MARA V DIAVOLOVA

WORK SAMPLE 2023 MIT SA+P

01 FROM STAGE TO STRUCTURE

location: boston, ma
instructor: cristina parreno
project type: mit core 02
m.arch year 01
collaborators: charles janson

Drawing on the logics of the theater - a tension between adaptability and preservation, a present in flux and a saturated past - our proposal follows in lock step with The Strand, working within these rhythms.

"From Stage to Structure" recycles timber discards, an intervention that embraces and encourages decay as an act of maintenance. The recycling plant embeds itself within the theater's material and programmatic cycles, and maps the relationship between timber from various waste streams in the city: domestic and construction discards, flyaways, compost.

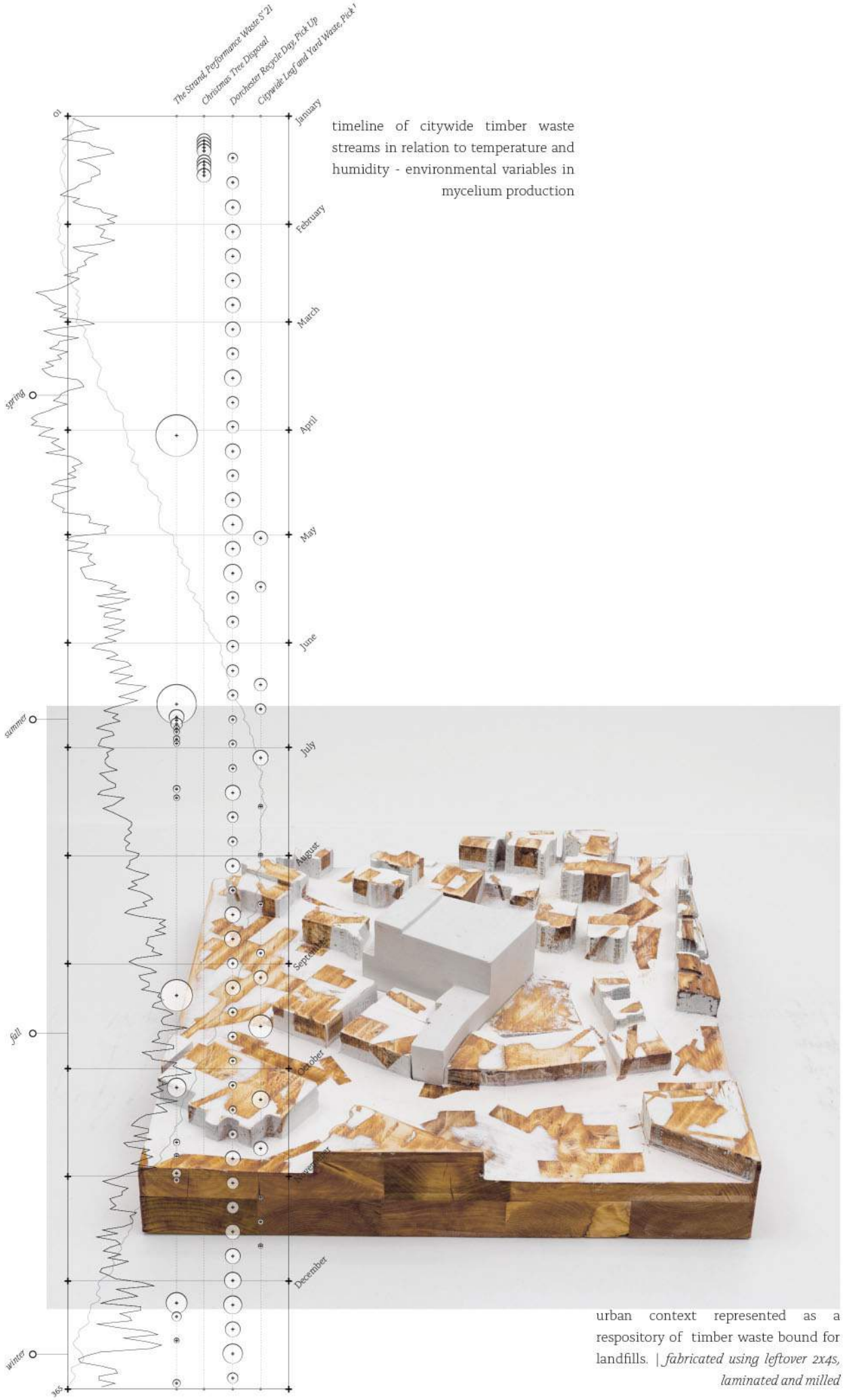
To locate the proposal within the theater, we take a chair as our subject, a subject with an ambiguous fate. The chair arrives at The Strand backlot, sorted and fated for one of two paths: decay or repair.

Following a vertical cargo lift, the chair is fed through a series of climate-controlled pods, structuring its decay and transformation into aggregate for mycelium production.

If lightly damaged, the chair circumvents reprocessing and arrives at the fifth pod, where it is fixed.

If the material cycle is the site, then programmatic experience is complicated. The public program is then about the experience and collaboration with production. Publically accessible via multiple fronts, the roof creates an osmosis between material renewal and one's agency over that phase change.

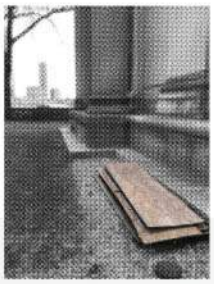
representational model, 1: 100 | *using a split wood with fungal overgrowth to CNC existing theater*



timeline of citywide timber waste streams in relation to temperature and humidity - environmental variables in mycelium production

urban context represented as a respository of timber waste bound for landfills. | *fabricated using leftover 2x4s, laminated and milled*

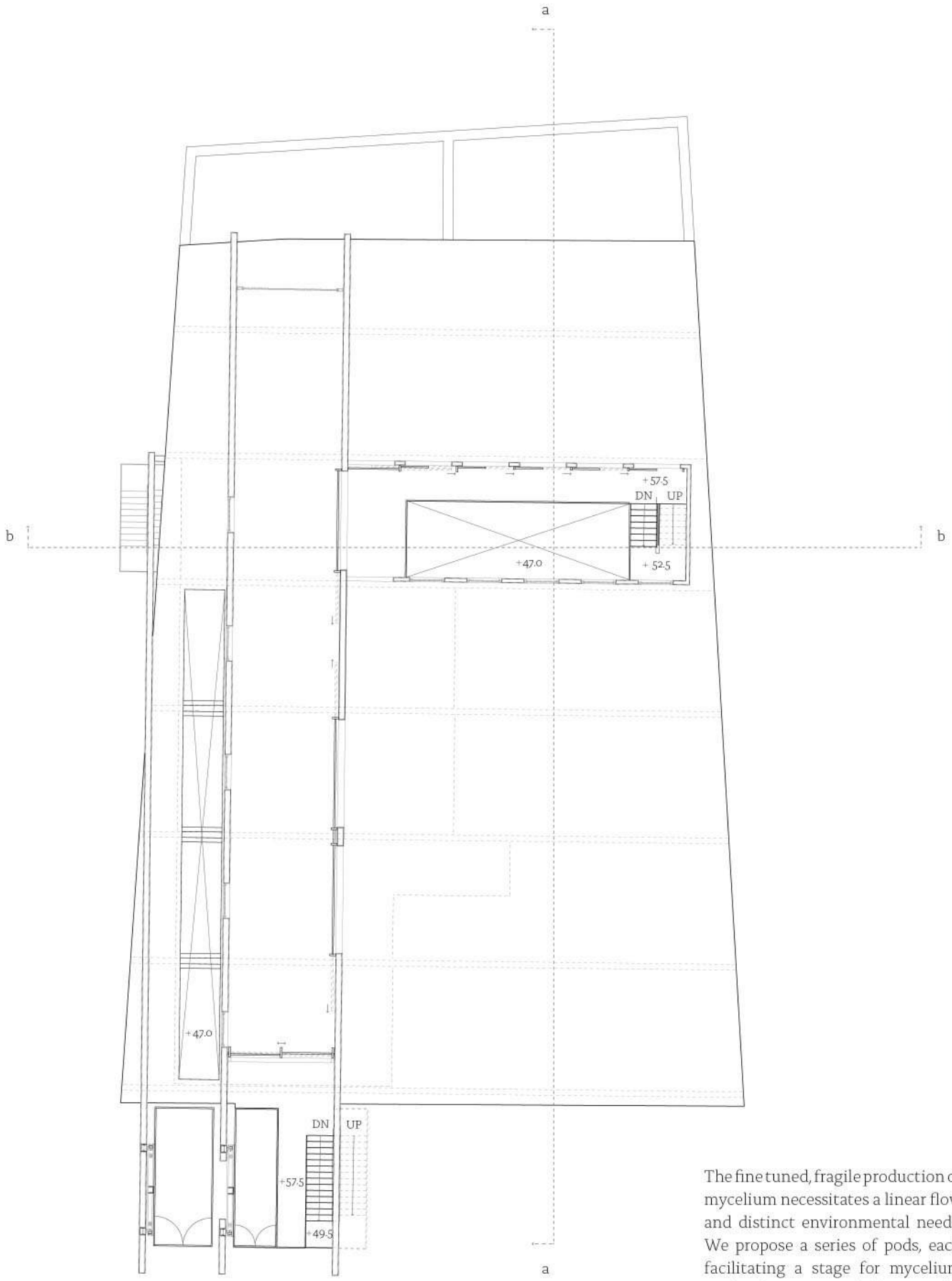
repositories of waste



MYCELIUM CHAIR CUSHION

04-12-22 15:58:00 *day 07/14* *pleurotus djamor*

chair designed to receive its missing piece: the cushion | *constructed with repurposed plywood and leftover 2x4s*

