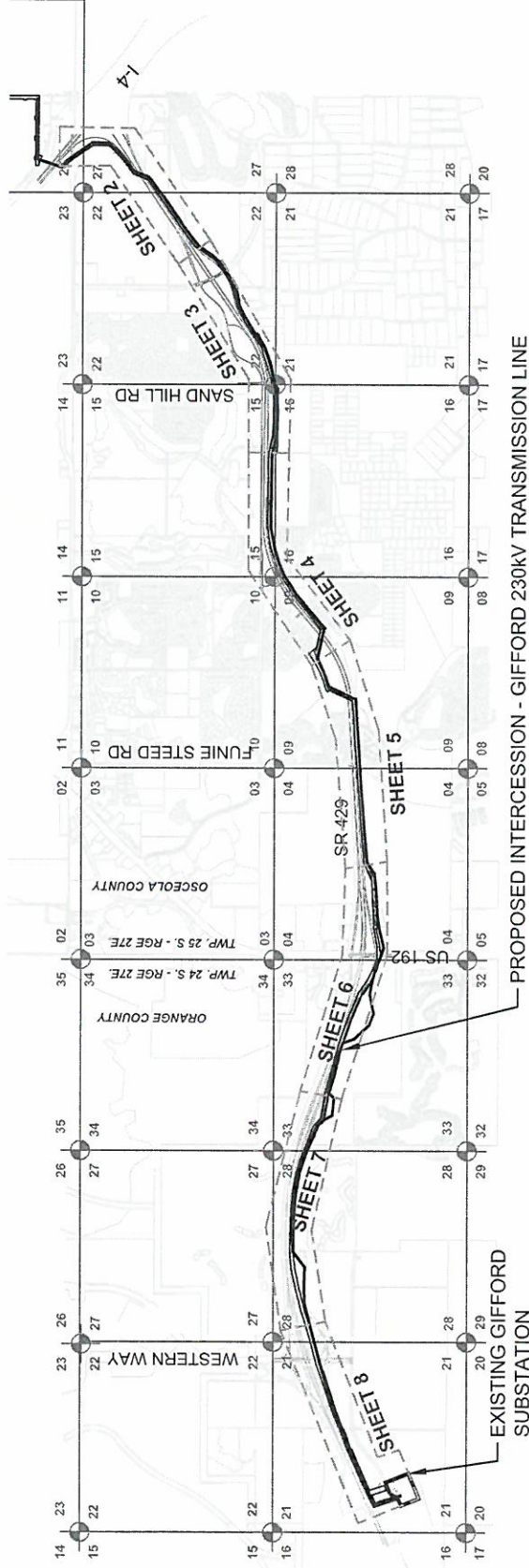
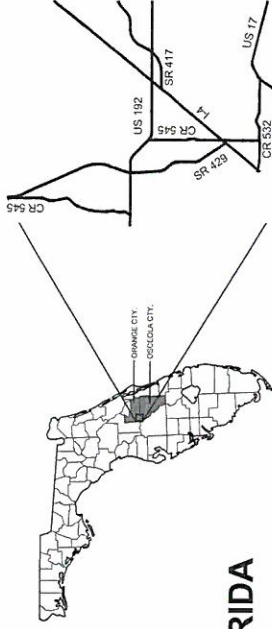


Progress Energy

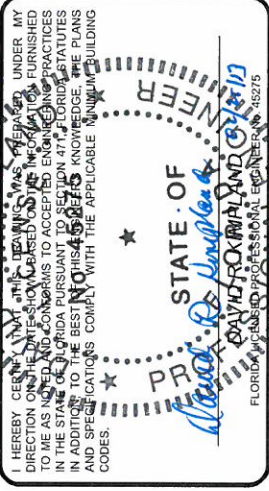
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE

WETLAND SURVEY

OSCEOLA COUNTY & ORANGE COUNTY, FLORIDA



OVERALL LOCATION MAP
NOT TO SCALE



PREPARED BY:

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. NO. 9447
813-909-1200

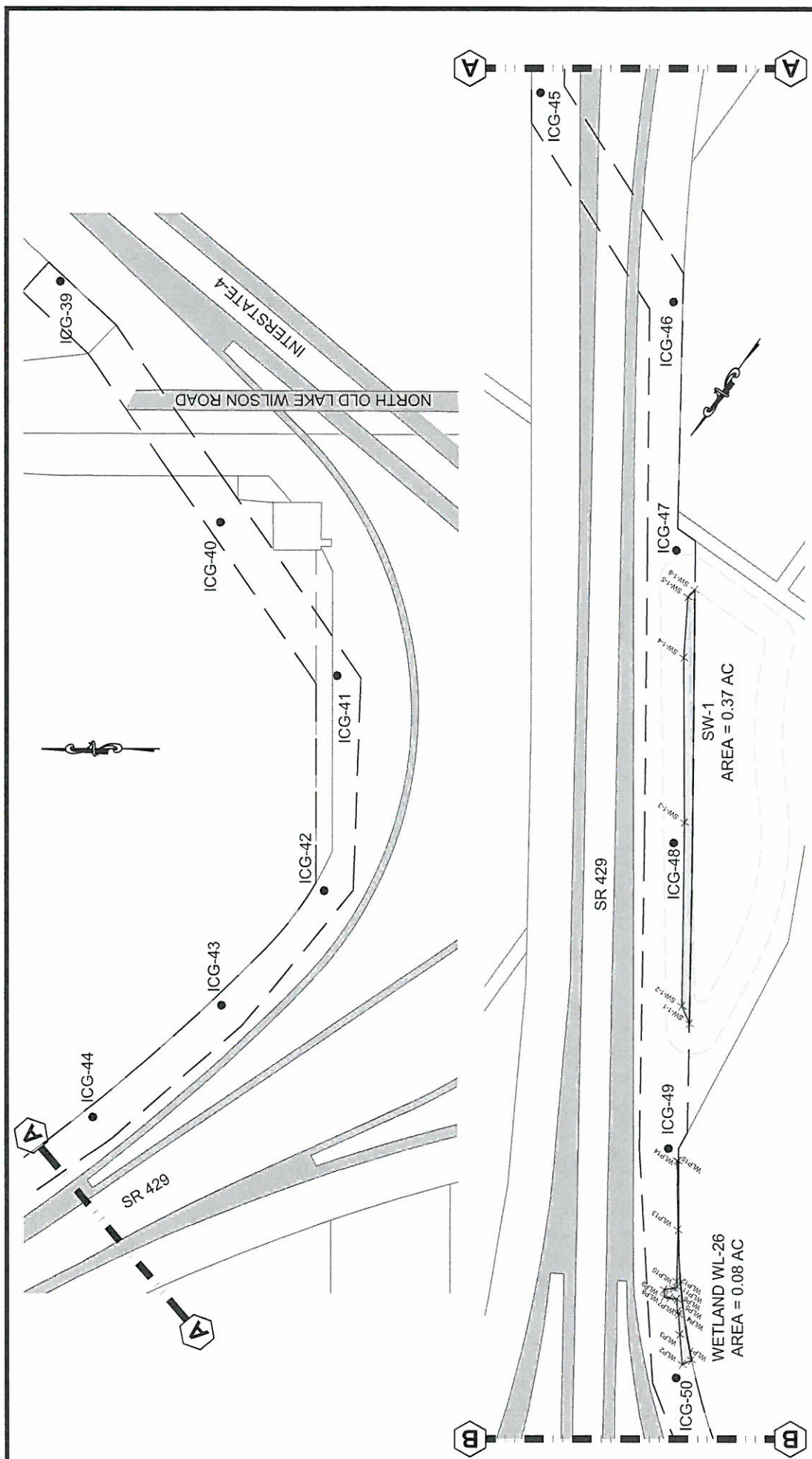
NOTES:

1. WETLAND AND SURFACE WATER DELINEATION
PERFORMED BY FLATWOODS CONSULTANTS
JANUARY, 2013



Progress Energy

02/14/13	DATE	NTS	TRANSMISSION DESIGN
14	DATE	H. SCALE	WETLAND SURVEY
RAR	DRAWN	KRM	INTERCESSION CITY - GIFFORD
DRK	CHECK	TECH	230KV TRANSMISSION LINE
1	OF 8	MLK	OSCEOLA & ORANGE COUNTY
1	SHEET	ENGR	FLORIDA
DWG.	ICG-3016		



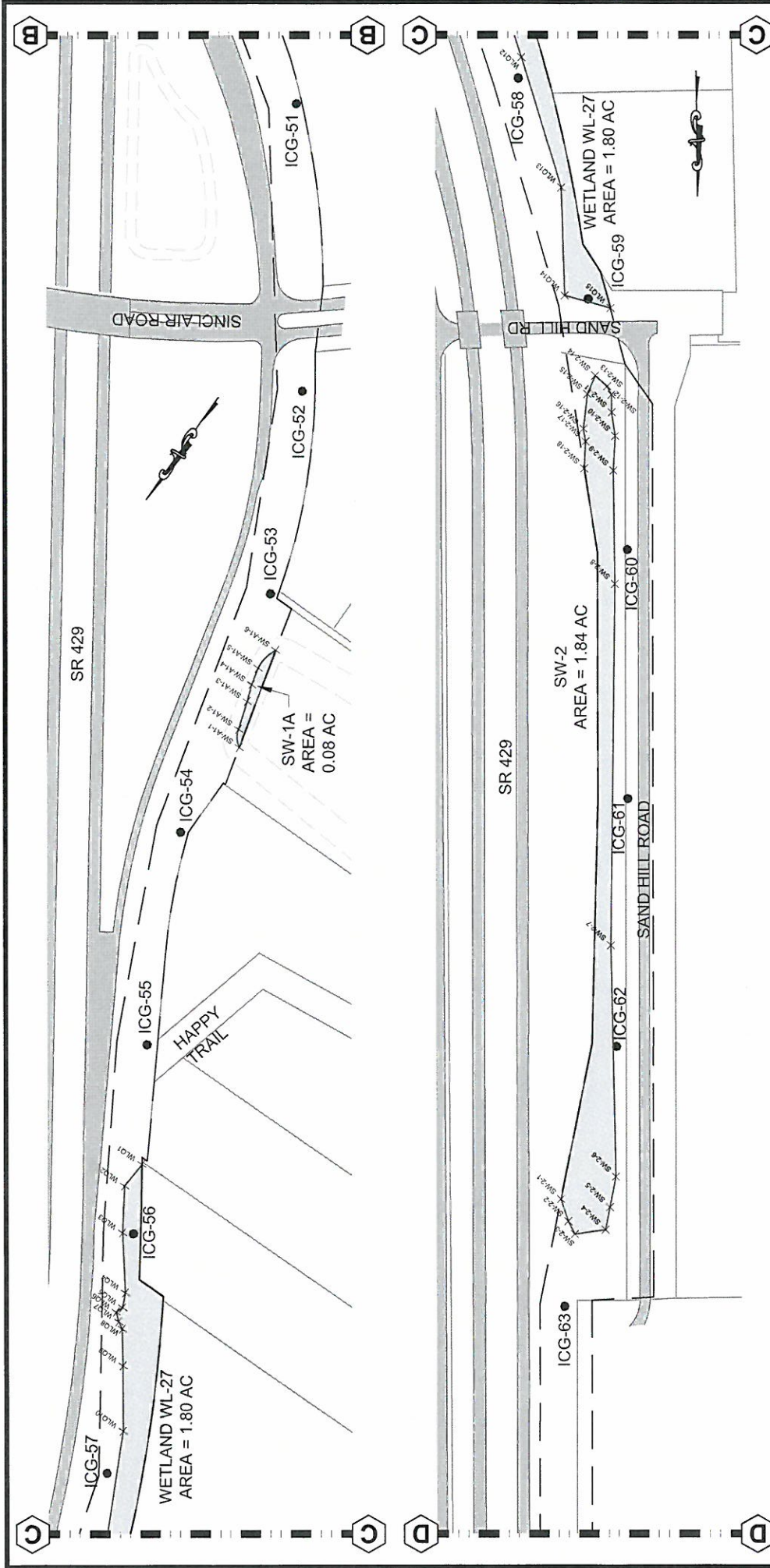
NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013
- PREPARED BY:
UC SYNERGETIC
 20525 AMBERFIELD DRIVE
 SUITE 201
 LAND O' LAKES, FL 34638
 C.A. NO. 9447
 813-909-1200
- LEGEND**
- EXISTING TRANSMISSION POLE (TO REMAIN)
 - EXISTING TRANSMISSION POLE (TO BE REMOVED)
 - PROPOSED STEEL TRANSMISSION POLE
 - LIMITS OF CONSTRUCTION / R.O.W.
 - WETLANDS / SURFACE WATER
 - WETLAND FLAG W/ IDENTIFIER OR TOP OF SLOPE

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATA WHICH I HAVE SEEN AND THE INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO ALL THE ENGINEERING PRACTICES IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, FLORIDA STATUTES IN ADDITION TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.

DAVID KIMBLE
 ENGINEER
 No. 4544
 STATE OF FLORIDA
 EXPIRATION DATE: 12/31/13

Progress Energy		TRANSMISSION DESIGN	
02/14/13	DATE	WETLAND SURVEY	
RAH	DATE	INTERSECTION CITY - GIFFORD	
DRAWN	DATE	230KV TRANSMISSION LINE	
CHK	DATE	OSCEOLA & ORANGE COUNTY	
ENGR	DATE	FLORIDA	
2	OF 8	DWG.	ICG-3016



NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

PREPARED BY:
UC SYNERGETIC
 20525 AMBERFIELD DRIVE
 SUITE 201
 LAND O' LAKES, FL 34638
 C.A. NO. 9447
 813-909-1200

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS / SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER OR TOP OF SLOPE

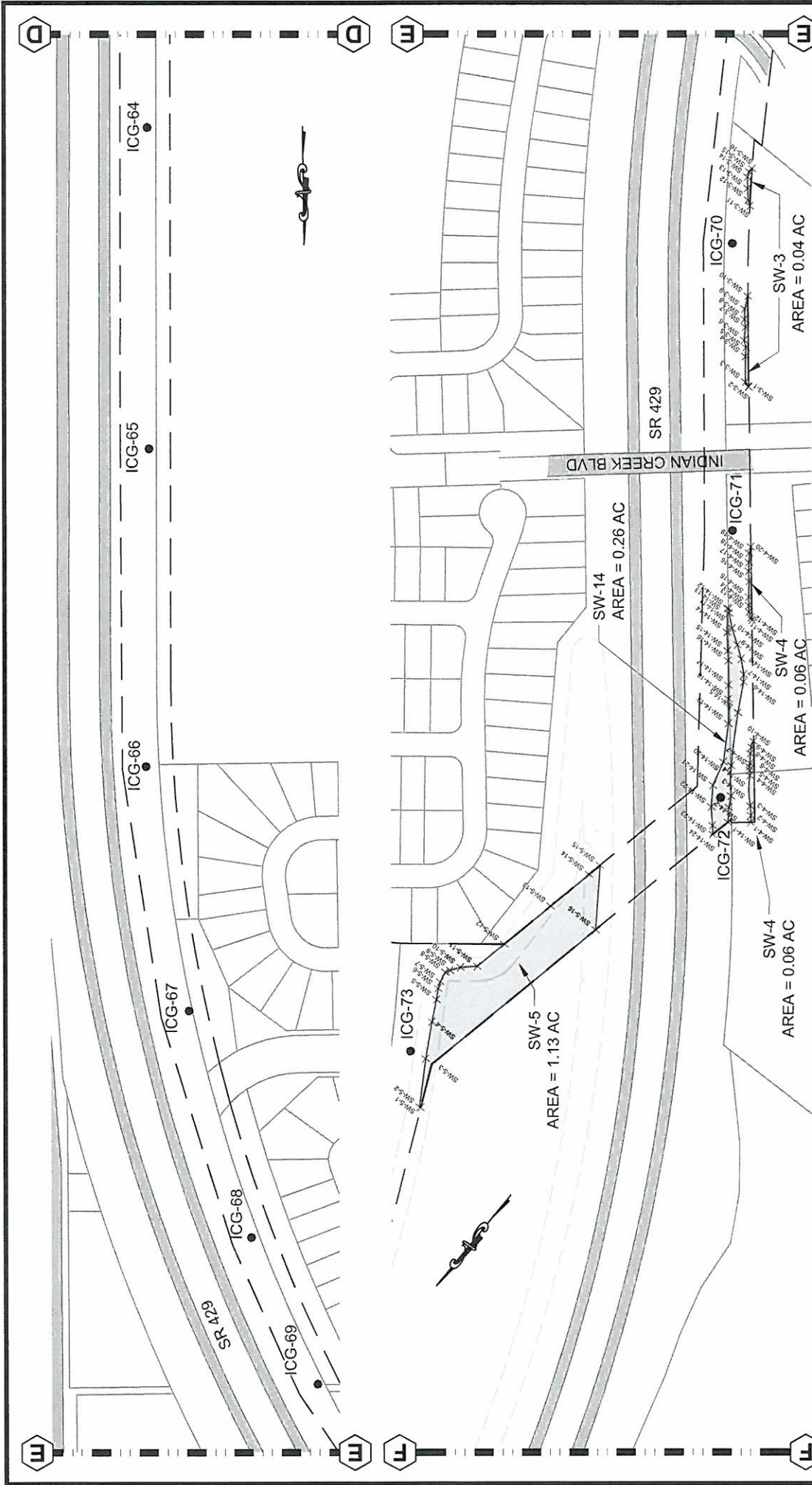


I HEREBY CERTIFY THAT THE PLANS WERE PREPARED UNDER MY DIRECTION ON THE DATE SHOWN BASED ON THE INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO ACCEPTED ENGINEERING PRACTICES IN THE STATE OF FLORIDA PURSUANT TO CHAPTER 471, FLORIDA STATUTES IN ADDITION TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES.

DAVID R. KIMBLER
 PROFESSIONAL ENGINEER
 NO. 43275



02/14/13	DATE	TRANSMISSION DESIGN
3 OF 8	SHEET	WETLAND SURVEY
3	OF 8	INTERSECTION CITY - GIFFORD
3	OF 8	230KV TRANSMISSION LINE
3	OF 8	OSCEOLA & ORANGE COUNTY
3	OF 8	FLORIDA
3	OF 8	ICG-3016



NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

PREPARED BY:
UC SYNERGETIC
 20525 AMBERFIELD DRIVE
 SUITE 201
 LAND O' LAKES, FL 34638
 C.A. NO. 9447
 813-909-1200

LEGEND

- ✱ EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- ▨ WETLANDS / SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER OR TOP OF SLOPE

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATE SHOWN HEREIN. THE INFORMATION FURNISHED TO ME AS NOTED AND COMPLIES WITH ALL APPLICABLE PRACTICES IN THE STATE OF FLORIDA PURSUANT TO SECTION 471.2, F.S. AND STATUTES IN ADDITION TO THE BEST OF THIS ENGINEER'S KNOWLEDGE. THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.

STATE OF FLORIDA
DAVID R. KIMPLAND
 PROFESSIONAL ENGINEER, No. 45275

Progress Energy

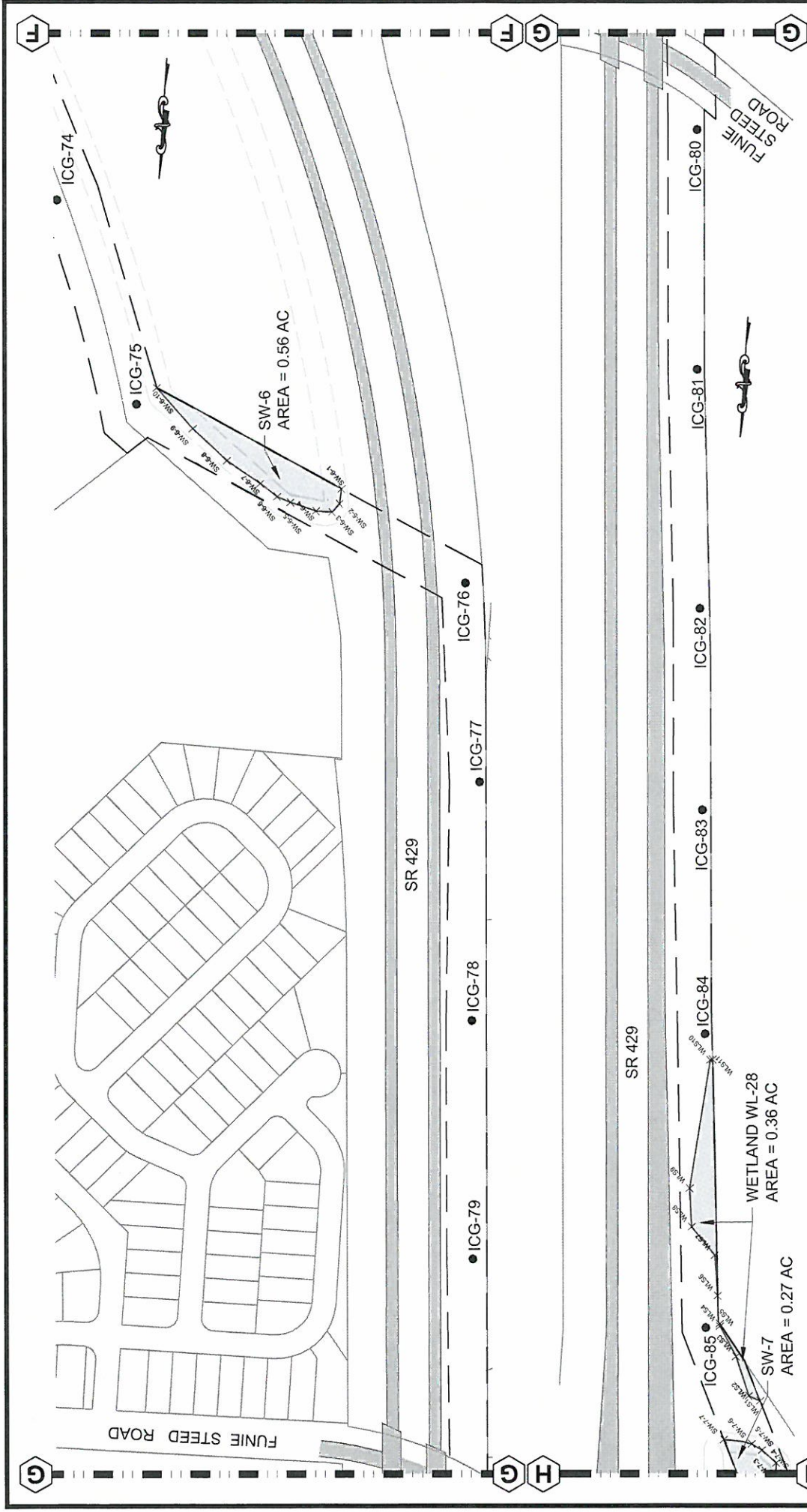
TRANSMISSION DESIGN	
DATE	02/14/13
SCALE	1" = 300'
RAR DRAWN	KRM
TECH	TECH
DRK CHECK	MKL
ENGR	ENGR

WETLAND SURVEY
 INTERSECTION CITY - GIFFORD
 230KV TRANSMISSION LINE
 OSCEOLA & ORANGE COUNTY
 FLORIDA

ICG-3016

4 OF 8 SHEET

DWG.



NOTES:

1. WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

PREPARED BY:
UC SYNERGETIC
 20525 AMBERFIELD DRIVE
 SUITE 201
 LAND O' LAKES, FL 34638
 C.A. NO. 9447
 813-909-1200

LEGEND

- ✕ EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- ▨ WETLANDS / SURFACE WATER
- ▨ WETLAND FLAG W/ IDENTIFIER OR TOP OF SLOPE

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATE SHOWN HEREON, AND THE INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO THE PROFESSIONAL PRACTICES IN THE STATE OF FLORIDA PURSUANT TO SECTION 471, F.S. IN ADDITION, TO THE BEST OF THIS ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS CONFORM WITH THE MINIMUM BUILDING CODES.

DAVID R. KIMPLAND
 PROFESSIONAL ENGINEER
 FLORIDA LICENSE NO. 145275

Progress Energy

TRANSMISSION DESIGN

WETLAND SURVEY

INTERSECTION CITY - GIFFORD

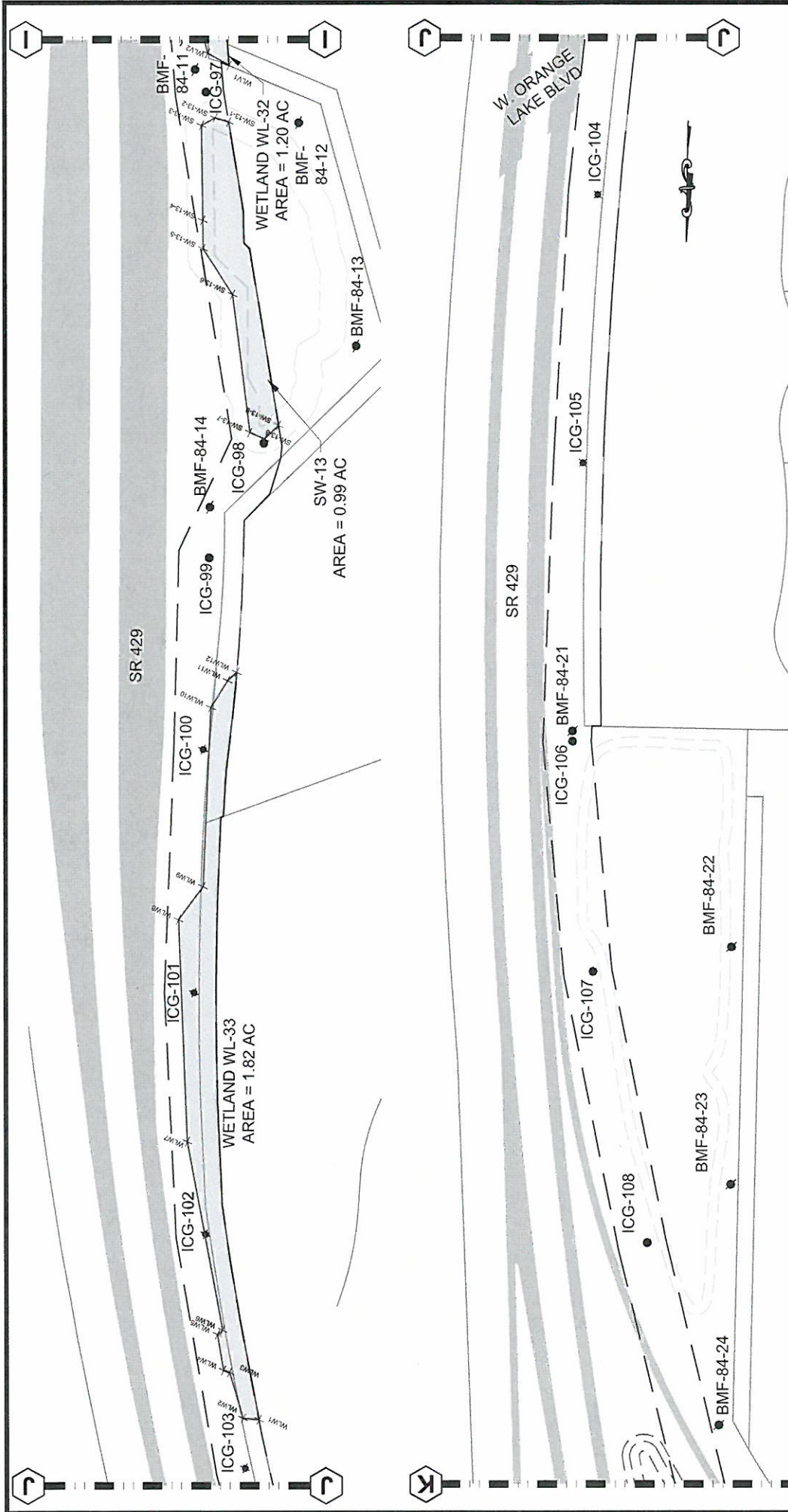
230KV TRANSMISSION LINE

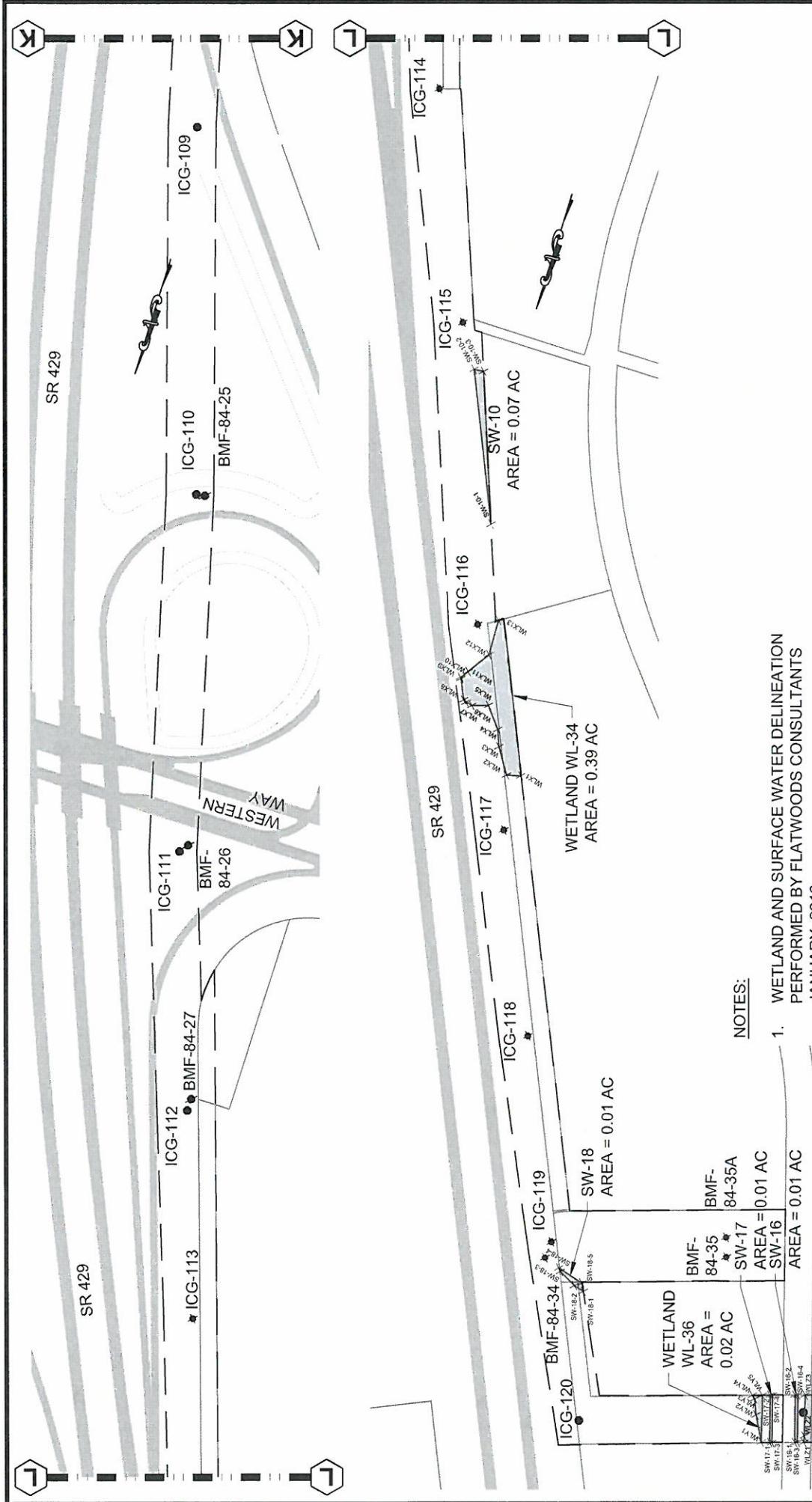
OSCEOLA & ORANGE COUNTY

FLORIDA

02/14/13	DATE	RAR	DRAWN	DRK	CHECK	5	OF	8	SHEET
1/13	SCALE	KRM	TECH	MLK	ENGR				

ICG-3016





NOTES:

