The design studio as experiment:

the speculation of urban futures

Graduate Landscape Architecture Program

College of Architecture and Environmental Design

Kent State University

CAED
LANDSCAPE ARCHITECTURE

Morphologies:

To explore the **various scales** and responsibilities of landscape architecture and articulate critical elements of **infrastructures, systems, and urban forms.**

Groundwork:

To introduce **base knowledge** of landscape architecture and create a foundation for design and **professional awareness**

Year 1
groundwork

Fall
Studio 1 - Gardens
History+Theory
Plants+Planted Form

Spring
Studio 2 – Neighborhoods
Ecological Systems
Design Visuals

Year 2
morphologies

Fall
Studio 3 - Systems
Site Engineering
Construction Methods

Spring
Studio 4 – Urban Form
Research Methods
Professional Practice

Year 3
experimentation

Fall
Capstone Studio 1
(or multi-disciplinary studio-1)
Cognate 1
Cognate 2

Spring
Capstone Studio 2
(or multi-disciplinary studio-2)
Cognate 3
Cognate 4

Experimentation: Inquiry into an approach that **integrates** design elements, theory, history, technical knowledge, and life experiences into a **comprehensive design strategy**

Cleveland Campus

Fragmentation

Neighborhoods and Habitats

Cleveland, Ohio

W.25th Rapid Stop
Ohio City

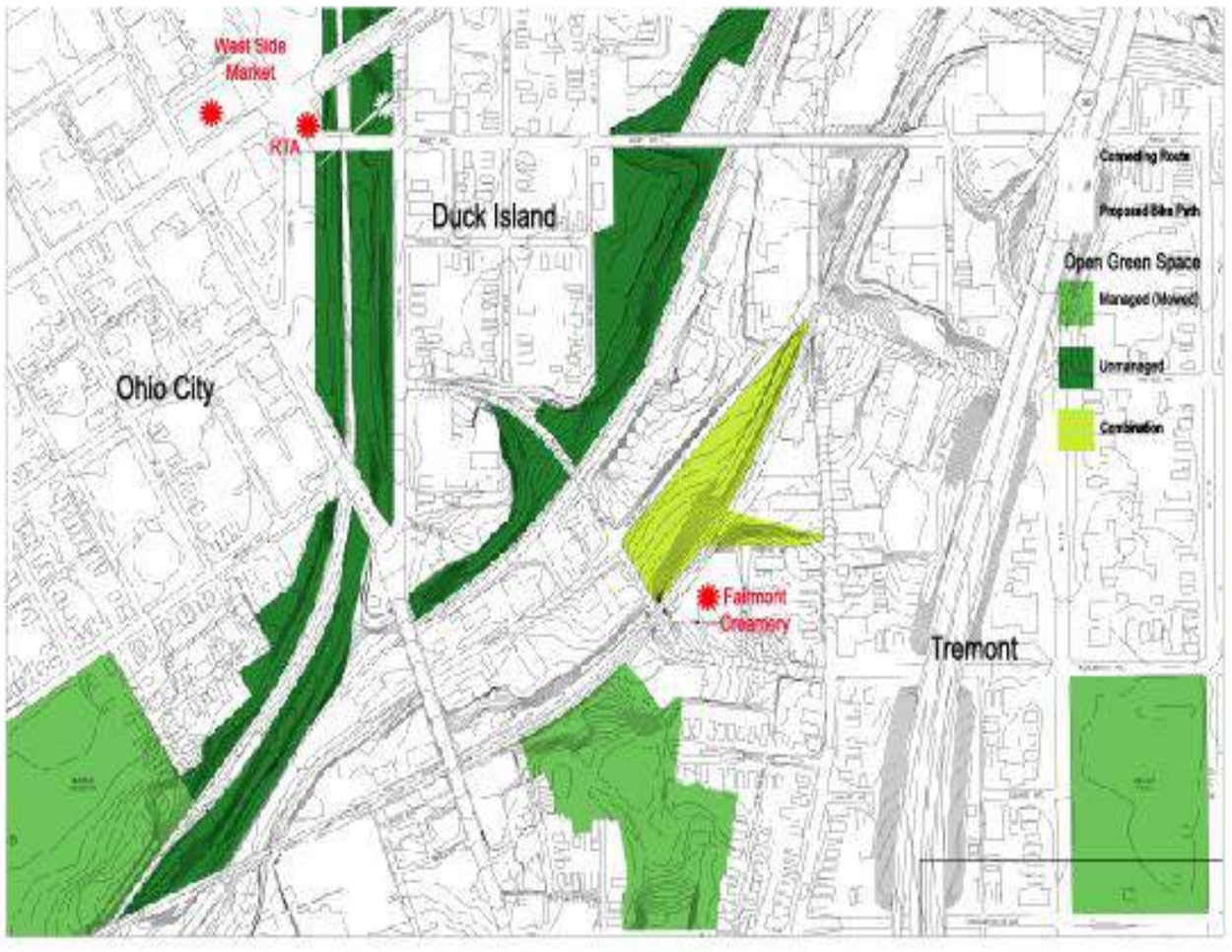
The Red Line Greenway
Ohio City

The Velvet Tango Room
Duck Island

Scranton Habitat Restoration
Cuyahoga River

The Fairmont Creamery
Tremont

West Side Market
Ohio City



St. Theodosius
Tremont

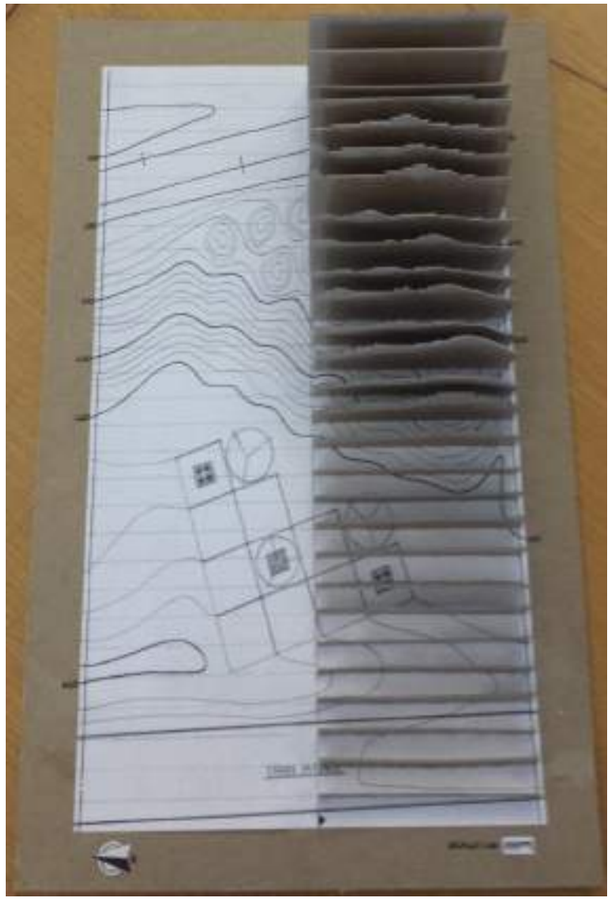
Great Lakes Brewing Company
Ohio City

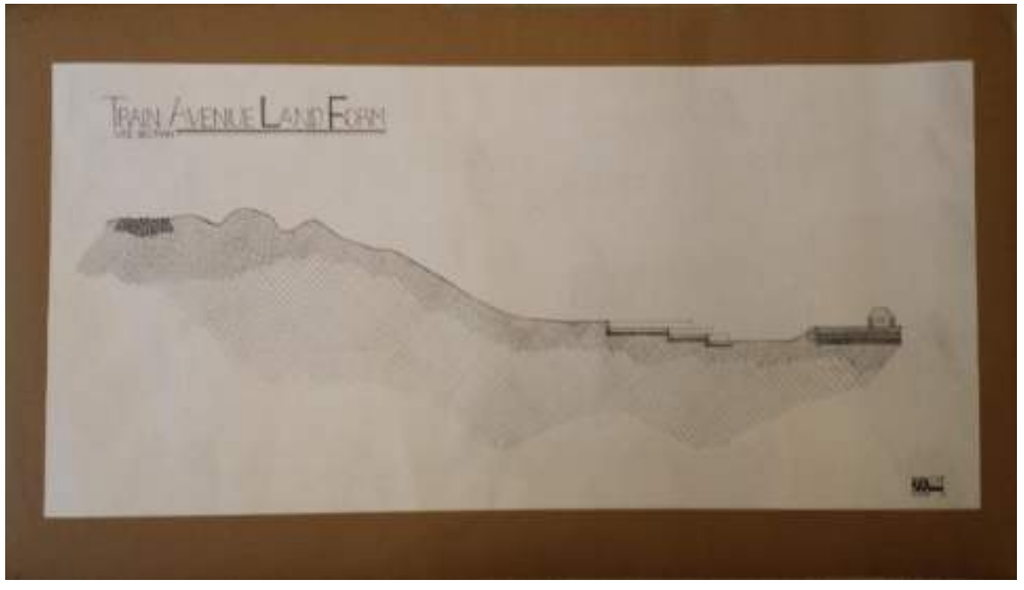
Lincoln Park
Tremont

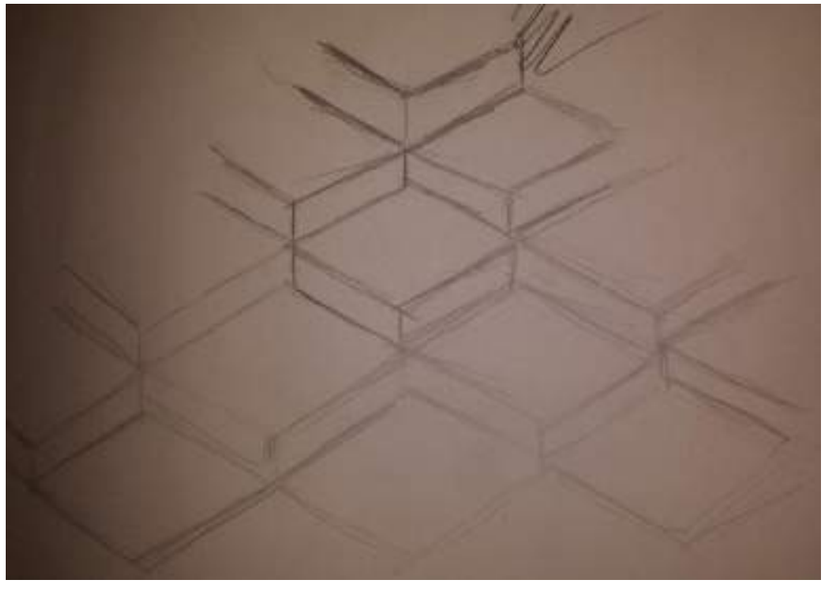
Monroe Street Cemetery
Ohio City

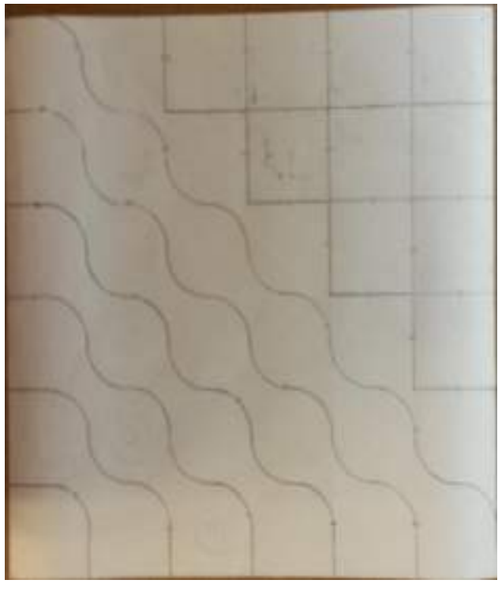
Tremont TapHouse
Tremont

Studio 1/Walworth Run - context







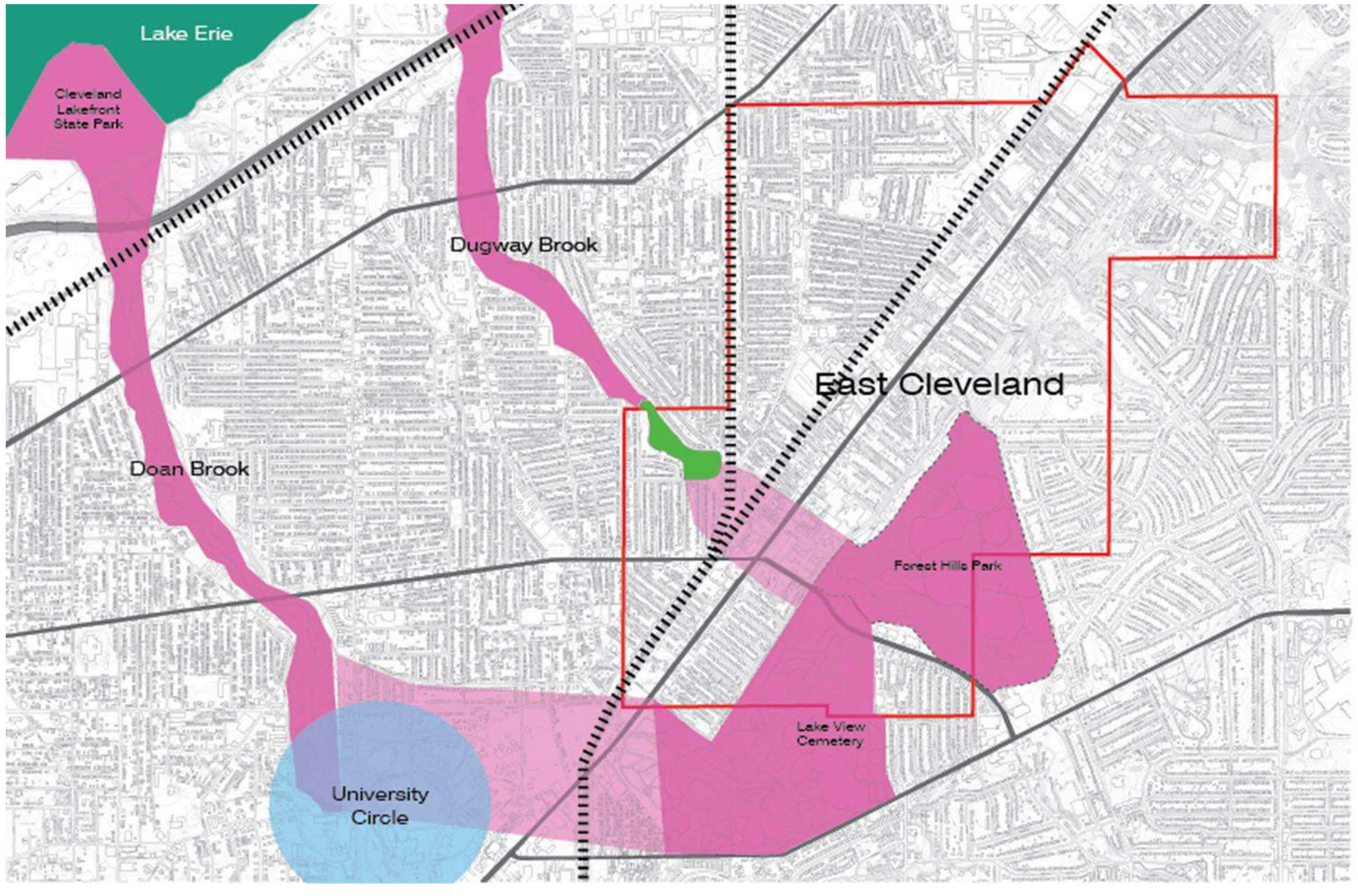


Studio 1/Walworth Run – sketches and concept iterations

Studio 1/Walworth Run – concept development

Studio 2/Warren Vacancy – a community fragmented

Studio 2/Warren Vacancy – a community reconnecting



Studio 2/Pattison Park– current conditions

EAST CLEVELAND PATTISON PARK

KENT STATE UNIVERSITY
COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN
MASTERS OF LANDSCAPE ARCHITECTURE
