



Lafayette Gardens

Spring 2020 - Sustainable Solutions

Bryce Currie, Diana De La Torre, Nika Cinicola,
Lisa Sholtz, and Major Jordan

Agenda

1. Project Summary and Background
2. Design Proposal
 - a. Visual Layout
 - b. Structural Aspects
 - c. Environmental Considerations
3. Economic Analysis



Summarizing Lafayette Gardens



- Mission
- Design
- Environmental Benefits
- Significance
 - Sustainability
 - Education
 - Collaboration
 - Inclusivity

Background Information

- EGRS Capstone Projects and the Acopian Atmosphere
 - Fall 2017 - Art in the Stairwell
 - Fall 2018 - Greenwall

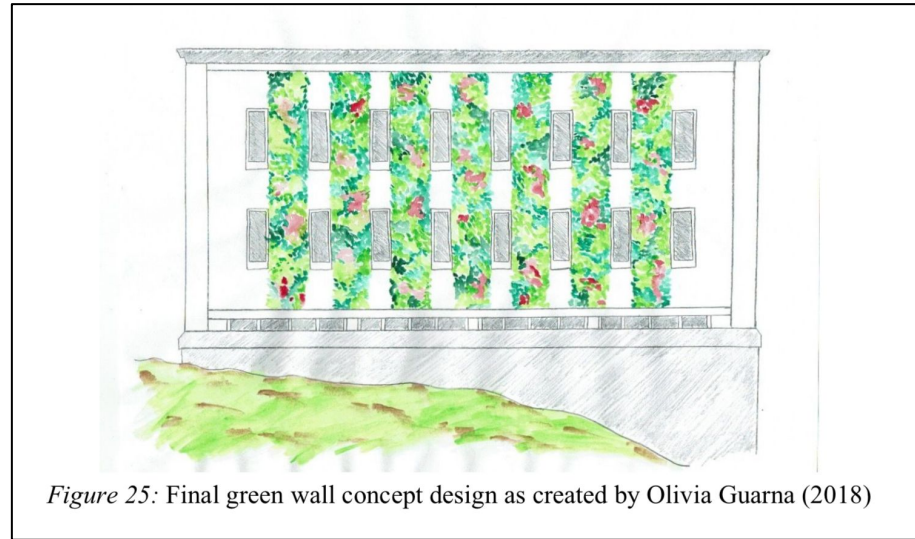
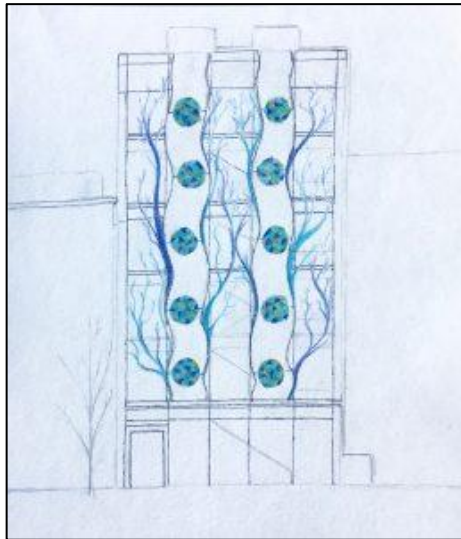


Figure 25: Final green wall concept design as created by Olivia Guarna (2018)