- WETLAND AND SURFACE WATER DELINEATION PERFORMED BY FLATWOODS CONSULTANTS JANUARY, 2013

LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- LIMITS OF CONSTRUCTION / R.O.W.
- WETLANDS / SURFACE WATER
- WETLAND FLAG W/ IDENTIFIER OR TOP OF SLOPE

PREPARED BY:
UC SYNERGETIC
 20525 AMBERFIELD DRIVE
 SUITE 201
 LAND O' LAKES, FL 34638
 C.A. NO. 9447
 813-909-1200

PROGRESS ENERGY

TRANSMISSION DESIGN

WETLAND SURVEY

INTERSECTION CITY - GIFFORD

230KV TRANSMISSION LINE

OSCEOLA & ORANGE COUNTY

FLORIDA

ICG-3016

I HEREBY CERTIFY THAT THIS DRAWING WAS PREPARED UNDER MY DIRECTION ON THE DATE SHOWN HEREIN, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA, AND THAT I AM NOT PROVIDING ANY SERVICES IN THE STATE OF FLORIDA IN VIOLATION OF ANY STATUTES, IN ADDITION, I AM NOT PROVIDING ANY SERVICES IN THE STATE OF FLORIDA IN VIOLATION OF ANY STATUTES, AND SPECIFICATIONS, COMPLIANCE WITH MINIMUM BUILDING CODES.

DAVID R. KIMPLAND
 PROFESSIONAL ENGINEER
 NO. 45275

S.R. 429

PROPOSED INTERCESSION CITY-GIFFORD
230kV LINEPROJECT
BOUNDARY

ICG-48

SW-1

PLAN SCALE
1" = 100'

648'

618'

±389'

±550'

SW-1

ICG-48
STA. 247+92.07'

EL = 101.8'

STA. 242+42.07'
SW-1

LEGEND



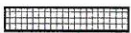
EXISTING TRANSMISSION POLE (TO REMAIN)



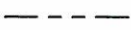
EXISTING TRANSMISSION POLE (TO BE REMOVED)



PROPOSED STEEL TRANSMISSION POLE

WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13

CONSTRUCTION MATTING



EXISTING RIGHT-OF-WAY LINE



PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'

HOR: 1" = 100'

NOTES:

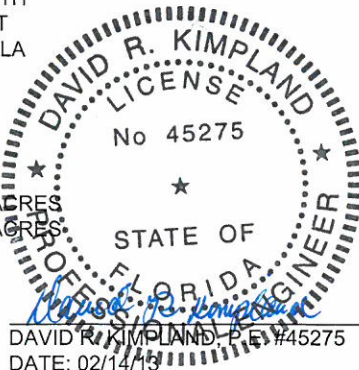
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 22
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

SW-1 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATEV: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWNKRM
TECH

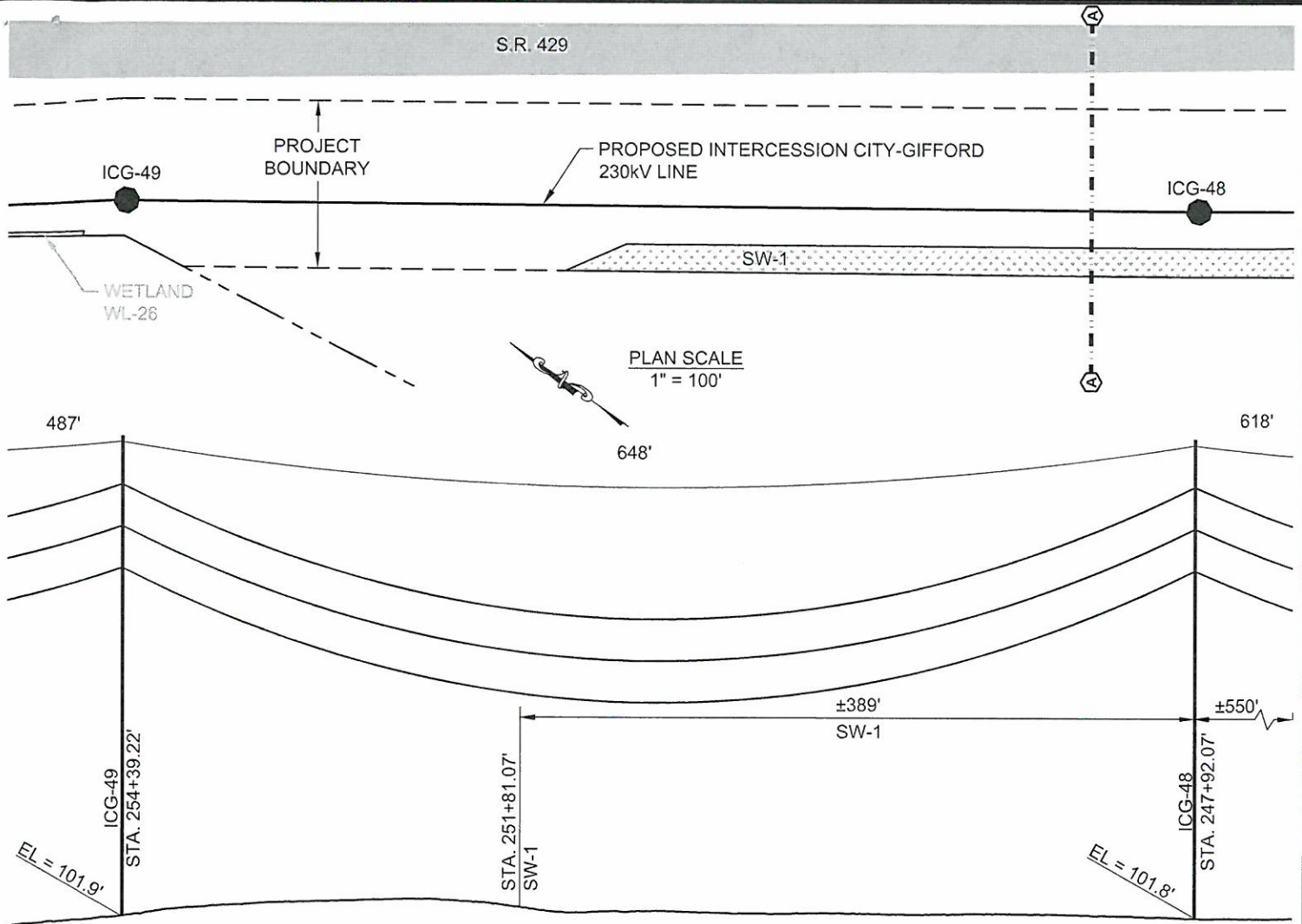
WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-1

DRK
CHECKKRM
ENGR1 OF 2
SHEET

DWG.

ICG-3017

S.R. 429

**LEGEND**

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

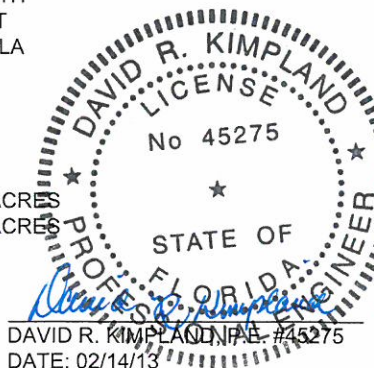
- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 22
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

SW-1 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

DRK
CHECK

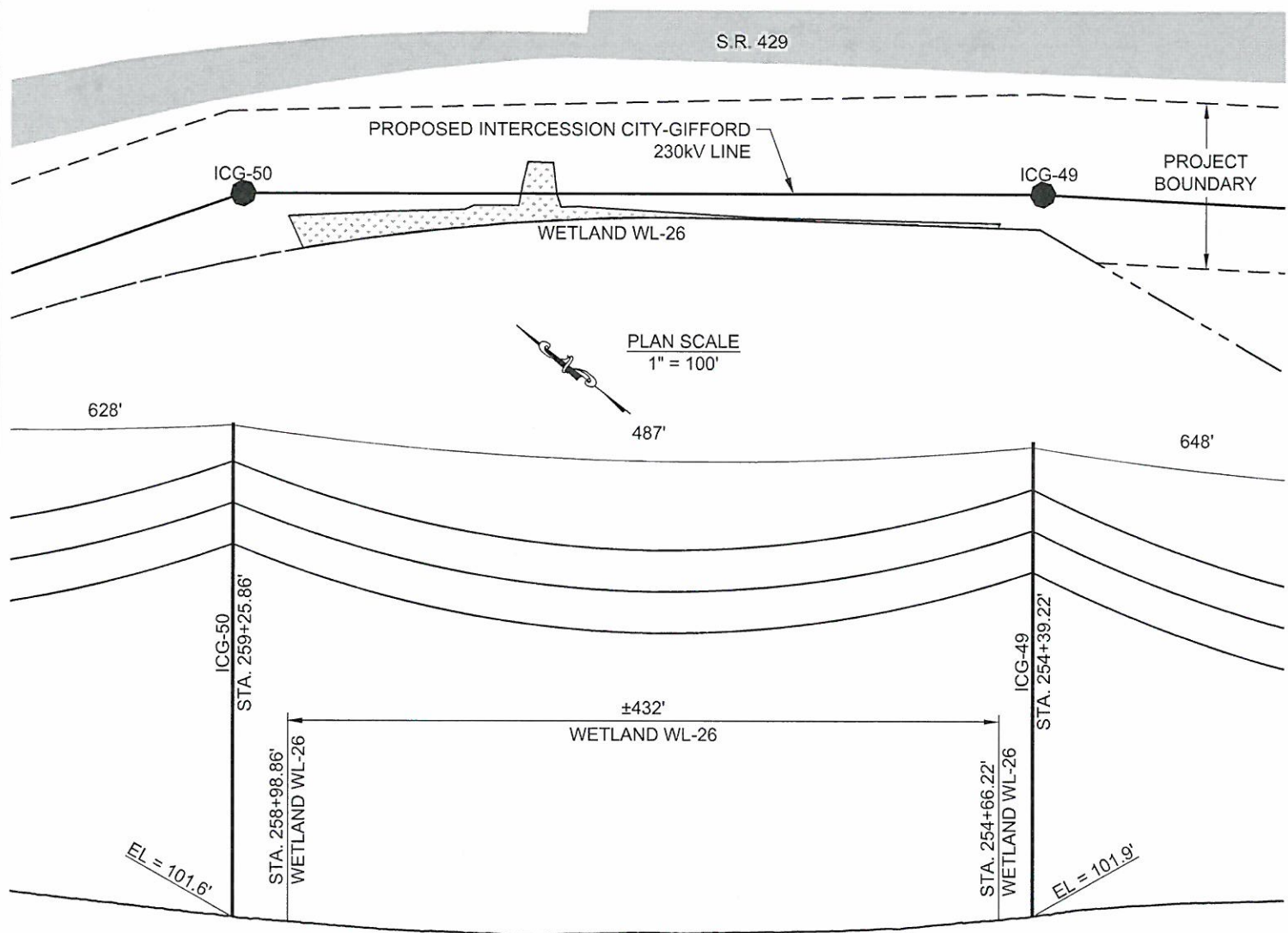
KRM
ENGR

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-1

2 OF 2
SHEET

DWG.

ICG-3017



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

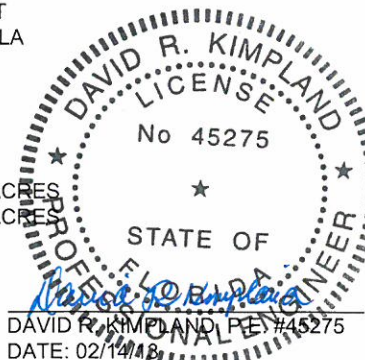
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 22
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

WETLAND WL-26 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.08 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-26

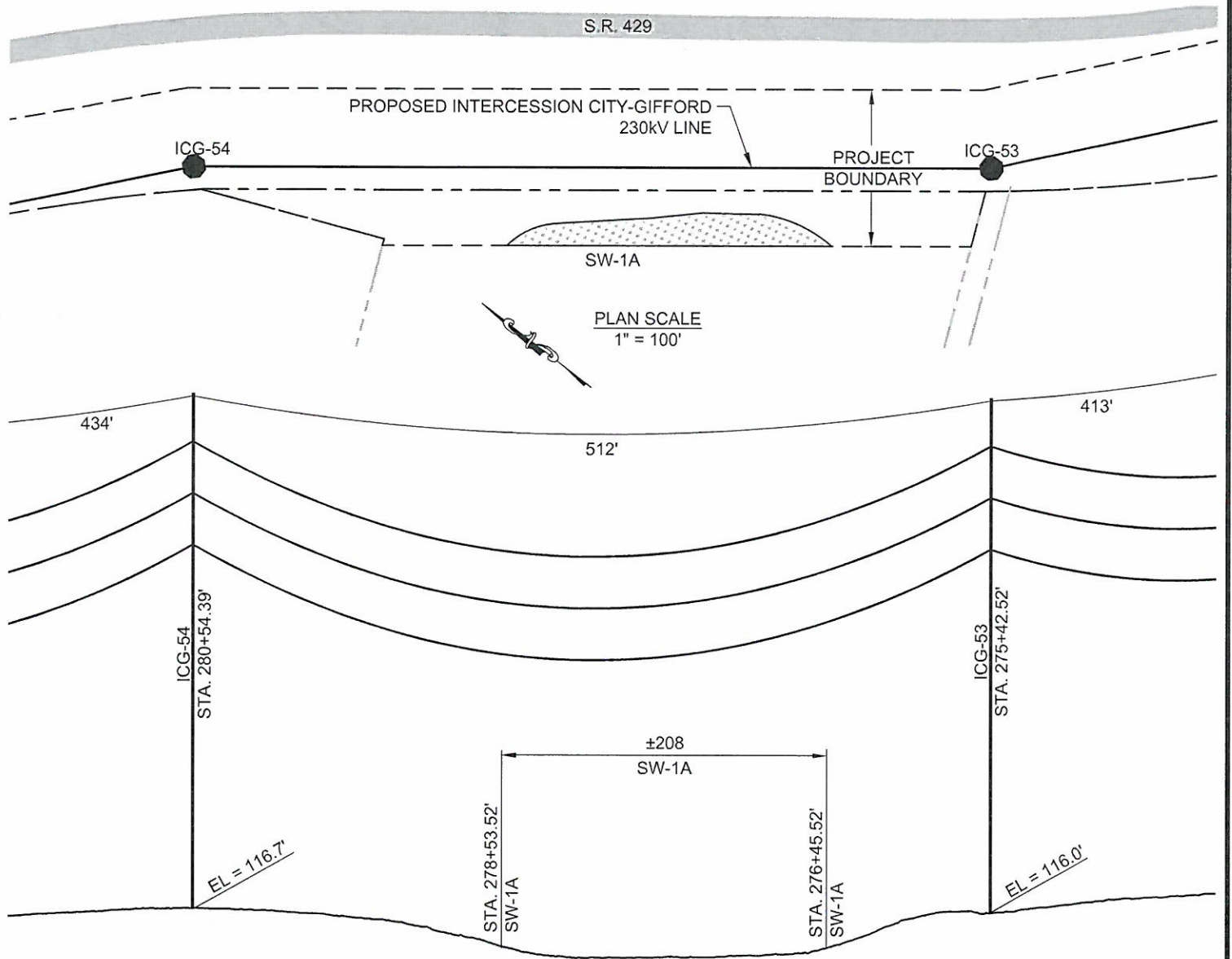
DRK
CHECK

KRM
ENGR

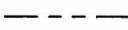
1 OF 1
SHEET

DWG.

ICG-3018



LEGEND

-  EXISTING TRANSMISSION POLE (TO REMAIN)
-  EXISTING TRANSMISSION POLE (TO BE REMOVED)
-  PROPOSED STEEL TRANSMISSION POLE
-  WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13
-  CONSTRUCTION MATTING
-  EXISTING RIGHT-OF-WAY LINE
-  PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

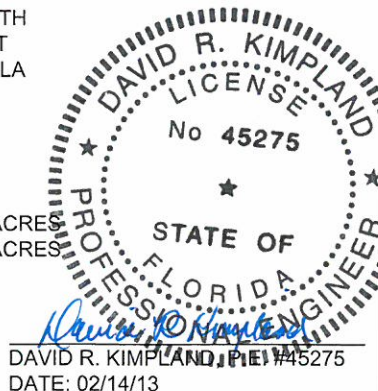
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 22
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

SW-1A TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
SW-1A

DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3018A

S.R. 429

PROPOSED INTERCESSION CITY-GIFFORD
230kV LINE

ICG-56

PROJECT
BOUNDARY

WETLAND WL-27

PLAN SCALE
1" = 100'

383'

487'

±1520'

±141'

WETLAND WL-27

ICG-56
STA. 288+70.41'STA. 287+29.16'
WETLAND WL-27

EL = 100.3'

LEGEND



EXISTING TRANSMISSION POLE (TO REMAIN)



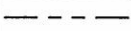
EXISTING TRANSMISSION POLE (TO BE REMOVED)



PROPOSED STEEL TRANSMISSION POLE

WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13

CONSTRUCTION MATTING



EXISTING RIGHT-OF-WAY LINE



PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'

HOR: 1" = 100'

NOTES:

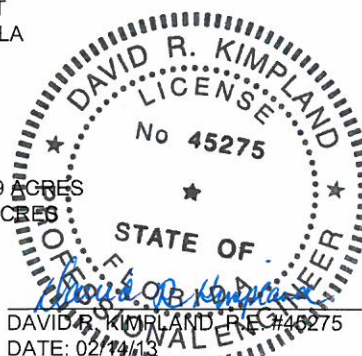
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2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

WETLAND WL-27 TOTALS
FILL: 0.0009 ACRES
CLEARING: 1.80 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND P.E. #45275
DATE: 02/21/13



Progress Energy

02/21/13
DATEV: 30
H: 100
SCALERAR
DRAWNKRM
TECHDRK
CHECKKRM
ENGR

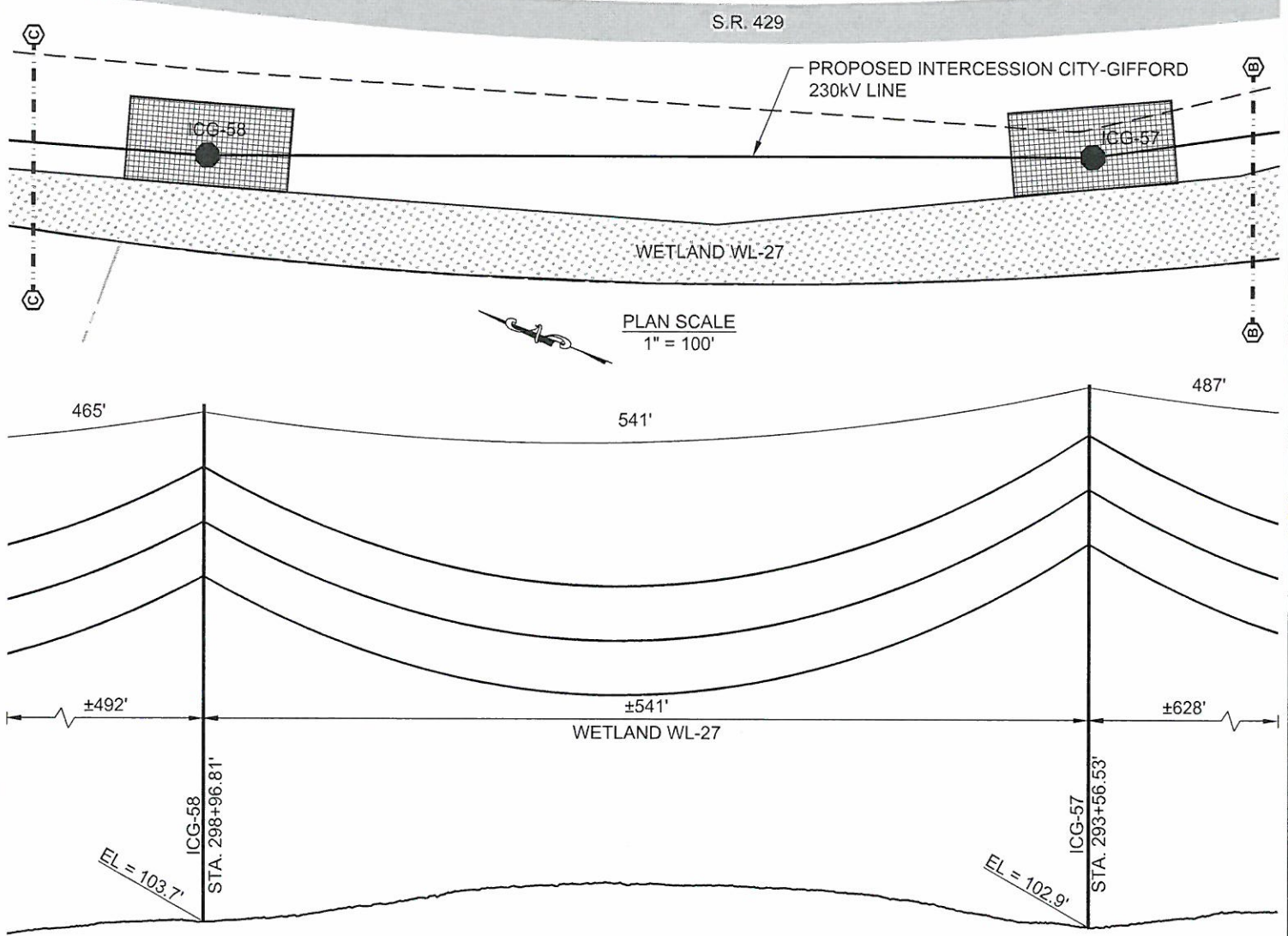
LINE ENGINEERING

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-27

1 OF 3
SHEET

DWG.

ICG-3019



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

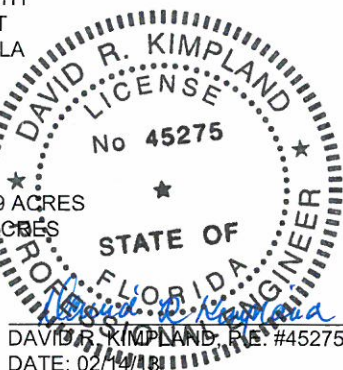
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

WETLAND WL-27 TOTALS
FILL: 0.0009 ACRES
CLEARING: 1.80 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-27

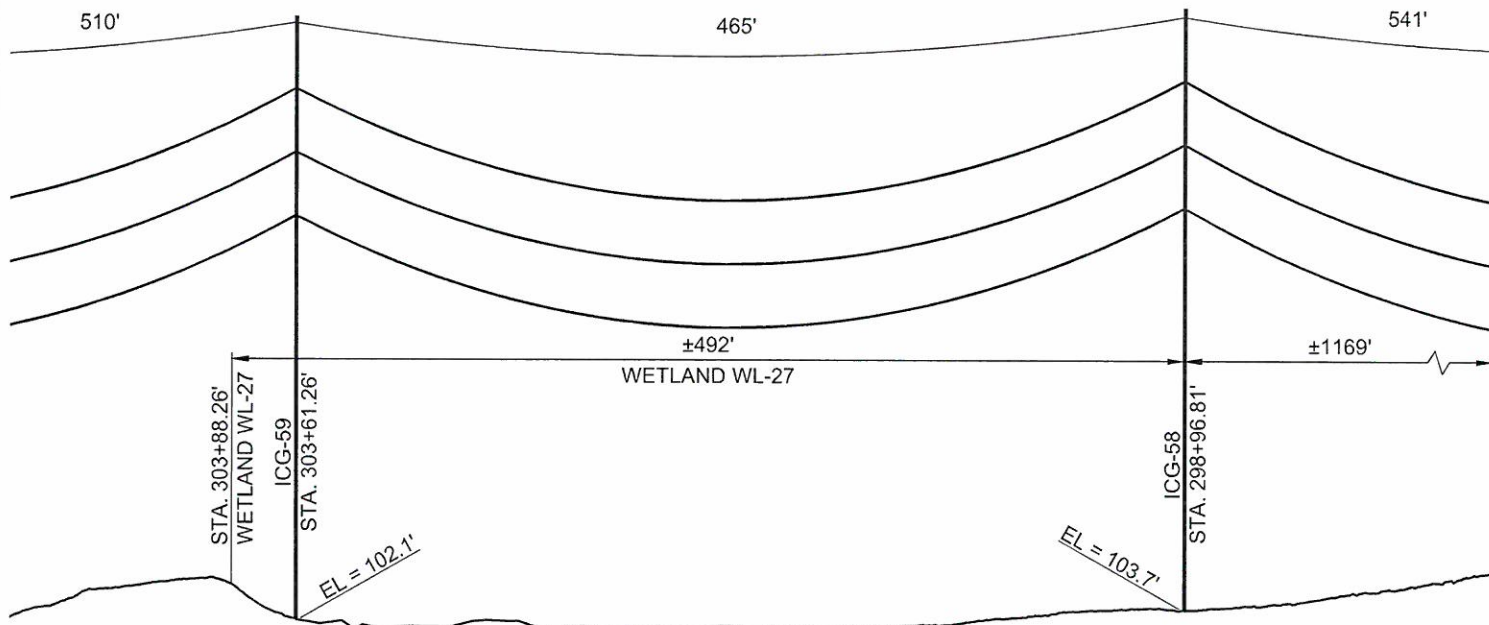
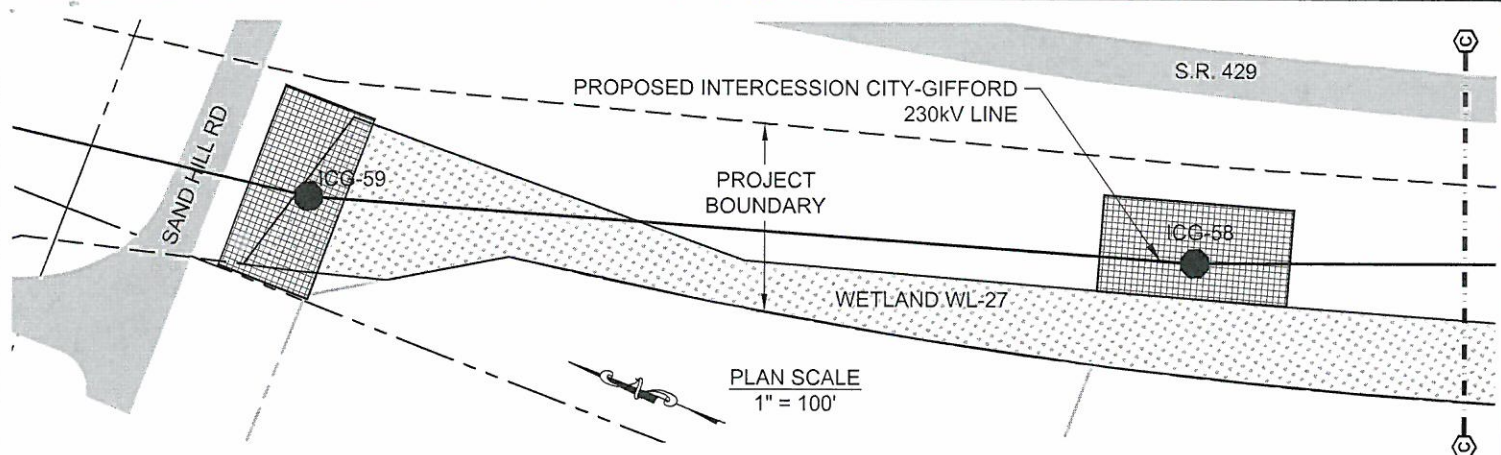
DRK
CHECK

KRM
ENGR

2 OF 3
SHEET

DWG.

