

### **UF-653**

Design Development May 4, 2023

David Wood



#### **Project Site & Overview**



- Project was brought to the LVL Committee in August 2021 for the programming phase and in July 2022 for ASD.
- Project was brought to the LVL Committee in April 2023.
  - Motion: Provide formally documented report about impacts to and justification of removal of the 41" Magnolia.

#### **Site Plan**



3



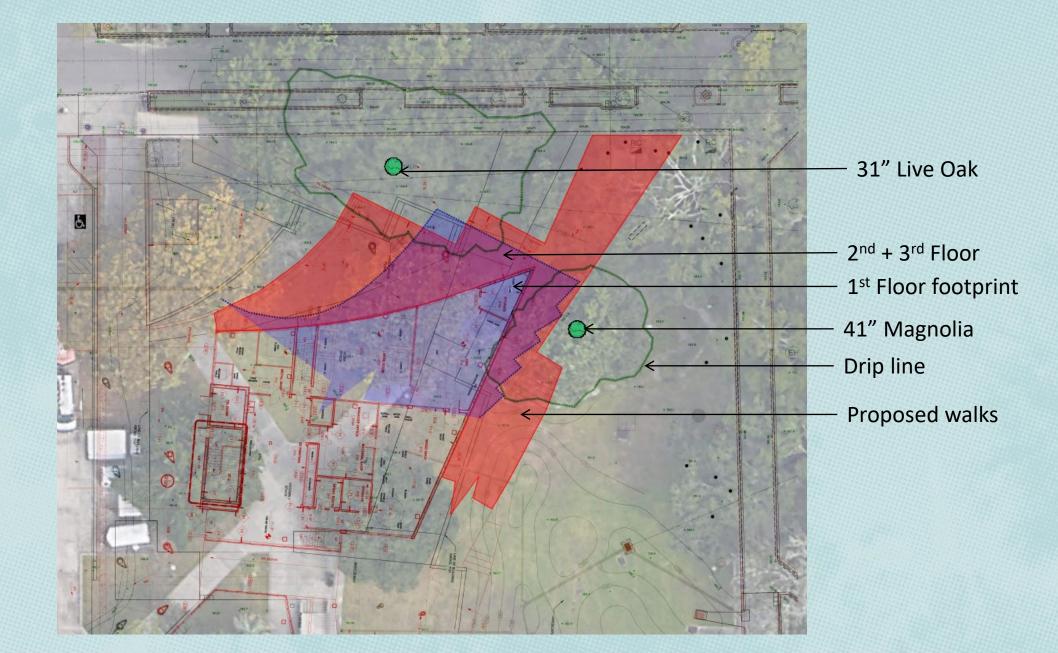
### Sustainability

- Project pursuing LEED Gold + WELL Certification
- Project proposes LID/Rain Garden for Architecture Lawn and LID planters along Murphree Way

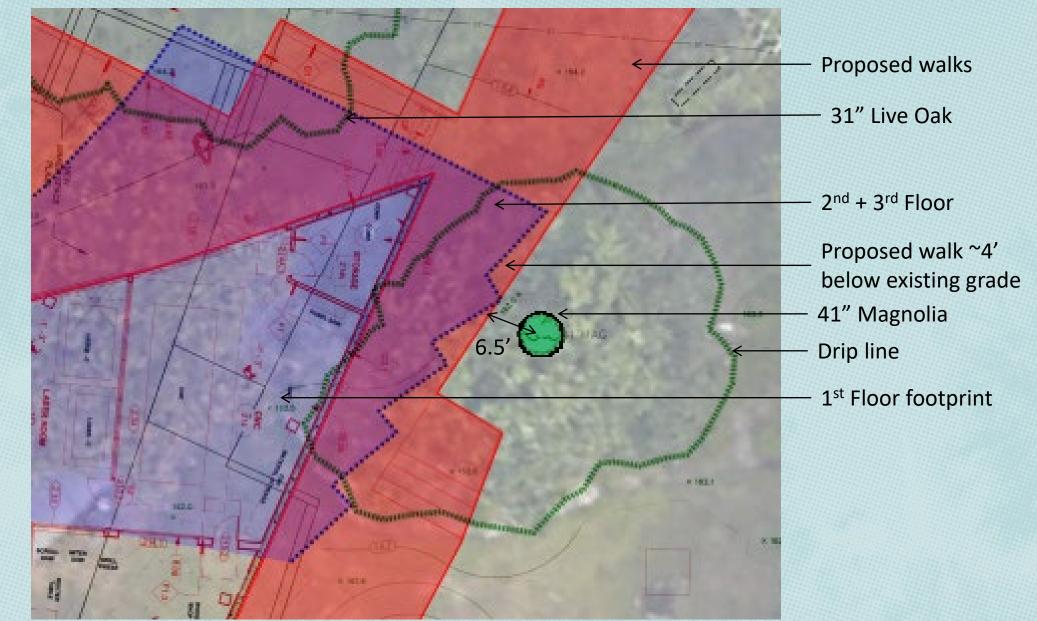












#### Tree Assessment, 41" Magnolia

Magnolia was assessed on 4/26/23

John Burns, ISA Board Certified Master Arborist FL-5833B SkyFrog Tree Service



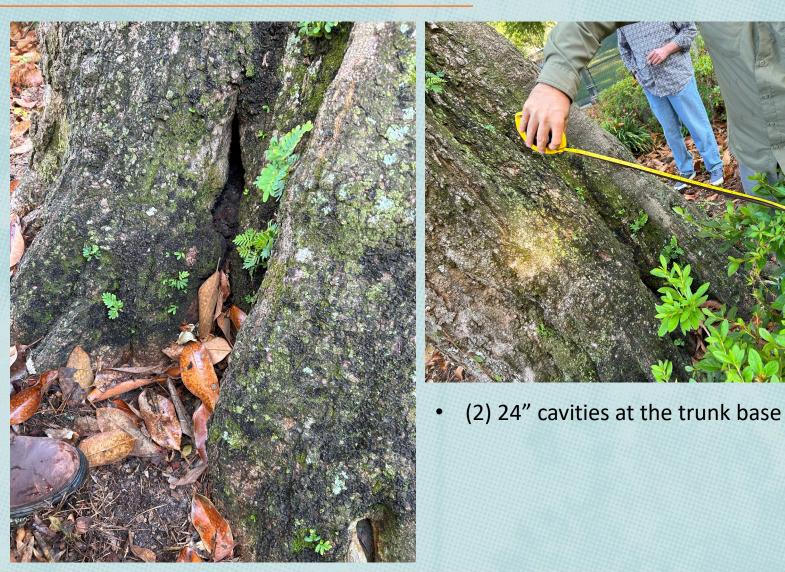
#### Tree Assessment, 41" Magnolia

Inconsistent canopy with tip dieback and trunk damage from previous event





### Tree Assessment, 41" Magnolia

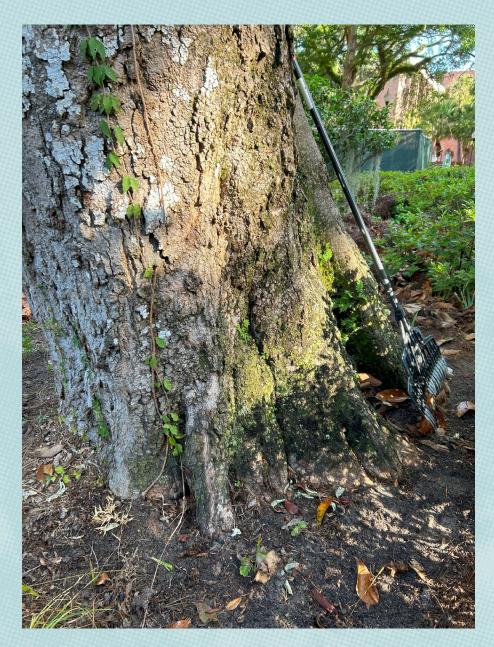




#### Tree Assessment, 41" Magnolia



- Buttress rooting is visible on the east side, but not present on the west side (lean) of the tree
- Tree shifted in response to event
- No response growth is visible on the west side of the trunk
- Epicormic sprouts present from failure of original trunk