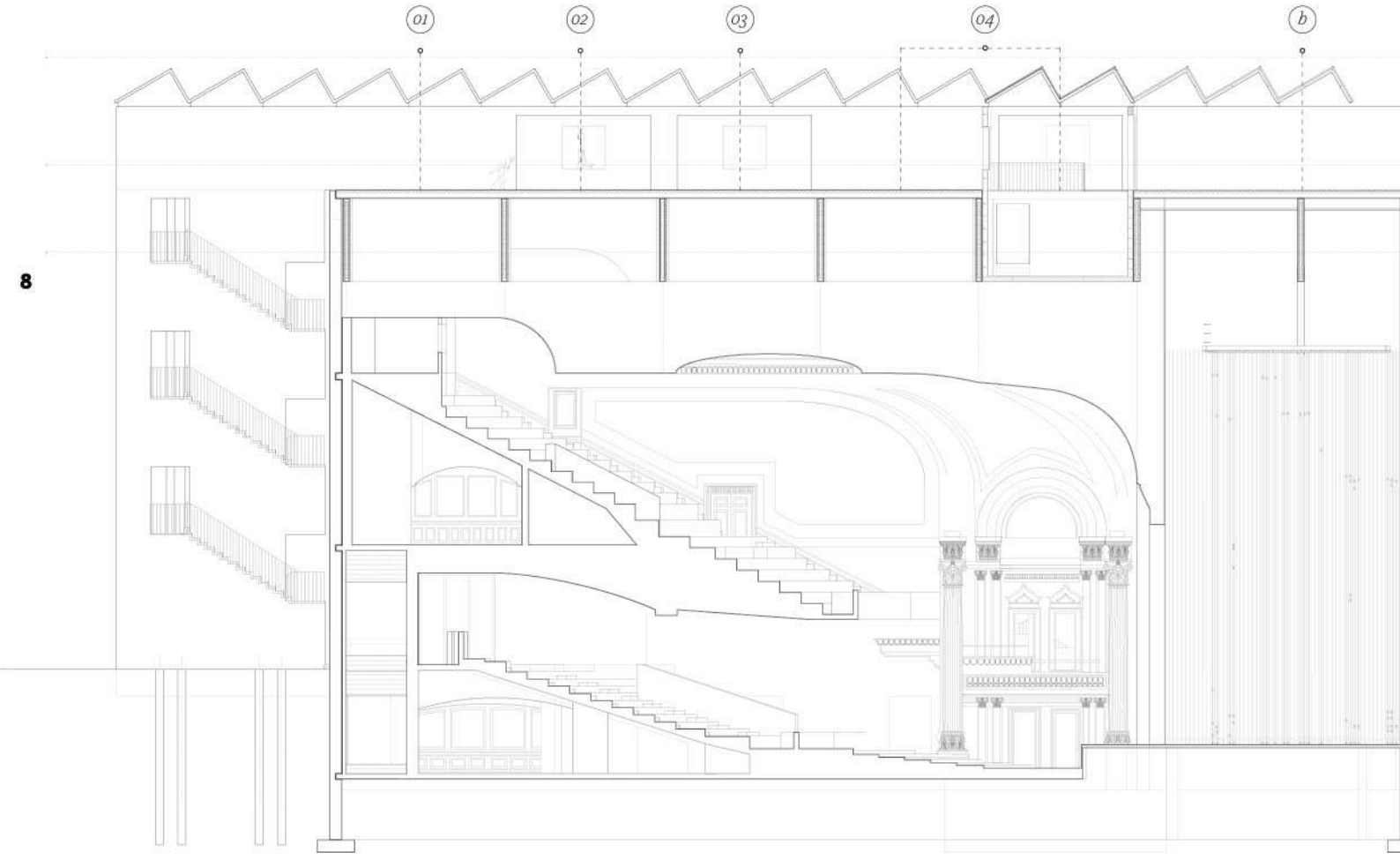


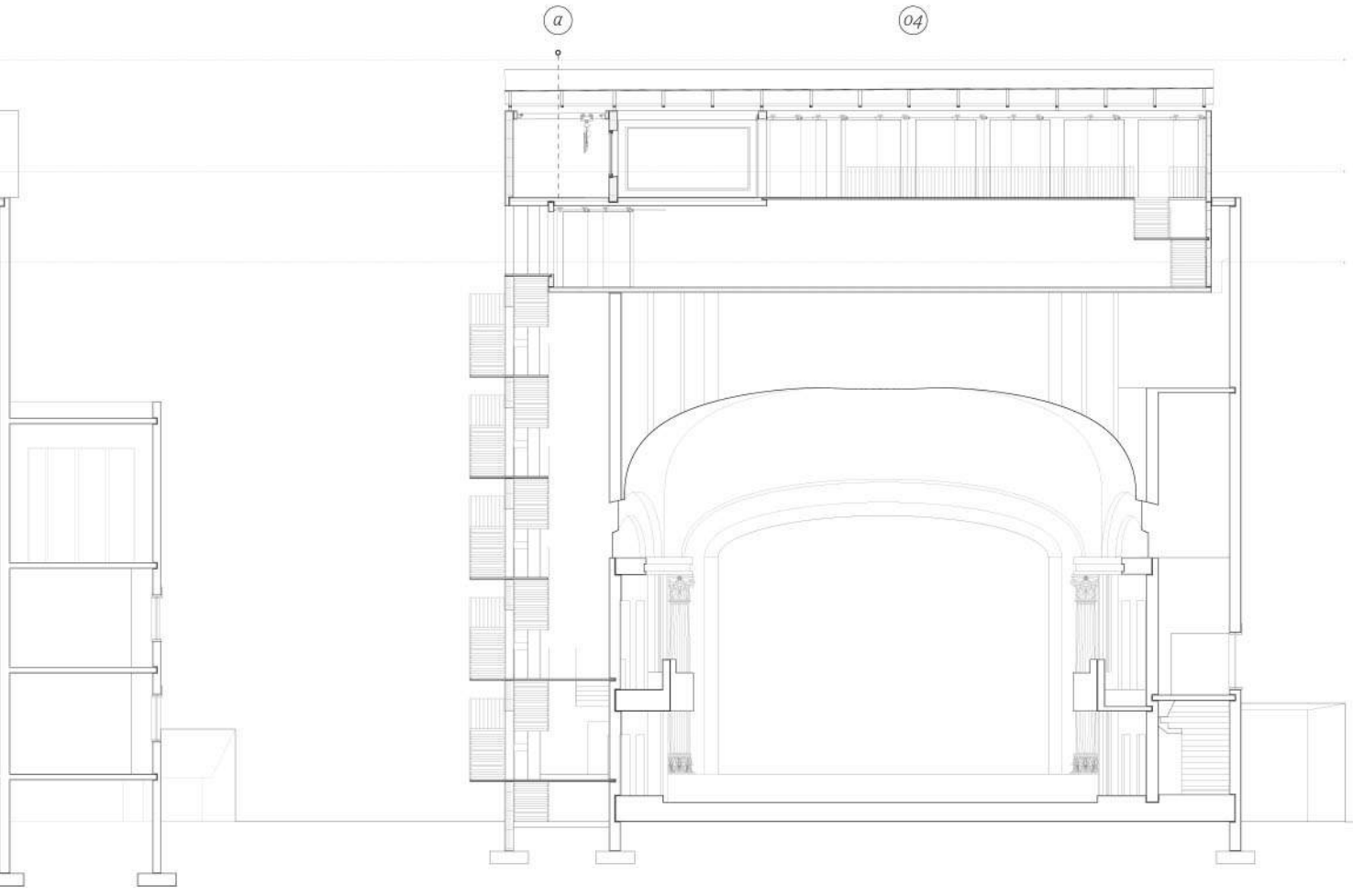
The fine tuned, fragile production of mycelium necessitates a linear flow and distinct environmental needs. We propose a series of pods, each facilitating a stage for mycelium production, suspended over the existing ceiling, and sandwiched between the theater's existing trusses , which we reinforce using glulam beams.

our subject, the chair, circumventing decay

view of double-height workshop with windows overlooking roofscape

PROGRAM	*CHIPPER*	*STORAGE*	*INOCULATION*	*SPAWNING & TOOLING*
AGENT	*MECHANICAL*	*NONE*	*HUMAN & FUNGAL*	*HUMAN & FUNGAL*
SUBJECT	*WOODCHIP*	*WOODCHIP*	*WOODCHIP*	*MYCELIUM*
ACTION	*CHIPPING*	*CONTAINING*	*INOCULATE*	*CASTING & ASSEMBLY*
ENVIRONMENT	*SHELTERED*	*SHELTERED*	*CLIMATE CONTROLLED*	*SHELTERED*
	DRY	*DRY*	*STILL AIR*	*WARM*
			WARM	





section a-a

Additional circulation is inserted on left, utilizing , yet extending the theater's existing stair core. Thus, the core also becomes a structural landing point for the transfer of loads of our intervention.

section b-b

02 DEGREES OF NEGOTIABILITY : TATE BRITAIN

location: london, uk
instructor: naiara vegara
marie de monseignat
katya larina
project type: arch. assoc.
spring semester visiting school

Boundary pertains to access.

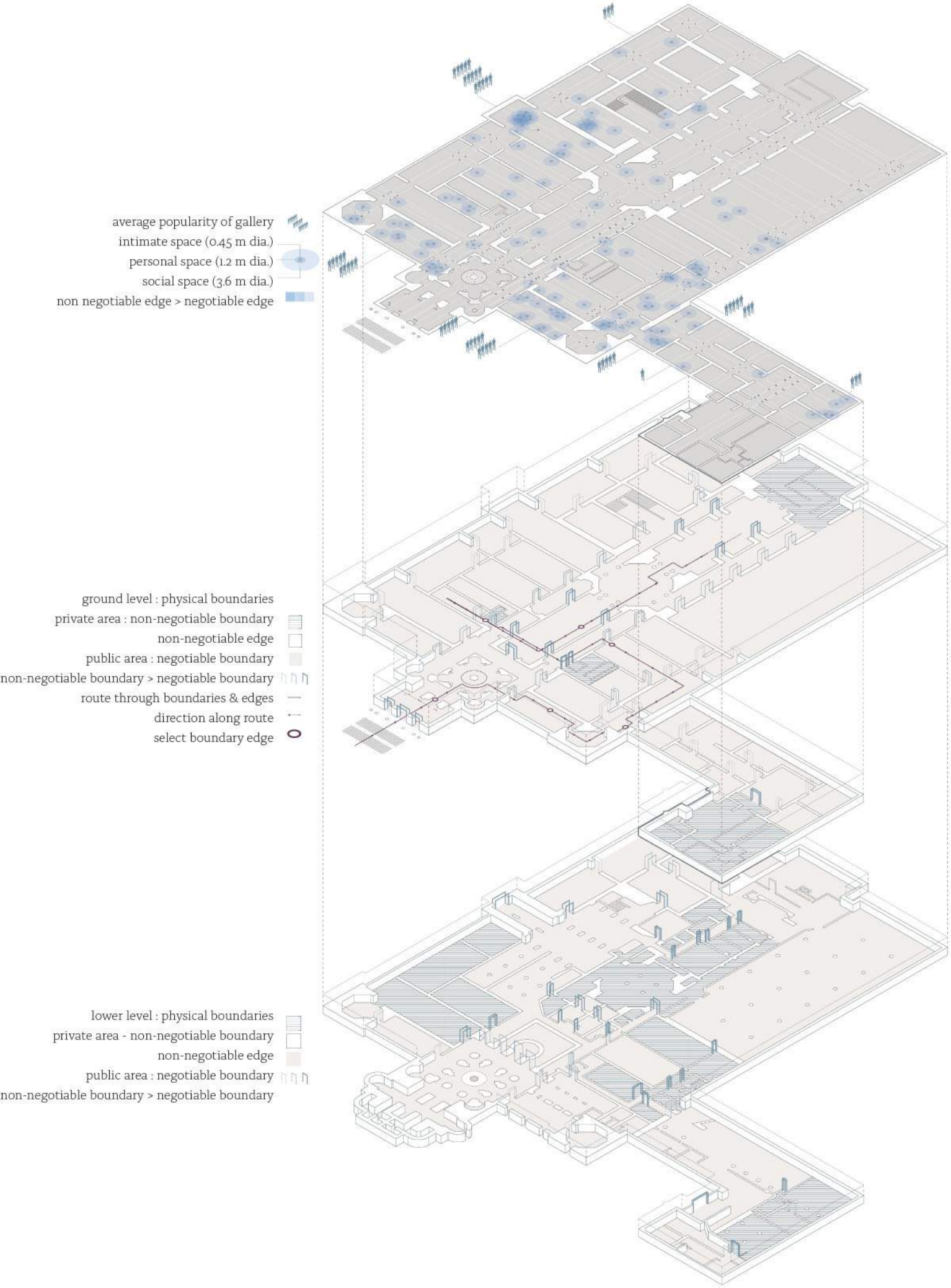
Edge pertains to proximity.

Yet, both operate on a spectrum of negotiability.

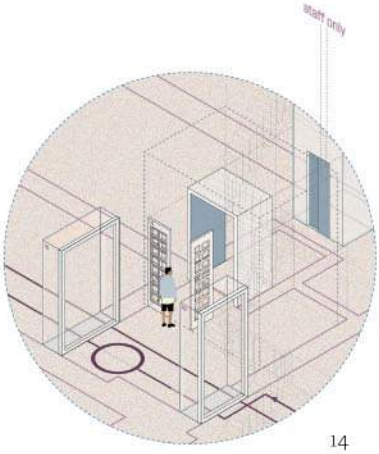
The negotiable is that which is dynamic, which relinquishes authority; which offers room for the user to delimit their experience in accordance with their understanding of cultural, political and physical boundaries. The non-negotiable is that which is static; which prescribes, revoking the user's agency.

Boundaries and edges contain a range of typologies: architectural, spatial or typographic. Yet, they all behave architecturally, defining occupiable and non-occupiable space - here, in the context of the museum as an institution, and art as a precious object.

catalogue : edge and boundary



exploded axonometric



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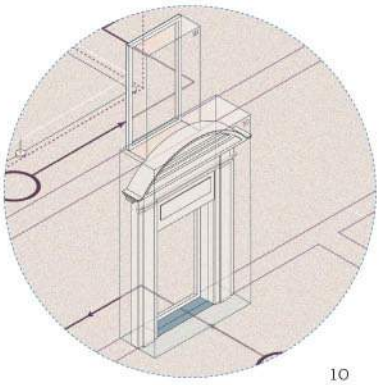

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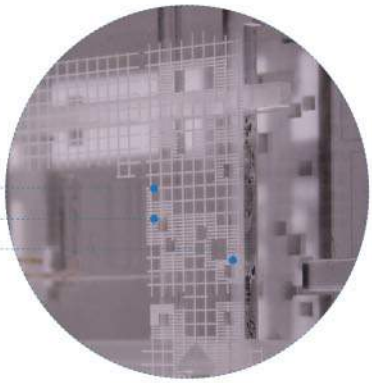
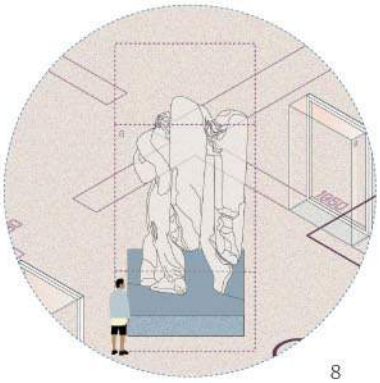


THE MUSEUM AS A NEGOTIABLE GRID

Together, the edges and boundaries of the Museum shape a territory with varying degrees of negotiability, constructing a viewer's relationship to artefacts.

