

An aerial photograph of a courtyard area. The courtyard features several distinct zones: a large area with a grey, textured ground surface, possibly gravel or a specific paving material; a section with a red, corrugated metal roof structure; and various plantings, including a large area of green foliage and a smaller area with red flowers. The courtyard is bordered by a concrete walkway with a grid pattern. The overall scene is captured from a high angle, showing the layout and materials of the courtyard.

Straub Thurmayr CSLA
Landscape Architects
and Urban Designers
501 South Drive
Winnipeg, MB
R3T 0B4 Canada

Westwood Collegiate Courtyard

THE TASTE OF CHLOROPHYLL

TABLE OF CONTENTS

SITE LOCATION

FLOOR PLAN

CURRENT CONDITIONS

MODUS OPERANDI

PRELIMINARY DESIGN _ 3 VERSIONS

- Boulevard
- Mosaic
- CrissCross

DESIGN

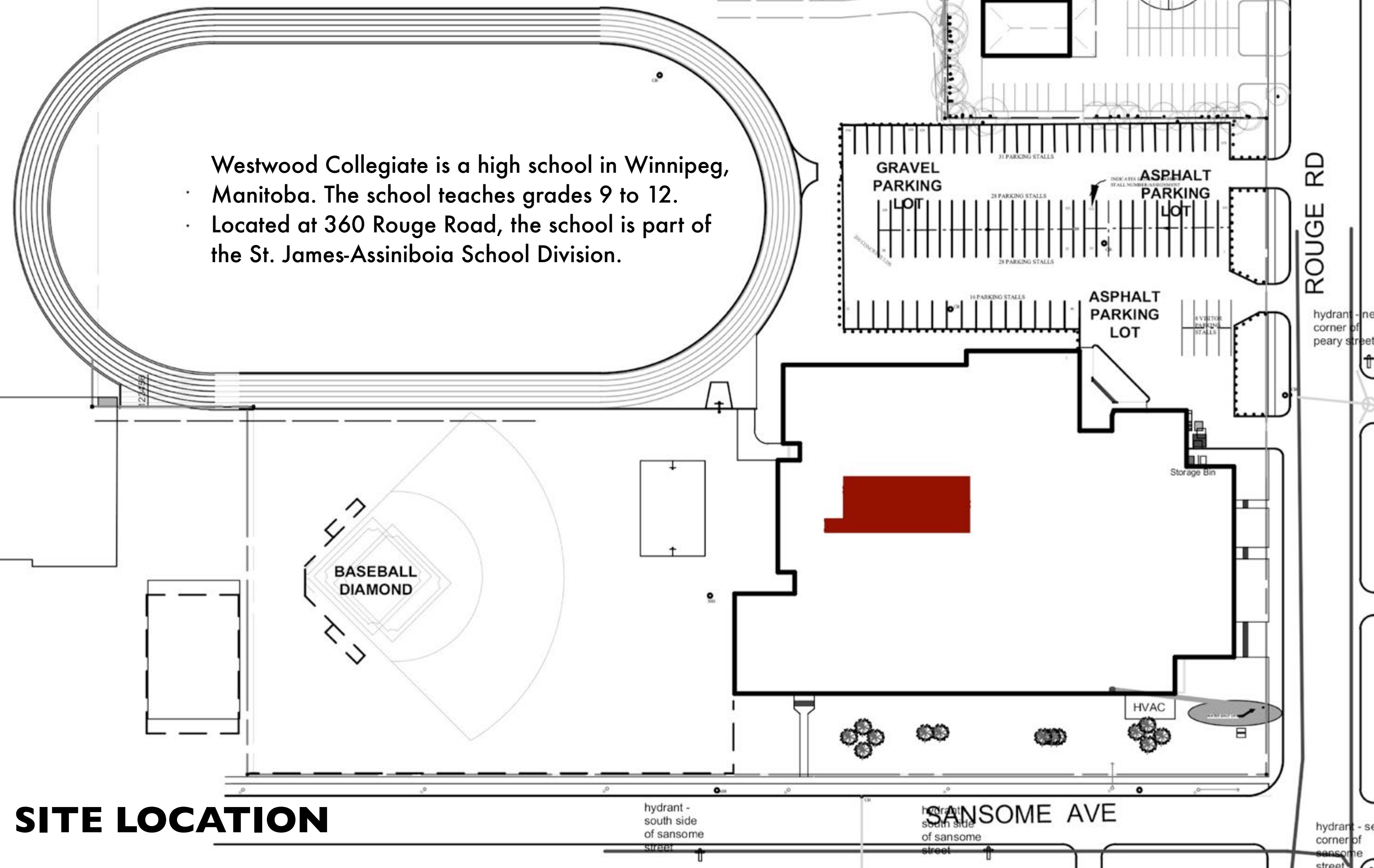
- Tree Survey
- Site Design without Ramp
- Site Design with Ramp
- Materials and Vegetation
- Swamp Mats
- Decks and Square Metres
- Decks and Spot Elevations
- Wooden Framework and Colours

CONSTRUCTION DETAILING

- Demolition Plan 1:100
- Materials Plan 1:100
- Grading Plan 1:100
- Layout Plan_Swamp Mats 1:100
- Layout Plan_Concrete Slabs 1:100
- Decks and Swamp Mats, Details 1:20
- Decks and Swamp Mats, Details 1:20

A GOOD LEARNING PLACE

- Nightlight Daylight
- Playing Teaching Learning
- Field Stone Patio
- Ash Deck Mosaic
- Isometry



Westwood Collegiate is a high school in Winnipeg, Manitoba. The school teaches grades 9 to 12.

- Located at 360 Rouge Road, the school is part of the St. James-Assiniboia School Division.

In summer 2017, Greg Johnson contacted us with the request for help and cooperation on a courtyard design. Greg is a teacher at the Westwood Collegiate and heard about us through Jason Hare from the University of Manitoba. Practically, there was no budget for this school project.

Since then, we had numerous design presentations and discussions with Greg, Sarah James, Vice Principal, Kevin Dueck, Principal, and other teachers. Randy Calvert, Manager of the Facilities and Maintenance St. James - Assiniboia School Division, Maintenance Department, was willing to provide support and advice right from the beginning, too. We took on the challenge to transform meeting results into spatial design ideas that based on terms like nature, well-being, and a good learning place.

Due to its centred and enclosed location, this project provided more freedom and flexibility than usually possible on school grounds. For example, vandalism or malice was not an issue we had to consider. The fact, that this courtyard is not accessible to the public, supported our request for experimentation and for research through design. The willingness to take risks and the openness to go beyond the exiting routines are an essential condition for our agreement to collaborate on such projects.

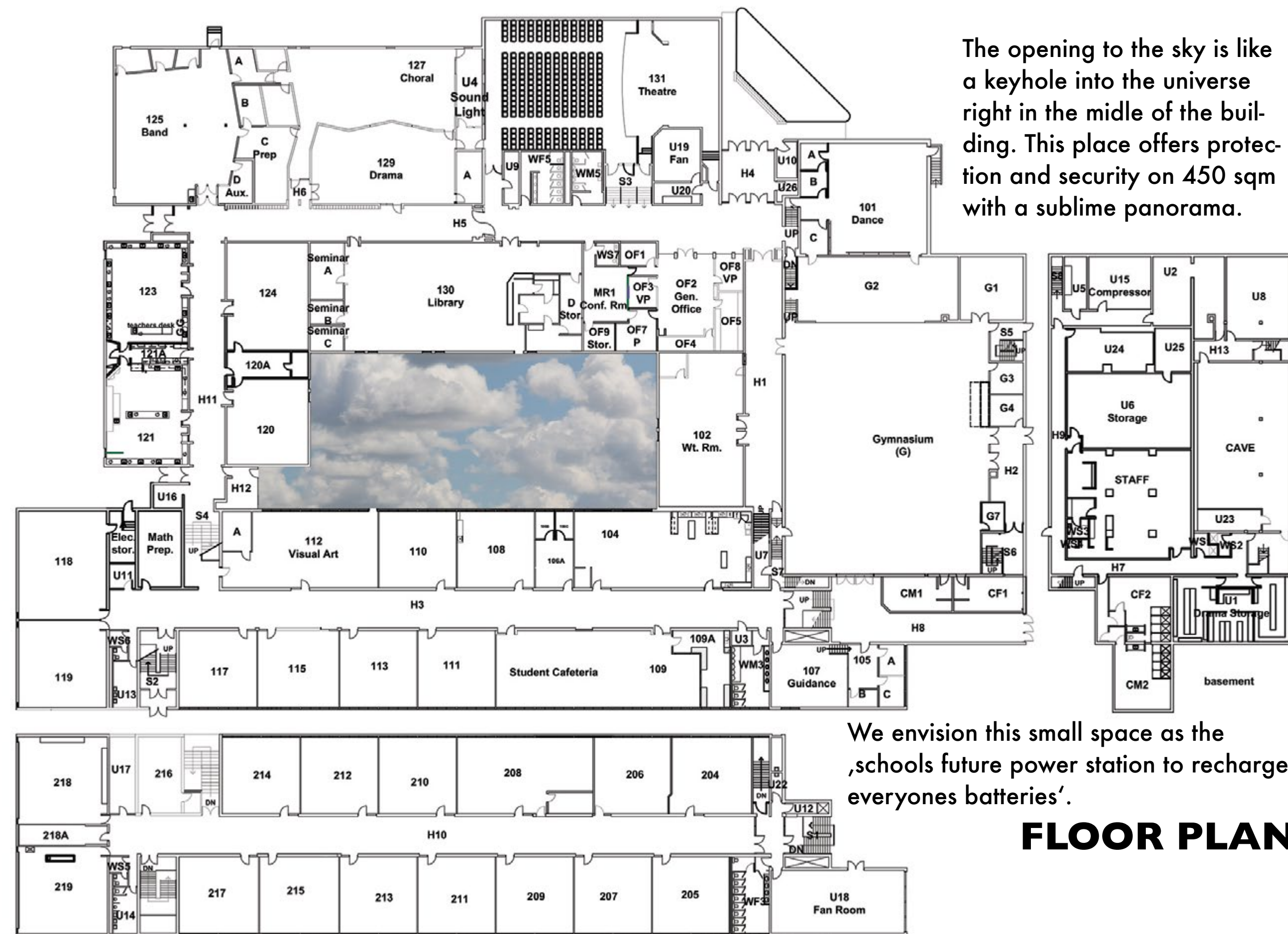
Straub Thurmayer CSLA
Landscape Architects
and Urban Designers
501 South Drive
Winnipeg, MB
R3T 0B4 Canada

SITE LOCATION



SKY WELL

The courtyard is like a clearing in a forest, a window through which the sky, the sun, the clouds and the always changing seasons are visible. We would like to celebrate this special quality.



The opening to the sky is like a keyhole into the universe right in the middle of the building. This place offers protection and security on 450 sqm with a sublime panorama.

We envision this small space as the 'schools future power station to recharge everyones batteries'.

FLOOR PLAN



Many of the favorite and most used rooms, surround the courtyard such as the library, the visual arts room and the workout room. All, with an exception of the workout room, have direct access to the courtyard. Especially the classrooms behind the glass façade are able to enjoy the sunlight and the view into the outside world.

CURRENT CONDITION

The facade of the library and workout room are less transparent. This will change. The two windows in the background belong to the workout room. As a result of this project both windows will be converted into spacious doors. A ramp will create universal access. In front of the library a small, colourful place will invite you to relax and daydream.

MODUS OPERANDI

We went on a trip over the summer in 2018. A site plan of the courtyard showing the location of the existing trees in the scale of 1:200 was part of our baggage and served as reference for physical model-making. We drew the layout of the courtyard into sand true to the scale of 1:50. On our walks we collected ingredients provided by nature to test our initial design ideas in 3D.

The making of the models helped us to define three different versions for the courtyard design. We took pictures of each of them and photographically documented the weeklong process of searching and building. Back in Winnipeg, we used those images to refine our ideas. At a series of meetings we presented and intensively discussed the three design versions with all involved teachers and with Randy from the School Division.

All comments have been well founded and preferences ranged from "proper geometry" to "balanced chaos". The discussion gave us valuable information on how to proceed and how to finally draw an idea that meets all and various needs and expectations.