TELEPHONE VAU

52 164 50

164.3 ×

× 163.6

× 164.73

SS # 11

PPROXIMAT HEADWALL (UNABLE

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2' DIAMETER -CONCRETE PAD

9.4" X 13.0" COVERED STRUCTURE (POSSIBLE IRRIGATION - CONTROL, 1 - 3" TALL WALLS)

(15" RCP)

164.87

164.37 164.39 (EH)

164.TX 164

162.98

N 20°LAO

× 161.4 N-23020

160.27

15WATO

9°LAO

× 161.6

201A0

× 164.6

164.31

162.66

162.5×

× 162.4 2

161.9

8" CONCRETE CURB

(>) 160.0

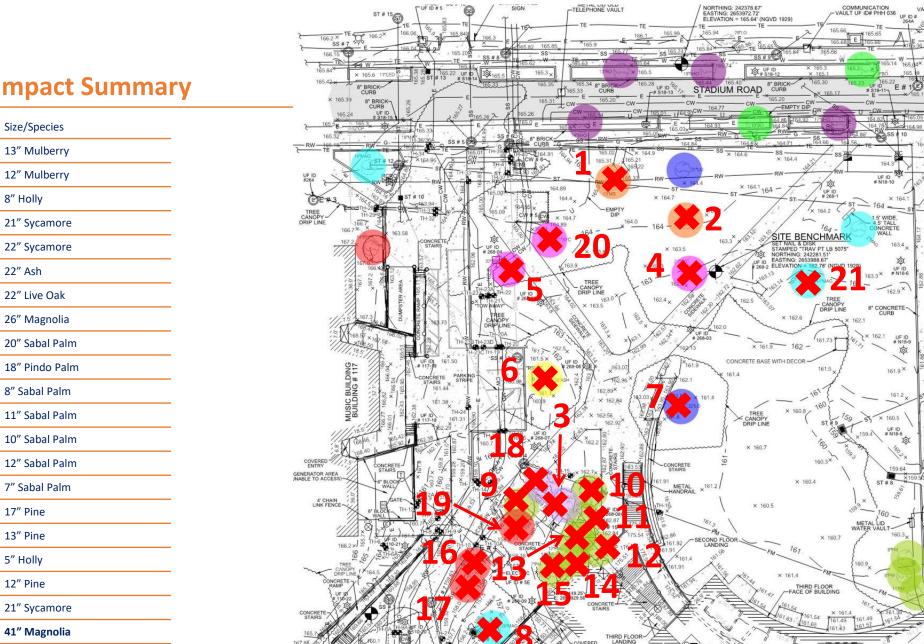
161-× 160.9

GROUND LEVEL

ø

VAULT UF ID# PHH 034-

8" BRICK-CURB



**Tree Impact Summary** 

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#### **Tree Impact Summary**

#	Size/Species	Required Mitigation Trees/Mitigation Fee
1	13" Mulberry	2 trees
2	12" Mulberry	2 trees
3	8" Holly	2 trees
4	21" Sycamore	\$1,000
5	22" Sycamore	\$1,000
6	22" Ash	\$1,000
7	22" Live Oak	\$1,000
8	26" Magnolia	\$2,000
9	20" Sabal Palm	2 trees
10	18" Pindo Palm	2 trees
11	8" Sabal Palm	2 trees
12	11" Sabal Palm	2 trees
13	10" Sabal Palm	2 trees
14	12" Sabal Palm	2 trees
15	7" Sabal Palm	2 trees
16	17" Pine	2 trees
17	13" Pine	2 trees
18	5" Holly	2 trees
19	12" Pine	2 trees
20	21" Sycamore	\$1,000
21	41" Magnolia	\$6,000
	TOTAL	28 TREES, \$13,000



Mitigation required **28 Trees** 

Mitigation provided 11 Trees

Total mitigation deficit 17 trees @ \$250 each =\$4,250

\$4,250 (deficit) + \$13,000 (heritage)

= \$17,250 total Mitigation Fee









#### **Stadium Road**



- Previous comments from LVL included recommendations to preserve and enhance existing canopy along Stadium Road.
- Discussion of utilizing tree mitigation funds for this project to perform an assessment of existing trees along Stadium + provide replanting strategy



#### **Motion Requested:**

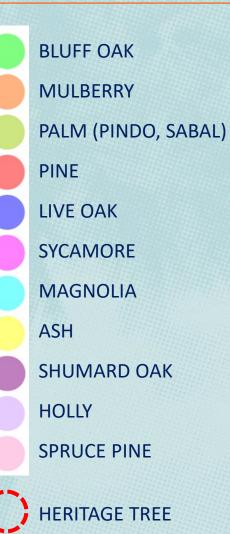
To approve the removal the requested trees, approve the site plan, and allow the use of any native plantings for the LID areas.

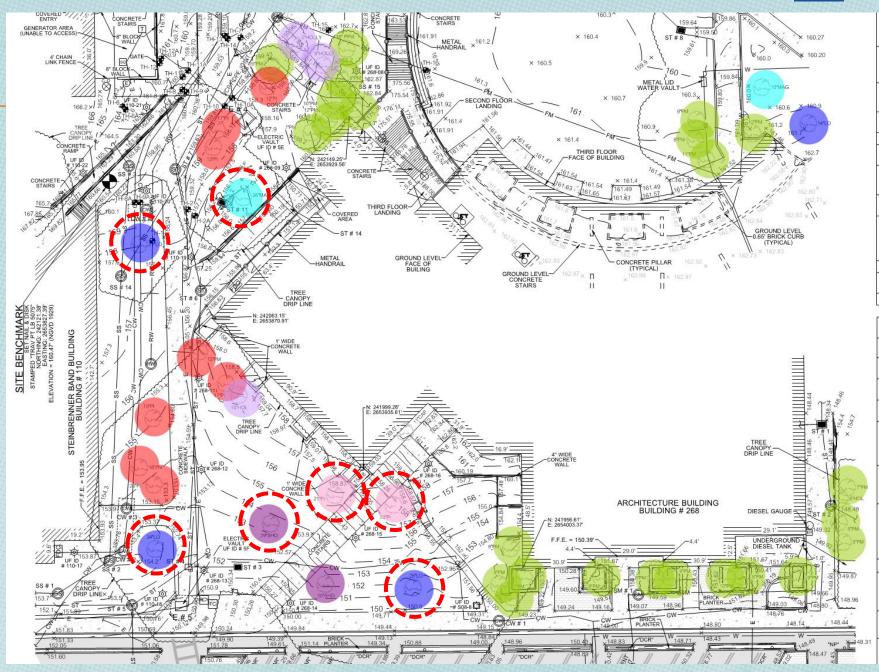
#### **Recommendation:**

To utilize required mitigation funds for the project to fund a canopy study along Stadium Road.









