

GRU Regular - 120171

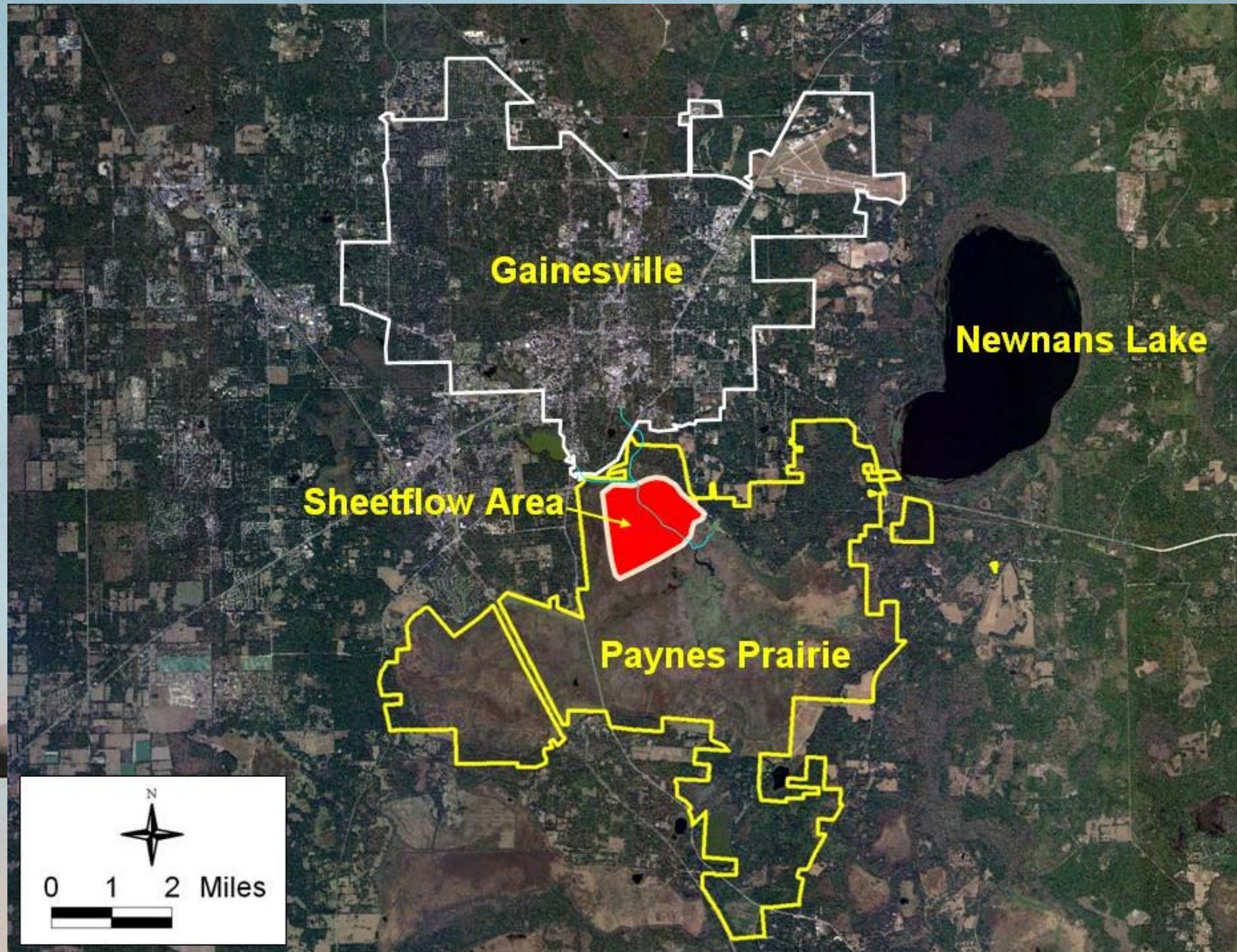
Sweetwater Branch/Paynes Prairie Sheetflow Restoration Project 100% Plans