Site Plan, Original Scale 1:200





Sand Drawing 1:50







BOULEVARD

MOSAIC

CRISSCROSS



BOULEVARD

Original Scale 1:50





Library



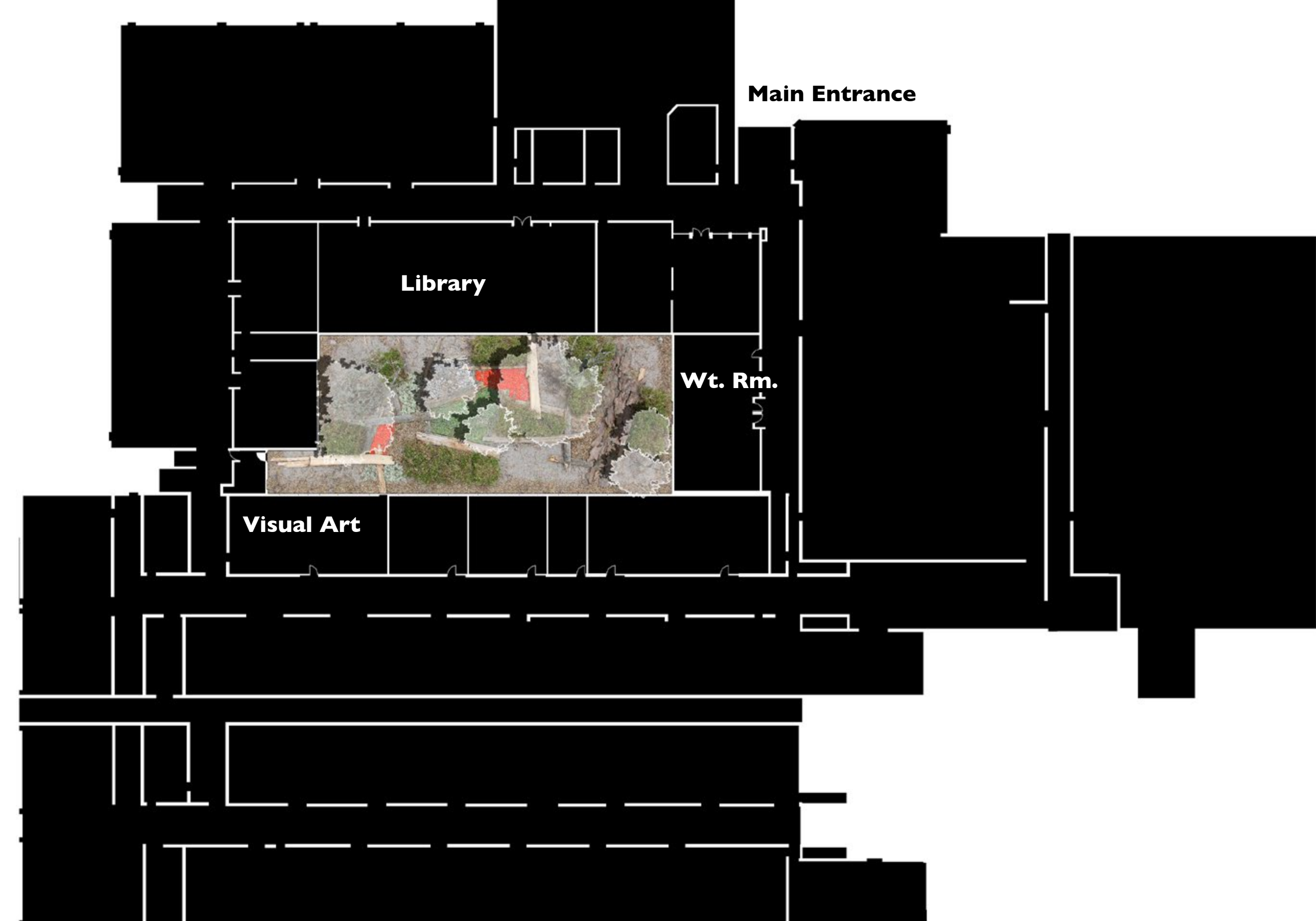
Wt.
Room

Visual Art



MOSAIC
Original Scale 1:50





Library

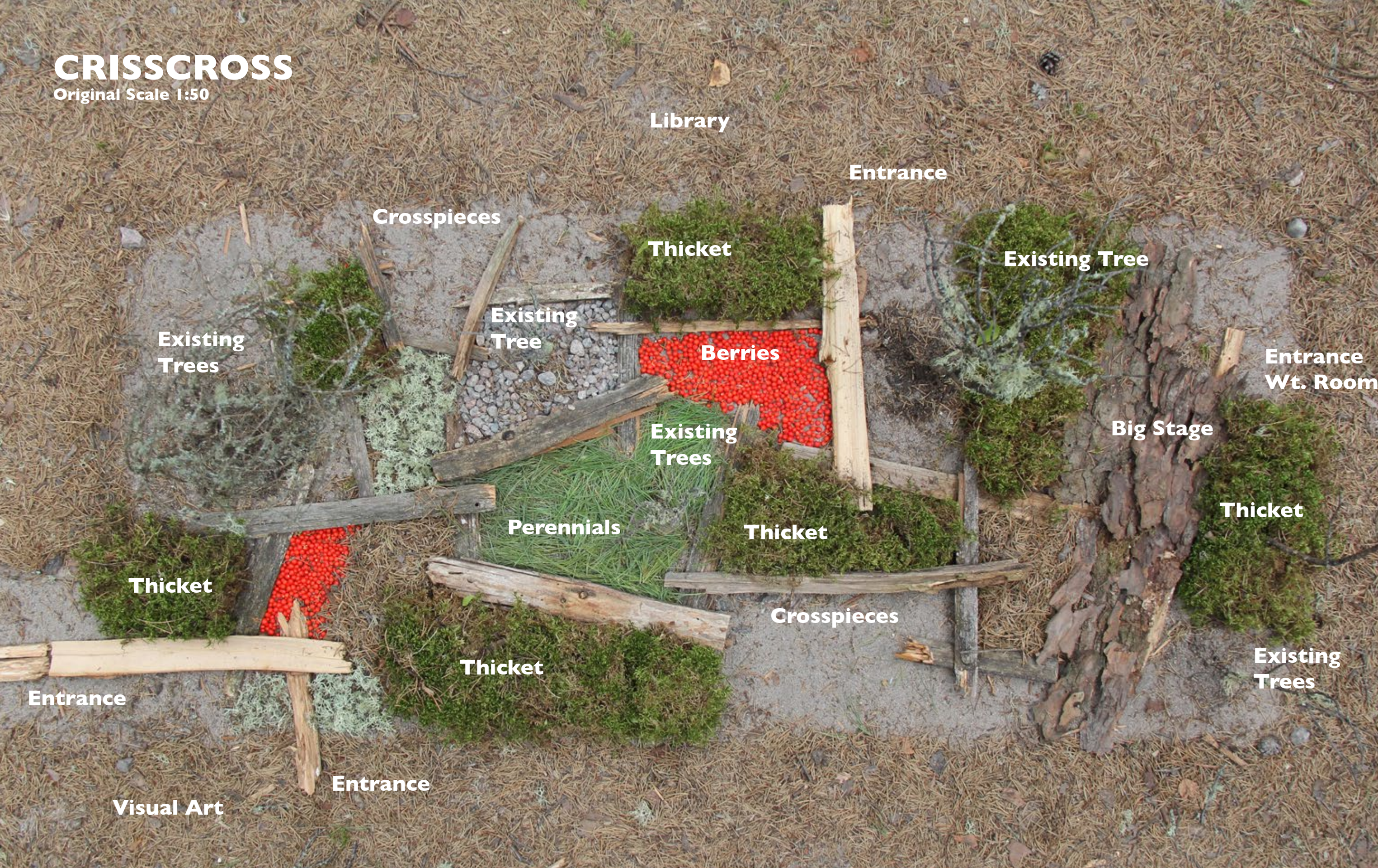
Wt.
Room

Visual Art



CRISSCROSS

Original Scale 1:50



D

E

S

S

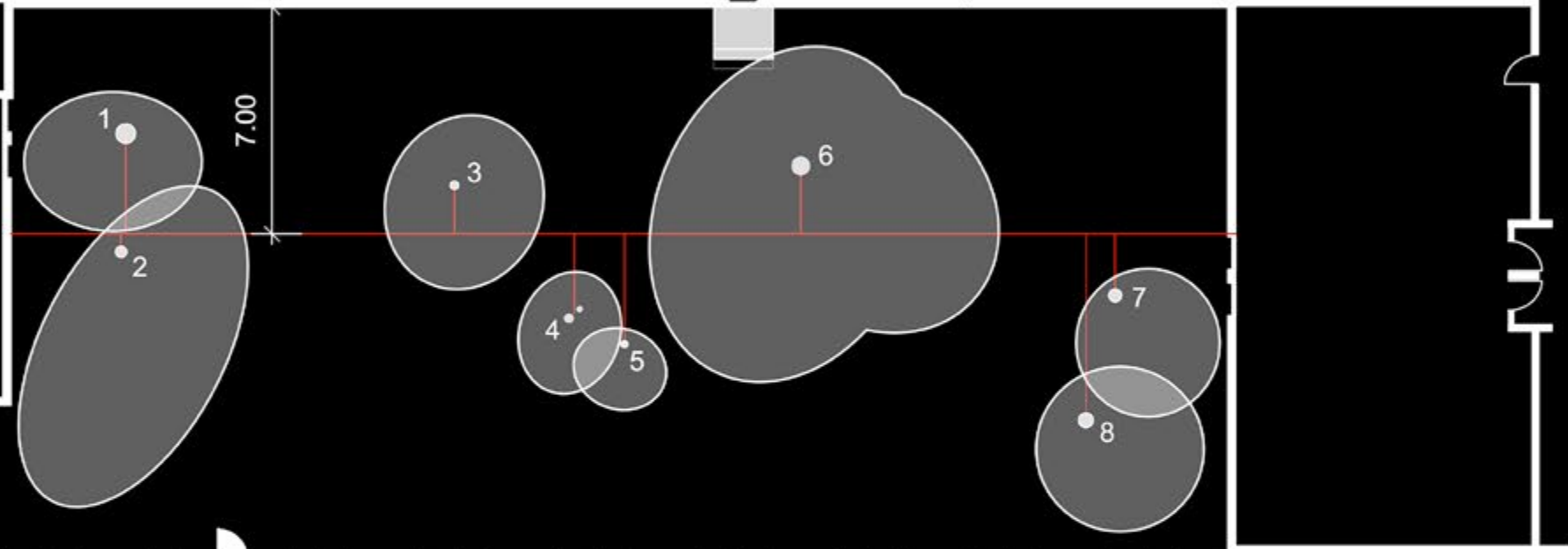
G

N



1. Fraxinus nigra, Black Ash, 0.60m
2. Ulmus pumila, Siberian Elm, 0.35m
3. Fraxinus nigra, Black Ash, 0.25m
4. Populus tremuloides, Trembling Aspen, 0.15 + 0.12m
5. Populus tremuloides, Trembling Aspen, 0.15m
6. Ulmus pumila, Siberian Elm, 0.55m
7. Picea mariana, Black Spruce, 0.40m
8. Picea mariana, Black Spruce, 0.45m

The numbers after the species name indicate the trunk diameters measured at 1.00m above ground

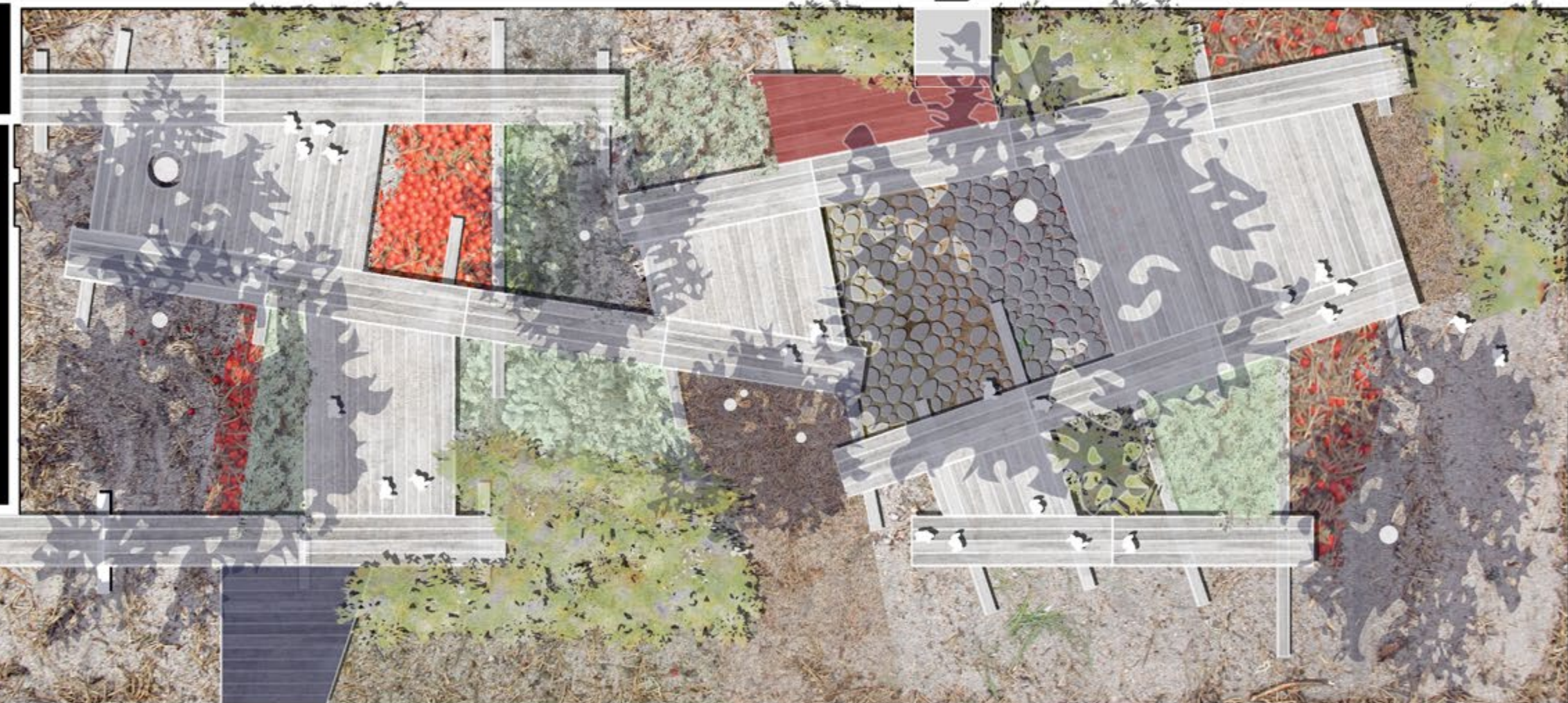


TREE SURVEY



Attention to all existing trees was of the highest priority. We measured the trees according to their position and size. Our responsibility was to insert a design that does not touch the ground or harm the roots.