SS # 12



#### **Site Survey**



SITE BENCHMARK

SUR\ ID

ST #

ST #

ST #

ST #



### **Tree Replanting**

- We were looking into relocation of the existing 22" Live Oak which was planted in Kim Tanzer's honor.
- Initially this tree was planned to be relocated. However, the relocation cost was very high and it was determined to be a better use of the project funds to remove and replant
- Removal of this tree has been accepted by Kim Tanzer and it will be replaced with a new 9"-10" Caliper Live Oak.





#### **PROPOSED PLANT PALETTE**

GROUNCOVERS

 $\infty$ 

SHRUBS



**River Birch** Betula nigra



**Seedling Live Oak** Quercus virginiana





Coontie Zamia floridana



**Dwarf Fakahatchee Grass** Tripsacum floridanum

**Dune Sunflower** 

Helianthus debilis



Serenoa repens



**Holly Fern** 



Cyrtomium falcatum









**Leather Leaf Fern** Rumohra adiantiformis



**Yaupon Holly** llex vomitoria

#### **PROPOSED PLANT PALETTE**

(\*NOT WITHIN THE UF LSMP)



**Firewheel\*** Gaillardia pulchella



Native Spider Lily\* Hymenocallis latifolia



Soft Rush\* Juncus effusus















### Landscape Plan & Compliance with the Landscape Master Plan

- Priority Projects:
  - Inner Road outside of the limits of the project site to the south
- Campus Areas for Enhancement:
  - Arts Axis Runs along Inner Road to the south of the project boundary
  - Grinter Hall Walkway Extends along Murphree Way to the west of project boundary; Murphree Way will be a major N/S utility corridor with service/loading functions needing to remain; project will look for opportunities to enhance the walk and screen utilities/service areas
- Street Frontages:
  - Inner Road to the south, Stadium Road to the north
- Building Setbacks:
  - Inner Road: 30' Standard, No change to building setback proposed
  - Stadium Road: 30' Standard, DCP Collaboratory will exceed setback in order to preserve existing heritage trees (~36' proposed)
- Service Areas:
  - Proposed Service areas will be along Murphree Way
- Project is located within Precinct 1 Core Campus

#### LANDSCAPE MASTER PLAN STANDARD SITE FURNISHINGS (PRECINCT 1)



TABLE & CHAIRS (FIXED) MINGLE TABLE WITH FIXED SEATING, 5 OR 6 SEATS, BLACK LANDSCAPE FORMS



HANDRAILS POWDERCOATED ALUMINUM JULIUS BLUM & CO.



**POWER PEDESTAL** LEGRAND POWER PEDESTAL, BLACK, LANDSCAPE FORMS



BIKE RACK 8-SLOT DOUBLE SIDED BIKE RACK PEAK RACKS







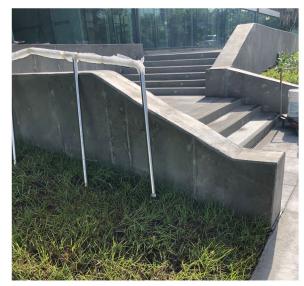
**BOLLARD** RICHMOND REMOVABLE BOLLARD STERNBERG LIGHTING



LIGHTPOLE TRADITIONAL LIGHTPOLE PHILLIPS LUMEC LIGHTING

#### **PROPOSED SITE FURNISHINGS**

not included within the LSMP





**SEAT WALLS** CAST IN PLACE CONCRETE



HAMMOCK POSTS GROVE BOLLARD WITH

CHAIN LOOP, BLACK KEYSTONE RIDGE

# MP06934 University of Florida Landscape Master Plan Physics Shared Use Path Project Updates re: Tree Preservation

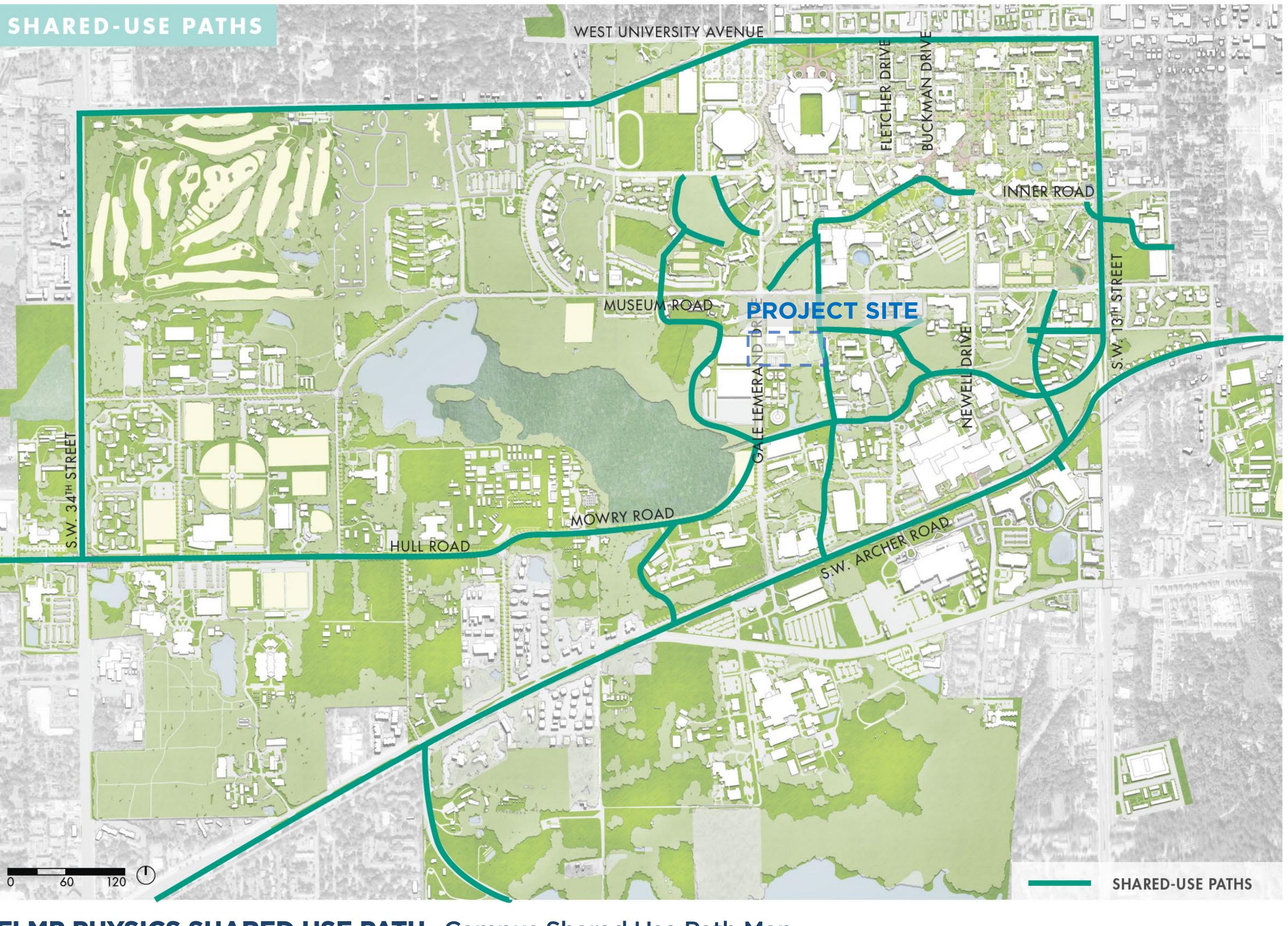




Gainesville, FL ML+H Project No. 21.38.0

# LVL Committee Meeting May 4, 2023







### UFLMP PHYSICS SHARED USE PATH Campus Shared Use Path Map

Gainesville, FL ML+H Project No. 21.38.0







### **UFLMP PHYSICS SHARED USE PATH** Context

Gainesville, FL ML+H Project No. 21.38.0

### **PHELPS LAB**

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### **BENTON HALL**

**LARSON HALL** 

MAE

HICT-SP-SH

A-RUB

(3. P.W)

