UF | UNIVERSITY of FLORIDA

# SITES

# Northeast Gateway

## Documentation

**Project ID: 13742**

gai consultants

COMMUNITY SOLUTIONS GROUP

## Introduction

The Northeast Gateway is one of thirteen Priority Projects within the University of Florida's Landscape Master Plan, and one of four projects identified in the campus Strategic Development Plan as civic spaces that would significantly enhance the campus by defining campus portals and creating places for large gatherings. This redevelopment project in the historical eastern portion of campus at 2nd Avenue connects to the Innovation District of downtown Gainesville. Northeast Gateway serves to expand the impact of the gateway, announcing the campus, welcoming the casual visitor, and orienting guests to the parking facilities beyond. The result is a positive first impression of the campus generated by quality materials, a well-maintained and clarified landscape, and the introduction to the pedestrian-centric campus core.
The redevelopment of UF's Northeast Gateway aligns with the SITES Guiding Principles. A few examples are listed below.

Do no harm.
The design and construction of Northeast Gateway considers the surrounding environment. For example, silt fencing is provided to reduce the movement of sediment into stormwater drains of adjacent roadways.

Apply the precautionary principle.
The project considers human and environmental health by identifying the campus as tobacco free.

Design with nature and culture.
The project considers the regional context with gateway details and materials that reinforce the historical Gothic architecture of the eastern portion of campus.

Use a decision-making hierarchy of preservation, conservation, and regeneration.
The project considers the historical landscape with the preservation of most of the native trees existing on site prior to redevelopment.

Provide regenerative systems as intergenerational equity.
The project is designed to be constructed in a sustainable manner and with sustainable maintenance and operation practices to provide a campus that can be enjoyed by many generations of future students, faculty and alumni.

Support a living process.
The project maintenance and operations can continue to adapt to the changing demographics of the University by implementing accessible walkways that support multiple levels of mobility. Landscape materials and water regimes can be adjusted for drought and wet conditions.

Use a systems thinking approach.
The project preserves existing trees and mitigates for trees removed with native canopy trees that are adapted to the North Florida environment with its annual cycle of dry and wet seasons, natural wind resistance needed for the annual hurricane season. The use of native trees on site also helps spread native tree stock throughout the region as the wind and fauna transport seed to adjacent areas. The project also minimizes the spread of exotic invasives by monitoring plants brought to the project site and providing specifications for the removal of existing invasive exotic plants if found within the project limits.

Use a collaborative and ethical approach.
The project encouraged direct and open communication by holding collaborative design and construction meetings and work sessions among colleagues, clients, manufacturers, and users to link long-term sustainability with ethical responsibility.

Maintain integrity in leadership and research.
The project design and construction meetings were conducting in a transparent, highly participatory process with a variety of stakeholders, consultants and contractors.

Foster environmental stewardship.
The site's redevelopment and management foster an ethic of environmental stewardship. For example, irrigation utilizes reclaimed water and irrigation for trees are temporary  with watering discontinued after a three year establishment period.

The design and construction of Newell Gateway considers SITES Goals. A few examples are listed below.

Create Regenerative Systems and Foster Resiliency
The project protects natural resources like vegetation by preserving existing native trees on site. The project also fosters resiliency by using reclaimed water for irrigation which reduces pressure on potable water supplies from aquifer, groundwater sources.

Ensure Future Resource Supply and Mitigate Climate Change
The project helps ensure future resource supply by using recycled and salvaged materials in the gatehouse, pavement, site lighting and other materials.

Transform the Market through Design, Development, and Maintenance  Practices
The project fosters leadership in the construction industry by advocating for sustainable practices by construction material suppliers, construction techniques and maintenance operations.

Enhance Human Well-Being and Strengthen Community
The project helps humans reconnect to nature by providing sidewalks that are shaded by native canopy trees that support native birds and other wildlife.

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# SECTION 1: SITE CONTEXT

| Prerequisite | Title | Points |
|---|---|---|
| Context P1.1 | Limit development on farmland | Required |
| Context P1.2 | Protect floodplain functions | Required |
| Context P1.3 | Conserve aquatic ecosystems | Required |
| Context P1.4 | Conserve habitats for threatened and endangered species | Required |
| **Credit** | **Title** | **Points** |
| Context C1.5 | Redevelop degraded sites | 3 points |
| Context C1.6 | Locate projects within existing developed areas | 4 points |
| Context C1.7 | Connect to multi-modal transit networks | 3 points |

# Prerequisite 1.1 | Limit development on farmland

## Case 1: Sites without farmland soils

The 2.25-acre (97,907 SF) project site slated for development does not contain soils defined by the NRCS as prime farmland, unique farmland, or farmland of statewide or local importance. Because of this, there are no additional requirements. Additionally, the site is not located in an area designated by the municipality, county, or state as an agricultural conservation or rural conservation zone, and at least 75 percent of the site area has been altered by preexisting paving, construction or land use, making it a previously developed site.

### Soil Map Unit Composition

Source: USDA Natural Resources Conservation Service (NRCS)

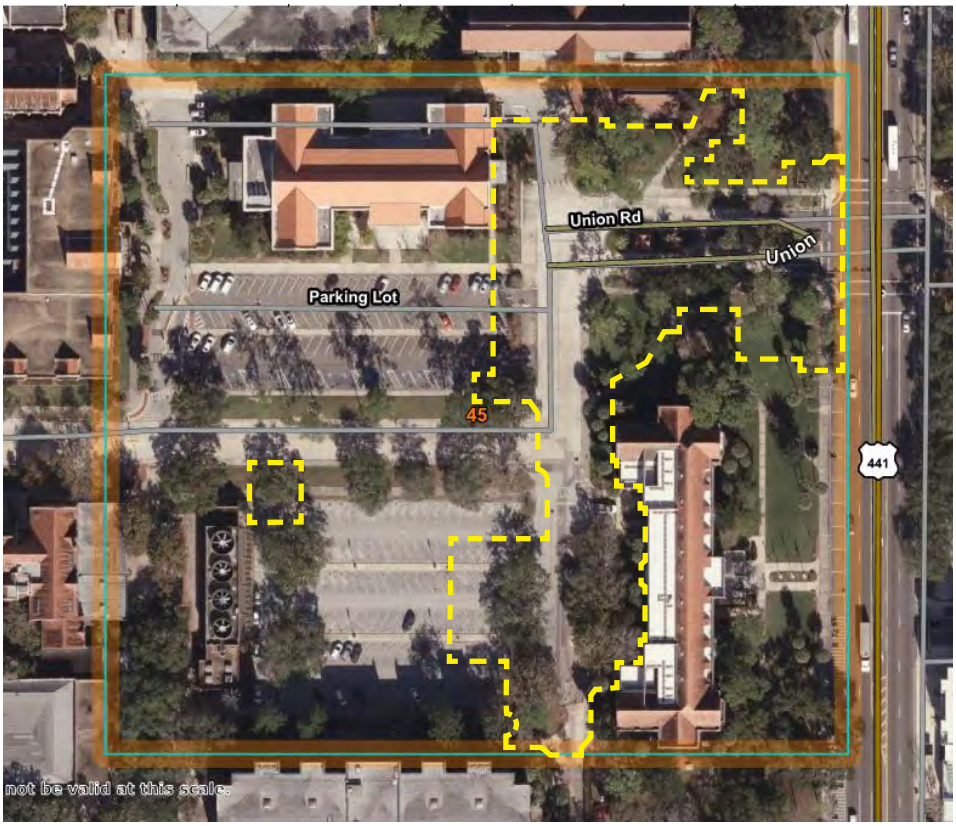
Symbol 45 — Urban land-Millhopper complex

- Urban land: 60 percent
- Millhopper and similar soils: 35 percent
- Minor components: 5 percent
  - Lochloosa: 2 percent
  - Arredondo: 2 percent
  - Sparr: 1 percent
- Estimates are based on observations, descriptions, and transects of the map unit.

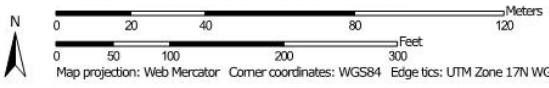
### Typical profile

Source: GSE Engineering & Consulting, Inc. Geotech Report

- 3 to 5 feet depth: Gray and brown SAND with silt
- 7.5 to 8 feet depth: Dark brown SAND with silt




Source: NRCS




**MAP LEGEND**

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Background**
- Aerial Photography
- SITE PROJECT BOUNDARY

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**MAP INFORMATION**

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alachua County, Florida
Survey Area Data: Version 21, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 20, 2019—Jan 1, 2020

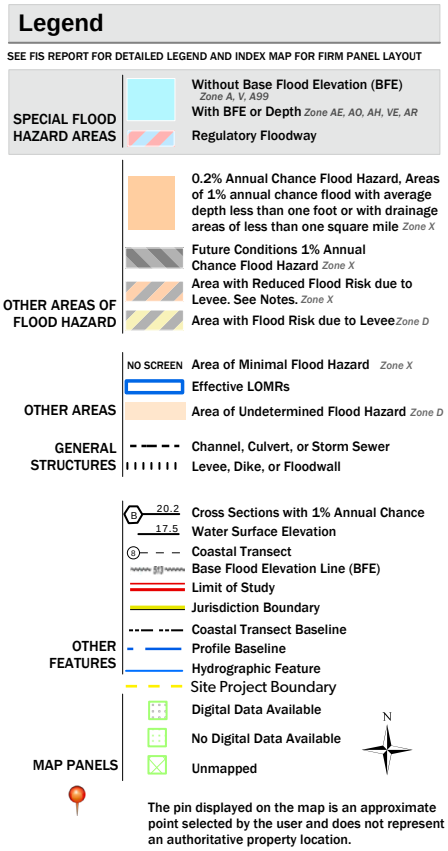
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

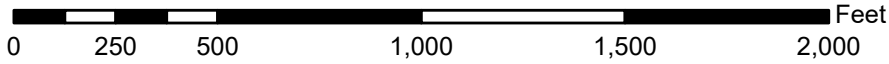
# PREREQUISITE 1.2 | PROTECT FLOODPLAIN FUNCTIONS

## Case 1: Sites without floodplain

The 2.25-acre (97,907 SF) project site slated for development is located in zone X (area of minimal flood hazard). The site does not contain land within the 100-year floodplain. There are no additional requirements.

Source: Federal Emergency Management Agency (FEMA)




This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/6/2020 at 5:07 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# Prerequisite 1.3 | Conserve aquatic ecosystems

## Case 1: Sites without aquatic ecosystems

The project site slated for development does not contain aquatic ecosystems or isolated wetlands. There are no additional requirements.

Source: U.S. Fish and Wildlife Service National Wetlands Inventory Map

- Aquatic ecosystems including wetlands that are incidental results of development activity and have been rated "poor" for all measured wetland functions. A qualified professional using a method that is accepted by regional, state, or federal permitting agencies must perform an aquatic ecosystem quality assessment.

December 8, 2020

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Site Project Boundary

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

1:3,781

0 0.03 0.06 0.12 mi

0 0.05 0.1 0.2 km

# PREREQUISITE 1.4 | CONSERVE HABITATS FOR THREATENED AND ENDANGERED SPECIES

## Case 1: Brownfields and previously developed sites

The site is previously developed and in the range of potential habitats for any plant or animal species on U.S. federal or state threatened or endangered lists or on the International Union for Conservation of Nature (IUCN) "Red List of Threatened Species" as critically endangered (CR) or endangered (EN). There is potential for the site to be utilized as foraging habitat by the following threatened or endangered plant and animal species:

- Sherman's fox squirrel (*Sciurus niger shermani*)
- Sandhill cranes (*Grus canadensis pratensis*)

Refer to letter below.

gai consultants

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Suite 700
Orlando, Florida 32801

**T** 407.423.8398
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January 11, 2021

UF-656 – Landscape Master Plan Implementation

Mr. Dustin Stephany
University of Florida
245 Gale Lemerand
PO Box 115050
Gainesville, FL 32611-5050

**University Court – Habitat Assessment**
**Prerequisite 1.4 | Conserve habitats for threatened and endangered species**

Dear Mr. Stephany:

The University Court project area located within the historic district of the University of Florida campus includes surface improvements to the area surrounding Tigert Hall, including improvements to the entry gateway, parking lots, and the existing gatehouse structure. The existing site has been previously developed and is an urban environment with a significant tree canopy. The University Court has a variety of native and ornamental trees, shrubs and groundcover.

The tree species include:

1. *Butia capitata*
2. *Callistemon citrinus*
3. *Cornus florida*
4. *Ilex x attenuata* 'East Palakta'
5. *Lagerstromia* spp.
6. *Liriodendron tulipifera*
7. *Magnolia grandiflora* 'D. D. Blanchard'
8. *Phoenix canariensis*
9. *Phoenix dactylifera*
10. *Pinus palustris*

11. *Pinus taeda*
12. *Prunus caroliniana*
13. *Quercus alba*
14. *Quercus laurifolia*
15. *Quercus rubra*
16. *Quercus shumardii*
17. *Quercus virginiana*
18. *Sabal palmetto*
19. *Taxodium distichum*
20. *Ulmus alata*
21. *Ulmus americana*
22. *Ulmus parvifolia* 'Drake'

Shrubs consist primarily of ornamentals like *Rhododendron indica* and the turfed areas consist primarily of *Zoysia japonica*.

The site is characterized by urban conditions and does not include natural areas or identifiable nesting habitat for threatened or endangered plant and animal species.

There is potential for the site to be utilized as foraging habitat by the following threatened or endangered plant and animal species:

- Southern fox squirrel (*Sciurus niger niger*)
- Sandhill cranes (*Grus canadensis pratensis*)

Southern fox squirrels (previously classified as Sherman's fox squirrel) typically inhabit open, fire-maintained longleaf pine, turkey oak, sandhills, and pine flatwoods communities. These habitats do not occur at the Newell Entry. There is the potential for this species to occasionally forage within the site if its home territory was within close proximity. There would need to be native habitat nearby for the fox squirrels as they would not typically travel far from their home range to feed. There is a more likely potential for foraging by sandhill cranes, particularly prior to nesting, or once the colts fledge. Florida sandhill cranes rely on shallow marshes larger than 5 acres in area for nesting and roosting, and open upland and wetland habitats for foraging (with vegetation <20 inches high). The nesting and roosting habitat does not occur at the Newell Entry. The actual potential for these areas to be utilized for foraging by these species would be reduced given the amount of vehicular and pedestrian traffic in the area.

Sincerely,

**GAI Consultants, Inc.**

Don J Silverberg, MS, PWS, GTA
January 11, 2021
UF-656 – Landscape Master Plan Implementation

**Don J Silverberg, MS, PWS, GTA**

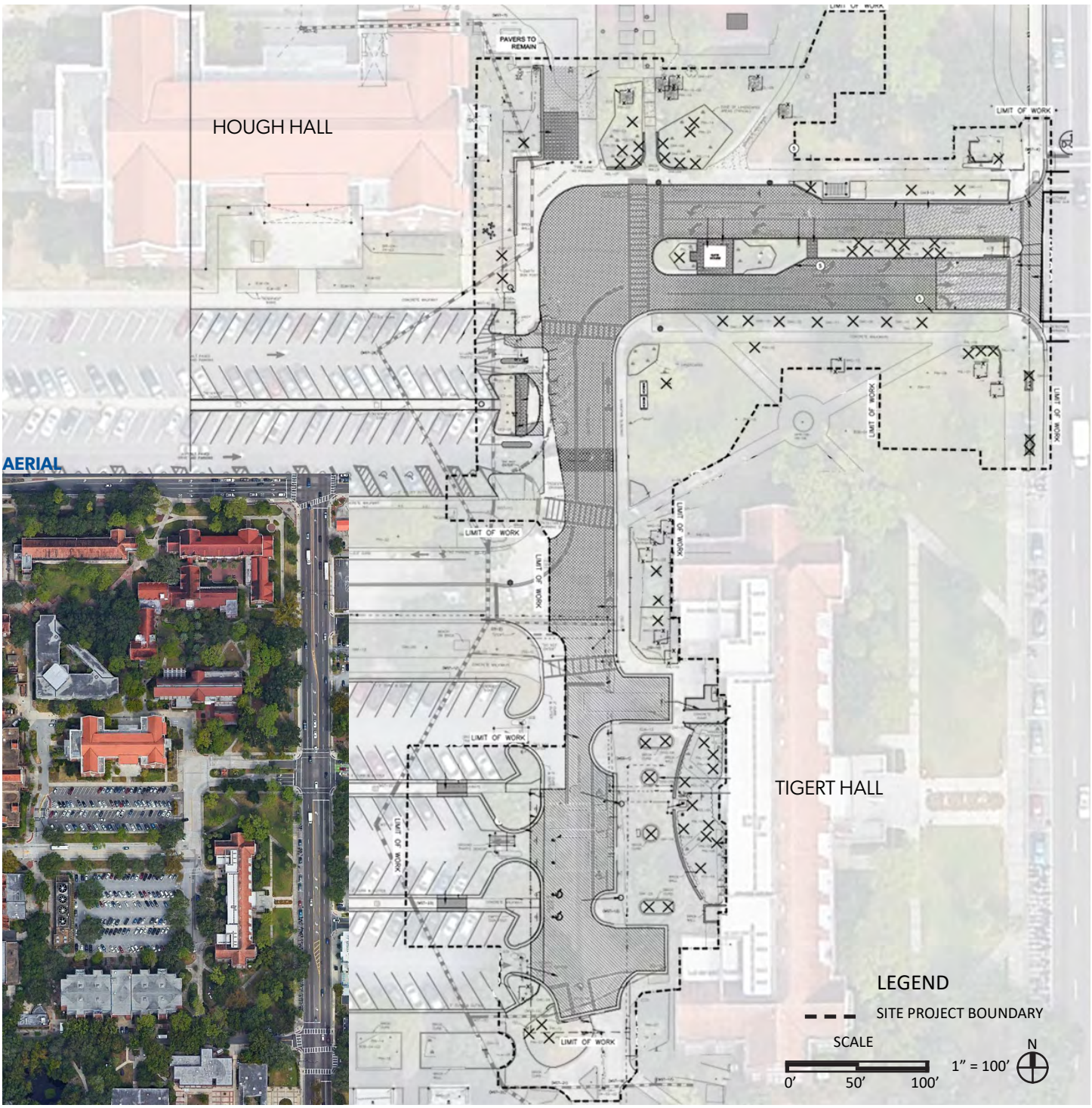
Environmental Manager

# Credit 1.5 | Redevelop degraded sites

## Case 1: Previously developed sites

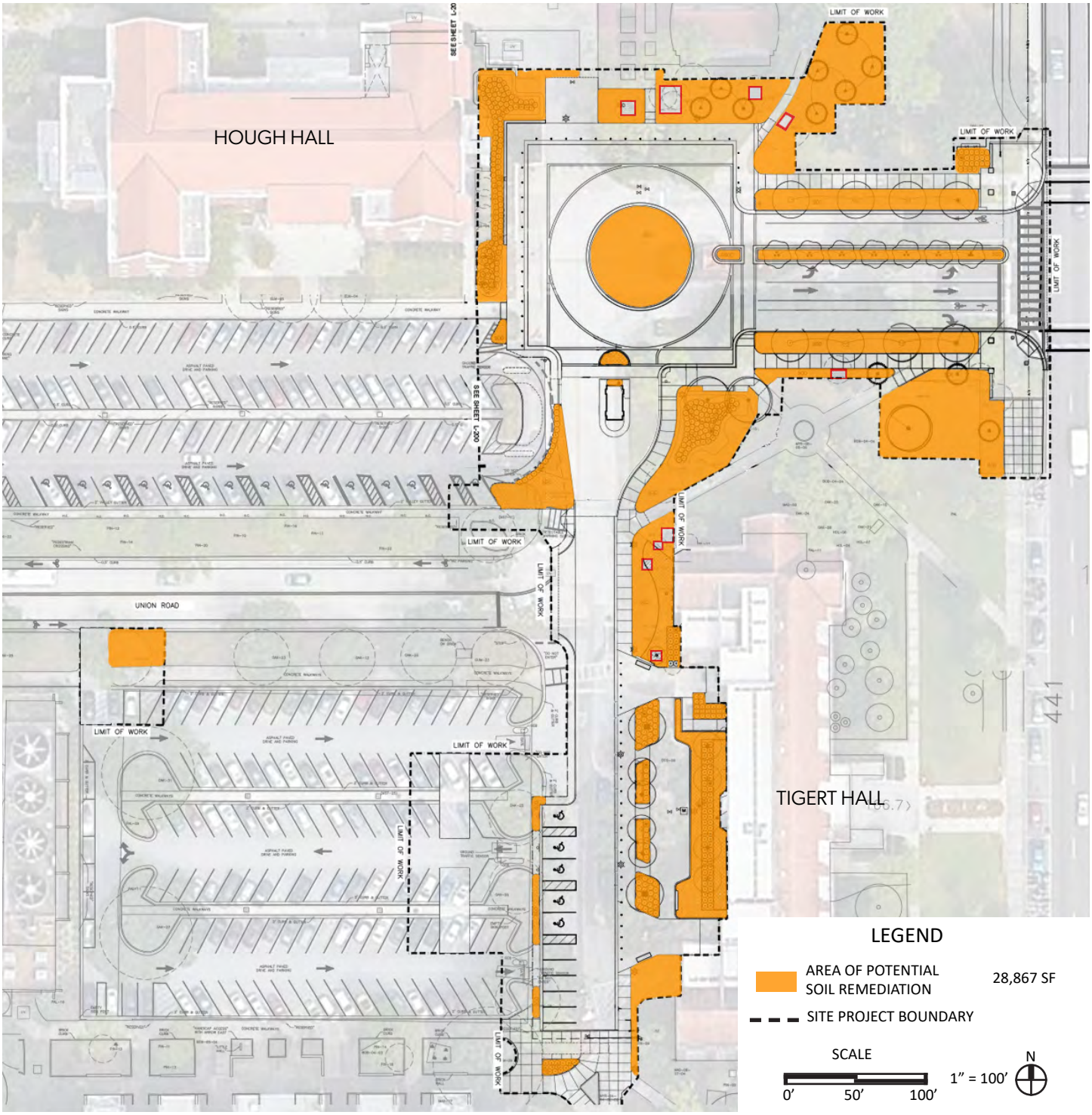
**Goal: 3 points**

Northeast Gateway qualifies for Context C1.5 Case 1 due to its classification as a previously developed site. The purpose of this map is to show that 100% of this site has been previously developed and the existing materials on site. The University of Florida dates back to 1853 and has been redeveloped many times throughout the years. The previous development on site includes concrete walkways and a road for connectivity to on campus facilities. For this site there are no areas without major development-related disturbance.



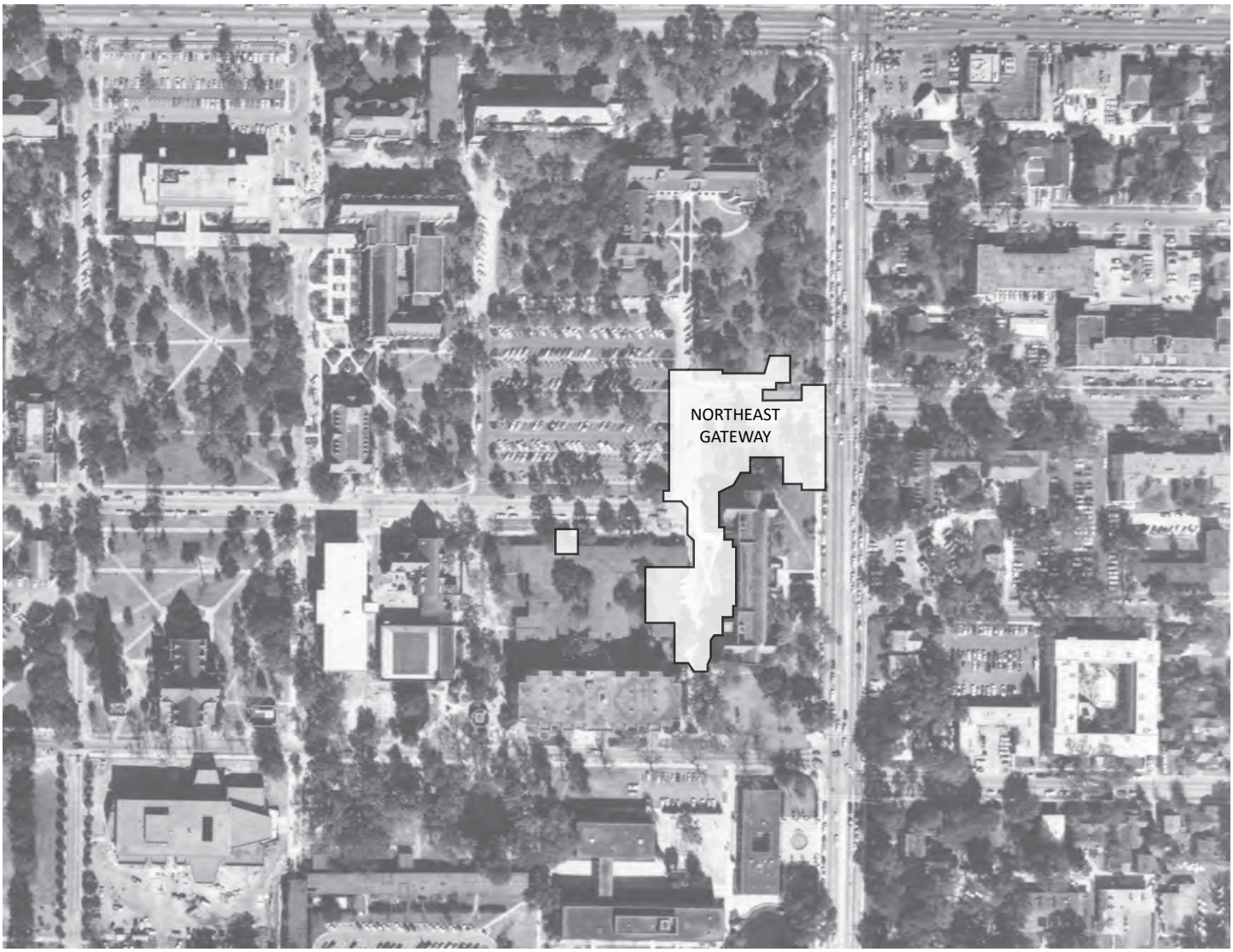
## SOIL REMEDIATION

With Northeast Gateway's previous development, the site contains disturbed soils. The area in orange outlines the disturbed areas which will remain unpaved following completion of construction, and the underlying soil will be remediated. Areas of sod that are not disturbed during construction will not have underlying soil remediated.



## Historical Photos

UF Campus Circa 1971



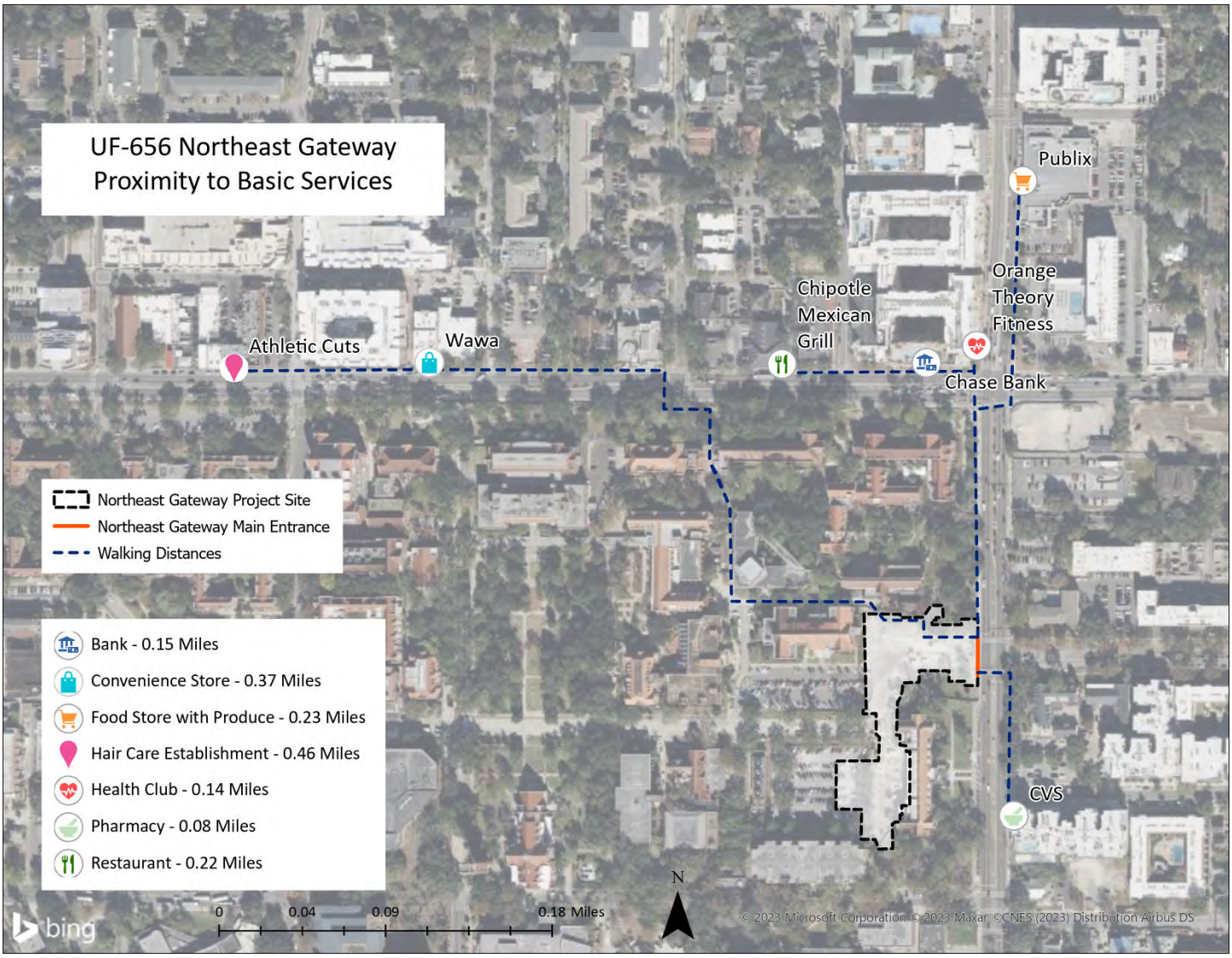
University of Florida Campus Historic District

Tigert Hall

# Credit 1.6 | Locate projects within existing developed areas

## Vicinity map and Site Plan

**Goal: 4 points**




Project Site is located within 500 feet of existing water and waste water infrastructure.
The above listed services are accessible to the public and are not restricted to campus occupents.

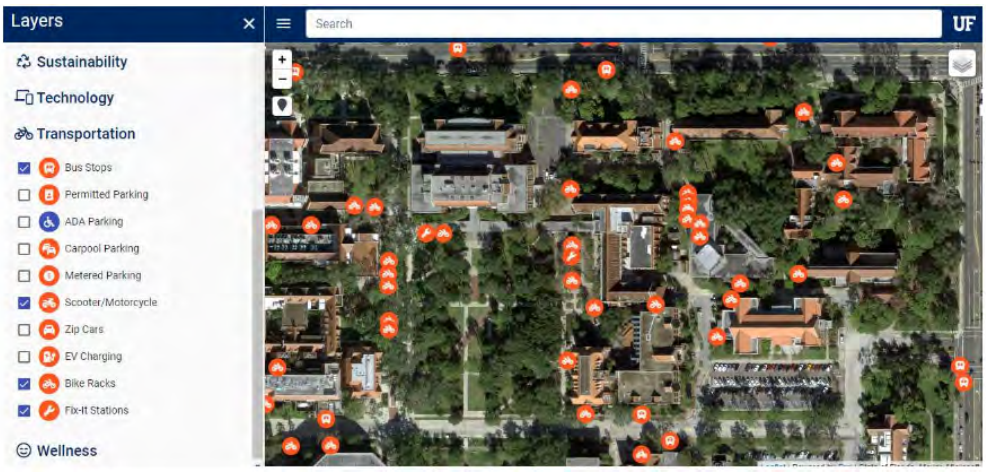
# Credit 1.7 | Connect to multi-modaltransit networks

## Transit Network

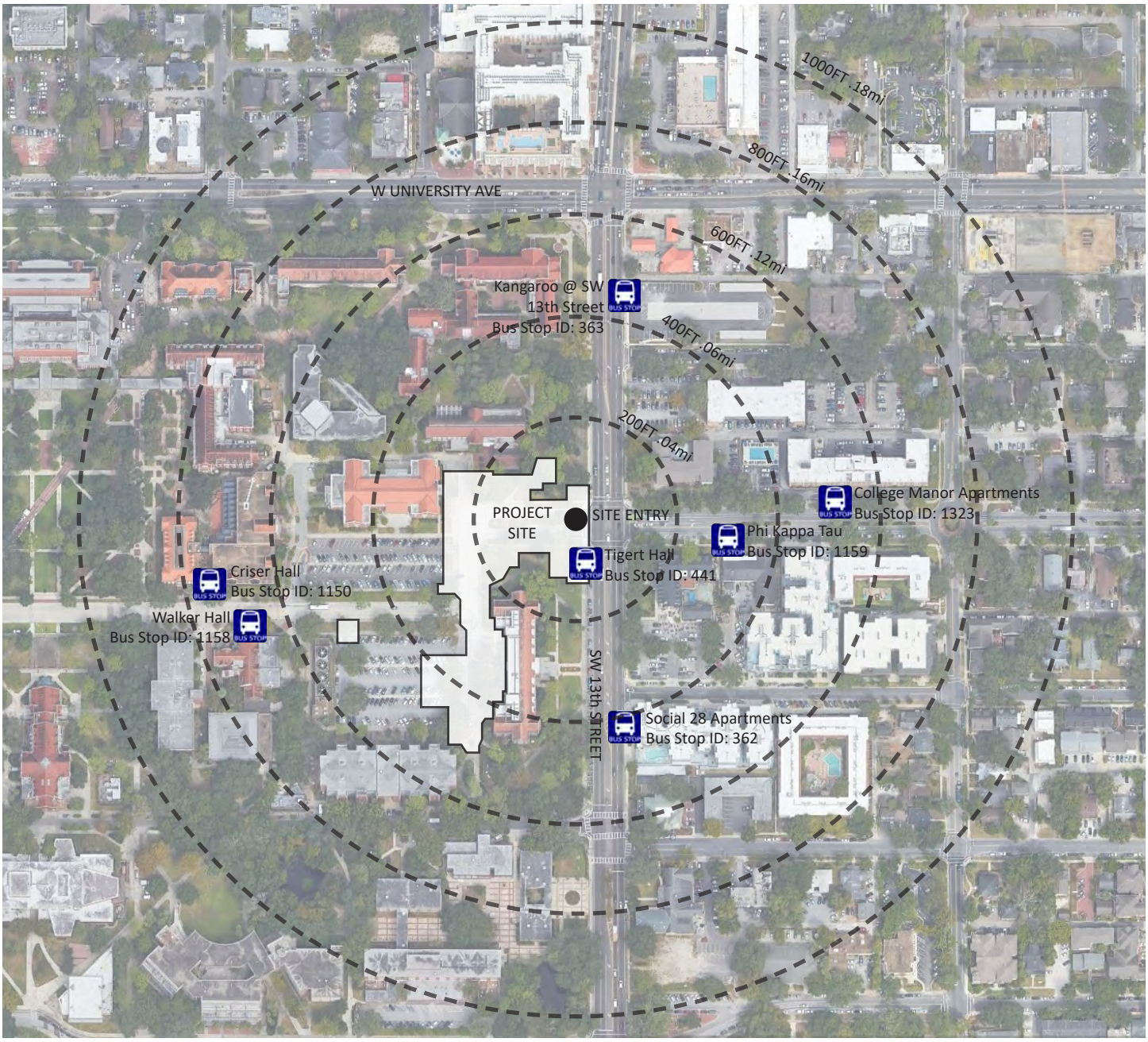
**Goal: 3 points**

Northeast Gateway qualifies for Context C1.7 Option 2. RTS Public Transit provides an accessible service for public transit across Gainesville and has created a 10 year Transit Development Plan (TDP) which details the transit agency's vision for public transportation, an evaluation of transit needs in the area and a plan to prioritize and implement future improvements. Depending on the bus route, the average user can utilize the RTS every 30 minutes throughout the weekdays and weekends (See schedules on following pages). This gateway project acts as a main entrance to the University of Florida and is never physcially closed to site users. However, after looking at various UF event calendars (Student Involvement, O'Connell Center, Rec Sports, and Reitz Union) its is clear that the current bus times meet the needs of users as the University itself does not have public events that run past 12:00am.
Additionally, it is important to note how proactive the University is at providing transportation to site users while improving health, safety and reducing pollution.

Large events such as sports competitions and graduation ceremonies include free transits across campus to and from the event. There are continuous crosswalks around the gateways and throughout campus. The gateway connects to bicycle network. All roads have shared bicycle lanes and the speed limit on campus is 20 MPH. The historic district includes many bicycle racks.

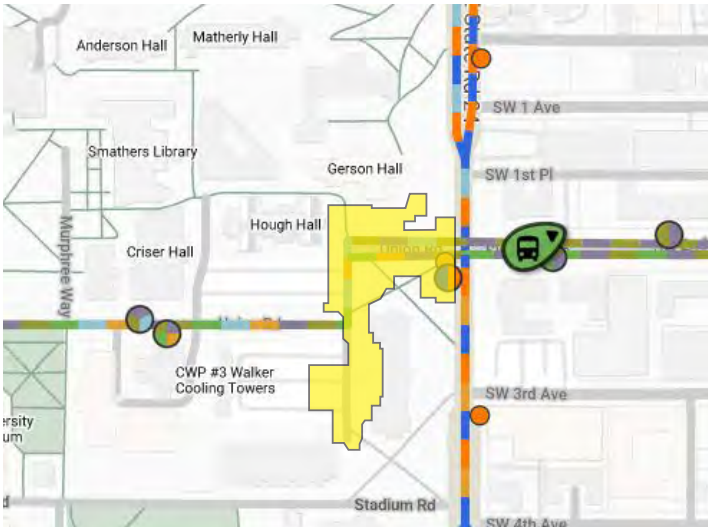



Additionally, for late night, the Student Nighttime Auxiliary Patrol (SNAP) services are available and will pick up at this location and transport site users to a desired location.
Lastly, the gateway project is less than 0.25 miles from e-scooter micro mobility station. This program is very helpful for other universities and cities to meet this credit intent.




Total Number of site users: 120

## Bus Routes Map

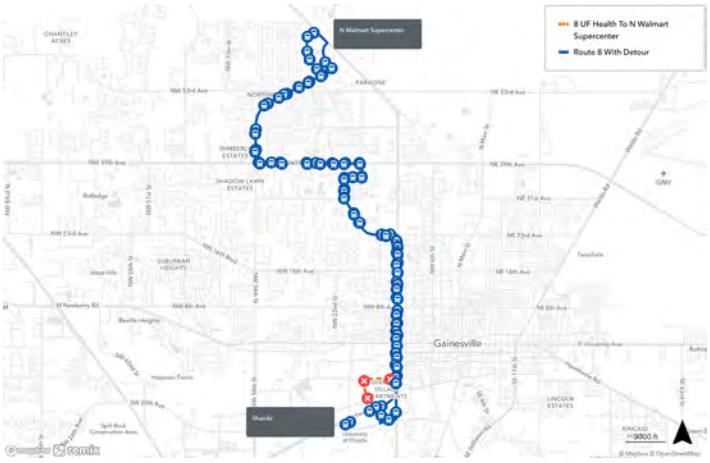



## Bus Routes (Summer 2021):

- Criser Hall - 25 33 46
- Walker Hall - 25 46 126 127
- Tigert Hall - 8 43
- Kangaroo @ SW-13th Street 8
- Phi Kappa Tau - 25 46 126 127
- College Manor Apt.- 25 46
- Social 28 Apt.- 8

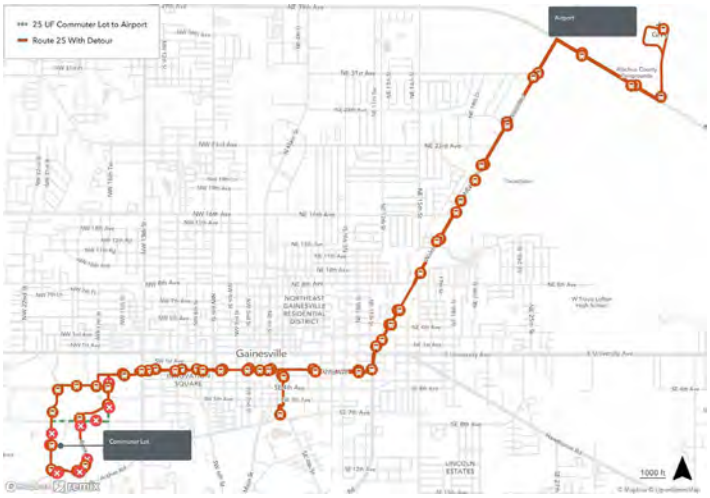
## Route 8 Celebration Pointe to Midtown

- First run starts: 6:02am
- Last run finishes: 10:10pm




## Route 25 UF Health to Santa Fe College

- First run starts: 7:20am
- Last run finishes: 5:38pm

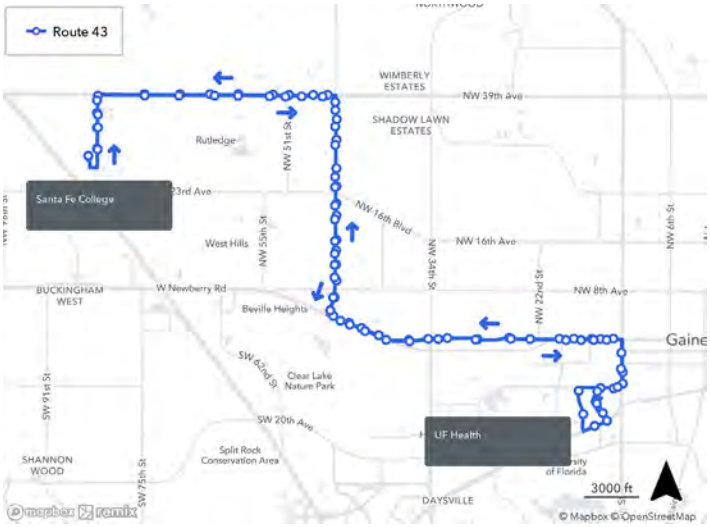


## Route 34 Celebration Pointe to Midtown

- First run starts: 6:45am
- Last run finishes: 1:04am

## Route 40 UF Health to Santa Fe College

- First run starts: 6:54am
- Last run finishes: 6:12pm




## Route 46 Reitz Union to Rosa Parks Transfer Station

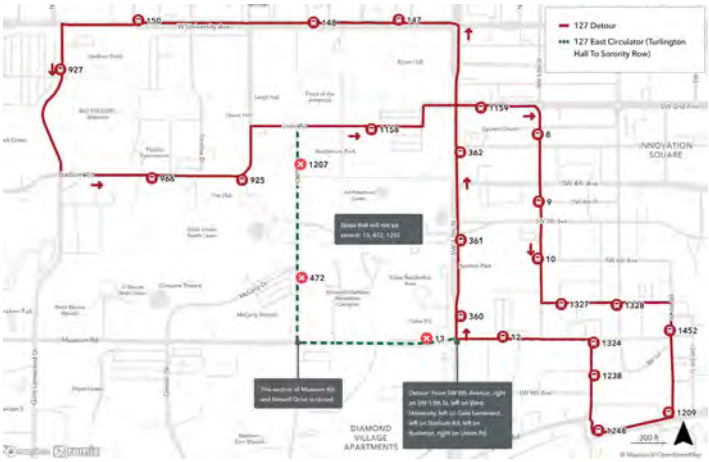
- First run starts: 7:45am
- Last run finishes: 5:23pm

## Route 126 Sorority Row to Lakeside

- First run starts: 5:45am
- Last run finishes: 10:45am

## Route 127 East Circulator

- First run starts: 7:20am
- Last run finishes: 5:30pm



# SECTION 2:
# PRE-DESIGN ASSESSMENT + PLANNING

| Prerequisite | Title | Points |
|---|---|---|
| Pre-Design P2.1 | Use an integrative design process | Required |
| Pre-Design P2.2 | Conduct a pre-design site assessment | Required |
| Pre-Design P2.3 | Designate and communicate Vegetation and Soil Protection Zones (VSPZs) | Required |
| **Credit** | **Title** | **Points** |
| Pre-Design P2.4 | Engage users and stakeholders | 3 points |

# Prerequisite 2.1 | Use an integrative design process

## 1. Integrate design team

This table identifies the integrated design team including the owner and professionals knowledgeable in design, construction, maintenance, sustainable practices, vegetation, water, soils, landscape ecology, materials, and human health and well-being. Signatures from all team members are included in the table who:
-participated in the collaborative communication process,
-participated in the development of the site maintenance plan,
-and participated in the site assessment and relevant discussions.

Each one of the individuals identified below has been directly and intimately involved in the Northeast Gateway project. Included in the list below are the landscape architects who created the design concepts as a part of the University's Campus Landscape Master Plan; the team of consultant landscape architects, engineers and architects who created the contract documents to execute the design; UF planners, UF support staff, and faculty; and the construction managers and their subcontractors who executed the work.

- Cydney McGlothlin is the University of Florida University Architect. Cydney guides projects through the multi-layered University approval process and works with the UF Planning, Design, & Construction team to ensure compliance with campus design guidelines and other standards.
- Linda Dixon is the Director of Planning at UF. She is responsible for approving and integrating projects into the Campus Master Plan and the Campus Landscape Master Plan at the University.
- Frank Javaheri is the Director of Construction for UF's Department of Planning, Design, & Construction. He currently oversees all major campus projects, assisting the individual UF project managers and guiding projects to completion. Frank has been actively involved in the design and construction process of the Northeast Gateway project.
- Melanie Heflin has over thirty years of in experience in construction. Melanie works as the Northeast Gateway UF Project Manager who is responsible for directing the design and construction team to execute the project within budget and scope.
- Dustin Stephany has a wide range of experience in engineering and construction management, as well as building operations and maintenance. As the University's Sustainable Building Coordinator, he provides guidance, direction and input into all campus LEED and SITES projects.
- Tina Gurucharri is the recently retired Chair of the University of Florida Department of Landscape Architecture.
- Dan Manley is the current interim Chair of the Department of Landscaped Architecture at UF. Dan coordinated a design charrette between the design team and UF landscape architecture students.
- Tom Schlick is the Assistant Director of Facilities Services, Grounds and Natural Resources, responsible for grounds operations, maintenance and scheduling along with construction support services to the campus community.
- Donna Bloomfield is the UF landscape and grounds superintendent providing maintenance plans and guiding activities to enhance the appearance, operation and functional life of the UF campus landscapes.
- Elizabeth McAlister is a project engineer with the University of Florida with experience in utilities and energy services. Elizabeth assisted throughout the project providing guidance to the consultant team's engineers.
- Scott Fox is the University's Director of Transportation and Parking where he is responsible for a wide range of transportation entities including garage and lot maintenance, incorporation of alternative transportation methods, review of planned University projects and their parking impacts, and management of the budget for these services.
- Joe Souza is UF's Director of Physical Security where he manages and improves security systems by implementing new security technology throughout the campus some of which will be implemented with this project.
- Wade Maclaren is Assistant Director of Operations Support Services for the Physical Plant at UF. Wade oversees maintenance projects to ensure high quality facilities.

- Rachel Mandell works as the university's Senior Planner. Rachel's primary objectives are to monitor the implementation of the Campus Master Plan and assist in the long-range planning efforts that guide the land use and landscape of the university.
- Andrew Meeker is a landscape architect and was previously with the City of Gainesville Commnity Redevelopment Agency, serving as a bridge between the campus and the City.
- Frank Bellomo is a landscape architect with over 40 years of experience on a variety of project types including extensive campus projects. He served as a landscape architect for the UF Campus Landscape Master Plan and is the Principal-in-Charge of the Northeast Gateway project and responsible for the successful delivery of the project.
- Sheeba West is a landscape architect and certified arborist who has been responsible for the delivery of complex projects in the public and private sector for over 20 years including projects on the UF campus.
- Donald Wishart is registered landscape architect and Distinguished Alumnus of the UF Department of Landscape Architecture. Donald provided significant input into the final design direction of the project.
- Andrea Penuela is a landscape architect and graduate of UF who provides design, presentation graphics and production assistance on projects of varying scales and complexities. Andrea served on the project team for Northeast Gateway, assisting with document production and presentation graphics.
- Ian Molgaard is a landscape designer who assists with document production as well as providing high quality graphics on numerous projects for GAI Consultants. Ian assisted with the UF Campus Landscape Master Plan and has been the key team member in the completion of the SITES documentation.
- Chris Jones is a principal landscape architect with IBI Placemaking. Chris served as Principal-in-Charge on the UF Campus Landscape Master Plan where the concept designs for the Northeast Gateway project were developed. He also provided design oversight to the team as the concept designs were advanced.
- Jaime Igua is a civil engineer and project manager with VHB, responsible for the design of the project drainage, grading and utilities.
- Leonard Sprague is a civil engineer with 20 years of experience on a variety of project types with a particular area of expertise in stormwater management design and hydraulics.
- Shawn Steers is a project engineer with VHB and assisted with all aspects of the infrastructure components of the project.
- Nat Grier is the national practice leader of Campus Transportation with VHB. Nat completed the UF Transportation Master Plan and coordinated during the development of the Campus Landscape Master Plan. He also assisted with transportation issues on the Northeast Gateway project.
- Andrew Mitchell is an electrical engineer and President of Mitchell Gulledge Engineering with a long history of projects on the UF campus.
- Peter Rizov is and electrical engineer who was responsible for the design of the electrical and lighting systems for the project. Peter also has extensive UF campus design experience.
- Elisabeth Manley is a landscape architect with over 20 years of experience. Located in Gainesville, her expertise in construction documentation and construction administration services allowed her to assist through the construction phase of the project, interfacing with the design team, UF and the construction manager.
- Jennifer Lyons has over 15 years in construction management in the Gainesville/Alachua County area. Jennifer is leading the construction team for CPPI for the Northeast Gateway. Jennifer also has taken an active role in the SITES certification and documentation processes.
- Darrel Pons oversees UF campus maintenance crews to achieve a healthy and aesthetic image of the grounds at the University of Florida.
- Craig Hill serves as Associate Vice President in Business Affairs, Craig is responsible for the strategic leadership and direction of multiple transportation and parking services.

## Integrate Design Team

| Name | Representing | Expertise | Role | Signature |
|---|---|---|---|---|
| **Melanie Heflin** | UF PDC | Construction, Maintenance | Project Manager | Melanie Heflin |
| **Cydney McGlothlin** | UF PDC | Architecture, Maintenance | University Architect | Cydney McGlothlin |
| **Linda Dixon** | UF PDC | Planning, Maintenance | Director of Planning | |
| **Donna Bloomfield** | UF Facilities | Grounds, Maintenance | Grounds Superintendent | Donna Bloomfield |
| **Tom Schlick** | UF Facilities | Facilities, Maintenance, Vegetation, Soils | Ass't. Director, Facilities Services | Thomas Schlick |
| **Scott Fox** | UF TAPS | Transp. & Parking, Maintenance | Transp. & Parking | Scott Fox |
| **Dustin Stephany** | UF PDC | Sustainability, Maintenance, Human Health and Well-being | Sustainability Coordinator | Dustin Stephany |
| **Joe Souza** | UF Security | Security, Maintenance | Director of Security | |
| **Wade Maclaren** | UF Facilities | Physical Plant, Maintenance | Ass't. Director, Physical Plant | Wade Maclaren |
| **Craig Hill** | UF Business Affairs | Finance, Maintenance | Finance | RETIRED |
| **Frank Bellomo** | GAI | Landscape Architecture, Design, Vegetation, Human Health and Well-being | Landscape Architect | Frank Bellomo |

| Name | Representing | Expertise | Role | Signature |
|---|---|---|---|---|
| **Donald Wishart** | GAI | Landscape Architecture, Design, Vegetation, Human Health and Well-being | Landscape Architect | DONALD WISHART |
| **Sheeba West** | GAI | Landscape Architecture, Design, Vegetation, Landscape Ecology, Human Health and Well-being | Landscape Architect | Sheeba West |
| **Andrea Penuela** | GAI | Landscape Architecture, Design, Vegetation, Human Health and Well-being | Landscape Designer | |
| **Chris Jones** | IBI | Landscape Architecture, Design, Vegetation, Human Health and Well-being | Landscape Architect | Chris Jones |
| **Jason O'Brian** | Walker Architects | Architecture, Design | Architect and Project Manager | |
| **Jaime Igua** | VHB | Civil Engineering, Design, Hydrology | Civil Engineer | Jaime Igua |
| **Andrew Mitchell** | Mitchell Gulledge | MEP Engineering, Design, Materials | MEP | |
| **Peter Rizov** | Mitchell Gulledge | Electrical Engineering, Design | Electrical Engineer | |
| **Tina Gurucharri** | UF College of Design construction and planning | Landscape Architecture, Design, Vegetation, Landscape Ecology, Human Health and Well-being | | RETIRED |
| **Leonardo Valencia** | VHB | Civil Engineering, Design | Civil Engineer | Leonardo Valencia |

| Name | Representing | Expertise | Role | Signature |
|---|---|---|---|---|
| **Frank Javaheri** | UF Construction | Construction, Design, Maintenance | Director of Construction | Faramarz Javaheri |
| **Rob Hoogevenn** | Certified Irrigation Designs Inc. | Irrigation | Irrigation Designer | Rob Hoogevenn |
| **Shawn Steers** | VHB | Civil Engineering, Design | Civil Engineer | Shawn Steers |
| **Elizabeth McAlister** | UF Facilities Serv. | Facilities, Maintenance | Facilities Services | Elizabeth McAlister |
| **Nat Grier** | VHB | Civil Engineering, Design | Transportation Engineer | Nathaniel Grier |
| **Elisabeth Manley** | Manley Design | Landscape Architect, Vegetation | Construction Oversight | Elisabeth Manley |
| **Jennifer Lyons** | CPPI | Construction Management, Construction, Materials | Construction Manager | Nolan Davis |

## 2. Collaborative Communication Process

The Northeast Gateway project used an integrative design process consisting of a team with a wide range of expertise. The communication process included over a dozen official meetings held virtually on Microsoft Teams. All formal meetings were summarized in minutes which were distributed to the team prior to the following meeting with action items addressed to team members. There were numerous informal meetings also held virtually. Communication was also conducted by phone and email often daily throughout the project timeline. Communication occurred on site visits. Lastly, communication occurred on BIM 360 where plans, specifications and other documents were shared with the team for review and comment. Team members who were primarily responsible for collaborative communication included Melanie Heflin/UF, Dustin Stephany/UF, Frank Bellomo/GAI, and Jennifer Lyons/CPPI.

## 3. Project Sustainability Principles and Performance Goals

Sustainability principles for the Northeast Gateway project mirror those found in the University of Florida Campus Landscape Master Plan (LMP), a document completed in 2018 and adopted by the university. This document should be considered as a supplement document to the 2020-2030 Campus Master Plan, a planning document required by Florida statutes and updated every 5 years. Sustainability principles are found throughout the Campus Master Plan as well as the Campus Landscape Master Plan, whose sustainability principles are directly aligned with the design of the Northeast Gateway.

The principles described below provided a sustainability framework for the Campus Landscape Master Plan. Within this framework is proposed a series of gateways, campus entry portals, which are a component part of meeting the University of Florida's goals of providing campus-wide comfortable and attractive entrances which encourage all modes of transportation from pedestrian to bicycle, bus, mass transit and eventually, autonomous modes of travel. As funds become available, individual projects advancing this goal are required to follow the LMP and the Campus Master Plan site specific framework. During both the design and construction phases of individual projects, the university's Landscape, Vegetation and Lakes (LVL) committee will be tasked to review compliance with both documents to assure a unified campus approach towards these specific performance measures:

- **(1) educate visitors on sustainable approaches undertaken by UF,**
- **(2) protect and improve campus natural communities,**
- **(3) Minimize campus hardscapes to reduce runoff and heat island gain**
- **(4) increase native landscaping,**
- **(5) promote multi-model transportation.**

Following construction, the LVL committee, as well as UF's planning department and maintenance staff, are all tasked to monitor and verify that these measures are continuously being implemented and maintained. Additionally, as new tools become available, the committee is responsible for updating the LMP to help the university transition standard outdoor areas to more engaging spaces.

As UF improves its walkable network it is poised to become a model for other campuses and communities on how to sustainably develop a sense of place through attractive gateways, walking corridors and outdoor civic spaces.

The following Principles are taken directly from the Campus Landscape Master Plan and are included here as sustainability principles because they intentionally tie the practices implemented at the Northeast Gateway with the ongoing and future campus projects that will ultimately become impacted by this gateway project:

***Campus Landscape Master Plan Principle 2: Redesign Campus Roadways to Support and Encourage All Modes of Travel***

The Northeast Gateway project is one of several LMP priority projects that modify campus roadways to support and encourage multi-modes of travel. The project provides a portal into campus for bicyclists and pedestrians through a direct connection to the SW 2nd Avenue corridor, which links this primary campus entry with Downtown Gainesville and off-campus facilities through a direct east/west route. SW 2nd Avenue feeds directly into the Northeast Gateway, bringing pedestrians, bicycles, automobiles

and Gainesville's Regional Transit System (RTS) buses into campus from downtown and places east. The gateway connects to off-campus facilities through a newly signalized intersection with new and improved pedestrian crosswalks and walk signals. It now more readily encourages not only pedestrian travel, but bicycle ingress and egress has been improved by creating shared use lanes at the gateway, demarked with newly painted sharrows.

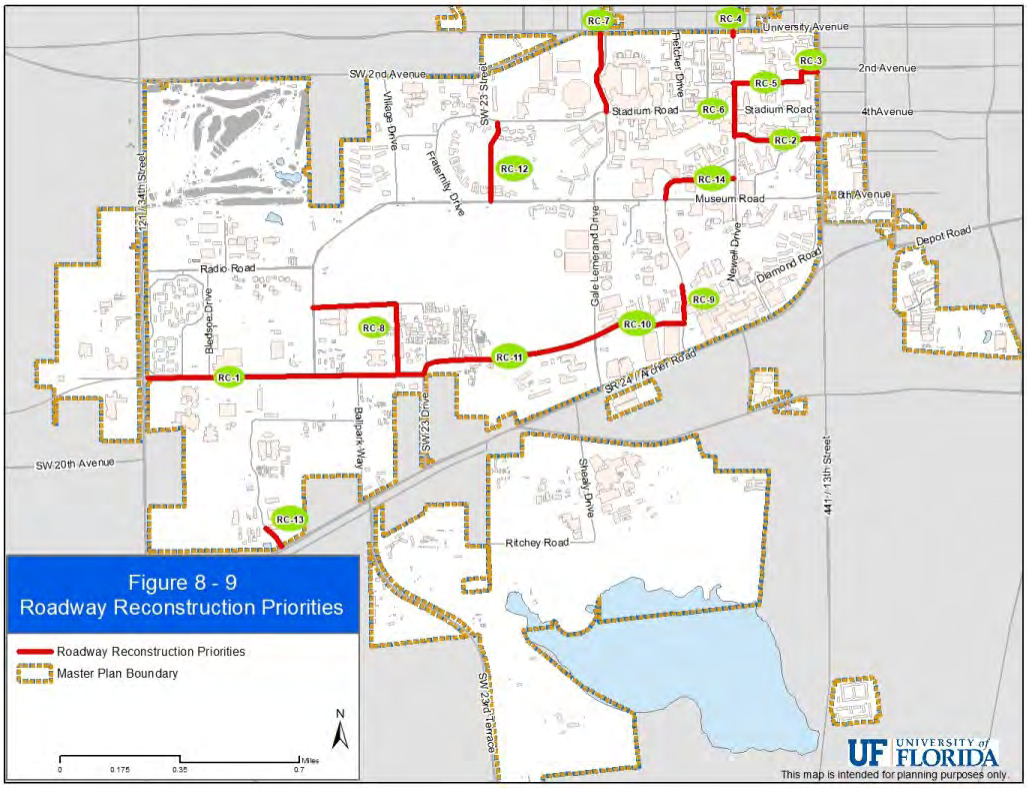
Additional improvements have been made through the creation of a large entry court, including temporary parking/drop-off areas for ride-share and carpool. The gateway serves as a multi-modal hub, where pedestrians, cyclists, cars and buses take advantage of improvements to the university's main entrance with connections throughout the campus and the city. To encourage bicycle use, a bike parking shelter has been provided within the project, directly south of the entry court and main entrance to the campus.

As described in the Landscape Master Plan, future improvements include the removal of Union Drive as a vehicular route into the campus and the replacement of that road with Union Walk, a pedestrian only route, linking the gateway to walks throughout campus. The removal of Union Road will also restrict over 80 acres of the campus to pedestrians and bicycles only, making it one of the largest auto-free campus zones in the US.

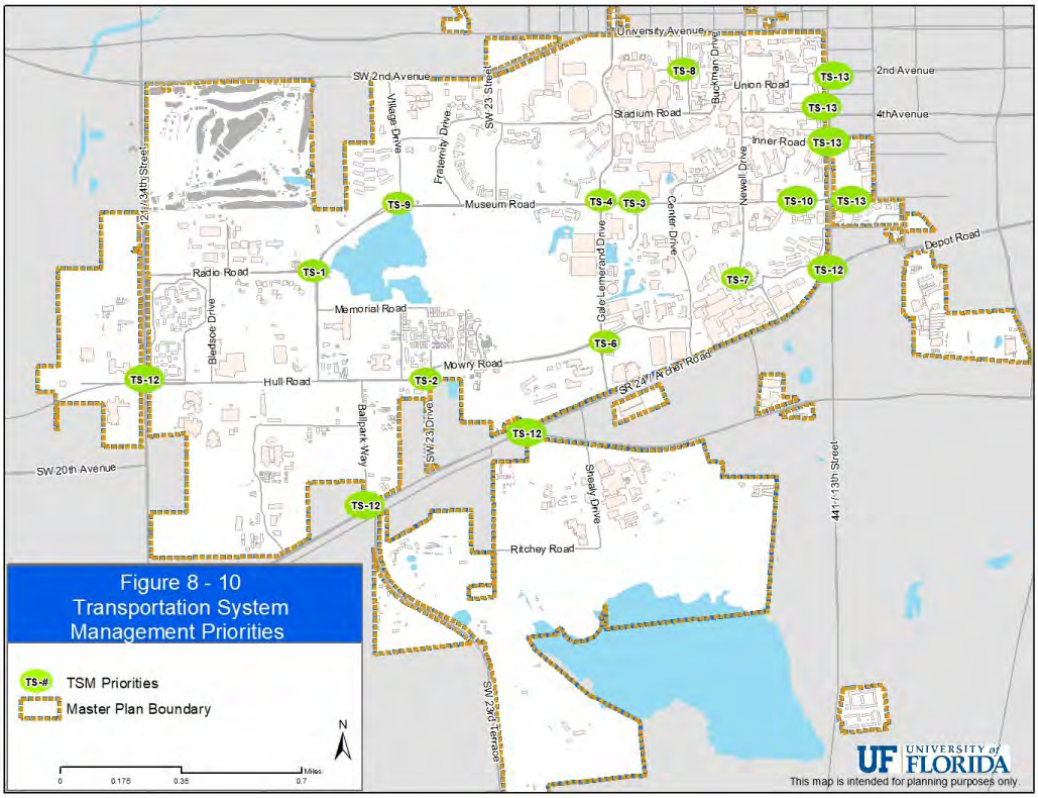
**Timeline:**

Short Term: Improvements to the crossings at 2nd Avenue and US 441 are complete, as is the addition of the shared use lanes and court. Refer to the attached Table 8-2, of the Transportation Element of the Campus Master Plan (ID #RC-3)

Long Term: Union walk is currently unfunded, so an exact timeline is unknown, however, the University of Florida's Board of Trustees has made Union Walk a priority project and it is highly likely that the project will commence in the next 1 to 2 years. Refer to Table 8-3 of the Transportation element of the Campus Master Plan for a description of the Union Walk project (ID #TS-13). Continued implementation of the other LMP Priority Projects are on a schedule that will likely span 5 years.




| | | | | |
|---|---|---|---|---|
| **RC-3** | Union Rd. | West of Tigert Hall to SW 13 Street | Reconstruct with gateways, drop-off, streetscape/landscape, artwork, reconfigured parking areas and relocated guardhouse per the Landscape Master Plan | 340 |




| | | | |
|---|---|---|---|
| **TS-13** | SW 13th Street | Community Entries | Improve pedestrian crossings along SW 13 St/US 441 at Museum Rd, Inner Rd, Stadium Rd, and Union Dr. |

***Landscape Master Plan Principle 3: Integrate All New Campus Projects into the Campus Fabric, Advancing Pedestrian and Bike Connections and Campus Spaces***

The Northeast Gateway project integrates a new pedestrian/bicycle portal with the existing SW 2nd Avenue pedestrian/bicycle corridor, the planned Union Walk pedestrian/bicycle enhancement, and the campuswide overall sidewalk system. The vehicle court was designed to accommodate both buses and ride-sharing services, as well as pedestrians and bicycles. Landscaping, lighting, and brick gateway features comply with the LMP and integrate with existing landscape features.

A future improvement that is physically connected to the Northeast Gateway project is the pedestrianization of Union Road into Union Walk, as described above. Union Walk is an important addition to the Northeast Gateway project. The gateway will continue to allow for vehicular access to the campus and administration for faculty and visitor parking, but Union Walk will remove the ability for cars to venture into the campus and beyond. Closing the area to vehicular use will result in a significant decrease in the number of vehicles on campus, resulting in a reduction of air pollutants and reduced heat island effect. The completion of Northeast Gateway is the first step in pedestrianizing the heart of the campus.

**Timeline:**

Short Term: The gateway is complete and the increase in pedestrian and bicycle traffic has been realized. Improvements to the crossing US 441 are also complete. It is believed that Union Walk will commence in the next 1 to 2 years.

Long Term: Sustainability impacts which are a result of the Northeast Gateway project go well beyond the reach of the project limits. Although only a small part of the overall 2000+ acre UF campus, the Northeast Gateway impacts are significantly more widespread in reach that this geographically small project area. As previously mentioned, there are other multi-modal improvements planned throughout the campus, all of which will be impacted by the Northeast Gateway project.

The completion of the multi-use path along US 441 remains unfunded and as a result an exact timeline is unknown, however the project is a part of the 2020-2030 Campus Master Plan.

***LMP Principle 4: Celebrate the Ecological Setting of the Campus, Embracing Sustainable Goals and LID Practices***

The Northeast Gateway project provides new landscaping including native plants irrigated with reclaimed water. At the urging of the Landscapes Vegetation and Lakes Committee (LVL) several species of native trees were utilized on the project. While the dominant campus tree canopy is the Live Oak, creating the signature landscape aesthetic of the campus, several other species were introduced to avoid a monoculture planting. This included natives Live Oaks, River Birch, Winged Elm, Shumard Oak and Longleaf Pine. A key part of the overall landscape design was the reestablishment of the Longleaf Pine community on this eastern edge of the campus. Historically, the Longleaf had been the dominant tree throughout much of the campus, but that species had been removed over decades of campus development, leaving a limited number on the eastern edge. The landscape plan included the planting of eleven of the pines directly adjacent to the gateway entrance to the campus.

As with all projects on the campus, stormwater drainage is permitted by the State of Florida's St. Johns River Water Management District to be collected in pipes and eventually discharged into Lake Alice, the largest water body on campus. The Northeast Gateway design team realized that this direct discharge of runoff is a less than desirable method of stormwater management if the intent is to protect the waters of Lake Alice. As a result, it was agreed to create two rain gardens within the Northeast Gateway project area. Planted with Florida native Muhley Grass (Muhlenbergia capillaris), these rain gardens accept the direct surface runoff, allowing the stormwater to percolate. Constructed with 24" of a specialized soil mix, the rain gardens, a Low Impact Development (LID) approach to handling stormwater, become a natural filtration system for the runoff and is further proof that the university is committed to incorporating sustainable goals and LID practices at this gateway as well as other identified LMP projects. Since this project ties to Lake Alice, the university remains committed to further protecting this watershed by reducing runoff while improving stormwater quality.

**Timeline:**

Short Term: Currently the LVL committee, planning department, university maintenance staff and other university, city and state personnel are updating the campus stormwater management plan. This plan is anticipated to be finalized in 2024 and will include new detailed projects, policies, and procedures. However the LID principles established at Northeast Gateway are complete and are operating as designed. In the short term only maintenance operations are required.

Long Term: Implementation of best practices in sustainability and LID is ongoing here and throughout the campus and will continue at this gateway over time particularly with regards to maintenance practices. Similar practices will occur during the planning and construction of the previously described Union Walk.

***Principle 5: Reflect UF's Ecological Setting in its Plant Materials, Promoting Simplicity and Maintainability in Planting Design***

The Northeast Gateway project utilizes the Campus Landscape Master Plan recommended plant list including native species. Invasive species are specifically excluded from the list and are not permitted to be planted on campus. The plants that were specified for the project were reviewed and approved by the university's grounds team specialists and the members of the LVL Committee. As previously described the native trees selected for the project, and in particular the Longleaf Pine, are a reflection of the naturally occurring plant communities at the campus. Additionally, the limited palette of species of shrubs and groundcovers was intentional. Such a design approach requires less maintenance resulting in less expenditure of energy to maintain. As evidenced by the planting plan, the specification of multiple tree species was intentional. Design reviews with the LVL Committee required species diversity so as not to create a monoculture.

**Timeline:**

Short Term: Landscape installations at the Northeast Gateway are now complete. Short term activities are the limited maintenance requirements.

Long Term: Implementation of this principle is ongoing and university staff will monitor the health of existing landscaping at this gateway over time. Any invasive plants will be eradicated by the grounds staff.

Policies and Objectives from the 2020-2030 Campus Master Plan which further sustainability goals for UF and are directly related to the Northeast Gateway project are included herein and highlighted:

1. Transportation Element
2. Urban Design Element
3. General Infrastructure Element

**Goal 2: Preserve, Maintain and Expand the On-Campus Transportation System to Meet the Needs of Students, Faculty, Staff and Visitors that is Convenient, Safe, Sustainable and Encourages Non-Auto Travel Choices.**

***Objective 2.1: To provide a roadway network that safely and efficiently accommodates all modes in a comfortable and aesthetically pleasing environment.***

**Policy 2.1.1:** Utilize and refine the roadway design standards depicted in the Landscape Master Plan, and partner with FDOT, City of Gainesville, Alachua County and MTPO to address standards for the Gateway Roads on the campus perimeter based on the roadway hierarchy depicted in Figure 8-1.

**Policy 2.1.2:** Utilize highway level of service standard "E" for analysis purposes on campus roads, and evaluate the multi-modal quality of service conditions for campus roads to determine an appropriate level of service standard for non-auto modes, if feasible.

**Policy 2.1.3:** Initiate a routine traffic counting program to include autos, bicycles and pedestrians in coordination with traffic counting programs conducted by FDOT, the City of Gainesville, Alachua County and the MTPO to gather data no less than once every five years.

**Policy 2.1.4:** Continue to designate speed limits of 20 miles per hour on all university-maintained roadways east of SW 34th Street, and 15 miles per hour within the area north of Museum Road and east of Gale Lemerand Drive.

**Policy 2.1.5:** Enhance the campus arrival experience by implementing wayfinding signage, intersection improvements, and Landscape Master Plan recommendations for gateways, landscaping, and lighting consistent with Priority Open Space Enhancements and Gateways depicted on Figures 1-5 and 1-6.

CAMPUS MASTER PLAN, 2020-2030 ELEMENT

***Objective 2.2: To provide pedestrian and bicycle facilities that safely and efficiently accommodate walking and bicycling in a comfortable and aesthetically pleasing environment.***

**Policy 2.2.1:** Pursue programming, design and implementation of new sidewalk connections as depicted in Figure 8-5 (Table 8-5) and streetscape improvements identified as Priority Open Space Enhancements in Figure 1-5 of the Urban Design Element.

**Policy 2.2.2:** Pursue programming, design and implementation of bicycle lanes and shared-use paths as depicted in Figure 8-2 (Table 8-6).

**Policy 2.2.3:** Pursue programming, design and implementation of pedestrian and roadway lighting improvements and continue to review exterior lighting standards in the *University of Florida Design and Construction Standards* for amendment as needed to provide adequate lighting levels and energy efficiency.

**Policy 2.2.4:** Improve pedestrian/bicycle crossings at SW 13th Street/Museum Road, Inner Road, Museum Road/Sweetwater Drive as depicted on Figures 8-3, 8-9, and 8-10 as well as connections to off-campus neighborhoods.

**Policy 2.2.5:** New building construction or reconstruction shall respect Pedestrian Connections and Shared-Use Paths identified on Figure 1-4 and strive to enhance these pedestrian and bicycle corridors through building orientation, landscaping and pedestrian amenities.

**Policy 2.2.6:** Monitor usage and adequacy of existing bicycle parking facilities in terms of quantity, design, lighting, location, security covering, and enhanced amenities (e.g. fix-it stations) and install new or upgraded bicycle parking facilities to correct observed deficiencies.

***Objective 2.6: To maintain or improve outdoor air quality and reduce fuel consumption.***

**Policy 2.6.1:** The University shall continue implementing an innovative state-of-the-art green fleet policy to encourage purchase of vehicles that are highly fuel-efficient and low emission, use alternative fuels or are non-motorized (e.g. bicycles or Segways).

**Policy 2.6.2:** The University shall evaluate the use of telecommuting and flexible schedules to reduce the peak hour travel demand and its impact on roads and parking.





**Policy 2.6.3:** The University shall continue to expand, where appropriate, distance learning and evening class offerings to reduce the peak hour travel demand and its impact on roads and parking.

**Policy 2.6.4:** Encourage use of environmentally-responsible scooters.

**Goal 1: Create and Maintain a Campus that is Welcoming, Easily Navigated, and Attractive.**

***Objective 1.1: Utilize design standards to create a unified campus appearance with clear connections between different campus regions, disciplines, and partners that welcome and orient campus users and assist them in navigating the campus through coherent visual cues.***

**Policy 1.1.1:** Continue to implement and update as necessary the University of Florida Design and Construction Standards, Landscape Master Plan, and Campus Design Guidelines. These documents apply to all university construction projects including those performed or managed by Facility Services Division, Planning, Design, and Construction Division, IFAS Facilities and Operations Division, Department of Housing and Residence Life, University Athletic Association and on-campus Sororities and Fraternities. These documents include guidelines and standards for architecture, landscaping, hardscaping, lighting, roads, parking, bicycle and pedestrian facilities, interior/exterior signage, irrigation, earthwork, stormwater, utilities and American with Disabilities Act (ADA) Compliance.

**Policy 1.1.2:** Implement gateway features as depicted on Figure 1-6 according to the Landscape Master Plan standards.

**Policy 1.1.3:** Implement and refine the roadway and streetscape design standards and guidelines of the Landscape Master Plan.

**Policy 1.1.4:** The University shall work with the City of Gainesville, Alachua County and the Florida Department of Transportation to improve access and aesthetics on Gateway Roads identified on Figure 1-6 through university participation on the Metropolitan Transportation Planning Organization and its committees, and any special interest groups or local government committees as may be created to address such issues.

**Policy 1.1.5:** Open space connections as identified on Figure 1-4 and 1-8 (Lake Alice Trails System), shall be maintained and enhanced to provide bicycle and pedestrian access.

***Objective 1.3: Utilize landscaping and tree canopy to enhance the campus environment and reflect the University's ecological setting.***

**Policy 1.3.1:** Use trees and other plant materials, exterior furniture, and paving materials to reinforce the spatial organization, create well defined functional open spaces, reinforce clearly defined entrances, enhance existing corridors and campus spaces particularly adjacent to buildings, within the Urban Park future land use classification, and along roadways, pedestrian connections and shared-use paths depicted in Figure 1-4 consistent with principles of the Campus Design Guidelines and Landscape Master Plan.

**Policy 1.3.2:** Implement appropriate landscape, hardscape, pedestrian, and/or bicycle improvements in areas identified as Open Space Enhancement Priorities in Figure 1-5. These improvements may be implemented as part of a building construction project or as independent projects funded through the Facilities Services Division, other administrative sources, grants or private donors. Such projects shall also reinforce the pedestrian connections and shared-use path corridors identified in Figure 1-4. These high-visibility open space enhancements shall be recommended for approval by the Lakes, Vegetation and Landscaping Committee.

**Policy 1.3.3:** Maintain campus edges that are attractive and welcoming by implementing Landscape Master Plan priority projects (Figure 1-5), gateway treatments (Figure 1-6), wayfinding signage, and intersection improvements (Figure 8-10) compatible with Landscape Master Plan standards and the urban design goals of the adjacent local government jurisdiction.

**Policy 1.3.4:** Consider the reduction of excessive hardscape areas across campus and the possibility of incorporating porous materials in areas of heavy pedestrian use.

**Policy 1.3.5:** Continue to maintain and expand University inventories of trees (particularly National Champion and Heritage Specimens) and rare plants (both ornamental and naturally occurring) on





the main campus. These inventories are maintained by Business Affairs Technical Services in collaboration with the Planning, Design and Construction Division, Facilities Services Division, School of Forest Resources and Conservation, and the Department of Biology.

**Policy 1.3.7:** Maintain and implement the tree and shrub planting plan as specified in the Landscape Master Plan include streetscape standards.

**Policy 1.3.8:** The University of Florida Design and Construction Standards, Division 329000 shall continue to specify procedures for the protection and replacement of existing trees and vegetation and provide these standards online.

**Policy 1.3.9:** Development projects that impact or necessitate the removal of existing trees and vegetation shall be addressed according to the University of Florida Design and Construction Standards. Required tree mitigation or relocation shall be approved by the Lakes, Vegetation and Landscaping Committee.

**Policy 1.3.10:** Consistent with the University of Florida Design and Construction Standards, special protection is afforded to national Champion and Heritage Specimen trees that are numbered and tagged as part of the University's "Tree Walk" maintained by the UF School of Forest Resources and Conservation. These tagged trees are for teaching purposes and require special protection during any construction activity that may disturb soil near these trees.

**Policy 1.3.11:** Campus utilities shall be placed where the planting and growth of trees is not compromised, and underground placement is preferred.

**Policy 1.3.12:** No living tree on the University of Florida main campus or Alachua County Satellite properties shall be removed or relocated without the approval of the Lakes, Vegetation and Landscaping Committee except under the following conditions:

- The tree is dead.
- The tree is an immediate safety hazard to people, domestic animals, buildings or other structures, or motor, bicycle or pedestrian traffic, and no responsible correction is available other than tree removal as verified by a certified arborist when feasible.
- The tree is infested with harmful insects or fungi that cannot be controlled, are not normally present on trees of the species, and may reasonably be expected to spread to other trees not so infested as verified by a certified arborist when feasible.
- The tree or trees were planted specifically for purposes of research or other arboriculture/silviculture activities and were intended to be removed upon research completion or harvest.
- A record of such removals is kept and forwarded monthly to the Lakes, Vegetation and Landscaping Committee.
- Trees of up to five inches in diameter (twenty inches in circumference) may be removed when deemed necessary for maintenance or operations.

**Policy 1.3.13:** Landscaping required as part of any building new construction, renovation,

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GENERAL INFRASTRUCTURE ELEMENT

***Objective 1.4: Implement sustainable stormwater practices in all campus site development incorporating Low Impact Development techniques where physically, economically, and practically possible.***

**Policy 1.4.1:** The University shall strive to incorporate stormwater improvements into all new building sites and into modification of existing sites. These improvements include, but are not limited to, rain gardens, roof-top gardens, porous soil amendments, hardscape storage, pervious pavement and other innovative stormwater techniques as depicted in Figure 9-2 with a commitment to funding proper maintenance of their appearance and function.

**Policy 1.4.2:** The University shall follow the examples and recommendations in the Landscape Master Plan to incorporate stormwater treatment techniques in the existing landscape through identified utilities and roadways projects and other project opportunities to be identified.

**Policy 1.4.3:** All proposed stormwater projects on campus involving the use of designated open space (land use classifications of Green Space Buffer, Urban Park and Conservation) shall seek approval from the Lakes, Vegetation and Landscape Committee during the design phase. These projects must be in conformance with the primary function of the open space.

## 4. Program Plan

### Opportunities, characteristics,and constraints:

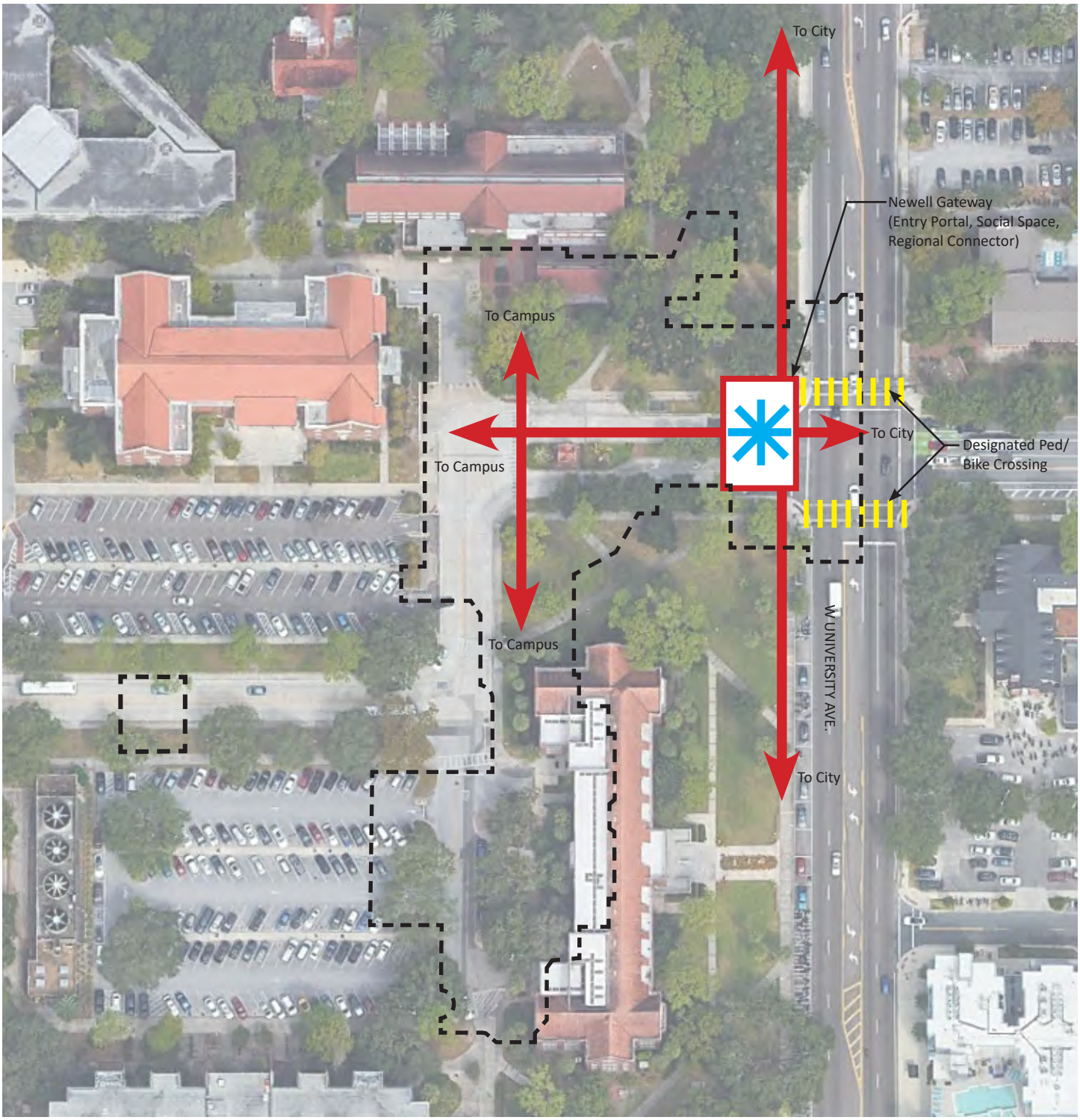
Located at its intersection with SW 13th Street, Union Road is converted to Northeast Gateway, a primary pedestrian gateway. It is a previously developed roadway with multiple parking lots. The gateway is the welcoming face to campus visitors and a main entry point onto the campus. Northeast Gateway also connects secondary walkways leading to surrounding buildings and the larger pedestrian network. The majority of existing trees are to remain and will be protected through construction. Additional trees are placed in adequate planting space which provide shade for the comfort of pedestrians and bicyclists. Low-maintenance shrub and groundcover planting areas contribute to collection of stormwater and infiltration.

**Opportunities:**

- Enhancing Landscape
- Upgrading Utilities
- Enhancing pedestrian and bicycle mobility

**Constraints:**

- Existing Trees
- Existing Utilities
- Continuous daily campus operations including heavy pedestrian traffic


To City
Newell Gateway
(Entry Portal, Social Space,
Regional Connector)
To Campus
To Campus
To City
Designated Ped/
Bike Crossing
To Campus
W UNIVERSITY AVE.
To City

## 5. Stakeholders and site user groups

Primary users are those members of the immediate campus population, that is, individuals who are on campus regularly for work or as students. Those would be the students, faculty/administration, and university employees.

Secondary users would individuals who are not regularly on campus and therefore would not have an opportunity to regularly use either gateway, only doing so on the occasions that they visit campus. Those individuals would be university visitors including alumni, visiting lecturers, prospective students and their families, etc. Also in that group would be Gainesville residents who might visit campus for any number of reasons including sporting events, cultural events, or just generally enjoying the beauty of the campus.

## 6. Plan for Construction Oversight

Elisabeth Manley, landscape architect with Manley Design, will be the team member responsible for construction oversight and will be coordinating the Construction Manager, Jennifer Lyons, CCPI. The pre-construction meeting will occur after the completion of the design and final bid acceptance and the method for making changes in the field during construction will follow standard practices.

## 7. Site Maintenance Plan

Site Maintenance Plan Strategy has been developed through collaboration with multiple entities throughout the University. Maintenance operations of Newell Gateway is mainly facilitated by the University's Grounds department of which intends to further our LMP goals, including irrigation whenever the opportunities exist.

Other entities include staff from our integrated pest management plan, Environmental Health and Safety, wastewater treatment staff to help meet our reclaimed water goals, waste and refuse staff to further divert as much waste from entering our local landfills. Once complete this document has been reviewed by UF's planning department to ensure that such activities are meeting the goals of our landscape master plan.

Refer to the table of Integrated Design Team members acknowledging participating in the development of the site maintenance plan.

# Prerequisite 2.2 | Conduct a pre-design site assessment

## Pre-design Site Visit

Below are photos of the design team conducting a pre-design site assessment for Newell Gateway. This included taking photos and learning more about the existing conditions of the site.

## Notes from Minutes

| Name | Representing | Item # | Item Description and Details |
|---|---|---|---|
| Tom Schlick | UF | Tigert 1-1 | Campus Entrance & Bus Stop:<br>• Remove hollies and brick planters at bus stop and replace with canopy trees in at-grade planter in same location.<br>• Check with RTS to determine what shelter to use to replace existing and if UF standard is permitted by RTS.<br>• Existing handicap ramp drop corners are preferred at crosswalk<br>• Alignment of gateway entry walls generally determined. May need to bridge foundation over existing water main. Alignment of walls should align with west end of entry median hardscape.<br>• Need to determine if signal loops to be replaced or if cameras will be used.<br>• North curb line to remain in current location because of vault.<br>• All drainage inlet tops at entrance area to be reconstructed.<br>• Pedestrian landing zone at corners of entry should encompass in grade utility box in new layout. |
| Dustin Stephany | UF | | |
| Frank Bellomo | GAI | | |
| Donald Wishart | GAI | | |
| Sheeba West | GAI | | |
| Andrea Penuela | GAI | | |
| Elisabeth Manley | Manley Designs | | |
| Jason O'Brian | Walker Architects | | |
| Jaime Igua | VHB | | |
| Andrew Mitchell | Mitchell Gulledge | | |
| Peter Risov | Mitchell Gulledge | | |

| Item # | Item Description and Details |
|---|---|
| Tigert 1-1 | Campus Entrance & Bus Stop:<br>• Remove hollies and brick planters at bus stop and replace with canopy trees in at-grade planter in same location.<br>• Check with RTS to determine what shelter to use to replace existing and if UF standard is permitted by RTS.<br>• Existing handicap ramp drop corners are preferred at crosswalk<br>• Alignment of gateway entry walls generally determined. May need to bridge foundation over existing water main. Alignment of walls should align with west end of entry median hardscape.<br>• Need to determine if signal loops to be replaced or if cameras will be used.<br>• North curb line to remain in current location because of vault.<br>• All drainage inlet tops at entrance area to be reconstructed.<br>• Pedestrian landing zone at corners of entry should encompass in grade utility box in new layout.<br>• All trees in the existing plaza and hollies directly adjacent to building to be removed.<br>• Assess drainage needs at well to doorway. |
| 1-5 | Little Parking Lot:<br>• Consider moving the proposed location of the east drive aisle to the west side of the two existing oak trees.<br>• Replace the sidewalk on the south side of the parking lot and reduce width slightly to allow for a long east/west landscape island where current concept plan shows head to head 90-degree parking.<br>• Eliminate concrete in island at north parking bay and add landscape to receive stormwater runoff. Modify the drainage inlets.<br>• Look at additional tree planting opportunities |
| 1-6 | Gatehouse:<br>• Jason and Andrew inspected the existing gatehouse.<br>• Cast concrete and doors may be re-purposed on new gatehouse.<br>• Jason and Andrew to check with EH&S to determine if restroom in gatehouse is required by code. If not, Tigert restrooms would be utilized to meet requirement. Route from gatehouse to Tigert must be accessible. |
| 1-7 | Electrical:<br>• Andrew reviewed the exiting light and transformer locations.<br>• Vehicle charging station locations were discussed for both parking lots. |

# Site Assessment Worksheet

## SITES® v2 Site Assessment Worksheet

**P2.2: CONDUCT A PRE-DESIGN SITE ASSESSMENT**

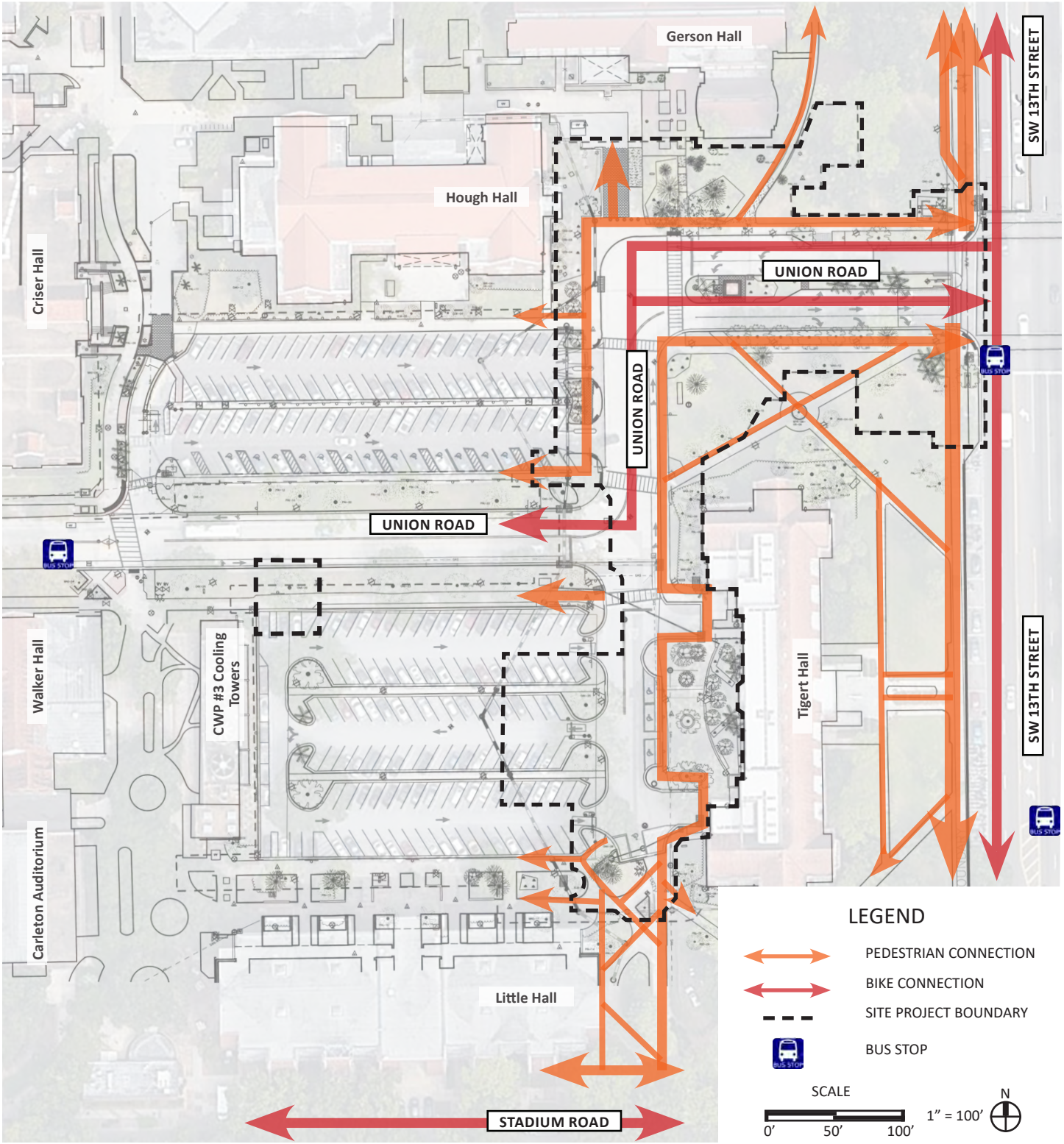
| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

| SITE CONTEXT | | | |
|---|---|---|---|
| Identify and map the following information | Information collected can help achieve the following SITES Prerequisites and Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Existing or planned pedestrian, bicycle, or transit including: Nearby transit routes and stops, bicycle lanes and shared lane markings, bicycle racks/storage, and bicycle networks | **C1.7:** Connect to multi-modal transportation networks,<br>**C6.5:** Support physical activity,<br>**C6.9:** Encourage fuel efficient and multi-modal transportation | Map at C1.7 provided by Regional Transit System of Gainesville; Map at C6.5 provided by the University of Florida. | The information gathered could influence the layout of the hardscapes for this portion of campus and the possibility of providing new transit stops at the project site. |
| **WATER** | | | |
| Identify and map the following information or provide a narrative as required by Table 2.A-B in the Reference Guide | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| 100-year floodplain, as determined by FEMA (or local equivalent for projects outside the United States). | **P1.2:** Protect floodplain functions | FEMA flood maps were anazlyzed and it was determined that our site did not fall within the 100-year floodplain boundaries. | The information gathered may influence the design of the impervious areas, the approach to stormwater design including LID opportunities and the specified landscape plants. |
| Full extent of delineated aquatic ecosystems, including isolated wetlands | **P1.3:** Conserve aquatic ecosystems | Figure 7.2, the Natural Communities Map of the Conservation Element of the UF Campus Master Plan indicates no aquatic ecosystem or wetlands on site. | The lack of aquatic ecosystems and wetlands could influence the design of the landscaping as well as the site drainage. |
| Wetland, shoreline, or riparian buffer | **P1.3:** Conserve aquatic ecosystems,<br>**C3.6:** Restore aquatic ecosystems | Figure 7-2, Natural Communities Map and Figure 7-4, Water Resources Map of the UF Campus Master Plan, indicates that there are no wetlands, shorelines or riparian buffers on the project site. | The information gathered may influence the layout of the impervious areas, possible LID approach to stormwter design and landscape plants specified. |
| Streams, wetlands, or shorelines that have been artificially modified (e.g., buried, piped, drained, channelized, bulkheaded, or armored). Determine existing conditions, dimensions, and historic extent. | **C3.6:** Restore aquatic ecosystems | Figure 7-4, Water Resources Map of the UF Campus Master Plan, and campus aerial photos, 1932 to present, indicates that there are no streams, wetlands or shorelines on the project site that were modified. | The information gathered could influence the layout of the impervious areas, stormwater and landscape design. |
| Overland water flow on site. Determine topography, direction of flow, and effects on the watershed, including natural rates of erosion. | **P3.1;** Manage precipitation on site,<br>**C3.3:** Manage precipitation beyond baseline,<br>**C3.6:** Restore aquatic ecosystems,<br>**P7.2:** Control and retain construction pollutants | The topographic survey of the site, completed by Deren Surveying, confirms generally flat topography, and allows for understanding of current surface water flow.. The survey can be found in the SWPPP - Stormwater Pollution Prevention Plan. Refer to C7.2 | The information gathered could influence the design of the impervious areas, the approach to sustainable stormwater design techniques and landscape design. |
| Existing and potential pollution sources (both point and nonpoint sources) and health hazards, including on-site sources and off-site sources in adjacent areas that may impact the site. | **C1.5:** Redevelop degraded sites,<br>**C3.3:** Manage precipitation beyond baseline,<br>**P7.2:** Control and retain construction pollutants | Review of 2010 UF Main Campus Water Quality Report. Includes water quality data on 20 sampling sites throughout the campus. Reviewed UF Clean Water Camapaign with online data. Analyzed UF Storm Drain System map to determine possible connections from offsite sources into Lake Alice Watershed. | The information gathered may influence the layout of the impervious areas and the design of the approach to stormwater design as a part of the overall campus stormwater system. |
| Average annual and monthly precipitation | **P3.1:** Manage precipitation on site,<br>**P3.2:** Reduce water use for landscape irrigation,<br>**C3.3:** Manage precipitation beyond baseline,<br>**C3.4**:Reduce outdoor water use,<br>**C3.5:** Design functional stormwater features as amenities | The average annual and monthly precipitation data was acquired from the St. Johns River Water Management District (SJRWMD) Hydrologic Data site. | The information gathered could influence the layout of the impervious areas, the approach to the stormwater system design to capture precipitation on site and the selection of appropriate landscape plants. |
| Watershed conditions including common stormwater pollutants, specific pollutants of concern, local, regional or state watershed plans, and artificial modification of natural hydrology | **P1.2**: Protect floodplain functions, **P3.1:** Manage precipitation on site,<br>**C3.3:** Manage precipitation beyond baseline,<br>**C3.5:** Design functional stormwater features as amenities,<br>**C3.6:** Restore aquatic ecosystems | Review of 2010 UF Main Campus Water Quality Report. Includes water quality data on 20 sampling sites throughout the campus. Reviewed UF Clean Water Camapaign with online data. Analyzed UF Storm Drain System map to determine possible connections from offsite sources into Lake Alice Watershed. Utilized the map "Watersheds University of Florida" | The information gathered may influence the layout of the hardscapes, and stormwater design to capture and filter surface runoff before making its way offsite and downstream. |
| Potable and non-potable water for the site and opportunities to capture, treat, and reuse rainwater and graywater. | **P3.2**: Reduce water use for landscape irrigation,<br>**C3.3:** Manage precipitation beyond baseline,<br>**C3.4:**Reduce outdoor water use,<br>**C3.5:** Design functional stormwater features as amenities | Availability of potable and non-potable water on site came from UF Facilities utility maps. Greywater is available. Capuring rainwater for irrigation use was considered but not implemented because of the limited available space for cisterns, the amount of water needing to be made available, and the concern over possible vandalism at the site. | The information gathered could influence the landscape design as well as the design of an efficient, reclaimed water irrigation system with components that are designed to be temporary. |

| SOILS | | | |
|---|---|---|---|
| Identify and map the following information or provide a narrative as required by Table 3.A-B in the Reference Guide | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Soils defined by the U.S. NRCS (or local equivalent for projects outside the United States) as prime farmland, unique farmland, farmland of statewide importance, or farmland of local importance. | **P1.1:** Limit development on farmland | Soil data was gathered from U.S. NRCS maps. Soil is not defined as farmland. Additional sol information specific to the site was completed by the geotechnical engineer. | The information gathered could influence the plants specified and the apporach to storm system design including possible LID techniques. |
| Healthy soils found on site. | **P4.1:** Create and communicate a soil management plan,<br>**C4.4:** Conserve healthy soils and appropriate vegetation,<br>**P7.3:** Restore soils disturbed during construction | Figure 7-3, Soils map, from the Conservation Element of the UF Campus Master Plan. Also utilized US Dept. of Agriculture Soil Conservation Service Soil Survey of Alachua County. | The information gathered may influence the preservation of existing trees on site which have extensive root systems that are critical to the soil structure. Could also influencen the plants specified and the apporach to storm drainage. |
| Soils disturbed by previous development. Identify degree of disturbance (disturbed or severely disturbed) and the following characteristics: organic matter content and depth, texture and bulk densities, infiltration rates, soil biological function and soil chemical characteristics. | **C7.4:** Restore soils disturbed by previous development | See the plan at C7.4 | The information gathered will influence design, establishment and maintenance of landscapes,hardscapes and site drainage. |
| Test results or verified allowable ranges for organic matter, compaction or infiltration and soil chemical characteristics or soil biological function | **P4.1:** Create and communicate a soil management plan,<br>**C6.7:**Provide on-site food production,<br>**P7.3:** Restore soils disturbed during construction<br>**C7.4**: Restore soils disturbed by previous development | Soil test results were completed and the results are found at C7.4 | The information gathered could influence design, establishment and maintenance of landscape on site. It could also help determine the viability of on-site food production. |
| Major native plant community types of the ecoregion based on the U.S. EPA (or local equivalent for projects outside of the United States), www.epa.gov/wed/pages/ecoregions/level_iii_iv.htm | **C4.6:** Conserve and use native plants,<br>**C4.7:**Conserve and restore native plant communities | Per EPA, the Level I Ecoregion is Eastern Temperate Forest, Level II is Mississippi Alluvial and SE Coastal Plain and Level III Ecoregion is Southern Coastal Plan. | The information will influence plant material selection and maintanence and the determiation if exisitng native habitat exists for restoration or augmentation. |
| Determine the terrestrial biome by using the World Wildlife Fund Wildfinder, www.worldwildlife.org/science/wildfinder/ | **C4.8**: Optimize Biomass | WWF Wildfinder identifies the terrestrial biome asTemperate Coniferous Forest | The information will influence plant material selection and maintanence and the determiation if exisitng native habitat exists for restoration or augmentation. |
| Follow local, state and federal regulations to ensure existing and imported soils are healthy for food production and are safe for physical contact by the public. For previously developed sites, brownfield sites or sites that have been subject to application of chlorinated pesticides and herbicides, see section 3.B. in Reference Guide for requirements | **C6.7**:Provide on-site food production | On site food production was deemed inappropriate for this site due to its highly urbanized character, limited space and high concentration of pedestrians, bicycles and scooters. Additionally, on site (i.e. on-campus) food production is dedicated to another part of the UF campus. | The presence of food production elsewhere on campus, concentrating energy expenditure to a single campus location, is a more appropriate approach to food production at UF. |
| **VEGETATION** | | | |
| Identify and map the following information or provide a narrative as required by Table 4.A in the Reference Guide | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Provide narrative describing how information gathered could influence site design. |
| Potential threatened or endangered species habitat. Include plant and animal species identified on federal or state threatened or endangered lists or on the International Union for Conservation of Nature Red List of Threatened Species as critically threatened or endangered. | **P1.4:** Conserve habitats for threatened and endangered species,<br>**P2.3** Designate and communicate VSPZs | No such habitat exists for plants of animals on this highly urbanized site. Refer to the letter in Credit P1.4 regarding Habitat Assessment | This information may influence plant material selection to support native flora and fauna. |
| Zones of land cover or vegetation types. Note whether each zone contains the following:<br>- invasive plants as listed by regional, state, or federal entities<br>- native plants and native plant communities<br>- appropriate plant species<br>- special status plants (for trees, note DBH) | **P4.2:** Control and manage invasive plants,<br>**P4.3:** Use appropriate plants,<br>**C4.4:** Conserve healthy soils and appropriate vegetation,<br>**C4.5:** Conserve special status vegetation,<br>**C4.6:** Conserve and use native plants,<br>**C4.7:** Conserve and restore native plant communities,<br>**C4.8:** Optimize biomass | See P1.4 list. P4.3 - Planting Plan (see Landscape Master Plan list of approved plants). Refer also to C4.5 Site Map. On-site analysis reveals some native trees exist on site including remnant longleaf pine from original pine flatwoods. | This information could influence plant material selection. The information may also affect the decision of trees that must be retained and the possibleaugmentation of the longleaf pine at this part of the campus. |
| Risk of catastrophic wildfire for on-site areas and adjacent landscapes at risk | **C4.11:** Reduce the risk of catastrophic wildfire | As a developed and highly urban environment, thre is a very risk of wildfire. In addition, the site is well protected by the City of Gainesville | This information may influence plant material selection and the determination of whether there are plants on site that increrase the chance of fire. |

| MATERIALS INVENTORY | | | |
|---|---|---|---|
| Identify and map the following information or provide a narrative as required by Table 4.B-C in the Reference Guide | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Existing landscape materials and other site elements (e.g. structures, roads, parking lots, pathways) that could be safely retained, salvaged, reused, or recycled. | **C5.2:** Maintain on-site structures and paving<br>**C5.4:** Reuse salvaged materials and plants,<br>**C7.5:** Divert construction and demolition materials from disposal<br>**C7.6:** Divert reusable vegetation, rocks, and soil from disposal | See data on C5.2 Maintain on-site structures and paving. See data on C5.4 Reuse salvaged materials and plants, materials and disposal. See data on C7.6 Divert reusable vegetation, rocks, and soil disposal. | This information will influence the salvaging and disposal of existing bricks, concrete and landscape and can minimize the need for new materials. |
| Potential suppliers of salvaged or reused materials, | **C5.4:** Reuse salvaged materials and plants | This information will influence the salvaging and disposal of existing bricks, concrete and landscape and can minimize the need for new materials. | This information will influence the selection of suppliers for pavers and furnishings. |
| Potential suppliers of recycled materials, | **C5.5**: Use recycled content materials | See data on C5.5 Use recycled content materials. | This information will influence the selection of suppliers for bricks, wall materials, benches, lighting and landscape and irrigation materials. |
| Potential suppliers of regional and local materials | **C5.6:** Use regional materials<br>**C6.11:** Support local economy | See data on C5.6 Use regional materials. See data on C6.11 Support local economy. | This information will influence the selection of suppliers for all project construction materials and design elements. |
| Potential suppliers of sustainable extracted materials | **C5.7:** Support responsible extraction of raw materials | See data on C5.7 Support responsible extraction of raw materials. | This information will influence the selection of suppliers of raw materials for the project.. |
| Potential suppliers of safer alternative materials | **C5..8**: Support transparency and safer chemistry | See data on C5.8 Support transparency and safer chemistry. | This information will influence the selection of suppliers for those that advocate and/or disclose their use use of materials which list chemicals and assess related hazards. |
| Potential suppliers of sustainable materials manufacturers | **C5.9:** Support sustainability in materials manufacturing | See data on C5.9 Support sustainability in materials manufacturing. | This information will influence the selection of suppliers for bricks, wall materials, benches, lighting and and other products to those who advocate and/or disclose information related to the sustainable production of their materials. |
| Potential suppliers of sustainable plant producers | **C5.10**: Support sustainability in plant production | See data on C5.10 Support sustainability in plant production. | This information will influence the selection of growers and suppliersof landscape plants and turf. |
| Potential local workforce and businesses | **C6.11**: Support local economy | See data on C6.11 Support local economy. | This information will influence the contractor who is hired to construct the project as well as his/her subcontractoors and staffing. |
| **HUMAN USE OF SITE** | | | |
| Identify and map the following information | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Nearby shops, services, and facilities in operation that have pedestrian access to site. Map walk distances of these basic services from planned project entrance. | **C1.6:** Locate projects within existing developed areas | C1.6 Vicinity Map and Site Plan | This information will influence improving connectivity to facilities adjacent to the site. |
| Historic buildings, structures, objects, and cultural landscapes that are significant to local culture and histories. Note whether these are listed in a historic register. | **C6.1:** Protect and maintain cultural and historic places | Refer to C6.1 Site Photographs and Maps provided by UF Planning, Design and Construction and UF Facilities at http://historic.facilities.ufl.edu/ | This information couldinfluence the site design to preserve and protect the buildings and existing mature trees on site. |
| Interesting or unique features that will enhance the user experience and encourage site use such as view corridors, site landmarks, large shade trees, and water features (natural or designed). | **C6.2:** Provide for optimum site accessibility, safety, and wayfinding,<br>**C6.4:** Support mental restoration,<br>**C6.5:** Promote physical activity,<br>**C6.6:** Support social connection | Refer to site plans at C6.2, C6.4, C6.5 and C6.6. Map at C6.5 by the University of Florida | This information will influence the layout of benches, lights and consider shade and safety of pedestians. |
| **CLIMATE AND ENERGY** | | | |
| Identify and map the following information or provide a narrative as required by Table 6.A-B in the Reference Guide | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Microclimate considerations including positive sounds or excessive noise, wind, and sun exposure (sun angles) and shading opportunities, and any unique microclimate factors that may affect site design decisions, building orientation, and plant selections. | **C4.10:** Use vegetation to minimize building energy use,<br>**C4.11:** Reduce the risk of catastrophic wildfire,<br>**C6.4:** Support mental restoration,<br>**C6.5:** Promote physical activity,<br>**C6.6:** Support social connection | Refer to C6.4 Site Plan C6.5 Site Plan C6.6 Site Plan. Wind data provided by www.weatherspark.com. Noise data provided by rentlingo.com/noise-index | This information will influence the protection of existing trees that provide shade to pedestrians on site and will influence plant selection esecially related to microclimate and safety for pedestrians. |
| Opportunities to generate renewable energy on site (e.g., wind, solar, geothermal, low-impact hydro) | **C8.6:** Use renewable sources for landscape electricity needs | Wind data provided by weatherspark.com. Refer also to Map at C4.9 for shading information | This information may influence the use of solar or wind energy |
| **ADDITIONAL CONSIDERATIONS** | | | |
| Identify and map the following information | Information collected can help achieve the following SITES Prerequisites and/or Credits | Provide title of map(s) where information is identified and include any additional notes OR provide reasons for not addressing topics | Describe how information gathered could influence site design. |
| Any additional considerations not included in the above | | | |

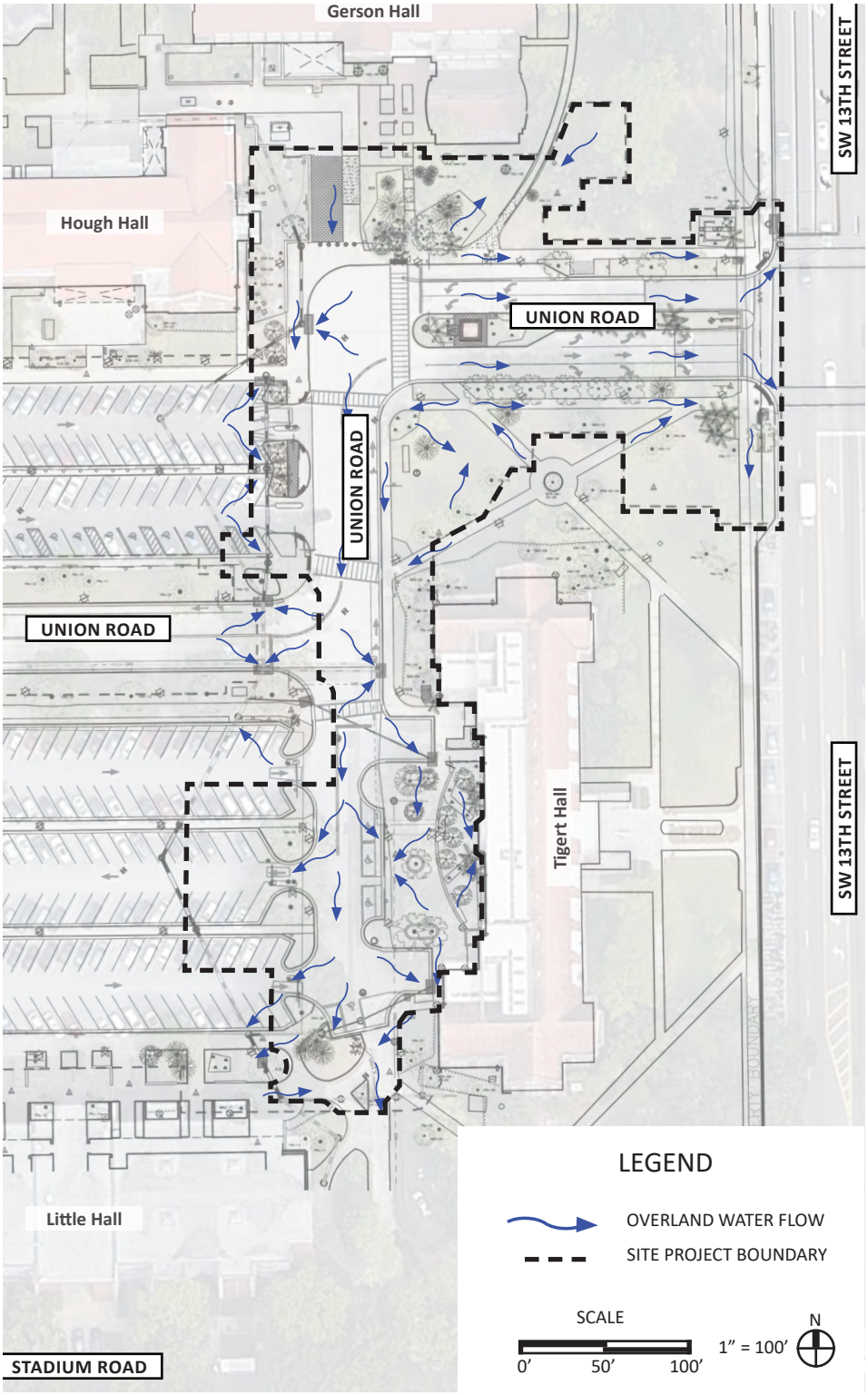
# 1. Site Context - Community and Connectivity




Source: https://gainesvillefl.maps.arcgis.com/apps/webappviewer/index.html?id=8e43b21cb3fc46bea35eccea2c67026f

## 2. Water

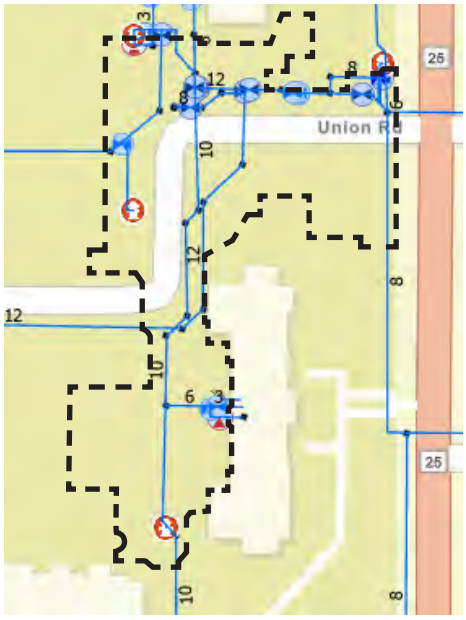
The site is not located within the 100-year floodplain and does not contain any aquatic ecosystems, wetlands, shorelines, riparian buffers or streams. Union Road and SW 13th Street are sources of urban vehicular pollution. Union Road is a source of urban vehicular pollution that may include heavy metals, oils and gas. There is potable and non-potable water access on site. The site is located within the Lake Alice Watershed which drains approximately 60% of the UF main Campus.