A stage for you? The result of our design investigations is sheer light. A dreamy place where plants and birds, chlorophyll and other living things are teamed with people in an opulent picture. This mosaic of light and shade offers a stage for moments of happiness between heaven and earth.



SITE DESIGN without Ramp



Landscape architecture can contribute towards getting people involved by offering spaces of multiple possibilities, which can be occupied by different users at different times. Places pre-programmed for tranquility and places pre-programmed to provide a wealth of experiences come under discussion, but it is the inhabitants themselves who choose. There are many possible ways of meeting or maintaining separation, even in the smallest spaces. The places are activated and deactivated by the inhabitants, fluctuating freely between permanence and a sense of the temporary.

A ramp along a lush coppice is designed for the second construction phase. This ramp will connect the inside with the outside and create universal access into the courtyard.



SITE DESIGN with Ramp

The courtyard surface currently lies below floor level of the surrounding rooms and is only accessible by foot. There is no driveway or access road. The selection of building materials and all proposed construction methods react to this particular condition. The whole structure must be light, portable and easy to set up.

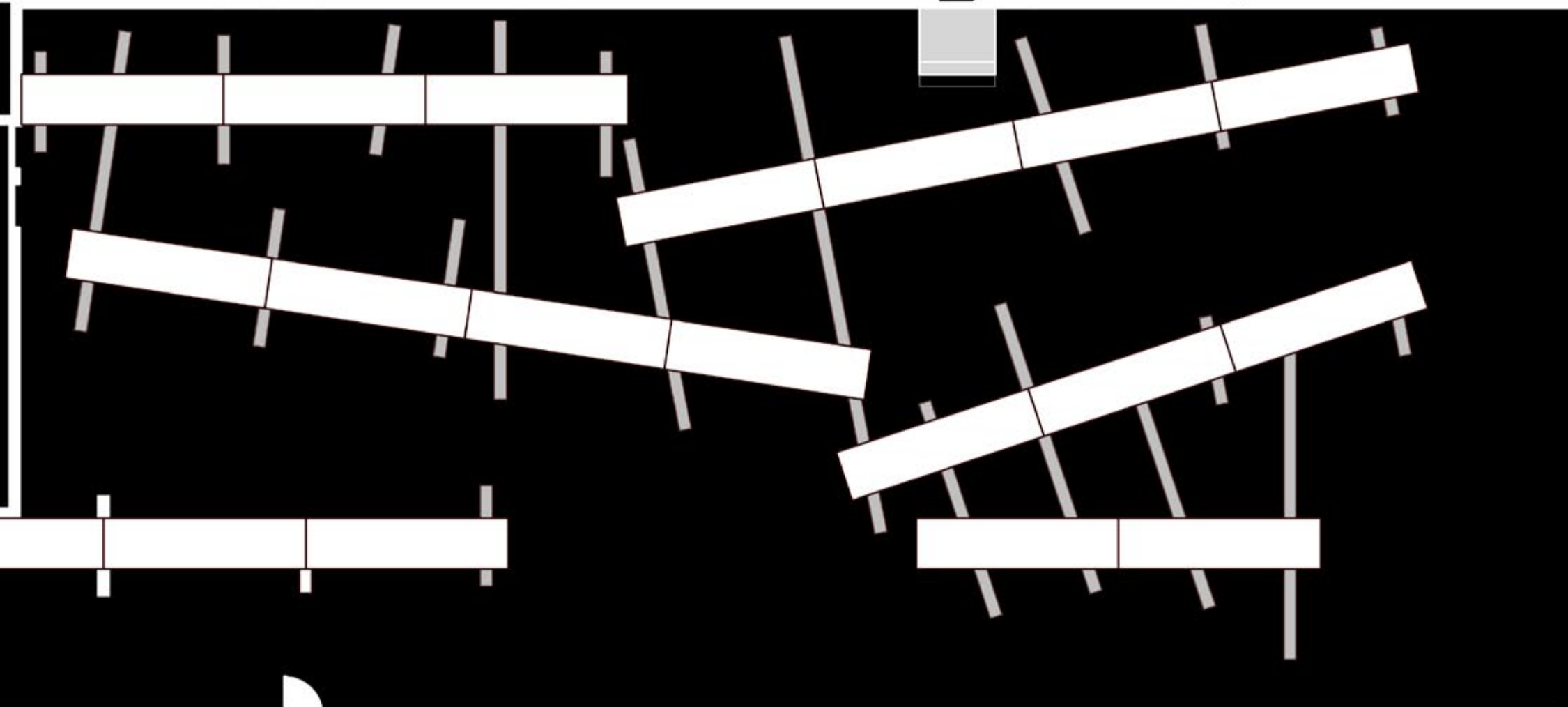
We don't want to move large volumes or big masses in this enclosed space and keep the existing topography unchanged. The wooden framework is simply put on top of the ground and hovers approximately 350mm above the existing surface offering an ideal seating height at its edges. Handrails are also not required. The new decks are an invitation to sit and linger all day long.



A variety of soils and aggregates, materials and plants facilitate a high degree of ecological and aesthetic diversity in a relatively small space. It is important for us to not seal even a single square foot of the ground. The surface remains open and permeable allowing it to breathe.

MATERIALS AND VEGETATION

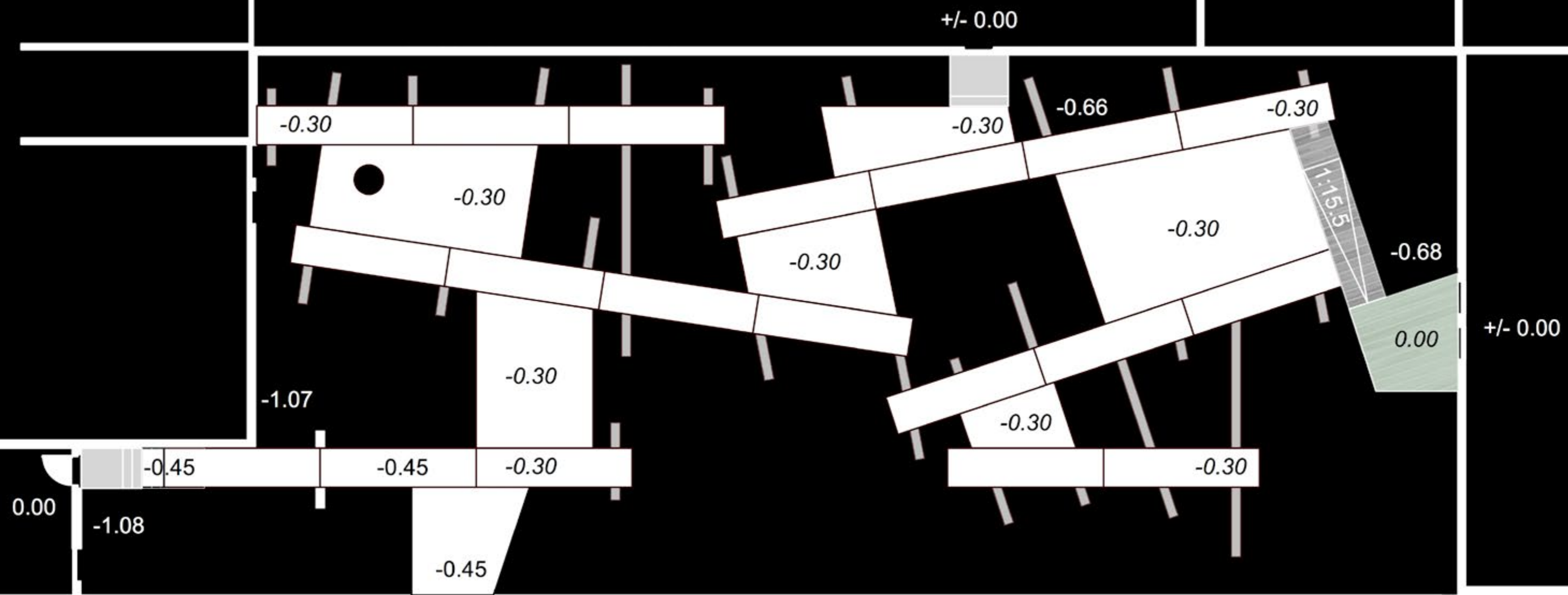
We decided on a simple construction principle using wood as the main material. A solid structure made of prefabricated swamp mats provides a frame for a series of platforms, stages and lush gardens full of chlorophyll.



SWAMP MATS



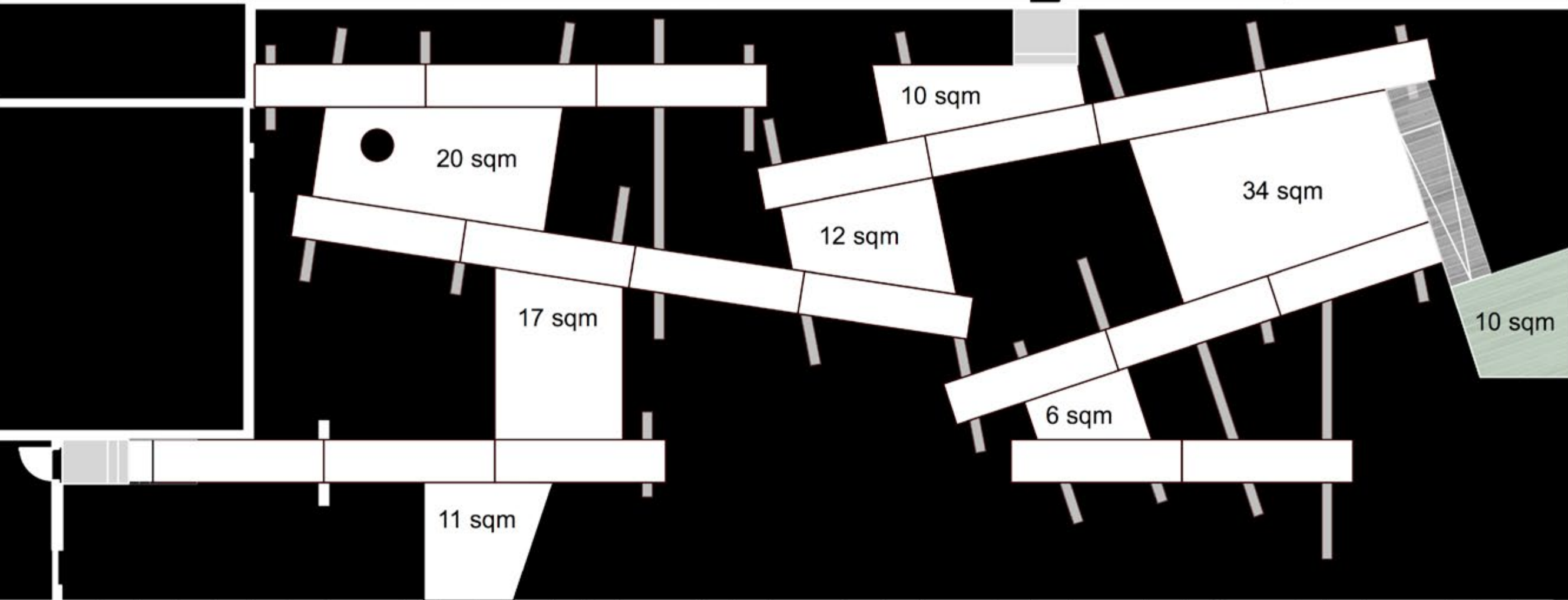
The structure seems to float on top of the surface. The intension of the chosen construction method is to touch the ground only lightly.