MAY 8TH, 2015

EXISTING SITE

PATTISON PARK IS A STAPLE THAT PROVIDES INTERACTION AND A SENSE OF PLACE WITHIN THE NEIGHBORING COMMUNITIES. WITH PATTISON PARK BEING IN BOTH EAST CLEVELAND AND CLEVELAND, THIS GIVES THE PARK THE UNIQUE ABILITY TO CONNECT THE TWO CITIES. THE NEW PROPOSAL FOR PATTISON PARK EMPHASISES CONNECTIVITY THROUGH CONTINUOUS PHYSICAL INTERACTION (E.G. THE JOGGING PATH AND OUTDOOR EXERCISE STATIONS) AS WELL AS VISUAL CUES THROUGHOUT THE PARK (E.G. TREE CANOPY OPENINGS, SCENIC POND, NATIVE WILD FLOWER PRESERVE, AND SUCCESSIONAL WILD GRASSES). THESE CONNECTIONS NOT ONLY CONNECT THE COMMUNITY WITH THE PARK BUT IT ALSO CONNECTS THE COMMUNITY WITH THE AREAS NATURAL ECOSYSTEM.

LEGEND

A. ENTRANCE SIGNS
B. OUTDOOR GYM
C. JOGGING PATH
D. SCENIC POND
E. RESTROOM FACILITIES
F. PLAYGROUND
G. BASEBALL FIELD
H. CONSOLIDATED PARKING
I. NATIVE WILDFLOWER PRESERVE
J. SUCCESSIONAL WILD GRASSES

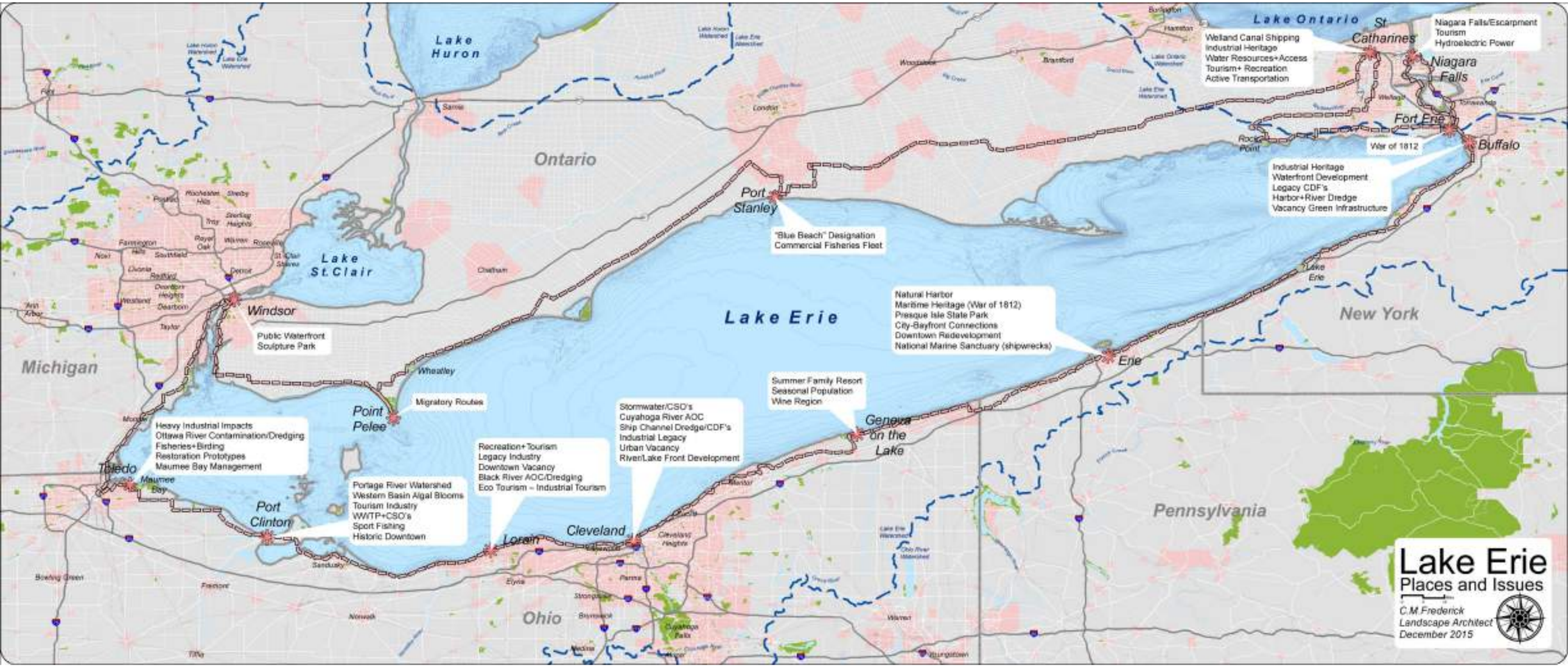
PROPOSED SITE

PROPOSED SITE AT NIGHT

Studio 2/Pattison Park– concept proposal

Studio 2/Pattison Park– a community comes together

Studio 2/Pattison Park– the past is the future



Studio 3/Systems+Infrastructure – Lake Erie/Cuyahoga Watershed

Port Clinton

St. Catherines

Camping

Buffalo

Niagara

Erie

Studio as experiment

Noun: a test, trial, or tentative procedure; an act or operation for the purpose of **discovering something unknown** or of **testing a principle**, supposition, etc.

Verb: to try or test, especially in order **to discover** or **prove something**

Beginning of semester– hope springs eternal

Places/stakeholders

- **Not** in a lab or a **controlled environment** but the **real** (and most times) **messy world**
- Real places – real people – real issues, yet it can still result in the **fantastic**

Rules of engagement

- Client must understand that this is a studio and the studio is an **experiment** (*sometimes a contract might be needed*)
- Students must **realize the issues** of the client/place/program/context
- Client – students – professor must collaborate on the **pragmatic teaching objectives** as well as the **serendipity of design process** (sometimes it is purposeful and sometimes it just feels good)
- Client should be at a **different place** at the conclusion of the project