*Water/Wastewater Systems
Gainesville Regional Utilities*

July 19, 2012



Project Location



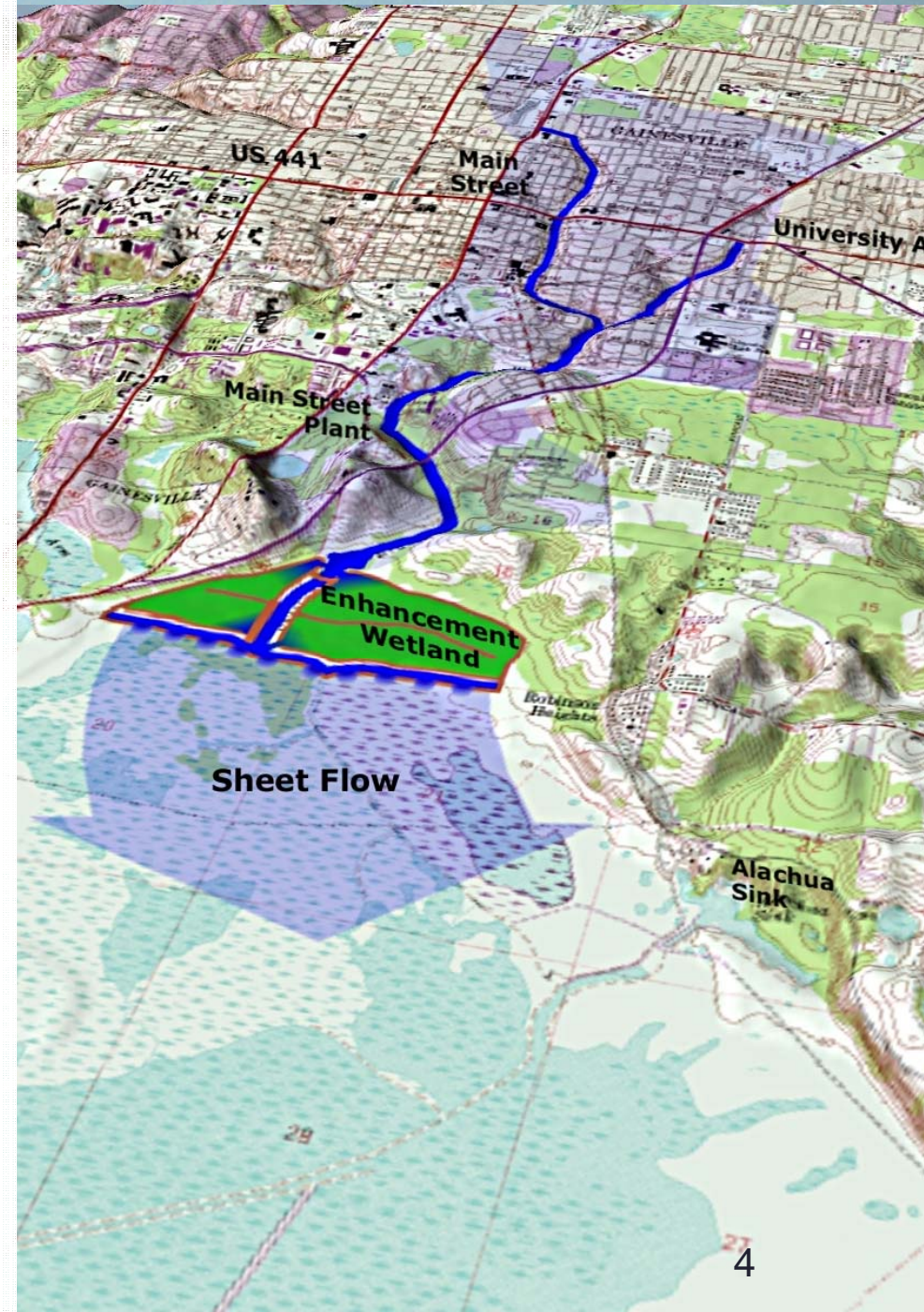
Historical Impacts to System



- **1930s:** Sweetwater Branch channeled directly to Alachua Sink
 - 1,300 acres of wetlands impacted.
 - Direct flow path from Gainesville to Alachua Sink
- **1930s:** Portion of Prairie Creek flow diverted away from Paynes Prairie
- **1800s to present:** Urbanization of Gainesville
 - Stormwater runoff
 - Trash & sediment
 - WW Effluent
 - Septic Tanks

Project Benefits

1. Improve Water Quality in Alachua Sink
 - Meet TMDL
2. Restore 1,300 ac natural wetlands
 - Rehydrate
 - Remove Trash & Sediment
3. Protect Floridan Aquifer
4. Help Restore flow balance to Paynes Prairie
5. Wildlife habitat & public park
 - Additional conservation land added to park



Paynes Prairie Sheetflow History

- April 9, 2007 Conceptual Project Plan presented
- February 25, 2008 Design Consultant Selected
- February 5, 2009 Land Exchange and MOU with State Approved
- June 17, 2010 30% Plans Presented
- January 20, 2011 Construction Manager at Risk Selected and NNC Issues Presented
- October 4, 2011 60% Plans Presented