DECKS AND SPOT ELEVATIONS



In the second phase of this project there is the intension to install a ramp suitable for wheelchairs to physically connect the courtyard and the building. Our design takes this into account and prepares the site in accordance with this important aspect.

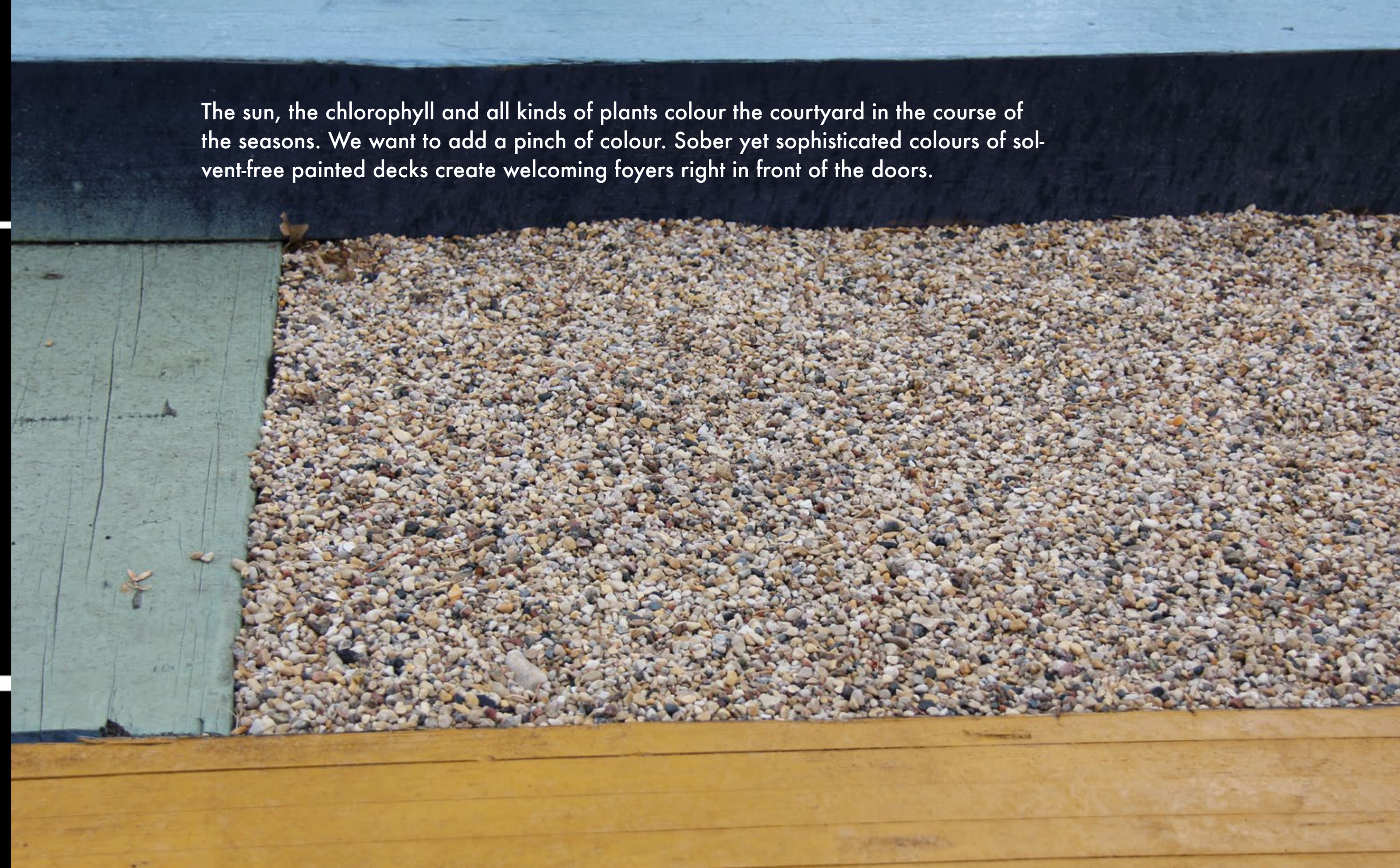


DECKS AND SQUARE METRES




WOODEN FRAMEWORK AND COLOURS

The sun, the chlorophyll and all kinds of plants colour the courtyard in the course of the seasons. We want to add a pinch of colour. Sober yet sophisticated colours of solvent-free painted decks create welcoming foyers right in front of the doors.





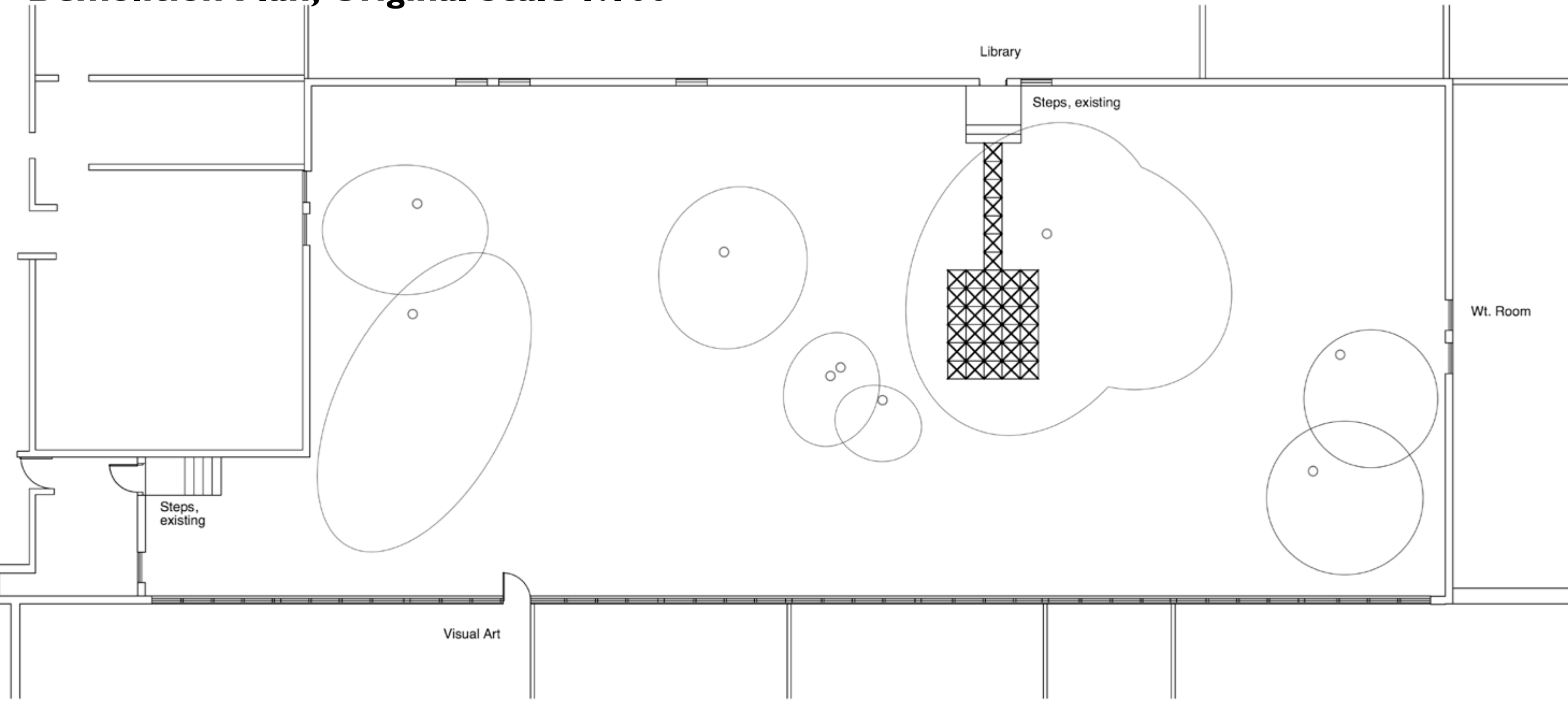
CONSTRUCTION DETAILING

Detailed working drawings are created for the craftsmen and the volunteers who are to give the imagined space a material and form. They are free of associative manipulation. They seem to be saying: "this is exactly how it will look."


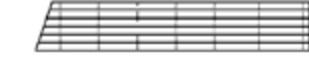


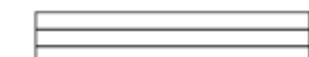


- 
- base layer
2 vegetation: ground level is 14" (350mm) below deck surface
3 granular subbase, 2" (50mm), 1/4" down, limestone

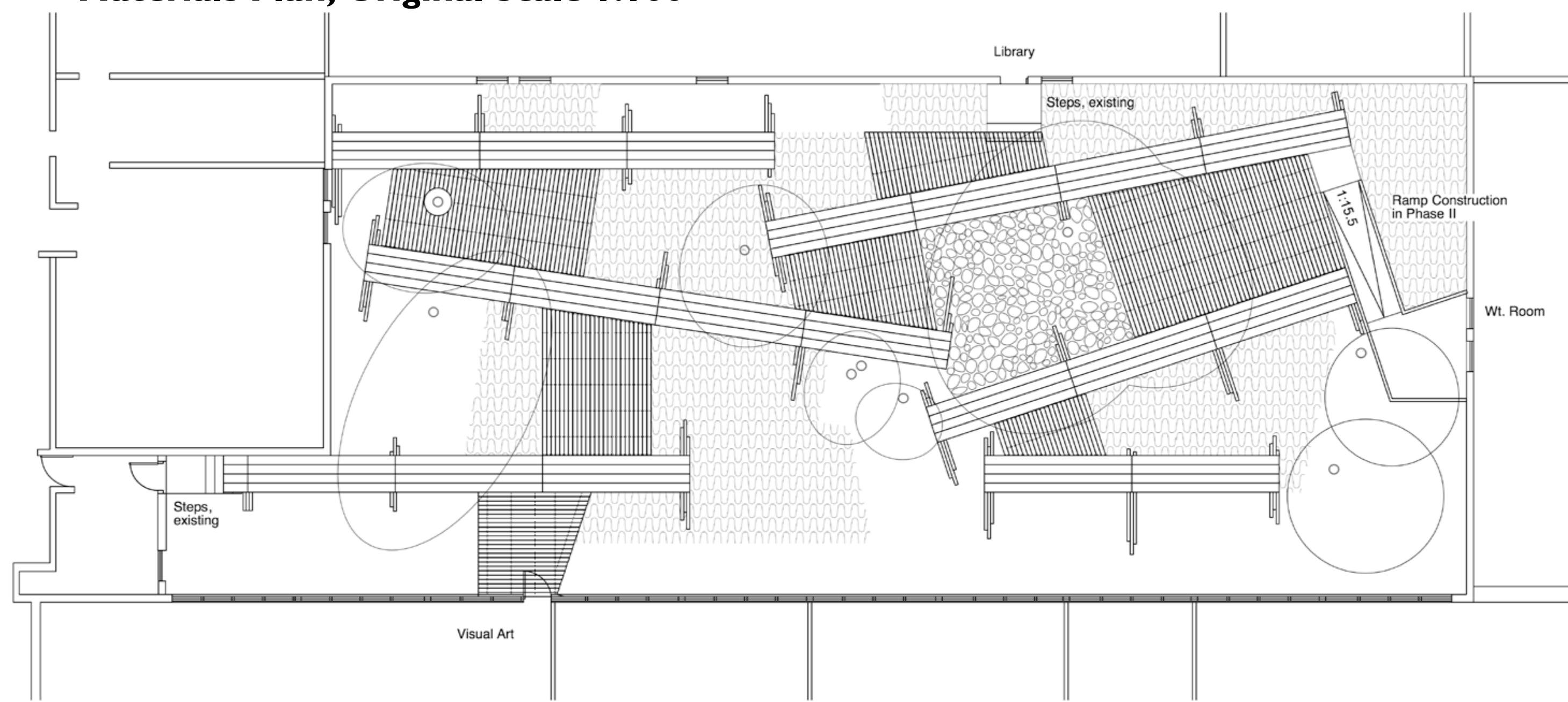
Demolition Plan, Original Scale 1:100

 Concrete Slab, existing To be removed
 Tree, existing To be retained



Materials Plan, Original Scale 1:100

 Timber 4" x 4" x 10' pressure treated
 Wooden Deck Timber 2" x 6" pressure treated
 Planting Areas
 Field Stone Pavement, Granit
 4' x 16' Light Swamp Mat
 Lawn, existing
 Tree, existing



Before commencing work, the constructor shall establish location and extent of service lines in area of Work and notify Consultant of findings.

