Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

5. Principles:

- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

6. Next steps

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

1. Project Team and Mission

UConn's Community Research & Design Collaborative (CRDC) is the umbrella organization for the outreach work of the landscape architecture faculty.

- Our mission is to be a regional leader in sustainable planning and design. We help our client's plan and design affordable, equitable, and ecologically healthy environments.

- Our mission is accomplished by providing our client's with objective, multi-disciplinary, state-of-the-art planning and design expertise.

- We promote and encourage academic-based collaborative research (service learning) with an emphasis on "real world" projects as they apply to sustainable development.

The Fairfield Team from left to right: Adjunct Instructor Natalie Miniutti, Associate Professor Peter Miniutti and Graduate Student Samantha Stewart.

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

1. UConn's Role on Project

- **Facilitate** communication between the public and town officials for the mitigation of some of the uses at the Town Facilities @ One Rod Highway:
    - Visual impact of fill operation and tree operation
    - Sound control
    - Wildlife concerns

- **Coordinate** the work efforts of town officials (Joe and Scott), contractors working at the town facility and consultants working on the mitigation project.

- **Create** an intervention that will allow the existing uses to continue while reducing the negative impact(s) on the adjacent neighborhoods.

My definition of landscape architecture is the creation of meaningful and memorable exterior spaces.

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

1. Project Site - Context

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

1. Project Site - Photographs

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

1. Project Site – Land Uses

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

5. Principles:

- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

6. Next steps

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Audience Input - Location

2. Survey 1

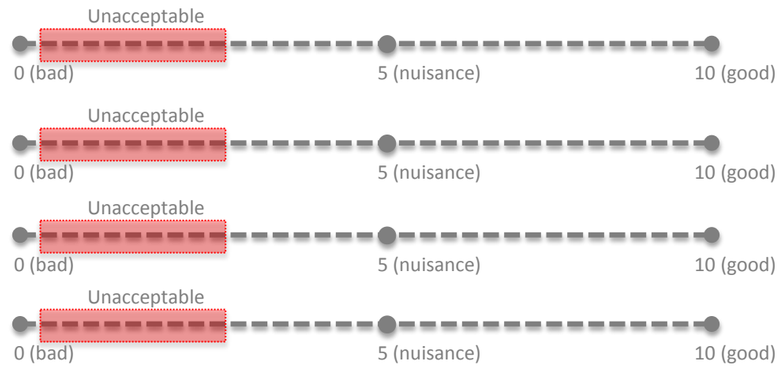
A
Views

The views to the Fill Area in the summer months are:

The views to the Fill Area in the winter months are:

The views to the Tree Operation Area in the summer months are:

The views to the Tree Operation Area in the winter months is:



Comments:

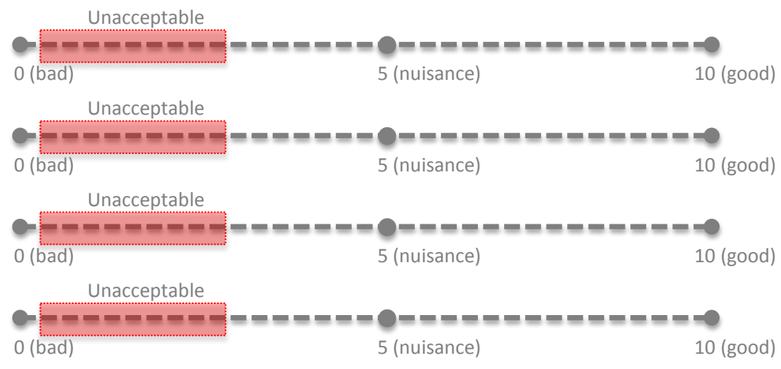
B
Other

The _____ from the Fill Area in the summer months is:

The _____ from the Fill Area in the winter months is:

The _____ from the Tree Operation Area in the summer months is:

The _____ from the Tree Operation Area in the winter months is:



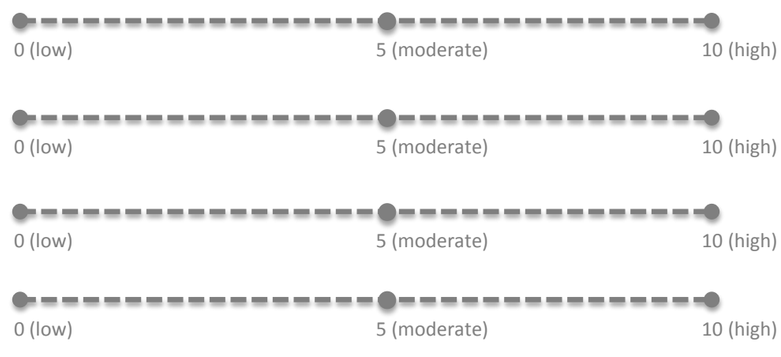
C
Environment

My overall environmental concerns regarding the Fill Area are:

My water quality concerns regarding the Fill Area are:

My wildlife health concerns regarding the Fill Area:

My _____ concerns regarding the Fill Area:



UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Survey 1 – Part A Results: Views

Comments:

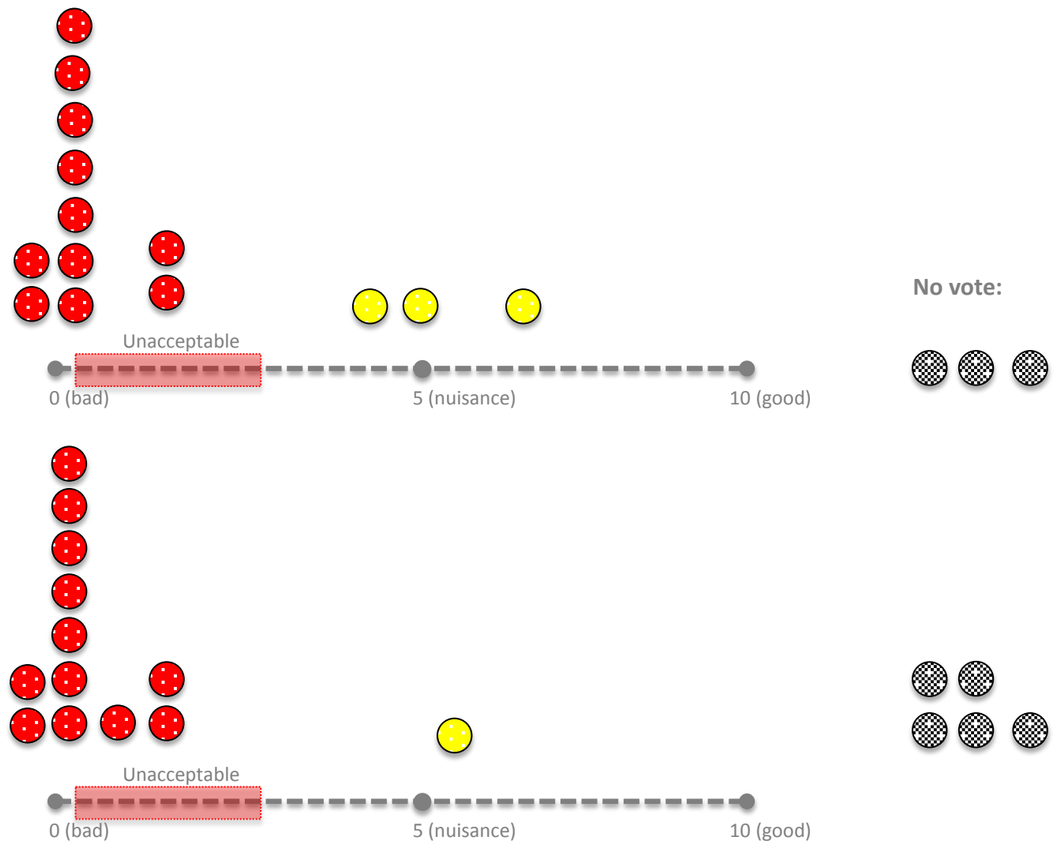
"A view of a heavy industrial site over a "once" bucolic marshland now devoid of water fowl equally as bad."

"Can't see but smell."

"While walking and recreation on the creek kayaking boating."

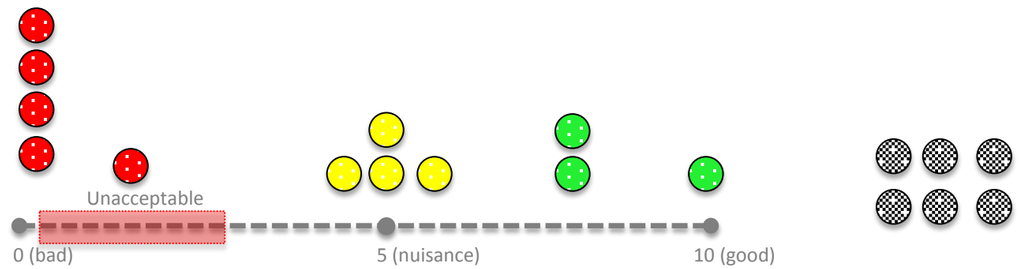
"Home is north of pile."

The views to the Fill Area in the summer months are:

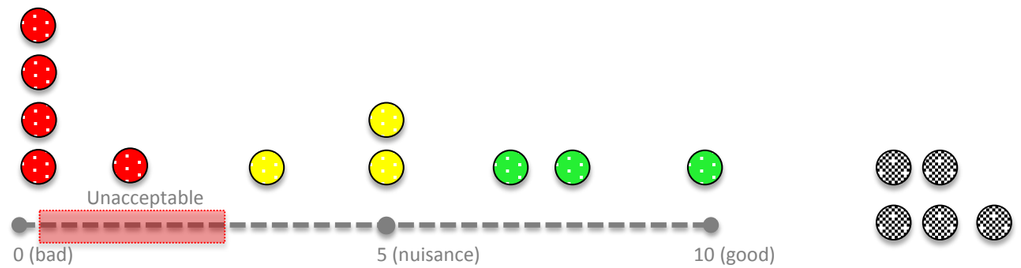


The views to the Fill Area in the winter months are:

The views to the Tree Operation Area in the summer months are:



The views to the Tree Operation Area in the winter months is:



UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

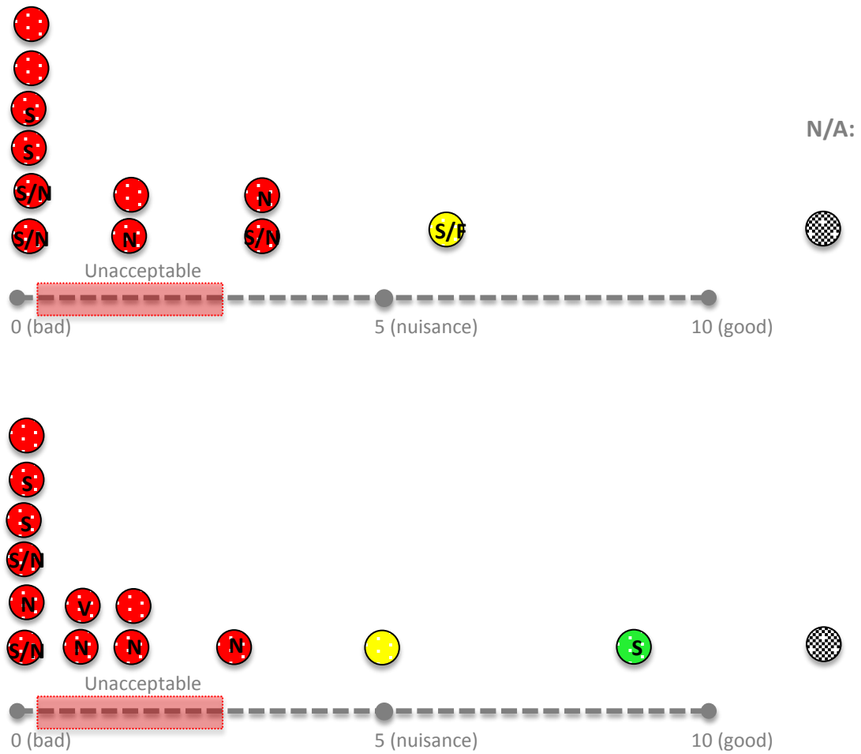
2. Survey 1 – Part B Other (smell and noise)

Other comments:

"Composting smell worse north of Veres Street."