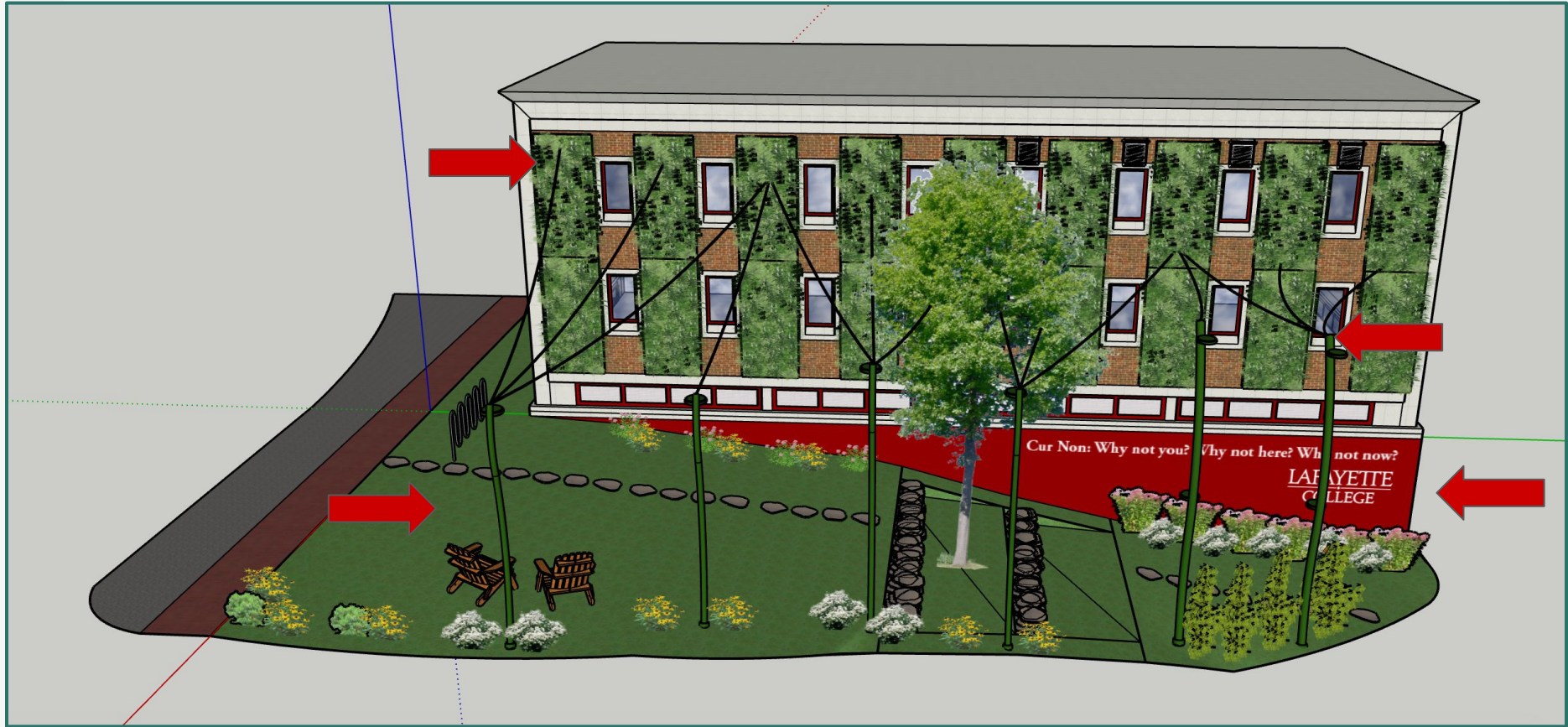


Preliminary Steps

- **Determining the purpose:**
 - Who will inhabit the space?
 - How will it be used?
 - What do we hope to accomplish?
- **Meeting with on-campus experts**
- **Defining the project:**
 - “Creating a multidimensional collaborative space on the north east wall of Acopian that facilitates interaction between students of all different areas here on campus.”