ICG-3019



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

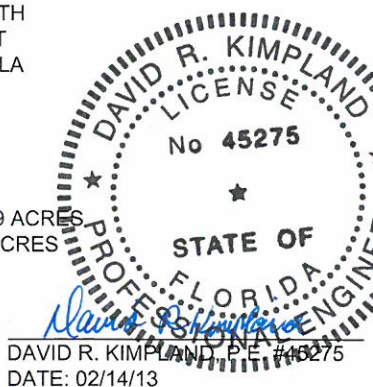
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

WETLAND WL-27 TOTALS
FILL: 0.0009 ACRES
CLEARING: 1.80 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-27

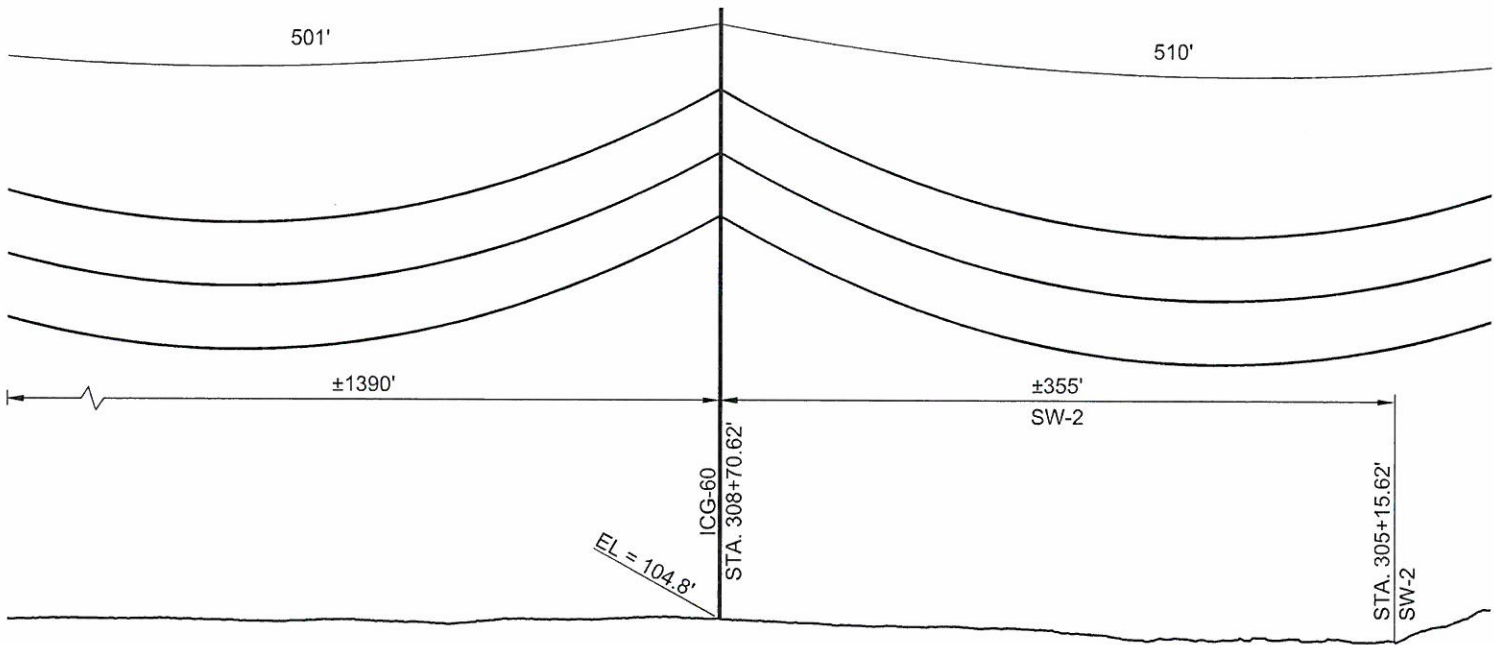
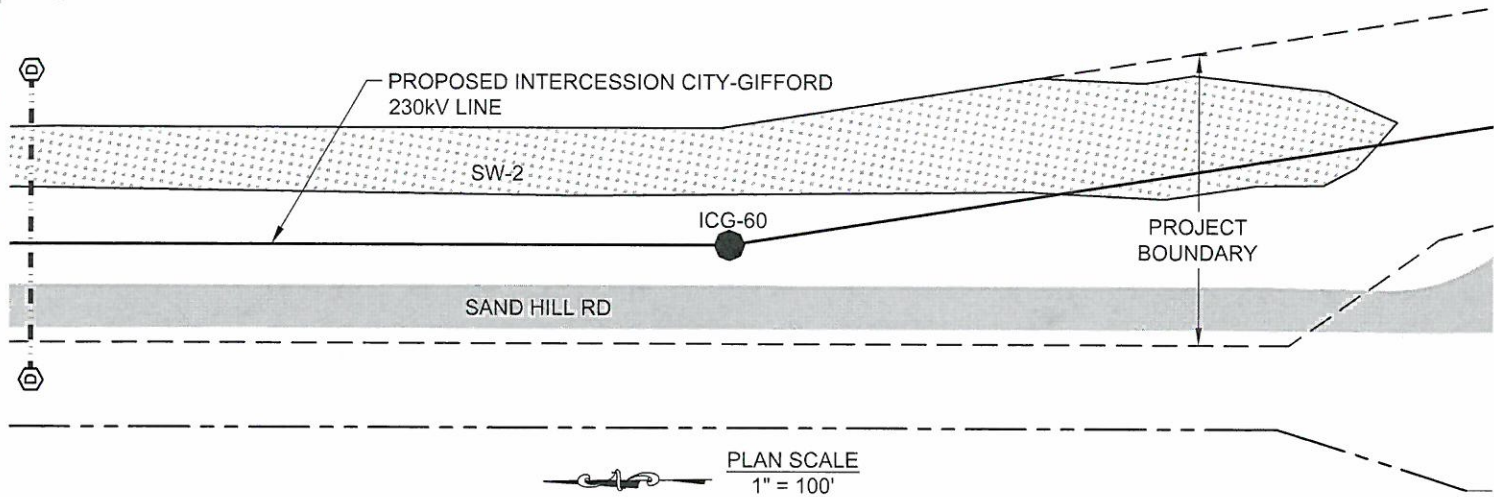
DRK
CHECK

KRM
ENGR

3 OF 3
SHEET

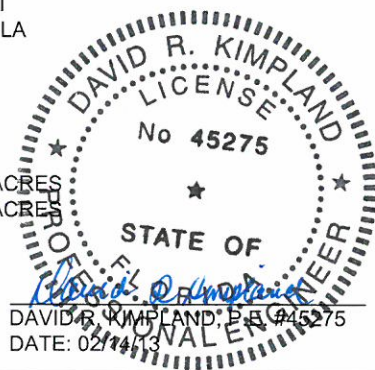
DWG.

ICG-3019

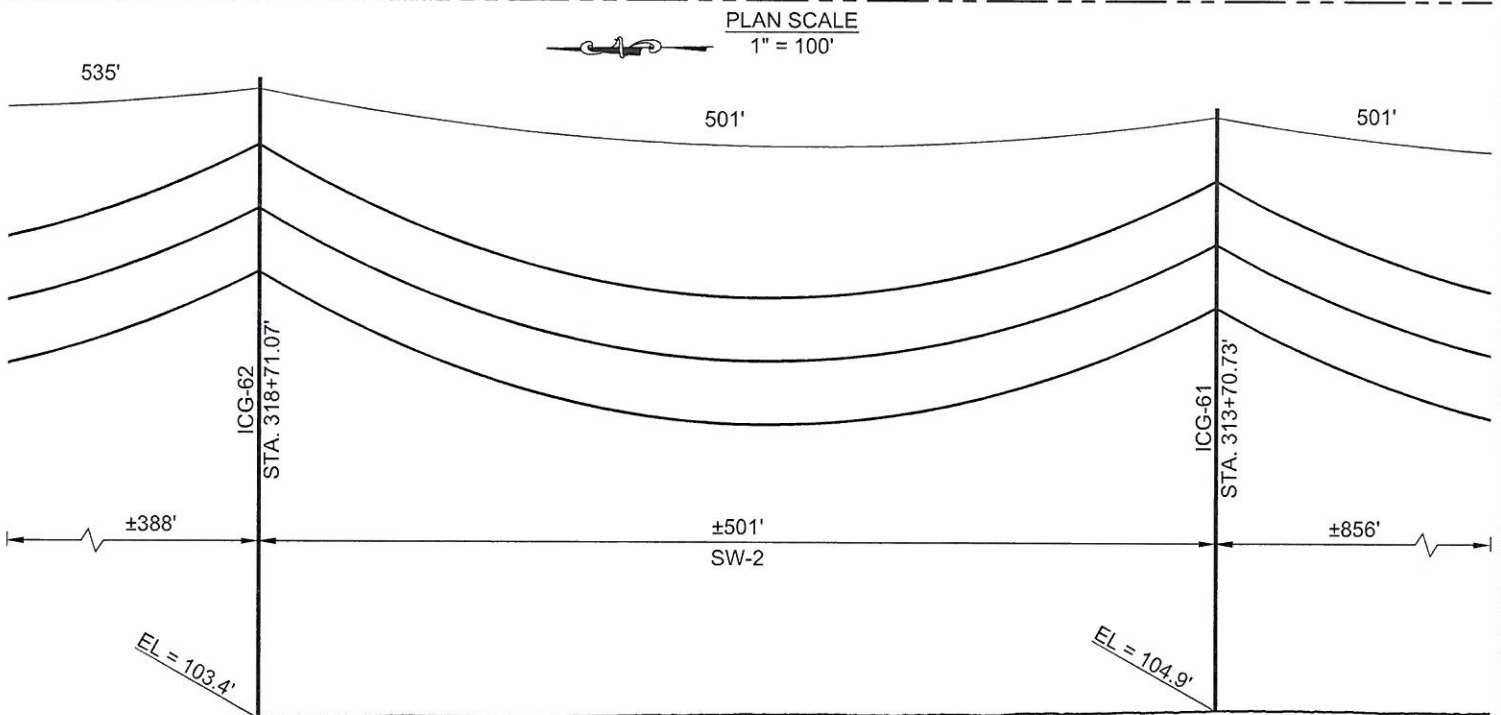
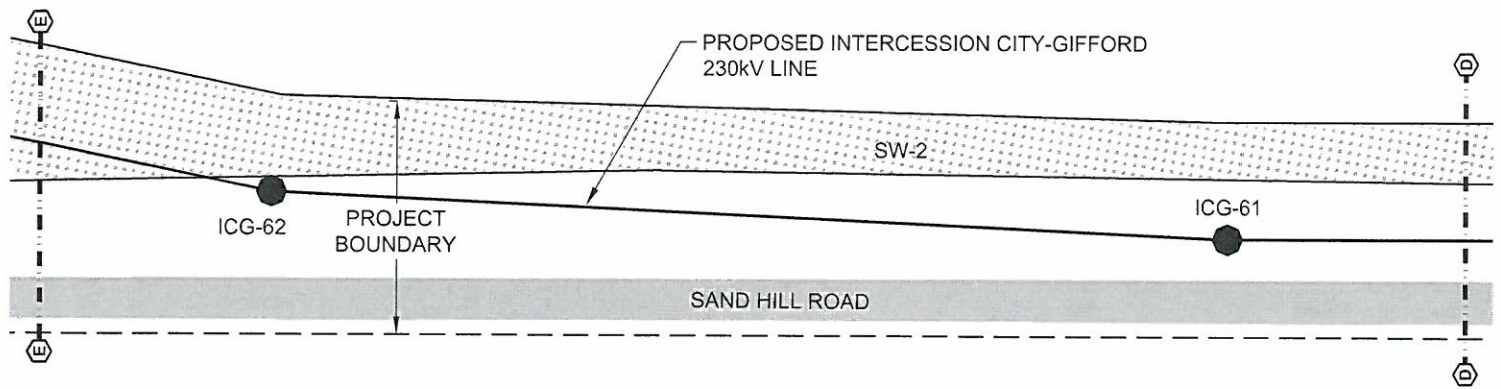


LEGEND EXISTING TRANSMISSION POLE (TO REMAIN) EXISTING TRANSMISSION POLE (TO BE REMOVED) PROPOSED STEEL TRANSMISSION POLE WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13 CONSTRUCTION MATTING EXISTING RIGHT-OF-WAY LINE PROJECT BOUNDARY LINE	NOTES: 1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS. 2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.
---	--

SECTION:	16
TOWNSHIP:	25 SOUTH
RANGE:	27 EAST
COUNTY:	OSCEOLA
PARCEL ID:	-
OWNER NAME:	FDOT
SW-2 TOTALS	
FILL:	0.00 ACRES
CLEARING:	0.00 ACRES
UC SYNERGETIC	
20525 AMBERFIELD DRIVE	
SUITE 201	
LAND O' LAKES, FL 34638	
C.A. 9447	



02/21/13 DATE	V: 30 H: 100 SCALE	LINE ENGINEERING	
RAR DRAWN	KRM TECH	WETLAND PERMIT	
DRK CHECK	KRM ENGR	INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE SW-2	
1 OF 3 SHEET		DWG. ICG-3020	



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

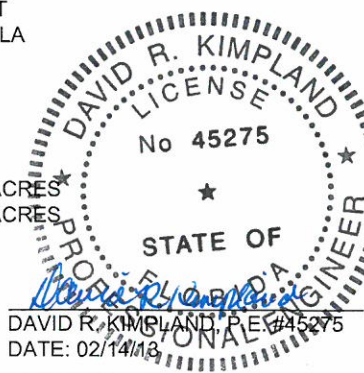
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2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS .

SECTION: 16
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

SW-2 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-2

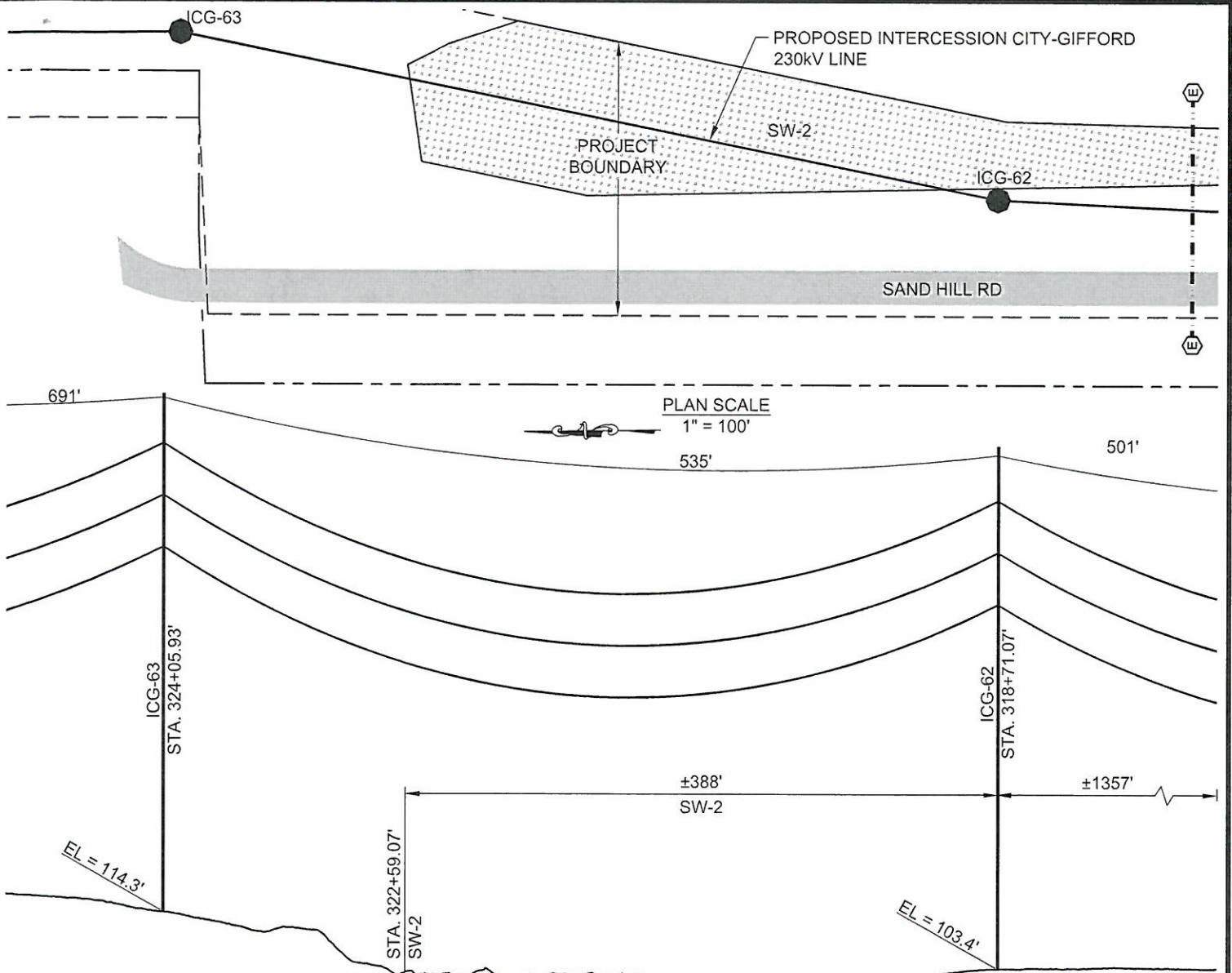
DRK
CHECK

KRM
ENGR

2 OF 3
SHEET

DWG.

ICG-3020



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

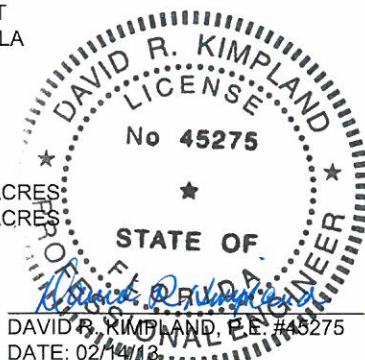
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2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 16
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: -

OWNER NAME: FDOT

SW-2 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-2

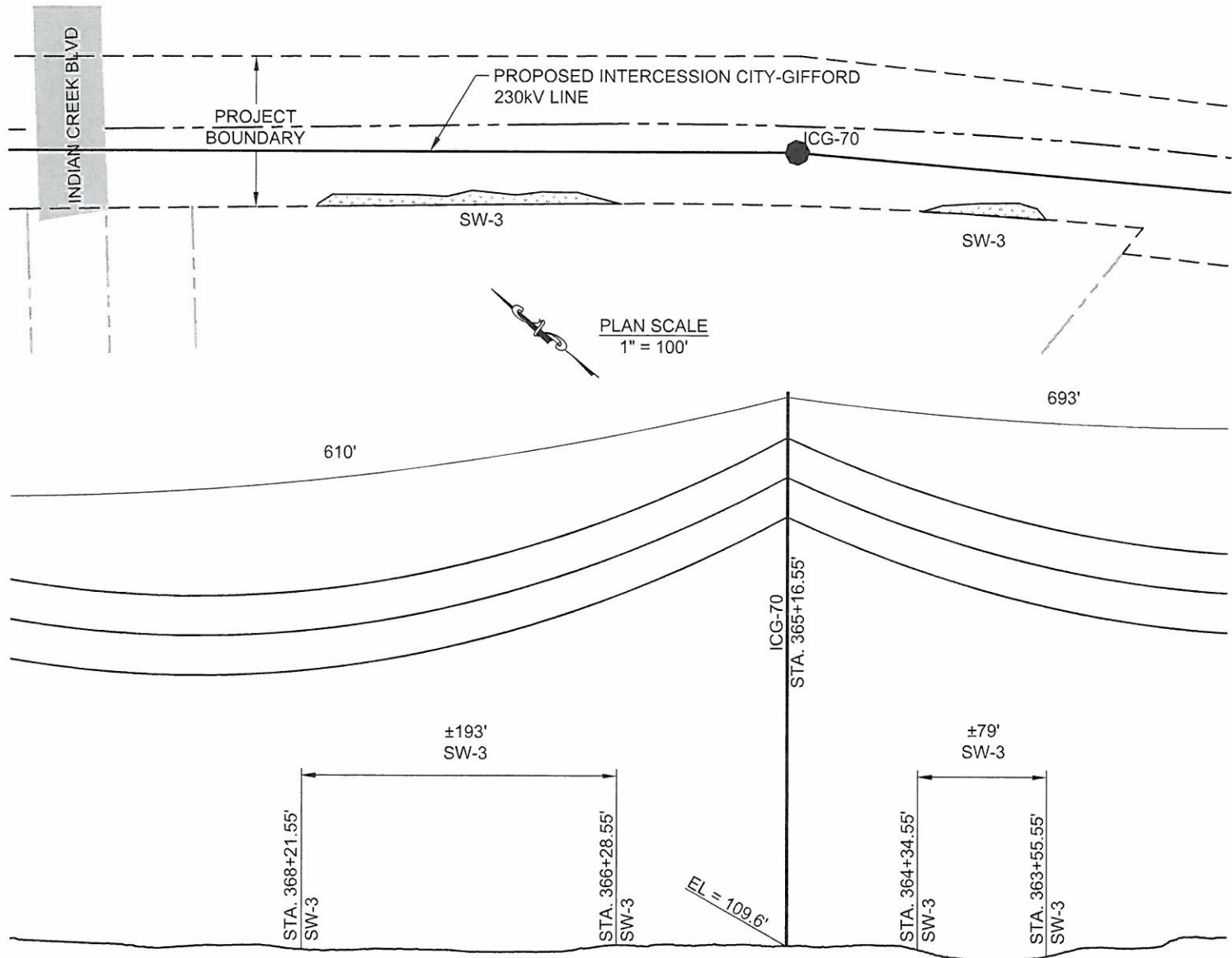
DRK
CHECK

KRM
ENGR

3 OF 3
SHEET

DWG.

ICG-3020



LEGEND

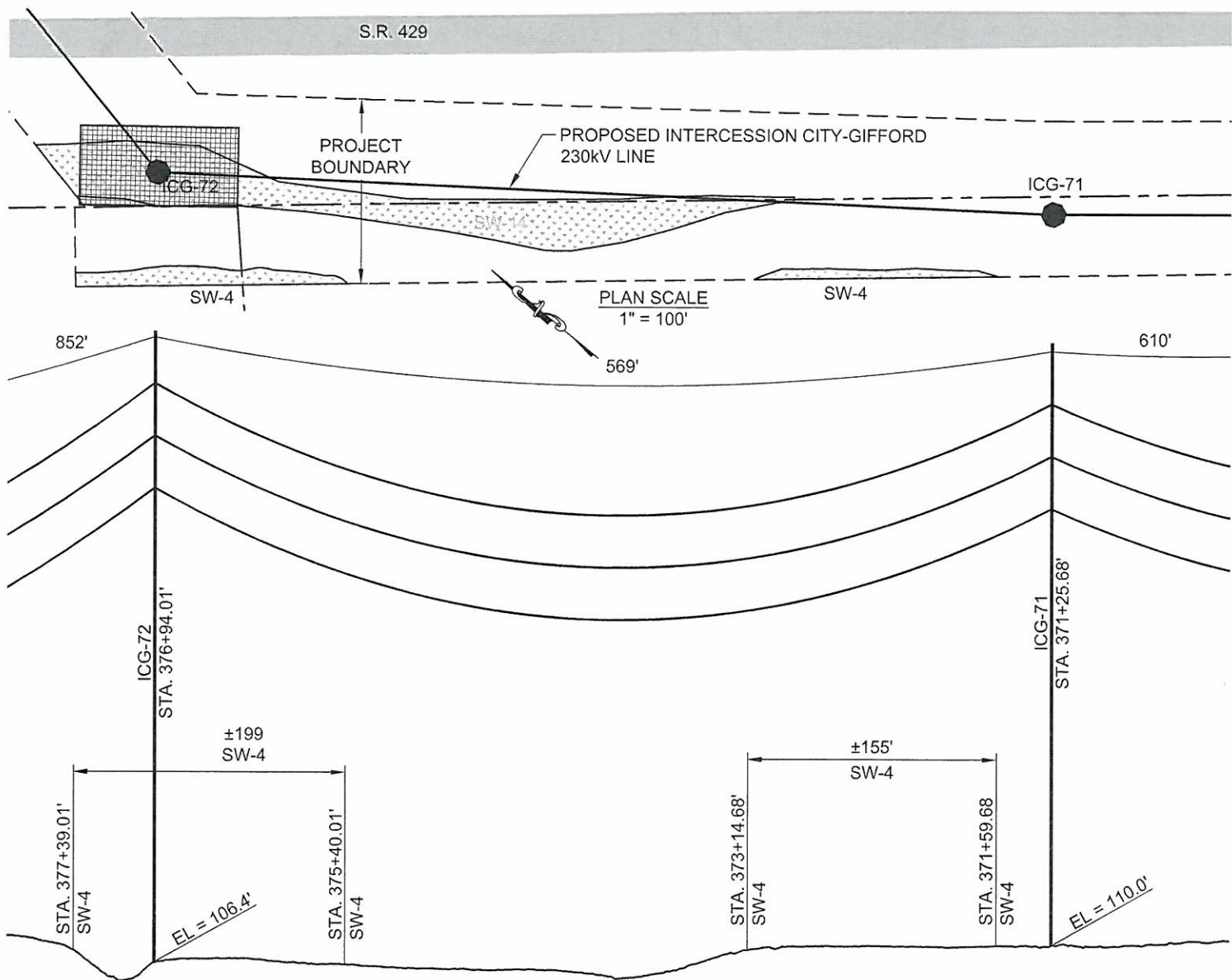
- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE
VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 9 TOWNSHIP: 25 SOUTH RANGE: 27 EAST COUNTY: OSCEOLA PARCEL ID: 09-25-27-3434-0001-0000 OWNER NAME: OSCEOLA COUNTY SW-3 TOTALS FILL: 0.00 ACRES CLEARING: 0.00 ACRES UC SYNERGETIC 20525 AMBERFIELD DRIVE SUITE 201 LAND O' LAKES, FL 34638 C.A. 9447													
DAVID R. KIMPLAND Professional Engineer No 45275 STATE OF FLORIDA DATE: 02/21/13		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">02/21/13 DATE</td> <td style="width: 25%;">V: 40 H: 100 SCALE</td> <td colspan="2" style="text-align: center;">LINE ENGINEERING</td> </tr> <tr> <td style="text-align: center;">RAR DRAWN</td> <td style="text-align: center;">KRM TECH</td> <td colspan="2" rowspan="2" style="text-align: center;">WETLAND PERMIT INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE SW-3</td> </tr> <tr> <td style="text-align: center;">DRK CHECK</td> <td style="text-align: center;">KRM ENGR</td> </tr> </table>		02/21/13 DATE	V: 40 H: 100 SCALE	LINE ENGINEERING		RAR DRAWN	KRM TECH	WETLAND PERMIT INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE SW-3		DRK CHECK	KRM ENGR
02/21/13 DATE	V: 40 H: 100 SCALE	LINE ENGINEERING											
RAR DRAWN	KRM TECH	WETLAND PERMIT INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE SW-3											
DRK CHECK	KRM ENGR												
1 OF 1 SHEET		DWG. ICG-3021											



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

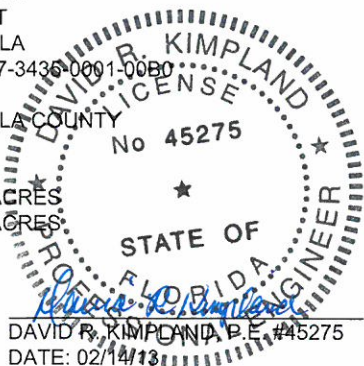
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2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS .