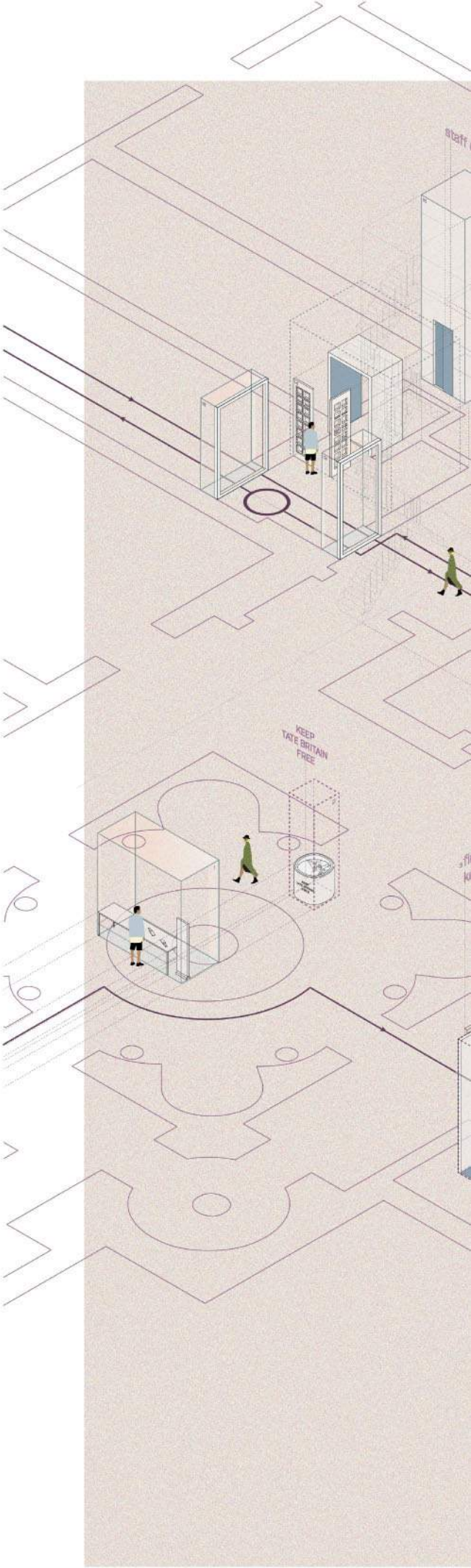


8

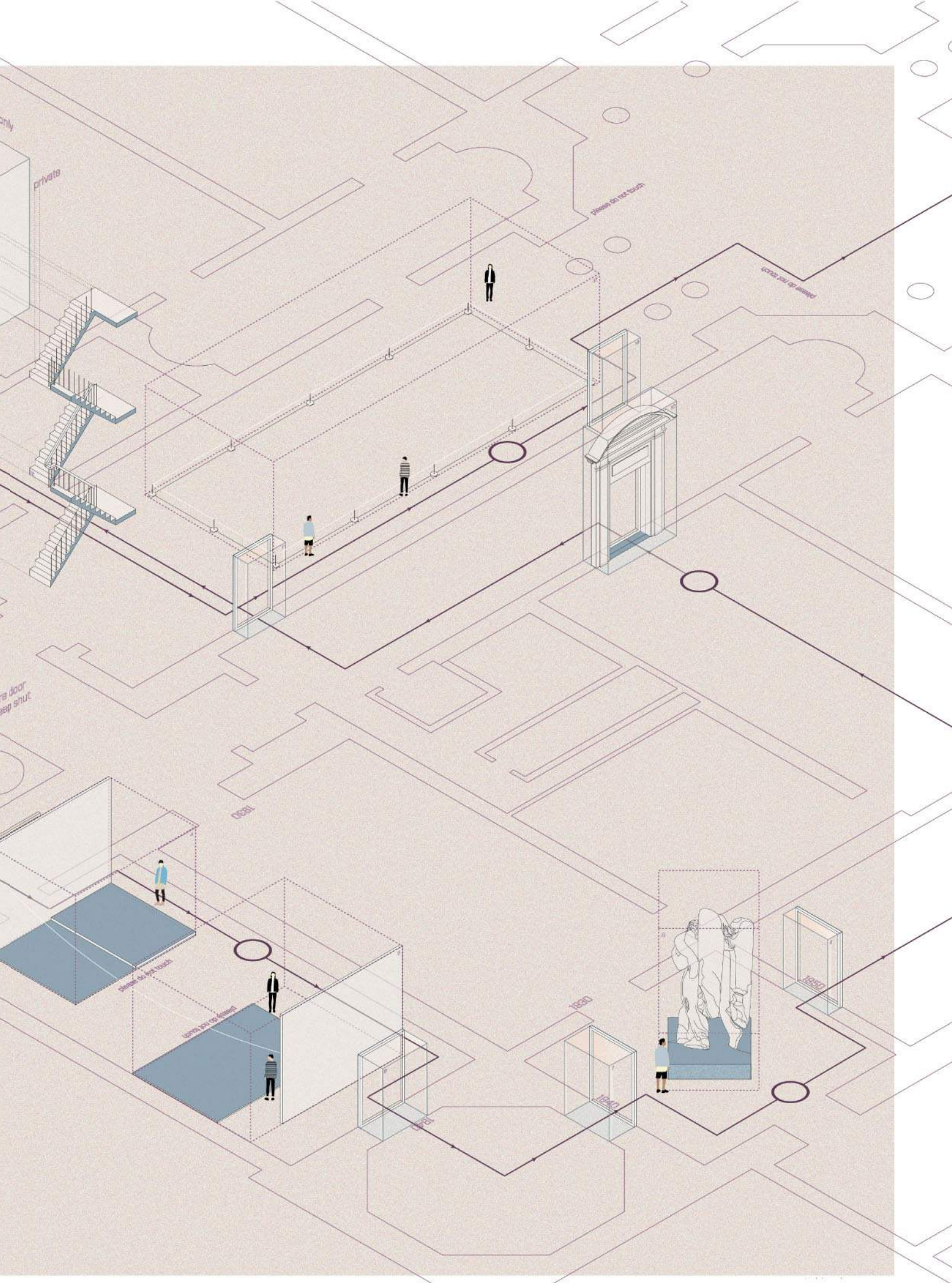
FIGURES, DOORS AND PASSAGES

"If anything is described by an architectural plan, it is the nature of human relationships, since the elements whose trace it records - walls, doors, windows and stairs - are employed first to divide and then selectively to reunite inhabited space." [1]

[1] *Robin Evans, Figures, Doors and Passages (1978)*



artefact, negotiable edge : 2, 4, 5, 8, 17 private stairwell, non-neg
fire door, negotiable boundary : 3, 15 staff entryway, negotiable



otiable boundary : 12
boundary : 14

negotiable boundary
non-negotiable boundary

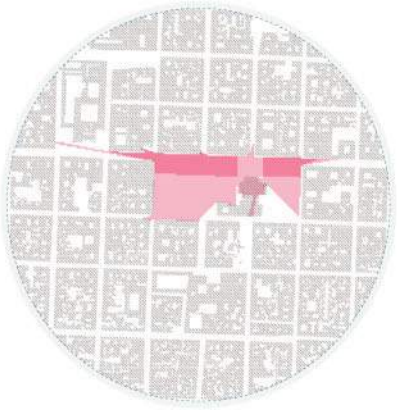
negotiable edge
non-negotiable edge

03 DESIGNING FOR NEGOTIABILITY

location: london, uk
instructor: naiara vegara
marie de monseignat
katya larina
project type: arch. assoc.
spring semester visiting school

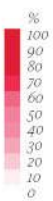
If you extend the definition of negotiability to the boundaries and edges of an urban environment, you begin to understand the porosity of that environment, architecturally and thereby, socially.

Looking at Morelia, Mexico - a city whose historical center was built under Spanish rule - one begins to understand the relationship between the colonial typology, the program of each urban block and the degree of negotiability. Namely, buildings in immediate proximity to the central Cathedral de Morelia have public or semi-public programs, which infer a greater degree of negotiability. On the contrary, the periphery is heavily populated with local residences, which are non-negotiable in nature.

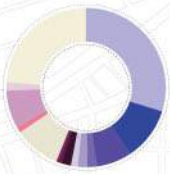


1.5 m

This is a serial study using LadyBug showing the degree of visibility at varying elevations of Cathedral de Morelia - the city's most important and most frequented landmark. The first and last elevation distinctly show how visibly porous the city's inner courtyards become as one progresses upwards. So, to whom does the city appear porous? The tourist or the resident?



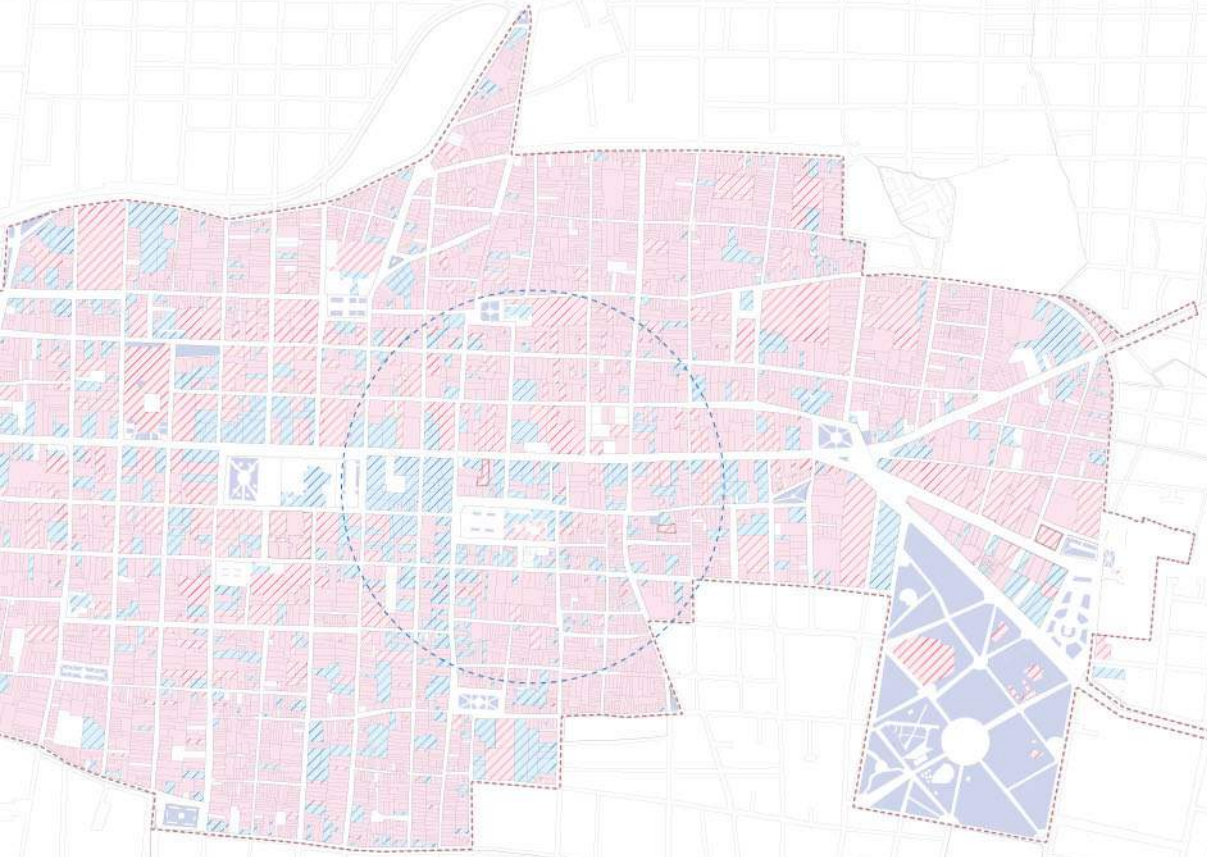
6 m 12 m 18 m 24 m 30 m

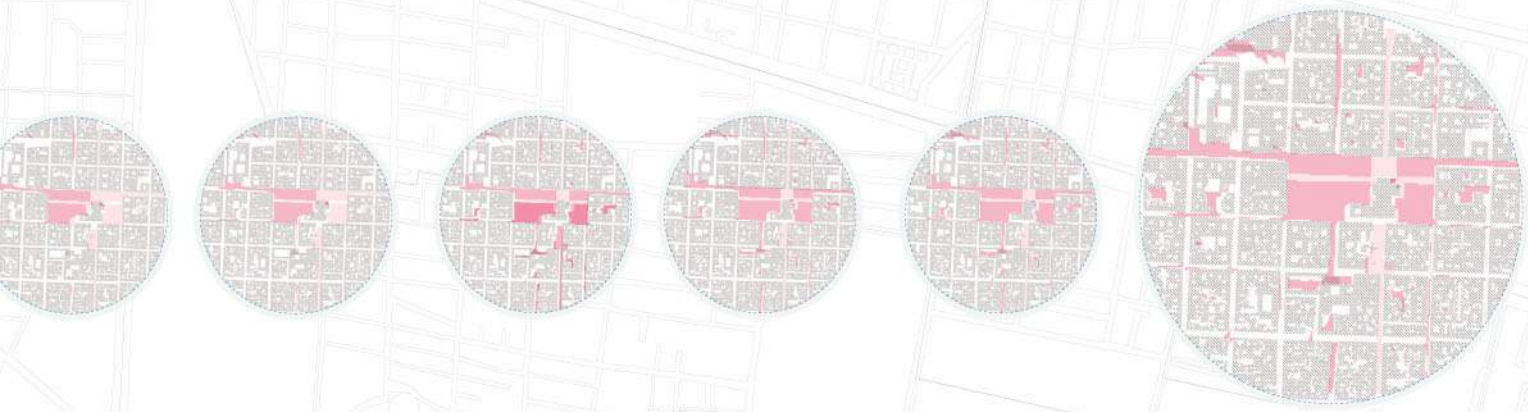


residential
mixed residential
commercial
commercial w/ offices
offices

hotels
parking
bodegas
industry
facilities

churches
green spaces
empty lots
roads





36 m
42 m
48 m
54 m
62 m
68 m

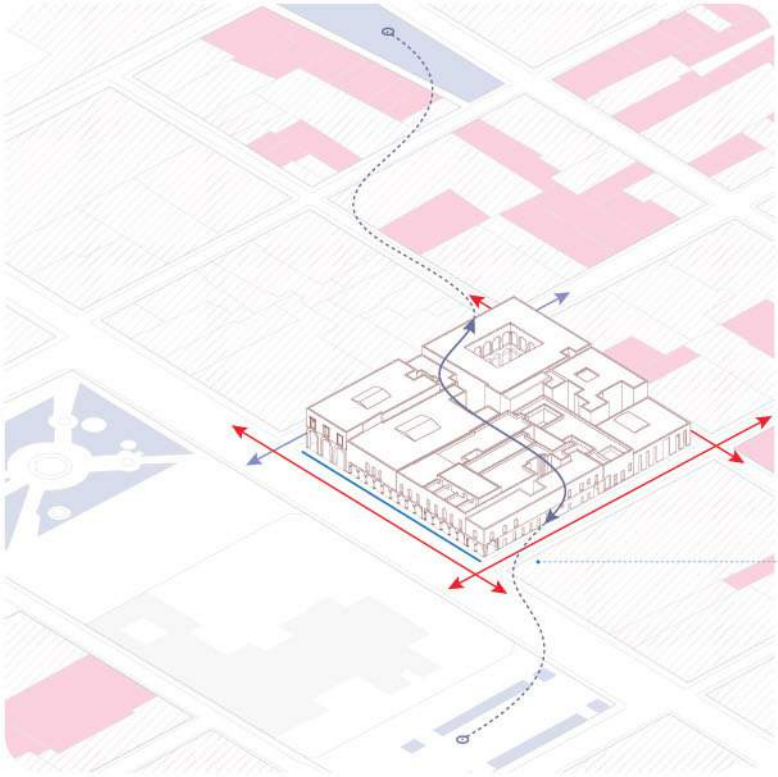
DECOLONIZING THE BLOCK

Taking the block directly across from Cathedral de Morelia, this unrolled elevation shows the degree of porosity, and so negotiability, in a typological sense. Clearly, the cathedral-facing façade is the most porous, where as that facing the residential perimeter is the least. This is immediately challenged when one takes a section through each side of the block where the courtyards dominate.