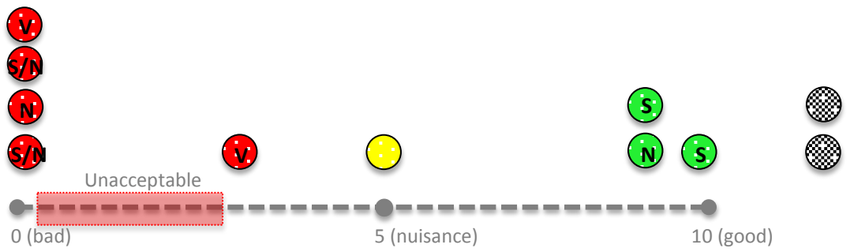
The _____ from the Fill Area in the summer months is:

View
Noise
smell
flies



The _____ from the Fill Area in the winter months is:

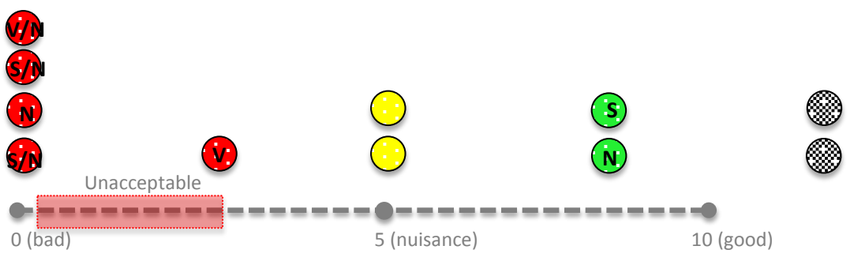
Smell
noise
view



The _____ from the Tree Operation Area in the summer months is:

View

Smell
noise



The _____ from the Tree Operation Area in the winter months is:

Smell
noise
VIew

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Survey 1 – Part C Environment

Comments:

"Concern is growth of fill north."

"Children while swimming"

"The banks on the marsh and creek."

"The birds, fiddler crabs, fish (and even the rats!) are all precious."

"Lack of marsh birds, white escets are gone."

"Dog swims in water."

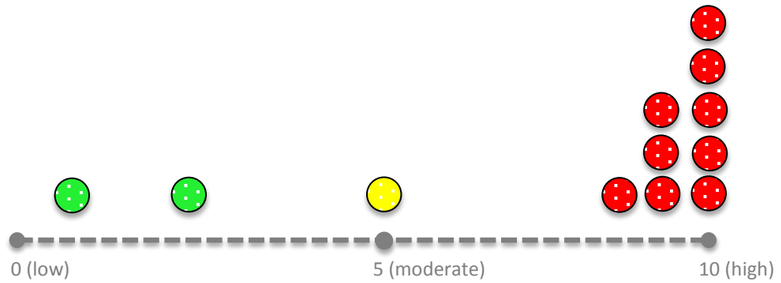
"Disrupts birds"

"Nobody monitors the content of the debris. I would believe some must be contaminated and the site is a very easy disposal at minimal expense."

"Water fowl is gone from a previously populated site."

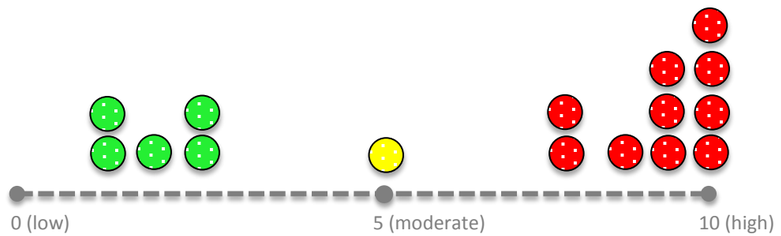
"The wildlife will not breed in the current conditions."

My overall environmental concerns regarding the Fill Area are:

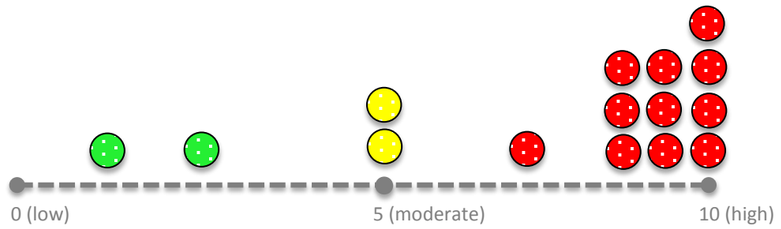


N/A:

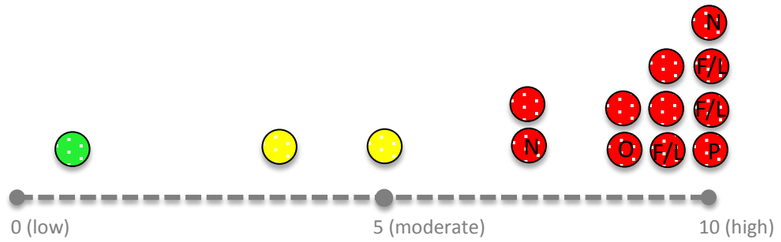
My water quality concerns regarding the Fill Area are:



My wildlife health concerns regarding the Fill Area:



My _____ concerns regarding the Fill Area:



Financial
Land/ property value
aesthetic
personal
Noise
overall

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Survey 1 – Participants

Survey Completed
Dru Georgradis
Edward Soderland
Doug Macshane
Jon & Jackie Davis
Peter & Rena Wiswell
Helen Hapgood
David Garrell
Richard Rowan
Silas Howland
Zecchi
Soderlund
Russo
Nancy Samuelson
Kristin Nick
G. Sargent
Unknown
William Bodine

No Information Given
Kathleen Griffin

Survey 1 Other Comments:

"The Town admits mismanagement. The time frame is too long. They weed to contribute some funds say 50% to lower the timeline to 8 months." ?

"Would love to see the buses housed elsewhere!"

"I hear it everyday."

"Too high."

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Survey 2

The steps to reduce the visual impact (along with other issues) of the Fill Area include:

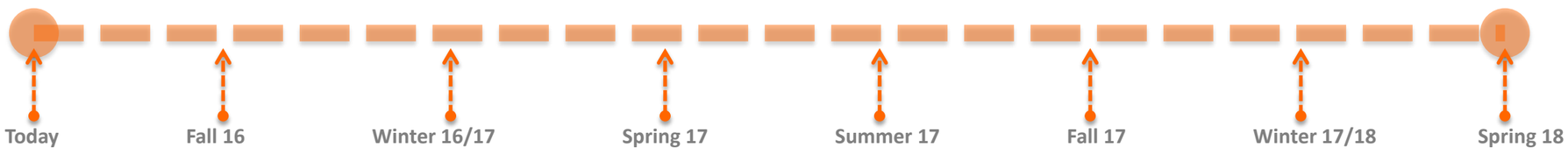
Step I: UConn, working with town officials, community and consultants, will develop a series of alternative concept plans which will be reviewed and discussed at public workshops. Ultimately, this step will culminate with an agreed upon Final Concept Plan

Step 2: UConn will develop the Final Concept Plan into Schematic Level Documents. The documents will include:

- *Layout Plan*
- *Grading Plan*
- *Planting Plan*
- *Other supporting documentation including consultant work*

Step 3: Begin implementation (construction) of the agreed upon plan.

Step 4: Completion of agreed upon plan



UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

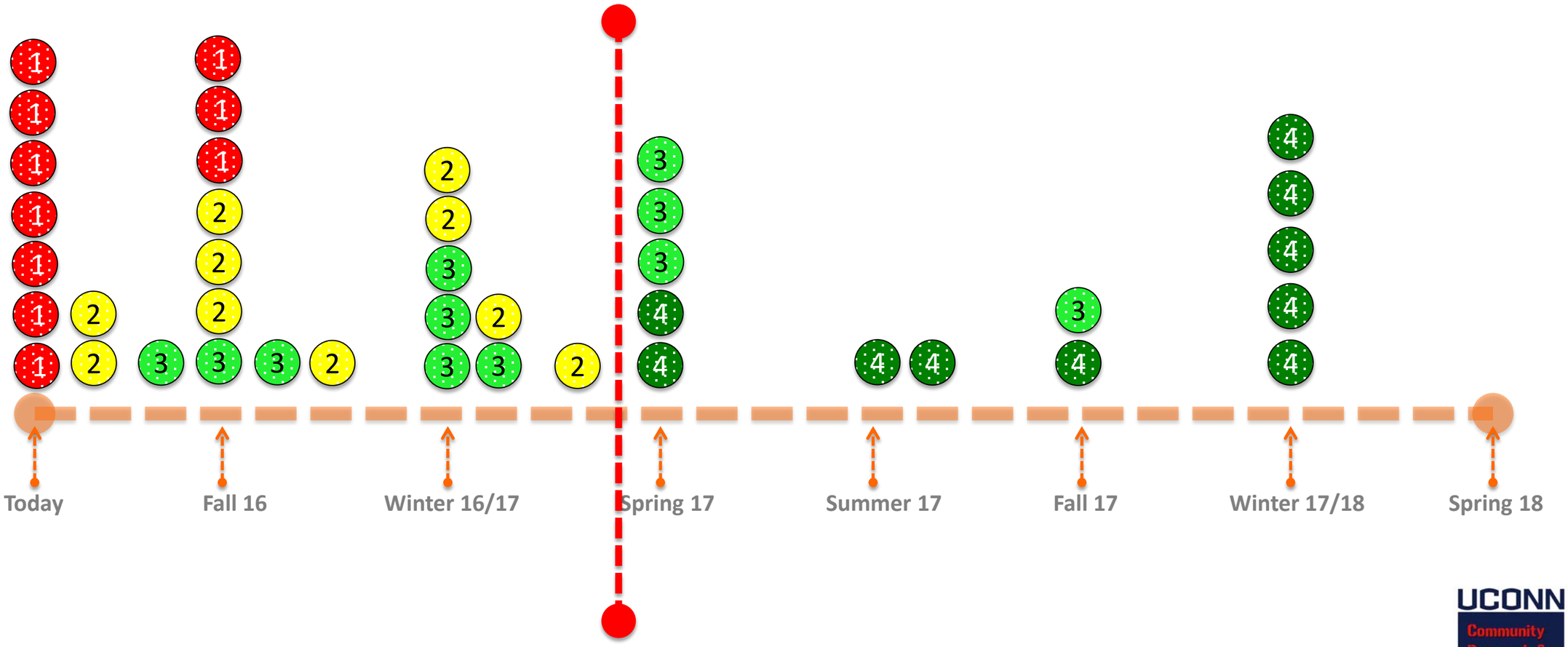
2. Survey 2 Results

Step I: *UConn, working with town officials, community and consultants, will develop a series of alternative concept plans which will be reviewed and discussed at public workshops. Ultimately, this step will culminate with an agreed upon Final Concept Plan*

Step 2*: UConn will develop the Final Concept Plan into Schematic Level Documents.*

Step 3*: Begin implementation (construction) of the agreed upon plan.*

Step 4: *Completion of agreed upon plan*



UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

2. Survey 2 Participants

Survey Completed
William Bodine & Victoria Fingelly
Gregory Sargent
Kristin & Tim Nick
Nancy Samuelson
Russo
Soderlund
Zecchi
Richard Rowan
Garrell
Jon & Jackie Davis

No Information Given
Silas Howland
Helen Hapgood
Peter & Rosa Weswell
Dru Geasraders
Doug Macshane
Edward Soderlund
Unknown

Survey 2 Comments:

“Avoid all summer months, the peak season.”

“Let’s sit back and really enjoy Spring/Summer of ’18.”

“What is the creek bottoms tests show. There has been a lot of materials dumped there over the years.”

“Problem has existed for years. No management oversite, contractors do not comply with contract legal terms. Town does not enforce contract terms or write penalties in. Very amateurish!”

