



TREE PLANTING WORK PLAN

2023/2024

PURPOSE

The Alachua County Tree Planting Program shall establish High Value Trees, appropriate for site conditions on County owned rights-of-way, developed County properties, and properties directly influencing the public sphere.

Lacy Crider Holtzworth
County Arborist

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The Annual Tree Planting Work Plan provides accountability for the Tree Planting Program by answering these questions: Where, how many, and what kind of trees were planted? Where are new trees proposed? What are the funding and expenditure impacts? What are the successes, and what are the challenges?

Forward

The Alachua County Tree Planting Program assists with implementation of the following Alachua County Comprehensive Plan policies:

- Transportation Mobility Element**
- Policy 1.6.5 Streets and roads shall be designed such that automobile and non-automobile modes of transportation are equitably served to the greatest extent possible... Design shall include strategies to calm automobile traffic, provide a pleasant pedestrian environment, and create safe, balanced, livable streets...
- Energy Element**
- Policy 3.2.2 The County shall protect and seek to increase tree canopy in the Urban Cluster.
 - Policy 3.2.2.1 The County shall partner with local groups and organizations to develop a community outreach program that encourages the public to plant trees and provides information on the resulting energy conservation and carbon sequestration benefits
- Conservation and Open Space Management**
- Policy 4.1.5 Factors contributing to the maintenance or improvement of air quality shall be identified and considered during land use planning and development review. These factors include but are not limited to....(c) Increased strategic planting of trees and shrubs to shade streets and buildings, reducing energy consumption and new carbon dioxide generation caused by combustion of fossil fuels;
 - Policy 4.1.8 The County shall establish a tree planting program to improve air quality in designated areas.
 - Policy 4.7.11 The County shall require the use of native wetland plant species, where design allows, for the creation of wetland habitat and for biologically enhancing filtration and treatment of pollutants in newly constructed stormwater retention and detention ponds.
 - Policy 5.3.4 Landscaping of highways and community gateways shall incorporate native vegetation and reflect themes of local history and culture. Tree preservation and planting of low-maintenance native vegetation should be pursued along public rights-of-way throughout the County, with special focus on entranceway corridors. (a) The County shall promote and protect the visual characteristics of canopy roads through tree planting programs and tree maintenance practices, in cooperation with other agencies and private landowners.
- Community Health Element**
- Policy 1.2.2 Promote a healthy community by planning for and implementing a connected system of walkways and bikeways which will provide alternative modes of transportation while also encouraging recreation, physical activity and exposure to the natural environment.
 - Policy 1.2.3 Develop and encourage volunteer opportunities in community projects that promote community health.
- Storm Water Management Element**
- Policy 5.1.10 Alachua County shall require stormwater management facilities be designed in accordance with the Stormwater Management and Landscaping Policies of the Metropolitan Transportation Planning Organization (MTPO) as outlined in the MTPO Policies Manual as an integral part of the development, as a physical or visual amenity that provides usable open space or that resembles native habitat communities by planting native vegetation in and around the facility to the maximum extent feasible.
- Government initiatives**
- Policy 5.1.2 The County shall pursue development of a program to mitigate for greenhouse gas emissions and develop project ideas to offset carbon impacts of County operation, such as energy conservation and efficiency projects, ecosystem restoration projects or the County’s Tree Planting Program.

Alachua County Board of Commissioners adopted the following Program on September 24th, 2018.



Alachua County Parks and Conservation Lands Operating Procedure

Date: 9/11/2018

Subject: County Tree Planting Program
Prepared by: Lacy C. Holtzworth, County Arborist

Objective: *The Alachua County Tree Planting Program shall establish High Value Trees, appropriate for site conditions on County owned rights-of-way, developed County properties, and properties directly influencing the public sphere.*

Implementation: Encompassing the goals of both the County’s *Right of Way Tree Planting Program* (as outlined in the Public Works Operating Procedure ORB-17, July 26, 2002) and the County’s *Comprehensive Plan*, The County’s *Tree Planting Program* shall plant High Value trees in locations that include but are not limited to; County owned - road right-of-ways, building grounds, storm water facilities, parks and parking lots. This Program also allows Staff to request private properties owners and municipal officials access to plant and establish trees on properties that meet the following program priorities. Unless otherwise directed, the County Arborist shall be responsible for scheduling, planting and maintaining tree planting projects to facilitate the most efficient use of staff and resources. Tree Planting projects shall be implemented based on the following (2) priorities:

1. First priority shall be placed on road segments where traffic calming is most needed and multimodal transportation choices are most likely to be utilized such as approaches to schools, commercial centers, employment centers, and service centers including libraries, parks, churches and community centers.
2. Second priority shall be locations that facilitate shade and buffering for pedestrians, cyclists, buildings, parking lots, and recreational amenities.

Public health and safety shall be paramount. All tree planting projects shall follow the guidelines of the most current edition of the *Manual for Uniform Minimum Standards for Design, Construction and Maintenance of Streets and Highways*. All Projects will accommodate local utility setback and separation requirements. No trees will be planted where they will grow to pose conflicts with utilities, transportation or facility operations.

Only High Value tree species appropriate for site conditions will be selected. All trees purchased will be nursery grown; meeting or exceeding Florida Division of Plant Industry, Nursery Grades and Standard #1. High Value trees are defined as species with structural resilience and disease resistance, resulting in medium to large trees, in good health, requiring minimal maintenance. Species with these characteristics include but are not limited to Live Oak, Bluff Oak, Winged Elm, Magnolia, Bald Cypress, Southern Red Cedar, Holly, Long Leaf and Spruce Pines.