The strategy then becomes to generate a tertiary programmatic path that links areas of high negotiability and begins to dissolve the colonial typology in an effort to challenge the following statement : *"the city has...become more a place to come to work rather than live."*[1]

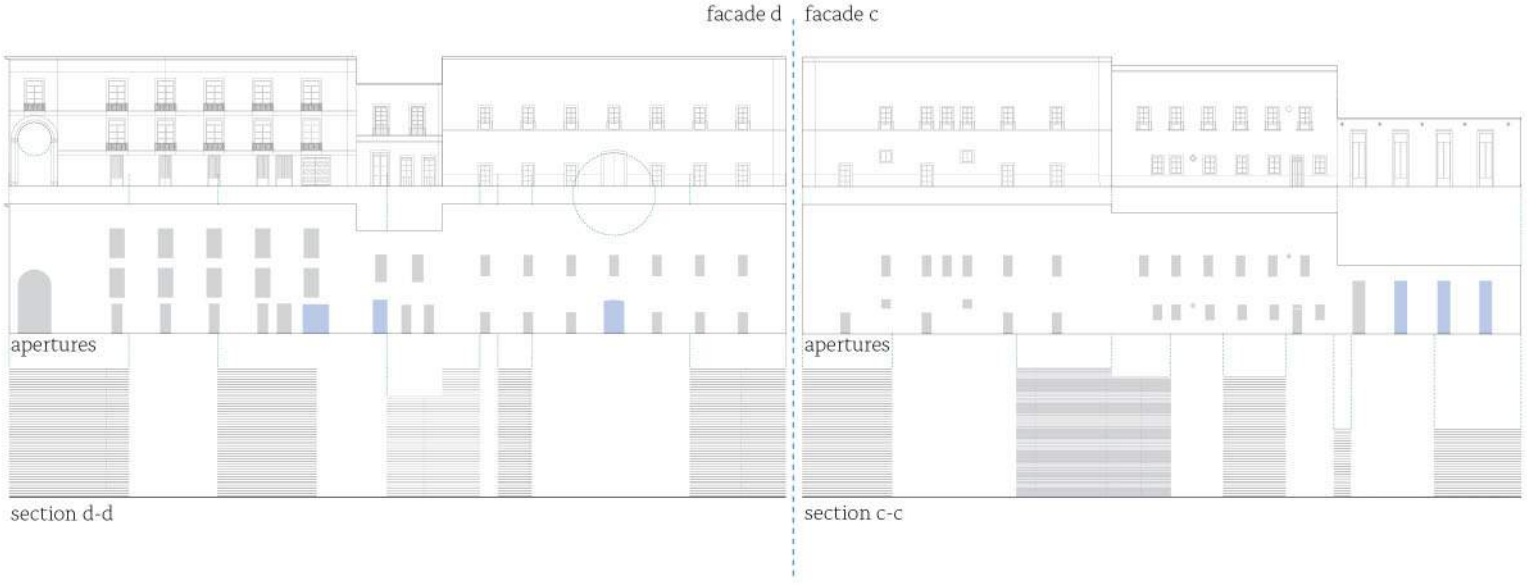
The space is inhabitable 24 hours a day, performing as a pocket park and community nook during the day-time and as a dance and performance space in the night-time.

1 *Alejandro Magana, born and raised in Morelia*

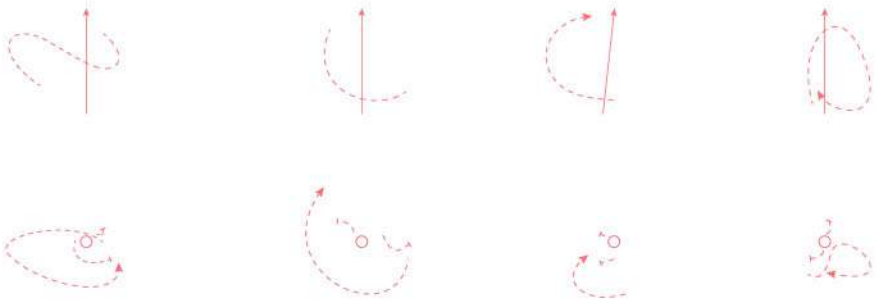


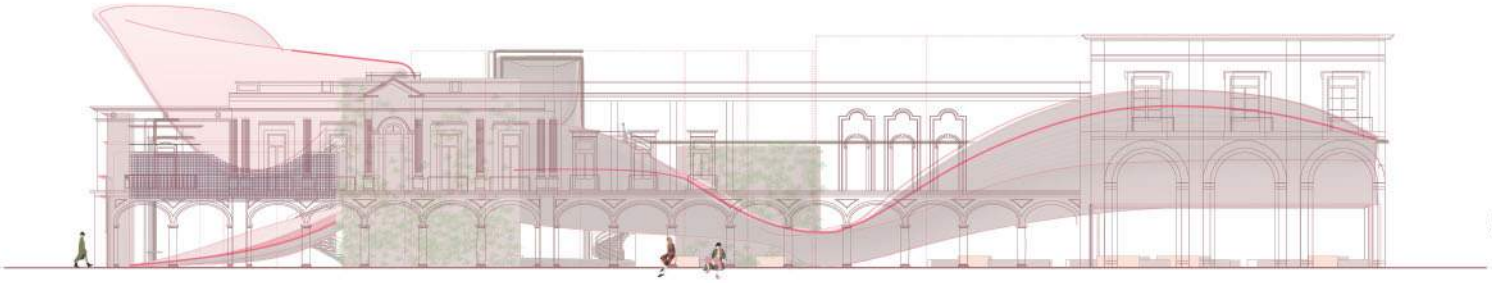
xray elevation / section a-a

- 01 : primary circulation
- 02 : secondary circulation
- 03 : tertiary circulation