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

5. Principles:

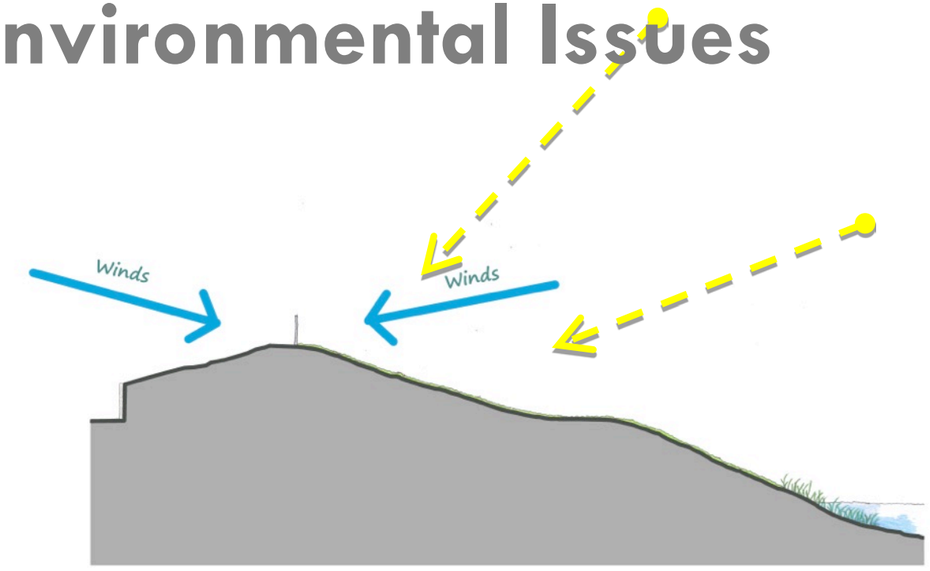
- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

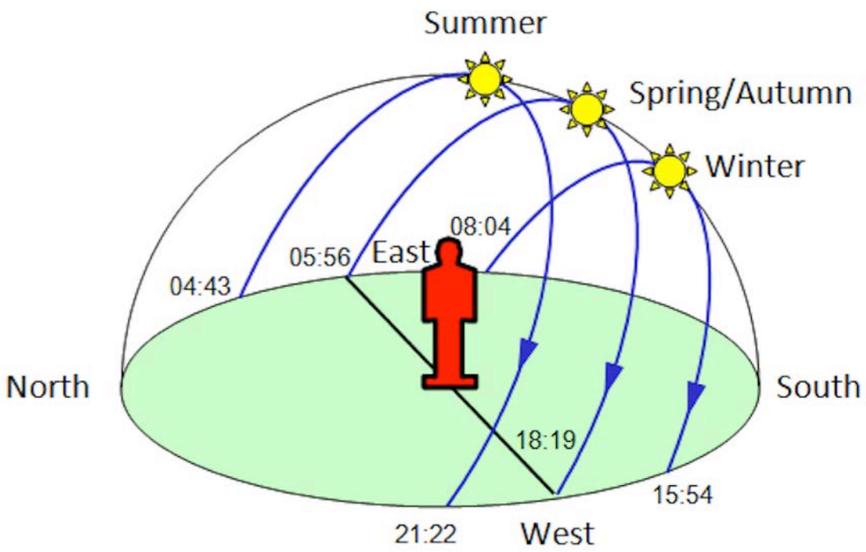
6. Next steps

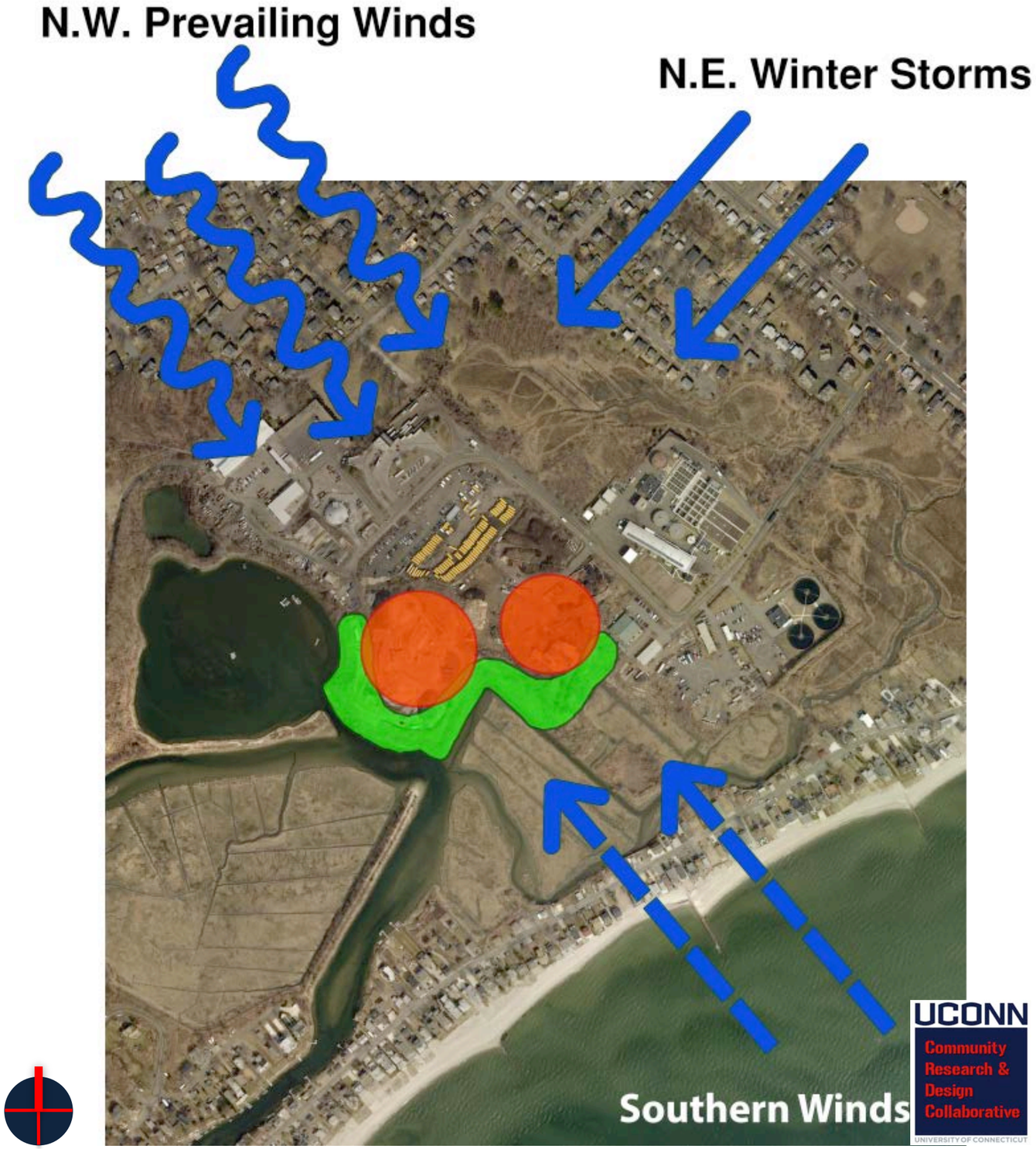
UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

3. Site Analysis – View Sheds

3. Site Analysis – Environmental Issues







Site Analysis: Wind, Sun, and Existing Vegetation

Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

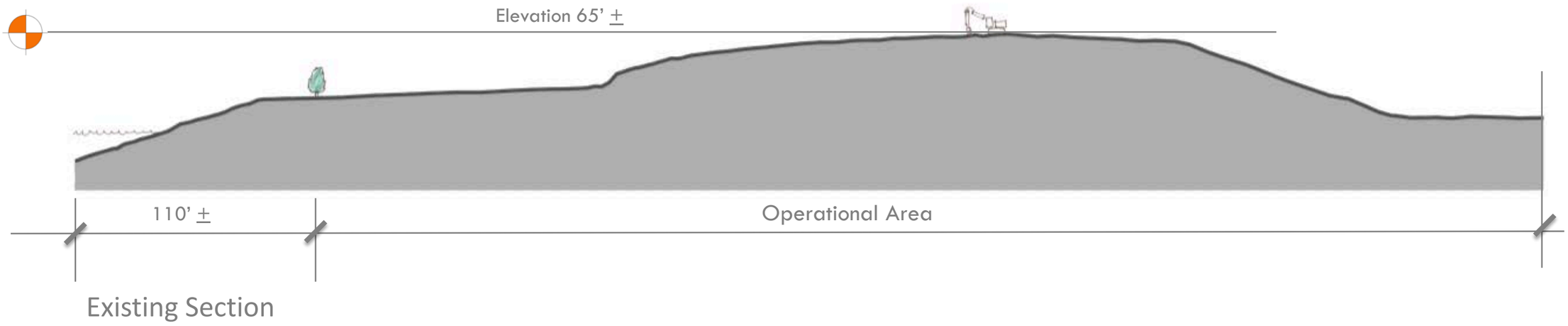
5. Principles:

- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

6. Next steps

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

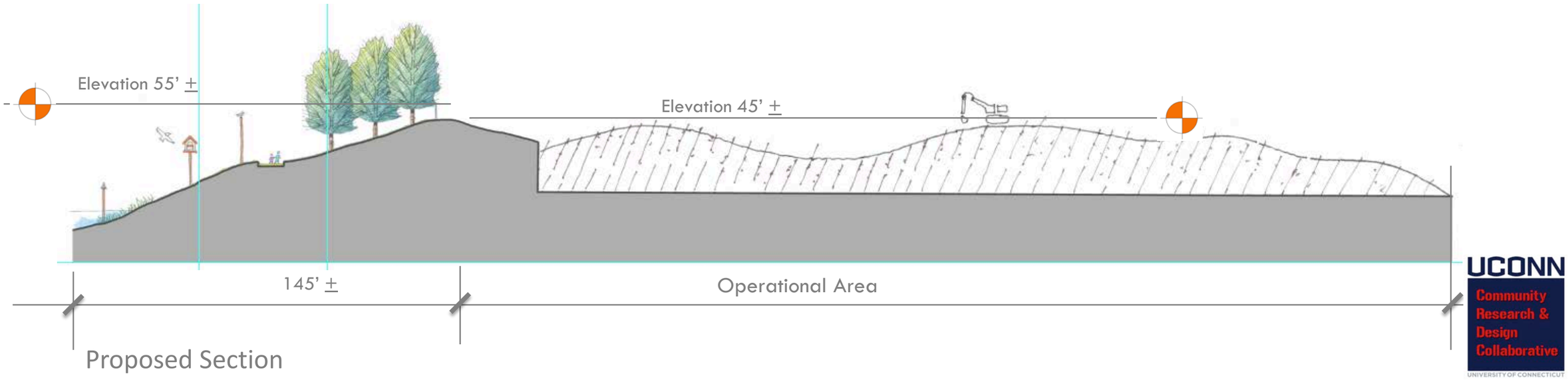
4. Preliminary Ideas – Cross Section



Existing Section

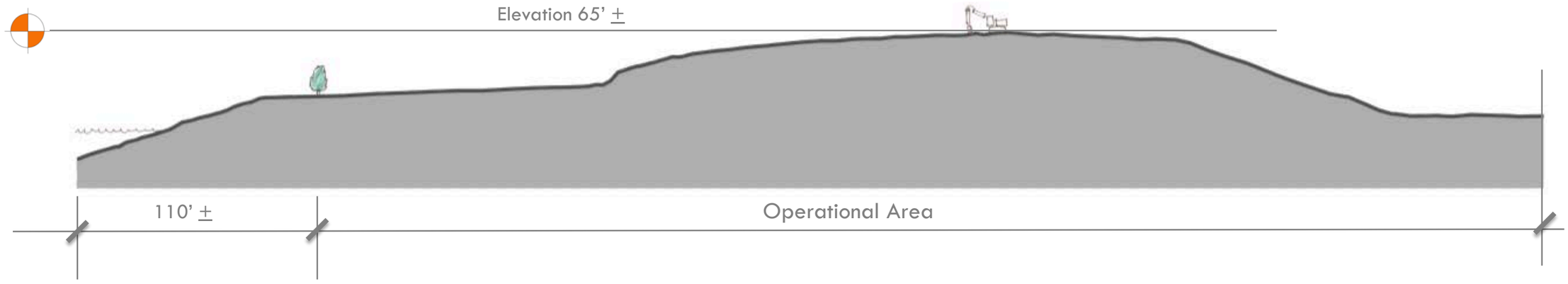
UCONN
Community
Research &
Design
Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Cross Section