Studio 3 intent

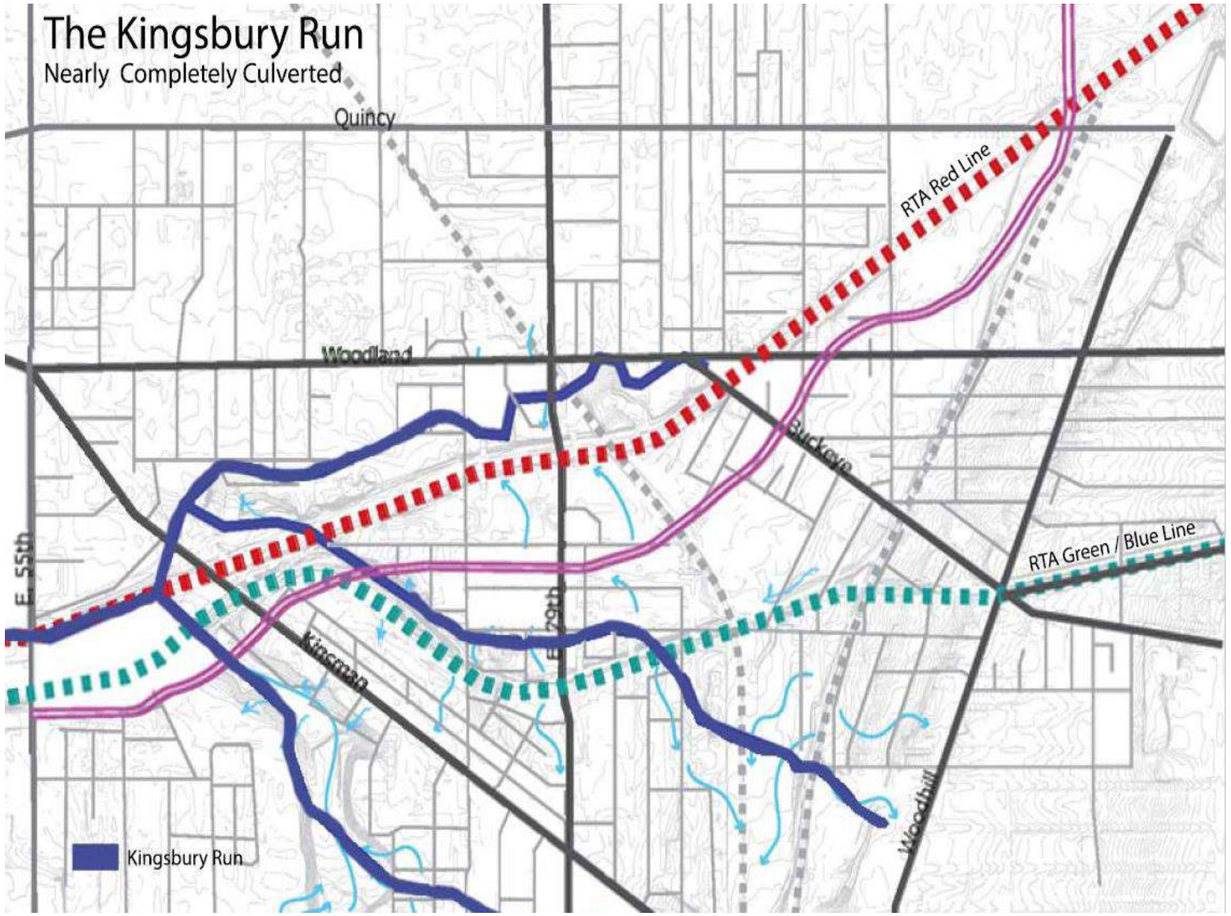
- Water as system and framework for design with technical requirements – yet it is also magical *(and the reason for life on the planet)*

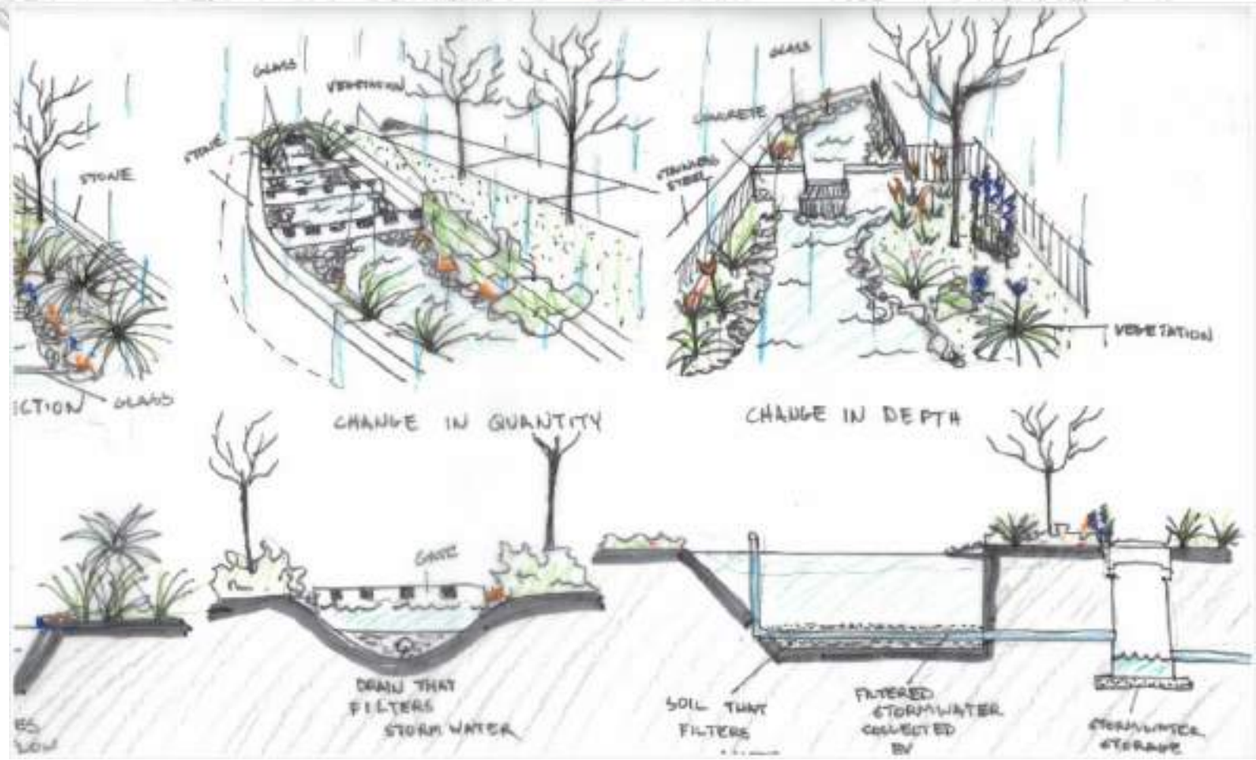
If there is magic on this planet,
it is contained in water.

Loren Eisely, The immense Journey, 1957

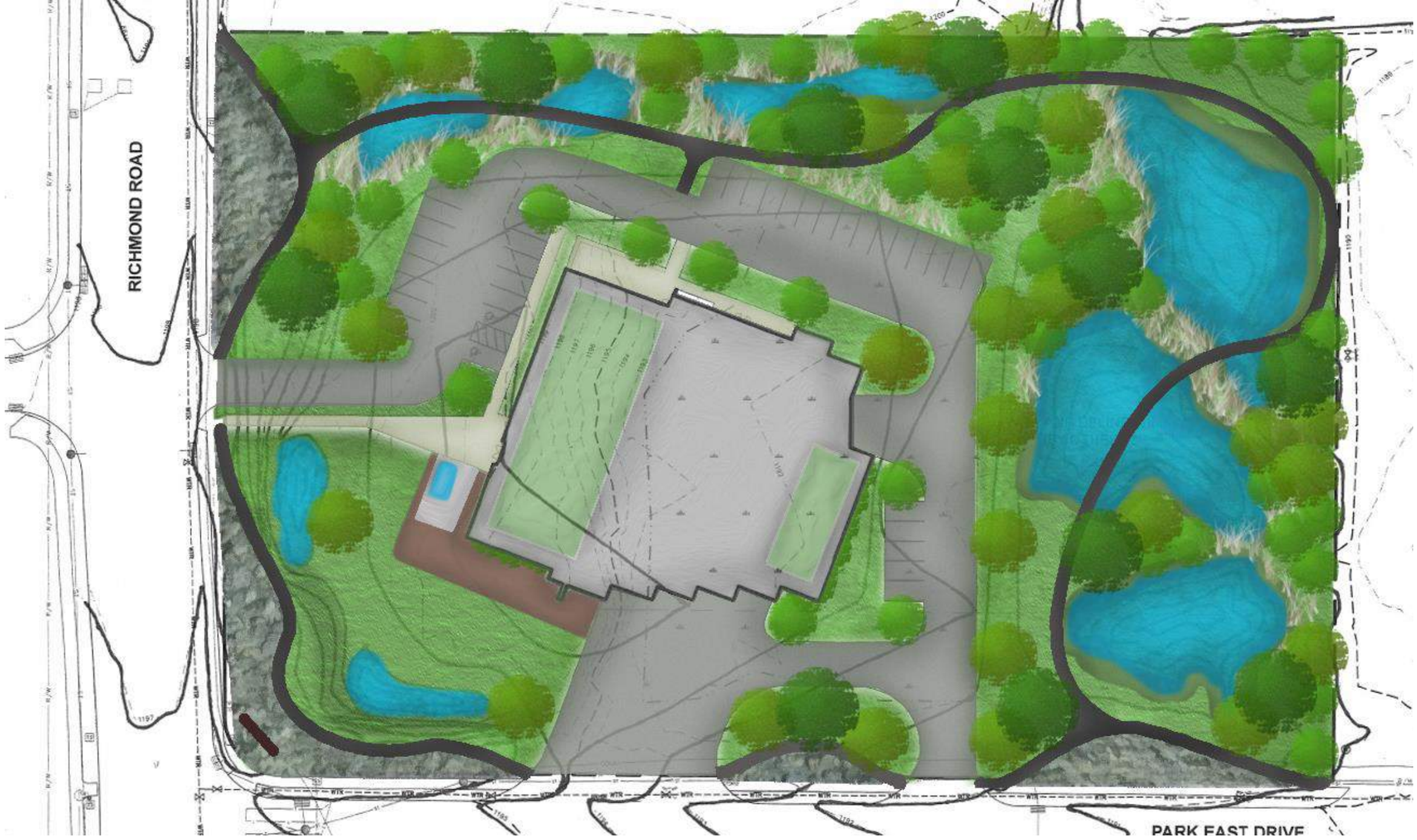
Technical Requirements

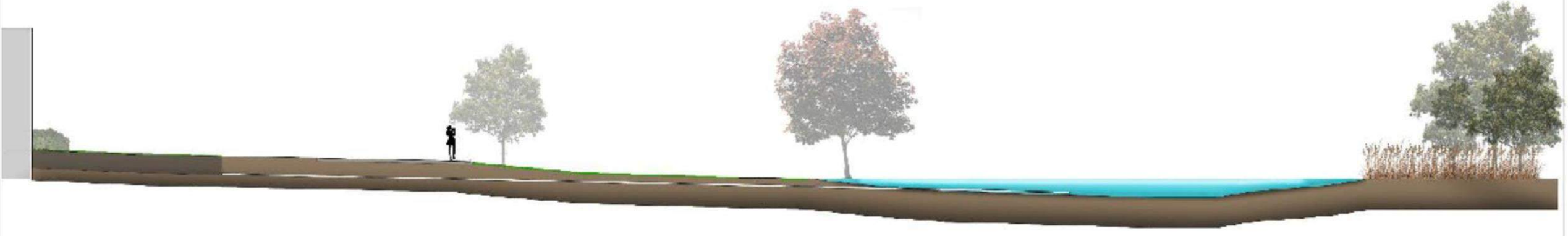
- Watershed delineation
- Land-cover mapping
- Plant community assessment
- Soils mapping
- Topography analysis
- Pre-development Q calculation
- Site grading
- Planting design
- Post-development Q calculation
- BMP/GI case studies





