



## Introduction to the Problem

The landscape around campus informs visitors and potential new students first impression when they walk on campus. It currently lacks cohesion, needs to be updated for safety, and could be better connected to the natural resources around campus. Updating the landscape will benefit current students, alumni, and future students, as well as faculty and staff.

## Background Information

The University has created a Master Plan that outlines the design principles that all UF Landscapes should follow.

1. Greet Gainesville with a More Welcoming and Integrated Urban Experience
2. Redesign Campus Roadways to Support and Encourage All Modes of Travel
3. Integrate All New Campus Projects into the Campus Fabric, Advancing Pedestrian and Bike Connections and Campus Spaces
4. Celebrate the Ecological Setting of the Campus, Embracing Sustainable Goals and LID Practices
5. Reflect UF's Ecological Setting in its Plant Materials, Promoting Simplicity and Maintainability in Planting Design
6. Unify the Campus with Comprehensive Standards for Hardscape and Furnishings<sup>1</sup>

These design principles will push the landscape towards the campus landscape vision, also laid out in the master plan, which is a welcoming and interconnected campus with a strengthened core, that is connected to its natural systems and has a cohesive image.

The master plan features 13 priority projects that demonstrate how these design principles are used to create this vision for the campus.

A landscape audit instrument is a tool to use when performing an audit that will insure consistent results every time

## Hypothesis

Creating a landscape audit instrument will simplify the process of connecting the current landscape to the goals of the Landscape Master Plan.

## Acknowledgments

Faculty Advisor: Dr. Gail Hansen

## Matrix of the Inventory of Each Priority Project Site

	Tiger Court	Union Walk	Tower Plaza	Gator Plaza	Newal Gateway	Stadium Lawn	Reitz Union Lawn E	Reitz Union Lawn N	Stadium Inner Road	Emerson Road	Physics Courtyard	Reitz Union Dropoff	Total #
Roadway	X	X	X	X	X	X			X	X	X	X	10
Bench	X	X	X	X	X		X	X		X	X		8
Low brick walls			X	X	X	X	X		X	X	X		9
Streetlights	X	X	X	X	X	X	X	X	X	X	X	X	13
Small trees	X	X	X	X	X	X	X	X	X	X	X	X	13
Large trees	X	X	X	X	X	X	X	X	X	X	X	X	13
Sidewalks	X	X	X	X	X	X	X	X	X	X	X	X	13
Turf	X	X	X	X	X	X	X	X		X	X	X	12
Picnic Tables	X		X		X		X	X	X		X		8
Shurbs	X	X	X	X	X	X		X	X	X		X	11
Planting beds	X	X	X	X	X	X	X	X		X	X	X	11
Brick tables			X				X						1
Pavers	X	X	X	X	X	X			X	X	X		9
Statue			X	X		X	X			X		X	6
Bike racks	X		X		X		X		X	X	X		6
Limestone boulders						X			X	X		X	4
Water drainage area						X	X						2
Parking area	X					X			X	X	X	X	5
Road blocks				X					X				2
>50% Hardscape	X	X	X	X					X	X	X	X	9
>50% Turf				X	X	X	X						4