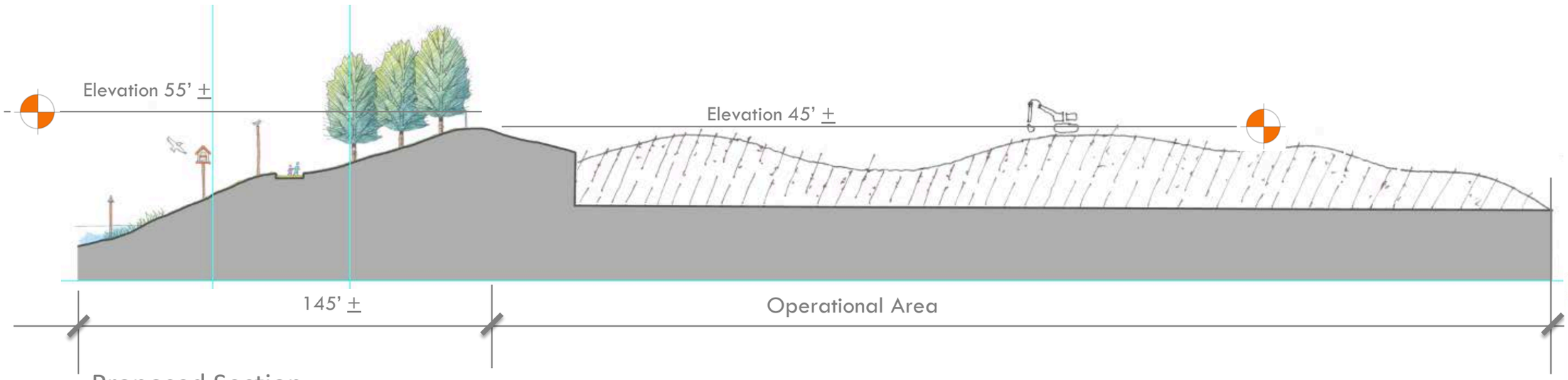


UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Cross Section



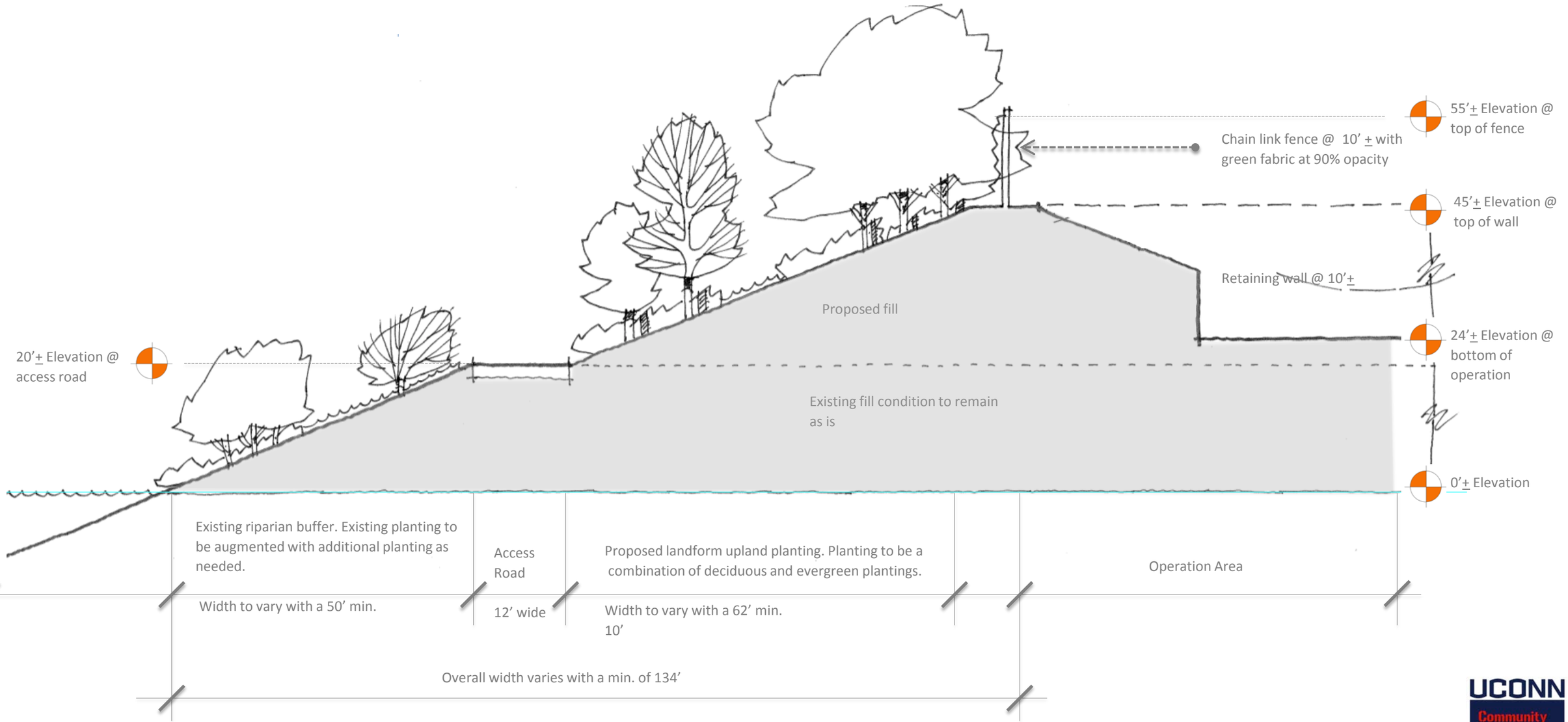
Existing Section



Proposed Section

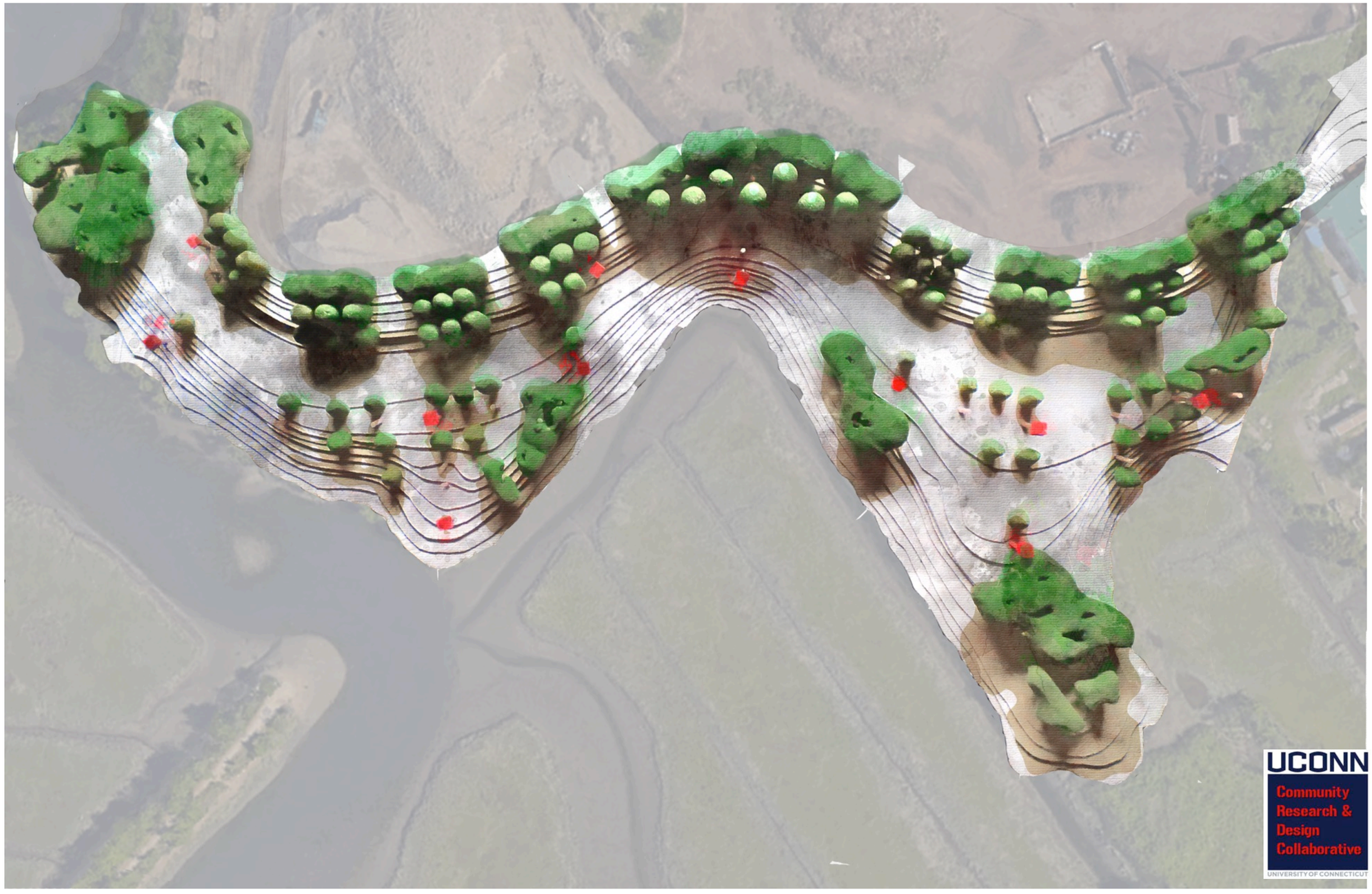
UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Cross Section



UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

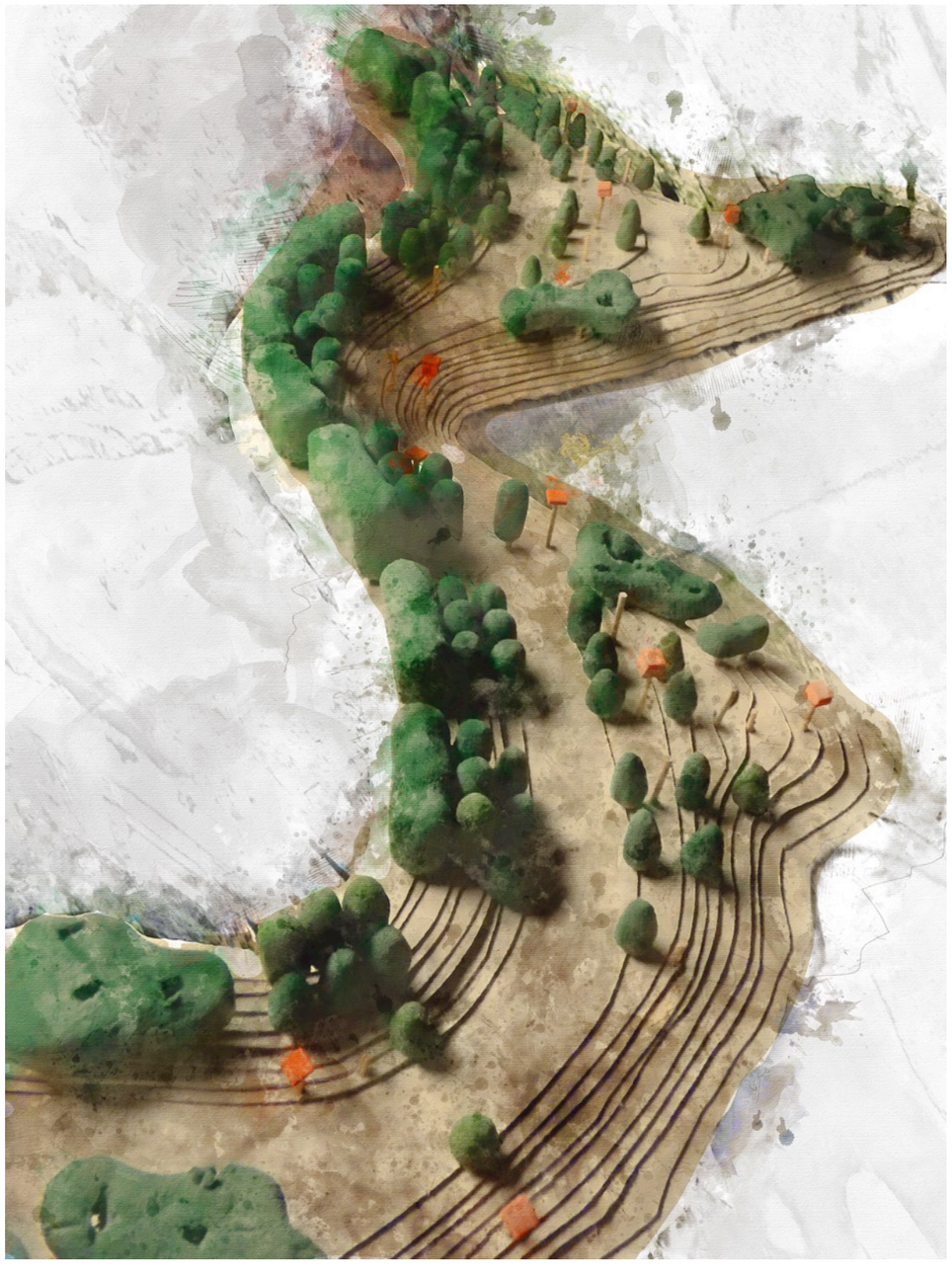
4. Preliminary Ideas – Plan



4. Preliminary Ideas – Walking View

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Bird's Eye View

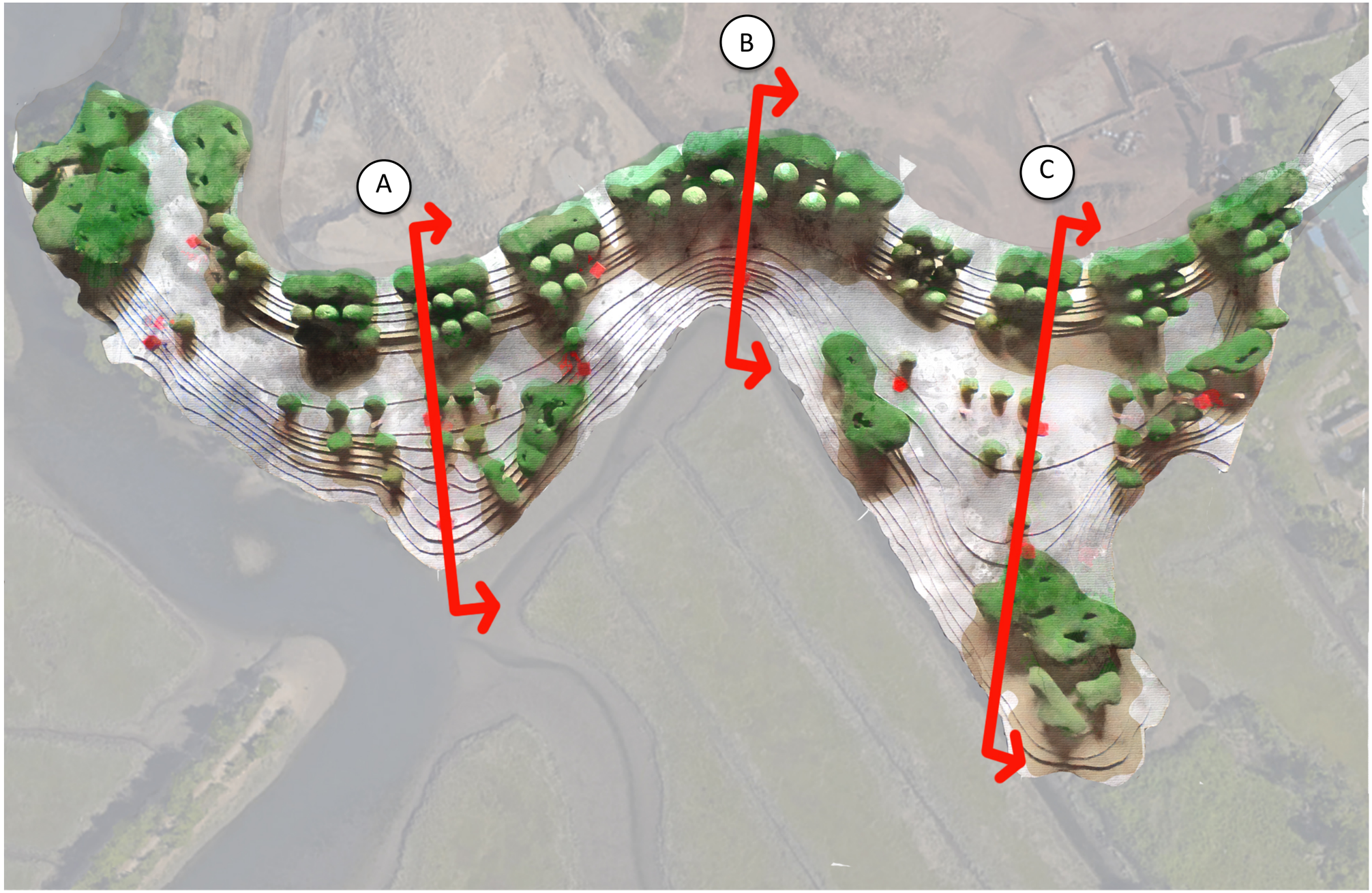


UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Bird's Eye View

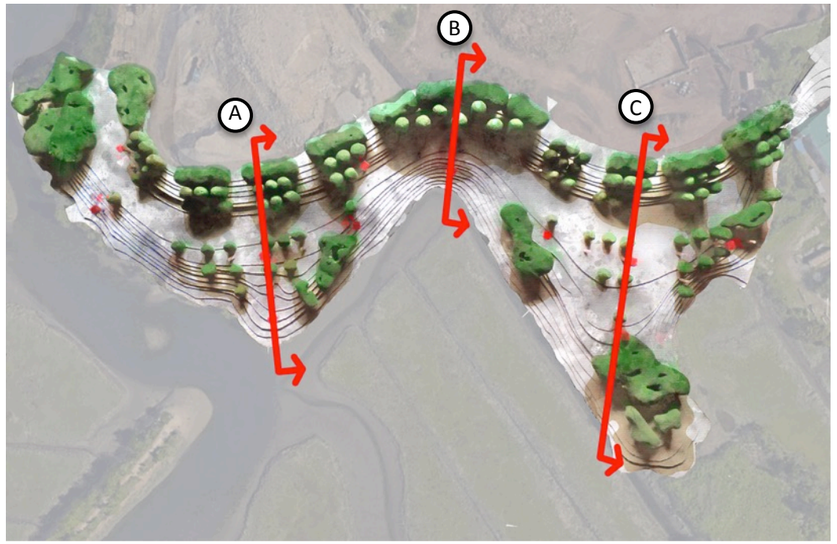
UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

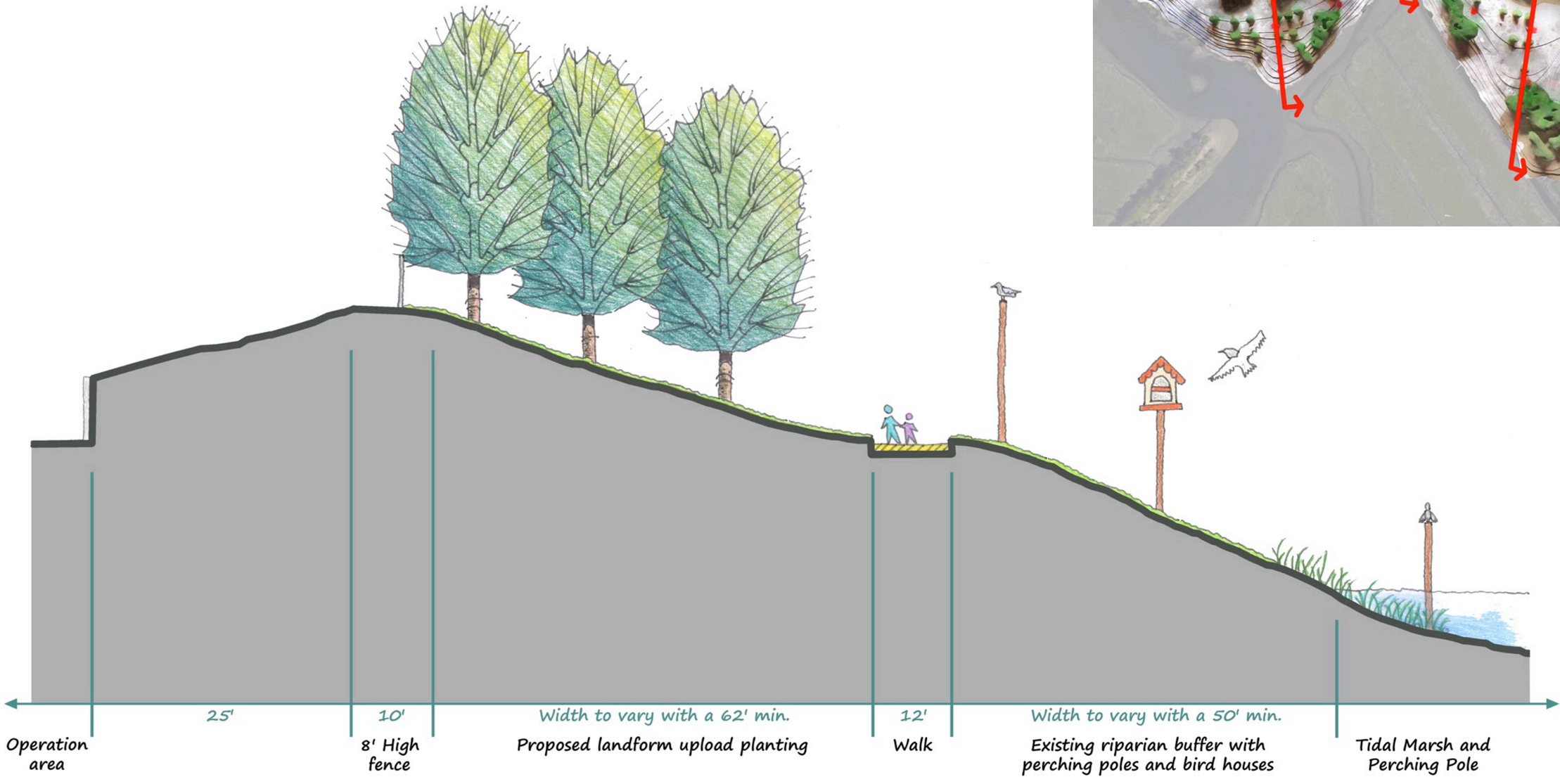
4. Preliminary Ideas – Sections



UCONN
Community
Research &
Design
Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Sections

