# *From time to time unforeseen challenges or opportunities can affect the planned budget, timeline, or overall goals of a project funded by the Student Sustainability Committee. Past examples of these situations include projects coming in under budget but having additional opportunities available, or inclement weather delaying the planting of agriculture projects.*

# *Below please include a brief project summary and your requested changes. Attach additional documents as needed. If you have any questions, please contact the Student Sustainability Committee at sustainability-committee@illinois.edu.*

# General Information

**Project Name:** Red Oak Rain Garden

**Total Amount Requested from SSC:** For this scope change: $9515.44 for wages.

# Contact Information

Applicant Name: C. Eliana Brown

Unit/Department: ACES/Extension

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# Project Information

***Please provide a brief background of the project, the goals, and the desired outcomes:***

The RORG team is renovating a 13-year-old rain garden that was in poor condition. The mission statement and goals are:

**MISSION STATEMENT:** The Red Oak Rain Garden is a public rain garden that soaks up rainwater, enhances the campus and community aesthetic and educational experience, and promotes well-being for everyone who visits.

**PROJECT GOALS:**

1. Modernize stormwater infrastructure to be a model for campus landscapes.

2. Provide outreach and education to campus, community, and the state of Illinois by being a venue for ecological outreach and wellness events, creating associated outreach material such as Extension brochures with a residential target audience, and providing technical information to professionals in the fields of engineering, landscape architecture and ecological restoration.

3. Reimagine the garden as an example of a living, learning laboratory enhancing the student experience. This is accomplished by installing monitoring equipment and making this data publicly available, strengthening partnerships with faculty to encourage integration of the garden into coursework, and by engaging a team of student leaders that advise and volunteer.

**RORG has three project phases:**

Phase I: Demolition/soil preparation/hardscaping

Phase II: Plant installation

Phase III: Boardwalk construction and sign installation

**Project status:**

Phase I is nearly complete.

Phase II is on schedule to begin 09/16/19. Plants arrive the week of 09/09/19 and a volunteer orientation is planned for 09/13/19. Additional wage funding is requested for this phase.

Phase III installation will be spring 2020. Additional wage funding is requested for this phase.

***Please provide a brief summary of how students will be involved in the project’s changes:***

Students have a direct role in Phase II of the project. Horticulture 100 students will be assisting in plant installation. Layne Knoche is preparing an instructional presentation for these students. The Allen Hall/LAR RORG Student Leadership Team is making plant markers and helping with a plant sale. This Team will continue under the guidance of an Extension Academic Professional who has funding independent of SSC with help from Layne. Plans are to have facilitated meetings for this student team to develop recommendations that promote peer garden usage including programming suggestions.

Phase III has already had student involvement. Designers met with a student representing the disabled community, who advised them on universal design elements for the boardwalk. Further student involvement for Phase III are being explored as part of civil and environmental engineering classes. The sustainably sourced material, osage orange wood, is different from typical construction materials and can be a great case study as a part of CEE 300 (Behavior of Materials), CEE 320 (Construction Engineering) and/or CEE 360 (Structural Engineering). We already are working with licensed Structural Engineer CEE Professor Emeritus William Gamble for the design.

*Please provide a brief summary of your requested scope change. How is your request different from your original plan?*

The RORG renovation is underway and it is successfully being completed. See blog at redoakraingarden.org/blog and follow on social media at @RainGardenUIUC for the latest construction news.

Since the last funding request, a plan change occurred significantly improving the projects’ sustainable aspect: replacing the planned concrete sidewalk through the garden with a wooden boardwalk (Phase III). **F&S Architectural Review Committee approved the boardwalk and the existing SSC sidewalk Grant can cover its construction cost. However, it requires additional funding – naming paying wages for recent MUP graduate, Anthony (Tony) Heath – to design the boardwalk and manage its construction.**

In late spring, the RORG Team met with an arborist from the Champaign Park District who expressed concern about constructing a sidewalk near the garden’s namesake, the red oak. This tree already shows signs of distress and it is a priority to support its health. Tony presented the option of a boardwalk to F&S as an alternative that would minimize tree root damage.

F&S suggested having a conversation with Allerton Park’s Director Derek Peterson, who recently had a boardwalk built. From this conversation, RORG has developed a partnership with Allerton Park, which will be supplying sustainably harvested osage orange trees that they cull as part of park maintenance. Their own boardwalk is made of this very hard wood that requires no chemical input for preservation. We’ll be using the same local business they used to mill lumber.

As mentioned, Tony is working with CEE Prof Emeritus William Gamble, who is a licensed structural engineer. We do not seek additional funds for Prof Gamble because he has donated his review services in-kind to the project.

The role of construction manager is crucial for project success. The construction manager has been on-site while Facilities & Services is working to ensure that the project runs smoothly. Further, the construction manage writes daily progress reports that are converted into blog posts for students (and others) to read. As mentioned, additional funding is requested for Tony Heath’s role as construction manager. **Further additional funding is requested for Layne Knoche for his role as Phase II construction manager.**

Layne is a recent grad from the Department of Landscape Architecture. He, like Tony, joined the project as a student. He is managing the installation of approximately 9,000 plants, which is a large endeavor that is critical for project success.

***Additional comments (Optional)***

The project has sought (and been awarded) funding and in-kind services outside of SSC. Please see our donor page for more information. redoakraingarden.org/donors.