2012 Recreational Trails Program Grant Application

Proposed Park Improvements This Application

-  Berm Trails
-  Boardwalk
-  Viewpoints/Overlooks

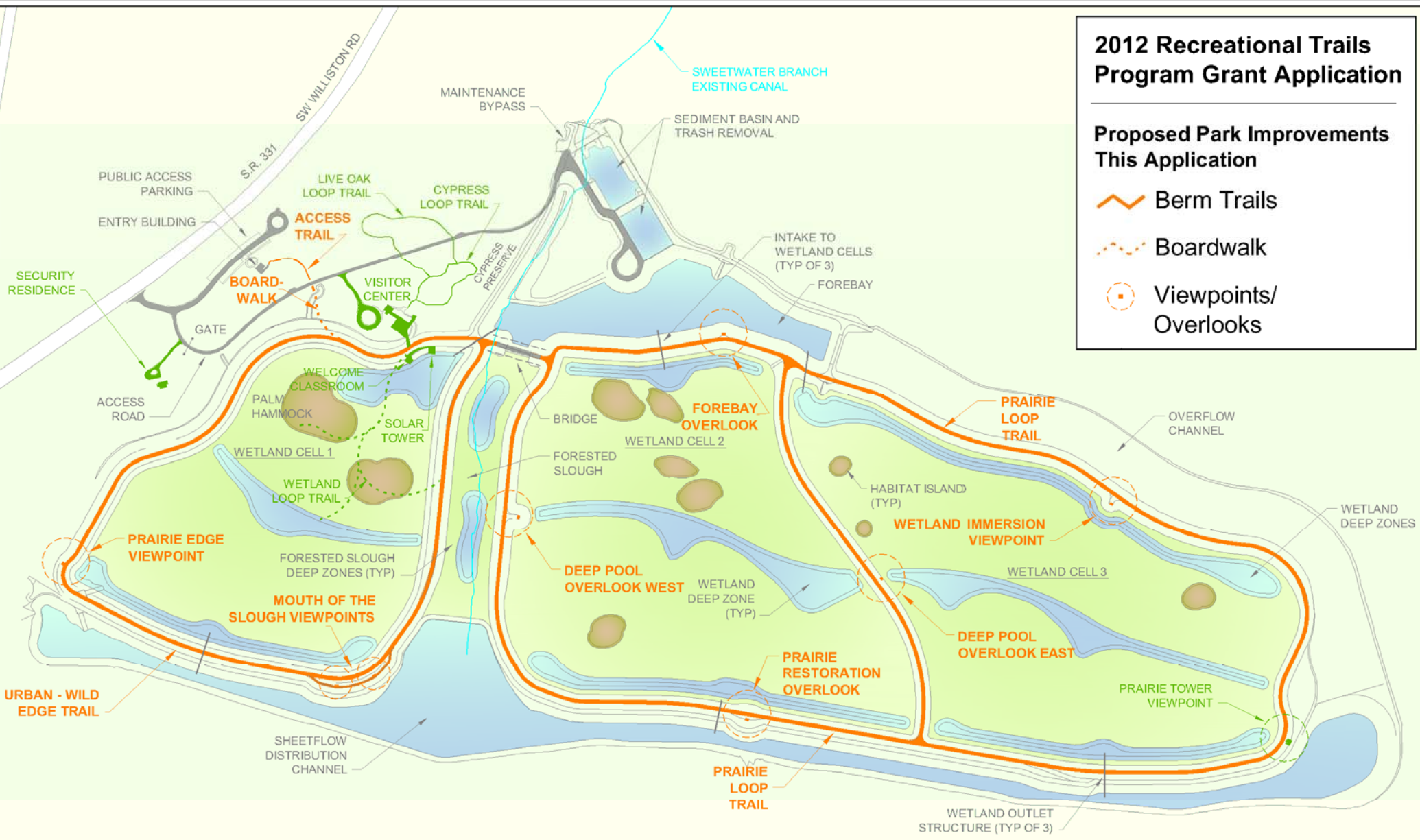



















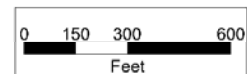
Exhibit E: Conceptual Site Plan Paynes Prairie Restoration

Concurrent Construction

- | | |
|--|--|
|  Access Road |  Sheetflow Distribution Channel |
|  Entry Building |  Wetland Cells 1, 2, & 3 |
|  Sediment & Trash Removal |  Forebay |
|  Bridge |  Forested Slough |
|  Shallow Water |  Habitat Island |
|  Deep Water | |

Future Park Improvements

-  Nature Trails
-  Boardwalk
-  Visitor Center Complex
-  Solar Viewing Tower
-  Security Residence
-  Additional Viewpoints



