

Designing for Community through Landscape.

Peter De Smidt

Studio C

## Introduction:

This project was born out of the challenge to find something in our lives that wasn't working. As a second year student at Rensselaer Polytechnic Institute I spend a large amount of my time studying and am always hunting for new locations to study. With a campus that boasts extraordinary views of the City of Troy and the Hudson valley, as well as features expertly designed and meticulously maintained landscaping, students seek every opportunity available to enjoy the beautiful campus.

Unfortunately, currently the options for outdoor seating and studying are very limited. Often spaces created for students at RPI are inaccessible to all students, not welcoming, out of commission, limited, or only seasonally available. When tasked to design for something that wasn't working within our lives, I (somewhat selfishly) chose to design new spaces on RPI's campus that addressed these experiential issues and design in a way that builds connection to the RPI community, strengthens the spaces sustainability, and compliments the already beautiful campus.

View of RPI's '86 Field





Landscaping outside of Greene Building and Lally

View of Troy Building and Ricketts Laboratory



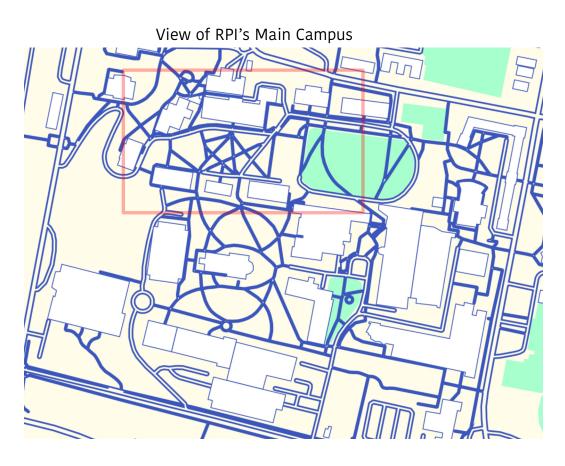


EMPAC and City of Troy

## Site Location:

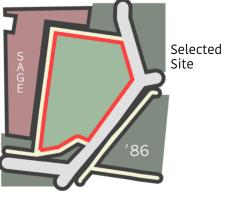
Sage Accessibility Entrance

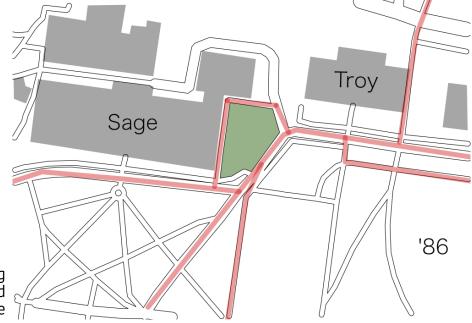
Because of the Sage Accessibility Entrance site's interesting landscape, ADA accessibility, high traffic volume, and current water drainage issue, I thought that this space provided a great canvas for a community space.





Arial Image of RPI Campus and Sage Site





Map of RPI Campus showing popular pedestrian paths around Sage accessibility entrance

# Site Photos



View from entrance



View leading to ADA ramp



View leading to stairs



View leading to entrance



Top view of whole site



View of ADA ramp



Existing Bench and stairs



View of site from far



Top view

# Conditions of the Space

This space offers an interesting and unique landscape, but suffers from poor drainage, retaining a large amount of water all year round making this space hard to utilize.