motion diagram
picture/plan/elevation

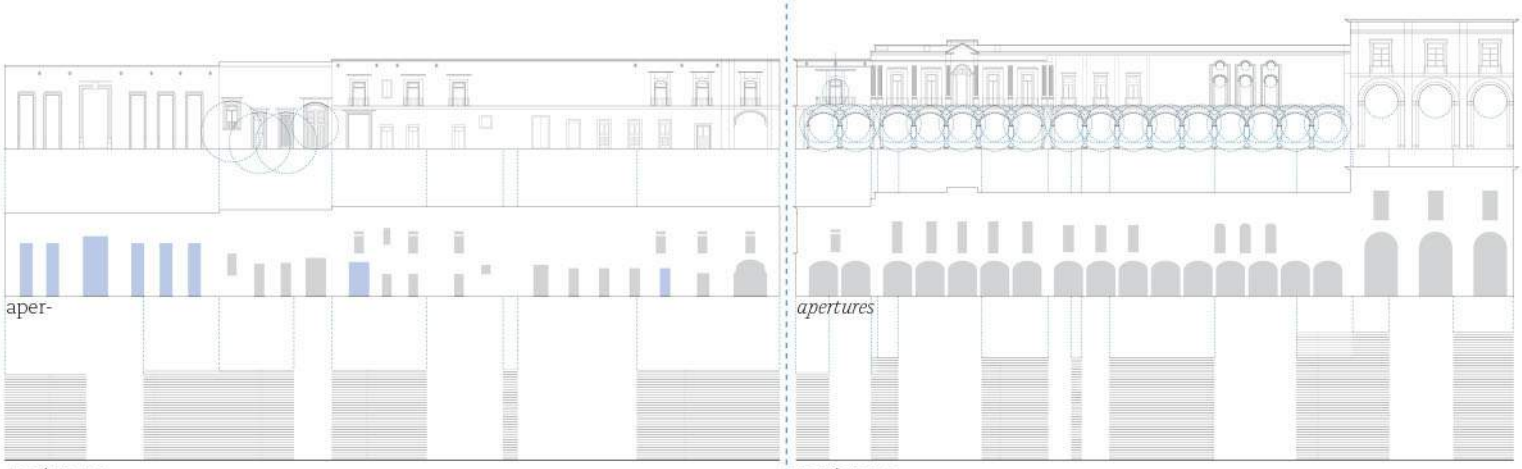




xray elevation, section a-a

facade b

facade a



aper-

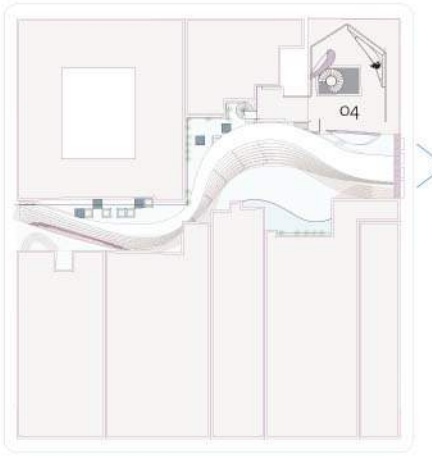
apertures

section a-a

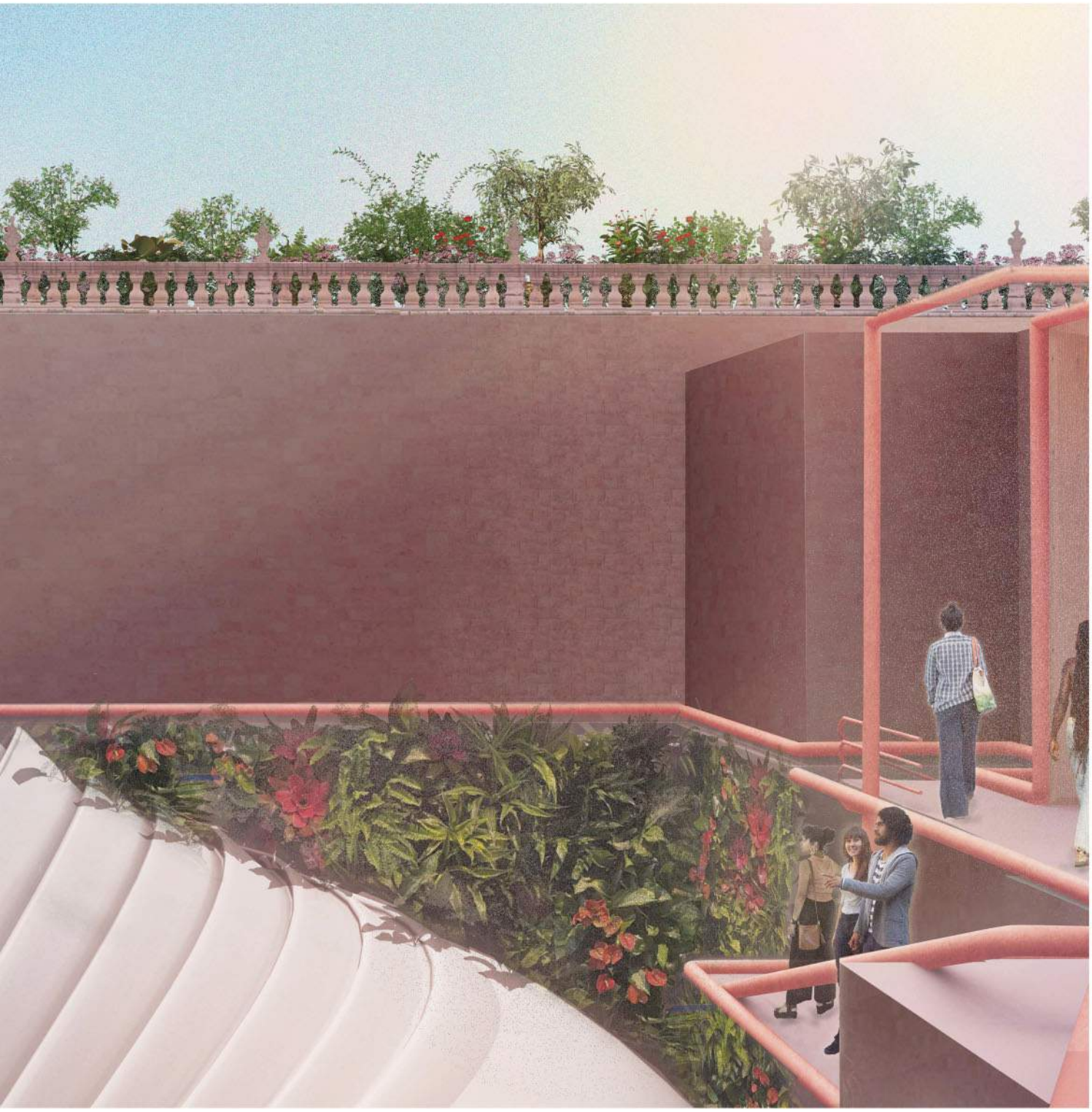
section a-a

plan a : a

01 : rehearsal space
02 : la balera
03 : exhibition cove



plan b : b
04 : community hub



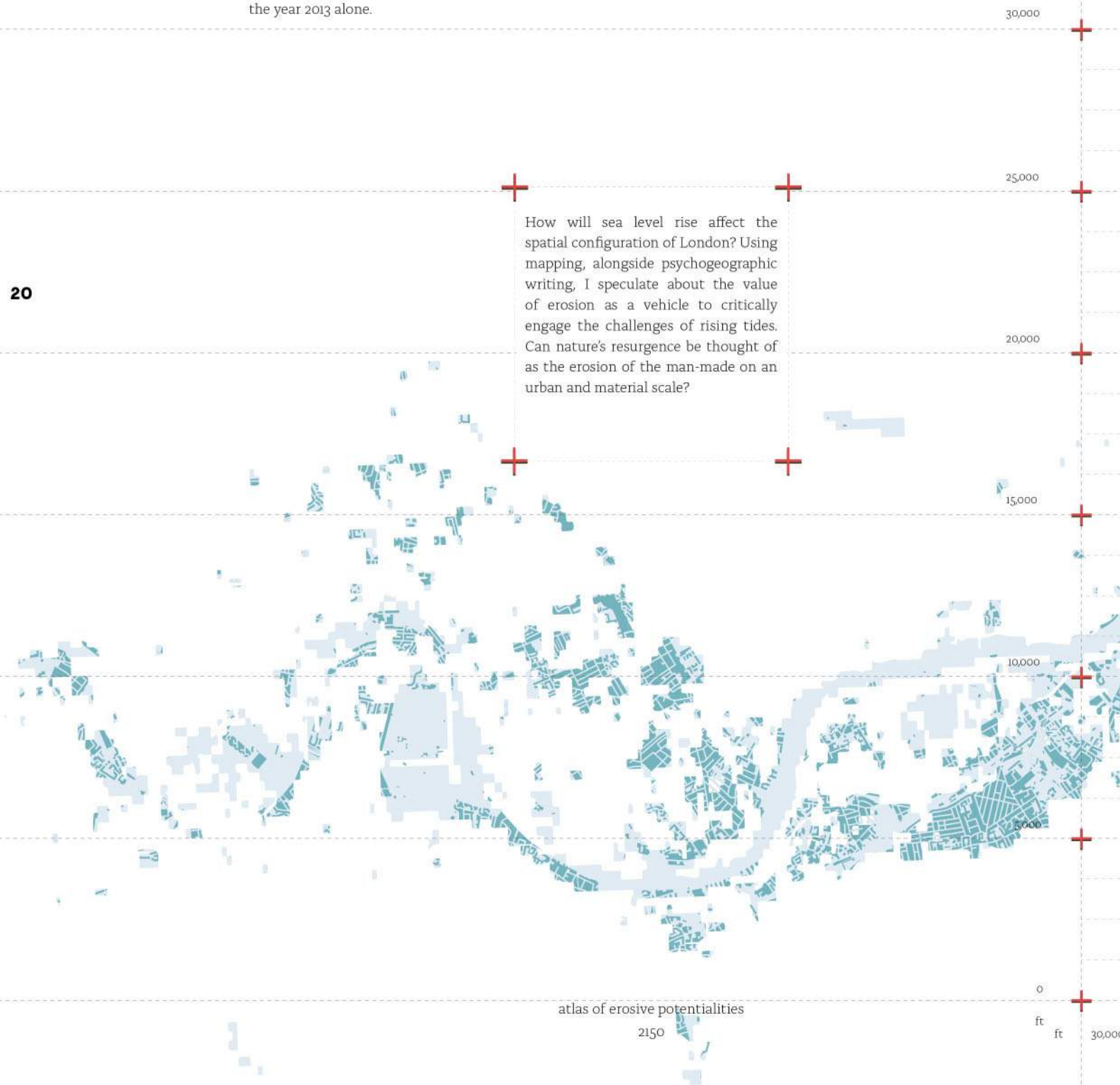
aerial view overlooking canopy

04 ATLAS OF EROSIVE POTENTIALITIES : ARCHITECTURAL NARRATIVES IN THE FACE OF SURGING SEAS

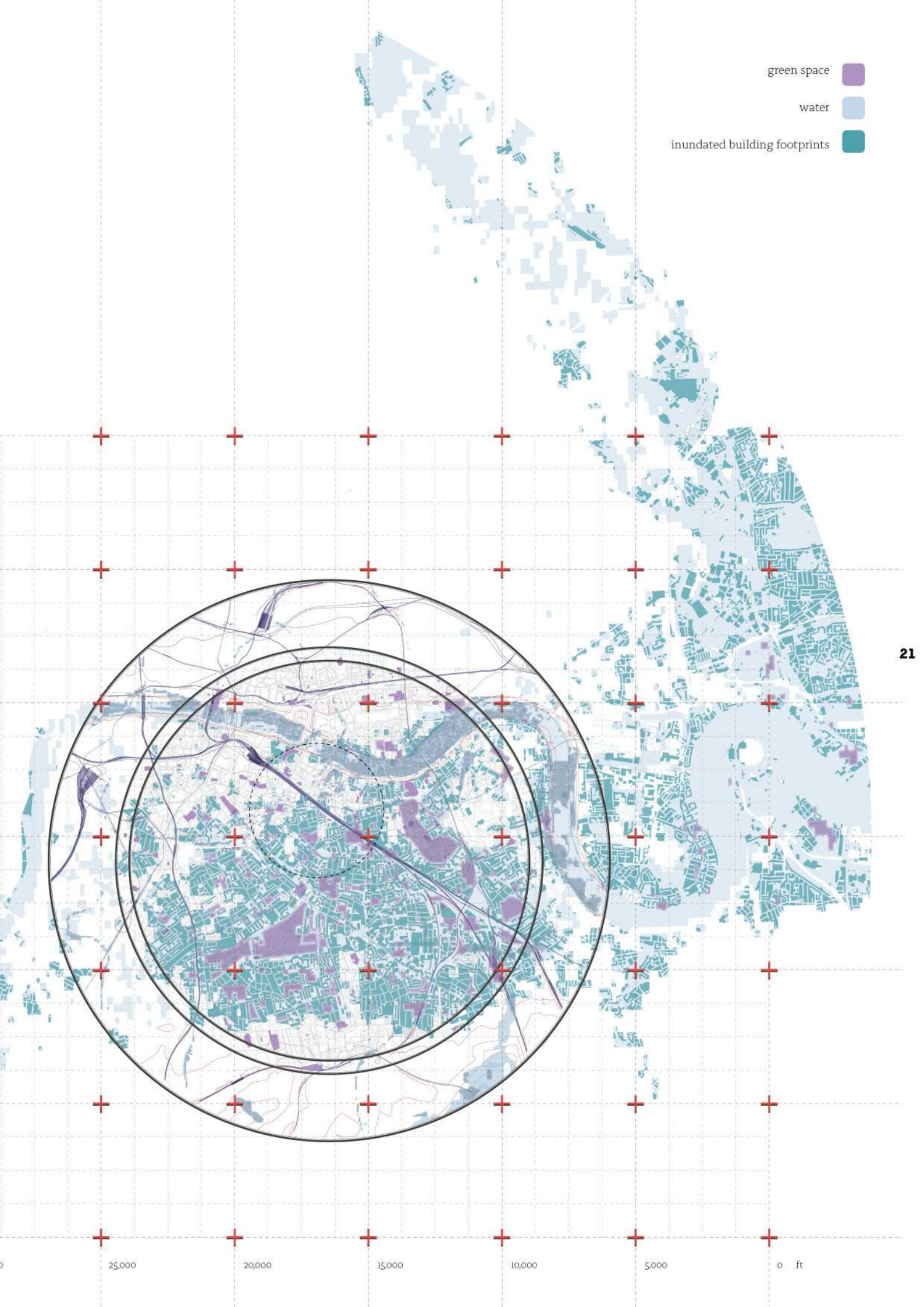
location: london, uk
adviser: daniel barber
s.e. eisterer
thesis: upenn, year 04
honors thesis

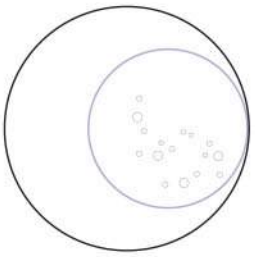
London is inherently vulnerable to flooding as a result of high tides and storm surges on the Thames, exacerbated, at an increasing frequency, by storms in the North Sea. Since 1984, the city has been on the defense, primarily in protection of the City of London, when the government erected the Thames Barrier. The 1,800-foot retractable floodgate stretches between Silvertown and New Charlton, cutting off high tide ahead of the meanders that define London's cityscape. Designed for a one in a one-thousand-year event, the two-billion-pound investment has already been used 182 times, 50 times in the year 2013 alone.

How will sea level rise affect the spatial configuration of London? Using mapping, alongside psychogeographic writing, I speculate about the value of erosion as a vehicle to critically engage the challenges of rising tides. Can nature's resurgence be thought of as the erosion of the man-made on an urban and material scale?

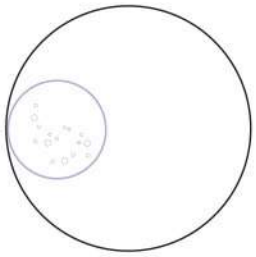


atlas of erosive potentialities
2150

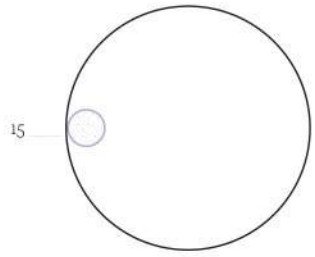

green space
water
inundated building footprints
25,000
20,000
15,000
10,000
5,000
0 ft



60 to 70 % of anthropogenic greenhouse gas emissions emanate from cities



the construction industry is responsible for 40 % of UK's carbon emissions



15 % of London is within a recognized flood risk zone from either tidal or fluvial flooding

PREFACE :

WATER is the first means to traverse the world; to exchange resources between faraway lands; to extract and redistribute. Water is inherently endowed with the quality of a fuel—energy, which can be transformed into power; but as found, it is a potentiality, a "not yet rigidified [form] of power."[1] Within a reservoir, it becomes an echo of socio-political conditions for the production of capital, a mirror image of a place in time.

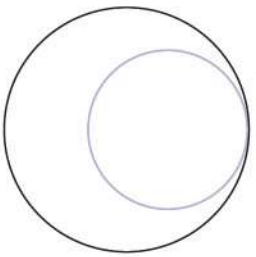
Once rigidified, it can become a tool for human use and abuse, losing its identity as anything but a 'means to.' [2] The most notable periods in the history of the United Kingdom are defined as those of greatest geographic reach, not in terms of landmass but in terms of claim to offshores. The hard divisions between land and water stem from cartography, of mapping as a tool for the "exploration" of offshore territories. Globally, waterways became dominant sites of economic activity. Shoreline factories, warehouses and ports enabled the centralization of economic production, distribution and exchange. The contemporary domestication of water emanates from the transformation of these labor practices, from predominately industrial in nature to primarily service-oriented. Waterfronts have become the sites of the spatial transformation of capital.[3] Specifically, London's riverfront is now the site of the global economy, of vertical forests, which offer far-reaching views that dissolve locality and instill globality.

...

Architects such as Keller Easterling and Rem Koolhaas have spoken on the value of subtraction or abstinence[4] in architecture; both of these terms, however, operate on the same timescale of quick or momentary exchanges. This thesis speculates on the value of erosion, a term, which implies a longer, geological, time scale in the transformation of London's built environment. Erosion is commonly defined as a natural process whereby an entity is being eroded by wind, water or other natural agents. In the context of the Anthropocene, however, erosion is hardly a "natural" phenomenon; instead, it is the product of anthropogenic activities. This thesis defines erosion as the gradual removal of the man-made, permitting the resurgence of the non-human within the built environment; it argues that the built environment is full of erosive potentialities—objects, systems, and moments, which bear a capacity for erosion as a means to transform place in the face of surging seas.

Subsequent chapters tell the psychogeography of a person living in a particular time, as a way to illuminate the layers of historical processes, which have led to the climate crisis as experienced today. This thesis explores the relationship between narrative and design; and then, between mapping and narrative. Beginning in 2052, the reader is briefly transported to Post-Carbon London, where carbon-neutral technological solutions are failing to resolve the crisis. Then, it focuses on three time periods – 1870, 2020 and 2150, presented chronologically; the objective is to imply a longer time scale for the contemporary and future realities. 1870 suggests the onset of the carbon emission curve, which we continue to accelerate; 2020 is the moment of potentiality, where indecision and inaction will (and do) prove detrimental; and 2150, as the projected scenario of managed retreat. This thesis proposes a reality where the resiliency of London's built environment is not predicated on defense. Instead, the built environment becomes a moment of exchange between man and the non-human; in this process, architecture and urbanity may be eroded, but their value multiplies as they become hosts to new habitats, human and non-human, both.

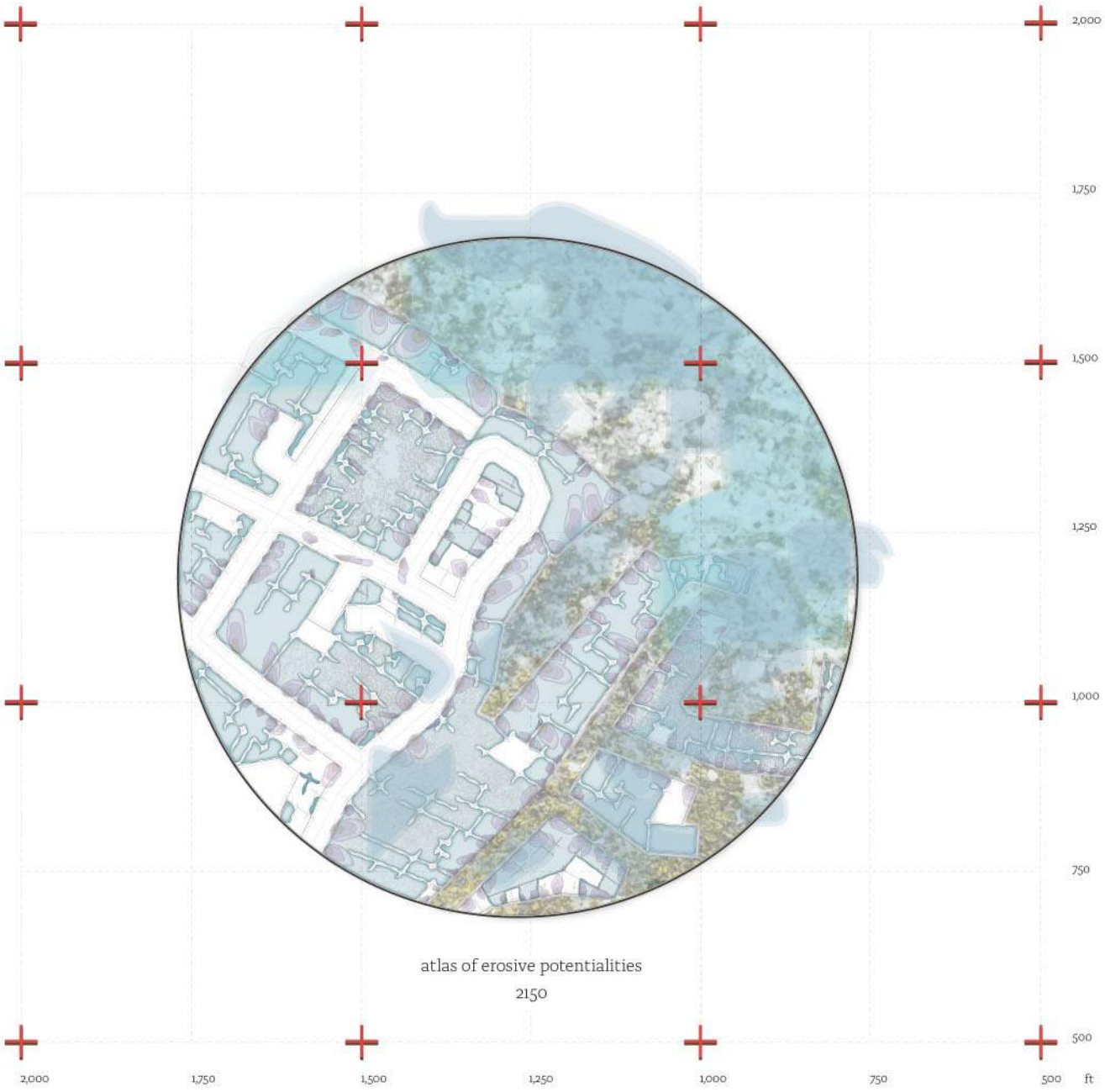
1 Pinkus, 2016
2 Harman, quoted in Gage, 2019
3 Harvey, quoted in Dawson, 2017
4 Koolhaas, Otero-Pailos, GSAPP Transcripts, 2014