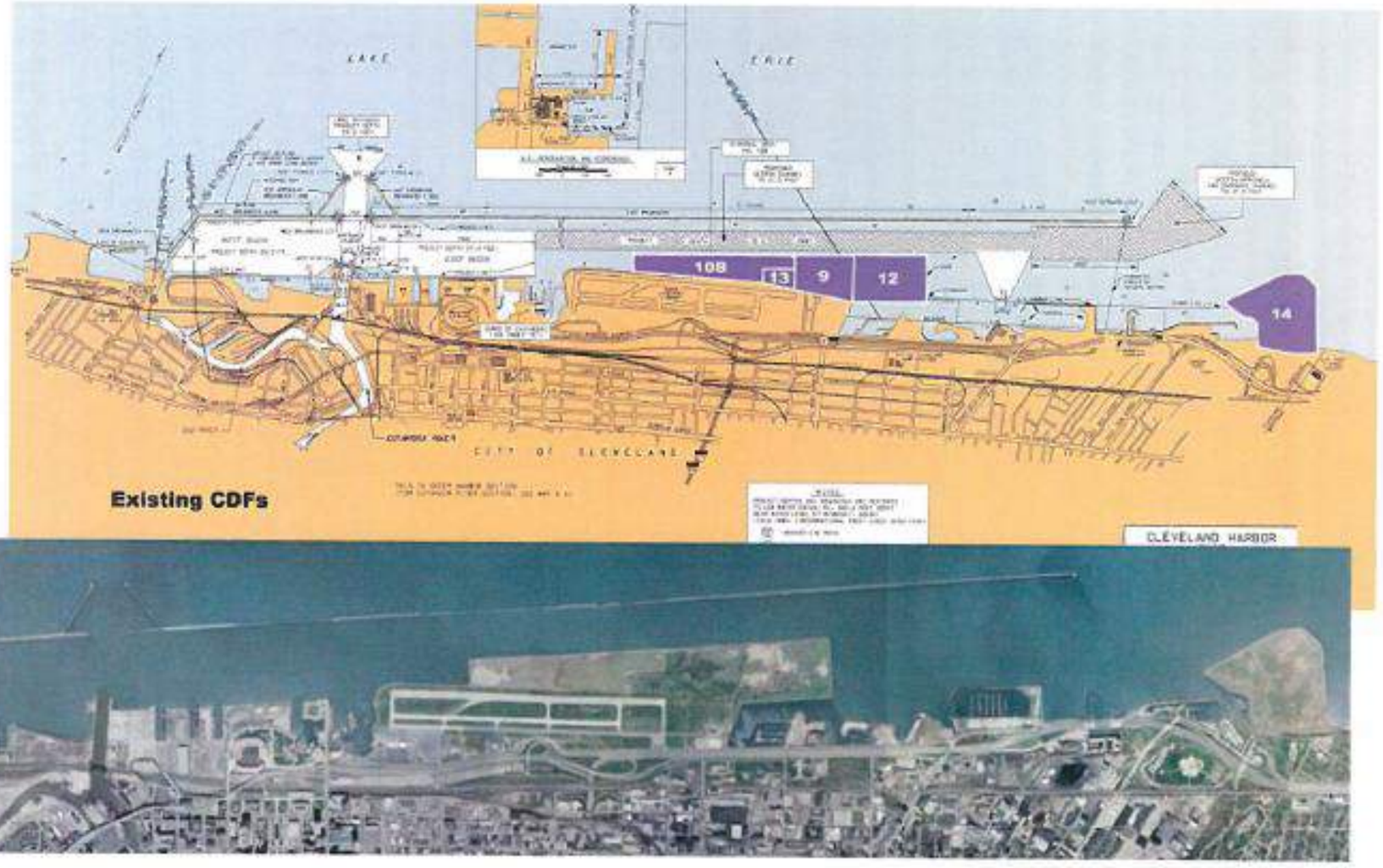
Studio 3/Kingsbury Run – “Restoration Corridor”





Studio 3/Beachwood Fire Station – the movement of water to organize a site

Cleveland CDFs

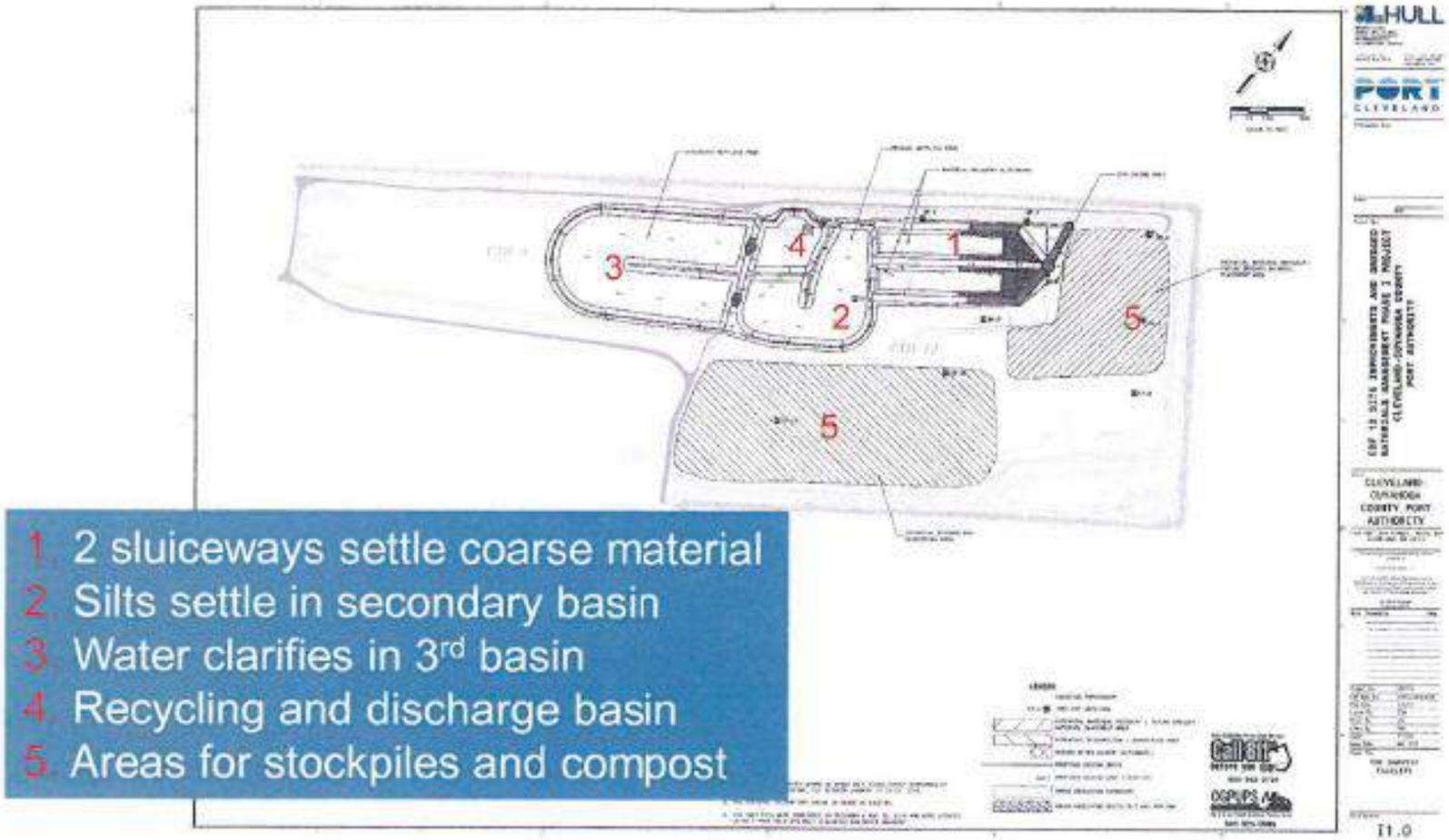


PORT CLEVELAND Maritime

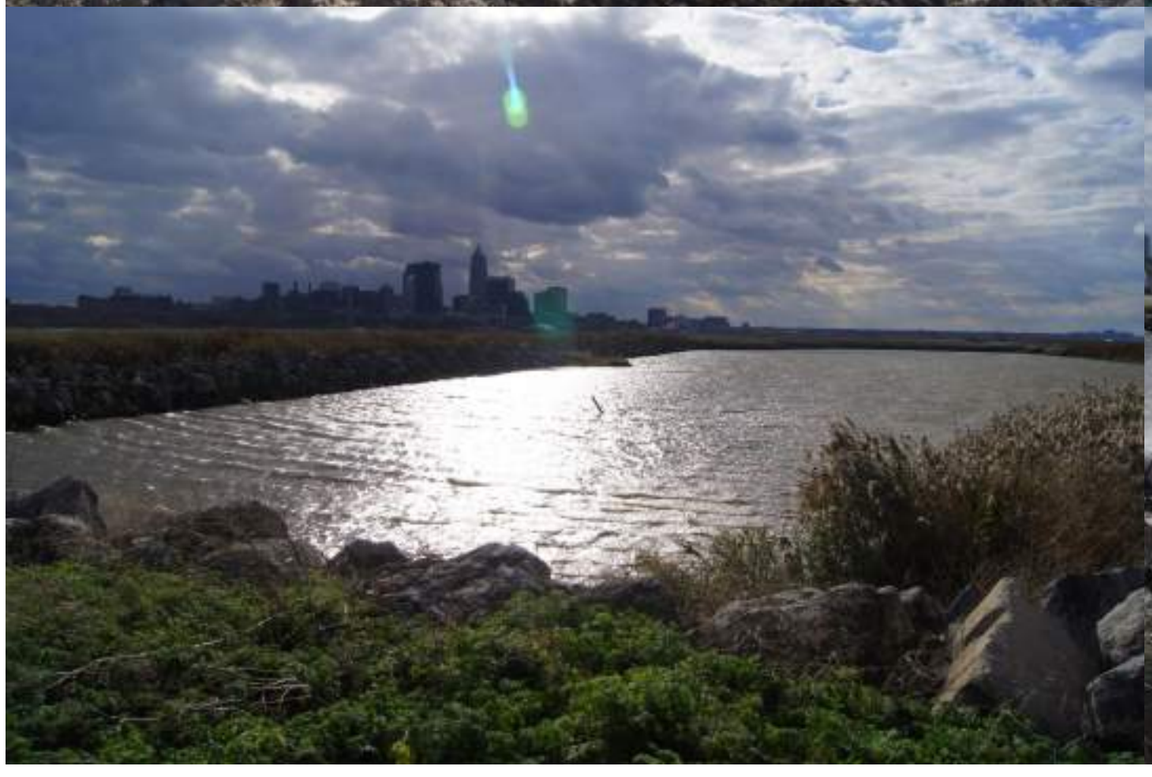
NOVEMBER 12, 2015

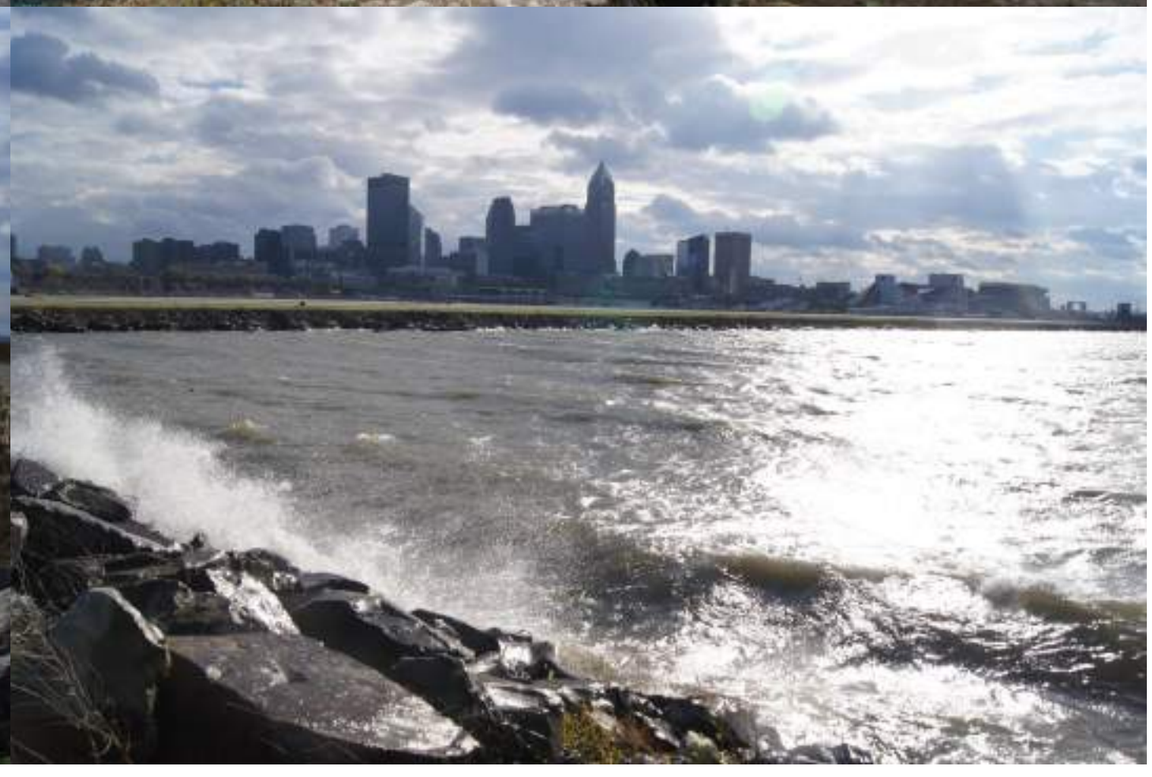
Studio 3/Port of Cleveland – the movement of sediment and creating open space