The County Arborist shall develop and maintain a list of proposed tree planting projects. The list of proposed projects for the coming year shall be provided to the Board of County Commissioners each year in conjunction with the presentation of the Department’s budget. Accompanying project descriptions should include addresses or locations, estimated tree quantities, estimated cost and aerial photos. A completed project list shall also be compiled with actual tree locations, quantities, species, and final installation cost.

Funding: The primary purpose of the Arboriculture Division’s operating expense shall be to administer the County’s Tree Planting Program. \$45,000 shall be appropriated annually for all cost directly associated with tree purchase, planting and establishment maintenance, up to 3 years after planting, on County maintained right of way. The County Tree Mitigation Fund, collected specifically to mitigate the loss of High Value Trees shall carry forward annually all new or remaining funds, to support all cost directly related to purchasing, planting and establishing new trees on any County owned property, as well as private or municipal properties where maintenance agreements can be arranged.



Project Categories

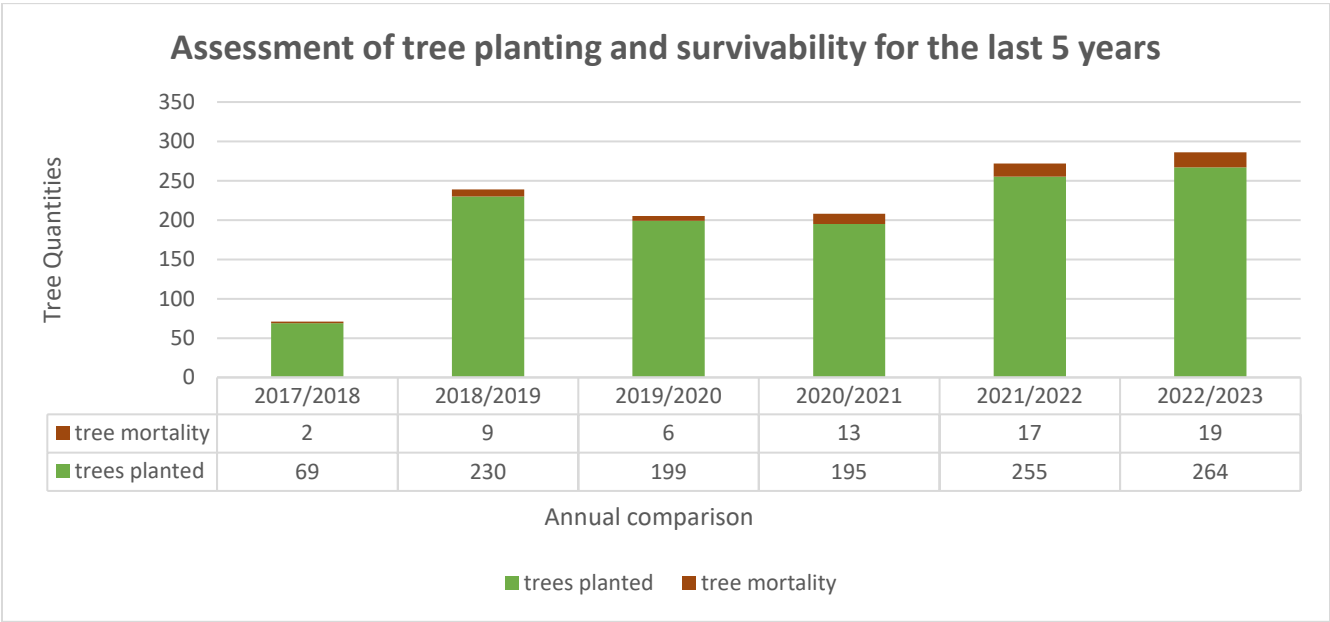
- 1st Priority Projects** propose planting trees along multimodal transportation corridors where shade and buffering is important for pedestrian safety and comfort. Priority Projects are typically located in urban or suburban settings requiring inter-agency planning and coordination.

2nd Community Projects are selected to facilitate safe, rewarding opportunities for volunteer groups and community involvement. These projects are designed to shade and beautify recreational facilities and public amenities. Community oriented tree planting projects encourage channels of communication, and good will for higher priority projects. Community and volunteer tree planting events allow for the dissemination of good arboriculture information, including the importance and value of trees.

2022/23 Tree Planting Program Results

264 Trees planted utilizing over 500 Volunteer Hours – The 2022/23 Unit price for a 1.5” caliper tree and 1 year of maintenance including vehicles and equipment cost is approximately \$175/tree. Administrative costs are not included in this unit price.