### **OBSERVATORY**

CHEMICAL ENGINEERING

04.26.2023



REPERENT CONCERNS

Z

J

**PYSCOLOGY** DEPARTMENT

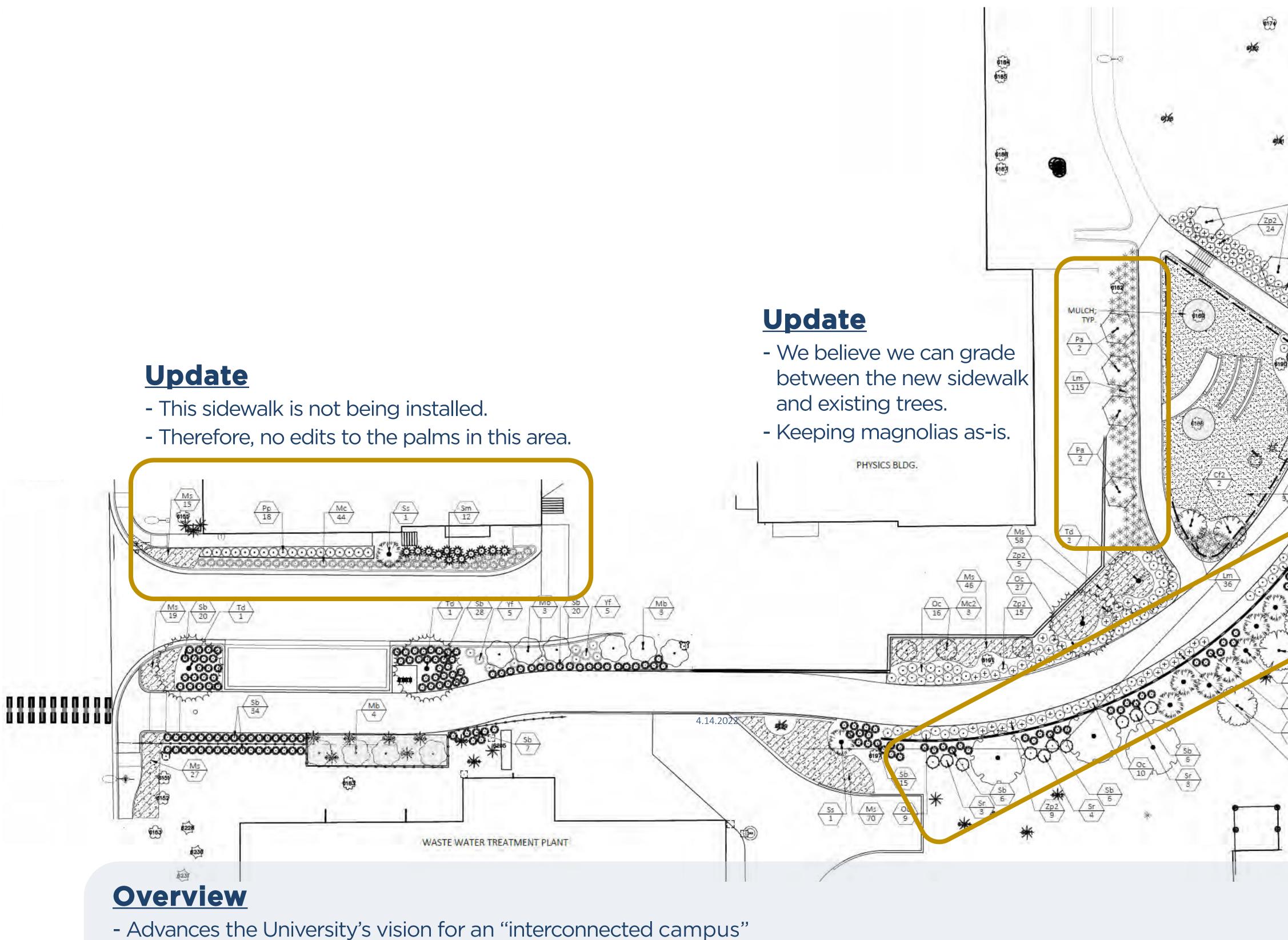
> NANOSCALE RESEARCH CENTER

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NEW ENGINEERING BUILDING



500 ft



- Represents landscape master plan priority project no. 12
- ADA accessible, 12'-O", shared use, pervious pathway



# **UFLMP PHYSICS SHARED USE PATH** Overview of Changes

Gainesville, FL ML+H Project No. 21.38.0

- Creates a safer and more direct pedestrian connection from Garages 5 & 14 to the Physics, DSIT, and Mechanical Engineering buildings - Enhances greenspaces along the pathway and provides screening from the Physics "back of house" and WWTP

04.26.2023

### **Update**

- Three (3) palms are outside of the wall for a 12' path, so we believe we should attempt to work around them.

- In coordination with Grounds, we believe other 7 may not transplant well due to continued issues with Lethal Bronzing on campus.