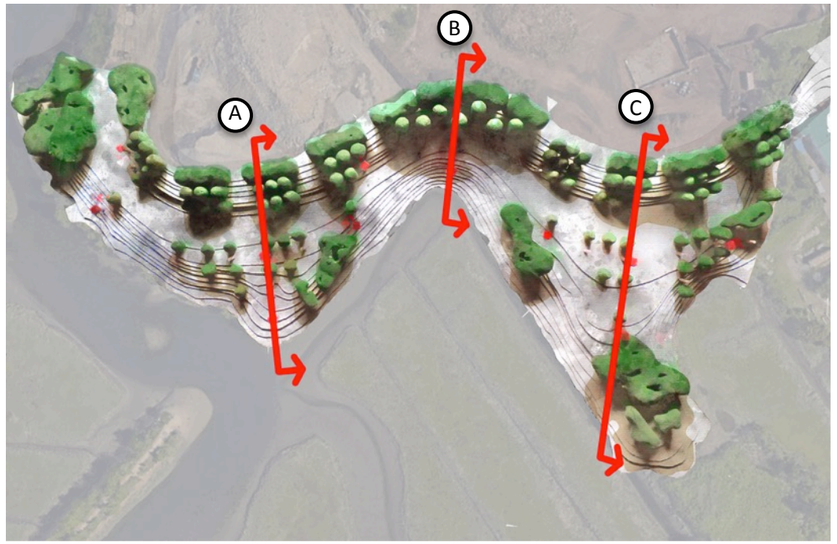


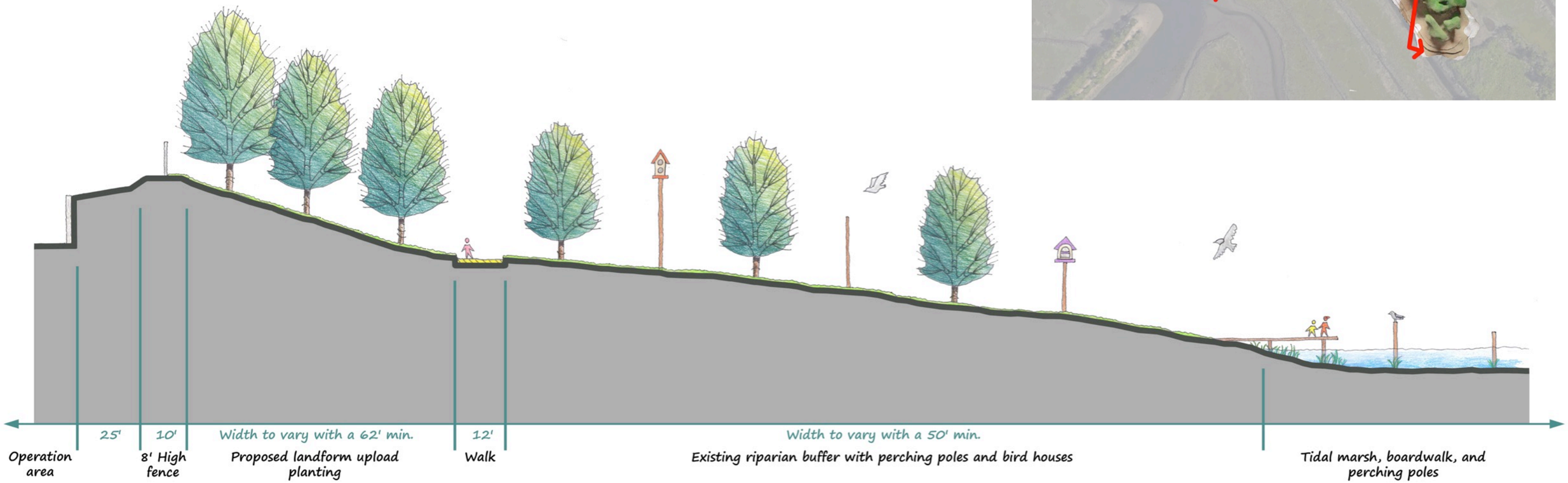


Section B

UCONN Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Sections

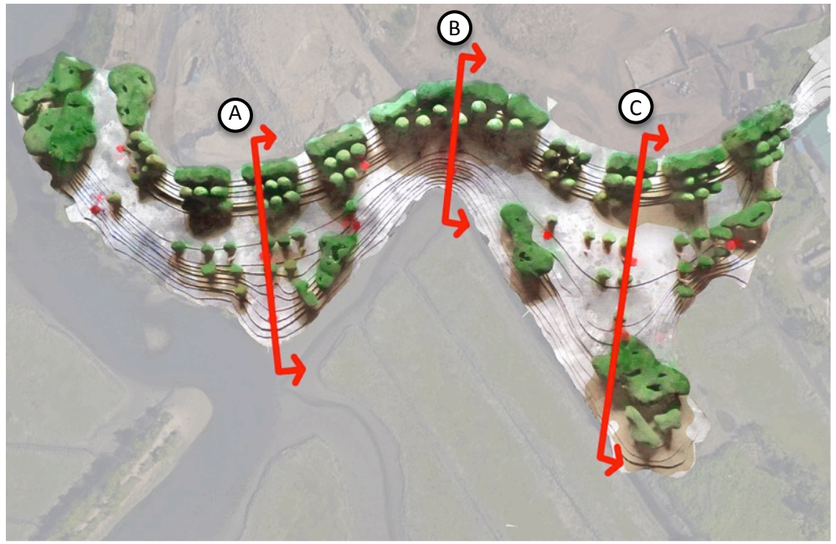


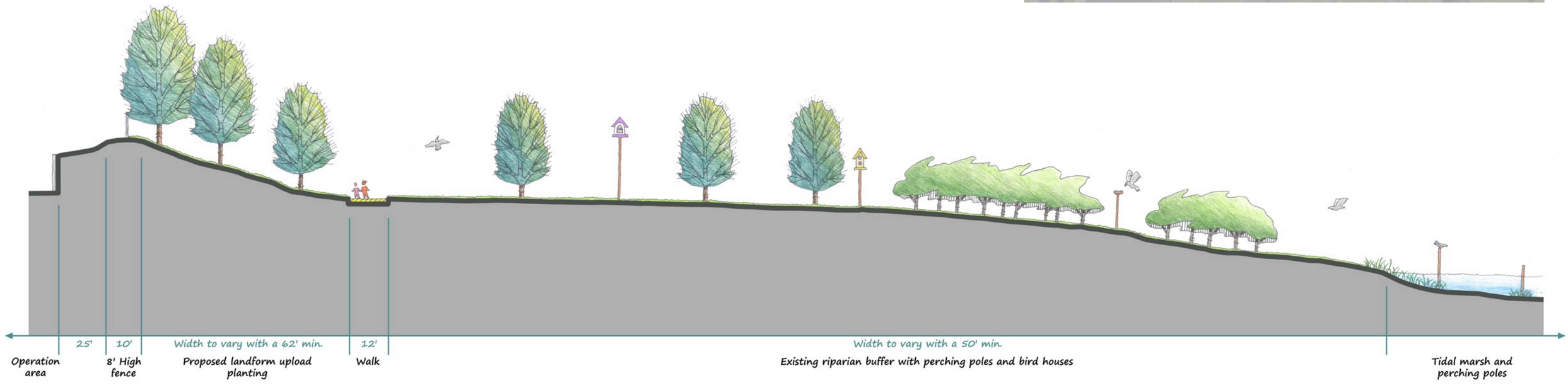


Section A

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

4. Preliminary Ideas – Sections





Section C

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

5. Principles:

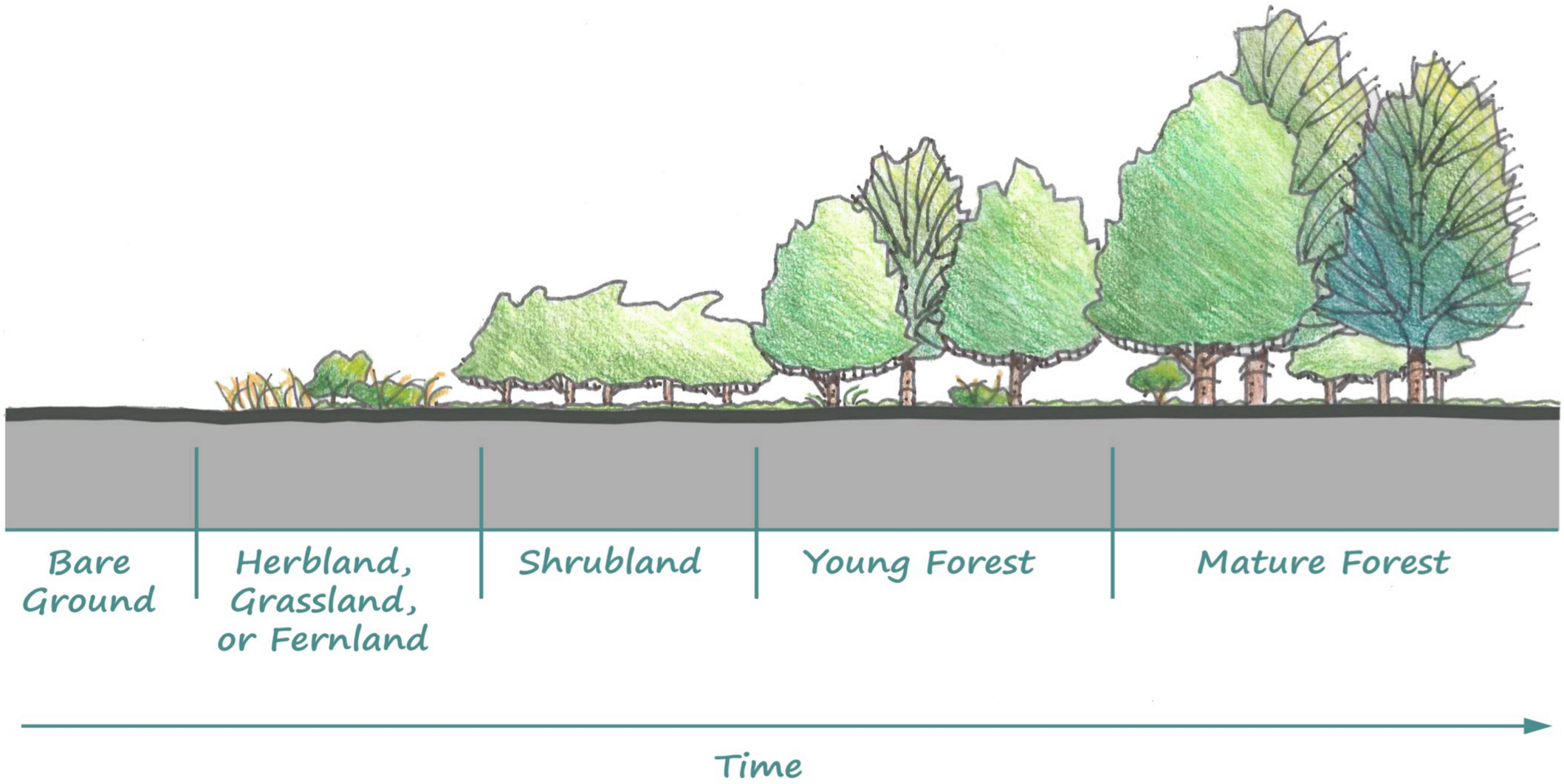
- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

6. Next steps

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Successional Growth

Ecological succession is the gradual process by which ecosystems change and develop over time. Nothing remains the same and habitats are constantly changing.



5. Principles – Successional Growth

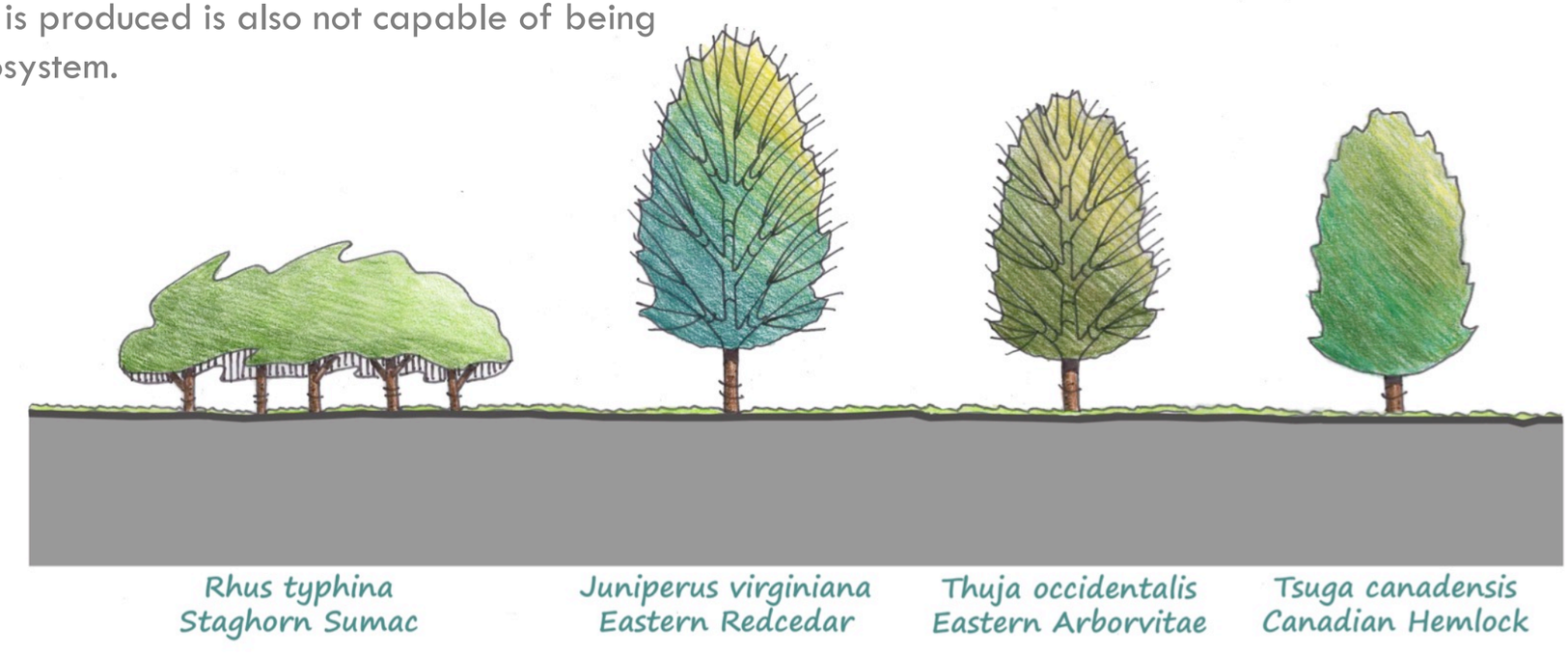
The Stages of Succession

Pioneer Pioneer types are new lifeforms that enter into a primary succession and begin to take hold. ex: seeds, bacteria, insects, or animals

Establishing Establishing is the process in which lifeforms identify elements in an ecosystem that can sustain their basic needs. ex: food, water, safe habitat

Sustaining Sustaining type means that life in the ecosystem has begun to enter a pattern that allows for a cycle of life to continue.

Producing This is when lifeforms are breeding and growing, but there is migration because what is produced is also not capable of being supported within the ecosystem.