Mud



Water Collection



Winter ice



Water Collection in winter



Access to stairs blocked by standing water



Water logged space

# Space Concept



**Eupatorium Dubium** 

- Requires High Moisture Level

-Grows in Troy's Hardiness level of 6A



Calamagrostis Arundinacea

- Requires High Moisture Level

-Grows in Troy's Hardiness level of 6A



Boston Ivy

- Grows best in well drained soil

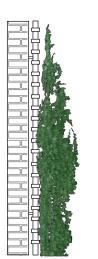
-Grows in Troy's Hardiness level of 6A



- Grows well in wet soil

-Grows in Troy's Hardiness level of 6A

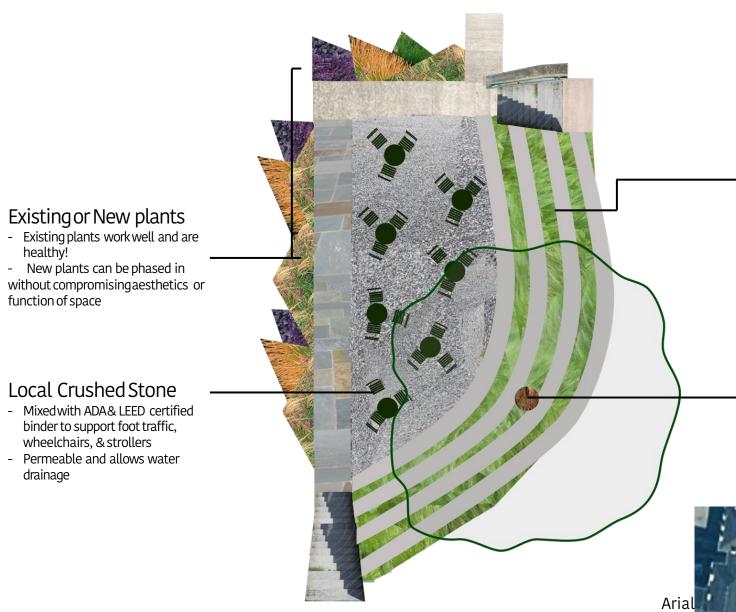
- Low to no maintenance



Trellis attachment system



#### Side view of planting concept featuring Boston ivy



#### Pennsylvania Sedge

- Reduces Maintenance
- Good for high traffic
- Good for wetter soils
- Comfortable and aesthetically interesting

#### Local Crushed Stone

Existing or New plants

- New plants can be phased in

healthy!

function of space

- Mixedwith ADA& LEED certified binder to support foot traffic, wheelchairs, & strollers
- Permeable and allows water drainage

#### Existing Mature Tree

- Respect this healthy mature tree! - Great shade in the summer
- Adds an interesting aesthetic
- element

Image of Sage Site

# Space Activations



Students Studying



Terraced Seating Diagram

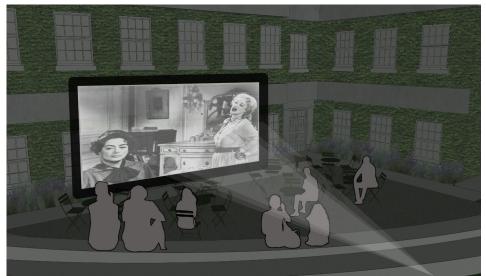


Outdoor moveable
movie projection
screen could be
easily stored and
checked out from
existing AV
checkout room
already located in
Sage Laboratory





Opportunity for Filmmaking class to present student films or UPAC Cinema to hold outdoor screenings on moveable projection screen





Space lit at night.

Opportunity to partner with RPI's Lighting Enabled Systems & Applications (LESA) or Center for Architecture Science & Ecology (CASE) to develop intelligent environmental lighting.

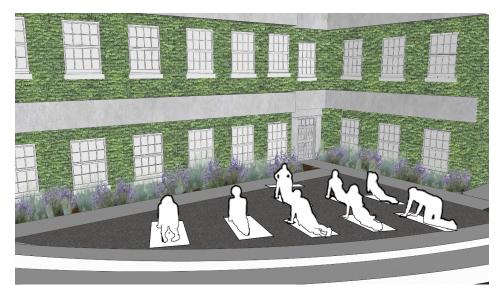






Opportunity for Outdoor lectures, workshops, or other small events.





Opportunity for outdoor recreation with Campus Health & Wellness or Mueller Center



Game Simulation Arts & Sciences outdoor Play-test on moveable outdoor projection screen.



# Materials



Materials, including Organic-Lock ADA & LEED certified aggregate binder for easy mobility and water permeability

# Drain Concept

Subsurface French Drain System to reduce pooling water, connecting to current drain system.



Possible french drain drain cover to line sidewalk filled with matching larger sized crushed stone



Image of Sage Site