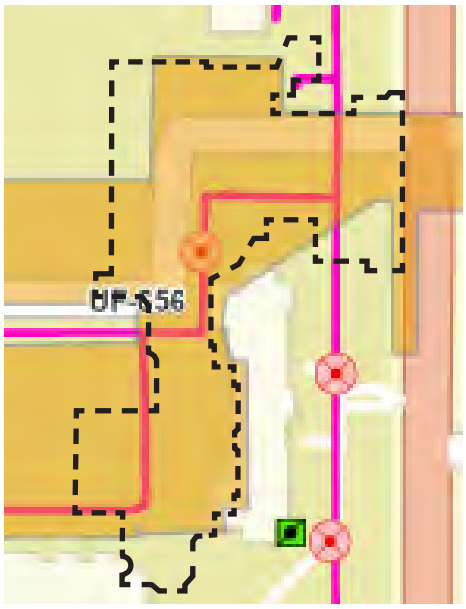

### Precipitation

47.09 in. Average Annaul Precipitation
3.92 in. Average Monthly Precipitation

### Potable Water Source




### Non-Potable Water Source



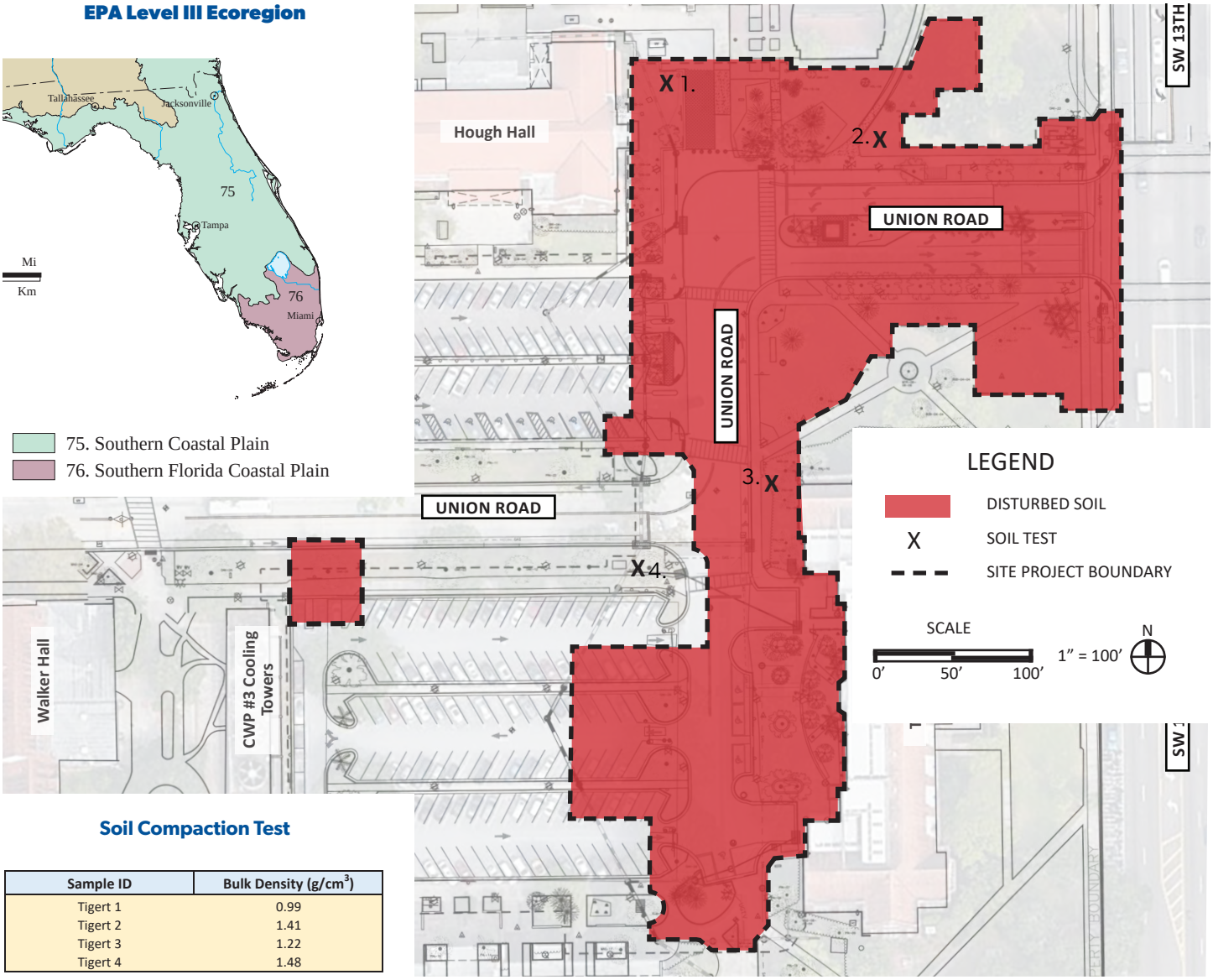
## 3. Soils

According to the EPA level III ecoregion, Southern Florida Coastal Plain is the major native plant community type on site. The site is not located on farmland and there will be no on-site food production.

### EPA Level III Ecoregion




75. Southern Coastal Plain
76. Southern Florida Coastal Plain




### Soil Compaction Test

| Sample ID | Bulk Density (g/cm$^3$) |
|---|---|
| Tigert 1 | 0.99 |
| Tigert 2 | 1.41 |
| Tigert 3 | 1.22 |
| Tigert 4 | 1.48 |

### Soil Chemical Characteristics

| Lab Number | Sample Identification | Copper | Manganese | Zinc | Organic Matter | Electrical Conductivity |
|---|---|---|---|---|---|---|
| | | mg/kg in the soil | | | % | dS/m |
| E166280 | Tigert 1 | 5.50 | 1.63 | 2.88 | 3.15 | 0.09 |
| E166281 | Tigert 2 | 2.14 | 10.27 | 25.59 | 3.70 | 0.10 |
| E166282 | Tigert 3 | 3.52 | 15.73 | 38.78 | 4.18 | 0.12 |
| E166283 | Tigert 4 | 1.32 | 5.10 | 15.45 | 2.60 | 0.08 |

### Test 1 - Organic Matter Results

AB-DTPA Extractable Nutrients

| | |
|---|---|
| PHOSPHORUS (mg/Kg or ppm P) | 15 |
| POTASSIUM (mg/Kg or ppm K) | 6 |
| MAGNESIUM (mg/Kg or ppm Mg) | 9 |
| CALCIUM (mg/Kg or ppm Ca) | 238 |

### Test 2 - Organic Matter Results

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| Phosphorus (P) | 229 | HIGH | Sulfur (S) | 22.1 | *For these nutrients see directions on the following pages |
| Potassium (K) | 111 | HIGH | Copper (Cu) | 2.1 | |
| Magnesium (Mg) | 218 | HIGH | Manganese (Mn) | 10.3 | |
| | | | Zinc (Zn) | 25.6 | |
| Calcium (Ca) | 1661 | Ca is typically adequate in Florida soils | | | |

### Test 3 - Organic Matter Results

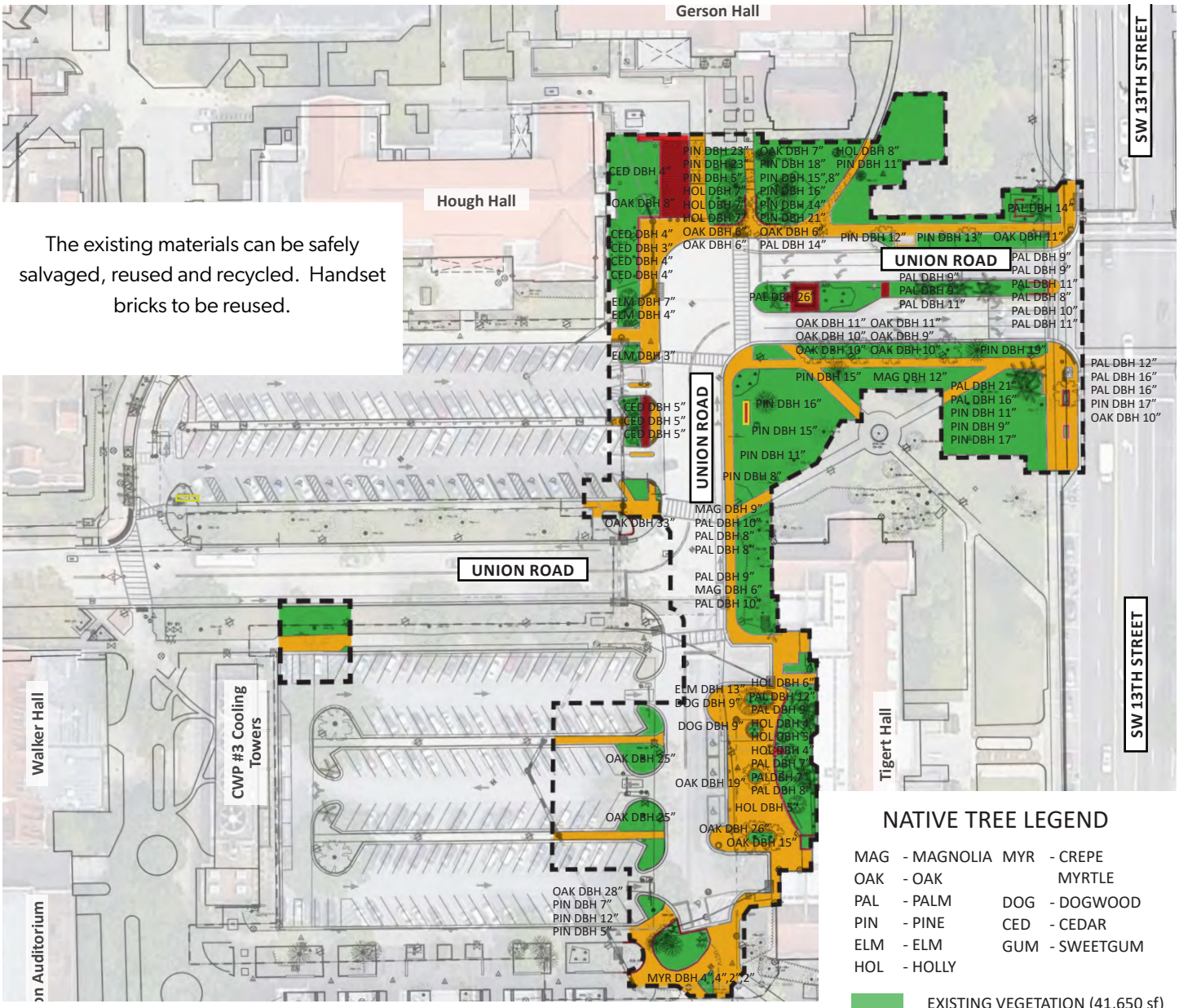
| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| Phosphorus (P) | 314 | HIGH | Sulfur (S) | 21.1 | *For these nutrients see directions on the following pages |
| Potassium (K) | 65 | HIGH | Copper (Cu) | 3.5 | |
| Magnesium (Mg) | 283 | HIGH | Manganese (Mn) | 15.7 | |
| | | | Zinc (Zn) | 38.8 | |
| Calcium (Ca) | 2127 | Ca is typically adequate in Florida soils | | | |

### Test 4 - Organic Matter Results

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| Phosphorus (P) | 119 | HIGH | Sulfur (S) | 18.1 | *For these nutrients see directions on the following pages |
| Potassium (K) | 44 | MEDIUM | Copper (Cu) | 1.3 | |
| Magnesium (Mg) | 172 | HIGH | Manganese (Mn) | 5.1 | |
| | | | Zinc (Zn) | 15.4 | |
| Calcium (Ca) | 1452 | Ca is typically adequate in Florida soils | | | |

## 4. A. Vegetation & B. Materials Inventory

The site does not contain any invasive plants and is not as risk for catastrophic wildfires. The site is characterized by urban conditions and does not include natural areas or identifiable habitat for threatened or endangered plant and animal species. There is potential for the site to be utilized as foraging habitat by the following threatened or endangered plant and animal species: Sherman's fox squirrel (Sciurus niger shermani), and Sandhill cranes (Grus canadensis pratensis).




The existing materials can be safely salvaged, reused and recycled. Handset bricks to be reused.

### NATIVE TREE LEGEND

| | | | |
|---|---|---|---|
| MAG | - MAGNOLIA | MYR | - CREPE MYRTLE |
| OAK | - OAK | | |
| PAL | - PALM | DOG | - DOGWOOD |
| PIN | - PINE | CED | - CEDAR |
| ELM | - ELM | GUM | - SWEETGUM |
| HOL | - HOLLY | | |

EXISTING VEGETATION (41,650 sf)

SITE PROJECT BOUNDARY

### EXISTING MATERIALS LEGEND

BRICK

CONCRETE

BENCH

SCALE

0' 50' 100'

1" = 100'

N

### Materials Salvaged

| ## | ITEM | Quantity | Estimated Value | Total Value | Diversion Type |
|---|---|---|---|---|---|
| 1 | 2 Tier Recycling Station | 5 | $ 1,821.00 | $ 9,105.00 | Salvaged |
| 2 | Precast Concrete Benches | 8 | $ 800.00 | $ 6,400.00 | Salvaged |

## 4. C. Materials, Plants, Soils and Labor Procurement

### SRM Concrete (Concrete)
Ken Russi / Email: krussi@smyrnareadymix.com

### Anderson Columbia Co. Inc. (Asphalt)
Julio Amparo / Email: Julio.Amparo@andersoncolumbia.com

### Limerock Industries, Inc (Limerock)
Dawn Summers / Email: summersdawn@bellsouth.net

### HD Whitecap (Steel & Wire for Concrete)
Terry Mulligan / Email: Terry.Mulligan@whitecap.com

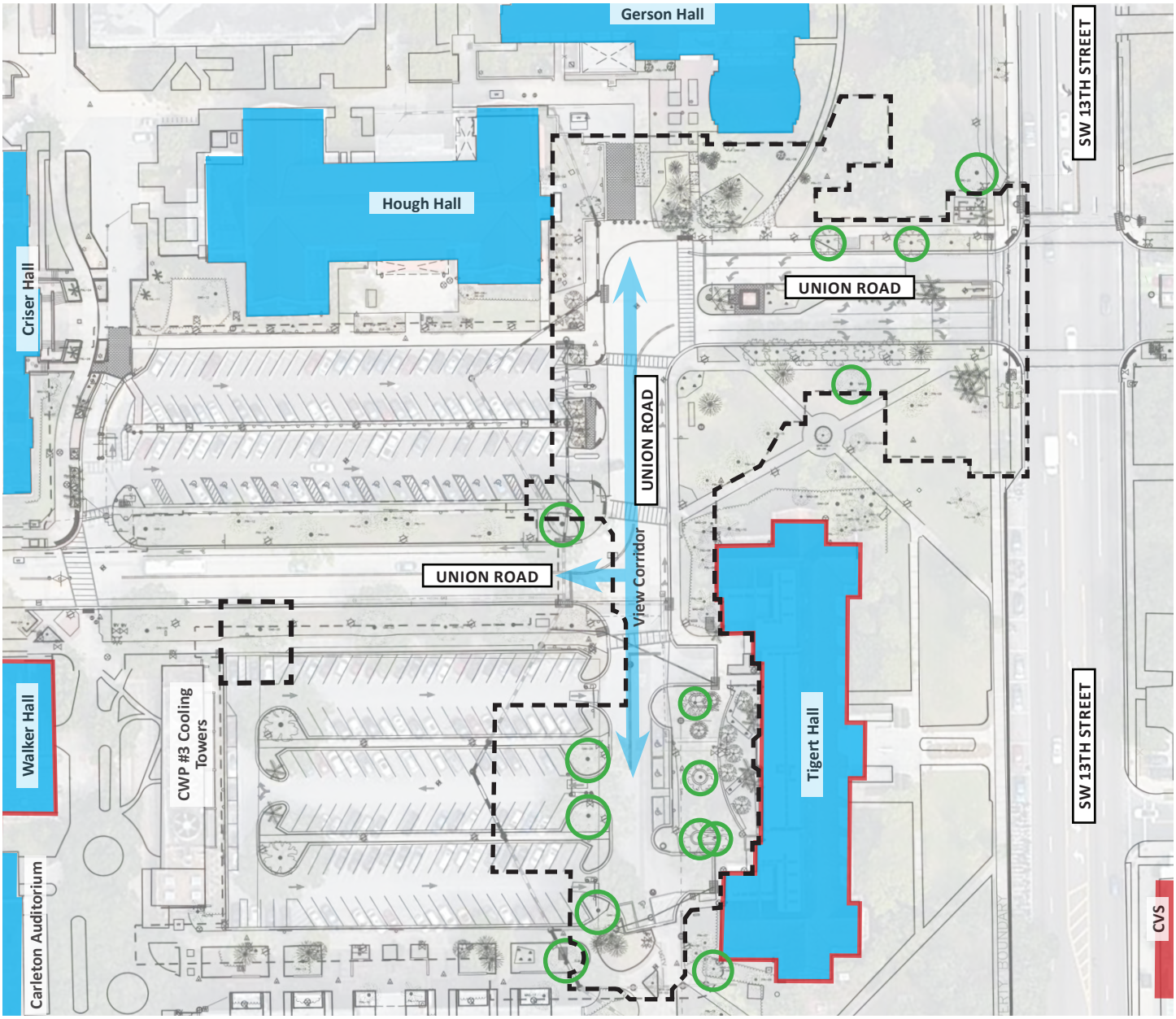
### Storm Structures
Material Supplies for UF-656 Landscape Master Plan Project
Oldcastle Infrastructure
Zoila Chavarria (Zoila.Chavarria@oldcastle.com)
904-577-9136

### Precast Concrete
Material Supplies for UF-656 Landscape Master Plan Project
Spring Precast
John Cronin (jcronin@springprecast.com)
229-938-0175

### USI
Material Supplies for UF-656 Landscape Master Plan Project
Core and Main
Jim Chambers (jim.chambers@coreandmain.com)
352-351-814

## 5. Human Use of Site

The University of Florida campus historic district was added to the National Register of Historic Places on April 20th in 1989, registration number 8AL 2552.




| Type of Service |
|---|
| Restaurant |
| Health Club |
| Place of Worship |
| Library |
| School |
| Convenience Store |
| Pharmacy |

| Basic Service Nearby | |
|---|---|
| Tigert Hall | 367 ft |
| CVS Pharmacy | 427 ft |
| Carleton Auditorium | 1,325 ft |
| Criser Hall | 685 ft |
| Walker Hall | 761 ft |
| Gerson Hall | 307 ft |
| Hough Hall | 823ft |

LEGEND

- HISTORIC SCHOOL BUILDING
- LARGE SHADE TREE
- SITE PROJECT BOUNDARY

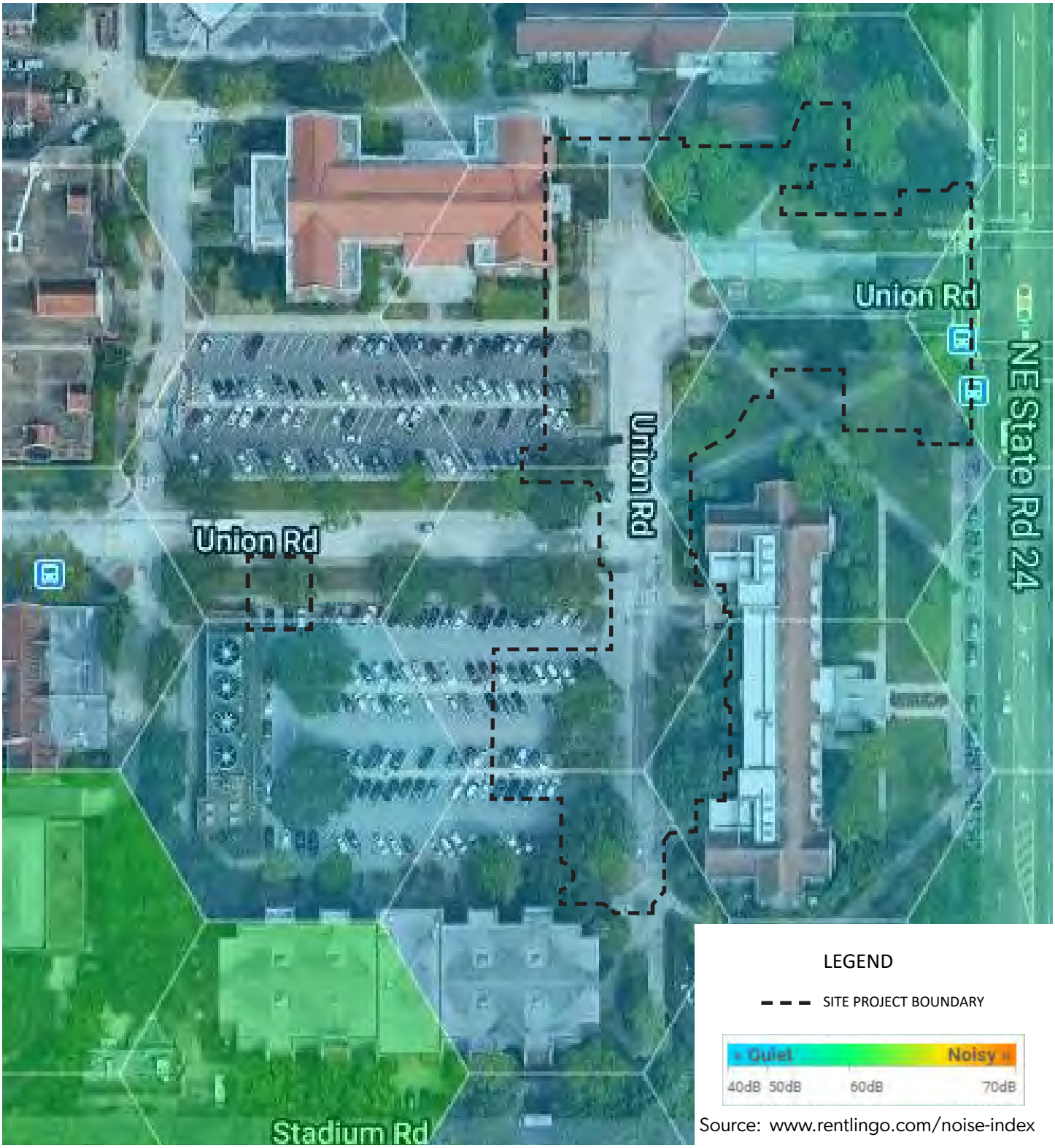
SCALE

0' 50' 100'

1" = 100'

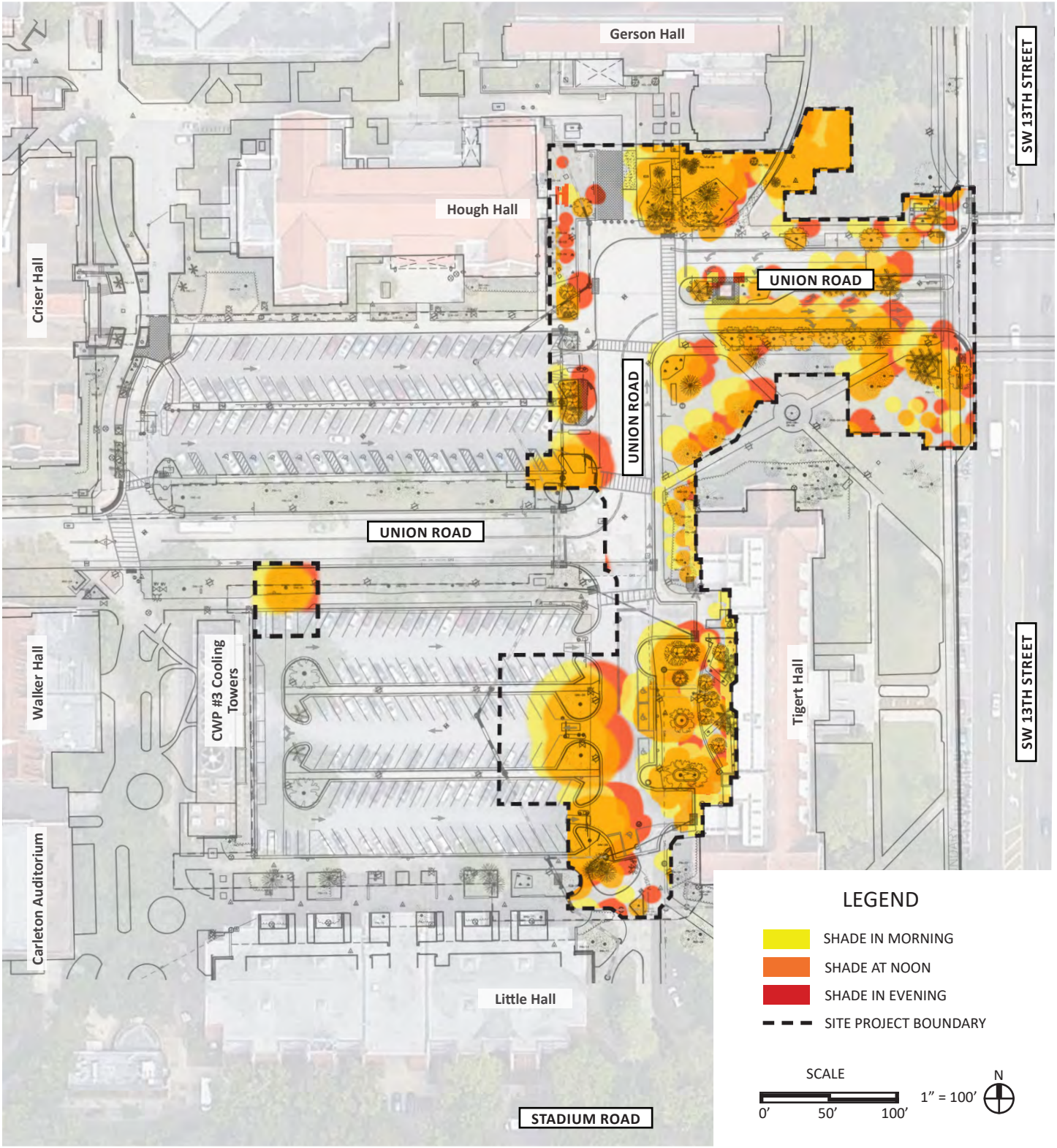
N

## 6. Climate and Energy



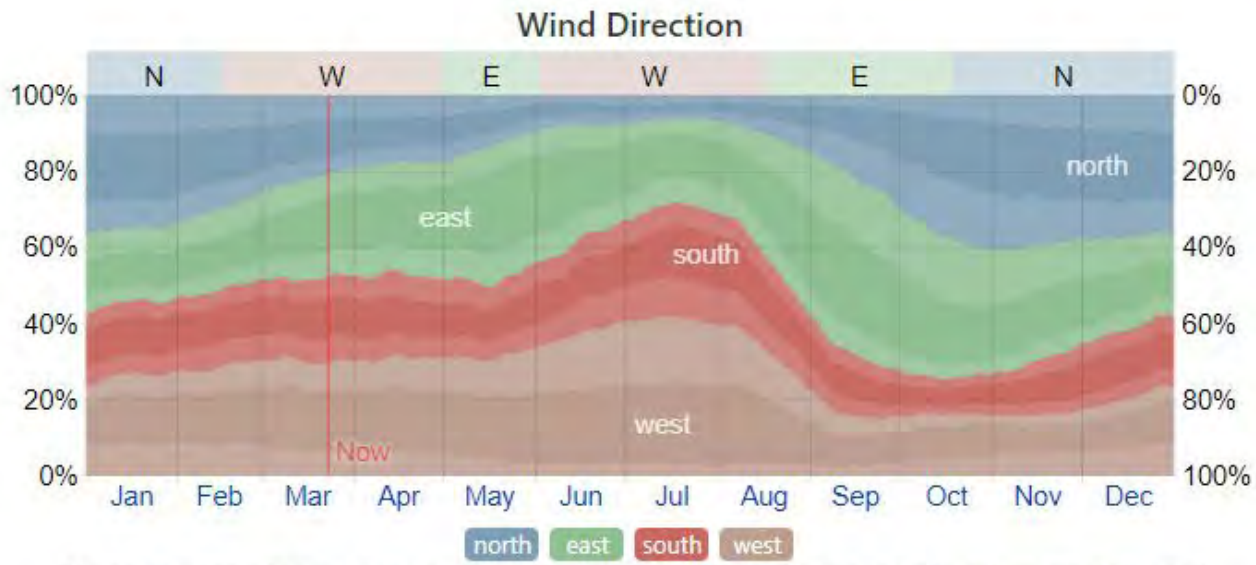

Source: www.rentlingo.com/noise-index

## 6. Climate and Energy



## 6. Climate and Energy

The predominant average hourly wind direction in Gainesville varies throughout the year.
The wind is most often from the west for 2.5 months, from February 15th to April 10th and for 2.5 months, from June 2nd to August 17th, with a peak percentage of 42% on July 16th. The wind is most often from the east for 1.1 months, from April 30th to June 2nd and for 2.0 months, from August 17th to October 18th, with a peak percentage of 47% on September 11th. The wind is most often from north for 3.9 months, from October 18th to February 15th, with a peak percentage of 36% on January !st.



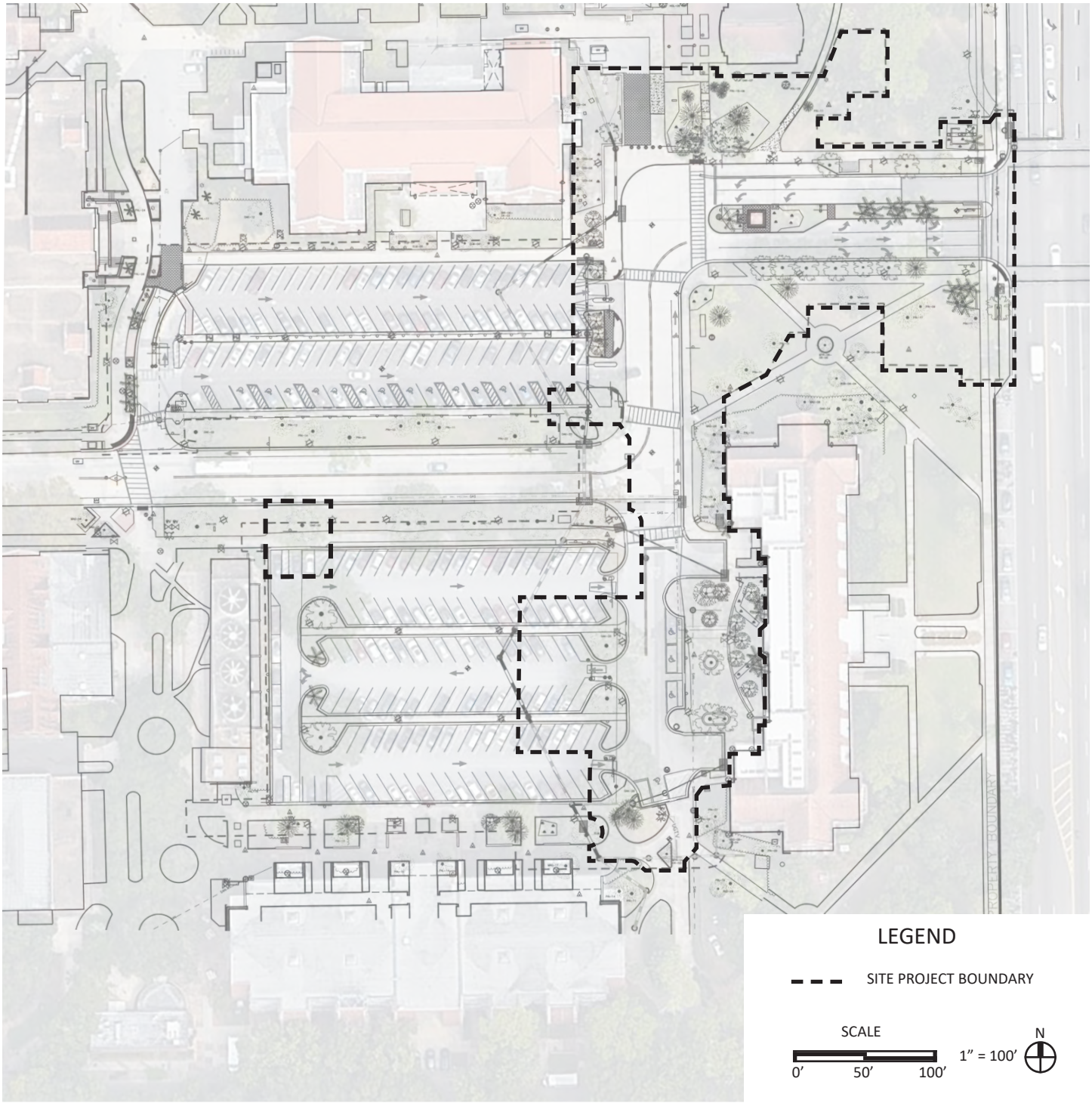

*The percentage of hours in which the mean wind direction is from each of the four cardinal wind directions, excluding hours in which the mean wind speed is less than 1.0 mph. The lightly tinted areas at the boundaries are the percentage of hours spent in the implied intermediate directions (northeast, southeast, southwest, and northwest).*

Source: www.weatherspark.com

# Prerequisite 2.3 | Designate and communicate Vegetation and Soil Protection Zones (VSPZs)

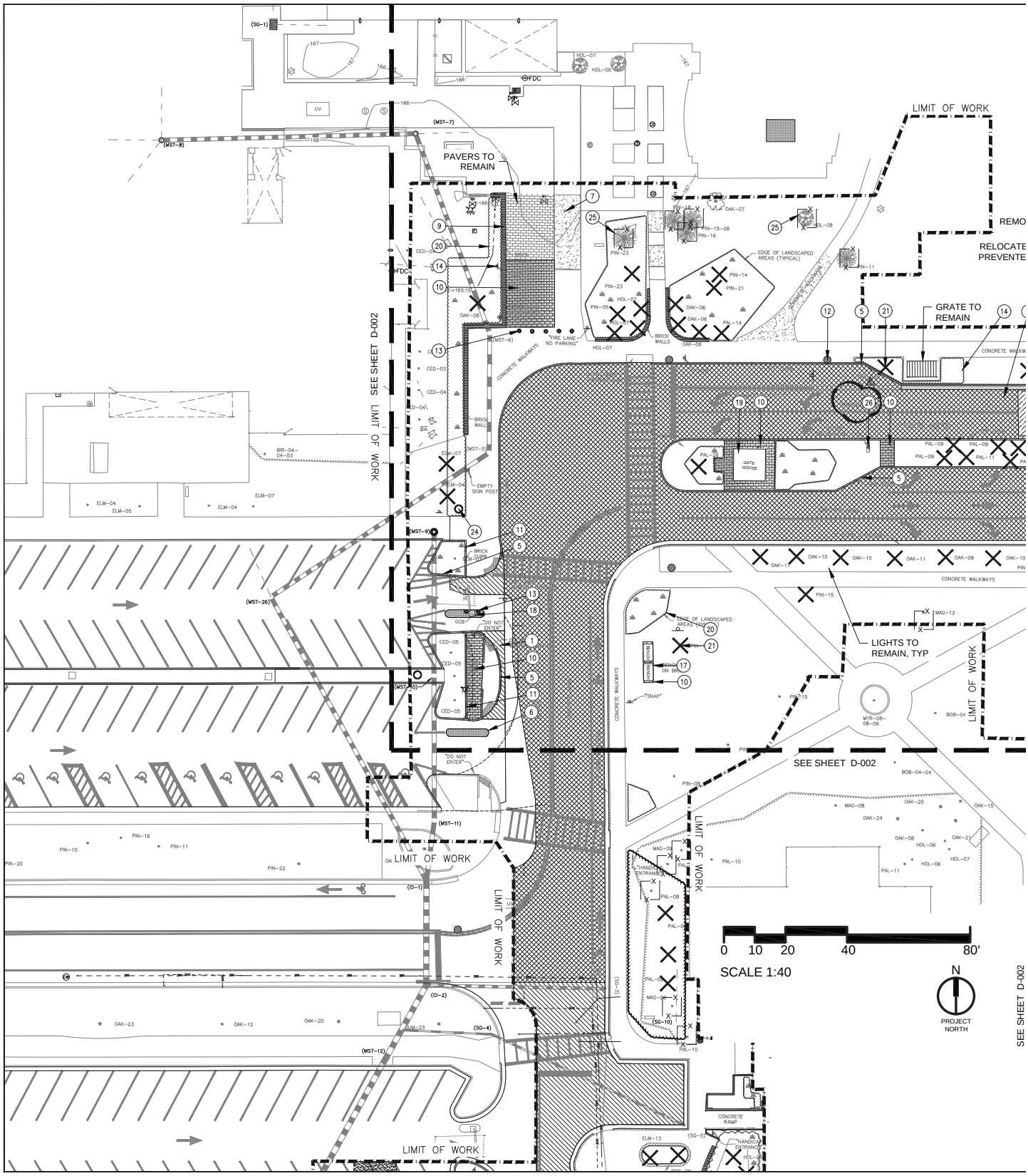
## Site plan

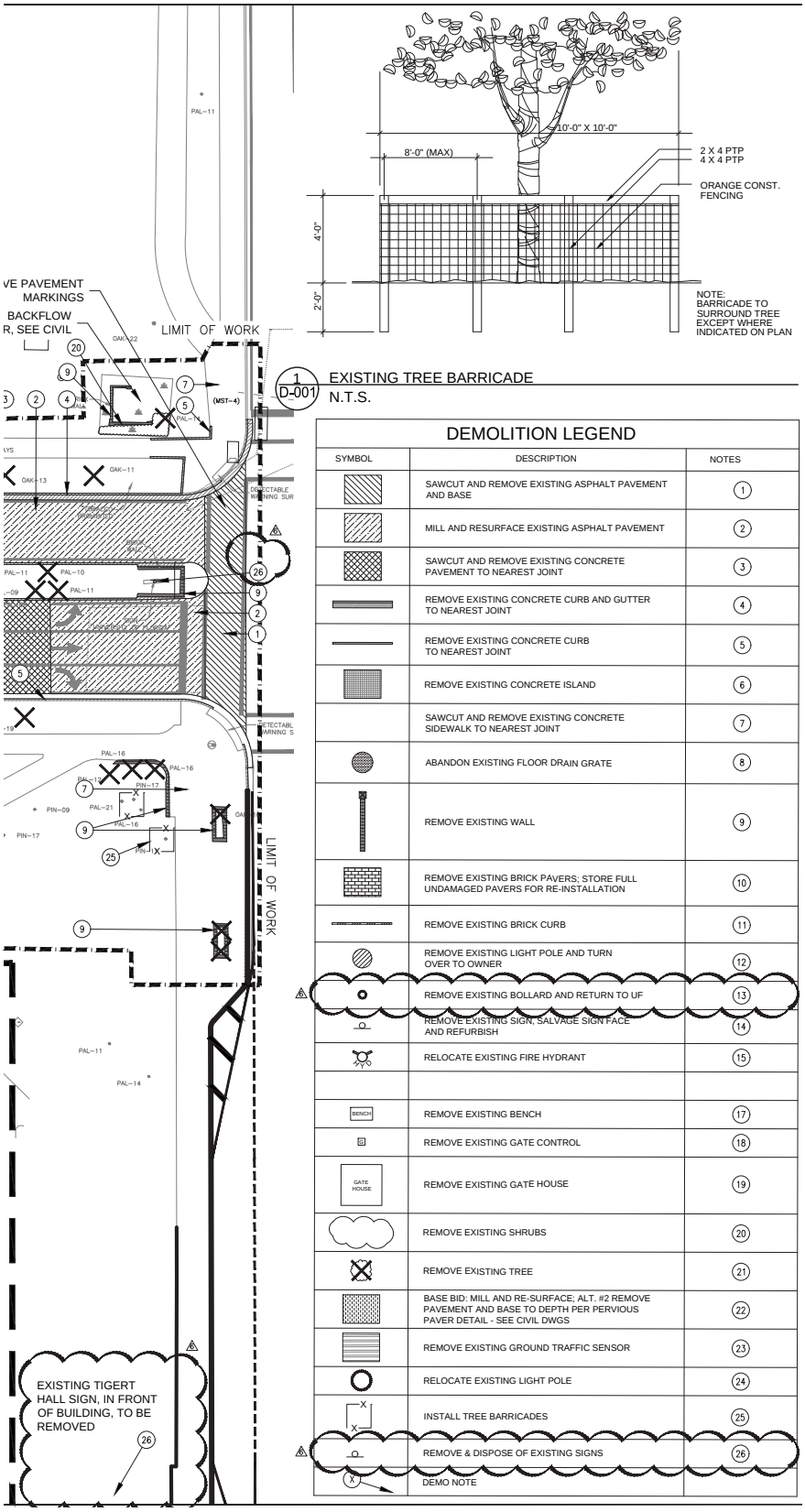
VSPZ boundaries are shown to the greatest extent possible. Due to large size of existing trees the VSPZ boundaries do not meet requirements. Tree protection barriers will be installed around base of tree before construction begins to protect all above ground portions of trees from mechanical damage, protect root systems from compaction, and provide awareness of protected areas to equipment operators. There is to be no staging of construction materials below canopy.



## Photographs of Tree Protection and Signage

## Construction Documents

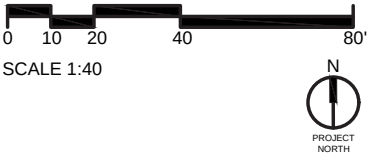








1 D-001 EXISTING TREE BARRICADE
N.T.S.




## DEMOLITION LEGEND

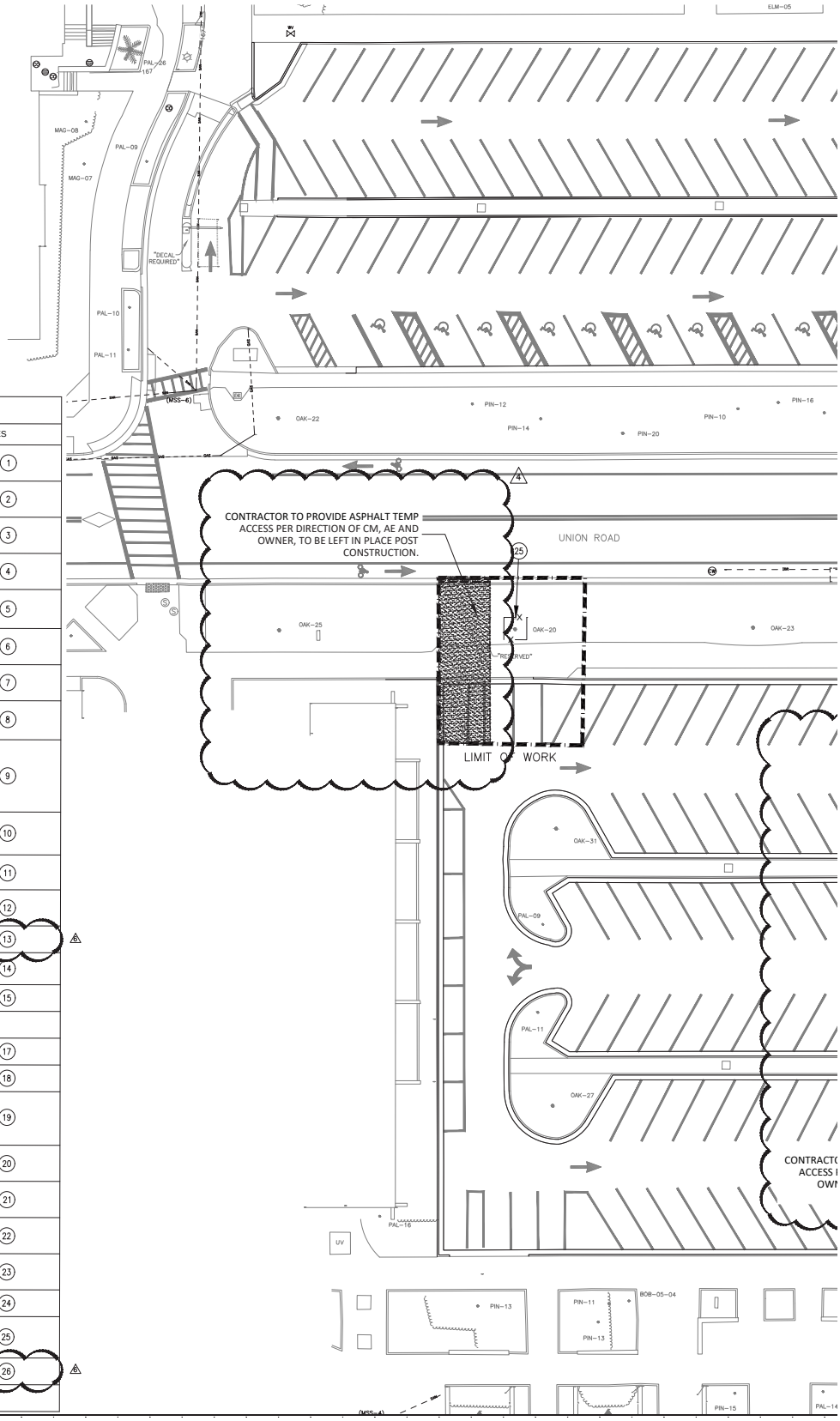
| SYMBOL | DESCRIPTION | NOTES |
|---|---|---|
| | SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT AND BASE | 1 |
| | MILL AND RESURFACE EXISTING ASPHALT PAVEMENT | 2 |
| | SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT TO NEAREST JOINT | 3 |
| | REMOVE EXISTING CONCRETE CURB AND GUTTER TO NEAREST JOINT | 4 |
| | REMOVE EXISTING CONCRETE CURB TO NEAREST JOINT | 5 |
| | REMOVE EXISTING CONCRETE ISLAND | 6 |
| | SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK TO NEAREST JOINT | 7 |
| | ABANDON EXISTING FLOOR DRAIN GRATE | 8 |
| | REMOVE EXISTING WALL | 9 |
| | REMOVE EXISTING BRICK PAVERS; STORE FULL UNDAMAGED PAVERS FOR RE-INSTALLATION | 10 |
| | REMOVE EXISTING BRICK CURB | 11 |
| | REMOVE EXISTING LIGHT POLE AND TURN OVER TO OWNER | 12 |
| | REMOVE EXISTING BOLLARD AND RETURN TO UF | 13 |
| | REMOVE EXISTING SIGN; SALVAGE SIGN FACE AND REFURBISH | 14 |
| | RELOCATE EXISTING FIRE HYDRANT | 15 |
| | | |
| BENCH | REMOVE EXISTING BENCH | 17 |
| | REMOVE EXISTING GATE CONTROL | 18 |
| GATE HOUSE | REMOVE EXISTING GATE HOUSE | 19 |
| | REMOVE EXISTING SHRUBS | 20 |
| | REMOVE EXISTING TREE | 21 |
| | BASE BID: MILL AND RE-SURFACE; ALT. #2 REMOVE PAVEMENT AND BASE TO DEPTH PER PERVIOUS PAVER DETAIL - SEE CIVIL DWGS | 22 |
| | REMOVE EXISTING GROUND TRAFFIC SENSOR | 23 |
| | RELOCATE EXISTING LIGHT POLE | 24 |
| | INSTALL TREE BARRICADES | 25 |
| | REMOVE & DISPOSE OF EXISTING SIGNS | 26 |
| | DEMO NOTE | |

0 10 20 40 80'

SCALE 1:40

N

PROJECT NORTH




## DEMOLITION LEGEND

| SYMBOL | DESCRIPTION | NOTES |
|---|---|---|
| | SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT AND BASE | 1 |
| | MILL AND RESURFACE EXISTING ASPHALT PAVEMENT | 2 |
| | SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT TO NEAREST JOINT | 3 |
| | REMOVE EXISTING CONCRETE CURB AND GUTTER TO NEAREST JOINT | 4 |
| | REMOVE EXISTING CONCRETE CURB TO NEAREST JOINT | 5 |
| | REMOVE EXISTING CONCRETE ISLAND | 6 |
| | SAWCUT AND REMOVE EXISTING CONCRETE SIDEWALK TO NEAREST JOINT | 7 |
| | ABANDON EXISTING FLOOR DRAIN GRATE | 8 |
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| | REMOVE EXISTING BRICK PAVERS; STORE FULL UNDAMAGED PAVERS FOR RE-INSTALLATION | 10 |
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| | | |
| BENCH | REMOVE EXISTING BENCH | 17 |
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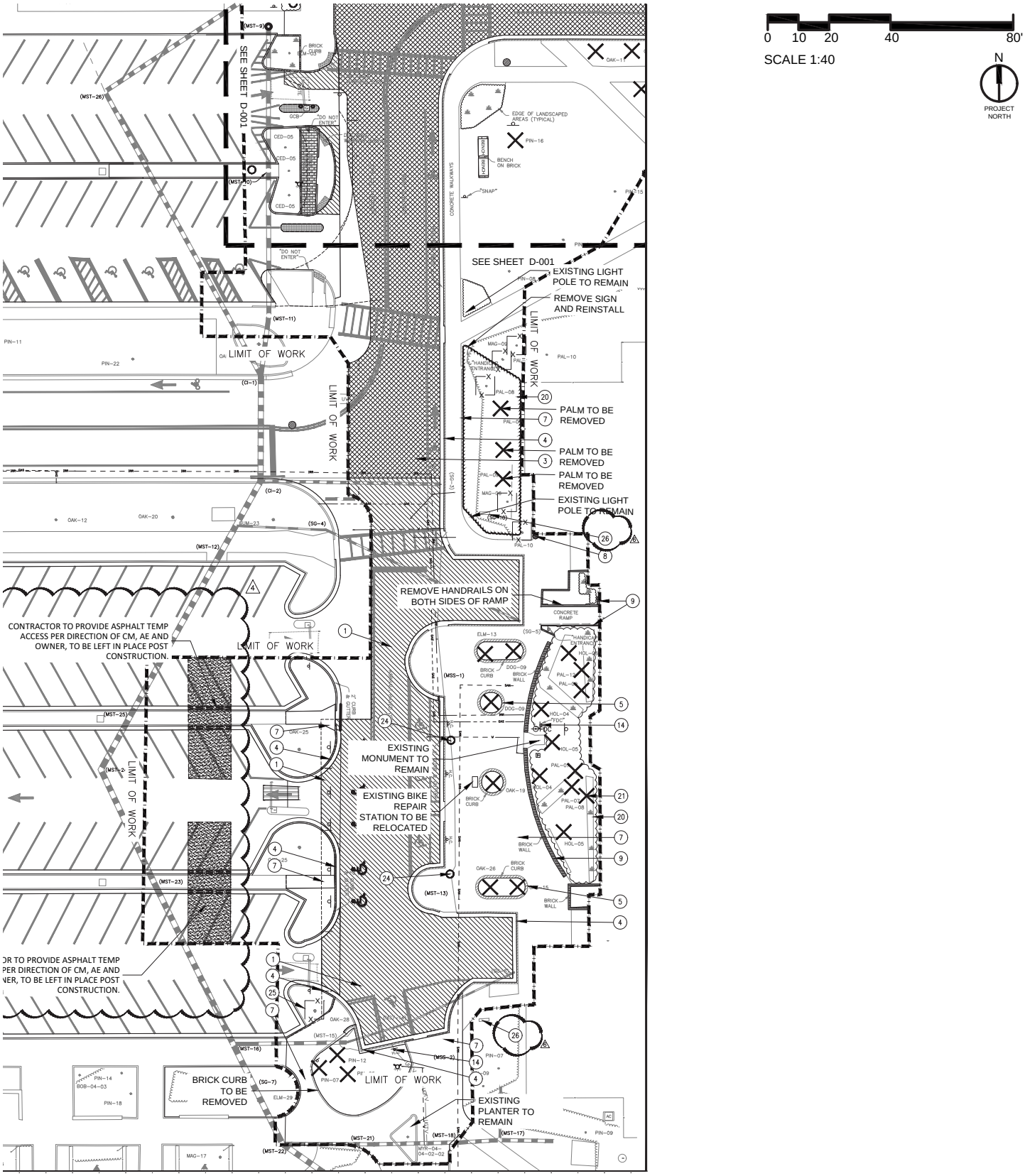
| | REMOVE EXISTING GROUND TRAFFIC SENSOR | 23 |
| | RELOCATE EXISTING LIGHT POLE | 24 |
| X X | INSTALL TREE BARRICADES | 25 |
| | REMOVE & DISPOSE OF EXISTING SIGNS | 26 |
| X | DEMO NOTE | |


0 10 20 40 80'
SCALE 1:40
N
PROJECT NORTH
SEE SHEET D-001
SEE SHEET D-001
EXISTING LIGHT POLE TO REMAIN
REMOVE SIGN AND REINSTALL
LIMIT OF WORK
LIMIT OF WORK
LIMIT OF WORK
PALM TO BE REMOVED
PALM TO BE REMOVED
PALM TO BE REMOVED
EXISTING LIGHT POLE TO REMAIN
REMOVE HANDRAILS ON BOTH SIDES OF RAMP
CONTRACTOR TO PROVIDE ASPHALT TEMP ACCESS PER DIRECTION OF CM, AE AND OWNER, TO BE LEFT IN PLACE POST CONSTRUCTION.
LIMIT OF WORK
EXISTING MONUMENT TO REMAIN
EXISTING BIKE REPAIR STATION TO BE RELOCATED
LIMIT OF WORK
OR TO PROVIDE ASPHALT TEMP PER DIRECTION OF CM, AE AND NER, TO BE LEFT IN PLACE POST CONSTRUCTION.
BRICK CURB TO BE REMOVED
LIMIT OF WORK
EXISTING PLANTER TO REMAIN

## Specifications

31 13 00 SELECTIVE TREE AND SHRUB REMOVAL AND TRIMMING

SECTION 1 – GENERAL

1.1 SUMMARY

A. This section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.

1.2 DEFINITIONS

A. The Protection Zone shall be defined as the area surrounding individual trees or groups of trees to be protected during construction, and is further defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line unless otherwise indicated.

1.3 SUBMITTALS

A. Contractor shall provide product data for each type of product indicated.

B. Contractor shall provide samples for each type of organic mulch in sealed plastic bags labeled with composition of materials by percentage of weight, protection zone fencing, and protection zone signage.

C. Contractor shall provide a written Tree Pruning Schedule detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.

E. Contractor shall provide maintenance recommendations from an arborist, for care and protection of trees affected by construction during and after completing the Work.

F. Contractor shall provide documentation of existing trees and plantings indicated to remain, which shall establish preconstruction conditions that might be misconstrued as damage caused by construction activities.

1.4 QUALITY ASSURANCE

A. Arborist shall be an arborist certified by ISA, be licensed arborist in the jurisdiction where Project is located, and be a current member of ASCA, or registered Consulting Arborist as designated by ASCA.

B. Contractor shall conduct pre-installation conference at the project site.

1.5 PROJECT CONDITIONS

A. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.

2. Parking vehicles or equipment.

3. Foot traffic.

4. Erection of sheds or structures.

5. Impoundment of water.

6. Excavation or other digging unless otherwise indicated.

7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

B. Contractor shall not direct vehicle or equipment exhaust toward protection zones.

C. Contractor shall prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

SECTION 2 – MATERIALS

2.1 MATERIALS

A. Topsoil shall be:

1. Natural or cultivated top layer of the soil profile or manufactured topsoil; containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch in diameter; and free of weeds, roots, and toxic and other non-soil materials.

2. Stockpiled topsoil from areas cleared and grubbed or stripped from locations shown on Drawings or locations stripped as directed by the Utility.

B. Organic Mulch shall be wood and bark chips, free from deleterious materials.

C. Protection-Zone Fencing shall be fencing fixed in position and may be previously used materials when approved by the Utility.

1. Plastic Protection-Zone Fencing shall be plastic construction fencing constructed of high-density extruded and stretched polyethylene fabric with 2-inch maximum opening in pattern and supported by tubular or T-shape galvanized-steel posts spaced not more than 8 feet apart, and shall be non-fading high-

visibility orange in color.

2. The height of the fencing shall be 4 feet.

D. Protection-Zone Signage shall be shop-fabricated, rigid plastic or metal sheet with attachment holes pre-punched and reinforced; and legibly printed with non-fading lettering.

SECTION 3 – EXECUTION

3.1 EXAMINATION AND PREPARATION

A. Contractor shall examine the site to verify that temporary erosion and sedimentation control measures are in place. Contractor shall verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones. Erosion and sedimentation control measures are to be as specified in Division 31 25 00 Erosion and Sedimentation Control.

B. Contractor shall protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Contractor shall protect root systems from ponding, erosion, or excessive wetting caused by dewatering operations.

C. Contractor shall mulch areas inside protection zones and other areas indicated with 4-inch average thickness of organic mulch. Do not place mulch within 6 inches of tree trunks.

3.2 PROTECTION ZONES

A. Contractor shall install protection-zone fencing along edges of protection zones in a manner that will prevent people from easily entering protected area.

B. Contractor shall install protection-zone signage in visibly prominent locations in a manner approved by the Utility.

C. Contractor shall repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by the Utility.

D. Contractor shall maintain protection-zone fencing and signage in good condition as acceptable to the Utility and remove when construction operations are complete and equipment has been removed from the site.

3.3 EXCAVATION

A. Contractor shall excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 31 20 00 Excavation Trenching and Backfilling.

B. Where utility trenches are required within protection zones, the Contractor shall hand excavate under or around tree roots or tunnel under the roots by drilling, auger boring, or pipe jacking. Contractor shall not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning.

C. Contractor shall not allow exposed roots to dry out before placing permanent backfill.

3.7 FIELD QUALITY CONTROL

A. Contractor shall engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

# Credit 2.4 | Engage users and stakeholders

## 1. Site assessment process and program plan — Goal: 3 points

Individual site users and stakeholders who participated in the program plan and site assessment process included those individuals identified in Prerequisite 2.1. They represented the following stakeholder groups:

Students

- Faculty
- University Staff:
  - Grounds
  - Facilities
  - Engineering
  - Security
  - IT
  - University Police
  - UF Planning
  - Environmental Health and Safety
  - Athletics
  - Parking and Transportation
  - University Architect
- University Administration
- University Alumni
- City of Gainesville
- Gainesville Community Redevelopment Agency
- Alachua County
- Gainesville Residents

The Northeast Gateway project was initially conceived as an integral part of the University of Florida Campus Landscape Master Plan, completed in 2020. As a part of the Landscape Master Plan process, Steering and Stakeholder Committees were established to determine desired areas of campus improvement and an overall campus wide approach to sustainability in the future disposition of roads, campus edges, pedestrian ways, water bodies, open spaces, connectivity to the City of Gainesville and other typologies. Steering and Stakeholder Committee members, who are the ultimate suite users and stakeholders, can be found in those committee meeting minutes (See Appendix A).

As a result of the Campus Landscape Master Plan, thirteen Priority Projects were identified, including Northeast Gateway. The initial concept design for Northeast Gateway was created at this Master Plan level. Because of its importance to the future of the campus the University advanced the project for detailed design and construction, resulting in an additional level of design scrutiny and review by five standing committees at UF who reviewed the Northeast Gateway project at both the schematic design and design development stages. These committees are comprised of university faculty with a particular expertise in the subject matter of the committee on which they serve as well as student representatives. Additional committee members include university staff, students, City of Gainesville and Alachua County representatives and other interested and affected parties. Committee members and who they represent can be found in the minutes of each committee meeting (See Appendix A). Minutes of the Parking and Transportation Committee were not made publicly available. Also included are copies of the presentations that were made to each committee at the schematic and design development phases of the project. These committees include Lakes, Vegetation and Landscaping (LVL), Architectural Review Council (ARC), Parking and Transportation, Land Use and Historic Preservation.

Based on the input of site users and stakeholders, the programmatic and functional needs were identified as:

- Establish a design aesthetic befitting a top 5 public university
- Strengthening the existing tree canopy while assuring diversity of species.
- Improving campus wayfinding
- Improving connectivity throughout campus, city, and county
- Designing vehicular areas to accommodate future use by autonomous vehicles
- Incorporating artful and educational treatment of rainwater on campus
- Enhancing campus edges and creating defined gateways to create a more welcoming campus and strengthen connections to the city
- Providing safe accommodations for pedestrians and cyclists
- Creating consistency of design and materials across campus

## 2.Schematic design review

As described above, the Schematic design plans for the Northeast Gateway project were reviewed by the following committees on the dates indicated:

| | |
|---|---|
| • Architectural Review Council | December 1, 2020 |
| • Parking and Transportation | December 8, 2020 |
| • Lakes, Vegetation and Landscaping | December 10, 2020 |
| • Historic Preservation | December 15, 2020 |
| • Land Use | February 2, 2021 |

The schematic design plans for the Northeast Gateway project were presented to the five UF committees at their regularly scheduled meetings. Copies of the minutes of those meetings are attached (See Appendix B). Highlighted on those minutes found in the Appendix for each meeting is an explanation of the details of the presentation made by the design team, along with committee member comments. Requested revisions were made at the Design Development level.

## 3. Design development presentation and review

Design development plans for the Northeast Gateway project were reviewed by the following committees on the dates indicated:

| | |
|---|---|
| • Architectural Review Council | February 2, 2021 |
| • Parking and Transportation | February 9, 2021 |
| • Historic Preservation | February 16, 202 |
| • Lakes, Vegetation and Landscaping | February 22, 2021 |
| • Land Use | March 2, 2021 |

Design development drawings for the Northeast Gateway project were presented to the five review committees at their regularly scheduled meetings. Copies of the minutes of those meetings are attached (See Appendix C). Following each presentation, the committee discussed concerns with appropriateness of design, sustainability, safety and security and other issues of concern to the individual committee members. Each one of the five committees approved the design development drawings as presented. Some requested minor modifications to the drawings and requested modifications, if any, were made as the contract documents were completed.

## 4. Present the design to the public

The design of the Northeast Gateway project was developed during the completion of the UF Campus Landscape Master Plan (LMP), prior to retaining the design team to complete the drawings and specifications for bidding and construction. It was at the LMP stage that the design intent was set.

The previously described Steering Committee and Stakeholder Committee members represented a cross section of the entire UF community. Additionally, during the completion of the LMP, 2 meetings were held at the campus student union, open to the public and any UF faculty, student or university staff member. Those portions of the presentation featuring the Northeast Gateway design from the overall Campus Landscape Master Plan (See Appendix D).

The project was also shared with the public in multiple newspapers. (See Below).

The Gainesville Sun | Gainesville.com

### UF's Northeast Gateway part of efforts to create beautiful, welcoming campus

**Carlos Dougnac and Linda B. Dixon** Guest columnist

Published 6:00 a.m. ET June 28, 2022

The University of Florida has a new "front door" — the Northeast Gateway, which is the first step in turning the core of our campus into a pedestrian realm.

The Northeast Gateway, accessed from University Avenue, is a major portal to our university and now has a look and feel befitting a top-five institution of higher education. The next phase will be the Union Walk project, which will link Tigert Hall to Tower Plaza, Gator (Corner) Plaza and Newell gateway. In time, we will have a primary walkway through campus that showcases the beauty of our buildings and landscape, with memorable spaces for large gatherings.

The university does not control the properties that border the campus — including areas along 13th Street and University Avenue currently under construction, which are governed by the city of Gainesville. That said, our partnership with the city ensures that new developments are complementary and also address needs of our campus community.

The University of Florida's Northeast Gateway UF/Dylan Taylor

We do have say over the greenspace within our campus as a whole — from its edges to its core, its roadways to its natural systems. We have prioritized greenspace in 31 conservation areas within the nearly 2,000 acres that comprise our main campus.

These areas were identified in 1995 and reconfirmed in a collaborative process that included faculty, staff and students in 2005. A similar update process is underway now to develop enhanced management strategies for these areas. Together, nearly one-third of our campus, 457 acres, is in designated conservation areas; another 99 acres are designated in other open space categories.

These conservation areas receive our highest efforts to preserve, manage and protect their natural features and status as native habitats for flora and fauna. We have adopted buffers and restrictions to keep them as natural and pristine as possible given their location within an urban environment.

We have creeks, ponds, wetlands and woods; thousands of trees, including heritage trees and pollinator plants; wildlife that ranges from egrets, eagles, osprey, owls, bats and woodpeckers to deer, otters and Florida's famed alligators.

Our dedication to conservation helps us fulfill our role as a pilot for the Audubon International Cooperative Sanctuary Program — we were, in fact, the first university in the country to set up university-wide environmental planning standards with this nonprofit organization.

Our campus is beautiful and we are constantly finding ways to enhance its natural and built environments. We know that a quality landscape provides an important sense of identity for a collegiate community. It also plays a part in prospective students wanting to attend UF and in the health and happiness of the students, staff and faculty already here.

Inviting outdoor spaces offer our campus community places to gather and collaborate; to ponder and study; to sit quietly and be refreshed.

The University of Florida's Northeast Gateway UF/Dylan Taylor

Our campus offers a respite from the city that surrounds it. I hope you will visit the new Northeast Gateway, take a walk around the courtyard adjacent to Tigert Hall and see for yourself how our vision for a truly spectacular university environment is taking shape.

**The Gainesville Sun 6/28/22**

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### UF plans to create an auto-free zone on campus

*The university will begin construction on two gateway projects in the late Summer*

**By Camila Pereira**
Alligator Staff Writer

In its effort to make a safer and more sustainable campus, UF will begin its first steps this summer to transform the academic core of campus into an auto-free zone.

To accomplish the long-term goal of increasing traffic safety, the university will implement an 86-acre bicycle and pedestrian zone in the heart of campus. This project includes the construction of the Newell and Northeast Gateway projects, which will incorporate more pedestrian access into campus and a connection from UF to the city, respectively.

The changes are expected to make campus easier to navigate as the university works toward becoming more pedestrian-friendly by 2024, Director of Planning Linda Dixon said.

Along with 13 other projects planned to take place over the next three to four years, construction of the two gateways will begin in August, as proposed in UF's Landscape Master Plan.

As a result of the deadly accidents of the last year, the bicycle and pedestrian zone will limit vehicles in the northeastern corner of campus access along Buckman Drive. To maintain transit and auto access, the former one-way Inner Road will now become a two-way road, according to the Transportation and Parking Strategic Plan.

The area will stretch diagonally across the core of campus, uniting the Plaza of the Americas and the Reitz Union Lawn with a curbless, brick-paved walkway that will replace current roadways.

In order to accommodate the construction, UF will eliminate some scooter and vehicle parking within the new auto-free core of campus.

Kim Walsh-Childers, a UF journalism professor, is concerned about whether this parking loss will make finding a parking spot even harder.

"There are faculty who have to drop kids off at daycare, and they can't do

SEE **TRAFFIC SAFETY**, PAGE 4

Mingmei Li / Alligator Staff

Jeremy Mall, 25, a culinary teacher at East Side high school, practices rock climbing in a homemade crop top at The Knot Climbing Gym on Tuesday, June 1, 2021. Mall is an avid "Crop Top Tuesday" participant, and he said climbing in crop tops is "fun and freeing".

### *Fewer parking spots*

**TRAFFIC SAFETY,** from pg. 1

can't do it at 6 o'clock in the morning, or 7 o'clock in the morning, so they have to be able to come to campus at 8:30 and still be able to find parking," Walsh-Childers said.

The Transportation and Parking Strategic Plan suggests reallocating lost parking to areas surrounding the bicycle and pedestrian zone. It also plans to expand existing parking garages and build new ones over the next 10 years.

As the pioneer campus-reform project, the Newell Gateway will be implemented at the intersection of Newell Drive and West University Avenue, converting the roadway on Newell Drive north of Inner Road into a pedestrian walkway as part of the efforts to create a bicycle and pedestrian zone.

New traffic signals will also be implemented on Northwest 16th Street to improve pedestrian safety.

The university permanently removed motorcycle and scooter parking in an area near Library West to accommodate the construction as of May 10, senior director of Transportation and Parking Services Scott Fox wrote in an email.

Paula Mello, a 24-year-old UF English and sustainability studies senior, rides her scooter to and from class. She has struggled to find parking on campus and even shattered her mirrors trying to cram her scooter into the crowded Library West parking lot.

"I feel like parking on campus is always a struggle everywhere, so I feel like getting rid of parking is not a straight out, perfectly great idea," Mello said.

To combat the loss of motorcycle and scooter parking, the Transportation and Parking Strategic Plan recommended implementing six new parking zones. Following the university's goal to reduce internal mobile traffic, these spots will be outside the core of campus.

Meanwhile, the Northeast Gateway will serve as the major connection from UF to the Innovation District in downtown Gainesville, providing a drop-off area next to Tigert Hall.

Because of the new campus vehicle restrictions, RTS bus routes are expected to be rerouted around the bicycle and pedestrian zone, according to the Transportation and Parking Strategic Plan.

Fatima Mirza, a 22-year-old UF alumna, used to take the bus to campus, but after construction started this year she resorted to purchasing a bike to get to her classes.

"I feel that changing the bus routes wouldn't really help students like me and others that heavily rely on that as a means of transportation," she said.

RTS will examine and test out new routes and schedules in hopes of minimizing changes and finding optimal routing for the community, according to the Transportation and Parking Strategic Plan.

Plans for the auto-free zone stem back to 2018, but the Landscape Master Plan and the Transportation and Parking Strategic Plan wasn't adopted until June 2019 by UF's Board of Trustees. Both plans were later evaluated and incorporated into the Campus Master Plan in December 2020, Dixon said.

The university also encourages students, faculty and staff to bike and walk to campus to minimize vehicular traffic.

"To experience that as a more park-like environment that really provides, prioritizes bicycling and walking over vehicles, I think that that will be a very transformational change," Dixon said.

*@CamilaSaPereira*
*cpereira@alligator.org*

**the independent florida alligator 6/7/21**

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‹ Higher Education

### University of Florida Campus Gateway Improvements

Gainesville, FL

VHB is helping fast-track the completion of two new entry gateways to accommodate the University of Florida campus community. The Northeast and Newell Gateways serve as main entries into the campus, at an area where pedestrian safety has been a concern, as well as a link to the Innovation District in Downtown Gainesville.

VHB designers and engineers are working with the University, City of Gainesville, and Florida Department of Transportation on the enhancements, which include moving a gate house on the Northeast Gateway to allow for pedestrian and vehicular-friendly drop-off, adding bicycle and turn lanes, new hardscape with pavers, and a dedicated space for a future art installation. Two parking areas are being retrofitted with environmentally friendly stormwater treatment features via bio-retention swales which will collect stormwater runoff from the asphalt. The run-off will be treated within the swales before entering the stormwater system. The Newell Gateway improvements consist of closing the vehicular driveway at University Avenue and replacing it with a brick-paved plaza.

With features that elevate sustainability and pedestrian safety, The Northeast and Newell Gateways will serve as an important first impression for visitors and students and help orient parking and campus entry for both pedestrians and vehicular traffic.

**Client**
University of Florida

**Services**
Site/Civil Engineering
Stormwater Design & Engineering
Transportation Planning & Engineering

**VHB - https://www.vhb.com/institutions/higher-education/university-of-florida-gateway-improvements/**

# APPENDIX

## A. Appendix for Site assessment process and program plan

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meeting notes

| | | | |
|---|---|---|---|
| To: | Erik Lewis | Date of Meeting: | December 12-14, 2017 |
| Company: | University of Florida | Meeting Number: | 1 |
| Project Name: | Landscape Master Plan | Project No: | |
| RE: | December 12-14, 2017 Campus Visit | | |
| Recorded By: | Ruth Loetterle | | |
| In Attendance: | See below for specific meeting attendees | | |

*Note: Any errors or omissions to meeting note content should be reported to the writer within five working days from date of distribution to ensure reissue; failure to do so establishes the following as record copy.*

**Tuesday, December 12**

Kick-off Meeting
*In attendance: Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, Donald Wishart, DJ Silverberg, David Sowell, Ruth Loetterle*

A review of figures in the Campus Master Plan

Figure 1-1 Planning Sector Boundaries
- UF is divided into Planning Sectors that establish standards for building heights, setbacks, light fixtures.
- Design standard set by the LMP may be more comprehensive in their application

Figure 1-3 Conservation, Green Space Buffers, and Urban Parks
- "Urban Park" designation is reserved for significant open space
- Conservation Areas are to be planted with native species only

Figure 1-4 Open Space Connections
- Pedestrian Connections are to be respected by new projects
- Shared-Use Paths are 12' wide off-street bikeways/trails, some paved in permeable asphalt

Figure 1-5 Open Space Enhancement Priorities
- May inform the selection of 10 projects
- Significant trees – Tree Walk isn't up to date

Figure 1-6 Urban Design Connections
- Emphasis on street trees and a second row of trees behind within City
- Tina Gurucharri has suggested planting native flowering trees as the second row on edge of conservation areas
- Tree mitigation policy currently provides much protection of small trees, but perhaps more protection is needed for large trees. Considering amending policy to allow the funding of site enhancements in lieu of contribution to tree fund
- Archer Road project – traffic slowed to 20 mph, bike lane added, some turning lanes removed, mid-block crossing added (serves 4 hospitals, all destination traffic)

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- Reitz Lawn – General idea is strong – no new planting/replacement in center, shaded N/S linear walks, bike route on N side. Design merits an additional look as funding of projects is beginning – how to route past ballroom and accommodate fire lane; how to separate bikes from peds (if bikes use sides, the placement of benches is complicated); how to enhance links from the north, loading dock between CSE and the HUB intrudes on ped connection (possibly shift to west side of HUB); how to make slope west of Marston usable; how to simplify walks
- Hull Road at 34th discussed as future enhanced west gateway
- Dairy Pond – LA classes have studied, mostly unmanaged, Facilities added concrete pad on N side in 2001 and cleared in last 2 years in response to security concern and effort to keeping plants to under 4'
- Ocala Pond – Dean of Fine Arts interested in enhancing to contribute to entry experience and create usable space, how to provide views and still have wildlife value
- Graham Pond – not natural pond, previously planting of natural edge not maintained and mowing to edge has resumed

Updated Urban Design Connections Plan

- Enhance connections -- between historic core and medical centers (hills on Newell and Central complicate the connection); between Health facilities on 34th and those on Archer; between Cultural Plaza and historic core
- Connection from existing and proposed garages at Lemerand lot to Reitz and past Physics service and observatory will become critical.
- Auto-restricted zone (Buckman to 13th; Stadium to University) – no buses, transit mall with reversible vehicles, incorporation of hydraulic bollards
- Bus routes – heavily used, large vehicles, some are city routes, McCarty is a major transit transfer stop
- Inner Rd is dysfunctional with diagonal parking and bike route
- Scooter management is needed, most users are former bus riders, most live within 1 mile of campus, many in Greek housing east of 13th St and students involved in athletics
- Undergrad parking is available at dorms and at 34th St
- Campus Greenway is part of a 30 mile trail connection to Depot Park

Guidelines

- In addition to furnishings, need to look at memorials and plaques as well as handrails.

**Wednesday, December 13**

Meeting with the Faculty of the College of Design, Construction and Planning
*In attendance: Linda Dixon, Erik Lewis, Tina Gurucharri, Peggy Carr, Dan Manley, Chris Jones, Frank Bellomo, Ruth Loetterle*

Ideas from Dan Manley's fall studios:

- Gator Pond – addressed current addition of untreated stormwater by replacing pipe from parking with vegetated swale
- Turlington Plaza – proposed alternative bus route (Stadium, Buckman, Union, 13th, Inner, Newell, McCarty) to avoid traffic along Newell at Turlington in order to have ped plaza space span the Newell roadway
- N/S bike linkage to E/W bike trail via route west of Black Hall, due to its flatter terrain

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- Woonerf between HUB and Newell – very congested area, conflicts between bus stop and ped connection; (recent shifting of bus stop has helped) students proposed use of Fletcher for return routes, and Buckman only for through route buses

Ideas from Peggy Carr's fall studios:

- Concern with earlier letter that allows Lake Alice to receive untreated campus stormwater; campus needs to model good stormwater management
- Study of campus sinkholes – Ocala, Gator, Dairy, and Liberty – to achieve sedimentation reduction, Lake Alice water quality improvement and nutrient reduction; revealing invisible processes appropriate to the campus aesthetic; proposing intervention for space types; studied precedents for treating field run-off, such as NFL (Foxboro, MA?) and European fields (most nutrient loading from athletic fields, stormwater from the stadium goes to Reitz ravine, causing erosion); studied the balancing of public access with habitat needs and their contribution to the historic campus fabric
- Current and possible campus stormwater treatment – (LID stormwater management techniques have become part of construction standards) basin under building at PK Yonge, O'Connell lot islands with trees, lawn and raised drains, Yulee pit redesign as a detention basin, Reitz Lawn and Vet School dog walk as broad swales

Ideas from Tina Gurucharri's fall studios:

- Opportunity to treat stormwater at campus gateways – Yulee Pit and 34 St to serve as a teaching tool and as a model for the City
- Potential to create parallel systems of swale and perforated pipes on campus for stormwater management
- Opportunity to celebrate/inform students about stormwater – 79% of students interviewed about stormwater on campus were unaware of campus sinkholes

General Campus Input:

- University Avenue – selectively remove walls at back of sidewalk; create a garden walkway within the campus paralleling the sidewalk
- Newell Plaza – work with City to combine NW 16$^{th}$ St with Newell intersection, move shelter, integrating shelter at edge with walls, move scooters out
- Gateways – each should have an element that create a unique photo opportunity
- Tigert Hall – provide a VIP entrance, locating it on the east side would replace curbside parking spaces with a bus stop and add a drop-off loop, locating it on the west side would require coordination with future parking garage
- Bike /pedestrian zones – how to direct compatible usage
- Wayfinding – campus design with visual coherence that intuitively helps navigate a campus
- Service areas – the location of service areas should be restricted from major ped connections

Student Collaboration with LMP Team:

- Dan's students will be photo documenting campus hardscape, which can be shared
- Charrette on Tuesday, February 20 at 4:00 for one of the selected ten spaces, to help students more quickly commit to an idea and study it
- Followed by presentation by LMP team at 6:00

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**Thursday, December 14**

Steering Committee Meeting
*In attendance: Carlos Dougnac, Linda Dixon, Erik Lewis, Mark Helms, Tina Gurucharri, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

- LMP team to meet with Facilities Services staff in January to solicit input – Tom Wichman, Jason Haeseler, and Dustin Jackson.
- Dustin wants to take holistic look at campus stormwater.
- LMP team to meet with Gail Hansen de Chapman of Lakes, Vegetation, and Landscaping Committee in January
- Residential area enhancements are currently undertaken by Housing; Facilities Services does mowing
- Much campus utility work is slated for the next five years, offering great potential for implementing site enhancements. An understanding of the schedule will be helpful in selecting the ten campus areas for study in the LMP, possible conference call prior to the next campus visit
- A rethinking of campus access should be undertaken; LMP team should meet with UF staff needing special campus access to discuss how to do business in the future, not merely continuing the way it has been done in the past

**Proposed Meeting Summary** (including recent meeting invitation/emails)

January 18-19, 2018

- Meet with Tom Wichman, Gail Hansen de Chapman, Jason Haeseler – Thursday, time tbd
- Meet with Nancy Chrystal-Green of Student Affairs – Thursday, time tbd
- Meet with Vice Presidents – Friday, January 19, 10:00 – 11:00
- Stakeholder meeting – Friday, 1:00-4:00
- Debrief with Project Steering Committee – Friday, time tbd

February 2018

- Meet with Project Steering Committee – date/time tbd
- Meet with transportation consulting team – Tuesday, February 20, 1:00 – 2:00
- Charrette and presentation with DCP students – Tuesday, February 20, charrette at 4:00, presentation at 6:00
- Meet with transportation consulting team – Wednesday, February 21, morning

END OF MEETING NOTES

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meeting notes

| | | | |
|---|---|---|---|
| To: | Erik Lewis | Date of Meeting: | January 18-19, 2018 |
| Company: | University of Florida | Meeting Number: | 2 |
| Project Name: | Landscape Master Plan | Project No: | 115095 |
| RE: | January Site Visit | | |
| Recorded By: | Ruth Loetterle | | |
| In Attendance: | See below for specific meeting attendees | | |

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**Thursday, January 18**

Campus Utilities Meeting
*In attendance: Jason Haeseler, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

Sector approach to upgrading utilities

- Campus is divided into 44 sectors, boundaries are typically roadways
- Prioritization of campus utility projects has identified most critical projects on campus. Work on that project is then packaged with all other utility projects within that sector to minimize repeated excavation and repair

Project to interconnect three chiller plants in North districts – at Weil, McCarty, Walker Halls

- All three are at capacity and at end of life, need to interconnect to shed load and make improvements to individual plants
- #1 priority is the connection of Weil and McCarty plants – connection will be taken down Gale Lemerand Dr, between Bldgs 0719 and 0720, and through the Union Lawn
- Connection of McCarty to Walker will be taken east of HUB, up Buckman Dr, east on Union Rd
- New plant at McCarty may be built west of existing, closer to Constans Theatre (Bldg 0150 is one of oldest on campus)
- New plant at Walker will be 2-story – area will be quieter and cooling tower addition to Walker Hall can be returned to Walker for repurposing (or removed)

Bridged sidewalk at Ben Hill Griffin Stadium

- Old track stands were left in place and bridged over; sidewalk (not road) on north side of Stadium Road is on a bridge

Other Projects

- Steam system will be taken through 13th St tunnel to Norman Hall
- Gale Lemerand Garage to start summer 2018
- Garage considered for Tigert Hall would be modelled on garage at Norman Hall

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**Thursday, January 18**

Meeting with the Facilities Services Grounds Department
*In attendance: Jason Haeseler, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Tom Wichman, Grounds Superintendents – Darrell, Donna, James, Phillip, and Russell, Ruth Loetterle*

Campus Furnishings

- Benches – Keystone bench used at POA costs $1800 vs $120 for wooden bench. Dedicated benches installed at Medical campus were in response to a request with limited funds
- Lighting – 7000 fixtures on campus, an annual replacement program would enable the campus to get a better price from vendor
- Brick "tabling" tables – each edge brick is pinned and grouted in place
- Brick walls – brick cap allows for quick and easy repairs, not requiring the ordering of a new cap; precast caps show age with staining and skateboarders use; peaked cap was used at Heavener Hall wall to discourage skate boarders
- Bike racks – owned by Transportation and Parking; white vinyl coated racks are going away
- Receptacles – owned by Resource Management; mixed reviews on Big Belly system; false readings, burst bags, gum on sensors are a problem; have a 10-year contract. Covered receptacles are a must – keep trash from blowing and critters out
- Fountains – Building Maintenance maintains
- Art – piece at Newell Hall was a late addition to the project; multiple points of contact in the turf compounds maintenance
- Signage – location in turf compounds maintenance; lack of uniformity in design, height, alignment, and installation creates visual pollution
- Brick walks – prefer 4" concrete base in high traffic areas, areas subjected to vehicular traffic, or adjacent to trees; bricks set on sand at Fine Arts are settling creating a maintenance headache
- Bollards – removable bollards are not always replaced leaving hole as a hazard
- Standards should reflect district identities
- "Or equal" clause is required; campus bikeway project was a DOT project and an exception

Planting

- Turf – tailgating occurs on any lawn area, damaging lawns; Ole Miss has good quality turf despite tailgating
- Importance of the right plant in the right place
- Hammocks – haven't seen damage to trees, but beds get trampled by students accessing hammocks; tight spacing of palms at Newell Hall to accommodate hammocks requires hand mowing
- Large beds are a problem for maintenance

Operations

- Parking spaces and access – spaces need to be provided so staff don't have to pull off on lawn areas; service area at New Chemistry is good; service along Stadium Rd east is challenging
- Move-in/move-out days challenge lawn
- Steam lines – problematic—killed large live oak on Museum Rd; agave gardens are low maintenance solution where there are leaks
- Irrigation – two systems on campus, Weathermatic and Rain Bird; drip irrigation installed on LEED projects is hard to maintain; prefer rotors in lawn areas and pop-ups in plant beds

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- In-house construction – boardwalks, stairs, porches, walks, brick walls
- Dumpsters – need to be effectively screened, use of compactors would eliminate four dumpsters, but footprint is bigger
- Lifts used for building washing – parked in the landscape on the east campus to minimize travelling time back to Facilities Services
- Golf carts - trying to limit use, other campuses have had problems

Top ten areas of campus for improvement

- North lawn at Ben Hill Griffin Stadium – traffic should be kept off except for game day; poor quality lawn, roots of trees exposed in detention pond; trucks take short cuts through the area
- West side of Buckman Drive – tired landscape, palms planted at New Chemistry, planters installed by Facilities remedied former worn dirt areas; originally Washingtonian Palms; Date palms flank street north of University Ave
- Physics – where live oak was lost; replanting has been designed and plants are ordered; connection to new parking garage south of Physics is complicated; steam tunnel passes through the area, helium storage for all of campus in SE corner of Physics, sludge trucks pass through area weekly from Water Reclamation Sludge Bldg to the south out to Gale Lemerand Dr.
- Fine Arts Courtyard – preliminary study has been done
- Reitz Union Hotel drop-off and South Side of Bookstore – area between Bldgs 0719 and 0720, west of Reitz Union is most intense utility corridor on campus; pedestrian problem exists at corner of Reitz Union Dr and Museum Rd
- East of HUB

Other campus areas for improvement

- South side of Shands on north side of Archer Rd – tired landscape, poor lawn, drainage problems; area to become a staging area for two years during construction of chilled water line
- Northwest corner of Norman Hall – heavy tailgating challenges the landscape
- Service areas in the historic core in general – services need to be consolidated, dumpsters need to be effectively addressed, parking needs to be provided so trucks don't block walks or park on lawn
- Specific service areas in the historic core – east side of Library West, northwest corner of Turlington Hall (terminus of view travelling south on Buckman Dr); Sisler Hall service area compromises nice courtyard on north side
- Tigert Hall – west side is unattractive, landscape on east side is tired, contractors park on lawn at south side
- West side of Broward Hall – dining hall formerly in building
- Weedy slope along 13th St at Cypress Hall

*Action Item: Tom Wichman to provide list of plants that work well on campus*

Next Meeting: April 2017

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**Thursday, January 18**

Lunch Meeting with Gail Hansen
*In attendance: Gail Hansen, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, Ruth Loetterle*

Areas for campus improvement

- South Side of Lake Alice – tall grasses obscure views to lake, removal and addition of a walkway would open lake to greater use
- Botanical garden –UF is a land grant university without a botanical garden; Wilmot Gardens is maintained by townspeople/master gardeners
- Hull Rd entrance – street trees in first section

Possible list of ten areas for conceptual design

1. Stadium Road West
2. Inner Road
3. Union Road
4. Newell Drive
5. A gateway
6. South side of Physics
7. Dairy Pond and connections
8. Area between Wertheim addition and Reitz Union
9. University Avenue – two paths, on either side of walls, bike path component
10. A creek
11. Business School courtyard

**Thursday, January 18**

Meeting with Student Affairs re NHPC and MGC site selection
*In attendance: Nancy Chrystal-Green, Reggie Lane, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, Ruth Loetterle*

Goals for NPHC and MGC sites

- Recognition of their presence on campus and communication of their presence to prospective students
- Incorporation of reverence, some rituals may be associated
- Do not need to accommodate performance space; that will remain in Turlington Plaza
- Coming out is associated with a photo op
- Recommend two separate sites
- Could be in pavement with an associated plaque in benches/wall
- Possible sites east of Constans Theatre and on redesigned entry walks to Union Lawn

NPHC and MGC

- NPHC member organizations are fixed at nine nationally
- MGC member organizations could expand beyond the current eleven
- Campus membership of individual organizations is between 3 and 40

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**Friday, January 19**

Meeting with Project Steering Committee
*In attendance: Carlos Dougnac, Linda Dixon, Erik Lewis, Mark Helms, Tina Gurucharri, Chris Jones, Frank Bellomo, Ruth Loetterle*

LMP should provide direction for residence halls

LMP should provide direction to guide infill of first floor of Reitz Union ballroom

UF would benefit from having a campus landscape architect in PDC and another LA in operations

LMP guidelines will be incorporated into UF's Design Guidelines

Street sections in LMP will establish build-to lines

Campus lighting should be Dark Sky compliant

*Action Item: Contact student group doing research on pedestrian tunnel safety*

**Friday, January 19**

Meeting with Charlie Lane and Curtis Reynolds
*In attendance: Charlie Lane, Curtis Reynolds, Carlos Dougnac, Linda Dixon, Erik Lewis, Mark Helms, Tina Gurucharri, Chris Jones, Frank Bellomo, Ruth Loetterle*

University Trustees want UF to become one of the nation's Top Five Public Universities

Strengthening the campus core

- Closing Union Road to vehicular traffic (including buses) would be transformative
- Important to communicate these transformative moves and the walking distance of 2 minutes

Establishing a unified image for UF

- Many tired spaces
- Sixteen college and sixteen institutes at UF pose a challenge to establishing a unified image
- North and south campuses lack a consistent language
- Unified streets with an appropriate scale and consistent canopy are essential
- LMP should provide the Cultural Plaza with a palette
- Overhead wires will be going away in five years

Campus introductions

- Lawn north of Ben Hill Griffin stadium provides introduction to UF from the west (Athletics is concerned about RV parking on lawn north of stadium; consider parking RV by new baseball field)
- Intersection of Museum with 13th provides introduction to UF when approached from the south (wooded edge just to the south could provide a new opportunity)
- Replacement of the electronic marquees at 34th St and Gale Lemerand Dr can be considered

Implementing the LMP

- Campus projects have a $2 mil threshold; keeping some projects under this amount would assist implementation
- Important to implement projects giving the "biggest bang for the buck".
- Identification of 8-10 areas for refreshing by in-house Facilities staff would assist implementation

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**Friday, January 19**

Meeting with Stakeholder Committee
*In attendance: Linda Dixon, Erik Lewis, Peggy Carr, Christopher Nelson, Wendy Thomas, Cydney McGlothlin, Howie Ferguson, Jason Haeseler, Matt Williams, Gail Hansen, John Barrow, Katerie Gladdys, Mario Agosto, Gregg Clarke, Tom Wichman, Mark Clarke, Hal Knowles, Andrew Meeker, William Waters, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

Suggestions for campus enhancement

- Improve campus wayfinding
- Provide sidewalk on west side of 13th St at Cypress Hall, possibly by eliminating median in 13th St
- Connect county, city, campus – Pace/Pause/Percolation. Pavement to Ponds, Plants to People
- Use topo change as rationale for design change
- Construct garages with ability for future conversion to building space
- Design roads with look to future use by AV vehicles and smaller roadway widths
- Incorporate artful, educational treatment of rainwater on campus
- Extend walkway inside walls along University Ave further west
- Enhance pedestrian connection from business school through Carlton Plaza to Gator Pond; consider removal of Little Hall Express so that connection terminates at Gator Pond (improvements to cooling tower will allow appendage to Walker to be removed or repurposed)
- Broward entry
- East side of Broward dining
- East side of Constans Theatre
- Stadium St – a well-used route for students living east of campus, still too much emphasis on cars
- Dedicated drop-off north side of Library, a safe "kiss and go"

Top ten areas of campus for improvement

- Enhance campus edges – building in flexibility in plan to allow for adaptation and updating
- Create symbolic entry points for the campus that create a sense of place
- Connect campus to Downtown at 2nd Ave – to encourage students to explore Downtown
- Provide space for a kiss and go drop-off
- Reconnect the heart of the campus – prospective students are not excited by Union Lawn, excitement starts at Marston/POA
- Interconnect campus green spaces and open space; create a large central green space that other campuses have
- Emphasize a regional sense of place
- Emphasize water on campus – enhance ponds, create walkways/boardwalk at Lake Alice; integrate ponds into LID; use art to help students visualize water cycle on campus
- Accommodate pedestrians and cyclists
- Activate Stadium Road east with public art – provide drop-off for unloading of heavy art materials
- Address and enhance services areas
- Consider turf growth when planting trees (no options for shade-loving turf)
- Provide planting standards so that tired plantings can be replaced
- Create consistency across campus

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**Friday, January 19**

Meeting with Dan Manley's Landscape Architectural students
*In attendance: Dan Manley and 15 students, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

Variety of paving types exist on campus; predominantly concrete pavement; grass curb is used at bat houses

Variety of wall types exist on campus; complementary vs consistency discussion

*Action Item: Dan Manley to forward students' analysis and campus photos*

END OF MEETING NOTES

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meeting notes

| | | | |
|---|---|---|---|
| To: | Erik Lewis | Date of Meeting: | January 26, 2018 |
| Company: | University of Florida | Meeting Number: | 3 |
| Project Name: | Landscape Master Plan | Project No: | PL-00012 |
| RE: | Project Areas for Conceptual Design | | |
| Recorded By: | Ruth Loetterle | | |
| In Attendance: | *Carlos Dougnac, Linda Dixon, Erik Lewis, Mark Helms, Tina Gurucharri, Chris Jones, Ruth Loetterle* | | |

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Thirteen campus project areas were selected for conceptual design, expanding the number from the original ten to allow the incorporation of the four civic spaces identified by the Strategic Development Plan. The projects were selected to include a variety of campus spaces to serve as typologies to guide the improvement of other similar projects. Three of the areas were identified as "transformative" projects on a campus-wide scale. All thirteen projects will be highly impactful.

Three Transformative Projects

1. Union Road from Tigert Hall to Dauer Hall
2. Turlington Plaza
3. Gator (Corner) Plaza (the intersection of Stadium Road and Gale Lemerand Drive)

Impactful Campus Projects

4. North lawn of Ben Hill Griffin Stadium
5. Gateway at the intersection of Newell Drive and University Avenue, including campus edges and Newell Drive to meet the recent reconstruction of Newell Drive at the Plaza of the Americas
6. Business School courtyard behind Matherly Hall
7. Gateway at 2nd Avenue and rear of Tigert Hall
8. Inner Road
9. East end of the Union Lawn – Dairy Pond/South and west sides of Marston/East and south side of the HUB, including the recognition of the NPHC and MGC in the important connective spaces south of Marston and east of the HUB
10. Stadium Road from Turlington Plaza to Gator Plaza
11. North side and west end of the Union Lawn
12. Linkage of Union Lawn to Museum Road
13. Pedestrian/bike linkage of Museum Road to Gale Lemerand Drive south of Physics and to Center Dr

The selected areas represent the following important typologies for the UF campus:

- pedestrian gateway
- vehicular gateway
- courtyard
- pond
- vehicular core street

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- non-vehicular core street
- campus edge
- bike/ped corridor
- service area

Other important areas for improvement, such as the campus edges along University Avenue / 13th Street, housing courtyards, and Newell Drive south of Inner Road will be addressed in the guidelines, on the overall Landscape Master Plan drawing, and in street sections, where appropriate. Their future improvement will also be guided by the conceptual design for the relevant typology.

The LMP Guidelines will address the incorporation of public art into the campus.

CRJA will follow up with an estimated fee for the increased scope.

END OF MEETING NOTES

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meeting notes

| | | | |
|---|---|---|---|
| To: | Erik Lewis | Date of Meeting: | February 20-21, 2018 |
| Company: | University of Florida | Meeting Number: | 3 |
| Project Name: | Landscape Master Plan | Project No: | PL-00012 |
| RE: | February Site Visit | | |
| Recorded By: | Ruth Loetterle | | |
| In Attendance: | See below for specific meeting attendees | | |

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**Tuesday, February 20**

Stadium North Lawn Meeting
*In attendance: Laird Veatch, Bill Smith, Erik Lewis, Chris Jones, Frank Bellomo, Ruth Loetterle*

Athletics wants to improve the stadium area as the northwest gateway to the campus

- Athletics Department is embracing Collegiate Gothic; development of Gator (Corner) Plaza will need to blend this new approach with previous approach
- Future enhancement of the front porch of the stadium will be built within the same footprint
- Support the replacement of the existing entry signs – they block views of the stadium area

Hospitality emphasis on game days for north lawn (see attached plan provided by Athletics)

- Maximize open, level lawn for use on game days – will require removal of some trees
- Desire symmetrical treatment of north lawn
- Tents for major donors will be erected flanking the central walk
- Music an Gator garden
- Major donor parking along east, west sides, perhaps on former roadbed of northbound Gale Lemerand
- Dumpsters located near chillers at SE corner, but is a major student approach
- Stormwater detention alternatives to expand level area – allow shallow detention over the whole site; shift eastern basin further east; exfiltration is not compatible with large vehicles

**Tuesday, February 20**

Meeting on site regarding the Newell Drive /16th Street intersection at University Ave
*In attendance: Deborah Leistner, Emmanuel Posadas, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, Ruth Loetterle*

- Gainesville is currently funding a pedestrian crossing study; traffic movement is being videotaped
- The City is open to expanding the intersection to allow crossing in line with both streets
- The City would consider informally closing the block of NW 16th St between 1st Ave NW and W University Ave to vehicular traffic through the placement of planters to help simplify the intersection at University
- Possible routing of bicycle traffic to 16th St north of University to promote a safe crossing of University at 16th Street

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**Friday, February 21**

Joint Transportation and Landscape Master Planning Teams Meeting
*In attendance: Carlos Dougnac, Craig Hill, Scott Fox, Tina Gurucharri, Linda Dixon, Erik Lewis, Nat Grier, Rohan Sadhai, Jordan Crandall, Chris Jones, Frank Bellomo, Ruth Loetterle*

Enhancement of campus edges

- Provision of sidewalk along 13th Street adjacent to Cypress Hall – parking for disabled residents and caregivers at Cypress Hall is required
- Removal of parking between Buckman and Fletcher Drives and relocation of scooter parking to this area – lot currently accommodates Bull Gator parking on game days
- Creation of additional Kiss and Ride locations at campus edges – in front of Tigert Hall?
- Advisable to get ahead of Uber/Lyft use and provide designated pick-up/drop-off area at campus edges

Ped/Bike Gateways

- Identify gateways at Stadium Road and Newell Drive as ped/bike entries
- Offset of campus and City streets to be incorporated into a single large gateway, to which bike routes in the City are directed for safe crossing of University Ave and 13th Street

Impact of the expansion of non-vehicular zone:

- Accommodation of access to evening performances at Auditorium and the Music Bldg.
- Accommodation of disabled staff and students
- Integration of University shuttle with RTS – linear transfer station along Museum Road? RTS stops along perimeter with expanded University shuttle system?
- Rerouting of University 100 series bus routes that currently use Union Road and Newell Drive to turn around at the center of campus
- Precludes Newell Drive as dedicated bus route from University to Medical Center in response to the City's wayfinding concerns; signage and clarity of landscape can address
- Move in/move out days – possible solutions using scheduling, carts, and volunteer moving assistance
- Additional enforcement on game days; possible pre-assignment of tailgating space

Redesign of Inner Road:

- Accommodation of increased evening discharge at Inner Road – light is currently slow
- Creation of cycle track on Inner Road; will need to accommodate crossings of three major N/S campus pedestrian routes – at either side of DCP and at Ocala for pedestrian traffic from tunnel
- Restriping of Inner Road – RTS needs an 11' min lane width; can get by with 10.5'
- Enlargement of turning radius at Inner Road and Newell Drive – existing radius at Buckman Drive and Union Road is inadequate for buses

Enhancement of Stadium Road:

- 15' wide vehicular lanes offer space for bike lanes
- While traffic speed could accommodate mixing of bikes and vehicles, consistency in bike ways for campus should be the goal; buffered bike lanes could be created as the first phase
- Cycle track is less compatible with the large number of destinations along Stadium Road

Transportation MP milestones – recommendations to be made in April/May with final report in mid/late summer; these are similar to Landscape MP milestones

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**Friday, February 21**

Meeting with Operations Staff and Joint Transportation and Landscape Master Planning Teams
*In attendance: Carlos Dougnac, Craig Hill, Scott Fox, Linda Dixon, Erik Lewis, Katie Karwan, Jason Haeseler, Derrick Bacon, Gregg Clarke, Chief Linda Stump, Lisa Deal, Bill Properzio, _____ (man sitting between Jason and Derrick Bacon at the corner), Nat Grier, Rohan Sadhai, Jordan Crandall, Chris Jones, Frank Bellomo, Ruth Loetterle*

Impact of the expansion of non-vehicular zone:

- Accommodation of reduction in parking, both accessible and other – possible expansion of parking at Hough Hall by employing 90 degree parking
- Accommodation/enhancement of transit facilities to ensure that ridership is not negatively affected; dedicated Newell Avenue bus does not need to be advanced
- Accommodation of service and delivery vehicles – analysis of St. Augustine's accommodation of service vehicles may serve as a guide; ped/bike ways will be constructed to accommodate heavy loading
- Attention to safety issues for nighttime movement on campus; current exploration of bringing evening classes to Historic Core for issues of safety
- Provision of adequate lighting for movement throughout the non-vehicular zone
- Adjustments to Fed Ex and UPS, and other private delivery services as they will be restricted from use of ped/bike ways; Business School is a regular recipient; UF will need to explore alternatives – development of a University delivery system to individual buildings (in use at other institutions); provision of designated parking spaces for walk-in delivery by private delivery to buildings (currently in practice at Oaks Mall); possible increase to pricing structure
- Adjustments to current loading areas such as at Fine Arts for delivery/drop-off of materials; gas deliveries to Chemistry and Williamson will not be affected
- Modifications to waste collection to be considered – possibly consolidated spaces for waste collection with ease of access; use of compactors to reduce number of locations; some areas may be walked in
- Continuation of early morning trash collection for issues of safety in busy areas
- Consideration and incorporation of Facilities Services zoned service areas proposed by Mark Helms to provide easier access to materials
- Facilitation of a cultural change among Facilities Service staff
- Accommodation of new routes such as Inner Road for two-way bus traffic, ensuring radii are adequate
- Employment of different bollard system, technology-operated, for safety – ensure that space adjacent to bollards does not permit movement around the bollards, especially for very public areas such as the O'Connell Center
- Adjustment in University policy regarding scooters
- Facilitation of a cultural shift among the community to ensure that vehicles do not use ped/bike ways
- Enhancement of service areas – the service area at Hernandez Hall is a good model
- Accommodation of City and RTS concerns re University/Downtown transit connections – accommodate City bus turnaround at Tigert Hall, possible bus pull-off in front of Tigert

Additional Post-meeting input

- Consider providing dedicated service parking at ends of three north/south pedestrian routes that occur between Newell Drive and SW 13th Street

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**Friday, February 21**

Meeting with CPPEC

*In attendance: Charlie Lane, Joseph Glover, Curtis Reynolds, Carlos Dougnac, Craig Hill, Scott Fox, Tom Mitchell, Mike McKee, Brad Pollitt, Laird Veatch, _____,_____,_____,_____,_____,_____ (see below), Linda Dixon, Erik Lewis, Nat Grier, Rohan Sadhai, Jordan Crandall, Chris Jones, Frank Bellomo, Ruth Loetterle*

General Comments

- Increase in online/asynchronous learning should be kept in mind; limit is unknown
- Decline in after 5:00 pm classes has declined due to shortage of space; space is now available
- Positive reduction in perceived barriers to City
- Enhanced access to green space
- Increased areas for enjoyment be visiting alums
- Provision of raised "stage" areas at Turlington is a positive addition
- Walls at campus edges were a response to jay-walking; MTPO study considered mid-block crossings at 16 and 19th
- A great opportunity, will require a cultural change, like other changes at an institution; it will be initially uncomfortable and then become accepted

Campus Gateways

- Athletics wants to develop the area north of the stadium as the NW campus gateway; shifting of Gale Lemerand Drive and elimination of marquee are positive changes
- Gateways should be considered for other locations, especially the Medical Center area
- Official entrance to the campus is currently unclear
- Gateways could be enhanced with the pairing of a defining moment with each gateway
- Gateway at 34th Street and Hull Road should be enhanced to better incorporate the area into the campus

*Unnamed attendees: two women on either side of Tom Mitchell, woman sitting next to James Glover, woman sitting next to Ruth, man sitting between Scott Fox and Carlos Dougnac, and man sitting between Brad Pollitt and Curtis Reynolds -- David Guzick, Cheryl Gater, Gene Herring, Karen Rice, Colt Little were all invited to the meeting…*

END OF MEETING NOTES

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meeting notes

| | | | |
|---|---|---|---|
| To: | Erik Lewis | Date of Meeting: | April 9-10, 2018 |
| Company: | University of Florida | Meeting Number: | 4 |
| Project Name: | Landscape Master Plan | Project No: | PL-00012 |
| RE: | April Site Visit | | |
| Recorded By: | Ruth Loetterle | | |
| In Attendance: | See below for specific meeting attendees | | |

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**Monday, April 9**

Team Meeting

*In attendance: Carlos Dougnac, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

Master Plan

- Differentiate existing vs proposed trees
- Low walls do effectively control pedestrian movement—Buckman and Stadium Rd West wall is successful
- New garage at Gale Lemerand will have an associated bus stop
- Date palm disease is challenging trees

Union Road

- Show and widen crosswalk at Union Rd and Buckman Dr

Tigert Court

- Only one inbound lane is needed; give additional space to median or to side
- Cost of relocating backflow preventer is $100,000; Linda supports
- Guardhouse should be on driver's side; provides tokens to enable VIP parking and directions to visitors

Newell Court

- Expand pedestrian crosswalk to include all of NW 16th St

Century Tower Plaza

- Century Tower Plaza is a good name
- Seatwall at potato is functional; serves as a meeting place within plaza; provide seatwall adjacent to potato to continue it as a landmark for meeting

Union Lawn East

- Panhellenic group performances involve 10-20 performers and 100 observers; would like to use terrace
- Gatherings at the monuments would probably number 10-12 persons
- Pinning ceremonies would not occur at the monuments

Inner Road

- Address pedestrian and bike crossings at eastern end; directing pedestrians to W 13th intersection and bicycles further west

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Stadium Road West

- Keep crosswalk/raised table at Fletcher limited to normal width; widening for entire block would further embolden pedestrians

Stadium Plaza

- All pavement at Gator at Ben Hill Griffin Stadium will be demolished for utilities
- Provide trees for shade at sitting steps
- Use of area as pedestrian space on game day contingent on a second parking exit onto Stadium Rd west of the plaza, so that buses can make loops
- Lighting—Scott Stricklin wants to use traditional; Linda supports a modern design
- Shade trees should replace palms

**Tuesday, April 10**

Stakeholder Meeting and Post Meeting Input

Master Plan

- Maximize shade for pedestrian spaces and corridors
- Cypress trees could help to visually connect water bodies and courses on campus
- Enhance connection to Reitz Union from McCarty bus stop to promote engagement with Liberty pond; possible overlook, replacement of fencing, widen walk at bus stop
- University Ave—proposed treatment should extend west past DOT-owned triangle; service drive needed parallel to University between west of Fletcher to provide parking access
- Ocala Pond is in good health
- New scooter parking locations—VHB input
- Wall and agave planting in W 13th median controls pedestrian crossings
- New baseball stadium will include parking for 500 cars; stadium will hold 100,000; possible parking at Flavet Field

Union Road

- Simplification of Turlington service area—compactor serving many adjacent buildings to be supplemented by dispersed locations; round structure removed; lift removed and service dock partially walled and converted to terrace; much expense went into screening of service area from Pugh Hall

Tigert Court

- Three outbound lanes may/may not be needed
- Smaller buses, not full-size city buses, will be entering court
- HC spaces currently needed for Walker Hall
- Provide for bicycle access, bicyclists currently avoid the entry

Century Tower Plaza

- Official name of stone is “Turlington Rock”; is multi-ton stone; plans for specialty lighting (e.g., celebrating game days and holidays) to await new location
- Uplighting to be added under overhang of Turlington Hall
- Front door of Turlington is not visible when approaching from the northeast, address tall brick wall and stairs
- Square corners of tabling tables should be rounded

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Union Lawn East

- Dancing—new members are presented on two weekends during the year; many performances—20 groups each presenting for two hours
- 1st Fridays of the month and Founder's Day—music at noontime class change

Union Lawn

- Enhance views of lawn from south as well as north

Stadium Plaza

- Norwegian study cites that traffic signage removal promotes slower movement and greater safety
- Question raised of how autonomous vehicles will navigate curbless environments
- Suggestion to manifest "The Swamp" in the planting at the stadium
- More LID efforts, even if small, for educational value
- Address nutrient loading of stormwater from Stadium field

Reitz Union

- Stage to be demolished with expansion of Constans Theater
- Circle at west end of lawn has been constructed
- Relocation of stone sculpture at Reitz Union circle will be difficult; the recent relocation from the north to south side of Reitz Union required two years of coordination
- Deletion of the sidewalk on the east side of Reitz Union Dr was deliberate; some concern expressed by Nancy Chrystal-Green
- Crosswalk at Reitz Union Drive and Museum is heavily used and unsafe; lighting is poor; pedestrian crossings slow vehicular traffic; a full signal is required to permit pedestrian crossing that is coordinated with the signal to the west at Gale Lemerand
- Connection to be made southward from Reitz Union Drive to Wilmont Gardens and to Rail Trail across Archer Rd

**Tuesday, April 10**

Meeting with Curtis Reynolds

*In attendance: Curtis Reynolds, Carlos Dougnac, Tina Gurucharri, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

General Campus

- Show future building sites as boxes to demonstrate how they will help shape adjacent spaces, relate to major circulation and be serviced
- Add roundabout at Museum and Hull

Tigert Court

- Possible only two outbound lanes needed

Stadium Road West

- Possible addition of center pier at intersection with Fletcher Dr to signal limited access

Stadium Plaza

- Need to gain an understanding of Athletics vision for Champion's Walk
- Curbs seem necessary for regular daily use
- Possible addition of a café associated with Gator Dining building

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Next steps

- Coordinate with Cultural Plaza
- Present to CPPEC in September
- Possible presentation to BOT in December
- Initial efforts need to demonstrate a big win for the campus; prioritization is important

**Tuesday, April 10**

Meeting with Tina Gurucharri

*In attendance: Carlos Dougnac, Tina Gurucharri, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

Stormwater Treatment

- Include rain gardens, etc. within campus for as demonstration for educational value
- Review Dan Manley studio research
- Review Peggy and Dan's award-winning project on Gator Pond
- Permeable pavement—experience on campus has found best results with pervious asphalt
- Include stormwater treatment in streetscape cross sections

Tree Planting

- Let the ecology of the campus read; tell the story of campus topography and watersheds with plant palette
- Plant cypress in wet/flooded areas, such as detention basins north of stadium

General Campus

- Expand pedestrian pavement at south Newell gateway
- Provide seating at overlook at Dairy Pond to accommodate folks without hammocks
- Shifting Inner Rd northward will affect future building site
- Parking on site of future Data Science Building will be accommodated in lot on half of Norman Field
- Broward Recreation area—Basketball is most heavily used; construction of new Rec Center is on back burner
- Business Dean loved closing of Union Rd to traffic; no service access concerns
- Walk between Broward and Rawlings Halls is heavily used

Phasing

- Neville and Union will have biggest impact

**Tuesday, April 10**

Health Center Site Walk with Brad Pollitt

*In attendance: Brad Pollitt, Linda Dixon, Erik Lewis, Chris Jones, Frank Bellomo, David Sowell, Ruth Loetterle*

General Campus

- A more cohesive, well-maintained landscape is the goal for the Archer Rd face of the Health Center
- The main drop entry space is dark, obscured and unwelcoming
- The sunken area is being developed as a children's garden
- The entrance to Dental Science from Center Dr needs to be enhanced
- Exterior signage is not as effective and does not reflect the identity of the Health Center
- The Sycamore tree is a descendent of the tree in Greece of Hippocratic Oath fame

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**Action Items by Area**

Union Road
- Show and widen crosswalk at Union Road and Buckman Drive

Tigert Court
- Reduce inbound lane to one; give additional space to median or to side
- Relocate guardhouse to be on driver's side
- Study reduction of outbound lanes to two and other traffic clarifications

Newell Court
- Expand pedestrian crosswalk to include all of NW 16th St

Century Tower Plaza
- Provide seatwall adjacent to relocated Turlington Rock to allowance its continuance as a landmark for meeting
- Improve visibility of front door of Turlington when approaching from the northeast

Union Lawn East
- Accommodate Panhellenic group performances on terrace
- Accommodate 10-12 persons at the monuments
- Provide seating at overlook at Dairy Pond to accommodate folks without hammocks

Union Lawn
- Enhance views of lawn from south as well as north

Inner Road
- Address pedestrian and bike crossings at eastern end; direct pedestrians to W 13th intersection and bicycles further west
- Minimize shifting of western end of Inner Road northward due to impact of future building site
- Expand pedestrian pavement at south Newell gateway

Stadium Road West
- Limit crosswalk/raised table at Fletcher to normal width
- Study addition of center pier at intersection with Fletcher Drive to signal limited access

Stadium Plaza
- Provide trees for shade at sitting steps
- Replace palms with shade trees
- Restore curbs within plaza
- Accommodate Athletics' vision for Champion's Walk
- Study addition of a café associated with Gator Dining building
- Incorporate more LID efforts, even if small, for educational value
- Address nutrient loading of stormwater from Stadium field

Stadium North Lawn
- Plant cypress in detention basins north of stadium

Reitz Union
- Include circle at west end of lawn

Master Plan
- Differentiate existing vs proposed trees
- Maximize shade for pedestrian spaces and corridor Express the ecology of the campus with plant palette
- Express the ecology of the campus with plant palette
- Interconnect water bodies and courses on campus with cypress trees

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- Include rain gardens, etc. within campus for as demonstration for educational value
- Review Dan Manley studio research
- Review Peggy and Dan's award-winning project on Gator Pond
- Include storm water treatment in streetscape cross sections
- Add roundabout at Museum and Hull Roads
- Extend proposed treatment of University Ave west past DOT-owned triangle
- Include service drive parallel to University between west of Fletcher to provide parking access
- Incorporate scooter parking locations per VHB input
- Show future building sites as boxes
- Enhance connection to Reitz Union from McCarty bus stop; widen walk at bus stop
- Study enhancement of walk between Broward and Rawlings Halls
- Round corners of tabling tables

University Health Center

- Create a more cohesive, well-maintained landscape
- Enhance main drop entry space
- Enhance to Dental Science from Center Drive
- Study exterior signage to reflect the identity of the Health Center

END OF MEETING NOTES

## B. Appendix for Schematic design review

**Preservation of Historic Buildings & Sites Committee**
**December 15, 2020 at 2:00 PM**
**Planning, Design & Construction Division, 245 Gale Lemerand Drive**
**ZOOM MINUTES**

**MEMBERS PRESENT:**

Marty Hylton – Chair –Interior Design
Joe Aufmuth – University Libraries
Ann Baird – Associate University Librarian, Libraries
Brent Carr - Psychiatry
Megan Daly – University Libraries
Tom Dana – College of Education
Sara Diffenbach - Student
Linda Dixon – Planning, Design & Construction
Chad Doering – Housing & Residence Education
Jacqueline Hahn – Student
Craig Hill – Business Affairs
Lisa King - Department of Clinical & Health Psychology
Francisco Oquendo - Planning, Design & Construction
Priya Sharma – Pediatric Radiology
Carl Van Ness – Librarian & Archivist, Special Collections

**MEMBERS ABSENT:**

Jason Byrd – Clinical Faculty, Psychiatry
Anthony Coman – Management Communication Center
Carlos Dougnac – Planning, Design & Construction
Samantha Evans – Student Affairs
Lacy Hoffman – Honors Program
Gail Mathapo – Assistant University Librarian
Rachel Slivon – Warrington College of Business, Lecturer

**OTHERS PRESENT:**

Erik Lewis – Planning, Design & Construction
Melissa Thomas - Planning, Design & Construction
Frank Javaheri – Planning, Design & Construction
Melanie Heflin – Planning, Design & Construction
Tamera Baughman – Planning, Design & Construction
Frank Bellomo – GAI
Chris Jones – IBI
Jason O'Brian – Walker Architects
Joe Akins – VMDO
Alexander Jack – VMDO
Michele Westrick – VMDO
Jennifer Lyons – Unknown
Lorenzo Battist – Unknown
Richardson,? – Unknown

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**I. ADOPTION OF AGENDA AND AUGUST 2020 MINUTES**

**Motion: Joe Aufmuth made the motion to adopt the agenda and approve the August minutes.**

**Second: Tom Dana**

**Motion Passed Unanimously**

**II. MAJOR PROJECTS**

**UF – 656 – Landscape Master Plan Tigert/Newell Gateways Melanie Heflin**
Melanie introduced herself and stated she was before the committee to talk about the Landscape Master Plan. She said that the project would be in sections and the first section would be the Tigert Hall and Newell Gateway improvements. Frank Bellomo from GAI, Jason O'Brian from Walker Architects, and Chris Jones from IBI are here to present today and CPPI is the Contractor. The project start will be May 2021, with estimated completion at the end of August prior to semester starting.