13 of the world's largest 20 cities are port cities

silicone cast of eroded sidewalk, Bermondsey

SCALAR SHIFTS :
The Atlas deploys scalar shifts to emphasize the need for shifts in resolution. Since the macro scale



atlas of erosive potentialities
2150

requires sweeping and systemic change, the micro scale becomes a productive lens through which to penetrate, frame, define and visualize the problem. Casting was a means to visualize the erosion of the man-made, challenging the premise of erosion as a 'natural process' in the anthropocene. These preliminary studies are the foundation of my honors thesis.

05 ONE EVEN KEEL

location: yarmouth, maine
instructor: rami el-samahy
project type: mit core 03
m.arch year 02
collaborators: evan ortiz

Driving north on Route 1, you might just miss it. Wedged between two economic forces – the Ford dealership and Dave's Lobster Shack – Even Keel Road is an unassuming dirt road. If you stay the course of its meander, you would find yourself at One Even Keel.

One Even Keel is the site of a newly established riverfront cooperative, leading the transition towards regenerative aquaculture. The few aquaculture facilities in the United States infill unused warehouses and wharfs, remnants of the fossil fueled global network of exchange. The nonresponsive nature of these buildings is unmatched for our need for a regenerative future.

Situated along the Cousins River, One Even Keel sits at the intersection of three ecosystems – marshland, riverfront and forested hillside – each subject to variability. The inherent precarity of the landscape, together with the unpredictability of climate change, demand a facility, which both anchors itself firmly and retains the ability to change over time:
daily, seasonally, yearly, generationally

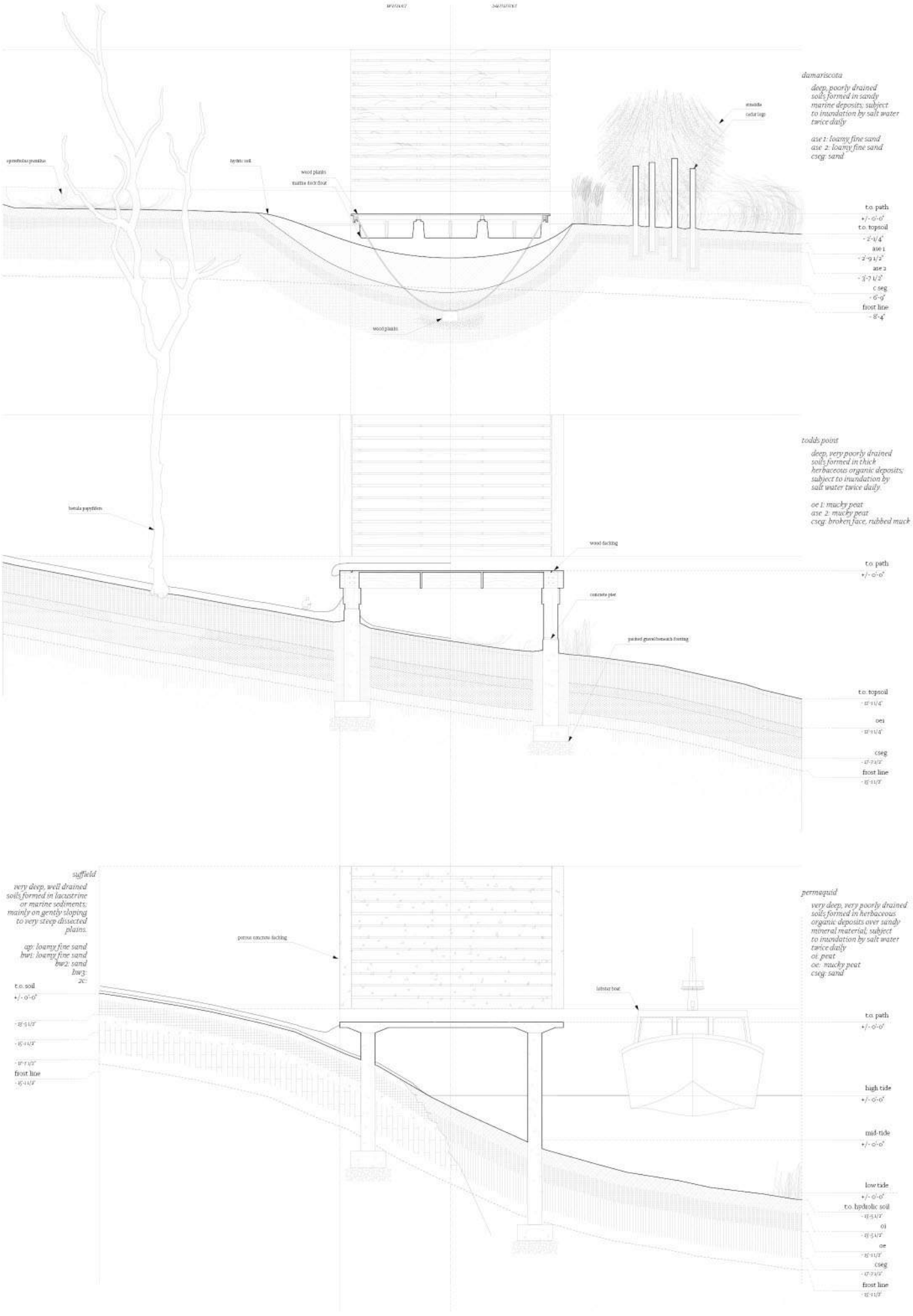
A line is drawn north to south, connecting marshland to river.

Two structures straddle this path, bridging ecologies, forms of production, the public and mariculture, construction typologies.

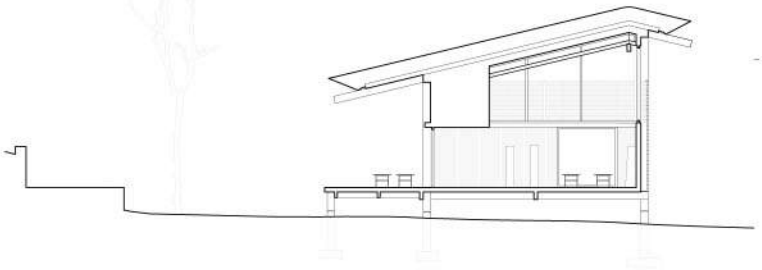
representational model, 1: 100 | *using a split wood with fungal overgrowth to CNC existing theater*

01 FORD DEALERSHIP 02 LOBSTER SHACK 03 ONE EVEN KEEL

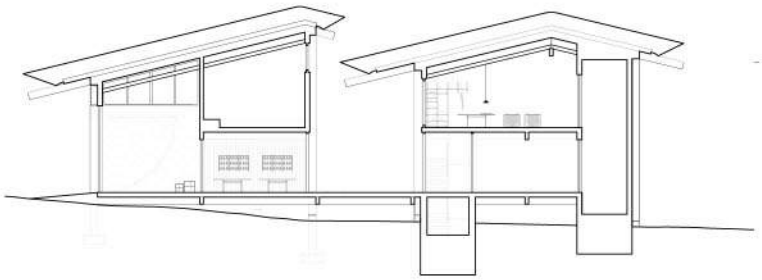
The site is crosses marshland to the north, forested hillside to the west and the riverbed to the south.



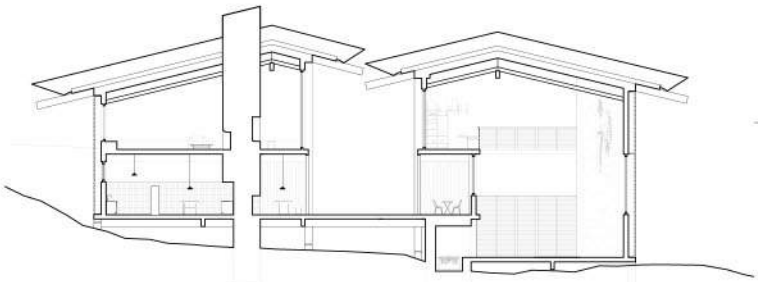
path cross-section across three ecologies, associated soil typologies; path changes in buoyancy and materiality



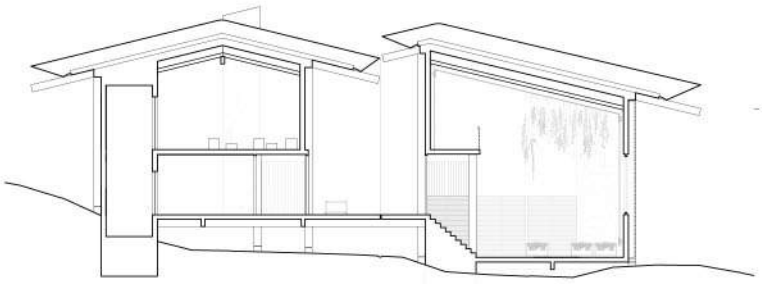
a-a:
cooperative market



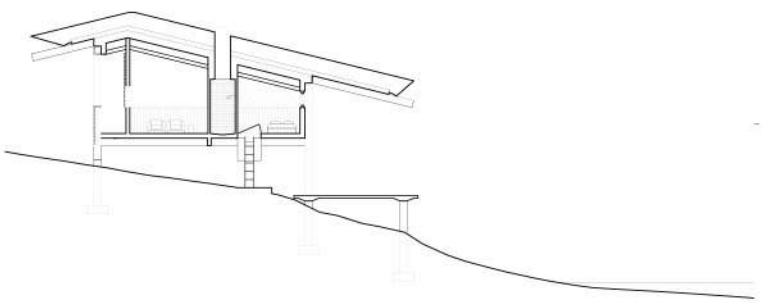
b-b:
delivery and storage
classroom
seaweed nursery
entryway