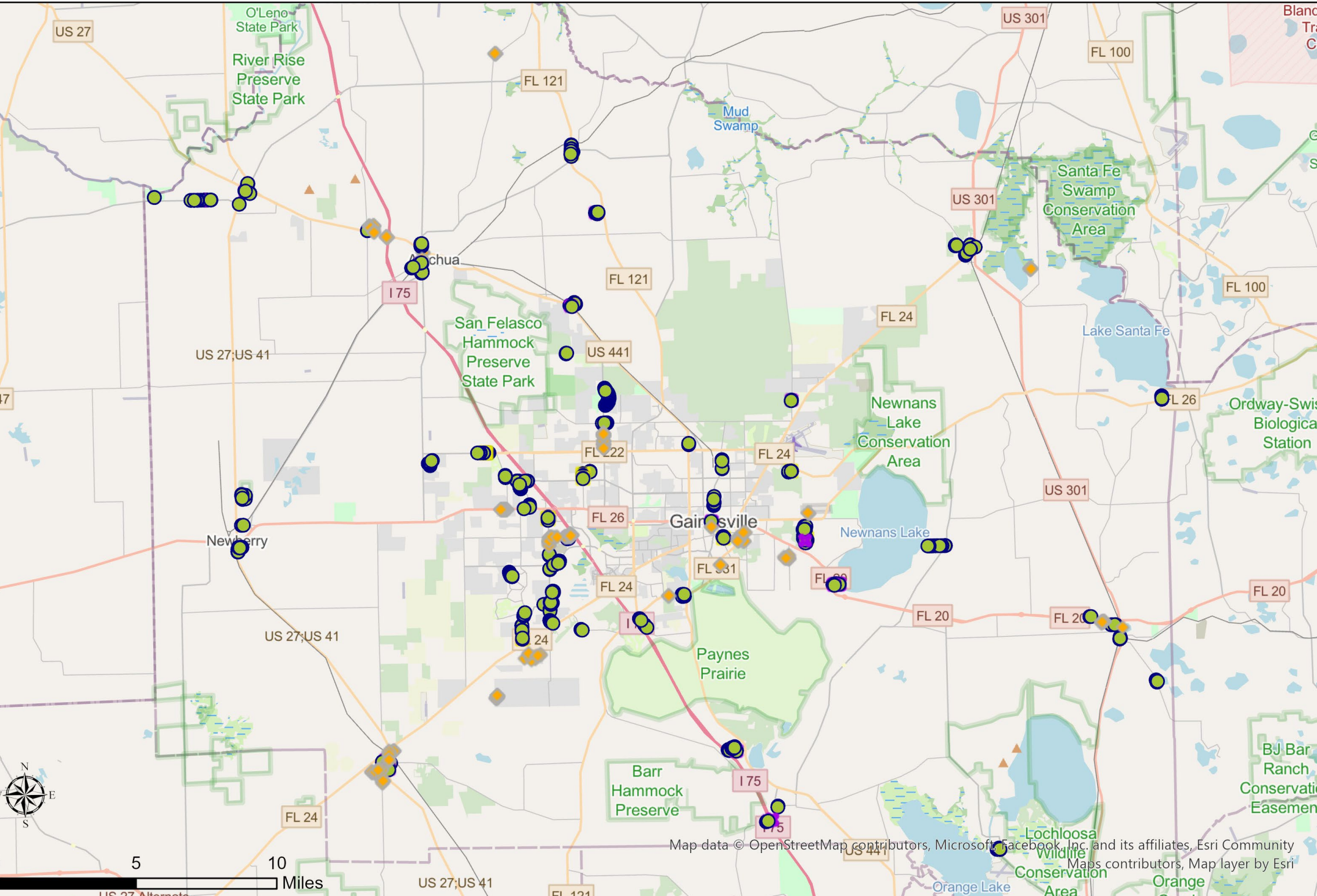
Category	Planting Date	Project Address	Tree Qty.	Tree Species	Volunteer. Hrs.
2	7/11/22 & 7/28/22	Cuscowilla Day Camp, Micanopy	12	6- Sweet Bay, 6 -Cypress,	30 volunteer hours
1	8/2/2022	734 NW 89th Street entrance island	2	2- Live Oak	N/A
1	8/4/2022	2313 SW 70th Ter	4	3- Sycamore, 1 Live Oak	N/A
1	8/9/2022	7110 SW Ave - storm water Basin	10	4- Sycamore 6 Cypress	N/A
1	8/30/2022	1208 N Main St. in front of bank	3	3- Magnolia	N/A
2	9/24/2022	4601 SW 75th St. Kimball Wiles Elem.	32	7-Magnolia, 15-Live Oak,4- Cypress, 2-Winged Elm, 1- Bluff Oak, 3-Sand Live Oak	111 volunteer hours
2	10/12/2022	Buck Bay parking lot	7	3-Cypress, 4 Eagleston Holly	N/A
2	10/22/2022	Veteran’s Park	19	6-Sycamore, 13-Live Oak	60 volunteer hours
1	11/5/2022	2100 Fort Clark Blvd	24	12-Cypress, 12- Live Oaks	30 volunteer hours
1	12/3/2022	SW 91st Street Village Center, and Basins	16	13 Magnolia, Sand Live Oak	55 volunteer hours
2	1/14/2023	Jonesville Park - Martin Luther King Service Day	22	3-Shumard Oaks, 11-Winged Elm, 8-Magnolia	20 volunteer hours
2	1/20/2023	Jonesville Park – Arbor Day Celebration	10	7-Shumard Oaks, 3 Magnolia	50 volunteer hours
1	2/15/2023	2568 NW 98th St Pump Station	16	6-Bluff oaks, 1- Shumard, 3-Magnolia, 4- cedar, - Florida maple, 1 live Oak,	N/A
1	3/22/2023	6901 SW 24th Ave	16	1- Live Oak, 3- Bald Cypress, 12- Magnolia	N/A
2	4/21/2023	Cuscowilla, Micanopy	9	3- Spruce Pine, 3 Magnolia, 3 Sparkleberry	100 volunteer hours
1	5/6/2023	Alachua, 14515 Peggy Road	30	25- Viburnum odoratissimum, 5- Live Oaks	90 volunteer hours
1	5/17/2023	Various locations Replacement trees	6	3- viburnum, 1 cedar, 1 cypress, 1-sycamore, 1 Bluff Oak	N/A
2	6/2/2023	Cuscowilla, Micanopy	9	1-Magnolia, 1-Florida Maple, 1-Live Oak, 3- Longleaf Pine, 3-Weeping Yaupon	15 volunteer hours
1	6/10/2023	Alachua Villas, Alachua	17	8-Live Oak, 4 Bald Cypress, 5- Magnolias	50 volunteer hours
			264	Total number of trees planted	541 total volunteer hours