Chris went over the locations of the gateways and started with the Newell Gateway. The transformation is essentially the removal of the road from this gateway. The transformation of that environment into a pedestrian gateway arrival point at the northern edge of the campus. This will follow the direction of the Landscape Master Plan and the Plaza of Americas for design. This is a 20' wide pedestrian walkway with a curbed condition will still accommodate service and emergency vehicles. There will be brick walls tying into the existing walls to create a gathering plaza space. There will be a 12' wide multiuse path that will run along University Avenue. The project will tie back to some of the existing circulation networks and transition down the roadway add oak trees to comply with the Landscape Master Plan. An alternate will be to extend the 20' wide walkway down the existing road with a concrete lined edge and center with the bollards. Chris showed the layout of the gateway and how the brick walls are laid out. Also, there will be a curb area and a mountable curb for emergency vehicles.

The Northeast Gateway at Tigert Hall impacts Union Drive. This project will reconfigure the entry and exist lanes and creating an auto court. The committee stated they were concerned about an outgoing bike lane and the design team stated they were still trying to figure that out. That determination will be in in a few weeks. There are drop-off and temporary parking zones along the edges with bollards. There will be seating around the auto court to accommodate the tour busses and kiss and ride. There will a new guard shed, and Jason O'Brian went over the structure. He stated the building will match the existing Tigert Hall. In the Little Hall parking lot will be headend parking instead of angle parking. The project will maintain the existing number of spaces to have a no net loss for parking in this area. There is an add alternate for have permeable brick pavers and the islands are stormwater catching zones to help with the runoff of the stormwater in this area. This will allow for sustainable improvements for this area. In front of the Little Lot the VIP and bike parking will be reconfigured to move it away from Tigert Hall. The gathering plaza will be reconfigured as well for a more secure and private gathering area.

**Motion: Joe Aufmuth made the motion to approve the Advanced Schematic Design phase of the project.**

**Second: Carl Van Ness**

**Motion Carried Unanimously**

2

**LAND USE AND FACILITIES PLANNING COMMITTEE MINUTES**
**February 02, 2021**
**Planning, Design & Construction**
**ZOOM Meeting**

**ATTENDEES:**

**MEMBERS PRESENT:**
Ann Baird, Librarian, UF AFA Library
Meredith Beaupre, Academic Advisor, Honors Program
David Bowles, Director of Rec Sports

Paul Davenport, Physiological Sciences
Sarah Davis, Student
Linda Dixon, Planning, Design & Construction
Margaret Fields, Associate Dean of Liberal Arts and Sciences
Megan Forbes, Chair, English Language Institute
Scott Fox, Transportation & Parking
Timothy Garrett, Associate Professor, Pathology, Immunology and Laboratory Medicine
Creed Greer, Program Director, University Writing Program
Kevin Heinicka, IFAS Facilities Planning & Operations
Mark Helms, AVP, Facility Services Division
Craig Hill, VP's Office – Business Affairs
Brian Keith, Associate Dean, Office of Library Administration
Mark Leeps, Assistant, Journalism
Frank Lomonte, Director & Professor, College of Journalism
Graciela Lorca, Associate Professor, Microbiology & Cell Science
Cydney McGlothlin, University Architect, Planning, Design & Construction
Jacqueline Miller, Curator/Adjunct Professor
Keith Rambo, Engineer, Electrical & Computer Engineering
Blake Robinson, Student
William (Bill) Smith, Assistant Director, Operations, University Athletics Association
Jay Watkins, Associate Director and Associate Professor,
Timothy Young, Sr. Associate, Academic Advising Center

**MEMBERS ABSENT:**
Missy Daniels, Growth Management, Alachua County
Carlos Dougnac, AVP, Planning, Design & Construction
Rhuanito Ferrarezi, Assistant Professor
Gail Hansen De Chapmen, Chair, Lakes, Vegetation & Landscaping Committee
Marty Hylton, Chair of PHB&S, Libraries
Frank Lomonte, Director and Professor, Journalism
Mary Lusk, Extension Agent – IFAS Extension
Carol McAuliffe, Assistant University Librarian
Jamieson McMahon, Building Code Inspector, EH&S
Andrew Persons, Director, Department of Doing, City of Gainesville
Amy Stein, Associate Professor
Richard Stepp, Associate Professor, Anthropology/Latin American Studies
Zhong (John) Su, Associate Professor, Radiation Oncology – JAX
Matt Williams, Director, Office of Sustainability

**VISITORS:**
Mike Castine, Growth Management, Alachua County – attending for Missy Daniels
Melissa Thomas, Planning, Design & Construction
Erik Lewis, Sr. Planner, Planning, Design & Construction
Frank Javaheri, Director of Construction, Planning, Design & Construction
Melanie Heflin, Project Manager, Planning, Design & Construction
Tamera Baughman, Project Manager, Planning, Design & Construction
Chad Doering, Director of Facilities, Housing
Chris Jones, IBI, Design Consultant
Kevin Trejos, Student
Frank Bellomo, GAI Associates, Landscape Design
Alexander Jack, VMDO
Nancy Chrystal-Green, UF
Michele Westrick, VMDO
Hannah Ulloa, Unknown

**CHAIR:** Timothy Young, Sr. Associate, Academic Advising Center, Chair

**CALL TO ORDER:**

Timothy called the meeting to order at 2:00pm.

**APPROVAL OF AGENDA AND MINUTES:**

Paul Davenport moved to approve the agenda and the December minutes; Megan Forbes seconded; motion passed unanimously.

**UF – 656 – Landscape Master Plan – Newell & Tigert Gateways (Advanced Schematic Design)**

**PRESENTING: Melanie Heflin / Frank Bellomo / Chris Jones**

**DISCUSSION:** Melanie introduced herself and stated she was before the committee today for Advanced Schematic Design phase approval. She had with her Frank Bellomo from GAI Associates and Chris Jones from IBI to present the project. Chris stated he would be speaking about the Landscape Master Plan with specifics on the Newell and Tigert Gateways. The Newell Gateway will be a pedestrian pathway with a plaza area and brick pavers. It will have brick walls and bollards to protect the area from vehicles. The brick walls will have planted beds behind them to enhance the UF experience moving the pedestrians down the brick paver pathway to the Plaza of Americas. The plaza will have a curb on both sides with a mountable curb in the middle for emergency vehicles. There will be a Magnolia tree and a small 8" oak that will be removed to enhance the flow of the bike and pedestrian walkway that runs behind the brick walls of the plaza. This will be the start of a bike & pedestrian pathway through parts of campus.

The Tigert Gateway entry and exit lanes will be reconfigured to have one lane entry with a bike lane and three lanes to exit: one turning left, one turning right and one straight with a bike lane. The bike lane is still being configured but there will be one on entry and exit. The corner will be enhanced with brick pavers and columns. The median will be a flowering understory trees with Oak trees on the streetscape to comply with the Landscape Master Plan. There will be an auto court for drop off and pick up. There will be bollards and seating walls to help guide pedestrians and bicycle traffic. The material will match the existing seating areas and sidewalks around the auto court. The Little parking lot was reconfigured to 90-degree parking instead of diagonal. This allowed no impact in parking spaces for this lot. The lot will be

permeable pavers with the medians to be rain gardens to compensate for the stormwater runoff. The back of Tigert Hall will be reconfigured to have VIP parking and 5 handicap spaces. There will be an outside gathering area that will be more private with added landscaping and seating.

The committee was concerned about the entrance at the Tigert Gateway to be painted crosswalks. The design groups stated "Duratherm" thermoplastic is proposed and it should last about 25 years. The committee asked if an RTS bus would be coming into the auto court. Chris responded that the design can accommodate buses and large vehicles if needed, but there will be a new RTS bus stop on SW 13th Street and buses are not anticipated to be regular users of the auto-court. The design anticipates the potential use of the autonomous shuttle The committee asked about the utilities at the corner of NW 13th Street and the Tigert Gateway and the design team stated that some utilities may need to be moved to accommodate the project but the utility vault will not be impacted. The committee was concerned about vehicular drop off at the Newell Gateway plaza and extra bollards have been added to the area to prohibit a vehicle from pulling over. FDOT is constructing a new crosswalk on the corner of the plaza to help move pedestrians and bikes across this area safely. The committee asked about the loss of scooter parking near the library. However, new scooter parking areas are being created to relocate scooter parking. The committee asked about the Newell Gateway and the movement of the pedestrians and Chris showed them the vision of the Gateway giving a connection to the new pedestrian and bike walkway.

**MOTION:** Paul Davenport motion to approve the Advanced Schematic Design phase as presented. Meredith Beaupre seconded motion. Motion passed unanimously.

UF | UNIVERSITY of FLORIDA

# MINUTES
## University Lakes, Vegetation and Landscape Committee
## December 10, 2020, at 9:00 AM
## Facilities, Planning & Construction
## ZOOM MEETING

The University Lakes, Vegetation and Landscape Committee (ULVLC) met Thursday, December 10, 2020 for a zoom meeting online.

**Members attending**:
William Barber – Assistant Director, UF Police Department
Donna Bloomfield – Grounds, Facility Services
Gregg Clarke – Director of Operations, Facility Services
Adam Dale – Assistant Professor, Entomology and Nematology Department
Linda Dixon – Director, Planning, Design & Construction
Gail Hansen De Chapman – Environmental Horticulture - Chair
Alpa Nawre – Assistant Professor, Landscape Architecture
Melanie Nelson – Associate Professor, Medicine
Tom Schlick – Assistant Director of Grounds, Facility Services

**Members not attending**:
Carlos Dougnac – Assistant Vice President, Planning, Design & Construction
Craig Hill – Assistant Vice President, Business Affairs
Brian Keith – Associate Dean, Library Administration
Brett Scheffers – Assistant Professor, Wildlife Ecology and Conservation
Kevin Trejos - Student
Matt Williams – Director, Sustainability

**Visitors attending**:
Melissa Thomas – Administrative, Planning, Design & Construction
Erik Lewis – Sr. Planner, Planning, Design & Construction
Tom Feather – Project Manager, Planning, Design & Construction
Tamera Baughman – Project Manager, Planning, Design & Construction
Melanie Heflin – Project Manager, Planning, Design & Construction
Frank Javaheri – Director of Construction, Planning, Design & Construction
Basil Lannone – Office of Sustainability
Chris Jones – IBI
Frank Bellomo – GAI Consultant/Landscape Architect
Laurie Hall – CHW- Landscape Architect
Chris Doering – Director of Facilities for Housing
Fiona Hogan – Office of Sustainability
Jim Richardson – VMDO
Pete ? – VMDO
Chris Gimuer – VMDO
Alexander Jack – VMDO
Michele Westrick – VMDO
Frances Lengowski – VMDO

Kasey Teimouri – Schenkel Shultz
Tina Gurucharri – Associate Professor, Department of Landscape Architecture
352-294-0655 – Tom Schlick - phone
352-342-7965 – Tom Feather - phone
352-294-0813 – Donna Bloomfield - phone

**I. Adoption of Agenda and Minutes**

**Motion: Adam Dale moved to adopt the agenda and approve the minutes with the change suggested to the November minutes.**

**Second: Melanie Nelson seconded.**

**Motion Carried Unanimously**

**II. MAJOR PROJECTS**

**UF – 656 – Landscape Master Plan Frank Javaheri / Melanie Heflin**

Frank introduced himself and said he is representing for Melanie Heflin, the Project Manager for this project. The project is here today for Advanced Schematic Design approval. This project is for the Landscape Master Plan and details the Newell Gateway and North East Tigert Gateway.

The Newell Gateway is being transformed into a pedestrian gateway through the Historic District. There will be brick and retainage walls. In the entrance area of the gateway there will be bollards in place to discourage vehicular usage. There will be regular curbs at the road with a small area on the curb being mountable by emergency vehicles. There will also be a 12' width sidewalk for a multiuse trail. In creating the symmetry of the trail, a 28" magnolia will need to be removed. The committee spoke about this tree and trying to reconfigure around the tree but reviewing the area, because it is a multiuse trail, it will not be feasible. This tree in the future will inhibit the canopy growth of the two 20" DBH oaks so the design team thought it would be better to remove the magnolia. There is a small 8.5" oak tree that will be removed and replaced with larger oak to match the path and stay in line with the Landscape Master Plan.

The North East Tigert Gateway will be a transformation of an auto court circle drive. This will be a vehicular/pedestrian gateway. There will be impacts on the landscape and a new bus shelter, a new guard house and an upgrade to the Criser lot, Little lot, VIP and service parking area, and an outdoor gathering plaza in the back of Tigert Hall. The auto court will have seating and bollards around it to help with traffic flow. The road will become a one lane entry with a bike lane and there will be three lanes exist. The design team went over the landscaping choices and the layout of the areas and streetscapes. The little lot will be widened to the south and the north allowed the space number to stay the same by headend parking instead of angled parking and the lot will be permeable pavers and the islands will be rain gardens collection areas and curb less to create a more sustainable solution. The seating area in the Tigert Hall gathering will be reconfigured and given an upgrade to refresh this area. The committee asked if there is a way to direct the pedestrian walkway thru the little parking lot. There is a grouping landscape area at the back of Tigert and in need of refresh and a heritage oak tree that will need to be removed because of the design. There will also be a few trees in the parking lots for reconfiguration. There is a total of 88 trees to be removed. There is a proposed plan of 71 new trees will be added. The rest will be with standard mitigation. The committee asked if the design team could try to save more of the long leaf pine trees. The committee also asked about diversity on the plantings. The committee asked to change out some of the Crepe myrtles to Chickasaw plum or a small flowering tree. The project will be coming back for Design Development approval and will be able to see the landscaping changes and a tree removal table. The committee asked for looking at organization of the different species and grouping like species to have a more diverse look. Some of the Cypress trees and cabbage palms will be transplanted but the other trees are being removed. There is a dogwood and some Crepe Myrtles that may be moved if possible if there is a place to move them.

**Motion: Alpa Nawre made the motion to approve the plans and tree removals as presented and with standard mitigation. The committee recommended species other than Crepe Myrtle be looked at in**

**the area at Tigert Hall and Union Road. The Committee requested the project come back to the committee with landscape details at Design Development.**

**Second: Melanie Nelson**

**Motion Carried Unanimously**

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**Preservation of Historic Buildings & Sites Committee**
**February 16, 2021 at 2:00 PM**
**Planning, Design & Construction Division, 245 Gale Lemerand Drive**
**ZOOM MINUTES**

**MEMBERS PRESENT:**

Marty Hylton – Chair –Interior Design
Joe Aufmuth – University Libraries
Ann Baird – Associate University Librarian, Libraries
Brent Carr - Psychiatry
Anthony Coman – Management Communication Center
Megan Daly – University Libraries
Sara Diffenbach - Student
Linda Dixon – Planning, Design & Construction
Craig Hill – Business Affairs
Gail Mathapo – Assistant University Librarian
Priya Sharma – Pediatric Radiology
Carl Van Ness – Librarian & Archivist, Special Collections

**MEMBERS ABSENT:**

Jason Byrd – Clinical Faculty, Psychiatry
Tom Dana – College of Education
Chad Doering – Housing & Residence Education
Carlos Dougnac – Planning, Design & Construction
Samantha Evans – Student Affairs
Jacqueline Hahn – Student
Lacy Hoffman – Honors Program
Lisa King - Department of Clinical & Health Psychology
Francisco Oquendo - Planning, Design & Construction
Rachel Slivon – Warrington College of Business, Lecturer

**OTHERS PRESENT:**

Melissa Thomas - Planning, Design & Construction
Frank Javaheri – Planning, Design & Construction
Melanie Heflin – Planning, Design & Construction
Milo Zapata – Planning, Design & Construction
Cydney McGlothlin – Planning, Design & Construction
Mark Humbert – Planning, Design & Construction
Bill McGinn – University of Florida
Frank Bellomo – GAI
Chris Jones – IBI
Jason O'Brian – Walker Architects
Joey Mandese – Vertex Construction
Adam Gayle – Walker Architects
Phillip Rickman – Sigma Alpha Epsilon

1

**UF – 656 – Landscape Master Plan Tigert/Newell Gateways Melanie Heflin/Cydney McGlothlin**
Cydney introduced herself and stated she was before the committee to present the Design Development phase. There will be a Newell Gateway and a Tigert Court Gateway with a new gate house.

Chris pointed out updates concerning committee recommendations and safety issues at University avenue. There will be a new pedestrian gateway at Newell and a crosswalk across University Avenue as part of an FDOT project. Bollards will be added at the road to control vehicle access. Some of the bollards will be removable for emergency vehicle access. The LUFPC expressed concern about the Newell Gateway and pedestrians going to the east. To accommodate this movement, there will be a pedestrian walkway to the east and an opening in the wall immediately west of the historic wall bench.

The Tigert Gateway shows improvements at the entry and exit to SW 13th Street and the parking lots around Tigert Hall. The updates added bike lanes to the exit and entry at SW 13th Street. The auto court area is the same design as presented previously. The Criser parking lot changes introduced permeable pavers for stormwater runoff. The project will adjust the striping in the southern bay to be code compliant for the handicap spaces. There will be planting elements in the middle of the parking lot to create shading and provide for stormwater. The Little parking lot was to be all permeable paving but now only the outer rows to the north and south will be the permeable pavers. The middle medians between the parking will be stormwater planters. The handicap spaces have increased in front of Tigert Hall. The bollards have been increased across the full length of Tigert Hall to separate the vehicular and pedestrian as an added security measure.

Jason O'Brian reviewed the architectural design of the guard house. He showed changes from the past design to present. The architectural design has been scaled down a little. The brick and precast trim, base, and sills will match the surrounding buildings. There will be clear glazing with anodized aluminum storefront and the metal around the roof will be copper. The committee discussed the color of the aluminum and confirmed it will match historic buildings in the area, e.g. Tigert Hall. The plans for the Guard house went to the Architectural Review Council and was approved.

**Motion: Brent Carr made the motion to approve the Design Development phase as presented.**

**Second: Joe Aufmuth**

**Motion Carried Unanimously**

UF UNIVERSITY of FLORIDA

**Land Use and Facilities Planning Committee**
**March 2, 2021 at 2:00 PM**
**Planning, Design & Construction Division, 245 Gale Lemerand Drive**
**ZOOM Minutes**

**ATTENDEES:**

**MEMBERS PRESENT:**
Ann Baird, Librarian, UF AFA Library
Meredith Beaupre, Academic Advisor, Honors Program
David Bowles, Director of Rec Sports
Nancy Chrystal-Green, AVP – Division of Student Affairs
Linda Dixon, Planning, Design & Construction
Carlos Dougnac, AVP, Planning, Design & Construction
Rhuanito Ferrarezi, Assistant Professor
Margaret Fields, Associate Dean of Liberal Arts and Sciences
Megan Forbes, Chair, English Language Institute
Timothy Garrett, Associate Professor, Pathology, Immunology and Laboratory Medicine
Gail Hansen De Chapmen, Chair, Lakes, Vegetation & Landscaping Committee
Kevin Heinicka, IFAS Facilities Planning & Operations
Mark Helms, AVP, Facility Services Division
Craig Hill, VP's Office – Business Affairs
Brian Keith, Associate Dean, Office of Library Administration
Mark Leeps, Assistant, Journalism
Frank Lomonte, Director & Professor, College of Journalism
Graciela Lorca, Associate Professor, Microbiology & Cell Science
Carol McAuliffe, Assistant University Librarian
Cydney McGlothlin, University Architect, Planning, Design & Construction
Jacqueline Miller, Curator/Adjunct Professor
Keith Rambo, Engineer, Electrical & Computer Engineering
William (Bill) Smith, Assistant Director, Operations, University Athletics Association
Amy Stein, Associate Professor
Richard Stepp, Associate Professor, Anthropology/Latin American Studies
Jay Watkins, Associate Director and Associate Professor,
Timothy Young, Sr. Associate, Academic Advising Center

**MEMBERS ABSENT:**
Missy Daniels, Growth Management, Alachua County
Paul Davenport, Physiological Sciences
Sarah Davis, Student
Scott Fox, Transportation & Parking
Creed Greer, Program Director, University Writing Program
Marty Hylton, Chair of PHB&S, Libraries
Mary Lusk, Extension Agent – IFAS Extension
Jamieson McMahon, Building Code Inspector, EH&S
Andrew Persons, Director, Department of Doing, City of Gainesville

Blake Robinson, Student
Zhong (John) Su, Associate Professor, Radiation Oncology – JAX
Matt Williams, Director, Office of Sustainability

**VISITORS:**
Mike Castine, Growth Management, Alachua County – attending for Missy Daniels
Melissa Thomas, Planning, Design & Construction
Frank Javaheri, Director of Construction, Planning, Design & Construction
Melanie Heflin, Project Manager, Planning, Design & Construction
Tom Feather, Project Manager, Planning, Design & Construction
Milo Zapata, Project Manager, Planning, Design & Construction
Myra Au - UF
Chris Jones, IBI, Design Consultant
Kevin Trejos, Student
Frank Bellomo, GAI Associates, Landscape Design
Patrick Eddy – Jacobs
Jessica Davidson – Jacobs
Chuson Faddon – Jacobs
Jose Ramos – Jacobs
Robert Mooney – Jacobs
JM Baker – Unknown
Adam Gayle – LEVEL Design
Joey Mandese – Vertex Construction
Fraser Ringel – HDD expert

**CHAIR:** Timothy Young, Sr. Associate, Academic Advising Center, Chair

**CALL TO ORDER:**

Tim called the meeting to order at 2:00pm.

**APPROVAL OF AGENDA AND MINUTES:**

Meredith Beaupre moved to approve the February minutes and the agenda with changing the order of UF-623 with UF-668 ; Rhuanito (Johnny) Ferrarezi seconded; motion passed unanimously.

**UF – 656 – Landscape Master Plan – Newell & Tigert Gateways (Design Development Phase)**

**PRESENTING: Melanie Heflin / Frank Bellomo / Chris Jones**

**DISCUSSION:** Melanie introduced herself and stated she was before the committee today for Design Development phase approval. She introduced Frank Bellomo from GAI Associates and Chris Jones from IBI to present the project.

The Newell Gateway is a pedestrian pathway with a plaza area and brick pavers connecting Newell Drive to a new signalized crossing of University Avenue. Previously, the committee expressed concern for

pedestrian movement to the east so a break in the wall was added with a sidewalk connection to allow for that movement.

The Tigert Gateway entry and exit lanes will be reconfigured to have one lane entry with a bike lane and three lanes to exit: one turning left, one turning right and one straight with a bike lane. The bike lane is still being designed but there will be one for entry and exit. The corner will be enhanced with brick pavers and columns. The median will be flowering understory trees with Oak trees on the streetscape to comply with the Landscape Master Plan. There will be an auto court for drop off and pick up. The material will match the existing seating areas and sidewalks around the auto court. Permeable pavers will be added to the Criser parking lot, and there will be a net loss of 10 spaces due to changing the spaces to 81/2' wide. The metered spaces in the Criser lot will remain. The Little parking lot will have permeable pavers at the edges of the lot and rain gardens in the medians to compensate for stormwater runoff. The back of Tigert Hall will be reconfigured to have VIP parking and 5 handicap spaces. There will be an outside gathering area that will be more private with added landscaping and seating. The committee asked about walking in the parking lot to the buildings, and whether the median space was better used as a pedestrian walkway. Chris responded that the area is too narrow for walking and has light poles. He noted that the parking lot is a gated controlled area, and that the swales in the median meet LEED goals for the project. UF has been coordinating with FDOT for modifications within the state road ROW. The committee asked about the impact to scooters in this area. This area will no longer be scooter accessible because this will become part of the new pedestrian pathway. New, mega scooter parking areas are being created to relocate scooter parking.

A member asked about an area near the Gatehouse that does not have pavers. The designers noted that this area is a curbed environment that changes to a flush environment for the pedestrian pathway but that they would consider incorporating pavers in that location.

**MOTION:** Megan Forbes made a motion to approve the project as presented. Brian Keith seconded motion. Motion passed unanimously.

**INFORMATION:**

Tim Young, the chair, stated that the election of committee chair will take place at the April or May meetings.

**ADJOURNMENT:** There being no further business to discuss, the meeting adjourned at 3:41pm.

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# MINUTES
## University Lakes, Vegetation and Landscape Committee
## February 22, 2021, at 9:00 AM
## Facilities, Planning & Construction
## ZOOM MEETING

The University Lakes, Vegetation and Landscape Committee (ULVLC) met Monday, February 22, 2021 for a zoom meeting online.

**Members attending**:
William Barber – Assistant Director, UF Police Department
Gregg Clarke – Director of Operations, Facility Services
Linda Dixon – Director, Planning, Design & Construction
Gail Hansen De Chapman – Environmental Horticulture - Chair
Brian Keith – Associate Dean, Library Administration
Alpa Nawre – Assistant Professor, Landscape Architecture
Matt Williams – Director, Sustainability

**Members not attending**:
Donna Bloomfield – Grounds, Facility Services
Adam Dale – Assistant Professor, Entomology and Nematology Department
Carlos Dougnac – Assistant Vice President, Planning, Design & Construction
Craig Hill – Assistant Vice President, Business Affairs
Melanie Nelson – Associate Professor, Medicine
Brett Scheffers – Assistant Professor, Wildlife Ecology and Conservation
Tom Schlick – Assistant Director of Grounds, Facility Services
Kevin Trejos - Student

**Visitors attending**:
Melissa Thomas – Administrative, Planning, Design & Construction
Tom Feather – Project Manager, Planning, Design & Construction
Frank Javaheri – Director of Construction, Planning, Design & Construction
Fiona Hogan – Office of Sustainability
Cydney McGlothlin – UF Architect, Planning, Design & Construction
Steven Vann – Project Manager, College of Engineering
Melanie Heflin – Project Manager, Planning, Design & Construction
Ronnie Cooper – Project Manager, IFAS
Frank Tipton – Project Manager, IFAS
Frank Bellomo – GAI Associates
Chris Jones – IBI
352-342-7965 – Unknown

**I. Adoption of Agenda and Minutes**

**Motion**: **Brian Keith moved to approve the Agenda.**

**Second:** **Alpa Nawre**

**Motion Carried Unanimously**

## II. MAJOR PROJECTS

**UF – 656 – Landscape Master Plan Implementation – Newell & Tigert Gateways Melanie Heflin**

Melanie introduced herself and the Landscape Master Plan Implementation of the Newell and Tigert Gateways for Design Development approval. Frank Bellomo from GAI and Chris Jones from IBI gave the presentation.

Frank stated the Newell Gateway would be a plaza area with brick pavers and walls. They are focusing othe design to address safety concerns on University Avenue. The project will implement a vertical curb and gutter system instead of the mountable curb. There will be bollards placed across the plaza close to the road to prevent vehicular traffic in the plaza area. The team is working with DOT on a new traffic signal and crosswalk adjacent to this gateway.

At the Tigert Gateway, the entry/exit was reconfigured to accommodate the bike lane on the exit. There will be an auto court for drop off with bollards and seating. The Criser parking lot will have winged elm on the islands and live oaks. The project will create stormwater planters and some small crape myrtles trees in the medians with a row of permeable pavers to address stormwater runoff. Some long leaf pine and other trees marked to be removed will now be saved. In the medians of Little parking lot, the project is proposing red maple. There are existing oaks that can now be saved on site. The new mitigation is 145 trees and the project will be addressing them with plantings and standard mitigation. The Little parking lot will have the permeable pavers on the north and south lanes of the parking. There will be stormwater planters in the median areas for this lot as well. The VIP parking in the back of Tigert has brick pavers and added handicap parking to have it all in one place. The gathering area in the back of Tigert will be configured as a meeting or gathering space. The committee was concerned about the Podocarpus shrubs because of needed maintenance. The committee asked if the design team could look at something else in our standards that may work with less maintenance. Bollards were added behind Tigert at the road to help secure the gathering area from vehicular traffic and create a safety barrier.

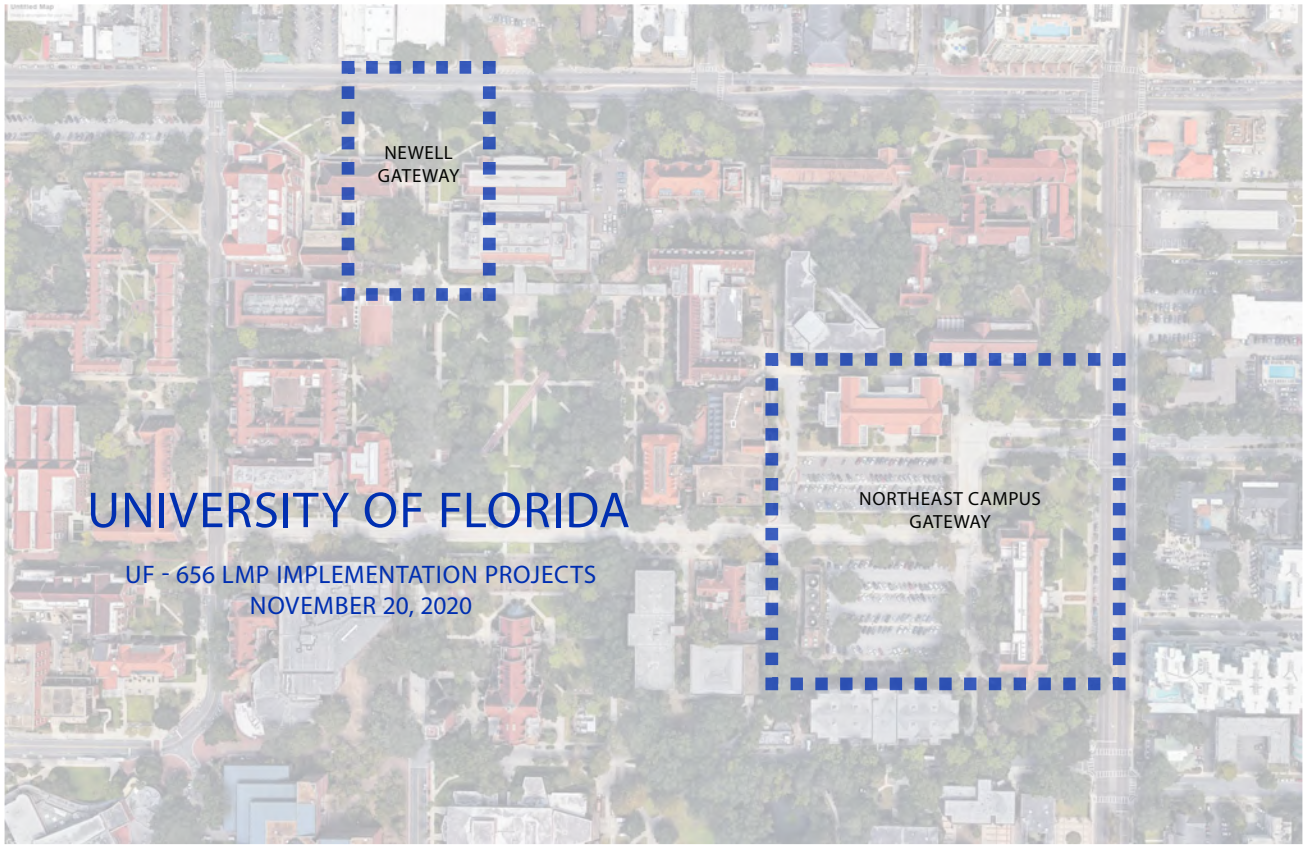
The committee asked about the security for the pedestrians on 13th Street. Frank show the aerial of the area to show the brick wall and pillar on each side of the intersection. The committee suggested looking at the security of the area for pedestrians. The committee was concerned about the landscape at the facade of Tigert viewed from Union Road. Five cabbage palms will remain in that area and one cabbage palm will be added for uniformity. There are two ligustrum trees that will be transplanted on campus by Facilities. The old cabbage palms will be removed. There is a Magnolia that will remain and azaleas will be added in the planting bed with the existing giant border grass that will remain.

**Motion:** **Brian Keith made the motion to approve the project as presented.**

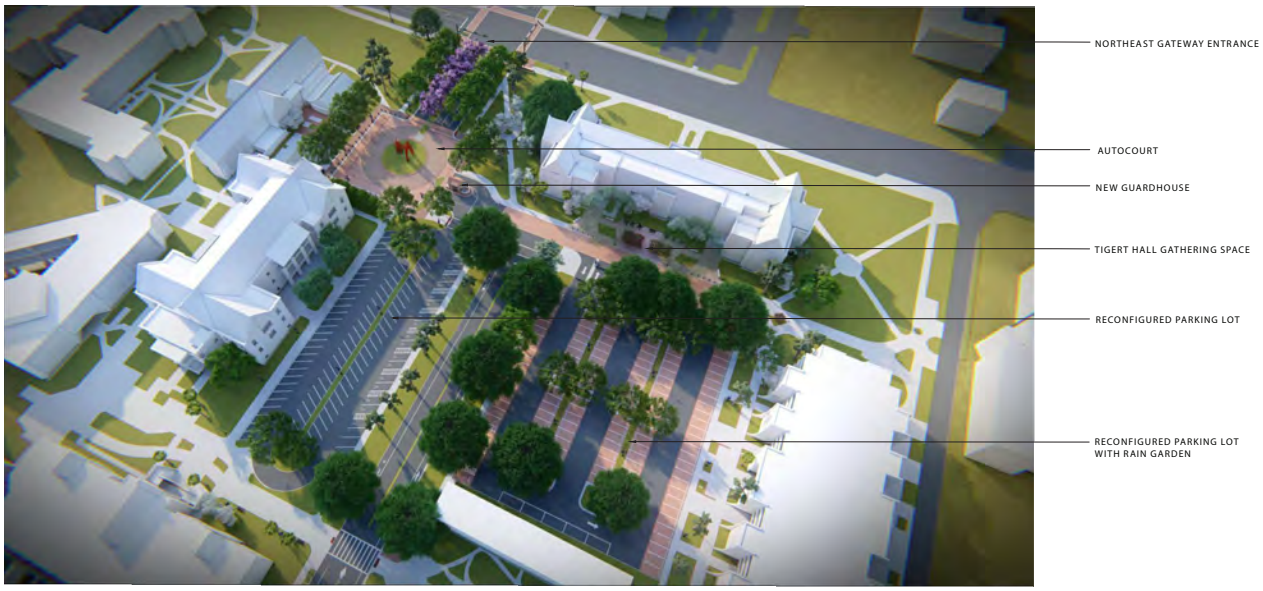
**Second:** **Alpa Nawre**

**Motion Carried Unanimously**

## D. Appendix for Present the design to the public



NORTHEAST GATEWAY
NOVEMBER 20, 2020




NORTHEAST GATEWAY PERSPECTIVES

NOVEMBER 20, 2020

UF UNIVERSITY of FLORIDA | IBI PLACEMAKING

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NORTHEAST GATEWAY

NOVEMBER 20, 2020

UF UNIVERSITY of FLORIDA | IBI PLACEMAKING

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NORTHEAST GATEWAY - ENTRANCE

NORTHEAST GATEWAY PERSPECTIVES
NOVEMBER 20, 2020

9

NORTHEAST GATEWAY - AUTOCOURT

NORTHEAST GATEWAY PERSPECTIVES
NOVEMBER 20, 2020

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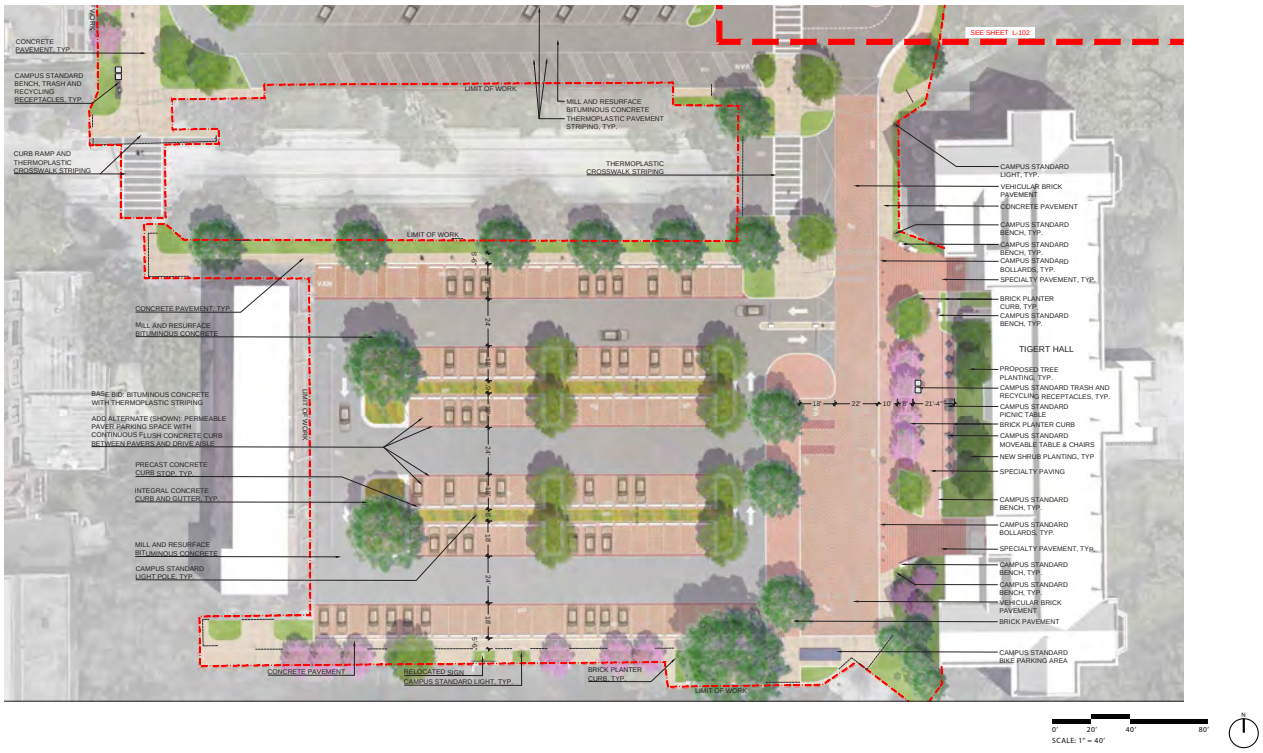


NORTHEAST GATEWAY

NOVEMBER 20, 2020

UF UNIVERSITY of FLORIDA | COMMUNITY SOLUTIONS GROUP | IBI PLACEMAKING

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NORTHEAST GATEWAY REFUSE ACCESS

NOVEMBER 20, 2020

UF UNIVERSITY of FLORIDA | COMMUNITY SOLUTIONS GROUP | IBI PLACEMAKING

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NORTHEAST GATEWAY - GUARDHOUSE

NORTHEAST GATEWAY PERSPECTIVES
NOVEMBER 20, 2020

14

NORTHEAST GATEWAY - GATHERING SPACE AT TIGERT HALL

NORTHEAST GATEWAY PERSPECTIVES
NOVEMBER 20, 2020

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# SECTION 3:
# SITE DESIGN | WATER

| Prerequisite | Title | Points |
|---|---|---|
| Water P3.1 | Manage precipitation on site | Required |
| Water P3.2 | Reduce water use for landscape irrigation | Required |
| **Credit** | **Title** | **Points** |
| Water C3.4 | Reduce outdoor water use | 5 points |

# PREREQUISITE 3.1 | MANAGE PRECIPITATION ON SITE

## Calculations

The 60th percentile precipitation event was calculated from rainfall data from a combination of two rainfall gauges at the Gainesville Alachua Fairgrounds Station and the Tuscawilla-Micanopy rain gauge within the Gainesville vicinity obtained from the St. Johns River Water Management District (SJRWMD) Hydrologic Data site. The combination of the two rainfall gauges was required to obtain daily rainfall dating back to 1989. Data from the Tuscawilla-Micanopy site ranged between 1990 to the beginning of 1998, and rainfall data for the Gainesville Alachua Fairgrounds ranged from the beginning of 1998 to 2020. This was the best and most complete available data that provided daily rainfall amounts for 30 years.

Data was organized and ranked from the highest amount of inches in rainfall to the lowest after removing all rainfall events of 0.1 inches or less. A percentile number was calculated for each ranked daily storm event based on the highest ranked event. From this data analysis the 60th percentile event is 0.56 inches of rainfall amount.

The total amount of required storage is 2,880 cft as calculated from the total impervious area (61,723 sft) for the proposed development on the NE Gateway and the 60th percentile precipitation event (0.56 inches). Refer to Table two and Exhibit X-210.

The stormwater features proposed for the site are two retention rain gardens with a total available capacity of 1,319 cft, less than the required volume for the 60th percentile precipitation event. The available storage onsite represents approximately the 30th percentile precipitation event. Additional storage could not be provided onsite due to the area being highly urbanized with large amount of underground utilities. Please see Table 1 for the storage capacity table for each rain garden (1 and 2).

Unfortunately, the proposed site will not be able to meet the minimum requirements for the pre-requisite P3.1.

**TABLE 1**
**UF LMP - NE Gateway (Tigert Court)**
**Stage-Storage Calulations**

**Rain Garden 1 By the Building**

| | STAGE | AREA | | STORAGE | |
|---|---|---|---|---|---|
| | (ft) | (ac) | (sft) | (ac-ft) | (cft) |
| TOP OF BANK | 165.8 | 0.03 | 1477.00 | 0.02 | 696.80 |
| POND BOTTOM | 165 | 0.01 | 265.00 | 0 | 0.00 |

**Rain Garden 2 By the Guard House**

| | STAGE | AREA | | STORAGE | |
|---|---|---|---|---|---|
| | (ft) | (ac) | (sft) | (ac-ft) | (cft) |
| TOP OF BANK | 166 | 0.02 | 1014.00 | 0.01 | 622.00 |
| POND BOTTOM | 165 | 0.01 | 230.00 | 0 | 0.00 |

| | |
|---|---|
| **Combined Retention (Rain Gardens)** | 1318.80 |

| Rainfall Amount at Various Percentile Events For a 30 Year span | | | |
|---|---|---|---|
| 60th Percentile | | 95th Percentile | |
| Amount | Required Retention | Amount | Required Retention |
| Inches | cft | Inches | cft |
| 0.56 | 2,880 | 1.88 | 9,670 |

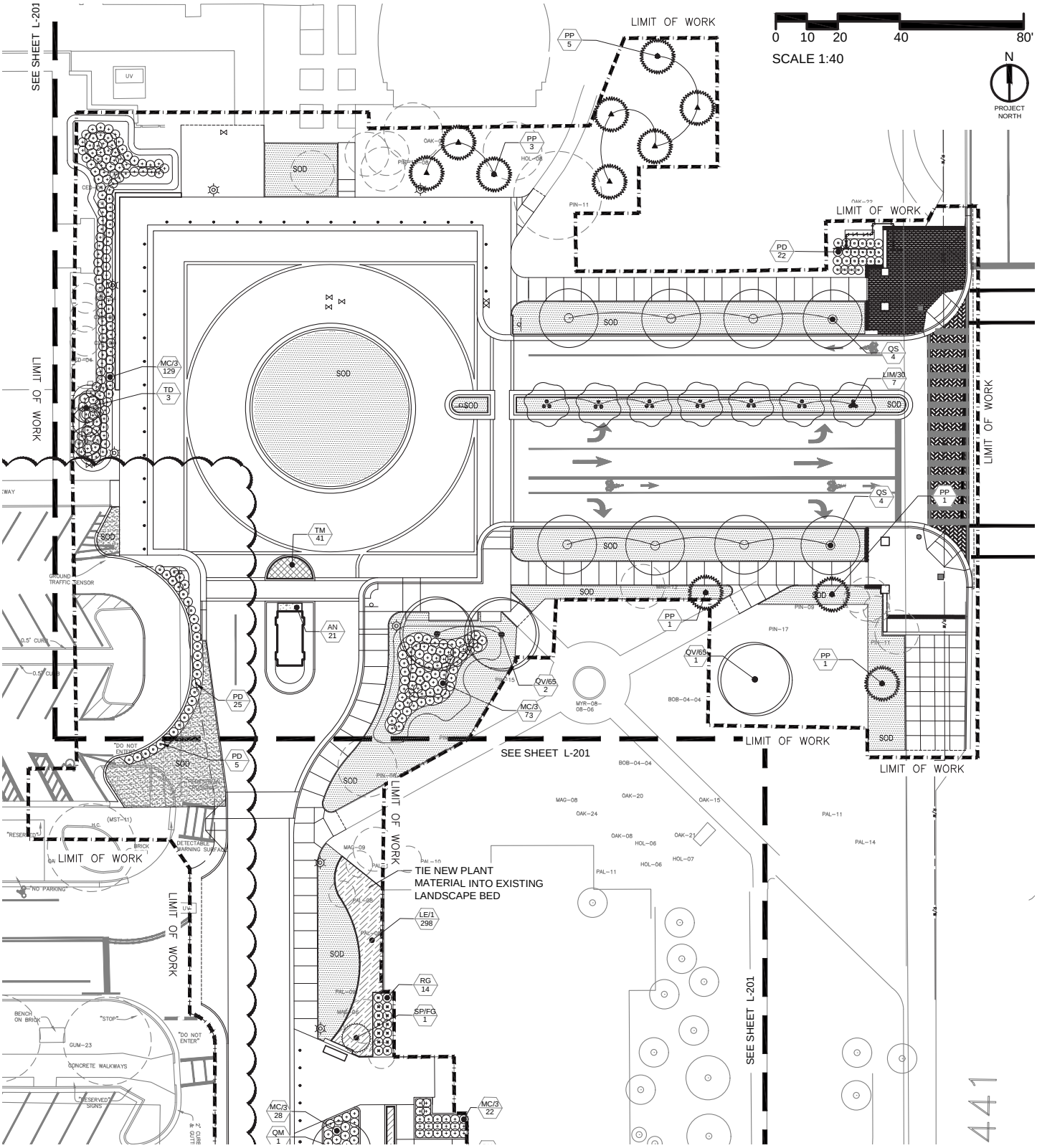
| | |
|---|---|
| Provided capacity in both Rain Gardens | 1,319 cft |

| 30 Year Span Data (1990-2020) | |
|---|---|
| Average Yearly | Average |
| inches | inches |
| 47.09 | 3.92 |

| Boring I.D. | Base of Aquifer (ft) | Porosity (%) | Hydraulic Conductivity ($k_h$) (ft/day) | Unsaturated Vertical Infiltration ($k_v$) (ft/day) | Seasonal High Groundwater Table (ft) |
|---|---|---|---|---|---|
| A-3 | > 15 | 20 | 17 | 11.3 | 4 |
| A-4 | > 15 | 20 | 6.9 | 4.6 | 4 |
| A-5 | > 15 | 20 | 4.8 | 3.2 | 4 |

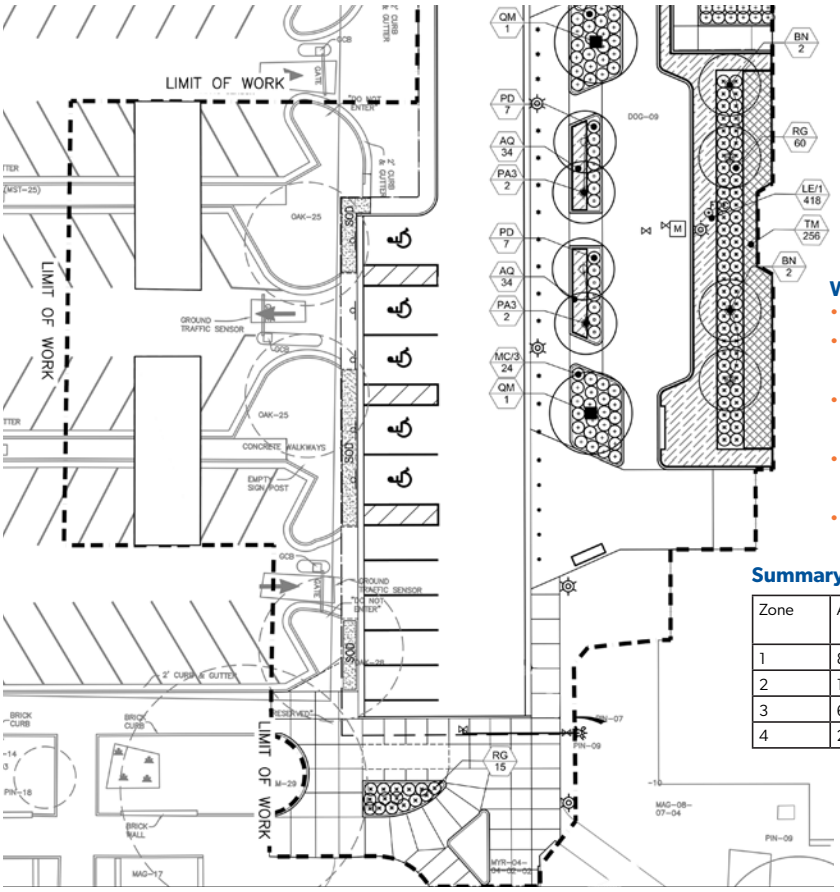
# Prerequisite 3.2 | Reduce water use for landscape irrigation

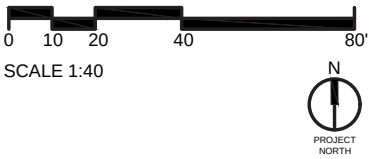
## Planting plan + Planting Schedule



## Section 3: Site Design – Water

The landscape and irrigation design strategy includes utilizing low water use native and Florida friendly plants irrigated by reclaimed, non-potable water source that exists on the campus site. Refer to summary of Hydrozones table for Landscape Coefficients. Plant selection supports minimizing water use and maintenance while balancing pedestrian use of site. As stated, there is no potable water utilized for irrigation at the Northeast Gateway project site. Reuse water supplies the irrigation system and a commitment has been made for the life of the project as evidence by the letter by Facilities Services.




### Water Budget Tool Report

- Your landscape is 67% below the baseline for this site.
- Single Site or Development?
  Single Site
- Landscape Area
  28,867 SF
- Irrigation?
  Yes
- Total Area of Turfgrass
  8,998 SF
- Landscape Water Allowance
  72,681 GAL / month
- Landscape Water Requirement
  34,626 GAL / month
- Potential Peak Watering Savings
  38,055 GAL / month (difference b/w the two numbers above)

### Summary of Hydrozones

| Zone | Area (SF) | Plant Type / Landscape Feature | Water Demand | Irrigation Type | Required Water (GAL/Month) |
|---|---|---|---|---|---|
| 1 | 8,998 | Turfgrass | Low | Fixed Spray | 0.6 |
| 2 | 12,897 | Trees | Low | Microspray | 0.2 |
| 3 | 6,697 | Shrubs | Low | Microspray | 0.2 |
| 4 | 275 | Nonveg. Softscape | Low | Drip (Standard) | |

### Irrigation Calculations

| Component | Type | Qty. | Total GPM |
|---|---|---|---|
| 8 Series | 1/4 | 2 | 0.52 |
| | 1/2 | 24 | 12.48 |
| | Full | 2 | 2.1 |
| 10 Series | 1/4 | 8 | 3.12 |
| | 1/2 | 44 | 34.76 |
| | Full | 1 | 1.58 |
| 12 Series | 1/4 | 20 | 26 |
| | 1/2 | 30 | 57 |
| | Full | 5 | 13 |
| 15 Series | 1/4 | 1 | 0.92 |
| | 1/2 | 18 | 33.3 |
| | Full | 10 | 37 |
| End Strip | | 24 | 14.64 |
| Side Strip | | 28 | 33.88 |

Total GPM: 308.3

308.3 GPM x 25 min run time, 2 times/week = 15,415 gal. week
15,415 x 4.4 weeks/month = 67,826 gal.

### PLANT SCHEDULE NE GATEWAY

| TREES | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| BN | 4 | Betula nigra | River Birch |
| LIM/30 | 7 | Lagerstroemia indica `Muskogee` | Crape Myrtle Multi-Trunk |
| PP | 11 | Pinus palustris | Longleaf Pine |
| QS | 8 | Quercus shumardii | Shumard Red Oak |
| QV/65 | 3 | Quercus virginiana | Southern Live Oak |
| SP/FG | 1 | Sabal palmetto | Cabbage Palmetto |
| UA | 2 | Ulmus alata | Winged Elm |

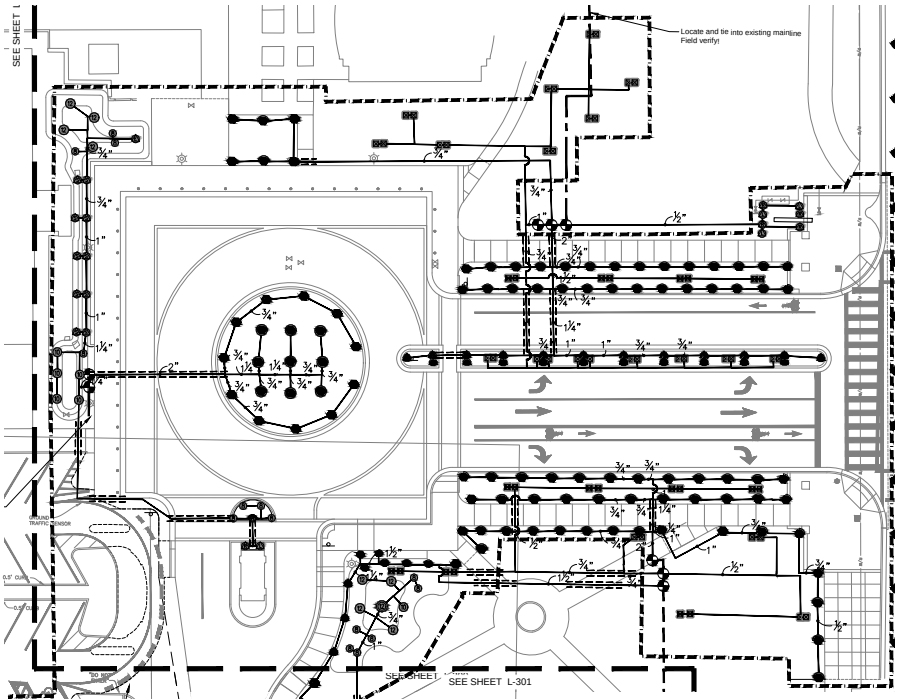
| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| MC/3 | 276 | Muhlenbergia capillaris | Pink Muhly Grass |
| PD | 66 | Podocarpus macrophyllus `Dwarf Pringles` | Dwarf Podocarpus |
| RG | 89 | Rhododendron indicum `Mrs. G.G. Gerbing` | Azalea G.G. Gerbing |

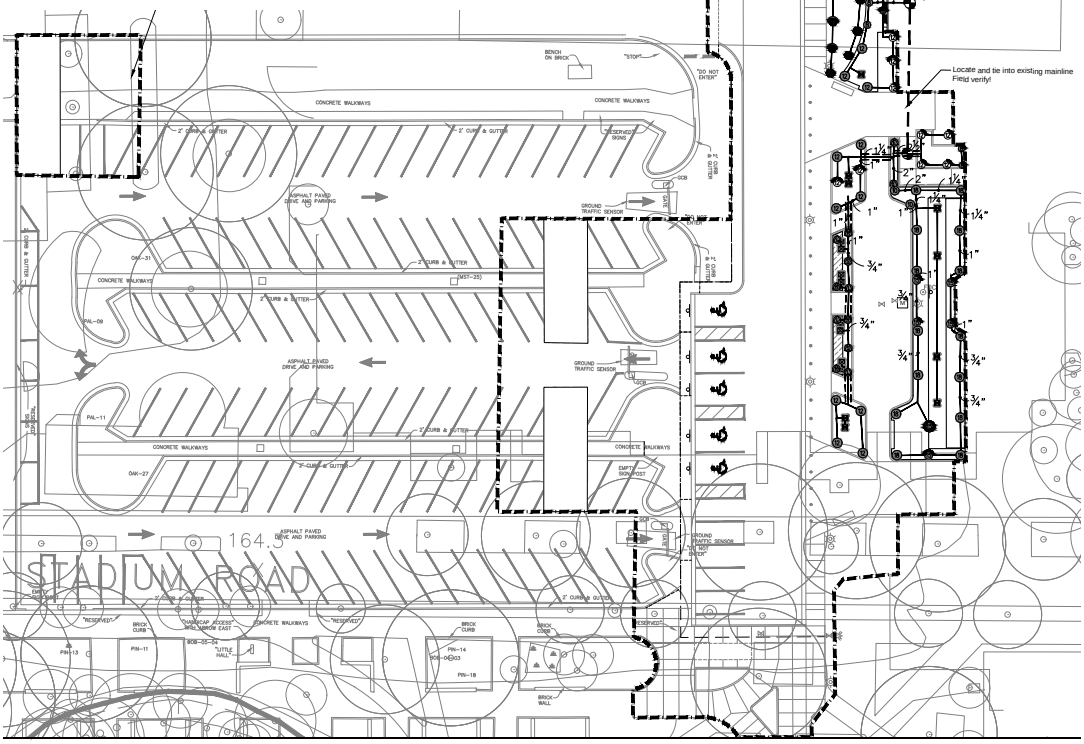
| SHRUB AREAS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| AQ | 68 | Agapanthus africanus `Queen Anne` | Queen Anne Lily of the Nile |
| LE/1 | 716 | Liriope muscari `Emerald Goddess` | Liriope |
| TM | 297 | Trachelospermum asiaticum `Minima` | Minima Jasmine |

| GROUND COVERS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| PN | 1,270 sf | Paspalum notatum | Bahia Grass |
| MULCH | | Pine Straw Mulch | |
| ZE | 7,728 sf | Zoysia japonica `Empire` | Korean Grass |

# Irrigation Plan + Irrigation Schedule

As a small part of the 2000+ acre campus, the irrigation system at the Northeast Gateway is a piece of a much larger system that irrigates the better part of the overall campus. While there are a limited number of irrigation meters on the larger campus system, they provide data on water use for much larger areas well beyond the Northeast Gateway project limits, and not for small component irrigation systems added to the overall campus system. To accurately determine irrigation water use at Northeast on a monthly basis, calculations can be made by determining the flow in gallons per minute for each reduced flow head installed, multiplied by the number of days per month that the system is run and the length of the run time each time the system runs. As evidenced by the email documentation from the UF Grounds Superintendent, the system will be run two days per week for 20-30 minutes. That email document, along with the water use calculations, can be found on page 109. Establishment period water use is not included in the documentation. As a part of that establishment period, individual bubblers are placed at the base on newly installed trees. These bubblers are removed by the university following the establishment period.




| IRRIGATION SCHEDULE | | |
|---|---|---|
| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | PSI |
| | Rain Bird 1806-PRS-NP 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP 5 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP 8 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP 10 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP 12 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP 15 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1806-PRS-NP ADJ Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. Pressure Regulating. With Non Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP SQ Series Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP 15 Strip Series Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP 8 Series MPR Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP 10 Series MPR Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP 12 Series MPR Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP 15 Series MPR Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP ADJ Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1812-PRS-NP HE-VAN Series Shrub Spray 12.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet. With Pressure Regulating Device and Non-Potable Purple Cap. | 30 |
| | Rain Bird 1800-1400 Flood 1401 Fixed flow rate (0.25-2.0GPM), full circle bubbler, 1/2" FIPT. | 30 |
| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
| | Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle. | 15 |
| | Existing Controller | 1 |
| | Irrigation Lateral Line: PVC Class 200 SDR 21 | 7,992 l.f. |
| | Irrigation Mainline: PVC Schedule 40 Existing Mainline | 1,390 l.f. |
| | Irrigation Mainline: PVC Schedule 40-NP | 324.6 l.f. |
| | Pipe Sleeve: PVC Schedule 40 | 1,079 l.f. |

Valve Callout
Valve Number
Valve Flow
Valve Size

Irrigation zones typically run two days a week for 20 – 30 minutes. During establishment of new installations, the days may be increased. Of course, soil types, site conditions and plant material are also considered. There is not a flow sensor on the overall system for detecting a broken sprinkler.

Donna Bloomfield
Grounds Superintendent
Phone: 352 294 0813
Email: dbloomf@ufl.edu

## TABLE 2
## UF LMP - NE Gateway (Tigert Court)
## Rainfall Summary Tables

NE Gateway (Tigert Court) Proposed Impervious Area 61,723 sft

30 Year Span Rainfall Data

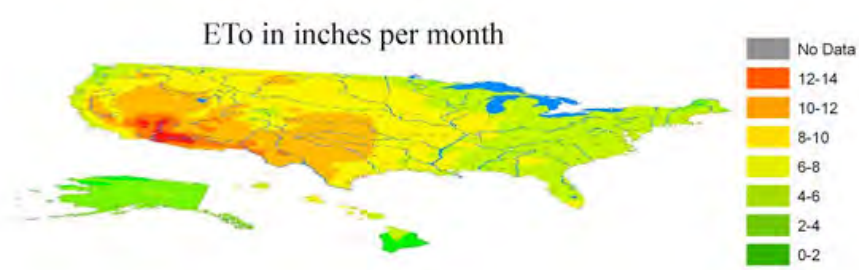
| Year | Rainfall | Monthly Average-Per Year |
|---|---|---|
| | Inches | Inches |
| 1990 | 42.9 | 3.58 |
| 1991 | 46.72 | 3.89 |
| 1992 | 44.35 | 3.70 |
| 1993 | 32.49 | 2.71 |
| 1994 | 41.52 | 3.46 |
| 1995 | 48.86 | 4.07 |
| 1996 | 51.23 | 4.27 |
| 1997 | 52.81 | 4.40 |
| 1998 | 49.78 | 4.15 |
| 1999 | 34.74 | 2.90 |
| 2000 | 34.83 | 2.90 |
| 2001 | 40.52 | 3.38 |
| 2002 | 51.92 | 4.33 |
| 2003 | 48.13 | 4.01 |
| 2004 | 56.15 | 4.68 |
| 2005 | 50.67 | 4.22 |
| 2006 | 32.77 | 2.73 |
| 2007 | 44.03 | 3.67 |
| 2008 | 41.34 | 3.45 |
| 2009 | 47.93 | 3.99 |
| 2010 | 40.82 | 3.40 |
| 2011 | 35.03 | 2.92 |
| 2012 | 58.9 | 4.91 |
| 2013 | 47.85 | 3.99 |
| 2014 | 56.23 | 4.69 |
| 2015 | 49.39 | 4.12 |
| 2016 | 44.31 | 3.69 |
| 2017 | 71.04 | 5.92 |
| 2018 | 63.45 | 5.29 |
| 2019 | 49.56 | 4.13 |
| 2020 | 49.54 | 4.13 |

| Rainfall Amount at Various Percentile Events For a 30 Year span | | | |
|---|---|---|---|
| 60th Percentile | | 95th Percentile | |
| Amount | Required Retention | Amount | Required Retention |
| Inches | cft | Inches | cft |
| 0.56 | 2,880 | 1.88 | 9,670 |

| | |
|---|---|
| Provided capacity in both Rain Gardens | 1,319 cft |

| 30 Year Span Data (1990-2020) | |
|---|---|
| Average Yearly | Average |
| inches | inches |
| 47.09 | 3.92 |

**Evapotranspiration Rate**



## Letter of Availability

UF | UNIVERSITY of FLORIDA

Business Affairs

www.facilities.ufl.edu
Planning, Design & Construction
245 Gale Lemerand Dr. Gainesville, FL 32611

DATE: 4/8/2022

SUBJECT: UF-656/Northeast Gateway SITES, Reclaimed Water Availability

INTENT: Letter of Availability – Reclaimed Water

To Whom It May Concern:

The University of Florida shall maintain a water protection and conservation program for the main campus and satellite facilities in Alachua County through the St. Johns Water Management District, Suwannee River Water Management District and the Gainesville Regional Utility, which outlines various procedures on how to protect and conserve the potable water supply and source, The university maintains a water protection and conservation program consistent with this policy, supportive of UF's green building program, and in compliance with its water use permits. The majority of the main campus is irrigated with reclaimed water, and low-flow fixtures are required by the UF Design and Construction Standards. The University's Water Reclamation Facility has the capacity to process over 3 million gallons daily, using the Kuger BioDenipho process. This process makes an end product suitable for use as reclaimed water, used for campus irrigation. The University's Water Reclamation Facility commits to providing reclaimed water for landscape irrigation to the Northeast Gateway site for the entirety of its operation.

Sincerely,

Charles Kammin

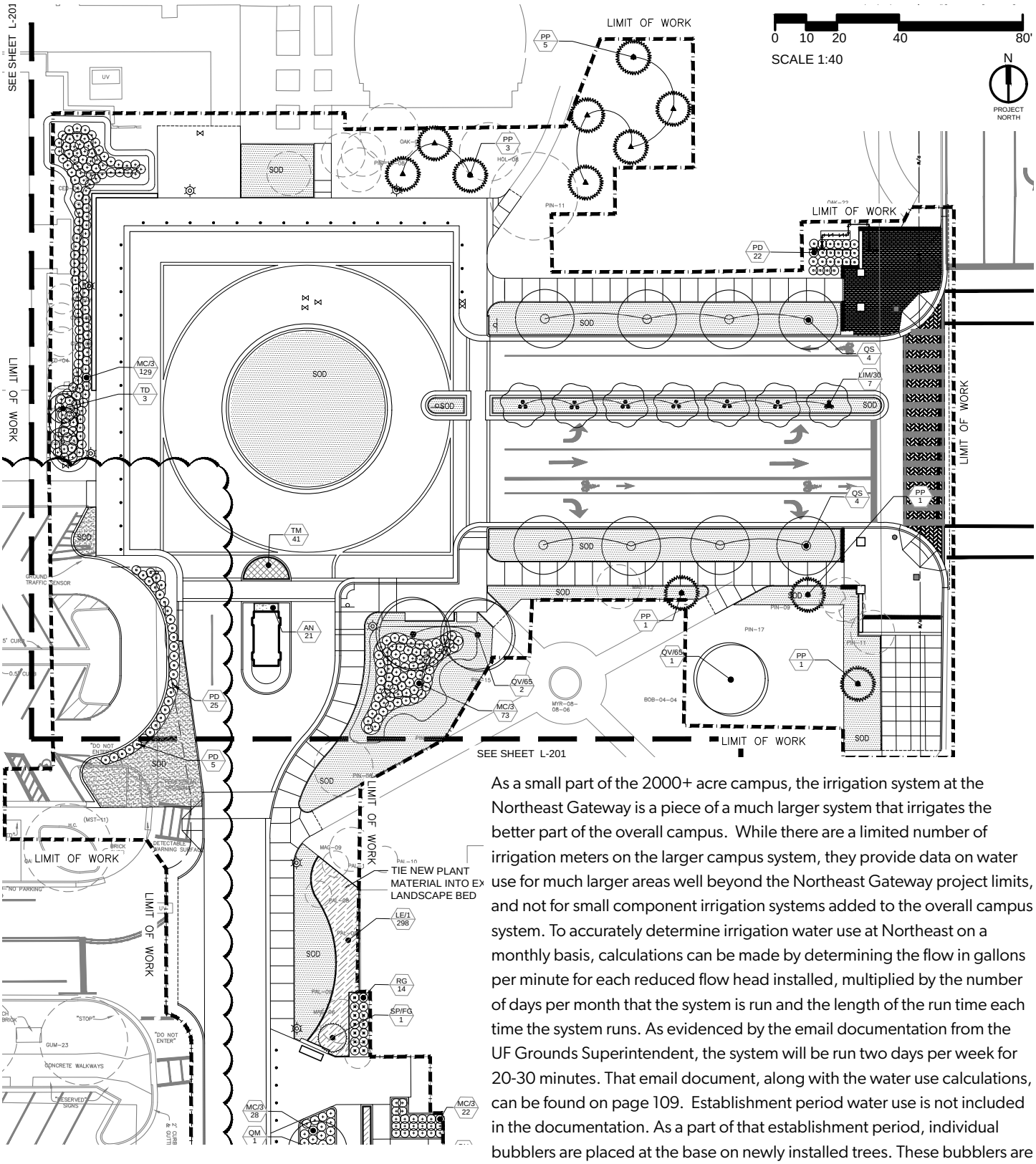
Director of Utilities & Energy Services

Facilities Services

# Credit 3.4 | Reduce outdoor water use

## Planting Plan

**Goal: 5 points**

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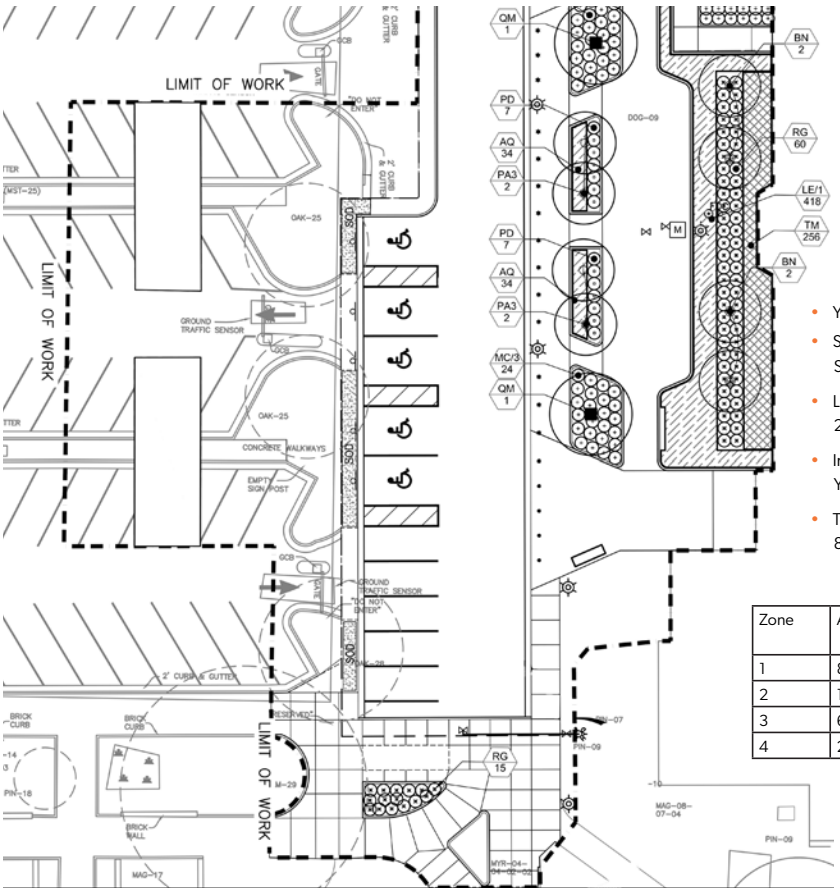


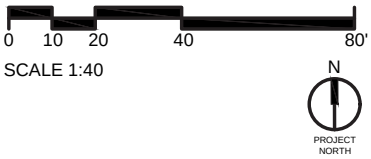


- Your landscape is 67% below the baseline for this site.
- Single Site or Development?
  Single Site
- Landscape Area
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- Irrigation?
  Yes
- Total Area of Turfgrass
  8,998 SF
- Landscape Water Allowance
  72,681 GAL / month
- Landscape Water Requirement
  34,626 GAL / month
- Potential Peak Watering Savings
  38,055 GAL / month (difference b/w the two numbers above)

| Zone | Area (SF) | Plant Type / Landscape Feature | Water Demand | Irrigation Type | Required Water (GAL/Month) |
|---|---|---|---|---|---|
| 1 | 8,998 | Turfgrass | Low | Micro Spray | 0.6 |
| 2 | 12,897 | Trees | Low | Micro Spray | 0.2 |
| 3 | 6,697 | Shrubs | Low | Drip (Standard) | 0.2 |
| 4 | 275 | Nonveg. Softscape | Low | Drip (Standard) | |

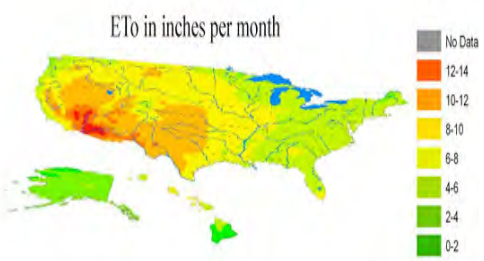
### Landscape coefficient values ($K_L$)

TREES - 0.2

SHRUBS - 0.2

GROUND COVER - 0.6

### Evapotranspiration Rate




## PLANT SCHEDULE NE GATEWAY

| TREES | QTY | BOTANICAL NAME | COMMON NAME |
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| LIM/30 | 7 | Lagerstroemia indica `Muskogee` | Crape Myrtle Multi-Trunk |
| PP | 11 | Pinus palustris | Longleaf Pine |
| QS | 8 | Quercus shumardii | Shumard Red Oak |
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| UA | 2 | Ulmus alata | Winged Elm |

| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
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| PD | 66 | Podocarpus macrophyllus `Dwarf Pringles` | Dwarf Podocarpus |
| RG | 89 | Rhododendron indicum `Mrs. G.G. Gerbing` | Azalea G.G. Gerbing |

| SHRUB AREAS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| AQ | 68 | Agapanthus africanus `Queen Anne` | Queen Anne Lily of the Nile |
| LE/1 | 716 | Liriope muscari `Emerald Goddess` | Liriope |
| TM | 297 | Trachelospermum asiaticum `Minima` | Minima Jasmine |

| GROUND COVERS | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| PN | 1,270 sf | Paspalum notatum | Bahia Grass |
| MULCH | | Pine Straw Mulch | |
| ZE | 7,728 sf | Zoysia japonica `Empire` | Korean Grass |

# Irrigation Plan

### Irrigation Calculations

| Component | Type | Qty. | Total GPM |
|---|---|---|---|
| 8 Series | 1/4 | 2 | 0.52 |
| | 1/2 | 24 | 12.48 |
| | Full | 2 | 2.1 |
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| | Full | 5 | 13 |
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| | 1/2 | 18 | 33.3 |
| | Full | 10 | 37 |
| End Strip | | 24 | 14.64 |
| Side Strip | | 28 | 33.88 |

Total GPM: 308.3

308.3 GPM x 25 min run time, 2 times/week = 15,415 gal. week

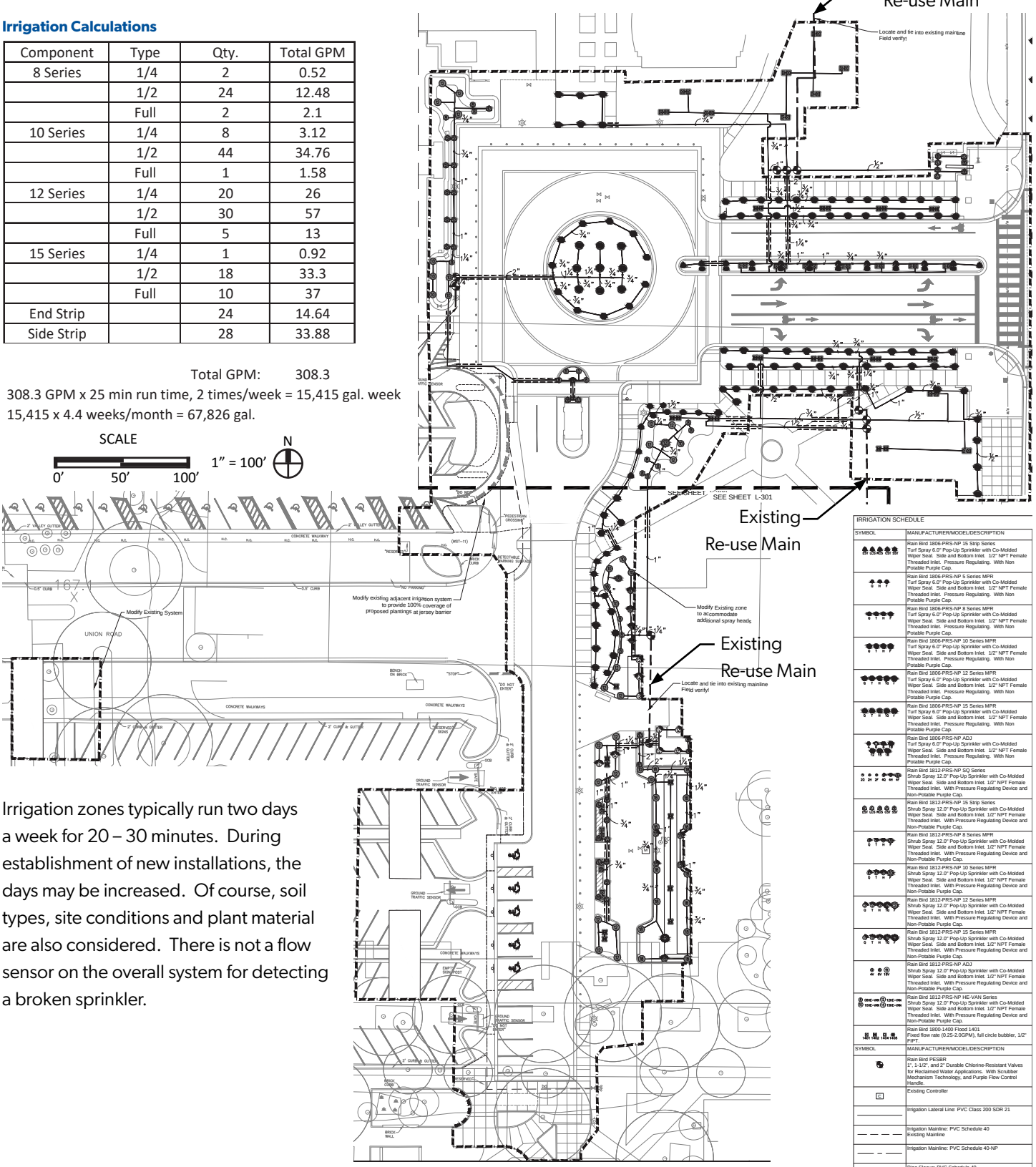
15,415 x 4.4 weeks/month = 67,826 gal.

SCALE

0' 50' 100'

1" = 100'

N




Irrigation zones typically run two days a week for 20 – 30 minutes. During establishment of new installations, the days may be increased. Of course, soil types, site conditions and plant material are also considered. There is not a flow sensor on the overall system for detecting a broken sprinkler.

# Water Budget Calculations

**WaterSense New Home Specification: Water Budget Tool (V 1.04)**

| Enter your information in these columns. | | These columns will automatically populate. | | |
|---|---|---|---|---|
| **This water budget tool shall be used to determine if the designed landscape meets Criteria 4.1.1 of the specification.** | | Peak watering month: | apr | |
| **Please refer to the WaterSense Water Budget Approach for additional information.** | | | | |
| Your Name: | [Enter] | | | |
| Builder Name: | [Enter] | 1B: Average monthly reference | | |
| Lot Number/Street Address: | [Enter] | evapotranspiration (ETo): | 5.77 | inches/month |
| City, State: | Gainesville, FL | 2A: Average monthly rainfall: | 2.08 | inches/month |
| Zip Code (required): | 32611 | | | |
| * In Canada, enter just the frst three characters of your postal code (e.g. A1A) | | | | |
| **Enter information about your landscape here:** | | Monthly **baseline** (gallons/month) based on the site's peak watering month: | 103,830 | gallons/month |
| **STEP 1A - ENTER THE LANDSCAPED AREA (A)** | | Monthly **landscape water allowance** or **LWA** (gallons/month) based on the site's peak watering month: | 72,681 | gallons/month |
| 28,867 | **Area of the designed landscape (square feet)** | | | |
| **Is an irrigation system installed on this site?** | | | | |
| Yes | | | | |

**Need help?**

**See the WaterSense website for help on what to plant or search for a certified irrigation pro!**

**Step 2B/Table 1.**

| Zone | Hydrozone/ Landscape Feature Area (sq. ft.) | Plant Type or Landscape Feature | Water Use | Irrigation Type | Landscape Coefficient ($K_L$) | Default DU (hidden) | Distribution Uniformity ($DU_{LQ}$) | $LWR_H$ (gal/month) |
|---|---|---|---|---|---|---|---|---|
| 1 | 12,897 | Trees | Low | Microspray | 0.2 | 70% | 70% | 7,277 |
| 2 | 8,998 | Turfgrass | Low | Fixed Spray | 0.6 | 65% | 65% | 25,384 |
| 3 | 6,697 | Shrubs | Low | Microspray | 0.2 | 70% | 70% | 3,778 |
| 4 | 275 | Nonvegetated Softscape | | No Irrigation | | | | - |
| 5 | | | | | | | | - |
| 6 | | | | | | | | - |
| 7 | | | | | | | | - |
| 8 | | | | | | | | - |
| 9 | | | | | | | | - |
| 10 | | | | | | | | - |
| 11 | | | | | | | | - |
| 12 | | | | | | | | - |
| 13 | | | | | | | | - |
| 14 | | | | | | | | - |
| 15 | | | | | | | | - |
| **Total Area =** | **28,867 of 28867 square feet** | | | **Landscape Water Requirement** or **LWR** for the Site (gal/month) | | | | 36,439 |

| | | |
|---|---|---|
| You have used | 50% | of your allowance. |
| This is | 65% | below the baseline. |

Peak Watering Month: apr

Is an irrigation system being installed on this site? Yes

## This worksheet determines if the designed landscape meets the water budget.

If the landscape water requirement is LESS than the landscape water allowance, then the water budget criterion is met.
If the landscape water requirement is GREATER than the landscape water allowance, then the landscape and/or irrigation system needs to be redesigned to use less water.

**STEP 3A - REVIEW THE LWA AND LWR FROM PART 1 AND PART 2**

**LWA** 72,681 (gallons/month) **LWR** 36,439 (gallons/month)

**STEP 3B - REVIEW THE TOTAL AREA OF TURFGRASS* IN THE DESIGNED LANDSCAPE FROM STEP 2B**

**The designed landscape contains** 8,998 **square feet of turfgrass.*** **This is** 31% **of the landscaped area.**

*This includes the area of any pools, spas, and/or water features, designated by WaterSense to be counted as turfgrass.

**OUTPUT - DOES THE DESIGNED LANDSCAPE MEET THE WATER BUDGET?**

**YES** If YES, then the water budget criterion is met.
If NO, then the landscape and/or irrigation system needs to be redesigned to use less water.

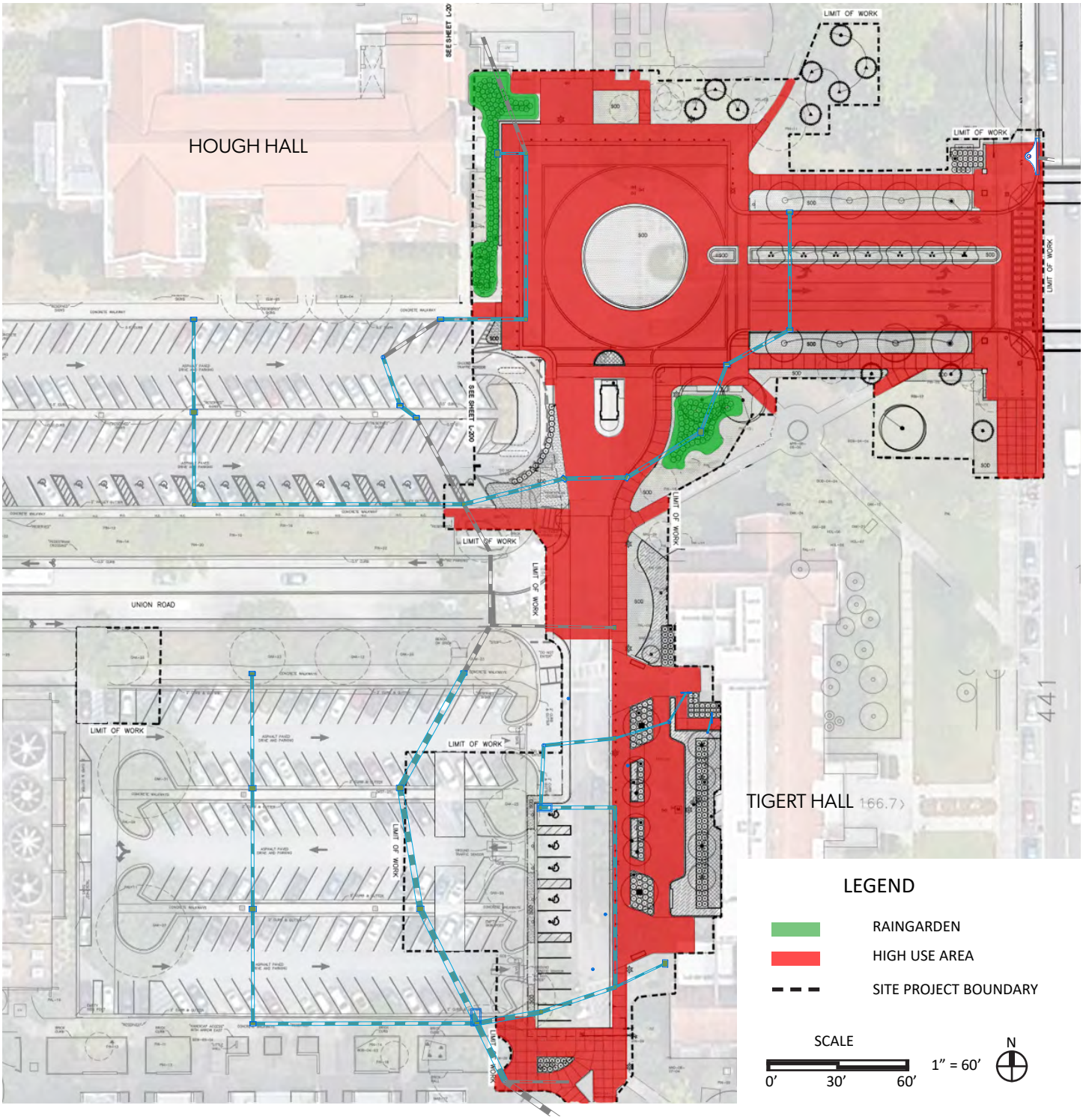
The designed landscape water requirement is a 65% reduction in water use from the baseline calculated in Part 1.

# Credit 3.5 | Design functional stormwater features as amenities

## Site plan

**Goal: 4 points**

Site precipitation is managed on site through the use of two rain gardens that will collect stormwater runoff. The rain gardens are integrated into the design of the site and can be accessed by surrounding walkways on every side. The rain gardens are not only functional, but the natural shape and plantings also serve as an aesthetically enhancing feature for site users.



### Calculations

Square Footage of stormwater and conveyance features
Area Drains/Gutters - 201 Sq.ft.
8″ Pipe - 35.6 Sq.ft.
10″ Pipe - 22.92 Sq.ft.
12″ Pipe - 82.3 Sq.ft.
15″ Pipe - 72.5 Sq.ft
18″ Pipe - 942.72 Sq.ft
30″ Pipe - 243.25 Sq.ft
Stormwater Ponds - 2,491 Sq.ft.

Total - 4091.29 Sq.ft.

**TABLE 1**
**UF LMP - NE Gateway (Tigert Court)**
**Stage-Storage Calulations**

**Rain Garden 1 By the Building**

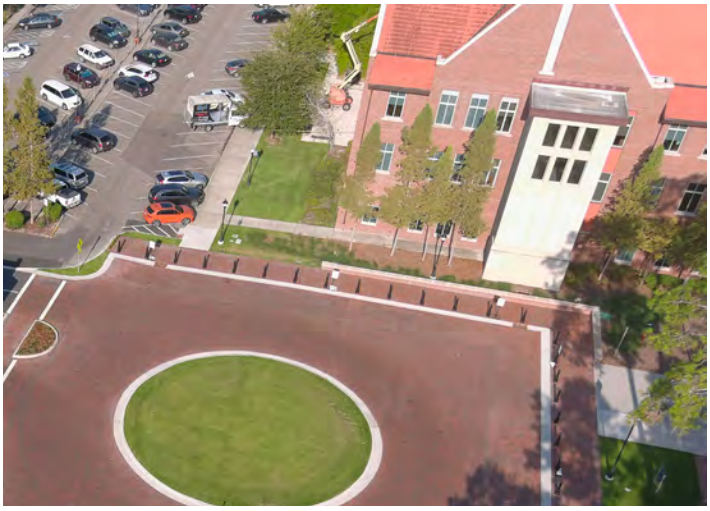
| | STAGE | AREA | | STORAGE | |
|---|---|---|---|---|---|
| | (ft) | (ac) | (sft) | (ac-ft) | (cft) |
| TOP OF BANK | 165.8 | 0.03 | 1477.00 | 0.02 | 696.80 |
| POND BOTTOM | 165 | 0.01 | 265.00 | 0 | 0.00 |

**Rain Garden 2 By the Guard House**

| | STAGE | AREA | | STORAGE | |
|---|---|---|---|---|---|
| | (ft) | (ac) | (sft) | (ac-ft) | (cft) |
| TOP OF BANK | 166 | 0.02 | 1014.00 | 0.01 | 622.00 |
| POND BOTTOM | 165 | 0.01 | 230.00 | 0 | 0.00 |

| | |
|---|---|
| **Combined Retention (Rain Gardens)** | 1318.80 |

### Photographs

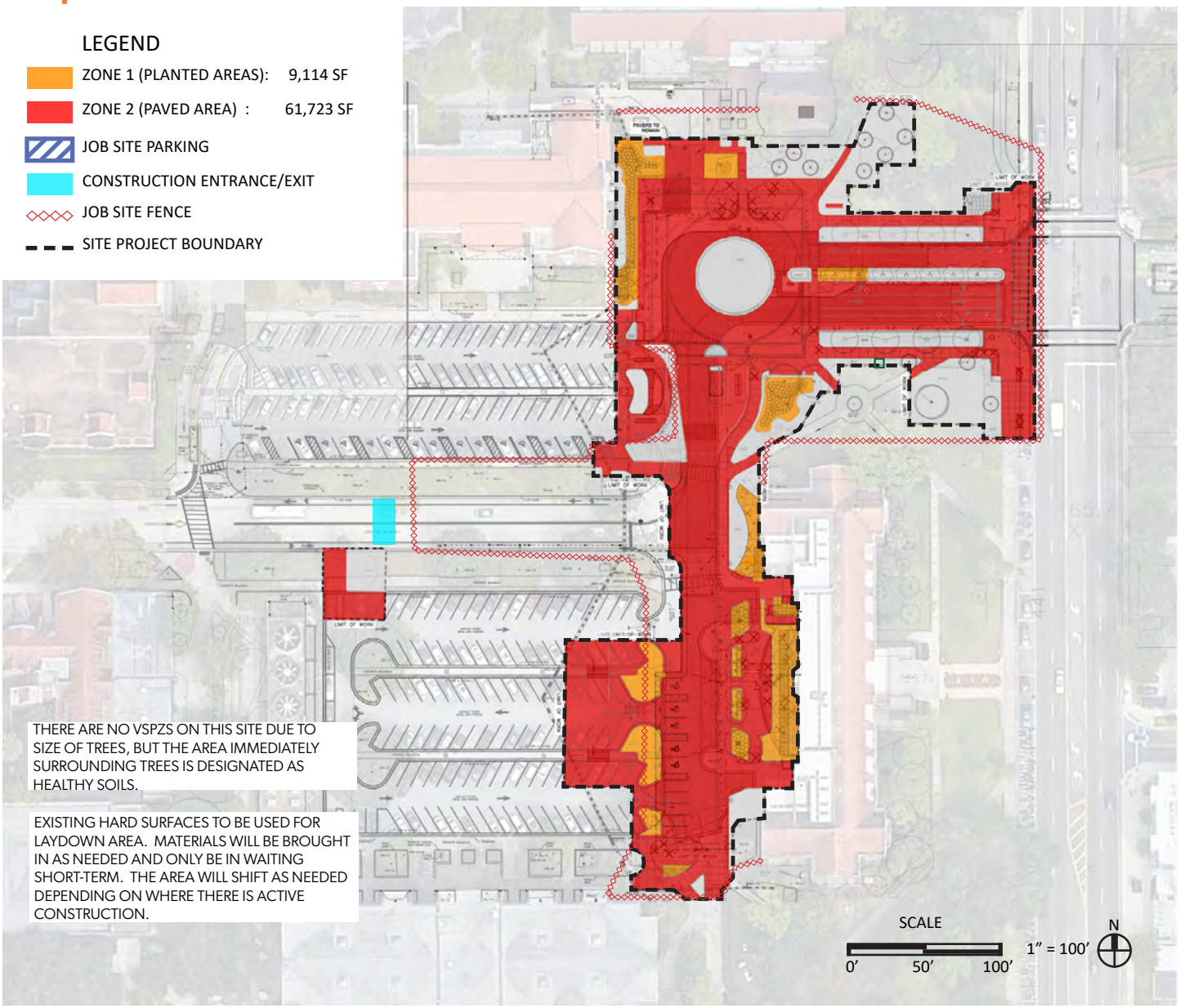


# SECTION 4:
# SITE DESIGN | SOIL + VEGETATION

| Prerequisite | Title | Points |
|---|---|---|
| Soil+Veg P4.1 | Create and communicate a soil management plan | Required |
| Soil+Veg P4.2 | Control and manage invasive plants | Required |
| Soil+Veg P4.3 | Use appropriate plants | Required |
| **Credit** | **Title** | **Points** |
| Soil+Veg C4.8 | Optimize biomass | 1 points |
| Soil+Veg C4.9 | Reduce urban heat island effects | 4 points |

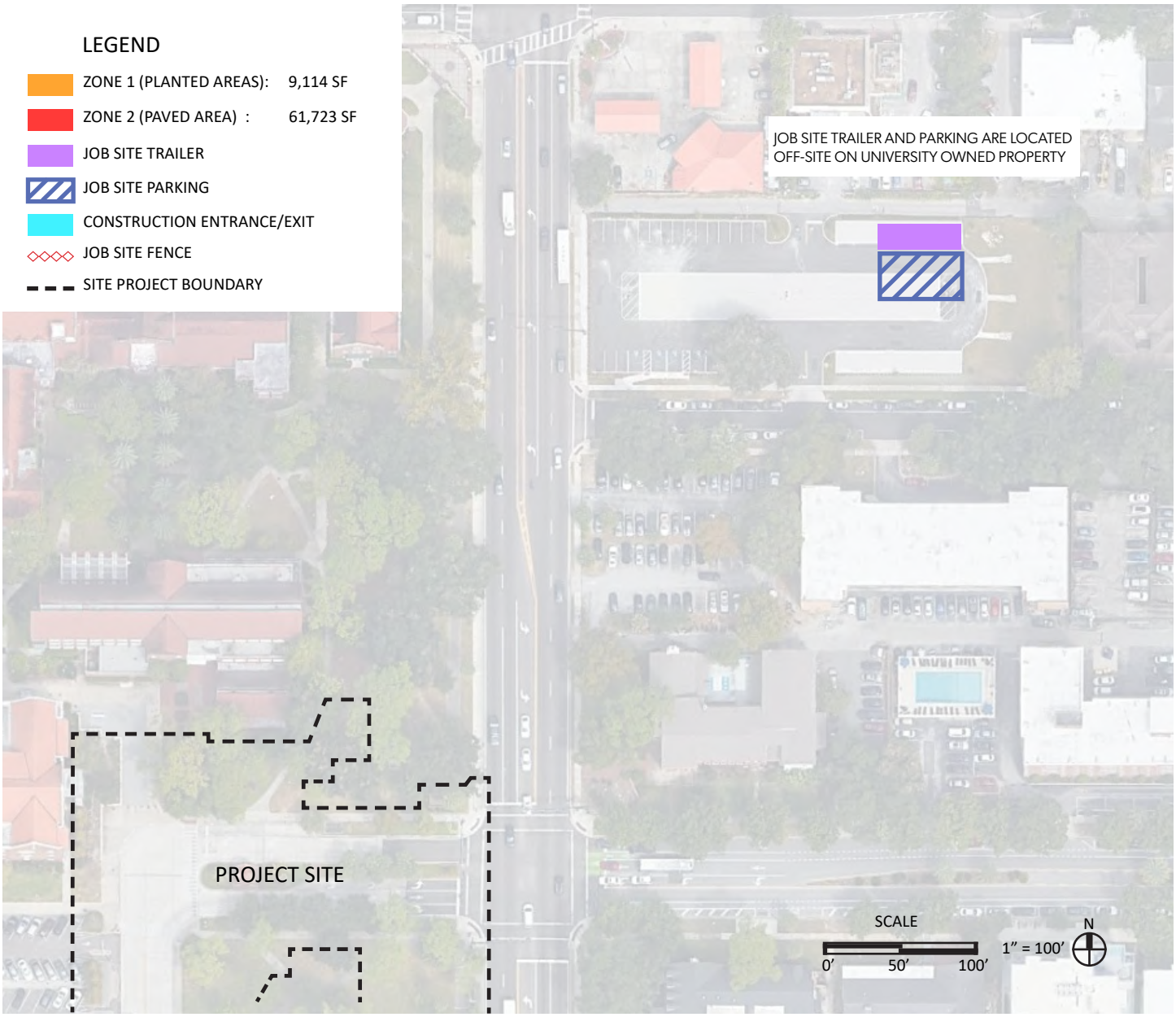
# Prerequisite 4.1 | Create and communicate a soil management plan

## Site plan




Northeast Gateway's soil management plan is shown as a series of hatch pattern zones with a key offering square footages of each soil restoration treatment zone, as well as the material staging area. Zone 1 outlines the disturbed areas where existing paving will be removed, some construction excavation will occur, and the underlying soil will be remediated and restored. Areas of sod that are not disturbed during construction will not have underlying soil remediated. Zone 2 contains pavement that will not be re-vegetated. The materials staging area is on existing paving that will remain in place and construction vehicle access is available down Newell Drive. The specific activities and methods of soil remediation will be described in more detail in the narrative portion of the submission documents and in the required Soil Management Plan Worksheet.

## Site plan


LEGEND
ZONE 1 (PLANTED AREAS): 9,114 SF
ZONE 2 (PAVED AREA) : 61,723 SF
JOB SITE TRAILER
JOB SITE PARKING
CONSTRUCTION ENTRANCE/EXIT
JOB SITE FENCE
SITE PROJECT BOUNDARY
JOB SITE TRAILER AND PARKING ARE LOCATED OFF-SITE ON UNIVERSITY OWNED PROPERTY
PROJECT SITE
SCALE
0'
50'
100'
1" = 100'
N

# SITES® v2 Soil Management Plan Worksheet

## P4.1: CREATE AND COMMUNICATE A SOIL MANAGEMENT PLAN

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Fill out this sheet once for each planned vegetated zone (the entire vegetated area of the site is either Veg & Soil Protection or Soil Restoration zones)

| VEGETATION AND SOIL PROTECTION ZONE INFORMATION (all areas designated as VSPZs under P:2.3) | |
|---|---|
| **VEGETATION AND SOIL PROTECTION ZONE ID** | N/A - Due to size of mature trees |
| **VSP ZONE SURFACE AREA** (square feet) | N/A - See strategy below |
| **VEGETATION AND SOIL PROTECTION STRATEGY** | Tree protection barriers will be installed around base of tree before construction begins. VSPZ boundaries are shown to the greatest extent possible, due to large size of exisging trees the VSPZ boundaries do not meet requirements. |

| SOIL RESTORATION ZONE INFORMATION (all areas disturbed by current or previous construction practices that will serve as final vegetated area) | |
|---|---|
| **SOIL RESTORATION ZONE ID** | Zone 1 |
| **DISTURBED BY CURRENT CONSTRUCTION?** | Yes |
| **PREVIOUSLY DISTURBED SOILS?** | Yes |
| **PLANTING TYPE / COVER** | Planting beds, native vegetation, trees and turf |
| **ZONE SURFACE AREA** (square feet) | 28,867 |
| **SOIL RESTORATION STRATEGY** | Disturbed soils identified in zone 1 will be restored using the following strategy. Landscape beds will have remediated soils to a depth of 12", tree planting areas to a depth of 18" and rain gardens to a depth of 24". Remediated soils shall meet the minimum requirements of ASTM D5268 Standard Specification for Topsoil Used for Landscaping Purpose. Soil testing will be performed on landscape soils to determine amendments required. |
| **SCARIFICATION DEPTH** (inches) | 6" |

**SOIL RESTORATION TREATMENT**

| TREATMENT* | INCHES APPLIED | AREA PER ZONE (square feet) | ESTIMATED QUANTITY (cubic yards) | PRODUCT NAME and MANUFACTURER/SUPPLIER NAME |
|---|---|---|---|---|
| Soil for raingardens | 24 | 2692 | 200.2848 | |
| Topsoil for plantings | 12 | 18,370 | 683.364 | O'Steen Brothers of Gainesville |
| Topsoil for trees | 18 | 7,805 | 435.519 | O'Steen Brothers of Gainesville |
| | | | 0 | |

*Retain delivery tickets for each treatment

| | |
|---|---|
| **COMMUNICATION OF SOIL MANAGEMENT PLAN** | Bryce Burger |

V1

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## Soil Restoration Treatment

As indicated by the chart, we imported local topsoils for the restoration of each treatment zone. These topsoils were procured from the top 6″ of soil on local construction sites prior to the commencement of site work operations. Soils were amended based on the recommendations of the testing lab.

### General

Indicated fertilizer amounts, coupled with nutrients already in the soil, will satisfy the crop-nutrient requirement for this growing season. Fertilizer and water management are linked. Maximum fertilizer efficiency is achieved only with close attention to water management. Supply only enough irrigation water to satisfy plant requirements and minimize leaching conditions.

Established trees (more than three to five years since transplanting) do not need routine fertilization.

For recently-planted trees, broadcast fertilizer within a diameter of 1.5 times the dripline diameter.

Broadcast P2O5 either in one application or as half the recommended amount in each of two applications during the growing season. To minimize leaching losses, broadcast N and K2O in small increments throughout the growing season. Schedule one application every 12 weeks (three times per growing season), adding 33% of the recommended amount of N and K2O at each application. To insure equal coverage when fertilizer rates are small, blend all compatible fertilizers.

### Soil pH

The pH of this soil is quite high. If this is a natural condition (i.e. if it is not from the over-application of lime), it is generally impractical to lower the soil pH with soil ammendments. Use plant species that are tolerant of high soil pH.

### Gypsum

Apply 10 lb gypsum per 1000 sq. ft. as a calcium fertilizer source.

### Magnesium

Apply the equivalent of 35 lb Mg/A, or 0.8 lb Mg per 1000 sq. ft., in a soluble form, such as magnesium sulfate or potassium magnesium sulfate.

## Lime and Fertilizer Recommendations

| | | |
|---|---|---|
| Lime: | **0.00** | **lbs per 1000 sq. ft.** |
| Nitrogen(N): | **1.10** | **lbs per 1000 sq. ft.** |
| Phosphorus($P_2O_5$): | **0.00** | **lbs per 1000 sq. ft.** |
| Potassium($K_2O$): | **0.00** | **lbs per 1000 sq. ft.** |
| Magnesium(Mg): | **0.80** | **lbs per 1000 sq. ft.** |

We do not test soil for N as there is no meaningful soil test for predicting N availability. Thus, the N recommendation was developed from research that measured response of the indicated crop to applied N fertilizer. If you expect significant nutrient release from organic sources such as crop residues or organic amendments, estimate the amount mineralized and subtract that amount from the fertilizer recommendations given below to arrive at crop needs.

**IMPORTANT: Prior to making any of the recommended applications, read carefully the footnotes/directions on this report. If you have any questions, please call the county extension agent listed above.**

# Prerequisite 4.2 | Control and manage invasive plants

# Case 1: No invasive plants found on site

## Narrative

The contractor shall ensure all plant material is free of invasive plants identified n the Florida Exotic Plant Council's List of Invasive Plant Species. The contractor is to inspect all plant material prior to delivery to the project site. In addition, the project landscape architect, who prepared the landscape plan, will inspect the project to assure that no invasives were inadvertently permitted to volunteer on the project site.

Landscape designs on campus are bound by the requirements of the University of Florida Landscape Master Plan, which addresses the general approach to landscape design on campus. It also provides a list of specific plant species that are permitted to be used on the campus, none of which are invasives, and many of which are Florida native plants.

A review of landscape designs and plant material selections for all campus projects is required by the UF's Lakes, Vegetation and Landscape (LVL) Committee, which reviews designs at the 30% and 60% stages of plan completion. This committee requires that the landscape architects present the designs at monthly meetings. The presentations are followed by a rigorous review by Committee members, who are comprised of UF faculty and staff including horticulture and landscape architecture professors as well as Grounds personnel.

The image below is taken from the first page of the approved plant list from the UF Landscape Master Plan.

### GENERAL CAMPUS PLANT PALETTE
PRECINCTS: 1,2,3,4

The plant species listed here have been selected in part to provide designers with varying options related to cultural requirements, texture, color and seasonal variety. The high percentage of native plants listed is intentional and is a reflection of the University's dedication to environmental stewardship. However no plant list can adequately meet all planting requirements for all conditions, and as a result a request to specify a plant that is not listed below may be made to the Lakes, Vegetation, and Landscaping Committee by submitting a formal request through the University's assigned project manager at the Planning Design and Construction Division.