Design Proposal



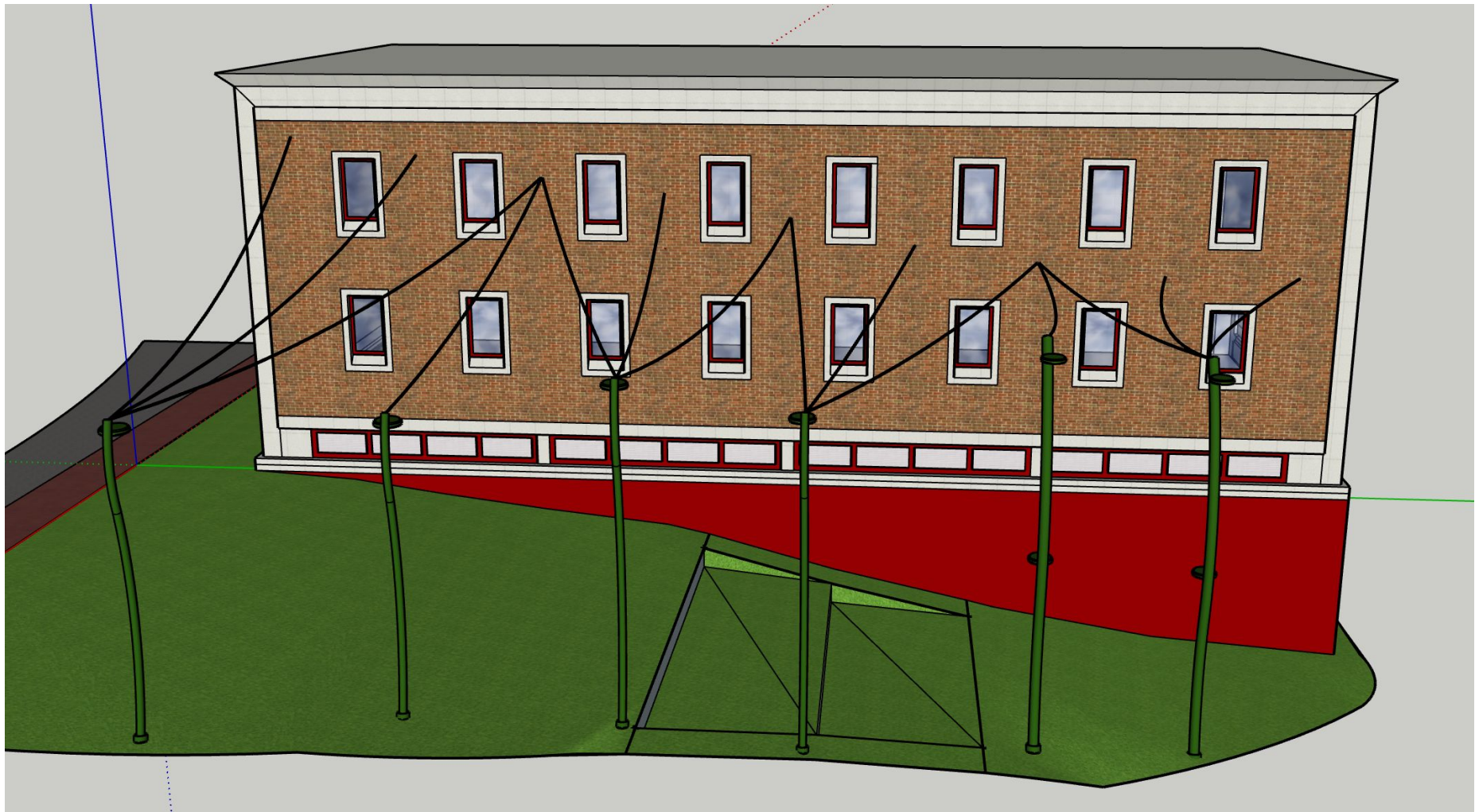


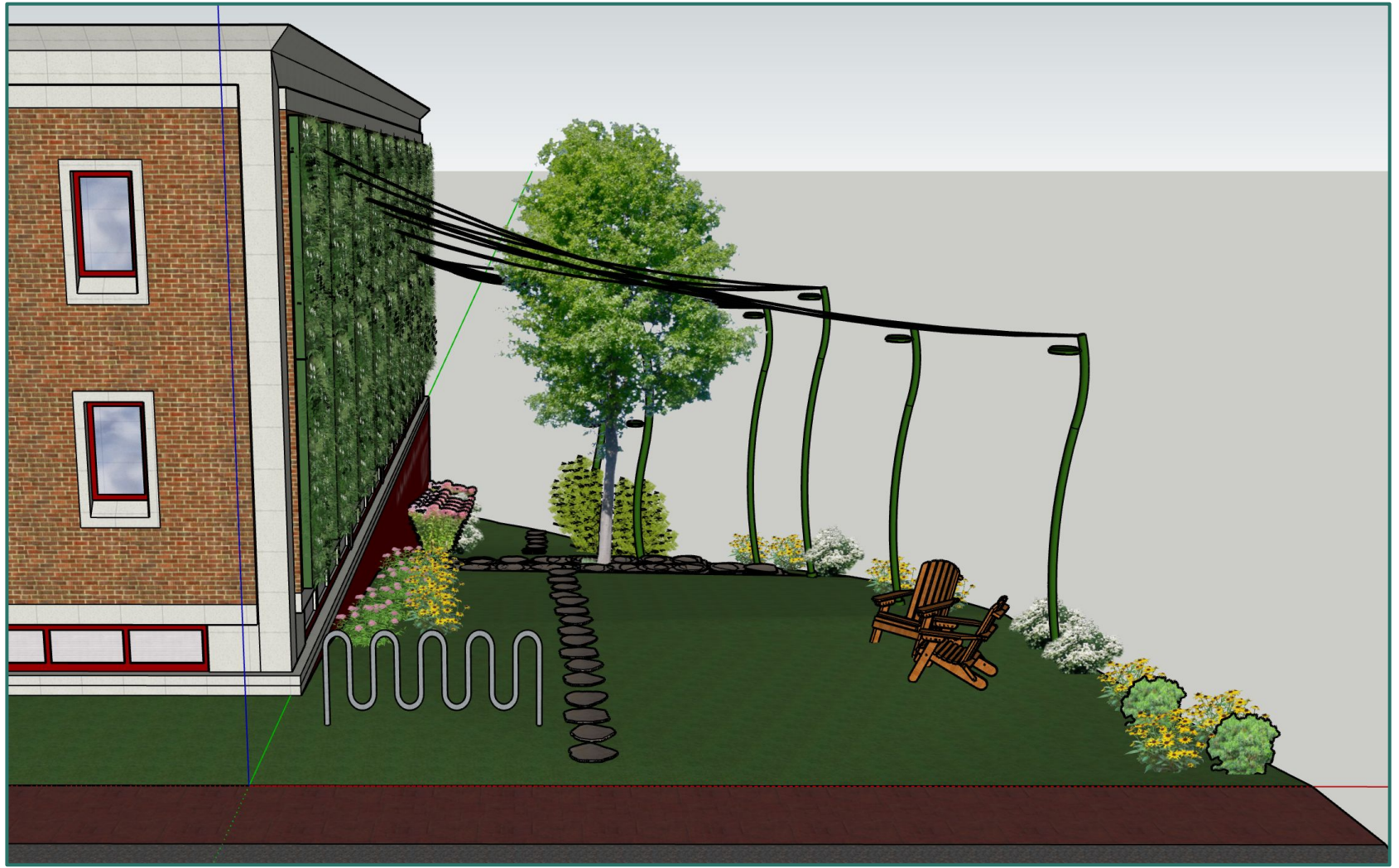


Cur Non: Why not you? Why not here? Why not now?

LAFAYETTE
COLLEGE









Car Non: Why not you? Why not here? Why not now?