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Construction Estimate

Base Project	
Forebay & Sediment Basin	\$ 3,777,962
Access Road	\$ 1,630,354
Enhancement Wetland	\$ 9,041,060
Channel Improvements	\$ 3,586,549
Sweetwater Canal Infill	\$ 1,122,696
Public Access	
Entry Complex	\$ 1,204,614
Trails & Boardwalk	\$ 898,293
Welcome Classroom & Shade Structures	\$ 479,203
Security Residence	\$ 345,239
Total	\$ 22,085,970
Prairie Tower Alternate	\$ 404,000



Paynes Prairie Sheetflow Project Partners

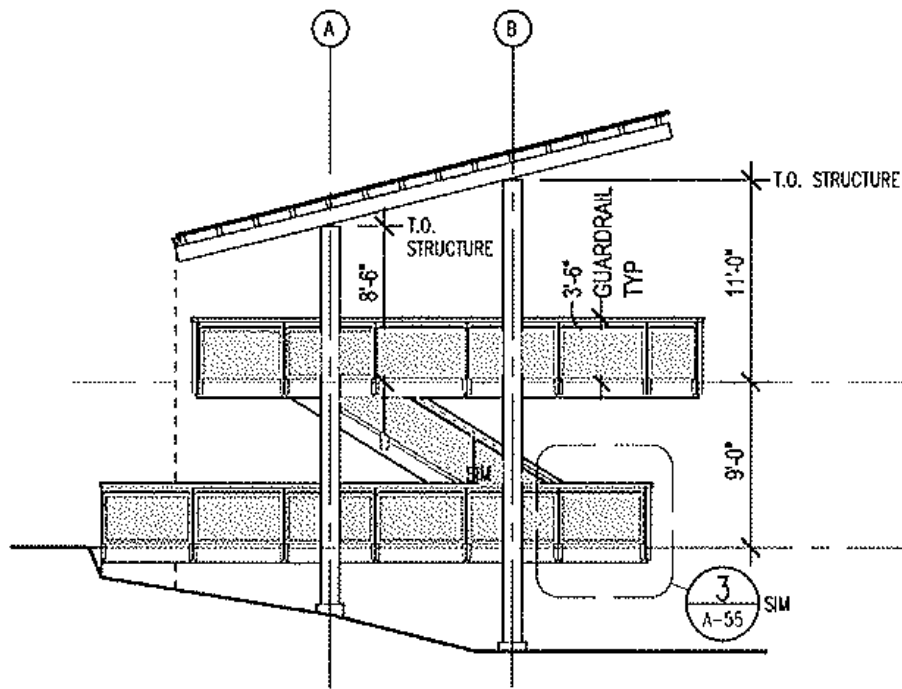
- FDEP
- St. Johns River Water Management District
- Florida Department of Transportation
- US EPA
- Alachua County
- Florida Fish and Wildlife Conservation Commission