2022/2023 Tree Planting Program Assessment

- **Priority Projects:** 55% of the trees planted since September 2021, fall into this category. A total of 144 Trees were planted on or near multi-modal transportation corridors.
- **Community Projects:** 45 % of the trees planted since September 2021, fall into this category. A total of 120 Trees were planted in publicly owned Parks, Community Centers, or similar facilities.
- **Mortality Rate:** 7.1% 264 trees planted; 19 trees lost.

Tree Planting Project Distribution Map: 2018-2023



Between 2018 and 2023: 1188 trees have been planted with a 93% survival rate.

2023/2024 Potential Tree Planting Project List

Category	Location	Tentative Planting Schedule	Maintenance route	Tree Quantities
1	Gainesville, NW 43rd Street -Contracted	Fall 2023	Mid County	49
1	Alachua first Baptist Church	Fall	North County	9
2	Alachua Santa Fe Highschool	Fall	North County	22
1	Archer Braided Trail	Fall	South County	14
1	Archer downtown and church of Nazarene	Fall	South County	10
2	Archer Elementary school	Fall	South County	10
2	Archer Park and cemetery	January 1/19	South County	18
1	Hammock Ridge Park, playground and bus stop	Winter	South County	22
1	SE 35 th Street Neighborhood	Winter	South County	20
2	Gainesville, Lincoln Middle School 11th Terrace	April-Earth Day	Mid County	28
1	Long Leaf Subdivision	TBD	Mid County	20
1	NW 8th Ave and Newberry Road Frontage	Spring	Mid County	40
1	SW 8th Avenue Tree Enhancement	Spring 2024	Mid County	20
1	SW 8th Ave Pocket Park	Spring 2024	Mid County	36
	Total			270



Photo: Augusta Harpold

FY2023/24 Potential number of trees proposed for planting: 270 trees.

2023/2024 Potential Tree Planting Project Assessment

Projects category: 80% of projects consist of priority projects; adjacent to and benefiting multi-modal transportation corridors. 20% of tree planting projects fall into the community project category benefiting public facilities and include public outreach and volunteer participation.

Anticipated funding: Tree Mitigation Funds carry forward \$975,168 from FY2022/23.

Anticipated expenditures: Current estimated cost for tree planting is \$137,000. Additional administrative cost will accrue this year due to staff increases, additional equipment purchases, as well as new cost associated with more complex tree planting techniques, such as using root barriers and structural soils.

NW 43rd Street between 39th and 53rd Avenues

Priority Project

49 Trees:

- 25 - Bluff Oak
- 24 - Winged Elm

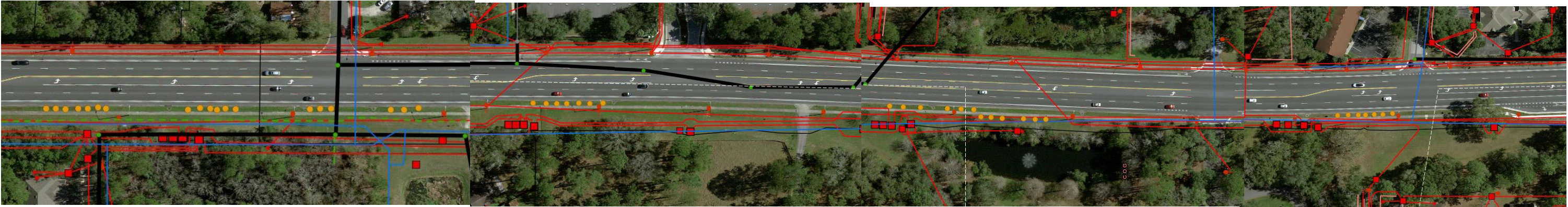
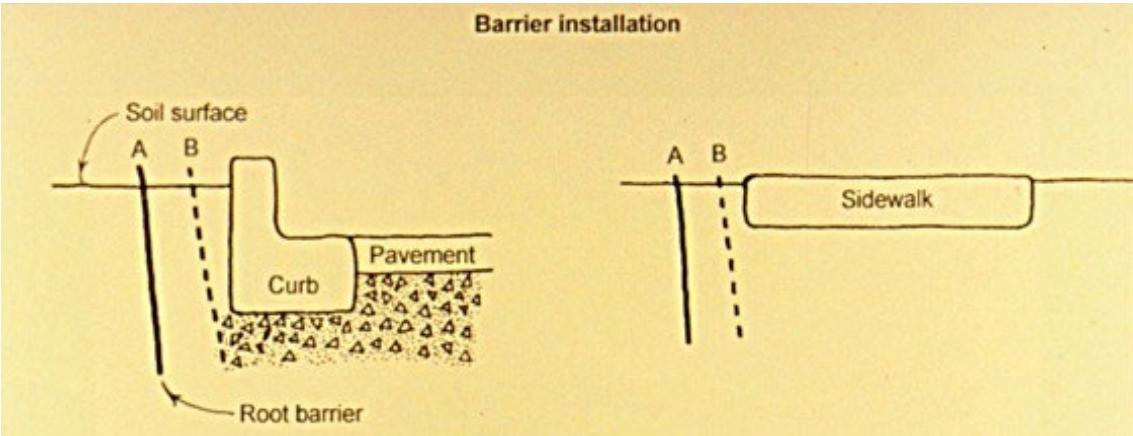
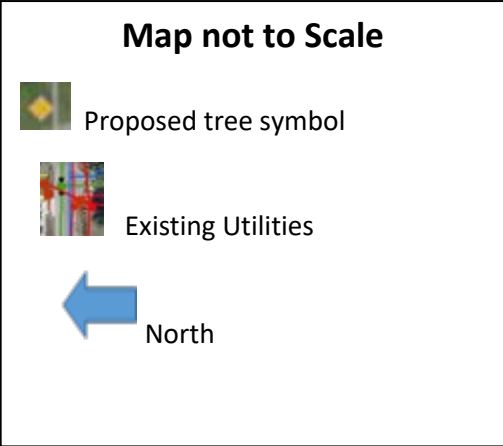
Installed with root barriers to protect infrastructure.