SECTION: 9
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 09-28-27-3436-0001-0080

OWNER NAME: OSCEOLA COUNTY

SW-4 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-4

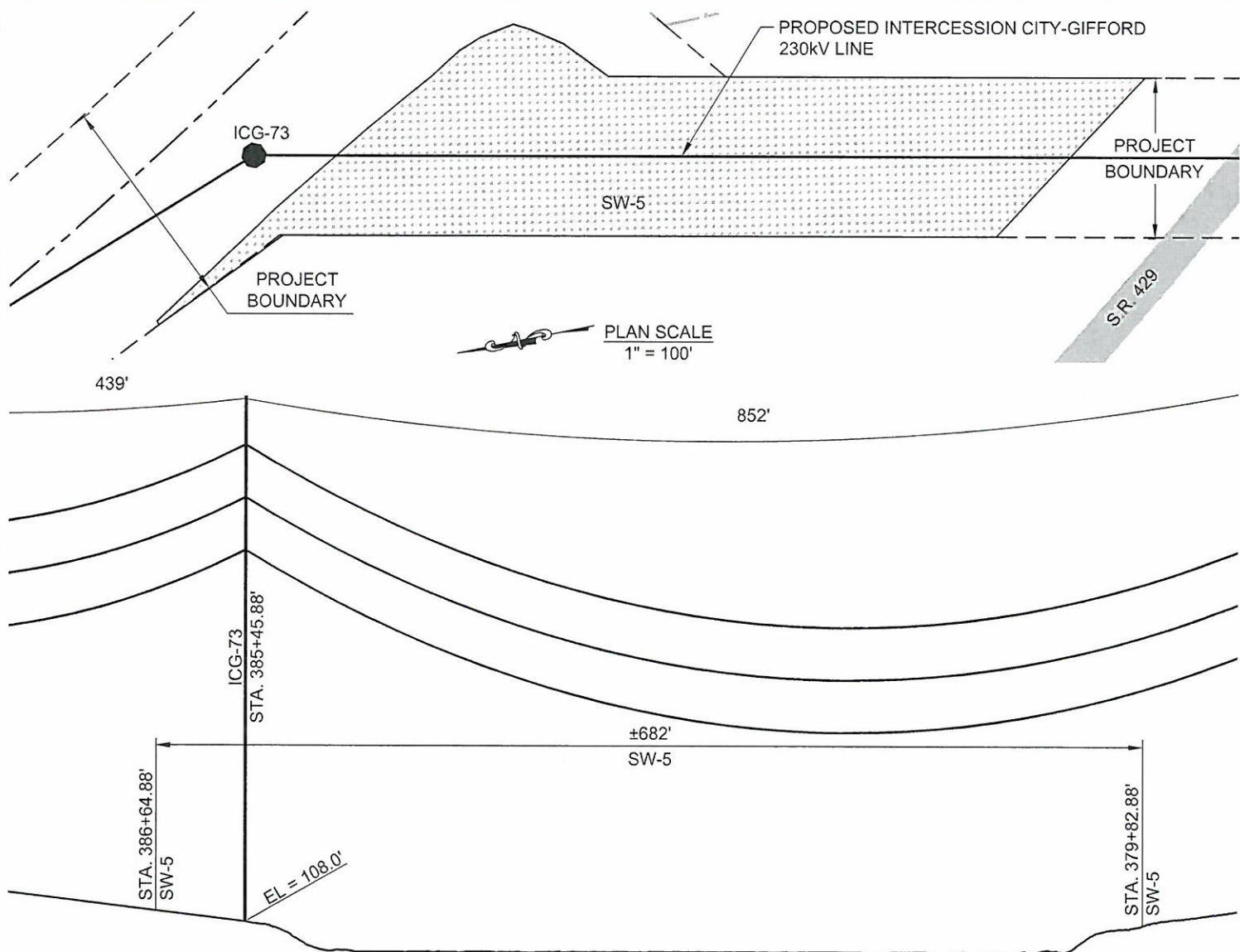
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3022



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

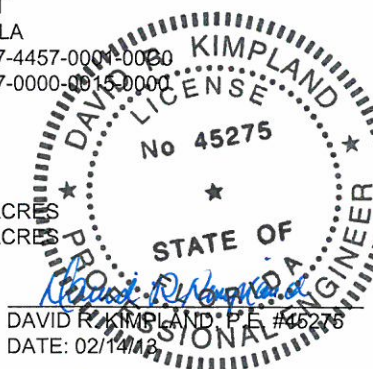
NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 9
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 09-25-27-4457-0000-0000
09-25-27-0000-0015-0001

OWNER NAME: FDOT

SW-5 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-5

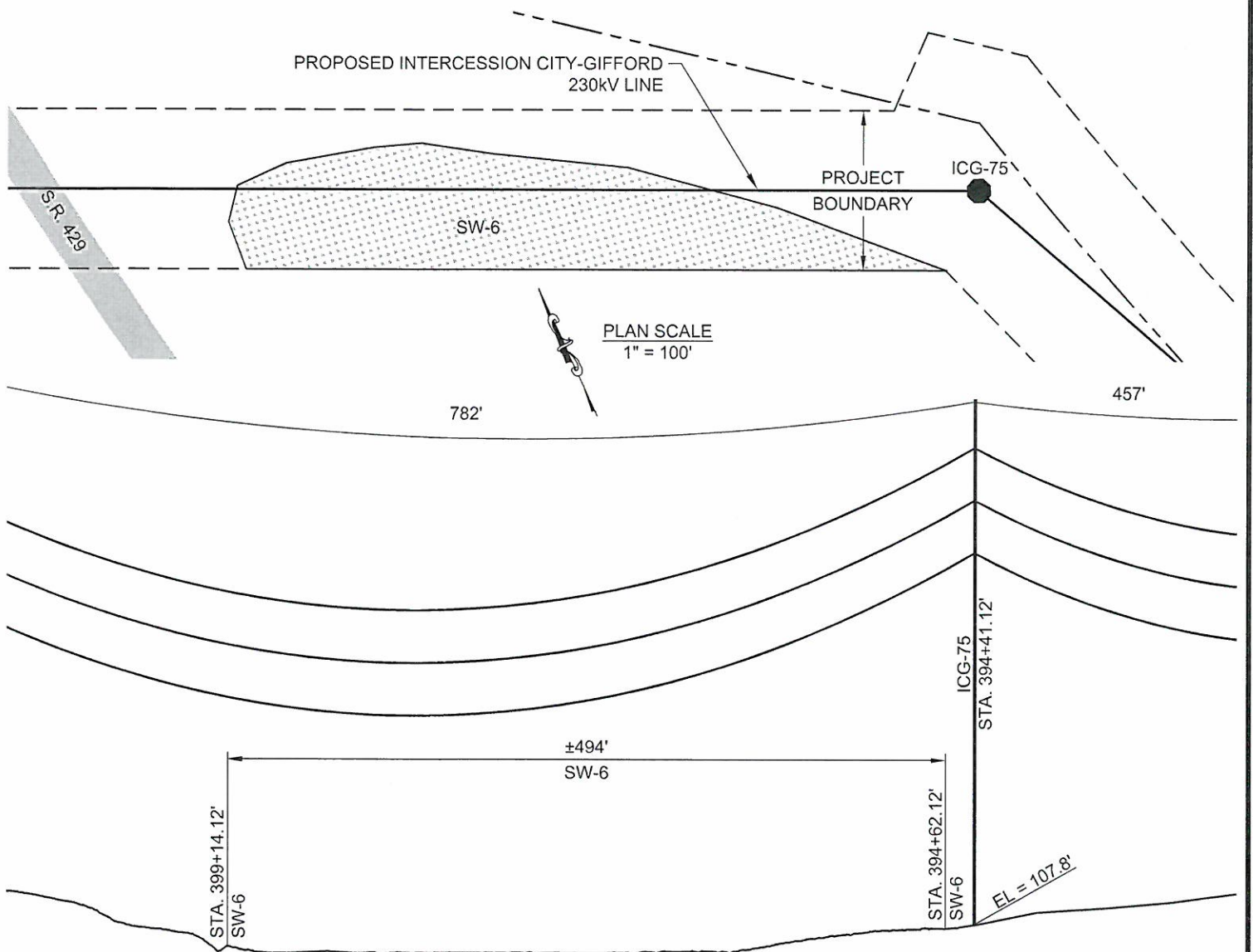
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3024



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

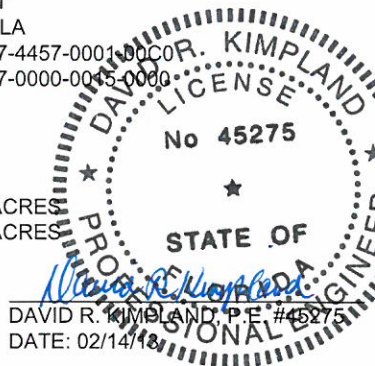
NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 9
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 09-25-27-4457-0001-0000
09-25-27-0000-0045-0000

OWNER NAME: FDOT

SW-6 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/14/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-6

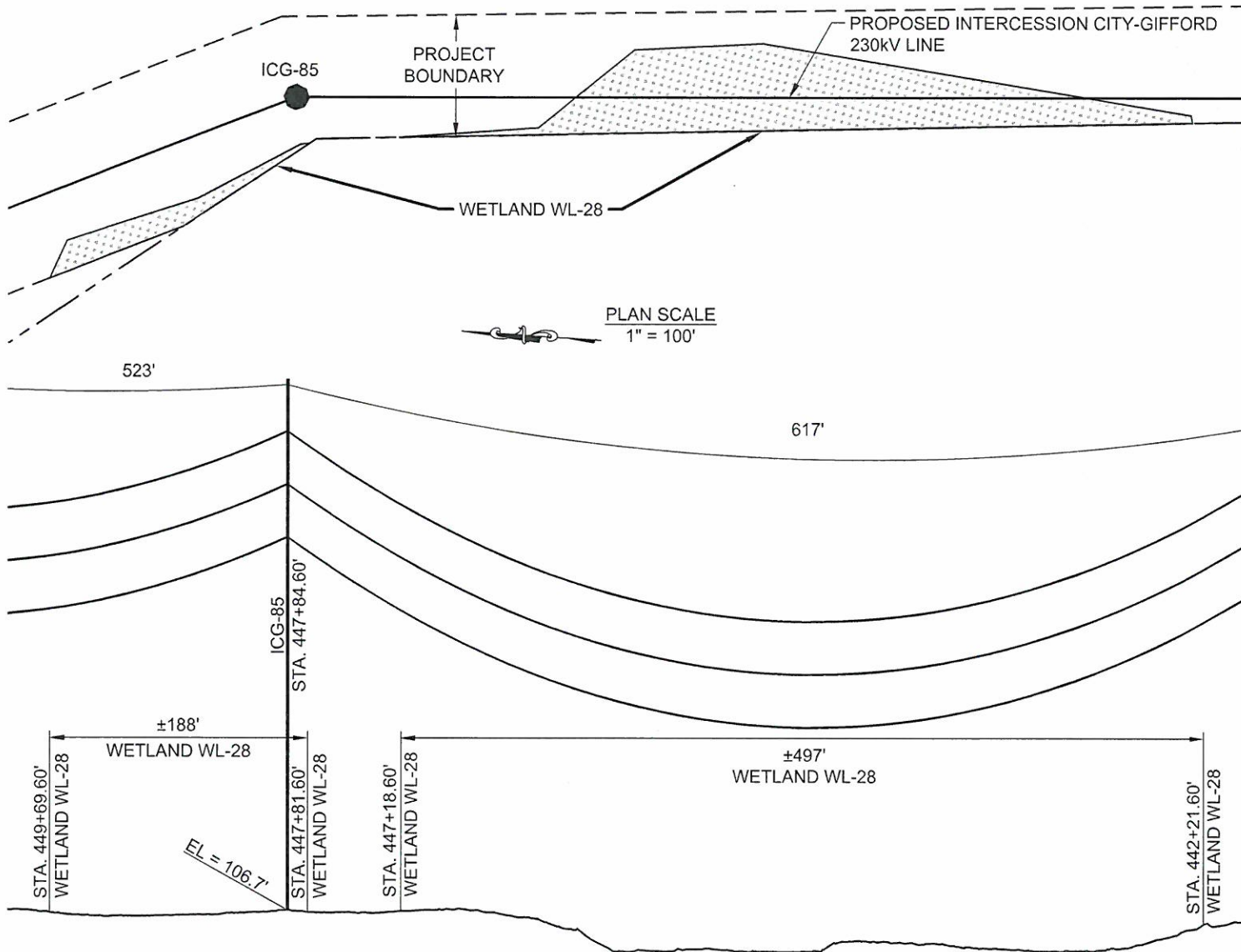
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3025



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

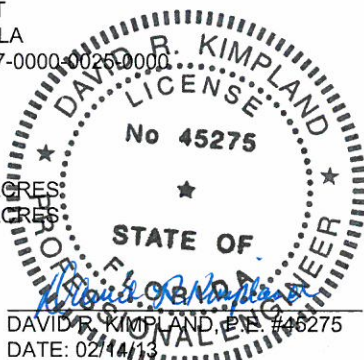
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 4
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 04-25-27-0000-0025-0000

OWNER NAME: FDOT

WETLAND WL-28 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.20 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-28

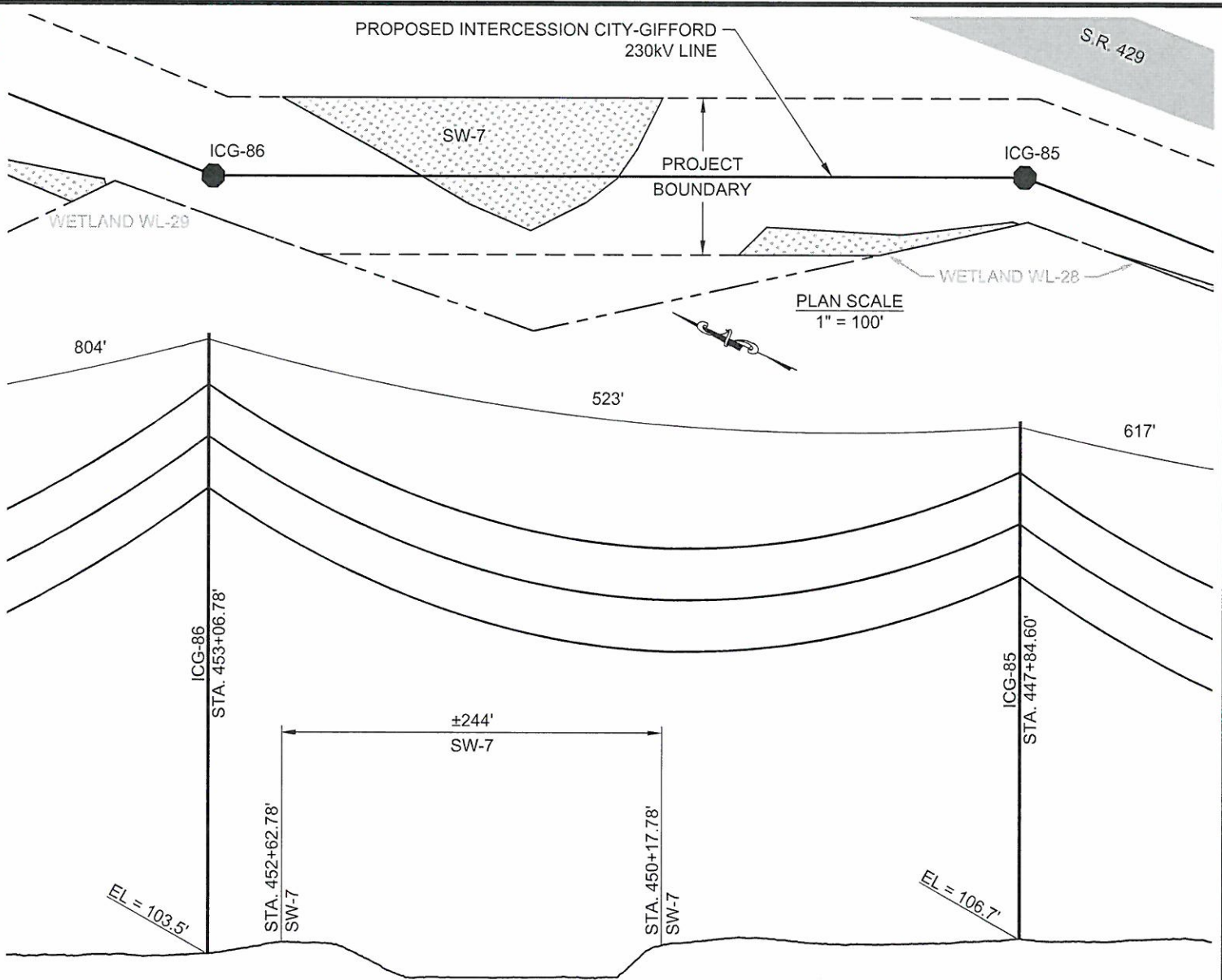
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3026



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

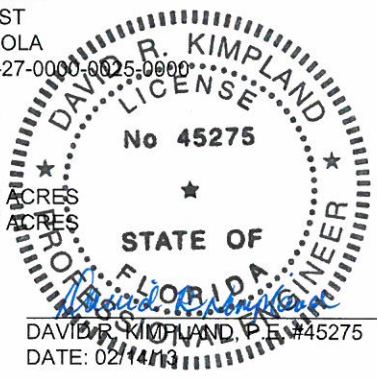
PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

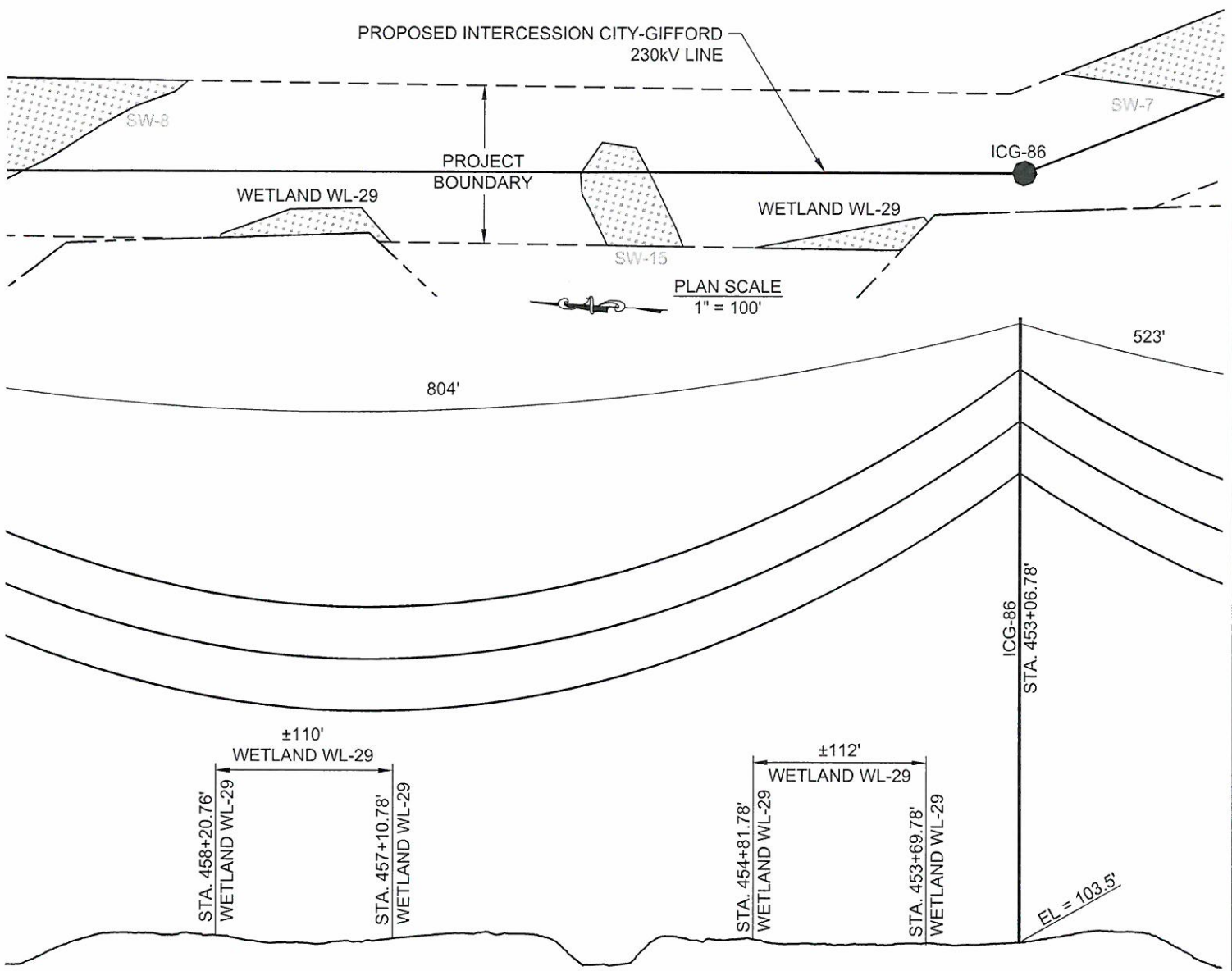
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION:	4
TOWNSHIP:	25 SOUTH
RANGE:	27 EAST
COUNTY:	OSCEOLA
PARCEL ID:	04-25-27-0000-0025-0000
OWNER NAME:	FDOT
SW-7 TOTALS	
FILL:	0.00 ACRES
CLEARING:	0.00 ACRES
UC SYNERGETIC 20525 AMBERFIELD DRIVE SUITE 201 LAND O' LAKES, FL 34638 C.A. 9447	



Progress Energy

02/21/13 DATE	V: 30 H: 100 SCALE	LINE ENGINEERING
RAR DRAWN	KRM TECH	WETLAND PERMIT INTERCESSION CITY - GIFFORD 230kV TRANSMISSION LINE SW-7
DRK CHECK	KRM ENGR	
1 OF 1 SHEET		DWG. ICG-3027



LEGEND

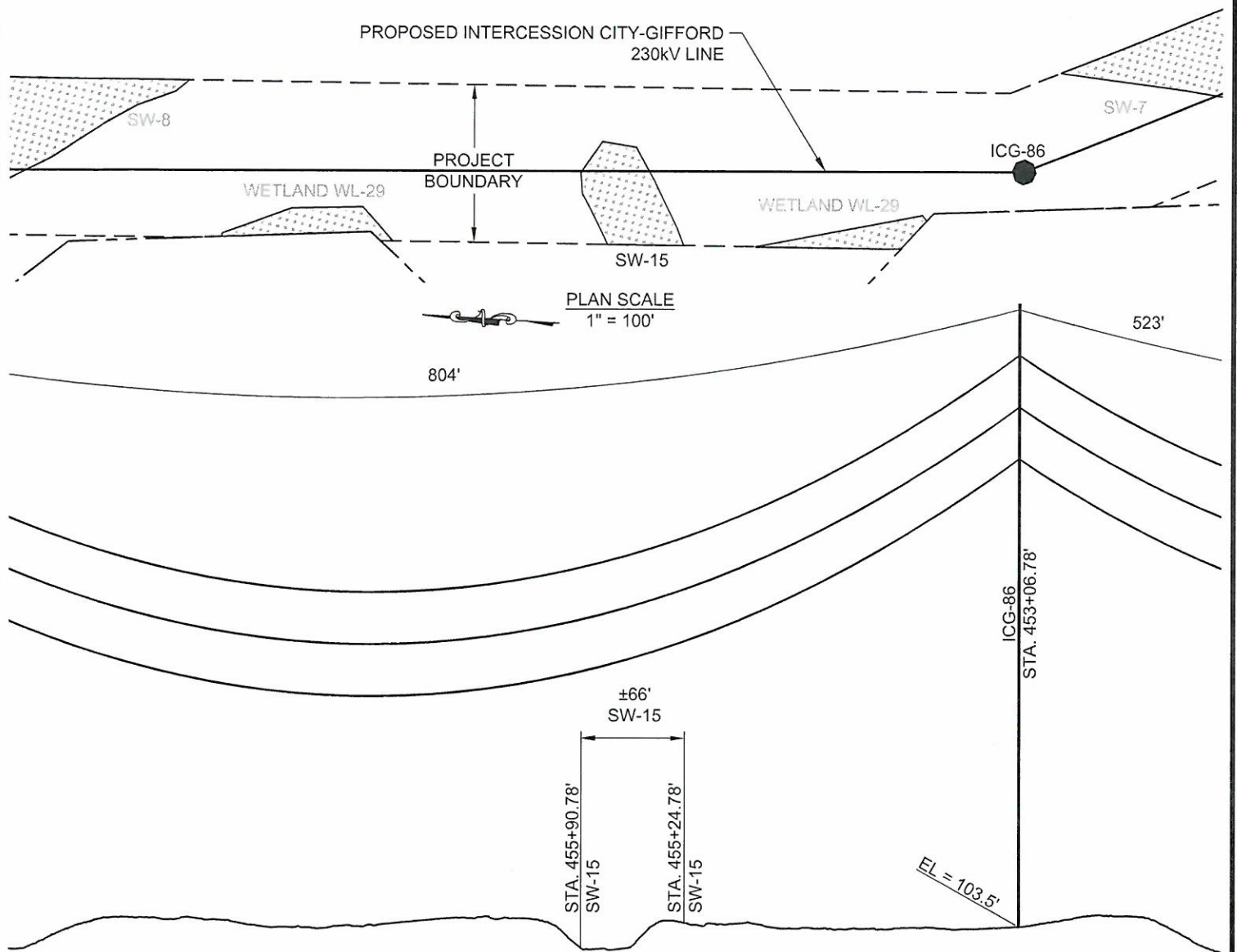
- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE
VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION:	4			Progress Energy	
TOWNSHIP:	25 SOUTH				
RANGE:	27 EAST				
COUNTY:	OSCEOLA				
PARCEL ID:	04-25-27-0000-0026-0000				
OWNER NAME:	FDOT	02/21/13	V: 30	LINE ENGINEERING	
		DATE	H: 100		
WETLAND WL-29 TOTALS				WETLAND PERMIT INTERCESSION CITY - GIFFORD 230KV TRANSMISSION LINE WETLAND WL-29	
FILL:	0.00 ACRES	RAR	KRM		
CLEARING:	0.00 ACRES	DRAWN	TECH		
UC SYNERGETIC		DRK	KRM	ICG-3028	
20525 AMBERFIELD DRIVE		CHECK	ENGR		
SUITE 201		1 OF 1		DWG.	
LAND O' LAKES, FL 34638		SHEET			
C.A. 9447		DATE: 02/14/13			



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

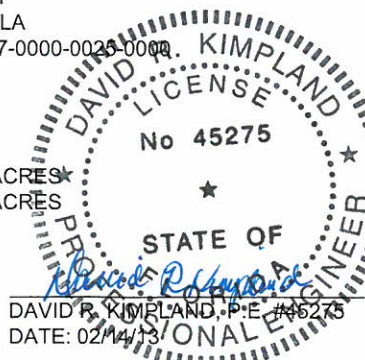
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 4
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 04-25-27-0000-0025-0000