## Methods

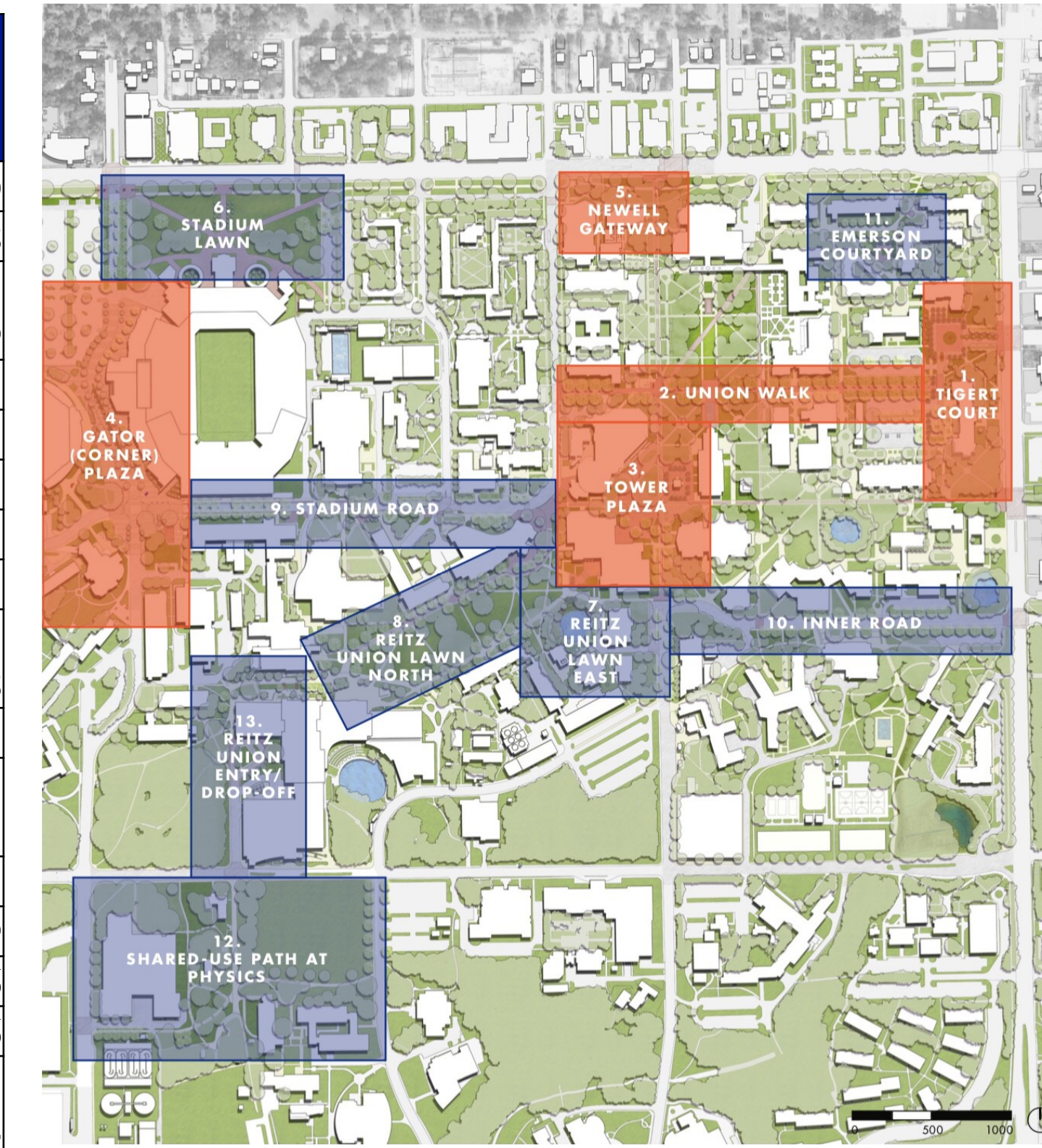
The first step was collecting data of what currently exists in the landscapes of the 13 priority project sites. This data was placed into the matrix which highlighted which items were most common and which were rare occurrences. This matrix was used to write questions which were used to create the landscape audit instrument. The audit instrument was tested in the Reitz Union Lawn east. It was tested multiple times to ensure that the results were consistent, which is important for an audit instrument. After the results were verified, action items were added, based on information from the UF Landscape Master Plan and observations made while doing the audit. These action items give ways to connect the current landscape with the overall vision for the campus.