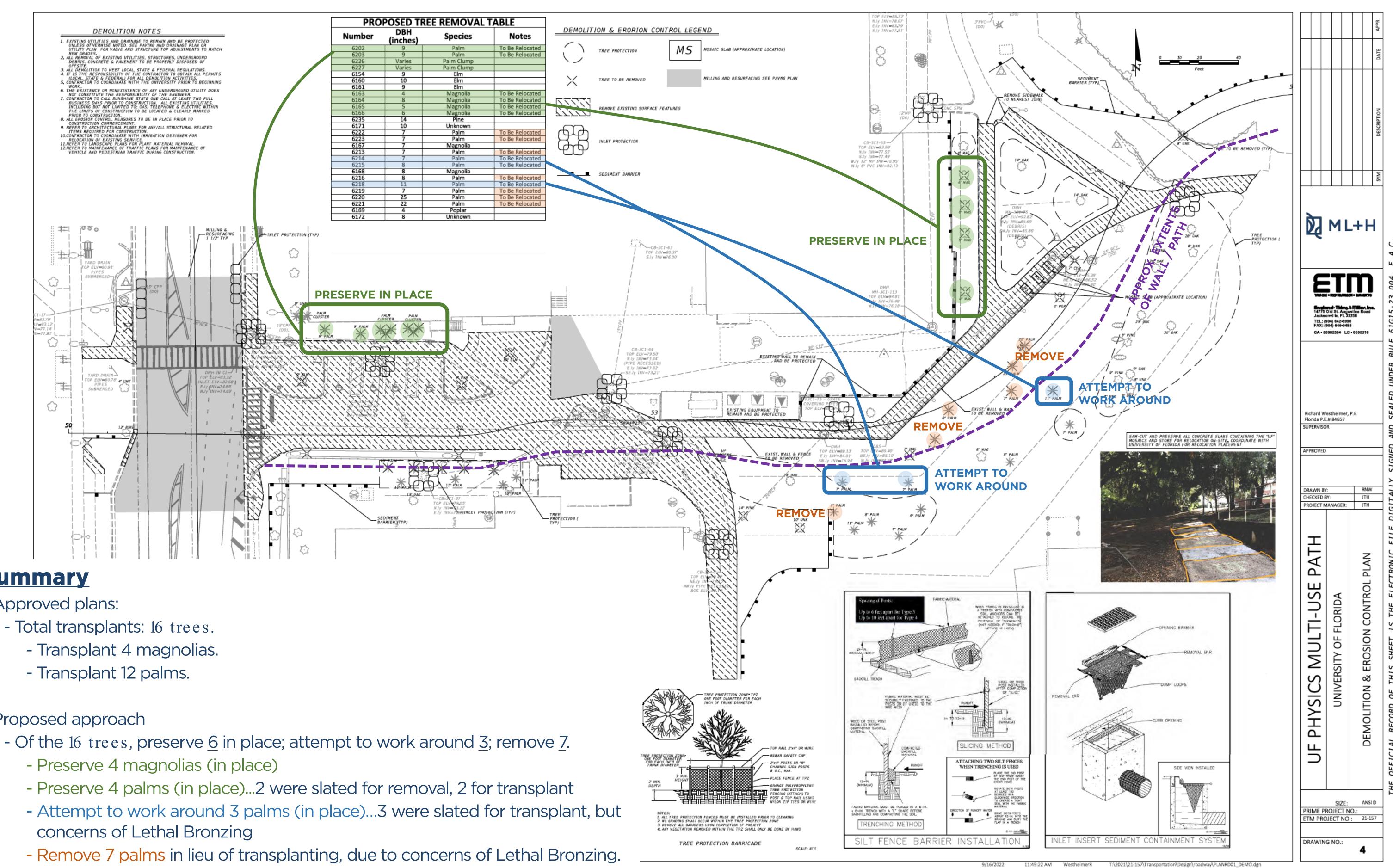




# **UFLMP PHYSICS SHARED USE PATH** Perspective: Main Pathway

Gainesville, FL ML+H Project No. 21.38.0





### **Summary**

- Approved plans:

- Total transplants: 16 trees.
  - Transplant 4 magnolias.

### - Proposed approach

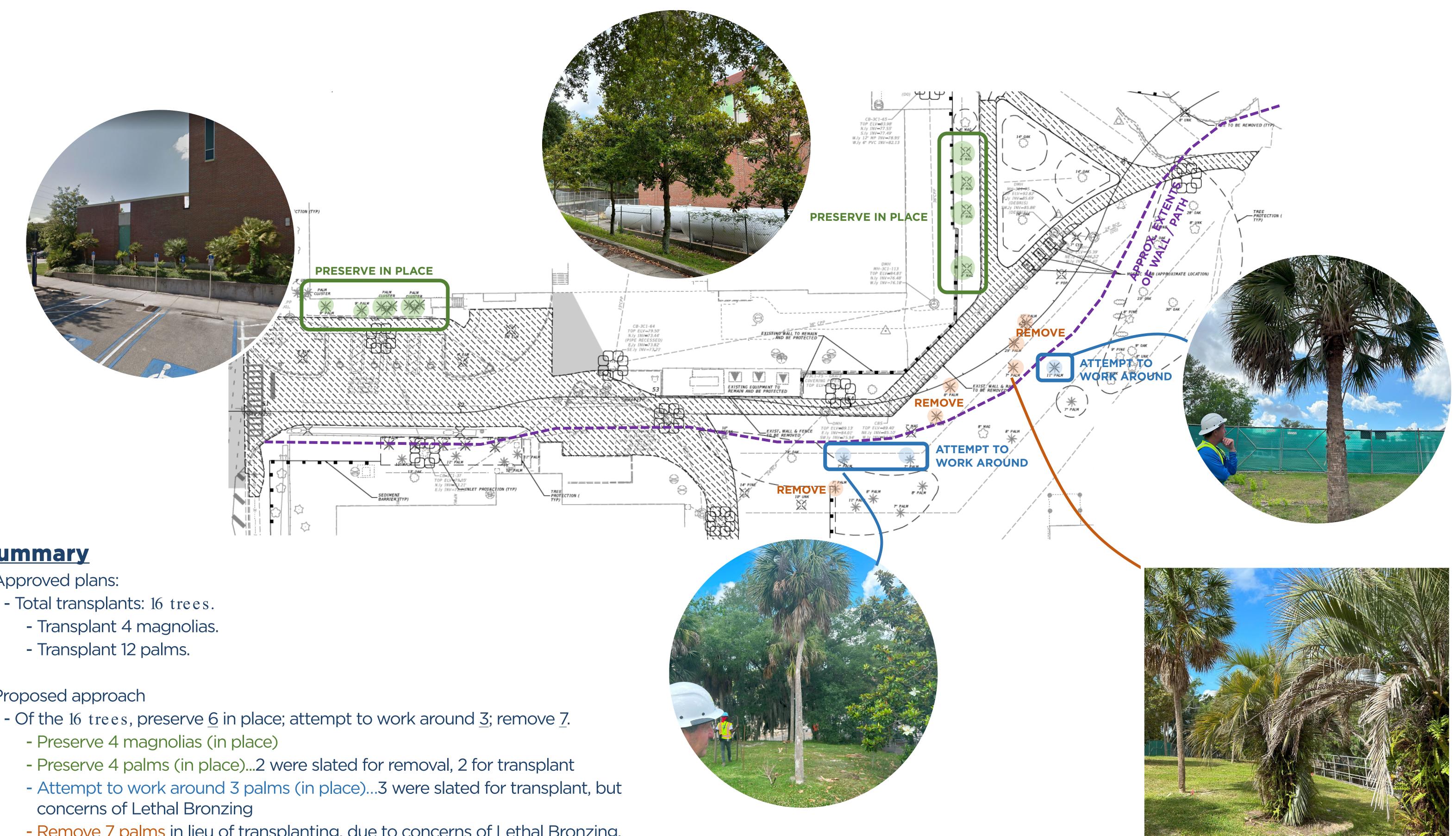
- Preserve 4 magnolias (in place)



# **UFLMP PHYSICS SHARED USE PATH** Tree Removal Updates

Gainesville, FL ML+H Project No. 21.38.0





### **Summary**

- Approved plans:

- Total transplants: 16 trees.

### - Proposed approach

- Remove 7 palms in lieu of transplanting, due to concerns of Lethal Bronzing.