Sediment Processing Center on CDF 12



Sustainable Sediment Management





November 2015 – existing conditions

VOLUME STUDY: AMOUNT OF SEDIMENT EVERY 5 YEARS (BROWNS STADIUM 281,393 CUBIC YARDS)

5 YEARS: 875,000 CUBIC YARDS (3.1 TIMES)

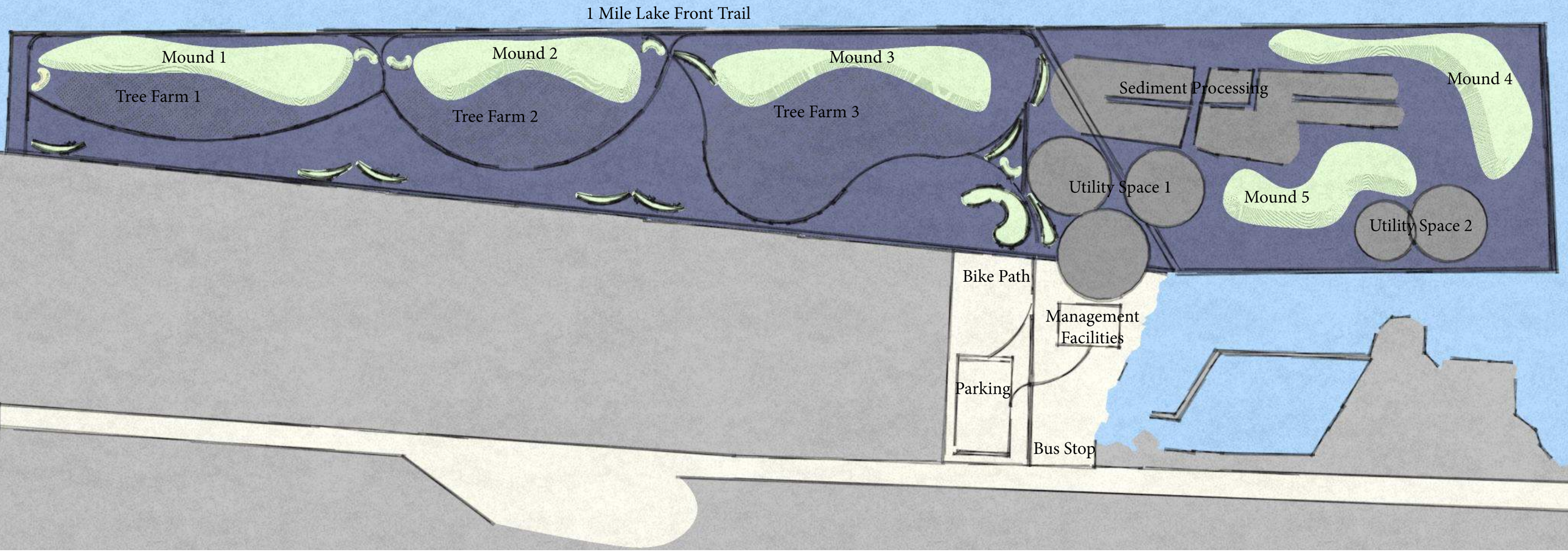
10 YEARS: 1.75 MILLION CUBIC YARDS (6.2 TIMES)

20 YEARS: 3.5 MILLION CUBIC YARDS (12.4 TIMES)

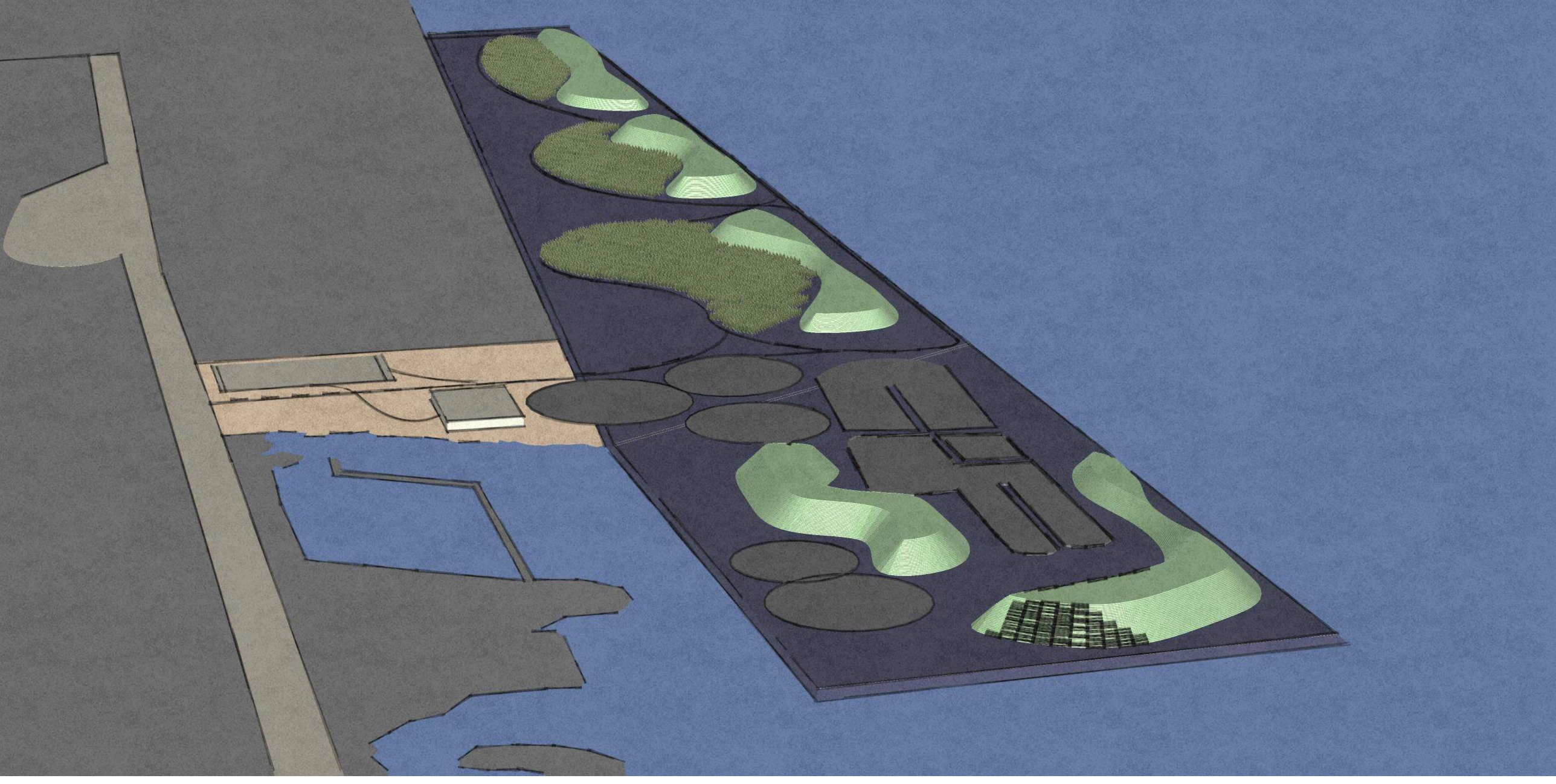
30YEARS: 5.25 MILLION CUBIC YARDS (18.6 TIMES)

40 YEARS: 7 MILLION CUBIC YARDS (25 TIMES)

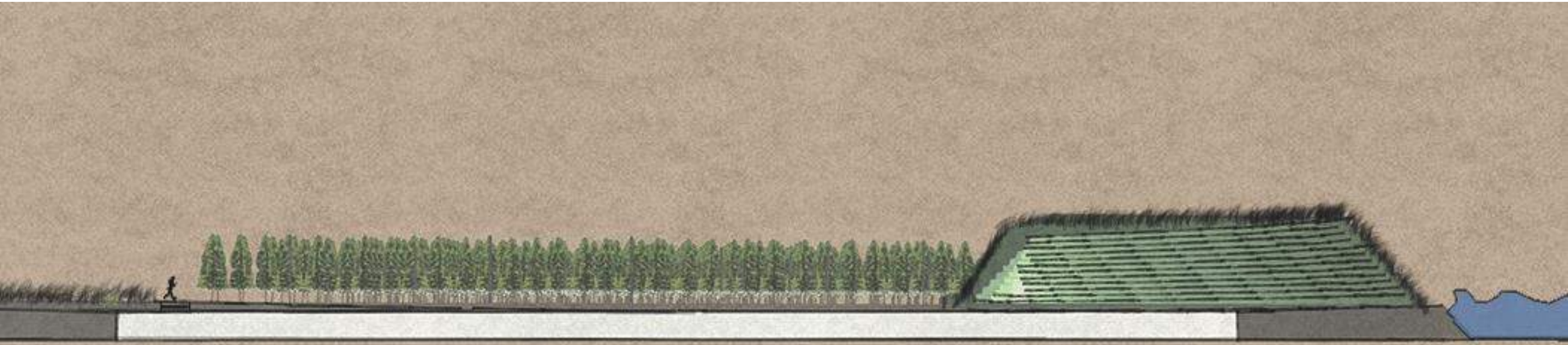
40 year lifespan – 250,000 CY/yr – 60 to 80, 000 CY to harvest