Current State of the Landscape in front of the "French Fries"<sup>2</sup>



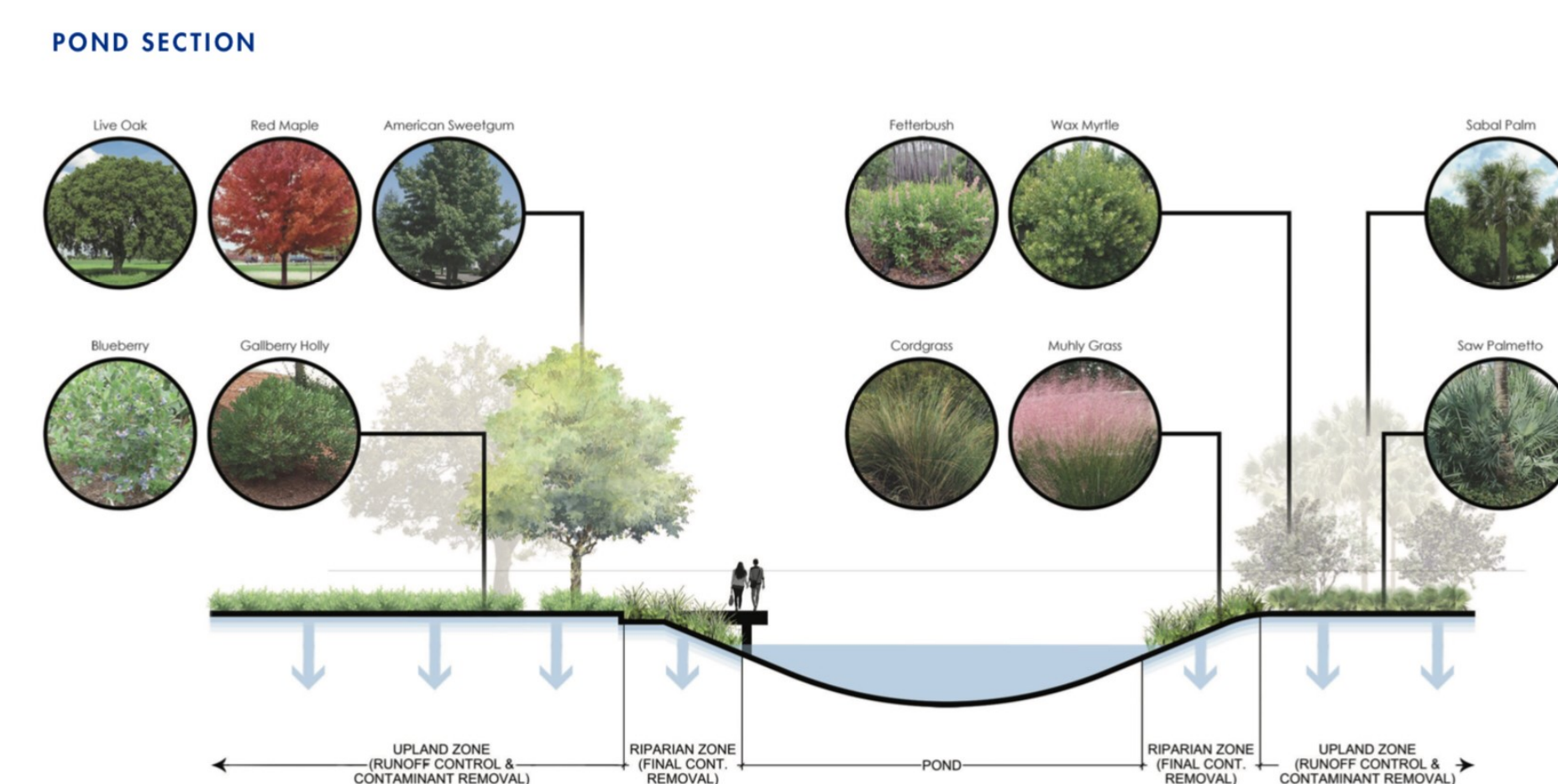
Current State of the Dairy Pond<sup>1</sup>