# **UFLMP PHYSICS SHARED USE PATH** Tree Removal Updates

Gainesville, FL ML+H Project No. 21.38.0





# Nuclear Field Building Renovation MP-07381

Schematic Design 04 May 2023

Stephen Caron, Project Manager



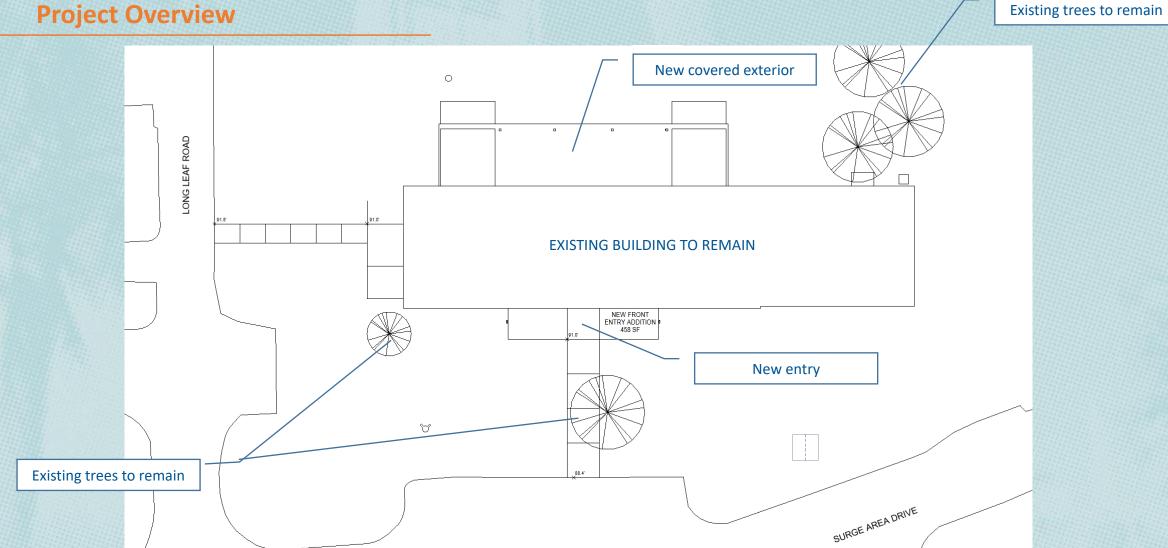
#### **Project Overview**

- The Nuclear Field Building (0554; c. 1960) is located in the surge area of campus:
  - 2230 Surge Area Dr., Gainesville FL 32611
- The building will be renovated to house Environmental Health & Safety
- 6,890 GSF
  - (6,402 GSF Existing; 488 GSF Addition)
- The existing building and site are being vacated by the College of Engineering and building will be adapted for reuse as an office building. Further, a series of projects will help to rehabilitate the site and improve drainage of the surge area.





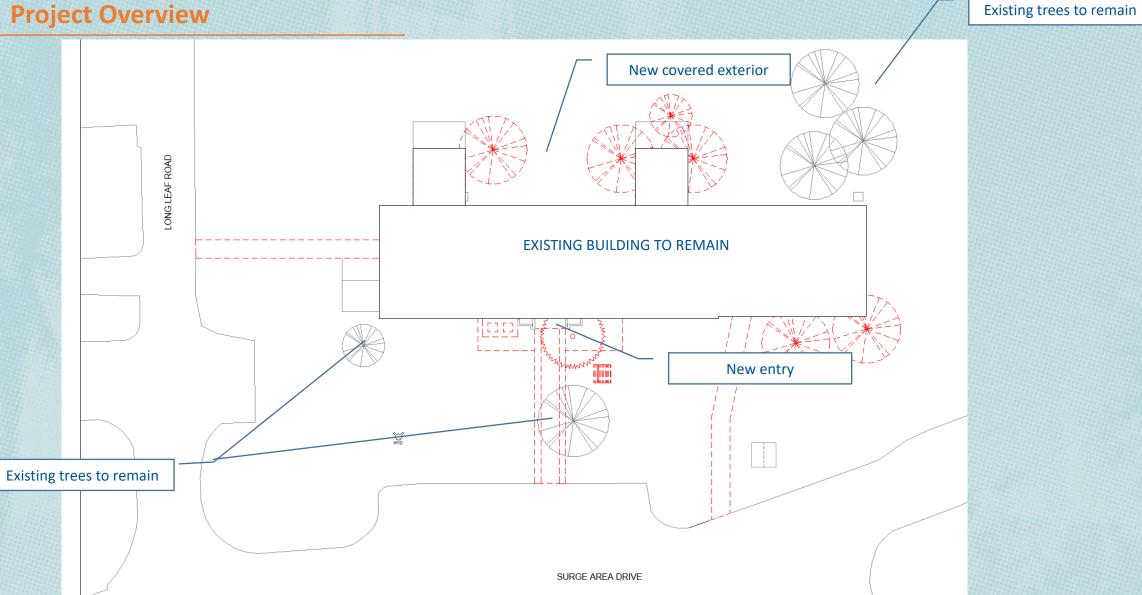






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#### Nuclear Field Building (0554) Renovation MP-07381

250

0

500

1,000

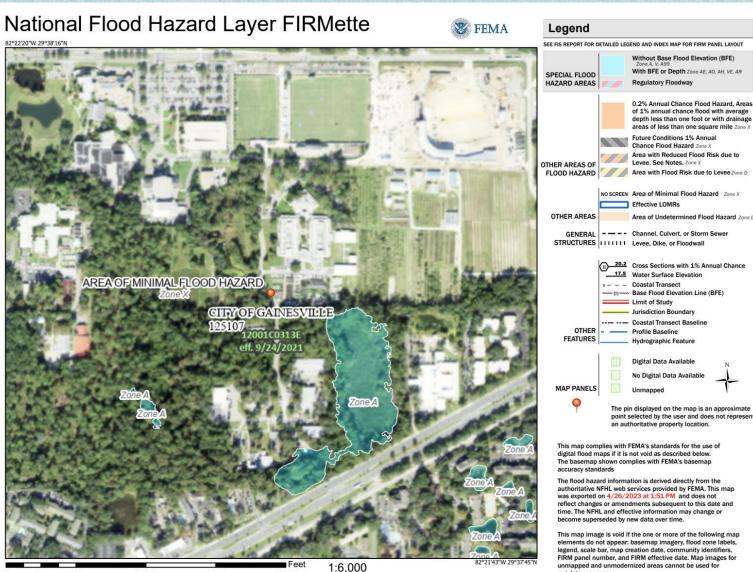
1,500

2,000



#### Site Plan

- The existing building is in an area of • minimal flood hazard per the FEMA map
- There are no known bird nests, habitats • or archeological concerns with the existing building/ site
- There are no heritage trees identified •

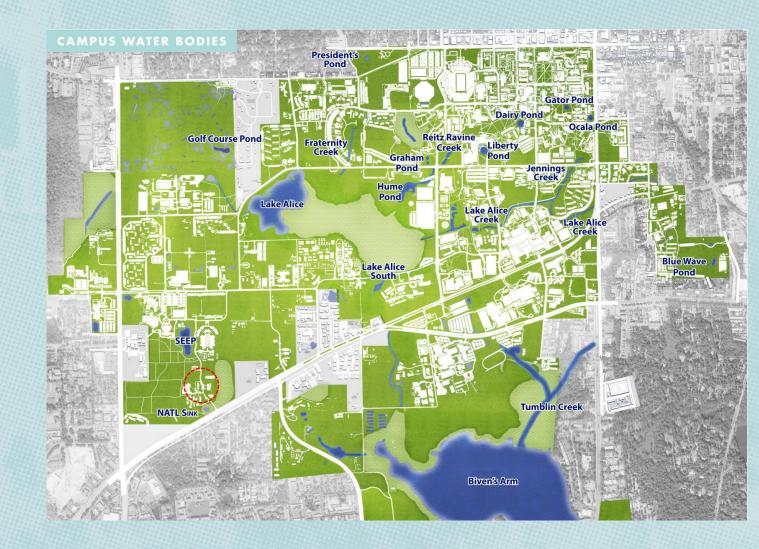


regulatory purposes. Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



### Site Plan (con't)

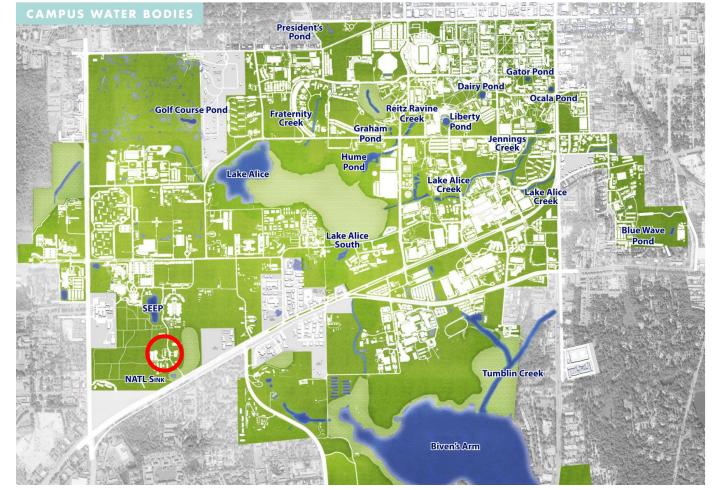
- The trees surrounding the existing building were planted too close to the structure
- Existing trees at entry present a concern for accessibility with evidence of heaving at sidewalks and structure and conflict with overhead utilities
- Trees present a danger to property and occupants due to size and location relative to exterior building envelope
- Three trees to be removed are in conflict with new entry and new covered patio to be added to existing building
- The trees requested to be removed exhibit signs of moderate to poor health, including:
  - Lack of significant canopy
  - Lack of new growth