OWNER NAME: FDOT

SW-15 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-15

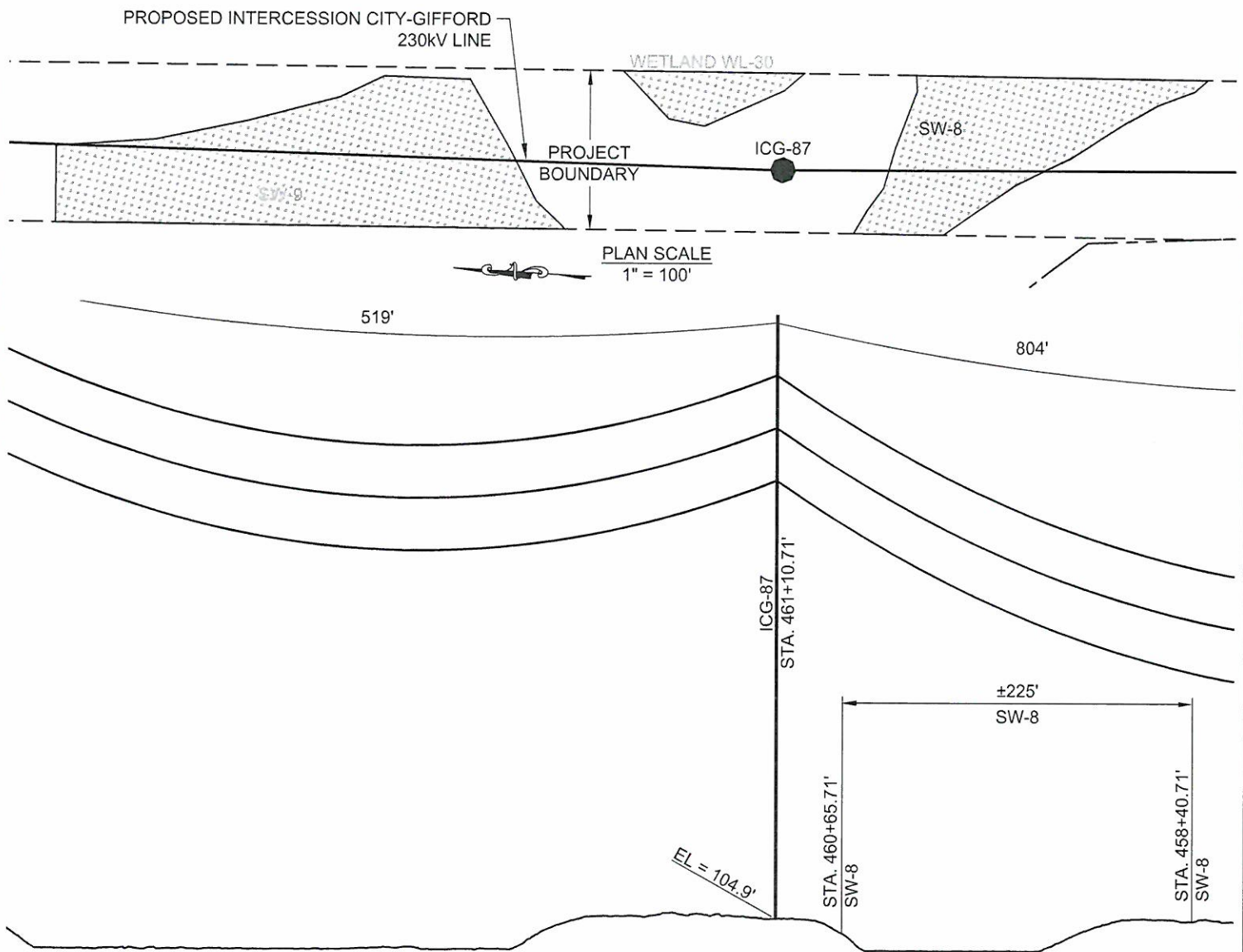
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3029



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

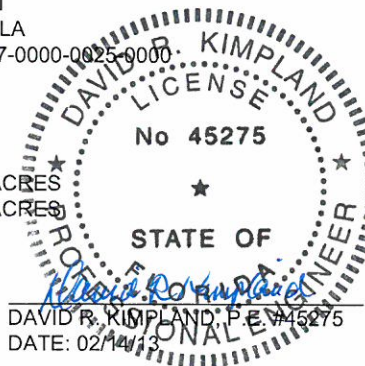
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 4
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 04-25-27-0000-0025-9000

OWNER NAME: FDOT

SW-8 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-8

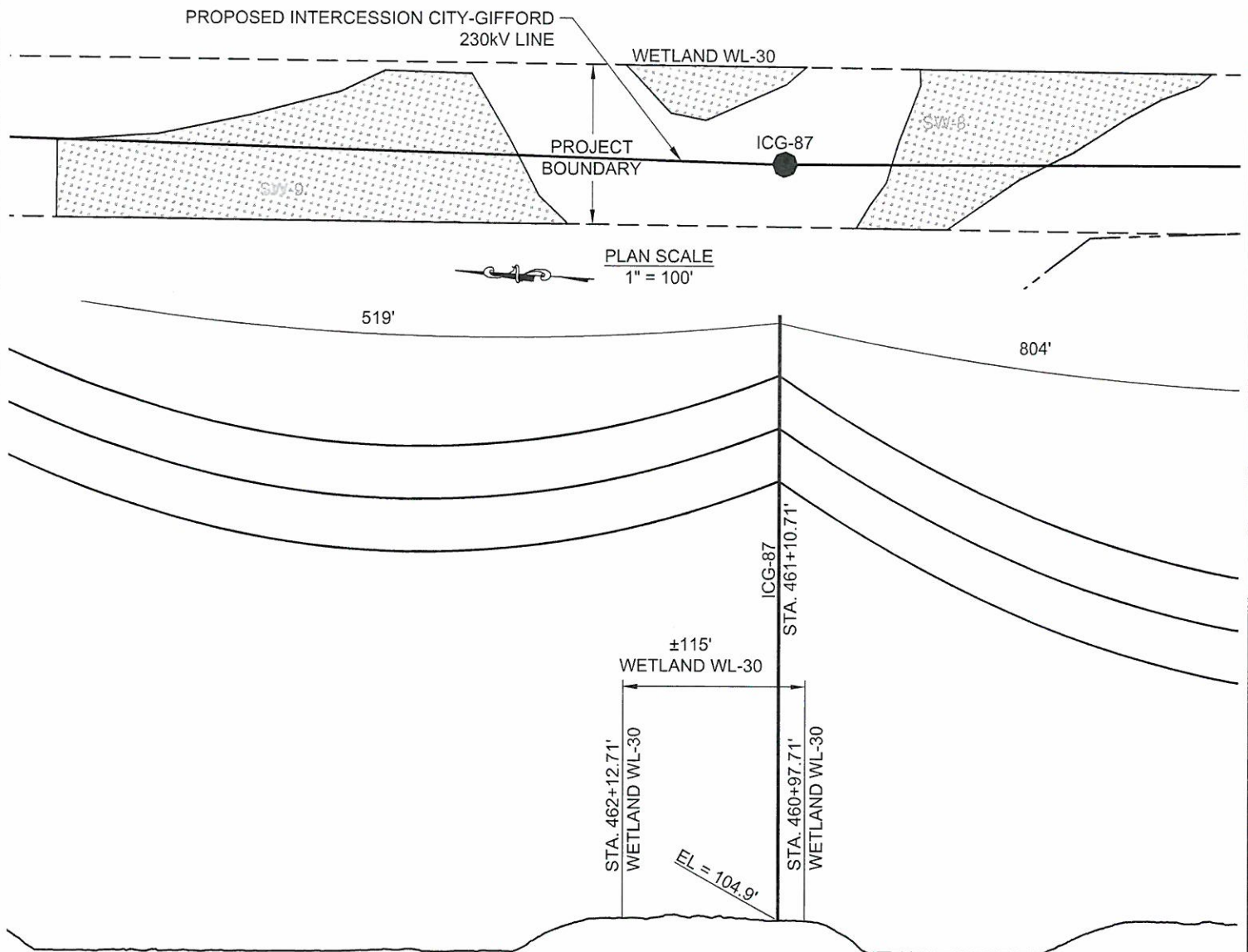
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3030



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

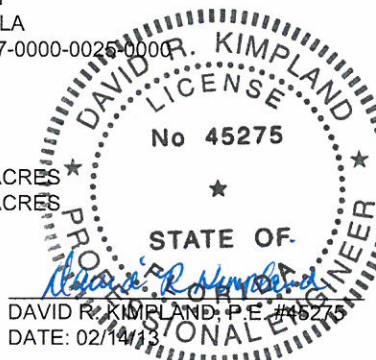
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS .

SECTION: 4
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 04-25-27-0000-0025-0000

OWNER NAME: FDOT

WETLAND WL-30 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



02/21/13
DATE

V: 30
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

DRK
CHECK

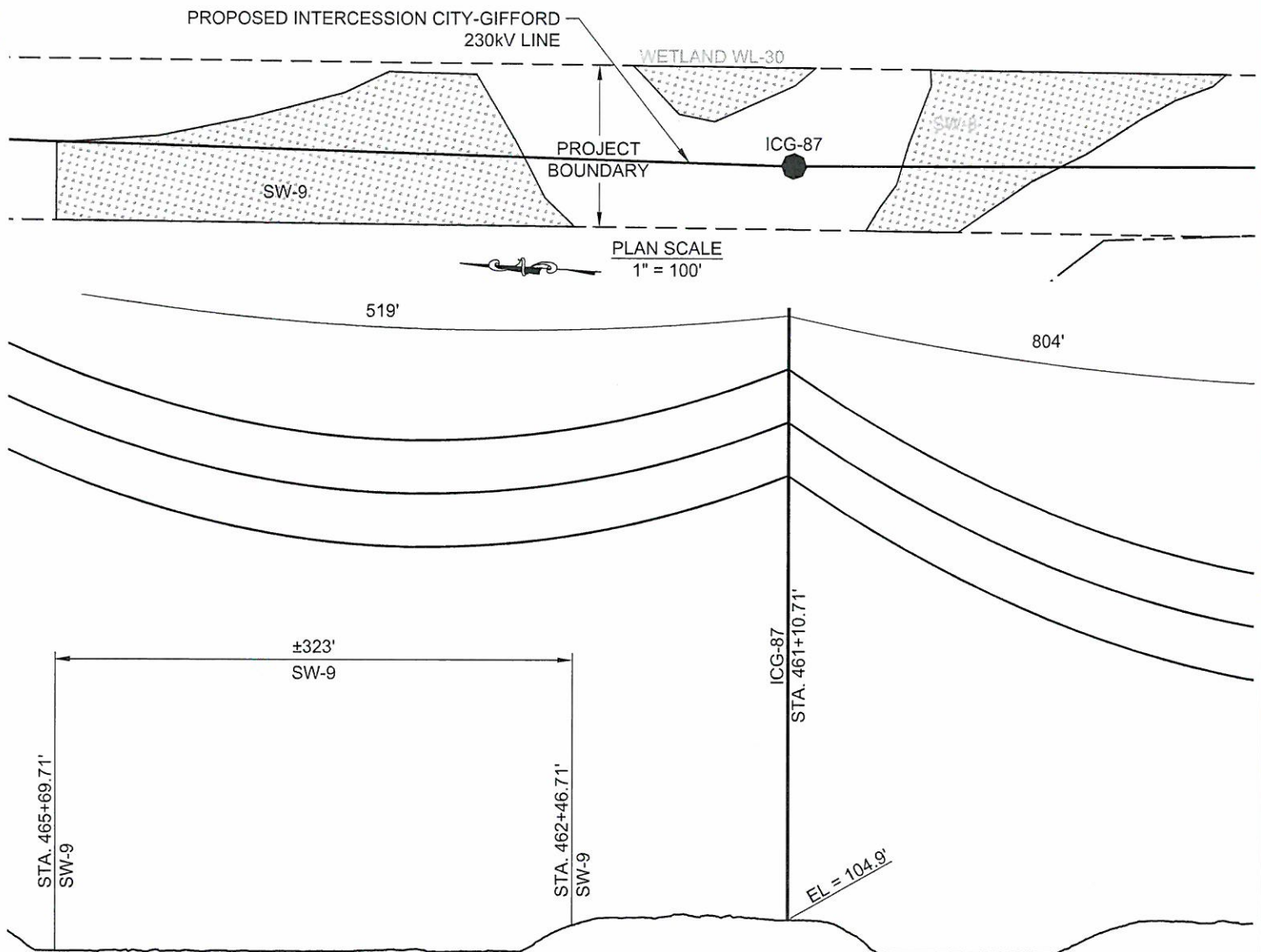
KRM
ENGR

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-30

1 OF 1
SHEET

DWG.

ICG-3031



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 30'
HOR: 1" = 100'

NOTES:

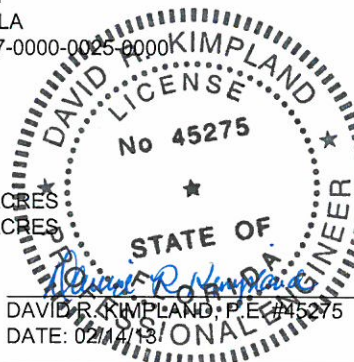
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 4
TOWNSHIP: 25 SOUTH
RANGE: 27 EAST
COUNTY: OSCEOLA
PARCEL ID: 04-25-27-0000-0025-0000

OWNER NAME: FDOT

SW-9 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
5025 WEST GRACE STREET
TAMPA, FL 33607
C.A. 9447



DAVID R. KIMPLAND, P.E. 045275

DATE: 02/21/13



Progress Energy

02/21/13
DATE

V: 30
H: 100
SCALE

KQT
DRAWN

KRM
TECH

DRK
CHECK

KRM
ENGR

LINE ENGINEERING

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
SW-9

1 OF 1
SHEET

DWG.

ICG-3032

S.R. 429 ON RAMP

PROPOSED INTERCESSION CITY-GIFFORD
230kV LINE

PROJECT
BOUNDARY

ICG-93

ICG-92

WETLAND WL-31

PLAN SCALE
1" = 100'

SW-12

740'

321'

449'

ICG-93

STA. 486+12.67'

ICG-92

STA. 482+92.46'

±375'

WETLAND WL-31

STA. 486+30.46'
WETLAND WL-31

EL = 103.7'

EL = 102.9'

STA. 482+55.46'
WETLAND WL-31

LEGEND



EXISTING TRANSMISSION POLE (TO REMAIN)



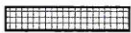
EXISTING TRANSMISSION POLE (TO BE REMOVED)



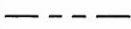
PROPOSED STEEL TRANSMISSION POLE



WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13



CONSTRUCTION MATTING



EXISTING RIGHT-OF-WAY LINE



PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'

HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 33-24-27-0000-00002

OWNER NAME: FDOT

WETLAND WL-31 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.34 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. 745275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-31

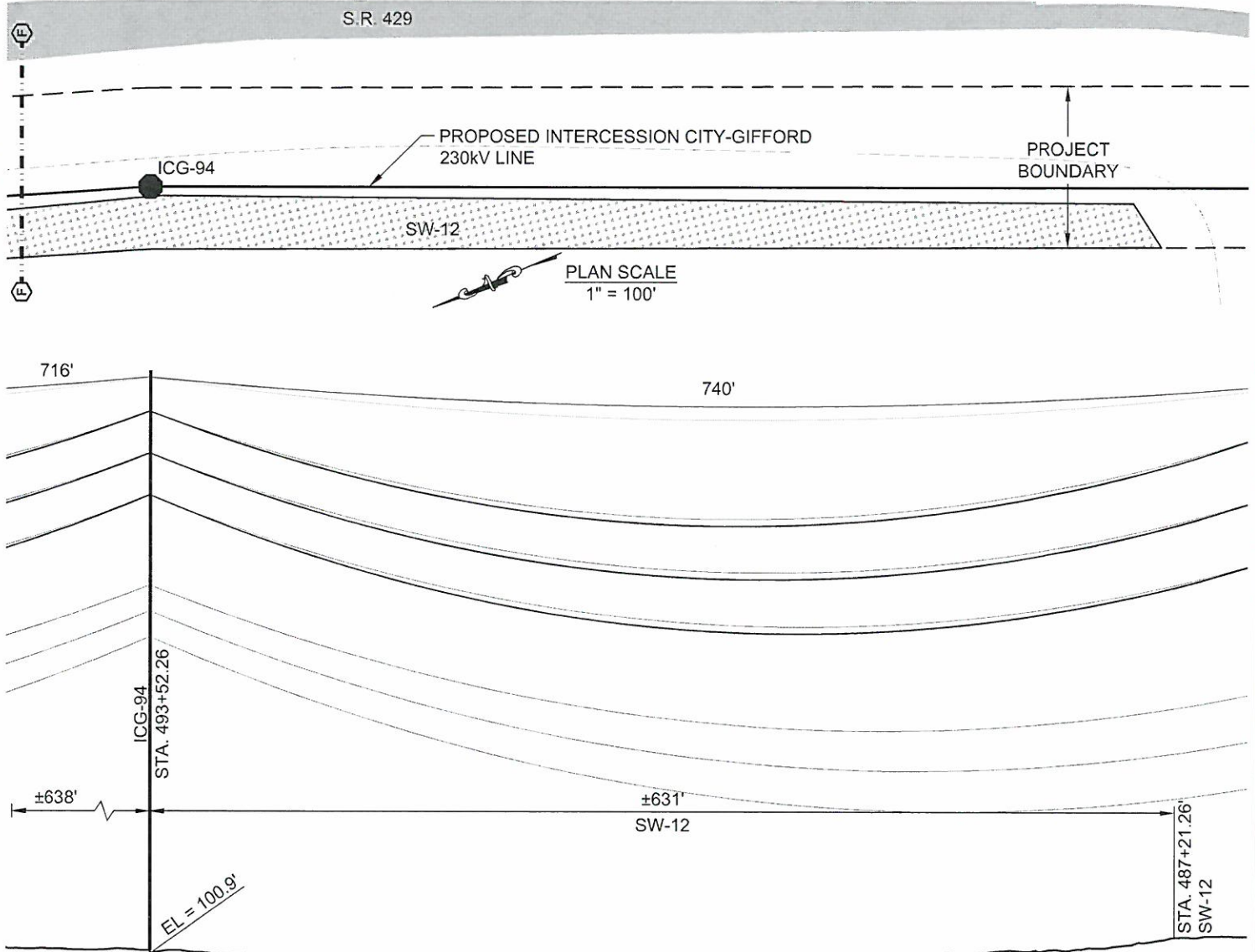
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3033



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

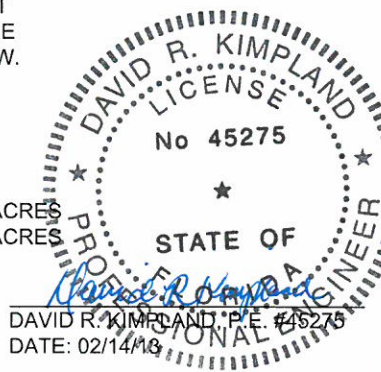
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: IN R.O.W.

OWNER NAME: FDOT

SW-12 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
5025 WEST GRACE STREET
TAMPA, FL 33607
C.A. 9447



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

KQT
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-12

DRK
CHECK

KRM
ENGR

1 OF 2
SHEET

DWG.

ICG-3034

S.R. 429

ICG-95

PROPOSED INTERCESSION CITY-GIFFORD
230kV LINEPROJECT
BOUNDARY

ICG-94

SW-12

PLAN SCALE
1" = 100'

683'

716'

740'

ICG-95
STA. 500+67.51STA. 499+93.26'
SW-12

EL = 104.0'

ICG-94
STA. 493+52.26

±631

±641'
SW-12

EL = 100.9'

LEGEND



EXISTING TRANSMISSION POLE (TO REMAIN)



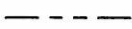
EXISTING TRANSMISSION POLE (TO BE REMOVED)



PROPOSED STEEL TRANSMISSION POLE

WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13

CONSTRUCTION MATTING



EXISTING RIGHT-OF-WAY LINE



PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'

HOR: 1" = 100'

NOTES:

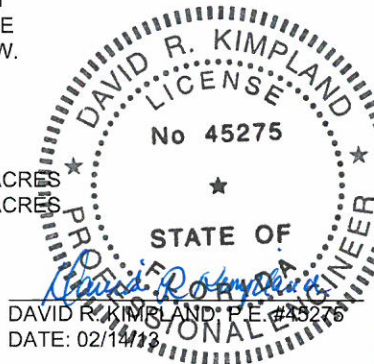
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2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS .

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: IN R.O.W.

OWNER NAME: FDOT

SW-12 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATEV: 50
H: 100
SCALE

LINE ENGINEERING

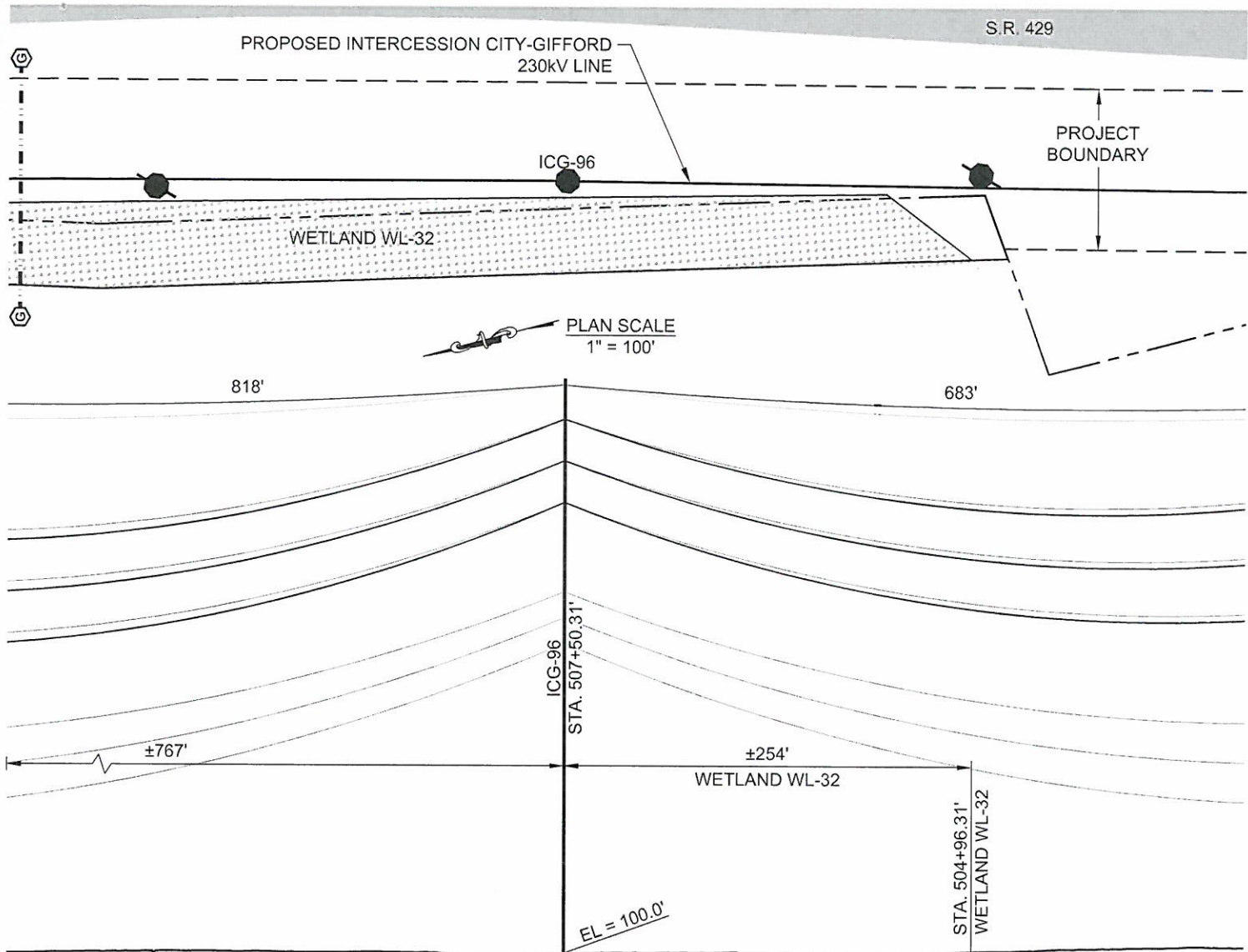
RAR
DRAWNKRM
TECHDRK
CHECKKRM
ENGR

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-12

2 OF 2
SHEET

DWG.

ICG-3034



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

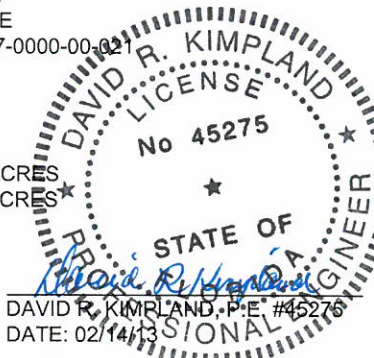
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 33-24-27-0000-00-001

OWNER NAME: FDOT

WETLAND WL-32 TOTALS
FILL: 0.00 ACRES
CLEARING: 1.20 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
WETLAND WL-32

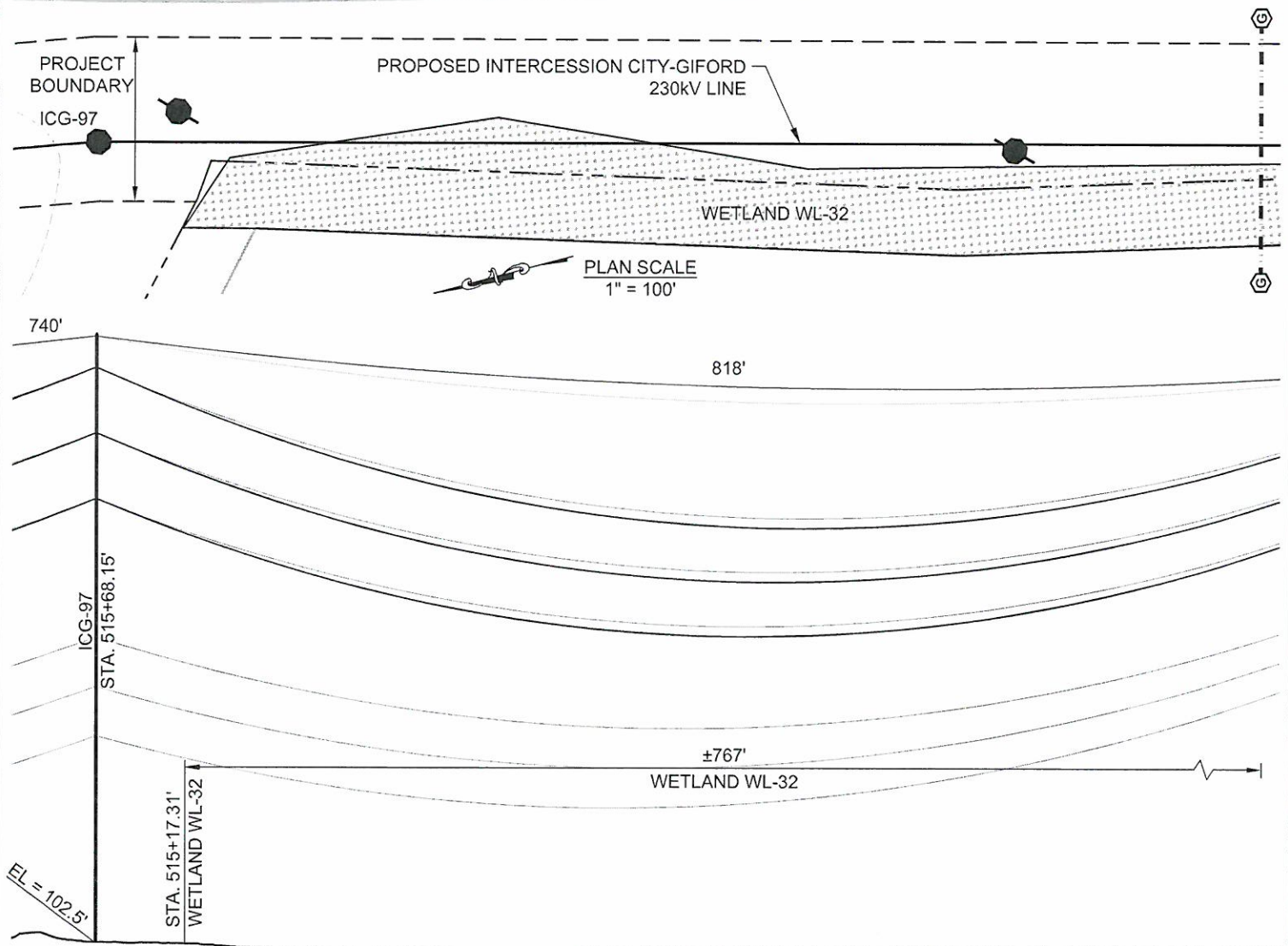
DRK
CHECK

KRM
ENGR

1 OF 2
SHEET

DWG.