Labor: Contractual services

Scheduled: Fall 2023

Cost Estimate: \$ 55,000

Property Ownership: County ROW



City of Alachua, First Baptist Church, 14005 NW 146th Avenue

10 Trees:

- Live Oak – 4
- Winged Elm -6


Labor: Volunteers, County staff and contract labor

Scheduled: Fall 2023


Cost Estimate: \$ 2,000 from Tree Mitigation Fund

Property Ownership: Private agreement


Map not to scale



North



Proposed tree symbol



Previously Planted tree symbol



Priority Project



City of Alachua, Santa Fe High School

22 Trees:

- Live Oak – 11
- Winged Elm - 12

Labor: Volunteers, County staff

Scheduled: Fall 2023


Cost Estimate: \$ 4,400 from Tree Mitigation Fund


Property Ownership: Interlocal Agreement




Community Project

Map not to scale

 North

 Proposed tree symbol

 Previously Planted tree symbol



City of Archer, Braided Trail

15 Trees:

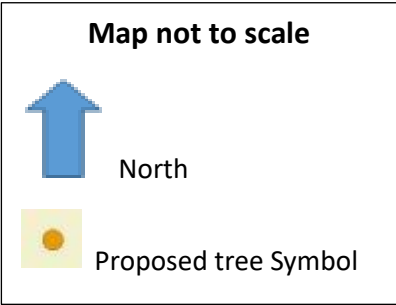
- TBD – 15

Labor: Volunteers and Staff

Scheduled: Fall 2023

Cost Estimate: \$ 3,000 Paid for by Tree Mitigation Funds

Property Ownership: County ROW



Priority Project

City of Archer, Recreational Park, and Cemetery

18 Trees:
Winged Elms, Magnolias, Viburnum
Labor: Volunteers and County staff
Scheduled: Winter 2023/2024 Arbor Day
Cost Estimate: \$3,600 from Tree Mitigation Fund
Property Ownership: Interlocal Agreement



Map not to scale.

Proposed tree symbol

North

City of Archer, SR 45 ROW, CSX ROW, Private Ownership

12 Trees: Live Oaks, Elms, and Magnolia


Labor: Volunteers and County Staffs

Schedule: Winter 2023/2024


Cost Estimate: \$ 2,400 from Tree Mitigation Fund

Property Ownership: Combination of Private Agreement and Interlocal Agreements

Map not to scale.



North



Proposed tree symbol



Priority Project



City of Archer Elementary School, SW 170th St

Trees +/- 10: Winged Elms or Live Oaks
Labor: County Staff with Volunteers
Scheduled: Winter 2023/2024
Cost Estimate: \$2,000 from Tree Mitigation Fund
Property Ownership: Interlocal Agreement

Map not to scale.

↑

North

●

Proposed tree symbol



Priority Project



Hammock Ridge HOA, Park, Playground and School Bus stop,

22 Trees: Live Oaks – 12 Sycamore – 10

Scheduled: Spring 2024


Labor: County Staff and volunteers

Cost Estimate: \$ 4,400 from Tree Mitigation fund


Property Ownership: Private agreement

Community Project

Map not to Scale.



Proposed tree symbol



North



Longleaf Subdivision (street tree replacement)

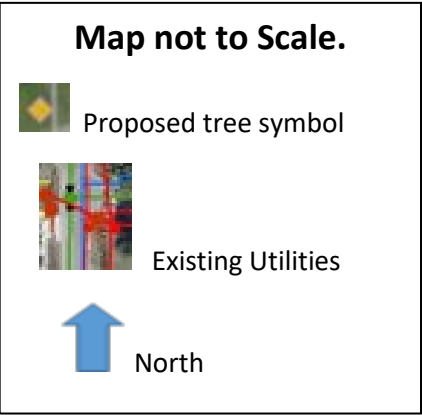
15 Trees with Root barriers:

- Eastern Hop Hornbeam – 5
- Weeping Yaupon Holly- 5
- Dwarf Magnolia cultivar -5