Map of the 13 Priority Project Areas used for Data Collection<sup>1</sup>



Detailed Plans for the East Reitz Lawn<sup>1</sup>



Plant Suggestion for Waterways from the Master Plan<sup>1</sup>



Plans for the Reitz Union Lawn East from the Master Plan<sup>1</sup>

## Completed Landscape Audit Instrument

Survey Item	Results (NA if it does not apply)	Compliance Action Items (opportunity to)	Notes
<b>Plant Material</b>			
Number of small trees (under 12 ft. tall)	12	Add small trees to provide shade to seating areas	Suggested trees: Betula nigra-River Birch, Cornus florida-Flowering Dogwood
Number of large trees (over 12 ft tall)	87	Add additional canopy trees along the edges	Suggested Trees: Quercus virginiana-Live Oak, Ulmus americana-American Elm
Percentage of trees that are recommended species	100%		
Number of plant beds	17	Add new plant beds with short plants that won't block the eye level view, especially under trees	Suggested plants that will work in shade under trees: Aspidistra elatior-Cast Iron Plant, Cytisium falcatum-Holly Fern
Number of different plant species	25	Increase the diversity of plants in the landscape	The majority of these species are in one plant bed, and more diversity is needed elsewhere
Percentage of plants that are recommended species	80%	Use plants for appropriate for site conditions and cultural requirements	
Percent of area covered by turf	50%	Enhance areas for passive recreation such as lawn games, walking, etc.	
Percent of area covered by plant beds	5%	Increase the number of visually appealing plants by replacing turf and hardscape with plant beds	
Percent of area covered by pond or storm water retention	30%	Provide a learning opportunity through educational signage	
Percent of shoreline covered by plants	65%	Add native plants commonly found around north Florida waterways	Plant Suggestions: Muhlenbergia capillaris-Muhly Grass, Lyonia lucida-Fetterbush
Number of invasive plants	1	Replace invasive plants with natives	This plant was a weed and not intentionally planted.
Number of shrubs blocking pedestrian view of pedestrians	1	Plant smaller shrubs to improve the safety of campus	
Number of shrubs blocking vehicular view of pedestrians	1	Plant smaller shrubs to improve the safety of campus	
Number (or percent) of tree canopy blocking overhead pedestrian or safety lights	2	Remove branches to improve night-time visibility and safety	
Number (or percent) of plants requiring extensive maintenance	5%	Simplify the plant material for maintenance	
Number (or percent) of plant material that matches plants in adjacent landscaped areas	85%	Unify the landscape with surrounding landscapes under a single vision	
Number of plants not appropriate for site conditions	3	Use plants appropriate for site conditions and cultural requirements	
Number of plants not appropriate for scale of space	NA		
<b>Hard Surface</b>			
Percent of area covered by hard surfaces	15%		
Percent of hard surface designated for motor vehicles	10%		
Percent of hard surfaces designated for pedestrians	90%		
Percent of the area covered by pervious pavers	10%	Add new pavers to different areas to improve the aesthetics of the walkway	
Number of tree grates	NA		
Number of curbs to be repaired or replaced	2	Repair curbs and make all areas ADA accessible	
Number of sidewalk or asphalt areas to be repaired	22	Repair cracks in the sidewalk and asphalt	More areas had smaller cracks, but 22 were safety hazards
<b>Other Features</b>			
Number of statues, memorials, and other significant points	2	Remove trees or shrubs that block the views of significant points from the majority of pedestrians	The Oak trees in front of the "French fries" statue block the view of the statue from anywhere in the Reitz Union Lawn
Number of limestone boulders	6	Add more boulders to add variety to the landscape	
Number of light posts	23	Correct mismatched light posts to create a cohesive image	The majority are the traditional light pole that is in the master plan, so the others should be changed to match
Number of benches	1	Increase the number of benches	
Number of tables	16	Increase the areas where students can eat and gather outdoors	
Number of stormwater collection features (swale, creek, pond, etc.)	1	Add educational signage for learning opportunities around the pond	

## Take Home Message

The importance of planning a landscape was very prevalent in this project. Most of the problems in the Reitz Union lawn east landscape could have been avoided with better planning, such as not placing light posts next to trees with a wide canopy and not using plants that present maintenance problems. The survey proved helpful in highlighting areas that need improvement for the landscape to match the overall vision for campus. There are now obvious steps forward for improving safety, connecting the landscape to nature, and improving cohesion.

## Works Cited

1. CRJA-IBI Group, GAI Community Solutions Group, DRMP, Inc., The University Of Florida Landscape Master Plan Report October 2018
2. David Conner and Associates, Reitz Union Lawn Planning Study: Observations & Study of a Major Campus Amenity, University of Florida, August 2014