c-c:
test kitchen
living room
seaweed drying
seaweed processing



d-d:
café
entryway
seaweed drying
seaweed processing



e-e:
lodging

serial cross-sections

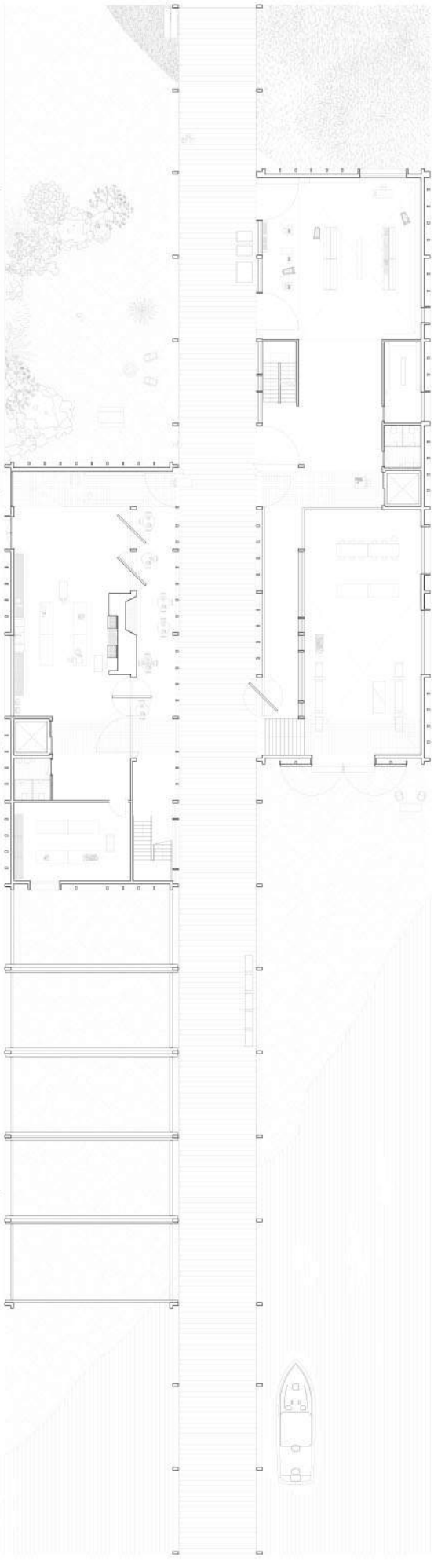
section a-a

section b-b

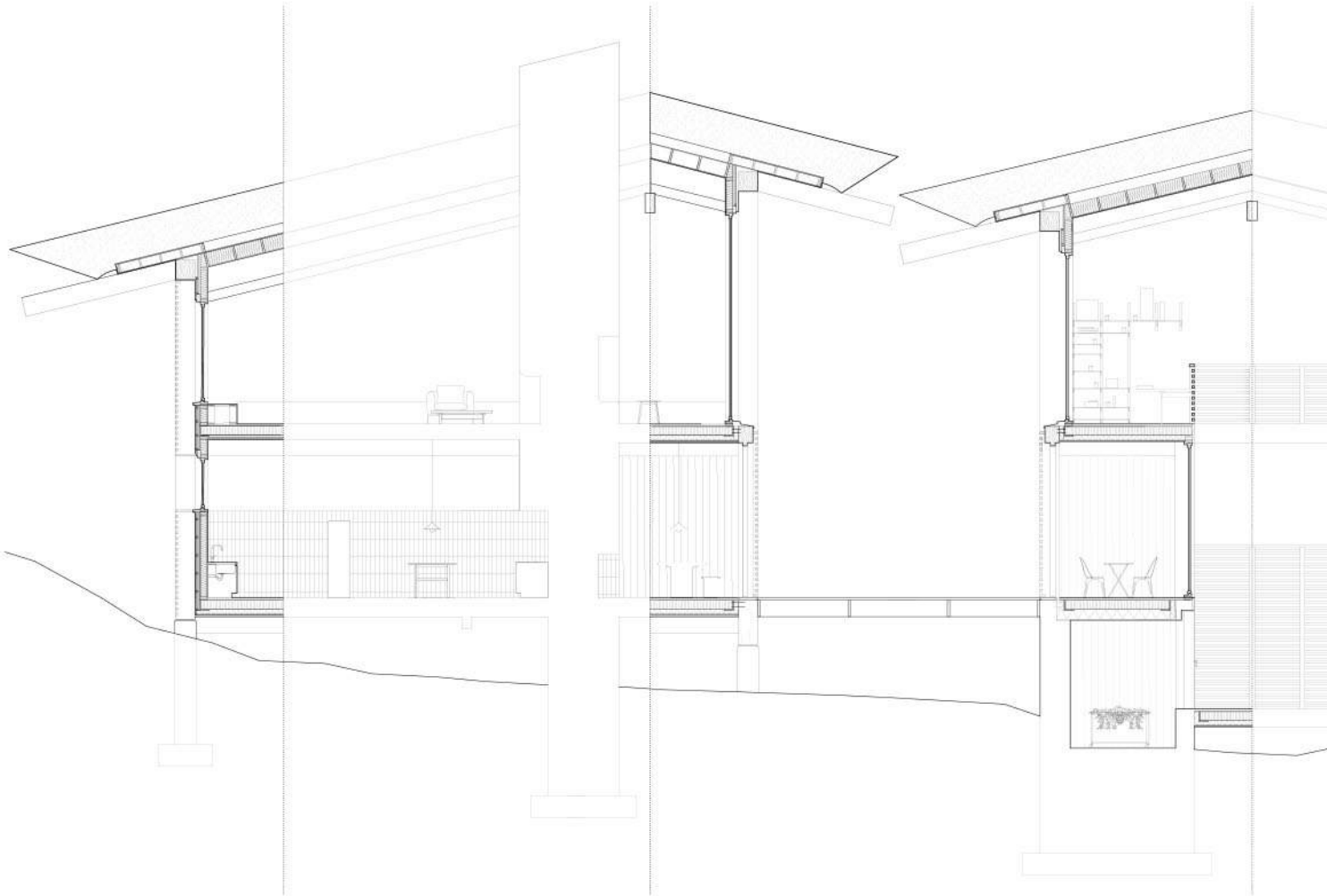
section c-c

section d-d

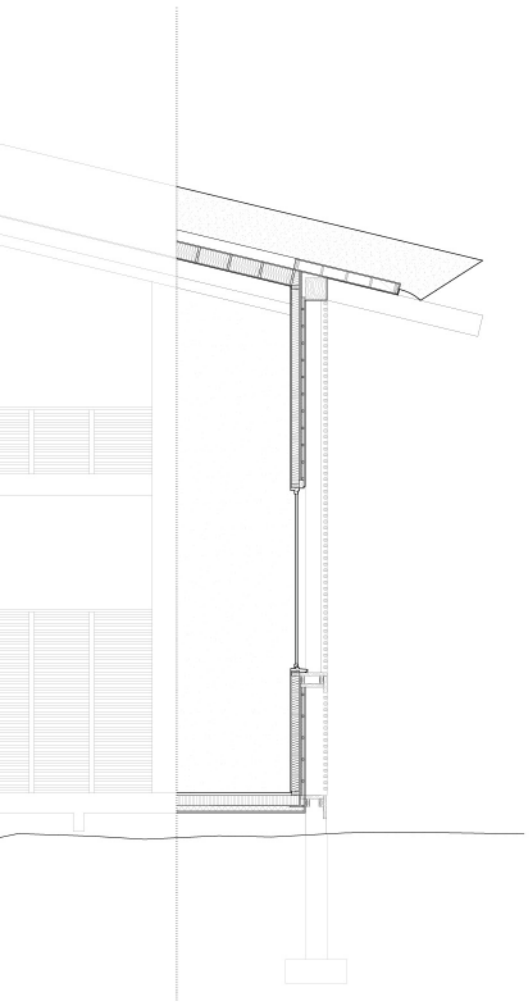
section e-e

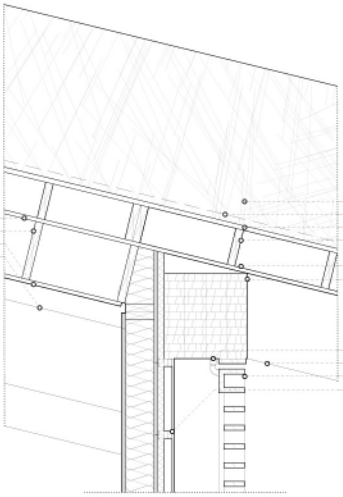


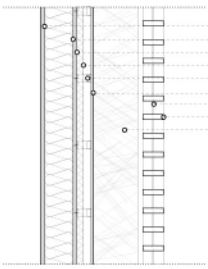
ground floor plan

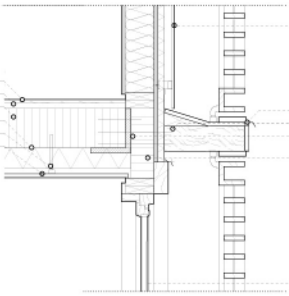


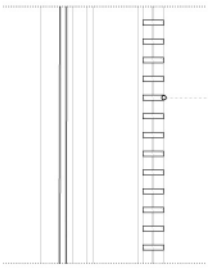
The duality between life and work; production and publicness, as expressed in section. The envelope is designed to "receive" a yearly packing of sea hay as insulation.

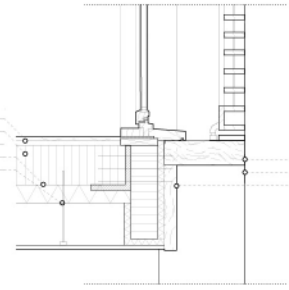


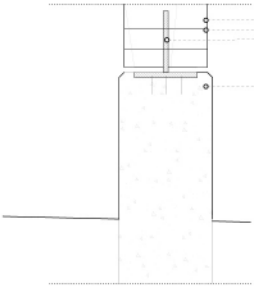

3/4" fiber cement
2x12
3/4" finish plywood
b.o primary beam beyond
2'-6 1/2" sea hay
t.o primary beam beyond
3/4" fiber cement sheathing
2x8 eave structure
3/4" x 4" cedar boards
1'-4" x 1'-4" glulam edge beam
offset pivot hinge
b.o. primary beam beyond
frame of cedar screen
metal mounting clips

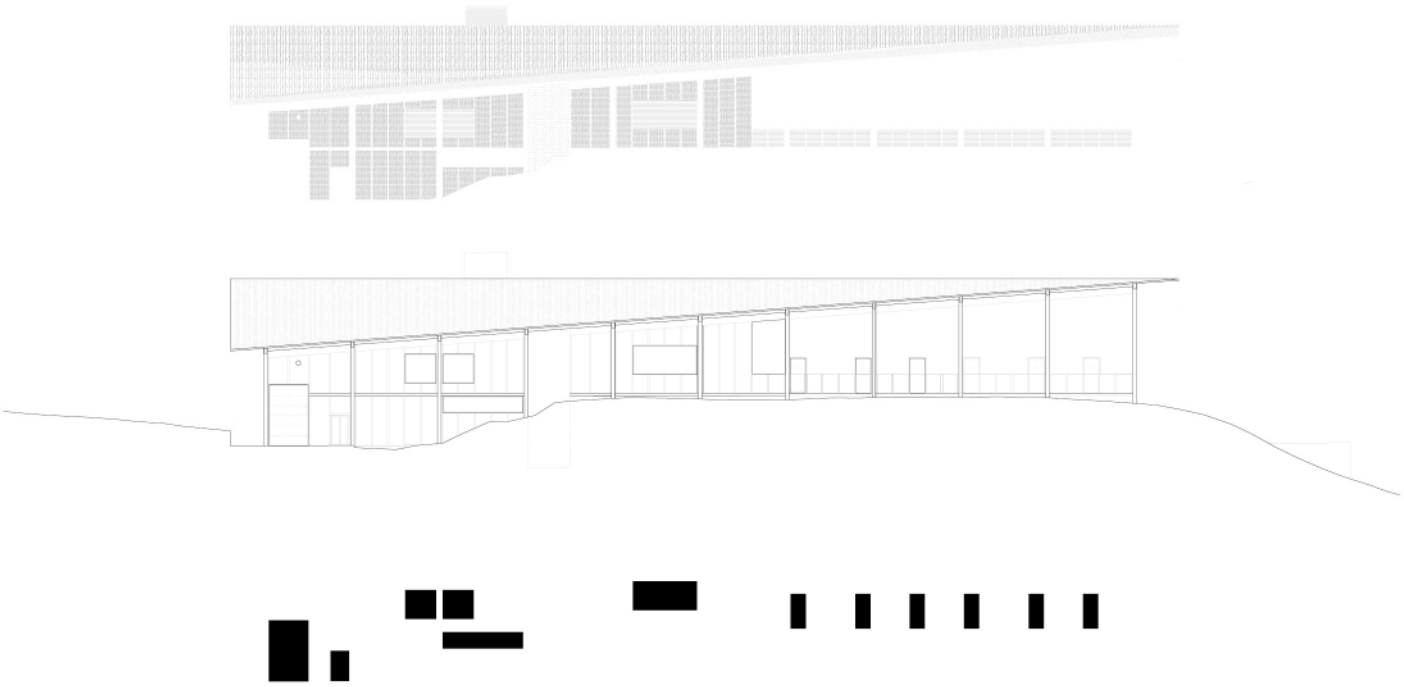

3/4" finish plywood [#]
5 1/2" loose fill cork insulation
3/4" plywood sheaching
1 1/4" rigid cork insulation
2 3/4" metal mounting clips
3/8" fiber cement cladding
1/4"diam. steel rod spacer
1"x 4" cedar boards
9" sea hay *
* in the fall, selected screens are infilled with compacted sea hay from the marsh on the northern edge of the site.


3/4" finished wood floor
1 " sleepers & acoustical mat
2x8 nail laminated timber (NLT)
2" insulated cork board
suspended ceiling hardware
dropped plywood ceiling
fiber cement rainscreen, typ.
metal flashing
carbon fiber fasteners at thermal break
steel bracket to mount NLT floor system to primary structure
4x12 Glulam Beam
double glazed, full height window

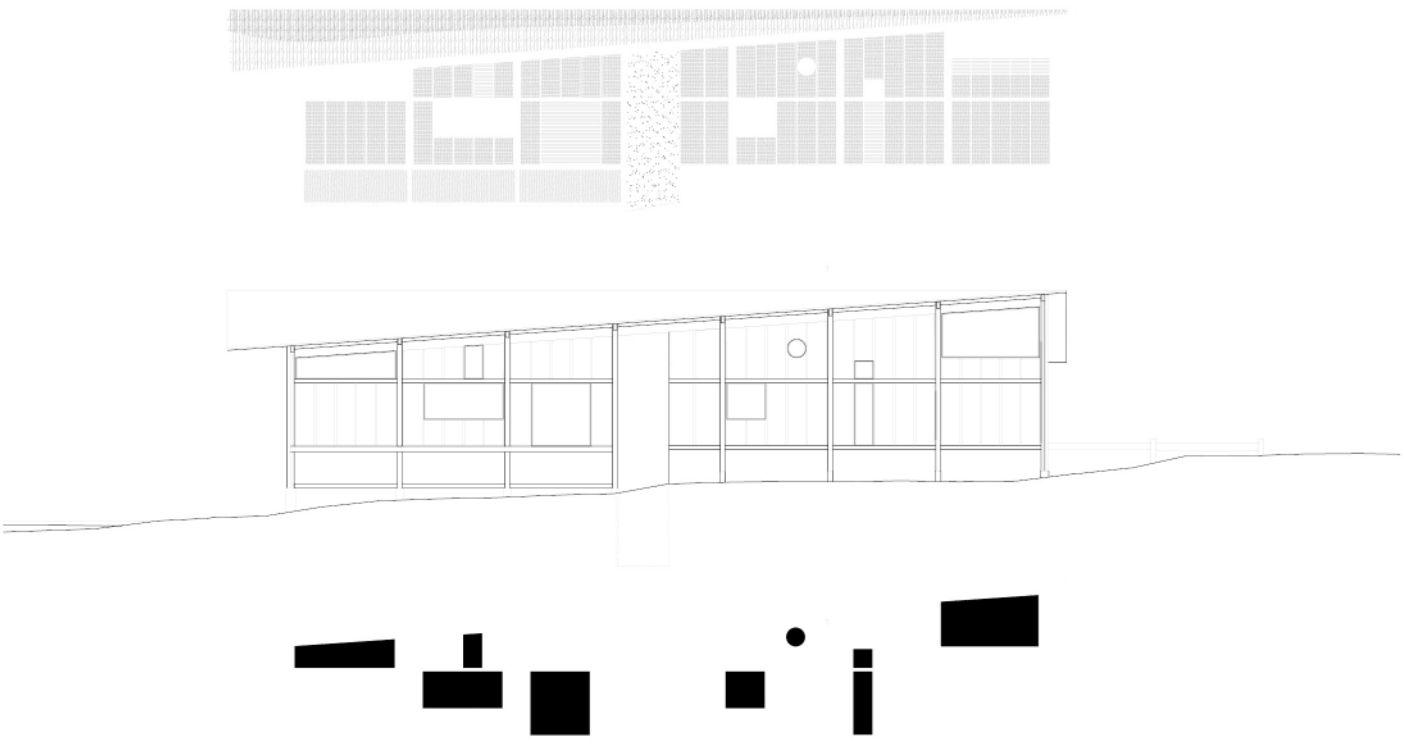

typical screen


3/4" finished wood floor
1 " sleepers & acoustical mat
2x8 nail laminated timber (NLT)
4" insulated cork board
suspended ceiling hardware
saddle between path deck & finish floor
glulam column beyond
cedar fascia