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Structural



LiveWall

- Professional Company
- Provides High Grade Components
- Structurally Sound Calculations
- Installation and Maintenance Guides with In-Depth Drawings

Full Width (16")



Wires

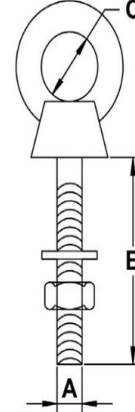
- **Wire Rope**
 - 1/8" Vinyl Coated Galvanized Wire
 - BS 2,000 lbs.
- **1/8" Galvanized Drop Forged Wire Rope Clips**
- **Crosby® 1/8" Standard Wire Rope Thimble**



Spires

- Aesthetically pleasing
 - Abstract
 - Structurally sound
-
- **3/8" x 4" Stainless Steel Shoulder Eye Bolt**

3/8" x 4" Stainless Steel Shoulder Eye Bolt
Item #:51611218



Thread Diameter (A): 3/8 inches
Threads Per Inch (TPI): 16 UNC
Thread Length (B): 4 inches
Eye Diameter (C): 1 inches

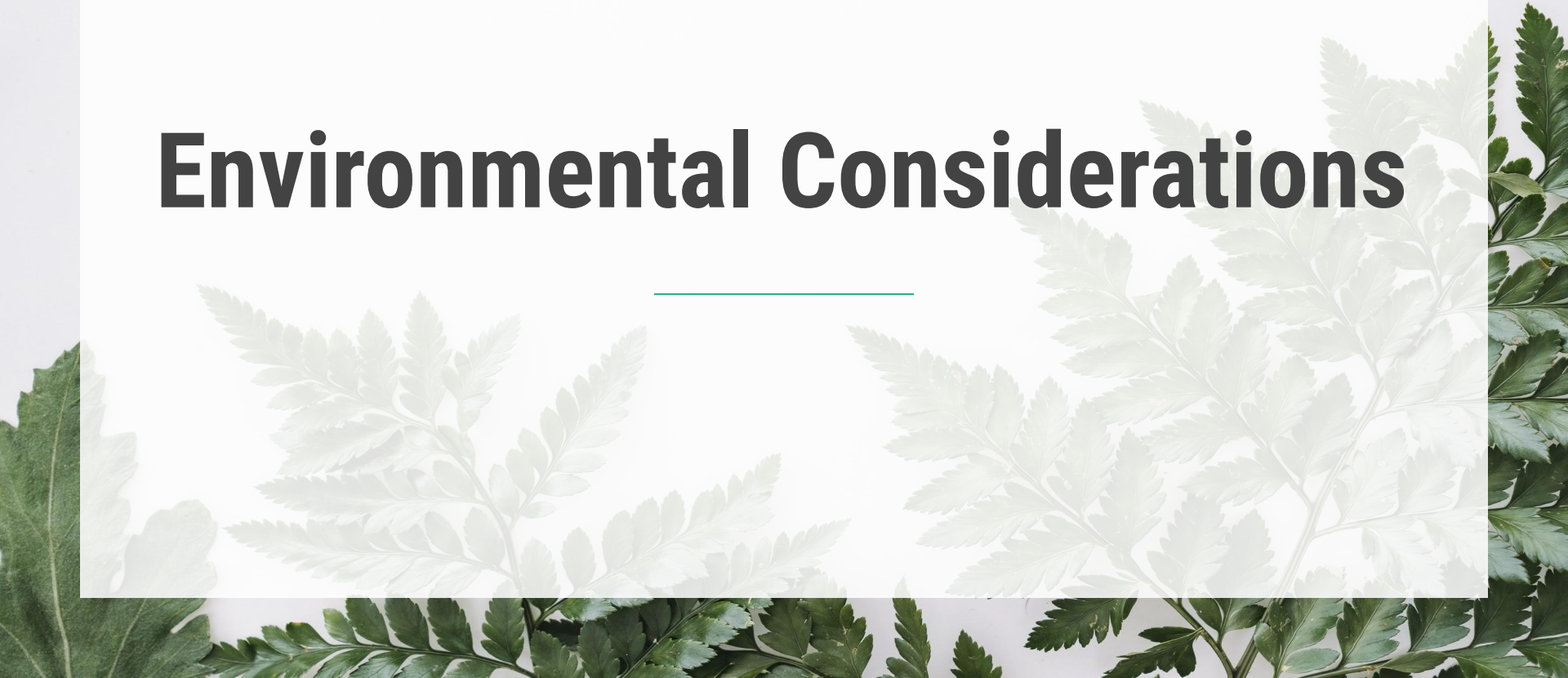
Round Tapered Aluminum Idyline
Sigma Pole (16'-29')



[Product Details](#)

[Spec Sheet](#)

Environmental Considerations



The background of the slide is a light green color with a pattern of fresh eucalyptus leaves. The leaves are arranged in a way that they appear to be framing the central text area. The leaves are various shades of green, from light to dark, and have a slightly glossy texture. The stems are thin and brownish-green.