The Contractor shall verify all dimensions, datums and levels prior to commencement of work. All errors and omissions to be reported to the Architect before proceeding. This drawing must not be scaled.

This drawing is the property of the Architect; the copyright in same being reserved to him. It is not to be reproduced without his permission. Any unauthorized alteration of the electronic data which constitute this document will void all responsibility for the altered document by the Architect.

This drawing is not to be used for building purposes until countersigned by:

School Division

Westwood Collegiate
TASTE OF CHLOROPHYLL
DEMOLITION
Sheet No. 5
 3/32"=1'0" / January 15, 2019
 Straub Thurmayer
 Landscape Architects



Before commencing work, the constructor shall establish location and extent of service lines in area of Work and notify Consultant of findings.

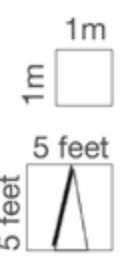
The Contractor shall verify all dimensions, datums and levels prior to commencement of work. All errors and omissions to be reported to the Architect before proceeding. This drawing must not be scaled.

This drawing is the property of the Architect; the copyright in same being reserved to him. It is not to be reproduced without his permission. Any unauthorized alteration of the electronic data which constitute this document will void all responsibility for the altered document by the Architect.

This drawing is not to be used for building purposes until countersigned by:

St. James - Assiniboia School Division, Maintenance Department

Westwood Collegiate
TASTE OF CHLOROPHYLL
MATERIALS
Sheet No. 4
 3/32"=1'0" / January 15, 2019
 Straub Thurmayer
 Landscape Architects



-0.45

Spot Elevation, proposed



Timber 4" x 4" x 10' pressure treated



4' x 16' Light Swamp Mat

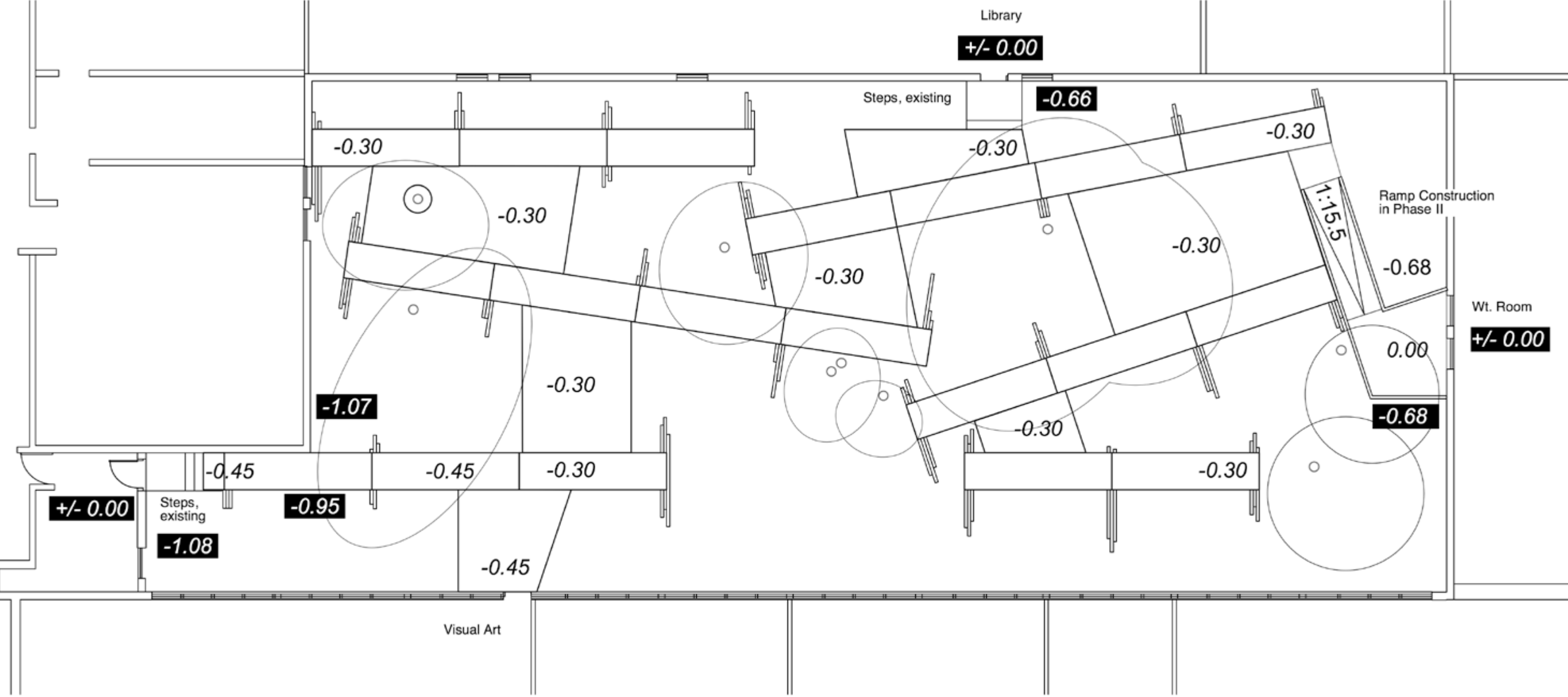
-0.68

Spot Elevation, existing



Tree, existing

Grading Plan, Original Scale 1:100



Before commencing work, the constructor shall establish location and extent of service lines in area of Work and notify Consultant of findings.

The Contractor shall verify all dimensions, datums and levels prior to commencement of work. All errors and omissions to be reported to the Architect before proceeding. This drawing must not be scaled.

This drawing is the property of the Architect; the copyright in same being reserved to him. It is not to be reproduced without his permission. Any unauthorized alteration of the electronic data which constitute this document will void all responsibility for the altered document by the Architect.

This drawing is not to be used for building purposes until countersigned by:
St. James - Assiniboia School Division, Maintenance Department

Westwood Collegiate
TASTE OF CHLOROPHYLL GRADING
Sheet No. 5
3/32"=1'0" / January 15, 2019

Straub Thurmayr
Landscape Architects



Timber 4" x 4" x 10' pressure treated

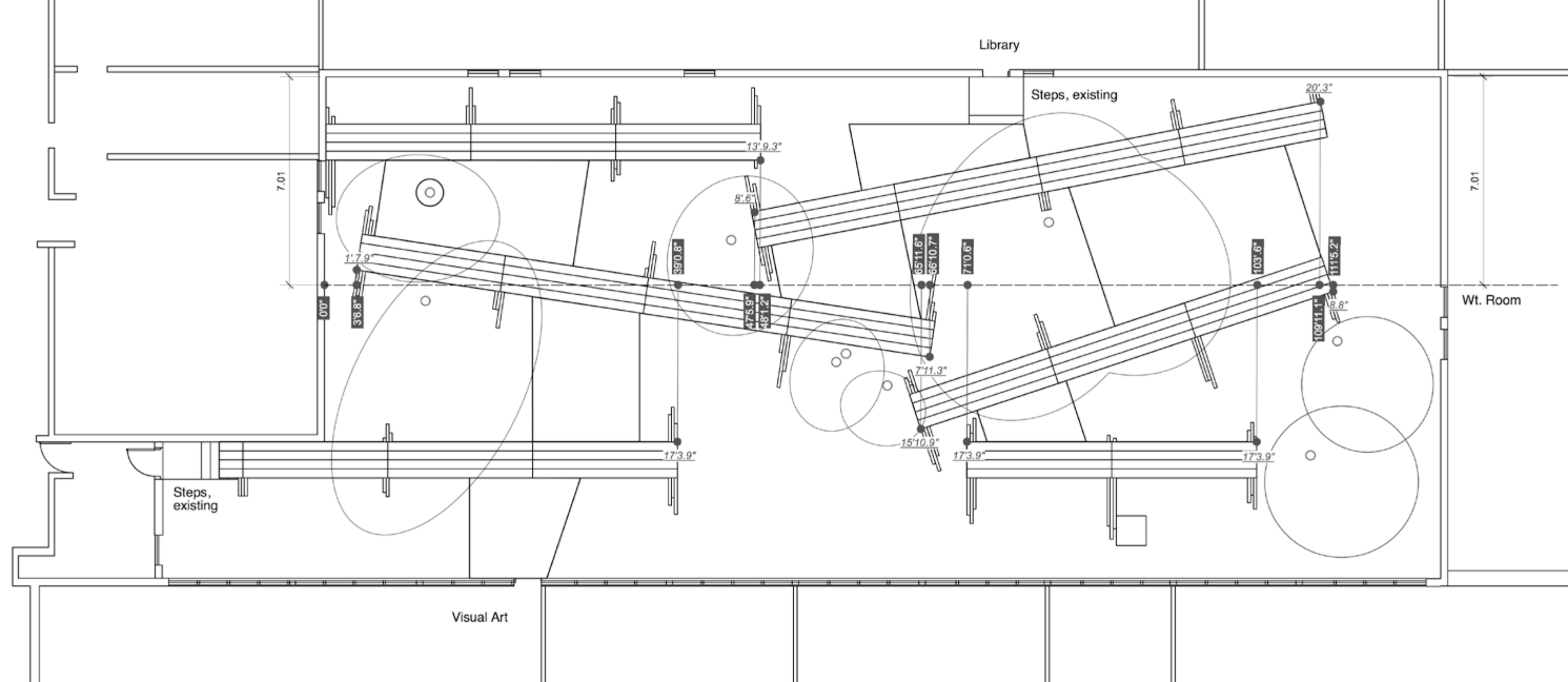


4' x 16' Light Swamp Mat



Tree, existing

Layout Plan_Swamp Mats, Original Scale 1:100



Before commencing work, the constructor shall establish location and extent of service lines in area of Work and notify Consultant of findings.

The Contractor shall verify all dimensions, datums and levels prior to commencement of work. All errors and omissions to be reported to the Architect before proceeding. This drawing must not be scaled.

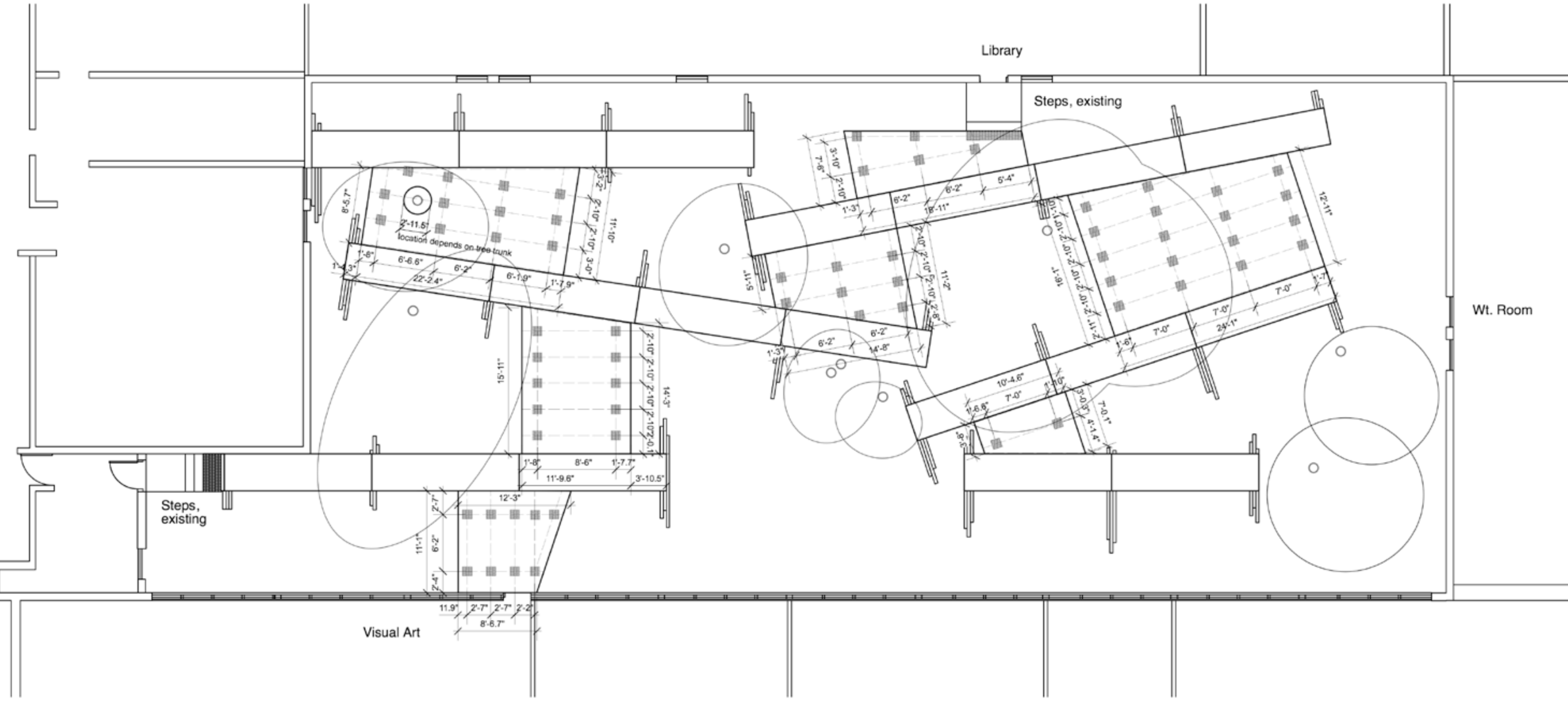
This drawing is the property of the Architect; the copyright in same being reserved to him. It is not to be reproduced without his permission. Any unauthorized alteration of the electronic data which constitute this document will void all responsibility for the altered document by the Architect.