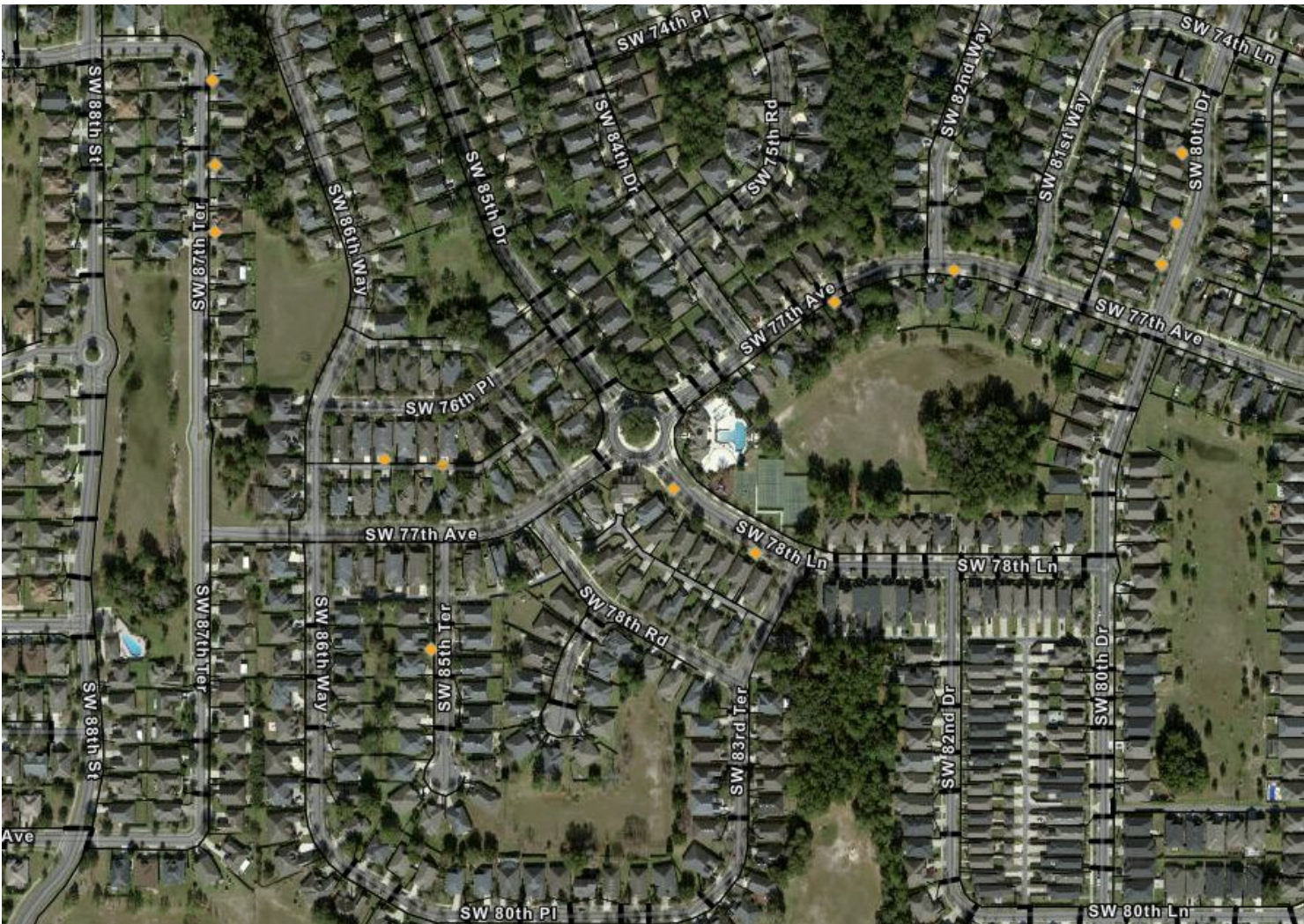
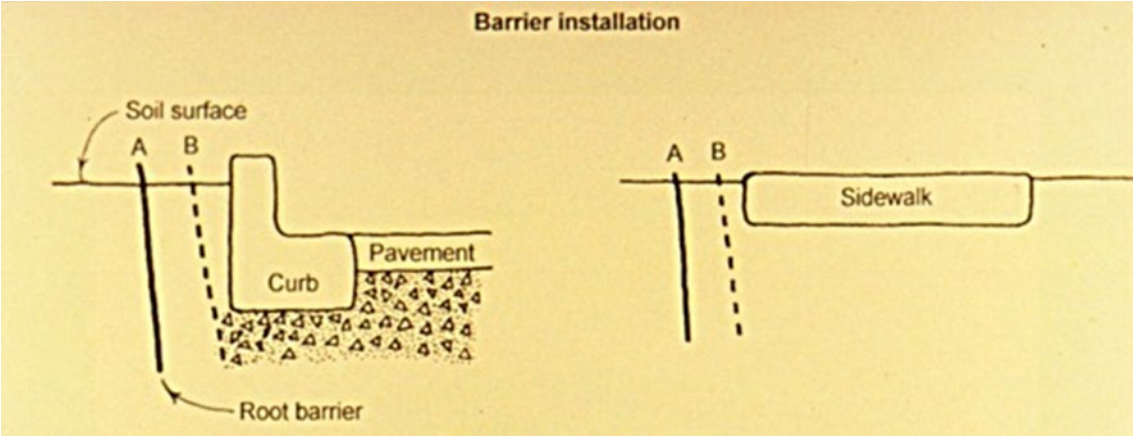
Scheduled: TBD