#### **Master Plan Conformance**

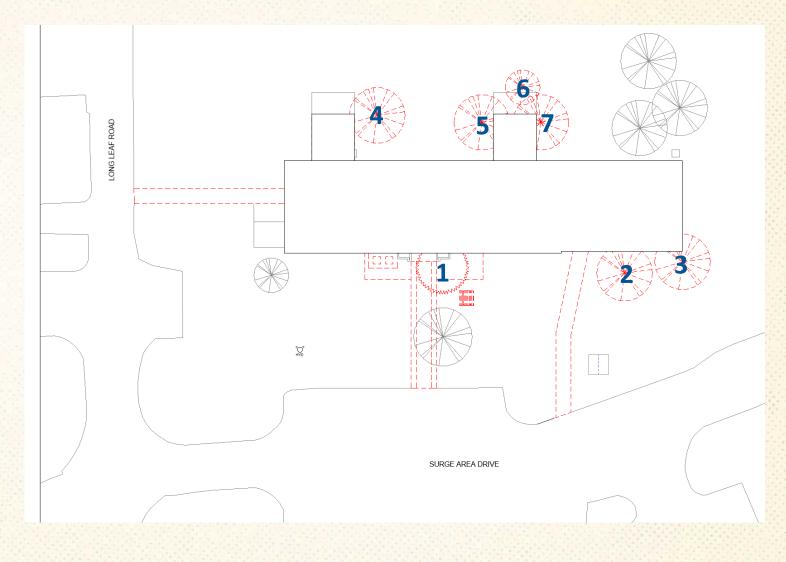
- The existing building site is in the West Precinct (per UF Landscape Master Plan)
- The existing building:
  - is <u>NOT</u> in an area identified as a priority project
  - <u>Does not</u> fall within an area identified as a campus area for enhancement
  - <u>Does not</u> front the Arts Axis or Arts Walk
  - Does front a secondary campus street
- Building is existing and minor addition complies with Campus Master Plan for setbacks
- The area is considered a Mesic Upland Forest
- Large trees recommended for this area include:
  - Pignut Hickory
  - Cabbage Palms
  - Longleaf Pine
  - Slash Pine
  - Live Oak
  - Swamp Chesnut Oak





#### **Tree Impacts**

- Trees shown to be removed in dashed red lines
- Numbers on each tree relate to schedule on next slide and subsequent photos





### **Tree Impacts**







### **Tree Impacts**





#### **Tree Impact Summary**

Tree #	Species	DBH	Health	Photo	Proposed Mitigation
1	PINE	17"	MODERATE	1	REPLACE
2	HICKORY	46"	MODERATE	2	REPLACE
3	LAUREL OAK	21"	POOR	3	REPLACE
4	LIVE OAK	24"	POOR	4	REPLACE
5	LIVE OAK	19"	POOR	5	REPLACE
6	LAUREL OAK	12"	POOR	6	REPLACE
7	WATER OAK	13"	POOR	7	REPLACE



#### **Sustainability and Site Impact Analysis**

- The project will not be pursuing any sort of certification
- The project will not explore relocating trees as their health is moderate to poor
- The project fronts the Surge Area and has adequate green space particularly to explore replacement of trees removed
- Stormwater is being reviewed in a separate project related to regrading areas around the building to flow unencumbered to the Surge Area

**Requested motion:** 

### "A motion to approve removal of trees pending final plan for tree replacement on site."

# **Conservation Area Land Management (CALM) Plan**

Lakes, Vegetation & Landscaping Committee 5/4/23



PLANNING, DESIGN & CONSTRUCTION OFFICE OF SUSTAINABILITY BUSINESS AFFAIRS TECHNICAL SERVICES

An Overview of the CALM Update Process, Final Deliverables & Request for Approval



### HISTORY

- 2004 CALM Process
- **31** conservation areas, totaling **450+** acres
- **Confusion** around conservation area **oversight** within the campus community
- February 2022 CALM Update process initiated
  - Approximately **30** member steering committee empaneled





### WHY ARE CAMPUS CONSERVATION AREAS IMPORTANT & HOW IS UF UNIQUE?

- Teaching
- Recreation
- Student experience
- Strategic Development Plan

- Research
- Stormwater treatment
- Flood control
- Wildlife corridors
- Biodiversity

"I love that UF has these spaces on campus...It's a huge part of what makes UF special and stand apart from other colleges."



- User Survey Response at Digital Design Wetlands



### CAMPUS-WIDE ENGAGEMENT

- **30** member Steering Committee
- 22 Site Visits
- **10** Follow-up Fridays
- 11 Working Sessions
- **189** responses to user surveys
- **3** campus tabling events
- **10+** Stakeholder Meetings
- Additional outreach events
- LVL Committee involvement





#### **UPDATES SINCE LAST LVL UPDATE**

- Presented to and received approval from upper administration on the CALM Update and boundary verifications.
- Engagement efforts received the 2023
  Champions for Change Award.
- Collaborating with Business Affairs Strategic Communications to market and implement the launch of the plan.
- All campus trails and conservation area amenities have been collected & mapped.
- Lake Alice Watershed Management
  Plan

#### FUNDING

- CITF Committee awarded funding for the planning & design of the Jennings Creek Bridge Project.
- Explored the use of Tree Mitigation
  Funds for invasive species & restoration projects.



## DELIVERABLES







COLLEGEOARI

M TERRACE



**BOUNDARY VERIFICATION** 



### The CALM plan will include 1 overall management plan with 23 site-specific management plans.

 The updated plan will use a dynamic platform with interactive features.

#### **BEFORE - 2004**

#### Conservation Area Land Management Plan

November 2004

#### Introduction

The Conservation Element for the University of Florida Master Plan serves two purposes. The first purpose is the traditional role within comprehensive plans of inventorying current environmental conditions, or data and analysis, on a campus wide basis and then developing Goals, Objectives and Policies that both maintain good conditions and improve upon those identified as not meeting federal, state, and campus environmental standards. The second purpose is to specifically address each Conservation Area on campus and develop management activities that are tailored to the major issues of each. The following document will outline the latter of these two efforts by giving an overview of Campus natural areas and specific details on each designated Conservation Area.

The 2000-2010 Master Plan contained some inconsistencies between what was considered a conservation land use and what was considered a preservation area. In other words, some areas like the credes adjacent to Sorority Row, P.K. Yonge and Diamond Village were considered Conservation Areas, but not preservation areas. In other cases, areas considered preservation were placed in the passive recreation land use category (examples Wilmot Cardens, DASH - Handicap course). Similarly, some wetlands and water bodies were not designated as a conservation land use. This plan, as well as the updated Master Plan, will strive to eliminate these inconsistencies and identify management strategies for those places designated as conservation.