This drawing is not to be used for building purposes until countersigned by:
St. James - Assiniboia School Division, Maintenance Department

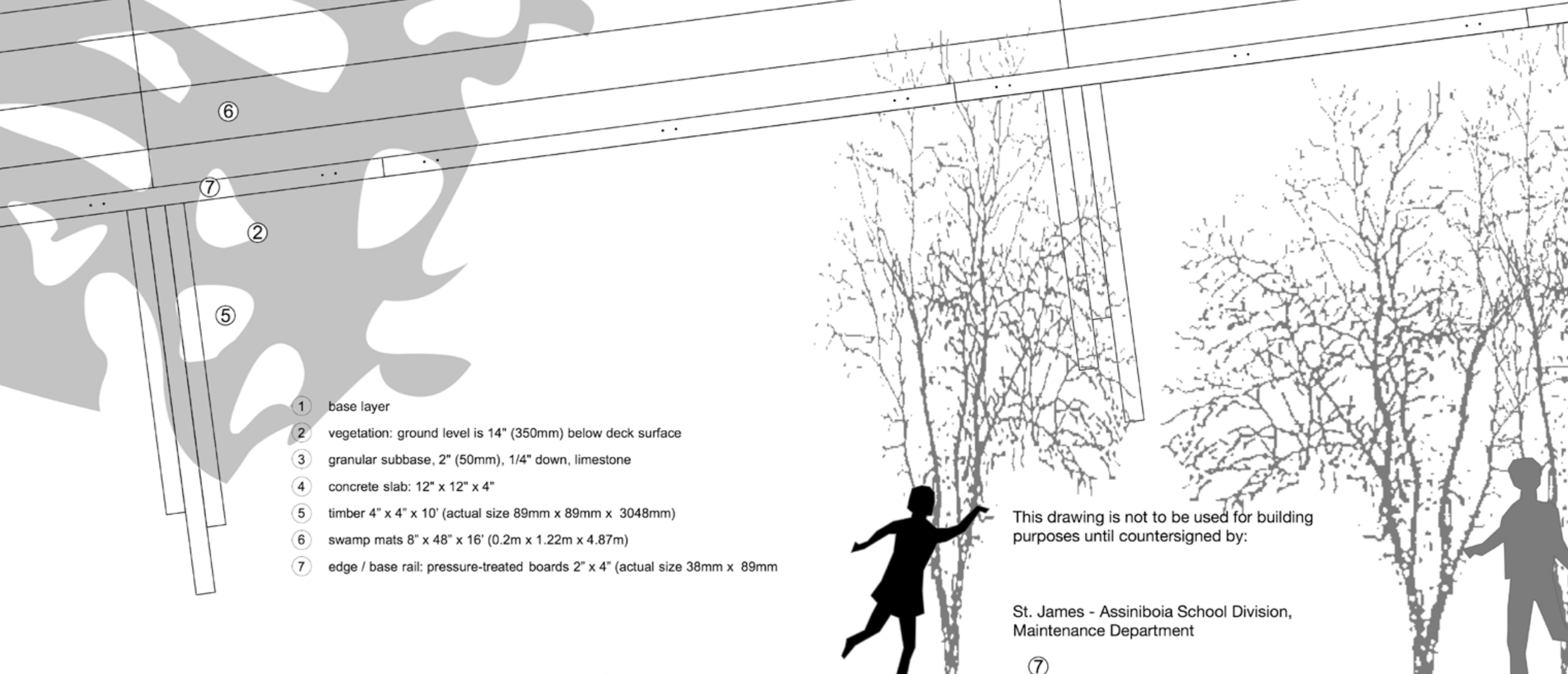
Westwood Collegiate
TASTE OF CHLOROPHYLL LAYOUT Swamp Mats
Sheet No. 6
3/32"=1'0" / January 15, 2019

Straub Thurmayr
Landscape Architects

Layout Plan_Concrete Slabs, Original Scale 1:100



Details Deck, Original Scale 1:20



- ① base layer
- ② vegetation: ground level is 14" (350mm) below deck surface
- ③ granular subbase, 2" (50mm), 1/4" down, limestone
- ④ concrete slab: 12" x 12" x 4"
- ⑤ timber 4" x 4" x 10' (actual size 89mm x 89mm x 3048mm)
- ⑥ swamp mats 8" x 48" x 16' (0.2m x 1.22m x 4.87m)
- ⑦ edge / base rail: pressure-treated boards 2" x 4" (actual size 38mm x 89mm)

This drawing is not to be used for building purposes until countersigned by:

St. James - Assiniboia School Division,
Maintenance Department

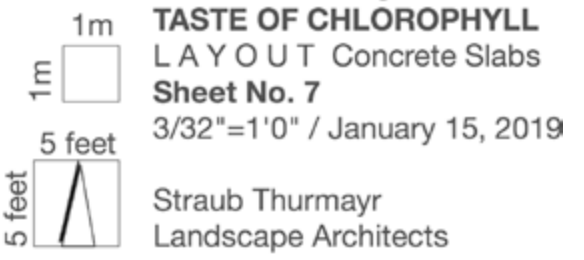
Before commencing work, the constructor shall establish location and extent of service lines in area of Work and notify Consultant of findings.

The Contractor shall verify all dimensions, datums and levels prior to commencement of work. All errors and omissions to be reported to the Architect before proceeding. This drawing must not be scaled.

This drawing is the property of the Architect; the copyright in same being reserved to him. It is not to be reproduced without his permission. Any unauthorized alteration of the electronic data which constitute this document will void all responsibility for the altered document by the Architect.

This drawing is not to be used for building purposes until countersigned by:

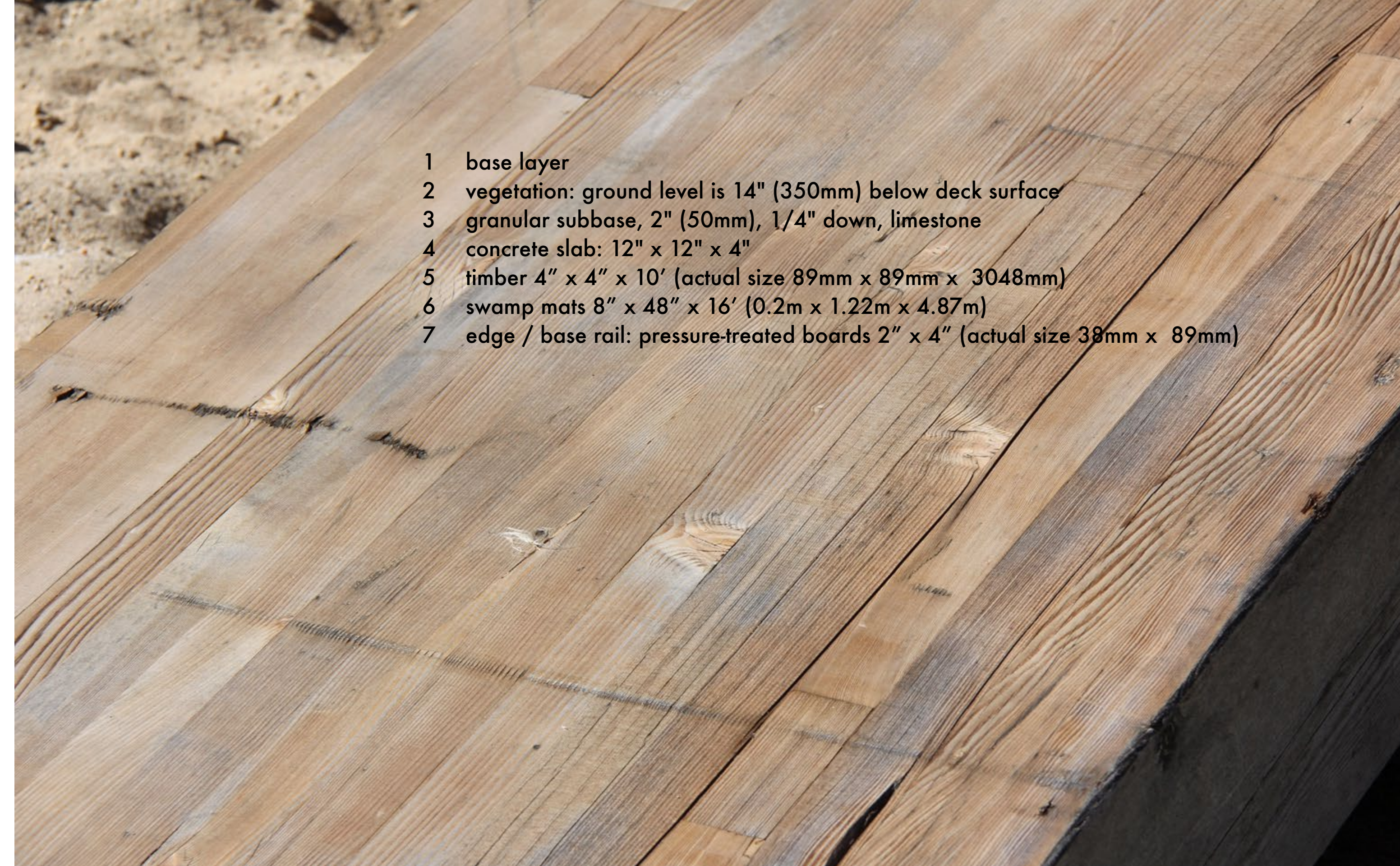
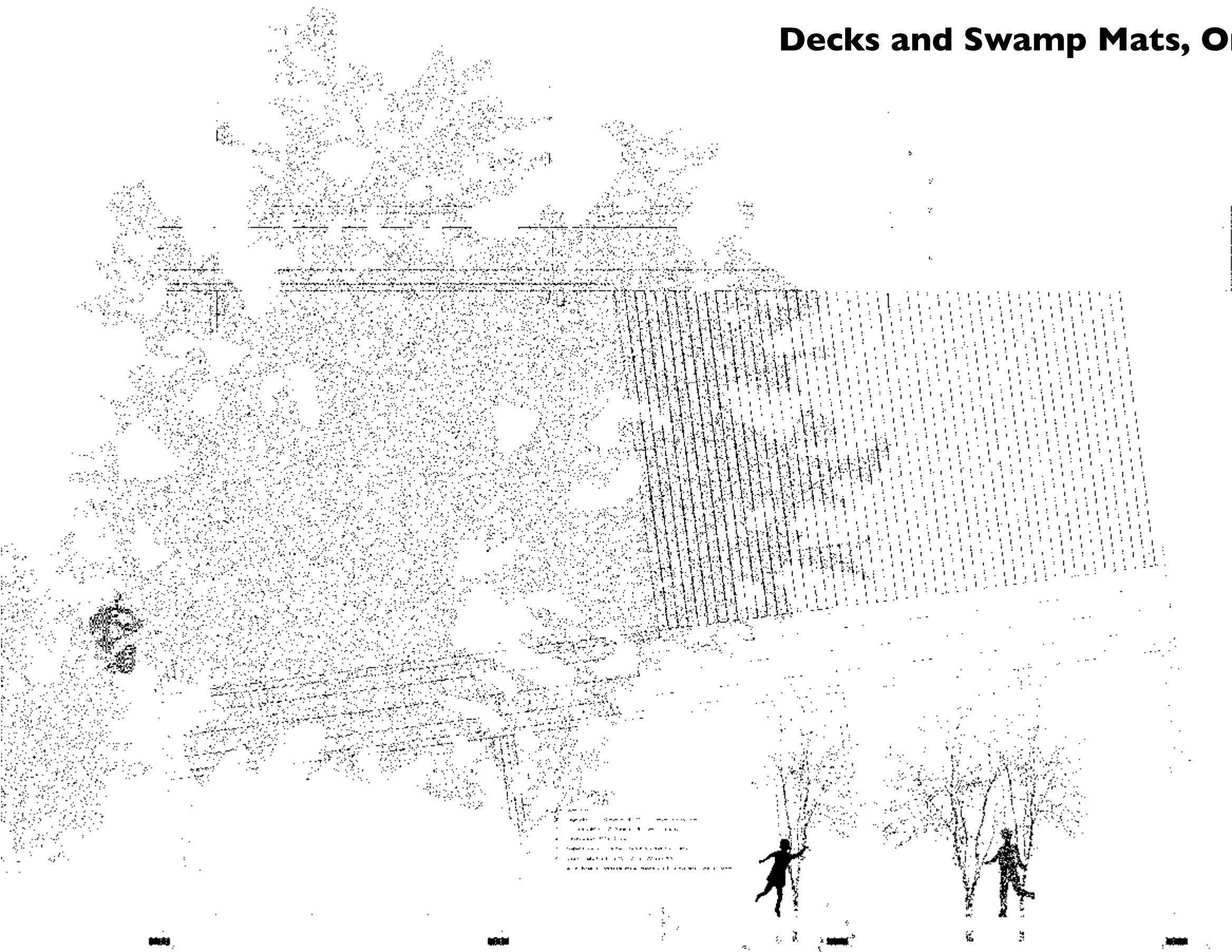
St. James - Assiniboia School Division,
Maintenance Department