ICG-3035



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 33-24-27-0000-00021

OWNER NAME: FDOT

WETLAND WL-32 TOTALS
FILL: 0.00 ACRES
CLEARING: 1.20 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-32

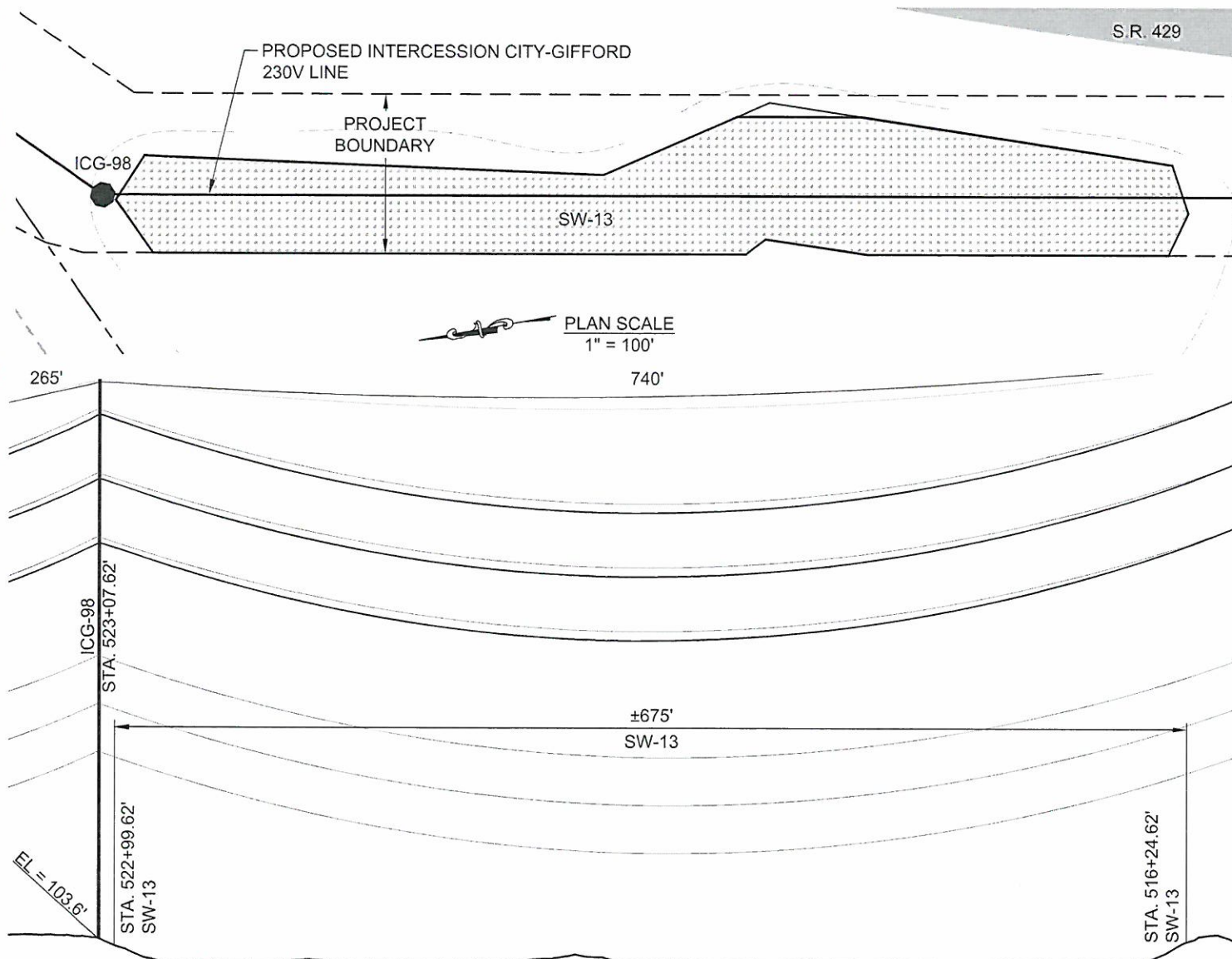
DRK
CHECK

KRM
ENGR

2 OF 2
SHEET

DWG.

ICG-3035



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

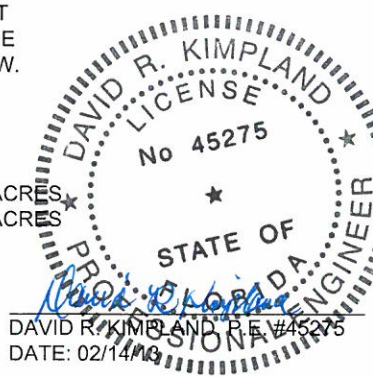
- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: IN R.O.W.

OWNER NAME: FDOT

SW-13 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
SW-13

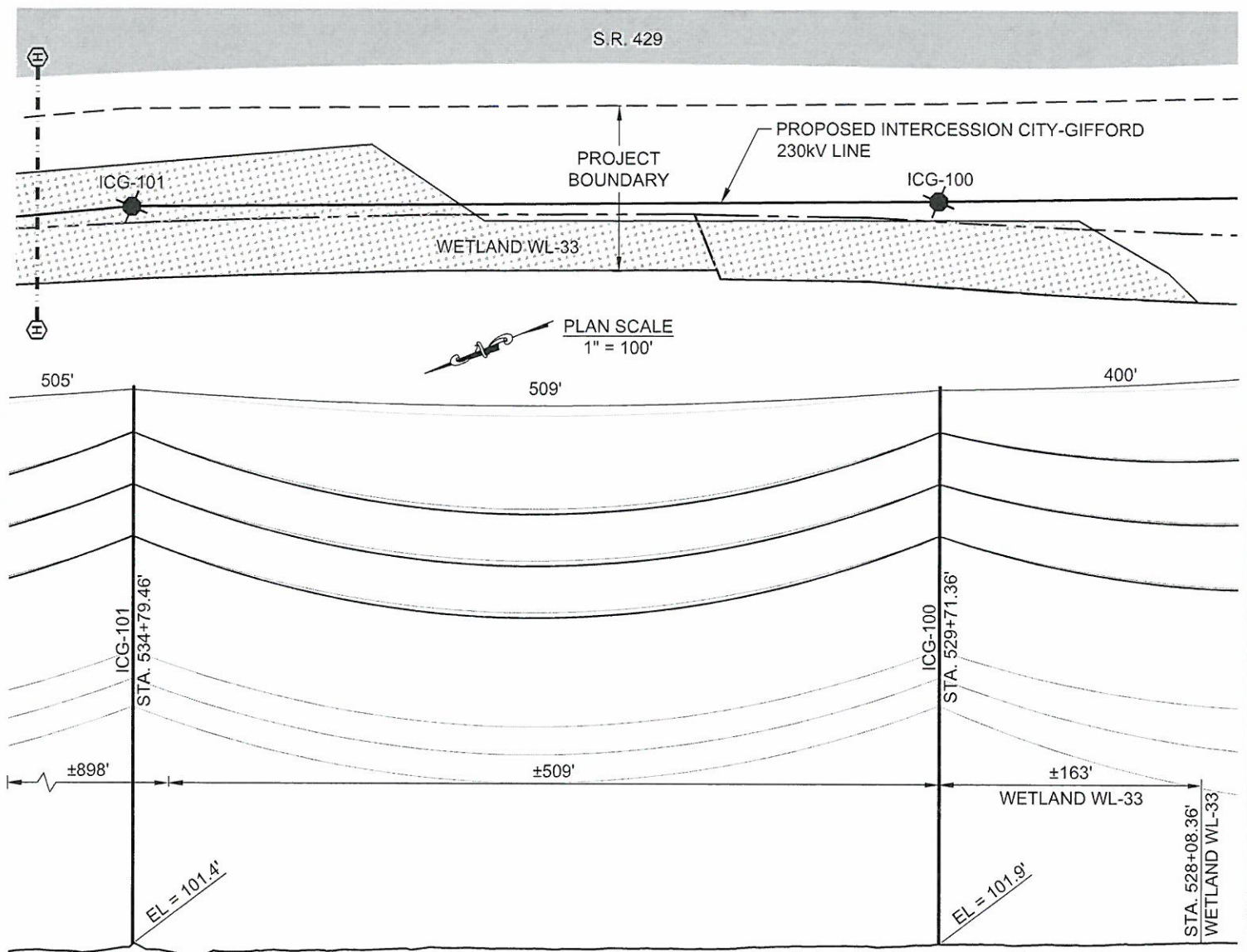
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3036



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 28/33
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 33-24-27-0000-00-02
28-24-27-0000-00-013

OWNER NAME:

FDOT
ORANGE LAKE COUNTRY CLUB INC

WETLAND WL-33 TOTALS
FILL: 0.00 ACRES
CLEARING: 1.82 ACRES
UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230KV TRANSMISSION LINE
WETLAND WL-33

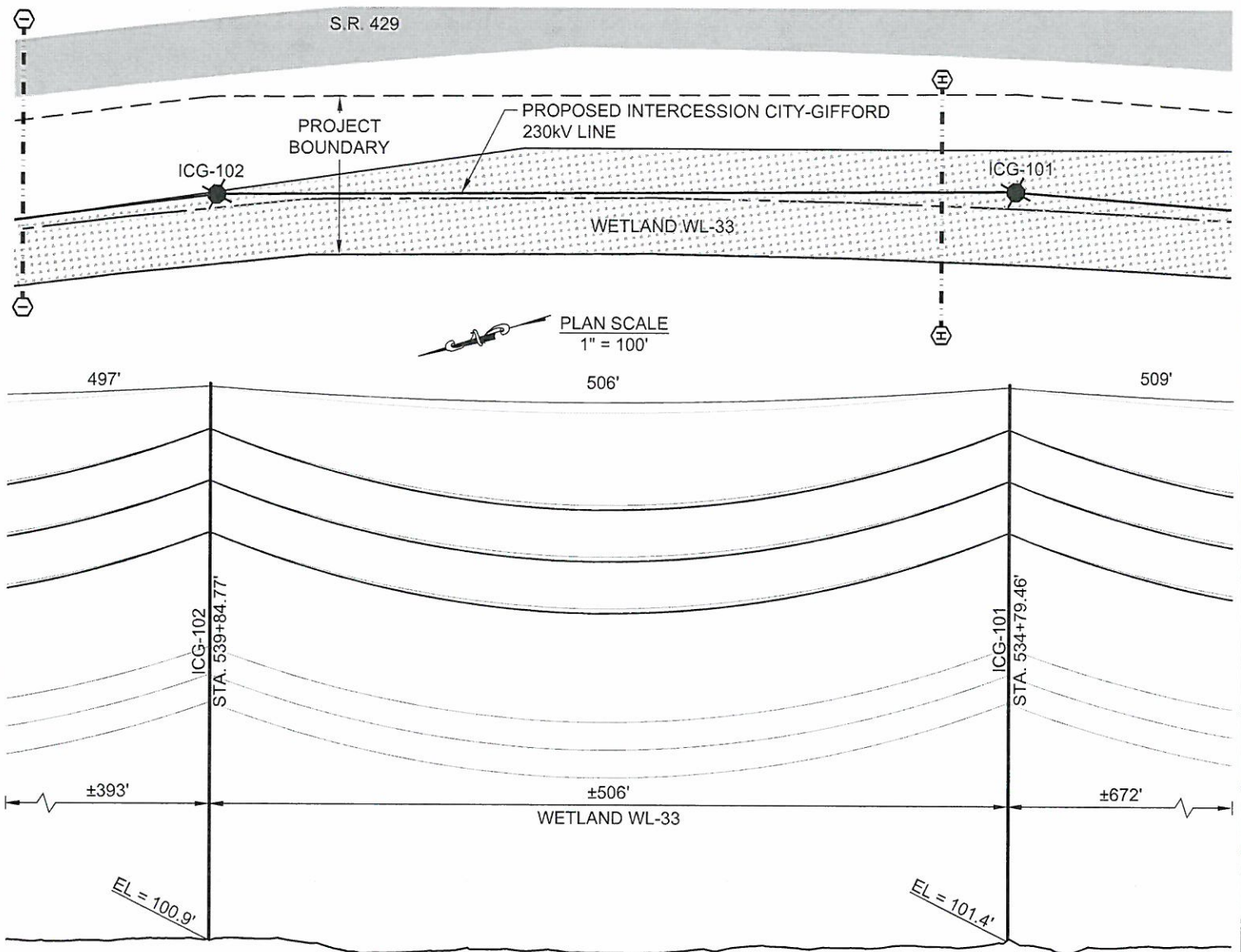
DRK
CHECK

KRM
ENGR

1 OF 3
SHEET

DWG.

ICG-3037



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 28
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 28-24-27-0000-00013

OWNER NAME: ORANGE LAKE COUNTRY CLUB INC

WETLAND WL-33 TOTALS
FILL: 0.00 ACRES
CLEARING: 1.82 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-33

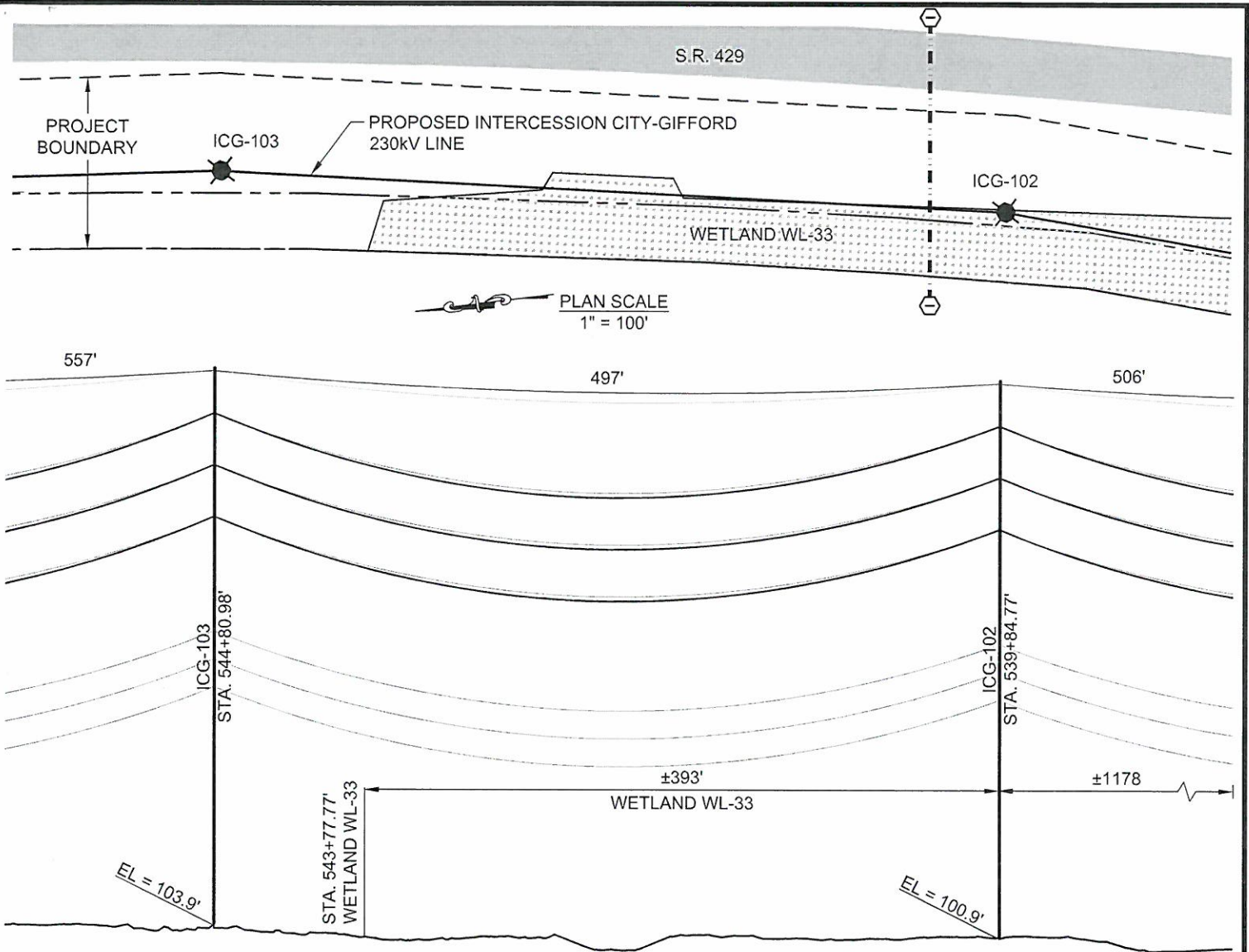
DRK
CHECK

KRM
ENGR

2 OF 3
SHEET

DWG.

ICG-3037



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 28
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 28-24-27-0000-00-043

OWNER NAME: ORANGE LAKE COUNTRY CLUB INC

WETLAND WL-33 TOTALS
FILL: 0.00 ACRES
CLEARING: 1.82 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-33

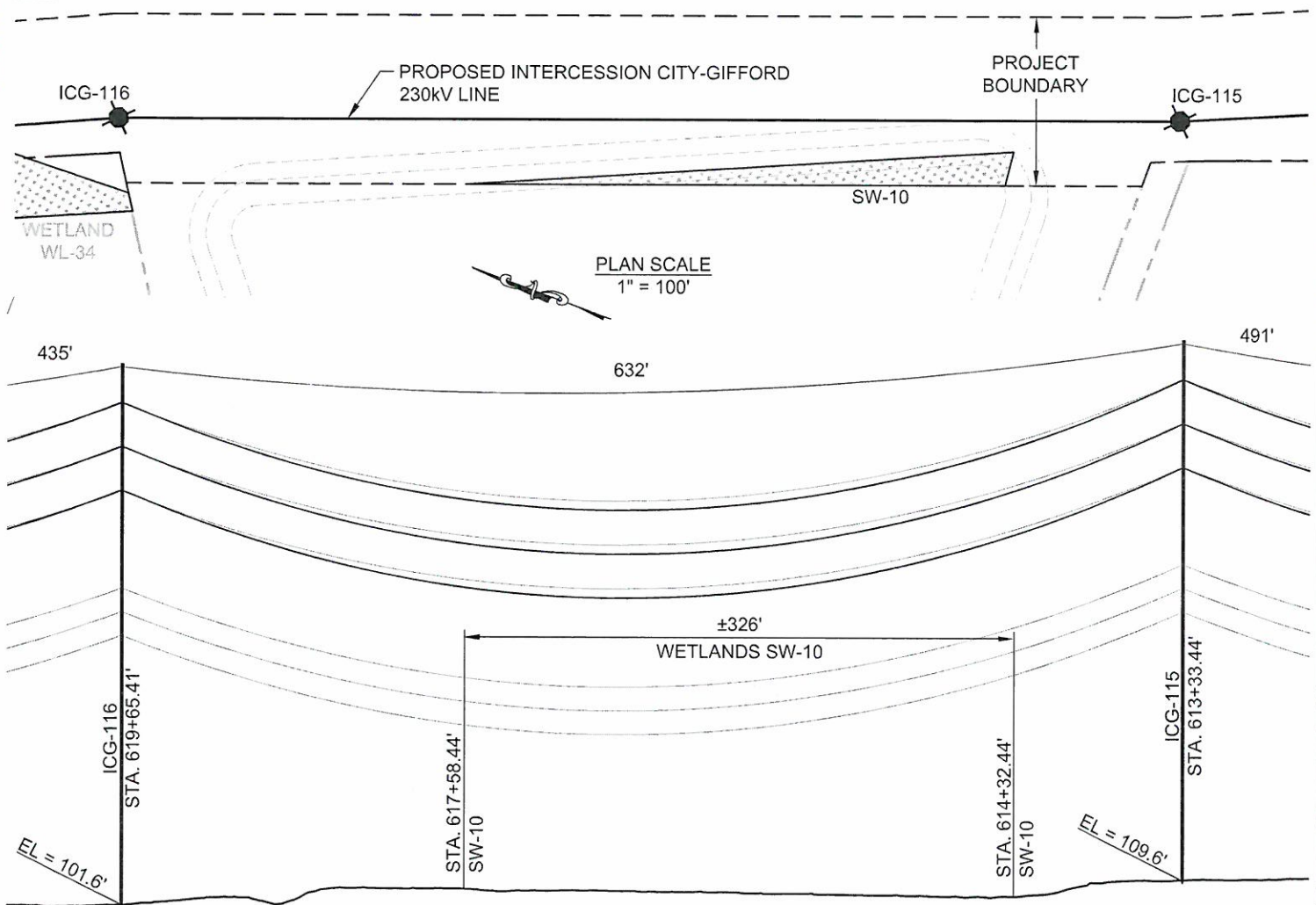
DRK
CHECK

KRM
ENGR

3 OF 3
SHEET

DWG.

ICG-3037



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

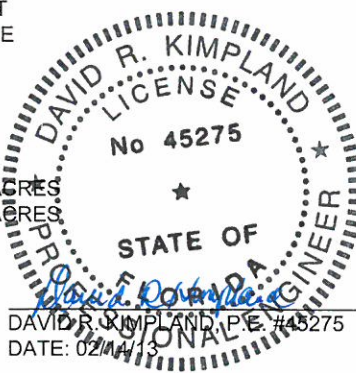
- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: -

OWNER NAME: FDOT

SW-10 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-10

DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3038

S.R. 429

PROPOSED INTERCESSION CITY-GIFFORD
230kV LINE

ICG-117

PROJECT
BOUNDARY

ICG-116

WETLAND WL-34

PLAN SCALE
1" = 100'

632'

436'

435'

ICG-117

STA. 622+00.26'

EL = 103.9'

STA. 622+93.41'
WETLAND WL-34

±331'

WETLAND WL-34

EL = 101.6'

ICG-116

STA. 619+65.41'

STA. 619+57.41'
WETLAND WL-34

LEGEND



EXISTING TRANSMISSION POLE (TO REMAIN)



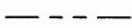
EXISTING TRANSMISSION POLE (TO BE REMOVED)



PROPOSED STEEL TRANSMISSION POLE

WETLAND AND SURFACE WATER LOCATION AS FIELD
DELINEATED BY FLATWOODS CONSULTANTS 01/13

CONSTRUCTION MATTING



EXISTING RIGHT-OF-WAY LINE



PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'

HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 16-24-27-0000-00-004

OWNER NAME: REEDY CREEK IMP DIST

WETLAND WL-34 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.39 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATEV: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWNKRM
TECHDRK
CHECKKRM
ENGR

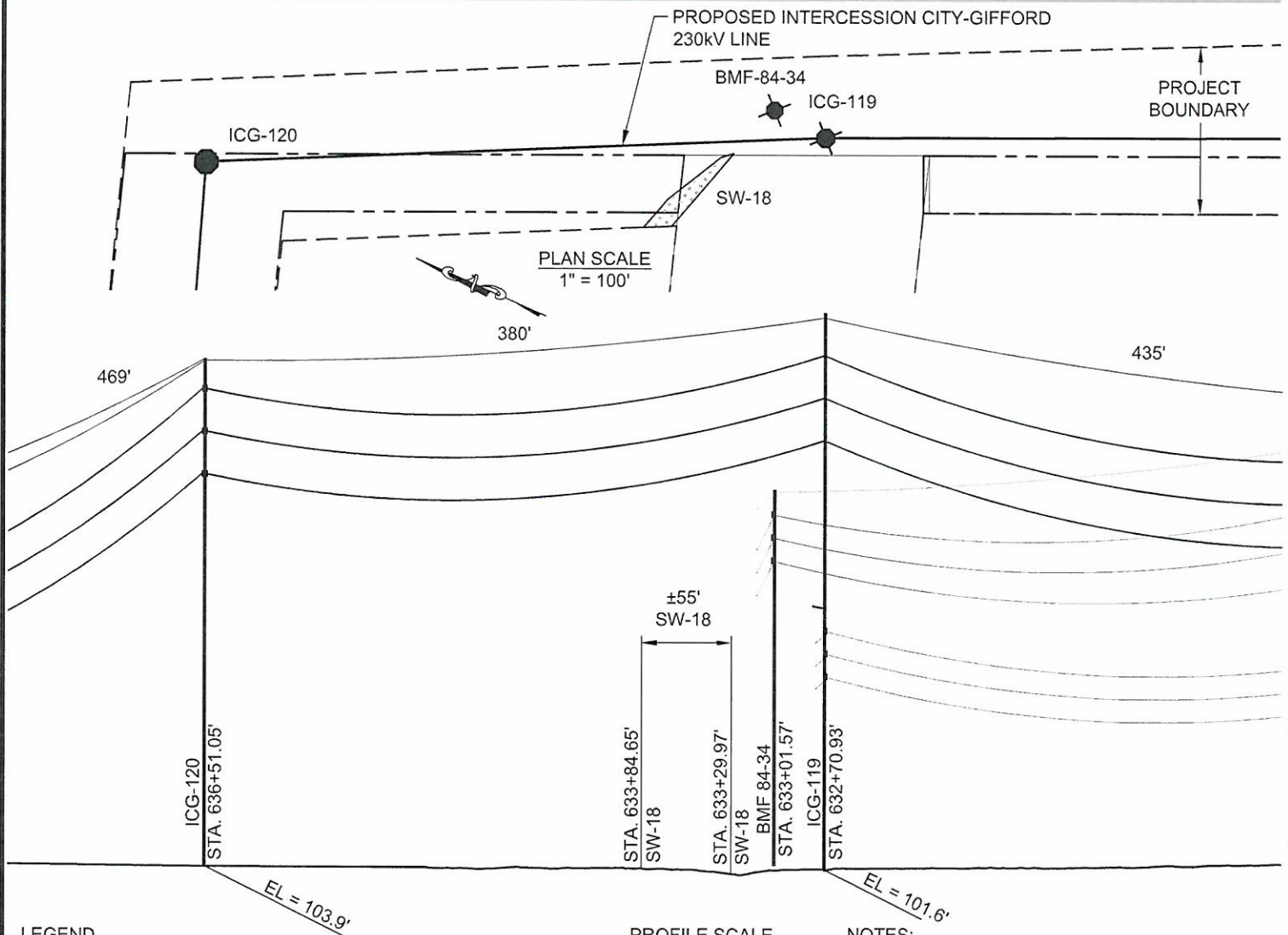
WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-34

1 OF 1
SHEET

DWG.