Construction Alternate

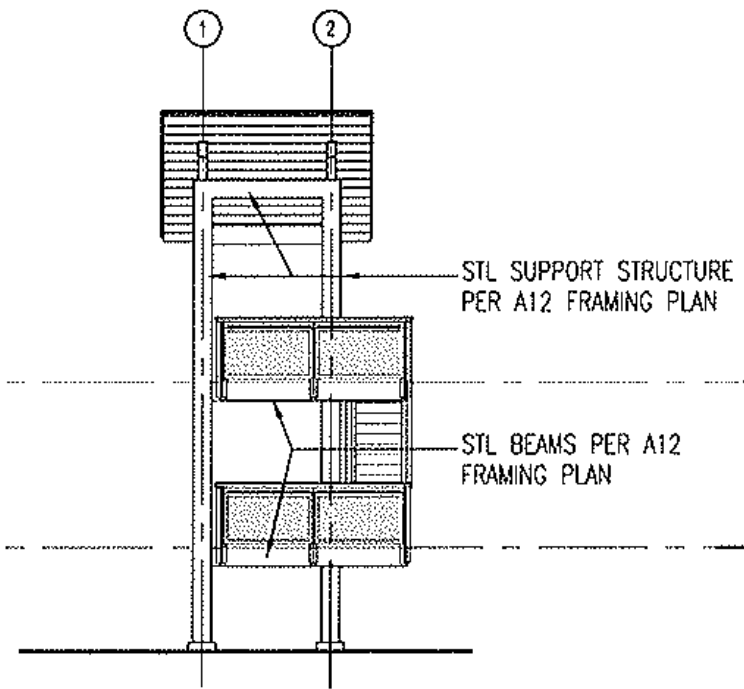
- Prairie Tower



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PRAIRIE TOWER - WEST ELEVATION

SCALE: 1/8" = 1'-0"