Cost Estimate: \$ 15,000 from Tree Mitigation Fund

Property Ownership: private/public partnership



Priority Project



Gainesville, Lincoln Middle School SE 11th Ave

Priority Project

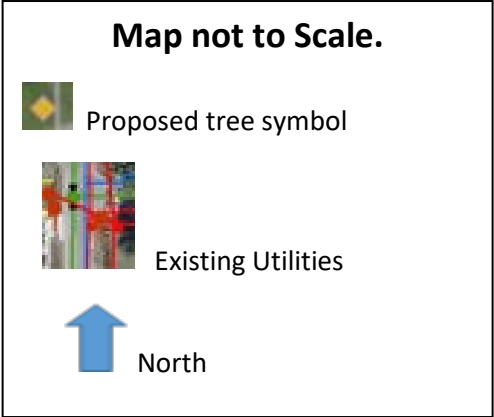
28 Trees:

- Winged Elm – 15
- Live Oak - 10
- Long Leaf Pine – 1
- Cypress - 2

Scheduled: Earth Day April 2024

Cost Estimate: \$ 6,000 from Tree Mitigation Fund

Property Ownership: Interlocal Agreement



SE 35th Street Neighborhood

Priority Project

20 Trees:

- Southern Red Cedar – 9
- Magnolia -10
- Live Oak - 1

Labor: County Staff and volunteers


Scheduled: Spring 2024


Cost Estimate: \$4,000 from Tree Mitigation Fund


Property Ownership: County ROW



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 North

 Proposed tree symbol

 Existing utilities

Gainesville, NW 8th Avenue and Newberry Road

Priority Project


- 40 Trees:**
- Viburnum Species – 15
 - Holly Species – 15
 - Eastern Hop Horn Beam - 9

Scheduled: TBD

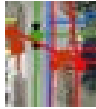
Cost Estimate: \$ 8,000

Property Ownership: County ROW


Map not to Scale



Proposed tree symbol



Existing Utilities



North



SW 8th Ave Tree Enhancement

Priority Project

20 Trees:

Live Oak – 11

Winged Elm – 10

Ornamental trees- 4


Labor: Volunteers, County staff and contract labor

Scheduled: Spring 2024


Cost Estimate: 20,000 with root barriers

Property Ownership: Combination of Private Agreement and County ROW


Map not to scale



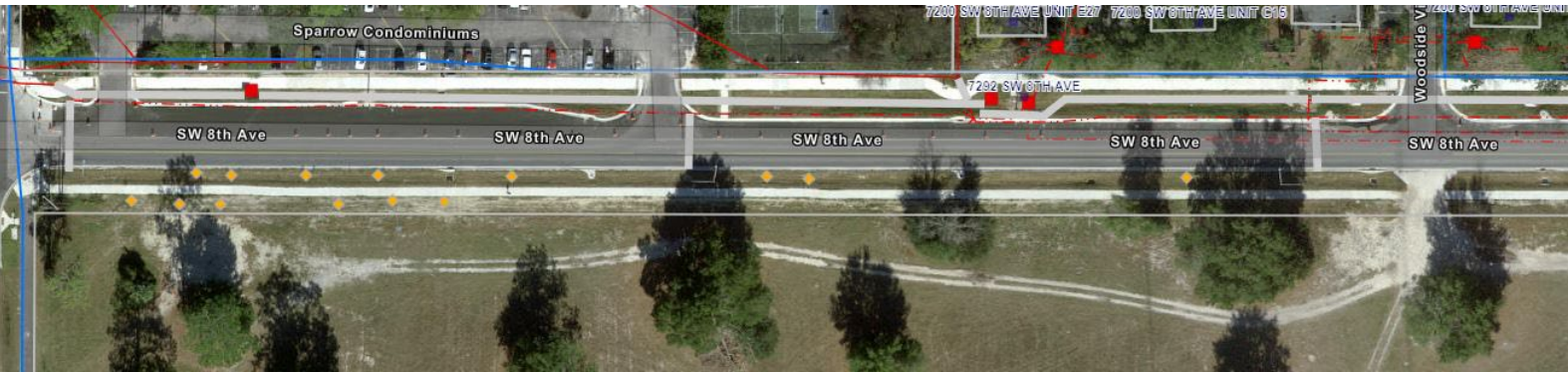
North



Proposed tree symbol



Previously Planted tree symbol



SW 8th Avenue Pocket Park

Community Project

36 Trees: Shade trees and fruit trees TBD


Labor: Volunteers, County staff

Scheduled: Spring 2024


Cost Estimate: \$ 7,200 from Tree Mitigation Fund

Property Ownership: County owned.