**LARGE TREES**

| BOTANICAL NAME<br>*COMMON NAME* | LIGHT | SOIL MOISTURE | NATIVE |
|---|---|---|---|
| Acer rubrum<br>*Red Maple* | | | |
| Carya glabra<br>*Pignut Hickory* | | | |
| Carya illinoensis<br>*Pecan* | | | |
| Fraxinus pennsylvanica<br>*Green Ash* | | | |
| Gordonia lasianthus<br>*Loblolly bay* | | | |
| Liquidambar styraciflua<br>*Sweetgum* | | | |
| Liriodendron tulipifera<br>*Tulip Poplar* | | | |
| Magnolia grandiflora<br>*Southern Magnolia* | | | |
| Magnolia virginiana and cvs.<br>*Sweetbay Magnolia* | | | |
| Persea borbonia<br>*Red bay* | | | |
| Pinus elliottii<br>*Slash Pine* | | | |
| Pinus elliottii var. elliottii<br>*Northern Slash Pine* | | | |
| Pinus palustris<br>*Long Leaf Pine* | | | |
| Pinus taeda<br>*Loblolly Pine* | | | |
| Platanus occidentalis<br>*Sycamore* | | | |
| Quercus falcata<br>*Southern Red Oak* | | | |
| Quercus geminata<br>*Sand Live Oak* | | | |
| Quercus michauxii<br>*Swamp Chestnut Oak* | | | |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6: CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Fill out this sheet once for each planned vegetated zone

| SITE INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **VEGETATED ZONE** (square feet or acres) | 36,184 sq. ft. |
| **SOIL RESTORATION ZONE ID** | Zone 1 |
| **SOIL DEPTH (inches)** | 12 inches |
| **SPACE LIMITATIONS** | None |
| **APPROXIMATE DIRECT SUN TIME** (hours) | 12 hours, 9 minutes |
| **SUN EXPOSURE** | Full Sun |
| **PRECIPITATION** (annual average in inches) | 47.09 |
| **HARDINESS ZONE** (USDA, where available) | 8B - 9A |
| **EPA LEVEL III ECOREGION** (where available) | Southern Coastal Plain |
| **COUNTY** | Alachua |
| **STATE** | Florida |
| **COUNTRY** | United States |

# SITES® v2 Vegetation Worksheet

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| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Betula nigra |
| **COMMON NAME** | River Birch |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Bronze birch border |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 40'-70' FT Ht., 40'-60' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Average, medium to wet soils |
| **PLANT WATER USE** | Medium to wet |
| **HARDINESS RANGE** (USDA, where available) | 3A - 9B |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

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**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Lagerstroemia indica 'Muskogee' |
| **COMMON NAME** | Crape Myrtle |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Muskogee |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Fungal leaf spot and powdery mildew, chlorosis, aphids and scale, winter injury |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | No |
| **MATURE HEIGHT and SPREAD** | 4'-12' FT Ht., 4'-12' FT Sprd. |
| **SUN EXPOSURE** | Full sun |
| **SOIL REQUIREMENTS** | Loamy, clay soils |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 7A -10A |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Pruning should be done in later winter/ early spring, pinch during growing seacon |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 I, PB I, PR I |
| **NATIVE TO EPA LEVEL III ECOREGION?** | No |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

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**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Pinus palustris |
| **COMMON NAME** | Longleaf Pine |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Borers, sawflies, pine-shoot moth, pine weevils |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 60'-80' FT Ht., 30'-40' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Clay, loam, sand, slightly alkaline, acidic, well-drained soil |
| **PLANT WATER USE** | Medium to wet |
| **HARDINESS RANGE** (USDA, where available) | 7b- 9a |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Droop as the tree grows, needs little pruning to develop a strong structure |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

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**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Prunus angustifolia |
| **COMMON NAME** | Chickasaw Plum |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Plum curculio, brown rot, leaf spot, canker, black knot, aphids, scale, borers, tent caterpillars |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 4'-20' FT Ht., 4'-20' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Average, medium, well-drained soils |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 6A - 9B |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Propagation is by seed or cuttings |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Quercus michauxii |
| **COMMON NAME** | Swamp Chestnut Oak |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Oak wilt, chestnut blight, shoestring root rot, anthracnose, oak leaf blister, cankers, leaf spots, powdery mildew, scale, oak skeletonizer, |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 60'-80' FT Ht., 30'-50' FT Sprd. |
| **SUN EXPOSURE** | Full sun |
| **SOIL REQUIREMENTS** | Acidic, moist loams |
| **PLANT WATER USE** | Medium to wet |
| **HARDINESS RANGE** (USDA, where available) | 4a - 9b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

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| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Quercus shumardii |
| **COMMON NAME** | Shumard Red Oak |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Anthracnose, canker, lead spot, rust, blight, galls, caterpillars, borersm leaf miners, oak lave bug and oak mite. Chlorosis. |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 40'-60' FT Ht., 30'-40' FT Sprd. |
| **SUN EXPOSURE** | Full sun |
| **SOIL REQUIREMENTS** | Average, dry to medium moisture, adifici, well-drained soils |
| **PLANT WATER USE** | Dry to medium |
| **HARDINESS RANGE** (USDA, where available) | 5b - 9b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Sabal Palmetto |
| **COMMON NAME** | Cabbage Palmetto |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Weevil, Ganoderma butt rot, Thielaviopsis trunk rot, Texas phoenix palm decline |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 40'-50' FT Ht., 10'-15' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Clay, loam, sand, acidic, alkaline, well-drained soil |
| **PLANT WATER USE** | Low |
| **HARDINESS RANGE** (USDA, where available) | 8b - 11 |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Needs little pruning |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Taxodium distichum |
| **COMMON NAME** | Bald Cypress |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Chlorosis, bagworms, gall mites, spider mites, twig blight |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Usually disease/ pest free |
| **MATURE HEIGHT and SPREAD** | 50'-70' FT Ht., 20'-45' FT Sprd. |
| **SUN EXPOSURE** | Full sun |
| **SOIL REQUIREMENTS** | Average, medium to wet, moisture retantive but reasonably well-drained soils |
| **PLANT WATER USE** | Medium to wet |
| **HARDINESS RANGE** (USDA, where available) | 4a - 9b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Needs little pruning to develop a strong structure |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Illicium floridanum |
| **COMMON NAME** | Florida Anisetree |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Yes |
| **MATURE HEIGHT and SPREAD** | 6'-10' FT Ht., 4'-8' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Moist soils |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 7a - 10b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Pruning once a year |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Muhlenbergia capillaris |
| **COMMON NAME** | Pink Muhly Grass |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Yes |
| **MATURE HEIGHT and SPREAD** | 2'-3' FT Ht., 2'-3' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Sandy or rocky, dry to medium moisture, well-drained soils |
| **PLANT WATER USE** | Dry to medium |
| **HARDINESS RANGE** (USDA, where available) | 5a - 9b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Low |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N, PR N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Podocarpus macrophyllus 'Dwarf pringles' |
| **COMMON NAME** | Dwarf Podocarpus |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Dwarf pringles |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | No |
| **MATURE HEIGHT and SPREAD** | 20'-40' FT Ht., 10'-20' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Rich, slightly scidic, well-drained soils |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 7a - 9b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Needs little pruning to deveop a strong structure |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N, PR I |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Zamia pumila |
| **COMMON NAME** | Coontie |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | N/A |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | No |
| **MATURE HEIGHT and SPREAD** | 1'-5' FT Ht., 3'-5' FT Sprd. |
| **SUN EXPOSURE** | Full sun to deep shade |
| **SOIL REQUIREMENTS** | Grows in any soil type |
| **PLANT WATER USE** | Low |
| **HARDINESS RANGE** (USDA, where available) | 7b - 10b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 N, PR N |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Agapanthus africanus 'Queen Anne' |
| **COMMON NAME** | Queen Anne Lily of the Nile |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Queen Anne |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | No |
| **MATURE HEIGHT and SPREAD** | 1.5'-2' FT Ht., 1.5'-2' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Moist soil, |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 8a - 11b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | Not in PFA |
| **NATIVE TO EPA LEVEL III ECOREGION?** | No |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Liriope muscari 'Emerald Goddess' |
| **COMMON NAME** | Liriope |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Emerald Goddess |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Mites, slugs, snails, scale |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | No |
| **MATURE HEIGHT and SPREAD** | 1'-1.5' FT Ht., 0.75'-1' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Average, medium moisture, well-drained soil |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 5b - 10b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Cut foliage to the ground in later winter to early spring |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 I |
| **NATIVE TO EPA LEVEL III ECOREGION?** | No |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Trachelospermum asiaticum 'Minima' |
| **COMMON NAME** | Minima Jasmine |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Minima |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | No serious insect or disease problems |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Yes |
| **MATURE HEIGHT and SPREAD** | 3'-6' FT Ht., 3'-6' FT Sprd. |
| **SUN EXPOSURE** | Full sun to part shade |
| **SOIL REQUIREMENTS** | Medium wet, well-drained loams |
| **PLANT WATER USE** | Medium |
| **HARDINESS RANGE** (USDA, where available) | 7a - 11b |
| **SPECIAL MAINTENANCE REQUIREMENTS** | Pruning along sidewalks and other edges, Propagation |
| **USDA PLANTS DATABASE NATIVE STATUS:** | N/A |
| **NATIVE TO EPA LEVEL III ECOREGION?** | No |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | No |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6 CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Newell Entry | 13740 |

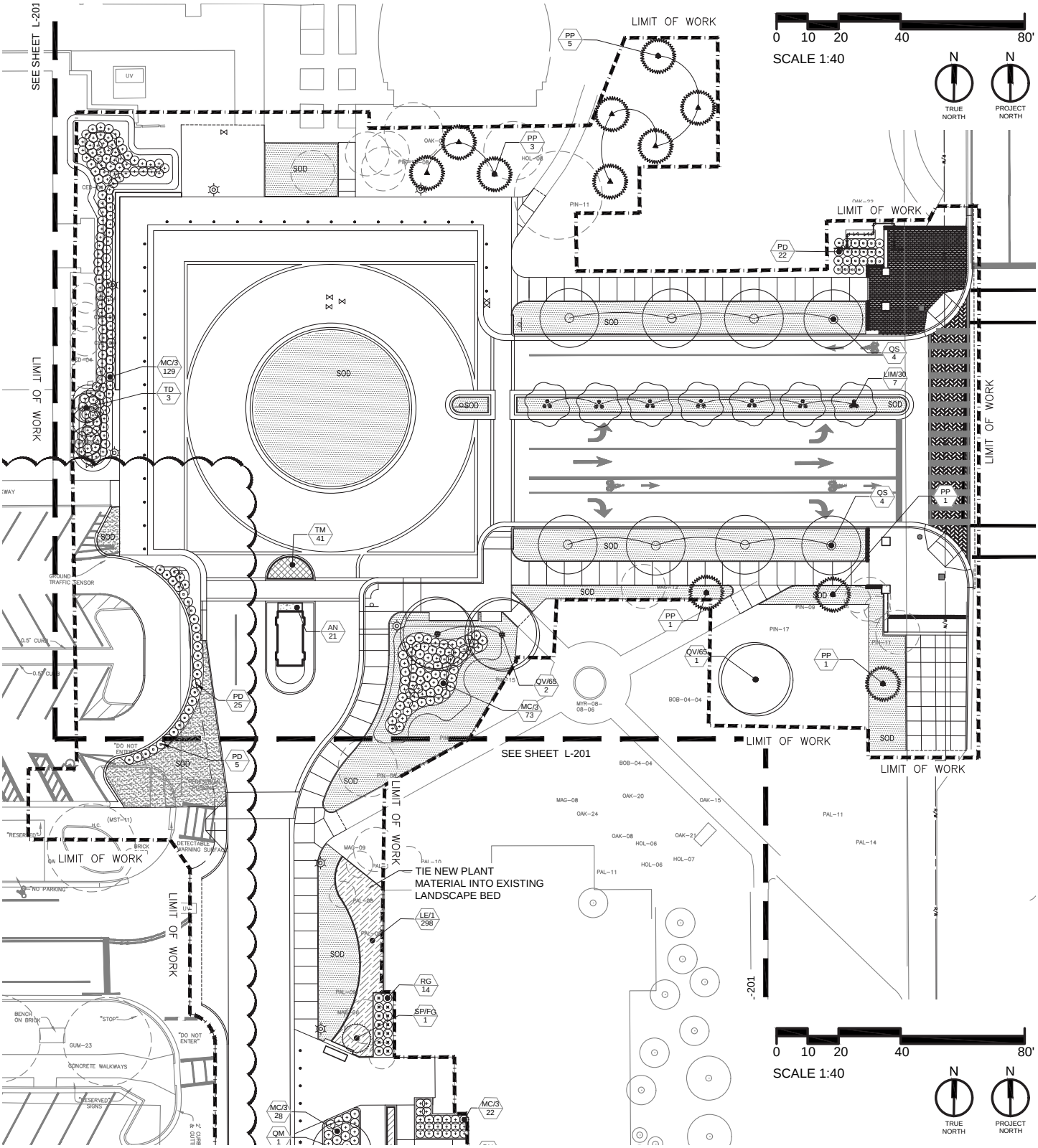
**INSTRUCTIONS:**

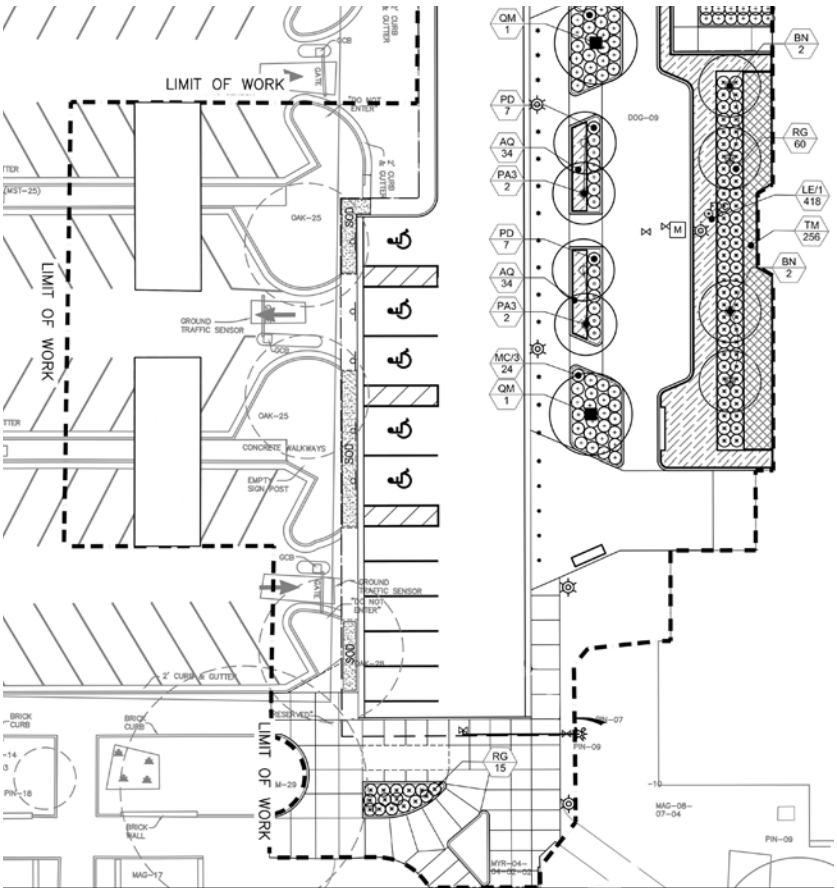
1. Copy and fill out this sheet for each plant species brought to the site

| PLANT INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **SCIENTIFIC NAME** | Zoysia japonica |
| **COMMON NAME** | Korean Grass |
| **CULTIVAR, HYBRID, VARIETY, ETC.** | Empire |
| **KNOWN DISEASES/PESTS FOR THE SPECIES IN THE REGION** | Pest Problems: Hunting billbug, mole crickets, white grubs, sod webworms, and nematodes. Large Patch disease |
| **IS THE SPECIES DISEASE/PEST RESISTANT?** | Weed resistant |
| **MATURE HEIGHT and SPREAD** | 2-4" HT. 2'-3' SPRD. Per year |
| **SUN EXPOSURE** | Full sun to partial shade |
| **SOIL REQUIREMENTS** | Clay; sand; loam; alkaline; acidic |
| **PLANT WATER USE** | Irrigation as needed, less water needed in fall and winter |
| **HARDINESS RANGE** (USDA, where available) | 7B through 10B |
| **SPECIAL MAINTENANCE REQUIREMENTS** | No |
| **USDA PLANTS DATABASE NATIVE STATUS:** | L48 I |
| **NATIVE TO EPA LEVEL III ECOREGION?** | Yes |
| **NATIVE TO COUNTY or KNOWN TO NATURALLY OCCUR WITHIN 200 MILES OF THE SITE?** | Yes |
| **FEDERAL and/or STATE NOXIOUS WEED/INVASIVE STATUS** | No |
| **NURSERY GROWN?** | Yes |
| **LEGALLY HARVESTED?** | Yes |
| **FOOD PRODUCTION?** | No |

# Prerequisite 4.3 | Use appropriate plants

## Planting plan






Based upon the existing plants that were located on site prior to construction, the soil testing that was completed pre-construction and post-construction, and final grading and drainage on the site, the plants are appropriate for the site conditions. Grading and drainage conditions are important to understand because there are two rain gardens on site receiving direct surface runoff for stromwater infiltration. Plants specidfied for each of these areas are acclimated to periodic inundation of water along with periodic dry conditions. In addition, an important landscape design concept that was executed as a part of the Northeast Gateway project, was the reintroduction of Longleaf Pines at the east end of the project adjacent to 13th street / US 441. These pines were historically found on the east side of the campus but most were lost over time to capmus facility expansions and additions. The intent was to reestablish the pine community, and those trees, now planted, are again thriving. Information on each plant provided by the UF Institute of Food and Agricultural Sciences is included. This information is evidence of the appropriateness of the plants specified.

PLANT SCHEDULE NE GATEWAY

| TREES | QTY | BOTANICAL NAME | COMMON NAME |
|---|---|---|---|
| BN | 4 | Betula nigra | River Birch |
| LIM/30 | 7 | Lagerstroemia indica `Muskogee` | Crape Myrtle Multi-Trunk |
| PP | 11 | Pinus palustris | Longleaf Pine |
| QS | 8 | Quercus shumardii | Shumard Red Oak |
| QV/65 | 3 | Quercus virginiana | Southern Live Oak |
| SP/FG | 1 | Sabal palmetto | Cabbage Palmetto |
| TD | 3 | Ulmus alata | Winged Elm |
| | | | |
| SHRUBS | QTY | BOTANICAL NAME | COMMON NAME |
| MC/3 | 276 | Muhlenbergia capillaris | Pink Muhly Grass |
| PD | 66 | Podocarpus macrophyllus `Dwarf Pringles` | Dwarf Podocarpus |
| RG | 89 | Rhododendron indicum `Mrs. G.G. Gerbing` | Azalea G.G. Gerbing |
| | | | |
| SHRUB AREAS | QTY | BOTANICAL NAME | COMMON NAME |
| AQ | 68 | Agapanthus africanus `Queen Anne` | Queen Anne Lily of the Nile |
| LE/1 | 716 | Liriope muscari `Emerald Goddess` | Liriope |
| TM | 297 | Trachelospermum asiaticum `Minima` | Minima Jasmine |
| | | | |
| GROUND COVERS | QTY | BOTANICAL NAME | COMMON NAME |
| PN | 1,270 sf | Paspalum notatum | Bahia Grass |
| MULCH | | Pine Straw Mulch | |
| ZE | 7,728 sf | Zoysia japonica `Empire` | Korean Grass |

# SITES® v2 Vegetation Worksheet

**P4.2: CONTROL AND MANAGE INVASIVE PLANTS**

**P4.3: USE APPROPRIATE PLANTS**

**C4.4: CONSERVICE HEALTHY SOILS AND APPROPRIATE VEGETATION**

**C4.6: CONSERVE AND USE NATIVE PLANTS**

**C4.7: CONSERVE AND RESTORE NATIVE PLANT COMMUNITIES**

**C6.7: PROVIDE ON-SITE FOOD PRODUCTION**

**C4.10: USE VEGETATION TO MINIMIZE BUILDING ENERGY USE**

**C4.11: REDUCE THE RISK OF CATASTROPHIC WILDFIRE**

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13742 |

**INSTRUCTIONS:**

1. Fill out this sheet once for each planned vegetated zone

| SITE INFORMATION | |
|---|---|
| **VEGETATED ZONE ID** | Zone 1 |
| **VEGETATED ZONE** (square feet or acres) | 36,184 sq. ft. |
| **SOIL RESTORATION ZONE ID** | Zone 1 |
| **SOIL DEPTH (inches)** | 12 inches |
| **SPACE LIMITATIONS** | None |
| **APPROXIMATE DIRECT SUN TIME** (hours) | 12 hours, 9 minutes |
| **SUN EXPOSURE** | Full Sun |
| **PRECIPITATION** (annual average in inches) | 47.09 |
| **HARDINESS ZONE** (USDA, where available) | 8B - 9A |
| **EPA LEVEL III ECOREGION** (where available) | Southern Coastal Plain |
| **COUNTY** | Alachua |
| **STATE** | Florida |
| **COUNTRY** | United States |

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FPS 18

# *Agapanthus orientalis* Agapanthus, African Lily, Lily of the Nile[1]

Edward F. Gilman, Ryan W. Klein, and Gail Hansen[2]

## Introduction

Clusters of large, blue, funnel-shaped flowers appear atop long stalks in summer and early fall, rising above the coarse, strap-like, green leaves. Flowers make a wonderful display in mass plantings. They can also be used as accents in a small garden or by the patio.

Figure 1. Full form—*Agapanthus orientalis*: agapanthus, African lily, lily of the Nile.
Credits: Edward F. Gilman, UF/IFAS

Figure 2. Flower—*Agapanthus orientalis*: agapanthus, African lily, lily of the Nile.
Credits: Edward F. Gilman, UF/IFAS

## General Information

**Scientific name:** *Agapanthus orientalis*
**Pronunciation:** ag-uh-PANTH-us or-ee-en-TAY-liss
**Common name(s):** Agapanthus, African lily, lily of the Nile
**Family:** *Amaryllidaceae*
**Plant type:** perennial; herbaceous
**USDA hardiness zones:** 9 through 11 (Figure 3)
**Planting month for zone 9:** year-round
**Planting month for zone 10 and 11:** year-round
**Origin:** not native to North America
**Invasive potential:** not known to be invasive
**Uses:** mass planting; container or above-ground planter; groundcover; accent; edging; attracts hummingbirds; suitable for growing indoors
**Availability:** somewhat available, may have to go out of the region to find the plant

Figure 3. Shaded area represents potential planting range.

## Description

**Height:** 2 to 4 feet
**Spread:** 1 to 2 feet
**Plant habit:** upright
**Plant density:** moderate
**Growth rate:** moderate
**Texture:** medium

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** linear
**Leaf venation:** parallel
**Leaf type and persistence:** evergreen
**Leaf blade length:** 8 to 12 inches
**Leaf color:** green
**Fall color:** no fall color change
**Fall characteristic:** not showy

## Flower

**Flower color:** blue; lavender; purple
**Flower characteristic:** summer-flowering

## Fruit

**Fruit shape:** no fruit
**Fruit length:** no fruit
**Fruit cover:** no fruit
**Fruit color:** no fruit
**Fruit characteristic:** no fruit

## Trunk and Branches

**Trunk/bark/branches:** not applicable
**Current year stem/twig color:** not applicable
**Current year stem/twig thickness:** not applicable

## Culture

**Light requirement:** plant grows in part shade/part sun
**Soil tolerances:** occasionally wet; slightly alkaline; clay; sand; acidic; loam
**Drought tolerance:**
**Soil salt tolerance:** unknown
**Plant spacing:** 18 to 24 inches

## Other

**Roots:** not applicable
**Winter interest:** no special winter interest
**Outstanding plant:** plant has outstanding ornamental features and could be planted more
**Pest resistance:** no serious pests are normally seen on the plant

## Use and Management

Growing in full sun or partial shade, *Agapanthus* is usually left undisturbed for several years and will form a large clump, making an attractive groundcover or accent plant. *Agapanthus* prefers moist, organic soil conditions but can endure drought once established. Plant about 18 to 24 inches apart for a thick groundcover effect.

Available cultivars include: 'Albus,' white flowers; 'Flore Pleno,' double flowers; 'Variegatus,' with striped leaves; and 'Nanus,' a dwarf, compact form.

Propagation is by division or seed.

Disease-resistant selections are available for humid climates.

Problems include chewing insects, maggots, and borers.

## Design Considerations

The strap-like leaves and large blue flowers of the agapanthus make it perfect for highly visible spaces in the landscape. Use with plants that are softer with small foliage and mounding or spreading forms. Dark green and/or burgundy foliage in the companion plants will highlight the clusters of blue flowers and soft green of the leaves. New agapanthus cultivars also have white, dark blue, and violet-blue flowers. When pairing with other flowering plants use white, and warm colors such as pinks and corals and soft yellows and light orange with the blue-flowered agapanthus. The white-flowered variety can be used with any other color to brighten the space.

## Pests and Diseases

Botrytis can devastate a planting, especially in humid climates in the eastern US. Try the disease-resistant selections in the East.

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FPS509

# *Rhododendron x* 'George Taber' 'George Taber' Azalea[1]

Edward F. Gilman[2]

## Introduction

Profuse, pink springtime blooms are so plentiful and large that they completely hide the foliage, making 'George Taber' azalea a favorite landscape shrub in the south. This large, spreading evergreen azalea is most impressive when used in mass plantings but makes an attractive specimen planting as well. Plant in mass on 4- to 6-foot centers.

## General Information

**Scientific name:** *Rhododendron x* 'George Tabor'
**Pronunciation:** roe-duh-DEN-drun
**Common name(s):** 'George Taber' azalea
**Family:** *Ericaceae*
**Plant type:** shrub
**USDA hardiness zones:** 8 through 10 (Fig. 1)
**Planting month for zone 8:** year round
**Planting month for zone 9:** year round
**Planting month for zone 10:** year round
**Origin:** not native to North America
**Uses:** mass planting; specimen; attracts butterflies; cut flowers; foundation
**Availability:** generally available in many areas within its hardiness range

## Description

**Height:** 10 to 12 feet
**Spread:** 8 to 10 feet
**Plant habit:** round
**Plant density:** moderate
**Growth rate:** slow
**Texture:** medium

Figure 1. Shaded area represents potential planting range.

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** ovate
**Leaf venation:** pinnate
**Leaf type and persistence:** evergreen
**Leaf blade length:** 2 to 4 inches
**Leaf color:** green
**Fall color:** no fall color change
**Fall characteristic:** not showy

## Flower

**Flower color:** pink
**Flower characteristic:** spring flowering; winter flowering

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ENH37

# Azaleas at a Glance[1]

Sydney Park Brown[2]

Spectacular flowers and shade tolerance - are among the reasons for the azalea's popularity in north and central Florida (USDA Hardiness Zones 8a–9b) (Figure 1). Azaleas are not successful in coastal areas where alkaline soils, salt drift, or saline irrigation water are found. They are also not adapted to the warm winters and soil conditions of most of south Florida.

Figure 1. 'George L. Taber'—A Southern Indica azalea.
Credits: Carolyn Wildes, UF/IFAS

Azaleas enhance the home landscape as foundation or mass plantings and as background or foreground plants, depending on their size. They are also sometimes pruned into single-trunked standards that serve as specimen plants. Generally, their open, relaxed growth habit is more suited to informal landscape designs, but they can be shaped more neatly with pruning.

## Adapted Species and Hybrids

Azaleas adapted to Florida require 4–8 weeks of temperatures below 50°F (10°C) and generally begin to bloom between February and early April when warm temperatures follow this chilling period. Sporadic flowering is more common in central than in north Florida because of milder winter temperature fluctuation. Azaleas belong to the genus *Rhododendron* and most are native to eastern Asia (evergreen species) or North America (deciduous species). Many azalea types and hybrids exist. Table 1 lists some of the most reliable cultivars for Florida landscapes. Mature plant size, flower characteristics, and bloom season should be considered when selecting azaleas. North Florida is home to several native species, most of which are deciduous and have fragrant flowers. Native azaleas are listed in Table 2.

## General Culture

Azaleas perform best in areas with filtered sunlight. Their shallow root system and low tolerance to drought and poor drainage make placement and care important.

### Exposure

Dappled or partial shade provides conditions for healthy growth and optimum flowering. Most do best when protected from intense afternoon sun. On the other hand, dense shade reduces plant growth and flowering. Azaleas exposed directly to early morning sun after a hard freeze thaw too rapidly, which causes bark splitting. Death of branches with split bark may not occur until months after the injury.

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## Soils

Well-drained, acidic soils with pH 4.5–6.0 are best suited for azaleas because they prefer the ample quantities of iron and other micronutrients that are readily available in acidic soils. Soil pH can be determined with a soil test. The UF/IFAS Extension Soil Testing Laboratory (https://soilslab.ifas.ufl.edu/ESTL%20Home.asp) or your local UF/IFAS Extension office (https://sfyl.ifas.ufl.edu/find-your-local-office/) can help with soil testing. Research does not indicate any benefit from adding organic matter to individual planting holes. However, when a number of azaleas are being transplanted together, the entire planting bed can be improved by adding organic matter, such as peat, compost, or pine bark. These amendments increase moisture and nutrient retention and lower soil pH. When azaleas are grown in soils with a pH higher than 6.0, they often develop a micronutrient deficiency, most typically iron, which exhibits on new growth as yellowing between the leaf veins (Figure 2). These deficiencies can be treated as needed with foliar sprays containing micronutrients. Soils can be *temporarily* modified (made more acidic) by applying elemental sulfur. Because excessive rates injure plant roots, no more than 1 pound of sulfur per 100 square feet of planting should be applied at one time. Apply sulfur no more than two or three times a year. Other soil amendments, such as ammonium sulfate, iron sulfate, and aluminum sulfate, can also be used to lower soil pH. These are often included in "acid-forming fertilizers." Azaleas growing in extremely acidic soils (pH 3.5–4.5) will be healthy but grow slowly.

Figure 2. Azalea leaves showing iron deficiency.
Credits: UF/IFAS Plant Nutrient Deficiency Database

## Planting/Transplanting

The planting hole for an azalea plant should be approximately 12 inches wider than the root mass. Plants should be spaced according to the cultivar's mature size, but generally they should be spaced 3–5 feet apart. Azaleas have very fibrous root systems that easily become pot bound. Before planting, gently loosen the root ball with your fingers and saturate it completely with water. Set the plant in the hole at or above the depth at which it was growing in the container, fill the hole with native soil (no amendments necessary in the planting hole), and water again.

An organic mulch should be applied and maintained at a depth of 2–3 inches to conserve water and reduce weed problems. Make sure the mulch does not cover the top of the root ball or touch the stem. November to February is the best season for transplanting; however, containerized azaleas may be planted any time if proper care is provided. Azaleas easily perish when they are not properly planted and established. When this occurs, the dead or dying azalea can be easily pulled from the soil with the root ball intact and few to no new roots.

## Watering

Irrigation is necessary for successful establishment and optimum growth during extended dry periods. Plants transplanted during the dry season into sandy soils require watering two to three times a week until they are established. Generally, established plants should receive about ¾–1 inch of water every 10 days to 2 weeks during dry periods to wet the soil to a depth of 10–12 inches. The lower leaves of plants that undergo a severe wilt will yellow and drop.

## Fertilization

Frequent and light fertilizer applications are often necessary in Florida's sandy soils. An acid-forming fertilizer containing iron and other micronutrients (sometimes sold as an "Azalea Special Fertilizer") should be applied as needed. Micronutrients should be applied with foliar sprays or soil-applied products when deficiencies occur. For more information about nutritional deficiencies, see the Plant Nutrient Deficiency database (https://hort.ifas.ufl.edu/database/nutdef/index.shtml).

## Pruning

Pruning is necessary to obtain a full, well-branched azalea. Several light prunings just after flowering and continuing through the growing season result in a compact, denser plant with more blooms. Flower buds are initiated in late spring and early summer, long before they can be seen, so pruning should cease in midsummer (July 4 is an easy date to remember). Pruning after this date decreases the number of spring flowers.

## Propagation

Evergreen azaleas are usually propagated by 3–4-inch cuttings taken after the spring growth has hardened or matured (June). They are also easy to root using different layering techniques. See *Propagation of Landscape Plants* (https://edis.ifas.ufl.edu/publication/mg108) and the Azalea Society of America (www.azaleas.org). Deciduous azaleas are usually propagated by seed or air layering because cuttings are difficult to root.



## Pests Problems

### Insects/Mites

Lace bugs, spider mites, leafminers/leafrollers, and azalea caterpillars are the most common pest problems for azaleas in the Florida landscape. Lace bugs are sucking insects that feed on the undersides of leaves. The top surface of the injured leaf appears speckled or mottled (Figure 3), and tiny black spots of insect excrement can be seen on the leaf undersides. (See *Azalea Lace Bug* at https://edis.ifas.ufl.edu/publication/in677).

Figure 3. Lace bug damage on azalea leaves.
Credits: UF/IFAS

Spider mite injury appears as a bronzing or rusty coloration of green leaves. A mite infestation can be verified by placing a white piece of paper beneath the foliage and slapping the leaves with your hand. Mites can be detected on the white paper as moving, tiny red or brown specks. Two spider mites that commonly attack azaleas are the southern red mite and the twospotted mite.

The azalea leafminer injures azalea leaves in different ways during its life cycle. The young larva "mines" inside the leaves, creating small brown areas. It then migrates to the upper leaf surface, rolls the leaf over itself, and chews holes in it. It will sometimes knit together and feed on new leaves, causing an unsightly plant. When mature, the larva often rolls up in an undamaged leaf and pupates.

The azalea caterpillar (Figure 4) occurs in north and central Florida and can strip leaves from large portions of a plant. When mature, the caterpillar has a red head and a black body covered with rows of yellow spots and (nonstinging) white hairs. Newly hatched caterpillars feed together on new growth, and entire populations can be controlled at that stage by simply picking off infested leaves. Mature caterpillars are best managed by handpicking and destroying them.

Figure 4. Azalea caterpillar.
Credits: UF/IFAS

More information about these pests can be found on the Featured Creatures website (https://entnemdept.ufl.edu/creatures/) or by consulting your local UF/IFAS Extension office (https://sfyl.ifas.ufl.edu/find-your-local-office/).

### Diseases

The most common diseases reported on azaleas include petal blight, leaf and flower gall, and various azalea declines. Petal blight is most severe during cool, wet spring weather. Infection first appears as small, white spots on colored petals or rust-colored spots on white-flowered varieties. Spots enlarge rapidly into irregular blotches, causing the blossoms to "melt" into a slimy mass. Affected blossoms dry and either drop or remain on the plant. The fungus survives on dried blossoms on or in the soil. Removing mulch and dead flowers 3–4 weeks before bloom reduces disease incidence.

Leaf and flower galls (Figure 5) are more alarming than damaging. The fleshy galls may occur on leaves, stems, or flowers and are most severe on densely shaded plantings with poor air circulation. To prevent a reoccurrence the following year, galls should be handpicked and destroyed when they first appear. Fungicide treatments are not generally warranted in home landscapes.

Figure 5. Azalea leaf and flower gall.
Credits: Norma Samuel, UF/IFAS

The disease, mushroom root rot, is usually fatal to azaleas, especially those planted in sites with tree stumps or buried organic debris. The causal fungus is visible as a white mycelium under the bark of major roots or the plant crown.

Slow decline in plant vigor with general stunting may be due to nematode injury of the root system. Root examination will reveal galls or swellings, necrosis of fine roots, and/or general stubbiness of small roots, depending on the nematode involved. Unfortunately, at this time there are no chemical controls for nematodes on established plants.

Slow decline in plant vigor with general stunting may be due to nematode injury of the root system. Root examination will reveal galls or swellings, necrosis of fine roots, and/or general stubbiness of small roots, depending on the nematode involved. Unfortunately, at this time there are no chemical controls for nematodes on established plants.

## Acknowledgements

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## Additional Resources

Dehgan, B. 1998. *Landscape Plants for Subtropical Climates.* Gainesville: University Press of Florida.

Galle, F. C. 1987. *Azaleas.* Portland, OR: Timber Press.

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ENH-501

# *Lagerstroemia indica*: Crapemyrtle[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

A long period of striking summer flower color, attractive fall foliage, and good drought-tolerance all combine to make crapemyrtle a favorite small tree for either formal or informal landscapes. It is highly recommended for planting in urban and suburban areas.

## General Information

**Scientific name:** *Lagerstroemia indica*
**Pronunciation:** lay-ger-STREE-mee-uh IN-dih-kuh
**Common name(s):** crapemyrtle
**Family:** *Lythraceae*
**USDA hardiness zones:** 7A through 9A (Figure 2)
**Origin:** native to Asia and Northern Australia
**UF/IFAS Invasive Assessment Status:** not considered a problem species at this time, may be recommended
**Uses:** street without sidewalk; specimen; deck or patio; container or planter; trained as a standard; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median; shade

Figure 1. Full Form - *Lagerstroemia indica*: crapemyrtle
Credits: UF/IFAS

1. This document is ENH-501, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2018. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.

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Figure 2. Range

## Description

**Height:** 10 to 30 feet
**Spread:** 15 to 25 feet
**Crown uniformity:** symmetrical
**Crown shape:** vase
**Crown density:** moderate
**Growth rate:** moderate
**Texture:** medium

## Foliage

**Leaf arrangement:** opposite/subopposite
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** elliptic (oval), obovate, oblong
**Leaf venation:** pinnate
**Leaf type and persistence:** deciduous
**Leaf blade length:** 1 to 3 inches
**Leaf color:** dark green on top, pale green underneath
**Fall color:** yellow, orange, red
**Fall characteristic:** showy

Figure 3. Leaf - *Lagerstroemia indica*: crapemyrtle
Credits: UF/IFAS

## Flower

**Flower color:** white/cream/gray, pink, purple, lavender, red
**Flower characteristics:** very showy; emerges in clusters on panicles
**Flowering:** late spring to summer

Figure 4. Flower - *Lagerstroemia indica*: crapemyrtle
Credits: UF/IFAS

## Fruit

**Fruit shape:** oval, round
**Fruit length:** ¼ to ½ inch
**Fruit covering:** dry or hard
**Fruit color:** brown
**Fruit characteristics:** does not attract wildlife; showy; fruit/leaves not a litter problem
**Fruiting:** persists through winter

Figure 5. Fruit - *Lagerstroemia indica*: crapemyrtle
Credits: UF/IFAS

## Trunk and Branches

**Trunk/branches:** branches droop; showy; typically multi-trunked; no thorns
**Bark:** Smooth, tan orange, and flakes off in patches to reveal shades of brown, green, and reddish brown
**Pruning requirement:** little required
**Breakage:** resistant
**Current year twig color:** brown, green
**Current year twig thickness:** thin
**Wood specific gravity:** unknown

## Culture

**Light requirement:** full sun
**Soil tolerances:** clay; sand; loam; alkaline; acidic; well-drained
**Drought tolerance:** high
**Aerosol salt tolerance:** moderate

Figure 6. Bark Variation 1 - *Lagerstroemia indica*: crapemyrtle
Credits: UF/IFAS

Figure 7. Bark Variation 2 - *Lagerstroemia indica*: crapemyrtle
Credits: Gitta Hasing, UF/IFAS



## Other

**Roots:** not a problem
**Winter interest:** yes
**Outstanding tree:** no
**Ozone sensitivity:** unknown
**Verticillium wilt susceptibility:** resistant
**Pest resistance:** resistant to pests/diseases

## Use and Management

Available in all shades of white, pink, red, or lavender, the 6- to 12-inch-long clustered blooms appear on the tips of branches during late spring and summer in USDA hardiness zones 9 and 10, and summer in other areas. The individual flowers are ruffled and crinkly as to appear made of crepe paper. The smooth, peeling bark and multi-branched, open habit of crape myrtle make it ideal for specimen planting where its bright red to orange-colored fall leaves add further interest. Most forms of the tree are upright, upright-spreading, or vase-shaped, spreading out as they ascend. Most tree types grow to 20 to 25 feet tall although there are more dwarf types available. The upright, vase-shaped crown makes the tall-growing selections well-suited for street tree planting.

Pruning should be done in late winter or early in the spring before growth begins because it is easier to see which branches to prune. New growth can be pinched during the growing season to increase branchiness and flower number. Pruning methods vary from topping to cutting crape myrtle nearly to the ground each spring to the removal of dead wood and old flower stalks only. Topping creates several long, thin branches from each cut which droop down under the weight of the flowers. This practice disfigures the nice trunk and branch structure. Lower branches are often thinned to show off the trunk form and color. You can remove the spent flower heads to encourage a second flush of flowers and to prevent formation of the brown fruits. Since cultivars are now available in a wide range of growth heights, severe pruning should not be necessary to control size. Severe pruning or topping can stimulate basal sprouting which can become a constant nuisance, requiring regular removal. Some trees sprout from the base of the trunk and roots even without severe heading. This can be a maintenance nuisance.

Crape myrtle grows best in full sun with rich, moist soil but will tolerate less hospitable positions in the landscape just as well, once it becomes established. It grows well in limited soil spaces in urban areas such as along boulevards, in parking lots, and in small pavement cutouts if provided with some irrigation until well established. They tolerate clay and alkaline soil well. However, the flowers of some selections may stain car paint. Insect pests are few but crape myrtle is susceptible to powdery mildew damage, especially when planted in some shade or when the leaves are kept moist. There are new cultivars (many developed by the USDA) available which are resistant to powdery mildew and aphids.

Many cultivars of crape myrtle are available: hybrid 'Acoma', 14 to 16 feet tall, white flowers, purple-red fall foliage, mildew resistant; hybrid 'Biloxi', 25 feet tall, pale pink blooms, orange-red fall foliage, hardy and mildew resistant; 'Cherokee', 10 to 12 feet, bright red flowers; 'Powhatan', 14 to 20 feet, clear yellow fall foliage, medium purple flowers. The hybrid cultivars 'Natchez', 30 feet tall, pure white flowers, resistant to aphids, one of the best crape myrtles; 'Muskogee', 24 feet tall, light lavender flowers, and 'Tuscarora', 16 feet tall, dark coral pink blooms, are hybrids between *Lagerstroemia indica* and *Lagerstroemia fauriei* and have greater resistance to mildew. The cultivar 'Crape-Myrtlettes' have the same color range as the species but only grow to three to four feet high. The National Arboretum releases are generally superior because they have been selected for their disease resistance. These releases may prove more resistant to powdery mildew in the deep south, although further testing needs to be done to confirm this.

Propagation is by cuttings or seed.

## Pests

Aphids often infest the new growth causing an unsightly but harmless sooty mold to grow on the foliage. Heavy aphid infestations cause a heavy black sooty mold which detracts from the tree's appearance.

## Diseases

Powdery mildew can severely affect crape myrtle. Select resistant cultivars and hybrids to avoid this disease. Leaf spots are only a minor concern and do not require treatment.

## Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.

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FPS-348

# *Liriope muscari* 'Evergreen Giant' Evergreen Giant Lilyturf[1]

Edward F. Gilman[2]

## Introduction

This large, clumping grasslike perennial makes an attractive, dark green groundcover and is accented with spikes of lilac purple blooms during summer months (Fig. 1). Though not actually spreading by underground stems, an individual plant after several years can reach 24 inches in width by suckering at the base and will quickly cover an open area. Plant on 18-inch centers for the best groundcover effect. Evergreen giant liriope can also be used as an edging along walks and other areas. Plant liriope to create a fine-textured, gentle ground cover which will sustain itself for many years. Large areas planted in liriope lend a soothing effect to any landscape.

Figure 1. 'Evergreen Giant' liriope

## General Information

**Scientific name:** *Liriope muscari* 'Evergreen Giant'
**Pronunciation:** luh-RYE-oh-pee mus-KAR-ree
**Common name(s):** 'Evergreen Giant' lilyturf, 'Evergreen Giant' liriope
**Family:** *Liliaceae*
**Plant type:** perennial; herbaceous; ornamental grass
**USDA hardiness zones:** 6 through 10 (Fig. 2)
**Planting month for zone 7:** year round
**Planting month for zone 8:** year round
**Planting month for zone 9:** year round
**Planting month for zone 10:** year round
**Origin:** not native to North America
**Uses:** mass planting; edging; naturalizing; small parking lot islands (< 100 square feet in size); medium-sized parking lot islands (100-200 square feet in size); large parking lot islands (> 200 square feet in size)
**Availability:** generally available in many areas within its hardiness range

## Description

**Height:** 1 to 2 feet
**Spread:** 1 to 2 feet
**Plant habit:** upright
**Plant density:** moderate
**Growth rate:** moderate
**Texture:** fine

Figure 2. Shaded area represents potential planting range.

## Foliage

**Leaf arrangement:** most emerge from the soil, usually without a stem
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** linear
**Leaf venation:** parallel
**Leaf type and persistence:** evergreen
**Leaf blade length:** 12 to 18 inches
**Leaf color:** green
**Fall color:** no fall color change
**Fall characteristic:** not showy

## Flower

**Flower color:** lilac; purple
**Flower characteristic:** summer flowering

## Fruit

**Fruit shape:** round
**Fruit length:** less than .5 inch
**Fruit cover:** fleshy
**Fruit color:** black
**Fruit characteristic:** showy

## Trunk and Branches

**Trunk/bark/branches:** not applicable
**Current year stem/twig color:** not applicable
**Current year stem/twig thickness:** not applicable

## Culture

**Light requirement:** plant grows in part shade/part sun; plant grows in the shade
**Soil tolerances:** alkaline; clay; sand; acidic; loam
**Drought tolerance:** moderate
**Soil salt tolerances:** unknown
**Plant spacing:** 18 to 24 inches

## Other

**Roots:** not applicable
**Winter interest:** no special winter interest
**Outstanding plant:** not particularly outstanding
**Invasive potential:** not known to be invasive
**Pest resistance:** no serious pests are normally seen on the plant

## Use and Management

Evergreen giant liriope enjoys more sun than other liriopes. Growth in full shade is a bit thin but acceptable. Growth is best on rich, moist, well-drained soils but the plant will accept much less hospitable conditions in most regions. In the hottest areas of the south, however, full sun plants tend to brown at the tips and die from heat stress. Plants should be fertilized once or twice a year but require little care otherwise.

Propagation is by division of the clumps or by seed.

## Pests and Diseases

Problems include mites, slugs, snails, and scale.

No diseases are of major concern.

1. This document is FPS-348, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date October 1999. Reviewed February 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.

2. Edward F. Gilman, professor, Environmental Horticulture Department, UF/IFAS Extension, Gainesville, FL 32611.

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ENH-722

# *Quercus virginiana*: Southern Live Oak[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

A large, sprawling, picturesque tree, usually graced with Spanish moss and strongly reminiscent of the Old South. Southern live oak is one of the broadest spreading of the oaks, providing large areas of deep, inviting shade. It is the state tree of Georgia. Reaching 60 to 80 feet in height with a 60 to 120 foot spread and usually possessing many sinuously curved trunks and branches, Southern live oak is an impressive sight for any large-scale landscape. An amazingly durable American native, it can measure its lifetime in centuries if properly located and cared for in the landscape. It makes an excellent street tree in the South. Unfortunately, oak wilt has devastated the tree in parts of central Texas. Give it plenty of room since the trunk can grow to more than six feet in diameter.

## General Information

**Scientific name:** *Quercus virginiana*
**Pronunciation:** KWERK-us ver-jin-ee-AY-nuh
**Common name(s):** live oak, southern live oak
**Family:** *Fagaceae*
**USDA hardiness zones:** 7B through 10B (Figure 2)
**Origin:** native to the Atlantic and Gulf Coastal states of the southeastern United States, in addition to south central Texas, and northeastern Mexico
**UF/IFAS Invasive Assessment Status:** native
**Uses:** street without sidewalk; shade; specimen; reclamation; parking lot island > 200 sq ft; tree lawn > 6 ft wide; urban tolerant; highway median

Figure 1. Full Form—*Quercus virginiana*: southern live oak

## Description

**Height:** 60 to 80 feet
**Spread:** 60 to 120 feet
**Crown uniformity:** symmetrical
**Crown shape:** spreading, round
**Crown density:** dense
**Growth rate:** moderate
**Texture:** fine

Figure 2. Range

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** elliptic (oval), linear
**Leaf venation:** pinnate
**Leaf type and persistence:** semi-evergreen, evergreen
**Leaf blade length:** 2 to 5 inches
**Leaf color:** dark green and glossy on top, paler green and may or may not have pubescence underneath
**Fall color:** no color change
**Fall characteristic:** not showy

Figure 3. Leaf—*Quercus virginiana*: southern live oak

## Flower

**Flower color:** male—yellow-green catkin; female—green to reddish spike that emerges from leaf axils
**Flower characteristics:** not showy
**Flowering:** early spring

Figure 4. Canopy—*Quercus virginiana*: southern live oak

Figure 5. Flower— *Quercus virginiana*: southern live oak

## Fruit

**Fruit shape:** elongated, oval
**Fruit length:** ¾ inch
**Fruit covering:** dry or hard acorn; cap is bowl-shaped, warty, scales and covers the top ⅓ of the shiny nut
**Fruit color:** dark brown
**Fruit characteristics:** attracts birds; not showy; fruit/leaves a litter problem

## Trunk and Branches

**Trunk/branches:** branches droop; showy; typically one trunk; no thorns
**Bark:** reddish brown and furrowed when young, turning gray to almost black, and becoming rough, deeply furrowed, and blocky with age

1. This document is ENH-722, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2006 and December 2018. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.

2. Edward F. Gilman, professor emeritus, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department; Ryan W. Klein, graduate assistant, Environmental Horticulture Department; Andrew K. Koeser, assistant professor, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center; Deborah R. Hilbert, graduate assistant, Environmental Horticulture Department, GCREC; and Drew C. McLean, biological scientist, Environmental Horticulture Department, GCREC; UF/IFAS Extension, Gainesville, FL 32611.

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**Pruning requirement:** needed for strong structure
**Breakage:** resistant
**Current year twig color:** gray
**Current year twig thickness:** thin
**Wood specific gravity:** 0.88

Figure 6. Bark—*Quercus virginiana*: southern live oak
Credits: Gitta Hasing

## Culture

**Light requirement:** full sun to partial shade
**Soil tolerances:** clay; sand; loam; alkaline; acidic; occasionally wet; well-drained
**Drought tolerance:** high
**Aerosol salt tolerance:** high

## Other

**Roots:** can form large surface roots
**Winter interest:** no
**Outstanding tree:** yes
**Ozone sensitivity:** unknown
**Verticillium wilt susceptibility:** resistant
**Pest resistance:** resistant to pests/diseases

## Use and Management

Once established, live oak will thrive in almost any location and has very good wind resistance. Southern live oak is a tough, enduring tree that will respond with vigorous growth to plentiful moisture on well-drained soil. Like other oaks, care must be taken to develop a strong branch structure early in the life of the tree. Be sure to eliminate multiple trunks and branches which form a narrow angle with the trunk as these are likely to split from the tree as it grows older.

Be sure that adequate soil space is given to live oak. Although roots will grow under curbs and sidewalks when planted in confined soil spaces allowing the tree to thrive in urban sites, in time, they lift sidewalks, curbs, and driveways. This may be a small price to pay for the bountiful shade cast by a row of healthy trees.

One of the biggest problems with live oak in our cities is the lack of pruning. Therefore, it is not a plant-and-forget tree. Because this tree can live for such a long time, it is very important to develop proper trunk and branch structure early in the life of the tree. Following planting in the nursery, prune the tree each year for the first three years, then every five years to age 30. This program will help ensure that the tree develops into a strong, long-lived fixture in the community, and will help develop the 14 to 15 foot tall vehicle clearance needed for planting along city streets.

Best growth is made in moist, acid soil, sand, loam, or clay, but the tree is amazingly adapted to drought. It also tolerates alkaline soil well. Young trees grow three feet each year and the trunk adds about one-inch in diameter under nursery conditions. Construction-impacted trees take a long time to die, giving live oak a reputation for being a tough tree. It is usually the last tree to die around a newly constructed building.

Sand live oak, *Quercus virginiana* var. *geminata (Q. geminata)*, grows on sandy soil, is more upright and open-crowned in habit, has thick revolute leaves and acorns produced in pairs. It may be more suited for street tree planting due to the smaller size. Leaves emerge about four weeks after live oak and sand live oak suckers more than live oak. The fast-growing variety 'Heritage' is recommended for desert areas, and is more common in the southwestern United States. *Quercus fusiformis* is native to central and southern Texas, is susceptible to oak wilt but resistant to root rot. Perhaps more adapted to Texas than *Quercus virginiana* but nursery operators do not normally differentiate among the live oaks.

## Pests

It is usually pest-free. Occasionally mites infest the foliage, but they are of little concern in the landscape.

Galls cause homeowners much concern. There are many types and galls can be on the leaves or twigs. Most galls are harmless so chemical controls are not suggested.



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FPS415

# *Muhlenbergia capillaris* Muhly Grass[1]

Edward F. Gilman[2]

## Introduction

Muhly grass has a clumping form, growing 3- to 4-feet-tall and about as wide. A stiff, upright growth habit makes this markedly different from many other grasses. Delicate, purple flowers emerge in the fall well above the foliage and can literally cover the foliage. It is native to pine flatwoods, coastal upland and beach dunes, and sandhill communities. This grass is very similar to *Muhlenbergia filipes*.

## General Description

**Scientific name:** *Muhlenbergia capillaris*
**Pronunciation:** mew-len-BER-jee-uh kap-pill-LAIR-riss
**Common name(s):** purple muhly grass, muhly grass
**Family:** *Gramineae*
**Plant type:** herbaceous; ornamental grass
**USDA hardiness zones:** 7 through 11 (Fig. 1)
**Planting month for zone 7:** year round
**Planting month for zone 8:** year round
**Planting month for zone 9:** year round
**Planting month for zone 10 and 11:** year round
**Origin:** native to Florida
**Uses:** reclamation plant; cut flowers; border; accent; mass planting
**Availability:** somewhat available, may have to go out of the region to find the plant

## Description

**Height:** 3 to 5 feet
**Spread:** 2 to 3 feet
**Plant habit:** upright
**Plant density:** open
**Growth rate:** moderate
**Texture:** fine

Figure 1. Shaded area represents potential planting range.

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** linear
**Leaf venation:** parallel
**Leaf type and persistence:** semi-evergreen
**Leaf blade length:** 18 to 36 inches
**Leaf color:** green
**Fall color:** copper
**Fall characteristic:** showy

1. This document is FPS415, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date September 1999. Reviewed February 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.

2. Edward F. Gilman, professor, Environmental Horticulture Department, UF/IFAS Extension, Gainesville, FL 32611.

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Scales of several types can usually be controlled with sprays of horticultural oil.

Aphids cause distorted growth and deposits of honeydew on lower leaves. On large trees, naturally-occurring predatory insects will often bring the aphid population under control.

Boring insects are most likely to attack weakened or stressed trees. Newly planted young trees may also be attacked. Keep trees as healthy as possible with regular fertilization and water during dry weather.

## Diseases

It is usually disease-free except for oak wilt in parts of Texas and perhaps some other isolated areas. Oak wilt is a fatal disease beginning with a slight crinkling and paling of the leaves. This is followed by leaf wilting and browning of leaf margins then working inward. The symptoms move down branches toward the center of the tree. Cut down and destroy infected trees. The disease may be spread by insects, pruning tools or transporting infected wood to uninfected areas. The disease appears to infect red, black, and live oaks particularly. Common practice in Texas where oak wilt is most prevalent is to immediately paint pruning cuts on live oak with pruning paint to help prevent the insect vector from coming to the tree. Avoid pruning in midspring to early summer in areas where oak wilt is present. Dormant or summer pruning is best.

Canker diseases attack the trunk and branches. Keep trees healthy by regular fertilization. Prune out diseased or dead branches.

A large number of fungi cause leaf spots but are usually not serious. Rake up and dispose of infected leaves.

Powdery mildew coats leaves with fugal growth resembling white powder.

Shoestring root rot attacks the roots and once inside moves upward, killing the cambium. The leaves on infected trees are small, pale, or yellowed and fall early. There is no practical control. Healthy trees may be more resistant than trees of low vigor. Recently, *Quercus virginiana* has been found to be susceptible to *Diplodia* spp.

## References

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. Gainesville: University of Florida Institute of Food and Agricultural Sciences.

Koeser, A.K., Friedman, M.H., Hasing, G., Finley, H., Schelb, J. 2017. Trees: South Florida and the Keys. Gainesville: University of Florida Institute of Food and Agricultural Sciences.



## Flower

**Flower color:** pink
**Flower characteristic:** fall flowering

## Fruit

**Fruit shape:** oval
**Fruit length:** less than .5 inch
**Fruit cover:** dry or hard
**Fruit color:** brown
**Fruit characteristic:** inconspicuous and not showy

## Trunk and Branches

**Trunk/bark/branches:** typically multi-trunked or clumping stems
**Current year stem/twig color:** not applicable
**Current year stem/twig thickness:** medium

## Culture

**Light requirement:** plant grows in full sun
**Soil tolerances:** extended flooding; acidic; alkaline; sand; loam; clay
**Drought tolerance:** high
**Soil salt tolerances:** moderate
**Plant spacing:** 24 to 36 inches

## Other

**Roots:** not applicable
**Winter interest:** plant has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers
**Outstanding plant:** plant has outstanding ornamental features and could be planted more
**Invasive potential:** not known to be invasive

## Use and Management

Muhly grass is a tough native grass useful in many different landscape sites. It has extreme tolerance to drought and flooding, making it suited for wetland sites as well as beachfront landscapes. It would be hard to find a more adaptable grass. Muhly grass makes a nice, fine-textured mass planting for sites ranging from roadside to residential landscape. Plant them in large, sweeping drifts on a large landscape for a dramatic effect. It is virtually maintenance free except in those instances where you might want to remove the brown foliage in the spring by cutting the clump back to the ground before new growth emerges. Growth is best in sandy or rocky soil.

## Pest and Diseases

There are no known pests or problems.

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ENH-628

# *Pinus palustris*: Longleaf Pine[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

This beautiful, native North American pine tree is capable of reaching 60 to 125 feet in height with a 30 to 40-foot-spread but is more often seen smaller. It is usually saved on a construction site for use as a specimen in the landscape or for providing dappled shade. Be sure to protect the area beneath the dripline from heavy equipment during construction. Longleaf pine stays in its tufted, grass-like stage for five to seven years after germinating, growing very slowly while it develops a root system, then takes off at a moderate rate. The bright green, evergreen needles are up to 14 inches long and very flexible, giving an almost weeping effect to the tree. A distinctive characteristic of longleaf pine is the new growth clusters, or buds, which are silvery white during the winter. The inconspicuous spring flowers are followed by a large, spiny cone, 6 to 10 inches long, which persist on the tree for a couple of years.

Figure 1. Full Form - *Pinus palustris*: longleaf pine
Credits: UF/IFAS

## General Information

**Scientific name:** *Pinus palustris*
**Pronunciation:** PIE-nus pal-US-triss
**Common name(s):** longleaf pine
**Family:** *Pinaceae*
**USDA hardiness zones:** 7A through 10A (Figure 2)
**Origin:** native to the southeastern United States
**UF/IFAS Invasive Assessment Status:** native
**Uses:** reclamation; specimen; shade

1. This document is ENH-628, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2018. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.

2. Edward F. Gilman, professor emeritus, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Department of Agricultural and Biological Engineering Department; Ryan W. Klein, graduate assistant, Environmental Horticulture Department; Andrew K. Koeser, assistant professor, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center; Deborah R. Hilbert, graduate assistant, Environmental Horticulture Department, GCREC; and Drew C. McLean, biological scientist, Environmental Horticulture Department, GCREC; UF/IFAS Extension, Gainesville, FL 32611.

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Figure 2. Range

## Description

**Height:** 60 to 125 feet
**Spread:** 30 to 40 feet
**Crown uniformity:** irregular
**Crown shape:** oval
**Crown density:** open
**Growth rate:** fast
**Texture:** fine

## Foliage

**Leaf arrangement:** spiral; typically in groups of 3 per fascicle but occasionally in groups of 2
**Leaf type:** simple
**Leaf margin:** entire

Figure 3. Leaf - *Pinus palustris*: Longleaf pine
Credits: UF/IFAS

**Leaf shape:** needle-like (filiform)
**Leaf venation:** parallel
**Leaf type and persistence:** needled evergreen, evergreen, fragrant
**Leaf blade length:** 8 to 14 inches
**Leaf color:** bright green
**Fall color:** no color change
**Fall characteristic:** not showy

## Flower

**Flower color:** yellow
**Flower characteristics:** not showy

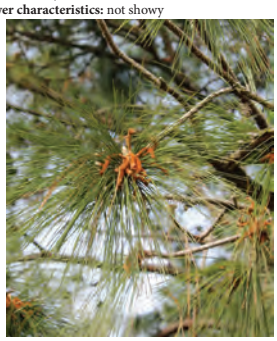

Figure 4. Cone, Young - *Pinus palustris*: Longleaf pine
Credits: UF/IFAS

## Fruit

**Fruit shape:** elongated, cone 9
**Fruit length:** 6 to 12 inches
**Fruit covering:** dry or hard
**Fruit color:** brown
**Fruit characteristics:** attracts squirrels/mammals; showy; fruit/leaves a litter problem; sits sessile

## Trunk and Branches

**Trunk/branches:** branches droop; showy; typically one trunk; no thorns
**Bark:** orange, brown, gray, scaly, and develops flat plates
**Pruning requirement:** little required
**Breakage:** susceptible to breakage
**Current year twig color:** brown
**Current year twig thickness:** very thick
**Wood specific gravity:** 0.59

Figure 5. Cone, Mature - *Pinus palustris*: Longleaf pine
Credits: UF/IFAS

Figure 6. Bark - *Pinus palustris*: Longleaf pine
Credits: Gitta Hasing, UF/IFAS

## Culture

**Light requirement:** full sun
**Soil tolerances:** clay; sand; loam; acidic; slightly alkaline; well-drained
**Drought tolerance:** high
**Aerosol salt tolerance:** high

## Other

**Roots:** not a problem
**Winter interest:** no
**Outstanding tree:** yes
**Ozone sensitivity:** unknown
**Verticillium wilt susceptibility:** resistant
**Pest resistance:** resistant to pests/diseases

## Use and Management

Longleaf pine is not usually planted in landscapes, but could be used due to its beautiful bark and nice, open habit. It would be suited for planting in large landscapes, such as golf courses and parks, and in other areas with plenty of overhead space. It would probably adapt to the hot conditions created near concrete and asphalt, but dropping needles often discourage people from planting pines near streets or other pavement. This may be a small price to pay for having this tree in the landscape. If people would start planting this tree, it might catch on as slash pine has in parts of the South.

Longleaf pine should be grown in full sun or partial shade on well-drained, acidic soil. Once established, trees are very drought-tolerant and require no irrigation for survival.

Propagation is by seed. Seedling trees in the wild usually transplant poorly due to a long tap root.

## Pests

Some of its pests are borers, sawflies, pine-shoot moth, and pine weevils. Pine bark beetles will occasionally attack old trees which are stressed.

## Diseases

No diseases are of major concern. This plant is resistant to fusiform rust.

## Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.

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ENH654

# *Podocarpus macrophyllus*: Podocarpus[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

With densely foliated lower limbs which reach the ground and neat, dark green, evergreen leaves, yew podocarpus is very popular as a dense screen or hedge. However, yew podocarpus can reach 30 to 40 feet in height when not sheared and is quite attractive as a tree with the lower branches removed, revealing the light brown, peeling bark. If space permits, leave the lower limbs on the tree for an almost spruce-like appearance. The tree grows in an open manner with large spaces between the branches creating a pleasing, irregular oval silhouette in middle and old age. The inconspicuous flowers are followed by fleshy, purple, small, edible fruits (though the similarly looking seeds are toxic, therefore it is best to avoid ingesting any part of this tree that resembles fruit) on female trees which are quite attractive to birds but not really messy on sidewalks or pavement.

Figure 1. Full Form - *Podocarpus macrophyllus*: Yew podocarpus
Credits: UF/IFAS

Figure 2. Hedge Form - *Podocarpus macrophyllus*: Yew podocarpus
Credits: UF/IFAS

## General Information

**Scientific name:** *Podocarpus macrophyllus*
**Pronunciation:** poe-doe-KAR-pus mack-roe-FILL-us
**Common name(s):** Yew podocarpus, yew-pine, Japanese yew
**Family:** *Podocarpaceae*
**USDA hardiness zones:** 8B through 11 (Figure 3)
**Origin:** native to southern China and Japan
**UF/IFAS Invasive Assessment Status:** not considered a problem species at this time, may be recommended (North, Central, South)
**Uses:** highway median; screen; street without sidewalk; specimen; shade; hedge; reclamation; espalier; deck or patio; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; trained as a standard; indoors

Figure 3. Range

## Description

**Height:** 30 to 40 feet
**Spread:** 20 to 25 feet
**Crown uniformity:** irregular
**Crown shape:** round
**Crown density:** moderate
**Growth rate:** slow
**Texture:** fine

### Foliage

**Leaf arrangement:** whorled
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** linear
**Leaf venation:** parallel
**Leaf type and persistence:** evergreen
**Leaf blade length:** 1 to 5 inches
**Leaf color:** dark green on top, grayish underneath
**Fall color:** no color change
**Fall characteristic:** not showy

### Flower

**Flower color:** yellow
**Flower characteristics:** not showy

Figure 4. Leaf - *Podocarpus macrophyllus*: Yew podocarpus
Credits: UF/IFAS

Figure 5. Flower - *Podocarpus macrophyllus*: Yew podocarpus
Credits: UF/IFAS

1. This document is ENH654, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 1993. Revised December 2018. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.

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## Fruit

**Fruit shape:** irregular, round, oval
**Fruit length:** ½ inch
**Fruit covering:** fleshy, drupe-like aril
**Fruit color:** reddish purple or blue
**Fruit characteristics:** attracts birds; not showy; fruit/leaves not a litter problem

Figure 6. Fruit - *Podocarpus macrophyllus*: Yew podocarpus
Credits: UF/IFAS

## Trunk and Branches

**Trunk/branches:** branches don't droop; not showy; typically one trunk; no thorns
**Bark:** reddish brown, shredding, and turns gray with age
**Pruning requirement:** little required
**Breakage:** resistant
**Current year twig color:** green
**Current year twig thickness:** medium, thick
**Wood specific gravity:** unknown

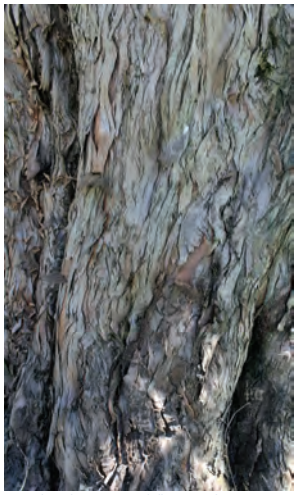

Figure 7. Bark - *Podocarpus macrophyllus*: Yew podocarpus
Credits: Gitta Hasing, UF/IFAS

## Culture

**Light requirement:** full sun to partial shade
**Soil tolerances:** clay; sand; loam; alkaline; acidic; well-drained
**Drought tolerance:** high
**Aerosol salt tolerance:** high

## Other

**Roots:** not a problem
**Winter interest:** no
**Outstanding tree:** yes
**Ozone sensitivity:** unknown
**Verticillium wilt susceptibility:** unknown
**Pest resistance:** resistant to pests/diseases



## Use and Management

This is one of a few trees which can be pruned into a nice hedge. The dark green foliage and dense growth creates a formal mass. It looks better when pruned with a hand pruner, not sheared with a hedge trimmer.

Showing best growth and form in full sun, yew podocarpus will grow more slowly and have a looser appearance when grown in shade. It will grow on the north side of a tall building with little or no direct sun. It will tolerate a wide variety of well-drained, acidic soils. Don't plant on wet soils. This is a tough tree, adaptable to urban conditions and should be used much more extensively as a street tree. It should be used more in areas of poor soils and restricted rooting space. Unfortunately, most people choose to trim the tree into a column or hedge, so not many have seen the true beauty of the tree. It will make an attractive specimen, street or parking lot tree, even for the smallest soil space in a downtown planting pit. Roots are not a problem in restricted-soil planting areas and usually do not lift sidewalks.

Many varieties are available for selection of habit, leaf form, color, etc. *Podocarpus macrophyllus* var. *angustifolius* is a narrow, columnar tree with curved leaves, 2 to 4.5 inches long; *Podocarpus macrophyllus* var. *appressus* is a low shrub with short leaves; *Podocarpus macrophyllus* var. *maki* has erect branches, columnar form, 1.5 to 3-inch-long leaves.

Propagation is by seeds or cuttings. Hardwood cuttings root easily. Cutting propagation would ensure more uniform trees than seedlings. Nursery operators should be encouraged to grow Yew Podocarpus in the single-trunked tree form for planting in urban landscapes.

### Pests and Diseases

No pests or diseases are of major concern. Occasionally bothered by scale, mites, and sooty mold but not seriously. Some magnesium-deficiency on sandy soil, which is easily corrected with magnesium sulfate.

## Additional References

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.

Koeser, A.K., Friedman, M.H., Hasing, G., Finley, H., Schelb, J. 2017. Trees: South Florida and the Keys. University of Florida Institute of Food and Agricultural Sciences.

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ENH253

# *Betula nigra*: River Birch[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

River birch can grow 50 to 90 feet tall but is often seen 40 to 50 feet. It normally grows with a central leader and small-diameter, dark-colored lateral branches. It has a narrow, oval to pyramidal crown when young, spreading wider with age as several branches become dominant. It lacks the white trunk bark associated with other birches but is distinguished by reddish-brown bark peeling off in film-like papery curls providing interest all year round. River birch can be easily trained with one central leader or as a multi-stemmed tree. Some nurseries plant two or three trees together to form a clump, but these trunks will not fuse into one strong trunk. Should be grown more as a single-trunked specimen. Branches droop particularly when they are wet, so regular pruning in the early years will be required to remove lower branches when they are located close to areas where clearance is needed for vehicular traffic.

Figure 1. Full Form - *Betula nigra*: river birch
Credits: Gitta Hasing, UF/IFAS

## General Information

**Scientific name:** *Betula nigra*
**Pronunciation:** BET-yoo-luh NYE-gruh
**Common name(s):** river birch
**Family:** *Betulaceae*
**USDA hardiness zones:** 4A through 9A (Figure 2)
**Origin:** native to the southeastern United States, including adjacent northern states, and the northern range of the Mississippi River
**UF/IFAS Invasive Assessment Status:** native
**Uses:** hedge; street without sidewalk; screen; shade; specimen; deck or patio

Figure 2. Range

## Description

**Height:** 40 to 50 feet
**Spread:** 25 to 35 feet
**Crown uniformity:** symmetrical
**Crown shape:** upright/erect, pyramidal, oval
**Crown density:** dense
**Growth rate:** fast
**Texture:** medium

## Foliage

**Leaf arrangement:** alternate (Figure 3)
**Leaf type:** simple
**Leaf margin:** double serrate

Figure 3. Leaf - *Betula nigra*: river birch
Credits: Gitta Hasing, UF/IFAS

**Leaf shape:** rhomboid, ovate
**Leaf venation:** pinnate
**Leaf type and persistence:** deciduous
**Leaf blade length:** 1 to 4 inches
**Leaf color:** dark green on top, paler green underneath
**Fall color:** yellow
**Fall characteristic:** not showy

## Flower

**Flower color:** brown
**Flower characteristics:** not showy
**Flowering:** mid spring

## Fruit

**Fruit shape:** elongated
**Fruit length:** 1 to 1 ½ inches
**Fruit covering:** dry or hard; cone-like catkin with many winged nutlets
**Fruit color:** reddish-brown
**Fruit characteristics:** does not attract wildlife; not showy; fruit/leaves not a litter problem
**Fruiting:** matures in the fall

Figure 4. Fruit - *Betula nigra*: river birch
Credits: Gitta Hasing, UF/IFAS

## Trunk and Branches

**Trunk/branches:** branches droop; very showy; typically multi-trunked; no thorns
**Bark:** reddish brown to creamy yellow and smooth, becoming papery and flaking or peeling off in large, curling plates with age

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2. Edward F. Gilman, professor emeritus, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department; Ryan W. Klein, graduate assistant, Environmental Horticulture Department, Gainesville, FL 32611; Andrew K. Koeser, assistant professor, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center (GCREC), Wimauma, FL 33598; Deborah R. Hilbert, graduate assistant, Environmental Horticulture Department, GCREC; and Drew C. McLean, biological scientist, Environmental Horticulture Department, GCREC; UF/IFAS Extension, Gainesville, FL 32611.

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**Pruning requirement:** little required
**Breakage:** resistant
**Current year twig color:** reddish, brown
**Current year twig thickness:** thin
**Wood specific gravity:** unknown

Figure 5. Bark - *Betula nigra*: river birch
Credits: Gary Kling, UF/IFAS

## Culture

**Light requirement:** full sun to partial shade
**Soil tolerances:** clay; sand; loam; acidic; wet to well-drained
**Drought tolerance:** moderate
**Aerosol salt tolerance:** low

## Other

**Roots:** not a problem
**Winter interest:** yes
**Outstanding tree:** yes
**Ozone sensitivity:** tolerant
**Verticillium wilt susceptibility:** resistant
**Pest resistance:** resistant to pests/diseases

## Use and Management

It is very well suited for planting along steam banks where it is native and in other areas that are inundated for weeks. River birch tolerates low soil oxygen, flooding, and clay soil, but needs moist conditions. The tree requires an acid soil, otherwise it becomes chlorotic. River birch is hardy, grows rapidly, but tends to be short-lived (30 to 40 years) in many urban settings, possibly due to inadequate water supply. Situate the tree so it receives adequate water. Large trees are prone to trunk decay. Not a tree to plant and forget due to irrigation requirement.

The tree is not as susceptible to bronze birch borer as are other birches. It is not particularly adapted to heat but can make a nice tree in USDA hardiness zone 8b, possibly 9a, if provided with irrigation and plenty of soil space. Not for confined street tree pits or tree lawns in the South. The yellow fall color display is of short duration.

The cultivar 'Heritage' grows 50 feet tall, has an oval shape and scaly bark that is beige in color, and is the closest to a paper white birch that will survive in hot areas; it grows from Minnesota to Florida. It is also tolerant of poor drainage. It is reportedly resistant to bronze birch borer and unlike most birches it is resistant to leaf spot. It is more vigorous than the species.

## Pests

No pests are of major concern. Resistant to bronze birch borer.

## Diseases

Leaf spots; chlorosis on soils with a high pH.

## Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.



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ENH-805

# *Ulmus alata*: Winged Elm[1]

Edward F. Gilman, Dennis G. Watson, Ryan W. Klein, Andrew K. Koeser, Deborah R. Hilbert, and Drew C. McLean[2]

## Introduction

Usually seen at 45 to 70 feet high, winged elm can reach 90 feet in height in the woods with a 30 to 40-foot spread. Canopy form is variable from pyramidal to vase or rounded. A North American native, this fast-growing deciduous tree is quickly identified by the corky, wing-like projections which appear on opposite sides of twigs and branches. Branches rise through the crown, then bend in a sweeping manner toward the ground. The size of the wings varies greatly from one tree to another. Because it is found growing in wet sites as well as dry, rocky ridges it is a very adaptable tree for urban planting.

Figure 1. Full Form—*Ulmus alata*: winged elm

## General Information

**Scientific name:** *Ulmus alata*
**Pronunciation:** UL-mus uh-LAY-tuh
**Common name(s):** winged elm
**Family:** *Ulmaceae*
**USDA hardiness zones:** 6A through 9B (Figure 2)
**Origin:** native to the southern two-thirds of the eastern half of the United States
**UF/IFAS Invasive Assessment Status:** Native
**Uses:** street without sidewalk; shade; specimen; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3–4 feet wide; tree lawn 4–6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median; reclamation

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Figure 2. Range

## Description

**Height:** 45 to 70 feet
**Spread:** 30 to 40 feet
**Crown uniformity:** irregular
**Crown shape:** pyramidal, vase, oval, upright/erect
**Crown density:** moderate
**Growth rate:** fast
**Texture:** fine

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** double serrate, serrate
**Leaf shape:** elliptic (oval), ovate
**Leaf venation:** pinnate
**Leaf type and persistence:** deciduous
**Leaf blade length:** 2 to 4 inches
**Leaf color:** dark green on top, paler green underneath with pubescence in the leaf axils
**Fall color:** yellow
**Fall characteristic:** showy

## Flower

**Flower color:** reddish
**Flower characteristics:** not showy; bell-shaped; emerges in clusters at leaf axils
**Flowering:** early spring

## Fruit

**Fruit shape:** flat, elliptic samara
**Fruit length:** ⅜ to ½ inch
**Fruit covering:** dry or hard; pubescence around the margins
**Fruit color:** brown
**Fruit characteristics:** does not attract wildlife; not showy; fruit/leaves not a litter problem
**Fruiting:** shortly after flowering

Figure 3. Leaf—*Ulmus alata*: winged elm

Figure 4. Fruit—*Ulmus alata*: winged elm

## Trunk and Branches

**Trunk/branches:** branches don't droop; not showy; typically one trunk; no thorns
**Bark:** red brown to ashy gray, shallowly fissured, with flat-topped ridges, and corky, wing-like appendages on opposite sides of twigs and branches, although the latter feature may be lacking on older species
**Pruning requirement:** needed for strong structure
**Breakage:** resistant
**Current year twig color:** gray, brown
**Current year twig thickness:** thin
**Wood specific gravity:** unknown

Figure 5. Branch—*Ulmus alata*: winged elm

Figure 6. Bark—*Ulmus alata*: winged elm
Credits: Gitta Hasing

## Culture

**Light requirement:** full sun to partial shade
**Soil tolerances:** clay; sand; loam; alkaline; acidic; wet to well-drained
**Drought tolerance:** high
**Aerosol salt tolerance:** moderate

## Other

**Roots:** not a problem
**Winter interest:** yes
**Outstanding tree:** no
**Ozone sensitivity:** tolerant
**Verticillium wilt susceptibility:** susceptible
**Pest resistance:** resistant to pests/diseases

## Use and Management

Winged elm will easily adapt to full sun or partial shade, growing relatively quickly on any soil. It is an extremely sturdy and adaptable tree and is well-suited as a shade or street tree. It grows very well in urban areas and is suited to parking lot islands and other confined soil spaces. It must be pruned regularly at an early age to eliminate double and multiple trunks. Select branches which form a wide angle with the trunk, eliminating those with narrow crotches. Strive to produce a central trunk with major lateral limbs spaced along the trunk. This trunk will not be straight (unless it is staked) but this is fine. Purchase trees with good form in the nursery and be selective since form varies greatly from one tree to the next.

It is not an easy tree to train and prune, requiring perhaps three or four pruning's in the first several years after seed germination. Trees look very open and lanky following proper pruning and this may be one reason the tree has not been very popular with nursery operators, architects, and urban foresters. But after this initial training period, trees fill in nicely to make a well-adapted, beautiful shade tree.

Propagation is by seed which, when sown immediately after harvest, germinate quickly and easily.

## Pests and Diseases

The biggest problem is Dutch elm disease which can kill trees. To protect the community from widespread tree loss, do not plant a large number of these trees. Some trees are susceptible to powdery mildew, causing varying degrees of leaf color changes in fall, right before leaves drop. Mites can yellow the foliage but usually cause no permanent damage. Scale insects can infest winged elm along branches. Scale infestations are often missed due to the thick, corky bark along the twigs.

## Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. Gainesville: University of Florida Institute of Food and Agricultural Sciences.



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ENH11
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# Zoysiagrass for Florida Lawns[1]

J. Bryan Unruh, Marco Schiavon, Alex J. Lindsey, Kevin E. Kenworthy, and L. E. Trenholm[2]

Zoysiagrasses (*Zoysia* spp.) were introduced into the United States from Asia and provide attractive turf throughout much of the United States. In recent years, newer cultivars of zoysiagrass have entered the market with improved insect resistance, accelerated establishment, and better overall performance. Zoysiagrasses are adapted to a variety of soil types and have good tolerance to shade, salt, and traffic. When properly managed, they produce a very dense ground cover that resists weed invasion, but certain pests can be problematic. Zoysiagrasses spread through rhizomes and stolons.

Proper lawn maintenance practices are the best means for avoiding pest problems and maintaining a healthy lawn. Zoysiagrass requires proper fertility to maintain good cover and healthy growth characteristics. During certain times of the year, it may need supplemental irrigation, especially during periods of extended drought, to remain green. Pesticides may be needed periodically, but their use can be minimized if other cultural practices (mowing, irrigation, fertilization) are done correctly.

Zoysiagrass maintenance is different from that of other Florida lawn grasses. When improper maintenance practices are followed, undesirable results generally occur. Table 1 provides a quick comparison of zoysiagrass to other lawn grasses.

## Species and Cultivars

Several species and varieties of zoysiagrass are used for residential and commercial landscapes, athletic fields, and golf course greens, tees, fairways, and roughs. They vary widely in leaf color, texture, and establishment rate (Patton et al. 2017).

### Species

#### *ZOYSIA JAPONICA* STEUD.

This species was introduced into the United States in 1894 and is commonly called Japanese lawngrass or Korean lawngrass. Cultivars of this species are generally coarse-textured. Of all the zoysiagrasses, this species has a faster growth rate and exhibits excellent cold tolerance. It is easily mown using a rotary mower. *Zoysia japonica* is the only zoysiagrass for which seed is commercially available; however, the seeded varieties generally do not produce as high-quality turf as do the vegetatively propagated (sodded or plugged) varieties. Seeded cultivars should be limited to use where convenience of establishment by seed is more important than quality.

#### *ZOYSIA MATRELLA* (L.) MERR.

Also called Manilagrass, this species was introduced into the United States in 1892 from Japan. It produces a finer and denser turf than *Zoysia japonica* but is generally less winter hardy and slower growing. Manilagrass resembles well adapted to Florida. All three have good shade tolerance and are good choices to replace bermudagrasses on golf courses where shade is a concern. They perform well at mowing heights ranging from 0.5" to 2.0". Disease issues include dollar spot and large patch.

### Thrive

'Thrive' is a new fine-textured *Z. matrella* with limited availability in Florida. Its appearance resembles Geo, Zeon, and Zorro. Other than anecdotal evidence of good drought tolerance, very little information is available about its origins and suitability for use in Florida.

### HYBRID CULTIVARS

### CitraZoy™

'CitraZoy™' zoysiagrass was developed and released by the University of Florida in 2019. It is a hybrid between a well-adapted *Z. matrella* and *Z. japonica* with a medium-fine leaf texture between Meyer and the *Z. matrella* cultivars. It has slightly better shade tolerance than the *Z. japonica* cultivars and is less shade tolerant than the *Z. matrella* cultivars. It has good establishment, good sod strength, good wear tolerance, and the best winter color retention of any zoysiagrass on the market. Large patch has never been observed to occur on CitraZoy; however, it will get leaf spot. It is expanding in production with a few Florida producers at the time of publication.

### Emerald

'Emerald' zoysiagrass is a selected hybrid between *Zoysia japonica* and *Zoysia pacifica* developed in Tifton, Georgia, and released in 1955. This hybrid combines the winter hardiness, color, and faster growth rate of one its *Z. japonica* parent with the fine texture and density of its *Z. pacifica* parent. Emerald resembles Manilagrass (particularly Geo, Zeon, Zorro, and Thrive) in color, texture, density, and disease issues, but has better winter hardiness and wider adaptation.

### Icon™

'Icon™' zoysiagrass was developed in Australia and is a hybrid between *Z. macrantha* and *Z. japonica*. It is coarse textured and similar in appearance and uses to Empire, El Toro, Palisades, and JaMur. It has excellent sod strength, very high salt tolerance, and produces very little thatch in comparison to other zoysiagrasses. It has good availability in Florida, and large patch has not been observed in Icon.

### Innovation™

'Innovation™' zoysiagrass was jointly developed and released in 2017 by Texas A&M University and Kansas State University. It is a hybrid between a *Z. matrella* and a cold-tolerant *Z. japonica*. Innovation is proven to have excellence winter hardiness with a finer leaf texture compared to Meyer. Its leaf texture is between Meyer and the *Z. matrella* cultivars. Currently, very little is known about its performance in Florida or disease responses, and it has limited availability.

## Establishment of Zoysiagrass

With one exception, zoysiagrasses must be planted vegetatively by sod, plugs, or sprigs. *Zoysia japonica* is the only species for which seed is commercially available. Proper site preparation before planting is critical to ensure successful establishment. Refer to ENH02, *Preparing to Plant a Florida Lawn* (https://edis.ifas.ufl.edu/lh012), for complete information.

### Seeding

Establishing zoysiagrass from seed is increasing in popularity. The seed, however, requires light for germination and cannot be covered with soil, as is normally recommended. Consequently, areas to be established by seed need to be covered with some type of erosion cloth to reduce any surface disruption caused by rain or irrigation. The best time to seed is during the period from April to July, because this permits a full growing season before winter weather. In north Florida, fall seeding is undesirable because the young seedlings may not become sufficiently established to withstand cold injury during the winter. It may take up to 2–3 weeks to germinate and an additional 6–8 weeks to establish. During this time, irrigation management is extremely important. After seeding, frequent, light irrigations are necessary to keep the soil moist and encourage germination. Maintain this moisture regime until the planted area is completely covered.

### Plugging

Because of the slow establishment rate of zoysiagrass (compared to St. Augustinegrass), plugs are usually planted on 8- to 12-inch centers. This means that plugs are planted every 8–12 inches in a row and rows are spaced 8–12 inches apart. Depending on the level of maintenance given, at least one full season (and longer for some varieties) is required for complete coverage and a uniform height. Plugs should be tamped firmly into the soil and watered in. During grow-in, the soil should be kept moist until the grass is well rooted. Weeds will dominate the bare areas between the plugs, and they should be scouted on a regular basis and weeds removed before they have a chance to gain hold.

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### Sprigging

Planting zoysiagrasses by sprigs is a laborious but effective method of establishment. Fresh sprigs with at least 2 or 4 nodes should be planted in rows that are 6 inches apart. Plant the sprigs end-to-end or no more than 6 inches apart in the row and cover them with soil about 1–2 inches deep, leaving part of each sprig exposed to light. A roller can be used to press sprigs into the soil. Soil must be kept moist until plants initiate new growth and the area is completely covered.

### Sodding

Sodding produces an instant turf as the entire area to be planted with grass material is covered. Sodding can also reduce potential weed competition that can occur when using other planting methods that leave bare ground. However, it is important to remember that the grass is still vulnerable at this stage, and it is not yet safe for play, traffic, or other activities. It is quite dependent until the roots have developed and extended down into the soil. Sod should only be laid over bare, moist soil, with pieces laid in a staggered brick-like pattern and the edges fitted tightly together to avoid any open cracks (Figure 1). Rolling and watering thoroughly ensures good contact with the soil for fast rooting. Sodded areas should be watered at least twice per day with ¼ inch of water until the sod is held fast to the soil by new roots (usually 2–3 weeks), after which watering should be reduced to an as-needed basis.

Figure 1. Sodding produces an instant lawn.

## Maintenance of Zoysiagrass

### Nutrient Management

Proper turfgrass nutrition is very important for sustaining a healthy lawn. Nutrients needed by plants come from many sources, including soil organic matter, trace amounts in rainfall, and fertilizers. Fertilization and other cultural practices influence the overall health and quality of the lawn and reduce its vulnerability to numerous stresses, including weeds, insects, and disease. It is very important that anyone fertilizing their lawn be familiar with and follow the Florida-Friendly Landscaping™ Best Management Practices (BMPs). These practices are designed to maintain healthy lawns and reduce potential nonpoint source pollution of water resources that might result from lawn and landscape fertilization and other cultural practices. There are state and local regulations that cover lawn fertilization, so be aware of city and county guidelines and always follow the directions on the fertilizer bag. For more information on BMPs, please refer to ENH979, *Homeowner Best Management Practices for the Home Lawn* (https://edis.ifas.ufl.edu/ep236).

A soil test is used to determine soil pH and what nutrients are available in the soil. The local Extension office has instructions and supplies for taking soil samples and submitting them to the UF/IFAS Extension Soil Testing Laboratory for analysis. Refer to SL281, *Soil Sampling and Testing for the Home Landscape or Vegetable Garden* (https://edis.ifas.ufl.edu/ss494), for more information. In particular, phosphorus levels are best determined by soil testing. Because many Florida soils are high in phosphorus, it is often not necessary to add phosphorus fertilizer to a lawn once it is established.

Florida Rule (5E-1.003) mandates that the fertilizer application rates cannot exceed 1 lb of nitrogen per 1000 square feet for any application. Based on the percentage of nitrogen that is in a slowly available or slow-release form in a fertilizer, UF/IFAS recommendations call for applying ½ pound (water-soluble nitrogen source) to 1 lb (slow-release nitrogen source) of nitrogen per 1000 square feet of turfgrass.

As a general rule, the first fertilizer application of the year should be early April in central Florida and mid-April in north Florida. In south Florida, fertilizer applications may be made throughout the year because growth is year-round. UF/IFAS guidelines for lawn grass fertilization offer a range of fertilizer rates over which a particular species may be successfully maintained in the various regions of the state. These ranges account for individual homeowner preferences for low-, medium-, or higher-input grass. Additionally, localized microclimatic effects can have a tremendous impact on turfgrass growth. A range of rates allows for these environmental variations. An example of this would be a typical home lawn that is partially shaded and partially sunny. The grass growing in the shade needs less fertilizer than that growing in full sun. Fertilization is also affected by soil type, organic matter in soils, and practices such as clipping management. Recycled clippings return



some nutrients back to the soil and are accounted for in UF/IFAS nutrient recommendations. Additionally, a newly sodded lawn on a sand soil with no organic matter may need more fertilizer than a lawn that has been fertilized for years. In Florida, new homes and new developments may be next to much older, developed landscapes, and a one-size-fits-all approach to fertilization is not reasonable. Thus, the guidelines provide a base range from which the end user can begin a fertilization program. The homeowner is encouraged to initiate a program based on these guidelines and to adjust it over time based on how the turfgrass responds.

Zoysiagrass responds better to a "spoon-feeding" fertilizer regimen (smaller quantities applied more frequently) rather than supplying larger quantities infrequently. It is best to take the annual fertilizer guidelines (Table 2) and divide the annual quantity into three applications (north Florida) to six applications (south Florida) per year in most situations. Avoid applying nitrogen fertilizer simply to promote green color. Instead, monitor growth and apply only when the growth rate has declined. Potassium nutrition also is important and should be applied at rates equal to nitrogen. During excessively rainy periods, potassium may need to be applied more frequently due to its leaching ability.

Because zoysiagrass is slow to green-up in the spring, avoid applying fertilizer until after the turf has become fully green to avoid premature green-up, which is prone to frost injury. This is especially important in north Florida, where late spring frosts may damage the grass. Delaying spring fertilization until the turf is actively growing and can use the fertilizer also reduces the potential for nitrogen leaching from fertilizer. Likewise, do not fertilize too late in the year, because this can slow regrowth the following spring. Applying nitrogen on zoysiagrass in early spring and late fall significantly increases the risk of large patch disease.

On high-pH (>7.0) soils or where high-pH water is applied, yellow leaf blades may be an indication of iron (Fe) or manganese (Mn) deficiency. Foliar applications of soluble or chelated sources of these micronutrients can provide a green-up due to elevated pH.

For iron deficiency, spray ferrous sulfate (2 ounces in 3–5 gallons of water per 1000 square feet) or a chelated iron source (refer to the label for rates) to temporarily enhance color. Iron applications every 6 weeks help maintain green color and, unlike nitrogen, do not promote excessive top growth. Granular iron sources should be limited to chelated sources (i.e., EDTA, DTPA, or EDDHA), whereas foliar applications can include soluble Fe sulfate or chelates. For information on using iron on Florida turfgrasses, please refer to ENH1287, *Iron for Florida Turfgrasses* (https://edis.ifas.ufl.edu/publication/EP551).

Note that iron is not a substitute for nitrogen, which provides the building blocks for turfgrass growth and is required for turf health. While both iron and nitrogen deficiencies result in yellowing of turfgrass, they are distinctly different deficiencies in plants. Applying iron does not cure yellowing due to nitrogen deficiency, and iron fertilizer is not a substitute for nitrogen fertilizer. Foliar iron fertilizers, such as iron sulfate or chelated iron solutions, help correct iron deficiencies, and nitrogen fertilizers applied according to BMPs correct nitrogen deficiencies.

### Mowing

With proper fertility, zoysiagrasses require regular mowing during the summer to look their best. Medium- to coarse-textured zoysiagrasses should be mowed weekly, or when they reach a height of 3–4 inches. They should be mowed at a height of 1.75–2.5 inches with a rotary mower. Fine-textured zoysiagrasses maintained at heights below 1 inch require more frequent mowing. Because zoysiagrass leaves contain more lignin and silica than other turfgrasses, they can be quite difficult to mow. Clippings should be left on the ground after mowing unless they become excessive and clump on the turf surface. A sharp, well-adjusted rotary or reel mower should be used.

### Watering

Zoysiagrass responds to drought by turning brown and going dormant in a short period of time (within a week under typical drought conditions). In the absence of rain or irrigation, zoysiagrass stays dormant for extended periods of time. Once irrigation or rainfall resumes, zoysiagrass will regain its green color.

Irrigating on an "as-needed" basis is the best way to water any established, mature grass if the proper amount of water is applied when needed. Allowing the zoysiagrass to go off-color is an acceptable water-conserving measure. However, when green grass is desired, irrigation is needed when leaf blades begin to fold up, wilt, or turn a blue-gray color, or when footprints remain visible after walking on the grass. Apply ½–¾ inch of water per application. This applies water to roughly the top 8 inches of soil, where most of the roots are. Be sure to follow any local watering restrictions. Refer to the EDIS publication LH025, *Watering Your Florida Lawn* (https://edis.ifas.ufl.edu/lh025), for additional information on proper watering techniques.



To determine application rates of a sprinkler system, place several straight-sided cans (e.g., tuna fish or cat food) throughout each irrigation zone. Run each zone to determine how long it takes to fill the cans to the ¾- or 1-inch level, then record the time. Each zone will likely take different amounts of time to give the same quantity of water. The recorded run times for each zone should then be programmed into the irrigation clock for automated systems. If the variation in the catch cans is great, a more thorough audit of the irrigation system is needed. Irrigation frequency should change seasonally, with less water needed in the fall and winter. Do not adjust the amount applied per irrigation event, just the frequency.

### Thatch Management

Zoysiagrasses typically develop a thick thatch layer in the years after establishment—especially when overfertilized with nitrogen. Thatch is an intermingled layer of living and dead turfgrass shoots, stems, and roots between the green vegetation and the soil. This thatch must be controlled or removed mechanically to maintain a uniform grass appearance. This is most often done using a vertical mower or power rake every year or two (Figure 2). Some have noted that scalping, during or shortly after spring green-up, helps reduce thatch buildup, but this can be injurious to the lawn. One of the most important methods of reducing thatch buildup is to keep nitrogen fertility at the recommended levels. Proper mowing heights also help prevent thatch buildup.

Figure 2. Agressive vertical mowing to remove thatch.
Credits: Alex J. Lindsey, UF/IFAS

### Pest Management

Like other lawn grasses grown in Florida, zoysiagrass lawns encounter pest problems. Periodic control of one or more of these problems may be necessary to grow a healthy turf. The local county Extension office can help identify pest problems and provide current control recommendations (http://sfyl.ifas.ufl.edu/find-your-local-office/).

#### WEEDS

One of the best attributes of zoysiagrass is its ability to resist weed invasion due to its thick, dense growth habit. Insect and disease problems can damage zoysiagrass, creating voids in this dense mat where weeds can invade. Fortunately, unlike St. Augustinegrass and centipedegrass, zoysiagrass is very tolerant to many effective pre- and postemergence herbicides, giving a wide range of options to the turf manager (Table 1). Refer to ENH884, *Weed Management in Home Lawns* (https://edis.ifas.ufl.edu/ep141), for more information.

#### INSECTS

Hunting billbug can be a serious insect on zoysiagrass. Billbugs feed on roots, causing the turf to die in irregular-shaped patches. The damage most often occurs in the fall and spring when populations are high and when damage may be misdiagnosed as dormancy. Stems and rhizomes break easily and have irregular feeding marks, and the turf will not hold together if cut. Most damage occurs on infertile or dry soil. If 10–12 billbugs are seen per square foot, control may be necessary.

Mole crickets and white grubs can also negatively impact zoysiagrass. Mole crickets feed on grass roots and leaf blades, and their tunneling activity dislodges plants from the soil, causing the plants to dry out. White grubs, like billbugs, feed on roots, causing the turf to turn yellow, wilt, and eventually die. Both of these insect pests often attract raccoons, skunks, armadillos, and birds, which may actually cause more damage than the insect itself.

Sod webworms can cause periodic injury to zoysiagrass. Injury from these insects can range from a mining of the green tissue (Figure 3) from the leaf tips to leaves completely chewed off.

For more information, refer to *Insect Management in Your Florida Lawn* (https://journals.flvc.org/edis/article/view/116061).

Figure 3. Sod webworm damage on zoysiagrass.
Credits: J. Bryan Unruh, UF/IFAS

#### NEMATODES

Many turf managers state that nematodes are serious pests on zoysiagrasses; however, this is not well documented in scientific literature. UF/IFAS researchers and turfgrass breeders are working to identify the extent of zoysiagrass susceptibility, and they are identifying superior cultivars that can withstand nematodes. The UF/IFAS Extension Service Florida Nematode Assay Laboratory in Gainesville (https://entnemdept.ufl.edu/nematology-assay-lab/) can diagnose whether nematodes are a problem by looking at a soil sample taken from the margin of the affected area. Proper cultural factors to encourage zoysiagrass root growth lessen nematode stress. These include applying less nitrogen, providing less frequent (but deep) watering, and ensuring adequate soil potassium and phosphorus.

#### DISEASES

The most troubling disease for zoysiagrass is large patch (Figure 4). This disease becomes active when soil temperatures (4-inch depth) are between 65°F and 75°F each fall and can be a problem through the following spring. Although zoysiagrass is probably not more susceptible to this disease than St. Augustinegrass, recovery can be slow due to zoysiagrass' prolonged dormant to semidormant condition. Zoysiagrass is the first turf species to go off-color in the fall and the last to green-up in the spring. Therefore, if a large patch disease outbreak occurs, damage will be visible well into the next summer. With this in mind, if damage cannot be tolerated, it is important to treat preventively to ward off any likelihood of this disease. Refer to PP-233, *Homeowner's Guide to Fungicides for Lawn and Landscape Disease Management* (https://edis.ifas.ufl.edu/pp154), for more information on fungicides. Additionally, avoid excessive applications of soluble nitrogen, keep thatch levels to a minimum, and avoid irrigating at a time that will not allow the turf to dry prior to nightfall. Refer to https://edis.ifas.ufl.edu/topic_turf_diseases for additional information on turfgrass diseases.

Figure 4. Large patch disease caused by *Rhizoctonia solani*.
Credits: J. Bryan Unruh, UF/IFAS

Other diseases that impact zoysiagrass include dollar spot and rust. Dollar spot typically occurs when nitrogen is below optimal levels. This can easily be corrected with a light application of nitrogen. Rusts occur during mild, humid weather and appear as small yellow to orange to reddish-brown pustules on the leaves. Fungicides are effective, but most often, frequent mowing with clipping removal will keep this under control.

### Other Problems

Other factors can also decrease the quality of a lawn. Excessive shade, compacted soils, over- or underwatering, improper mowing, traffic, and high or low pH can all cause a lawn to perform poorly. It is important to recognize what the source of the problem is and to correct it if possible. For more information on these types of stresses, refer to ENH153, *Environmental Stresses and Your Florida Lawn* (https://edis.ifas.ufl.edu/ep070).

## Literature Cited

Patton, A. J., B. M. Schwartz, and K. E. Kenworthy. 2017. "Zoysiagrass (*Zoysia* spp.) History, Utilization, and Improvement in the United States: A Review." *Crop Science* 57 (S1): S-37–S-72. https://doi.org/10.2135/cropsci2017.02.0074

Table 1. A generalized comparison of zoysiagrass to common lawn grasses grown in Florida.

| | Centipedegrass | St. Augustinegrass | Zoysiagrass |
|---|---|---|---|
| Mowing Height | 1.5"–2.5" | Cultivar dependent (2"–4") | Cultivar dependent (0.25"–2.5") |
| Mower Type | Rotary | Rotary | Reel-type or rotary |
| Annual Fertility Requirement | 1–2 lb N/1000 $ft^2$ | 2–6 lb N/1000 $ft^2$ | 2.0–4.5 lb N/1000 $ft^2$ |
| Grassy-Weed Herbicides | Preemergence—many<br>Postemergence—few | Preemergence—many<br>Postemergence—none | Preemergence—many<br>Postemergence—many |
| Broadleaf Weed Herbicide Tolerance | Many are damaging. | Many are damaging. | Most are safe. |
| Insects | Spittlebugs<br>Ground Pearls | Chinch Bugs<br>Sod Webworm<br>White Grubs | Hunting Billbugs<br>Sod Webworm<br>Mole Crickets<br>White Grubs |
| Diseases | Centipedegrass Decline | Take-all Root Rot<br>Large Patch<br>Gray Leaf Spot | Large Patch<br>Dollar Spot<br>Rust |
| Comparative Water Use | Persists on less water but can wilt quickly in the absence of water. | Moderate—wilts, but some leaves remain green for longer periods of time. | Moderate, but can wilt quickly in the absence of water. Within 1–2 weeks, the leaves will be brown and the turf will go dormant. |

Table 2. Annual fertilization recommendations for zoysiagrass in three regions of Florida.

| Location[1] | Nitrogen Fertility Guideline[2] (lb N/1000 sq ft/year) |
|---|---|
| North Florida | 2–3 |
| Central Florida | 2–4 |
| South Florida | 2.5–4.5 |

[1] North Florida in this example is considered to be anything north of Ocala. Central Florida is defined as anything south of Ocala to a line extending from Vero Beach to Tampa. South Florida includes the remaining southern portion of the state.
[2] Preferences for lawn quality and maintenance level vary; therefore, a range of fertility rates is recommended. Additionally, effects within a localized region (i.e., microenvironmental influences such as shade, drought, soil conditions, and irrigation) necessitate a range of fertility rates.



UF | IFAS Extension UNIVERSITY of FLORIDA

FPS509

# *Rhododendron x* 'George Taber' 'George Taber' Azalea[1]

Edward F. Gilman[2]

## Introduction

Profuse, pink springtime blooms are so plentiful and large that they completely hide the foliage, making 'George Taber' azalea a favorite landscape shrub in the south. This large, spreading evergreen azalea is most impressive when used in mass plantings but makes an attractive specimen planting as well. Plant in mass on 4- to 6-foot centers.

## General Information

**Scientific name:** *Rhododendron x* 'George Tabor'
**Pronunciation:** roe-duh-DEN-drun
**Common name(s):** 'George Taber' azalea
**Family:** *Ericaceae*
**Plant type:** shrub
**USDA hardiness zones:** 8 through 10 (Fig. 1)
**Planting month for zone 8:** year round
**Planting month for zone 9:** year round
**Planting month for zone 10:** year round
**Origin:** not native to North America
**Uses:** mass planting; specimen; attracts butterflies; cut flowers; foundation
**Availability:** generally available in many areas within its hardiness range

## Description

**Height:** 10 to 12 feet
**Spread:** 8 to 10 feet
**Plant habit:** round
**Plant density:** moderate
**Growth rate:** slow
**Texture:** medium

Figure 1. Shaded area represents potential planting range.

## Foliage

**Leaf arrangement:** alternate
**Leaf type:** simple
**Leaf margin:** entire
**Leaf shape:** ovate
**Leaf venation:** pinnate
**Leaf type and persistence:** evergreen
**Leaf blade length:** 2 to 4 inches
**Leaf color:** green
**Fall color:** no fall color change
**Fall characteristic:** not showy

## Flower

**Flower color:** pink
**Flower characteristic:** spring flowering; winter flowering

1. This document is FPS509, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date October 1999. Reviewed February 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.

2. Edward F. Gilman, professor, Environmental Horticulture Department; UF/IFAS Extension, Gainesville, FL 32611.

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# Credit 4.8 | Optimize biomass

## Existing Site plan

**Goal: 1 points**

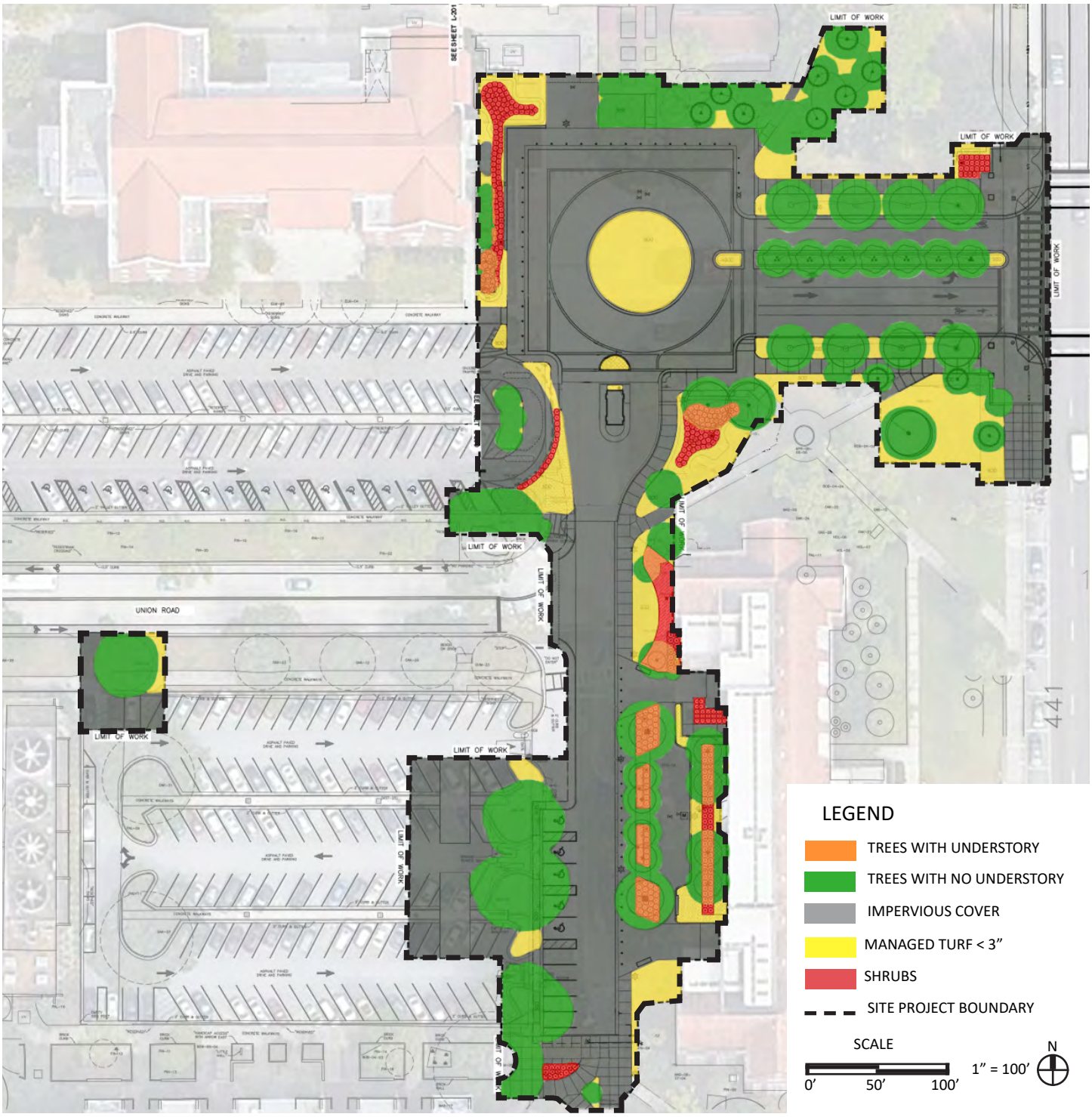
**Calculations**

Trees with understory = 4,532/97,907 = 0.0462 x 6= 0.2777
Trees with no understory = 23,729/97,907 = 0.2423 x 4= 0.9694
Impervious Cover = 51,485/97,907 = 0.5258 x 0 = 0
Managed Turf <3" = 15,409/97,907 = 0.1574 x 3 = 0.4722
Shrubs = 2,752/97,907 = 0.0281 x 2 = 0.0562

EXISTING BDI = 1.78

There was no managed turf >3".

## Proposed Site Plan




**Calculations**

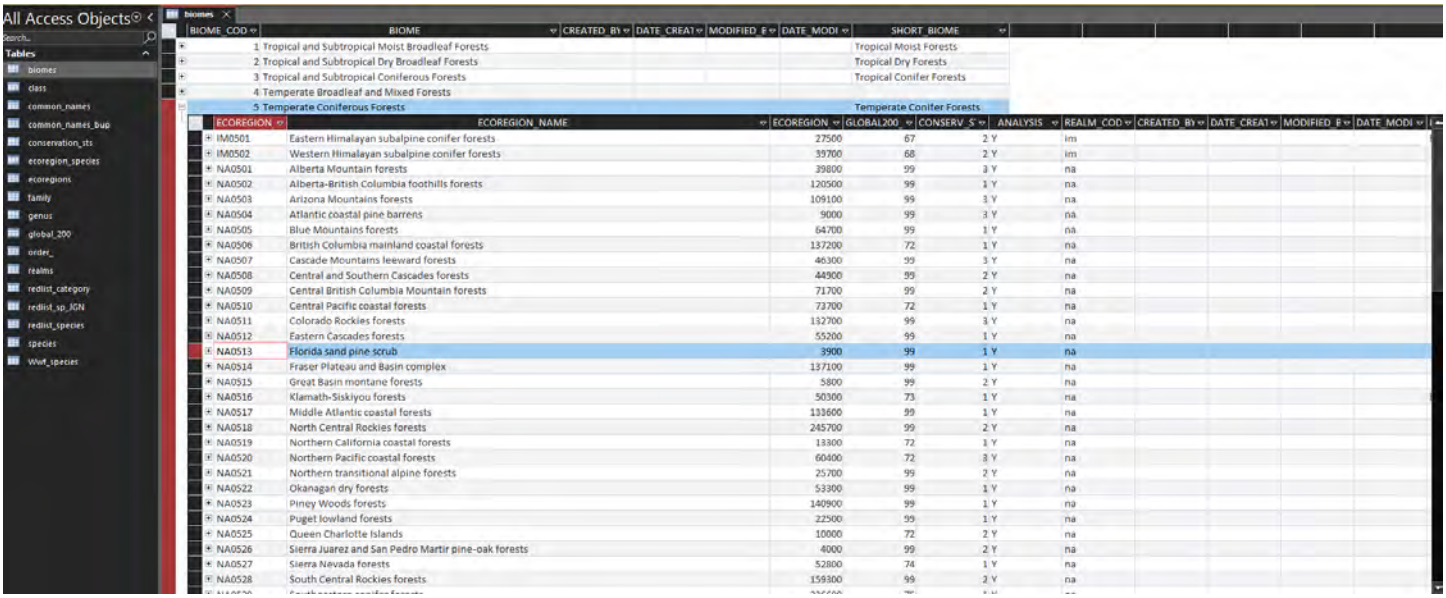
Trees with understory = 2,484/97,907 = 0.0253 x 6= 0.1522
Trees with no understory = 25,297/97,907 = 0.2583 x 4= 1.0335
Impervious Cover = 61,723/97,907 = 0.6401 x 0 = 0
Managed Turf <3" = 5,246/97,907 = 0.0761 x 3 = 0.0536
Shrubs = 2,206/97,907 = 0.0225 x 2 = 0.0451

PROPOSED BDI = 1.28

There is no managed turf >3".

## Terrestrial Biome

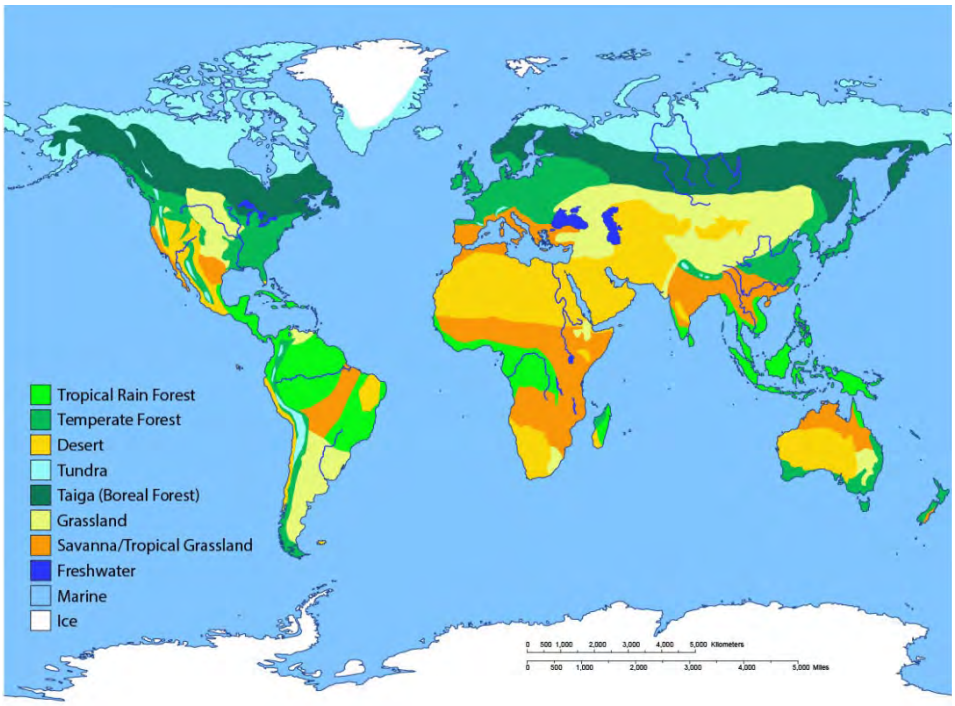
The terrestrial biome for this site according to the World Wildlife Fund Wildfinder is Temperate Coniferous Forest.



biomes

| BIOME_COD | BIOME | CREATED_BY | DATE_CREAT | MODIFIED_B | DATE_MODI | SHORT_BIOME |
|---|---|---|---|---|---|---|
| 1 | Tropical and Subtropical Moist Broadleaf Forests | | | | | Tropical Moist Forests |
| 2 | Tropical and Subtropical Dry Broadleaf Forests | | | | | Tropical Dry Forests |
| 3 | Tropical and Subtropical Coniferous Forests | | | | | Tropical Conifer Forests |
| 4 | Temperate Broadleaf and Mixed Forests | | | | | |
| 5 | Temperate Coniferous Forests | | | | | Temperate Conifer Forests |

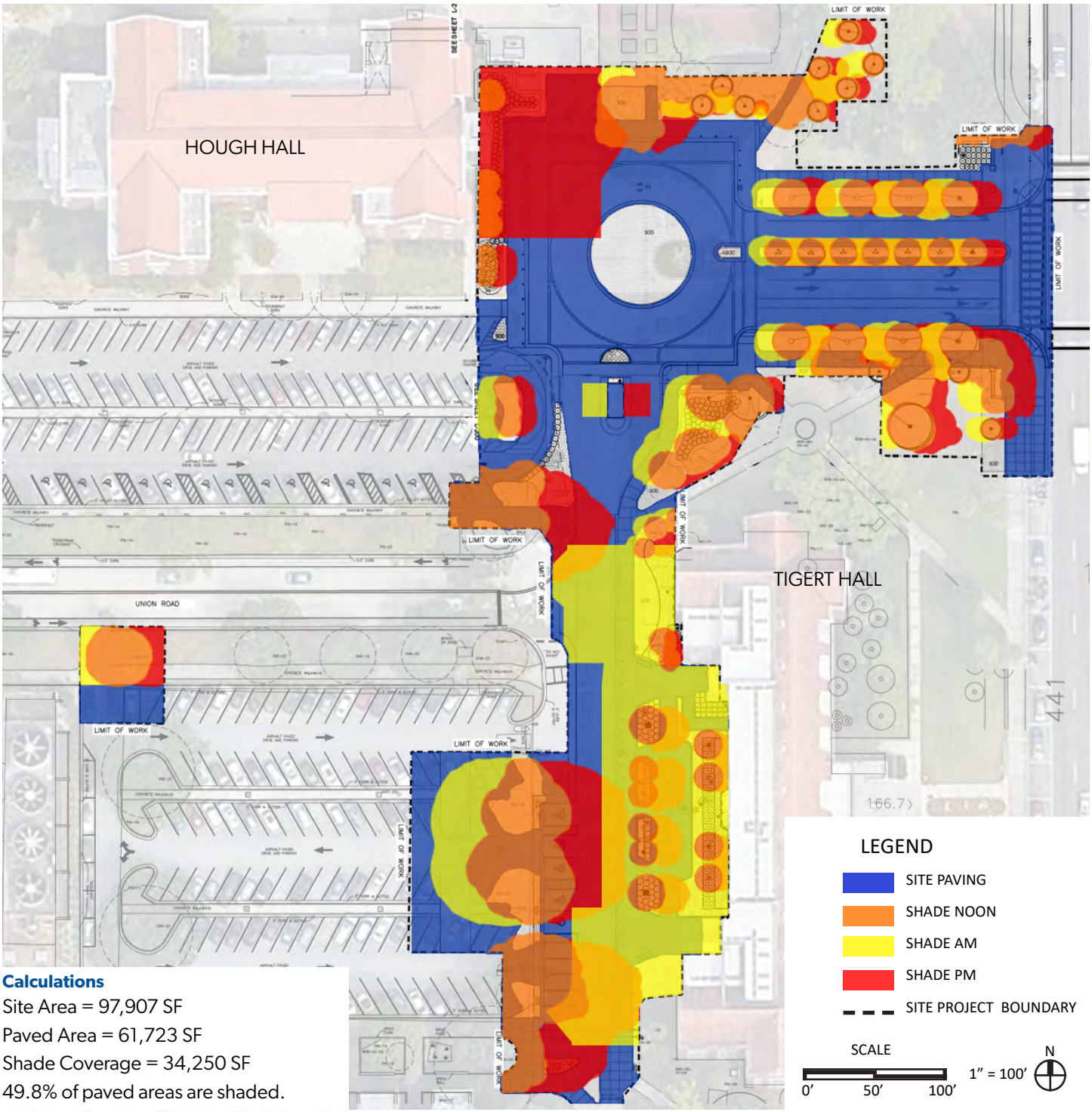
| ECOREGION | ECOREGION_NAME | ECOREGION | GLOBAL200 | CONSERV_S | ANALYSIS | REALM_COD | CREATED_BY | DATE_CREAT | MODIFIED_B | DATE_MODI |
|---|---|---|---|---|---|---|---|---|---|---|
| IM0501 | Eastern Himalayan subalpine conifer forests | 27500 | 67 | 2 | Y | im | | | | |
| IM0502 | Western Himalayan subalpine conifer forests | 39700 | 68 | 2 | Y | im | | | | |
| NA0501 | Alberta Mountain forests | 39800 | 99 | 3 | Y | na | | | | |
| NA0502 | Alberta-British Columbia foothills forests | 120500 | 99 | 1 | Y | na | | | | |
| NA0503 | Arizona Mountains forests | 109100 | 99 | 3 | Y | na | | | | |
| NA0504 | Atlantic coastal pine barrens | 9000 | 99 | 3 | Y | na | | | | |
| NA0505 | Blue Mountains forests | 64700 | 99 | 1 | Y | na | | | | |
| NA0506 | British Columbia mainland coastal forests | 137200 | 72 | 1 | Y | na | | | | |
| NA0507 | Cascade Mountains leeward forests | 46300 | 99 | 3 | Y | na | | | | |
| NA0508 | Central and Southern Cascades forests | 44900 | 99 | 2 | Y | na | | | | |
| NA0509 | Central British Columbia Mountain forests | 71700 | 99 | 2 | Y | na | | | | |
| NA0510 | Central Pacific coastal forests | 73700 | 72 | 1 | Y | na | | | | |
| NA0511 | Colorado Rockies forests | 132700 | 99 | 3 | Y | na | | | | |
| NA0512 | Eastern Cascades forests | 55200 | 99 | 1 | Y | na | | | | |
| NA0513 | Florida sand pine scrub | 3900 | 99 | 1 | Y | na | | | | |
| NA0514 | Fraser Plateau and Basin complex | 137100 | 99 | 1 | Y | na | | | | |
| NA0515 | Great Basin montane forests | 5800 | 99 | 2 | Y | na | | | | |
| NA0516 | Klamath-Siskiyou forests | 50300 | 73 | 1 | Y | na | | | | |
| NA0517 | Middle Atlantic coastal forests | 133600 | 99 | 1 | Y | na | | | | |
| NA0518 | North Central Rockies forests | 245700 | 99 | 2 | Y | na | | | | |
| NA0519 | Northern California coastal forests | 13300 | 72 | 1 | Y | na | | | | |
| NA0520 | Northern Pacific coastal forests | 60400 | 72 | 3 | Y | na | | | | |
| NA0521 | Northern transitional alpine forests | 25700 | 99 | 2 | Y | na | | | | |
| NA0522 | Okanagan dry forests | 53300 | 99 | 1 | Y | na | | | | |
| NA0523 | Piney Woods forests | 140900 | 99 | 1 | Y | na | | | | |
| NA0524 | Puget lowland forests | 22500 | 99 | 1 | Y | na | | | | |
| NA0525 | Queen Charlotte Islands | 10000 | 72 | 2 | Y | na | | | | |
| NA0526 | Sierra Juarez and San Pedro Martir pine-oak forests | 4000 | 99 | 2 | Y | na | | | | |
| NA0527 | Sierra Nevada forests | 52800 | 74 | 1 | Y | na | | | | |
| NA0528 | South Central Rockies forests | 159300 | 99 | 2 | Y | na | | | | |



# CREDIT 4.9 | REDUCE URBAN HEAT ISLAND EFFECTS

## Site plan

**Goal: 4 points**




**Calculations**

Site Area = 97,907 SF

Paved Area = 61,723 SF

Shade Coverage = 34,250 SF

49.8% of paved areas are shaded.

$$\frac{\text{area of non-roof measures}}{0.5} + \frac{\text{area of high-reflectance roof}}{0.75} + \frac{\text{area of vegetated roof}}{0.5} \geq \text{total site paving area} + \text{total roof area}$$

$$\frac{34{,}250}{0.5} + \frac{151}{0.75} + \text{None} \geq 61{,}874 \text{ SF}$$

Use paving materials with an SR of at least 0.33 at installation or a three year aged SR value of at least 0.28.

SRI of new grey concrete = 0.35

SRI of 3 year aged brick = 0.29

SRI of aged Clay Tile Roof = 0.45

R&D Services

**Solar Reflectance, Thermal Emittance, and Calculated SRI for Four Colors of Brick Pavers Manufactured by Pine Hall Brick**

The solar reflectance and thermal emittance of four colors of brick pavers manufactured by Pine Hall Brick Company, Inc. have been measured in accordance with ASTM C 1549 and ASTM C 1371, respectively. The solar reflectance was measured at air mass 1.5. The surface properties were determined for both sides of the 4x8 inch pavers. The measured solar reflectances and thermal emittances we used to calculate the SRI (solar reflectance index) for each of the pavers as outlined in ASTM E 1980. A list of the measured properties are contained in Table 1. The calculated SRI values are shown in Table 2 for each of the materials tested and for the average for each of the colors tested. Test reports for the solar reflectances and thermal emittances are attached.