10

PRAIRIE TOWER - SOUTH ELEVATION

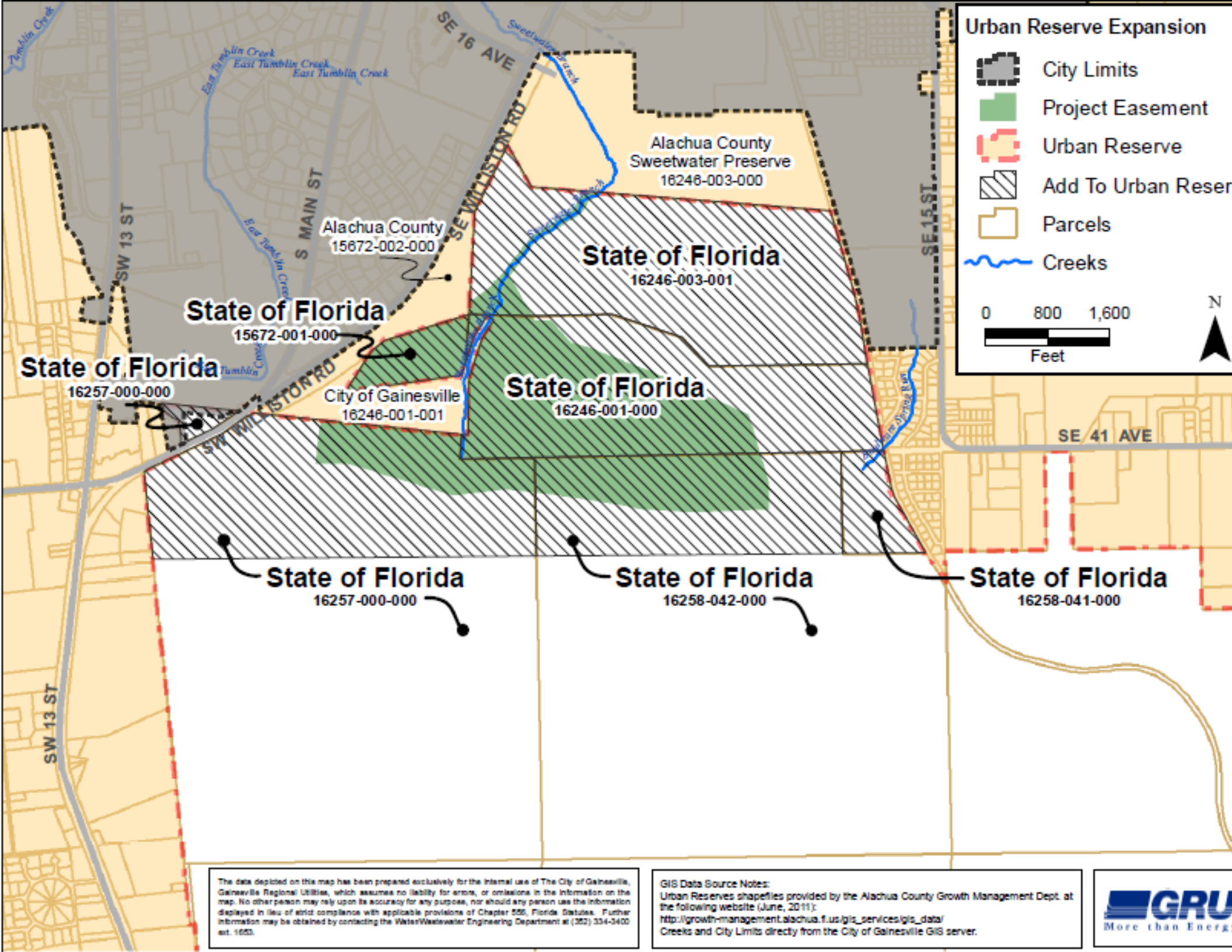
SCALE: 1/8" = 1'-0"









Future Public Use Improvements

- **Solar Tower**
- **Visitor Center**





Urban Reserve Expansion

-  City Limits
-  Project Easement
-  Urban Reserve
-  Add To Urban Reserve
-  Parcels
-  Creeks

0 800 1,600
Feet

N

The data depicted on this map has been prepared exclusively for the internal use of The City of Gainesville, Gainesville Regional Utilities, which assumes no liability for errors, or omissions in the information on the map. No other person may rely upon its accuracy for any purpose, nor should any person use the information displayed in lieu of strict compliance with applicable provisions of Chapter 550, Florida Statutes. Further information may be obtained by contacting the Water/Wastewater Engineering Department at (352) 334-3400 ext. 1053.

GIS Data Source Notes:
Urban Reserves shapefiles provided by the Alachua County Growth Management Dept. at the following website (June, 2011):
http://growth-management.alachua.fl.us/gis_services/gis_data/
Creeks and City Limits directly from the City of Gainesville GIS server.