Benefits for Users

- Creates a welcoming space
- Boosts a stronger sense of community
- Allows for a place of stress relief
- Increases workplace productivity
- Fragrances can help improve memory and have calming effects



Benefits for the Environment

- Rehabilitates existing environment
- Increases biodiversity
 - Safe space for birds
 - Provides a habitat for pollinators
 - Implements of bat boxes creates a sheltered space

Bat Boxes

Four three-chambered bat boxes will be placed at the top of Acopian, at least 15 feet off the ground





Finalized List

Plant Choices for the Wall

- Coleus
- Bergenia cordifolia
- Fuschia
- Golden Creeping Jenny
- Japanese Pieris
- Violas



Considering the Seasons

The plants shown previously were meticulously chosen for its success in the standard pots.

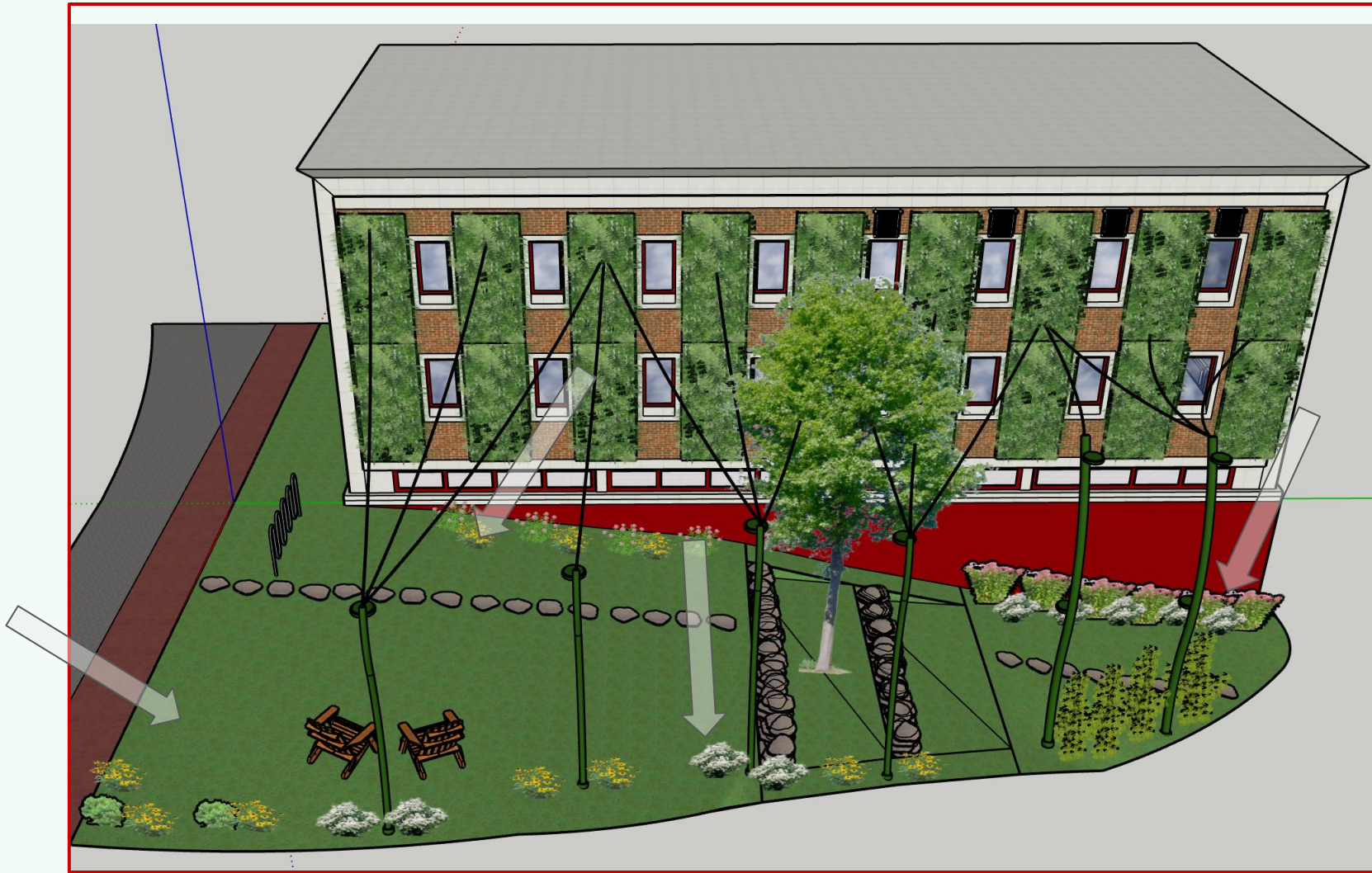
We also considered how these plants would look during the different seasons.