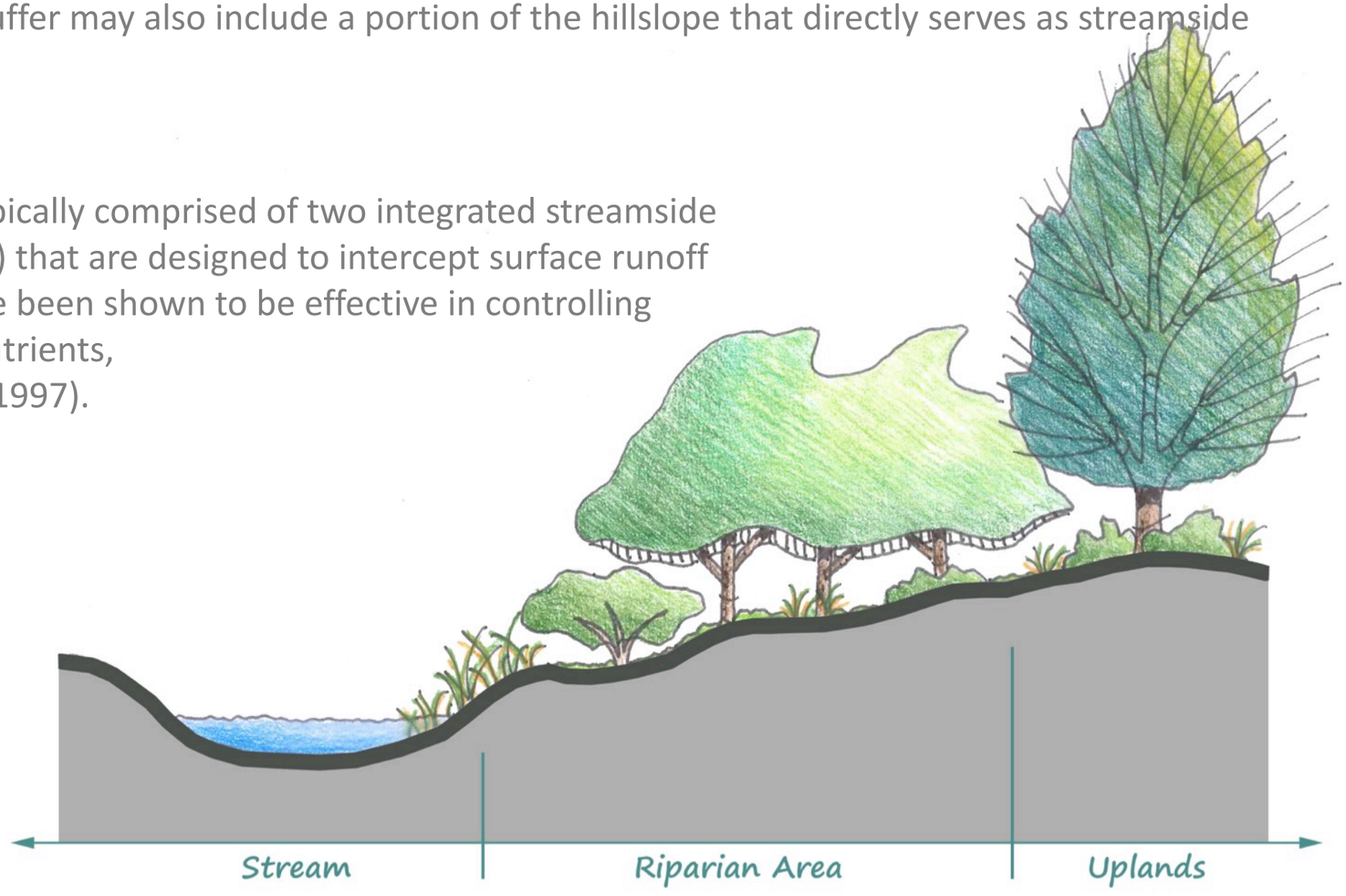


5. Principles – Riparian Buffer

The **USDA Forest Service** defines a riparian buffer as follows:

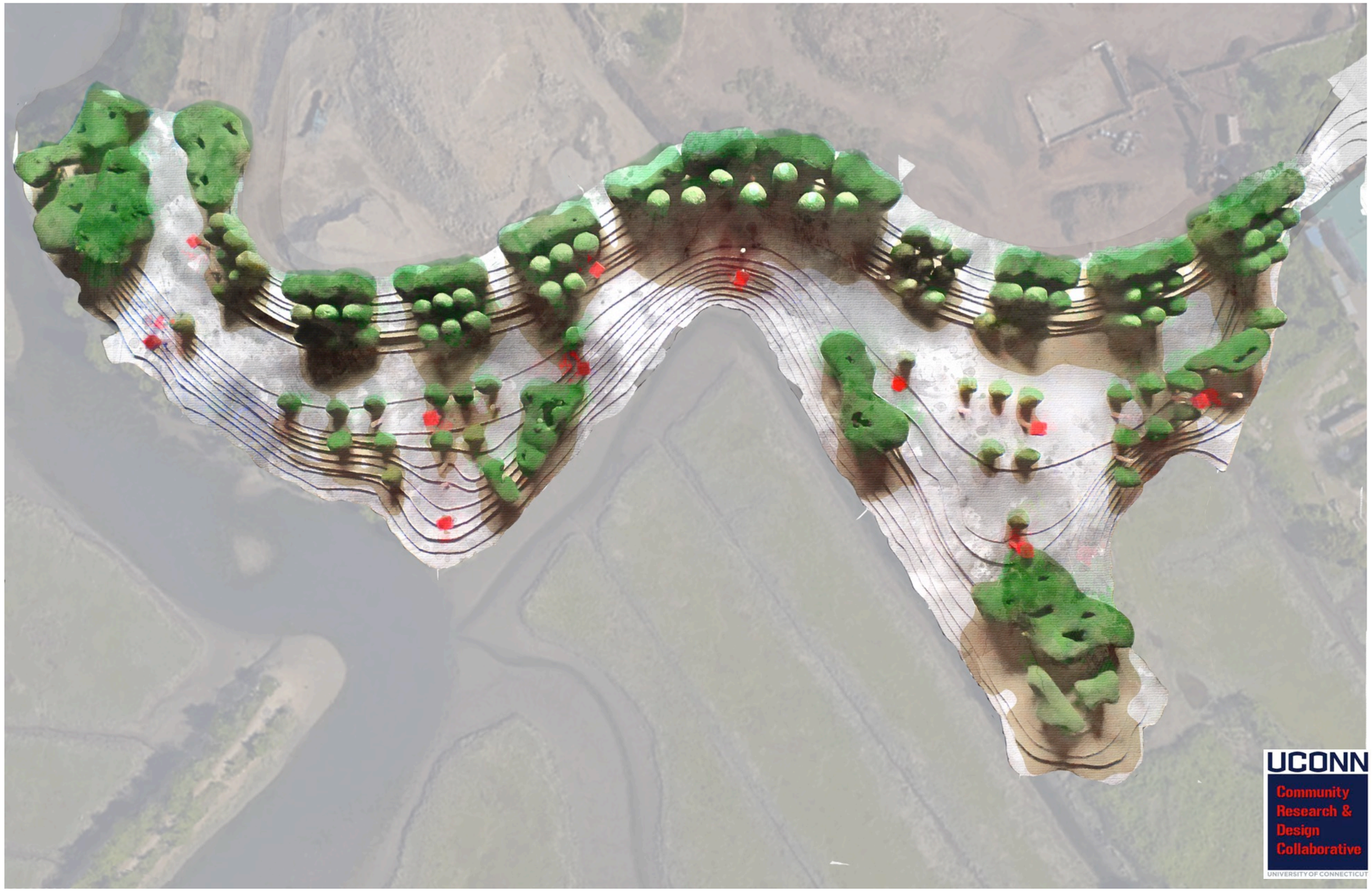
The aquatic ecosystem and the portions of the adjacent terrestrial ecosystem that directly affect or are affected by the aquatic environment. This includes streams, rivers, lakes, and bays and their adjacent side channels, floodplain, and wetlands. In specific cases, the riparian buffer may also include a portion of the hillslope that directly serves as streamside habitats for wildlife.

Forested riparian buffer systems in are typically comprised of two integrated streamside riparian buffers (forest and grass or shrub) that are designed to intercept surface runoff and subsurface flow. Riparian buffers have been shown to be effective in controlling nonpoint source pollution by removing nutrients, especially nitrogen and sediment (USDA, 1997).

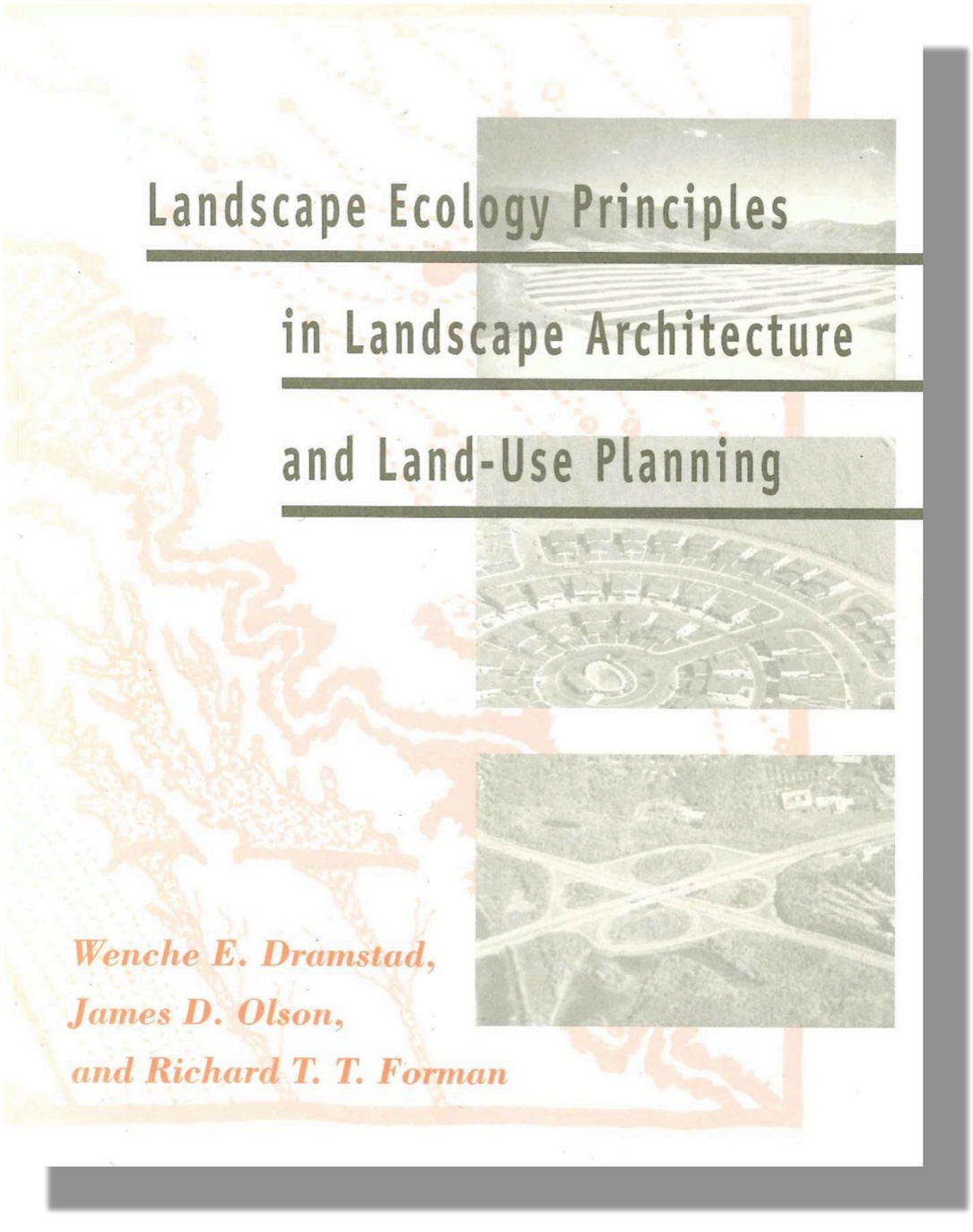


UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Riparian Buffer

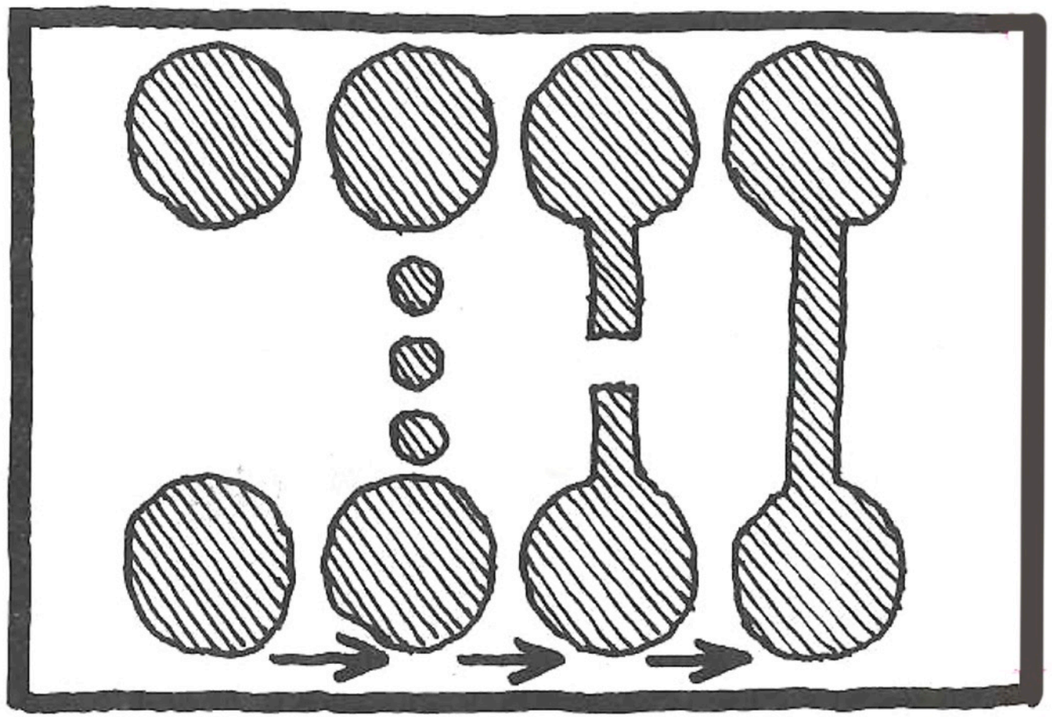


5. Principles – Bio-diversity Patterns



UCONN
Community
Research &
Design
Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Bio-diversity Patterns