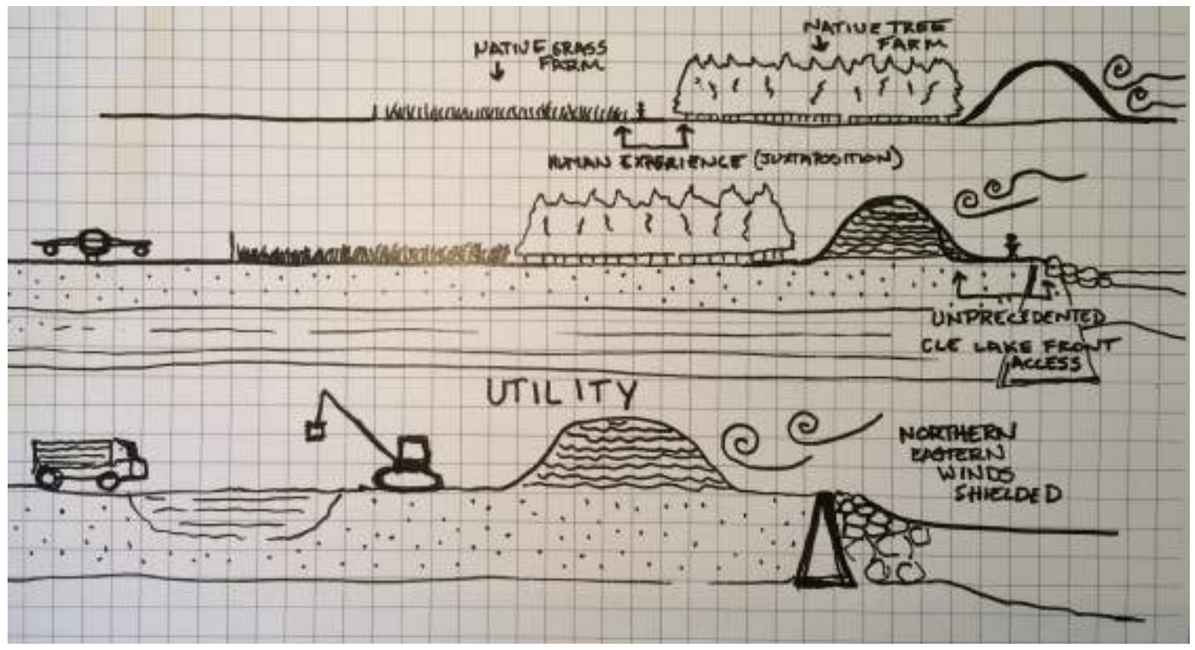


Lake Erie Sand Dunes



Dunes as protection for tree farm/future park vegetation

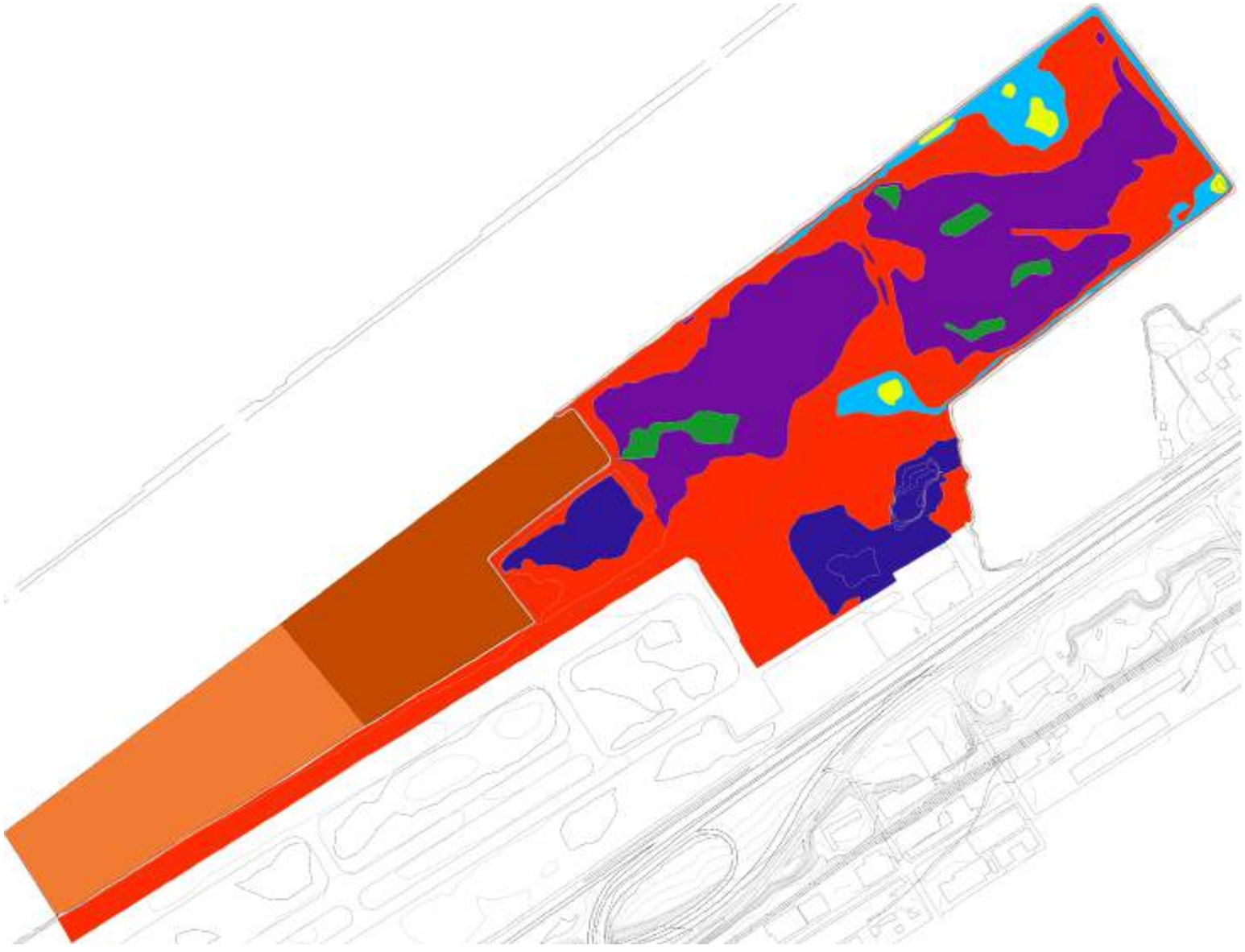




Section of tree farm and dunes/process diagram

Sediment layering– open space as ecological levels

SURFACE AREA / ECOREGION



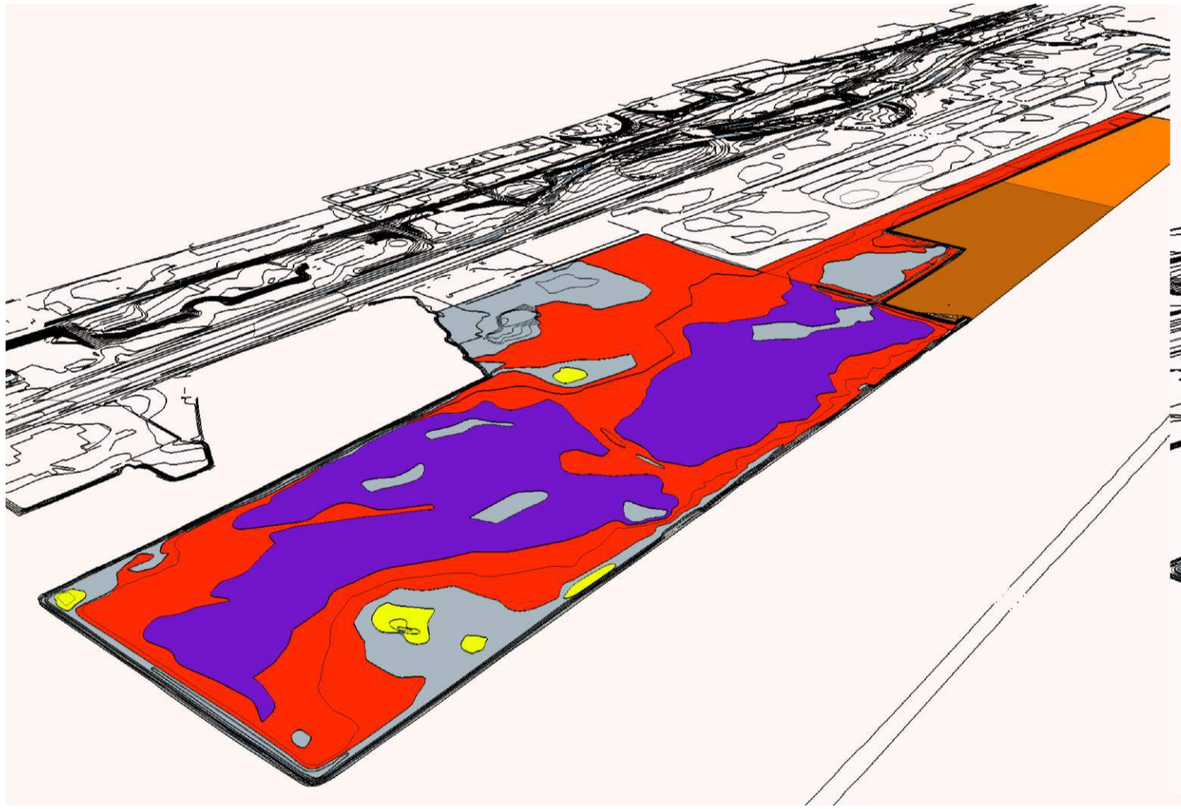
2,893.48 FT²
1,561.75 FT²
941.458 FT²
941.458 FT²
849.64 FT²
761.64FT²
406.31 FT²
264.64 FT²