Westwood Collegiate
TASTE OF CHLOROPHYLL
DETAIL 2
Sheet No. 9
1:20 / January 15, 2019

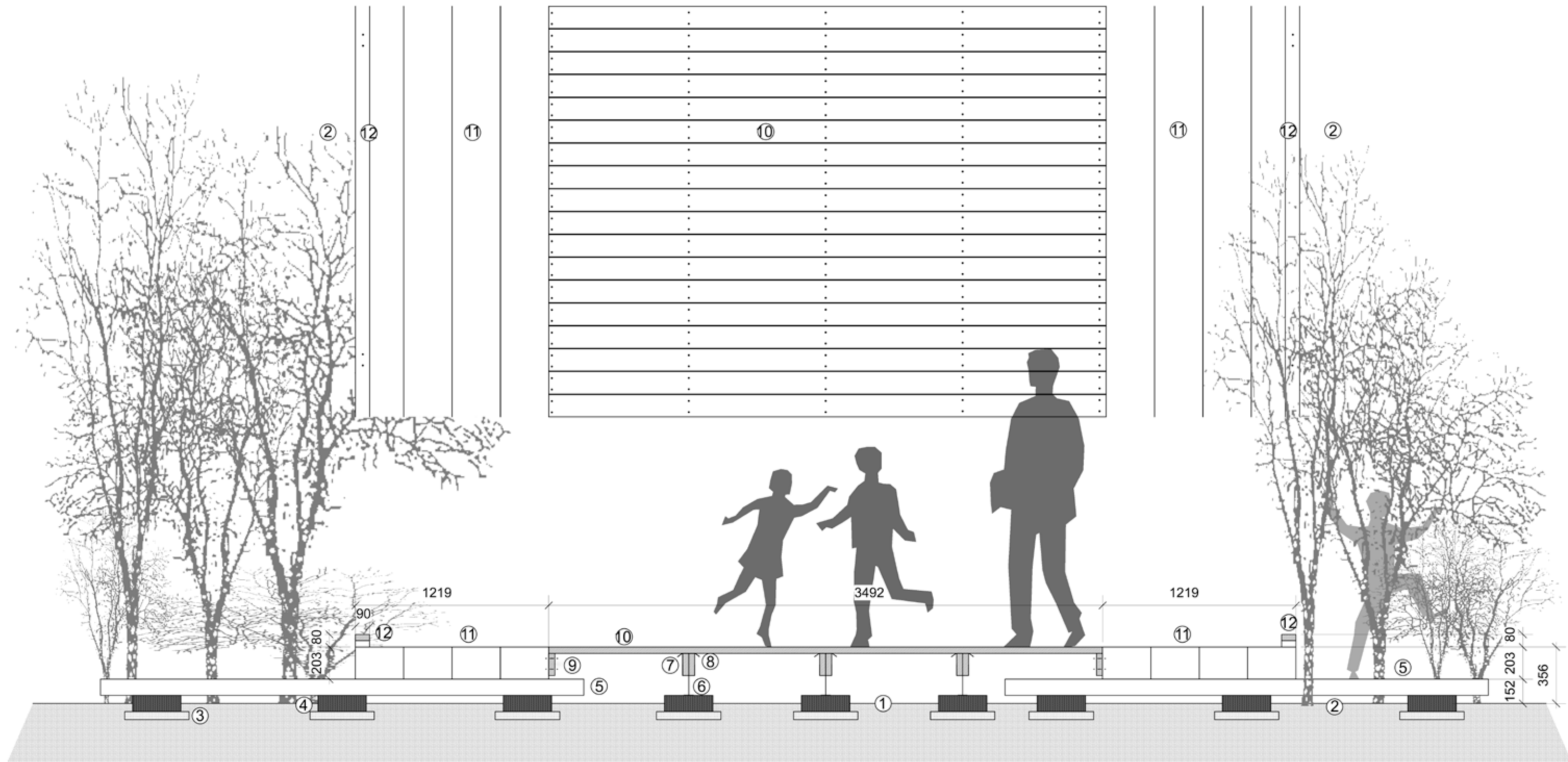
Straub Thurmayer
Landscape Architects

Decks and Swamp Mats, Original Scale 1:20



- 1 base layer
- 2 vegetation: ground level is 14" (350mm) below deck surface
- 3 granular subbase, 2" (50mm), 1/4" down, limestone
- 4 concrete slab: 12" x 12" x 4"
- 5 timber 4" x 4" x 10' (actual size 89mm x 89mm x 3048mm)
- 6 swamp mats 8" x 48" x 16' (0.2m x 1.22m x 4.87m)
- 7 edge / base rail: pressure-treated boards 2" x 4" (actual size 38mm x 89mm)

Decks and Swamp Mats, Original Scale 1:20



- ① base layer
- ② vegetation: ground level is 14" (350mm) below deck surface
- ③ granular subbase, 2" (50mm), 1/4" down, limestone
- ④ concrete slab: 12" x 12" x 4"
- ⑤ timber 4" x 4" x 10' (actual size 89mm x 89mm x 3048mm)
- ⑥ bearer support, height adjustable, metal or wood
- ⑦ beam: 2 pressure-treated boards 2" x 6" (actual size 38mm x 89mm), nailed lamination
- ⑧ tar paper
- ⑨ support battens
- ⑩ decking: pressure-treated boards 2" x 6" (actual size 38mm x 140mm)
- ⑪ swamp mats 8" x 48" x 16' (0.2m x 1.22m x 4.87m)
- ⑫ edge / base rail: pressure-treated boards 2" x 4" (actual size 38mm x 89mm)

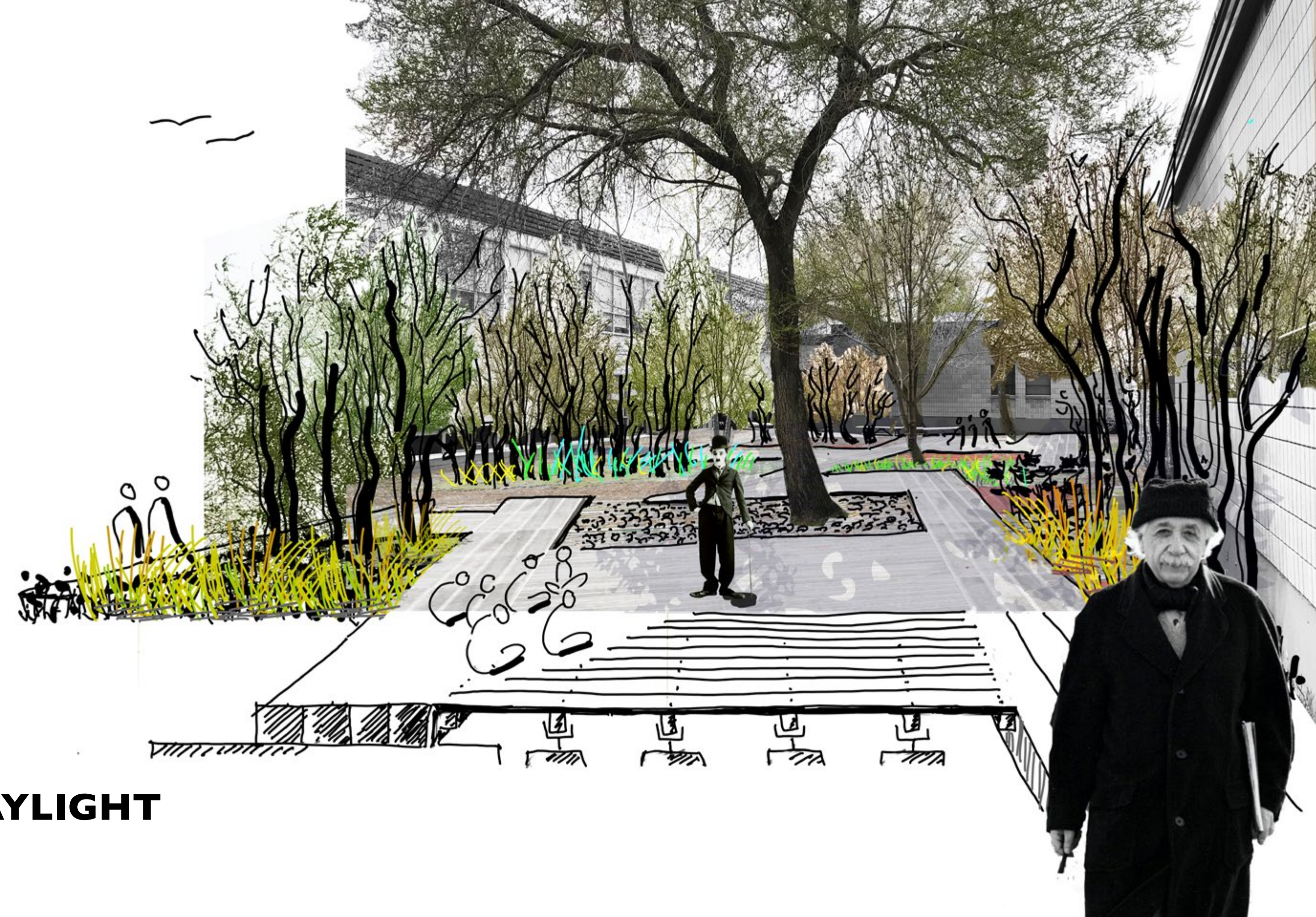


A good school needs more than teachers, books and classrooms. Plato founded an academy in an olive grove outside the gates of Athens. Here, he and his students enjoyed teaching, learning and wandering at leisure in the cool shade of trees. The subjects taught were philosophy and science and the students called themselves academics. This great centre of learning, rich in trees, became both a garden and a meeting place.