ICG-3039

S.R. 429

**LEGEND**

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 50'
HOR: 1" = 100'

NOTES:

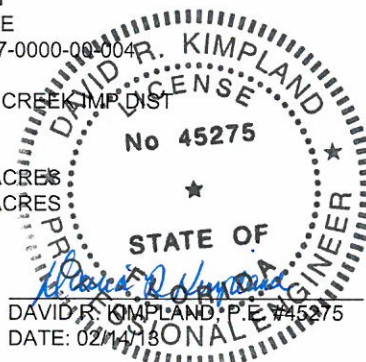
- TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
- PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 16-24-27-0000-000004

OWNER NAME: REEDY CREEK IMP DIST

SW-18 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 50
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-18

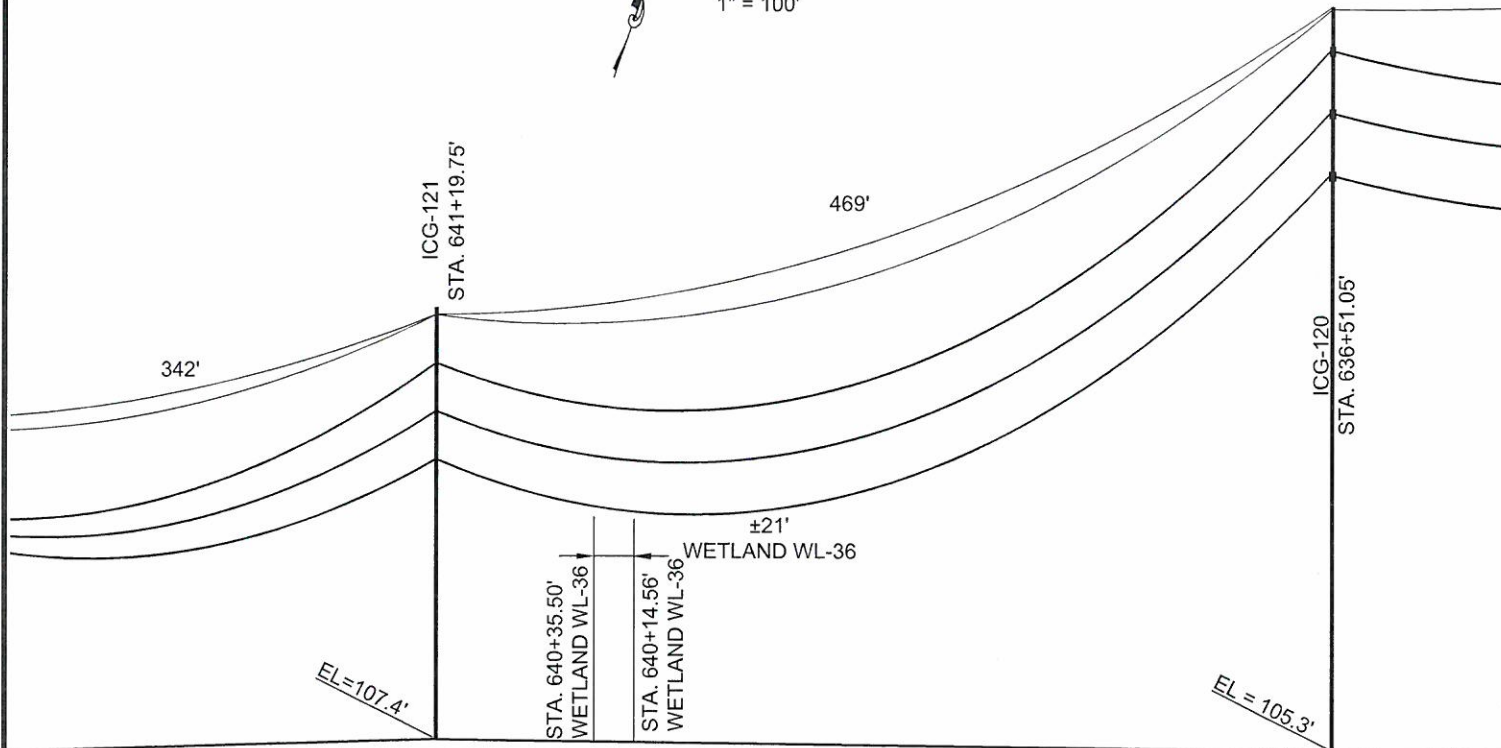
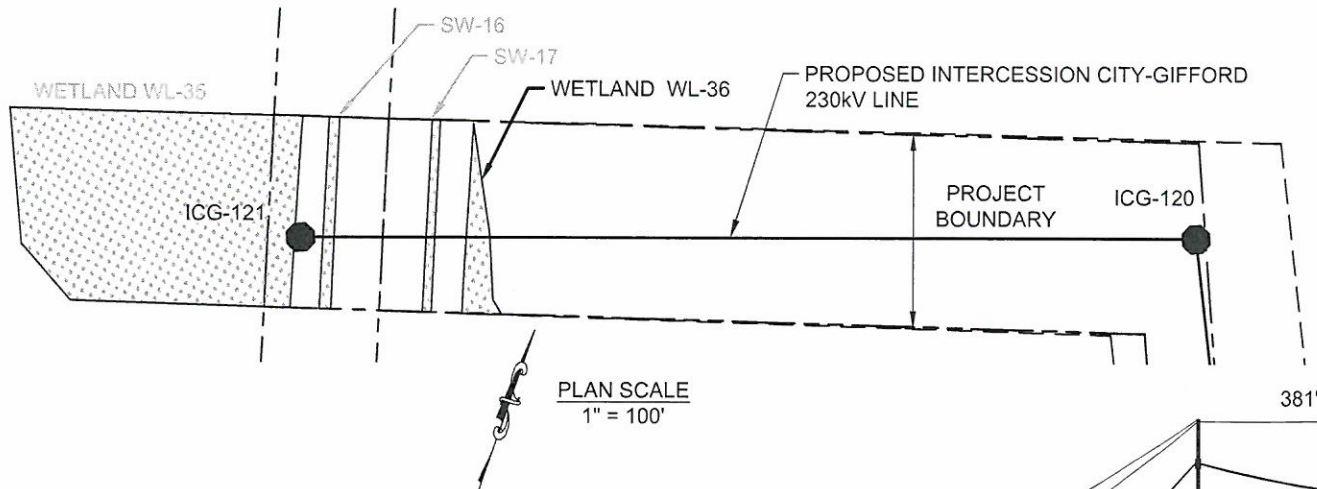
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3040



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 21-24-27-0000-000037

OWNER NAME: REEDY CREEK IMP DIST

WETLAND WL-36 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.02 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-36

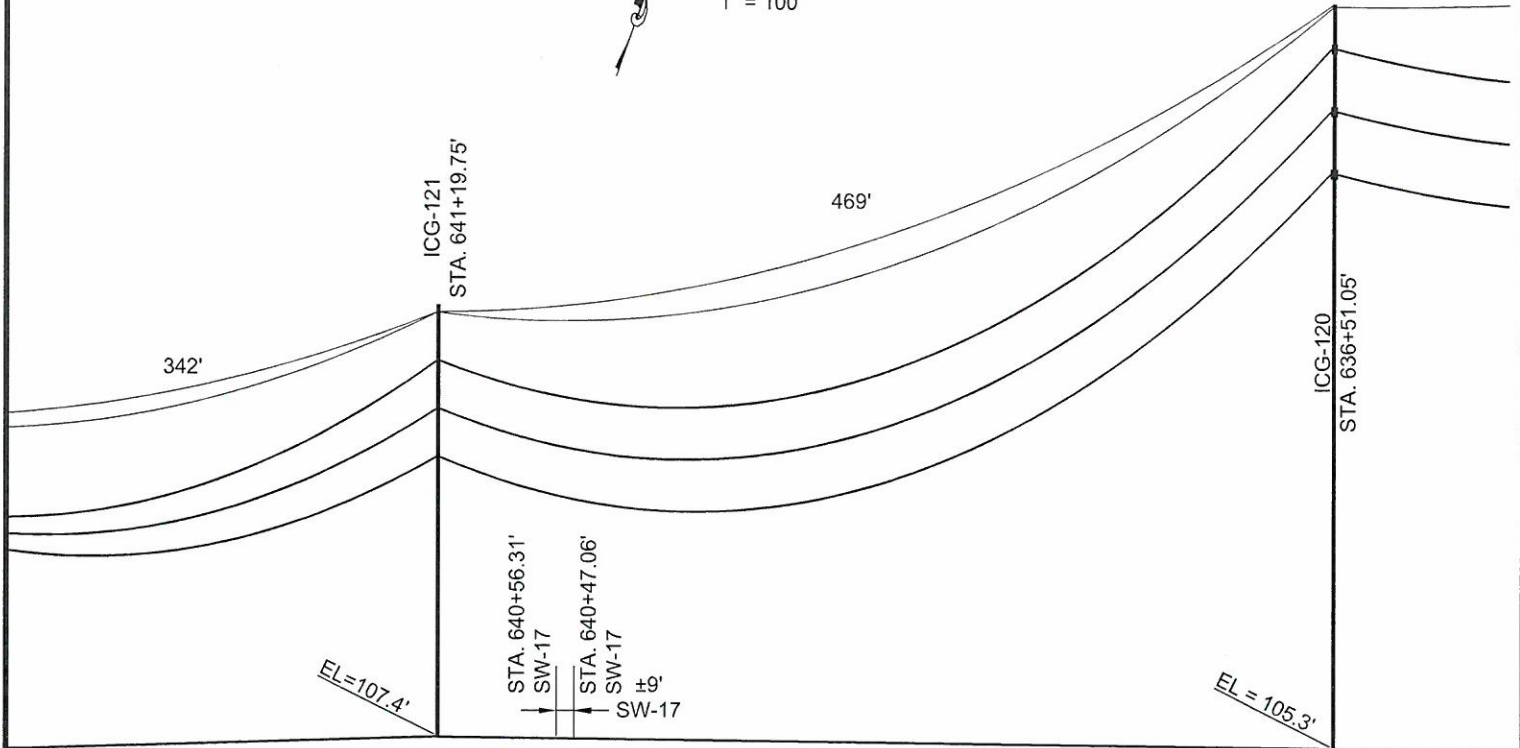
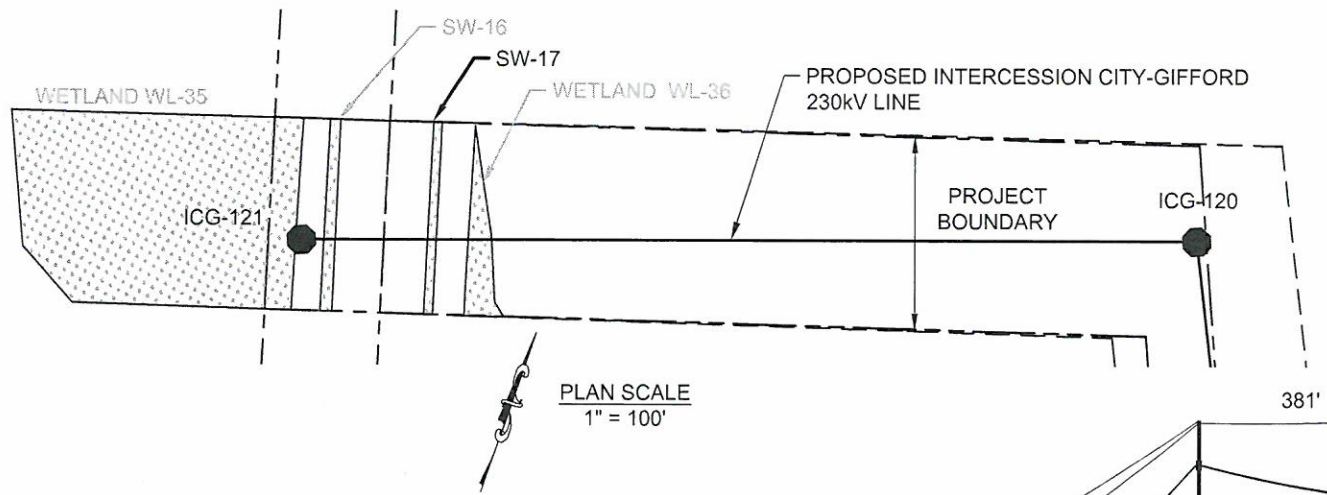
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3041A



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 21-24-27-0000-00-03

OWNER NAME: REEDY CREEK MP DIST

SW-17 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-17

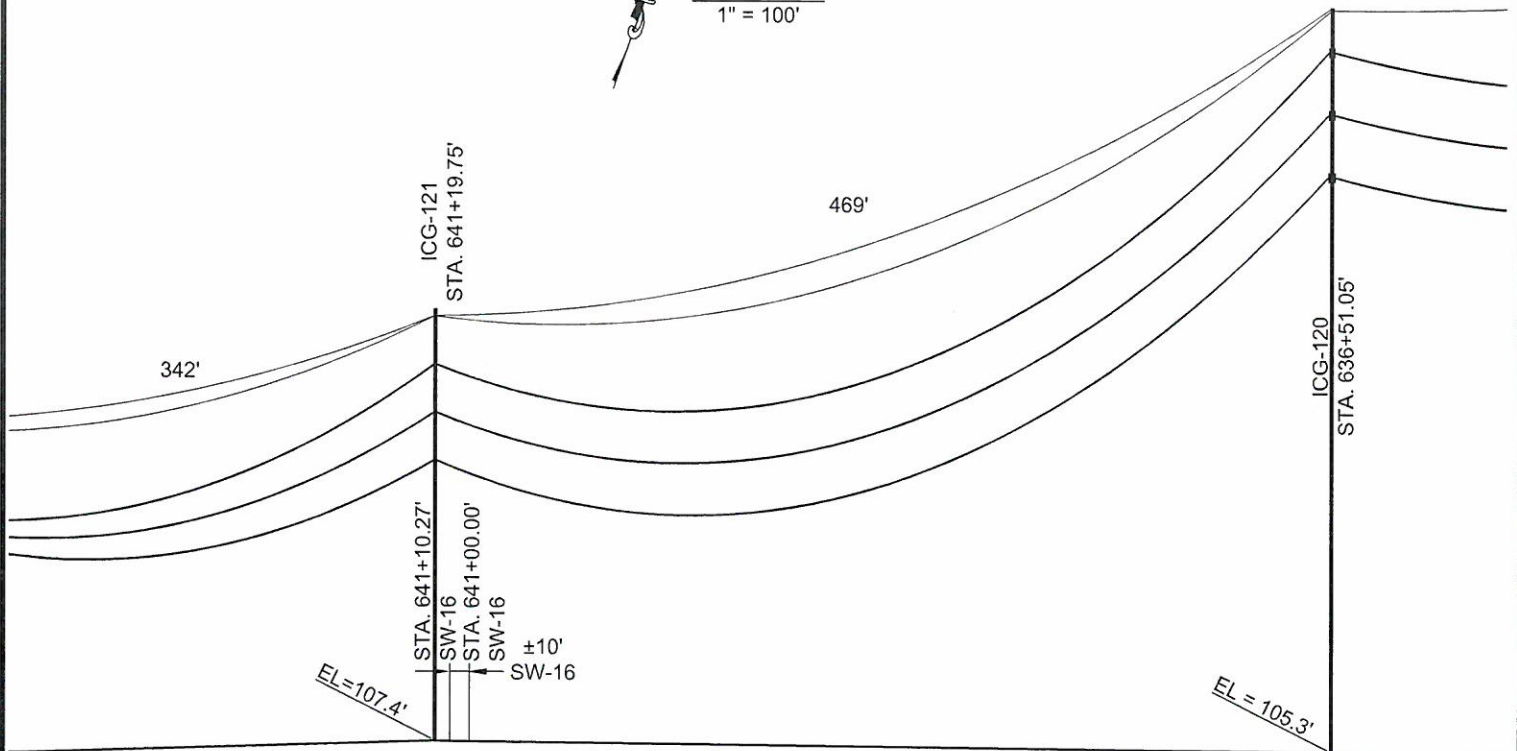
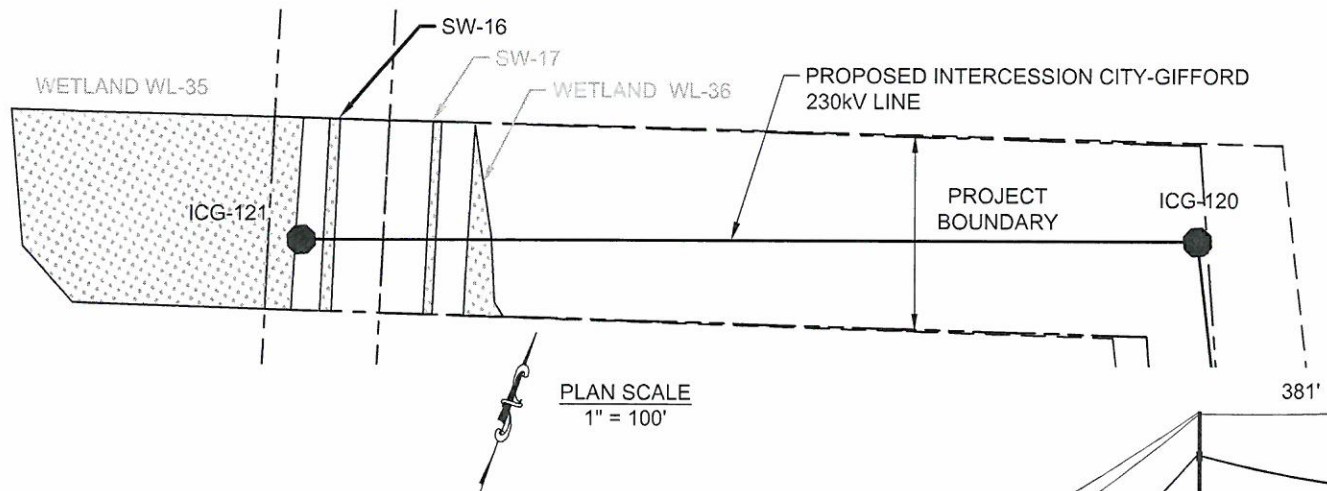
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3041B



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

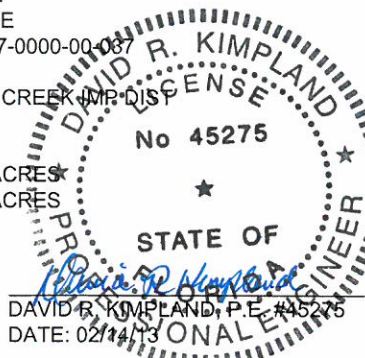
1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 21
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 21-24-27-0000-00-00

OWNER NAME: REEDY CREEK AIR DIST

SW-16 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
SW-16

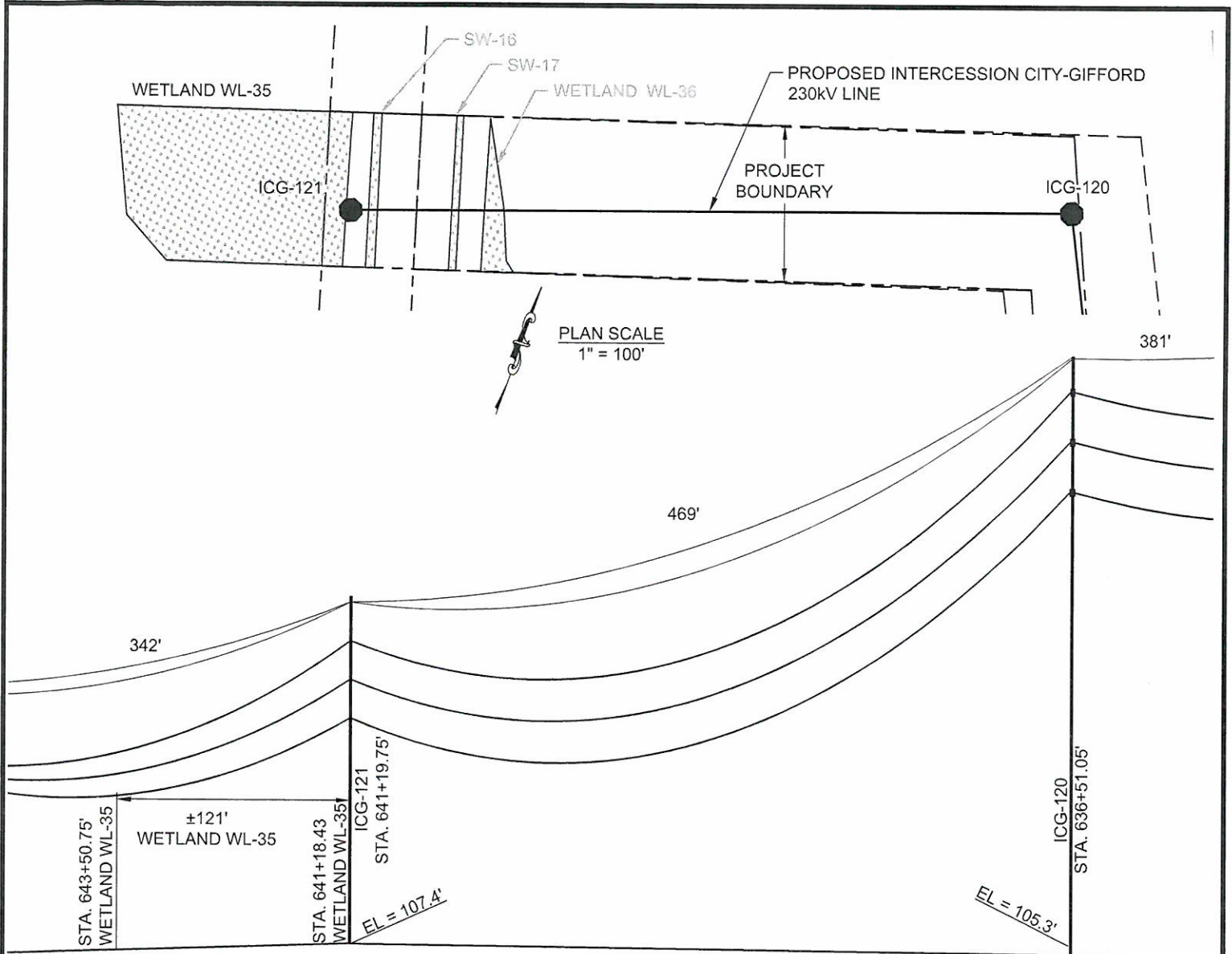
DRK
CHECK

KRM
ENGR

1 OF 1
SHEET

DWG.

ICG-3041C



LEGEND

- EXISTING TRANSMISSION POLE (TO REMAIN)
- EXISTING TRANSMISSION POLE (TO BE REMOVED)
- PROPOSED STEEL TRANSMISSION POLE
- WETLAND AND SURFACE WATER LOCATION AS FIELD DELINEATED BY FLATWOODS CONSULTANTS 01/13
- CONSTRUCTION MATTING
- EXISTING RIGHT-OF-WAY LINE
- PROJECT BOUNDARY LINE

PROFILE SCALE

VERT: 1" = 40'
HOR: 1" = 100'

NOTES:

1. TEMPORARY MATTING WILL BE UTILIZED AS NEEDED FOR ACCESS THROUGH WETLAND AREAS & DURING CONSTRUCTION IN WETLANDS.
2. PROVIDE SILT FENCING OR STAKED TURBIDITY BARRIERS AROUND TEMPORARY MATTING DURING CONSTRUCTION IN ALL WETLANDS.

SECTION: 16
TOWNSHIP: 24 SOUTH
RANGE: 27 EAST
COUNTY: ORANGE
PARCEL ID: 16-24-27-0000-10-004
16-24-27-0000-00-037

OWNER NAME: REEDY CREEK IMP DIST

WETLAND WL-35 TOTALS
FILL: 0.00 ACRES
CLEARING: 0.00 ACRES

UC SYNERGETIC
20525 AMBERFIELD DRIVE
SUITE 201
LAND O' LAKES, FL 34638
C.A. 9447

DAVID R. KIMPLAND, P.E. #45275
DATE: 02/14/13



Progress Energy

02/21/13
DATE

V: 40
H: 100
SCALE

LINE ENGINEERING

RAR
DRAWN

KRM
TECH

DRK
CHECK

KRM
ENGR

WETLAND PERMIT
INTERCESSION CITY - GIFFORD
230kV TRANSMISSION LINE
WETLAND WL-35

1 OF 1
SHEET

DWG.

ICG-3041D



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

February 21, 2013

Dr. Stuart L. Santos, P.W.S.
Regulatory Division, Jacksonville District
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, FL 32232-0019

RE: PEF/TECO Lake Agnes-Gifford Transmission Line (TA07-16)
Modification A
ERP Tracking #49-309790-003
Water Quality Certification and CZM Consistency

Dear Dr. Santos:

This letter serves as notice that the Progress Energy Florida (PEF)/Tampa Electric Company (TEC) Lake Agnes-Gifford transmission line project was modified on January 15, 2013, through written final order in accordance with 403.509, Florida Statutes (F.S.). The Conditions of Certification are available at: http://publicfiles.dep.state.fl.us/Siting/Outgoing/Web/Certification/ta07_16_2012_A.pdf

The modification was for alteration of the certified corridor in two areas along State Road (SR) 429. PEF has been working with the Florida Department of Transportation (FDOT) to extend the corridor around FDOT's SR429 retention ponds in order to allow for additional routing opportunities. PEF also proposed various technical alterations relating to hardware and equipment.

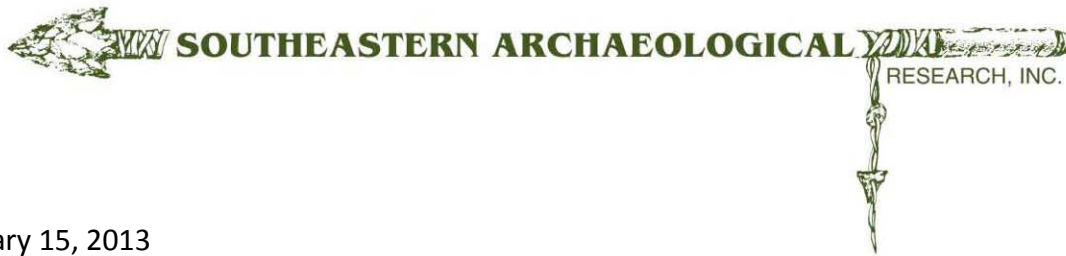
Pursuant to the Operating Agreement between the Florida Department of Environmental Protection (Department), United States Army Corps of Engineers (USACOE) and water management districts, this written final order granting certification under the Florida Electric Power Plant Siting Act, section 403.501-.518, F.S., also constitutes certification of compliance with state water quality standards pursuant to section 401 of the Clean Water Act, 33 U.S.C. 1341 and a finding of consistency with the Florida Coastal Management Program, as required by Section 307 of the Coastal Zone Management Act.

If additional information or assistance is required, please contact Ann Seiler at (850) 245-2143 or at ann.seiler@dep.state.fl.us.

Sincerely,

Cindy Mulkey
Administrator, Siting Coordination Office

cc: Daniel Hendricks, PEF - Daniel.Hendricks@pgnmail.com
Tom Lubozynski, DEP District Siting Liaison, tom.lubozynski@dep.state.fl.us
Lisa Prather, DEP District ERP Coordinator, lisa.prather@dep.state.fl.us
Melinda Parrot, SFWMD, mparrott@sfwmd.gov



February 15, 2013

Timothy Parsons, Ph.D., RPA
Compliance Review Supervisor
Florida Division of Historical Resources
500 South Bronough Street, Room 423
Tallahassee, FL 32399-0250

**RE: Cultural Resource Desktop Assessment and Work Plan Recommendation for
the Intercession City-Gifford 230-kV Transmission Line (North Section), Osceola
and Orange Counties, Florida**
SEARCH No.: 2939-13023P

Dear Dr. Parsons:

Progress Energy Florida (PEF) proposes to construct and upgrade a 230-kV transmission line in Osceola and Orange Counties, from the I-4 corridor, north along SR 429 for approximately eight miles, to a substation to the northwest of the intersection of Western Way and SR 429 (**Figure 1**).¹ This segment constitutes the northern portion of the Lake Agnes-Gifford 230-kV Transmission Line project. The project corridor follows the proposed centerline of the transmission line, and includes a 50-foot buffer on each side. The overall proposed corridor is 8.3 miles long, and comprises 98.1 acres.

Southeastern Archaeological Research, Inc. (SEARCH) conducted a cultural resources reconnaissance assessment of the southern segment of the Lake Agnes-Gifford 230-kV Transmission Line in March of 2012. SEARCH concluded that the proposed transmission line's southern segment will have no effect on cultural resources listed or eligible for listing in the National Register of Historic Places (NRHP). The Division of Historic Resources (DHR) concurred with SEARCH's findings (DHR Project File No.: 2012-01839 [2012-0465]/FDEP Permit Application No.: 49-0309790-001).

The State of Florida Department of Environmental Protection modified the Conditions of Certification for the Lake Agnes-Gifford 230-kV Transmission Line in January of 2013 pursuant to the Transmission Line Siting Act (TLSA). Section B, Part V.B. Cultural Resources, calls for a qualified cultural resources consultant to conduct a thorough review of the proposed corridor and to consult with the DHR prior to conducting any fieldwork. SEARCH has been engaged to conduct this work and to consult with the DHR. The Principal Investigator for this project meets the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716) and is listed in the Register of Professional Archaeologists.

¹ Figures are included as an appendix accompanying this Letter Report.

From I-4 north to US 192, new transmission line construction is proposed; from US 192 north to the substation, transmission lines already exist and PEF proposes to rebuild and upgrade the existing line. **Figure 2** shows the segment proposed for new transmission line construction and the segment which is slated for upgrading and rebuilding.

The majority of the project corridor is contained within the right-of-way (ROW) for SR 429. The ROW for SR 429 was surveyed prior to its construction. Figure 2 shows the surveys conducted for SR 429 (Survey #s 4578 and 17465). Figure 2 also shows those segments of the PEF project corridor that appear to be outside of the previously surveyed areas. Since these small segments appear to have been modified for retention ponds, entrance and exit ramps, and berms during the construction of SR 429, it is likely that these areas appear outside the areas shown as previously surveyed as a result of slight variations in the digitization of the surveys.