INTERIOR PLATEAU

ERIE DRIFT PLAINS

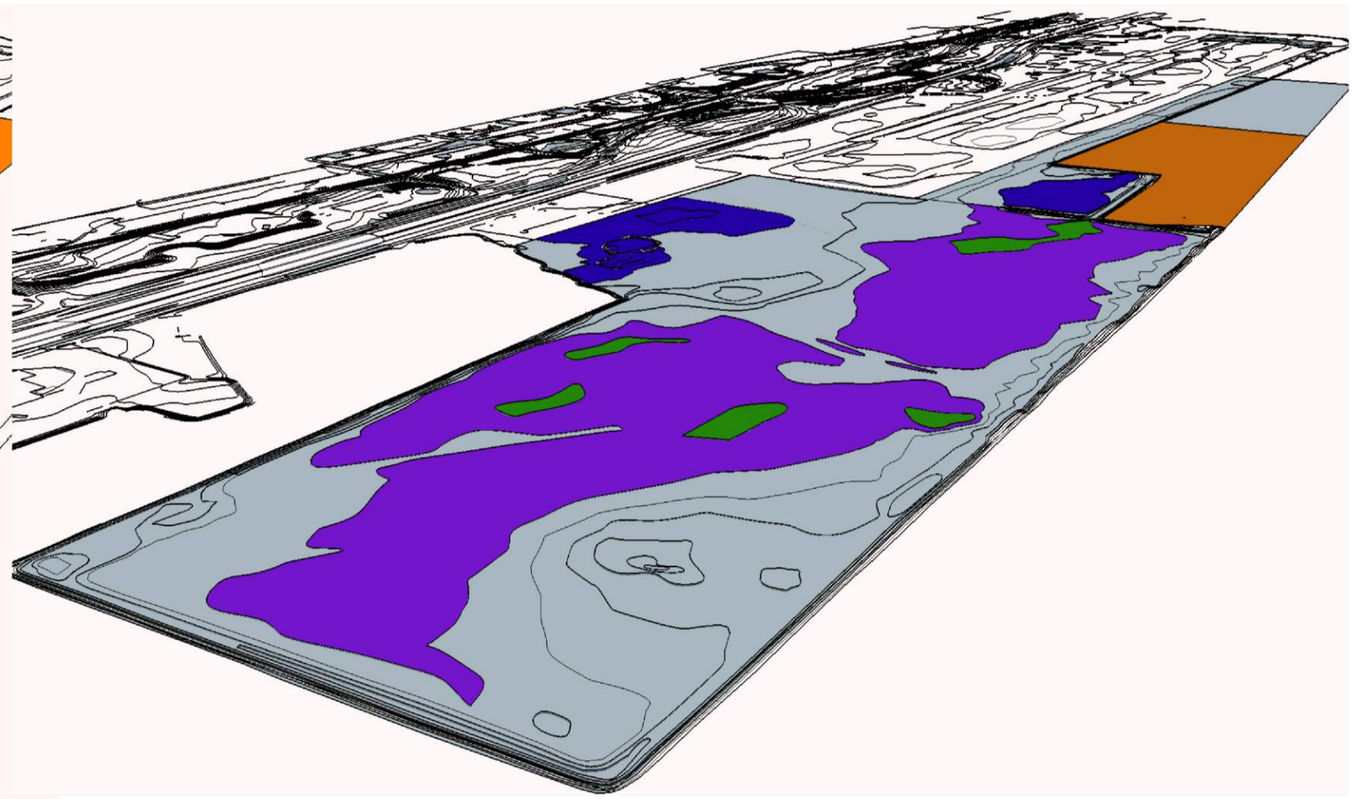
HURON/ERIE LAKE PLAIN

FORMAL PARK



RAISED 6.3 FEET

*15 YEARS OF DREDGED SEDIMENT = 70,857,000 FT³

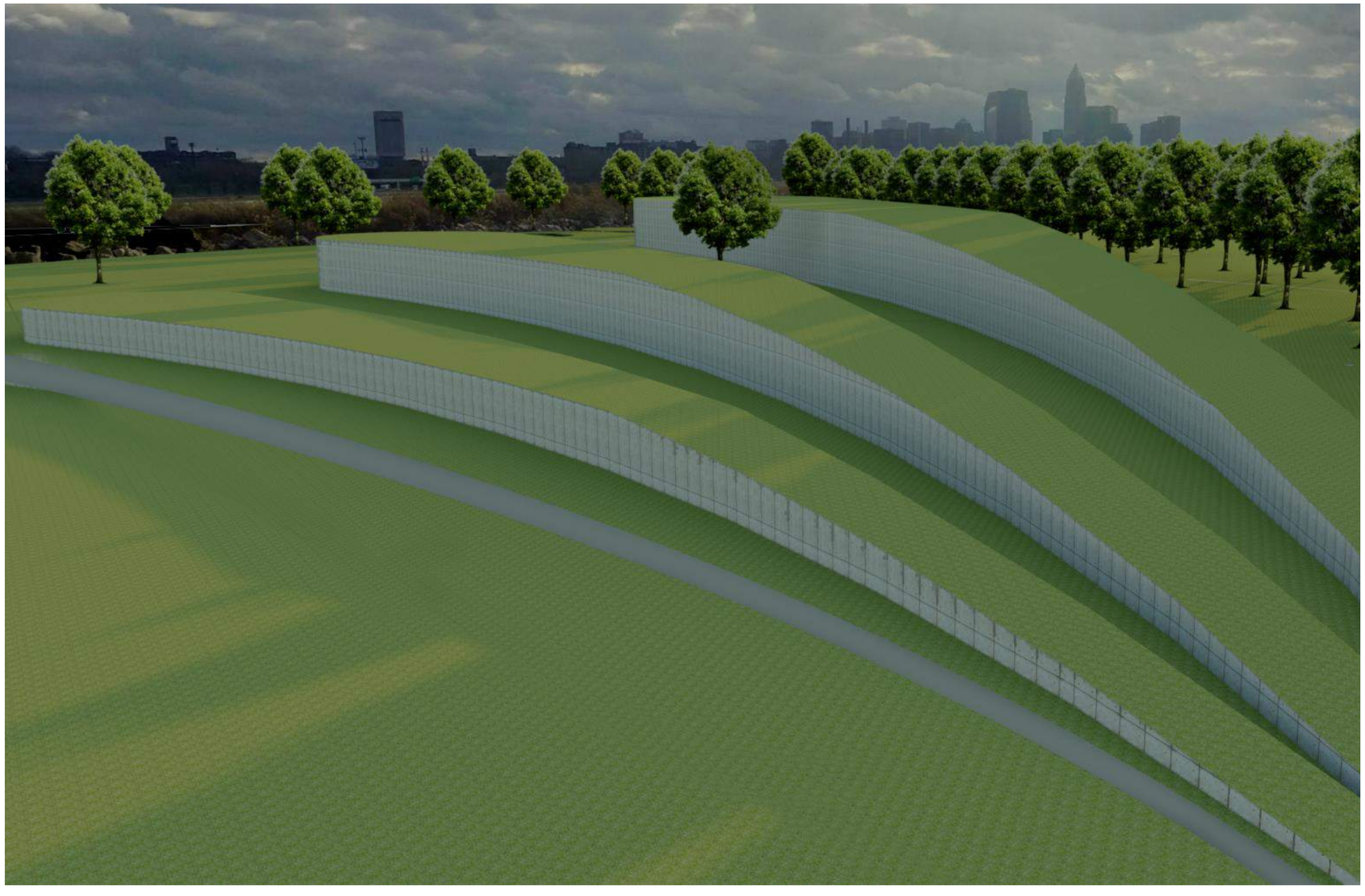


RAISED 15 FEET

RAISED 30 FEET

*30 YEARS OF DREDGED SEDIMENT = 141,750,000 FT³

Ecological phasing management



Terrace structures

INTERIOR PLATEAU PRAIRIE

Bitternut Hickory *Carya cordiformis*

Bluestem Grass *Andropogon gerardi*

Rattlesnake Master *Eryngium yuccifolium*

ERIE DRIFT PLAINSFOREST

American Beech *Fagus grandifolia*

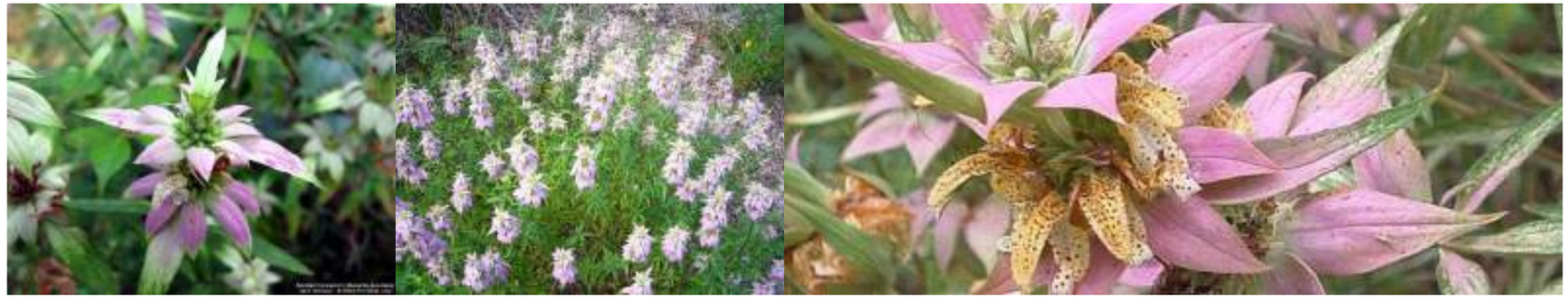
Red Maple *Acer rubrum*

Black Birch *Betula lenta*

HURON/ERIE LAKE PLAIN BEACH

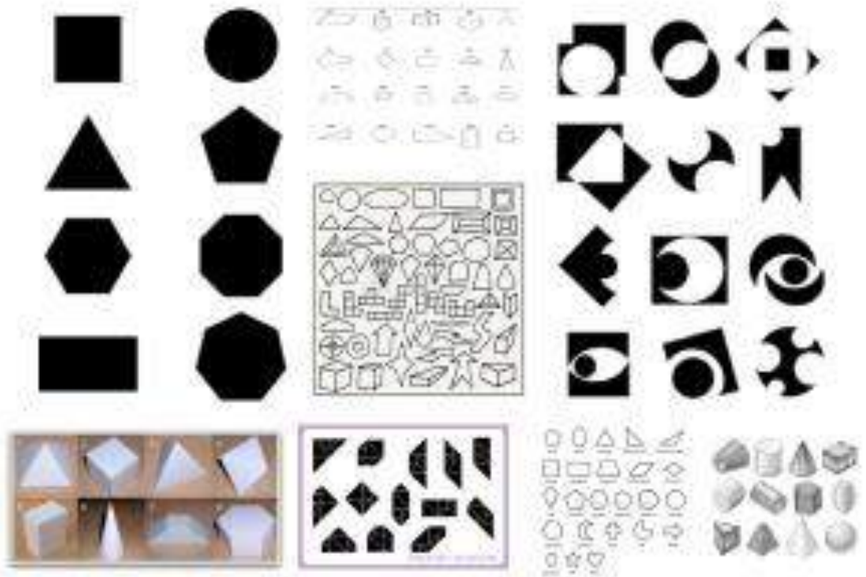
American Beachgrass *Ammophila breviligulata*

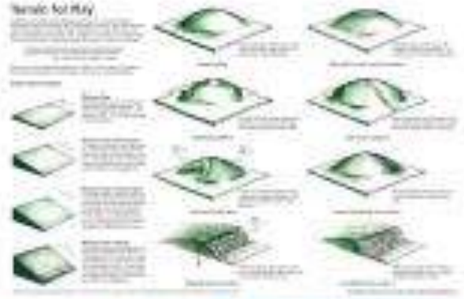
Silverweed Cinquefoil *Argentina anserine*



Spotted Horsemint *Monarda punctata*

“Another beautiful day in Cleveland”



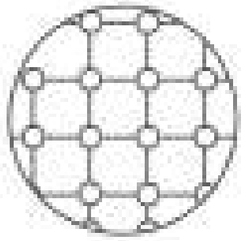


Landform texturing

FORM/ TEXTURE STUDY

GEOMETRIC FORMS

1. CIRCLE WITH FORMAL TEXTURE (REPITION ACTIVITY)
2. SQUARE WITH INFORMAL TEXTURE (RYTHM ACTIVITY)
3. CIRCLE WITH FORMAL TEXTURE (DIRECTIONAL RELATION)
4. SQUARE WITH RADIATION TEXTURE (GROUP RELATION)



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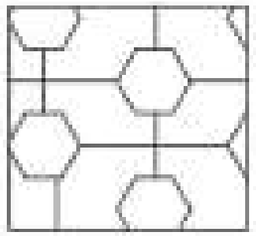

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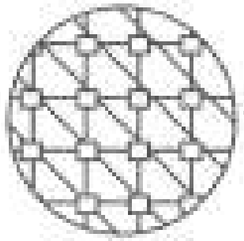

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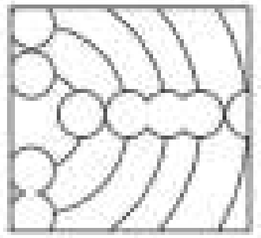
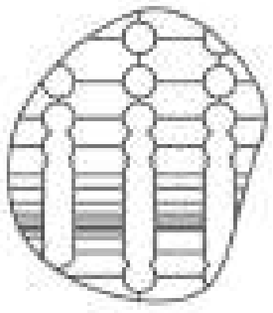


4.

ORGANIC FORMS

1. ORGANIC FORM WITH GRADATION TEXTURE (GROUP RELATION)
2. ORGANIC FORM WITH INFORMAL TEXTURE (DIRECTIONAL ACTIVITY
3. ORGANIC FORM WITH RADIATION TEXTURE (DIRECTIONAL RELATION)
4. ORGANIC FORM WITH GRADATION TEXTURE (SPACE RELATION)



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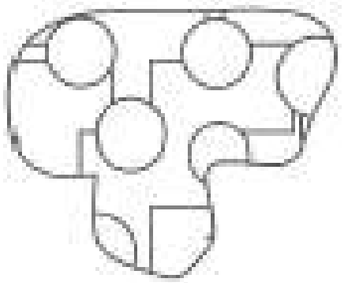

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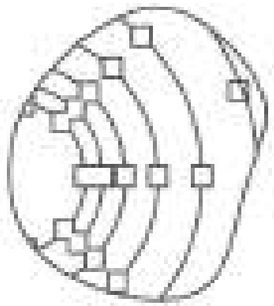

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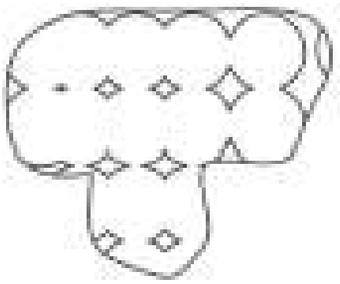
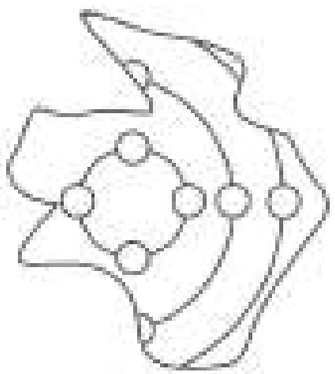


4.