Table 1. **Measured Solar Reflectance and Thermal Emittance Values**

| Color | Side | Solar Reflectance | Thermal Emittance |
|---|---|---|---|
| Buff | 1 | 0.51 | 0.91 |
| | 2 | 0.51 | 0.90 |
| | Average | 0.51 | 0.905 |
| Red | 1 | 0.28 | 0.91 |
| | 2 | 0.29 | 0.91 |
| | Average | 0.285 | 0.91 |
| Rose | 1 | 0.27 | 0.93 |
| | 2 | 0.31 | 0.93 |
| | Average | 0.29 | 0.93 |
| Flashed Red | 1 | 0.11 | 0.95 |
| | 2 | 0.19 | 0.91 |
| | Average | 0.15 | 0.93 |

Table 2. Calculated SRI Values

| Color | Side | SRI | | |
|---|---|---|---|---|
| | | Low Wind | Medium Wind | High Wind |
| Buff | 1 | 59.9 | 60.1 | 60.3 |
| | 2 | 59.4 | 59.8 | 60.1 |
| | Average | 59.7 | 60.0 | 60.2 |
| Red | 1 | 29.7 | 30.0 | 30.3 |
| | 2 | 31.0 | 31.3 | 31.5 |
| | Average | 30.4 | 30.7 | 30.9 |
| Rose | 1 | 29.7 | 29.6 | 29.5 |
| | 2 | 34.8 | 34.7 | 34.6 |
| | Average | 32.3 | 32.2 | 32.1 |
| Flashed Red | 1 | 11.1 | 10.5 | 9.9 |
| | 2 | 18.2 | 18.5 | 18.8 |
| | Average | 14.7 | 14.5 | 14.4 |

The SRI scale covers the range from 0 to 100.

References:

ASTM C 1371, "Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers."

ASTM C 1549, "Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer."

ASTM E 1980, "Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces."

David W. Yarbrough, PhD, PE
October 8, 2007

Euco Densit LLC obtained the SRI of a pavement surface using the Densiphalt material. The Densiphalt section used for the SRI measurement was built at the Massachusetts National Air Guard facility in Brockton, Massachusetts. The test was conducted according to ASTM E 1918 by DeLuca-Hoffman Associates, Inc. (*19*).

Table 1 shows the test results obtained in this study, including:

- The average solar reflectance determined in the field according to ASTM E 1918 and in the laboratory in compliance with ASTM C 1549.
- The average thermal emissivity measured in the laboratory in accordance with ASTM C 1371. Since the aggregates used for the chip seals and sand seals were from the same quarry, it was reasonable to assume that both should have similar thermal emittance values.
- The average SRI determined according to ASTM E 1980 using the calculator developed by the Heat Island Group of the Lawrence Berkeley National Laboratory (*7*). The field and laboratory SRI values were calculated based on the thermal emissivity as well as the solar reflectance measured in the field and laboratory, respectively. The SRI values were determined for medium wind that has a convective coefficient of 12 $Wm^{-2}K^{-1}$.

As shown in Table 1, the two test methods—ASTM E 1918 and ASTM C 1549—produced different solar reflectance values, resulting in different SRI for the same materials. The difference was as high as 11 percent in this study. The rougher the surface, the larger the difference in SRI results determined according to the two test methods. The difference was thought to be due to the following two reasons:

- The ASTM C 1549 method is very sensitive to the roughness of the measured surface; and
- The samples used for the two test methods are different—a 10 ft by 10 ft surface area in the field for ASTM E 1918 and a small surface area of a 6 in. core in the laboratory.

**TABLE 1 Solar Reflectance Index (SRI) of Materials Used in This Study**

| Materials | Avg. Reflectance | | Avg. | Avg. SRI (percent) | | |
|---|---|---|---|---|---|---|
| | Field | Lab | Emittance | Field | Lab | Difference |
| Unbound Coarse Aggregate | 0.45 | N/A* | N/A | | | |
| Unbound Fine Aggregate | 0.42 | N/A | N/A | | | |
| Coarse-Graded HMA | | | | | | |
| Control Section | 0.08 | 0.06 | 0.93 | 5 | 3 | 2 |
| Shot Blasting | 0.18 | 0.24 | 0.96 | 19 | 27 | -8 |
| Fine-Graded HMA | | | | | | |
| Surface Gritting | 0.20 | 0.14 | 0.97 | 22 | 15 | 7 |
| E-Krete without Sand Spray | 0.36 | 0.36 | 0.96 | 42 | 42 | 0 |
| Sand Seals | 0.40 | 0.36 | 0.87 | 44 | 39 | 5 |
| E-Krete with Sand Spray | 0.36 | 0.33 | 0.94 | 41 | 37 | 4 |
| StreetBond, Irish Cream | 0.45 | 0.46 | 0.96 | 54 | 55 | -1 |
| StreetBond, Sun-Baked Clay | 0.39 | 0.42 | 0.96 | 46 | 50 | -4 |
| Chip Seals | 0.37 | 0.29 | 0.87** | 40 | 29 | 11 |
| Shot Blasting | 0.21 | 0.19 | 0.91 | 21 | 18 | 3 |
| Control Section | 0.08 | 0.08 | 0.97 | 7 | 7 | 0 |
| Synthetic Binder | 0.30 | 0.33 | 0.98 | 35 | 39 | -4 |
| Densiphalt by EucoDensi (*19*) | | | | 24~32 | | |

## 8. ESTIMATED CONSTRUCTION COST FOR EACH TECHNOLOGY

Table 2 shows estimated construction cost, including material, labor and equipment costs, for each surface treatment technology. The costs were estimated for a virtual parking lot of 20,000 square feet built in Auburn, Alabama at the time of this writing. For a future construction project, the cost for each technology can be obtained by contacting the respective company listed in Appendix B.

**TABLE 2 Estimated Costs of Materials Used in This Study**

| Technology | SRI in this Study | Estimated Cost (USD per S.F.) |
|---|---|---|
| Shot Blasting by Blastrac | 18 – 27 | 0.20 – 0.30 |
| Surface Gritting | 15 – 22 | N/A |
| E-Krete Micro-Surfacing by PolyCon | 37 – 42 | 0.35 – 0.65 |
| Chip Seals and Sand Seals | 29 – 44 | 0.30 – 0.40 |
| StreetBond Coating by IPC | 46 – 55 | 1.40 – 1.70 |
| Synthetic Binder by Toda America, Inc | 35 – 39 | N/A |
| Densiphalt by EucoDensi | 24 – 32 | N/A |

* N/A = Not available

**TABLE 1:**
**MIXTURE PROPORTIONS AND AVERAGE SOLAR REFLECTANCE TEST RESULTS**

| | Mixture proportions, lb/yd³ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Aggregate | | | | | | |
| Mixture designation* | Cement | SCM | Fine | Coarse | Water | AEA, fl oz/yd³ | *w/cm* | *cm/fa* | Solar reflectance |
| CDG-AE-CP-...-... | 565 | 0 | 1245 | 1896 | 225 | 3.7 | 0.40 | 0.45 | 0.43 |
| CDG-AE-CP-...-SD | 261 | 213 | 1242 | 1892 | 228 | 3.7 | 0.48 | 0.38 | 0.51 |
| CDG-AE-CP-...-SL | 261 | 213 | 1242 | 1892 | 228 | 3.7 | 0.48 | 0.38 | 0.47 |
| CDG-AE-CP-FDG-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.39 |
| CDG-AM-CP-FDG-... | 381 | 127 | 1246 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.40 |
| CR-AB-CP-...-... | 565 | 0 | 1258 | 1895 | 294 | 3.7 | 0.52 | 0.45 | 0.36 |
| CR-AE-CP-...-... | 565 | 0 | 1245 | 1896 | 225 | 3.7 | 0.40 | 0.45 | 0.36 |
| CR-AE-CP-FDG-... | 381 | 127 | 1228 | 1869 | 244 | 3.7 | 0.48 | 0.41 | 0.41 |
| CR-AM-CL-FDG-... | 381 | 127 | 1246 | 1876 | 252 | 4.1 | 0.50 | 0.41 | 0.43 |
| CR-AM-CP-FDG-... | 381 | 127 | 1242 | 1869 | 244 | 3.7 | 0.48 | 0.41 | 0.40 |
| CS-AB-CP-...-... | 565 | 0 | 1258 | 1895 | 299 | 3.7 | 0.53 | 0.45 | 0.51 |
| CS-AB-CP-...-SD | 261 | 213 | 1256 | 1892 | 272 | 3.7 | 0.57 | 0.38 | 0.54 |
| CS-AB-CP-...-SL | 261 | 213 | 1256 | 1892 | 228 | 3.7 | 0.48 | 0.38 | 0.57 |
| CS-AB-CP-FDG-... | 381 | 127 | 1242 | 1869 | 276 | 3.7 | 0.54 | 0.41 | 0.48 |
| CS-AB-CP-FPB-... | 381 | 127 | 1242 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.57 |
| CS-AE-CL-...-... | 565 | 0 | 1245 | 1903 | 247 | 3.7 | 0.44 | 0.45 | 0.46 |
| CS-AE-CL-...-SD | 261 | 213 | 1242 | 1899 | 295 | 3.7 | 0.62 | 0.38 | 0.57 |
| CS-AE-CL-FDG-... | 381 | 127 | 1228 | 1876 | 252 | 3.7 | 0.50 | 0.41 | 0.41 |
| CS-AE-CP-...-... | 565 | 0 | 1245 | 1896 | 225 | 3.7 | 0.40 | 0.45 | 0.42 |
| CS-AE-CP-...-SD | 261 | 213 | 1242 | 1892 | 228 | 3.7 | 0.48 | 0.38 | 0.52 |
| CS-AE-CP-...-SL | 261 | 213 | 1242 | 1892 | 228 | 4.0 | 0.48 | 0.38 | 0.57 |
| CS-AE-CP-...-SM | 261 | 213 | 1242 | 1892 | 228 | 2.7 | 0.48 | 0.38 | 0.54 |
| CS-AE-CP-FDG-... | 381 | 127 | 1228 | 1869 | 244 | 4.0 | 0.48 | 0.41 | 0.34 |
| CS-AE-CP-FLG-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.42 |
| CS-AE-CP-FMG-... | 381 | 127 | 1228 | 1869 | 244 | 3.7 | 0.48 | 0.41 | 0.44 |
| CS-AE-CP-FPB-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.47 |
| CS-AE-CP-FVLG-... | 381 | 127 | 1228 | 1869 | 244 | 3.2 | 0.48 | 0.41 | 0.48 |
| CS-AE-CP-FYB-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.46 |
| CS-AL-CP-...-... | 565 | 0 | 1224 | 1822 | 271 | 3.7 | 0.48 | 0.46 | 0.53 |
| CS-AL-CP-...-SD | 261 | 213 | 1271 | 1892 | 289 | 3.7 | 0.61 | 0.37 | 0.60 |
| CS-AL-CP-...-SL | 261 | 213 | 1271 | 1892 | 282 | 3.7 | 0.59 | 0.37 | 0.64 |
| CS-AL-CP-FDG-... | 381 | 127 | 1255 | 1869 | 244 | 3.7 | 0.48 | 0.40 | 0.46 |
| CS-AL-CP-FPB-...- | 381 | 127 | 1255 | 1869 | 244 | 2.7 | 0.48 | 0.40 | 0.54 |
| CS-AM-CL-...-... | 565 | 0 | 1260 | 1903 | 274 | 3.7 | 0.48 | 0.45 | 0.44 |
| CS-AM-CP-...-... | 565 | 0 | 1258 | 1895 | 226 | 4.0 | 0.40 | 0.45 | 0.52 |
| CS-AM-CP-FDG-... | 381 | 127 | 1242 | 1869 | 244 | 4.0 | 0.48 | 0.41 | 0.43 |

**TABLE 1 CONTINUED:**
**MIXTURE PROPORTIONS AND AVERAGE SOLAR REFLECTANCE TEST RESULTS**

| | Mixture proportions, lb/yd³ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Aggregate | | | | | | |
| Mixture designation* | Cement | SCM | Fine | Coarse | Water | AEA, fl oz/yd³ | *w/cm* | *cm/fa* | Solar reflectance |
| CW-AB-CP-...-... | 565 | 0 | 1254 | 1888 | 301 | 3.7 | 0.53 | 0.45 | 0.59 |
| CW-AE-CP-...-... | 565 | 0 | 1240 | 1888 | 259 | 3.7 | 0.46 | 0.46 | 0.59 |
| CW-AL-CL-FDG-... | 381 | 127 | 1228 | 1876 | 257 | 3.7 | 0.51 | 0.41 | 0.44 |
| CW-AL-CP-...-... | 565 | 0 | 1219 | 1815 | 271 | 3.7 | 0.48 | 0.46 | 0.69 |
| CW-AL-CP-...-SL | 261 | 213 | 1271 | 1892 | 252 | 3.7 | 0.53 | 0.37 | 0.63 |
| CXB-AE-CP-...-... | 565 | 0 | 1244 | 1895 | 226 | 3.7 | 0.40 | 0.45 | 0.34 |
| CXB-AE-CP-FDG-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.43 |
| CXR-AE-CP...-... | 565 | 0 | 1244 | 1895 | 249 | 3.7 | 0.44 | 0.45 | 0.37 |
| CXR-AE-CP-FDG-... | 381 | 127 | 1228 | 1869 | 244 | 2.7 | 0.48 | 0.41 | 0.41 |

*The mixture designation lists the mixture constituents. See Fig. 1 to 3 for labels.

Note: 1 lb/yd³ = 0.59 kg/m³; 1 fl oz/yd³ = 3.87 mL/m³.

# SECTION 5:
# SITE DESIGN | MATERIALS SELECTION

| Prerequisite | Title | Points |
|---|---|---|
| Materials P5.1 | Eliminate the use of wood from threatened tree species | Required |
| **Credit** | **Title** | **Points** |
| Materials 5.4 | Reuse salvaged materials and plants | 4 points |
| Materials 5.5 | Use recycled content materials | 4 points |
| Materials 5.6 | Use regional materials | 5 points |
| Materials 5.7 | Support responsible extraction of raw materials | 1 points |
| Materials 5.8 | Support transparency and safer chemistry | 1 points |
| Materials 5.9 | Support sustainability in materials manufacturing | 1 points |
| Materials 5.10 | Support sustainability in plant production | 1 points |

# Prerequisite 5.1 | Eliminate the use of wood from threatened tree species

All concrete pours for the project utilized wood forms that were extracted only from non-threatened tree species. No other wood products were used during the construction.

## Materials Worksheet

### SITES® v2 Materials Worksheet

**PRODUCT AND MATERIAL IDENTIFICATION**

**INSTRUCTIONS:**

1. Complete the following form for all products and materials purchased for the project that are included in the prerequisite and credits (applicable) excluding labor.

| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Salvaged or Reused | Cost per Unit | Quantity | Total Materials Cost |
|---|---|---|---|---|---|---|
| Live Oak | Cherry Lake Tree Farm | Plant | N | $ 185.00 | 1 | $ 185.00 |
| Muhly | Cherry Lake Tree Farm | Plant | N | $ 15.00 | 198 | $ 2,970.00 |
| Azalea | Cherry Lake Tree Farm | Plant | N | $ 15.00 | 167 | $ 2,505.00 |
| Sod | Woerner Farms | Sod | N | $ 0.65 | 7,341 | $ 4,771.65 |
| Pinestraw | Elixson Wood Products | Mulch - other | N | $ 6.00 | 200 | $ 1,200.00 |
| Pinestraw | University of Florida | Mulch - other | Y | $ 6.00 | 100 | $ 600.00 |
| Holly Fern | University of Florida | Plant | Y | $ 10.00 | 50 | $ 500.00 |
| Liriope | University of Florida | Plant | Y | $ 100.00 | 3 | $ 300.00 |
| Drift Rose | University of Florida | Plant | Y | $ 14.00 | 25 | $ 350.00 |
| Society Garlic | University of Florida | Plant | Y | $ 3.00 | 100 | $ 300.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | Y | $ 2,442.00 | 4 | $ 9,768.00 |
| Precast Benches | University of Florida | Concrete | Y | $ 800.00 | 2 | $ 1,600.00 |
| Reclaimed Brick Paver - 7-7/8" x 3-7/8" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1.54 | 2,100 | $ 3,234.00 |
| Reclaimed Brick Paver - 8" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1.54 | 1,012 | $ 1,558.48 |
| Reclaimed Brick Paver - 7-15/16" x 3-7/8" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1.54 | 576 | $ 887.04 |
| Reclaimed Brick Paver - 7-1/2" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1.54 | 672 | $ 1,034.88 |
| Reclaimed Brick Paver - 8-1/16" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1.54 | 600 | $ 924.00 |
| Concrete Picnic Table | University of Florida | Concrete | Y | $ 1,000.00 | 2 | $ 2,000.00 |
| Concrete/Wood Benches | University of Florida | Concrete | Y | $ 850.00 | 1 | $ 850.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | $ 2.75 | 1,767 | $ 4,853.24 |
| CMU Block - 8x4x16 | Bell Concrete Products | Brick or masonry unit | N | $ 2.65 | 175 | $ 464.34 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | N | $ 1.77 | 7,475 | $ 13,246.80 |
| Mortar | Spec Mix | Concrete | N | $ 7.25 | 280 | $ 2,030.00 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | N | $ 140.00 | 25 | $ 3,500.00 |
| TAPS Signage | University of Florida | Non-wood decking, railing, fencing, trellises, or | N | $ 100.00 | 7 | $ 700.00 |
| Light Poles & Fixtures | University of Florida | Lighting | Y | $ 3,700.00 | 3 | $ 11,100.00 |
| Brick Pavers - 4x8" HD Full Range | Pine Hall Brick | Brick or masonry unit | N | $ 1.54 | 18,126 | $ 27,889.11 |
| Sand | Osteen Bros, Goldhead, Keystone Heights, FL | Sand (if used as a base course material) | N | $ 38.00 | 63 | $ 2,394.00 |
| Cement Edge | Home Depot | Concrete | N | $ 8.82 | 15 | $ 132.30 |
| Crushed Concrete | Watson Construction, Newberry, FL | Concrete | N | $ 26.50 | 68 | $ 1,802.00 |
| Metal Edging | Permaloc, | Other materials or base course layers | N | $ 4.15 | 240 | $ 997.00 |
| Concrete - 4,000 PSI | SRM Concrete | Concrete | N | $ 119.05 | 318 | $ 37,857.00 |
| Asphalt | Anderson Columbia | Other materials or base course layers | N | $ 270.95 | 63 | $ 17,070.00 |
| Welded Wire Fabric | HD Whitecap | Concrete | N | $ 0.07 | 12,896 | $ 902.72 |
| Rebar | HD Whitecap | Concrete | N | $ 1,650.00 | 6 | $ 9,900.00 |
| Limerock | Limerock Industries | Other materials or base course layers | N | $ 5.00 | 1,637 | $ 8,185.00 |
| CL200 Purple PVC Lateral Line | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | N | $ 1.58 | 1,282 | $ 2,025.56 |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 5.38 | 1 | $ 5.38 |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | $ 13.48 | 24 | $ 323.52 |
| Existing Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | Y | $ 125.85 | 5 | $ 629.25 |
| Precast Architectural Concrete | Spring Precast | Concrete | N | $ 49.82 | 129 | $ 6,427.25 |
| Storm Structures | Oldcastle Infrastructure | Concrete | N | $ 1,816.38 | 7 | $ 12,714.66 |
| Storm Piping | JM Eagle & Sanderson Pipe | Pipe, hose, or irrigation equipment | N | $ 52,344.00 | 1 | $ 52,344.00 |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 3.38 | 25 | $ 84.50 |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 6.88 | 25 | $ 172.00 |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood | N | $ 2,442.00 | 1 | $ 2,442.00 |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 9.77 | 56 | $ 547.12 |
| Sch. 40 PVC Sleeve | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | N | $ 1.58 | 100 | $ 158.00 |
| Bollards | Sternberg Lighting | Non-wood decking, railing, fencing, trellises, or | N | $ 1,090.00 | 3 | $ 3,270.00 |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | N | $ 916.18 | 1 | $ 916.18 |
| Fixtures | Sesco | Lighting | N | $ 3,834.58 | 1 | $ 3,834.58 |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | N | $ 21,796.18 | 1 | $ 21,796.18 |
| Wire | Sesco | Conduit, wiring, and electrical equipment | N | $ 1,756.18 | 1 | $ 1,756.18 |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | N | $ 556.18 | 1 | $ 556.18 |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | N | $ 6,556.18 | 1 | $ 6,556.18 |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | N | $ 76.18 | 1 | $ 76.18 |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | N | $ 3,420.31 | 1 | $ 3,420.31 |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | N | $ 672.00 | 1 | $ 672.00 |
| Total value for applicable products and materials ($) | | | | | | $ 299,288.79 |

| MATERIALS IDENTIFICATION (from Materials List tab) | | | Product type is eligible for prerequisite | Wood Species | CITES Status | IUCN Status | Third-Party Certification? | Meets P5.1? |
|---|---|---|---|---|---|---|---|---|
| Description of Material | Manufacturer or Supplier Name | Material/Product Type | | | | | | |
| Live Oak | Cherry Lake Tree Farm | Plant | N | | | | | N/A |
| Muhly | Cherry Lake Tree Farm | Plant | N | | | | | N/A |
| Azalea | Cherry Lake Tree Farm | Plant | N | | | | | N/A |
| Sod | Woerner Farms | Sod | N | | | | | N/A |
| Pinestraw | Elixson Wood Products | Mulch - other | N | | | | | N/A |
| Pinestraw | University of Florida | Mulch - other | N | | | | | N/A |
| Holly Fern | University of Florida | Plant | N | | | | | N/A |
| Liriope | University of Florida | Plant | N | | | | | N/A |
| Drift Rose | University of Florida | Plant | N | | | | | N/A |
| Society Garlic | University of Florida | Plant | N | | | | | N/A |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood product | Y | Oak | Other or not listed | Other or not listed | N | Y |
| Precast Benches | University of Florida | Concrete | N | | | | | N/A |
| Reclaimed Brick Paver - 7-7/8" x 3-7/8" x 2- | University of Florida | Brick or masonry unit | N | | | | | N/A |
| Reclaimed Brick Paver - 8" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | N | | | | | N/A |
| Reclaimed Brick Paver - 7-15/16" x 3-7/8" | University of Florida | Brick or masonry unit | N | | | | | N/A |
| Reclaimed Brick Paver - 7-1/2" x 4" x 2- | University of Florida | Brick or masonry unit | N | | | | | N/A |
| Reclaimed Brick Paver - 8-1/16" x 4" x 2- | University of Florida | Brick or masonry unit | N | | | | | N/A |
| Concrete Picnic Table | University of Florida | Concrete | N | | | | | N/A |
| Concrete/Wood Benches | University of Florida | Concrete | N | | | | | N/A |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | | | | | N/A |
| CMU Block - 8x4x16 | Bell Concrete Products | Brick or masonry unit | N | | | | | N/A |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | N | | | | | N/A |
| Mortar | Spec Mix | Concrete | N | | | | | N/A |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | N | | | | | N/A |
| TAPS Signage | University of Florida | Non-wood decking, railing, fencing, trellises, or | N | | | | | N/A |
| Light Poles & Fixtures | University of Florida | Lighting | N | | | | | N/A |
| Brick Pavers - 4x8" HD Full Range | Pine Hall Brick | Brick or masonry unit | N | | | | | N/A |
| Sand | Osteen Bros, Goldhead, | Sand (if used as a base course material) | N | | | | | N/A |
| Cement Edge | Home Depot | Concrete | N | | | | | N/A |
| Crushed Concrete | Watson Construction, | Concrete | N | | | | | N/A |
| Metal Edging | Permaloc, | Other materials or base course layers | N | | | | | N/A |
| Concrete - 4,000 PSI | SRM Concrete | Concrete | N | | | | | N/A |
| Asphalt | Anderson Columbia | Other materials or base course layers | N | | | | | N/A |
| Welded Wire Fabric | HD Whitecap | Concrete | N | | | | | N/A |
| Rebar | HD Whitecap | Concrete | N | | | | | N/A |
| Limerock | Limerock Industries | Other materials or base course layers | N | | | | | N/A |
| CL200 Purple PVC Lateral Line | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Existing Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Precast Architectural Concrete | Spring Precast | Concrete | N | | | | | N/A |
| Storm Structures | Oldcastle Infrastructure | Concrete | N | | | | | N/A |
| Storm Piping | JM Eagle & Sanderson | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | Y | Pine | Other or not listed | Other or not listed | N | Y |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | Y | Pine | Other or not listed | Other or not listed | N | Y |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood product | Y | Oak | Other or not listed | Other or not listed | N | Y |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Sch. 40 PVC Sleeve | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | | | | | N/A |
| Bollards | Sternberg Lighting | Non-wood decking, railing, fencing, trellises, or | N | | | | | N/A |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Fixtures | Sesco | Lighting | N | | | | | N/A |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Wire | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | N | | | | | N/A |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | N | | | | | N/A |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | N | | | | | N/A |
| All products meet prerequisite? | | | | | | | | Yes |

# Credit 5.4 | Reuse salvaged materials and plants

## Narrative

**Goal: 4 points**

All materials listed represent the total scope of work for the Northeast Gateway, part of the UF Landscape Master Plan project. This list was updated to include all material ordered & installed for the project whether they complied with the SITES standards or not as well as confirming wood products from threatened tree species weren't used, as directed by the preliminary review.
The scope of work for the Northeast Gateway included demo/salvaging of the existing wall & brick pavers for reuse, demo/salvaging of irrigation equipment, demo/salvaging of landscaping to be incorporated into new site design, demo of existing concrete pathways, relocation of backflow preventer, installation of new storm water system, installation of new irrigation & landscaping, installation of new concrete pathways & foundations, installation of new brick pavers, installation of new gateway walls, installation of Northeast Gateway gatehouse, installation of new asphalt roadways, & installation of all site furnishings including, but not limited to, tables, benches, bollards, recycling stations, bike racks, & bike shelter. A big portion of each site's total cost value is related to labor since there was a lot of demolition needed & masonry work which is labor intensive, hence why values are lower than average. Cost values were taken with a 60%-40% split for material and labor from subcontractor's pay applications as a baseline, with some exceptions such as spray foam insulation at a 70%-30% split and precast concrete being 100% because it was a material purchase order. The following items listed below were either salvaged or reused from the project site:

- Pine straw – Existing pine straw from existing planters was used to supplement with addition of new pine straw;
- Lily of the Nile - Remained on site & incorporated into new planters;
- Dogwood - Remained on site & incorporated into new planters;
- Holly Fern – Remained on site & incorporated into new planters;
- Liriope - Remained on site & incorporated into new planters;
- Drift Rose - Remained on site & incorporated into new planters;
- Society Garlic - Remained on site & incorporated into new planters;
- 2-Tier Recycling Station – Picked-up from University of Florida maintenance team to be stored until future use;
- Reclaimed Brick Pavers – Salvaged from Newell project site & reinstalled on both Newell & Northeast project sites, remaining pavers were picked up from University of Florida maintenance team to be stored until future use;
- Concrete Picnic Tables – Stored picnic tables from University of Florida attic stock delivered to project site & incorporated in space;
- Concrete/Wood Benches – Salvaged/picked up by University of Florida maintenance team to be stored for future use;
- Light Fixtures – Existing light fixtures on project site were either incorporated into new space or picked up by UF maintenance team to store for future use;
- Bollards – Salvaged/picked up by University of Florida maintenance team to be stored for future use;
- TAPS Signage - Salvaged/picked up by University of Florida Transportation & Parking Services team to be stored for future use or incorporated into site design;
- Gate Arms & Mechanical Elements - Salvaged/picked up by University of Florida Transportation & Parking Services team to be stored for future use;
- Historical Monument – Protected & incorporated into new Northeast Gateway site design;
- Bicycle Repair Station - Salvaged/picked up by University of Florida maintenance team to be stored for future use;
- Double Bicycle Racks - Salvaged/picked up by University of Florida maintenance team to be stored for future use;
- Existing Electric Rain Bird 150 PEB Valve – Incorporated into new irrigation system installed;
- Existing Backflow Preventer – Relocated to new area on Northeast Gateway & integrated into system;
- 1" x 4" Wood Forms – Used during the pouring of concrete sidewalks & foundations;
- 2" x 6" Wood Forms - Used during the pouring of concrete sidewalks & foundations;
- Clay Roof Tiles – Taken from University of Florida attic stock & installed with new tiles

# Materials Worksheet

## SITES® v2 Materials Worksheet

**C5.4: REUSE SALVAGED MATERIALS AND PLANTS**
**C5.5: USE RECYCLED CONTENT MATERIALS**
**C5.6: USE REGIONAL MATERIALS**

**INSTRUCTIONS:**
1. Enter applicable information for each material under each credit. Percentages are based on cost or replacement value.

| MATERIALS IDENTIFICATION (from Materials List tab) | | | | C5.4: SALVAGED MATERIALS | | |
|---|---|---|---|---|---|---|
| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Total Cost of Material | Product type is eligible for credit | Salvaged or Reused (from Materials List tab) | Total Cost of Salvaged Material |
| River Birch | Cherry Lake Tree Farm | Plant | $ 740.00 | Y | N | $ - |
| Crape Myrtle | Cherry Lake Tree Farm | Plant | $ 1,295.00 | Y | N | $ - |
| Longleaf Pine | Half Moon Growers | Plant | $ 2,035.00 | Y | N | $ - |
| Chickasaw Plum | Half Moon Growers | Plant | $ 660.00 | Y | N | $ - |
| Oak Trees | Cherry Lake Tree Farm | Plant | $ 2,405.00 | Y | N | $ - |
| Muhly Grass | Cherry Lake Tree Farm | Plant | $ 4,140.00 | Y | N | $ - |
| Podocarpus | Cherry Lake Tree Farm | Plant | $ 1,590.00 | Y | N | $ - |
| Azaleas | Cherry Lake Tree Farm | Plant | $ 1,335.00 | Y | N | $ - |
| Lilies | Cherry Lake Tree Farm | Plant | $ 1,020.00 | Y | N | $ - |
| Liriope | Cherry Lake Tree Farm | Plant | $ 5,728.00 | Y | N | $ - |
| Jasmine | Rode Groundcovers, Inc | Plant | $ 2,376.00 | Y | N | $ - |
| Pinestraw | University of Florida | Mulch - other | $ 1,500.00 | Y | Y | $ 1,500.00 |
| Swamp Chestnut Oak | Half Moon Growers | Plant | $ 80.00 | Y | Y | $ 80.00 |
| Knockout Roses | Blooming House Nursery | Plant | $ 150.00 | Y | Y | $ 150.00 |
| Sabal Palm- 20' OA Height | TNT Nursery | Plant | $ 1,440.00 | Y | Y | $ 1,440.00 |
| Lily of the Nile | University of Florida | Plant | $ 390.00 | Y | Y | $ 390.00 |
| Dogwood 3" | University of Florida | Wood - Natural Lumber | $ 100.00 | Y | Y | $ 100.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | $ 9,105.00 | Y | Y | $ 9,105.00 |
| Precast Concrete Benches | University of Florida | Concrete | $ 6,400.00 | Y | Y | $ 6,400.00 |
| Light Fixtures | University of Florida | Lighting | $ 25,900.00 | Y | Y | $ 25,900.00 |
| Bollards | University of Florida | Non-wood decking, railing, fencing, trellises, or | $ 5,450.00 | Y | Y | $ 5,450.00 |
| TAPS Signage | University of Florida | Cut or processed stone | $ 1,000.00 | Y | Y | $ 1,000.00 |
| Gate Arms & Mechanical Elements | University of Florida | Conduit, wiring, and electrical equipment | $ 12,500.00 | Y | Y | $ 12,500.00 |
| Historical Monument | University of Florida | Cut or processed stone | $ 2,000.00 | Y | Y | $ 2,000.00 |
| Bicycle Repair Station | University of Florida | Cut or processed stone | $ 1,800.00 | Y | Y | $ 1,800.00 |
| Existing Backflow Preventor - Double Check Gate Valve | University of Florida | Pipe, hose, or irrigation equipment | $ 15,000.00 | Y | Y | $ 15,000.00 |
| Double Bicycle Racks | University of Florida | Cut or processed stone | $ 2,200.00 | Y | Y | $ 2,200.00 |
| Concrete/Wood Benches | University of Florida | Concrete | $ 1,700.00 | Y | Y | $ 1,700.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 1,911.00 | Y | N | $ - |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 127.00 | Y | N | $ - |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | $ 6,439.50 | Y | N | $ - |
| Mortar | Spec Mix | Concrete | $ 2,349.00 | Y | N | $ - |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | $ 4,200.00 | Y | N | $ - |
| Bahia | Tater Farms | Sod | $ 187.20 | Y | N | $ - |
| Zoysia | Woerner Farms | Sod | $ 811.85 | Y | N | $ - |
| Concrete - 4,000 PSI Mix | SRM Concrete | Concrete | $ 212,052.00 | Y | N | $ - |
| Asphalt | Anderson Columbia | Other materials or base course layers | $ 27,900.00 | Y | N | $ - |
| Welded Wire Fabric | HD Whitecap | Concrete | $ 2,708.30 | Y | N | $ - |
| Limerock | Limerock Industries | Other materials or base course layers | $ 24,550.00 | Y | N | $ - |
| Pavers- ADA Pavers Red Rustic | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 1,749.60 | Y | N | $ - |
| Pavers- PH Rumbled Full Range HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 106,080.00 | Y | N | $ - |
| Pavers- PH Pathway 4x8 FullRange HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 24,043.50 | Y | N | $ - |
| Pavers- PH Coco HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 4,140.00 | Y | N | $ - |
| Pavers - PH Cocoa | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 219.78 | Y | N | $ - |
| Pavers- PH Pathway 4x8 Full Range | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 28,851.12 | Y | N | $ - |
| Sand | Osteen Bros, Goldhead, Keystone Heights, FL | Sand (if used as a base course material) | $ 2,242.00 | Y | N | $ - |
| Cement Edge | Home Depot | Concrete | $ 308.70 | Y | N | $ - |
| Reclaimed Brick Pavers | University of Florida | Cut or processed stone | $ 6,448.00 | Y | Y | $ 6,448.00 |
| Crushed Concrete | Watson Construction, Newberry, FL | Concrete | $ 4,240.00 | Y | N | $ - |
| Metal Edging | Permaloc, | Other materials or base course layers | $ 1,470.00 | Y | N | $ - |
| CL200 Purple PVC Lateral Line | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 5,802.16 | Y | N | $ - |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 102.22 | Y | N | $ - |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 404.40 | Y | N | $ - |
| Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 1,510.20 | Y | N | $ - |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 2,295.95 | Y | N | $ - |
| Sch. 40 PVC Sleeve | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 385.13 | Y | N | $ - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2.5" Irrigation Mainline | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 576.70 | Y | Y | $ 576.70 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 119.94 | Y | Y | $ 119.94 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 39.98 | Y | N | $ - |
| Hunter RP Rotary-Spray Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 21.75 | Y | N | $ - |
| Rain Bird ESP Lxme 8 Station Modular | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 808.30 | Y | N | $ - |
| Valve Wire Junction Box | NDS | Pipe, hose, or irrigation equipment | $ 79.92 | Y | N | $ - |
| Precast Architectural Concrete | Spring Precast | Concrete | $ 4,882.36 | Y | N | $ - |
| Storm Structures | Oldcastle Infrastructure | Concrete | $ 55,023.50 | Y | N | $ - |
| Storm Piping | JM Eagle & Sanderson Pipe | Pipe, hose, or irrigation equipment | $ 179,058.00 | Y | N | $ - |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | $ 84.50 | Y | Y | $ 84.50 |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | $ 172.00 | Y | Y | $ 172.00 |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood | $ 4,884.00 | Y | N | $ - |
| Rebar | HD Whitecap | Concrete | $ 29,700.00 | Y | N | $ - |
| Pinestraw | Elixson Wood Products | Mulch - other | $ 3,000.00 | Y | N | $ - |
| Steel Plate | Holt Metals | Cut or processed stone | $ 2,311.20 | Y | N | $ - |
| Gatehouse Roof Drains | Barry Pattern & Foundry, Inc | Cut or processed stone | $ 2,010.16 | Y | N | $ - |
| Bike Shelter | Handi Hut | Cut or processed stone | $ 10,223.00 | Y | N | $ - |
| Bollards | Sternberg Lighting | Conduit, wiring, and electrical equipment | $ 47,060.00 | Y | N | $ - |
| Bike Racks | Peak Racks | Cut or processed stone | $ 2,361.00 | Y | N | $ - |
| Mingle Seating | Landscape Forms | Cut or processed stone | $ 27,934.62 | Y | N | $ - |
| Benches | Keystone Ridge Designs | Cut or processed stone | $ 32,893.75 | Y | N | $ - |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | $ 1,374.27 | Y | N | $ - |
| Fixtures | Sesco | Lighting | $ 5,751.87 | Y | N | $ - |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | $ 32,694.27 | Y | N | $ - |
| Wire | Sesco | Conduit, wiring, and electrical equipment | $ 2,634.27 | Y | N | $ - |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | $ 834.27 | Y | N | $ - |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | $ 9,834.27 | Y | N | $ - |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | $ 114.27 | Y | N | $ - |
| LG Mini Split | LG | Conduit, wiring, and electrical equipment | $ 4,600.00 | Y | N | $ - |
| Casework | OEC | Wood - Manufactured/compressed wood | $ 3,270.00 | Y | N | $ - |
| Solid Surface Window Sills | Rainbow Cabinets | Cut or processed stone | $ 727.20 | Y | N | $ - |
| ACT Tile | Armstrong | Wood - Manufactured/compressed wood | $ 1,350.00 | Y | N | $ - |
| ACT Suspension System | Armstrong | Cut or processed stone | $ 497.00 | Y | N | $ - |
| Glazing | Vitro | Sand (for purposes other than soil amendment | $ 3,437.00 | Y | N | $ - |
| Doors & Hardware | Kawneer | Cut or processed stone | $ 5,061.00 | Y | N | $ - |
| Ceramic Floor Tile | Garden State Tile | Cut or processed stone | $ 3,679.00 | Y | N | $ - |
| Drywall | CertainTeed | Wood - Manufactured/compressed wood | $ 1,295.00 | Y | N | $ - |
| Spray Foam Insulation | Huntsman Building Solutions | Extruded, spray or board foams | $ 2,660.00 | Y | N | $ - |
| Steel Trusses | Clark Dietrich | Cut or processed stone | $ 20,655.00 | Y | N | $ - |
| Ice & Water Shield Roof Underlayment | GCP Applied Technologies | Adhesive, sealant, elastomer, water proofing, | $ 1,907.36 | Y | N | $ - |
| Clay Roof Tiles | Ludowici | Cut or processed stone | $ 17,116.20 | Y | N | $ - |
| Clay Roof Tiles | University of Florida | Cut or processed stone | $ 1,626.44 | Y | Y | $ 1,626.44 |
| Interior Paint | Sherwin Williams | Paint or coating | $ 2,340.00 | Y | N | $ - |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | $ 5,130.47 | Y | N | $ - |
| ADA Handrails | Hutchinson Welding | Cut or processed stone | $ 5,787.00 | Y | N | $ - |
| Copper Flashing | Perry Roofing | Cut or processed stone | $ 524.30 | Y | N | $ - |
| Break Metal | Perry Roofing | Cut or processed stone | $ 400.18 | Y | N | $ - |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | $ 1,008.00 | Y | N | $ - |
| Storefront | Kawneer | Cut or processed stone | $ 13,381.75 | Y | N | $ - |
| Stucco | Amerimix | Aggregate/gravel | $ 2,580.73 | Y | N | $ - |
| Insulation | DuPont | Wood - Manufactured/compressed wood | $ 655.00 | Y | N | $ - |
| Wall Framing | Clark Dietrich | Cut or processed stone | $ 7,105.00 | Y | N | $ - |
| Building Signage | Clear Image | Cut or processed stone | $ 953.71 | Y | N | $ - |
| Repelicone W | DCP | Adhesive, sealant, elastomer, water proofing, | $ 538.40 | Y | N | $ - |
| Metal Roofing | GulfCoast | Cut or processed stone | $ 1,292.00 | Y | N | $ - |
| Gutter & Drip Edge | Perry Roofing | Cut or processed stone | $ 300.00 | Y | N | $ - |
| Roof Underlayment | Home Depot | Wood - Natural Lumber | $ 273.96 | Y | N | $ - |
| Traffic Camera & Controller | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 24,120.00 | Y | N | $ - |
| Pedestrian Detector & Signal | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 4,380.00 | Y | N | $ - |
| Total materials cost (from Introduction tab) | | | $ 1,178,701.47 | Total salvaged materials cost | | $ 95,742.58 |
| | | | | Total materials cost (less ineligible product and recycled materials cost) | | $ 753,988.47 |
| | | | | Percent salvaged materials (%) | | 12.70% |

*NOTE: Materials can only count for either c5.4 or c5.5, b*

# CREDIT 5.5 | USE RECYCLED CONTENT MATERIALS

## Narrative

**Goal: 4 points**

All materials listed represent the total scope of work for the Northeast Gateway, part of the UF Landscape Master Plan project. This list includes all material ordered & installed for the project whether they complied with the SITES standards or not as well as confirming wood products from threatened tree species weren't used. A big portion of each site's total cost value is related to labor since there was a lot of demolition needed & masonry work which is labor intensive, hence why values are lower than average.

### SITES® v2 Materials Worksheet

**C5.4: REUSE SALVAGED MATERIALS AND PLANTS**
**C5.5: USE RECYCLED CONTENT MATERIALS**
**C5.6: USE REGIONAL MATERIALS**

**INSTRUCTIONS:**
1. Enter applicable information for each material under each credit. Percentages are based on cost or replacement value.

| MATERIALS IDENTIFICATION (from Materials List tab) | | | | C5.5: RECYCLED CONTENT | | | |
|---|---|---|---|---|---|---|---|
| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Total Cost of Material | Product type is eligible for credit | Post-Consumer (%) | Pre-Consumer (%) | Total Cost of Recycled Materials |
| River Birch | Cherry Lake Tree Farm | Plant | $ 740.00 | N | | | N/A |
| Crape Myrtle | Cherry Lake Tree Farm | Plant | $ 1,295.00 | N | | | N/A |
| Longleaf Pine | Half Moon Growers | Plant | $ 2,035.00 | N | | | N/A |
| Chickasaw Plum | Half Moon Growers | Plant | $ 660.00 | N | | | N/A |
| Oak Trees | Cherry Lake Tree Farm | Plant | $ 2,405.00 | N | | | N/A |
| Muhly Grass | Cherry Lake Tree Farm | Plant | $ 4,140.00 | N | | | N/A |
| Podocarpus | Cherry Lake Tree Farm | Plant | $ 1,590.00 | N | | | N/A |
| Azaleas | Cherry Lake Tree Farm | Plant | $ 1,335.00 | N | | | N/A |
| Lilies | Cherry Lake Tree Farm | Plant | $ 1,020.00 | N | | | N/A |
| Liriope | Cherry Lake Tree Farm | Plant | $ 5,728.00 | N | | | N/A |
| Jasmine | Rode Groundcovers, Inc | Plant | $ 2,376.00 | N | | | N/A |
| Pinestraw | University of Florida | Mulch - other | $ 1,500.00 | Y | | | $ - |
| Swamp Chestnut Oak | Half Moon Growers | Plant | $ 80.00 | N | | | N/A |
| Knockout Roses | Blooming House Nursery | Plant | $ 150.00 | N | | | N/A |
| Sabal Palm- 20' OA Height | TNT Nursery | Plant | $ 1,440.00 | N | | | N/A |
| Lily of the Nile | University of Florida | Plant | $ 390.00 | N | | | N/A |
| Dogwood 3" | University of Florida | Wood - Natural Lumber | $ 100.00 | N | | | N/A |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | $ 9,105.00 | N | | | N/A |
| Precast Concrete Benches | University of Florida | Concrete | $ 6,400.00 | Y | | | $ - |
| Light Fixtures | University of Florida | Lighting | $ 25,900.00 | Y | | | $ - |
| Bollards | University of Florida | Non-wood decking, railing, fencing, trellises, or | $ 5,450.00 | Y | | | $ - |
| TAPS Signage | University of Florida | Cut or processed stone | $ 1,000.00 | Y | | | $ - |
| Gate Arms & Mechanical Elements | University of Florida | Conduit, wiring, and electrical equipment | $ 12,500.00 | Y | | | $ - |
| Historical Monument | University of Florida | Cut or processed stone | $ 2,000.00 | Y | | | $ - |
| Bicycle Repair Station | University of Florida | Cut or processed stone | $ 1,800.00 | Y | | | $ - |
| Existing Backflow Preventor - Double Check Gate Valve | University of Florida | Pipe, hose, or irrigation equipment | $ 15,000.00 | Y | | | $ - |
| Double Bicycle Racks | University of Florida | Cut or processed stone | $ 2,200.00 | Y | | | $ - |
| Concrete/Wood Benches | University of Florida | Concrete | $ 1,700.00 | Y | | | $ - |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 1,911.00 | Y | | 18.80% | $ 179.63 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 127.00 | Y | | 18.80% | $ 11.94 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | $ 6,439.50 | Y | 13.00% | | $ 837.14 |
| Mortar | Spec Mix | Concrete | $ 2,349.00 | Y | | 10.00% | $ 117.45 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | $ 4,200.00 | Y | 15.00% | | $ 630.00 |
| Bahia | Tater Farms | Sod | $ 187.20 | N | | | N/A |
| Zoysia | Woerner Farms | Sod | $ 811.85 | N | | | N/A |
| Concrete - 4,000 PSI Mix | SRM Concrete | Concrete | $ 212,052.00 | Y | 18.07% | | $ 38,317.80 |
| Asphalt | Anderson Columbia | Other materials or base course layers | $ 27,900.00 | Y | | 95.00% | $ 13,252.50 |
| Welded Wire Fabric | HD Whitecap | Concrete | $ 2,708.30 | Y | | | $ - |
| Limerock | Limerock Industries | Other materials or base course layers | $ 24,550.00 | Y | 100.00% | | $ 24,550.00 |
| Pavers- ADA Pavers Red Rustic | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 1,749.60 | Y | 95.00% | | $ 1,662.12 |
| Pavers- PH Rumbled Full Range HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 106,080.00 | Y | 95.00% | | $ 100,776.00 |
| Pavers- PH Pathway 4x8 FullRange HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 24,043.50 | Y | 95.00% | | $ 22,841.33 |
| Pavers- PH Coco HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 4,140.00 | Y | 95.00% | | $ 3,933.00 |
| Pavers - PH Cocoa | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 219.78 | Y | 95.00% | | $ 208.79 |
| Pavers- PH Pathway 4x8 Full Range | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 28,851.12 | Y | 95.00% | | $ 27,408.56 |
| Sand | Osteen Bros, Goldhead, Keystone Heights, FL | Sand (if used as a base course material) | $ 2,242.00 | Y | 100.00% | | $ 2,242.00 |
| Cement Edge | Home Depot | Concrete | $ 308.70 | Y | 10.00% | | $ 30.87 |
| Reclaimed Brick Pavers | University of Florida | Cut or processed stone | $ 6,448.00 | Y | 100.00% | | $ 6,448.00 |
| Crushed Concrete | Watson Construction, Newberry, FL | Concrete | $ 4,240.00 | Y | 13.00% | | $ 551.20 |
| Metal Edging | Permaloc, | Other materials or base course layers | $ 1,470.00 | Y | | 13.00% | $ 95.55 |
| CL200 Purple PVC Lateral Line | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 5,802.16 | Y | 1.00% | | $ 58.02 |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 102.22 | Y | 20.00% | | $ 20.44 |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 404.40 | Y | | 90.00% | $ 181.98 |
| Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 1,510.20 | Y | 20.00% | | $ 302.04 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 2,295.95 | Y | 20.00% | | $ 459.19 |
| Sch. 40 PVC Sleeve | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 385.13 | Y | 1.00% | | $ 3.85 |
| 2.5" Irrigation Mainline | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 576.70 | Y | 1.00% | | $ 5.77 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 119.94 | Y | 20.00% | | $ 23.99 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 39.98 | Y | 20.00% | | $ 8.00 |
| Hunter RP Rotary-Spray Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 21.75 | Y | | 65.00% | $ 7.07 |
| Rain Bird ESP Lxme 8 Station Modular | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 808.30 | Y | 20.00% | | $ 161.66 |
| Valve Wire Junction Box | NDS | Pipe, hose, or irrigation equipment | $ 79.92 | Y | | 3.00% | $ 1.20 |
| Precast Architectural Concrete | Spring Precast | Concrete | $ 4,882.36 | Y | 10.00% | | $ 488.24 |
| Storm Structures | Oldcastle Infrastructure | Concrete | $ 55,023.50 | Y | 10.00% | | $ 5,502.35 |
| Storm Piping | JM Eagle & Sanderson Pipe | Pipe, hose, or irrigation equipment | $ 179,058.00 | Y | | 95.00% | $ 85,052.55 |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | $ 84.50 | N | | | N/A |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | $ 172.00 | N | | | N/A |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood | $ 4,884.00 | N | | | N/A |
| Rebar | HD Whitecap | Concrete | $ 29,700.00 | Y | 82.00% | 15.00% | $ 26,581.50 |
| Pinestraw | Elixson Wood Products | Mulch - other | $ 3,000.00 | Y | | | $ - |
| Steel Plate | Holt Metals | Cut or processed stone | $ 2,311.20 | Y | 10.00% | | $ 231.12 |
| Gatehouse Roof Drains | Barry Pattern & Foundry, Inc | Cut or processed stone | $ 2,010.16 | Y | | | $ - |
| Bike Shelter | Handi Hut | Cut or processed stone | $ 10,223.00 | Y | | | $ - |
| Bollards | Sternberg Lighting | Conduit, wiring, and electrical equipment | $ 47,060.00 | Y | 60.00% | | $ 28,236.00 |
| Bike Racks | Peak Racks | Cut or processed stone | $ 2,361.00 | Y | | | $ - |
| Mingle Seating | Landscape Forms | Cut or processed stone | $ 27,934.62 | Y | | | $ - |
| Benches | Keystone Ridge Designs | Cut or processed stone | $ 32,893.75 | Y | | | $ - |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | $ 1,374.27 | Y | | | $ - |
| Fixtures | Sesco | Lighting | $ 5,751.87 | Y | | | $ - |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | $ 32,694.27 | Y | 25.00% | | $ 8,173.57 |
| Wire | Sesco | Conduit, wiring, and electrical equipment | $ 2,634.27 | Y | | | $ - |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | $ 834.27 | Y | | | $ - |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | $ 9,834.27 | Y | | | $ - |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | $ 114.27 | Y | | | $ - |
| LG Mini Split | LG | Conduit, wiring, and electrical equipment | $ 4,600.00 | Y | | | $ - |
| Casework | OEC | Wood - Manufactured/compressed wood | $ 3,270.00 | N | | | N/A |
| Solid Surface Window Sills | Rainbow Cabinets | Cut or processed stone | $ 727.20 | Y | | | $ - |
| ACT Tile | Armstrong | Wood - Manufactured/compressed wood | $ 1,350.00 | N | 15.00% | 65.00% | N/A |
| ACT Suspension System | Armstrong | Cut or processed stone | $ 497.00 | Y | 30.00% | | $ 149.10 |
| Glazing | Vitro | Sand (for purposes other than soil amendment | $ 3,437.00 | Y | 95.00% | | $ 3,265.15 |
| Doors & Hardware | Kawneer | Cut or processed stone | $ 5,061.00 | Y | | 50.00% | $ 1,265.25 |
| Ceramic Floor Tile | Garden State Tile | Cut or processed stone | $ 3,679.00 | Y | | 10.00% | $ 183.95 |
| Drywall | CertainTeed | Wood - Manufactured/compressed wood | $ 1,295.00 | N | | | N/A |
| Spray Foam Insulation | Huntsman Building Solutions | Extruded, spray or board foams | $ 2,660.00 | Y | | | $ - |
| Steel Trusses | Clark Dietrich | Cut or processed stone | $ 20,655.00 | Y | 24.30% | 9.40% | $ 5,989.95 |
| Ice & Water Shield Roof Underlayment | GCP Applied Technologies | Adhesive, sealant, elastomer, water proofing, | $ 1,907.36 | Y | | | $ - |
| Clay Roof Tiles | Ludowici | Cut or processed stone | $ 17,116.20 | Y | 3.00% | | $ 513.49 |
| Clay Roof Tiles | University of Florida | Cut or processed stone | $ 1,626.44 | Y | | | $ - |
| Interior Paint | Sherwin Williams | Paint or coating | $ 2,340.00 | Y | | | $ - |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | $ 5,130.47 | Y | | | $ - |
| ADA Handrails | Hutchinson Welding | Cut or processed stone | $ 5,787.00 | Y | 95.00% | | $ 5,497.65 |
| Copper Flashing | Perry Roofing | Cut or processed stone | $ 524.30 | Y | | | $ - |
| Break Metal | Perry Roofing | Cut or processed stone | $ 400.18 | Y | 95.00% | | $ 380.17 |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | $ 1,008.00 | Y | 95.00% | | $ 957.60 |
| Storefront | Kawneer | Cut or processed stone | $ 13,381.75 | Y | | 50.00% | $ 3,345.44 |
| Stucco | Amerimix | Aggregate/gravel | $ 2,580.73 | Y | | | $ - |
| Insulation | DuPont | Wood - Manufactured/compressed wood | $ 655.00 | N | | | N/A |
| Wall Framing | Clark Dietrich | Cut or processed stone | $ 7,105.00 | Y | 24.30% | 9.40% | $ 2,060.45 |
| Building Signage | Clear Image | Cut or processed stone | $ 953.71 | Y | | | $ - |
| Repelicone W | DCP | Adhesive, sealant, elastomer, water proofing, | $ 538.40 | Y | | | $ - |
| Metal Roofing | GulfCoast | Cut or processed stone | $ 1,292.00 | Y | 95.00% | | $ 1,227.40 |
| Gutter & Drip Edge | Perry Roofing | Cut or processed stone | $ 300.00 | Y | 95.00% | | $ 285.00 |
| Roof Underlayment | Home Depot | Wood - Natural Lumber | $ 273.96 | N | | | N/A |
| Traffic Camera & Controller | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 24,120.00 | Y | | | $ - |
| Pedestrian Detector & Signal | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 4,380.00 | Y | | | $ - |
| Total materials cost (from Introduction tab) | | | $ 1,178,701.47 | Total recycled materials cost | | | $ 424,713.00 |
| | | | | Total materials cost (less ineligible product and salvaged materials cost) | | | $ 1,035,386.38 |
| | | | | Percent recycled materials (%) | | | 41.02% |

# Credit 5.6 | Use regional materials

## Narrative

**Goal: 5 points**

All materials listed represent the total scope of work for the Northwest Gateway, part of the UF Landscape Master Plan project. This list was updated to include all material ordered & installed for the project whether they complied with the SITES standards or not as well as confirming wood products from threatened tree species weren't used, as directed by the preliminary review. A big portion of each site's total cost value is related to labor since there was a lot of demolition needed & masonry work which is labor intensive, hence why values are lower than average.

All new plantings/mulch are taken from the farm where they were grown, hence why these values are reflected the same. All raw materials/additives taken directly from quarry, hence why extraction & manufacturing distances are the same. All salvaged/reused material from the University of Florida's campus show 0 miles for both extraction & manufacturing since they were already located on site. Any items that did not fall in the range of compliance reflect same distances because they did not comply with credit. All other items listed were revised to show more accurate data for manufacturing & extraction distances with the exception of 1 material which states the same distance for both manufacturing & extracting:

- Cherokee Brick – Website states that both of their facilities are over 1 million square feet & are located on 6,000 acres that extract & manufacture their brick from (https://www.cherokeebrick.com/our-capabilities)

# Materials Worksheet

## SITES® v2 Materials Worksheet

**C5.4: REUSE SALVAGED MATERIALS AND PLANTS**
**C5.5: USE RECYCLED CONTENT MATERIALS**
**C5.6: USE REGIONAL MATERIALS**

**INSTRUCTIONS:**
1. Enter applicable information for each material under each credit. Percentages are based on cost or replacement value.

| MATERIALS IDENTIFICATION (from Materials List tab) | | | | C5.6: REGIONAL | | | | |
|---|---|---|---|---|---|---|---|---|
| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Total Cost of Material | Maximum Allowable Distance (miles) | Manufacturer Supplier Distance (miles) | Extraction Distance (miles) | Percent Weight Regional (%) | Total Cost of Regional Materials |
| River Birch | Cherry Lake Tree Farm | Plant | $ 740.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 740.00 |
| Crape Myrtle | Cherry Lake Tree Farm | Plant | $ 1,295.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 1,295.00 |
| Longleaf Pine | Half Moon Growers | Plant | $ 2,035.00 | 250.00 | 20.00 | 20.00 | 100.00% | $ 2,035.00 |
| Chickasaw Plum | Half Moon Growers | Plant | $ 660.00 | 250.00 | 20.00 | 20.00 | 100.00% | $ 660.00 |
| Oak Trees | Cherry Lake Tree Farm | Plant | $ 2,405.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 2,405.00 |
| Muhly Grass | Cherry Lake Tree Farm | Plant | $ 4,140.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 4,140.00 |
| Podocarpus | Cherry Lake Tree Farm | Plant | $ 1,590.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 1,590.00 |
| Azaleas | Cherry Lake Tree Farm | Plant | $ 1,335.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 1,335.00 |
| Lilies | Cherry Lake Tree Farm | Plant | $ 1,020.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 1,020.00 |
| Liriope | Cherry Lake Tree Farm | Plant | $ 5,728.00 | 250.00 | 90.00 | 90.00 | 100.00% | $ 5,728.00 |
| Jasmine | Rode Groundcovers, Inc | Plant | $ 2,376.00 | 250.00 | 25.00 | 25.00 | 100.00% | $ 2,376.00 |
| Pinestraw | University of Florida | Mulch - other | $ 1,500.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 1,500.00 |
| Swamp Chestnut Oak | Half Moon Growers | Plant | $ 80.00 | 250.00 | 20.00 | 20.00 | 100.00% | $ 80.00 |
| Knockout Roses | Blooming House Nursery | Plant | $ 150.00 | 250.00 | 10.00 | 10.00 | 100.00% | $ 150.00 |
| Sabal Palm- 20' OA Height | TNT Nursery | Plant | $ 1,440.00 | 250.00 | 8.00 | 8.00 | 100.00% | $ 1,440.00 |
| Lily of the Nile | University of Florida | Plant | $ 390.00 | 250.00 | 0.00 | 0.00 | 100.00% | $ 390.00 |
| Dogwood 3" | University of Florida | Wood - Natural Lumber | $ 100.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 100.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | $ 9,105.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 9,105.00 |
| Precast Concrete Benches | University of Florida | Concrete | $ 6,400.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 6,400.00 |
| Light Fixtures | University of Florida | Lighting | $ 25,900.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 25,900.00 |
| Bollards | University of Florida | Non-wood decking, railing, fencing, trellises, or | $ 5,450.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 5,450.00 |
| TAPS Signage | University of Florida | Cut or processed stone | $ 1,000.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 1,000.00 |
| Gate Arms & Mechanical Elements | University of Florida | Conduit, wiring, and electrical equipment | $ 12,500.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 12,500.00 |
| Historical Monument | University of Florida | Cut or processed stone | $ 2,000.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 2,000.00 |
| Bicycle Repair Station | University of Florida | Cut or processed stone | $ 1,800.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 1,800.00 |
| Existing Backflow Preventor - Double Check Gate Valve | University of Florida | Pipe, hose, or irrigation equipment | $ 15,000.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 15,000.00 |
| Double Bicycle Racks | University of Florida | Cut or processed stone | $ 2,200.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 2,200.00 |
| Concrete/Wood Benches | University of Florida | Concrete | $ 1,700.00 | 500.00 | 0.00 | 0.00 | 100.00% | $ 1,700.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 1,911.00 | 500.00 | 39.00 | 23.00 | 100.00% | $ 1,911.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 127.00 | 500.00 | 39.00 | 23.00 | 100.00% | $ 127.00 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | $ 6,439.50 | 500.00 | 252.00 | 252.00 | 100.00% | $ 6,439.50 |
| Mortar | Spec Mix | Concrete | $ 2,349.00 | 500.00 | 6.00 | 59.00 | 100.00% | $ 2,349.00 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | $ 4,200.00 | 500.00 | 3.00 | 54.00 | 100.00% | $ 4,200.00 |
| Bahia | Tater Farms | Sod | $ 187.20 | 250.00 | 50.00 | 50.00 | 100.00% | $ 187.20 |
| Zoysia | Woerner Farms | Sod | $ 811.85 | 250.00 | 20.00 | 20.00 | 100.00% | $ 811.85 |
| Concrete - 4,000 PSI Mix | SRM Concrete | Concrete | $ 212,052.00 | 500.00 | 4.00 | 57.00 | 100.00% | $ 212,052.00 |
| Asphalt | Anderson Columbia | Other materials or base course layers | $ 27,900.00 | 500.00 | 48.00 | 34.00 | 100.00% | $ 27,900.00 |
| Welded Wire Fabric | HD Whitecap | Concrete | $ 2,708.30 | 500.00 | 8.00 | 76.00 | 100.00% | $ 2,708.30 |
| Limerock | Limerock Industries | Other materials or base course layers | $ 24,550.00 | 500.00 | 13.00 | 13.00 | 100.00% | $ 24,550.00 |
| Pavers- ADA Pavers Red Rustic | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 1,749.60 | 500.00 | 483.00 | 451.00 | 100.00% | $ 1,749.60 |
| Pavers- PH Rumbled Full Range HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 106,080.00 | 500.00 | 483.00 | 451.00 | 100.00% | $ 106,080.00 |
| Pavers- PH Pathway 4x8 FullRange HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 24,043.50 | 500.00 | 483.00 | 451.00 | 100.00% | $ 24,043.50 |
| Pavers- PH Coco HD | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 4,140.00 | 500.00 | 483.00 | 451.00 | 100.00% | $ 4,140.00 |
| Pavers - PH Cocoa | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 219.78 | 500.00 | 483.00 | 451.00 | 100.00% | $ 219.78 |
| Pavers- PH Pathway 4x8 Full Range | Pine Hall Brick Madison, NC | Brick or masonry unit | $ 28,851.12 | 500.00 | 483.00 | 451.00 | 100.00% | $ 28,851.12 |
| Sand | Osteen Bros, Goldhead, Keystone Heights, FL | Sand (if used as a base course material) | $ 2,242.00 | 500.00 | 2.00 | 2.00 | 100.00% | $ 2,242.00 |
| Cement Edge | Home Depot | Concrete | $ 308.70 | 500.00 | 10.00 | 276.00 | 100.00% | $ 308.70 |
| Reclaimed Brick Pavers | University of Florida | Cut or processed stone | $ 6,448.00 | 50.00 | 0.00 | 0.00 | 100.00% | $ 6,448.00 |
| Crushed Concrete | Watson Construction, Newberry, FL | Concrete | $ 4,240.00 | 500.00 | 16.00 | 16.00 | 100.00% | $ 4,240.00 |
| Metal Edging | Permaloc, | Other materials or base course layers | $ 1,470.00 | 500.00 | 935.00 | 935.00 | 0.00% | $ - |
| CL200 Purple PVC Lateral Line | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 5,802.16 | 500.00 | 42.00 | 165.00 | 100.00% | $ 5,802.16 |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 102.22 | 500.00 | 427.00 | 372.00 | 100.00% | $ 102.22 |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 404.40 | 500.00 | 1,021.00 | 1,021.00 | 100.00% | $ - |
| Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 1,510.20 | 500.00 | 427.00 | 372.00 | 100.00% | $ 1,510.20 |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 2,295.95 | 500.00 | 427.00 | 372.00 | 100.00% | $ 2,295.95 |
| Sch. 40 PVC Sleeve | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 385.13 | 500.00 | 42.00 | 165.00 | 100.00% | $ 385.13 |
| 2.5" Irrigation Mainline | Sanderson Pipe Corporation | Pipe, hose, or irrigation equipment | $ 576.70 | 500.00 | 42.00 | 165.00 | 100.00% | $ 576.70 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 119.94 | 500.00 | 427.00 | 372.00 | 100.00% | $ 119.94 |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 39.98 | 500.00 | 427.00 | 372.00 | 100.00% | $ 39.98 |
| Hunter RP Rotary-Spray Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | $ 21.75 | 500.00 | 86.00 | 86.00 | 100.00% | $ 21.75 |
| Rain Bird ESP Lxme 8 Station Modular | Rain Bird Corporation | Pipe, hose, or irrigation equipment | $ 808.30 | 500.00 | 427.00 | 372.00 | 100.00% | $ 808.30 |
| Valve Wire Junction Box | NDS | Pipe, hose, or irrigation equipment | $ 79.92 | 500.00 | 849.00 | 849.00 | 100.00% | $ - |
| Precast Architectural Concrete | Spring Precast | Concrete | $ 4,882.36 | 500.00 | 203.00 | 265.00 | 100.00% | $ 4,882.36 |
| Storm Structures | Oldcastle Infrastructure | Concrete | $ 55,023.50 | 500.00 | 66.00 | 446.00 | 100.00% | $ 55,023.50 |
| Storm Piping | JM Eagle & Sanderson Pipe | Pipe, hose, or irrigation equipment | $ 179,058.00 | 500.00 | 127.00 | 42.00 | 100.00% | $ 179,058.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | $ 84.50 | 500.00 | 10.00 | 46.00 | 100.00% | $ 84.50 |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | $ 172.00 | 500.00 | 10.00 | 46.00 | 100.00% | $ 172.00 |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood | $ 4,884.00 | 500.00 | 1,162.00 | 1,162.00 | 0.00% | $ - |
| Rebar | HD Whitecap | Concrete | $ 29,700.00 | 500.00 | 68.00 | 114.00 | 100.00% | $ 29,700.00 |
| Pinestraw | Elixson Wood Products | Mulch - other | $ 3,000.00 | 50.00 | 25.00 | 25.00 | 100.00% | $ 3,000.00 |
| Steel Plate | Holt Metals | Cut or processed stone | $ 2,311.20 | 50.00 | 5.00 | 44.00 | 100.00% | $ 2,311.20 |
| Gatehouse Roof Drains | Barry Pattern & Foundry, Inc | Cut or processed stone | $ 2,010.16 | 50.00 | 477.00 | 477.00 | 100.00% | $ - |
| Bike Shelter | Handi Hut | Cut or processed stone | $ 10,223.00 | 50.00 | 1,014.00 | 1,014.00 | 100.00% | $ - |
| Bollards | Sternberg Lighting | Conduit, wiring, and electrical equipment | $ 47,060.00 | 500.00 | 1,072.00 | 1,072.00 | 100.00% | $ - |
| Bike Racks | Peak Racks | Cut or processed stone | $ 2,361.00 | 50.00 | 2,577.00 | 2,577.00 | 100.00% | $ - |
| Mingle Seating | Landscape Forms | Cut or processed stone | $ 27,934.62 | 50.00 | 1,086.00 | 1,086.00 | 100.00% | $ - |
| Benches | Keystone Ridge Designs | Cut or processed stone | $ 32,893.75 | 50.00 | 942.00 | 942.00 | | $ - |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | $ 1,374.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 1,374.27 |
| Fixtures | Sesco | Lighting | $ 5,751.87 | 500.00 | 80.00 | 231.00 | 100.00% | $ 5,751.87 |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | $ 32,694.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 32,694.27 |
| Wire | Sesco | Conduit, wiring, and electrical equipment | $ 2,634.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 2,634.27 |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | $ 834.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 834.27 |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | $ 9,834.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 9,834.27 |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | $ 114.27 | 500.00 | 80.00 | 231.00 | 100.00% | $ 114.27 |
| LG Mini Split | LG | Conduit, wiring, and electrical equipment | $ 4,600.00 | 500.00 | 625.00 | 625.00 | 100.00% | $ - |
| Casework | OEC | Wood - Manufactured/compressed wood | $ 3,270.00 | 500.00 | 23.00 | 67.00 | 100.00% | $ 3,270.00 |
| Solid Surface Window Sills | Rainbow Cabinets | Cut or processed stone | $ 727.20 | 50.00 | 40.00 | 45.00 | 100.00% | $ 727.20 |
| ACT Tile | Armstrong | Wood - Manufactured/compressed wood | $ 1,350.00 | 500.00 | 250.00 | 212.00 | 100.00% | $ 1,350.00 |
| ACT Suspension System | Armstrong | Cut or processed stone | $ 497.00 | 50.00 | 250.00 | 212.00 | 100.00% | $ - |
| Glazing | Vitro | Sand (for purposes other than soil amendment | $ 3,437.00 | 500.00 | 2,536.00 | 2,536.00 | 100.00% | $ - |
| Doors & Hardware | Kawneer | Cut or processed stone | $ 5,061.00 | 50.00 | 111.00 | 111.00 | 100.00% | $ - |
| Ceramic Floor Tile | Garden State Tile | Cut or processed stone | $ 3,679.00 | 50.00 | 203.00 | 203.00 | 100.00% | $ - |
| Drywall | CertainTeed | Wood - Manufactured/compressed wood | $ 1,295.00 | 500.00 | 2,216.00 | 2,216.00 | 100.00% | $ - |
| Spray Foam Insulation | Huntsman Building Solutions | Extruded, spray or board foams | $ 2,660.00 | 500.00 | 1,000.00 | 1,000.00 | 100.00% | $ - |
| Steel Trusses | Clark Dietrich | Cut or processed stone | $ 20,655.00 | 50.00 | 88.00 | 88.00 | 100.00% | $ - |
| Ice & Water Shield Roof Underlayment | GCP Applied Technologies | Adhesive, sealant, elastomer, water proofing, | $ 1,907.36 | 500.00 | 99.00 | 169.00 | 100.00% | $ 1,907.36 |
| Clay Roof Tiles | Ludowici | Cut or processed stone | $ 17,116.20 | 50.00 | 848.00 | 848.00 | 100.00% | $ - |
| Clay Roof Tiles | University of Florida | Cut or processed stone | $ 1,626.44 | 50.00 | 0.00 | 0.00 | 100.00% | $ 1,626.44 |
| Interior Paint | Sherwin Williams | Paint or coating | $ 2,340.00 | 500.00 | 115.00 | 142.00 | 100.00% | $ 2,340.00 |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | $ 5,130.47 | 500.00 | 707.00 | 707.00 | 100.00% | $ - |
| ADA Handrails | Hutchinson Welding | Cut or processed stone | $ 5,787.00 | 50.00 | 42.00 | 37.00 | 100.00% | $ 5,787.00 |
| Copper Flashing | Perry Roofing | Cut or processed stone | $ 524.30 | 50.00 | 6.00 | 43.00 | 100.00% | $ 524.30 |
| Break Metal | Perry Roofing | Cut or processed stone | $ 400.18 | 50.00 | 6.00 | 43.00 | 100.00% | $ 400.18 |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | $ 1,008.00 | 500.00 | 1,732.00 | 1,732.00 | 100.00% | $ - |
| Storefront | Kawneer | Cut or processed stone | $ 13,381.75 | 50.00 | 111.00 | 111.00 | 100.00% | $ - |
| Stucco | Amerimix | Aggregate/gravel | $ 2,580.73 | 50.00 | 125.00 | 125.00 | 100.00% | $ - |
| Insulation | DuPont | Wood - Manufactured/compressed wood | $ 655.00 | 500.00 | 355.00 | 314.00 | 100.00% | $ 655.00 |
| Wall Framing | Clark Dietrich | Cut or processed stone | $ 7,105.00 | 50.00 | 98.00 | 98.00 | 100.00% | $ - |
| Building Signage | Clear Image | Cut or processed stone | $ 953.71 | 50.00 | 6.00 | 25.00 | 100.00% | $ 953.71 |
| Repelicone W | DCP | Adhesive, sealant, elastomer, water proofing, | $ 538.40 | 500.00 | 421.00 | 384.00 | 100.00% | $ 538.40 |
| Metal Roofing | GulfCoast | Cut or processed stone | $ 1,292.00 | 50.00 | 10.00 | 10.00 | 100.00% | $ 1,292.00 |
| Gutter & Drip Edge | Perry Roofing | Cut or processed stone | $ 300.00 | 50.00 | 6.00 | 43.00 | 100.00% | $ 300.00 |
| Roof Underlayment | Home Depot | Wood - Natural Lumber | $ 273.96 | 500.00 | 10.00 | 55.00 | 100.00% | $ 273.96 |
| Traffic Camera & Controller | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 24,120.00 | 500.00 | 452.00 | 466.00 | 100.00% | $ 24,120.00 |
| Pedestrian Detector & Signal | Cubic Transportation Systems | Conduit, wiring, and electrical equipment | $ 4,380.00 | 500.00 | 452.00 | 466.00 | 100.00% | $ 4,380.00 |
| Total materials cost (from Introduction tab) | | | $ 1,178,701.47 | Total regional materials cost | | | | $ 961,174.47 |
| | | | | Total materials cost | | | | $ 1,178,701.47 |
| | | | | Percent regional materials (%) | | | | 81.55% |

*NOTE: Soil, Mulch, Soil amendments, Aggregate, Natural rocks and boulders must be extracted and manufactured within 50 miles. Plants and sod must be grown within 250 miles.*

# CREDIT 5.7 | SUPPORT RESPONSIBLE EXTRACTION OF RAW MATERIALS

## Materials Worksheet

**Goal: 1 points**

### SITES® v2 Materials Worksheet

**C5.7: SUPPORT RESPONSIBLE EXTRACTION OF RAW MATERIALS**

**INSTRUCTIONS:**

1. Only the product types listed in the Reference Guide are eligible for this credit. If any materials supplier provides publically available information meeting the requirements of this credit no letter needs to be submitted, but the project should still choose "Y" in the "Supporting Documentation" and "Option 1 Letter Sent" Columns under this credit.

| **MATERIALS IDENTIFICATION** (from Materials List tab) | | | Product Eligibility | | | Total Cost of Material | Option | Supporting Documentation | *Option 2 and Option 3 only:* Percent Weight Responsibly Extracted (%) | Option 1 Letter Sent (Y or N) | Total Cost of Option 2 Materials | Total Cost of Option 3 Materials |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Salvaged or Reused | Recycled | Product and Material Eligibility for C5.7 | | | | | | | |
| River Birch | Cherry Lake Tree Farm | Plant | N | N | N | $ 740.00 | | | | | N/A | N/A |
| Crape Myrtle | Cherry Lake Tree Farm | Plant | N | N | N | $ 1,295.00 | | | | | N/A | N/A |
| Longleaf Pine | Half Moon Growers | Plant | N | N | N | $ 2,035.00 | | | | | N/A | N/A |
| Chickasaw Plum | Half Moon Growers | Plant | N | N | N | $ 660.00 | | | | | N/A | N/A |
| Oak Trees | Cherry Lake Tree Farm | Plant | N | N | N | $ 2,405.00 | | | | | N/A | N/A |
| Muhly Grass | Cherry Lake Tree Farm | Plant | N | N | N | $ 4,140.00 | | | | | N/A | N/A |
| Podocarpus | Cherry Lake Tree Farm | Plant | N | N | N | $ 1,590.00 | | | | | N/A | N/A |
| Azaleas | Cherry Lake Tree Farm | Plant | N | N | N | $ 1,335.00 | | | | | N/A | N/A |
| Lilies | Cherry Lake Tree Farm | Plant | N | N | N | $ 1,020.00 | | | | | N/A | N/A |
| Liriope | Cherry Lake Tree Farm | Plant | N | N | N | $ 5,728.00 | | | | | N/A | N/A |
| Jasmine | Rode Groundcovers, Inc | Plant | N | N | N | $ 2,376.00 | | | | | N/A | N/A |
| Pinestraw | University of Florida | Mulch - other | Y | N | Y | $ 1,500.00 | | | | | N/A | N/A |
| Swamp Chestnut Oak | Half Moon Growers | Plant | Y | N | N | $ 80.00 | | | | | N/A | N/A |
| Knockout Roses | Blooming House | Plant | Y | N | N | $ 150.00 | | | | | N/A | N/A |
| Sabal Palm- 20' OA Height | TNT Nursery | Plant | Y | N | N | $ 1,440.00 | | | | | N/A | N/A |
| Lily of the Nile | University of Florida | Plant | Y | N | N | $ 390.00 | | | | | N/A | N/A |
| Dogwood 3" | University of Florida | Wood - Natural Lumber | Y | N | Y | $ 100.00 | | | | | N/A | N/A |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | Y | N | Y | $ 9,105.00 | | | | | N/A | N/A |
| Precast Concrete Benches | University of Florida | Concrete | Y | N | Y | $ 6,400.00 | | | | | N/A | N/A |
| Light Fixtures | University of Florida | Lighting | Y | N | Y | $ 25,900.00 | | | | | N/A | N/A |
| Bollards | University of Florida | Non-wood decking, railing, fencing, trellises, or | Y | N | Y | $ 5,450.00 | | | | | N/A | N/A |
| TAPS Signage | University of Florida | Cut or processed stone | Y | N | Y | $ 1,000.00 | | | | | N/A | N/A |
| Gate Arms & Mechanical Elements | University of Florida | Conduit, wiring, and electrical equipment | Y | N | Y | $ 12,500.00 | | | | | N/A | N/A |
| Historical Monument | University of Florida | Cut or processed stone | Y | N | Y | $ 2,000.00 | | | | | N/A | N/A |
| Bicycle Repair Station | University of Florida | Cut or processed stone | Y | N | Y | $ 1,800.00 | | | | | N/A | N/A |
| Existing Backflow Preventor - Double | University of Florida | Pipe, hose, or irrigation equipment | Y | N | Y | $ 15,000.00 | | | | | N/A | N/A |
| Double Bicycle Racks | University of Florida | Cut or processed stone | Y | N | Y | $ 2,200.00 | | | | | N/A | N/A |
| Concrete/Wood Benches | University of Florida | Concrete | Y | N | Y | $ 1,700.00 | | | | | N/A | N/A |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | Y | Y | $ 1,911.00 | | | | | N/A | N/A |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | Y | Y | $ 127.00 | | | | | N/A | N/A |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | N | Y | Y | $ 6,439.50 | | | | | N/A | N/A |
| Mortar | Spec Mix | Concrete | N | N | Y | $ 2,349.00 | | | | Y | $ - | $ - |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | N | N | Y | $ 4,200.00 | | | | Y | $ - | $ - |
| Bahia | Tater Farms | Sod | N | N | N | $ 187.20 | | | | | N/A | N/A |
| Zoysia | Woerner Farms | Sod | N | N | N | $ 811.85 | | | | | N/A | N/A |
| Concrete - 4,000 PSI Mix | SRM Concrete | Concrete | N | N | Y | $ 212,052.00 | | | | Y | $ - | $ - |
| Asphalt | Anderson Columbia | Other materials or base course layers | N | Y | Y | $ 27,900.00 | | | | | N/A | N/A |
| Welded Wire Fabric | HD Whitecap | Concrete | N | N | Y | $ 2,708.30 | | | | Y | $ - | $ - |
| Limerock | Limerock Industries | Other materials or base course layers | N | Y | Y | $ 24,550.00 | | | | | N/A | N/A |
| Pavers- ADA Pavers Red Rustic | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 1,749.60 | | | | | N/A | N/A |
| Pavers- PH Rumbled Full Range HD | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 106,080.00 | | | | | N/A | N/A |
| Pavers- PH Pathway 4x8 FullRange HD | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 24,043.50 | | | | | N/A | N/A |
| Pavers- PH Coco HD | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 4,140.00 | | | | | N/A | N/A |
| Pavers - PH Cocoa | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 219.78 | | | | | N/A | N/A |
| Pavers- PH Pathway 4x8 Full Range | Pine Hall Brick Madison, | Brick or masonry unit | N | Y | Y | $ 28,851.12 | | | | | N/A | N/A |
| Sand | Osteen Bros, Goldhead, | Sand (if used as a base course material) | N | Y | Y | $ 2,242.00 | | | | | N/A | N/A |
| Cement Edge | Home Depot | Concrete | N | N | Y | $ 308.70 | | | | Y | $ - | $ - |
| Reclaimed Brick Pavers | University of Florida | Cut or processed stone | Y | N | Y | $ 6,448.00 | | | | | N/A | N/A |
| Crushed Concrete | Watson Construction, | Concrete | N | N | Y | $ 4,240.00 | | | | Y | $ - | $ - |
| Metal Edging | Permaloc, | Other materials or base course layers | N | Y | Y | $ 1,470.00 | | | | | N/A | N/A |
| CL200 Purple PVC Lateral Line | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | N | Y | $ 5,802.16 | | | | Y | $ - | $ - |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | N | Y | $ 102.22 | | | | Y | $ - | $ - |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | N | Y | $ 404.40 | | | | Y | $ - | $ - |
| Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | N | Y | $ 1,510.20 | | | | Y | $ - | $ - |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | N | Y | $ 2,295.95 | | | | Y | $ - | $ - |
| Sch. 40 PVC Sleeve | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | N | Y | $ 385.13 | | | | Y | $ - | $ - |
| 2.5" Irrigation Mainline | Sanderson Pipe | Pipe, hose, or irrigation equipment | Y | N | Y | $ 576.70 | | | | | N/A | N/A |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | Y | N | Y | $ 119.94 | | | | | N/A | N/A |
| Mainline Isolation Valves | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | N | Y | $ 39.98 | | | | Y | $ - | $ - |
| Hunter RP Rotary-Spray Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | N | Y | $ 21.75 | | | | Y | $ - | $ - |
| Rain Bird ESP Lxme 8 Station Modular | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | N | Y | $ 808.30 | | | | Y | $ - | $ - |
| Valve Wire Junction Box | NDS | Pipe, hose, or irrigation equipment | N | N | Y | $ 79.92 | | | | Y | $ - | $ - |
| Precast Architectural Concrete | Spring Precast | Concrete | N | N | Y | $ 4,882.36 | | | | Y | $ - | $ - |
| Storm Structures | Oldcastle Infrastructure | Concrete | N | N | Y | $ 55,023.50 | | | | Y | $ - | $ - |
| Storm Piping | JM Eagle & Sanderson | Pipe, hose, or irrigation equipment | N | N | Y | $ 179,058.00 | | | | Y | $ - | $ - |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | Y | N | Y | $ 84.50 | | | | | N/A | N/A |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | Y | N | Y | $ 172.00 | | | | | N/A | N/A |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood | N | N | Y | $ 4,884.00 | | | | Y | $ - | $ - |
| Rebar | HD Whitecap | Concrete | N | N | Y | $ 29,700.00 | | | | Y | $ - | $ - |
| Pinestraw | Elixson Wood Products | Mulch - other | N | N | Y | $ 3,000.00 | | | | Y | $ - | $ - |
| Steel Plate | Holt Metals | Cut or processed stone | N | N | Y | $ 2,311.20 | | | | Y | $ - | $ - |
| Gatehouse Roof Drains | Barry Pattern & Foundry, | Cut or processed stone | N | N | Y | $ 2,010.16 | | | | Y | $ - | $ - |
| Bike Shelter | Handi Hut | Cut or processed stone | N | N | Y | $ 10,223.00 | | | | Y | $ - | $ - |
| Bollards | Sternberg Lighting | Conduit, wiring, and electrical equipment | N | N | Y | $ 47,060.00 | | | | Y | $ - | $ - |
| Bike Racks | Peak Racks | Cut or processed stone | N | N | Y | $ 2,361.00 | | | | Y | $ - | $ - |
| Mingle Seating | Landscape Forms | Cut or processed stone | N | N | Y | $ 27,934.62 | | | | Y | $ - | $ - |
| Benches | Keystone Ridge | Cut or processed stone | N | N | Y | $ 32,893.75 | | | | Y | $ - | $ - |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 1,374.27 | | | | Y | $ - | $ - |
| Fixtures | Sesco | Lighting | N | N | Y | $ 5,751.87 | | | | Y | $ - | $ - |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 32,694.27 | | | | Y | $ - | $ - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wire | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 2,634.27 | | | | Y | $ - | $ - |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 834.27 | | | | Y | $ - | $ - |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 9,834.27 | | | | Y | $ - | $ - |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | N | N | Y | $ 114.27 | | | | Y | $ - | $ - |
| LG Mini Split | LG | Conduit, wiring, and electrical equipment | N | N | Y | $ 4,600.00 | | | | Y | $ - | $ - |
| Casework | OEC | Wood - Manufactured/compressed wood | N | N | Y | $ 3,270.00 | | | | Y | $ - | $ - |
| Solid Surface Window Sills | Rainbow Cabinets | Cut or processed stone | N | N | Y | $ 727.20 | | | | Y | $ - | $ - |
| ACT Tile | Armstrong | Wood - Manufactured/compressed wood | N | N | Y | $ 1,350.00 | | | | Y | $ - | $ - |
| ACT Suspension System | Armstrong | Cut or processed stone | N | N | Y | $ 497.00 | | | | Y | $ - | $ - |
| Glazing | Vitro | Sand (for purposes other than soil amendment | N | Y | Y | $ 3,437.00 | | | | | N/A | N/A |
| Doors & Hardware | Kawneer | Cut or processed stone | N | N | Y | $ 5,061.00 | | | | Y | $ - | $ - |
| Ceramic Floor Tile | Garden State Tile | Cut or processed stone | N | N | Y | $ 3,679.00 | | | | Y | $ - | $ - |
| Drywall | CertainTeed | Wood - Manufactured/compressed wood | N | N | Y | $ 1,295.00 | | | | Y | $ - | $ - |
| Spray Foam Insulation | Huntsman Building | Extruded, spray or board foams | N | N | Y | $ 2,660.00 | | | | Y | $ - | $ - |
| Steel Trusses | Clark Dietrich | Cut or processed stone | N | N | Y | $ 20,655.00 | | | | Y | $ - | $ - |
| Ice & Water Shield Roof Underlayment | GCP Applied | Adhesive, sealant, elastomer, water proofing, | N | N | Y | $ 1,907.36 | | | | Y | $ - | $ - |
| Clay Roof Tiles | Ludowici | Cut or processed stone | N | N | Y | $ 17,116.20 | | | | Y | $ - | $ - |
| Clay Roof Tiles | University of Florida | Cut or processed stone | Y | N | Y | $ 1,626.44 | | | | | N/A | N/A |
| Interior Paint | Sherwin Williams | Paint or coating | N | N | Y | $ 2,340.00 | | | | Y | $ - | $ - |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | N | N | Y | $ 5,130.47 | | | | Y | $ - | $ - |
| ADA Handrails | Hutchinson Welding | Cut or processed stone | N | N | Y | $ 5,787.00 | | | | Y | $ - | $ - |
| Copper Flashing | Perry Roofing | Cut or processed stone | N | N | Y | $ 524.30 | | | | Y | $ - | $ - |
| Break Metal | Perry Roofing | Cut or processed stone | N | N | Y | $ 400.18 | | | | Y | $ - | $ - |
| Dampproofing | Master Builders | Adhesive, sealant, elastomer, water proofing, | N | N | Y | $ 1,008.00 | | | | Y | $ - | $ - |
| Storefront | Kawneer | Cut or processed stone | N | N | Y | $ 13,381.75 | | | | Y | $ - | $ - |
| Stucco | Amerimix | Aggregate/gravel | N | N | Y | $ 2,580.73 | | | | Y | $ - | $ - |
| Insulation | DuPont | Wood - Manufactured/compressed wood | N | N | Y | $ 655.00 | | | | Y | $ - | $ - |
| Wall Framing | Clark Dietrich | Cut or processed stone | N | N | Y | $ 7,105.00 | | | | Y | $ - | $ - |
| Building Signage | Clear Image | Cut or processed stone | N | N | Y | $ 953.71 | | | | Y | $ - | $ - |
| Repelicone W | DCP | Adhesive, sealant, elastomer, water proofing, | N | N | Y | $ 538.40 | | | | Y | $ - | $ - |
| Metal Roofing | GulfCoast | Cut or processed stone | N | N | Y | $ 1,292.00 | | | | Y | $ - | $ - |
| Gutter & Drip Edge | Perry Roofing | Cut or processed stone | N | N | Y | $ 300.00 | | | | Y | $ - | $ - |
| Roof Underlayment | Home Depot | Wood - Natural Lumber | N | N | Y | $ 273.96 | | | | Y | $ - | $ - |
| Traffic Camera & Controller | Cubic Transportation | Conduit, wiring, and electrical equipment | N | N | Y | $ 24,120.00 | | | | Y | $ - | $ - |
| Pedestrian Detector & Signal | Cubic Transportation | Conduit, wiring, and electrical equipment | N | N | Y | $ 4,380.00 | | | | Y | $ - | $ - |
| | | | | | | Option 1 compliance has been met for all products | | | | Yes | | |
| | | | | | | Total eligible materials cost (Option 2 and Option 3 only) | | | | | $ - | $ - |
| | | | | | | Total materials cost (less ineligible product, salvaged, and recycled materials cost) | | | | | | $ 825,475.34 |
| | | | | | | Percent materials meeting Option 2 (%) | | | | | | 0.00% |
| | | | | | | Percent materials meeting Option 3 (%) | | | | | | 0.00% |

*NOTE: If any materials supplier provides publically available information meeting the requirements of this credit no letter needs to be submitted, but the project should still choose "Y" in the "Supporting Documentation" Column under this credit.*

## Advocacy Letters

See apendix C for copies of letters sent.

Advocacy letters have been sent to the following list of suppliers/manufacturers:

- Amerimix
- Anderson Columbia
- Armstrong
- Barry Pattern
- Bell Concrete Products
- Cemex
- CertainTeed
- Cherokee Brick
- Clark Dietrich
- Clear Image Signs
- Cubic Transportation
- DCP
- Dow Corning
- DuPont
- Elixson Wood Products
- Garden State Tile
- GCP
- Gulf Coast
- Handi-Hut
- HD Whitecap
- Holt Metals
- Home Depot
- Hunter Industries
- Huntsman Building Solutions
- Hutchinson Welding
- JM Eagle
- Kawneer
- Keystone Ridge Designs
- Landscape Forms
- LG Electronics
- Limerock Industries
- Ludowici
- Master Builders Solutions
- Max-R
- NDS Inc.
- OEC
- Oldcastle infrastructure
- O'Steen Bros
- Peak Racks
- Permaloc
- Perry Roofing
- Pine Hall
- Rain Bird
- Rainbow Cabinets
- Sanderson Pipe
- Sesco Lighting
- Sherwin-Williams
- Spec Mix
- Spring Precast
- SRM Concrete
- Sternberg Lighting
- Watson Construction

# CREDIT 5.8 | SUPPORT TRANSPARENCY AND SAFER CHEMISTRY

## Materials Worksheet

**Goal: 1 points**

### SITES® v2 Materials Worksheet

**C5.8: SUPPORT TRANSPARENCY AND SAFER CHEMISTRY**

**INSTRUCTIONS:**

1. Only the product types listed in the Reference Guide are eligible for this credit. If any materials supplier provides publically available information the "Supporting Documentation" and "Option 1 Letter Sent" Columns under this credit.

**MATERIALS IDENTIFICATION**
(from Materials List tab)

| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Salvaged or Reused | Total Cost of Material |
|---|---|---|---|---|
| Live Oak | Cherry Lake Tree Farm | Plant | N | $ 185.00 |
| Muhly | Cherry Lake Tree Farm | Plant | N | $ 2,970.00 |
| Azalea | Cherry Lake Tree Farm | Plant | N | $ 2,505.00 |
| Sod | Woerner Farms | Sod | N | $ 4,771.65 |
| Pinestraw | Elixson Wood Products | Mulch - other | N | $ 1,200.00 |
| Pinestraw | University of Florida | Mulch - other | Y | $ 600.00 |
| Holly Fern | University of Florida | Plant | Y | $ 500.00 |
| Liriope | University of Florida | Plant | Y | $ 300.00 |
| Drift Rose | University of Florida | Plant | Y | $ 350.00 |
| Society Garlic | University of Florida | Plant | Y | $ 300.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood product | Y | $ 9,768.00 |
| Precast Benches | University of Florida | Concrete | Y | $ 1,600.00 |
| Reclaimed Brick Paver - 7-7/8" x 3-7/8" x 2- | University of Florida | Brick or masonry unit | Y | $ 3,234.00 |
| Reclaimed Brick Paver - 8" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1,558.48 |
| Reclaimed Brick Paver - 7-15/16" x 3-7/8" x | University of Florida | Brick or masonry unit | Y | $ 887.04 |
| Reclaimed Brick Paver - 7-1/2" x 4" x 2- | University of Florida | Brick or masonry unit | Y | $ 1,034.88 |
| Reclaimed Brick Paver - 8-1/16" x 4" x 2- | University of Florida | Brick or masonry unit | Y | $ 924.00 |
| Concrete Picnic Table | University of Florida | Concrete | Y | $ 2,000.00 |
| Concrete/Wood Benches | University of Florida | Concrete | Y | $ 850.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | $ 4,853.24 |
| CMU Block - 8x4x16 | Bell Concrete Products | Brick or masonry unit | N | $ 464.34 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | N | $ 13,246.80 |
| Mortar | Spec Mix | Concrete | N | $ 2,030.00 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | N | $ 3,500.00 |
| TAPS Signage | University of Florida | Non-wood decking, railing, fencing, trellises, or | N | $ 700.00 |
| Light Poles & Fixtures | University of Florida | Lighting | Y | $ 11,100.00 |
| Brick Pavers - 4x8" HD Full Range | Pine Hall Brick | Brick or masonry unit | N | $ 27,889.11 |
| Sand | Osteen Bros, Goldhead, | Sand (if used as a base course material) | N | $ 2,394.00 |
| Cement Edge | Home Depot | Concrete | N | $ 132.30 |
| Crushed Concrete | Watson Construction, | Concrete | N | $ 1,802.00 |
| Metal Edging | Permaloc, | Other materials or base course layers | N | $ 997.00 |
| Concrete - 4,000 PSI | SRM Concrete | Concrete | N | $ 37,857.00 |
| Asphalt | Anderson Columbia | Other materials or base course layers | N | $ 17,070.00 |
| Welded Wire Fabric | HD Whitecap | Concrete | N | $ 902.72 |
| Rebar | HD Whitecap | Concrete | N | $ 9,900.00 |
| Limerock | Limerock Industries | Other materials or base course layers | N | $ 8,185.00 |
| CL200 Purple PVC Lateral Line | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | $ 2,025.56 |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 5.38 |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | $ 323.52 |
| Existing Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | Y | $ 629.25 |
| Precast Architectural Concrete | Spring Precast | Concrete | N | $ 6,427.25 |
| Storm Structures | Oldcastle Infrastructure | Concrete | N | $ 12,714.66 |
| Storm Piping | JM Eagle & Sanderson | Pipe, hose, or irrigation equipment | N | $ 52,344.00 |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 84.50 |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 172.00 |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood product | N | $ 2,442.00 |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 547.12 |
| Sch. 40 PVC Sleeve | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | $ 158.00 |
| Bollards | Sternberg Lighting | Non-wood decking, railing, fencing, trellises, or | N | $ 3,270.00 |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | N | $ 916.18 |
| Fixtures | Sesco | Lighting | N | $ 3,834.58 |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | N | $ 21,796.18 |
| Wire | Sesco | Conduit, wiring, and electrical equipment | N | $ 1,756.18 |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | N | $ 556.18 |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | N | $ 6,556.18 |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | N | $ 76.18 |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | N | $ 3,420.31 |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | N | $ 672.00 |
| Option 1 compliance has been met for all products | | | | |
| Total eligible materials cost (Option 2 and Option 3 only) | | | | |
| Total materials cost (less ineligible products and salvaged/reused materials cost) | | | | |
| Percent materials meeting Option 2 (%) | | | | |
| Percent materials meeting Option 3 (%) | | | | |

meeting the requirements of this credit no letter needs to be submitted, but the project should still choose "Y" in

| Product type is eligible for credit | Option | Supporting Documentation | Option 1 Letter Sent (Y or N) | Total Cost of Option 2 Materials | Total Cost of Option 3 Materials |
|---|---|---|---|---|---|
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| Y | | | Y | $ - | N/A |
| | | | Yes | | |
| | | | | $ - | $ - |
| | | | | | $ 101,399.56 |
| | | | | | 0.00% |
| | | | | | 0.00% |

## Advocacy Letters

See apendix C for copies of letters sent.

Advocacy letters have been sent to the following list of suppliers/manufacturers:

- Armstrong
- CertainTeed
- Cubic Transportation
- DCP
- Dow Corning
- DuPont
- GCP
- HomeDepot
- Hunter Industries
- Huntsman Building Solutions
- JM Eagle
- LG Electronics
- Master Builders Solutions
- Max-R
- NDS
- OEC
- Rain Bird
- Sanderson Pipe
- Sesco Lighting
- Sternberg Lighting
- UF

# CREDIT 5.9 | SUPPORT SUSTAINABILITY IN MATERIALS MANUFACTURING

## Materials Worksheet

**Goal: 1 points**

### SITES® v2 Materials Worksheet

**C5.9: SUPPORT SUSTAINABILITY IN MATERIALS MANUFACTURING**

**INSTRUCTIONS:**
1. Natural rocks or boulders; plants, sod, and seed; soils; and salvaged materials are excluded from this credit. If any manufacturer provides publ
should still choose "Y" in the "Supporting Documentation" and "Option 1 Letter Sent" Columns under this credit.

**MATERIALS IDENTIFICATION**
(from Materials List tab)

| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Salvaged or Reused | Total Cost of Material |
|---|---|---|---|---|
| Live Oak | Cherry Lake Tree Farm | Plant | N | $ 185.00 |
| Muhly | Cherry Lake Tree Farm | Plant | N | $ 2,970.00 |
| Azalea | Cherry Lake Tree Farm | Plant | N | $ 2,505.00 |
| Sod | Woerner Farms | Sod | N | $ 4,771.65 |
| Pinestraw | Elixson Wood Products | Mulch - other | N | $ 1,200.00 |
| Pinestraw | University of Florida | Mulch - other | Y | $ 600.00 |
| Holly Fern | University of Florida | Plant | Y | $ 500.00 |
| Liriope | University of Florida | Plant | Y | $ 300.00 |
| Drift Rose | University of Florida | Plant | Y | $ 350.00 |
| Society Garlic | University of Florida | Plant | Y | $ 300.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood product | Y | $ 9,768.00 |
| Precast Benches | University of Florida | Concrete | Y | $ 1,600.00 |
| Reclaimed Brick Paver - 7-7/8" x 3-7/8" x 2- | University of Florida | Brick or masonry unit | Y | $ 3,234.00 |
| Reclaimed Brick Paver - 8" x 4" x 2-1/4" | University of Florida | Brick or masonry unit | Y | $ 1,558.48 |
| Reclaimed Brick Paver - 7-15/16" x 3-7/8" x | University of Florida | Brick or masonry unit | Y | $ 887.04 |
| Reclaimed Brick Paver - 7-1/2" x 4" x 2- | University of Florida | Brick or masonry unit | Y | $ 1,034.88 |
| Reclaimed Brick Paver - 8-1/16" x 4" x 2- | University of Florida | Brick or masonry unit | Y | $ 924.00 |
| Concrete Picnic Table | University of Florida | Concrete | Y | $ 2,000.00 |
| Concrete/Wood Benches | University of Florida | Concrete | Y | $ 850.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | N | $ 4,853.24 |
| CMU Block - 8x4x16 | Bell Concrete Products | Brick or masonry unit | N | $ 464.34 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | N | $ 13,246.80 |
| Mortar | Spec Mix | Concrete | N | $ 2,030.00 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | N | $ 3,500.00 |
| TAPS Signage | University of Florida | Non-wood decking, railing, fencing, trellises, or | N | $ 700.00 |
| Light Poles & Fixtures | University of Florida | Lighting | Y | $ 11,100.00 |
| Brick Pavers - 4x8" HD Full Range | Pine Hall Brick | Brick or masonry unit | N | $ 27,889.11 |
| Sand | Osteen Bros, Goldhead, | Sand (if used as a base course material) | N | $ 2,394.00 |
| Cement Edge | Home Depot | Concrete | N | $ 132.30 |
| Crushed Concrete | Watson Construction, | Concrete | N | $ 1,802.00 |
| Metal Edging | Permaloc, | Other materials or base course layers | N | $ 997.00 |
| Concrete - 4,000 PSI | SRM Concrete | Concrete | N | $ 37,857.00 |
| Asphalt | Anderson Columbia | Other materials or base course layers | N | $ 17,070.00 |
| Welded Wire Fabric | HD Whitecap | Concrete | N | $ 902.72 |
| Rebar | HD Whitecap | Concrete | N | $ 9,900.00 |
| Limerock | Limerock Industries | Other materials or base course layers | N | $ 8,185.00 |
| CL200 Purple PVC Lateral Line | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | $ 2,025.56 |
| Rain Bird 1401 Flood Bubbler | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 5.38 |
| Hunter PGP/PGJ Rotar/Mini Rotor Fixture | Hunter Industries | Pipe, hose, or irrigation equipment | N | $ 323.52 |
| Existing Electric Rain Bird 150 PEB Valve | Rain Bird Corporation | Pipe, hose, or irrigation equipment | Y | $ 629.25 |
| Precast Architectural Concrete | Spring Precast | Concrete | N | $ 6,427.25 |
| Storm Structures | Oldcastle Infrastructure | Concrete | N | $ 12,714.66 |
| Storm Piping | JM Eagle & Sanderson | Pipe, hose, or irrigation equipment | N | $ 52,344.00 |
| 1" x 4" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 84.50 |
| 2" x 6" Wood Forms | Home Depot | Wood - Natural Lumber | Y | $ 172.00 |
| 3-Tier Recycling Station | Max-R | Wood - Manufactured/compressed wood product | N | $ 2,442.00 |
| Rain Bird 1806/1812 RD Spray Fixture | Rain Bird Corporation | Pipe, hose, or irrigation equipment | N | $ 547.12 |
| Sch. 40 PVC Sleeve | Sanderson Pipe | Pipe, hose, or irrigation equipment | N | $ 158.00 |
| Bollards | Sternberg Lighting | Non-wood decking, railing, fencing, trellises, or | N | $ 3,270.00 |
| Switchgear | Sesco | Conduit, wiring, and electrical equipment | N | $ 916.18 |
| Fixtures | Sesco | Lighting | N | $ 3,834.58 |
| Conduit & Fittings | Sesco | Conduit, wiring, and electrical equipment | N | $ 21,796.18 |
| Wire | Sesco | Conduit, wiring, and electrical equipment | N | $ 1,756.18 |
| Temp Power | Sesco | Conduit, wiring, and electrical equipment | N | $ 556.18 |
| Pole Bases | Sesco | Conduit, wiring, and electrical equipment | N | $ 6,556.18 |
| Lighting Controls | Sesco | Conduit, wiring, and electrical equipment | N | $ 76.18 |
| Joint Sealant | Dow | Adhesive, sealant, elastomer, water proofing, | N | $ 3,420.31 |
| Dampproofing | Master Builders Solutions | Adhesive, sealant, elastomer, water proofing, | N | $ 672.00 |

| | |
|---|---|
| Option 1 compliance has been met for all eligible products | |
| Total eligible materials cost (Option 2 and Option 3 only) | |
| Total materials cost (less ineligible products and salvaged/reused materials cost) | |
| Percent materials meeting Option 2 (%) | |
| Percent materials meeting Option 3 (%) | |

cally available information meeting the requirements of this credit no letter needs to be submitted, but the project

| Product type is eligible for credit | Option | Supporting Documentation | Option 1 Letter Sent (Y or N) | Total Cost of Option 2 Materials | Total Cost of Option 3 Materials |
|---|---|---|---|---|---|
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
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| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
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| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| | | | Yes | | |
| | | | | $ - | $ - |
| | | | | | $ 251,764.99 |
| | | | | | 0.00% |
| | | | | | 0.00% |

## Advocacy Letters

See apendix C for copies of letters sent.

Advocacy letters have been sent to the following list of suppliers/manufacturers:

- Amerimix
- Anderson Columbia
- Armstrong
- Barry Pattern
- Bell Concrete
- Cemex
- CertainTeed
- Cherokee
- ClarkDietrich
- Clear Image Signs
- Cubic Transportation
- DCP
- Dow Corning
- DuPont
- Elixson Wood Products
- Garden State Tile
- GCP
- Gulf Coast
- Handi-Hut
- HD Whitecap
- Holt Metals
- Home Depot
- Hunter Industries
- Huntsman Building Solutions
- Hutchinson Welding
- JM Eagle
- Kawneer
- Keystone Ridge Designs
- Landscape Forms
- LG
- Limerock Industries
- Ludowici
- Master Builders Solutions
- Max-R
- NDS Inc.
- OEC
- Oldcastle Infrastructure
- O'Steen Bros
- Peak Racks
- Permaloc
- Perry Roofing
- Pine Hall Brick
- Rain Bird
- Rainbow
- Sanderson Pipe
- Sesco Lighting
- Sherwin-Williams
- Spec Mix
- Spring Precast
- SRM Sternberg Lighting
- UF
- Watson Concstruction

# CREDIT 5.10 | SUPPORT SUSTAINABILITY IN PLANT PRODUCTION

## Materials Worksheet

**Goal: 1 points**

### SITES® v2 Materials Worksheet

**C5.10: SUPPORT SUSTAINABILITY IN PLANT PRODUCTION**

**INSTRUCTIONS:**

1. Only plants, sod, and seed are included in this credit. If any materials supplier provides publically available information meetin "Supporting Documentation" and "Option 1 Letter Sent" Columns under this credit.

**MATERIALS IDENTIFICATION**
(from Materials List tab)

| Description of Material | Manufacturer or Supplier Name | Material/Product Type | Total Cost of Material |
|---|---|---|---|
| River Birch | Cherry Lake Tree Farm | Plant | $ 740.00 |
| Crape Myrtle | Cherry Lake Tree Farm | Plant | $ 1,295.00 |
| Longleaf Pine | Half Moon Growers | Plant | $ 2,035.00 |
| Chickasaw Plum | Half Moon Growers | Plant | $ 660.00 |
| Oak Trees | Cherry Lake Tree Farm | Plant | $ 2,405.00 |
| Muhly Grass | Cherry Lake Tree Farm | Plant | $ 4,140.00 |
| Podocarpus | Cherry Lake Tree Farm | Plant | $ 1,590.00 |
| Azaleas | Cherry Lake Tree Farm | Plant | $ 1,335.00 |
| Lilies | Cherry Lake Tree Farm | Plant | $ 1,020.00 |
| Liriope | Cherry Lake Tree Farm | Plant | $ 5,728.00 |
| Jasmine | Rode Groundcovers, Inc | Plant | $ 2,376.00 |
| Pinestraw | University of Florida | Mulch - other | $ 1,500.00 |
| Swamp Chestnut Oak | Half Moon Growers | Plant | $ 80.00 |
| Knockout Roses | Blooming House Nursery | Plant | $ 150.00 |
| Sabal Palm- 20' OA Height | TNT Nursery | Plant | $ 1,440.00 |
| Lily of the Nile | University of Florida | Plant | $ 390.00 |
| Dogwood 3" | University of Florida | Wood - Natural Lumber | $ 100.00 |
| 2 Tier Recycling Station | University of Florida | Wood - Manufactured/compressed wood | $ 9,105.00 |
| Precast Concrete Benches | University of Florida | Concrete | $ 6,400.00 |
| Light Fixtures | University of Florida | Lighting | $ 25,900.00 |
| Bollards | University of Florida | Non-wood decking, railing, fencing, trellises, or | $ 5,450.00 |
| TAPS Signage | University of Florida | Cut or processed stone | $ 1,000.00 |
| Gate Arms & Mechanical Elements | University of Florida | Conduit, wiring, and electrical equipment | $ 12,500.00 |
| Historical Monument | University of Florida | Cut or processed stone | $ 2,000.00 |
| Bicycle Repair Station | University of Florida | Cut or processed stone | $ 1,800.00 |
| Existing Backflow Preventor - Double | University of Florida | Pipe, hose, or irrigation equipment | $ 15,000.00 |
| Double Bicycle Racks | University of Florida | Cut or processed stone | $ 2,200.00 |
| Concrete/Wood Benches | University of Florida | Concrete | $ 1,700.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 1,911.00 |
| CMU Block - 8x8x16 | Bell Concrete Products | Brick or masonry unit | $ 127.00 |
| Brick - 3-5/8" x 2-1/4" x 7-5/8" | Cherokee | Brick or masonry unit | $ 6,439.50 |
| Mortar | Spec Mix | Concrete | $ 2,349.00 |
| Concrete - 3000 CMG Cell Fill | CEMEX | Concrete | $ 4,200.00 |
| #REF! | #REF! | #REF! | #REF! |
| #REF! | #REF! | #REF! | #REF! |
| Total value for applicable products and | | | $ 1,178,701.47 |
| Material Product Dropdown | | | |
| Plant | | | |
| Seed | | | |
| Sod | | | |
| Soil | | | |
| Mulch - wood | | | |
| Mulch - other | | | |
| Sand (if used as a soil amendment) | | | |
| Other soil amendment | | | |
| Compost | | | |
| Stone | | | |
| Natural rock or boulder (uncut) | | | |
| Cut or processed stone | | | |
| Aggregate/gravel | | | |
| Sand (if used as a base course material) | | | |
| Other materials or base course layers | | | |
| Wood - Manufactured/compressed wood | | | |
| Non-wood decking, railing, fencing, | | | |
| Pipe, hose, or irrigation equipment | | | |
| Conduit, wiring, and electrical equipment | | | |
| Lighting | | | |
| Membrane, liner or geotextile | | | |
| Fabric or canvas | | | |
| Extruded, spray or board foams | | | |
| Concrete | | | |
| Brick or masonry unit | | | |
| Sand (for purposes other than soil | | | |
| Paint or coating | | | |
| Adhesive, sealant, elastomer, water | | | |
| Synthetic surfacing materials and | | | |

| | |
|---|---|
| Option 1 compliance has been met for all eligible products | |
| Total eligible materials cost (Option 2 and Option 3 only) | |
| Total eligible materials cost | |
| Percent materials meeting Option 2 (%) | |
| Percent materials meeting Option 3 (%) | |

g the requirements of this credit no letter needs to be submitted, but the project should still choose "Y" in the

| Product type is eligible for credit | Option | Supporting Documentation | Option 1 Letter Sent (Y or N) | Total Cost of Option 2 Materials | Total Cost of Option 3 Materials |
|---|---|---|---|---|---|
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| N | | | | N/A | N/A |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| Y | | | Y | $ - | $ - |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A |
| N | | | | N/A | N/A

# SECTION 5 - APPENDIX

## A. C5.7 Letters

### Amerimix

October 11, 2021

Amerimix

400 Perimeter Center Terrace NE, Suite 1000, Atlanta, GA 30346

Dear Amerimix,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
  - Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products: documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  Compliance with ASTM Test Method D6866;
  A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  Receipts of vendor invoices documenting which wood products meet certification requirements;
  Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  Publicly available third-party verified corporate sustainability report including ALL of the following information:
  - A commitment to long-term ecologically responsible land use;
  - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
  - Evidence of their economic and social support of adjacent communities;
  - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
  - Labor practices
  - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

### Anderson Columbia

October 11, 2021

Anderson Columbia

871 NW Guerdon St, Lake City, FL 32055

Dear Anderson Columbia,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products: documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  Compliance with ASTM Test Method D6866;
  A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  Receipts of vendor invoices documenting which wood products meet certification requirements;
  Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  Publicly available third-party verified corporate sustainability report including ALL of the following information:
  - A commitment to long-term ecologically responsible land use;
  - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
  - Evidence of their economic and social support of adjacent communities;
  - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
  - Labor practices
  - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Armstrong

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Armstrong World Industries

2500 Columbia Ave Bldg 701, Lancaster, PA 17603

Dear Armstrong World Industries,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Barry Pattern

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Barry Pattern & Foundry, Inc

3333 35th Ave N, Birmingham, AL 35207

Dear Barry Pattern & Foundry, Inc,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www. sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

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- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
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    - Labor practices
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Bell Concrete Products

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Bell Concrete Products

2480 US-129, Bell, FL 32619

Dear Bell Concrete,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

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- Global Reporting Initiative (GRI) sustainability report;
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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Cemex

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Cemex

305 SW Depot Ave, Gainesville, FL 32601

Dear Cemex,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

CertainTeed

October 11, 2021

CertainTeed

5080 Recker Hwy, Winter Haven, FL 33880

Dear CertainTeed,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
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- Evidence of their economic and social support of adjacent communities;
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- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

Cherokee Brick

October 11, 2021

Cherokee Brick

3250 Waterville Rd, Macon, GA 31206

Dear Cherokee Brick,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

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- Global Reporting Initiative (GRI) sustainability report;
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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
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A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Clark Dietrich

October 11, 2021

ClarkDietrich

38020 Pulp Dr, Dade City, FL 33523

Dear ClarkDietrich,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Clear Image Signs

October 11, 2021

Clear Image Signs

1901 NW 67th PL Unit A, Gainesville, FL 32653

Dear Clear Image Signs,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## Cubic Transportation

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Cubic Transportation Systems, Inc

1308 South Washington St, Tullahoma, TN 37388

Dear Cubic Transportation Systems, Inc,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

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- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## DCP

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Don Construction Products

2826 Lineberger Industrial Dr, Lancaster, SC 29720

Dear Don Construction Products,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Dow Corning

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Dow Corning

760 Hodgenville RD, Elizabethtown, KY 42701

Dear Dow Corning,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**To help us achieve 3 points for Option 2, please provide the following:**

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

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O For bio-based raw materials:
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O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
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- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# DuPont

Sustainable SITES Initiative™ GBCI®

October 11, 2021

DuPont

1467 Prosser Dr SE, Dalton, GA 30721

Dear DuPont,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Elixson Wood Products

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Elixson Wood Products

18976 NW 84th Ave, Starke, FL 32091

Dear Elixson Wood Products,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Garden State Tile

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Garden State Tile

2500 Abercorn St, Savannah, GA 31401

Dear Garden State Tile,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## GCP

Sustainable SITES Initiative™ GBCI®

October 11, 2021

GCP Applied Technologies Inc

2325 Lakeview Pkwy Suite 450, Alpharetta, GA 30009

Dear GCP Applied Technologies Inc,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
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    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## Gulf Coast

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Gulf Coast Supply & Manufacturing

14429 SW 2nd PL G30, Newberry, FL 32669

Dear Gulf Coast Supply & Manufacturing,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

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- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Handi-Hut

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Handi-Hut Inc

3 Grunwald St, Clifton, NJ 07013

Dear Handi-Hut, Inc,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# HD Whitecap

Sustainable SITES Initiative™ GBCI®

October 11, 2021

HD Whitecap

11416 NW Hwy 441, Gainesville, FL 32653

Dear HD Whitecap,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

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☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Holt Metals

October 11, 2021

Holt Metals & Fabrication

24593 NW 9th PL, Newberry, FL 32669

Dear Holt Metals & Fabrication,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**To help us achieve 5 points for Option 3, please provide the following:**

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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
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O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Home Depot

October 11, 2021

Home Depot

7107 NW 4th Blvd, Gainesville, FL 32607

Dear Home Depot,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Other programs meeting CSR criteria.