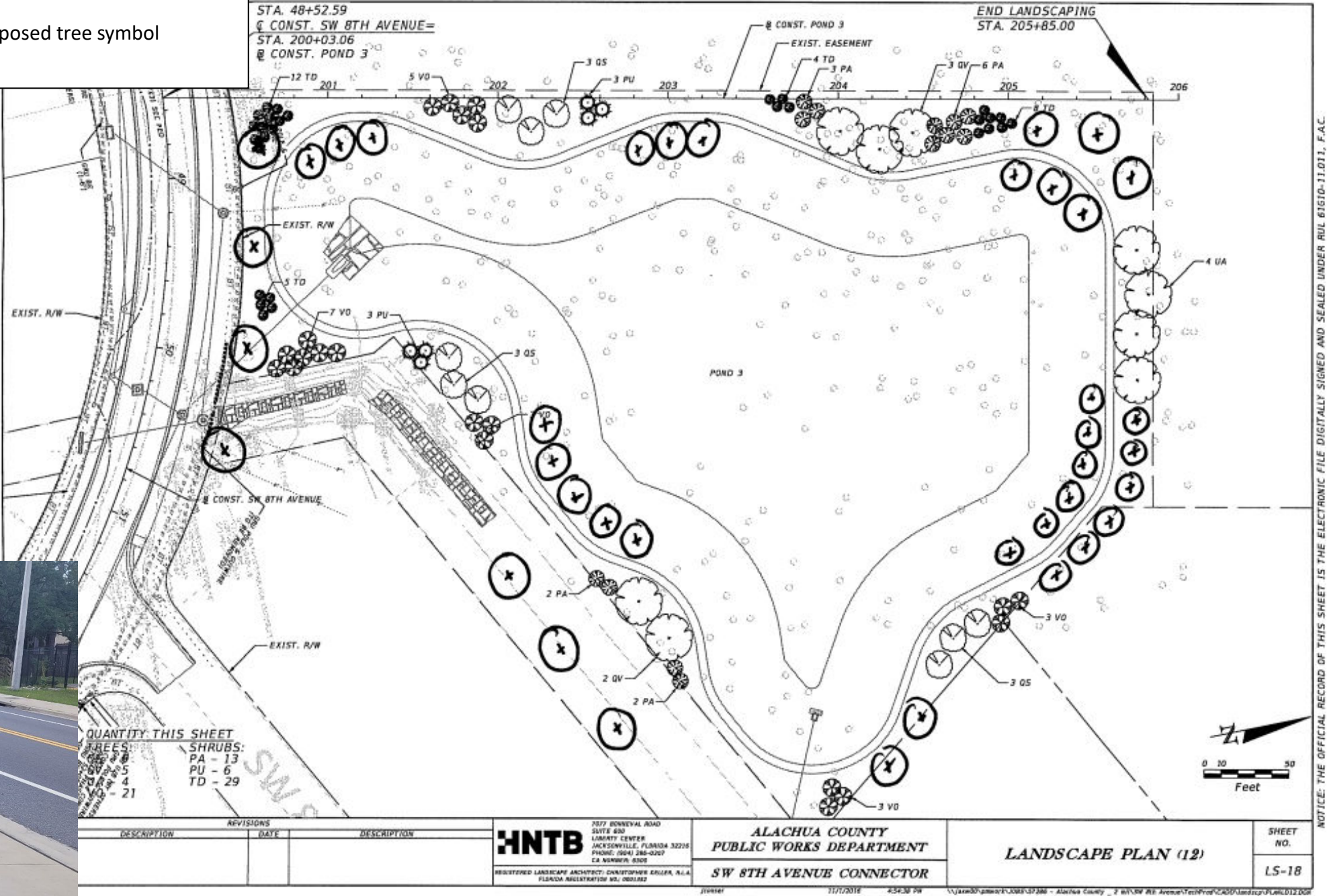
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North



Proposed tree symbol



Summary:

This Annual Tree Planting Work Plan is provided to the Alachua County Board of Commissioners for comment as part of the Environmental Protection Department budget. This Work Plan has become a valuable tool to help coordinate, implement, document, and maintain the Alachua County's Tree Planting Program. On occasions, due to unforeseen circumstances, this Work Plan must be revised, potential projects are sometimes postponed or omitted. Ultimately the County Arborist assumes responsibly to facilitate necessary agreements, involve potential stakeholders, schedule project installations, and follow through with maintenance operations.

Year after year, this Work Plan documents the Tree Planting Programs successes and challenges. Last year we identified staffing limits as an obstacle to the programs continued success. As a result, one full-time Landscape Maintenance Worker position was approved, and filled to assist with Tree Maintenance. This year we anticipate purchasing a maintenance truck specifically designed to better facilitate tree planting and maintenance operations. We also anticipate implementing more complex tree planting projects; projects requiring more coordination with other departments and agencies, private landowners as well as more innovative tree planting techniques.

Looking forward we recognize the Alachua County Tree Planting Program continues to face challenges:

- Finding adequate space for trees along public right of ways and in the Urban Cluster continues to be a challenge. Future tree planting projects will require more coordination with adjacent property owners, interagency agreements, and public/private partnerships. In some key locations, it will be necessary to install root barriers, structural soils, or other innovative techniques to adequately protect tree growth and adjacent structures.
- Trees are a long-term investment, and concerns about long term tree care continue to challenge Program objectives. A five-city study found that cities received benefits ranging from \$1.50–\$3.00 for every dollar invested in trees (U.S. Environmental Protection Agency 2015). Unlike man-made systems, trees are the only urban infrastructure that increase service and value over time. As trees mature, benefits increase exponentially, unlike more traditional infrastructure such as roads and bridges that deteriorate with age. (Urban Canopy works, LLC 2022) Recognizing the value of trees and urban forest requires community input and support. An *Urban Forestry Management Plan* would help establish the public commitment and organizational framework to best protect, mitigate and care for our urban trees and forest.

Over the last 5 years close to 1200 trees have been planted with a survivability rate of approximately 93%. Every quadrant of the County benefits from the Alachua County Tree Planting Program.