While the proposed transmission corridor appears to have been sufficiently surveyed, SEARCH conducted background research to evaluate the potential for cultural resources listed or eligible for listing in the NRHP to be contained within the project corridor.

HISTORIC MAP AND AERIAL PHOTOGRAPH REVIEW

Historic maps and aerial photographs were examined in order to identify past land use in the vicinity of the project corridor which lies within Sections 21 and 28 of Township 24 South, Range 27 East and Sections 4, 9, 16, 21, 22, 26, and 27 of Township 25 South, Range 27 East. The earliest available maps of detail are the General Land Office (GLO) survey maps created by state land surveyors in the first half of the nineteenth century. These maps characteristically show landscape features such as vegetation, bodies of water, roads, and Spanish land grants. The level of detail in GLO maps varies, with some also depicting structures, Indian villages, railroads, and agricultural fields.

GLO survey maps of the project area were first created in 1848. These maps show the location of the “Road from Lake Monroe to Tampa” which crosses the current project corridor several times in the northern half before branching to the east and away from the project area south of Boggy Creek (GLO 1848a, 1848b) (**Figure 3**). Multiple creeks with surrounding swamp land and small ponds are illustrated throughout the general area of the current transmission line project. There are no other indications of human activity in the vicinity of the project area.

An atlas of Florida created in 1926 shows the Bay Lake area to the north of the project area and Intercession City to the southeast (Associated Map Company 1926). No roads are present in the vicinity of the project area. A General Highway Map of Osceola County created in 1936 shows State Road 206 (modern SR 25/US 27) to the west and an unnamed road to the east of the project area (FDOT 1936). A General Highway Map of Orange County created in 1950, reprinted in 1960, shows a similar picture as the 1936 Osceola County highway map of the northern portion of the project area (FDOT 1950).

A topographic map from 1953 shows an old railroad grade crossing the project corridor in its northern portion (USGS 1953a, 1953b) (**Figure 4**). The railroad grade does not appear on any railroad maps or on any other late nineteenth-century or early twentieth-century maps; it was probably destroyed prior to the construction of SR 429 in 2006. It was likely a small logging tram line that was constructed by timber interests and is not associated with any of the larger railroad lines through the area. The railroad grade is not visible on modern aerials in the vicinity of SR 429 and no evidence of the grade is visible within the project corridor or the ROW of SR 429. US 192 is shown curving around Black Lake in a similar configuration to modern Black Lake Road and Funie Steed Road is shown intersecting the project area to the south of US 192 (see Figure 2). The southern portion of the project area is shown as largely undeveloped land. Structures are scattered throughout the general area; however, none are located within or adjacent to the project area.

Beginning in the 1930s, the USDA took aerial photographs of the State of Florida. Photographs of this area of Orange and Osceola Counties were first taken in 1944 and continued to be taken in subsequent decades. Aerials from 1944 show the project corridor surrounded by undeveloped land, including swamps associated with the various creeks (USDA 1944). The roads and railroad grade visible on the 1953 quadrangles are visible as thin undeveloped roadways. Between 1944 and 1954, the surrounding landscape shifts from largely undeveloped swamp land to cleared agricultural lands, including citrus groves. US 192 is visible as a two-lane paved roadway, while other roads are still unpaved dirt roads (USDA 1954). The landscape surrounding the project corridor does not show significant change until after I-4 is constructed to the south in the 1960s (USDA 1968). Development related to Walt Disney World appears to the northeast of the project area after aerials taken in 1975. US 192 is visible in its current configuration as a four-lane highway with Black Lake Road to the northeast in 1974 with development scattered along both sides, but outside the project corridor. The old railroad grade remains visible but diminished in size, indicating that vegetation has begun encroaching prior to 1974 (USDA 1974).

PREVIOUSLY RECORDED CULTURAL RESOURCES

The Florida Master Site File (FMSF) database was reviewed in February 2013 to determine if any previous surveys of the project corridor have been undertaken and if any previously recorded archaeological or historical sites have been recorded in or near the project area. Excluding cell tower surveys, the project corridor intersects 20 previously conducted cultural resource surveys (**Figure 5**). The surveys that most closely align with the project corridor were conducted for the construction of SR 429 (Survey #s 4578 and 17465) and were referenced above (see Figure 2). Survey #4578 was conducted in 1996 by Archaeological Consultants, Inc. on behalf of the Orlando-Orange County Expressway Authority. Survey #17465 represents the Project Development and Environment Study (PD&E) State Environmental Impact Report submitted for SR 429. This submitted PD&E study includes the survey area from Survey #4578.

The FMSF database lists six previously recorded archaeological sites identified along the project corridor (**Figure 5, Table 1**). Four of these sites have been evaluated by the State Historic Preservation Officer (SHPO) as not eligible for listing in the NRHP. Two of the sites are listed as Not Evaluated: 8OS0049, and 8OS0613. Site 8OS0049 is listed as an unspecified prehistoric lithic scatter site and is mapped with just its extreme northeastern corner within the project corridor. The site was recorded in 1983 and the FMSF database contains no associated survey, recorder or site file. This site was not relocated during the surveys for SR 429. Site 8OS0613 was recorded by SouthArc, Inc. during a survey in the area conducted in 1992 (Survey #3276). They record the site as consisting of six pieces of lithic debitage at the edge of a grove. Based on the lack of diagnostic artifacts, features or cultural strata, they evaluated the site as not eligible for the NRHP.

Table 1. Previously Recorded Cultural Resources

FMSF No.	Site Name	Site Type	Comments	SHPO Evaluation
8OR03219	Whittenhorse Creek 2	Prehistoric Habitation	-	Ineligible for NRHP
8OS00049	Davenport Swamp	Prehistoric Lithic scatter/quarry	Recorded in 1983; FMSF contains no site file, associated notes, recorder name or survey.	Not Evaluated by SHPO
8OS00139	World Golf & Tennis	Prehistoric Lithic scatter/quarry	-	Ineligible for NRHP
8OS00613	Davenport Swamp	Prehistoric Lithic scatter/quarry	Recorded in 1992 by SouthArc, Inc., (Survey #3276) the site consists of six pieces of lithic debitage at the edge of a grove. Evaluated by the survey as Not Eligible for the NRHP based on the lack of diagnostic artifacts, features or cultural strata.	Not Evaluated by SHPO
8OS01777	North Point	Prehistoric Land-terrestrial	-	Ineligible for NRHP
8OS01778	Boggy Swamp	Prehistoric Land-terrestrial	-	Ineligible for NRHP

While no historic structures were identified from the FMSF database search, a review of the Orange County Property Appraiser (<http://www.ocpafl.org/>) and the Osceola County Property Appraiser (<http://www.property-appraiser.org/>) records was conducted in order to identify unrecorded historic structures adjacent to the project corridor. The database search did not identify any unrecorded historic structures within or adjacent to the corridor.

CONCLUSIONS

Progress Energy Florida proposes to construct and upgrade a 230-kV transmission line in Osceola and Orange Counties, from the I-4 corridor, north along SR 429 for approximately eight miles, to the substation to the northwest of the intersection of Western Way and SR 429. The project corridor lies within Sections 21 and 28 of Township 24 South, Range 27 East and Sections 4, 9, 16, 21, 22, 26, and 27 of Township 25 South, Range 27 East.

The State of Florida Department of Environmental Protection modified the Conditions of Certification for the transmission line in January of 2013. The revised requirements call for background research and consultation with the DHR prior to conducting any fieldwork. SEARCH conducted background research by reviewing historic maps and aerial photographs and searching the FMSF database for previous surveys and previously recorded cultural resources.

The proposed project corridor closely follows and is primarily contained within the ROW of SR 429. Surveys conducted prior to the construction of SR 429 identified no cultural resources listed or eligible for listing in the NRHP. Six previously recorded cultural resources are mapped as being within the project corridor; four of these have been evaluated by the SHPO as not eligible for the NRHP. Of the other two sites, site 8OS0049 is listed as an unspecified, prehistoric lithic scatter site and is mapped with just its extreme northeastern corner within the project corridor. The site was recorded in 1983 and the FMSF database contains no associated survey, recorder or site file. The site was not located during the surveys of the SR 429 ROW. Site 8OS0613 was recorded by SouthArc, Inc. during a survey in the area (Survey #3276). They record the site as consisting of six pieces of lithic debitage at the edge of a grove. Based on the lack of diagnostic artifacts, features or cultural strata, they evaluated the site as not eligible for the NRHP. In SEARCH's opinion, there is a low probability that either of these sites would have intact cultural deposits within the project corridor that would be eligible for listing in the NRHP.

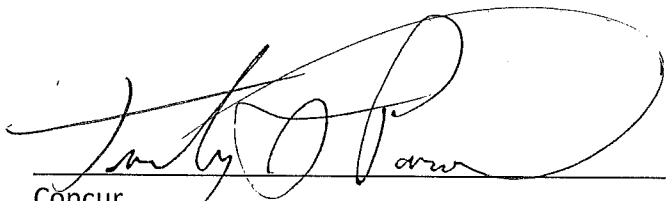
Figure 6 shows those segments of the PEF project corridor that appear to be outside of the previously surveyed areas. Figure 6 also contains close up aerial photographs of these segments showing that these areas were modified for retention ponds, entrance and exit ramps, and berms during the construction of SR 429; it is likely that these areas appear outside the areas shown as previously surveyed as a result of slight variations in the digitization of the surveys. In SEARCH's opinion, there is a low probability that these segments would contain intact cultural deposits eligible for listing in the NRHP.

It is the opinion of SEARCH that the Progress Energy Florida proposed corridor for the build and upgrade of the 230-kV transmission line in Osceola and Orange Counties, from the I-4 corridor, north along SR 429 to the substation to the northwest of the intersection of Western Way and SR 429, has been sufficiently surveyed. No cultural resources listed in the NRHP are contained within the corridor and there is a low probability that cultural resources eligible for listing in the NRHP would be located within the corridor. No further cultural resource work is recommended.

I would appreciate your review at your earliest convenience as we would like to provide PEF with your agency comments as soon as possible. If you concur with my recommendation that no further cultural resource work is needed within the proposed corridor between I-4 and the substation to the north, please sign below and return. If you have any questions, or if you need additional information, please feel free to contact me.

Sincerely,

Bruce Nodine, M.A., RPA
Principal Investigator
bruce@searchinc.com
Ph 352-333-0049


Concur

Timothy Parsons, Ph.D., RPA
Compliance Review Supervisor
Florida Division of Historical Resources

2/19/13
Date

DHR/SHPO Project File No.: 2013-0594

REFERENCES CITED

Associated Map Company

- 1926 *Atlas of Florida containing Sectional Maps of Each County.* Living Pictures Inc, Melbourne, FL.

Florida Department of Transportation (FDOT)

- 1950 Orange County General Highway Map. Florida Department of Transportation, Tallahassee. Electronic document, <http://ufdc.ufl.edu/mapfl>, accessed February 8, 2013.

General Land Office

- 1848 Township 24 South, Range 27 East. Electronic document, <http://www.glorerecords.blm.gov/>, accessed February 8, 2013.
- 1848 Township 25 South, Range 27 East. Electronic document, <http://www.glorerecords.blm.gov/>, accessed February 8, 2013.

State Road Department

- 1936 Osceola County General Highway Map. Florida Department of Transportation, Tallahassee. Electronic document, <http://fcit.usf.edu/florida/maps/>, accessed February 8, 2013.

United States Department of Agriculture (USDA)

- 1944 Aerial Photographs: Osceola County. On file at the University of Florida Map and Imagery Library, Gainesville. Electronic document, <http://ufdc.ufl.edu/aerials>, accessed February 8, 2013.
- 1954 Aerial Photographs: Osceola and Orange Counties. On file at the University of Florida Map and Imagery Library, Gainesville. Electronic document, <http://ufdc.ufl.edu/aerials>, accessed February 8, 2013.
- 1968 Aerial Photographs: Polk County. On file at the University of Florida Map and Imagery Library, Gainesville. Electronic document, <http://ufdc.ufl.edu/aerials>, accessed February 8, 2013.
- 1974 Aerial Photographs: Osceola and Orange Counties. On file at the University of Florida Map and Imagery Library, Gainesville. Electronic document, <http://ufdc.ufl.edu/aerials>, accessed February 8, 2013.

United States Department of the Interior, Geological Survey (USGS)

- 1953a Florida Intercession City Quadrangle, 15 Minute Series Topographic, 1:2400 scale. Electronic document, <http://www.usgs.gov/>, accessed February 8, 2013.
- 1953b Florida Windermere Quadrangle, 15 Minute Series Topographic, 1:2400 scale. Electronic document, <http://www.usgs.gov/>, accessed February 8, 2013.

APPENDIX:

FIGURES 1 THROUGH 6



Figure 1. The Progress Energy Florida 230-kV Corridor Intercession City-Gifford (North Section) Project Area, Osceola and Orange Counties, Florida.

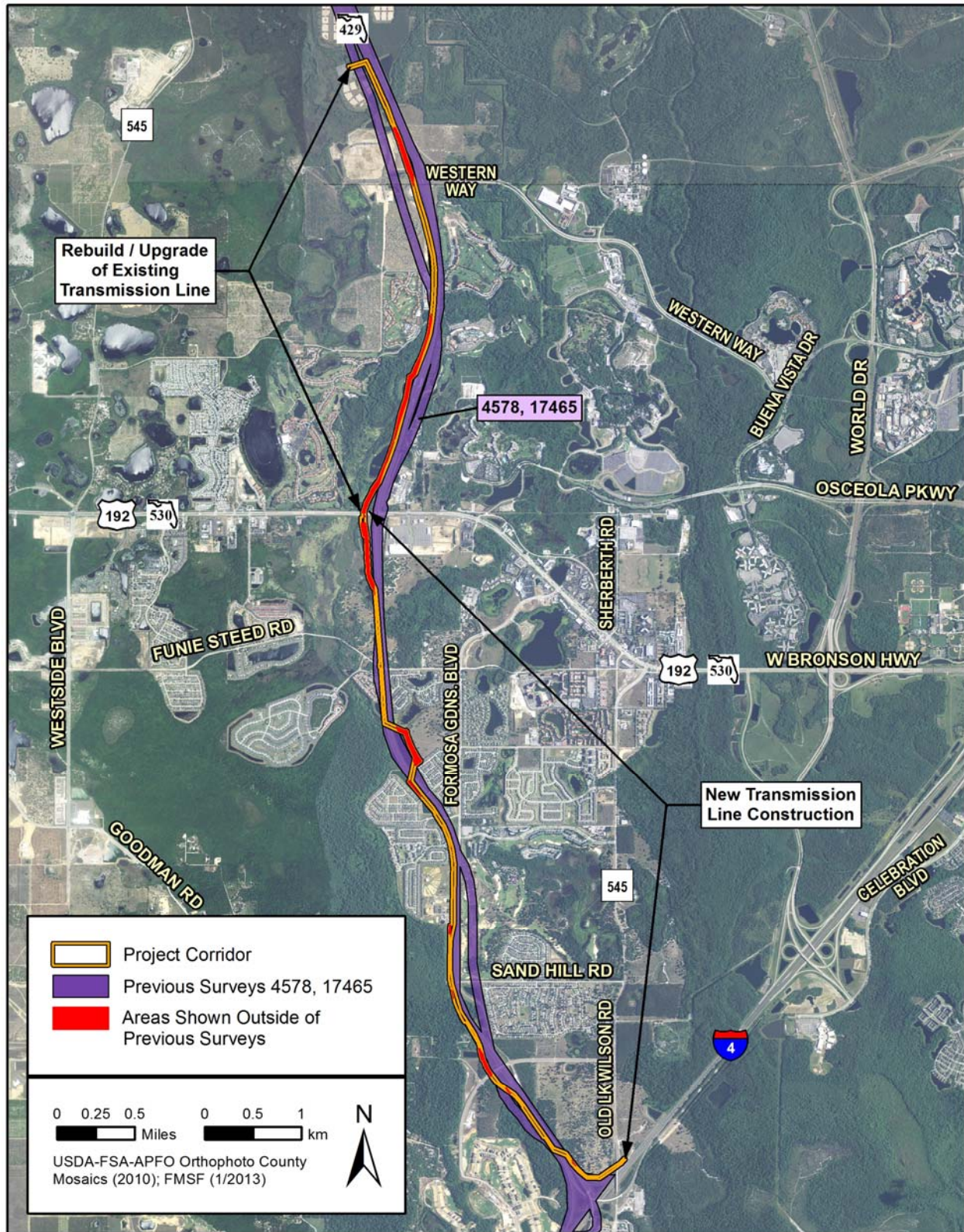


Figure 2. The Progress Energy Florida 230-kV corridor new transmission line and rebuild segments.

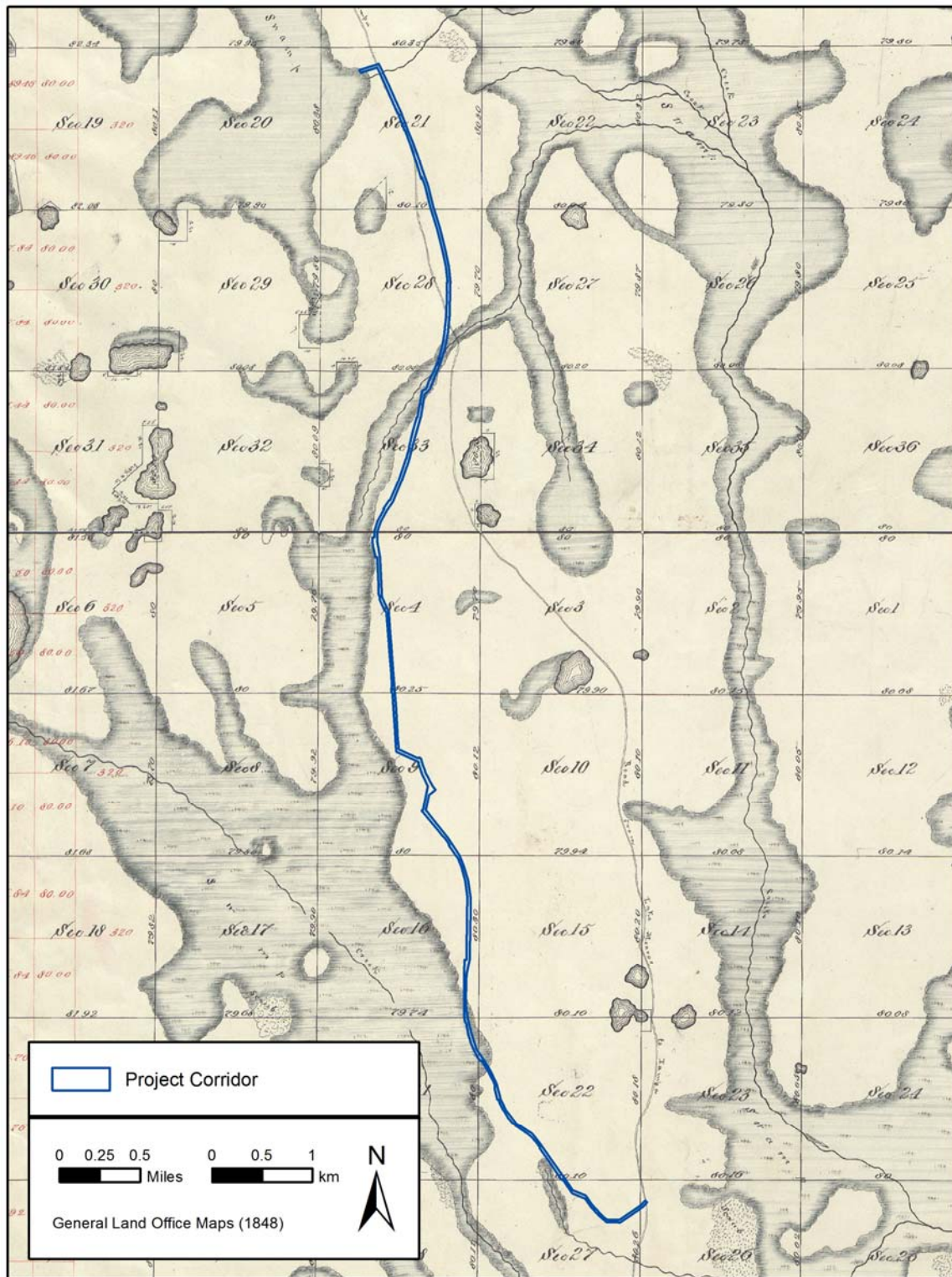


Figure 3. General Land Office map from 1848 showing the geo-referenced project corridor.

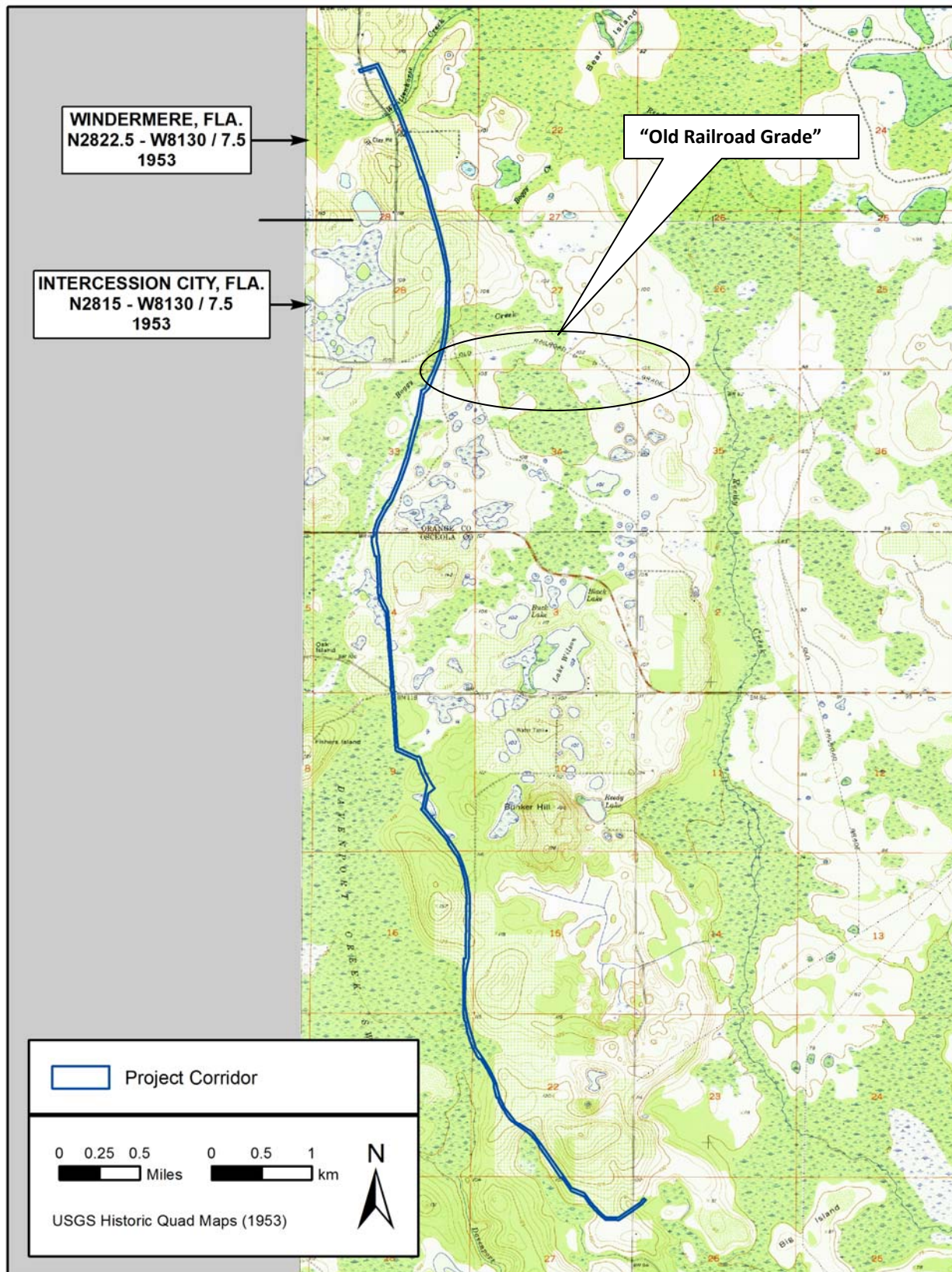


Figure 4. 1953 USGS topographic map showing the geo-referenced project corridor

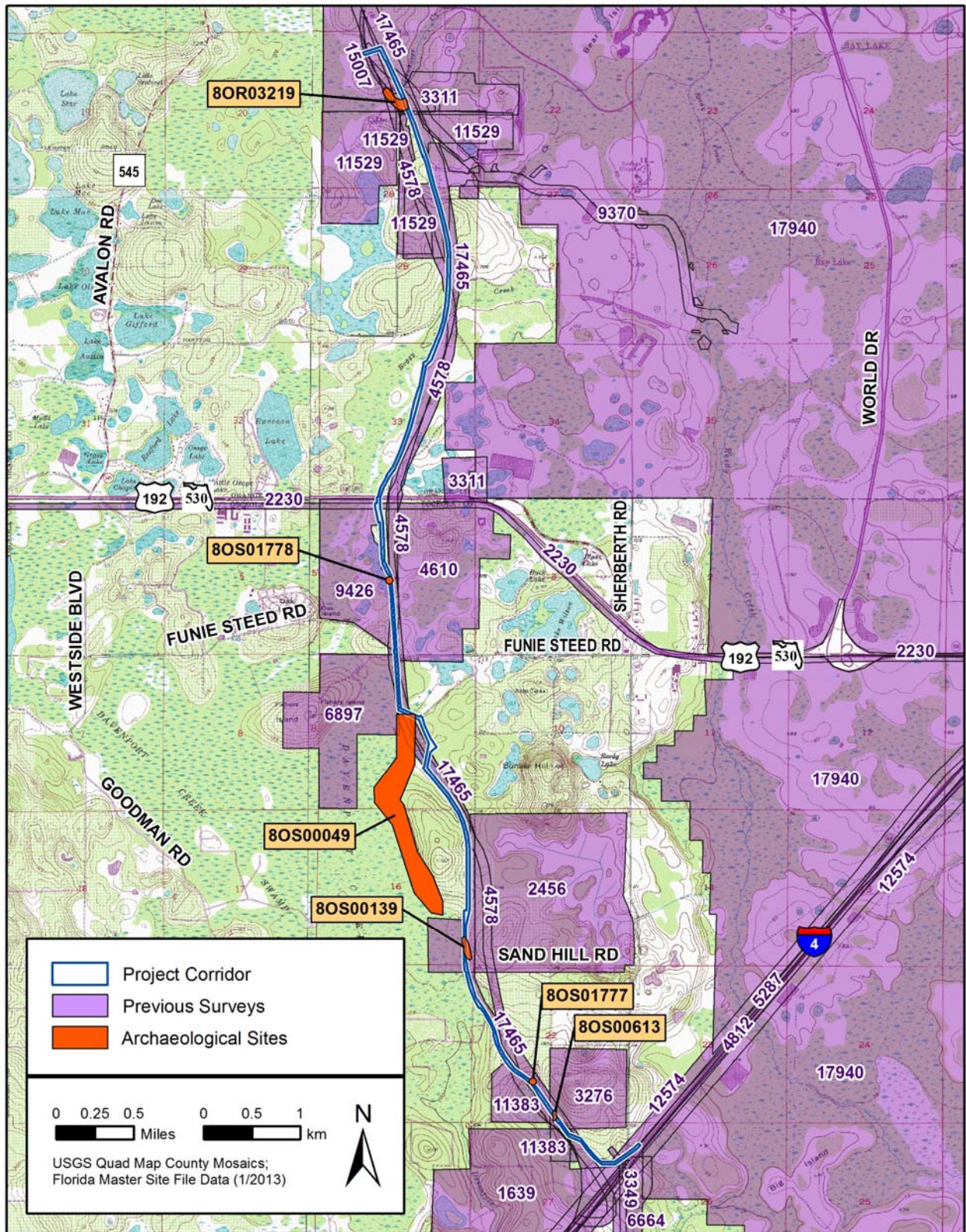


Figure 5. Previous surveys and previously recorded cultural resources that intersect the project corridor.



Figure 6. Segments that appear unsurveyed along the project corridor represent areas that have been modified as retention ponds, entrance and exit ramps and berms. These areas likely display as outside of the surveyed areas due slight variations in the digitization of the surveys.