RANDOM FORMS

1. RANDOM FORM WITH RADIAL TEXTURE (BALANACED RELATION)
2. RANDOM FORM WITH INFORMAL TEXTURE (DIRECTIONAL RELATION)
3. RANDOM FORM WITH INFORMAL TEXTURE (DOMINANT RELATION)
4. RANDOM FORM WITH FORMAL TEXTURE (FREQUENCY ACTIVITY)



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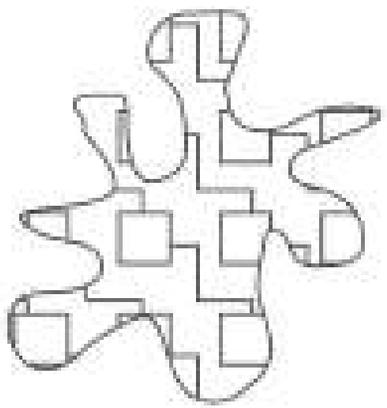

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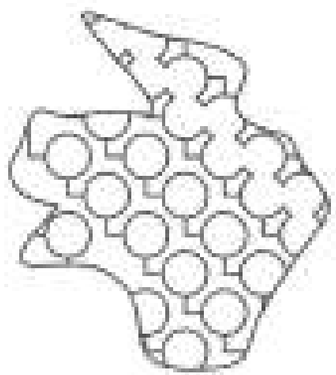

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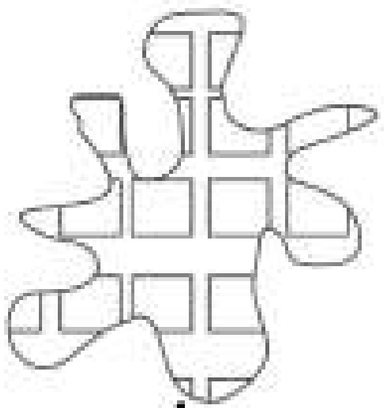
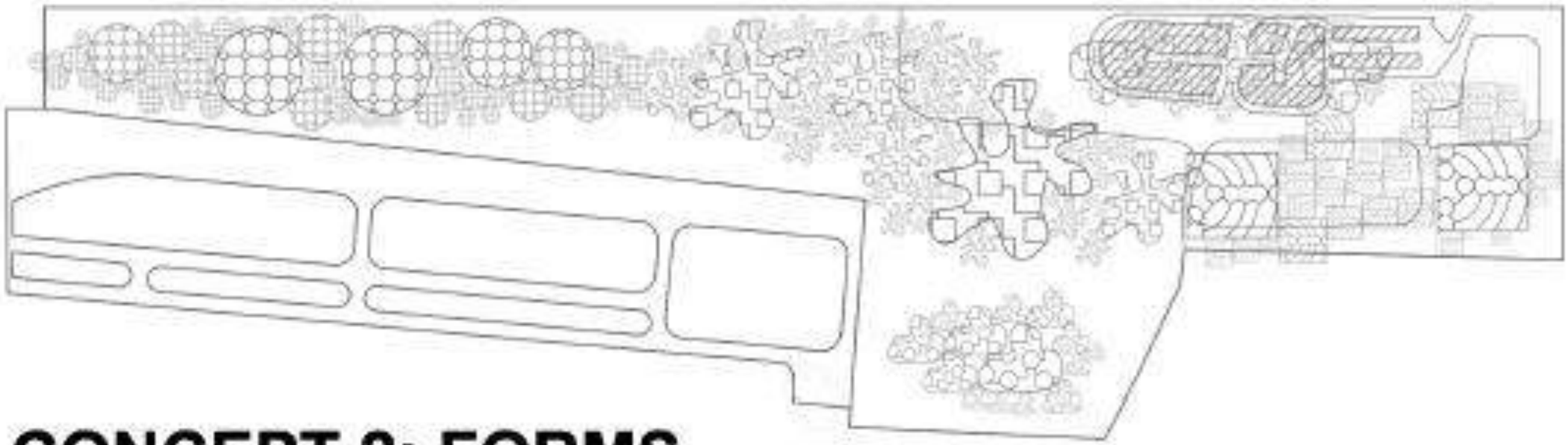


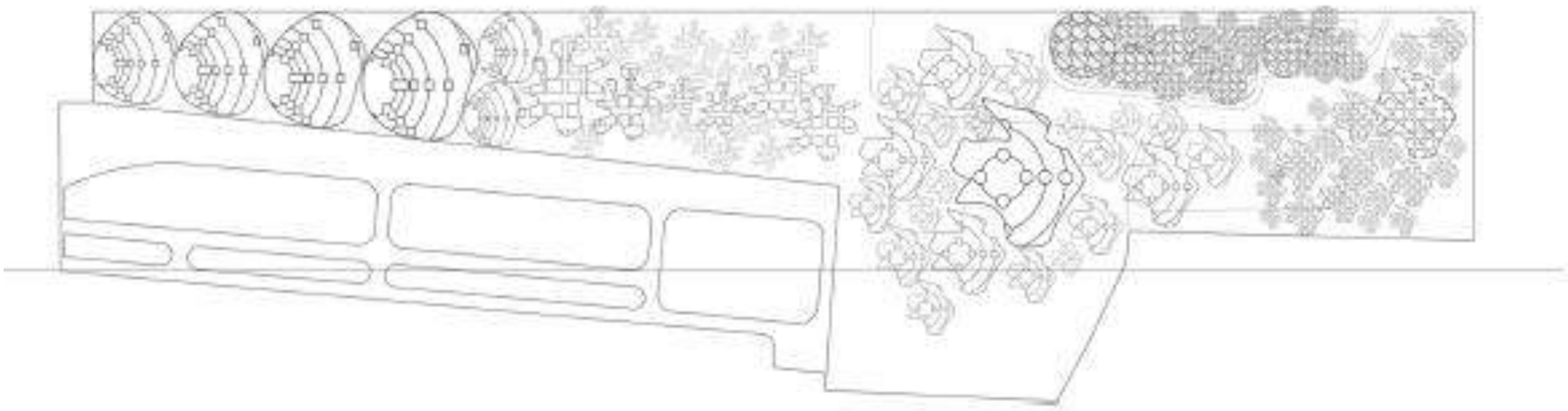
4.

Conceptual studies

CONCEPT 1: FORMS

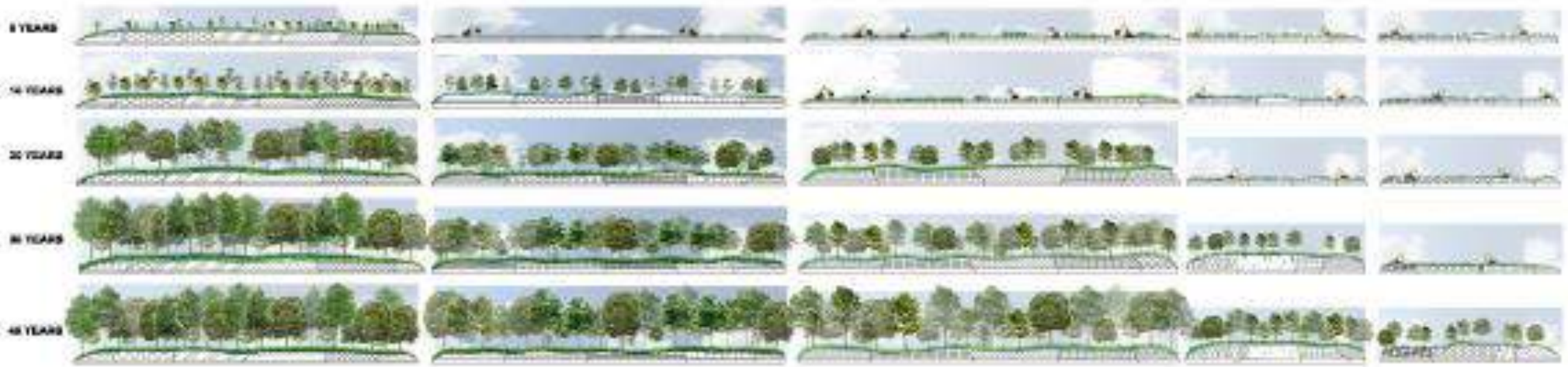


CONCEPT 2: FORMS

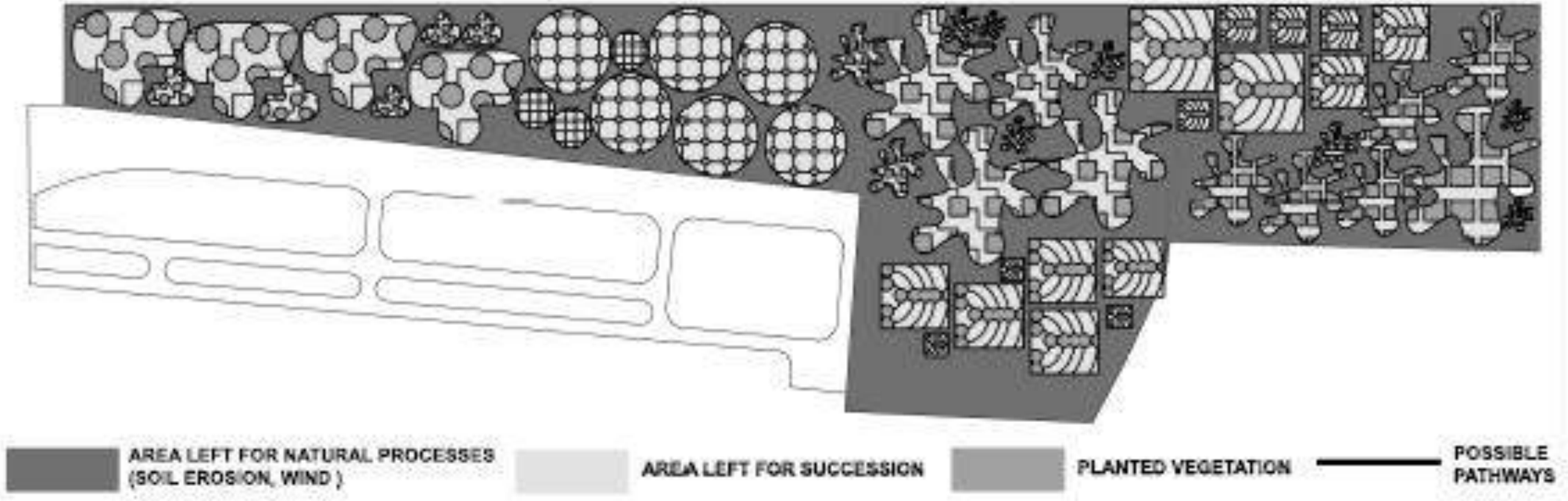


Concept development

SECTION CUTS IN YEARS



FORM CONCEPT MASTER PLAN



Master plan and phasing

1. SLIVER MAPLE (ACER SACCHARINUM)


2. OHIO BUCKEYE (AESCULUS GLABRA)


3. SHADBLOW (AMELANCHIER CANADENSIS)


4. PAW PAW (ASIMINA TRILOBA)


5. RIVER BIRCH (BETULA NIGRA)


6. AMERICAN HORNBEAM (CARPINUS CAROLINEANA)


7. FRINGE TREE (CHIONANTHUS VIRGINICUS)


8. YELLOW WOOD (CLEDRASTRIS LUTEA)


9. SPINDLE TREE (EUONYMUS ATROPURPUREUS)


10. GREEN ASH (FRAXINUS PENNSYLVANCIA)


11. AMERICAN HOLLY (IIEX OPACA)


12. TUPLIP POPLAR (LIRIODENDRON TULIPFERA)


13. BLACK GUM (NYSSA SYLVATICA)


14. SOURWOOD (OXYDENDRUM)


15. EASTERN WHITEPINE (PINUS STROBUS)


16. PIN OAK (QUERCUS PALUSTRIS)


17. BLACK WILLOW (SALIX NIGRA)


18. AMERICAN HEMLOCK (TSUGA CANADENIS)

Planting palette

End of semester– abandon hope, all ye who enter here

Expectations/Time Frame/Follow-up