A GOOD LEARNING PLACE

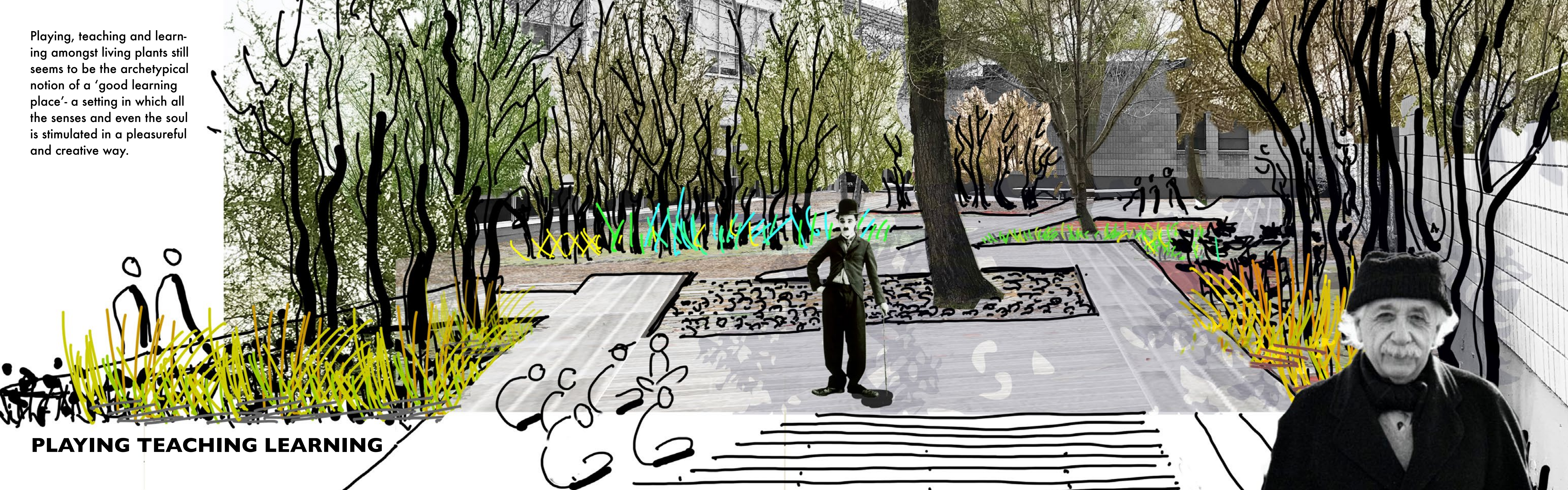


NIGHTLIGHT

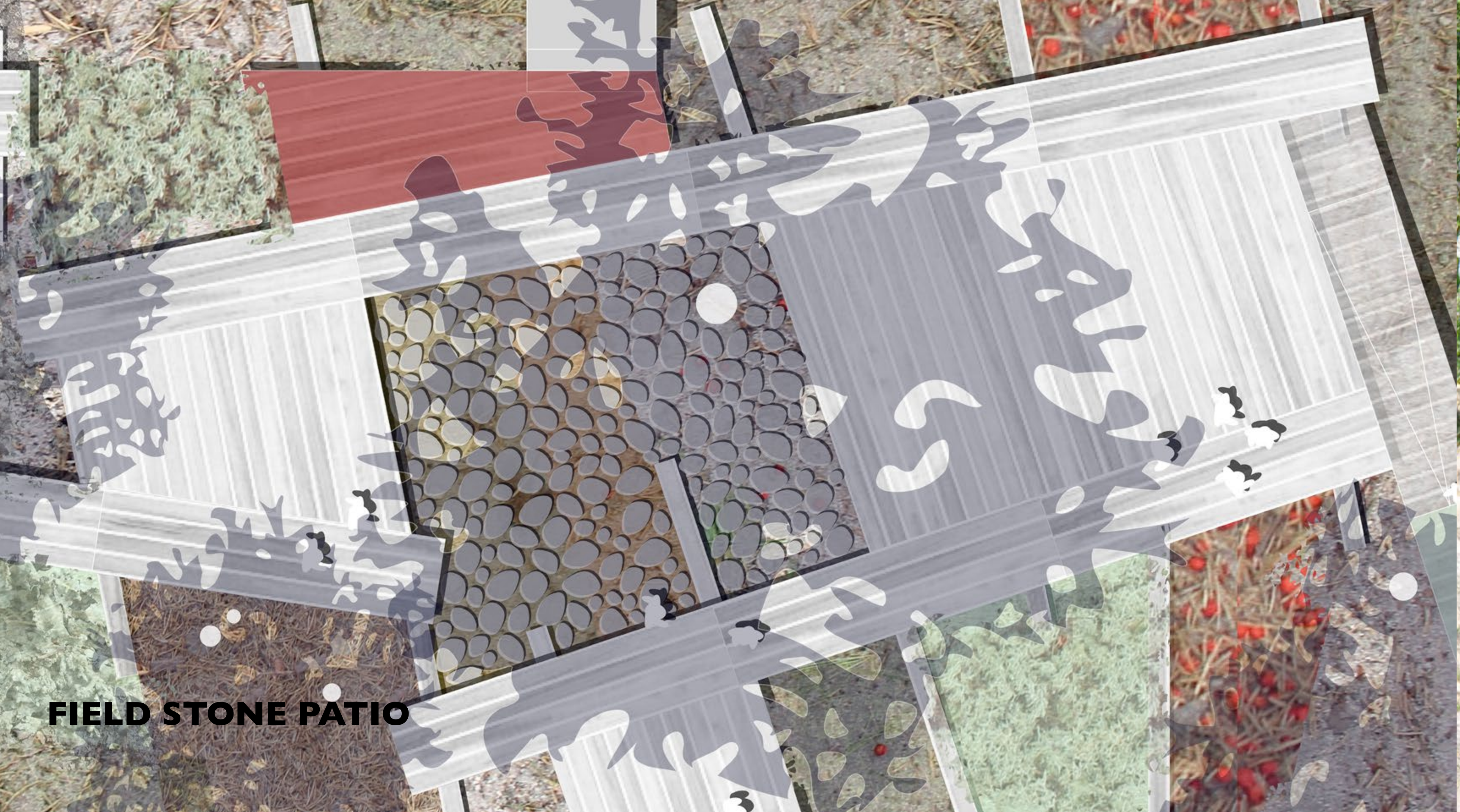


DAYLIGHT

Playing, teaching and learning amongst living plants still seems to be the archetypical notion of a 'good learning place'- a setting in which all the senses and even the soul is stimulated in a pleasurable and creative way.

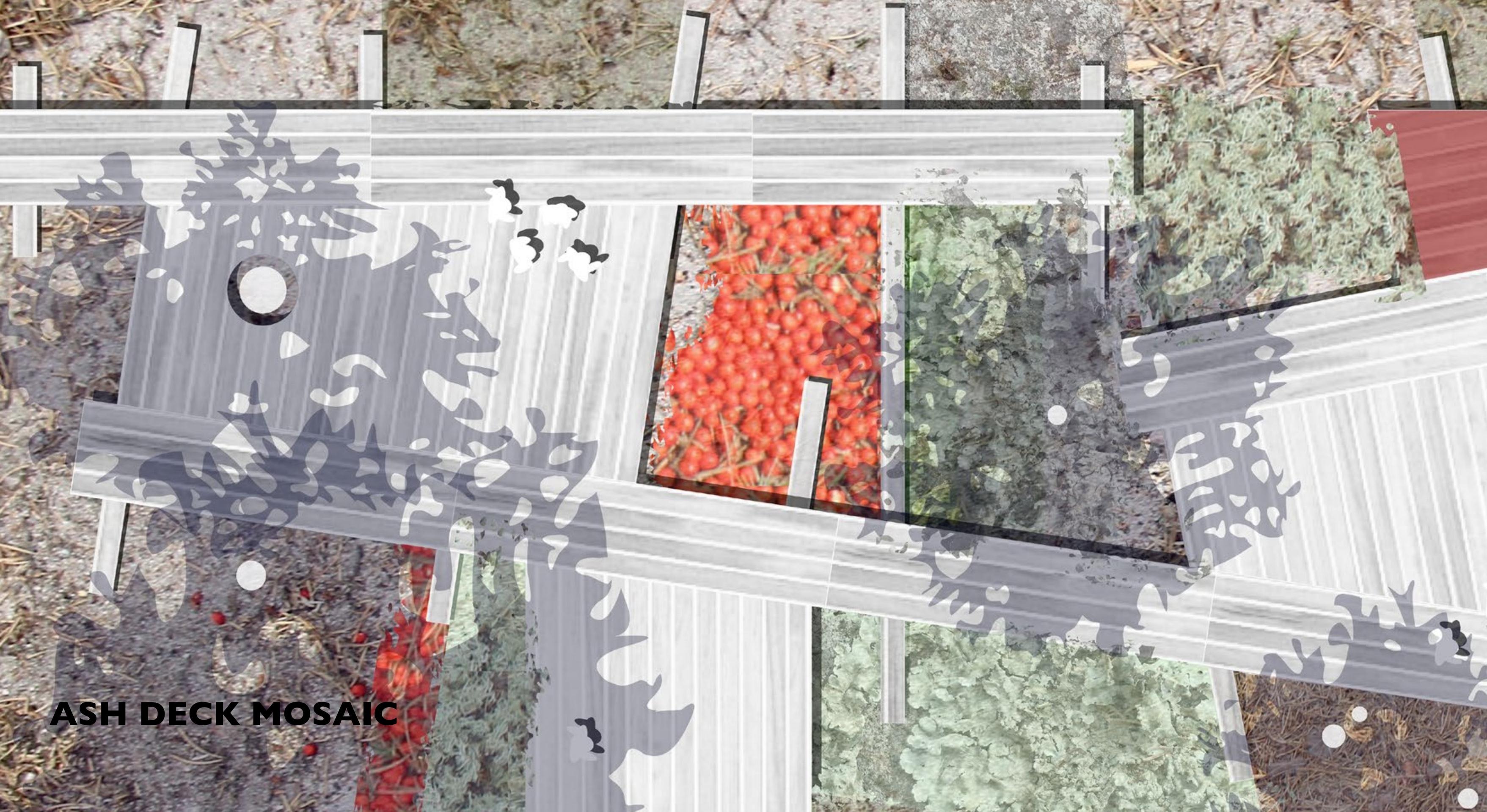


PLAYING TEACHING LEARNING



FIELD STONE PATIO



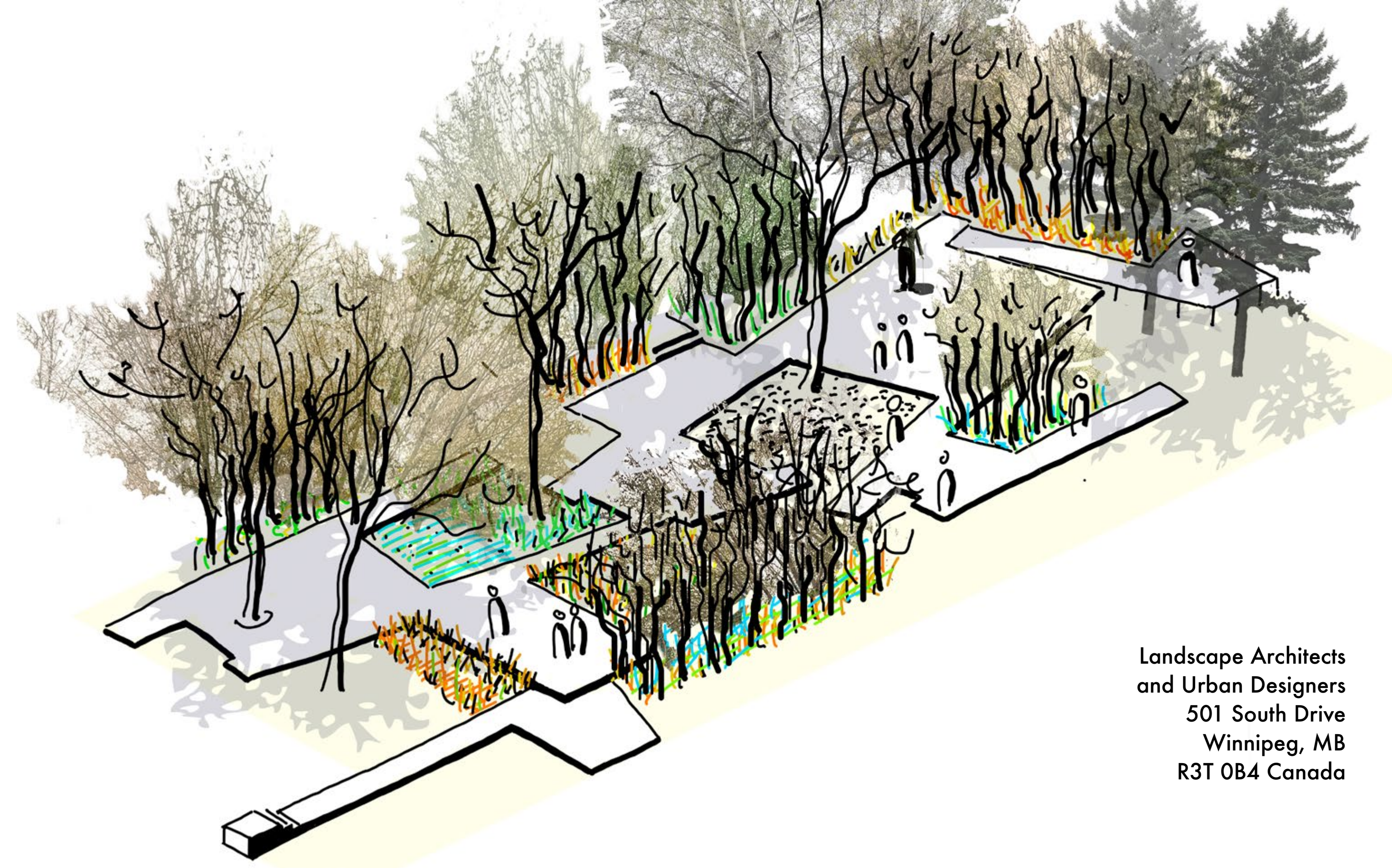


ASH DECK MOSAIC



Westwood Collegiate Courtyard

THE TASTE OF CHLOROPHYLL



Landscape Architects
and Urban Designers
501 South Drive
Winnipeg, MB
R3T 0B4 Canada