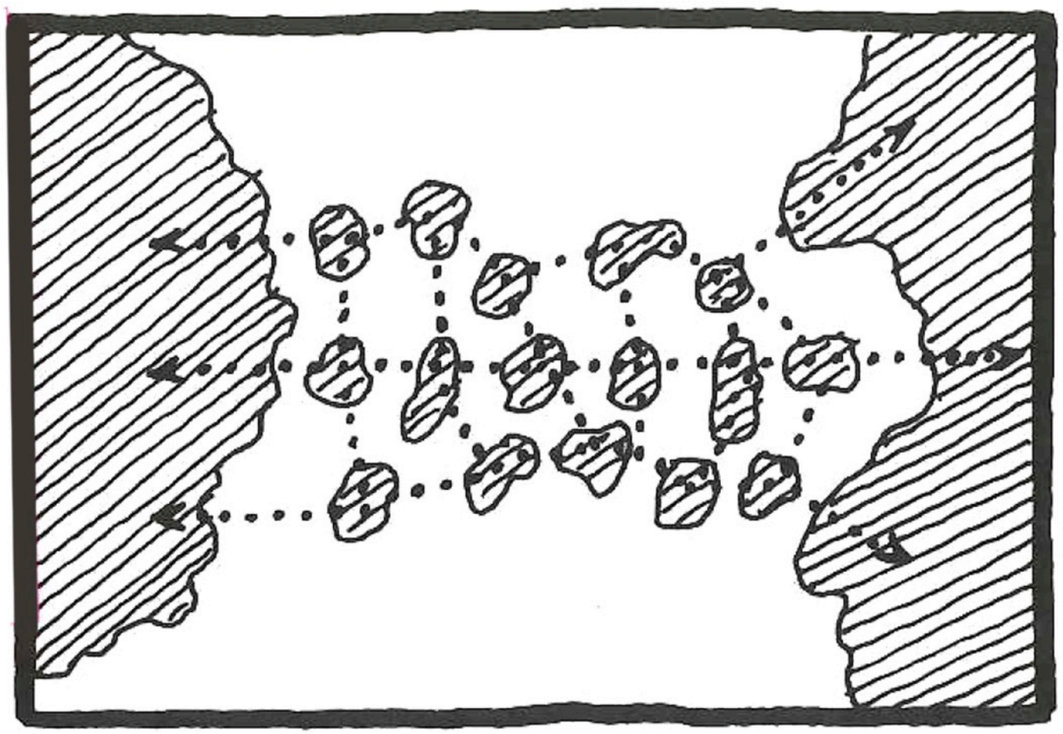


Stepping Stone Connectivity

A row of stepping stones (small patches) is intermediate in connectivity between a corridor and no corridor, and hence intermediate in providing for movement of interior species between patches.

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Bio-diversity Patterns

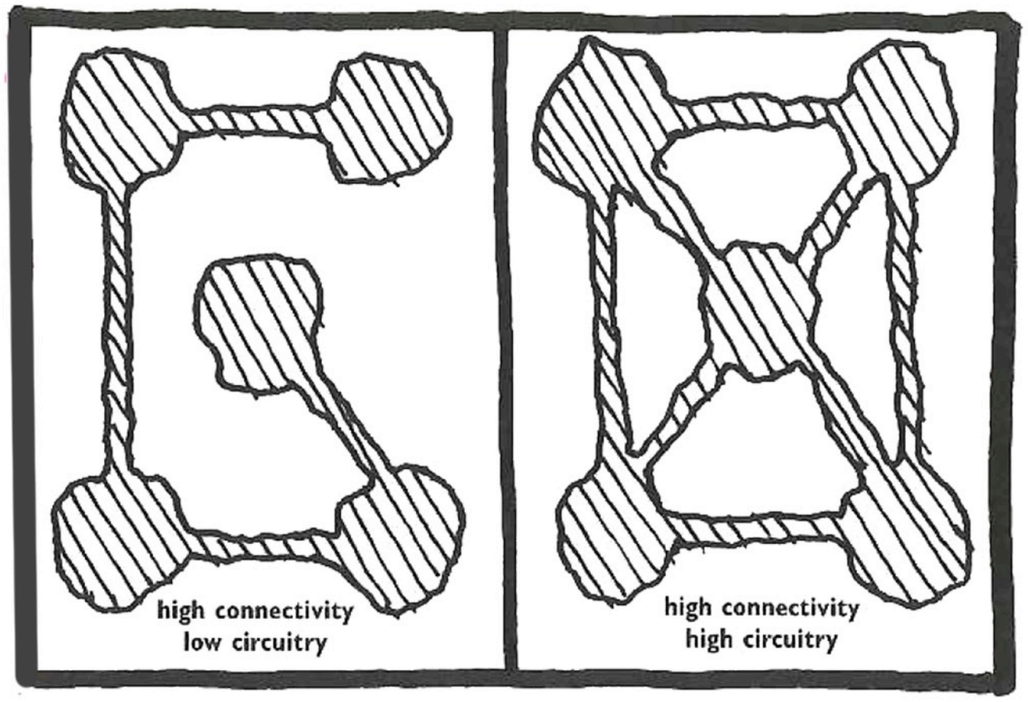


Cluster of Stepping Stones

The optimal spatial arrangement of a cluster of stepping stones between large patches provides alternate or redundant routes, while maintaining an overall linearly-oriented array between the large patches.

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Bio-diversity Patterns

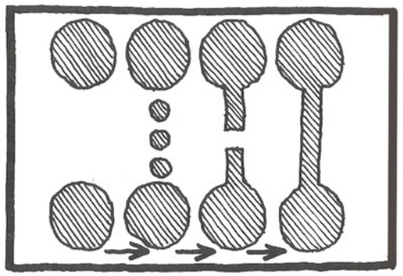


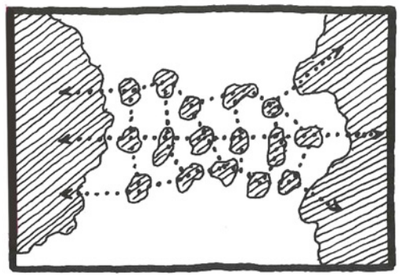
Network Connectivity and Circuitry

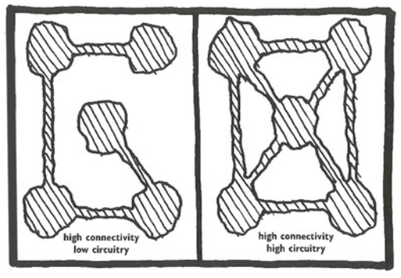
Network connectivity (i.e. the degree to which all nodes are linked by corridors), combined with network circuitry (i.e. the degree to which loops or alternate routes are present), indicates how simple or complex a network is, and provides an overall index of the effectiveness of linkages for species movement.

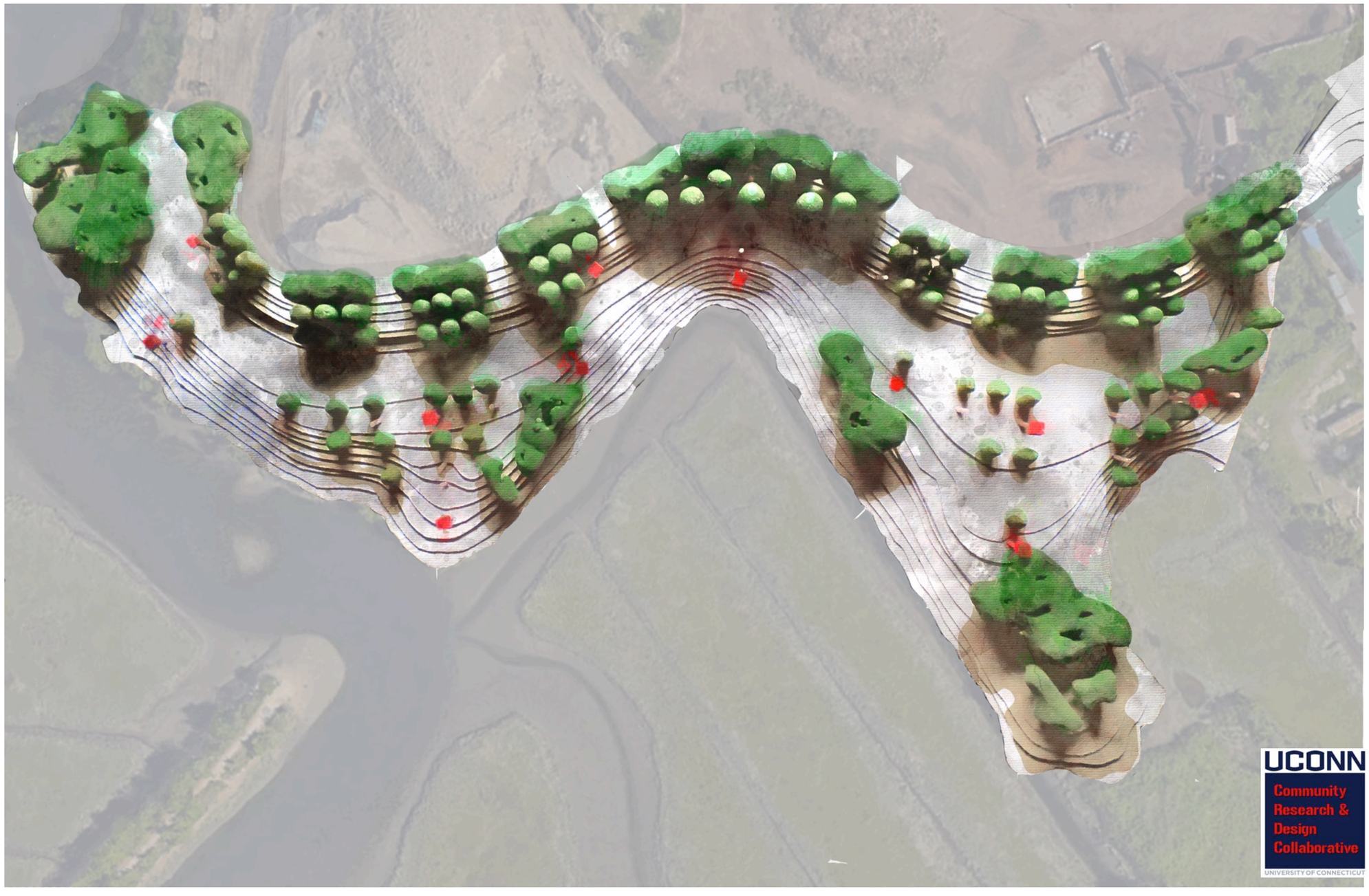
UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT

5. Principles – Bio-diversity Patterns









Town Facilities @ One Rod Highway Fairfield, CT.

UConn's presentation will include:

1. Introduction:

- Project Team and Our Mission
- UConn's Role on Project
- Project Site

2. Audience Input:

- Location
- Visual survey
- Environmental survey
- Timeline

3. Site Analysis:

- View Sheds
- Natural Features

4. Preliminary Ideas:

- Cross Section
- Planting
- Plan

5. Principles:

- Succession Growth
- Riparian Buffer
- Bio-diversity Patterns

6. Next steps

UCONN
Community Research & Design Collaborative
UNIVERSITY OF CONNECTICUT