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Project Issues

- Cultural Resource Mitigation
- Soil Contaminants
- Numeric Nutrient Criteria
- Public Use Management



Cultural Resource Mitigation



- Reevaluation found site not eligible for inclusion on the National Register of Historic Places.

Soil Use and Disposal Plan



- Approved by FDEP Waste Cleanup Section & Parks & Recreation
- US EPA is reviewing the Plan currently



Numeric Nutrient Criteria

- EPA NNC Rule takes effect August 31, 2013
- FDEP has Proposed its own NNC Rule
- Alternatives to Comply
 - Pipeline - \$8 million + \$175k/year
 - Reclassification and Site Specific Alternative Criteria - EPA Rule
 - Stressor Identification Study - DEP Rule



Numeric Nutrient Criteria (cont'd)



- Biological studies are underway
- Study Plan approved by FDEP and reviewed by EPA
- DEP is providing assistance
- Design includes provisions for future pipeline if required

Public Use Management

City Commission will discuss including an increment in the Parks and Recreation budget during budget hearings.



Next Steps

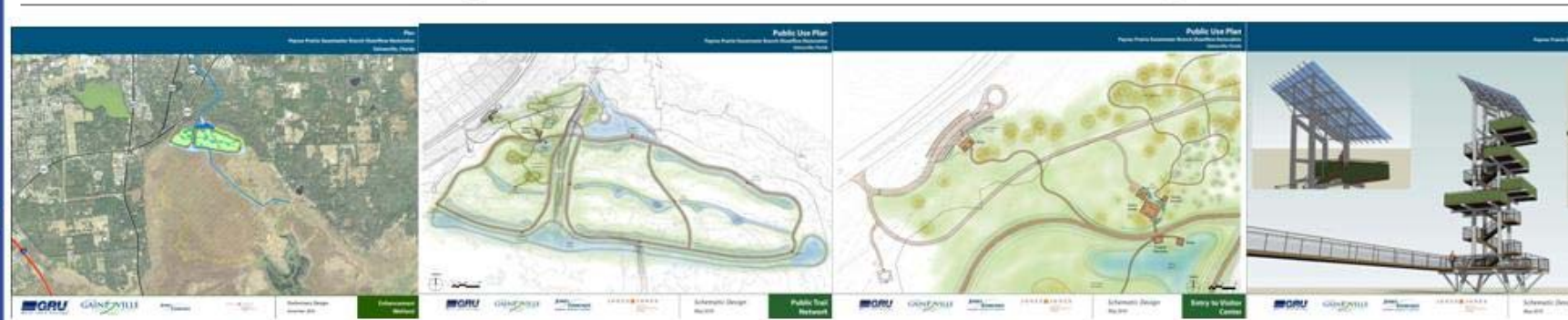
- City Commission approval of 100% Plans
- Negotiate & Execute Construction Contract
- Public Meeting – Scheduled July 24, 2012
- Start Construction – August 2012
- Estimated Construction Completion – Summer 2014





- Public Works**
 - Public Works Management
 - Project Management
 - Depot Park Project
 - Archer Rd/SW 16th Ave Project
 - Paynes Prairie Sheetflow Project
 - Permits
- Operations**
 - Three Year Pavement Management Program
 - Public Works Operations
 - Right of Way Maintenance
 - Street Sweeping
 - Mosquito Control
 - Sidewalk Maintenance

Sweetwater Branch / Paynes Prairie Sheetflow Restoration Project



What's the Project?

A 125-acre constructed enhancement wetland to polish the base flow from Sweetwater Branch before it is discharged to a mile long sheetflow distribution project, the EDEP will fill two miles of agricultural drainage canals in Paynes Prairie Preserve State Park. This will restore the historic Sheetflow will be resto

www.cityofgainesville.org/pps

Neighborhood Meeting

Tuesday July 24th, 2012

The Thomas Center

6:00 pm



Recommendation

- Approve 100 % plans



Questions?