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O For all other extracted materials not addressed above:
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Hunter Industries

October 11, 2021

Hunter Industries

4501 Hunter Rd #9204, San Marcos, TX 78666

Dear Hunter Industries,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Huntsman Building Solutions

October 11, 2021

Huntsman Building Solutions

10003 Woodloch Forest Dr, The Woodlands, TX 77380

Dear Huntsman Building Solutions,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

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- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Hutchinson Welding

October 11, 2021

Hutchinson Welding & Repair

1053 Hwy 17, Satsuma, FL 32189

Dear Hutchinson Welding & Repair,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# JM Eagle

October 11, 2021

JM Eagle

2101 J-M Dr, Adel, GA 31620

Dear JM Eagle,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
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- For bio-based raw materials:
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- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Kawneer

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Kawneer

4645 L B McLeod Rd, Orlando, FL 32811

Dear Kawneer,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
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- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
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- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Keystone Ridge Designs

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Keystone Ridge Designs, Inc

670 Mercer Rd, Butler, PA 16001

Dear Keystone Ridge Designs, Inc,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Landscape Forms

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Landscape Forms

7800 E Michigan Ave, Kalamazoo, MI 49048

Dear Landscape Forms,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
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- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# LG Electronics

Sustainable SITES Initiative™ GBCI®

October 11, 2021

LG Electronics

111 Sylvan Ave, Englewood Cliffs, NJ 07632

Dear LG Electronics,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Limerock Industries

October 11, 2021

Limerock Industries

2500 NW 202nd St, Newberry, FL 32669

Dear Limerock Industries,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Ludowici

October 11, 2021

Ludowici

4757 Tile Plant Rd, New Lexington, OH 43764

Dear Ludowici,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Master Builders Solutions

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Master Builders Solutions

889 Valley Park Dr S, Shakopee, MN 55379

Dear Master Builders Solutions,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Max-R

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Max-R

W248 N5499 Executive Dr, Sussex, WI 53089

Dear Max-R,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# NDS Inc.

Sustainable SITES Initiative™ GBCI®

October 11, 2021

NDS Inc

21300 Victory Blvd #215, Woodland Hills, CA 91367

Dear NDS Inc,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

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- Global Reporting Initiative (GRI) sustainability report;
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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# OEC

Sustainable SITES Initiative™ GBCI®

October 11, 2021

OEC Business Interiors

1925 SW 18th Ct Ste 105, Ocala, FL 34471

Dear OEC Business Interiors,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## Oldcastle Infrastructure

October 11, 2021

Oldcastle Infrastructure

12300 Presidents Ct, Jacksonville, FL 32220

Dear Oldcastle Infrastructure,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## O'Steen Brothers

October 11, 2021

O'Steen Bros, Inc

1006 SE 4th St, Gainesville, FL 32601

Dear O'Steen Bros, Inc,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Peak Racks

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Peak Racks, Inc

870 Capitolio Way #5, San Luis Obispo, CA 93401

Dear Peak Racks, Inc,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Permaloc

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Permaloc Corporation

13505 Barry St, Holland, MI 49424

Dear Permaloc Corporation,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Perry Roofing

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Perry Roofing

2505 NW 71st PL, Gainesville, FL 32653

Dear Perry Roofing,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Pine Hall

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Pine Hall Brick

2701 Shorefair Dr NW, Winston-Salem, NC 27105

Dear Pine Hall Brick,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

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**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rain Bird

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rain Bird Corporation

6991 E Southpoint Rd Bldg 2, Tucson, AZ 85756

Dear Rain Bird Corporation,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rainbow Cabinets

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rainbow Cabinets

4690 NE 35th St, Ocala, FL 34479

Dear Rainbow Cabinets,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sanderson Pipe

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sanderson Pipe Corporation

1 Enterprise Blvd, Sanderson, FL 32087

Dear Sanderson Pipe Corporation,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
- A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
- Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
- A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
- Compliance with ASTM Test Method D6866;
- A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
- Receipts of vendor invoices documenting which wood products meet certification requirements;
- Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
- A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
- Publicly available third-party verified corporate sustainability report including ALL of the following information:
  - A commitment to long-term ecologically responsible land use;
  - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sesco Lighting

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sesco Lighting

9250 Baymeadows Rd #350, Jacksonville, FL 32256

Dear Sesco Lighting,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

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**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

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- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
- A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
- Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
- A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
- Compliance with ASTM Test Method D6866;
- A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
- Receipts of vendor invoices documenting which wood products meet certification requirements;
- Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
- A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
- Publicly available third-party verified corporate sustainability report including ALL of the following information:
  - A commitment to long-term ecologically responsible land use;
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  - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sherwin-Williams

October 11, 2021

Sherwin-Williams

101 W Prospect Ave, Cleveland, OH 44115

Dear Sherwin-Williams,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

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- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
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- Labor practices
- Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

# Spec Mix

October 11, 2021

Spec Mix

1230 Eagan Industrial Rd, Eagan, MN 55121

Dear Spec Mix,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
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O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
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O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## Spring Precast

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Spring Precast

3782 US-280, Cobb, GA 31735

Dear Spring Precast,

Your organization is receiving this letter as a supplier of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ Responsible extraction criteria as demonstrated by the following:

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A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## SRM Concrete

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Anderson Columbia

116 NE 33rd Ave, Gainesville, FL 32609

Dear SRM Concrete,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

O For mined or quarried materials:
A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
A copy of the public declaration from each manufacturer committing to responsible mining practices.

O For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;

O For bio-based raw materials:
Compliance with ASTM Test Method D6866;
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.

O For new wood products:
Receipts of vendor invoices documenting which wood products meet certification requirements;
Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.

O For all other extracted materials not addressed above:
A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
Publicly available third-party verified corporate sustainability report including ALL of the following information:
- A commitment to long-term ecologically responsible land use;
- A commitment to reducing environmental harms from extraction and/or manufacturing processes;
- Evidence of their economic and social support of adjacent communities;
- A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
- Labor practices
- Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sternberg Lighting

October 11, 2021

Sternberg Lighting

555 Lawrence Ave, Roselle, IL 60172

Dear Sternberg Lighting,

Your organization is receiving this letter as a manufacturer of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*Credit 5.7: Support responsible extraction of raw materials* aims to protect ecosystems, respect cultural and community values, and improve land use through responsible extraction of raw materials for site design and construction. To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to:

- Track and disclose sustainable extraction processes by implementing a Global Reporting Initiative (GRI) sustainability report, or equivalent, including the Mining and Metals supplement, if applicable; and by publishing a publicly available sustainability statement that discloses efforts to achieve sustainable practices.
- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Watson Construction

October 11, 2021

Watson Construction

940 NW 247 Dr, Newberry, FL 32669

Dear Watson Construction,

Your organization is receiving this letter as a provider of raw materials for UF-656 Landscape Master Plan Project, which is seeking certification as a sustainably developed landscape via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Provide five percent of the total materials that meet or exceed the responsible extraction criteria outlined below, based on cost.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Evidence of disclosure of annual environmental practices via the Global Reporting Initiative (GRI), or equivalent (including the Mining and Metals supplement, if applicable);

☐ A publicly available sustainability statement that discloses efforts to achieve sustainable practices.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ A third-party verified corporate sustainability report (CSR), including statements of environmental impacts of extraction operations and activities associated with the manufacturer's product and the product's supply chain, in one of these formats:

- Global Reporting Initiative (GRI) sustainability report;
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises;
- U.N. Global Compact: Communication of Progress;
- ISO 26000: 2010 Guidance on Social Responsibility
- Other programs meeting CSR criteria.

☐ Responsible extraction criteria as demonstrated by the following:

- For mined or quarried materials:
  - A letter signed by the owner of each manufacturer and its raw material suppliers, stating that they have reviewed and understood the Framework for Responsible Mining;
  - Checklist for each manufacturer listed all of the Framework for Responsible Mining's Leading Edge issues, and identifying which Leading Edge measures they are currently implementing;
  - A copy of the public declaration from each manufacturer committing to responsible mining practices.
- For bio-based products, documentation demonstrating compliance with the Sustainable Agriculture Network's Sustainable Agriculture Standard, including any audit reports;
- For bio-based raw materials:
  - Compliance with ASTM Test Method D6866;
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing harvest procedures, as defined by the exporting and receiving country.
- For new wood products:
  - Receipts of vendor invoices documenting which wood products meet certification requirements;
  - Chain-of-custody documentation demonstrating certification by the Forest Stewardship Council or SITES-approved equivalent.
- For all other extracted materials not addressed above:
  - A letter signed by the owner of each manufacturer and its raw materials suppliers, addressing all laws governing extraction and manufacturing procedures as defined by the exporting and receiving country, including human rights laws;
  - Publicly available third-party verified corporate sustainability report including ALL of the following information:
    - A commitment to long-term ecologically responsible land use;
    - A commitment to reducing environmental harms from extraction and/or manufacturing processes;
    - Evidence of their economic and social support of adjacent communities;
    - A commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria;
    - Labor practices
    - Governance structure

Please note: these requirements do not apply to products containing recycled content, that are salvaged, reused or refurbished, or to plants or hide products.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# B. C5.8 Letters

## Armstrong

October 11, 2021

Armstrong World Industries

2500 Columbia Ave Bldg 701, Lancaster, PA 17603

Dear Armstrong World Industries,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
  - BizNGO's Chemical Alternatives Assessment Protocol
  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
  - U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
  - An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

- Each substance should be identified by the Chemical Abstract Service (CAS) name, number, and weight percentage, and include the identification or known impurities and byproducts.
- Criteria should be consistent with federal regulations, including the U.S. Occupational Safety and Health Administration (OSHA) Occupational and Health Hazard Communication Standard (29 CFR 1910); the U.S. Consumer Production Safety Commission Consumer Product Safety Act and Federal Hazardous Substances Act; and the U.S. Federal Trade Commission laws and guidelines prohibiting deceptive acts or practices, including deceptive representations in advertising, labeling, product inserts, catalogs, and sales presentations (or local equivalent for projects outside of the United States).
- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## CertainTeed

October 11, 2021

CertainTeed

5080 Rocker Hwy, Winter Haven, FL 33880

Dear CertainTeed,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
  - BizNGO's Chemical Alternatives Assessment Protocol
  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
  - U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
  - An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

- Each substance should be identified by the Chemical Abstract Service (CAS) name, number, and weight percentage, and include the identification or known impurities and byproducts.
- Criteria should be consistent with federal regulations, including the U.S. Occupational Safety and Health Administration (OSHA) Occupational and Health Hazard Communication Standard (29 CFR 1910); the U.S. Consumer Production Safety Commission Consumer Product Safety Act and Federal Hazardous Substances Act; and the U.S. Federal Trade Commission laws and guidelines prohibiting deceptive acts or practices, including deceptive representations in advertising, labeling, product inserts, catalogs, and sales presentations (or local equivalent for projects outside of the United States).
- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Cubic Transportation

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Cubic Transportation Systems, Inc

1308 South Washington St, Tullahoma, TN 37388

Dear Cubic Transportation Systems, Inc,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:

☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.

☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ Documentation for Option 2, AND

☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:

- BizNGO's Chemical Alternatives Assessment Protocol
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- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# DCP

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Don Construction Products

2826 Lineberger Industrial Dr, Lancaster, SC 29720

Dear Don Construction Products,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

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In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.

☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ Documentation for Option 2, AND

☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:

- BizNGO's Chemical Alternatives Assessment Protocol
- GreenScreen for Safer Chemicals
- U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
- U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
- An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

- Each substance should be identified by the Chemical Abstract Service (CAS) name, number, and weight percentage, and include the identification or known impurities and byproducts.
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- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Dow Corning

Sustainable SITES Initiative™ GBCI

October 11, 2021

Dow Corning

760 Hodgenville Rd, Elizabethtown, KY 42701

Dear Dow Corning,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

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- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# DuPont

Sustainable SITES Initiative™ GBCI

October 11, 2021

DuPont

1467 Prosser Dr SE, Dalton, GA 30721

Dear DuPont,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Pipes, hoses, and irrigation components

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**To help us achieve 3 points for Option 2, please provide the following:**

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    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
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- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
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**Disclosure Documentation Guidance**

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# GCP

Sustainable SITES Initiative™ GBCI®

October 11, 2021

GCP Applied Technologies Inc

2325 Lakeview Pkwy Suite 450, Alpharetta, GA 30009

Dear GCP Applied Technologies Inc,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Pipes, hoses, and irrigation components

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Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

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**To help us achieve 3 points for Option 2, please provide the following:**

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- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
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**Disclosure Documentation Guidance**

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Home Depot

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Home Depot

7107 NW 4th Blvd, Gainesville, FL 32607

Dear Home Depot,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Hunter Industries

Sustainable SITES Initiative™ GBCI

October 11, 2021

Hunter Industries

4501 Hunter Rd #9204, San Marcos, TX 78666

Dear Hunter Industries,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Huntsman Building Solutions

Sustainable SITES Initiative™ GBCI

October 11, 2021

Huntsman Building Solutions

10003 Woodloch Forest Dr, The Woodlands, TX 77380

Dear Huntsman Building Solutions,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
  - BizNGO's Chemical Alternatives Assessment Protocol
  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
  - U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
  - An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

- Each substance should be identified by the Chemical Abstract Service (CAS) name, number, and weight percentage, and include the identification or known impurities and byproducts.
- Criteria should be consistent with federal regulations, including the U.S. Occupational Safety and Health Administration (OSHA) Occupational and Health Hazard Communication Standard (29 CFR 1910); the U.S. Consumer Production Safety Commission Consumer Product Safety Act and Federal Hazardous Substances Act; and the U.S. Federal Trade Commission laws and guidelines prohibiting deceptive acts or practices, including deceptive representations in advertising, labeling, product inserts, catalogs, and sales presentations (or local equivalent for projects outside of the United States).
- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# JM Eagle

Sustainable SITES Initiative™ GBCI®

October 11, 2021

JM Eagle

2101 J-M Dr, Adel, GA 31620

Dear JM Eagle,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Pipes, hoses, and irrigation components

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# LG Electronics

Sustainable SITES Initiative™ GBCI®

October 11, 2021

LG Electronics

111 Sylvan Ave, Englewood Cliffs, NJ 07632

Dear LG Electronics,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Master Builders Soluctions

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Master Builders Solutions

889 Valley Park Dr S, Shakopee, MN 55379

Dear Master Builders Solutions,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Max-R

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Max-R

W248 N5499 Executive Dr, Sussex, WI 53089

Dear Max-R,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# NDS

Sustainable SITES Initiative™ GBCI®

October 11, 2021

NDS Inc

21300 Victory Blvd #215, Woodland Hills, CA 91367

Dear NDS Inc,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Criteria should be consistent with federal regulations, including the U.S. Occupational Safety and Health Administration (OSHA) Occupational and Health Hazard Communication Standard (29 CFR 1910); the U.S. Consumer Production Safety Commission Consumer Product Safety Act and Federal Hazardous Substances Act; and the U.S. Federal Trade Commission laws and guidelines prohibiting deceptive acts or practices, including deceptive representations in advertising, labeling, product inserts, catalogs, and sales presentations (or local equivalent for projects outside of the United States).
- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# OEC

Sustainable SITES Initiative™ GBCI®

October 11, 2021

OEC Business Interiors

1925 SW 18th Ct Ste 105, Ocala, FL 34471

Dear OEC Business Interiors,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.8: Support transparency and safer chemistry* aims to decrease harmful health and environmental impacts and encourage the use of safer alternatives by promoting the use of materials with available chemical inventories, lifecycle information, and hazard assessments.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
  - BizNGO's Chemical Alternatives Assessment Protocol
  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
  - U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
  - An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

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- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
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Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rain Bird

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rain Bird Corporation

6991 E Southpoint Rd Bldg 2, Tucson, AZ 85756

Dear Rain Bird Corporation,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
  - ☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

    In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.
  - ☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
  - BizNGO's Chemical Alternatives Assessment Protocol
  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
  - U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
  - An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

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- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sanderson Pipe

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sanderson Pipe Corporation

1 Enterprise Blvd, Sanderson, FL 32087

Dear Sanderson Pipe Corporation,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to develop and disclose chemical inventories and / or conduct chemical hazard assessments, per the guidance below, for the following products:

- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

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**To help us achieve 3 points for Option 2, please provide the following:**

- ☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:
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**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
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  - GreenScreen for Safer Chemicals
  - U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
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**Disclosure Documentation Guidance**

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sesco Lighting

October 11, 2021

Sesco Lighting

9250 Baymeadows Rd #350, Jacksonville, FL

Dear Sesco Lighting,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**To help us achieve 3 points for Option 2, please provide the following:**

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**To help us achieve 5 points for Option 3, please provide the following:**

- ☐ Documentation for Option 2, AND
- ☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sternberg Lighting

October 11, 2021

Sternberg Lighting

555 Lawrence Ave, Roselle, IL 60172

Dear Sternberg Lighting,

Your organization is receiving this letter as a manufacturer of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

UF

Sustainable SITES Initiative™
GBCI®

October 11, 2021

University of Florida

Gainesville, FL 32608

Dear University of Florida,

Your organization is receiving this letter as a supplier of materials for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Pipes, hoses, and irrigation components

Chemical inventories are defined as the listing of all chemicals associated with the manufacturing of a material and should include, to the extent known or reasonably ascertainable, all chemicals intentionally added by the manufacturer, any intermediate chemicals that may be wholly or partially consumed during the manufacturing process, and any process chemicals that may end up in manufacturing effluent or be otherwise released.

Chemical hazard assessment refers to the process of identifying product constituents; collecting, developing, and evaluating data on human health and environmental endpoints such as carcinogenicity, reproductive toxicity, neurotoxicity, aquatic toxicity, and persistence; and identifying potential hazards. This process allows for comparisons of alternatives to determine relative "greenness" and safety. The process also identifies areas for improvement. Chemical hazard assessments, focused on inherent risks of chemicals, do not take into account exposure scenarios as a more in-depth and lengthy risk assessment would.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ Documentation demonstrating disclosure of material chemistry, including GHS-compliant (https://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf), or otherwise complete Safety Data Sheets, and chemical safety reports for five percent or more of the products listed above. This includes:

☐ Chemical inventories covering all chemicals, whether used intentionally or otherwise known to be present, in all life cycle stages of the product

In cases where the compilation of a complete chemical inventory is not feasible, the inventory requirements should cover chemicals and their life cycle stages thought to present the greatest hazards to workers, consumers, the general population, and environmental species.

☐ A report of all known hazards and their concentrations regardless of whether the chemical's presence in the product or process is intentional. This reporting includes the identification of any impurities, byproducts, and emissions from finished products or product curing steps.

**To help us achieve 5 points for Option 3, please provide the following:**

☐ Documentation for Option 2, AND

☐ Completed chemical hazard assessments from one of the following screening-level hazard assessment tools for five percent or more of the products using:

- BizNGO's Chemical Alternatives Assessment Protocol
- GreenScreen for Safer Chemicals
- U.S. EPA's DfE Alternatives Assessment Criteria for Hazard Evaluation
- U.S. EPA's Sustainable Futures tool suite (to be used only when measured data is not available)
- An equivalent robust hazard assessment strategy using recognized and reliable data sources.

**Disclosure Documentation Guidance**

All disclosures must adhere to the following standards:

- Each substance should be identified by the Chemical Abstract Service (CAS) name, number, and weight percentage, and include the identification or known impurities and byproducts.
- Criteria should be consistent with federal regulations, including the U.S. Occupational Safety and Health Administration (OSHA) Occupational and Health Hazard Communication Standard (29 CFR 1910); the U.S. Consumer Production Safety Commission Consumer Product Safety Act and Federal Hazardous Substances Act; and the U.S. Federal Trade Commission laws and guidelines prohibiting deceptive acts or practices, including deceptive representations in advertising, labeling, product inserts, catalogs, and sales presentations (or local equivalent for projects outside of the United States).
- For products required by the U.S. OSHA to have a safety data sheet (SDS), make a comprehensive SDS, in addition to all product ingredient and warning labels as required by the Consumer Product Safety Commission. SDSs should be provided for chemical components of formulated mixtures (particularly multi-component product systems) that undergo chemical reactions in situ. Also provide SDSs for final products resulting from such chemical reaction.
- For substances for which the manufacturer or supplier has developed an SDS consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), only GHS-compliant SDSs will satisfy this requirement. For substances for which no GHS-compliant SDS is available, a report prepared within the previous five years in accordance with the NSF/GCI/ANSI 355 Greener Chemicals Products and Processes Information Standard shall be deemed to satisfy this requirement.

Please note: these requirements do not apply to products or materials that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# C. C5.9 Letters

## Amerimix

October 11, 2021

Amerimix

400 Perimeter Center Terrace NE, Suite 1000, Atlanta, GA 30346

Dear Amerimix,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## Anderson Columbia

October 11, 2021

Anderson Columbia

871 NW Guerdon St, Lake City, FL 32055

Dear Anderson Columbia,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Armstrong

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Armstrong World Industries

2500 Columbia Ave Bldg 701, Lancaster, PA 17603

Dear Armstrong World Industries,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
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- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Barry Pattern

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Barry Pattern & Foundry, Inc

3333 35th Ave N, Birmingham, AL 35207

Dear Barry Pattern & Foundry, Inc,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

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**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
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- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Bell Concrete

October 11, 2021

Bell Concrete Products

2480 US-129, Bell, FL 32619

Dear Bell Concrete,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Cemex

October 11, 2021

Cemex

305 SW Depot Ave, Gainesville, FL 32601

Dear Cemex,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR

☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR

☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

- Use of energy, water, and toxics,
- Releases of key pollutants to air and water,
- Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

- ☐ Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
- ☐ Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
- ☐ Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;

☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);

☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

Certainteed

October 11, 2021

CertainTeed

5080 Recker Hwy, Winter Haven, FL 33880

Dear CertainTeed,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
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  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

Cherokee

October 11, 2021

Cherokee Brick

3250 Waterville Rd, Macon, GA 31206

Dear Cherokee Brick,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
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**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
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**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
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- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# ClarkDietrich

October 11, 2021

ClarkDietrich

38020 Pulp Dr, Dade City, FL 33523

Dear ClarkDietrich,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Clear Image Signs

October 11, 2021

Clear Image Signs

1901 NW 67th PL Unit A, Gainesville, FL 32653

Dear Clear Image Signs,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Cubic Transportation

October 11, 2021

Cubic Transportation Systems, Inc

1308 South Washington St, Tullahoma, TN 37388

Dear Cubic Transportation Systems, Inc,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;

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☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# DCP

October 11, 2021

Don Construction Products

2826 Lineberger Industrial Dr, Lancaster, SC 29720

Dear Don Construction Products,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR

☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR

☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

- Use of energy, water, and toxics,
- Releases of key pollutants to air and water,
- Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

- Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
- Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
- Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;

☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);

☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Dow Corning

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Dow Corning

760 Hodgenville Rd, Elizabethtown, KY 42701

Dear Dow Corning,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
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  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# DuPont

Sustainable SITES Initiative™ GBCI®

October 11, 2021

DuPont

1467 Prosser Dr SE, Dalton, GA 30721

Dear DuPont,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
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**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
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- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Elixson Wood Products

October 11, 2021

Elixson Wood Products

18976 NW 84th Ave, Starke, FL 32091

Dear Elixson Wood Products,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:
  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
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  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

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- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:
  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Garden State Tile

October 11, 2021

Garden State Tile

2500 Abercorn St, Savannah, GA 31401

Dear Garden State Tile,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# GCP

Sustainable SITES Initiative™ GBCI®

October 11, 2021

GCP Applied Technologies Inc

2325 Lakeview Pkwy Suite 450, Alpharetta, GA 30009

Dear GCP Applied Technologies Inc,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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  - ● Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Gulf Coast

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Gulf Coast Supply & Manufacturing

14429 SW 2nd PL G30, Newberry, FL 32669

Dear Gulf Coast Supply & Manufacturing,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - ● Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - ● Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - ● Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Handi-Hut

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Handi-Hut Inc

3 Grunwald St, Clifton, NJ 07013

Dear Handi-Hut, Inc,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
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  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# HD Whitecap

Sustainable SITES Initiative™ GBCI®

October 11, 2021

HD Whitecap

11416 BW Hwy 441, Gainesville, FL 32653

Dear HD Whitecap,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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  - Use of energy, water, and toxics,
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**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Holt Metals

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Holt Metals & Fabrication

24593 NW 9th PL, Newberry, FL 32669

Dear Holt Metals & Fabrication,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Home Depot

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Home Depot

7107 NW 4th Blvd, Gainesville, FL 32607

Dear Home Depot,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Hunter Industries

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Hunter Industries

4501 Hunter Rd #9204, San Marcos, TX 78666

Dear Hunter Industries,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Sincerely,

**Nolan Davis**

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300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Huntsman Building Solutions

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Huntsman Building Solutions

10003 Woodloch Forest Dr, The Woodlands, TX 77380

Dear Huntsman Building Solutions,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.9: Support sustainability in materials manufacturing* aims to support sustainability in materials manufacturing by specifying and using materials from manufacturers whose practices increase energy efficiency, reduce resource consumption and waste, and minimize negative effects on human health and the environment.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

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  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Hutchinson Welding

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Hutchinson Welding & Repair

1053 Hwy 17, Satsuma, FL 32189

Dear Hutchinson Welding & Repair,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;

☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);

☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# JM Eagle

Sustainable SITES Initiative™ GBCI®

October 11, 2021

JM Eagle

2101 J-M Dr, Adel, GA 31620

Dear JM Eagle,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Kawneer

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Kawneer

4645 L B McLeod Rd, Orlando, FL 32811

Dear Kawneer,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Keystone Ridge Designs

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Keystone Ridge Designs, Inc

670 Mercer Rd, Butler, PA 16001

Dear Keystone Ridge Designs, Inc,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Landscape Forms

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Landscape Forms

7800 E Michigan Ave, Kalamazoo, MI 49048

Dear Landscape Forms,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**Nolan Davis**

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352-756-7377

# LG

Sustainable SITES Initiative™ GBCI®

October 11, 2021

LG Electronics

111 Sylvan Ave, Englewood Cliffs, NJ 07632

Dear LG Electronics,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

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  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Limerock Industries

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Limerock Industries

2500 NW 202nd St, Newberry, FL 32669

Dear Limerock Industries,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;

☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);

☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Ludowici

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Ludowici

4757 Tile Plant Rd, New Lexington, OH 43764

Dear Ludowici,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Master Builders Solutions

October 11, 2021

Master Builders Solutions

889 Valley Park Dr S, Shakopee, MN 55379

Dear Master Builders Solutions,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Max-R

October 11, 2021

Max-R

W248 N5499 Executive Dr, Sussex, WI 53089

Dear Max-R,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# NDS Inc.

Sustainable SITES Initiative™ GBCI®

October 11, 2021

NDS Inc

21300 Victory Blvd #215, Woodland Hills, CA 91367

Dear NDS Inc,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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352-756-7377

# OEC

Sustainable SITES Initiative™ GBCI®

October 11, 2021

OEC Business Interiors

1925 SW 18th Ct Ste 105, Ocala, FL 34471

Dear OEC Business Interiors,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.9: Support sustainability in materials manufacturing* aims to support sustainability in materials manufacturing by specifying and using materials from manufacturers whose practices increase energy efficiency, reduce resource consumption and waste, and minimize negative effects on human health and the environment.

To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking for your organization to perform, track and disclose sustainable practices for all new products used for this project, in at least one of the following ways, by:

- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Oldcastle Infrastructure

October 11, 2021

Oldcastle Infrastructure

12300 Presidents Ct, Jacksonville, FL 32220

Dear Oldcastle Infrastructure,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

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**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# O'Steen Brothers

October 11, 2021

O'Steen Bros, Inc

1006 SE 4th St, Gainesville, FL 32601

Dear O'Steen Bros,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
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- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
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**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Peak Racks

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Peak Racks, Inc

870 Capitolio Way #5, San Luis Obispo, CA 93401

Dear Peak Racks, Inc,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Permaloc

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Permaloc Corporation

13505 Barry St, Holland, MI 49424

Dear Permaloc Corporation,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Perry Roofing

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Perry Roofing

2505 NW 71st PL, Gainesville, FL 32653

Dear Perry Roofing,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Pine Hall Brick

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Pine Hall Brick

2701 Shorefair Dr NW, Winston-Salem, NC 27105

Dear Pine Hall Brick,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

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  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - ● Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - ● Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - ● Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

If you have any questions regarding the requested information above, please email Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 12/1/2021. Otherwise, please email the requested documentation by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rain Bird

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rain Bird Corporation

6991 E Southpoint Rd Bldg 2, Tucson, AZ 85756

Dear Rain Bird Corporation,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

- Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
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☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);

☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;

☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rainbow Cabinets

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rainbow Cabinets

4690 NE 35th St, Ocala, FL 34479

Dear Rainbow Cabinets,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sanderson Pipe

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sanderson Pipe Corporation

1 Enterprise Blvd, Sanderson, FL 32087

Dear Sanderson Pipe Corporation,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sesco Lighting

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sesco Lighting

9250 Baymeadows Rd #350, Jacksonville, FL 32256

Dear Sesco Lighting,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sherwin-Williams

October 11, 2021

Sherwin-Williams

101 W Prospect Ave, Cleveland, OH 44115

Dear Sherwin-Williams,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Spec Mix

October 11, 2021

Spec Mix

1230 Eagan Industrial Rd, Eagan, MN 55121

Dear Spec Mix,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- Reporting annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- Conducting a peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- Publicly announcing goals to reduce, by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

  - Use of energy, water, and toxics,
  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide one of the following:**

- ☐ A report of annual environmental performance via the Global Reporting Initiative (GRI) or equivalent; OR
- ☐ A peer-reviewed full life-cycle assessment (LCA) or an environmental product declaration (EPD) for the product; OR
- ☐ Copies of public announcement regarding (or website link to) future environmental impact goals to reduce by at least twenty-five (25) percent (per unit product or equivalent basis) over a five (5) year period, the company's performance metrics in the following categories:

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  - Releases of key pollutants to air and water,
  - Disposal of hazardous and non-hazardous wastes.

**To help us achieve 5 points for Option 3, please provide the documentation to demonstrate three or more of the following are conducted:**

- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

  - Emission of hazardous air pollutants (per U.S. Clean Air Act or local equivalent for projects outside of the U.S.)
  - Emissions of toxic water pollutants (per U.S. Clean Water Act or local equivalent for projects outside of the U.S.)
  - Generation of hazardous and non-hazardous waste (per U.S. Resource Conservation and Recovery Act or local equivalent for projects outside of the U.S.)

- ☐ *Greenhouse gas emissions:* Emissions reports demonstrating that the three (3) lowest years for carbon emissions in the previous ten (10) years are at least twenty-five (25) percent better than the corresponding ten (10) year average (per unit of product) OR receipts for purchased carbon offsets from a legally binding trading system that provides independent third-party verification for twenty-five (25) percent of carbon emissions;
- ☐ *Reduced energy consumption:* Documentation demonstrating consumption per unit of product of twenty-five (25) percent less energy than the industry average in the manufacturing process (consult the National Institute of Standards and Technology Building for Environmental and Economic Sustainability, the National Renewable Energy Laboratory U.S. Life-Cycle Inventory Database, or the Commercial Buildings Energy Consumption Survey for industry-specific data);
- ☐ *Use of renewable energy sources:* Letter from the plant provider describing renewable energy sources to meet ten (10) percent of manufacturing electricity demands OR at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources for the facility at which the product is made;
- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

Please note: these requirements do not apply to rocks, plants, soils, or products that are salvaged, reused or refurbished.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Spring Precast

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Spring Precast

3782 US-280, Cobb, GA 31735

Dear Spring Precast,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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- ☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# SRM Concrete

Sustainable SITES Initiative™ GBCI®

October 11, 2021

SRM Concrete

116 NE 33rd Ave, Gainesville, FL 32609

Dear SRM Concrete,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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- ☐ *Emissions:* Reports demonstrating reductions of at least fifty (50) percent overall or per unit of product in at least two of the three (2 of the 3) categories below:

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Sternberg Lighting

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Sternberg Lighting

555 Lawrence Ave, Roselle, IL 60172

Dear Sternberg Lighting,

Your organization is receiving this letter as a manufacturer of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# UF

Sustainable SITES Initiative™ GBCI®

October 11, 2021

University of Florida

Gainesville, FL 32608

Dear University of Florida,

Your organization is receiving this letter as a supplier of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Watson Construction

October 11, 2021

Watson Construction

940 NW 247 Dr, Newberry, FL 32669

Dear Watson Construction,

Your organization is receiving this letter as a provider of new products for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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☐ *Reduction in potable water use:* Calculations showing potable or other natural surface or subsurface water resources comprise less than twenty-five (25) percent and non-potable sources comprise at least seventy-five (75) percent of the total water volume consumed in manufacturing the specified product line (the calculations should include a brief description of the non-potable water sources).

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

## D. C5.10 Letters

# Blooming House Nursery

October 11, 2021

Blooming House Nursery

11802 NW 39th Ave, Gainesville, FL 32606

Dear Blooming House Nursery,

Your organization is receiving this letter as a provider providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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To meet the intent of this credit and earn respective points in the SITES Rating System, we are asking your organization to perform, track, and disclose sustainable practices in plant production. These efforts may include:

1. *Reduction of potable water use:* Use non-potable water (e.g., captured rainwater, recycled graywater, reclaimed/treated wastewater, water treated and conveyed by a public agency specifically for non-potable uses) for fifty (50) percent of the total annual irrigation volume OR reduce total irrigation volume by fifty (50) percent;
2. *Reduction of runoff from irrigation:* Capture and recycle all irrigation runoff water on site (i.e., no dry-weather discharges);
3. *Sustainable soil amendments / growing media:* Use peat-free growing media or other sustainable sources AND use cover crops and amend soils with compost, manure, or other sustainable sources;
4. *Organic matter recycling:* Compost or recycle one hundred (100) percent of vegetation trimmings on site for use in nursery operations or for sale to the public;
5. *Waste reduction:* Conduct a waste audit to identify the weight or volume of ongoing consumables, and reuse, recycle, or compost fifty (50) percent of the on-going consumables waste stream;
6. *Use of integrated pest management:* Employ a certified Integrated Pest Management (IPM) practitioner OR use an IPM-certified nursery;
7. *Prevention of invasive species*: Demonstrate that invasive species are managed and are not distributed;
8. *Reduced energy consumption*: Demonstrate that energy use during the three (3) most recent years is at least twenty-five (25) percent less than the average energy use over the previous ten (10) years;
9. *Use of renewable energy sources:* Use on-site renewable energy sources to meet ten (10) percent of electricity demands OR engage in at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources;
10. *Safe and fair working conditions:* Develop nursery employment policies that establish open communication with employees about issues such as workplace safety and job satisfaction.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

**To help us achieve 3 points for Option 2, please provide the following:**

☐ A publicly available sustainability statement disclosing efforts to achieve at least six of ten (6 of 10) sustainable practices in plant production, listed above.

**To help us achieve 5 points for Option 3, please provide the following documentation to demonstrate that at least six significant improvements in sustainable practices have been achieved:**

☐ *Reduction of potable water use:* Calculations showing the use of non-potable water for fifty (50) percent of the total annual irrigation volume OR a reduction in total irrigation volume of at least fifty (50) percent, AND a brief description of the availability and sources of non-potable water used for irrigation;

☐ *Reduction of runoff from irrigation:* Letter describing the methods by which all irrigation runoff water used in plant production is captured and recycled;

☐ *Use of sustainable soil amendments / growing media:* Letter describing growing media used in plant production and verifying these media are peat-free and, where applicable, that cover crops have been used and soils amended with compost, manure, or other sustainable sources;

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Please note: If multiple businesses are involved in plant production, this request applies to the business that grows the plant material until it's ready for sale (finishes the plant material).

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Cherry Lake Tree Farm

October 11, 2021

Cherry Lake Tree Farm

7836 Cherry Lake Rd, Groveland, FL 34736

Dear Cherry Lake Tree Farm,

Your organization is receiving this letter as a supplier providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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1. *Reduction of potable water use:* Use non-potable water (e.g., captured rainwater, recycled graywater, reclaimed/treated wastewater, water treated and conveyed by a public agency specifically for non-potable uses) for fifty (50) percent of the total annual irrigation volume OR reduce total irrigation volume by fifty (50) percent;
2. *Reduction of runoff from irrigation:* Capture and recycle all irrigation runoff water on site (i.e., no dry-weather discharges);
3. *Sustainable soil amendments / growing media:* Use peat-free growing media or other sustainable sources AND use cover crops and amend soils with compost, manure, or other sustainable sources;
4. *Organic matter recycling:* Compost or recycle one hundred (100) percent of vegetation trimmings on site for use in nursery operations or for sale to the public;
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☐ *Reduction of runoff from irrigation:* Letter describing the methods by which all irrigation runoff water used in plant production is captured and recycled;

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Elixson Wood Products

October 11, 2021

Elixson Wood Products

18976 NW 84th Ave, Starke, FL 32091

Dear Elixson Wood Products,

Your organization is receiving this letter as a provider providing sod/mulch for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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2. *Reduction of runoff from irrigation:* Capture and recycle all irrigation runoff water on site (i.e., no dry-weather discharges);
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Half Moon Growers

October 11, 2021

Half Moon Growers

21704 SW 30th Ave, Newberry, FL 32669

Dear Half Moon Growers,

Your organization is receiving this letter as a provider providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Rode Groundcovers

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Rode Groundcovers, Inc

13050 W Hwy 318, Williston, FL 32696

Dear Rode Groundcovers, Inc,

Your organization is receiving this letter as a provider providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Tater Farms

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Tater Farms

9350 Hastings Blvd, Hastings, FL 32145

Dear Tater Farms,

Your organization is receiving this letter as a supplier providing sod for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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3. *Sustainable soil amendments / growing media:* Use peat-free growing media or other sustainable sources AND use cover crops and amend soils with compost, manure, or other sustainable sources;
4. *Organic matter recycling:* Compost or recycle one hundred (100) percent of vegetation trimmings on site for use in nursery operations or for sale to the public;
5. *Waste reduction:* Conduct a waste audit to identify the weight or volume of ongoing consumables, and reuse, recycle, or compost fifty (50) percent of the on-going consumables waste stream;
6. *Use of integrated pest management:* Employ a certified Integrated Pest Management (IPM) practitioner OR use an IPM-certified nursery;
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9. *Use of renewable energy sources:* Use on-site renewable energy sources to meet ten (10) percent of electricity demands OR engage in at least a four (4) year contract for the purchase of twenty (20) percent of electricity from renewable energy sources;
10. *Safe and fair working conditions:* Develop nursery employment policies that establish open communication with employees about issues such as workplace safety and job satisfaction.

To demonstrate to GBCI that the requirements are met for this credit, please email the following documentation to Dustin Stephany from UF PD&C at d.stephany@ufl.edu by 1/1/2022 along with a copy of this letter, indicating which documents are provided by checking the appropriate box.

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☐ *Reduction of runoff from irrigation:* Letter describing the methods by which all irrigation runoff water used in plant production is captured and recycled;

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# TNT Nursery

Sustainable SITES Initiative™ GBCI®

October 11, 2021

TNT Nursery

11802 NW 39th Ave, Gainesville, FL 32606

Dear TNT Nursery,

Your organization is receiving this letter as a provider providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

*SITES Credit 5.10: Support sustainability in plant production* aims to support sustainable practices in plant production by purchasing plants, sod, and seed from organizations whose practices increase energy efficiency, reduce resource consumption and waste, and minimize negative effects on human health and the environment.

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1. *Reduction of potable water use:* Use non-potable water (e.g., captured rainwater, recycled graywater, reclaimed/treated wastewater, water treated and conveyed by a public agency specifically for non-potable uses) for fifty (50) percent of the total annual irrigation volume OR reduce total irrigation volume by fifty (50) percent;
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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# UF

Sustainable SITES Initiative™ GBCI®

October 11, 2021

University of Florida

Gainesville, FL 32608

Dear University of Florida,

Your organization is receiving this letter as a supplier providing plants for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Thank you for your participation in SITES and for your part in making sustainable places.

Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# Woerner Farms

Sustainable SITES Initiative™ GBCI®

October 11, 2021

Woerner Farms

13011 NE 80th Ave, Bronson, FL 32621

Dear Woerner Farms,

Your organization is receiving this letter as a provider providing sod for UF-656 Landscape Master Plan Project, which is seeking certification via the Sustainable Sites Initiative® (SITES®). SITES offers a comprehensive rating system designed to distinguish sustainable sites, measure their performance, and elevate the value of landscapes. It is administered by the Green Business Certification Inc. (GBCI) and more information about the program (including a free download of the SITES v2 Rating System and Scorecard) is available at www.sustainablesites.org.

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Sincerely,

**Nolan Davis**

Charles Perry Partners, Inc.
300 SW 13th St, Gainesville, FL 32611

Nolan.davis@cppi.com

352-756-7377

# SECTION 6:
# SITE DESIGN | HUMAN HEALTH + WELL BEING

| Credit | Title | Points |
|---|---|---|
| HHWB 6.1 | Protect and maintain cultural and historic places | 3 points |
| HHWB 6.2 | Provide optimum site accessibility, safety, and wayfinding | 2 points |
| HHWB 6.3 | Promote equitable site use | 2 points |
| HHWB 6.4 | Support mental restoration | 2 points |
| HHWB 6.5 | Support physical activity | 2 points |
| HHWB 6.6 | Support social connection | 2 points |
| HHWB 6.8 | Reduce light pollution | 4 points |
| HHWB 6.9 | Encourage fuel efficient and multi-modal transportation | 4 points |
| HHWB 6.10 | Minimize exposure to environmental tobacco smoke | 2 points |
| HHWB 6.11 | Support local economy | 3 points |

# Credit 6.1 | Protect and maintain cultural and historic places

## Narrative

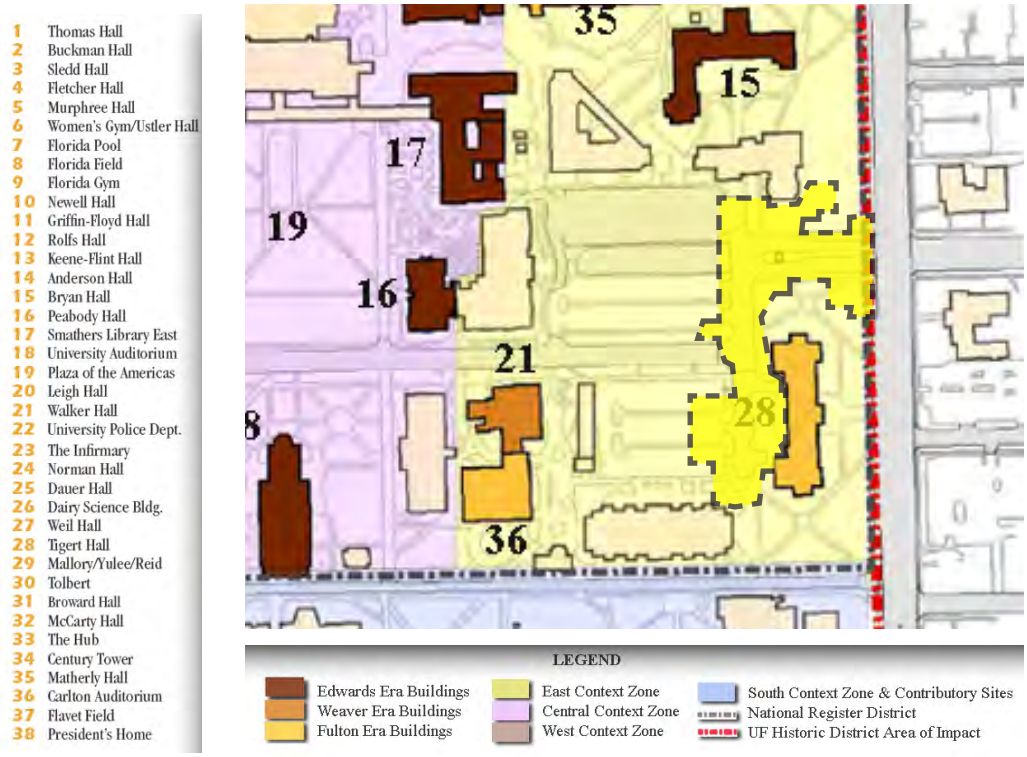
**Goal: 3 points**

The UF campus is remarkable among large public institutions in the United States for its ongoing expression of social and architectural change within a context of architectural compatibility. This cohesive character is the beneficiary of 3 historic eras: implementation of the original campus plan from 1905-1925, coalescence and enhancement from 1925-1944, and compatible transition to modern ideals from 1944-1956.

The University of Florida has preserved a noteworthy archive of campus plan updates since 1905, original architectural drawings and specifications, and archival photographs. At the forefront in preservation education, UF has an established program in Historic Preservation dating from the late 1960s.

Source: https://historic.facilities.ufl.edu/

## Site Photographs and Maps



## Documentation

NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

**United States Department of the Interior**
National Park Service

# National Register of Historic Places Registration Form

MAR 24 1989
NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

**1. Name of Property**

historic name University of Florida Campus Historic District

other names/site number N/A 8AL 2552

**2. Location**

street & number See Continuation Sheet N/A [ ] not for publication

city, town Gainesville N/A [ ] vicinity

state Florida code FL county Alachua code 001 zip code 32611

**3. Classification**

| Ownership of Property | Category of Property | Number of Resources within Property | |
|---|---|---|---|
| | | Contributing | Noncontributing |
| [ ] private | [ ] building(s) | 8 | 11 buildings |
| [ ] public-local | [X] district | | sites |
| [X] public-State | [ ] site | | 1 structures |
| [ ] public-Federal | [ ] structure | | objects |
| | [ ] object | 8 | 12 Total |

Name of related multiple property listing: N/A

Number of contributing resources previously listed in the National Register 11

**4. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this [x] nomination [ ] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [x] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of certifying official — Date 3/13/89

State Historic Preservation Officer
State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

**5. National Park Service Certification**

I, hereby, certify that this property is:

[X] entered in the National Register.
[ ] See continuation sheet.
[ ] determined eligible for the National Register. [ ] See continuation sheet.
[ ] determined not eligible for the National Register.
[ ] removed from the National Register.
[ ] other, (explain:)

Entered in the National Register 4/20/89

Signature of the Keeper — Date of Action

Source: https://npgallery.nps.gov/NRHP/AssetDetail?assetID=25bf96c5-3404-48ca-8d85-5ae8fa4055fc

UF | UNIVERSITY of FLORIDA

**Business Affairs**
Planning, Design & Construction

232 Stadium
PO Box 115050
Gainesville, FL 32611-5050
352-273-4000
352-273-4034 Fax

July 13, 2021

Subject: UF-656/Northeast Gateway SITES, Equitable Site Use

To Whom It May Concern:

The Planning, Design and Construction Division of the University of Florida is responsible for campus planning including preservation of the university's historic and cultural assets. As Director of Planning, my role includes project review and coordination with the Florida Division of Historical Resources (FDHR).

The Northeast Gateway project is located within the University of Florida Campus Historic District as listed in the National Register of Historic Places on April 20, 1989 and referenced in the Florida Master Site File as 8AL-2552. The project is immediately adjacent to Tigert Hall (1951) that was added as a contributing resource to the District in 2008.

The University of Florida works to preserve these historic and cultural assets through its internal processes and Programmatic Memorandum of Agreement with the FDHR. The Newell Gateway project was designed to be compatible with its historic context.

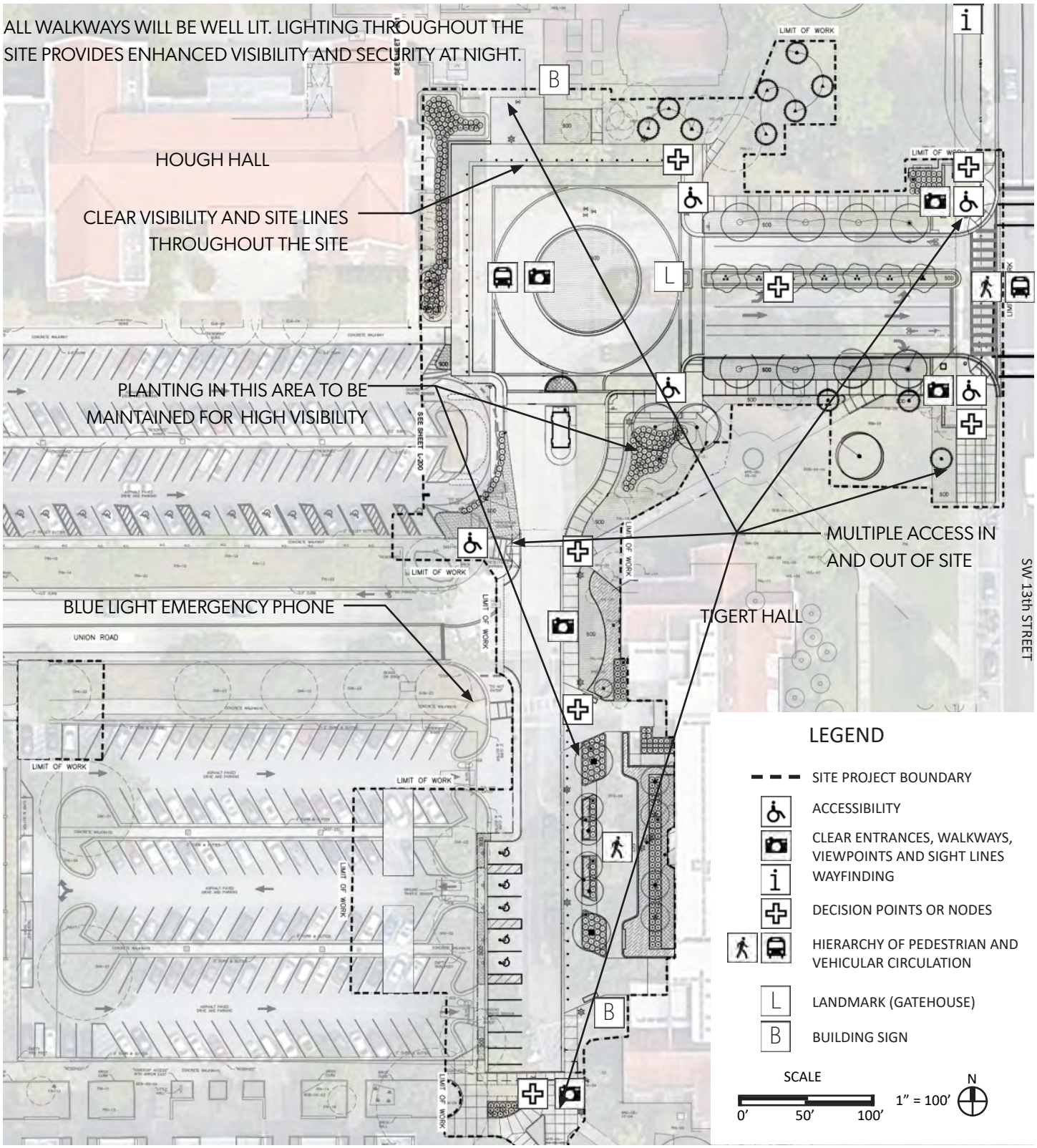
Sincerely,

Linda B. Dixon, AICP
Director of Planning

# Credit 6.2 | Provide optimum site accessibility, safety, and wayfinding

## Site plan

**Goal: 2 points**



## Photos

CONSTRUCTION DETOUR
CAMPUS BEAUTIFICATION UNDERWAY!
CAMPUS LANDSCAPE MASTERPLAN
UF-656 NORTHEAST GATEWAY
YOU ARE HERE
PLAZA OF THE AMERICAS
CRISER HALL
TIGERT HALL
UF FOOTBALL STADIUM
FOR THE MOST CURRENT INFORMATION
VISIT CAMPUSMAP.UFL.EDU ONLINE

# Credit 6.3 | Promote equitable site use

## Narrative

**Goal: 2 points**

The Northeast Gateway serves as an entry point into the University of Florida's campus. Due to its central location in the larger community, the University of Florida main campus is also an integral part of the City of Gainesville and Alachua County. As such, the community gateways, campus entry features, perimeter appearance and overall urban form of the campus is of vital community importance. The gateways are conceived as entry features that provide access, orientation and amenities through design features such as signage and intersection treatments. Major gateways shall be designed to enhance access for motor vehicles, pedestrians and bicyclists and include significant entry features and signage. The University shall work with the City of Gainesville, Alachua County and the Florida Department of Transportation to improve access and aesthetics on Gateway Roads through university participation on the Metropolitan Transportation Planning Organization and its committees, and any special interest groups or local government committees as may be created to address such issues. The University shall finalize and implement the Wayfinding Plan for main campus and its environs in coordination with the City of Gainesville and Florida Department of Transportation. The Northeast Gateway site is open for free public access and provides amenities for a variety of activities including seating, shade, walkways/bicycle paths, bicycle parking, and open lawn spaces. There will also be free, accessible WiFi through the campus programs. The free WiFi will allow users to access the internet on site through their devices.

Majority of the site users will visit the site during daylight hours. The site has multiple trees that will stay during construction, allowing for the natural canopy to remain intact. This allows for a more optimal visit by the site users as it addresses the microclimate. Site users will have multiple options to lounge in the shade as there will be picnic tables, benches and seats under the trees. If visitors would like to be active, there are open lawns and pathways for physical activity. Open space connections shall be maintained and enhanced to provide bicycle and pedestrian access. The Northeast Gateway project will provide pedestrian and bicycle facilities that safely and efficiently accommodate walking and bicycling in a comfortable and aesthetically pleasing environment. The site design will reduce the dependence on single-occupant vehicles as a primary mode of travel to campus and to encourage transportation modal choice. The University will work in accordance with RTS to encourage use of bus stops within 0.25-mile walking distance from the site entrance.

Feedback and needs of the local community were taken into account while designing the Northeast Gateway. Suggestions were taken from the Landscape Master Plan meetings, see Appendices (C2.4 Appendix A). Such feedback that was incorporated into the design were improved stormwater management strategies, enhanced campus connections, elements that create unique photo opportunities, and a "VIP entrance" with a bus stop and a drop-off loop. These suggestions included: seating, shade walkways/ bicycle parking and more open lawn spaces.

The Northeast Gateway is easily accessible and accommodates for all types of members of the community. The University will ensure equal access to university facilities, services and resources for individuals regardless of physical ability through application of universal design concepts. This allows for the site to be used beyond the primary user groups. The Northeast Gateways serves as an inviting entrance into UF's historic district; announcing the campus, welcoming the casual visitor, and orienting guests to the parking facilities beyond.

## Letter

UF | UNIVERSITY of FLORIDA

**Business Affairs**
Planning, Design & Construction

232 Stadium
PO Box 115050
Gainesville, FL 32611-5050
352-273-4000
352-273-4034 Fax

July 13, 2021

Subject: UF-656/Northeast Gateway SITES, Equitable Site Use

To Whom It May Concern:

The Planning, Design and Construction Division of the University of Florida is responsible for campus planning including preservation of the university's historic and cultural assets. As Director of Planning, my role includes project review and coordination with the Florida Division of Historical Resources (FDHR).

The Northeast Gateway project is located within the University of Florida Campus Historic District as listed in the National Register of Historic Places on April 20, 1989 and referenced in the Florida Master Site File as 8AL-2552. The project is immediately adjacent to Tigert Hall (1951) that was added as a contributing resource to the District in 2008.

The University of Florida works to preserve these historic and cultural assets through its internal processes and Programmatic Memorandum of Agreement with the FDHR. The Newell Gateway project was designed to be compatible with its historic context.

Sincerely,

Linda B. Dixon, AICP
Director of Planning

# Credit 6.4 | Support mental restoration

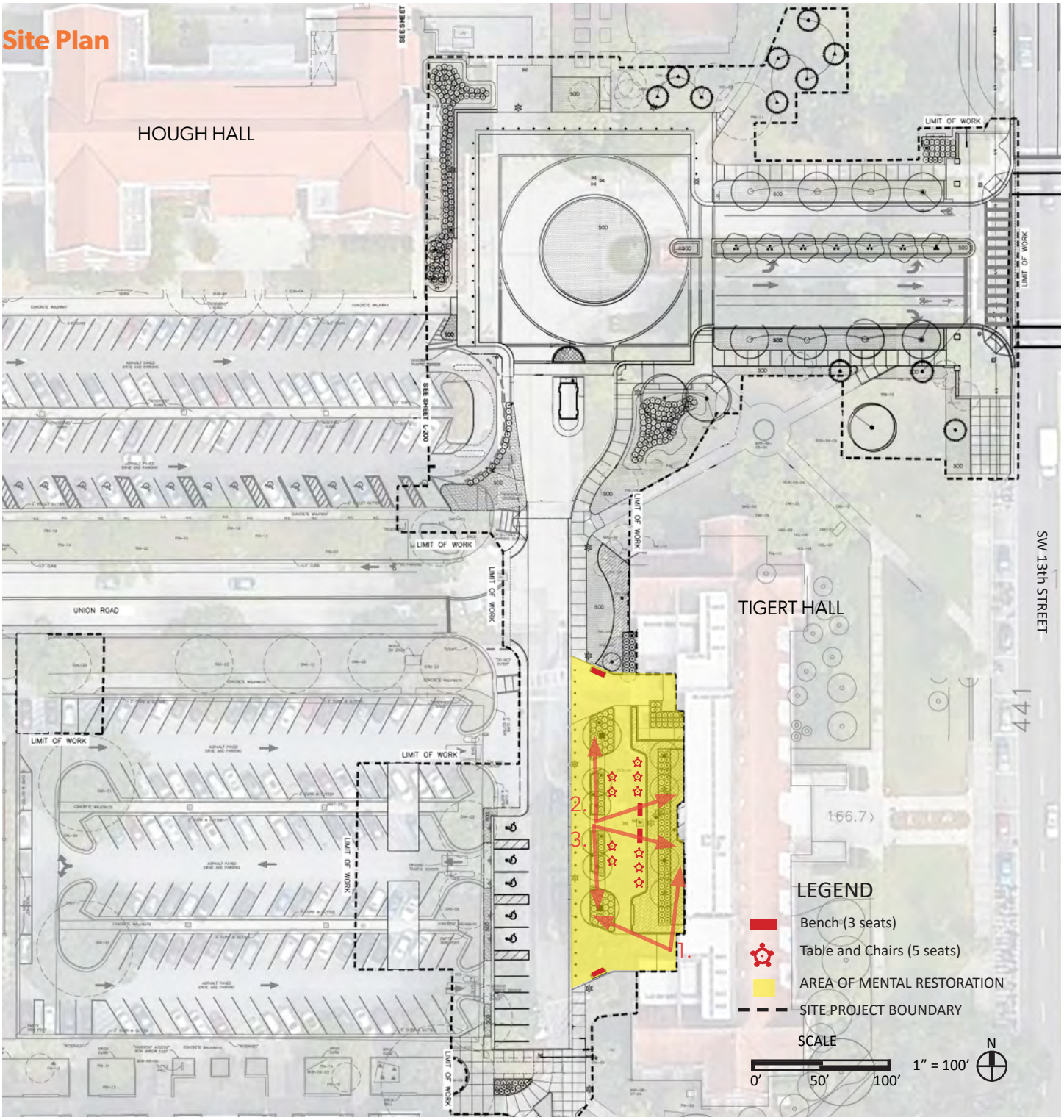
## Narrative

**Goal: 2 points**

The site provides a visual and physical access to vegetation along the pathways throughout the site. Overhead canopy trees provide shade along pedestrian pathways where users will feel entirely enclosed within vegetation. A Vehicular Gateway that runs parallel with the SW 13th St., on the eastern edge of the site, offers a visual and noise buffer from the busy road.

Total Number of Site Users: 120

## Site Plan



## Photos

1.

2.

3.

# Credit 6.5 | Support physical activity

## Site Plan

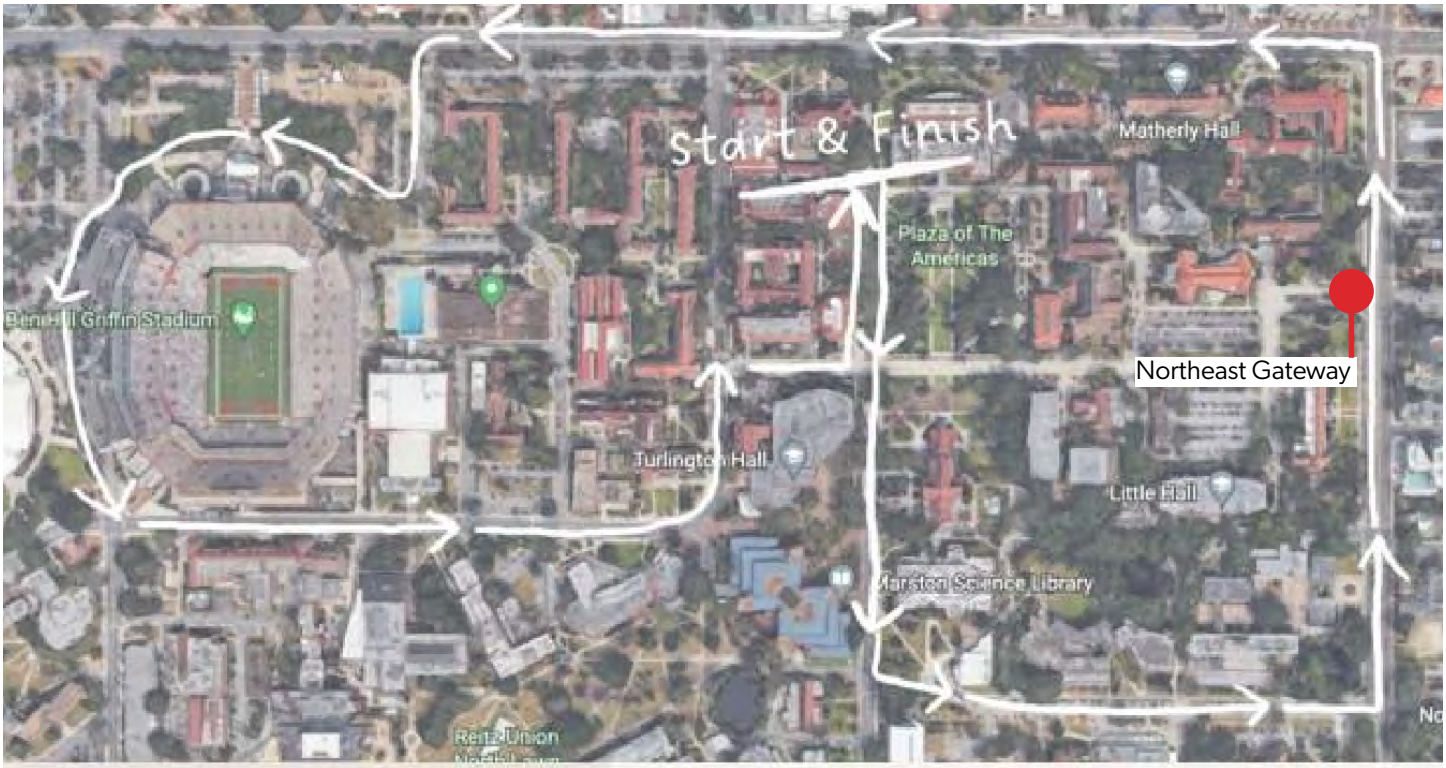
**Goal: 2 points**

There are many activities in which site users occupy this gateway project. The two most distinct community-wide scheduled events include the Johnny Townsend Gator Gallop Fundraising Event and the homecoming parade. Both of these events are not coordinated through the Univeristy of Florida and are not considered campus events. These events occur once a year.

The four largest district user groups are as follows: (1) The general student body, (2) the general public, (3) University of Florida staff, (4) Univeristy of Florida Faculty. Each of these user groups are significantly benefit from the features of these specialty events and bicycle network. As mention, the parade is organized by the citizens, for citizens and also the University of Florida as these events occur during Homecoming Week. Both the parade and fund raising events will include a large group of site users for a few hours during the day. As site users frequent the gateway, they will observe and experience the University's development of a more pedestrian friendly environment.

Total Number of Site Users: 120

## Gator Gallop Route



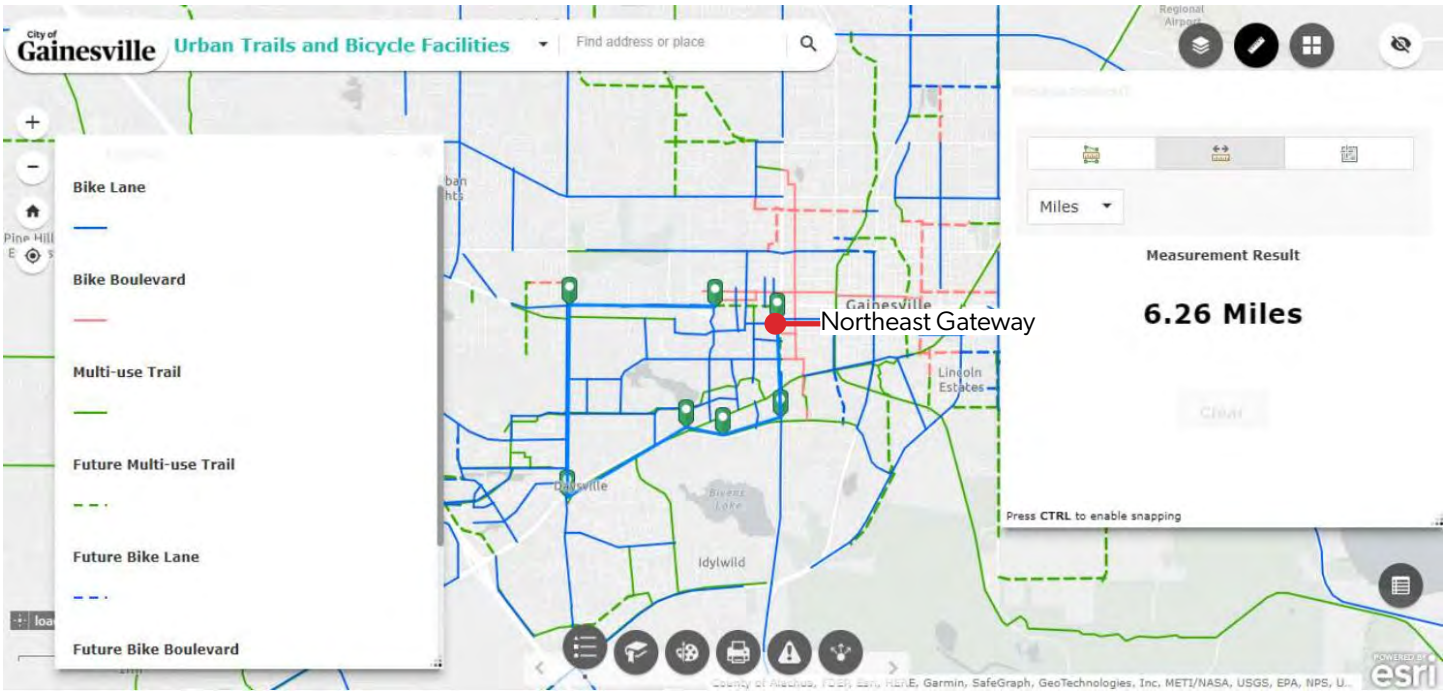

JOHNNY TOWNSEND FOUNDATION

The Gator Gallop is an exciting fun run where students and the Gainesville community race through campus, on average sees around 400-500 attendees.

## Homcoming and Gator Growl Route

The Gator Growl is a student-run pep rally at the University of Florida that was founded in 1924. It marks the culmination of Homecoming Week at the university.

## Bicycle Routes




This gateway directly connects with the University of Florida and City of Gainesville bicycle network. Below shows the Gateway location and measures more than 6 miles of bicycle network both on and off campus. The key indicates various types of bicycle lanes within the network. Both the University and City are working together to improve current League of American Bikers silver level ranking.

# Credit 6.6 | Support social connection

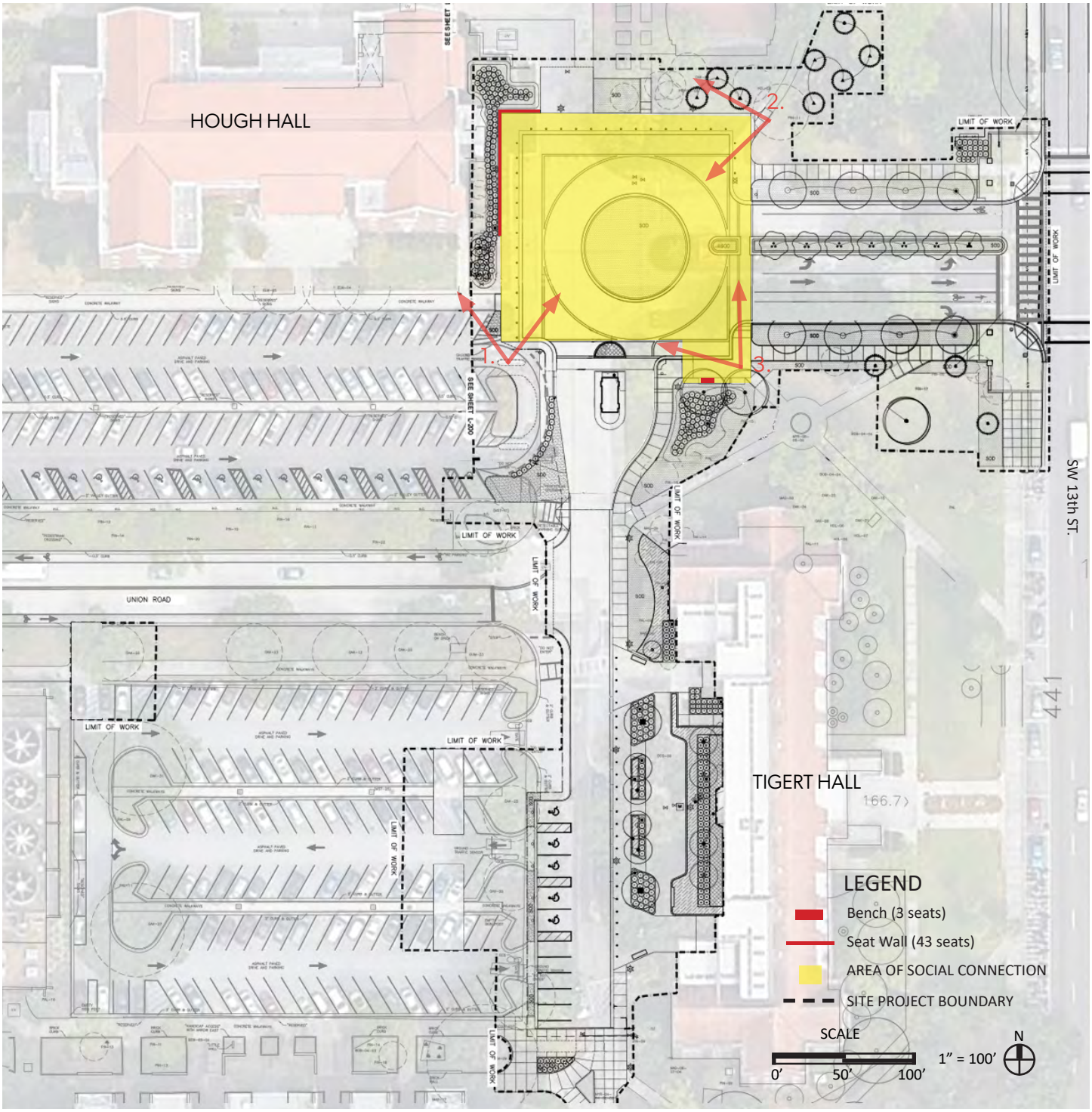
## Site plan

**Goal: 2 points**

The site encourages social connections through shared pathways and open amenities that allow users to interact and engage within the space. The long seat wall along the walkway will accommodate a large amount of users who can comfortably socialize while in-between classes or serving as a meet up point.

Total Number of Site Users: 120

Total Seating provided = 46 seats



## Photos

1.

2.

3.

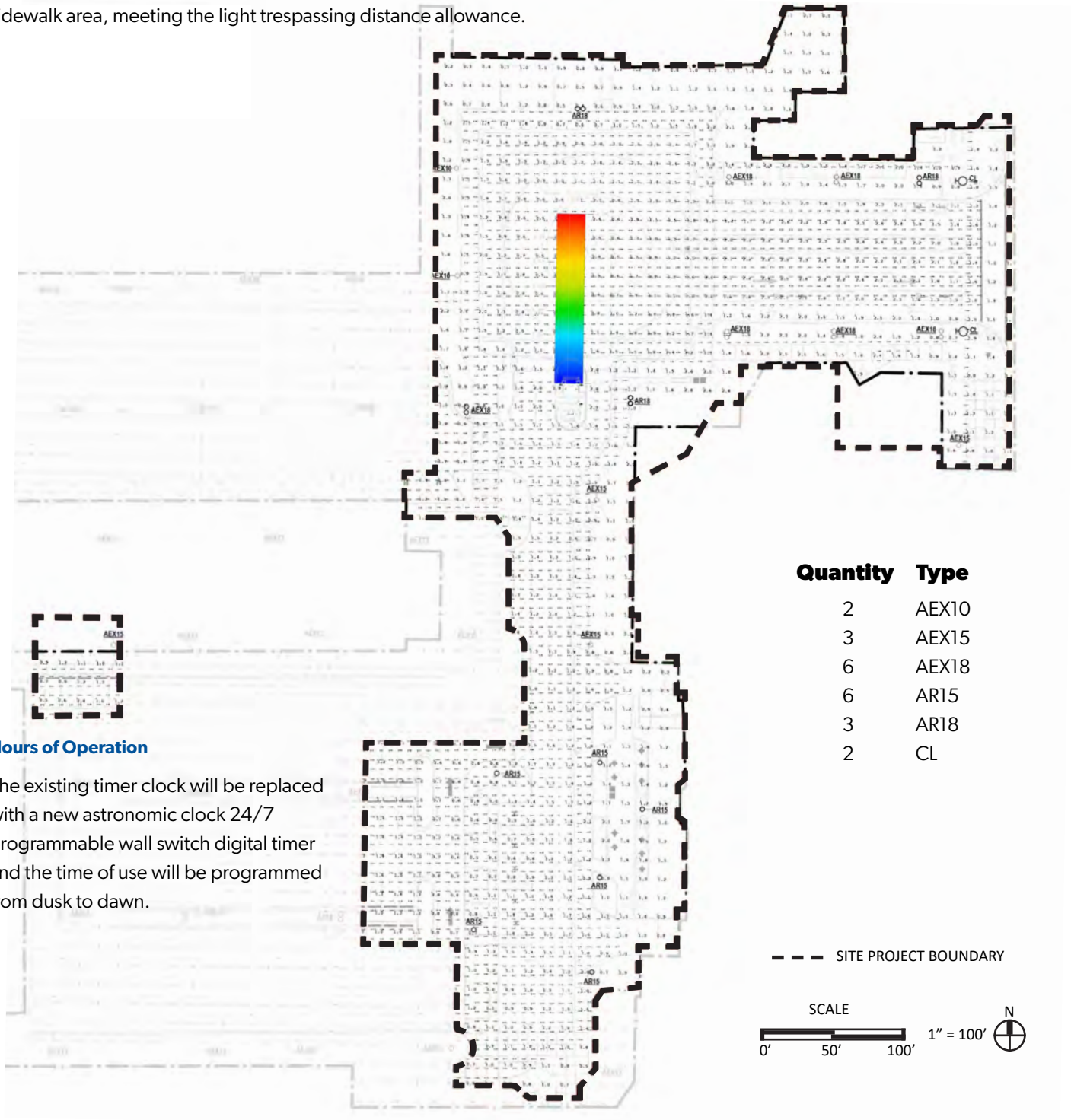
# Credit 6.8 | Reduce light pollution

## Method 2: Calculation method

**Goal: 4 points**

### Narrative

The gateway's location falls on the outside of campus main campus boundary. The campus is surrounded by the City of Gainesville. This area classifies a MLO lighting zone 3 - Moderately High Ambient Light. Therefore the max BUG rating will be 5-3-3, with the highest pole height being 18'. The majority of the SITES project boundary surrounds main campus (with the same MLO zone) and is therefore exempt from light tresspassing. The other portion abuts a public roadway, where the centerline is 37', including the sidewalk area, meeting the light trespassing distance allowance.




| Quantity | Type |
|---|---|
| 2 | AEX10 |
| 3 | AEX15 |
| 6 | AEX18 |
| 6 | AR15 |
| 3 | AR18 |
| 2 | CL |

#### Hours of Operation

The existing timer clock will be replaced with a new astronomic clock 24/7 programmable wall switch digital timer and the time of use will be programmed from dusk to dawn.

| Luminaire Name | Backlight Rating | Uplight Rating | Glare Rating |
|---|---|---|---|
| RL54-AEX10 Wide | 3 | 3 | 3 |
| RL54-AEX15 Wide | 3 | 3 | 3 |
| RL54-AEX18 Wide | 3 | 3 | 3 |
| RL54-ARX15 Wide | 3 | 3 | 3 |
| RL54-ARX18 Wide | 3 | 3 | 3 |
| Evergreen Lighting COZ2220LS | 1 | 0 | 1 |
| | | | |

LIGHT FIXTURE SCHEDULE

| TYPE | DESCRIPTION | BASIS OF DESIGN | LIGHT SOURCE | INITIAL LUMENS | COLOR TEMPERATURE | WATTAGE | VOLTAGE | MOUNTING | NOTES |
|---|---|---|---|---|---|---|---|---|---|
| 4D | 4" LED RECESSED DOWNLIGHT WITH IC HOUSING | LIGHTOLIER LYTECASTER L4R A E 1 VA L4R 06 80 40 VA L4R D D | LED | 650 lm | 4000 K | 7 VA | 120 V | NEW CONSTRUCTION, IC, PLASTER CEILING | |
| 6D | 6" LED RECESSED DOWNLIGHT | LIGHTOLIER EASYLITE 6 R N Z6RDL 15 W O CD WLV U | LED | 1500 lm | 4000 K | 15 VA | 120 V | RECESSED ACCOUSTIC TILE | |
| 6DE | 6" LED RECESSED DOWNLIGHT WITH EMERGENCY | LIGHTOLIER EASYLITE 6 R N EM Z6RDL 15 W O CD WLV U | LED | 1500 lm | 4000 K | 15 VA | 120 V | RECESSED ACCOUSTIC TILE | INTEGRAL EMERGENCY PACK |
| CL | LED WALL SCONCE - LANTERN TYPE | EVERGREEN LIGHTING FLORENCE ARM MOUNT FLOZ109LS | LED | 900 lm | 4000 K | 9 VA | 277 | WALL BOX, SEE ARCH ELEVATIONS | |
| WP | LED PEDESTRIAN WALL LIGHT | ARCHITECTURAL AREA LTG CYPHER CY2-25-4K8-1-UNV-DBS-F-FPP | LED | | | 25 VA | 120 | WALL MOUNT. REPLACE EXISTING. | FIELD VERIFY EX VOLTAGE |
| WS2 | LED WALL SCONCE - LANTERN TYPE | EVERGREEN LIGHTING FLORENCE ARM MOUNT FLOZ109LS | LED | 900 lm | 4000 K | 9 VA | 120 | WALL BOX, 80" AFG TO BOTTOM | |

LIGHTING POLES AND FIXTURES - NORTHEAST GATEWAY

| TYPE | DESCRIPTION | BASIS OF DESIGN | LIGHT SOURCE | INITIAL LUMENS | COLOR TEMPERATURE | WATTAGE | VOLTAGE | MOUNTING |
|---|---|---|---|---|---|---|---|---|
| AEX10 | EXISTING 10' LIGHTING POLE, PROVIDE NEW HADCO TALL METAL TOP | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 5762 lm | 4000 K | 69 VA | 277 | EXISTING 10' POLE AND BASE |
| AEX15 | EXISTING 15' LIGHTING POLE, PROVIDE NEW HADCO TALL METAL TOP | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 5762 lm | 4000 K | 69 VA | 120 | EXISTING 15' POLE AND BASE |
| AEX18 | EXISTING 15' LIGHT POLE WITH DOUBLE ARM LED ACORN | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 17282 lm | 4000 K | 138 VA | 480 V | EXISTING 15' POLE WITH CROWN ACCESSORY |
| AR10 | RELOCATE 10' LIGHTING POLE AND PROVIDE NEW HADCO TALL METAL TOP | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 5762 lm | 4000 K | 69 VA | 277 | RELOCATE 10' POLE AND BASE |
| AR15 | RELOCATE 15' LIGHTING POLE AND PROVIDE NEW HADCO TALL METAL TOP | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 5762 lm | 4000 K | 69 VA | 120 | EXISTING 15' POLE AND BASE |
| AR18 | RELOCATE 15' LIGHTING POLE AND PROVIDE NEW HADCO TALL METAL TOP | EX HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N AND POLE | LED | 17282 lm | 4000 K | 138 VA | 480 V | EXISTING 15' POLE WITH CROWN ACCESSORY |

Calculation Summary

| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
|---|---|---|---|---|---|---|---|
| NORTHEAST GATEWAY | Illuminance | Fc | 1.34 | 4.2 | 0.2 | 6.70 | 21.00 |

LEED COMPLIANCE, RATING SYSTEM V4, SS8 LIGHT POLLUTION REDUCTION:

UPLIGHT, OPTION 1: BUG RATING METHOD: ALL SITE LIGHTING FIXTURES HAVE B-U-G RATING OF B3-U4-G3 FOR ZONE LZ3 (SECURITY LIGHTING) AND MORE THAN 1 FIXTURE HEIGHTS DISTANCE FROM LIGHTING BOUNDARY.

SUBMITTED FOR COMPLIANCE WITH USGBC SITES V2 RATING SYSTEM, SECTION 6.8, BUG RATING:

**RL34/RL54** Refractive Globe with Lumilock LED engine GX4

LED Post Top Luminaire

**Wide Body Type 5 – Metal Roof** **Wide**

| Catalog Logic | LED QTY | System Current (mA) | Color Temperature | Avg System Wattage[1] (W) | Lumen Output | Efficacy (Lm/W) | BUG rating |
|---|---|---|---|---|---|---|---|
| RL54-D-x-W-2 | 64 | 200 | 3000 | 39 | 3871 | 99 | B3-U3-G2 |
| RL54-D-x-W-3 | 64 | 350 | 3000 | 69 | 6534 | 95 | B3-U3-G3 |

Photometric Toolbox™

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : COZ2220LS-TBK-A-41K.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] L05136405
[TESTLAB] LIGHT SCIENCES, INC.
[ISSUEDATE] 7/14/2013
[MANUFAC] EVERGREEN LIGHTING
[LUMCAT] COZ2220LS-TBK-A-41K
[LUMINAIRE] COZUMEL LED DARKSKY ARM MOUNT
[MORE] ALUMINUM REFLECTOR IN ROOF
[MORE] LEDS WITH OPTICS-DARK SKY
[BALLASTCAT] HATCH LC22-0700N-UNV-D
[BALLAST] INPUT: 120/277VAC, 50/60Hz. OUTPUT: 700MA/27V
[LAMPPOSITION] 0,0
[LAMPCAT] 4100K
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[_INPUT] 120VAC, 20W
[_TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

| | |
|---|---|
| IES Classification | Type III |
| Longitudinal Classification | Medium |
| Lumens Per Lamp | 1736 (1 lamp) |
| Total Lamp Lumens | 1736 |
| Luminaire Lumens | 1539 |
| Downward Total Efficiency | 89 % |
| Total Luminaire Efficiency | 89 % |
| Luminaire Efficacy Rating (LER) | 77 |
| Total Luminaire Watts | 20 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 843.14 |
| Maximum Candela Angle | 75H 67.5V |
| Maximum Candela (<90 Degrees Vertical) | 843.14 |
| Maximum Candela Angle (<90 Degrees Vertical) | 75H 67.5V |
| Maximum Candela At 90 Degrees Vertical | 0 (0.0% Lamp Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 115.601 (6.7% Lamp Lumens) |
| Cutoff Classification (deprecated) | Full Cutoff |

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : COZ2220LS-TBK-A-41K.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

| | Lumens | % Lamp | % Luminaire |
|---|---|---|---|
| FL - Front-Low (0-30) | 115.0 | 6.6 | 7.5 |
| FM - Front-Medium (30-60) | 552.9 | 31.8 | 35.9 |
| FH - Front-High (60-80) | 344.9 | 19.9 | 22.4 |
| FVH - Front-Very High (80-90) | 24.7 | 1.4 | 1.6 |
| BL - Back-Low (0-30) | 83.4 | 4.8 | 5.4 |
| BM - Back-Medium (30-60) | 263.3 | 15.2 | 17.1 |
| BH - Back-High (60-80) | 138.0 | 8.0 | 9.0 |
| BVH - Back-Very High (80-90) | 17.1 | 1.0 | 1.1 |
| UL - Uplight-Low (90-100) | 0.0 | 0.0 | 0.0 |
| UH - Uplight-High (100-180) | 0.0 | 0.0 | 0.0 |
| Total | 1539.3 | 88.7 | 100.0 |
| BUG Rating | B1-U0-G1 | | |

# Credit 6.9 | Encourage fuel efficient and multi-modal transportation

**Goal: 4 points**

## Narrative

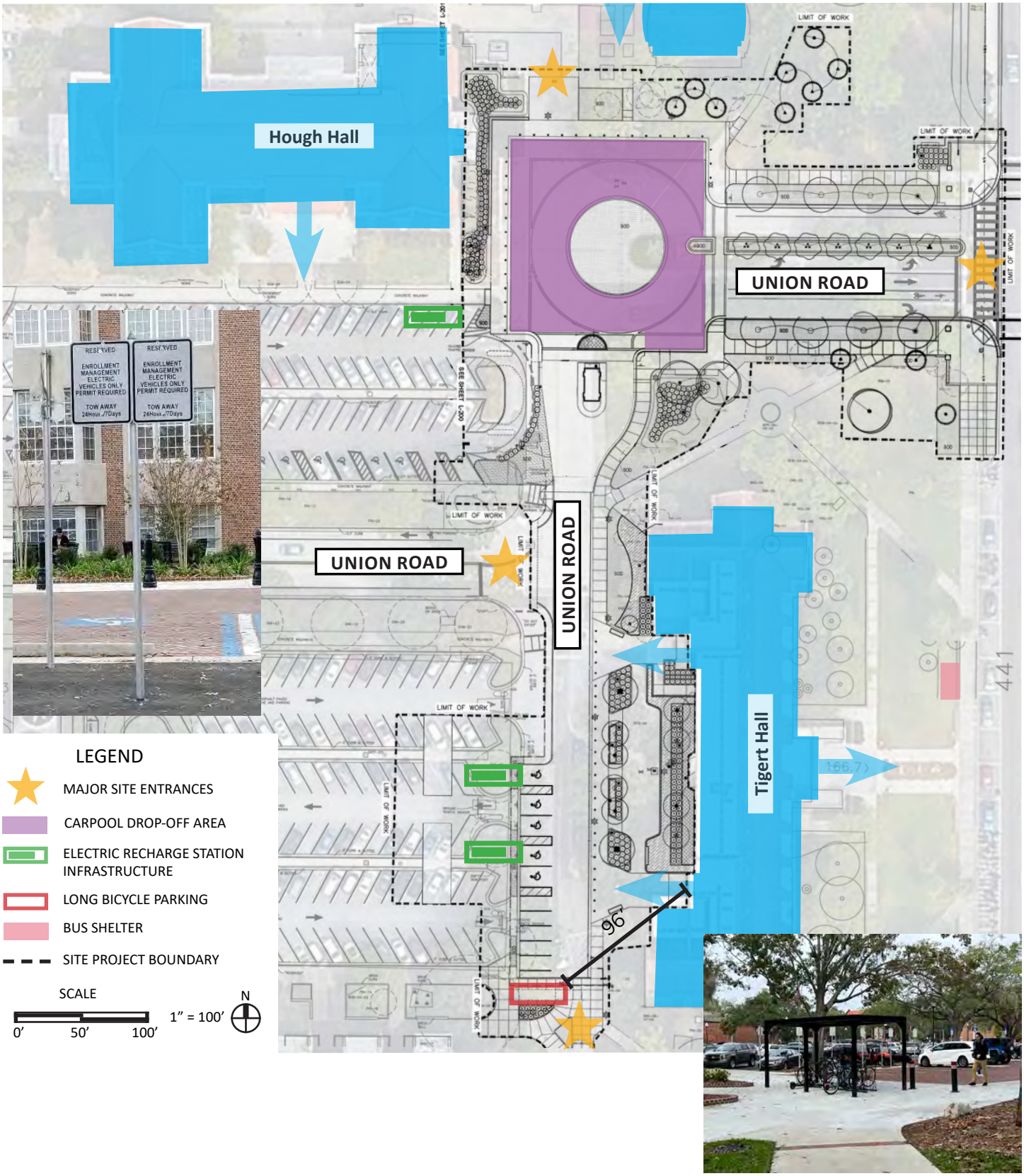
The Transportation and Parking Strategic Plan (TPSP) provides context and direction for the development of the University of Florida's transportation network and supporting infrastructure over the next 10 years and beyond. The TPSP is strongly informed by previous and on-going plans, including the Strategic Development Plan (SDP), Campus Master Plan (CMP) and Landscape Master Plan (LMP), to provide an integrated future campus vision. The intent of the Transportation and Parking Strategic Plan (TPSP) is to identify strategies that support UF's growth towards pre-eminence, foster collaboration, and identify innovative solutions to the transportation and arrival challenges faced by students, staff, faculty, and visitors. The TPSP will promote mobility, by enabling safe and convenient access to and from campus and provide access within the campus area to all modes of travel. The TPSP will promote strategies to reduce the number of single-occupant drivers to and from campus as a means of achieving a more efficient and affordable transportation system. The TPSP will identify strategies to enhance the visitor, employee, and student experience for approaches to campus and on-campus. The TPSP will promote the use of technology and creativity:

- To aid in reducing peak hour traffic to and from campus;
- To efficiently manage parking demand on campus;
- To help in reaching the University's carbon neutrality target; and
- To enhance safety at major intersections around campus for all modes.

The University currently offers a wide range of travel support programs including the Carpool drop-off program, ride matching, emergency ride home, and occasional parking privileges for program participants. All of these programs promote travel choice and allow flexibility for commuters to select the commute mode that best serves their needs. Students, faculty and staff can receive a Carpool parking decal by filling out the application.
Additional information for infrastructure, facilities, or incentives include the University of Florida Gator Gears and Department Bicycle Share programs. Additional information on the various shuttles programs can be found at (UF Micromobility Pilot, Campus Connector (carpooling), UF Carpool Program, Ridemigos, and SNAP (carpooling), RTS bus transportation, UF Safe Rides by Lyft, and Zipcar Sharing program.

Total Number of Site Users: 120
Total Number of Parking Spaces: 14, 4 of which are EV
Total Number of Bike Parking: 14

## Site Plan


Hough Hall
UNION ROAD
UNION ROAD
UNION ROAD
Tigert Hall
LIMIT OF WORK
SEE SHEET L-300
96'
441
LEGEND
MAJOR SITE ENTRANCES
CARPOOL DROP-OFF AREA
ELECTRIC RECHARGE STATION INFRASTRUCTURE
LONG BICYCLE PARKING
BUS SHELTER
SITE PROJECT BOUNDARY
SCALE
0'
50'
100'
1" = 100'
N

# Credit 6.10 | Minimize exposure to environmental tobacco smoke

## Option 1: Designate limited smoking zones

Goal: 2 points

### The smoke-free policy and implementation plan

**Policy Statement**

Smoking and tobacco use are prohibited in all facilities and areas of the University of Florida campus with no exception. This includes, but is not limited to, all indoor and outdoor areas and properties. Indoor areas and properties include, but are not limited to, all common work areas, elevators, hallways, university-owned or -leased vehicles, garages, restrooms, cafeterias or dining areas, employee lounges, conference and meeting rooms, and all other enclosed areas in the workplace. Outdoor areas include, but are not limited to, parking lots, grounds, rooftops, plazas, courtyards, entrance and exit ways, and any other areas of the university campus. This policy applies to all faculty, staff, consultants, contractors, and visitors.

For purposes of this policy, 'university campus" or "campus" includes those lands located in Alachua County, Florida, occupied or controlled by the University of Florida; those lands located in the city of Jacksonville, Florida occupied or controlled by the University of Florida; any other lands in the state of Florida on which a health care facility occupied or controlled by the University of Florida is located; and lands occupied by any fraternity or sorority officially recognized by the University of Florida. The fifty feet (50') areas surrounding such facilities are also designated as no smoking areas. The President or designee may allow smoking in specific designated areas of campus for clinical treatment purposes, including smoking cessation programs or research-related purposes.

Any facilities occupied or controlled by the University of Florida that are not on the university campus as defined above continue to be designated no smoking facilities.
For purposes of this policy, "smoking" means inhaling, exhaling, burning carrying or possessing any lighted tobacco product, including cigarettes, cigars, pipe tobacco, and any other lit tobacco products.

For purposes of this policy, "tobacco use" means the personal use of any tobacco product, whether intended to be lit or not, which shall include smoking, as defined above, as well as the use of an electronic cigarette or any other device intended to simulate smoking and the use of smokeless tobacco, including snuff; chewing tobacco; smokeless pouches; any other form of loose-leaf, smokeless tobacco; and the use of unlit cigarettes, cigars, and pipe tobacco.

**Communication**

Persons will be informed of this policy through:

- Signs posted in appropriate areas throughout the university
- Human Resource Services web site and *InfoGator* newsletter
- E-mail communication to all employees and students
- Employee and student handbooks

**Enforcement**

The responsibility for the enforcement and communication of this policy rests with all members of the university community.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

UF- 2.022 No Smoking and Tobacco Use.

(1) For the purpose of this regulation, the following definitions shall apply:

(a) "University campus" or "campus" shall include those lands located in Alachua County, Florida, occupied or controlled by the University of Florida; those lands located in the City of Jacksonville, Florida, occupied or controlled by the University of Florida; and any other lands in the State of Florida on which a health care facility occupied or controlled by the University of Florida is located.

(b) "Smoking" means inhaling, exhaling, burning, carrying or possessing any lighted tobacco product, including cigarettes, cigars, pipe tobacco, and any other lighted tobacco products.

(c) "Tobacco use" means the personal use of any tobacco product, whether intended to be lighted or not, which shall include smoking, as defined in paragraph (b) above; the use of an electronic cigarette or any other device intended to simulate smoking; and the use of smokeless tobacco, including snuff, chewing tobacco, smokeless pouches, any other form of loose-leaf, smokeless tobacco and the use of unlit cigarettes, cigars, and pipe tobacco.

(2) Tobacco use is prohibited in all areas of the University campus.

(3) All facilities occupied or controlled by the University that are not on the University campus continue to be designated no smoking facilities. The fifty feet (50') areas surrounding such facilities are also designated as no smoking areas. The President or designee may allow smoking in specific designated areas of campus for clinical treatment purposes, including smoking cessation programs or research-related purposes.

## No Smoking Sign

# Credit 6.11 | Support local economy

## Calculations

**Goal: 3 points**

Total number of construction workers = 83
Percentage of construction workers receiving a living wage = 92.8%
Overall construction budget = $2,562,428.57

## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

| PROJECT NAME | PROJECT ID# |
|---|---|
| UF-656 Landscape Master Plan - Northeast | 13740 |

**INSTRUCTIONS:**

1. Complete the following form for Contractor and all Subcontractors that will be performing work on the project.
2. If the municipality where the project is located has a first source policy, the forms and associated documents showing approval by the municipality may be submitted in lieu of the SITES documentation. Please include copy of first source addendum that was included in contracts with contractors and subcontractors.

| NAME of CONTRACTOR or SUBCONTRACTOR | CONTRACTOR or AUTHORIZED REPRESENTATIVE | VALUE of CONTRACT | TOTAL HOURS OF CONTRACT | TOTAL HOURS BY LOCAL INDIVIDUALS | TOTAL HOURS BY LOW-INCOME INDIVIDUALS | PERCENTAGE of LOCAL HOURS | PERCENTAGE of LOW-INCOME HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS |
|---|---|---|---|---|---|---|---|---|
| Bryce A. Burger Landscaping | Bryce Burger | $98,198.88 | 585 | 585 | 0 | 100.00% | 0.00% | 0 |
| Hicks Asphalt Paving & Concrete | Tammi Hicks | $1,111,021.43 | 2392 | 2392 | 0 | 100.00% | 0.00% | 0 |
| Van Goettling Masonry | Daran Bedenbaugh | $205,816.00 | 1620 | 1620 | 0 | 100.00% | 0.00% | 0 |
| Utility Service of Gainesville, Inc. | Justis Ebling | $680,961.30 | 2565 | 2565 | 0 | 100.00% | 0.00% | 0 |
| Lawn Enforcement Agency | Mike Troiano | $405,783.96 | 288 | 288 | 0 | 100.00% | 0.00% | 0 |
| Perry Roofing | Danielle Friend | $35,000.00 | 260 | 260 | 0 | 100.00% | 0.00% | 0 |
| Robinson Glazing | Shawna Cornett | $25,647.00 | 39 | 39 | 0 | 100.00% | 0.00% | 0 |
| Workflow (Lawn Enforcement) | Wirely Olivera | | 960 | 960 | 0 | 100.00% | 0.00% | 0 |
| | **TOTAL:** | $ 2,562,428.57 | 8709.00 | 8709.00 | 0.00 | 100.00% | 0.00% | 0 |

V1
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1/5/2023

## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Bryce A. Burger Landscape

**TOTAL HOURS OF CONTRACT:**
585

**AUTHORIZED REPRESENTATIVE**
Bryce Burger

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 5 | 585 | 585 | 0 | Y | Safety | N | $13.64 | 5 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Bryce A. Burger

## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Hicks Asphalt Paving & Concrete

**TOTAL HOURS OF CONTRACT:**
2392

**AUTHORIZED REPRESENTATIVE**
Tammi Hicks

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 27 | 2392 | 2392 | 0 | Y | Safety | N | $13.64 | 27 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Tammi Hicks

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## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Van Goettling Masonry

**TOTAL HOURS OF CONTRACT:**
1620

**AUTHORIZED REPRESENTATIVE**
Daran Bedenbaugh

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 15 | 1620 | 1620 | 0 | Y | Safety | N | $13.64 | 15 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Daran Bedenbaugh

## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Utility Service of Gainesville, Inc

**TOTAL HOURS OF CONTRACT:**
2565

**AUTHORIZED REPRESENTATIVE**
Justis Ebling

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 18 | 2565 | 2565 | 0 | Y | Safety | N | $13.64 | 18 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Justis Ebling

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## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Lawn Enforcement Agency

**TOTAL HOURS OF CONTRACT:**
288

**AUTHORIZED REPRESENTATIVE**
Mike Troiano

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 2 | 288 | 288 | 0 | Y | Safety | N | $13.64 | 2 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Mike Troiano

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## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Perry Roofing Contractors

**TOTAL HOURS OF CONTRACT:**
260

**AUTHORIZED REPRESENTATIVE**
Danielle Friend

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 4 | 260 | 260 | 0 | Y | Roofing/Safety | N | $14.10 | 0 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Danielle Friend

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## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Robinson Glazing Solutions, LLC

**TOTAL HOURS OF CONTRACT:**
39

**AUTHORIZED REPRESENTATIVE**
Shawna Cornett

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 2 | 39 | 39 | 0 | Y | Glazing | N | $13.04 | 0 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Shawna Cornett

## SITES® v2 Construction Hiring Worksheet

**C6.11: SUPPORT LOCAL ECONOMY**

**PROJECT NAME**
UF-656 Landscape Master Plan - Northeast

**PROJECT ID#**
13740

**INSTRUCTIONS:**

1. Please complete the following form for your company's work on the project. The form should be completed by an authorized representative of the contractor or subcontractor.

**CONTRACTOR**
Workflow

**TOTAL HOURS OF CONTRACT:**
960

**AUTHORIZED REPRESENTATIVE**
Wirely Olivera

| NUMBER OF LOCAL WORKERS | TOTAL HOURS | TOTAL LOCAL HOURS | LOCAL APPRENTICE or ENTRY LEVEL HOURS | DID WORKERS RECEIVE JOB TRAINING? (Y/N) | TYPE of TRAINING | WERE WORKERS PART of YOUTH DEVELOPMENT PROGRAMS? | AREA'S LIVING WAGE FOR ONE ADULT | NUMBER OF LOCAL WORKERS RECEIVING LIVING WAGE |
|---|---|---|---|---|---|---|---|---|
| 10 | 960 | 960 | 0 | Y | Safety | N | $13.64 | 10 |

**SIGNATURE OF AUTHORIZED REPRESENTATIVE:**
Wirely Olivera

# SECTION 7: CONSTRUCTION

| Prerequisite | Title | Points |
|---|---|---|
| Construction P7.1 | Communicate and verify sustainable construction practices | Required |
| Construction P7.2 | Control and retain construction pollutants | Required |
| Construction P7.3 | Restore soils disturbed during construction | Required |
| **Credit** | **Title** | **Points** |
| Construction C7.4 | Restore soils disturbed by previous development | 4 points |
| Construction C7.5 | Divert construction and demolition materials from disposal | 4 points |
| Construction C7.6 | Divert reusable vegetation, rocks, and soil from disposal | 4 points |
| Construction C7.7 | Protect air quality during construction | 4 points |

# PREREQUISITE 7.1 | COMMUNICATE AND VERIFY SUSTAINABLE CONSTRUCTION PRACTICES

## SITES® v2 Punchlist

**P7.1: COMMUNICATE AND VERIFY SUSTAINABLE CONSTRUCTION PRACTICES**

**PROJECT NAME**
Northeast Gateway

**PROJECT ID#**
13742

**INSTRUCTIONS:**
1. Complete the following form for each prerequisite and desired credit.
2. Assign responsibility for each to a member of the integrated design team. That person will sign off on each assigned item as it is implemented.

| ACTION ITEM | SITES PREREQUISITES | TEAM MEMBER ASSIGNED | DATE COMPLETED | SIGNATURE |
|---|---|---|---|---|
| **SITE ASSESSMENT**<br>- Communicate the site assessment to all construction personnel-**For Section 2.2.4.C Materials, Plants, Soils and Labor Procurement Narrative: Dustin/CPPI provide information** | P2.2: Conduct a pre-design site assessment | Charles Garrett | 10/26/2022 \| 4:20 PM EDT | |
| **PRE-CONSTRUCTION MEETING**<br>- Communicate all sustainability principles and performance goals<br>- Collect pre-construction meeting minutes and signatures-**For Section P7.1 CPPI to provide meeting minutes and signatures for OAC Kick-off meeting and Subcontractor Meeting minutes** | P2.1: Use an integrative design process | Frank Belllomo | 10/24/2022 \| 2: | Frank Bellomo |
| | P7.1: Communicate and verify sustainable construction practices | Charles Garrett | 10/26/2022 \| 4: | Charles Garrett |
| **VEGETATION AND SOIL PROTECTION ZONES**<br>- Communicate locations and protective measures to all construction personnel<br>- Install protective measures (e.g., fence or physical barrier)<br>- Install protection signage<br>- Take photographs of protection measures and signage-**For Section P2.3-CPPI/Manley to provide photos of tree protection fencing and signage.** | P1.1: Limit development on farmland | Frank Bellomo | 10/24/2022 \| 2: | Frank Bellomo |
| | P1.2: Protect floodplain functions | Jaime Igua | 10/27/2022 \| 1 EDT | Jaime Igua |
| | P1.3: Conserve aquatic ecosystems | Frank Bellomo | 10/24/2022 \| 2:31 PM PDT | Frank Bellomo |
| | P1.4: Conserve habitats for threatened and endangered species | D.J. Silverberg | | |
| | P2.3: Designate and communicate VSPZs | Ian Molgaard | 10/21/2022 \| 6: | Ian Molgaard |
| | P4.1: Create and communicate a soil management plan | Frank Bellomo | 10/24/2022 \| 2: | Frank Bellomo |
| **WATER STEWARDSHIP**<br>- Ensure plan for decommissioning temporary irrigation is communicated; | P3.2: Reduce water use for landscape irrigation | Rob Hoogevenn | 10/21/2022 \| 3:27 AM EDT | Rob Hoogevenn |
| **SOILS, PLANTS, MATERIALS STEWARDSHIP**<br>- Complete applicable sections of the Soil Management Plan<br>- Communicate Soil Management Plan to all construction personnel<br>- Ensure no invasives are being brought to the site<br>- Ensure all plants brought to the site are appropriate for site conditions<br>- Verify that any threatened tree species used has sustainable forestry management certification<br>- Ensure sedimentation control measures are implemented on site | P4.1: Create and communicate a soil management plan | Frank Bellomo | 10/24/2022 \| 2:3 | Frank Bellomo |
| | P4.2: Control and manage invasive plants | Elisabeth Manley | 10/21/2022 \| 6:0 AM | Elisabeth Manley |
| | P4.3: Use appropriate plants | Frank Bellomo | 10/24/2022 \| 2:3 | Frank Bellomo |
| | P5.1: Eliminate the use of wood from threatened tree species | Frank Bellomo<br>Jason O'Brian | 10/24/2022 \| 2:31 PM PDT<br>10/24/2022 \| 3:28 PM EDT | Frank B |
| | P7.2: Control and retain construction pollutants | Charles Garrett | 10/26/2022 \| 4: | Charles Garrett |
| - Take videos and/or photos of sedimentation control measures<br>- Collect receipts for soil, compost, and amendments suppliers-**For Section P4.1-CPPI to provide signatures verifying that the Soil Management Plan has been communicated to construction contractors via site drawings and written specifications-For Section P5.1 CPPI to provide completed Materials Worksheet; For Section P7.2-CPPI/Manley to provide photos of silt fencing and inlet protection-For Section P7.3-Final Soil Test to be ordered by UF/Dustin/Melanie and coordinated by CPPI/Manley at or prior to Substantial Completion-Sequence to be determined by OAC team. CPPI to provide receipts.** | P7.3: Restore soils disturbed during construction | Charles Garret<br>Bryce Burger | DocuSigned by:<br>Bryce Burger<br>24B7357AB62E4A6... | Charles Garrett<br>Digitally signed by Charles Garrett<br>DN: CN=Charles Garrett, E=cgarrett@cppi.com, O=Cornerstone Perry Partners, Inc.<br>Reason: I am approving this document<br>Date: 2023.01.25 15:33:30-05'00' |

| ACTION ITEM | SITES CREDITS | TEAM MEMBER ASSIGNED | DATE COMPLETED | SIGNATURE |
|---|---|---|---|---|
| - Ensure the section of the site assessment is complete and documents- the percent of total site area this is previously developed-100% of site is previously developed; Site plan, aerial photographs, areas of soil remediation, calculations, historical photos; REMAINING ITEM FROM M. HEFLIN-REGULATORY PERMIT NARRATIVE | C1.5 Redevelop degraded sites | Ian Molgaard | 10/21/2022 \| 6:16 AM PDT | Ian Molgaard |
| Vicinity map, site plan with walking routes and basic services and table of walking distances | C1.6 Locate projects within existing developed areas | Ian Molgaard | 10/21/2022 \| 6:16 AM PDT | Ian Molgaard |
| REMAINING ITEM SITE USER CALCULATIONS | C1.7 Connect to multi-modal transit networks | Ian Molgaard | 10/21/2022 \| 6:16 AM PDT | Ian Molgaard |
| -Site Assessment process and program plan<br>- Schematic Design Review<br>-Design development presentation and review | C2.4 Engage users and stakeholders | Frank Bellomo | 10/24/2022 \| 2: | Frank Bellomo |
| - Ensure that habitat for mosquitos will not be created<br>- Ensure plan for decommissioning temporary irrigation is communicated<br>- Ensure the section of the site maintenance plan is complete | C3.4 Reduce Outdoor water use | Ian Molgaard | 10/21/2022 \| 6:16 AM PDT | Ian Molgaard |
| - Calculations | C4.8 Optimize Biomass | Ian Molgaard | 10/21/2022 \| 6: | Ian Molgaard |
| - List of selected materials that demonstrate the required SR or SRI values | C4.9 Reduce urban heat island effects | Ian Molgaard | 10/21/2022 \| 6:1 | Ian Molgaard |
| - Materials Worksheet with descriptions of each salvaged material | C5.4 Reuse salvaged materials and plants | Charles Garrett | 10/26/2022 \| 4: | Charles Garrett |
| - Materials worksheet and desciption of each recycled material | C5.5 Use recycled content materials | Charles Garrett | 10/26/2022 \| | Charles Garrett |
| - Materials Worksheeet | C5.6 Use regional materials | Charles Garrett | 10/26/2022 \| 4 | Charles Garrett |
| - Materials Worksheet<br>- Documentation from manufacturers or suppliers demonstrating disclosure of environmental practices.<br>- Documentation showing that manufacturers have a publicly available sustainability statement. | C5.7 Support responsible extraction of raw materials | Dustin Stephany | 10/20/2022 \| 9:35 PM EDT | Dustin Stephany |
| - Materials Worksheet<br>- Documentation from materials manufacturers demonstrating disclosure of material chemistry. | C5.8 Support transparency and safer chemistry | Dustin Stephany | 10/20/2022 \| 9: | Dustin Stephany |
| - Materials Worksheet<br>- Documentation from manufacturers or suppliers demonstrating disclosure of environmental practices.<br>- Copies of public announcemnet regarding future environmental impact reduction goals | C5.9 Support sustainability in materials manufacturing | Dustin Stephany | 10/20/2022 \| 9: | Dustin Stephany |
| - Materials Worksheet<br>- Documentation from plant providers demonstrating disclosure of 6 of the 10 sustainable production practices | C5.10 Support sustainability in plant production | Dustin Stephany | 10/20/2022 \| 9:35 PM EDT | Dustin Stephany |
| Option-2-Current site photos, historic features documents, narrative, letter from National Register of Historic Places | C6.1 Protect and maintain cultural and historic places | Dustin Stephany | 10/20/2022 \| 9:35 PM EDT | Dustin Stephany |
| - Photographs post construction | C6.2 Provide optimum site accessibility, safety, and wayfinding | Frank Bellomo | 10/24/2022 \| 2 T | Frank Bellomo |
| -Letter confirming the intent to provide free public access to elements, signed by owner, with | C6.3 Promote equitable site use | Dustin Stephany | 10/20/2022 \| 9 | Dustin Stephany |
| - Photographs post construction | C6.4 Support mental restoration | Frank Bellomo | 10/24/2022 \| 2:31 PM PDT | Frank Bellomo |

| ACTION ITEM | SITES CREDITS | TEAM MEMBER ASSIGNED | DATE COMPLETED | SIGNATURE |
|---|---|---|---|---|
| - Photos post construction<br>- Narrative describing services provided and two methods for how program will be announced.<br>- List of four largest and distinct user groups | C6.5 Support physical activity | Dustin Stephany | 10/20/2022 \| 9:3 | Dustin Stephany |
| - Photographs post construction<br>- Narrative of how services, microclimate conditions, and social connection | C6.6 Support social restoration | Dustin Stephany | 10/20/2022 \| 9:37 PM EDT | Dustin Stephany |
| - Photometric data and calculations | C6.8 Reduce Light Pollution | Craig Culledge | | |
| - Site plans of locations for preffered parking, bus shelters, bike parking<br>- Narrative describing infrastructure and support programs to promote shared vehicle usage.-Follow-up on site plan to verify that 3 criteria are met. | C6.9 Encourage fuel efficient and multi-modal transportation | Frank Bellomo,<br>Dustin Stephany | 10/24/2022 \| 2:31 PM PDT<br>10/20/2022 \| 9 | Frank Bellomo<br>Dustin Stephany |
| - Develop smoke free policy, install permenant signage, ensure Site Maintenance Plan sheet is completed.B7 | C6.10 Minimize exposure to environmental tobacco smoke | Dustin Stephany | 10/20/2022 \| 9:37 PM EDT | Dustin Stephany |
| - Construction hiring Worksheet, calculations, list of individuals from programs that support on-the-job training, signed by appropriate contract holders.<br>- Overall construction budget and a list of locally owned and operated businessess. | C6.11 Support local economy-MAYBE | Charles Garrett | Charles Garrett | Digitally signed by Charles Garrett<br>DN: C=US, E=charles.garrett@cppi.com, O=Charles Perry Partners, Inc. ", CN="Charles Garrett "<br>Date: 2023.01.05 12:28:39-05'00' |
| - Strategy for restoring soil conditions<br>- Receipts from soil, compost, and amendment suppliers | C7.4 Restore soils disturbed by previous development | Bryce Burger<br>Frank Bellomo | 1 \| PDT | DocuSigned by:<br>Bryce Burger<br>24B7357AB62E4A6... Frank Bellomo |
| - List of all construction demo materials generated on site, calculations<br>- Narrative of implementation of management plan | C7.5 Divert construction and demolition materials from disposal | Charles Garrett | Charles Garrett | Digitally signed by Charles Garrett<br>DN: C=US, E=charles.garrett@cppi.com, O=Charles Perry Partners, Inc. ", CN="Charles Garrett "<br>Date: 2023.01.05 12:29:38-05'00' |
| - Estimated amount of material waste<br>- Location of reveiving agents<br>- Documentation (photos and receipts) verifying materials diverted<br>- Signature of owner that no land-clearing materials were disposed of in landfill | C7.6 Divert reusable vegetation, rocks, and soil from disposal-MAYBE | Tom Schlick | 10/21/2022 \| 8 T | Thomas Schlick |
| - List of all equipment, run-time calculations, fuel purchase records<br>- Idle-reduction policy, narrative<br>- Equipment maintenance plan | C7.7 Protect air quality during construction-MAYBE | Tom Schlick | 10/21/2022 \| 8:04 AM EDT | Thomas Schlick |
| - Waste Stream Study, narrative, site plan locations | C8.3 Recycle organic matter | Dustin Stephany | 10/20/2022 \| 9:37 PM EDT | Dustin Stephany |
| - Site maintenance plan<br>- Plant Healthcare Plan and best management practives | C8.4 Minimize pesticide and fertilizer use | Tom Schlick | 10/21/2022 \| 8:04 AM EDT | Thomas Schlick |
| - Product cut sheets<br>- Calculations and completed worksheets | C8.5 Reduce outdoor energy consumption | Dustin Stephany | 10/20/2022 \| 9:37 | Dustin Stephany |
| - List of all powered maintenance equipment<br>- Emissions reduction worksheet | C8.7 Protect air quality during landscape maintenance | Tom Schlick | 10/21/2022 \| 8:04 AM EDT | Thomas Schlick |
| - Communication of case study | C9.2 Develop and communicate a case study | Dustin Stephany | 10/20/2022 \| 9: | Dustin Stephany |

## Preconstruction Meeting Minutes

# Minutes

## Pre-Construction Meeting

| | |
|---|---|
| **UF Project No**. UF-656 | **Date**: August 31, 2021 |
| **Owner**: University of Florida | **Location**: CPPI Corporate Office |
| **Project Name**: UF – 656 Landscape Master Plan Implementation Newell Gateway and Northeast Gateway | **Time**: 9:00AM – 11:30AM |

- **Attendees:**
  - **Hicks Concrete, Asphalt, and Paving – Ronnie Hicks**
  - **USI – Hal Ebling, Justice Ebling**
  - **Van Goettling Masonry – Daran Bedenbaugh**
  - **GAI – Sheeba West**
  - **UF – Melanie Heflin, Dustin Stephany**
  - **CPPI – Charles Garrett, Jennifer Lyons**
- **9:00 – 9:15**
  - Introductions:
    - Melanie Heflin – UF PD&C Project Manager
    - Jennifer Lyons – CPPI Project Manager
    - Charles Garrett – CPPI Superintendent
  - Jobsite Conduct
    - The jobsites are located in highly visible and trafficked areas of the University of Florida Campus.
    - Zero tolerance regarding harassment of any kind.
    - Zero tolerance regarding alcohol and tobacco.
    - Jobsite cleanliness is a priority. This is everyone's responsibility to make sure the site is clean and orderly each day.
    - University of Florida COVID -19 protocols must be adhered to at all times.
    - PPE – Workers must wear the required PPE at all times while on the construction site.
    - UF requires badge to be worn by contractors. Background check completion must be noted on UF sharepoint for all contractors' employees on site.
    - Review contract documents - Principles and performance goals are the guiding overarching concepts & the observable & measurable end results of having 1 or more objective completed within a fixed time frame; conveyed in the specifications & drawings
      1. Plans
         a. Newell Gateway
         b. Northeast Gateway
      2. Specifications
      3. Addendums: #1 - #5, Change Directive #1
      4. Site Logistics Plans
         a. Newell Gateway
         b. Northeast Gateway

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www.cppi.com

5. Schedule – Newell by end of 2021 and NE by end of March 2022

- **9:20 – 10:00 am**
  - SITES Certification Requirements – Dustin Stephany presentation
    1. UF's sustainability track record
    2. Guiding and project specific principles: prerequisites/credits, reuse/salvaged materials, soil management plan, advocacy letters, and punchlist
    3. Sites requirements need to translate to construction documents for field implementation
  - Document review
    1. Punchlist Worksheet – SITES Punchlist is a set of line items to be carried out by the contractor in order to achieve SITES prerequisites and credits
    2. Materials Worksheet
    3. Construction Hiring Worksheet
    4. Field Operations
    5. Letters to suppliers

- **10:00 am – 11:00 am**
  - Working Hours
    - Monday-Friday 7:00 am – 3:30 pm
    - Rain Days/Rain Out
    - Jobsite deliveries are to be scheduled 7 days in advance with CPPI superintendent and every effort to deliver to the site at non-peak (student/faculty) occupancy hours.
      1. Early morning deliveries for larger items that may require a semi- truck / low boy hauler etc....
      2. You must have someone from your company present and fully capable of unloading your material when it arrives. Deliveries will be sent away if you fail to schedule or you are not onsite to unload it.
  - Utility Outages
    - Utility outage requests are to be sent to CPPI Superintendent 2 weeks in advance of the desired date of the request.
    - Dig Permits utility locates are to be called in by the subcontractor, coordinated with CPPI superintendent.