Summer



Winter





Cont...

Plant Choices for the Ground

- Spicebush
- Spring-beauty
- Forest Goldenrod
- Violet, common blue
- Rosa Virginiana



Cont...

Plant Choices for the Ground

- Wild Bergamot
- Inkberry
- Three-lobed Coneflower
- Cutleaf Coneflower
- Joe-pye Weeds



Economic Contexts





This section will cover 4 major points

- 1) How much does this project cost?
- 2) How will the project be funded?
- 3) How can we determine the value?
- 4) What are the next steps?

An investment into the future of Lafayette's Community

- \$160,000 - 250,000
- The wall and landscaping > 90%
- Maintenance ?



How to fund this project?

A Major Donor

We are going to need to incorporate some sort of large donor in order to fund this endeavor. As a result the area would be renamed in their honor.

Campus Organizations

In order to fund smaller portions of the project such as the bat boxes we would look to organizations on campus such as LEAP to get involved.

Student Course Work

We could fund certain portions of the project by turning them into student led independent study work. The mural would likely be the focal point of this approach.



Where is the value in this project?

- We have found tremendous value in this project and its ability to enhance the standing of the school in education, sustainability, and collaboration.
- We have developed a survey to determine the perspective of the community in regards to area in order to properly recognize the full Lafayette



What comes next in the area of economics?

- 1) Obtain more specific estimates and valuations of the project from outside parties.
- 2) Conduct the survey to understand the perspective of the Lafayette community in regards to the project.
- 3) Further look at the detailed costs of irrigation and maintenance on the project.



In Conclusion

- A unique and multifunctional space
- Education, Inclusivity, Collaboration, Sustainability
- There are a variety of diverse values that this project provides Lafayette
 - Recreational Value
 - Educational Value
 - Environmental Value
 - Reputational Value
- Acopian and beyond

Thank you!

For more information, check out our website: sites.lafayette.edu/greeningacopian

A Special Thanks To...



Professor Joe Biondo



Professor Ben Cohen



Professor Scott Hummel



Professor Jim Toia



Professor Mary Wilford-Hunt

As well as Prof. Liu, Prof. Butler, Prof. Rothenberger, Mr. Scott Kennedy and the LiveWall team for their incredible assistance

For All Their Help And Support!

The image features a central text element 'Questions?' surrounded by four clusters of tropical foliage. The top-left and top-right clusters consist of long, thin palm fronds layered over a large, heart-shaped leaf with prominent veins. The bottom-left and bottom-right clusters feature a large, dark green, palmately lobed leaf, similar to a Ficus or similar species, with several pointed lobes. The entire composition is set against a plain white background.

Questions?