#### **Conditions Inventory**

#### Water Resources

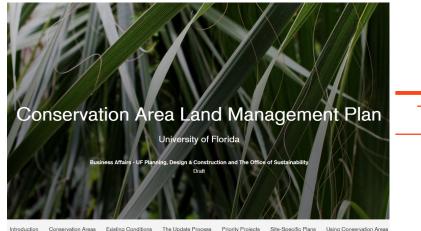
The University of Florida's hydrology is unique from much of the State of Florida in that runoff from storm events, irrigation and surficial aquifer seepage all empty into depressions that ultimately recharge the Floridan aquifer. This is in contrast to the more typical view of Florida hydrology, which is generally characterized by surface water that runs into larger bodies of water that in turn flow to the ocean, or by areas of porous soils that allow water to recharge directly to an aquifer. The watersheds of the University are along the Cody Scarp. This scarp marks a geologic transition zone where the clays of the Northern Highlands physiographic province give way to karst prone limestones and sands of the Gulf Coastal Lowlands, Lands to the west of campus (transition area grading to Gulf Coastal Lowlands) are generally characterized as a mixture of sand and unconsolidated clavs that allow for the easy downward movement of water to the Floridan aquifer, with very little in the way of surface water drainage features. Meanwhile, lands to the north and east of campus consist of remnants of the Northern Highlands province, which are characterized as poorly drained, low recharge, with significant drainage where water instead of recharging the aquifer makes its way via a series of creeks and rivers into the St. Johns River and ultimately the Atlantic Ocean. The University is in the transition zone between these provinces in a zone called a stream to sink watershed. As the name implies, stream to sink watersheds are where surface water flows down gradient and ultimately ends up in a depression or sinkhole. In the University's case the majority of surface water ends up in one of three depressions or sinkholes - Bivens Arm (Alachua Sink), Surgarfoot Prairie (Haile Sink) or Lake Alice (drainage wells).

#### Watersheds

#### Lake Alice Watershed

The Lake Alice watershed (basin) covers about 80% of campus, with approximately 1,140 acres of the basin on campus and an additional 381 acres contributing from off campus. Stormwater, reclaimed irrigation water and surfical aquifer seepage from creeks are the major contributors to the lake, which is

#### **AFTER - CURRENT DRAFT**







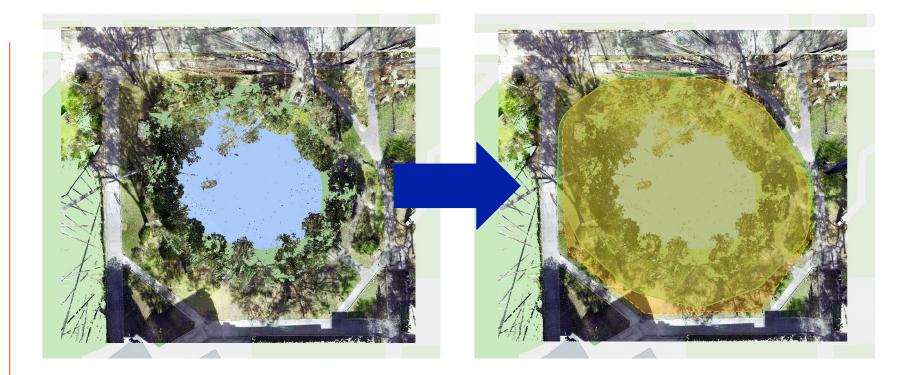
#### **COMMON THEMES**





#### FIELD VERIFIED BOUNDARIES

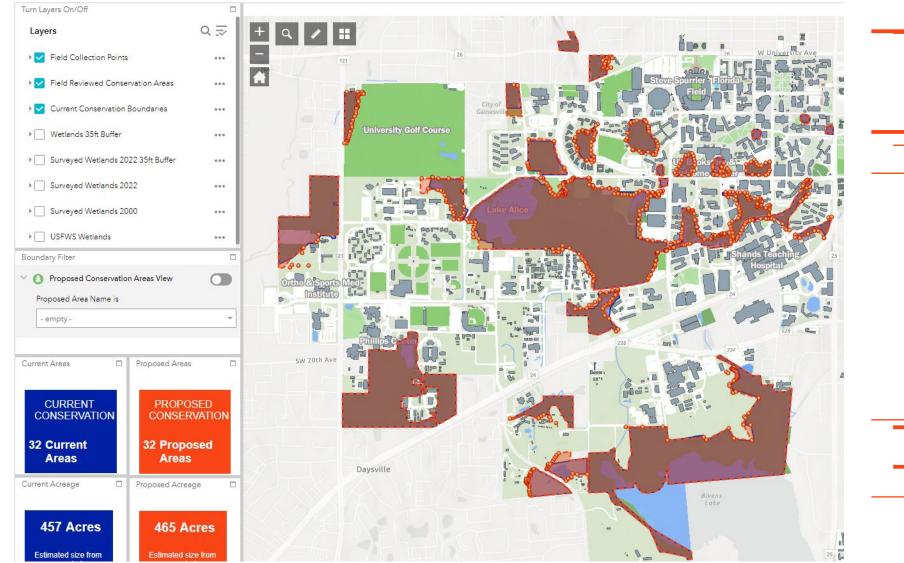
- This process provided clear, consistent and accurate boundary delineations.
- Trimble accuracy within **inches**, Lidar accuracy within **millimeters**
- Data based points



# **BOUNDARY VERIFICATION**

#### COMMITTEE INVOLVEMENT IN BOUNDARY WORK

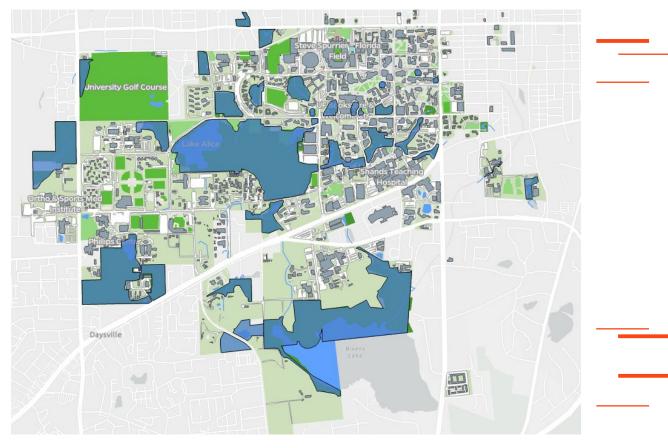
 Live updates in the
 App created by BATS allowed for the
 committee to follow
 along in the
 boundary update
 process





#### **Before & After Field Verification**





BEFORE

## CONSERVATION AREA LAND MANAGEMENT PLAN

#### **REQUESTED MOTION**

 A motion to approve the updated conservation area land management plans and associated field verified conservation area boundaries







OVERALL PRIORITY PROJECTS	SITE-SPECIFIC PRIORITY PROJECTS	
Updated identified signage for all conservation areas, including kiosks.	Bridge remodel and site enhancements at Jennings Creek.	
Implement trails and boardwalk enhancements from the Campus Trails Master Plan.	Addition of pedestrian pathway along the parking lot at McCarty Woods.	
Enhance connectivity among the conservation areas in the core campus.	Bridge addition and safety enhancements at University Park Arboretum.	
Identify & implement accessibility improvements.	Expand trail system and include an overlook at Bivens Rim Forest.	
Install new tables and site furnishings.	Restore Law School Woods as an accessible conservation area.	
Develop and fund a long-term plan for invasive species removal.	Provide public access and trail restoration at President's Park.	