**General Requirements**

- Project Signage
  - CPPI to install signage around the construction fencing as required by the University of Florida.
- Hot work procedures
  - Hot work permits to be applied for by the subcontractor.
- Parking
  - Parking for each jobsite is indicated within the construction fencing areas on the logistics plans. Workers should carpool in company vehicles if available as parking space is at a premium.
  - Workers must have a TAPS parking tag to hang on their mirror while parked inside the construction fenced area. Get from CPPI Superintendent.

- Dumpster Location
  - A dumpster will be located within each construction fenced area.
- Barrier Location
  - See site logistics plan and construction documents for indication of barriers.
- Toilet Facilities
  - Temporary toilet facilities will be provided at each jobsite (Newell and Northeast)
- Jobsite Security and Locks
  - Jobsite will be locked at the end of each workday for both locations by a combination cable lock. The code for the locks will be provided by CPPI Superintendent Charles Garrett.
- Storage Facilities/Areas
  - The jobsite areas are limited on space, however some area will be available for materials. This must be coordinated with CPPI Superintendent Charles Garrett as to the location, amount, and duration the materials will be there.

**Architect/Owner/Contractor Communications**

- An integrated design team includes the owner, client, & professionals knowledgeable in design, construction, & maintenance to meet the unique constraints & opportunities of the site.

- Channels and procedures for communication – Autodesk Build
- Processing of submittals and shop drawings, RFIs
  - Submittals and shop drawings are to be sent to Charles.Garrett@cppi.com, Nolan.Davis@cppi.com or uploaded in Build

  - RFI's are to be sent to Jennifer.lyons@cppi.com Charles.Garrett@cppi.com, Nolan.Davis@cppi.com or uploaded in Build

- Processing field change/orders
  - Change orders are to be sent to Jennifer.lyons@cppi.com

- Inspection Procedures
  - Notify CPPI Superintendent of any inspections that are scheduled for your work at least (5) Days in advance.
  - Inspections are to be identified and listed on the pull planning board in the jobsite trailer in order for CPPI to notify UF prior to work being covered up after inspection.
- Close-out Documents
  - Closeout documents are to be submitted to Jennifer.lyons@cppi.com, Nolan.Davis@cppi.com

**Project Specific**

- Lead Times
  - Long lead items need to be discussed with CPPI Superintendent and Project Manager.
- Schedule/Coordination
  - Weekly Coordination with CPPI Superintendent Charles Garrett.
  - Pull Planning required for 6-week look ahead.

CPPI CHARLES PERRY PARTNERS, INC

construction management | design build | general contracting

- ❑ Review the construction schedules
  1. Newell Gateway
  2. Northeast Gateway
- ❑ Weekly Subcontractor Meeting
  1. Tuesdays at 10:00 am at the jobsite trailer.
- ❑ Safety Meetings:
  1. Tuesday at 7:00 am onsite (Northeast Gateway)

- ❑ **11:00 am – 11:30 am**
  - ❑ Lunch / project planning discussions

## Preconstruction Meeting Signatures

| Signer Events | Signature | Timestamp |
|---|---|---|
| Charles Garrett<br>Charles.Garrett@CPPI.com<br>Security Level: Email, Account Authentication (None) | Charles Garrett<br>Signature Adoption: Pre-selected Style<br>Using IP Address: 98.180.246.115 | Sent: 1/24/2022 2:09:06 PM<br>Viewed: 1/26/2022 10:21:16 AM<br>Signed: 1/26/2022 10:21:42 AM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/26/2022 10:21:16 AM<br>ID: 43c2940c-a966-448d-82ad-f1923f925056 | | |
| Daran Bedenbaugh<br>daran.bedenbaugh@vangoettlingmasonry.com<br>Security Level: Email, Account Authentication (None) | Daran Bedenbaugh<br>Signature Adoption: Pre-selected Style<br>Using IP Address: 174.64.77.190 | Sent: 1/24/2022 2:09:07 PM<br>Viewed: 2/11/2022 2:01:51 PM<br>Signed: 2/11/2022 2:02:29 PM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 2/11/2022 2:01:51 PM<br>ID: e958e12e-6c35-4551-b582-8bf9d82accd7 | | |
| Donnie Hicks<br>donniehicksapc@gmail.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Drawn on Device<br>Using IP Address: 174.211.193.76<br>Signed using mobile | Sent: 1/24/2022 2:09:06 PM<br>Viewed: 1/29/2022 11:57:58 AM<br>Signed: 1/31/2022 6:53:35 AM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/29/2022 11:57:58 AM<br>ID: 362fc9f3-2a24-46fa-8a6f-6c79d3377021 | | |
| Dustin Stephany<br>d.stephany@ufl.edu<br>University of Florida<br>Security Level: Email, Account Authentication (None) | Dustin Stephany<br>Signature Adoption: Pre-selected Style<br>Using IP Address: 128.227.115.220 | Sent: 1/24/2022 2:09:09 PM<br>Viewed: 1/24/2022 2:10:36 PM<br>Signed: 1/24/2022 2:10:48 PM |

| Signer Events | Signature | Timestamp |
|---|---|---|
| Hal Ebling<br>halebling@gmail.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 98.180.247.40 | Sent: 1/24/2022 2:09:07 PM<br>Viewed: 1/25/2022 7:51:24 AM<br>Signed: 1/25/2022 7:53:46 AM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/25/2022 7:51:24 AM<br>ID: 5d5c97b2-8257-4403-a58e-d5431bf53cfb | | |
| Ian Molgaard<br>I.Molgaard@gaiconsultants.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 4.53.44.34 | Sent: 1/24/2022 2:09:07 PM<br>Viewed: 1/24/2022 2:36:27 PM<br>Signed: 1/24/2022 2:36:52 PM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/24/2022 2:36:27 PM<br>ID: a63b0bee-b1b1-478a-bb03-c33ed2ef89b8 | | |
| Jennifer Lyons<br>Jennifer.Lyons@CPPI.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 209.251.130.130 | Sent: 1/24/2022 2:09:09 PM<br>Viewed: 1/24/2022 2:21:21 PM<br>Signed: 1/24/2022 2:21:43 PM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/24/2022 2:21:21 PM<br>ID: f27e5466-4bc6-4dc0-9fa7-b5e4ba23f257 | | |
| Justis Ebling<br>usi.justis@gmail.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 98.180.247.40 | Sent: 1/24/2022 2:09:08 PM<br>Viewed: 1/24/2022 2:37:17 PM<br>Signed: 2/9/2022 4:05:22 PM |
| **Electronic Record and Signature Disclosure:**<br>Accepted: 1/24/2022 2:37:17 PM<br>ID: 163bf050-025c-4a2a-b432-a2c9b67fbcd6 | | |
| Melanie Heflin<br>mheflin@ufl.edu<br>Project Manager<br>University of Florida -Planning, Design & Construction Division<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 67.34.199.241 | Sent: 1/24/2022 2:09:08 PM<br>Viewed: 1/24/2022 2:09:27 PM<br>Signed: 1/24/2022 2:09:39 PM |
| **Electronic Record and Signature Disclosure:**<br>Not Offered via DocuSign | | |
| Sheeba West<br>S.West@gaiconsultants.com<br>Security Level: Email, Account Authentication (None) | Signature Adoption: Pre-selected Style<br>Using IP Address: 4.53.44.34 | Sent: 1/24/2022 2:09:09 PM<br>Viewed: 1/26/2022 3:15:24 PM<br>Signed: 1/26/2022 3:15:42 PM |
| **Electronic Record and Signature Disclosure:** | | |

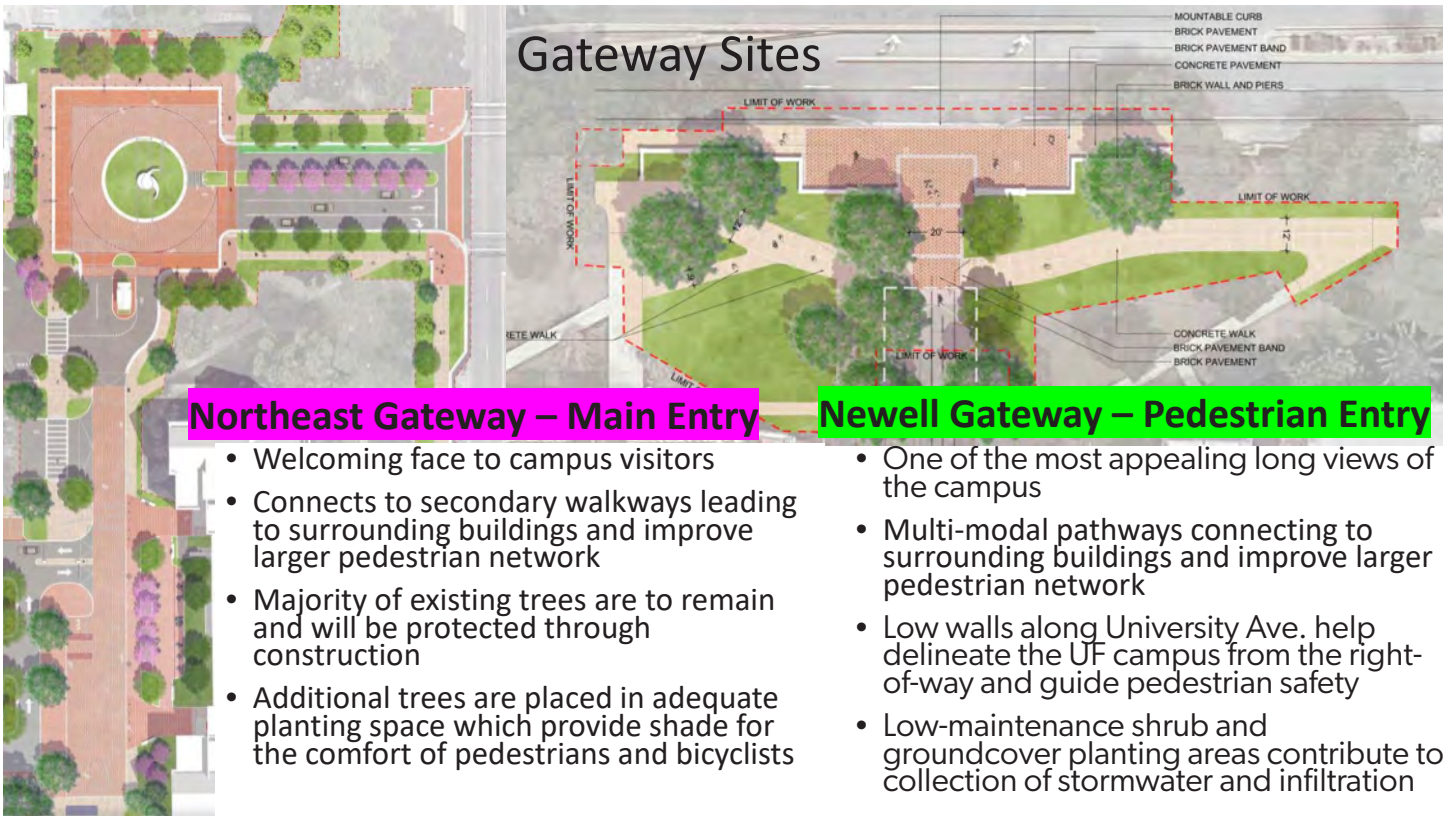
## Preconstruction Meeting Presentation

# SITES Preconstruction Meeting

8-31-21

# Overview

- Introduction
- What is SITES?
- What is the Plan?
- How do we get there?
- Our Part




## Northeast Gateway – Main Entry

- Welcoming face to campus visitors
- Connects to secondary walkways leading to surrounding buildings and improve larger pedestrian network
- Majority of existing trees are to remain and will be protected through construction
- Additional trees are placed in adequate planting space which provide shade for the comfort of pedestrians and bicyclists

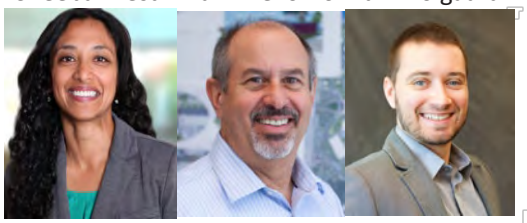
## Newell Gateway – Pedestrian Entry

- One of the most appealing long views of the campus
- Multi-modal pathways connecting to surrounding buildings and improve larger pedestrian network
- Low walls along University Ave. help delineate the UF campus from the right-of-way and guide pedestrian safety
- Low-maintenance shrub and groundcover planting areas contribute to collection of stormwater and infiltration

# Meet the Team

CPPI

Sheeba West - Frank Bellomo - Ian Molgaard



gai consultants

COMMUNITY SOLUTIONS GROUP

Troy Lauramoore - Jennifer Lyons - Charles Garret

Elizabeth Manley

MANLEY DESIGN

Melanie Heflin - Dustin Stephany - Rachel Mandell

American Society of Landscape Architects

Lady Bird Johnson Wildflower center

United States Botanic Garden

GREEN BUILDING CERTIFICATION INSTITUTE

THE Sustainable SITES Initiative

- Global certification program
- Performance based criteria
- Tools that protect and enhance the human experience
- Designed for the future of green building industry
- Benchmarking
- Foster regenerative, resilient and efficient design
- Traditional land development underestimate or ignore healthy ecosystems

# Guiding Principles

## Point Based System

70+ points - CERTIFIED
85+ points - SILVER
**100+ points – GOLD (TEAM GOAL)**
135+ points – PLATINUM

**Do no harm.** Make no changes to the site that will degrade the surrounding environment. Promote sustainable design projects on sites where previous disturbance or development presents an opportunity to regenerate ecosystem services through sustainable design.

**Apply the precautionary principle.** Be cautious in making decisions that could threaten human and environmental health. Some actions can cause irreversible damage. Examine a full range of alternatives (including no action), and be open to contributions from all potentially affected parties.

**Design with nature and culture.** Create and implement designs that are responsive to economic, environmental, and cultural conditions and to the local, regional, and global context.

**Use a decision-making hierarchy of preservation, conservation, and regeneration.** Maximize the benefit of ecosystem services by preserving existing environmental features, conserving resources in a sustainable manner, and regenerating lost or damaged ecosystem services

**Provide regenerative systems as intergenerational equity.** Provide future generations with a sustainable environment supported by regenerative systems and endowed with regenerative resources.

**Support a living process.** Continuously re-evaluate assumptions and values, and adapt to demographic and environmental change.

**Use a systems thinking approach.** Understand and value the relationships in an ecosystem. Use an approach that reflects and sustains ecosystem services and re-establishes the integral and essential relationship between natural processes and human activity.

**Use a collaborative and ethical approach.** Encourage direct and open communication among colleagues, clients, manufacturers, and users to link long-term sustainability with ethical responsibility.

**Maintain integrity in leadership and research.** Implement transparent and participatory leadership; develop research with technical rigor; and communicate new findings in a clear, consistent, and timely manner.

**Foster environmental stewardship.** In all aspects of land development and management, foster an ethic of environmental stewardship—an understanding that responsible management of healthy ecosystems improves the quality of life for present and future generations.

# Project Specific Principles and Performance Goals

**Redesign Campus Roadways to Support and Encourage All Modes of Travel**

- Accommodate safe multi-modes of transportation/shared paths: e-scooters, bicycles, pedestrian, skateboards, Segway and bus
- Incorporate rows of trees with setbacks @ walkways to incorporate more shade and plant growth

**Integrate New Campus Projects Into the Campus Fabric, Advancing Pedestrian and Bike Connections and Campus Space**

- Improve accessibility simplify gateway and walkway connections while enriching the views

**Reflect UF's Ecological Setting in its Plant Materials, Promoting Simplicity and Maintainability in Planting Design**

- Promote and restore native landscaping for North Central Florida
- Protect existing trees with tree barricades, rerouting utilities and paving and soil remediation
- Incorporate simplified grouped landscaping and promote ease of maintenance (pruning vs thinning vs seasonal replacement)

**Embracing Sustainable Goals and LID Practices (Newell Gateway Only)**

- Reduced hardscapes and increase planting areas to demonstrate best stormwater management practices, improve water quality and serve as educational feature
- Reuse materials where possible

# What is the Plan?

- Focus on Prerequisites, then Credits
- Reuse Salvaged Materials
- Soil Management Plan
- Advocacy Letters
- Punchlist

SITESv2 scorecard — Project: Newell Gateway — Project #: 13740 — MAJOR DEADLINE: 26-Mar (DD's 100% / Construction): (3-26 / 5-1) — LAST UPDATED: 7/1/2021

| STATUS | Yes 10 | ? 0 | No 3 | N/A | | | SITE CONTEXT — Possible 13 points |
|---|---|---|---|---|---|---|---|
| Complete | REQUIRED | | | | P | 1.1 | Limit development on farmland |
| Complete | REQUIRED | | | | P | 1.2 | Protect floodplain functions |
| Complete | REQUIRED | | | | P | 1.3 | Conserve aquatic ecosystems |
| Complete | REQUIRED | | | | P | 1.4 | Conserve habitats for threatened and endangered species |
| Progress | 3 | 0 | 3 | - | C | 1.5 | Redevelop degraded sites |
| Progress | 4 | 0 | 0 | - | C | 1.6 | Locate projects within existing developed areas |
| Progress | 3 | 0 | 0 | - | C | 1.7 | Connect to multi-modal transit networks |

| STATUS | 3 | 0 | 0 | | | | PRE-DESIGN ASSESSMENT + PLANNING — Possible 3 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 2.1 | Use an integrative design process |
| Progress | REQUIRED | | | | P | 2.2 | Conduct a pre-design site assessment |
| Progress | REQUIRED | | | | P | 2.3 | Designate and communicate VSPZs |
| No Start | 3 | 0 | 0 | - | C | 2.4 | Engage users and stakeholders |

| STATUS | 15 | 1 | 1 | | | | SITE DESIGN (WATER) — Possible 23 points |
|---|---|---|---|---|---|---|---|
| Complete | REQUIRED | | | | P | 3.1 | Manage precipitation on site |
| Progress | REQUIRED | | | | P | 3.2 | Reduce water use for landscape irrigation |
| Progress | 6 | 0 | 0 | - | C | 3.3 | Manage precipitation beyond baseline |
| Progress | 5 | 1 | 0 | - | C | 3.4 | Reduce outdoor water use |
| Progress | 4 | 0 | 1 | - | C | 3.5 | Design functional stormwater features as amenities |
| Complete | 0 | 0 | 0 | N/A | C | 3.6 | Restore aquatic ecosystem |

| STATUS | 4 | 3 | 26 | | | | SITE DESIGN (SOIL + VEGETATION) — Possible 40 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 4.1 | Create and communicate a soil management plan |
| Progress | REQUIRED | | | | P | 4.2 | control and manage invasive plants |
| Progress | REQUIRED | | | | P | 4.3 | Use appropriate plants |
| Complete | 0 | 0 | 6 | 0 | C | 4.4 | Conserve healthy soils and appropriate vegetation |
| Complete | 0 | 0 | 4 | - | C | 4.5 | Conserve special status vegetation |
| Complete | 0 | 0 | 6 | - | C | 4.6 | Conserve and use native plants |
| Complete | 0 | 0 | 6 | - | C | 4.7 | Conserve and restore native plant communities |
| Progress | 0 | 3 | 0 | - | C | 4.8 | Optimize biomass |
| Progress | 4 | 0 | 0 | - | C | 4.9 | Reduce urban heat island effects |
| Complete | 0 | 0 | 0 | N/A | C | 4.10 | Use vegetation to minimize building energy use |
| Complete | 0 | 0 | 4 | 0 | C | 4.11 | Reduce the risk of catastrophic wildfire |

| STATUS | 15 | 4 | 22 | | | | SITE DESIGN (MATERIALS SELECTION) — Possible 41 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 5.1 | Eliminate the use of wood from threatened tree species |
| Complete | 0 | 0 | 4 | 0 | C | 5.2 | Maintain on-site structures and paving |
| Complete | 0 | 0 | 4 | - | C | 5.3 | Design for adaptability and disassembly |
| Complete | 0 | 0 | 4 | - | C | 5.4 | Use salvaged materials and plants |
| No Start | 0 | 3 | 1 | - | C | 5.5 | Use recycled content materials |
| No Start | 3 | 1 | 1 | - | C | 5.6 | Use regional materials |
| No Start | 3 | 0 | 2 | - | C | 5.7 | Support responsible extraction of raw materials |
| No Start | 3 | 0 | 2 | - | C | 5.8 | Support transparency and safer chemistry |
| No Start | 3 | 0 | 2 | - | C | 5.9 | Support sustainability in materials manufacturing |
| No Start | 3 | 0 | 2 | - | C | 5.10 | Support sustainability in plant production |

| STATUS | Yes 20 | ? 2 | No 8 | N/A | | | SITE DESIGN (HUMAN HEALTH + WELL-BEING) — Possible 30 point |
|---|---|---|---|---|---|---|---|
| Progress | 3 | 0 | 0 | 0 | C | 6.1 | Protect and maintain cultural and historic places |
| Progress | 2 | 0 | 0 | - | C | 6.2 | Provide optimum site accessibility, safety, and wayfinding |
| Progress | 2 | 0 | 0 | - | C | 6.3 | Promote equitable site use |
| Progress | 2 | 0 | 0 | - | C | 6.4 | Support mental restoration |
| Progress | 0 | 2 | 0 | - | C | 6.5 | Support physical activity |
| Progress | 2 | 0 | 0 | - | C | 6.6 | Support social connection |
| No Start | 0 | 0 | 4 | - | C | 6.7 | Provide on-site food production |
| Progress | 4 | 0 | 0 | - | C | 6.8 | Reduce light pollution |
| No Start | 0 | 0 | 4 | - | C | 6.9 | Encourage fuel efficient and multi-modal transportation |
| Progress | 2 | 0 | 0 | - | C | 6.10 | Minimize exposure to environmental tobacco smoke |
| No Start | 3 | 0 | 0 | - | C | 6.11 | Support local economy |

| STATUS | 7 | 5 | 5 | | | | CONSTRUCTION — Possible 17 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 7.1 | Communicate and verify sustainable construction practices |
| Progress | REQUIRED | | | | P | 7.2 | Control and retain construction pollutants |
| Progress | REQUIRED | | | | P | 7.3 | Restore soils disturbed during construction |
| No Start | 3 | 0 | 2 | - | C | 7.4 | Restore soils disturbed by previous development |
| No Start | 4 | 0 | 0 | - | C | 7.5 | Divert construction and demolition materials from disposal |
| No Start | 0 | 3 | 1 | - | C | 7.6 | Divert reusable vegetation, rocks, and soil from disposal |
| No Start | 0 | 2 | 2 | - | C | 7.7 | Protect air quality during construction |

| STATUS | 12 | 5 | 5 | | | | OPERATIONS + MAINTENANCE — Possible 22 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 8.1 | Plan for sustainable site maintenance |
| Progress | REQUIRED | | | | P | 8.2 | Provide for storage and collection of recyclables |
| Progress | 3 | 1 | 1 | - | C | 8.3 | Recycle organic matter |
| Progress | 5 | 0 | 0 | - | C | 8.4 | Minimize pesticide and fertilizer use |
| No Start | 2 | 2 | 0 | - | C | 8.5 | Reduce outdoor energy consumption |
| No Start | 0 | 0 | 4 | - | C | 8.6 | Use renewable sources for landscape electricity needs |
| Progress | 2 | 2 | 0 | - | C | 8.7 | Protect air quality during landscape maintenance |

| STATUS | 3 | 8 | 0 | | | | EDUCATION + PERFORMANCE MONITORING — Possible 11 points |
|---|---|---|---|---|---|---|---|
| No Start | 0 | 4 | 0 | - | C | 9.1 | Promote sustainability awareness and education |
| No Start | 3 | 0 | 0 | - | C | 9.2 | Develop and communicate a case study |
| No Start | 0 | 4 | 0 | - | C | 9.3 | Plan to monitor and report site performance |

| STATUS | 0 | 0 | 9 | | | | INNOVATION OR EXEMPLARY PERFORMANCE — Possible 9 points |
|---|---|---|---|---|---|---|---|
| No Start | 0 | 0 | 9 | - | C | 10.1 | Innovation or exemplary performance |

| TOTAL | 89 | 28 | 79 | ESTIMATED POINTS (Total possible 200) |
|---|---|---|---|---|

| KEY | |
|---|---|
| YES | Project confident points are achievable |
| ? | Project striving to achieve points, not 100% confident |
| NO | Project is unable to achieve these credit points |
| N/A | Credit is not applicable to the project |

| CERTIFICATION | Points |
|---|---|
| CERTIFIED | 70 |
| SILVER | 85 |
| GOLD (GOAL) | 100 |
| PLATINUM | 135 |

SITESv2 scorecard — Project: Northeast Gateway — Project #: 13742 — MAJOR DEADLINE: 26-Mar (DD's 100% / Construction): (3-26 / 5-1) — LAST UPDATED: 7/1/2021

| STATUS | Yes | ? | No | N/A | | | SITE CONTEXT — Possible 13 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 1.1 | Limit development on farmland |
| Progress | REQUIRED | | | | P | 1.2 | Protect floodplain functions |
| Progress | REQUIRED | | | | P | 1.3 | Conserve aquatic ecosystems |
| Progress | REQUIRED | | | | P | 1.4 | Conserve habitats for threatened and endangered species |
| No Start | 3 | 0 | 3 | - | C | 1.5 | Redevelop degraded sites |
| Progress | 4 | 0 | 0 | - | C | 1.6 | Locate projects within existing developed areas |
| Progress | 3 | 0 | 0 | - | C | 1.7 | Connect to multi-modal transit networks |

| STATUS | Yes | ? | No | N/A | | | PRE-DESIGN ASSESSMENT + PLANNING — Possible 3 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 2.1 | Use an integrative design process |
| Progress | REQUIRED | | | | P | 2.2 | Conduct a pre-design site assessment |
| Progress | REQUIRED | | | | P | 2.3 | Designate and communicate VSPZs |
| No Start | 3 | 0 | 0 | - | C | 2.4 | Engage users and stakeholders |

| STATUS | Yes | ? | No | N/A | | | SITE DESIGN (WATER) — Possible 23 points |
|---|---|---|---|---|---|---|---|
| No Start | REQUIRED | | | | P | 3.1 | Manage precipitation on site |
| Progress | REQUIRED | | | | P | 3.2 | Reduce water use for landscape irrigation |
| No Start | 0 | 0 | 6 | - | C | 3.3 | Manage precipitation beyond baseline |
| No Start | 5 | 1 | 0 | - | C | 3.4 | Reduce outdoor water use |
| No Start | 0 | 0 | 5 | - | C | 3.5 | Design functional stormwater features as amenities |
| No Start | 0 | 0 | 0 | N/A | C | 3.6 | Restore aquatic ecosystem |

| STATUS | Yes | ? | No | N/A | | | SITE DESIGN (SOIL + VEGETATION) — Possible 40 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 4.1 | Create and communicate a soil management plan |
| Progress | REQUIRED | | | | P | 4.2 | control and manage invasive plants |
| Progress | REQUIRED | | | | P | 4.3 | Use appropriate plants |
| Complete | 0 | 0 | 6 | 0 | C | 4.4 | Conserve healthy soils and appropriate vegetation |
| Complete | 0 | 0 | 4 | - | C | 4.5 | Conserve special status vegetation |
| Complete | 0 | 0 | 6 | - | C | 4.6 | Conserve and use native plants |
| No Start | 0 | 0 | 6 | - | C | 4.7 | Conserve and restore native plant communities |
| No Start | 0 | 3 | 0 | - | C | 4.8 | Optimize biomass |
| No Start | 4 | 0 | 0 | - | C | 4.9 | Reduce urban heat island effects |
| No Start | 0 | 0 | 4 | 0 | C | 4.10 | Use vegetation to minimize building energy use |
| No Start | 0 | 0 | 4 | 0 | C | 4.11 | Reduce the risk of catastrophic wildfire |

| STATUS | Yes | ? | No | N/A | | | SITE DESIGN (MATERIALS SELECTION) — Possible 41 points |
|---|---|---|---|---|---|---|---|
| No Start | REQUIRED | | | | P | 5.1 | Eliminate the use of wood from threatened tree species |
| No Start | 0 | 4 | 0 | 0 | C | 5.2 | Maintain on-site structures and paving |
| No Start | 0 | 0 | 4 | - | C | 5.3 | Design for adaptability and disassembly |
| No Start | 0 | 4 | 0 | - | C | 5.4 | Use salvaged materials and plants |
| No Start | 0 | 3 | 1 | - | C | 5.5 | Use recycled content materials |
| No Start | 3 | 1 | 1 | - | C | 5.6 | Use regional materials |
| No Start | 3 | 0 | 2 | - | C | 5.7 | Support responsible extraction of raw materials |
| No Start | 3 | 0 | 2 | - | C | 5.8 | Support transparency and safer chemistry |
| No Start | 3 | 0 | 2 | - | C | 5.9 | Support sustainability in materials manufacturing |
| No Start | 3 | 0 | 2 | - | C | 5.10 | Support sustainability in plant production |

| STATUS | Yes | ? | No | N/A | | | SITE DESIGN (HUMAN HEALTH + WELL-BEING) — Possible 30 point |
|---|---|---|---|---|---|---|---|
| No Start | 3 | 0 | 0 | 0 | C | 6.1 | Protect and maintain cultural and historic places |
| No Start | 2 | 0 | 0 | - | C | 6.2 | Provide optimum site accessibility, safety, and wayfinding |
| No Start | 2 | 0 | 0 | - | C | 6.3 | Promote equitable site use |
| No Start | 2 | 0 | 0 | - | C | 6.4 | Support mental restoration |
| No Start | 0 | 2 | 0 | - | C | 6.5 | Support physical activity |
| No Start | 2 | 0 | 0 | - | C | 6.6 | Support social connection |
| No Start | 0 | 0 | 4 | - | C | 6.7 | Provide on-site food production |
| No Start | 4 | 0 | 0 | - | C | 6.8 | Reduce light pollution |
| No Start | 0 | 4 | 0 | - | C | 6.9 | Encourage fuel efficient and multi-modal transportation |
| Progress | 2 | 0 | 0 | - | C | 6.10 | Minimize exposure to environmental tobacco smoke |
| No Start | 0 | 3 | 0 | - | C | 6.11 | Support local economy |

| STATUS | Yes | ? | No | N/A | | | CONSTRUCTION — Possible 17 points |
|---|---|---|---|---|---|---|---|
| No Start | REQUIRED | | | | P | 7.1 | Communicate and verify sustainable construction practices |
| No Start | REQUIRED | | | | P | 7.2 | Control and retain construction pollutants |
| No Start | REQUIRED | | | | P | 7.3 | Restore soils disturbed during construction |
| No Start | 4 | 0 | 1 | - | C | 7.4 | Restore soils disturbed by previous development |
| No Start | 4 | 0 | 0 | - | C | 7.5 | Divert construction and demolition materials from disposal |
| No Start | 0 | 3 | 1 | - | C | 7.6 | Divert reusable vegetation, rocks, and soil from disposal |
| No Start | 0 | 2 | 2 | - | C | 7.7 | Protect air quality during construction |

| STATUS | Yes | ? | No | N/A | | | OPERATIONS + MAINTENANCE — Possible 22 points |
|---|---|---|---|---|---|---|---|
| Progress | REQUIRED | | | | P | 8.1 | Plan for sustainable site maintenance |
| Progress | REQUIRED | | | | P | 8.2 | Provide for storage and collection of recyclables |
| Progress | 3 | 1 | 1 | - | C | 8.3 | Recycle organic matter |
| Progress | 5 | 0 | 0 | - | C | 8.4 | Minimize pesticide and fertilizer use |
| No Start | 2 | 2 | 0 | - | C | 8.5 | Reduce outdoor energy consumption |
| No Start | 0 | 0 | 4 | - | C | 8.6 | Use renewable sources for landscape electricity needs |
| Progress | 2 | 2 | 0 | - | C | 8.7 | Protect air quality during landscape maintenance |

| STATUS | Yes | ? | No | N/A | | | EDUCATION + PERFORMANCE MONITORING — Possible 11 points |
|---|---|---|---|---|---|---|---|
| No Start | 0 | 4 | 0 | - | C | 9.1 | Promote sustainability awareness and education |
| No Start | 3 | 0 | 0 | - | C | 9.2 | Develop and communicate a case study |
| No Start | 0 | 4 | 0 | - | C | 9.3 | Plan to monitor and report site performance |

| STATUS | Yes | ? | No | N/A | | | INNOVATION OR EXEMPLARY PERFORMANCE — Possible 9 points |
|---|---|---|---|---|---|---|---|
| No Start | 0 | 0 | 9 | - | C | 10.1 | Innovation or exemplary performance |

| TOTAL | Yes | ? | No | ESTIMATED POINTS (Total possible 200) |
|---|---|---|---|---|
| | 77 | 43 | 80 | |

| KEY | |
|---|---|
| YES | Project confident points are achievable |
| ? | Project striving to achieve points, not 100% confident |
| NO | Project is unable to achieve these credit points |
| N/A | Credit is not applicable to the project |

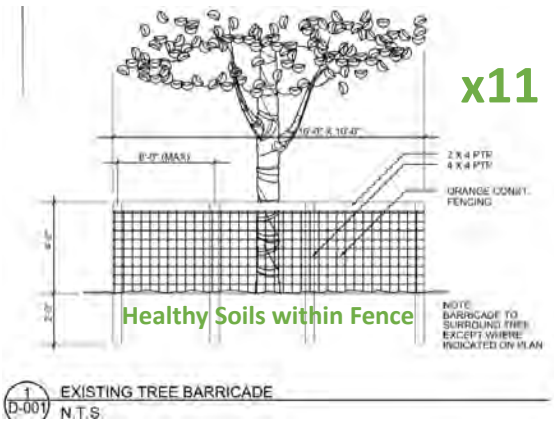
| CERTIFICATION | Points |
|---|---|
| CERTIFIED | 70 |
| SILVER | 85 |
| GOLD (GOAL) | 100 |
| PLATINUM | 135 |

# Salvaging Materials for Reuse

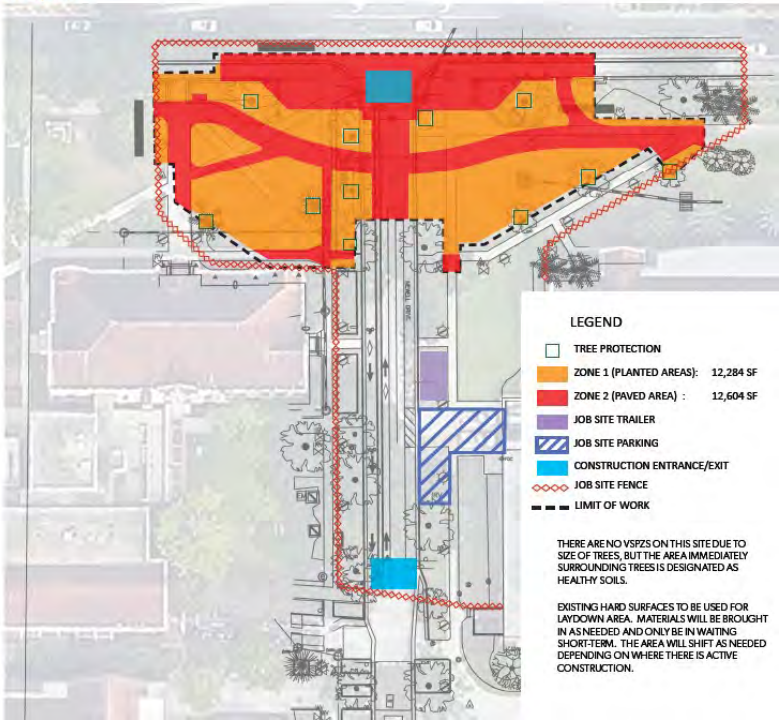
- Be mindful of our waste diversion goal of 75% (by weight)
- What materials can be reused? think cost and replacement value
- Plants
  - Need a list of plant materials already salvaged
  - Salvage plants ought to be disease free and so no sign of stress prior to moving, recommend plant societies
    - Florida native plant society
    - Florida wild flowers.org
    - Orchid society/ bromeliad/ camelias
    - Edible plant project

# Soil Management Plan

## Newell Gateway




Site plan

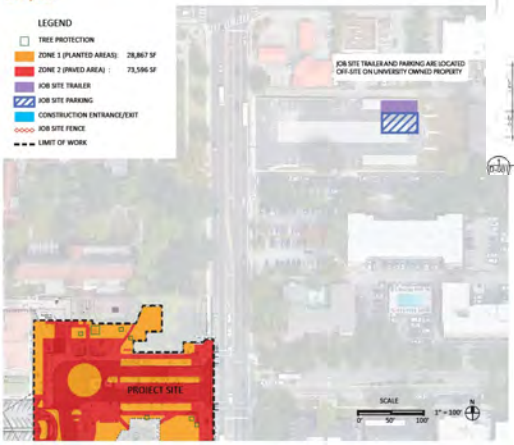


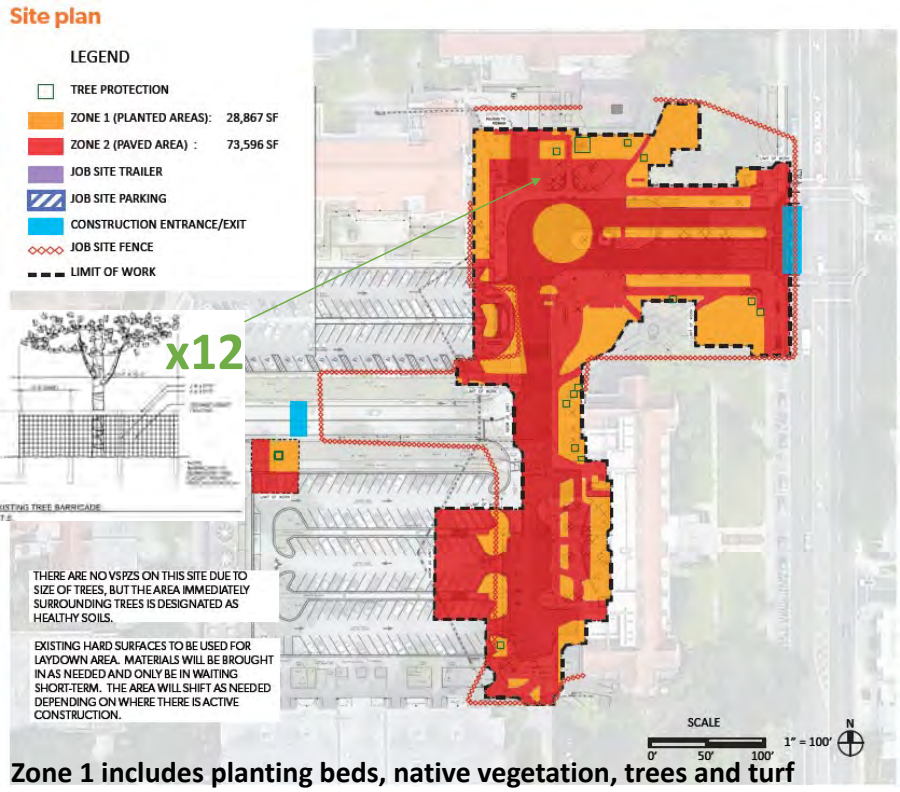

**Zone 1 includes planting beds, native vegetation, trees and turf**

# Soil Management Plan

## Northeast Gateway

Site plan




**Zone 1 includes planting beds, native vegetation, trees and turf**

Landscape beds will have remediated soils @12" depth (trees @18" depth)
Landscape Topsoil conditions to meet ASTM D5268

Soil will be tested to determine amount of amendments (UF Compost) is needed prior to adding turf

# Advocacy Letters for Providers, Manufacturers and Suppliers

- 5% of material cost report annual environmental performance or provide a public strategy disclosing efforts to minimize environmental impacts through extraction criteria

- 5% of material costs transparently report inventories of all chemicals within products and their effects to human health, lifecycle hazard, by products, emissions, impurities, etc. (complete MSDS)
  - SCOPE: Decking railings, pipes, hoses, irrigation components, lighting, membranes, extruded/spray/board foam, paints and coatings, adhesives and sealants

# Advocacy Letters for Providers, Manufacturers and Suppliers

- 25% of material costs support sustainable manufacturing by using materials that increase energy efficiency reduce resource consumption and waste, minimize the negative affects of human health (in air or water)
- 80% of plants, sod, seed meet at least 6 requirements below

1. Reduction of Potable Water Use
2. **Reduction of Runoff from Irrigation**
3. **Sustainable soil Amendments/ Growing Media**
4. **Organic Matter Recycling**
5. Waste Reduction
6. **Integrated Pest Management**
7. **Prevention of Invasive Species**
8. Reduce Energy Consumption
9. Use Renewable Energy
10. **Safe and Fair Working Conditions**

# Punchlist

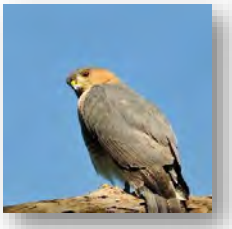
**Charles Garret - CPPI**

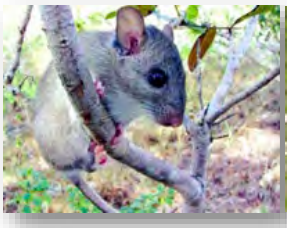
- Fill out various worksheets
  - Local construction hiring
  - Material usage
- Manage construction budget
- Verify construction material waste diversion through waste tickets
- Control and retain construction pollutants
- Communicate site assessments to construction personnel

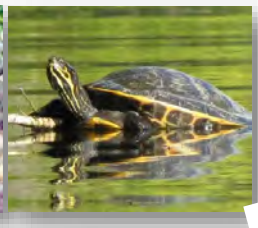
**Elizabeth Manley – Manley Design**

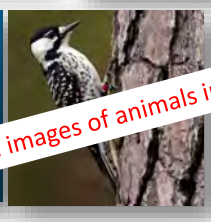
- Photographs
- Divert construction materials by identifying onsite reclaimed materials for reuse
- Eliminate the amount of materials being wasted
- Execute strategy for restoring soil conditions
- Control and manage any invasives

## Endangered Species

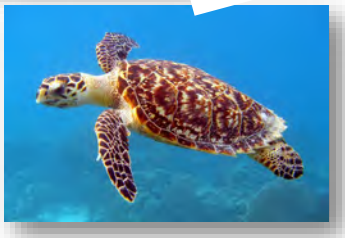


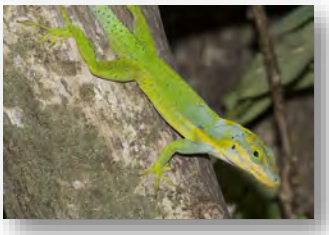






Free lunch to those who find images of animals in or around the jobsite





# Threatened Species

# Recently Removed from threatened List

Questions?

# Prerequisite 7.2 | Control and retain construction pollutants

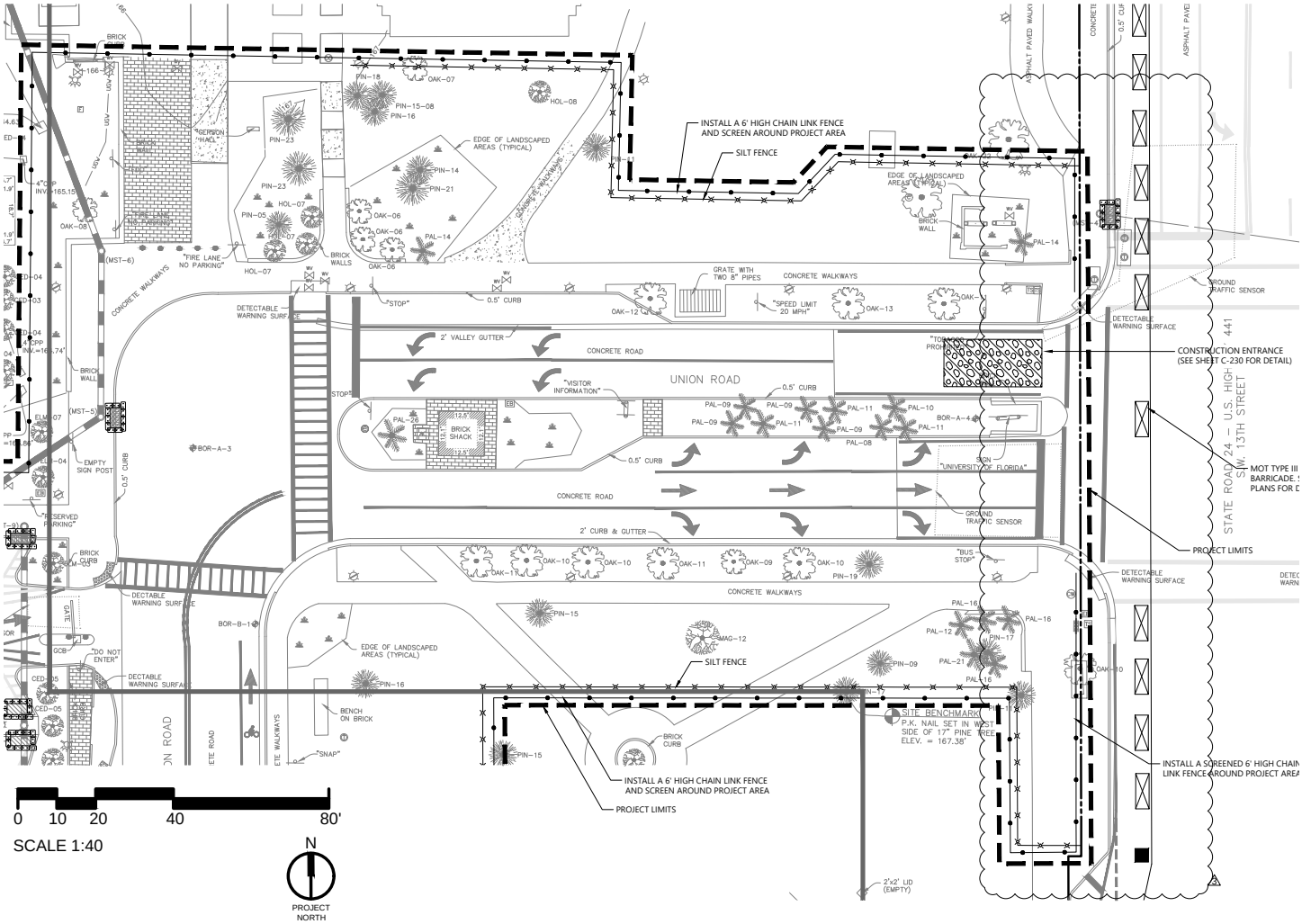
## Narrative

As with most urban watersheds, erosion, sedimentation and nutrient loading are the primary water quality concerns that are common to many of the University's waterbodies. The University shall require appropriate methods of controlling soil erosion and sedimentation to help minimize the destruction of soil resources used or disturbed during site development. Such methods shall include, but are not limited to:

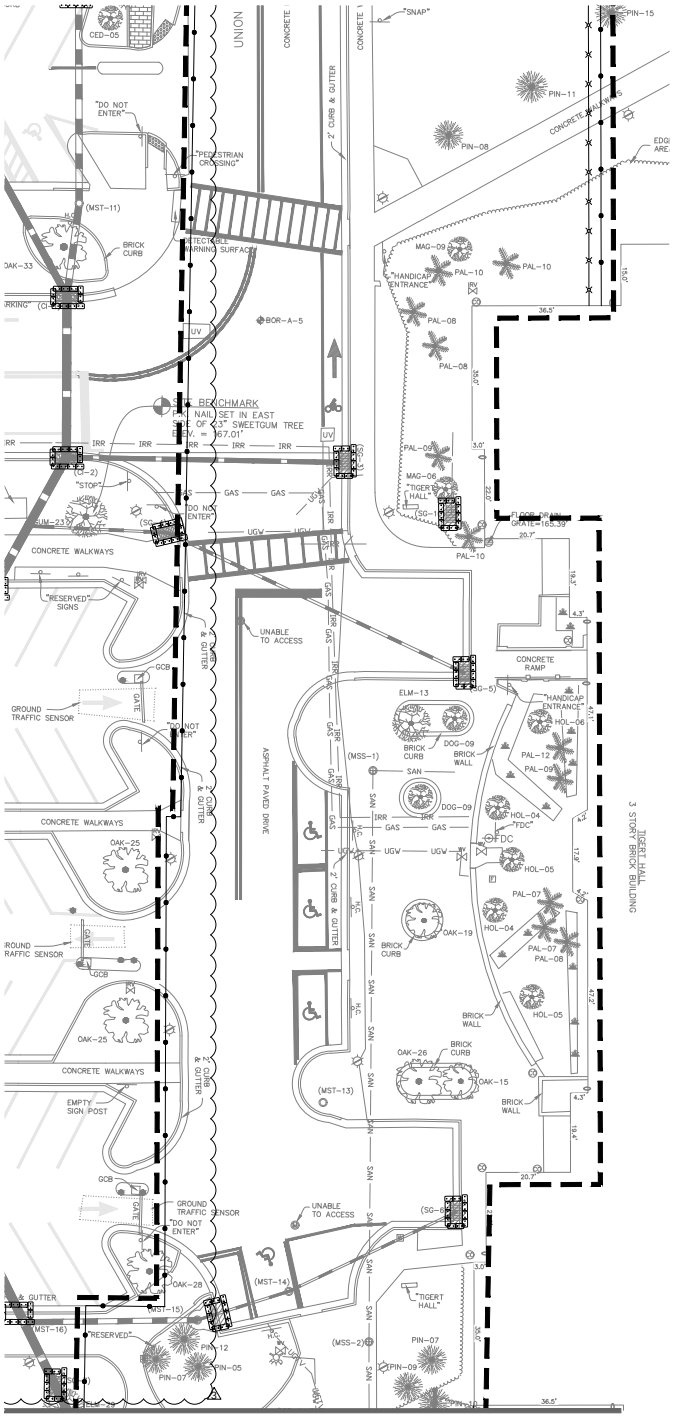
- Phasing and limiting the removal of vegetation;
- Minimizing the amount of land area that is cleared;
- Limiting the amount of time bare land is exposed to rainfall;
- Using temporary ground cover on cleared areas if construction is not imminent;
- Using silt fencing, hay bales, or other appropriate sediment barriers adjacent to drainage structures and areas of slope; and
- Maintaining vegetative cover on areas of high soil erosion potential (i.e., steep or long slopes, stormwater conveyances, etc.), where feasible

These methods will be implemented on site where applicable.
Refer to plan below.

## SWPPP - STORMWATER POLLUTION PREVENTION PLAN



## Photos




LEGEND:

| | |
|---|---|
| INV. | RECORD MEASUREMENT |
| ELEV. | FIELD MEASUREMENT |
| RCP | REINFORCED CONCRETE PIPE |
| CMP | CORRUGATED METAL PIPE |
| CPP | CORRUGATED PLASTIC PIPE |
| PVC | POLYVINYL CHLORIDE PIPE |
| VCP | VITRIFIED CLAY PIPE |
| DIP | DUCTILE IRON PIPE |
| GCB | GATE CONTROL BOX |
| AC | AIR CONDITIONER |
| | BOLLARD |
| BOR | BORING LOCATION |
| | CLEAN OUT |
| EB | ELECTRIC BOX |
| EHH | ELECTRIC HANDHOLE |
| | GROUND LIGHT |
| EM | ELECTRIC METER |
| | ELECTRIC TRANSFORMER |
| FDC | FIRE DEPARTMENT CONNECTION |
| F | FIRE VALVE INDICATOR POST |
| | FIRE HYDRANT |
| IV | IRRIGATION VALVE |
| EC | EMERGENCY CALL BOX |
| S | STEAM MANHOLE |
| CW | CHILLED WATER MANHOLE |
| G | GROUND ROD |
| PM | PARKING METER |
| | METAL LIGHT POLE WITH BRICK BASE |
| | METAL LIGHT POLE |
| | (MST) STORM WATER MANHOLE |
| | (MSS) SANITARY SEWER MANHOLE |
| SG | (SG) STORM GRATE |
| | ROOF DRAIN |
| | SIGN (AS INDICATED) |
| H.C. | HANDICAP SIGN |
| SV | SEWER VALVE |
| TB | TELEPHONE BOX |
| T | TELEPHONE MANHOLE |
| UV | UTILITY VAULT |
| WM | WATER METER |
| WV | WATER VALVE |
| | HANDRAILS |
| | FENCE LINES |
| OE | OVERHEAD ELECTRIC LINES |
| W | UNDERGROUND WATER LINES |
| STM | UNDERGROUND STORM WATER LINES |
| SAN | UNDERGROUND SANITARY SEWER LINES |
| UE | UNDERGROUND ELECTRIC LINES |
| IRR | UNDERGROUND IRRIGATION LINES |
| UE (NFV) | UNDERGROUND ELECTRIC (NFV) |
| W (NFV) | WATER (NFV) |
| CHR (NFV) | CHILLED WATER RETURN (NFV) |
| CHS (NFV) | CHILLED WATER SERVICE (NFV) |
| STM (NFV) | STEAM (NFV) |
| CON (NFV) | STEAM CONDUIT (NFV) |
| FOC (NFV) | FIBER/TELEPHONE (NFV) |
| GAS (NFV) | GAS (NFV) |
| IRR (NFV) | IRRIGATION (NFV) |
| | SANITARY (NFV) |
| UE (NFV) | UNDERGROUND ELECTRIC (STREET LIGHTS)(NFV) |

TREE LEGEND

| | |
|---|---|
| CED– | CEDAR TREE |
| ELM– | ELM TREE |
| GUM– | SWEETGUM TREE |
| HOL– | HOLLY TREE |
| MAG– | MAGNOLIA TREE |
| OAK– | OAK TREE |
| PAL– | PALM TREE |
| PIN– | PINE TREE |
| RED– | RED BUD TREE |
| BIR– | BIRCH TREE |
| BOB– | BOTTLE BRUSH |
| MYR– | CREPE MYRTLE |
| DOG– | DOGWOOD |

**SWPP LEGEND**

See Erosion Control Details

| Symbol | Description |
|---|---|
| | PROPERTY LINE |
| | SITE PROJECT BOUNDARY |
| | INLET PROTECTION |
| | CONSTRUCTION ENTRANCE/EXIT |
| | SILT FENCE |
| | CHAIN LINK FENCE |

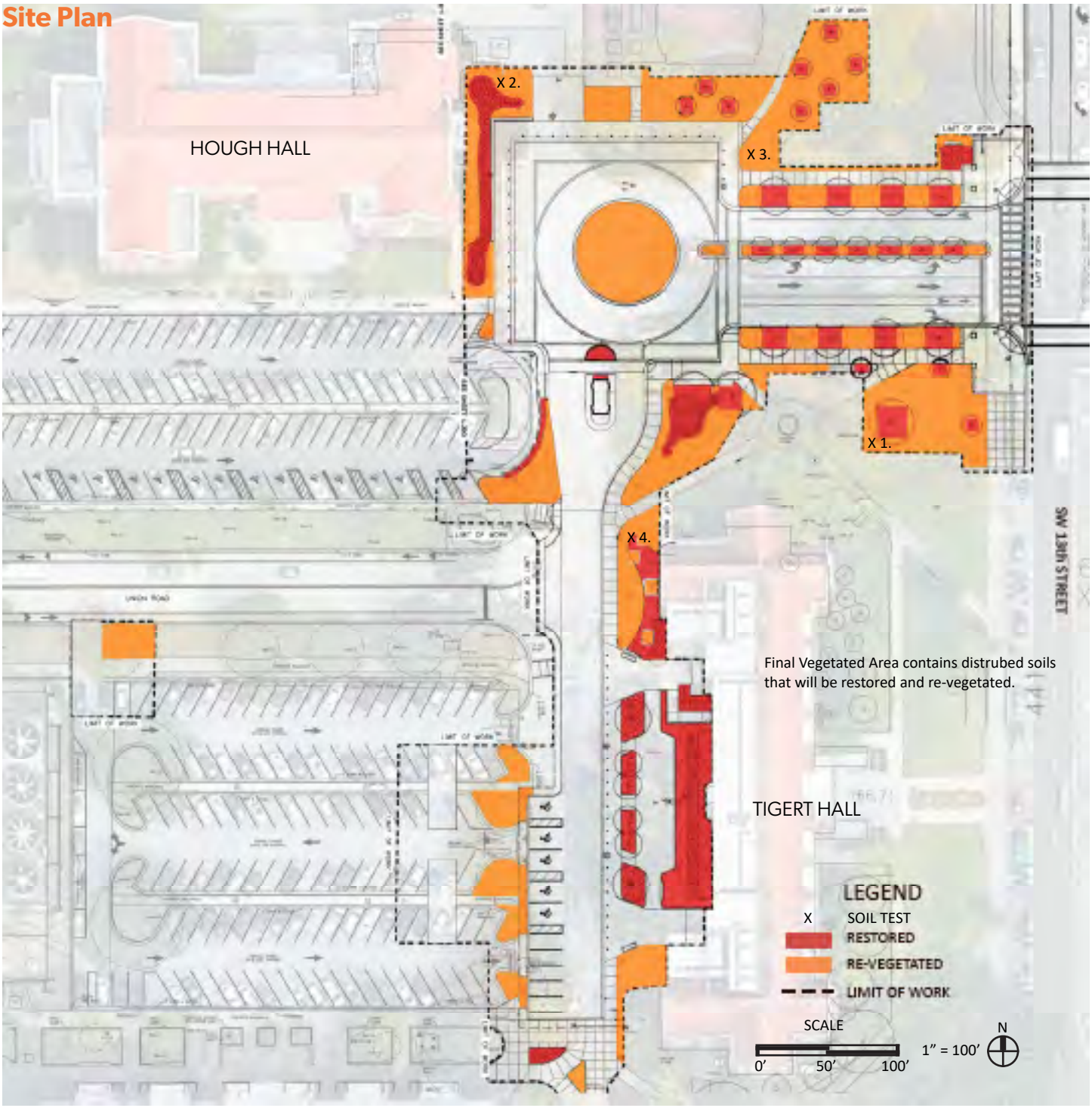
## Photos

# Prerequisite 7.3 | Restore soils disturbed during construction

## Narrative

Imported soils used within the planting areas of the Northeast Gateway were placed at the required depth of 12". The imported material was procured from O'Steen Brothers of Gainesville, and consisted of stockpiled topsoil imported for the project. This topsoil was procured from other construction sites within the Gainesville area through the stripping of the top 6" of soil prior to any significant earthwork taking place. Native landscape plantings comprising the rain gardens were backfilled to a depth of 24" as required by the project documents. This specified mix, from O'Steen Brothers of Gainesville, consisted of 50% sand, 30% topsoil and 20% compost. Post construction test results are below.

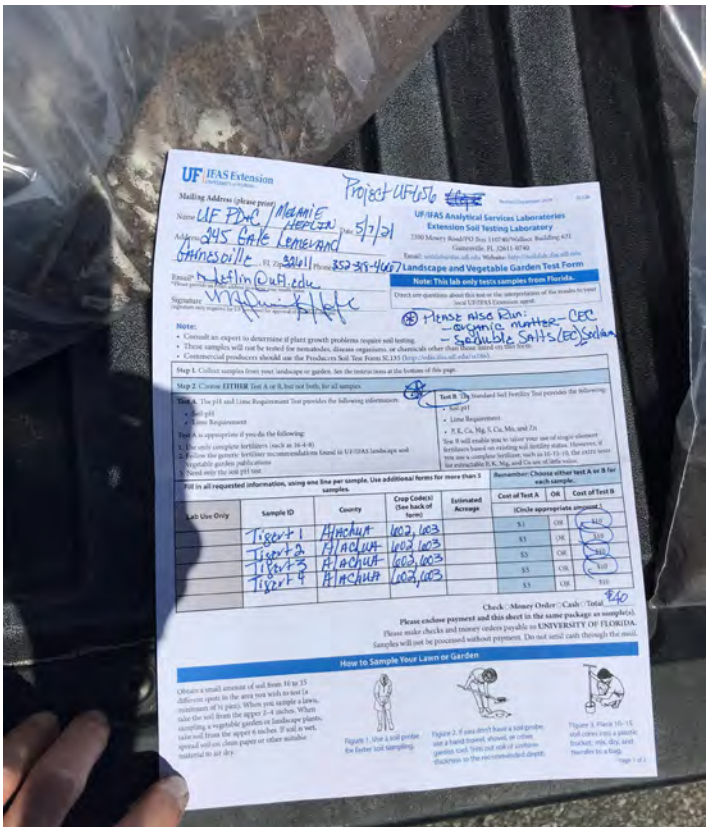
## Site Plan



## Soil Tests

The tested restored final soil conditions meet final soil restoration criteria.

- **1. Organic matter:** The top 12 - 18 in. of soil on site contains 3% of organic matter. The organic matter is provided through the addition of compost.
- **2. Compaction:** The bulk density of the final soils are ≤ the reference soil bulk density of 1.2 g/cm³. The bulk densities do not exceed the maximum values given in P7.3 A.
- **3. Soil Chemical characteristics:** Soil chemistry is adjust for plant growth per testing lab recommendations. Refer to the soil test for PH, soluble salts, cation exchange capacity, extractable phosphorus, potassium, calcium, and magnesium.




## Compaction

| Sample ID | Bulk Density (g/cm³) |
|---|---|
| Tigert 1 | 0.99 |
| Tigert 2 | 1.41 |
| Tigert 3 | 1.22 |
| Tigert 4 | 1.48 |

## Organic Matter

| Lab Number | Sample Id | EC dS/m | OrgMat % |
|---|---|---|---|
| E180020 | Tigert 1 | 0.27 | 3.84 |
| E180021 | Tigert 2 | 0.24 | 3.57 |
| E180022 | Tigert 3 | 0.22 | 3.84 |
| E180023 | Tigert 4 | 0.22 | 3.10 |

## Soil Test 1

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
| **Target pH:** | **5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water):** | **8.0** | This is the pH of your sample in water medium |
| **A-E Buffer Value:** | **N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **27** | **HIGH** | **Sulfur** (S) | **10.3** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **62** | | **Copper** (Cu) | **0.5** | |
| **Magnesium** (Mg) | **8** | | **Manganese** (Mn) | **2.1** | |
| | | | **Zinc** (Zn) | **1.3** | |
| **Calcium** (Ca) | **168** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 2

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
| **Target pH:** | **5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water):** | **8.1** | This is the pH of your sample in water medium |
| **A-E Buffer Value:** | **N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **31** | **HIGH** | **Sulfur** (S) | **7.8** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **72** | | **Copper** (Cu) | **0.6** | |
| **Magnesium** (Mg) | **11** | | **Manganese** (Mn) | **2.4** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **183** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 3

### Soil Test Results and Their Interpretations

| | |
|---|---|
| **Target pH: 5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water): 8.1** | This is the pH of your sample in water medium |
| **A-E Buffer Value: N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **29** | **HIGH** | **Sulfur** (S) | **7.2** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **59** | | **Copper** (Cu) | **0.5** | |
| **Magnesium** (Mg) | **10** | | **Manganese** (Mn) | **2.0** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **192** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 4

### Soil Test Results and Their Interpretations

| | |
|---|---|
| **Target pH: 5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water): 8.1** | This is the pH of your sample in water medium |
| **A-E Buffer Value: N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **30** | **HIGH** | **Sulfur** (S) | **7.9** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **66** | | **Copper** (Cu) | **0.7** | |
| **Magnesium** (Mg) | **11** | | **Manganese** (Mn) | **2.2** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **195** | **Ca is typically adequate in Florida soils** | | | |

# Credit 7.4 | Restore soils disturbed by previous development

## Narrative

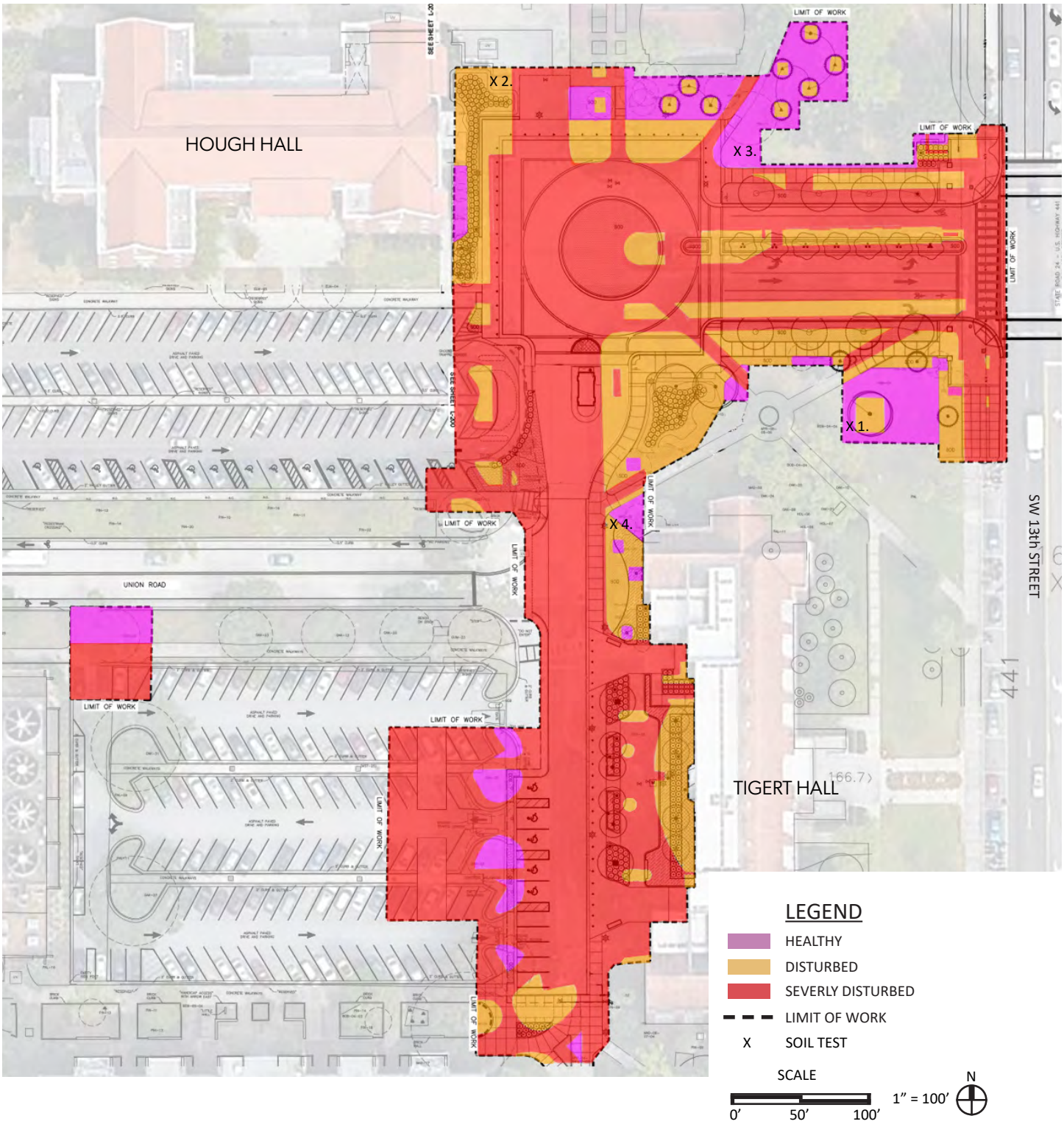
**Goal: 3 points**

Imported soils used within the planting areas of the Newell Gateway, other than the rain gardens, were placed at the required depth of 12". The imported material was procured from O'Steen Brothers of Gainesville, and consisted of stockpiled topsoil imported for the project. This topsoil was procured from other construction sites within the Gainesville area through the stripping of the top 6" of soil prior to any significant earthwork taking place. Native landscape plantings comprising the rain gardens were backfilled to a depth of 24" as required by the project documents. This specified mix, from O'Steen of Gainesville, consisted of 50% sand, 30% topsoil and 20% compost. Post construction test results are below.

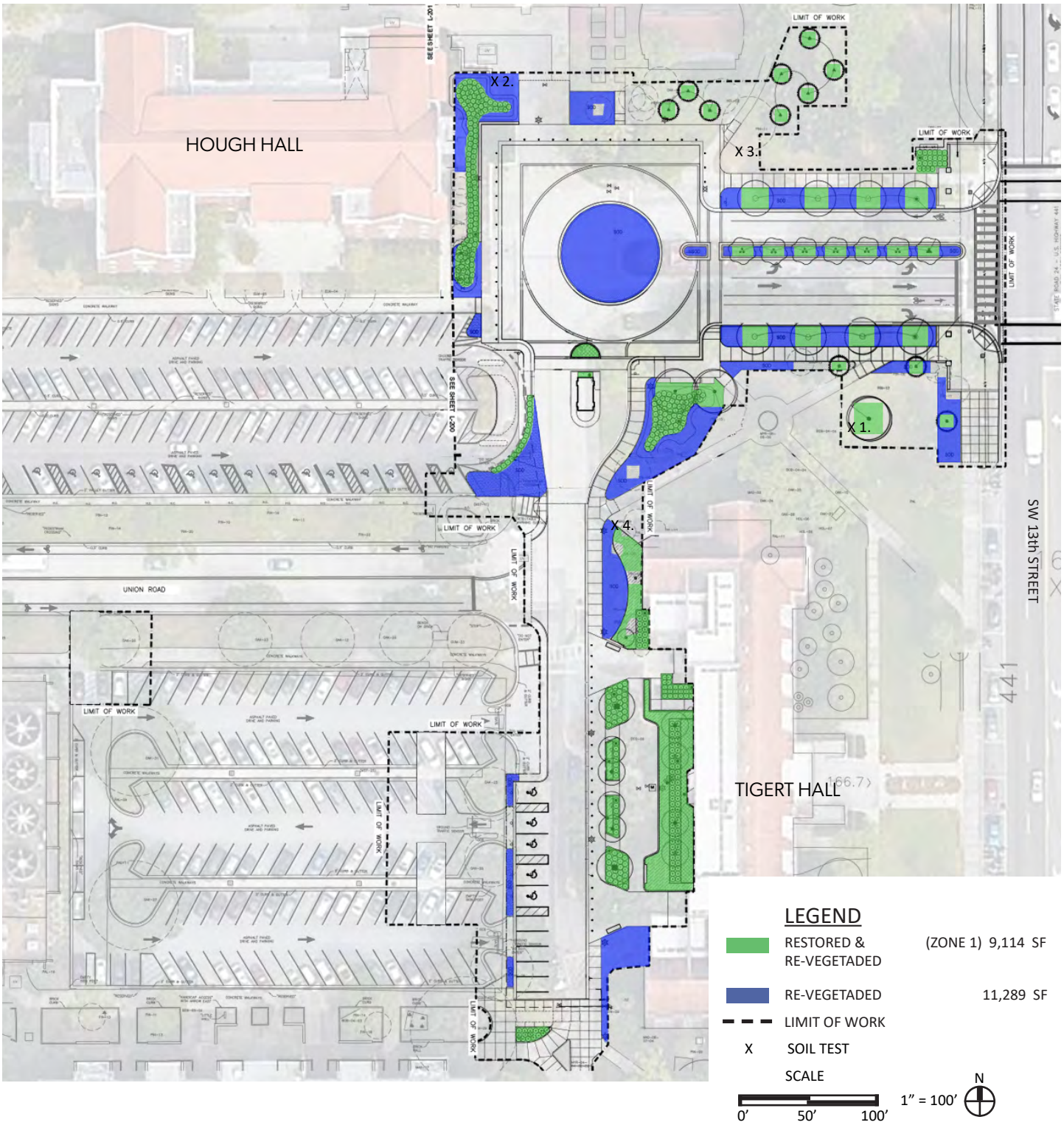
Provided is a PDF showing the degrees of disturbance of soil & quantity takeoffs. The red shows the location for all disturbed soils. Disturbed soils are areas disturbed by human development activities such as grading, excavation, or compaction, and seriously disturbed soils are soils where topsoil was removed or not present; IE areas covered by buildings or paved surfaces.

The total project area for the Northeast Gateway is about 97,907 SF, the area of healthy soil is about 15,781 SF, the area of disturbed soil is about 20,403 SF, and the area of seriously disturbed soils is about 61,723 SF. Based on these values, the total % area of healthy soils vs. disturbed soils vs. seriously disturbed soils on Northeast Gateway is 16.12% to 20.84% to 63.04%.

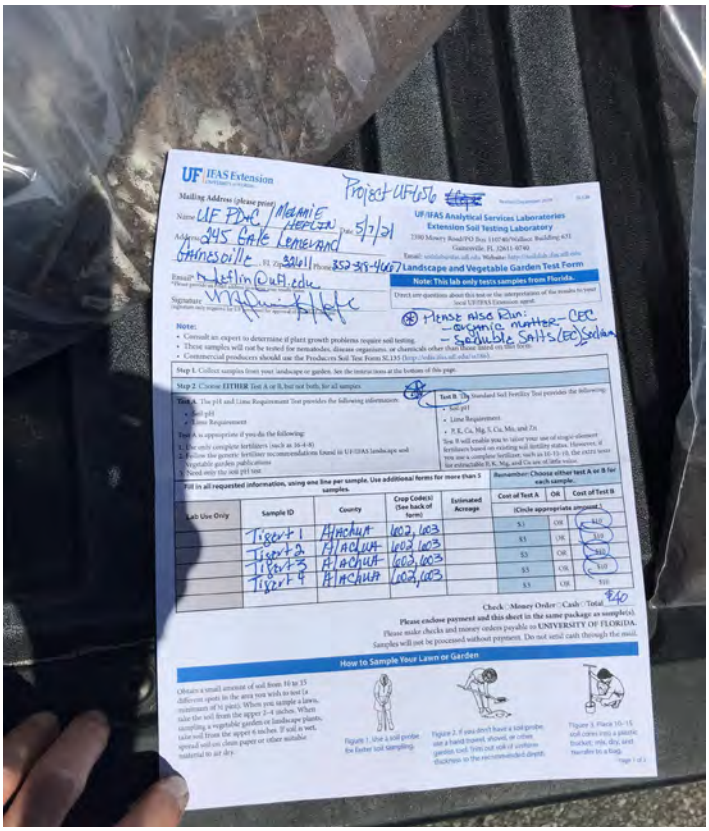
## Site Plan


HOUGH HALL
TIGERT HALL
SW 13th STREET
UNION ROAD
LIMIT OF WORK
X 1.
X 2.
X 3.
X 4.
LEGEND
HEALTHY
DISTURBED
SEVERLY DISTURBED
LIMIT OF WORK
X SOIL TEST
SCALE
0'
50'
100'
1" = 100'
N

The total project area for the Northeast Gateway is 97,907 SF, the area of restored & revegetated soil is 9,114 SF, which 9.31% of total site area. The additional area to be re-vegetated is 11,289 SF, which is 11.53% of total site area. The total area of revegetation is 20,403 SF, which is 20.84% of total site area.



## Soil Tests




## Compaction

| Sample ID | Bulk Density (g/cm$^3$) |
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| E180022 | Tigert 3 | 0.22 | 3.84 |
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## Soil Test 1

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
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| **pH (1:2 Sample:Water):** | **8.0** | This is the pH of your sample in water medium |
| **A-E Buffer Value:** | **N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **27** | **HIGH** | **Sulfur** (S) | **10.3** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **62** | | **Copper** (Cu) | **0.5** | |
| **Magnesium** (Mg) | **8** | | **Manganese** (Mn) | **2.1** | |
| | | | **Zinc** (Zn) | **1.3** | |
| **Calcium** (Ca) | **168** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 2

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
| **Target pH:** | **5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water):** | **8.1** | This is the pH of your sample in water medium |
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|---|---|---|---|---|---|
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| **Magnesium** (Mg) | **11** | | **Manganese** (Mn) | **2.4** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **183** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 3

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
| **Target pH:** | **5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water):** | **8.1** | This is the pH of your sample in water medium |
| **A-E Buffer Value:** | **N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **29** | **HIGH** | **Sulfur** (S) | **7.2** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **59** | | **Copper** (Cu) | **0.5** | |
| **Magnesium** (Mg) | **10** | | **Manganese** (Mn) | **2.0** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **192** | **Ca is typically adequate in Florida soils** | | | |

## Soil Test 4

### Soil Test Results and Their Interpretations

| | | |
|---|---|---|
| **Target pH:** | **5.5** | This is the pH at which the above crop will grow at its optimum |
| **pH (1:2 Sample:Water):** | **8.1** | This is the pH of your sample in water medium |
| **A-E Buffer Value:** | **N/A** | Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. If the pH is higher than Target pH, Buffer pH will not be determined |

### AB-DTPA Extractable Nutrients

| Nutrients | Level mg/kg or ppm | Interpretation | Nutrients | Level mg/kg or ppm | |
|---|---|---|---|---|---|
| **Phosphorus** (P) | **30** | **HIGH** | **Sulfur** (S) | **7.9** | ***For these nutrients see directions on the following pages** |
| **Potassium** (K) | **66** | | **Copper** (Cu) | **0.7** | |
| **Magnesium** (Mg) | **11** | | **Manganese** (Mn) | **2.2** | |
| | | | **Zinc** (Zn) | **1.6** | |
| **Calcium** (Ca) | **195** | **Ca is typically adequate in Florida soils** | | | |

# Credit 7.5 | Divert construction and demolition materials from disposal

## Narrative

**Goal: 4 points**

During construction of the Northeast Gateways the contractor, CPPI, took extensive measures to ensure that we met the project goal of diverting 75% of structural materials and 95% of road and infrastructure materials from the job sites by recycling, salvaging, or
reusing on the project. Materials considered under the structural materials designation include but are not limited to: bricks, steel, and wood. Materials considered under infrastructure and road materials include but are not limited to: pavement and drainage structures. For all structural materials with the project, CPPI made a list of all materials to keep track of that were deemed structural by SITES' definition stated above. From this list, we devised a plan on site for properly disposing of/reusing these structural materials back into the project sites as follows:

- For waste, CPPI placed 1 dumpster at each project site during the entire duration of construction to collect all waste material that could not be recycled during the project.
- For recyclables, CPPI stacked all recyclable materials near the dumpster and called a recycling agency to collect the recyclable materials on site when a sufficient load could be taken.
- For reusable material, CPPI stacked these away from the dumpster & wrapped in plastic wrap to be reused on each project site as needed and transported using heavy equipment.

We then setup meetings to implement these plans with the subcontractors responsible to assist CPPI with keeping track of specific materials that fell under their scope of work and eligible to be recycled or reused on the project. If the material fit neither of these categories, the subcontractor was then directed to dispose in the waste dumpster. CPPI kept a log of the tonnage of each material that was disposed in waste, recyclable, and reused on the project and calculated the percentage amount recycled or reused based on the total quantities calculated. For all road and infrastructure materials with the project, CPPI made a list of all materials to keep track of that were deemed road and infrastructure by SITES' definition stated above. From this list, we devised a plan on site for properly disposing of/reusing these road and infrastructure materials back into the project sites as follows:

- For waste, CPPI placed 1 dumpster at each project site during the entire duration of construction to collect all waste material that could not be recycled during the project.
- For recyclables, CPPI stacked all recyclable materials near the dumpster and called a recycling agency to collect the recyclable materials on site when a sufficient load could be taken.
- For reusable material, CPPI stacked these away from the dumpster & wrapped in plastic wrap to be reused on each project site as needed and transported using heavy equipment.

We then setup meetings to implement these plans with the subcontractors responsible to assist CPPI with keeping track of specific materials that fell under their scope of work and eligible to be recycled or reused on the project. If the material fit neither of these categories, the subcontractor was then directed to dispose in the waste dumpster. CPPI kept a log of the tonnage of each material that was disposed in waste, recyclable, and reused on the project and calculated the percentage amount recycled or reused based on the total quantities calculated.

Due to the scope of work for this project, most of the reported values for waste diversion related to road & infrastructure material. The only existing structures from the project site was a gatehouse. When talking with our team, it was determined that the split between road & infrastructure & structural waste diverted from landfill was a 96%-4% road & infrastructure – structural. All of the C&D landfill waste reported is related to structural waste, showing that 100% of all road & infrastructure material was diverted from waste. Reworking the calculations, it was found that 50.77% of the structural waste from the existing gatehouse & wall was diverted from landfill.

## Calculations

| Project Name: | UF-656 LMP | | | | | | | | Total Waste Tons | | 2570.30 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Percent Diverted | | | 96% | | Project Goal | 75% | | Total Diverted Tons | | 2474.34 |
| | | | | | | Florida Statute 403.7032 | | | | | |
| | | | | WASTE DIVERSION | | | | | | | |
| | C&D Landfilled Waste | Class I MSW | Land Clearing Debris | Cardboard and Paper | Metals | Concrete, Asphalt, Masonry | Bottles and Cans | Wood | Drywall | E-Waste | MISC. Diversion |
| MONTH | shingles, plumbing, windows, insulation | Household garbage, plastic film, scrapped equipment | trees, limbs, landscape, sod, rocks etc | corrugated, boxboard, white and craft paper | scrap metal, sheet metal, wire, rebar | asphalt, concrete, brick, CMU, clay roof tile | cans, bottles, glass | scrap wood, pallets, non-pressure treated | gypsum board, wallboard, sheetrock | electronics, controls, appliances | ceiling tile or carpet tile recycling, donated or repurposed material |
| | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) | (tons) |
| January | 6.13 | | 387.10 | | | | | | | | |
| February | 10.66 | | 129.03 | | | | | | | | |
| March | | | | | | 176.09 | | | | | |
| April | 8.84 | | | | | | | | | | |
| May | 10.33 | | | | | | | | | | |
| June | | | | | | | | | | | |
| July | | | | | | | | | | | |
| August | | | | | | | | | | | |
| September | | | | | | | | | | | |
| October | 60.00 | | | | | 1494.44 | | | | | |
| November | | | | | | 803.81 | | | | | |
| December | | | | | | | | | | | |
| Total | 95.96 | 0.00 | 516.13 | 0.00 | 0.00 | 2474.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

*Builder shall submit this, monthly, to Facilities Services Recycling and Solid Waste Management (Recycling-and-Waste@FacilitiesServices.ufl.edu), and CC the UF PM.*

Concrete, Asphalt, Masonry Recalculations (96% road & infrastructure; 4% structural)
- Total: 2,474.34 Tons
- 2,474.34 * 0.04 = 98.9736 tons
- 98.9736 + 95.96 = 194.9336 tons
- (98.9736/194.9336) * 100 = 50.77% structural waste recycled
- 100% of road & infrastructure material was recycled; 2474.34 * 0.96 = 2,375.3664 tons

## Documentation

Recycled Concrete

| | Concrete Size | LBS | Tons | Total Tons | |
|---|---|---|---|---|---|
| 10/18/2021 | | | | | |
| | 80"X28X8" | 372,903 | 186.45 | | |
| | 90"X35"X8" | 524,394 | 262.20 | | |
| | 70"X20"X8" | 233,064 | 116.53 | | |
| | 90"X4"X4" | 29,965 | 14.98 | | |
| | 200"X2"X9" | 74,914 | 37.46 | | |
| | 200"X8"X18" | 49,942 | 24.97 | | |
| Total | | | | 642.59 | |
| | | | | | |
| 10/19/2021 | | | | | |
| | 65"X19"X8" | 205,596 | 102.80 | | |
| | 190"X7"X5" | 138,382 | 69.19 | | |
| | 82"X27"X8" | 368,575 | 184.29 | | |
| | 74"X16"X8" | 197,105 | 98.55 | | |
| | 65"X2"X9" | 24,347 | 12.17 | | |
| | 65"X18"X8" | 16,231 | 8.12 | | |
| | 66"X36"X8" | 395,544 | 197.77 | | |
| Total | | | | 672.89 | |
| | | | | | |
| Oct 20, 2021 | | | | | |
| | 86"X19"X8" | 272,019 | 136.01 | | |
| | 86"X6"X5" | 53,688 | 26.84 | | |
| | 86"X2"X9" | 32,213 | 16.11 | | |
| Total | | | | 178.96 | |
| | | | | | |
| Nov 8, 2021 | | | | | |
| Asphalt | 58"X28"2" | | 20.30 | | |
| Concrete | 47"X31"6" | 181,915 | 90.95 | | |
| Total | | | | 111.25 | |
| | | | | | |
| Nov 9, 2021 | | | | | |
| Asphalt | 41"X32"X2" | | 16.40 | | |
| Concrete | 34"X41"X6" | 174,049 | 87.02 | | |
| Total | | | | 103.4246 | |
| | | | | | |
| Nov 11, 2021 | | | | | |
| Asphalt | 90"X31"X2" | | 34.88 | | |
| Concrete | 42"X37"X6" | 194,026 | 97.01 | | |
| Total | | | | 131.89 | |
| | | | | | |
| Nov 29, 2021 | | | | | |
| | 21"X13"X6" | 34,086 | 17.04 | | |
| | 100"X6"X4" | 49,942 | 24.97 | | |
| | 82"X6"X4" | 40,953 | 20.48 | | |
| | 48"X9"4" | 35,959 | 17.98 | | |
| | 72"X5"4" | 29,965 | 14.98 | | |
| | 60"X8"X6" | 59,931 | 29.97 | | |
| | 64"X5"X4" | 26,636 | 13.32 | | |
| | 18"X28"X15" | 13,110 | 6.55 | | |
| | 50"X28"X15" | 36,416 | 18.21 | | |
| | 13"X28"X15" | 9,468 | 4.73 | | |
| | 13"X28"X15 | 9,468 | 4.73 | | |
| | 17"X9"X4" | 12,735 | 6.37 | | |
| | 54"X27"X8" | 242,720 | 121.36 | | |
| Asphalt | 32"X28"X2" | | 11.20 | | |
| | 130"X5"X4" | 54,104.2 | 27.0521 | | |
| Total | | | | 338.95 | |

| | | | | | |
|---|---|---|---|---|---|
| Nov 30, 2021 | | | | | |
| | 118"X8"X4" | 79 | 39.29 | | |
| | 17"X22"X4" | 31,131 | 15.57 | | |
| | 57"X28"X15" | 41,515 | 20.76 | | |
| | 10"X28"X15" | 7,283 | 3.64 | | |
| | 21"X28"X15" | 15,295 | 7.65 | | |
| | 12"X28"X15" | 8,740 | 4.37 | | |
| | 142"X2"X9" | 53,189 | 26.59 | | |
| | | | | 117.86 | |
| | | | | | |
| March 7, 2022 | | | | | |
| | 97"X20X6" | 242,221 | 121.11 | | |
| | 39"X12"X6" | 58,433 | 29.22 | | |
| | 14"X8"X6" | 13,984 | 6.99 | | |
| Asphalt | 64"X12"X4" | | 18.77 | | |
| | | | | 176.09 | |
| | | 4,666,233 | 2473.91 | 2473.91 | 0.00 |

Northeast
- C&D Landfill - 57.58 tons (All structural)
- Land Clearing - 309.68 tons (Excluded from total)
- Concrete, Asphalt, Masonry - 1,484.604 tons (Total)
- Concrete, Asphalt, Masonry - 1,484.604 * 0.96 = 1,425.21984 tons (road & infrastructure recycled)
- Concrete, Asphalt, Masonry - 1,484.604 * 0.04 = 59.38416 tons (structural recycled)

# Credit 7.6 | Divert reusable vegetation, rocks, and soil from disposal

## Narrative

**Goal: 4 points**

100% of all plant material, rock waste, and soils generated during the land-clearing activities have been retained on site. The location of receiving agent is located 2 miles away from the project site, but is retained on the UF campus. The calculations provided for the waste reporting log for land clearing debris represents the total weight of all land clearing debris (plants, rocks, soils, etc.) that was reallocated for use throughout the site. Nothing was hauled off the site during construction for any land clearing debris. This value does not include invasive plant species, which were demolished from the project sites & relocated to another farm within 50 miles of the project. From the calculations, the total weight of all land clearing debris equals 516.13 tons for both Newell & Northeast projects, with broken out values provided with the recalculations.

As the construction manager of the project, I Charles Garrett, confirm that 100% of all plant material, rock waste, and soils generated during the land-clearing activities have been retained on site.

Charles Garrett

10/27/2022 | 1:30 PM EDT

## Documentation

## Location of Receiving Agents

## Signature

# Credit 7.7 | Protect air quality during construction

## Narrative

**Goal: 4 points**

This policy was enforced by all personnel from Charles Perry Partners, Inc. as well as the foreman from subcontractors using the heavy equipment (i.e. Hicks Asphalt Paving and Concrete & Utility Service of Gainesville, Inc.). A meeting took place with all applicable personnel to issue the policy and ensure everyone is aware of the standard for the project. If there was anyone who failed to follow this policy, a 3-strike limit would have been enforced, with the 1st and 2nd strikes being warnings and the 3rd strike being termination from the job site. At which time this occurs, if at all, the subcontractor at fault will be responsible for providing additional personnel to continue the flow of work without delaying the project schedule.

## Construction Equipment Used On Site

All of the machines are equipped with Tier IV Final emissions equipment.
There are no records of the fuel purchased for the equipment because they are refilled from fuel cells on the work trucks.

USI Fuel Consumption

- 2020 CAT 323 Excavator (2.7-4.0 gph) 166.8 hrs. ~558.6 gallons
- 2020 CAT 305E2 Mini Excavator (1-1.5 gph) 154.8 hrs. ~201 gallons
- 2020 Volvo L60H Wheel Loader (1.4-2.0 gph) 286.8 hrs ~487.8 gallons
- 2021 CAT 420 Backhoe (1.5-2.7 gph) 169.8 hrs. ~357 gallons

Hicks Fuel Consumption

- CAT D5K Bulldozer (3.0 gph) 480 hrs. ~1,440 gallons
- JD 544 Front End Loader (2.0 gph) 480 hrs. ~960 gallons
- CAT 316 Excavator (2.5 gph) 480 hrs ~1,200 gallons
- 289 Skid Steer (2.0 gph) 480 hrs. ~960 gallons
- CAT 1000 Paver (4.0 gph) 480 hrs. ~1,290 gallons
- CB54B Roller (2.3 gph) 480 hrs. ~1,104 gallons
- JD670D Grader (2.0 gph) 480 hrs. ~960 gallons

All equipment fully serviced at 4000 hrs.

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**UF-656 Landscape Master Plan – C7.7 Idle Reduction Policy**

**Background**

Air pollution is a huge concern for ground-level ozone emissions from heavy equipment diesel engines on construction sites. This impacts worker health as well as quality of life for construction workers and citizens living in the area. Heavy equipment exhaust, including that from idling heavy equipment, contributes tremendously to air pollution in the area.

**Statement of Purpose**

The purpose of this policy is to protect the health of the workers, pedestrians, and environment from exposure to equipment exhaust; reduce engine wear on equipment; decrease fuel consumption; & minimize costs.

**Definition**

For this policy, the term "heavy equipment" refers to diesel engine vehicles such as dozers, excavators, backhoes, etc. operated by subcontractors on the jobsite to complete tasks for the project. All heavy equipment regardless of tier rating used ultra-low sulfur diesel when working on the project. Engine tiers for each piece of equipment is defined as follows:

- Tier 1 – an engine subject to tier 1 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or title 40, CFR, part 89.112(a).
- Tier 2 – an engine subject to tier 2 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or title 40, CFR, part 89.112(a).
- Tier 3 - an engine subject to tier 3 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or title 40, CFR, part 89.112(a).
- Tier 4 - an engine subject to tier 4 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or title 40, CFR, part 89.112(a).

**Statement of Policy**

It is the policy from Charles Perry Partners, Inc. to enforce on all subcontractors utilizing heavy equipment, specifically Hicks Asphalt Paving and Concrete & Utility Service of Gainesville, Inc., to have operators turn off equipment engines and not sit idle for more than 5 minutes if work is not being conducted. Work includes, but is not limited to:

- Excavation
- Installing asphalt base
- Grading

**Exemptions**

This policy of turning off equipment engines when stopped does not apply for the periods during which idling is necessary according to the following situations:

1. Work is being conducted during times where no sunlight is available (early morning & late evening)
2. When direction of work is unclear and clarification to continue operating is necessary for periods of 15 minutes or less
3. When work requires equipment to hold heavy material in place to be installed

In any of these cases, if equipment can be run from battery, operators should refrain from idling unless there is major concern with draining the battery.

**Implementation**

This policy will be effective until the end of the construction project.

## Equipment Maintenance Plan

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**UF-656 LMP – Credit 7.7 Equipment Maintenance Plan**

- CAT 305E2-CR (Mini Excavator) –
  - Every 50 service hours:
    - Grease front implement
  - Every 500 miles:
    - Engine oil & filter maintenance
    - SOS oil sampling valve & overall long-term durability for easy extraction
- CAT 323 (Hydraulic Excavator) – All daily maintenance should be done at ground level. Use oil dipstick provided to check engine oil; monitor filter life via the in-cab monitor, maximum 1,000 hours between service then double the interval. Replace hydraulic oil filter every 3,000 hours. Scheduled Oil Sampling (S.O.S.) ports are located on ground level for easy extraction of samples
- CAT 420 (Backhoe Loader) –
  - Every 10 service hours, the following maintenance must occur:
    - Backhoe boom, stick, bucket, & cylinder bearings – Lubricate
    - Backup alarm – Test
    - Braking system – Test
    - Cooling system coolant level – Check
    - Engine air filter service indicator – Inspect
    - Engine oil level – Check
    - Fuel system water separator – Drain
    - Hydraulic system oil level – Check
    - Loader bucket, cylinder, & linkage bearings – Lubricate
    - Seat belt – Inspect
    - Stabilizer – Clean/inspect
    - Stabilizer & cylinder bearings – Lubricate
    - Swing frame & cylinder bearings – Lubricate
    - Tire inflation – Check
    - Transmission oil level – Check
    - Wheel nut torque – Check
  - 50 service hours:
    - Cab filter (fresh air) – Clean/Inspect/Replace
    - Cab filter (recirculation) – Clean/Inspect/Replace
    - Fuel tank water & sediment – Drain
    - Parking brake – Check/Adjust
  - 250 service hours:
    - Axle breathers – Clean/Replace
    - Belts – Inspect/Adjust/Replace
    - Differential oil level (Front) – Check
    - Differential oil level (Rear) – Check
    - Engine oil sample – Obtain
    - Extendable stick pads – Inspect/Adjust

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        - Final drive oil level (Front) – Check
        - Final drive oil level (Rear) – Check
        - Power side-shift stabilizer wear pads – Inspect
        - Side-shift stabilizer wear pads – Inspect/Adjust
    - 500 service hours:
        - Cooling system coolant sample (Level 1) – Obtain
        - Differential oil sample (Front) – Obtain
        - Differential oil sample (Rear) – Obtain
        - Drive shaft spline – Lubricate
        - Engine oil & filter – Change
        - Final drive oil sample (Front) – Obtain
        - Final drive oil sample (Rear) – Obtain
        - Fuel system filter & water separator – Replace
        - Fuel system secondary filter – Replace
        - Hydraulic oil sample – Obtain
        - Hydraulic system oil filter – Replace
        - Transmission oil filter – Replace
        - Transmission oil sample – Obtain
    - 1,000 service hours:
        - Differential oil (Front) – Change
        - Differential oil (Rear) – Change
        - Engine valve lash – Check
        - Final drive oil (Front) – Change
        - Final drive oil (Rear) – Change
        - Rollover protective structure (ROPS) – Inspect
        - Transmission magnetic screen – Clean
        - Transmission oil – Change
        - Wheel bearings (Front) – Lubricate
    - 2,000 service hours:
        - Engine crankcase breather – Replace
        - Hydraulic system oil – Change
        - Receiver dryer (Refrigerant) – Replace
    - Every year:
        - Cooling system coolant sample (Level 2) – Obtain
    - 3,000 service hours:
        - Cooling system water temperature regulator – Clean/Replace
    - Every 3 years after date of installation:
        - Seat belt – Replace
    - 6,000 service hours:
        - Cooling system coolant extender (ELC) – Add
    - 12,000 service hours:
        - Cooling system coolant (ELC) – Change
- Volvo L60H (Wheel Loader)

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- Every 1,000 service hours
  - Engine oil – Replace
- Cat D5K (Bulldozer)
  - Every 4,000 service hours
    - Full service maintenance
- JD 544 (Front End Loader)
  - Every 4,000 service hours
    - Full service maintenance
- CAT 316 (Excavator)
  - Every 4,000 service hours
    - Full service maintenance
- CAT 289D (Skid Steer)
  - Every 4,000 service hours
    - Full service maintenance
- CAT AP1000 (Paver)
  - Every 4,000 service hours
    - Full service maintenance
- CAT CB54B (Roller)
  - Every 4,000 service hours
    - Full service maintenance
- John Deere 670D (Grader)
  - Every 4,000 service hours
    - Full service maintenance

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# Fuel Purchase Records

## Hicks Invoices

**INVOICE**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 158979 | | | 8/19/2021 | 8/19/2021 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 380.00 | $2.500290 | $950.11 |
| | FLORIDA SCETS TAX | | | 380.00 | $0.080000 | $30.40 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 380.00 | $0.060000 | $22.80 |
| | FLORIDA 9TH CENT GILCHRIST | | | 380.00 | $0.010000 | $3.80 |
| | FEDERAL EXCISE DIESEL | | | 380.00 | $0.244000 | $92.72 |
| | FLORIDA EXCISE DIESEL | | | 380.00 | $0.185000 | $70.30 |
| | FLORIDA COASTAL PROTECTION | | | 380.00 | $0.000480 | $0.18 |
| | FLORIDA WATER QUALITY | | | 380.00 | $0.001190 | $0.45 |
| | FLORIDA INLAND PROTECTION | | | 380.00 | $0.019040 | $7.24 |
| | **Extra Charges Subtotal:** | | | | | **$227.89** |
| | **ULS CLR DSL Total:** | | | **380.00** | **$3.100000** | **$1.178.00** |

| BOL # |
|---|
| d-157427 |

| | |
|---|---|
| **Subtotal:** | $950.11 |
| **Extra Charges:** | $227.89 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$1,178.00** |

**INVOICE**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 162253 | | | 10/12/2021 | 10/12/2021 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| 90 MARINE FUEL | **MARINE FUEL** | | | 234.00 | $2.960150 | $692.68 |
| | CHV INLAND PROTECTION | | | 234.00 | $0.019040 | $4.46 |
| | FL COASTAL PROTECTION | | | 234.00 | $0.000480 | $0.11 |
| | FEDERAL OIL SPILL RECOVERY - DIE | | | 234.00 | $0.002140 | $0.50 |
| | LEVY COUNTY ABOVE MINIMUM | | | | | $0.00 |
| | LEVY COUNTY FUEL TAX | | | 234.00 | $0.188000 | $43.99 |
| | FLORIDA WATER QUALITY | | | 234.00 | $0.001190 | $0.28 |
| | FLORIDA EXCISE | | | 234.00 | $0.185000 | $43.29 |
| | FED EXCISE | | | 234.00 | $0.184000 | $43.06 |
| | **Extra Charges Subtotal:** | | | | | **$135.69** |
| | **90 MARINE FUEL Total:** | | | **234.00** | **$3.540043** | **$828.37** |

| BOL # |
|---|
| d-160677 |

| | |
|---|---|
| **Subtotal:** | $692.68 |
| **Extra Charges:** | $135.69 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$828.37** |

**INVOICE**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 160665 | | | 9/16/2021 | 9/16/2021 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| 90 MARINE FUEL | **MARINE FUEL** | | | 200.00 | $2.720150 | $544.03 |
| | CHV INLAND PROTECTION | | | 200.00 | $0.019040 | $3.81 |
| | FL COASTAL PROTECTION | | | 200.00 | $0.000480 | $0.10 |
| | FEDERAL OIL SPILL RECOVERY - DIE | | | 200.00 | $0.002140 | $0.43 |
| | LEVY COUNTY ABOVE MINIMUM | | | | | $0.00 |
| | LEVY COUNTY FUEL TAX | | | 200.00 | $0.188000 | $37.60 |
| | FLORIDA WATER QUALITY | | | 200.00 | $0.001190 | $0.24 |
| | FLORIDA EXCISE | | | 200.00 | $0.185000 | $37.00 |
| | FED EXCISE | | | 200.00 | $0.184000 | $36.80 |
| | **Extra Charges Subtotal:** | | | | | **$115.98** |
| | **90 MARINE FUEL Total:** | | | **200.00** | **$3.300050** | **$660.01** |
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 779.00 | $2.350290 | $1,830.88 |
| | FLORIDA SCETS TAX | | | 779.00 | $0.080000 | $62.32 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 779.00 | $0.060000 | $46.74 |
| | FLORIDA 9TH CENT GILCHRIST | | | 779.00 | $0.010000 | $7.79 |
| | FEDERAL EXCISE DIESEL | | | 779.00 | $0.244000 | $190.08 |
| | FLORIDA EXCISE DIESEL | | | 779.00 | $0.185000 | $144.12 |
| | FLORIDA COASTAL PROTECTION | | | 779.00 | $0.000480 | $0.37 |
| | FLORIDA WATER QUALITY | | | 779.00 | $0.001190 | $0.93 |
| | FLORIDA INLAND PROTECTION | | | 779.00 | $0.019040 | $14.83 |
| | **Extra Charges Subtotal:** | | | | | **$467.18** |
| | **ULS CLR DSL Total:** | | | **779.00** | **$2.950013** | **$2,298.06** |

| BOL # |
|---|
| D-159098 |

| | |
|---|---|
| **Subtotal:** | $2,374.91 |
| **Extra Charges:** | $583.16 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,958.07** |

**INVOICE**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 164895 | | | 11/24/2021 | 11/24/2021 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 576.00 | $2.800290 | $1,612.97 |
| | FLORIDA SCETS TAX | | | 576.00 | $0.080000 | $46.08 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 576.00 | $0.060000 | $34.56 |
| | FLORIDA 9TH CENT GILCHRIST | | | 576.00 | $0.010000 | $5.76 |
| | FEDERAL EXCISE DIESEL | | | 576.00 | $0.244000 | $140.54 |
| | FLORIDA EXCISE DIESEL | | | 576.00 | $0.185000 | $106.56 |
| | FLORIDA COASTAL PROTECTION | | | 576.00 | $0.000480 | $0.28 |
| | FLORIDA WATER QUALITY | | | 576.00 | $0.001190 | $0.69 |
| | FLORIDA INLAND PROTECTION | | | 576.00 | $0.019040 | $10.97 |
| | **Extra Charges Subtotal:** | | | | | **$345.44** |
| | **ULS CLR DSL Total:** | | | **576.00** | **$3.400017** | **$1,958.41** |

| BOL # |
|---|
| d-163294 |

| | |
|---|---|
| **Subtotal:** | $1,612.97 |
| **Extra Charges:** | $345.44 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$1,958.41** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 166183 | | | 12/16/2021 | 12/16/2021 | |

| Product | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|
| ULS CLR DSL | UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE. | | 467.00 | $2.900290 | $1,354.44 |
| | FLORIDA SCETS TAX | | 467.00 | $0.080000 | $37.36 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | 467.00 | $0.060000 | $28.02 |
| | FLORIDA 9TH CENT GILCHRIST | | 467.00 | $0.010000 | $4.67 |
| | FEDERAL EXCISE DIESEL | | 467.00 | $0.244000 | $113.95 |
| | FLORIDA EXCISE DIESEL | | 467.00 | $0.185000 | $86.40 |
| | FLORIDA COASTAL PROTECTION | | 467.00 | $0.000480 | $0.22 |
| | FLORIDA WATER QUALITY | | 467.00 | $0.001190 | $0.56 |
| | FLORIDA INLAND PROTECTION | | 467.00 | $0.019040 | $8.89 |
| | **Extra Charges Subtotal:** | | | | **$280.07** |
| | **ULS CLR DSL Total:** | | **467.00** | **$3.500021** | **$1.634.51** |

| BOL # |
|---|
| p-164583 |

| | |
|---|---|
| **Subtotal:** | $1,354.44 |
| **Extra Charges:** | $280.07 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$1,634.51** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 168137 | | | 1/20/2022 | 1/20/2022 | |

| Product | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|
| ULS CLR DSL | UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE. | | 647.00 | $2.737290 | $1,771.03 |
| | FLORIDA SCETS TAX | | 647.00 | $0.083000 | $53.70 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | 647.00 | $0.065000 | $42.06 |
| | FLORIDA 9TH CENT GILCHRIST | | 647.00 | $0.010000 | $6.47 |
| | FEDERAL EXCISE DIESEL | | 647.00 | $0.244000 | $157.87 |
| | FLORIDA EXCISE DIESEL | | 647.00 | $0.190000 | $122.93 |
| | FLORIDA COASTAL PROTECTION | | 647.00 | $0.000480 | $0.31 |
| | FLORIDA WATER QUALITY | | 647.00 | $0.001190 | $0.77 |
| | FLORIDA INLAND PROTECTION | | 647.00 | $0.019040 | $12.32 |
| | **Extra Charges Subtotal:** | | | | **$396.43** |
| | **ULS CLR DSL Total:** | | **647.00** | **$3.350015** | **$2,167.46** |

| BOL # |
|---|
| D-166538 |

| | |
|---|---|
| **Subtotal:** | $1,771.03 |
| **Extra Charges:** | $396.43 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,167.46** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 169704 | | | 2/15/2022 | 2/15/2022 | |

| Product | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|
| ULS CLR DSL | UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE. | | 657.00 | $3.087290 | $2,028.35 |
| | FLORIDA SCETS TAX | | 657.00 | $0.083000 | $54.53 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | 657.00 | $0.065000 | $42.71 |
| | FLORIDA 9TH CENT GILCHRIST | | 657.00 | $0.010000 | $6.57 |
| | FEDERAL EXCISE DIESEL | | 657.00 | $0.244000 | $160.31 |
| | FLORIDA EXCISE DIESEL | | 657.00 | $0.190000 | $124.83 |
| | FLORIDA COASTAL PROTECTION | | 657.00 | $0.000480 | $0.32 |
| | FLORIDA WATER QUALITY | | 657.00 | $0.001190 | $0.78 |
| | FLORIDA INLAND PROTECTION | | 657.00 | $0.019040 | $12.51 |
| | **Extra Charges Subtotal:** | | | | **$402.56** |
| | **ULS CLR DSL Total:** | | **657.00** | **$3.700015** | **$2,430.91** |

| BOL # |
|---|
| d-168130 |

| | |
|---|---|
| **Subtotal:** | $2,028.35 |
| **Extra Charges:** | $402.56 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,430.91** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 171211 | | | 3/16/2022 | 3/16/2022 | |

| Product | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|
| ULS CLR DSL | UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE. | | 605.00 | $3.787290 | $2,291.31 |
| | FLORIDA SCETS TAX | | 605.00 | $0.083000 | $50.22 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | 605.00 | $0.065000 | $39.33 |
| | FLORIDA 9TH CENT GILCHRIST | | 605.00 | $0.010000 | $6.05 |
| | FEDERAL EXCISE DIESEL | | 605.00 | $0.244000 | $147.62 |
| | FLORIDA EXCISE DIESEL | | 605.00 | $0.190000 | $114.95 |
| | FLORIDA COASTAL PROTECTION | | 605.00 | $0.000480 | $0.29 |
| | FLORIDA WATER QUALITY | | 605.00 | $0.001190 | $0.72 |
| | FLORIDA INLAND PROTECTION | | 605.00 | $0.019040 | $11.52 |
| | **Extra Charges Subtotal:** | | | | **$370.70** |
| | **ULS CLR DSL Total:** | | **605.00** | **$4.400017** | **$2,662.01** |

| BOL # |
|---|
| d-169598 |

| | |
|---|---|
| **Subtotal:** | $2,291.31 |
| **Extra Charges:** | $370.70 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,662.01** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 172879 | | | 4/14/2022 | 4/14/2022 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 200.00 | $4.287290 | $857.46 |
| | FLORIDA SCETS TAX | | | 200.00 | $0.083000 | $16.60 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 200.00 | $0.065000 | $13.00 |
| | FLORIDA 9TH CENT GILCHRIST | | | 200.00 | $0.010000 | $2.00 |
| | FEDERAL EXCISE DIESEL | | | 200.00 | $0.244000 | $48.80 |
| | FLORIDA EXCISE DIESEL | | | 200.00 | $0.190000 | $38.00 |
| | FLORIDA COASTAL PROTECTION | | | 200.00 | $0.000480 | $0.10 |
| | FLORIDA WATER QUALITY | | | 200.00 | $0.001190 | $0.24 |
| | FLORIDA INLAND PROTECTION | | | 200.00 | $0.019040 | $3.81 |
| | **Extra Charges Subtotal:** | | | | | **$122.55** |
| | **ULS CLR DSL Total:** | | | **200.00** | **$4.900050** | **$980.01** |

| BOL # |
|---|
| D-171323 |

| | |
|---|---|
| **Subtotal:** | $857.46 |
| **Extra Charges:** | $122.55 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$980.01** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 176822 | | | 6/21/2022 | 6/21/2022 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 274.00 | $5.137290 | $1,407.62 |
| | FLORIDA SCETS TAX | | | 274.00 | $0.083000 | $22.74 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 274.00 | $0.065000 | $17.81 |
| | FLORIDA 9TH CENT GILCHRIST | | | 274.00 | $0.010000 | $2.74 |
| | FEDERAL EXCISE DIESEL | | | 274.00 | $0.244000 | $66.86 |
| | FLORIDA EXCISE DIESEL | | | 274.00 | $0.190000 | $52.06 |
| | FLORIDA COASTAL PROTECTION | | | 274.00 | $0.000480 | $0.13 |
| | FLORIDA WATER QUALITY | | | 274.00 | $0.001190 | $0.33 |
| | FLORIDA INLAND PROTECTION | | | 274.00 | $0.019040 | $5.22 |
| | **Extra Charges Subtotal:** | | | | | **$167.89** |
| | **ULS CLR DSL Total:** | | | **274.00** | **$5.750036** | **$1,575.51** |

| BOL # |
|---|
| D-175167 |

| | |
|---|---|
| **Subtotal:** | $1,407.62 |
| **Extra Charges:** | $167.89 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$1,575.51** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 174884 | | | 5/18/2022 | 5/18/2022 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 405.00 | $4.387290 | $1,776.85 |
| | FLORIDA SCETS TAX | | | 405.00 | $0.083000 | $33.62 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 405.00 | $0.065000 | $26.33 |
| | FLORIDA 9TH CENT GILCHRIST | | | 405.00 | $0.010000 | $4.05 |
| | FEDERAL EXCISE DIESEL | | | 405.00 | $0.244000 | $98.82 |
| | FLORIDA EXCISE DIESEL | | | 405.00 | $0.190000 | $76.95 |
| | FLORIDA COASTAL PROTECTION | | | 405.00 | $0.000480 | $0.19 |
| | FLORIDA WATER QUALITY | | | 405.00 | $0.001190 | $0.48 |
| | FLORIDA INLAND PROTECTION | | | 405.00 | $0.019040 | $7.71 |
| | **Extra Charges Subtotal:** | | | | | **$248.15** |
| | **ULS CLR DSL Total:** | | | **405.00** | **$5.000000** | **$2,025.00** |

| BOL # |
|---|
| D-173245 |

| | |
|---|---|
| **Subtotal:** | $1,776.85 |
| **Extra Charges:** | $248.15 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,025.00** |

## INVOICE

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**SOLD TO:** 6166
HIcks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** HIcks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 178250 | | | 7/14/2022 | 7/14/2022 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 453.00 | $4.387290 | $1,987.44 |
| | FLORIDA SCETS TAX | | | 453.00 | $0.083000 | $37.60 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 453.00 | $0.065000 | $29.45 |
| | FLORIDA 9TH CENT GILCHRIST | | | 453.00 | $0.010000 | $4.53 |
| | FEDERAL EXCISE DIESEL | | | 453.00 | $0.244000 | $110.53 |
| | FLORIDA EXCISE DIESEL | | | 453.00 | $0.190000 | $86.07 |
| | FLORIDA COASTAL PROTECTION | | | 453.00 | $0.000480 | $0.22 |
| | FLORIDA WATER QUALITY | | | 453.00 | $0.001190 | $0.54 |
| | FLORIDA INLAND PROTECTION | | | 453.00 | $0.019040 | $8.63 |
| | **Extra Charges Subtotal:** | | | | | **$277.57** |
| | **ULS CLR DSL Total:** | | | **453.00** | **$5.000022** | **$2,265.01** |

| BOL # |
|---|
| D-176596 |

| | |
|---|---|
| **Subtotal:** | $1,987.44 |
| **Extra Charges:** | $277.57 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$2,265.01** |

## USI Invoices

**INVOICE**

**PLEASE REMIT TO**
**UNITED FUELS**
**P.O. BOX 2298**
**CHIEFLAND, FL 32644**

**UNITED FUELS**
**P. O. BOX 2030**
**CHIEFLAND, FL 32644**
**352-493-4784**

**SOLD TO:** 6166
Hicks Seal Coating and Striping
RONNIE HICKS
5610 SW CR 313
Trenton FL 32693

**SHIP TO:** 6166
**Company Name** Hicks Seal Coating and Striping
**Contact Name** RONNIE HICKS
**Address** 5610 SW CR 313
**City/State** Trenton FL 32693
**Phone** (352) 535-5479

| Invoice # | PO # | | Delivery Date | Due Date | |
|---|---|---|---|---|---|
| 180144 | | | 8/18/2022 | 8/18/2022 | |

| Product | | Dollar Amount | $ Amt Price | Quantity | Qty Price | Total |
|---|---|---|---|---|---|---|
| ULS CLR DSL | **UNDYED ULTRA LOW SULFUR DIESEL 15 PPM SULFUR MAXIMUM. DOES NOT CONTAIN ANY VISIBLE EVIDENCE OF DYE.** | | | 390.00 | $3.787290 | $1,477.04 |
| | FLORIDA SCETS TAX | | | 390.00 | $0.083000 | $32.37 |
| | FLORIDA LOCAL OPT. TAX - DIESEL | | | 390.00 | $0.065000 | $25.35 |
| | FLORIDA 9TH CENT GILCHRIST | | | 390.00 | $0.010000 | $3.90 |
| | FEDERAL EXCISE DIESEL | | | 390.00 | $0.244000 | $95.16 |
| | FLORIDA EXCISE DIESEL | | | 390.00 | $0.190000 | $74.10 |
| | FLORIDA COASTAL PROTECTION | | | 390.00 | $0.000480 | $0.19 |
| | FLORIDA WATER QUALITY | | | 390.00 | $0.001190 | $0.46 |
| | FLORIDA INLAND PROTECTION | | | 390.00 | $0.019040 | $7.43 |
| | | | **Extra Charges Subtotal:** | | | **$238.96** |
| | | | **ULS CLR DSL Total:** | **390.00** | **$4.400000** | **$1,716.00** |

| BOL # |
|---|
| D-178458 |

| | |
|---|---|
| **Subtotal:** | $1,477.04 |
| **Extra Charges:** | $238.96 |
| **EFT Discount:** | $0.00 |
| **Total Freight:** | $0.00 |
| **Total:** | **$1,716.00** |

Almond Oil company

**Page:** 1

# Invoice

**Remit To:**
504 SE Williston Road, Gainesville, FL 32641
Phone: (352) 376-5131 : Fax: (352) 378-6482
Email: ar@almondoilcompany.com

**Invoice Number:** 0142278-IN
**Invoice Date:** 5/30/2023
**Ship Date:** 5/30/2023
**Invoice Due Date:** 6/19/2023
**Terms:** NET 20 DAYS

**Cust #: 02-USI**

**Bill To:**
UTILITY SERVICE INC
1360 N.W. 53RD AVE
GAINESVILLE, FL 32609

**Ship To:**
DYED - USI MAIN OFFICE
1360 N.W. 53RD AVE
GAINESVILLE, FL 32609

| Customer P.O. | Order Number | Ship VIA | Ticket Number | Tax Schedule |
|---|---|---|---|---|
| | 0102444 | AOC8 | 809 | FL AL |

| Item Code | Whse | Item Description | TAX | UOM | Quantity | Unit Price | Amount |
|---|---|---|---|---|---|---|---|
| 01HSD | 000 | DYED DIESEL No. 2 ULS, <15PPM NON TAXABLE USE ONLY PENALTY FOR TAXABLE USE | TX | GAL | 236.400 | 2.9522 | 697.90 |
| T1DD-SRF | 000 | TAX - FEDERAL SUPERFUND RECOVERY FEE | TX | EACH | 236.400 | 0.0039 | 0.92 |
| T4DD | 000 | TAX - DYED DIESEL ENV/MISC TAXES<br>Fed LUST Tax 0.00100<br>Fed Oil Spill Tax 0.00214<br>Fl Pollutant Tax 0.02071 | TX | EACH | 236.400 | 0.0239 | 5.65 |

Customer hereby agrees and promises to pay all invoices or other amounts due Almond Oil Company. Customer has three days from the date of invoice to dispute any alleged discrepencies otherwise Customer deems this invoice as true and accurate. Any payments returned for non-sufficient funds, stopped payments, and/or incorrect banking information shall be subject to a $30.00 per incident charge. Customer agrees to pay interest at a rate of 1.5% per month (18% annual interest) or $10.00 per statement, whichever is greater, on all past due amounts. Customer agrees to pay in addition to past due balances plus interest and charges, all collection costs which may include reasonable attorney's fees, whether suit be filed or not, court costs and investigative services. Venue is Alachua County, Florida.

| | |
|---|---|
| Taxable: | 704.47 |
| Non Taxable: | 0.00 |
| Net Invoice: | 704.47 |
| Sales Tax: | 52.84 |
| Invoice Total: | 757.31 |
| Deposit Amount: | 0.00 |
| **Amount Due:** | 757.31 |

JUN 01 2023

# SECTION 8: OPERATIONS + MAINTENANCE

| Prerequisite | Title | Points |
|---|---|---|
| O+M P8.1 | Plan for sustainable site maintenance | Required |
| O+M P8.2 | Provide for storage and collection of recyclables | Required |
| **Credit** | **Title** | **Points** |
| O+M C8.3 | Recycle organic matter | 4 points |
| O+M C8.4 | Minimize pesticide and fertilizer use | 5 points |
| O+M C8.5 | Reduce outdoor energy consumption | 3 points |
| O+M C8.7 | Protect air quality during landscape maintenance | 2 points |

# PREREQUISITE 8.1 | PLAN FOR SUSTAINABLE SITE MAINTENANCE

## Site Maintenance Plan Worksheet

### SITES® v2 Site Maintenance Plan Worksheet

**P8.1: PLAN FOR SUSTAINABLE SITE MAINTENANCE**

**PROJECT NAME**
Northeast Gateway

**PROJECT ID#**
13742

**INSTRUCTIONS:**
1. Complete using an integrated design team, including the maintenance contractor or manager

| Maintenance Plan Topics | Required actions to achieve 10-year desired outcome | | | 10-year desired outcome |
|---|---|---|---|---|
| | Maintenance activities | Specialist required | Timeline/ Schedule | |
| **WATER** | | | | |
| **Stormwater features and BMPs effectiveness**<br>**(Required component of P3.1, C3.3, C3.5)**<br>Describe the proper maintenance activities to ensure continued effectiveness of stormwater features and BMPs (e.g., replacement of vegetation, removal of accumulated sediment load). | The University shall abide by all requirements and conditions of the current Master Stormwater Permit by the SJRWMD. The UF Facilities Services Division implements strategies to mitigate University generated stormwater and to minimize sotrmwater borne pollutants through the implementation of BMPs.<br>Some BMPs include, but are not limited to,<br>- incorporating stormwater management retention and detention features into the Landscape Master Plan project scope<br>- using slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater<br>- conducting regular training for maintenance personnel about isses such as motor vehicle maitenance in order to prevent leakage of oil, grease and other fluids, collection and proper disposal of paint and cleaning products (including their empty containers) and collection of suitable recyclable materials<br>- avoiding the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides (ban use for cosmetic purposes), aimed at identified targetted species<br>- coordinating pesticide application with irrigation practices to reduce runoff and leaching<br>- using pervious materials to minimize | UF Environmental Health and Saftey<br>-Office of Sustainability<br>-Facilities Services<br>-UF/IFAS | Facilities Services reports to the SJRWMD quarterly. Abide by the 2020 Master Stormwater Permit by the SJRWMD until next renewal in 2030. | The Univeristy will continue to assess, train, and monitor implementation of these BMPs over the 10-year period with the desire of<br>- decreasing the use of fertilizers and pesticides<br>- minimal pollutant runoff<br>- little to no sediment runoff<br>- improving the quality of nearby aquatic systems and meet Class III-Limited water quality standards in Lake Alice<br>- implementing the latest advances in agricultural BMPs<br>The University shall strive to inform faculty, staff, students and visitors on stormwater issues through outreach and demonstration projects and encourage healthy practices. |
| **Water treatment**<br>**(Required component of C3.3, C3.4, C3.5)**<br>Describe the process for treating water features, if present (e.g. avoiding chlorine or bromine). | Not applicable- No water features on site. | Not applicable- No water features on site. | Not applicable- No water features on site. | Not applicable- No water features on site. |
| **Water quality**<br>**(Required component of C3.3, C3.4, C3.5, C3.6)**<br>Describe the appropriate maintenance activities designed to reduce the exposure to and the mobilization and transport of pollutants in runoff. | The Univeristy shall not allow stormwater discharge to cause or contribute to a violation of water quality standards in Waters of the State. BMPs designed to reduce the expose to and the mobilization and transport of pollutants in runoff include but are not limited to...<br>- use of NPK slow release fertilizers<br>- carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to grouondwater<br>- conducting regular training for maintenance personnel about issues such as motor vehicle maintenance in order to prevent leakage of oil, grease and other fluids, collection and proper disposal of yard debris, disposal of paint and cleaning products (including their empty containers) and collection of suitable recyclable materials<br>- coordinating pesticide application with irrigation practices to reduce runoff and leaching<br>- using vegetative management (e.g., planted buffers and minimal mowing)<br>- monitoring sedimentation load in nearby aquatic systems | UF Facilities Services administered Groundskeeper III Team<br>- UF Facilities Services Grounds Assistant Director: Tom Schlik<br>- UF Facilities Services Grounds Superintendents: Donna Bloomfield and Darrel Pons | Facilities Services reports to the SJRWMD quarterly. Abide by the 2020 Master Stormwater Permit by the SJRWMD until next renewal in 2030. | The Univeristy will continue to assess, train, and monitor implementation of these BMPs over the 10-year period with the desire of<br>- decreasing the use of fertilizers and pesticides<br>- minimal pollutant runoff<br>- little to no sediment runoff<br>- improving the quality of nearby aquatic systems and meet Class III-Limited water quality standards in Lake ALice<br>- implementing the latest advances in agricultural BMPs<br>The University shall strive to inform faculty, staff, students and visitors on stormwater issues through outreach and demonstration projects and encourage healthy practices. |
| **Irrigation allotment and schedule**<br>**(Required component of P3.2, C3.4)**<br>Describe the anticipated watering schedule (frequency and duration) that allows the site to meet annual volume requirements and restrictions. | The watering schedule is based on seasonal and landscaping needs. In Florida, the wet season is typically from June to September; during this season the site will be watered less frequently and for a shorter duration due to increased precipitation. The dry season is from October to May and during this season, the site will be watered more frequently and for a longer duration due to less precipitation. The University shall conserve water resources through the use of low water demand design principles, including:<br>- use of drought tolerant and site appropriate native plant material to the maximum degree possible,<br>- soil moisture senors<br>- rainfall shut-off devices<br>- use of drought tolerant ground cover<br>- use of canopy trees<br>- use of soil enhancers and mulch to enable soils to retain moisture | UF Facilities Services- Grounds | The site is watered 2 times a week for 20 minutes. | - Adapt with the weather and climate conditions to prevent water loss; can be achieved by implementing soil moisture sensors to create a water schedule that meets annual volume requirements but does not waste unnecessary water.<br>- Continue to irrigate at no/low occupancy in evening hours<br>- Curtail the use of well water or domestic water for irrigation purposes by increasing the use of reclaimed water<br>- The University shall strive to inform faculty and staff on the benefitds of utilizing reclaimed water for irrigation through outreach and demonstration projects to encourage healthy practices. |

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| **Irrigation water source**<br>**(Required component of P3.2, C3.4)**<br>Describe the process for maintaining non-potable water sources used for landscape irrigation (e.g. rainwater harvesting, graywater systems). | The University's Water Reclamation Facility is responsible for process of maintaining non-potable water sources used for landscape irrigation. This facility gathers waste water and treats it on site through the Kruger BIO-DENIPHO process. The Univerity's Water Reclamation Facility then stores the non-potable water and distributes when needed. | UF Facilities Services - Utilities Operations | The University will continue to comply with the permit from the Department of Environmental Protection until it is updated. | -To continue the use of reclaimed water for landscape irrigation needs for a 10-year period or longer.<br>- Use water meters to analyze water usage and startegize methods to conserve water resources over time.<br>- Curtail the use of well water or domestic water for irrigation purposes by increasing the use of reclaimed water<br>- The University shall strive to inform faculty and staff on the benefits of utilizing reclaimed water for irrigation through outreach and demonstration projects to encourage healthy practices. |
| **Temporary Irrigation**<br>**(Required component of C3.4**)<br>Describe the process for disconnecting/ removing temporary irrigation systems, if present, after the plant establishment period. | There will be temporary irrigation systems for the trees and shubberies on site. They will be implemented for three years, or until deemed unecessary by the groundskeeeping team, then the temporary systems will be capped. | UF Facilities Services administerd Groundskeeper III Team | Temporary irrigation system for trees and shubberies active for three years. | Develop and sustain a healthy environment for new plants over the 10-year period and longer, therefore the new plants can easily transition and adapt faster. |
| **SOIL STEWARDSHIP** | | | | |
| **Soil amendments and fertilizers**<br>**(Required component of P4.1,C6.7, P7.3, C7.4, C8.4)**<br>Describe the process for identifying soil deficiencies, including conducting soil test(s) prior to adding amendments and fertilizers. Specify use of the least harmful amendments (such as compost) when necessary. | The process for identifying soil deficiencies include completing a soil test before development that test for bulk densities and soil chemical characterisitics and comparing the results to the test of the final soil conditions. The final soil conditions will also be tested for at least three percent of organic matter in the top twelve inches of top soil. If soil deficiences are identified through labratory tests or visual tests, it will be treated with compost or NPK slow-release fertilizers to restore back to previous conditions. Since the site is located in Zone A, it is treated with high maintenance which requires frequent monitoring for deficiencies. | - UF Facilities Services- Groundskeeper III Team<br>- UF/IFAS Analytical Services Labratory<br>- UF/IFAS Extension Soil Testing Labratory | First soil test, prior to development, completed on: 05/14/2021<br>Second soil test will be completed after development. Soil conditions will be evaluated once a month through scouting. | To maintain previous soil conditions before development or to improve previous soil conditions before development. Soil conditions will allow for future vegetation to prosper and help UF achieve their goals for the Landscape Master Plan. The University shall establish healthy soil conditions to enhance the campus environment and reflect the University's ecological setting with the incorporation of native vegetation. The University shall strive to inform faculty and staff on the benefits of utilizing compost rather than fertilizer through outreach and demonstration projects to encourage healthy practices. |
| **Use of fertilizers**<br>**(Required component of P4.1, P4.2, C6.7, C8.4)**<br>Describe the process for applying fertilizers (only if needed) to ensure that application is effective and prevents harm to environmental and human health. | The process of applying fertilizers begins with visual tests by the lawn maintenance crew. If vegetation is seen to have no deficiencies, fertilizer will not be applied. If vegetation is seen to have deficiences it will be treated with compost from on-site facility. If compost is not seen as an effective method, NPK fifty percent slow- release fertilizers will be used for different types of vegetation. The application of these specific fertilizers prevents harm to environmental and human health from potential excess runoff. | UF Facilities Services & UF/IFAS administered Groundskeeper III Team | Vegetation and soil will be evaluated once a month through scouting. | The University shall continue to phase out the implementation of non-native plants and increase the amount of native vegetation. The additions of native vegetation shall decrease the demand for fertilizers. The University shall utilize native vegetation to decrease fertilizer use and enhance the campus environment to reflect the University's ecological setting. The University shall strive to inform faculty and staff on the ecological implications of abundant fertilizer use through outreach and demonstration projects to encourage healthy practices. |
| **Erosion and compaction**<br>**(Required component of P4.1, P7.3, C7.4)**<br>Describe the process for alleviating soil erosion or compaction (due to site use or maintenance) that is detrimental to plant health. | The processes for alleviating soil erosion or compaction include but are not limited to...<br>- phasing and limiting the removal of vegetation<br>- minimizing the amount of land area that is cleared<br>- limiting the amount of time bare land is exposed to rainfall<br>- using temporary ground cover on cleared areas if construction is no imminent<br>- using silt fencing, hay bales, or other appropriate sediment barriers adjacent to water bodies, wetlands and areas of slope<br>- maintaining vegetative cover on areas of high soil erosion potential (i.e., banks of streams, steep or long slopes, stormeater conveyances, etc.), where feasible.<br>- utilization of smal dics to alleviate soil compaction completed by maintenance team<br>- monitor nearby aquatic systems for increased sedminet load; utilize Dino 6 Dregde to gather sediment if necessary | UF Facilities Services & UF/IFAS administered Groundskeeper III Team | - Soil conditions will be evaluated once a month through scouting.<br>- Assessment of soil erosion after severe weather event<br>- Weekly monitoring of soil erosion or compaction during and after construction | The Univeristy will continue to assess, train, and monitor implementation of these BMPs over the 10-year period with the desire of<br>- minimal pollutant runoff<br>- little to no sediment runoff<br>- improving the quality of nearby aquatic systems and meet Class III-Limited water quality standards in Lake Alice<br>- implementing the latest advances in agricultural BMPs to avoid erosion and compaction<br>The University shall strive to inform faculty, staff, students and visitors on soil erosion and soil compaction issues through outreach and demonstration projects and encourage healthy practices. |
| **VEGETATION** | | | | |
| **Plant health care**<br>**(Required component of C3.5, C3.6, P4.3, C4.4, C4.5, C4.6, C4.7, C4.8, C4.9, C4.10, C4.11, C6.7, C8.3, C8.4)**<br>Describe the process for maintaining vegetation, including food producing gardens, according to long-term plans for the site and adhering to recognized standards for professional horticultural practice. Describe the process for monitoring plant health to prevent problems. Provide a list (include common and scientific names) of potential appropriate, noninvasive plants that can be used for any plant replacement for replacing plants. When replacing plants, consider maintenance needs of plants and design style. | The process for maintaining vegetation on site is scouting. The evaluation includes monitioring plant health to prevent problems. Potential approporiate, non-invasive plants for replacement:<br>- Shumard/Bluff Oak, Quercus austrina<br>- Southern Live Oak, Quercus virginiana<br>- Crepe myrtle, Lagerstroemia spp.<br>- D.D. Blanchard, Magnolia grandiflora<br>- Sabal Palm, Sabal palmetto | - UF Facilities Services & UF/IFAS administered Groundskeeper III Team<br>- certified arborist | Vegetation will be evaluated once a month through scouting. | - Maintain optimal plant health through recognized standards for professional horticultural practices to prevent the implementation of replacement plants.<br>- Encourage the incorporation of native plants to foster a healthier environment.<br>- continue to maintain and expand the University inventories of trees (particularly National Champion and Heritage Specimens) and rare plants on the main campus<br>- The University shall utilize landscaping and tree canopy to enhance the campus environment and reflect the University's ecological setting. |
| **Healthy plant material management**<br>**(Required component of C6.7, C8.3, C8.4)**<br>Describe the process for managing excess organic plant material generated on site (e.g., composting, recycling). Plan and schedule for harvest of food producing gardens. | The process for managing excessive organic plant material generated on site includes collecting leaf and other debris through a vacuum that reduces the organic material 15:1 which is then carried to the composting facility. The organic matter will take approximately one year to decompose then will be transported and used for fertilization needs. No food production on site. | UF Facilities Services & UF/IFAS administered Groundskeeper III Team | Excess organic plant material will be collected ____ a week when the site is being maintained by the UF Groundskeeper Team III and then carried to the composting facility, where the matter will take approximately one year to decompose. Gather organic plant material after major storm event. | Have all excess organic plant material generated on site be collected and transported to compost facility ensuring healthy plant material management. The University shall utilize healhty plant material management practices to enhance the campus environment and reflect the University's ecological setting. The University shall strive to inform faculty and staff on healhty plant material management practices through outreach and demonstration projects. |
| **Diseased and invasive plant disposal**<br>**(Required component of P4.2, C7.6, C8.3)**<br>Identify the proper techniques for addressing dead, diseased, invasive, or pest-infested vegetation in a manner that does not increase the likelihood of spread. | Where feasible the Univeristy shall remove non-native invasive plants from the campus grounds and dispose of it off-site. As these species are located on site, the University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Vegetation will be evaluated once a month through scouting. | Control and prevent the spread of plant diseases and invasive pests by proper management through frequent observation of site and site specific treatment. The University shall properly and safely dispose of diseased and invasive plants to enhance the cmapus environment and reflect the University's ecological setting. The University shall strive to inform faculty, staff, students and visitors on plant diseases and invasive plant species through outreach and demonstration projects. |

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| **Site safety**<br>**Required component of C4.11, C8.3, C8.4)**<br>Describe the process for maintaining vegetation to ensure site safety and meet the needs of the intended uses of the site. Describe the process for managing vegetative biomass to reduce the risk of catastrophic wildfire. If prescribed fires are to be used, describe a burn plan that is similar in technique, frequencies and intensities to natural fire regimes in the ecosystem. | Maintaining vegetation is completed by the Groundskeeper III Team under the UF Facilities Operations department to ensure site safety and that the site is being utilized for its intended use. The vegetative biomass on-site is not sufficient enough to sustain a catastrophic wildfire. The site will not implement prescribed fires or any variation of a burn plan. Trimming, pruning and mowing will take place as needed to minimize fire hazard. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Vegetation will be evaluated once a month through scouting. | Vegetation will be constanlty managed so that there is not an excess build up of vegetative biomass. The University shall utilize landscaping and tree canopy to enhance the campus environment and reflect the University's ecological setting. |
| **Pest management**<br>**(Required component of P4.2, C6.7, C8.4)**<br>Describe how pest, diseases, and any unwanted species of plants and animals will be controlled using Integrated Pest Management (IPM) techniques. | The invasive species management plan that will be implemented on site includes the monthly scouting process carried out by the Groundskeeper III Team as well as scheduled routine visits by the EH&S Pest Management. Servicing includes:<br>- appplying baits<br>- maintaining insect light traps<br>- physical removal<br>- larva and adulticide applications for mosquitos made as needed<br>- capture, relocation and exclusion for birds, squirrels, raccoons, possums, snakes, bat and alligators as required.<br>Most pest problems can be resolved by using non-chemical insect traps or baits; pesticides would only be used if deemed necessary.<br>If an invasive species is identified on site the University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management Department | Vegetation will be evaluated once a month through scouting. | The University shall utilize the Integrated Pest Management plan to prevent the growth of pests on site. Employing the Integrated Pest Management Plan enhances the campus environment to reflect the University's ecological setting. The University shall strive to inform faculty, staff, students and visitors on the identification of pests and the process of reporting pests on-site through outreach and demonstration projects. |
| **Invasive species list**<br>**(Required component of P4.2)**<br>Provide a list (include common and scientific names) of plant species identified in the area according to Regional lists, State Noxious Weeds laws, and Federal Noxious Weeds laws. | The University should frequently reference the following list for newly intorduced non-native invasice species:<br>- IFAS Assessment of Non-Native Plants in Florida's Natural Areas<br>- Department of Agriculture and Consumer Services' "Noxious Weed List"<br>- Florida Exotic Pest Plant Council's "List of Invasive Plant Species"<br>The Florida Exotic Pest Plant Council classifies these plant speicies as invasive plant species that have been identified near the site:<br>- Cat's Claw (Dolichandra unguis-cati)<br>- Boston/ Sword Fern (Nephrolepis cordifolia)<br>- Skunkvine (Paederia foetida) | UF Facilities Services- Grounds Department | Vegetation will be evaluated once a month through scouting. | Control and prevent the spread of plant diseases and invasive pests by proper management through frequent observation of site and site specific treatment. The University shall properly and safely dispose of diseased and invasive plants to enhance the cmapus environment and reflect the University's ecological setting. The University shall strive to inform faculty, staff, students and visitors on plant diseases and invasive plant species through outreach and demonstration projects. |
| **Invasive Management Plan**<br>**(Required component of P4.2, C8.4)**<br>Provide an active multi-year invasive species management plan for control and subsequent management of any plant species included in the row above, including: IPM strategies, procedure for identifying and monitoring for additional invasive species, procedure for adding new species, treatments, long-term control including monitoring, and methods to dispose of invasive plant materials. | The invasive species management plan that will be implemented on site includes the monthly scouting process carried out by the Groundskeeper III Team as well as scheduled routine visits by the EH&S Pest Management. Pest technicians are responsible for responding to service requests, further inspect the troubled area, identifying the insect and pest monitoring. The technicians, along with the pest management coordinator, will then develop proper pest prevention measures and treatment. Servicing includes:<br>- appplying baits<br>- maintaining insect light traps<br>- physical removal<br>- larva and adulticide applications for mosquitos made as needed<br>- capture, relocation and exclusion for birds, squirrels, raccoons, possums, snakes, bat and alligators as required.<br>Most pest problems can be resolved by using non-chemical insect traps or baits; pesticides would only be used if deemed necessary.<br>Typically if an invasive plant species is identified it will be immediately removed and disposed of off-site; equipment used to collect invasive species will be sanitized. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Vegetation will be evaluated once a month through scouting. | The University shall utilize the Integrated Pest Management plan to prevent the growth of pests on site. Employing the Integrated Pest Management Plan enhances the campus environment to reflect the University's ecological setting. The University shall strive to inform faculty, staff, students and visitors on the identification of pests and the process of reporting pests on-site through outreach and demonstration projects. |
| **MATERIALS MANAGEMENT** | | | | |
| **Materials replacement**<br>**(Required component of P5.1, C5.4, C5.5, C5.6, C5.7, C5.8, C5.9, C5.10, C6.8, C8.5)**<br>Provide a list of preferred characteristics for replacement materials (e.g., materials from local and regional sources, recycled content materials, certified wood, energy-efficient lighting) | Materials that need to be replaced on site will come from the original supplier if it cannot be recycled content. Recycable content that can be used for replacement, such as brick, will be sourced from local or regional facilities. | Planning, Construction and Design Division at UF, Land Use and Facilities Committee, Preservation of Historic Buildings and Sites Committee | Bi-annual evaluation and recorded condition of the materials used on site. | New additions shall strive to maintain a consistent build that defines the campus civic realm, preserves campus character, and promotes design innovation. |
| **Functionality and extended use**<br>**(Required component of C5.2, C5.3, C5.4, C5.8)**<br>Describe the process for repairing and maintaining structures and paving in a way that reduces harm to environmental and human health (e.g. use of low-emitting adhesives) and ensures the effectiveness of the material (e.g., clean pervious surfaces) | The University shall continue to deveop and implement cleaning and maintenance protocols for use by maintenance staff, supervisors, contractors and building occupants such as using less abrasive "green" cleaning products, such as soft wash, to ensure proper protection of historic materials in the Campus Historic District. The University will continue to identify, designate and protect the university's historic and archaeological resources by complying with the State Division of Historic Resources pursuant to Section 267.061(2) Florida Statutes regarding maintenance. rehabilitation, remodeling, renovation and demolition activites. | UF Facilities Services administered Groundskeeper III Team | Bi-annual evaluation and recorded condition of the structures on site. Structures will be cleaned and fixed on an as-needed basis. | The University shall only implement sustainable processes for repairing and maintaining structures. The University shall strive to keep structures in good condition so that it maintains a consistent build the defines the campus civic realm, preserves campus character, and promotes design innovation. |

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|---|---|---|---|---|
| **Site safety**<br>**(Required component of C5.2, C6.2, P8.2, C8.3, C8.4)**<br>Describe the process for repairing and maintaining structures and paving that reduces harm to environmental and human health and ensures site safety and that meets the needs of the intended uses of the site. Describe the process for properly disposing of harmful materials. | There will be no generation of harmful materials on site. Hazardous materials will be properly disposed of based on typ eof material. The University shall continue to deveop and implement cleaning and maintenance protocols for use by maintenance staff, supervisors, contractors and building occupants such as using less abrasive "green" cleaning products, such as soft wash, to ensure proper protection of historic materials in the Campus Historic District. The University will continue to identify, designate and protect the university's historic and archaeological resources by complying with the State Division of Historic Resources pursuant to Section 267.061(2) Florida Statutes regarding maintenance. rehabilitation, remodeling, renovation and demolition activites. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Bi-annual evaluation and recorded condition of the structures on site. Structures will be cleaned and fixed on an as-needed basis. | The University shall only implement sustainable processes for repairing and maintaining structures. The University shall strive to keep structures in good condition so that it maintains a consistent build the defines the campus civic realm, preserves campus character, and promotes design innovation. |
| **Historic buildings, structures, objects and cultural landscapes**<br>**(Required component of C4.5, C5.2, C6.1)**<br>Describe the process for maintaining the integrity of historic buildings and structures and cultural landscapes. Process to include detailed specifications related to the repair or replacement of features and any maintenance work to be documented for records. Describe the process for determining how conflicts between historic and environmental concerns will be addressed. | Continue to identify, designate and protect the university's historic and archaeological resources by complying with the provisions set forth in the programmatic memorandum of agreement with the State Division of Historic Resources pursuant to Section 267.061(2) Florida Statutes regarding new construction, earthwork and landscaping activities. Prior to an historic property or landscape being rehabilitated or substantially altered in a way that may adversly affects its character, form, integrity or archaeological or historic value, the University shall consult with the Preservation of Historic Buildings and Sites Committee and the Land Use and Facilities Planning Committee, in addition to any other committee reviews called for through the standard project review process defined in the Implementation Element. Since the site boundaries are within the campus Historic District which is on the National Register of Historic Places, the University should also consult the Florida Department of State's Division of Historical Resources to avoid or mitigate adverse impacts, and undertake any appropriate salvage or recoveyr action as required by the programmtic memorandum of agreement. | Planning, Construction and Design Division at UF, Land Use and Facilities Committee, Preservation of Historic Buildings and Sites Committee | Bi-annual evaluation and recorded condition of the historic structures on site. Structures will be cleaned and fixed on an as-needed basis. | Continue to identify, designate, protect, and enhance the University's historic and archaeological resources by complying with the provisions set forth in the programmatic memorandum of agreement with the Florida Statutes regarding new construction, earthwork and landscaping activities. The Planning, Desing and Construction Division, Preservatoion of Historic Buildings and Sites Committee, and Architectural Review Council shall continue to collaborate on historic preservation with best practices for rehabilitation and new construction specific to the University of Florida campus.<br>The University shall strive to inform faculty, staff, students and visitors about the significance of the historic structures through outreach and demonstration projects. |
| **Recyclable materials**<br>**(Required component of P8.2)**<br>Describe the process for managing and recycling all paper, glass, plastics, and metals that will be generated on site. | The University shall promote recycling through increased educational efforts directed toward faculty, students and staff. The Facilities Services and Office of Sustainability seek opportunities to expand the type of recycled materials based on industry demand. Currently the following items can be recycled on site: office paper, newsprint, phone books, magazines, junk mail, soft-cover books, corrugated containers (boxes), toner & inkjet cartridges, cans, glass bottles & jars, wastewater solids, precious metals, white goods, scrap metal, used pallets, used lumber, yard debris and masonry. There will be three locations for recycling on site. Recycables will be gathered once or twice a week depending on how full the bins are. Once gathered, recycables are gathered and sorted at an on-site facility. Once sorted, recycables are collected by a third-party vendor and taken off-site. | UF Facilities Services and Office of Sustainability<br>Dale Morris | Recycling bins will be gathered once or twice a week depending on how full the cans are. | To provide for safe, sanitary, efficient, economical and environmentally sound recycling collection program that assures public health adn safety for the current and future demands of the University. The University shall strive to reduce the total volume of solid waste requiring disposal and increase landfill diversion (i.e. ruse, repurpose, recycling, composting) of the remainder by at least 90% in pursuit of zero-waste goal. The University shall continure implementing and expanding recycling programs associated with major sporting, entertainment and other large events on campus. The university shall look for opportunities to expand the current recycling program to include an additional recycling bin ands other recycable materials. The University shall promote recycling through increased educational efforts directed toward falculy, staff, students and visitors. |
| **On-site food waste**<br>**(Required component of C6.7, C8.3)**<br>For sites that generate food waste, describe the process for on-site collection of compostable organics to prevent them from entering the municipal solid-waste stream. | Not applicable- No food waste generated on-site. | Not applicable- No food waste generated on-site. | Not applicable- No food waste generated on-site. | Not applicable- No food waste generated on-site. |
| **SENSITIVE SITE FEATURES** | | | | |
| **Conserve aquatic ecosystems**<br>**(Required component of P1.2, P1.3, C3.5, C3.6)**<br>Indicate the maintenance techniques and describe the monitoring activities that will ensure proper aquatic ecosystem function remains. | No aquatic ecosystems on site. Maintenance techniques include using BMP's to ensure minimal sediment and pollutant runoff that could possibly contaminate nearby aquatic ecosystems off site. Nearby aquatic ecosystems off site include sinkholes, creeks, ponds and Lake Alice on the UF campus. UF IFAS team completes frequent water quality monitoring tests in aquatic ecosysems off site to ensure proper aquatic ecosystem function remains. Off site aquatic ecosystems are cleaned using GeoForm's Dino6 Dredge that removes excess sediments that settle at the bottom of the waterways from sediment runoff. The excess sediment is taken out and dried to be recycled. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Frequent water quality monitoring test taken at nearby off-site aquatic ecosystems. | The University will continue to assess, train, and monitor implementation of these BMPs over the 10-year period with the desire of<br>- decreasing the use of fertilizers and pesticides<br>- minimal pollutant runoff<br>- little to no sediment runoff<br>- improving the quality of nearby aquatic systems and meet Class III-Limited water quality standards in Lake Alice<br>- implmenting the latest advances in agricultural BMPs<br>The University shall strive to inform faculty, staff, students and visitors on healthy practices to maintain aquatic ecosystems through outreach and demonstration projects. |
| **Conserve habitats for threatened and endangered species**<br>**(Required component of P1.4, C4.7)**<br>Describe the process for avoiding impacts during site maintenance to threatened and endangered species and their habitats. | The University shall continue to protect and conserve endangered and threatened species of plants and wildlife, and species of special concern, as required by the Endangered Species Act of 1973 and federal and state management policies relating to the protection of threatened and endangered species of special concern. Protection plans for these listed species, if documented on site, shall be formulated that are consistent with those of the appropriate local, state and federal agencies. Since the site boundaires are located in already impacted urban areas, the presence of threatened and endangered species is low. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Examine for endangered species during the monthly scouting process. | To restrict University activities known to threaten the habitat and survival of endangered and threatened species on or adjacent to the main campus or satellite properties. The University shall inform faculty, staff, and students about endangered species on-site and proper techniques to not disturbs speciesthrough outreach and demonstration projects. |

| | | | | |
|---|---|---|---|---|
| **Maintain Vegetation and Soil Protection Zones**<br>**(Required component of P1.1, P1.2, P1.3, P1.4, P2.3, P4.1, C4.4, C4.5, C4.6, C4.7)**<br>Describe ongoing management activities to protect the integrity of vegetation and soil protection zones. | Ongoing management activites to protect the integrity of vegetation and soil protection zones include integrating suitable ground cover in the designated VSPZ areas. Suitable ground cover includes mulch or vegatation, such as jasmine, that do not require much maintenance. This allows for the VSPZ areas to not be disturbed frequently ensuring its protection. | UF Facilities Services administered Groundskeeper III Team and EH&S Pest Management | Mow over the VSPZ only twice a year. Any pruning will be identified and completed by an aborist. | Protect the integrity of vegetation and soil protection zones by maintaining healthy practices. Maintain a healthy environment that allows for the vegetation to grow and improves soil conditions in soil protection zones. The University shall make efforts to inform faculty, staff, students and visitors on VSPZ and techniques to protect the integrity of the zones. |
| **LANDSCAPE MAINTENANCE EQUIPMENT** | | | | |
| **Equipment maintenance**<br>**(Required component of P4.2, C8.7)**<br>List the types of equipment (manual, electric, low-emitting, or gasoline powered) used on site. Describe the process for maintaining equipment. Include a description of the process for cleaning equipment to remove invasive species to prevent transport to other sites. | The types of equipment that will be used on site include:<br>- (2) 4 Stroke 60"-72" Riding Mower<br>- (5) 2 Stroke Line Trimmer/Edger<br>- (1) 2 Stroke Backpack Blower<br>Excess vegetation that accumulates on the maintenance equipment will be collected and sent with the vegetation clippings gathered from the maintenance acitivites to the composting facility. If an invasive species is found it will be removed from the site and discarded in a bag to an off-site facility. If equipment is used to remove an invasive species, the vegetation will be cleaned off the equipment and discarded in a bag that will be transported to an off-site facility; the equipment will then be sanitized. | UF Facilities Services administered Groundskeeper III Team | Equipment will be used on site once a week in the morning hours. | All types of landscaping equipment will be electric in 10 years or less to reduce the amount CO2 emissions emitted by current gas powered equipment. |
| **Site user experience**<br>**(Required component of C6.4, C8.4, C8.7)**<br>Describe the maintenance schedule that minimizes users' exposure to noise, localized air pollution, and other disturbances. | The site will be maintainanced once a week during morning hours when visitors are less likely to frequent the site. Maintenancing the site once a week during the morning hours minimizes the users' exposure to noise, localized air pollution and other distrubances. | UF Facilities Services administered Groundskeeper III Team | Equipment will be used on site once a week in the morning hours. | Reduce all types of pollution by requiring electric equipment and scheduling maintenance at a time when site users frequent the site the least. |
| **SNOW AND ICE** | | | | |
| **Managing snow/ice** (for sites receiving snow/ice)<br>**(Required component of P1.2, P1.3, P1.4, P3.1, C3.3, C3.5, C3.6, C6.2)**<br>Describe the process for managing snow/ice in ways that limit degradation of water quality and surrounding plants and soil health. Also, describe the process for stockpiling areas and managing any snow-melt that will be used as a water source on site. | Not applicable- No snow or ice in this region. | Not applicable- No snow or ice in this region | Not applicable- No snow or ice in this region | Not applicable- No snow or ice in this region |
| **ADAPTIVE MANAGEMENT** | | | | |
| **Update Site Maintenance Plan**<br>**(Required component of P8.1)**<br>Describe the process for reevaluating the maintenance plan on an annual basis, and revising as needed to adapt to future conditions and unforeseen changes. | The site will be monitored weekly when being maintenanced. Once a month the groundskeeper team will go more in depth and evaluate the site through the scouting process. If the groundskeepers see any deficiencies on site, it will be communicated to the superintendents immediately. The UF Facilities Services Grounds Department Superintendents will meet annually with the other team members to discuss the efficiency and success of the maintenance plan. The team will communicate and brainstorm on how the maintenance plan can be improved to further support the scope of the project. If the site maintenance plan needs to be adpated for future conditions and unforseen changes, the team will meet when necessary to develop a mitigation plan. | UF Facilities Services: Tom Schlick, Donna Bloomfield, Darrell Pons, Groundskeeper III Team<br><br>UF PDC: Dustin Stephany, Melanie Heflin, Cydney McGlothin, Frank Javaheri, Linda Dixon, Rachel Mandel<br><br>GAI: Frank Bellomo, Don Wishart, Sheeba West, Andrea Penuela | The team will meet once annually to reevaluate the site maintenance plan. If an issue arises within the site maintenance plan that is urgent, the team will meet when needed. | The team will meet once a year to discuss the maintenance plan and how it correlates with the scope of the project for ten years. It is important that the team meets annually for the first three years to work through any issues during the establishment period. Through effective communication, the team will be able to adapt to any unforseen changes/conditions and continue to support the scope of the project ten years after establishment. |

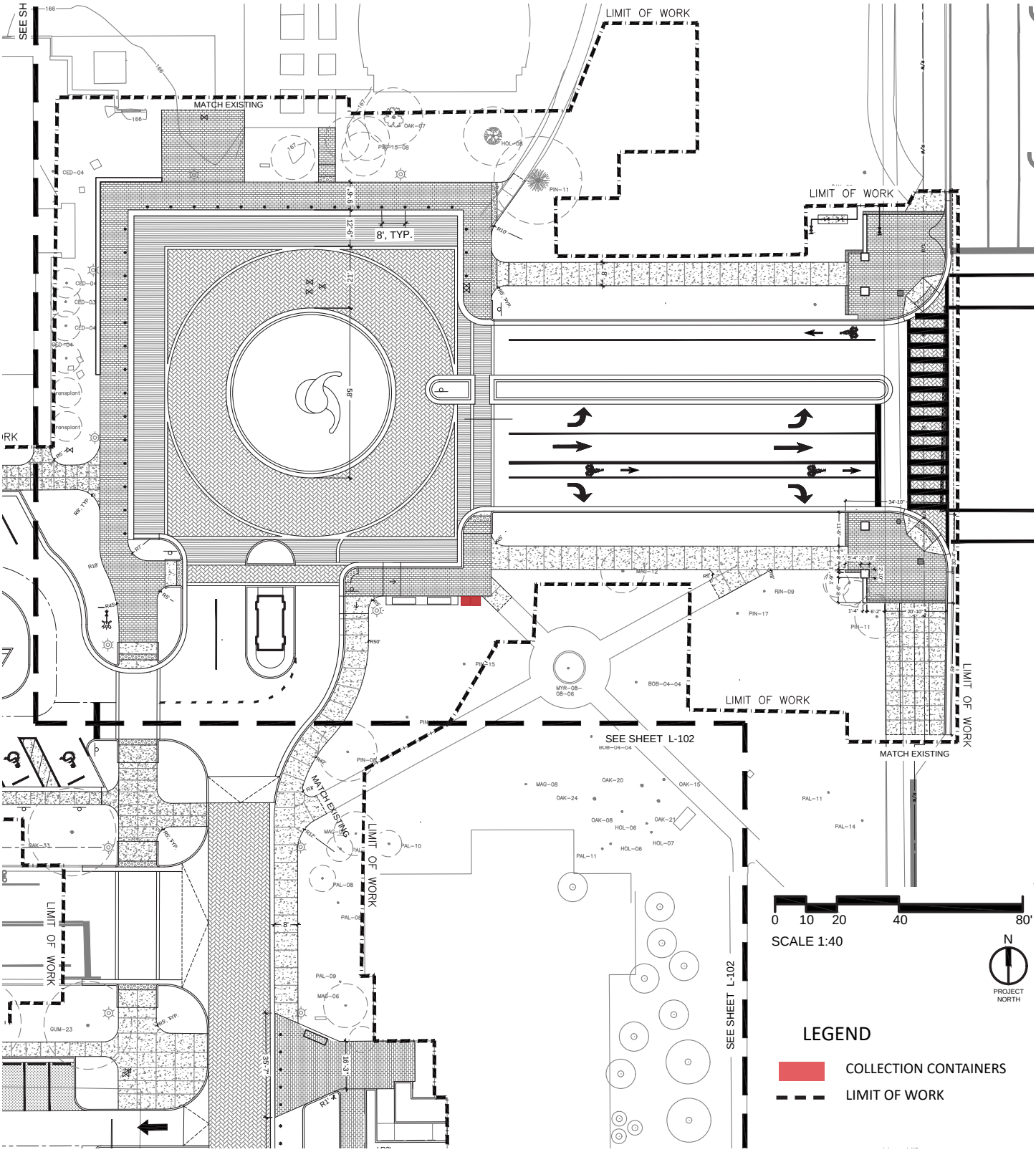
Signatures from all integrated team members stating the site maintenance plan and relevant discussions were conducted collaboratvely.

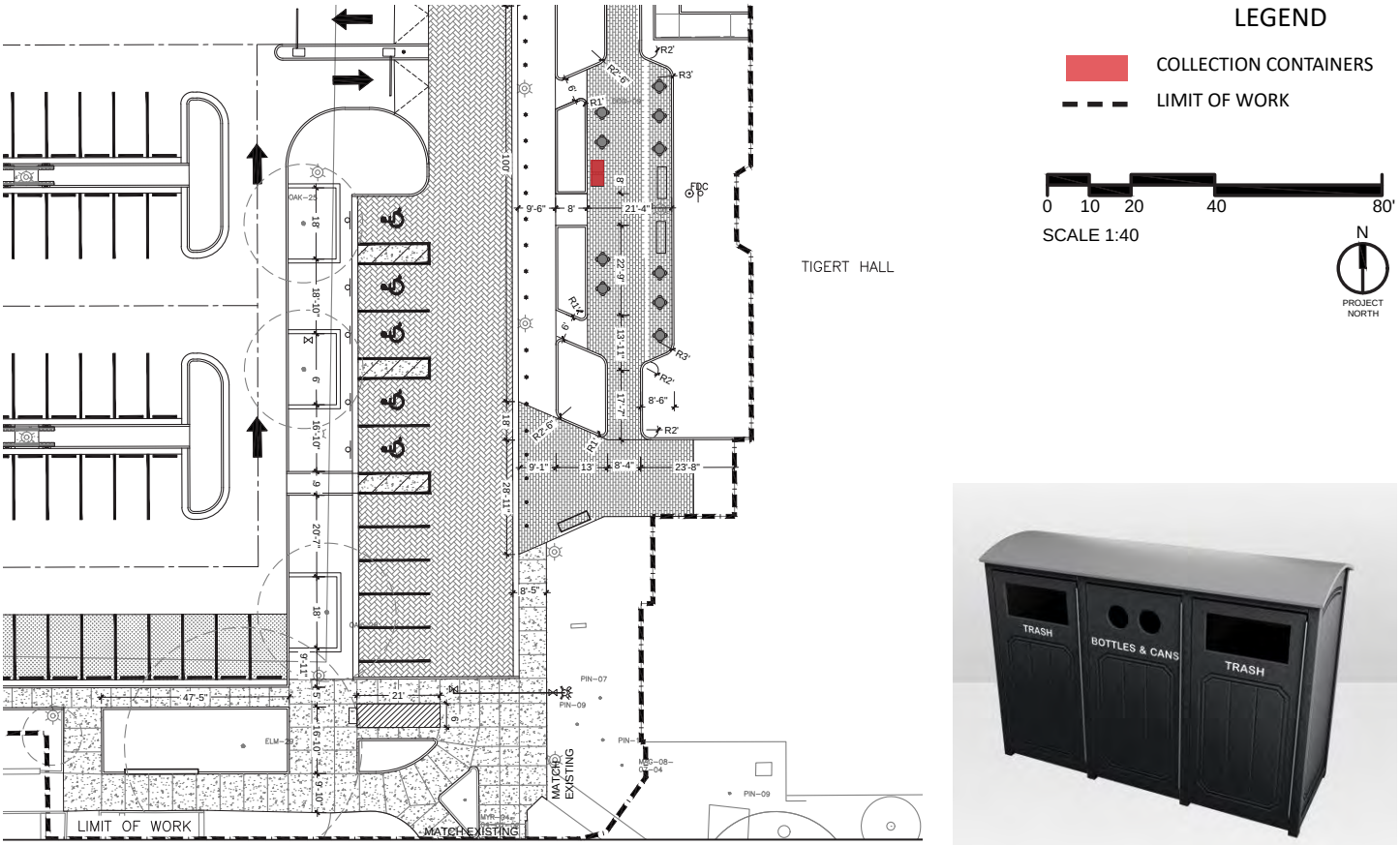
- **9:20 – 10:00 am**
  - SITES Certification Requirements – Dustin Stephany presentation
    1. UF's sustainability track record
    2. Guiding and project specific principles: prerequisites/credits, reuse/salvaged materials, soil management plan, advocacy letters, and punchlist
    3. Sites requirements need to translate to construction documents for field implementation

| | | | |
|---|---|---|---|
| 1/31/2022 \| 6:53 AM EST | Donnie Hicks - | | donniehicksapc@gmail.com |
| 1/25/2022 \| 7:53 AM EST | Hal Ebling - | | halebling@gmail.com |
| 2/9/2022 \| 4:05 PM EST | Justis Ebling - | | usi.justis@gmail.com |
| 2/11/2022 \| 2:02 PM EST | Daran Bedenbaugh - | | daran.bedenbaugh@vangoettlingmasonry.com |
| 1/26/2022 \| 3:15 PM EST | Sheeba West - | | S.West@gaiconsultants.com |
| 1/24/2022 \| 2:36 PM EST | Ian Molgaard - | | I.Molgaard@gaiconsultants.com |
| 1/24/2022 \| 2:10 PM EST | Stephany, Dustin J - | | d.stephany@ufl.edu |
| 1/24/2022 \| 2:09 PM EST | Heflin, Melanie K - | | mheflin@ufl.edu |
| 1/26/2022 \| 10:20 AM EST | Charles Garrett - | | Charles.Garrett@CPPI.com |
| 1/24/2022 \| 2:21 PM EST | Jennifer Lyons - | | Jennifer.Lyons@CPPI.com |

# Prerequisite 8.2 | Provide for storage and collection of recyclables

## Site plans









| | | |
|---|---|---|
| D1 | TRASH AND RECYCLING | TYPE: TERRA (CUSTOM PER LANDSCAPE MASTER PLAN)<br>COLOR: BLACK<br>FINISH: MAX-R LUMBER<br>SOURCE: MAX-R; www.max-r.com (877) 646-0663<br>NOTES: |

## Narrative & Results of Waste Stream Study

The Northeast Gateway site contains six waste and recycling receptacles. There is an existing two-tier receptacle on the northeast corner of the site boundary that will remain as is. This receptacle is directly next to the bus station and has one bin for trash and one bin for recyclable bottles and cans. A three-tier receptacle was placed in the northwest corner of the boundary. This three-tier receptacle has two bins for trash and one bin for bottles and can recyclables. This location will benefit from a three-tier receptacle because it is an entry into campus and receives a high volume of foot traffic. A two-tier unit was placed in the southeast corner of the roundabout since that is where the electric buses stop and let passengers load or unload. This two-tier receptacle has one bin for trash while the other bin is for bottles and cans. The two three-tier receptacles at the entrances of Tigert Hall remain as is. These receptacles have one bin for trash, one bin for paper, and one bin for recyclable bottles and cans. Since Tigert Hall is an administration building, the paper bins are instrumental. A three-tier receptacle was placed in the outdoor gathering area behind Tigert Hall. This receptacle contains two bins for trash and one bin for recyclable bottles and cans. It is inferred that this receptacle is used by the full-time employees during their breaks.

Firgure 1

Firgure 2

The individual bins in the receptacles are designed to hold gallons of waste and recyclables each. This allows for the two-tier receptacles to hold 30 gallons of waste and 30 gallons of recyclables and the three-tier receptacles to hold 60 gallons of trash and 30 gallons of recyclables each. The waste and recyclables are monitored twice weekly and are collected at least once a week depending on the volume of waste. Pre COVID-19 there was an average collection of trash twice a week and recyclables once a week. With this data, there is an estimate of 480 gallons of trash and 240 gallons of recyclables being collected in the Northeast Gateway limit if work weekly. In the case that there are events held on or nearby the site, the receptacles will be evaluated the morning after and will be collected if the volume is at least 50% full.

The waste is differentiated by color of bags, where trash is collected in black bags while recyclables are collected in transparent bags. Once the recyclables are gathered from the receptacles, the bags are placed in a trailer and transported to on-site campus recycling yard (Figure 1). At the recycling yard, each bag is inspected for contamination which is done by examining the content through the transparent bags. If there is a small amount of contamination in the recycling bags, it will be hand picked out and discarded as waste. If there is a significant amount of contamination in the recycling bags where the recyclables are

unsalvageable, the entire bag will be discarded as waste. Waste will be discarded in waste dumpsters (Figure 2). The recyclable waste that passes through the sorting process will be transported to the recycling dumpsters on campus at Flavet Field if it is paper and/or cardboard (Figure 3) or the Recycling Bullpen if it is metal and/or glass (Figure 4 and Figure 5). The waste and recyclable waste will be collected by the third-party vendor WCA and taken to the Alachua County Transfer Station.

Firgure 3

Firgure 4

Firgure 5

## Vendor Contract

UF UNIVERSITY of FLORIDA

Office of the Vice President
and Chief Financial Officer
*Procurement Services*
https://procurement.ufl.edu/

971 Elmore Drive
PO Box 115250
Gainesville, FL 32611-5250
(352) 392-1331 Fax 352-392-8837

University of Florida
MEMORANDUM OF UNDERSTANDING (MOU)
Waste Stream Handling Solutions

Purpose: The intent of this document is to clearly outline the mutual understanding between the University of Florida ("University") and WCA of Florida, LLC ("Vendor") surrounding our enhanced partnership for waste stream handling solutions.

I. General Terms

A. Contract Basis: Vendor accepts the terms and conditions as outlined by Invitation to Negotiate ITN20KO-132 Waste Stream Handling Solutions document and University accepts the proposal submitted by the Vendor in their response to the ITN as well as responses to the Selection Committees questions and requests for clarifications submitted on April, 29, 2020, May 13, 2020 and May 27, 2020. Additional terms outlined in this MOU are mutually agreeable to the vendor and the University indicated by acceptance and signature.

B. Effective Date: Pricing and terms effective as of August 1, 2020 thru June 30, 2025.

C. Term of Contract: The contract will have an option to renew based on satisfactory performance and the written approval of both parties for up to two (2) additional five (5) year periods.

D. Termination: As outlined in Section 6.41 of ITN20KO-132.

II. Pricing

A. Pricing/Discount Structure: (Attachment A)

B. Price Adjustments: As outlined in Section 6.34 in ITN20KO-132.

III. Services

As outlined in ITN20KO-132.

A. Lot 1
1) Compactor Services
2) Roll-off Services
3) Front-load Services
4) Hauling of Cardboard Bales
5) MSW Cart Collection from Dasburg House
6) Compactor Cleaning
7) Compactor Painting
8) Compactor/Baler Repairs and Maintenance
9) Contract Management

B. Lot 3
1) Indoor Office Paper Collection

*The Foundation for The Gator Nation*

An Equal Opportunity Institution

C. Lot 4
   1) Bottle and Can Collection

IV. Management

A. Contract Manager: Vendor will provide dedicated contract manager as described in ITN20KO-132.

Signed by: Joseph Glover _____ Date: 7/29/2020 | 8:44 PM EDT
ida

Signed by: _____ Date: 7-20-2020
WCA of Florida, LLC.

ITN20KO-132
ATTACHMENT A

PRICE PAGE - LOT 1

| Item | Description | Cost |
|---|---|---|
| 1.2.1 Compactor Services | Compactor Cost per pull (one price for all pulls regardless of destination facility) | $136.83 |
| | | |
| 1.2.2 Roll-off Services | Roll-off Cost per pull - MSW, Bottles and Cans, C&D | $136.83 |
| | Roll-off Cost per pull - Special Waste | $300.00 |
| | Container Charge (if any) | $0.00 |
| | Delivery Charge (if any) | $0.00 |
| | | |
| 1.2.3 Front-load Services | Front-load cost per cubic yard - MSW | $5.12 |
| | Front-load cost per cubic yard - Cardboard | $2.61 |
| | Container Charge (if any) | $0.00 |
| | | |
| 1.2.4 Hauling of Cardboard Bales | Cost per haul (6 bale minimum) | $125.00 |
| | | |
| 1.2.5 MSW Cart Collection from Dasburg House | Dasburg House cost per collection | $0.00 |
| | | |
| 1.2.6 Compactor Cleaning | Cost per Level 1 cleaning | $114.02 |
| | Cost per Level 2 cleaning | $114.02 |
| | | |
| 1.2.7 Compactor Painting | Pull charge (if any) | $136.83 |
| | Per hour labor charge for painting and prep work | $100.00 |
| | | |
| 1.2.8 Compactor/Baler Repairs Maintenance | Cost per compactor to complete annual greasing, perform detailed annual assessment, and prepare report outlining recommendations and price quotes | $85.00 |
| | Per hour labor charge for repairs | $85.00 |
| | Per hour charge for travel time (if any) | $0.00 |
| | Upcharge on parts (if any) | $0.00 |
| | Pull charge (if any) | $136.83 |
| | | |
| 1.2.10 Home Football Game Clean-up Services | Hourly rate for use of rear-loader and driver | $142.53 |

ITN20KO-132
ATTACHMENT A

PRICE PAGE - LOT 3

| Item | Description | Cost |
|---|---|---|
| 1.2.11 Indoor Office Paper Collection | Office paper cost per collection per bin | $2.38 |

ITN20KO-132
ATTACHMENT A

PRICE PAGE - LOT 4

| Item | Description | Cost |
|---|---|---|
| 1.2.12 Bottle and Can Collection | Bottle and can cost per collection per cart | $2.38 |

# Credit 8.3 | Recycle organic matter

## Narrative

**Goal: 4 points**

**Figure 1**

Excess vegetation trimmings are generated on site after site maintenance. The vegetation trimmings are collected and gathered in a facility truck. The truck takes the vegetation trimmings to the on-site composting facility. Here the vegetation trimmings are unloaded in an open space and gathered together to create a large pile. This would be the first stage of the composting system (Figure 1). During the first stage, the composting material will be turned to keep oxygen available in the pile to accelerate the decomposition process. Once there is a significant amount of decomposition, the organic matter will then be screened for the second stage of composting. The organic matter will go through a composting screening machine, the EZ Screen 1200XLS (Figure 2). The matter that goes through the EZ Screen 1200XLS is expelled out to create a new composting pile (Figure 3). Organic matter that does not pass through the screening process will be deposited back into the original pile (Figure 1) to go through the initial decomposition process again. The screening process will happen one more time after allowing the organic matter to decompose another significant amount. Organic matter that passes through the screening process will be moved to create a third composting pile where it will finish out the remaining months of the decomposition process. Once the organic matter is in its final decomposition phase, it will be transported to a concrete cinder block bin to be ready for use (Figure 4). In total, the University allows twelve months for the composting process. Once the organic matter is completely decomposed, it is gathered out of the cinder block bin and recycled as a nutrient-rich fertilizer and soil amendment for various locations on campus.

**Figure 2**

Figure 3

Figure 4

## Site Plan

Northeast Gateway
On-site composting
PALM TERRACE
SOUTH BLACKACRES
GOLFVIEW
Lake Alice

# Credit 8.4 | Minimize pesticide and fertilizer use

## Option 2: Best management practices for plant health care

### Narrative

### Goal: 5 points

The IPMP establishes a plan of action for identifying specific pest, population and specific management strategies for identified pests. Physical and mechanical controls are implemented first, followed by biotic controls and targeted chemical controls from least toxic to most as a last resort. A notification protocol is in place for surrounding site users when chemical pesticides are applied in place. In the rare cae where toxic materials are needed, Environmental Health and Safety will prioritize application where there is the least amount of traffic (for example during spring, semester, and holiday breaks). If the situation is an emergency then building managers adjacent to the area of concern will be notified via Facilities Services Building Points of Contact database.

All "weed and feed" type ferilizers are banned from use. The University must follow Alachua County's fertilizer ordinance concerning the application window. Fertilizers containing any nitrogen are not permitted to be used during the rainy season. Almost all fertilizers are purchased from SiteOne's outlet in Gainesville, with varying formulations due to availability and cost. Fertilizers are not used for cosmetic purposes and only applied to keep from having bare ground. Pre-emergent herbicides are not banned. Application of fertilizers before a known storm are banned, this is not only an ecological decision, but an economic one too.

Buffer zones are enforced where fertilizers and pesticides may not be applied such as: water bodies, wetlands, aquatic ecosystems, drains, conveyance features, areas where runoff can impact water quality, and human use areas. Any mis-targeted material is blown back into the target zone immediately following application. Buffer zone is at least 10 feet, but usually more.

The types of ferilizers used include synthetic and 100% organic. The fertilizer used depends on the location, time of year, and target vegetation. There is proper storage and handling of fertilizers. Fertilizers are dry granular so there is no mixing. Fertilization and pest control records are kept, although not mandatory by law. The fertilization records help with assessing results and controlling costs.

## Policies

# INTEGRATED PEST MANAGEMENT POLICY

### General Household Pest Services (GHP)

GHP service includes monthly, bi-monthly or quarterly (as required) inspecting, monitoring (sticky trap placement and checking) applying baits, servicing and maintaining insect light traps, physical removal, (including specialized vacuuming as required) applying residuals to exterior perimeters, around doors and windows, reporting entry points and structural deficiencies for repair orders and emphasizing sanitation. Rodent control measures utilize exclusion and mechanical trapping whenever possible to minimize the use of harmful products. All "food areas" and other pest-prone areas are serviced at least monthly.

### Service Requests (Trouble Calls)

All requests for service are placed by calling (352) 392-1591. Callers are asked to give the pest type, location, name and phone number of caller. All non-hospital service requests are to be answered within 48 hours, whenever possible. Hospital trouble calls are usually answered the same day or within 24 hours on UF work days. The information is tracked using the Pestcon system.

### IPM Team

**Pest technicians** – responsible for responding to service requests, further inspect the troubled area, identifying the insect and pest monitoring. The technicians, along with the pest management coordinator, will then develop proper pest prevention measures and treatment.

**Building custodians** – responsible for properly cleaning the building. They are to prevent outside entry from pests (ie: ensure door seals and cracks in building are properly sealed) and submit work orders to the Grounds Department in Physical Plant to keep trees and shrubbery trimmed away from the building to prevent harborage. If a custodian identifies a pest problem they are to report it to the IPM Team who will send out a technician to assess the situation.

**Customer** (UF community & visitors) – responsible for keeping their work areas clean, reducing harborages such as clutter, not eating in their work areas, cleaning up drink spills, and reporting any pest sightings to the IPM team.

### IPM Plan and Implementation Guidelines

Technicians will respond to all service requests and assess the situation using the following guidelines.

**Pest identification** – Proper identification of the insect can make treatment and eradication easier. Technicians will identify the pest or bring a sample to the pest management coordinator for proper identification or referral to the UF Entomology Department.

University of Florida – Environmental Health and Safety - Pest Management Department

**Pest Monitoring –** Action thresholds will be determined by the pest management coordinator who will devise a treatment method using the least intrusive and safest methods with public safety in mind.

**Pest prevention** – Technicians will ensure students, faculty and staff are properly educated on prevention techniques to help deter pests from breeding such as not eating at their desks, cleaning up spills, or overwatering plants.

**Pesticide application** – Most pest problems can be resolved by using non-chemical insect traps or baits. Only as a last resort will pesticides be used to treat the interior of a building and only in an afterhours setting to prevent exposure to students, faculty and staff. If a situation calls for an emergency application, the person who requested notice will be notified and given an explanation of the emergency.

### Best Practice IPM Control Methods

**Sanitation** – Building occupants may inadvertently attract pest into the building. Technicians will perform a walk-through assessment and identify the problem areas or activities and devise a plan to address them. Eliminate or control all potential food and water sources. Food service areas and break rooms area high prone areas for pests and should be thoroughly cleaned, food and waste should be kept in airtight containers, and empty beverage containers should be rinsed or isolated. Clean all spills promptly and eliminate clutter to simplify cleaning and minimize hiding places for pests. Pests also prefer wet environments and so all dripping faucets and leaking pipes should be fixed.

**Exclusion** –Landscaping can offer safe havens for pests, including rodents, keep shrubs and other plants at least 18 inches from the building. Ideally fill that space with small stones or similar substrate to minimize opportunities for plant growth. Install barriers to prevent pests from entering the building. Seal any cracks, crevices, and holes in external walls. Inspect all seals around doors and windows, install door sweeps on exterior doors if needed.

**Traps** – Install traps for both insects and rodents only where needed, rather than throughout the entire building. Rodent baits may be used on the exterior but only as a last resort. Solid bait blocks will be placed in locked outdoor dispensers.

### Pesticide Application Communications Plan

Most pesticide treatments will be applied on the perimeter of a building minimizing the impact to students, faculty and staff. In the rare case where interior treatment is necessary, the students, faculty and staff members within this space will be notified prior to application. Additionally, signage will be applied indicating the area treated as well as contact information if the user has further questions. This signage will be posted at least 24 hours post application.

Last Updated: 4-25-2016

University of Florida – Environmental Health and Safety - Pest Management Department

## Other Services Offered

**Termite Prevention and Control -** New construction soil preventative termiticide applications (referred to as Pretreats) require a 24 hour notice. Contractors are expected to have the area clear of work tools and ready to lay a moisture barrier after treatment to prevent any dilution of the product due to rain after treatment. Treatments are also available during renovations where the slab has been disrupted and needs repairing. Corrective subterranean termite treatments are provided to UF structures when infestations are discovered or reported. Materials and methods vary depending on the nature of the infestation but include sub-slab termiticide foam slab injection, direct wood injection, surface application of liquid borates or trench and treat application methods. Inspection of buildings for termites and other Wood Destroying Organisms are provided on request on an as needed basis.

**Turf and Ornamental Pest Management -** Comprehensive campus-wide fire ant broadcast baiting occurs each spring and fall. Mound treatments are provided during summer as required. Chinch bug control is provided for St. Augustine grass. Shrubbery and indoor tropical plants are treated for mealybug and scale insect control, greenhouse pest control is provided as requested. Sports Turf Pest Management to include weed insect and disease as required to maintain vigor. Sidewalk, fenceline and bare-ground weed control is applied around cooling towers and electrical substations with non-selective herbicides when needed.

**Nuisance Wildlife -** Capture, relocation and exclusion for birds, squirrels, raccoons, possums, snakes and bats as required. For nuisance alligators contact UPD at 392-1111.

**Mosquito Control -** Maintains active surveillance for conducive areas. Larva and adulticide applications made as needed to aid in source reduction.

**Fumigation Services -** Administration and coordination of commercial structural fumigation contracts. In-house operation of fumigation chamber for museum artifacts and specimens.

**Aquatic Weed Management -** Routinely treats the shorelines of Lake Wauburg north and south complexes for aquatic weed control.

**Miscellaneous Services -** Bee, wasp, hornet and yellow jacket nest treatment/removal in buildings and grounds. Dead animal removal inside and under UF buildings. Pigeon control project coordination.

Last Updated: 4-25-2016

University of Florida – Environmental Health and Safety - Pest Management Department

# Feeding Wild Animals Living on Campus Policy

## OBJECTIVE

Florida Statutes Chapter 386 Section.041 prohibits specific actions that contribute to conditions "injurious to public health." The feeding of non-domestic (feral) cats contributes to adverse health and safety issues including fleas, rabies, property damage and native wildlife depletion that all impact our beautiful campus.

## POLICY

When humans feed non-domesticated animals such as feral cats other non-targets animals such as raccoons, possums, squirrels, skunks and foxes become conditioned to associate humans with food. They then expect food from well-intending humans who may not realize they are endangering the safety and health of others.

Therefore, individuals or groups will not be allowed to feed feral cats or any other type of wild animal on campus. EH&S Pest Management technicians are authorized to remove any animal food and containers found on campus grounds.

Students and untrained or unvaccinated personnel must avoid animal exposure due to the potential for human injury and transmission of disease.

## AUTHORITY

The Division of Environmental Health and Safety's Pest Management Services Department is charged with protecting the campus and its inhabitants from exposure to animals that have the potential for human injury and disease transmission.

Effective 2002, Florida Administrative Code 68A (4000.1). Florida Fish and Wildlife can charge anyone feeding foxes and raccoons with 60 days in jail and a fine of $500.

## PROCEDURES

We must make our campus safer by not leaving food for the wildlife that inhabit our campus, thus allowing the natural available food supply to moderate the populations.

Any questions or wildlife complaints should be directed to EH&S Pest Management at (352) 392-1591 or afterhours to UPD at (352) 392-1111.

Last Updated: 4-25-2016

University of Florida – Environmental Health and Safety - Pest Management Department

## Helpful Tips (to be added on the webpage)

* Office pests like cockroaches, ants and mice love to "do lunch."

* Please ensure coffee supplies and opened foods are stored in the refrigerator or in tightly sealed containers.

* Rinse out that drink can before you recycle.

* If you spill it, wipe it up.

**Caretakers of the UF Bat House Project**

http://news.ufl.edu/2011/10/24/bat-cam/

http://www.flmnh.ufl.edu/bats/

Last Updated: 4-25-2016

# Credit 8.5 | Reduce outdoor energy consumption

## Narrative

**Goal: 3 points**

The project included both exterior lighting that already exists and existing lighting that was relocated elsewhere on the site. Energy reduction calculations did not include these. Alternatives were selected based on cost competitiveness and equivalency in lumens. The total lighting reduction within the project site is 80%. No aerators, ceiling fans, water pumps or transformers on the project site. Overall energy savings is 40%.

## Calculations

NORTHEAST Gateway
Site Lighting

**RL34/RL54** Refractive Globe with Lumilock LED engine GX4

LED Post Top Luminaire

LED Wattage and Lumen Values: 4000K

| Ordering Code | Total LEDs | LED current (mA) | Average system watts (W) | Short: Delivered lumens | Short: Efficacy (LPW) | Short: BUG rating | Wide: Delivered lumens | Wide: Efficacy (LPW) | Wide: BUG rating |
|---|---|---|---|---|---|---|---|---|---|
| **RL34, Acrylic Roof** | | | | | | | | | |
| RL34xAxxxxxxxxNx2xxxx | 64 | 300 | 39 | 5193 | 132.1 | B1-U5-G3 | 5136 | 130.7 | B1-U5-G3 |
| RL34xAxxxxxxxxNx3xxxx | 64 | 350 | 49 | 6767 | 137.1 | B2-U5-G4 | 6670 | 135.7 | B2-U5-G4 |
| RL34xAxxxxxxxxNx4xxxx | 64 | 450 | 66 | 10710 | 162.3 | B2-U5-G4 | 10550 | 159.9 | B2-U5-G4 |
| RL34xAxxxxxxxxNx5xxxx | 64 | 530 | 93.4 | 13464 | 144.4 | B3-U5-G5 | 12396 | 133.1 | B3-U5-G4 |
| **RL34, Metal Roof** | | | | | | | | | |
| RL34MxAxxxxxxxxNx2xxxx | 64 | 300 | 39 | 3528 | 89.8 | B1-U3-G3 | 3467 | 88.2 | B1-U3-G3 |
| RL34MxAxxxxxxxxNx3xxxx | 64 | 350 | 49 | 4957 | 99.3 | B2-U4-G3 | 4853 | 97.3 | B2-U3-G3 |
| RL34MxAxxxxxxxxNx4xxxx | 64 | 450 | 66 | 7273 | 110.2 | B2-U4-G4 | 7150 | 108.3 | B2-U3-G3 |
| RL34MxAxxxxxxxxNx5xxxx | 64 | 530 | 93.4 | 8461 | 91.2 | B2-U4-G4 | 8314 | 89.8 | B3-U4-G4 |
| **RL54, Acrylic Roof** | | | | | | | | | |
| RL54xAxxxxxxxxNx2xxxx | 64 | 300 | 39 | 5148 | 131.9 | B2-U5-G3 | 4985 | 127.8 | B3-U5-G2 |
| RL54xAxxxxxxxxNx3xxxx | 64 | 350 | 49 | 6841 | 139.1 | B3-U5-G3 | 6507 | 132.2 | B3-U5-G3 |
| RL54xAxxxxxxxxNx4xxxx | 64 | 450 | 67 | 10487 | 155.3 | B3-U5-G4 | 10098 | 149.5 | B3-U5-G3 |
| RL54xAxxxxxxxxNx5xxxx | 64 | 530 | 93.4 | 12791 | 137.4 | B3-U5-G4 | 12048 | 129.3 | B4-U5-G3 |
| **RL54, Metal Roof** | | | | | | | | | |
| RL54MxAxxxxxxxxNx2xxxx | 64 | 300 | 39 | 3514 | 89.8 | B2-U3-G3 | 3419 | 87.3 | B3-U3-G2 |
| RL54MxAxxxxxxxxNx3xxxx | 64 | 350 | 49 | 5033 | 99.5 | B3-U4-G3 | 5362 | 94.9 | B3-U3-G3 |

| Lighting Fixture Schedule - Northeast Gateway | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Quantity | Description | Manufacturer and Model Number | Lumens | Color | Watts | Annual kWh | Mounting | Comparable Unit | Watts | Annual KWh |
| AEX10 | 2 | Existing LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 402.96 | Existing 10' Pole and Base | Dabmar Lighting GM687-BZ-MT | 175 | 1022 |
| AEX15 | 7 | Existing LED Acorn Light and 15' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 1410.36 | Existing 15' Pole and Base | Dabmar Lighting GM687-BZ-MT | 175 | 3577 |
| AR10 | 2 | Relocate LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 402.96 | Existing 10' Pole and Base | Dabmar Lighting GM687-BZ-MT | 175 | 1022 |
| CL | 2 | LED Wall Sconce - Lantern Type | Evergreen Lighting COZ2220LS | 2000 | 4000 | 20 | 116.8 | Wall, See Landscape plan | Hubbell WGH-250P | 250 | 1460 |
| WP | 4 | Wall Pack - Downward Lit | Performance Lighting MIMIK 30M Type II | 2750 | 4000 | 36 | 420.48 | Wall | Progress Wall Lantern Model P5863-20 | 100 | 1168 |
| AN15 | 1 | New LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 201.48 | Existing 10' Pole and Base | Dabmar Lighting GM687-BZ-MT | 175 | 511 |
| AR18 | 8 | New LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 1611.84 | Existing 18' Pole and Base | Dabmar Lighting GM687-BZ-MT | 175 | 4088 |
| 4D | 4 | Accent Lighting | Lightolier Lytecaster LAR AE IVA LAR 068040 VA LAR DD | 650 | 4000 | 7 | 81.76 | Ceiling | Juno IC1 4 Inch Incandescent New Construction Downlight Can | 60 | 700.8 |
| 6D/E | 4 | Ambiant Lighting | Lightolier Easylit 6R N Z6RDL 15W CDWLVU | 1500 | 4000 | 15 | 175.2 | Ceiling | Juno IC22 6 Inch Incandescent New Construction Downlight Can | 75 | 876 |
| | 1 | Mini Split System | LG LCN128HVA | 19.4 SEER | 12.6 EER | | 1236000 | N/A | Amana PTC153G35AXXX | 10 EER | 2057143 |
| | | | | | | Total | 1240823.84 | | | Total | 2071567.8 |
| | | | | | | | | | | Total Savings | 40.1% |

All purchased equipment has been included

## Product Cut Sheet

# NORTHEAST Gateway Site Lighting

EXISTING OR RELOCATED

| Lighting Fixture Schedule - Northeast Gateway | | | | | | | |
|---|---|---|---|---|---|---|---|
| Type | Description | Manufacturer and Model Number | Lumens | Color | Watts | Volts | Mounting |
| AEX10 | Existing LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 277 | Existing 10' Pole and Base |
| AEX15 | Existing LED Acorn Light and 15' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 120 | Existing 15' Pole and Base |
| AR10 | Relocate LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 277 | Existing 10' Pole and Base |
| CL | LED Wall Sconce - Lantern Type | Evergreen Lighting COZ2220LS | 2000 | 4000 | 20 | 20 | Wall, See Landscape plan |
| WP | Wall Pack - Downward Lit | Performance Lighting MIMIK 30M Type II | 2750 | 4000 | 36 | 120 | Wall |
| AN15 | New LED Acorn Light and 10' Pole | HADCO ACORN RL54-A-C-N-A-FASTENER-BLACK-W-N-N-N-A-3-N-N-N-N-AND POLE | 5762 | 4000 | 69 | 277 | Existing 10' Pole and Base |

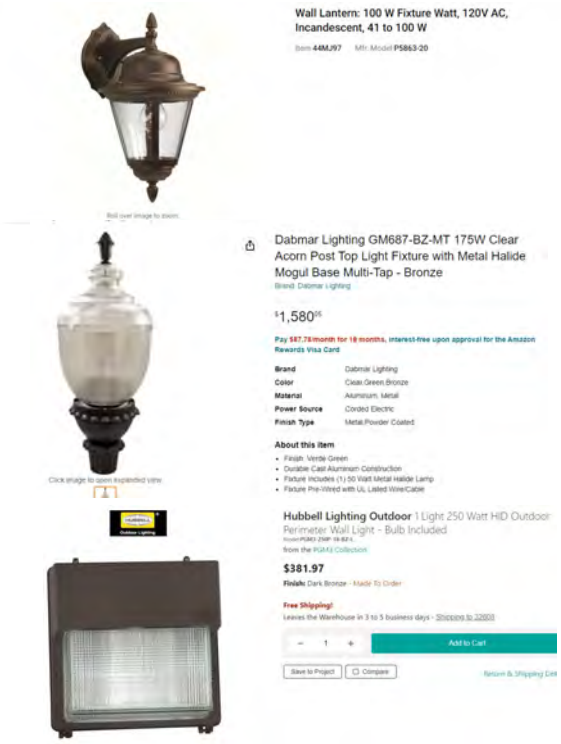
CL: 2 x 20watts = 40watts vs Alternate x 100watts = 200watts

WP: 4 x 36watts = 144watts vs Alternate 250 x 4 = 1,000watts

AN15: 69watts vs Alternate Acorn Light = 175watts

Total watts (125watts) vs Alternate watts (1,375) = 91% reduction

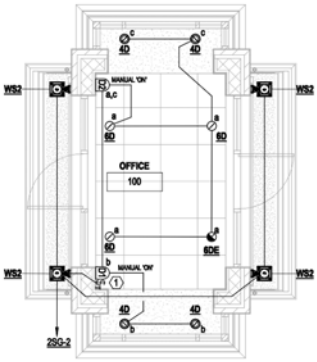
Low-Cost Lighting Alternate (below)



# NE Gateway Guardhouse

## LIGHT FIXTURE SCHEDULE

| TYPE | DESCRIPTION | BASIS OF DESIGN | LIGHT SOURCE | INITIAL LUMENS | COLOR TEMPERATURE | WATTAGE | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 4D | 4" LED RECESSED DOWNLIGHT WITH IC HOUSING | LIGHTOLIER LYTECASTER L4R A E 1 VA L4R 06 80 40 VA L4R D D | LED | 650 lm | 4000 K | 7 VA | 120 V |
| 6D | 6" LED RECESSED DOWNLIGHT | LIGHTOLIER EASYLITE 6 R N Z6RDL 15 W O CD WLV U | LED | 1500 lm | 4000 K | 15 VA | 120 V |
| 6DE | 6" LED RECESSED DOWNLIGHT WITH EMERGENCY | LIGHTOLIER EASYLITE 6 R N EM Z6RDL 15 W O CD WLV U | LED | 1500 lm | 4000 K | 15 VA | 120 V |
| WS2 | LED WALL SCONCE - LANTERN TYPE | EVERGREEN LIGHTING FLORENCE ARM MOUNT FLOZ2220LS DARK SKY | LED | 2000 lm | 4000 K | 20 VA | 120 V |




LIGHTING

4D (7watts) x4 = 32W vs. Alternate (60w) = 240w
6D/E (15watts) x4 = 60W vs. Alternate (75w) = 300w
WS2 (20watts x4 = 80W vs. Alternate (100w) = 400w
Total (172watts) vs Alternate (940 watts) = 81% reduction

HVAC

Ductless Minisplit 12.6 EER (0.95kW/ton x 6 ton = 5.7kW) vs
Window Unit 10.1 EER (1.19kW/ton x 6 ton = 7.14kW)
Total 20.1% reduction

## DUCTLESS MINISPLIT SCHEDULE

| | |
|---|---|
| MANUFACTURER | LG |
| UNIT TYPE | MINISPLIT HEAT PUMP |
| CONDENSING UNIT | HP-1 |
| CONDENSING UNIT MODEL | LUU127HV |
| AIR HANDLER MARK | AC-1 |
| AIR HANDLER MODEL | LCN128HV4 |
| AIR HANDLER UNIT TYPE | CEILING CASSETTE |
| DESIGN CONDITIONS | |
| SUMMER OUTDOOR TEMP DB/WB (DEG F) | 96/80 |
| SUMMER INDOOR DB/WB (DEG F) | 75/63 |
| WINTER OUTDOOR TEMP (DEG F) | 30 |
| WINTER INDOOR (DEG F) | 70 |
| TOTAL AIR (CFM) | 335 |
| TOTAL COOLING CAPACITY (BTUH) | 11,100 |
| SEER | 19.4 |
| EER | 12.6 |
| AIR ENTERING COOLING COIL DB/WB (DEG F) | 75/63 |
| TOTAL HEATING CAPACITY (BTUH) | 14,000 |
| HSPF | 10.4 |
| SYSTEM ELECTRICAL CHARACTERISTICS | |
| VOLTS-PHASE | 208-1 |
| SYSTEM AMPACITY (MCA) | 12.3 |
| SYSTEM MOCP | 15 |

NOTES:
(1) PROVIDE 24x24 CASSETTE GRILLE LG PT-QCHW0
(2) PROVIDE WALL MOUNTED CONTROLLER LG PREMTC00U

Photometric Toolbox™

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : COZ2220LS-TBK-A-41K.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] L05136405
[TESTLAB] LIGHT SCIENCES, INC.
[ISSUEDATE] 7/14/2013
[MANUFAC] EVERGREEN LIGHTING
[LUMCAT] COZ2220LS-TBK-A-41K
[LUMINAIRE] COZUMEL LED DARKSKY ARM MOUNT
[MORE] ALUMINUM REFLECTOR IN ROOF
[MORE] LEDS WITH OPTICS-DARK SKY
[BALLASTCAT] HATCH LC22-0700N-UNV-D
[BALLAST] INPUT: 120/277VAC, 50/60Hz. OUTPUT: 700MA/27V
[LAMPPOSITION] 0,0
[LAMPCAT] 4100K
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[_INPUT] 120VAC, 20W
[_TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

| | |
|---|---|
| IES Classification | Type III |
| Longitudinal Classification | Medium |
| Lumens Per Lamp | 1736 (1 lamp) |
| Total Lamp Lumens | 1736 |
| Luminaire Lumens | 1539 |
| Downward Total Efficiency | 89 % |
| Total Luminaire Efficiency | 89 % |
| Luminaire Efficacy Rating (LER) | 77 |
| Total Luminaire Watts | 20 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 843.14 |
| Maximum Candela Angle | 75H 67.5V |
| Maximum Candela (<90 Degrees Vertical) | 843.14 |
| Maximum Candela Angle (<90 Degrees Vertical) | 75H 67.5V |
| Maximum Candela At 90 Degrees Vertical | 0 (0.0% Lamp Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 115.601 (6.7% Lamp Lumens) |
| Cutoff Classification (deprecated) | Full Cutoff |

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : COZ2220LS-TBK-A-41K.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

| | Lumens | % Lamp | % Luminaire |
|---|---|---|---|
| FL - Front-Low (0-30) | 115.0 | 6.6 | 7.5 |
| FM - Front-Medium (30-60) | 552.9 | 31.8 | 35.9 |
| FH - Front-High (60-80) | 344.9 | 19.9 | 22.4 |
| FVH - Front-Very High (80-90) | 24.7 | 1.4 | 1.6 |
| BL - Back-Low (0-30) | 83.4 | 4.8 | 5.4 |
| BM - Back-Medium (30-60) | 263.3 | 15.2 | 17.1 |
| BH - Back-High (60-80) | 138.0 | 8.0 | 9.0 |
| BVH - Back-Very High (80-90) | 17.1 | 1.0 | 1.1 |
| UL - Uplight-Low (90-100) | 0.0 | 0.0 | 0.0 |
| UH - Uplight-High (100-180) | 0.0 | 0.0 | 0.0 |
| Total | 1539.3 | 88.7 | 100.0 |
| BUG Rating | B1-U0-G1 | | |

# Credit 8.7 | Protect air quality during landscape maintenance

## Option 1: Scheduled maintenance

**Goal: 2 points**

### Narrative

**Intent**: protect air quality and reduce pollution by minimizing the use of powered landscape maintenance equipment and exposes site users to localized air pollutants and generates green house gases.

Here at the University of Florida, our maintenance staff conduct weekly scheduled ground maintenance on the project site. Since this area is considered high visibility, Grounds staff conduct maintenance early in the morning as during this time will likely have the lowest amount of site users. It is only during this time when powered equipment is being used.
Additionally, in effort to further meet the intent of this credit and to optimize user experience, the University of Florida maintenance team is budgeting for electric powered equipment. Currently UF owns two fully electric zero turn mowers and these mowers are used in the historic district, including this site.

Total site users: 120
Peak time of site use: 10am - 3pm

# SITES v2® Emissions Reduction Worksheet

## C8.7: PROTECT AIR QUALITY DURING LANDSCAPE MAINTENANCE

| PROJECT NAME | PROJECT ID# |
|---|---|
| Northeast Gateway | 13740 |

**INSTRUCTIONS:**
1. Fill out this sheet for all powered equipment used for landscape maintenance on site. For each piece of equipment, choose equipment type, enter occurrences per year and hours per occurrence.

**BASELINE MAINTENANCE EQUIPMENT**

| Equipment Type | Occ/yr | Hrs/Occ | Hrs/yr | HC+Nox (g/hr) | Annual HC+Nox | CO2 (g/hr) | Annual CO2 |
|---|---|---|---|---|---|---|---|
| 4 Stroke 60"-72" Riding Mower | 46 | 3 | 138.00 | 11 | 1,518 | 9,939 | 1,371,542 |
| 4 Stroke 60"-72" Riding Mower | 46 | 3 | 138.00 | 11 | 1,518 | 9,939 | 1,371,542 |
| 2 Stroke Line Trimmer/Edger | 46 | 3 | 138.00 | 60 | 8,280 | 2,885 | 398,130 |
| 2 Stroke Line Trimmer/Edger | 46 | 3 | 138.00 | 60 | 8,280 | 2,885 | 398,130 |
| 2 Stroke Line Trimmer/Edger | 46 | 3 | 138.00 | 60 | 8,280 | 2,885 | 398,130 |
| 2 Stroke Line Trimmer/Edger | 46 | 3 | 138.00 | 60 | 8,280 | 2,885 | 398,130 |
| 2 Stroke Line Trimmer/Edger | 46 | 3 | 138.00 | 60 | 8,280 | 2,885 | 398,130 |
| 2 Stroke Backpack Blower | 46 | 3 | 138.00 | 50 | 6,900 | 2,981 | 411,311 |
| | | | | | | | |
| | | | | | | | |
| | | **Totals** | 1104 | 372 | 51,336 | 37,283 | 5,145,045 |

**PROPOSED MAINTENANCE EQUIPMENT**

| Equipment Type | Occ/yr | Hrs/Occ | Hrs/yr | HC+Nox (g/hr) | Annual HC+Nox | CO2 (g/hr) | Annual CO2 |
|---|---|---|---|---|---|---|---|
| Electric mower | | | | 0 | | 0 | |
| Electric mower | | | | 0 | | 0 | |
| Electric line trimmer or edger | | | | 0 | | 0 | |
| Electric line trimmer or edger | | | | 0 | | 0 | |
| Electric line trimmer or edger | | | | 0 | | 0 | |
| Electric line trimmer or edger | | | | 0 | | 0 | |
| Electric line trimmer or edger | | | | 0 | | 0 | |
| Electric backpack blower | | | | 0 | | 0 | |
| | | | | | | | |
| | | | | | | | |
| | | **Totals** | 0 | 0 | 0 | 0 | 0 |
| | | **PERCENT REDUCTIONS** | | **100%** | **100%** | **100%** | **100%** |

# SECTION 9: EDUCATION + PERFORMANCE MONITORING

| Credit | Title | Points |
|---|---|---|
| Education C9.2 | Develop and communicate a case study | 3 points |

# CREDIT 9.2 | DEVELOP AND COMMUNICATE A CASE STUDY

**Completed case study**

**Goal: 3 points**

## Northeast Gateway

**Location:** Gainesville, FL
**Size:** 2.25-acre (97,907 SF)
**Client:** University of Florida
**Project ID:** 13742
**Project Type:** Educational/Institutional Redevelopment

**Project Summary**

The Northeast Gateway is one of the thirteen Priority Projects within the University of Florida's Landscape Master Plan, and one of the four projects identified in the campus Strategic Development Plan as civis spaces that would significantly enhance the campus by defining campus portals and creating places for large gatherings. This redevelopment project in the historical eastern portion of campus at 2nd Avenue connects to the Innovation District of downtown Gainesville. Northeast Gateway serves to expand the impact of the gateway, announcing the campus, welcoming the casual visitor, and orienting guests to the parking facilities beyond. The result is a positive first impression of the campus generated by quality materials, a well-maintained and clarified landscape, and the introduction to the pedestrian-centric campus core. The redevelopment of UF's Northeast Gateway aligns with the SITES Guiding Principles.

**Project Details/Site Context**

The Northeast Gateway site is 97,907 square foot, located in the eastern part of the University of Florida's campus. Gainesville, Florida is part of the temperate forest biome, giving it a humid subtropical climate. Due to its environment, there were many opportunities to protect and enhance the ecosystem in the Northeast Gateway during the pre-design phase, including, but not limited to:

- Reducing stormwater pollution
- Conserving and increasing native species
- Minimizing pesticides and fertilizer use

The Northeast Gateway was a previously developed site filled with concrete walkways and a road for connectivity to campus facilities. This location is an area of high foot and vehicular traffic. Its unique location allowed for opportunities to maximize transportation options, increase collection of recyclables, and enhance the surrounding historic buildings. However, there were constraints such as having to develop around heritage trees and operating next to busy roads with high traffic volume. With all the considered conditions, the University of Florida allocated $3,396,000 for the redevelopment of the Northeast Gateway.

1 AUTOCOURT
2 SPECIALTY PAVING
3 VEHICULAR GATEWAY
4 BUS STOP
5 VISITOR / SHORT TERM PARKING
6 CART PARKING
7 SCULPTURE
8 RECONFIGURED PARKING
9 GUARDHOUSE
10 RAISED TABLE
11 BIKE PARKING

**Project Team**

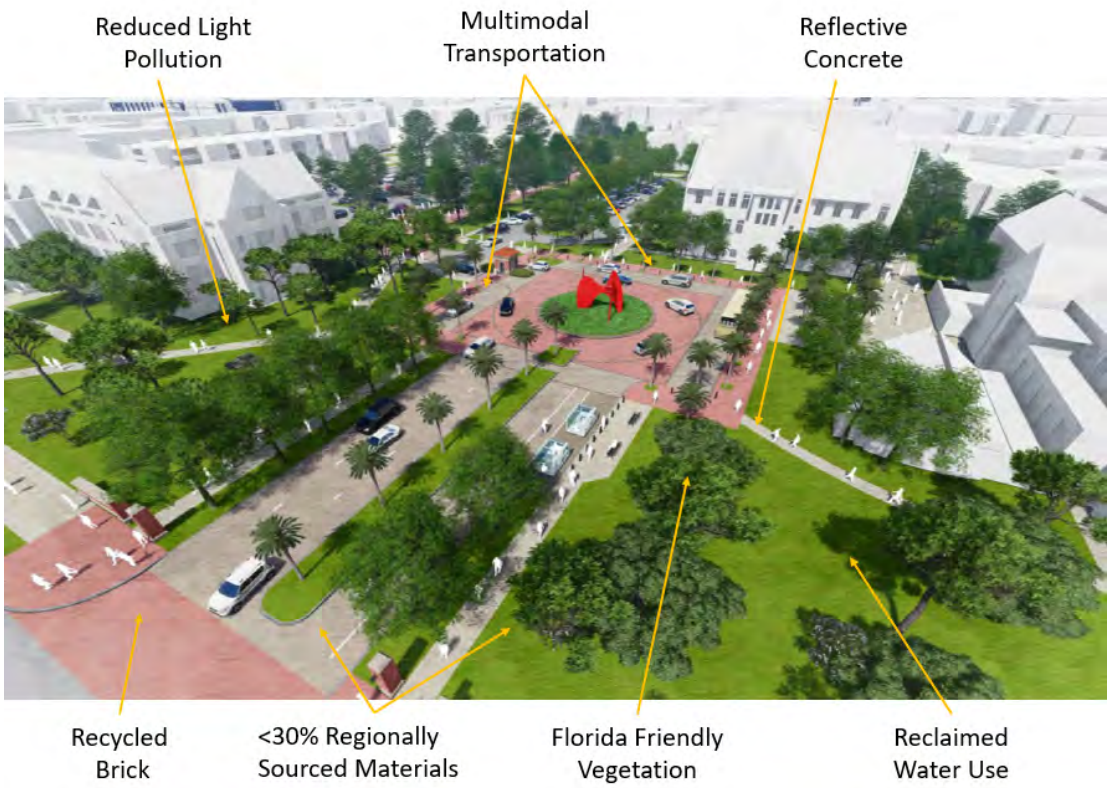
| Name | Representing | Expertise | Role |
|---|---|---|---|
| Melanie Heflin | UF PDC | Construction, Maintenance | Project Manager |
| Cydney McGlothlin | UF PDC | Architecture | University Architect |
| Linda Dixon | UF PDC | Planning | Director of Planning |
| Dustin Stephany | UF PDC | Sustainability | Sustainability Coordinator |
| Donna Bloomfield | UF Facilities | Grounds, Maintenance | Grounds Superintendent |
| Tom Schlik | UF Facilities | Facilities, Maintenance | Ass't Director, Facilities Services |
| Scott Fox | UF TAPS | Transp. & Parking | Transp. & Parking |
| Wade Maclaren | UF Facilities | Physical Plant, Maintenance | Ass't Director, Physical Plant |
| Frank Bellomo | GAI | Landscape Arch. | Landscape Architect |
| Donald Wishart | GAI | Landscape Arch. | Landscape Architect |
| Andrea Penuela | GAI | Landscape Arch. | Landscape Designer |
| Ian Molgaard | GAI | Landscape Arch. | Landscape Designer |
| Chris Jones | IBI | Landscape Arch. | Landscape Architect |
| Jason O'Brian | Walker Architects | Architecture, Design | Architect & Project Manager |
| Jaime Igua | VHB | Civil Engineering | Civil Engineer |
| Andrew Mitchell | Mitchell Gulledge | MEP Engineering | MEP |
| Peter Rizov | Mitchell Gulledge | Electrical Eng. | Electrical Engineer |
| Leonardo Valencia | VHB | Civil Engineering | Civil Engineer |
| Shawn Steers | VHB | Civil Engineering | Civil Engineer |
| Nat Grier | VHB | Civil Engineering | Civil Engineer |

| | | | |
|---|---|---|---|
| Rob Hoogevenn | Certified Irrigation Designs Inc. | Irrigation | Irrigation Designer |
| Elizabth McAlister | UF Facilities | Facilities, Maintenance | Facilities Services |
| Elisabeth Manley | Manley Design | Landscape Arch. | Construction Oversight |
| Jennifer Lyons | CPPI | Construction Management | Construction Manager |
| Charles Garrett | CPPI | Construction Management | Superintendent |

**Challenges & Solutions**

| Challenges | Solutions |
|---|---|
| Learning curve of new certification program. | Frequent and transparent communication. |
| Ensuring sustainability items are timely met. | Communicating goals and exercising time management. |
| Multiple forms to track progress (Microsoft Teams, BIM360, individual checklists) | Updating team with biweekly meetings of past and current action items. |
| Subcontractors not fully understanding scope of work. | Sitting down with subcontractors and fully communicating deliverables and expectations, sharing SITES Reference Guide. |
| Vendors not having information on website (ie. sustainability practices/goals, materials lists, extraction location). | Calling or emailing vendors to obtain specific information. |
| The size of the site created constraints in having full VSPZs around heritage trees. | Creating our own protective barriers around the heritage trees so they would not be disrupted during construction. The team also located the construction laydown site offsite to an adjacent vacant lot so it was not on tree roots. |
| Staying motivated throughout the certification process. | Reminding the team of the sustainability achievements & how the site will serve as an educational tool for users and visitors. |

**Sustainable Features**



**Environmental, Social and Economic Performance Benefits**

| Environmental | Social | Economic |
|---|---|---|
| • 100% Reclaimed Water<br>• 456,660 gallons of potential water savings annually<br>• 100% vegetation trimmings recycled | • Unobstructed vegetation views from >50% of common spaces<br>• 100% tobacco smoke eliminated | • $45,090 saved by incorporating reused materials<br>• $2,740 potential annual water cost savings |

**Lessons Learned**

There was an initial learning curve to the SITES certification process. Team members had to be educated on the program and the benefits of going through it. Processes proved to be more intensive and challenging compared to a typical construction project. Team members had to be versatile and easy to adapt to the new processes that come with SITES. This was able to be achieved through constant communication. Transparent communication within the team was key to establishing action items and meeting timely goals. We learned as a team that it is important to have one main form of communication to track and meet these goals.

**Maintenance and Monitoring**

The Operation and Maintenance Plan has been developed through collaboration with multiple entities throughout the University of Florida. Maintenance operations of Northeast Gateway are mainly facilitated by the University's Grounds Department which intends to further the LMP goals. The O+M Plan includes best management practices to further sustainable initiatives. It includes a section on how the practices will be tracked and what the 10-year desired outcome is. This ensures that the Northeast Gateway promotes long-term sustainability through best management practices.

**Photos**

## Documentation

The case study can be found at the locations below.

- UF GREEN BUILDING CASE STUDIES - https://facilities.ufl.edu/sustainability/certified-sustainable-buildings/

# SECTION 10: INNOVATION OR EXEMPLARY PERFORMANCE

| Credit | Title | Points |
|---|---|---|
| Innovation C10.1 | Innovation or exemplary performance (bonus points) | 9 points |

# Credit 10.1 | Innovation or exemplary performance

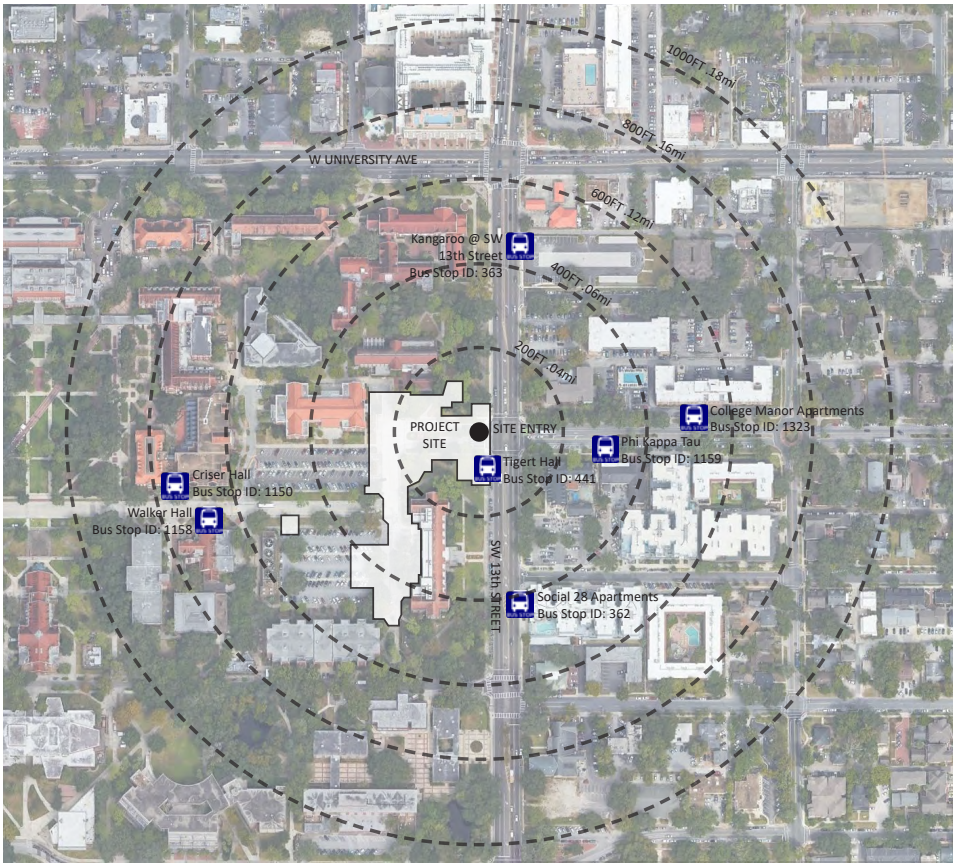
## Narrative

**Goal: 9 points**

The Newell Gateway project achieves significant measurable performance on the following 3 credits: C1.7 Connect to multi-modal transit networks, C6.4 Support mental restoration, and C6.6 Support social connection.

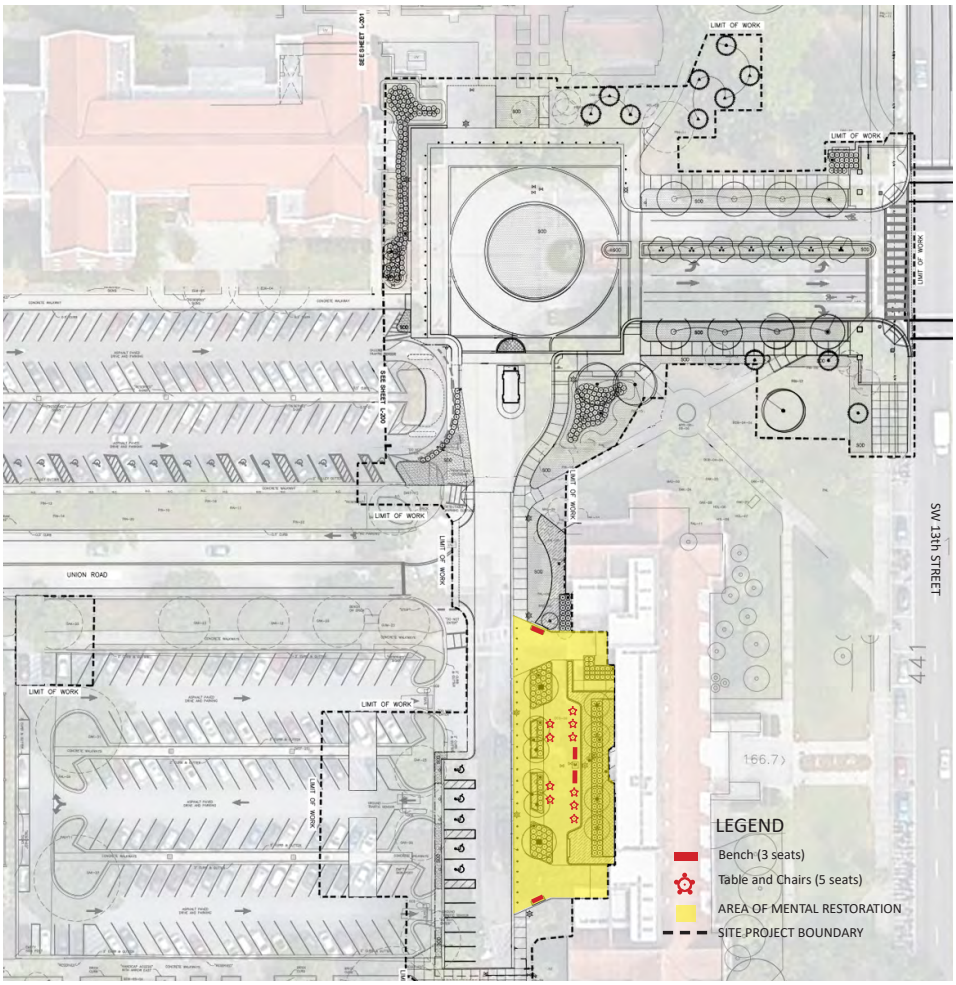
Newell Gateway also exhibits innovation outside of the SITES v2 Rating System through Innovation through Increased Security as well as Innovation through Bollard Installation.

## C1.7 Connect to multi-modal transit networks



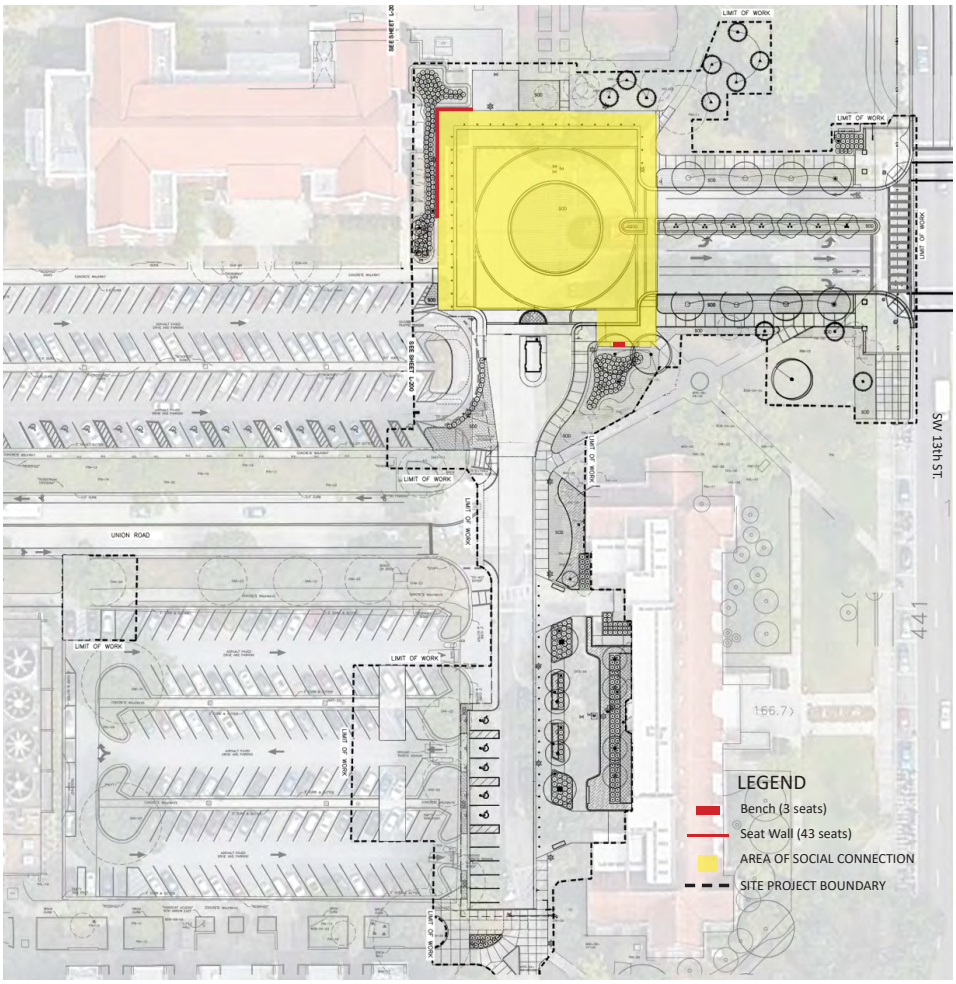

Credit C1.7 achieves significant performance by the high quantity of accessible transit terminals within a very close proximity to the project entrance. According to C1.7 option 2, at least one project entrance is within 0.25-mile walking distance of bus stop. Northeast Gateway exceeds this quantity by having 7 bus stops within 0.16-mile.

# C6.4 Support mental restoration




Credit C6.4 achieves significant performance by providing more seating than the 10% minimum requirements. With a total of 120 site users and 62 seats available, the total amount of seats provided is 51.6%.

# C6.6 Support social connection




Credit C6.6 achieves significant performance by providing more seating than the 10% minimum requirements. With a total of 120 site users and 46 seats available, the total amount of seats provided is 38.3%.

# Innovation through Future Proofing

## Intent

Build the site resiliency through collection of data and mesh network connectivity. This collected data will be assessed real-world insight on how to build value, ecological sustainability and safety.

## Requirements

Project must incorporate the 7-pin technology on installed light fixtures.

## Narrative

The University intends to future-proof itself through the phased adoption of IoT lighting technology throughout campus. The benefits of IoT technology is that wi-fi is extended beyond buildings and all throughout main campus as well as this gateway. The 7-pin connector allows the univeristy to adapt to economically meet future needs. For example, the project now has the ability to inform the campus operators the status of individual light fixture performance and functionality. If a fixture has a burned out bulb, the technology will automatically inform operations staff of which fixture is out through smart communications instead of a random work order. Through this technology the University is able to receive innovative datasets such as amount of user traffic flow from different modes of travel such as walking, biking, e-scooters, etc. This data collection will provide a means for prioritizing site upgrades and increasing facility value through real-world information.

# Innovation through awareness

## Intent

To educated the public on the SITES initiative and bring awareness to how the project impacts the local community.

## Requirements

Present project to the public and build awareness of the SITES initiative.

## Narrative

The gateway project is being presented at the Florida Recreation and Parks Association (Out of This World) annual confernece! Here (on page 24) UF and GAI presenters will discuss what is the Sustainable SITES initiative, how it works and why go through SITES certification. The team will present in front of various park and recreation professionals and discuss their overall as well as share tips and tricks for going through the SITES process. This presentation will build exposure to what the university is doing to build a more sustainable campus and how SITES is as tool to help us get there!

# EDUCATION SESSIONS

management openly and effectively to unlock you and your team's potential!

3:00 PM-5:00 PM | 0.2 CEUs

## SMALL TOWN, BIG IDEAS

**Amanda Salazar**
*Director, Wildwood Parks and Recreation*

Working for a small city doesn't mean you have to think small. Join us in this exciting session to brainstorm with other professionals who work in smaller populated areas, or work with smaller budgets, to find creative ways to make a big impact for your communities!

3:00 PM-4:30 PM | 0.1 CEUs

## STRATEGIES FOR FLORIDA YOUTH SPORTS CONFERENCE PANEL

**Jack Kardys**
*President, J Kardys Strategies,LLC*

While the benefits for youth who engage in sports and regular physical activity are clear—improved physical health, confidence, self-esteem, life and social skills, teamwork, and leadership-- the state of affairs in our nation's youth sports programs is far from encouraging with only 20% of adolescents meeting prescribed daily physical activity guidelines and 54% playing a sport. According to recent RAND and Pew studies, these numbers are distorted by disparities in participation rates for girls, racial and ethnic minorities, youth from households of low socioeconomic status, youth living in rural areas, and youth with disabilities who are disproportionally affected by barriers of cost, access, and time. The National Youth Sports Strategy (NYSS), developed by the U.S. Department of Health and Human Services (HHS), focuses on strategies that can facilitate improved participation rates despite these barriers.

This panel will explore the role of park and recreation professionals in developing an implementation plan built upon the pillars of the NYSS by increasing awareness of the benefits of youth sports participation; promoting partnership strategies that increase participation for all; developing evaluation methods and metrics to ensure successful implementation plans; and identifying funding models to support youth sports and physical activity.

3:00 PM-4:00 PM | 0.1 CEUs

## SUSTAINABILITY IN DESIGN: AN INTRO TO THE USGBC SITES PROGRAM

**Frank Bellomo, PLA, ASLA**
*Senior Director of Landscape Architecture, GAI Consultants, Inc.*

**Ian Molgaard,** LEED Green Associate
*Senior Landscape Designer, GAI Consultants, Inc.*

**Dustin Stephany, LEED AP, WELL AP, GPP, CEM**
*Sustainable Building Coordinator, University of Florida Department of Planning, Design and Construction*

Most professionals are familiar with the US Green Building Council (USGBC) LEED Certification program for buildings, but few are aware of USGBC's Sustainable Sites Initiative (SITES) program, a set of guidelines that seeks to define sustainable sites and measure performance with a goal of elevating the value of landscapes. The design of park projects, whether large or small, urban or rural, active or resource-based, can be reimagined to protect and improve the natural environment from planning, construction and into operation for generations to come. This session will give an overview of the process and benefits of the SITES program and will show you valuable techniques to use in the planning and design of your project that can help you save time and increase the opportunity for a successful certification.

3:00 PM-5:00 PM | 0.2 CEUs

## USING EMOTIONAL INTELLIGENCE TO ENHANCE CUSTOMER SERVICE

**Alan Rosen, MPA, ICMA-CM, 5A Certified Coach**
*CEO, Local Government Solutions*

What is Emotional Intelligence (EQ) and how can it impact your relationships with customers and with coworkers? Our basic makeup consists of IQ, personality, and EQ. It is almost impossible to change your IQ and personality, so how can you increase you EQ and what will that change mean for your organization? This interactive and informational session will enhance your interactions within and outside of your organization. Attendees will learn about their own and others' personalities through the 5 Archetypes assessment and learn how to leverage that information to enhance relationships. Participate in several "games" that can be used in your organization to facilitate staff training in the future. Participants should take the free 5 Archetypes Assessment before the session and bring their scores with them to get the most out of the two hours. Note: Participants in this session will need to take this assessment before attending the session: https://www.careydavidson.com/5-archetypes-assessment

4:15 PM-5:15 PM | 0.1 CEUs

## LET'S EMPHASIZE THE "LEADER" IN RECREATION LEADER

**Travis Parker, CPRP**
*Director of Parks and Recreation, City of Newberry Parks and Recreation*

**Anna Schutzler**
*Programs Coordinator, City of Newberry*

This session will focus on key issues and opportunities that are specific to the recreation and parks field, and specifically, leaders. We will discuss the leadership skills needed to build a strong team, enhance collaboration with other departments, and build confidence.

4:15 PM-5:15 PM | 0.1 CEUs

## MEANT TO MENTOR - A DISCUSSION ON MANAGING VS LEADING

**Christina Carmona, CPRP**
*Recreation Facility Manager, Doral Parks and Recreation*

This session will be an interactive discussion based on the difference between being a "manager" and a "leader". We will discuss tips to move you from manager to leader. Connecting with staff allows you to become a supervisor for all types of employees. Get resources and tips to learn how to mentor the supervisors who report to you.

4:15 PM-5:15 PM | 0.1 CEUs

## READ IT!

**Becky Gunter, CPRP**
*Director, Seminole Recreation*

**Alex Koagel**
*Program Coordinator, Seminole Recreation*

We read it, so you don't….well kind of. Join us as we discuss different leadership books and podcasts. We will ask the audience to share books/podcasts that you have read or listened to. Each person (including us) will give a brief 3-5 minute description of each book and then the room will rank it - would you read it, or will you pass? You will leave this session with knowledge from each of the books as well as a book list. If you are a reader we need you. This session is meant to be interactive. We are looking for a fellow professionals who are willing to share the leadership books or podcasts you would recommend. This session is meant to be interactive. We are looking for fellow professionals who are willing to share the leadership books or podcasts you would recommend.

4:15 PM-5:15 PM | 0.1 CEUs

## RECOGNIZE, EMBRACE AND PROGRAM...PICKLEBALL AND TENNIS GET YOUR GAME ON!

**Andi Mohl**
*Operations Manager, City of Palm Beach Gardens*

**Wendy Tatum**
*Director of Tennis and Pickleball, City of Palm Beach Gardens*

Over 26 million people played tennis or pickleball in 2022. By programming your facilities, you can reach an unlimited audience through your community and surroundings areas using innovative, social and adaptive programming.

4:15 PM-5:15 PM | 0.1 CEUs

## REFRESH YOUR AQUATIC CENTER-BEST AQUATIC PRACTICES

**Devon Poulos, CPRP, AFO, LGIT**
*Aquatics Manager, North Port Parks & Recreation*

**Patricia Sturgess, CPRP,AFO,WSIT**