8 "x16" glulam column
bolt connection
steel t-connection embedded in concrete pier
concrete pier



western facade, nestled in forested hillside



eastern facade, overlooking cousins river

envelope

structure

aperture

north facade , picture window overlooking marshland | *milled landscape using a 2x6 glue-up;*

envelope

structure

aperture

interior view of cooperative market, opening to path | *hand-crafted structure and envelope*

06 COLLECTIVE REPLAY

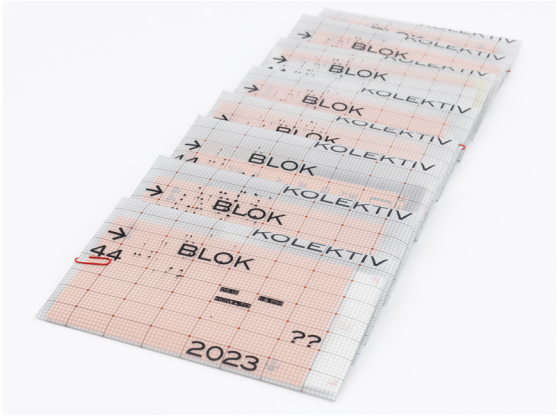
location: belgrade, serbia
instructor: ana miljacki
project type: collective studio
collaborators:
christopher allen
jenna schnitzler
lauren gideonse
sloan aulgur
susan williams
ina wu

Our REPLAY proposal was introduced through an envelope with a series of loose-leaf handouts. Each envelope contains a character card of a quasi-fictional quality, loosely based on people we met in Belgrade. The network of people contained within is the basis for the culminating portion of this studio, including its architectural proposal.

The cards give a character overwiew along with potential housing needs and social connections between the group. The characters reflect a shared need for affordable housing, community connection and an openness to alternative modes of living.

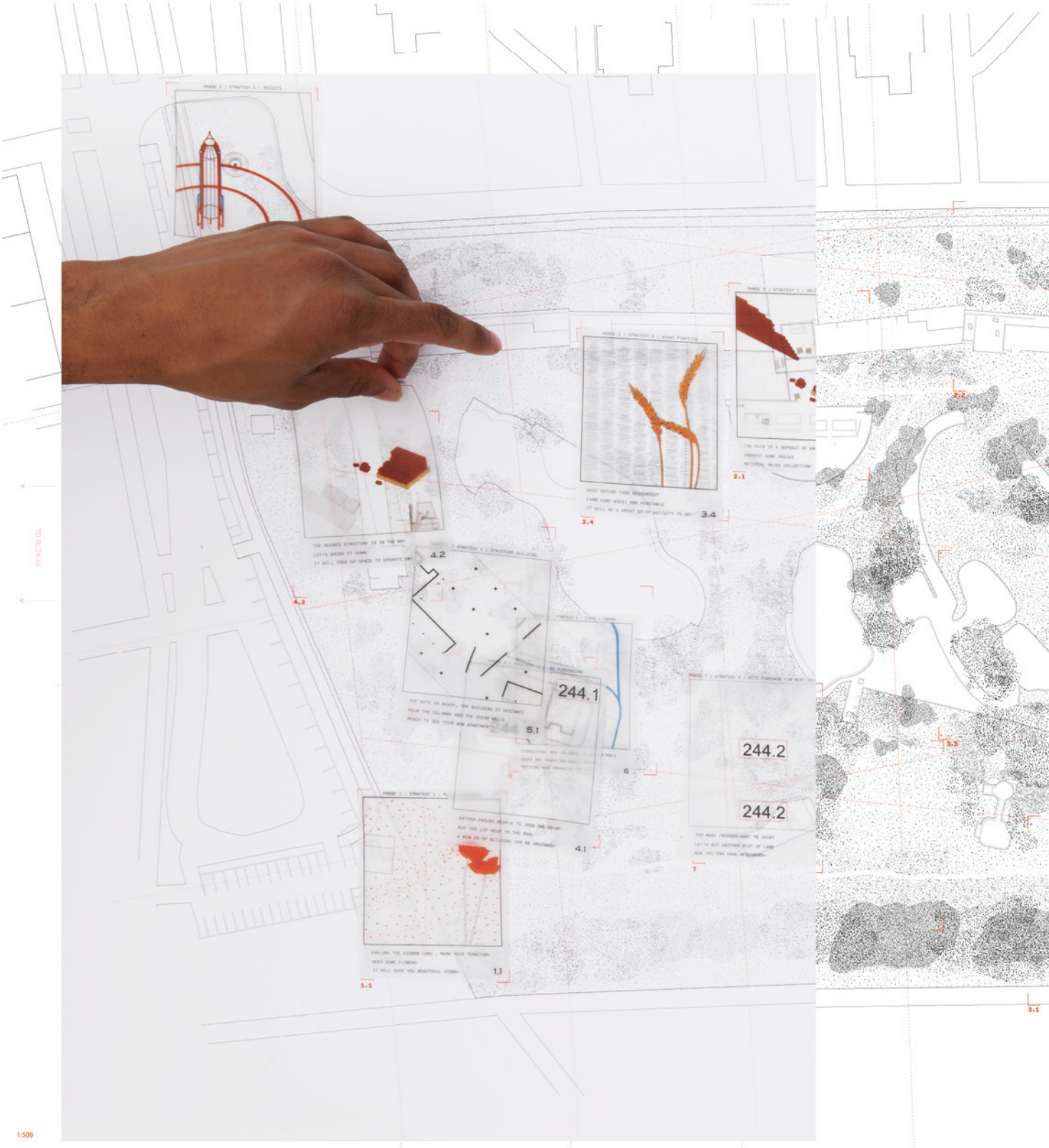
Together, as a Collective Studio, we envisioned a framework in which the Co-Op exists, strategized choosing of the site, explored modes of living and care, and speculated on how it could all grow in the future.

envelope containing "how to" cards for constructing a cooperative housing model

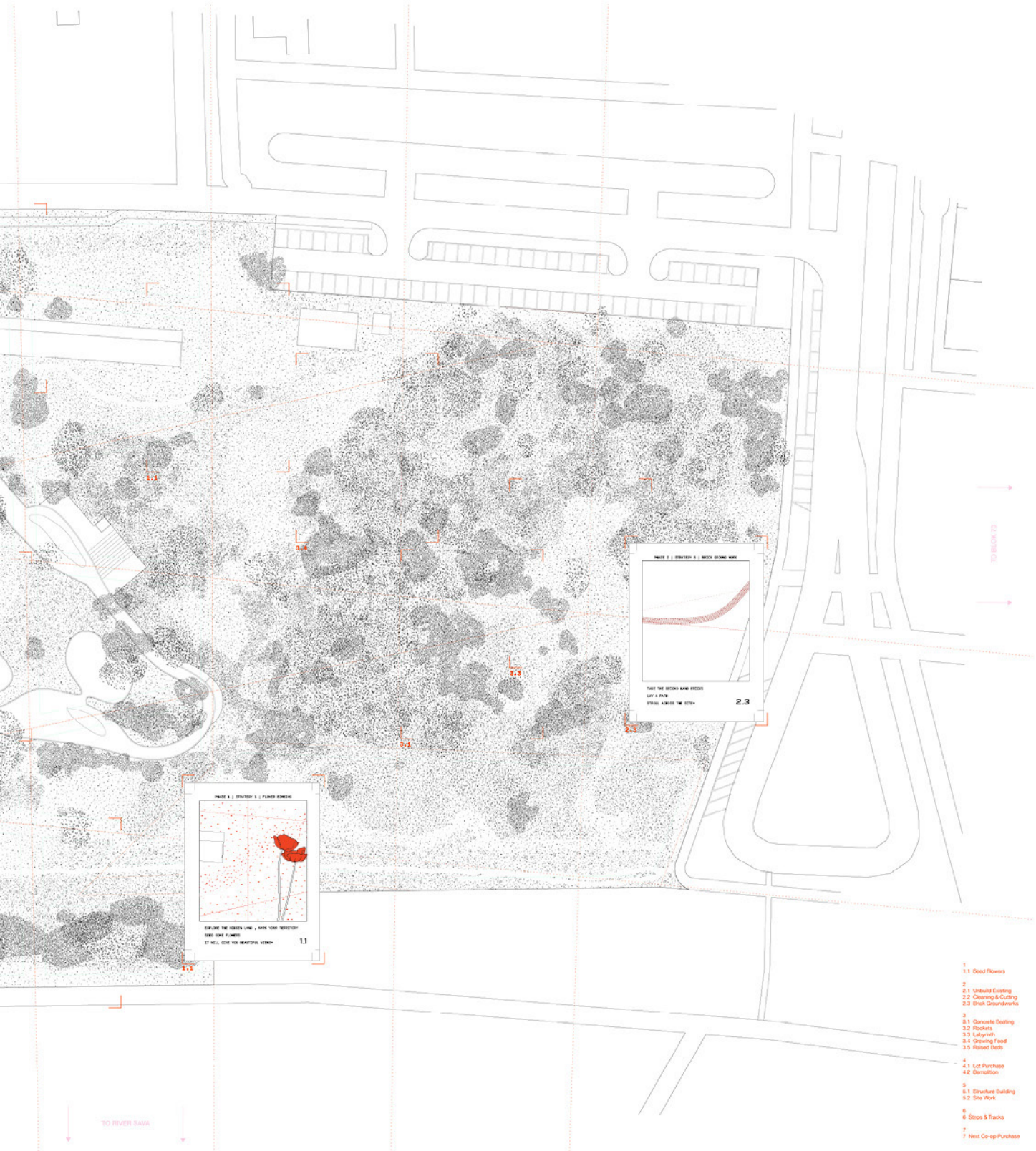


sharing shelf at basketball court

ground floor basketball court and sharing shelf, with upper level terracing



the cooperative model warants a gradual ocupation of the site; the most cost-effective, yet gesturally powerful moves, including flower bombing, the tending of vegetation and overgrowth as signs of care



1
1.1 Seed Flowers

2
2.1 Unbuild Existing
2.2 Cleaning & Cutting
2.3 Brick Groundworks

3
3.1 Concrete Seating
3.2 Rockets
3.3 Labyrinth
3.4 Growing Food
3.5 Raised Beds

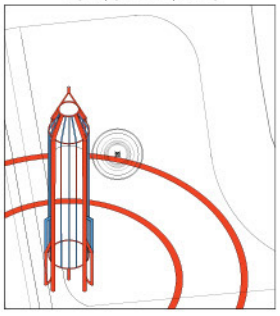
4
4.1 Lot Purchase
4.2 Demolition

5
5.1 Structure Building
5.2 Site Work

6
6 Steps & Tracks

7
7 Next Co-op Purchase

PHASE 2 | STRATEGY 2 | ROCKETS

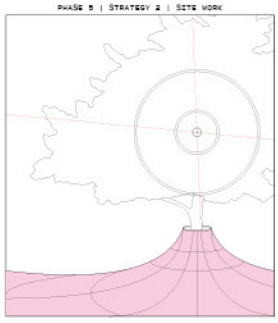


THE PAST IS MISSING
LET'S BRING BACK THE PLAY ROCKETS
KIDS CAN PLAY THE SAME WAY YOU DID BEFORE~ 3.2

PHASE 2 | STRATEGY 5 | RAISED BEDS

THE POOLS ARE KIND OF EMPTY
GATHER YOUR FRIENDS AND PLANT!
A NEW LIFE FOR THE ABANDONED AQUAPARK~ 3.5

PHASE 5 | STRATEGY 2 | SITE WORK



REUSE THE CONCRETE FORMWORK FROM THE BLOKS
THE VOLCANO PLANTER IS AN UNIQUE OPTION
A DISTINCT FEATURE FOR THE NEIGHBORHOOD~ 5.2

neighborhood 1

neighborhood 2

Djuro

A widower of many years, Djuro has been living with his daughter and her family. They are moving out of the country for a period, but don't want to leave him alone. He likes being around people, particularly children as he misses his family. He remembers the best parts of life in Yugoslavia and is interested in this experiment.

Jelica

Jelcia is an architect and academic with a particularfocus on the preservation of New Belgrade buildings.She is well connected both within Belgrade and in the cultural circles. She is very busy and rarely home. She wants a simple apartment, low responsibilities, but with access to nice spaces for working and occasional gathering.

Miroslav

Miroslav and his wife are both very handy and looking for an opportunity to start a small business that takes advantage of their skills. They recently sold a company and have some extra capital that they would be looking to invest in a community. They have an adult child who visits frequently that they need to be able to host.

01 bedroom
02 living room
03 kitchen
04 bathroom
05 balcony
06 common laundry
07 common living room
08 shared study
09 common kitchen
10 shated balcony
11 shared bicycle parking

neighborhood 3

neighborhood 4

kitchen "thick wall:" interface for sharing resources

outdoor lounge area

view across interior: private study to shared living room

shared living room to terrace

07 COMMONING DEVICES

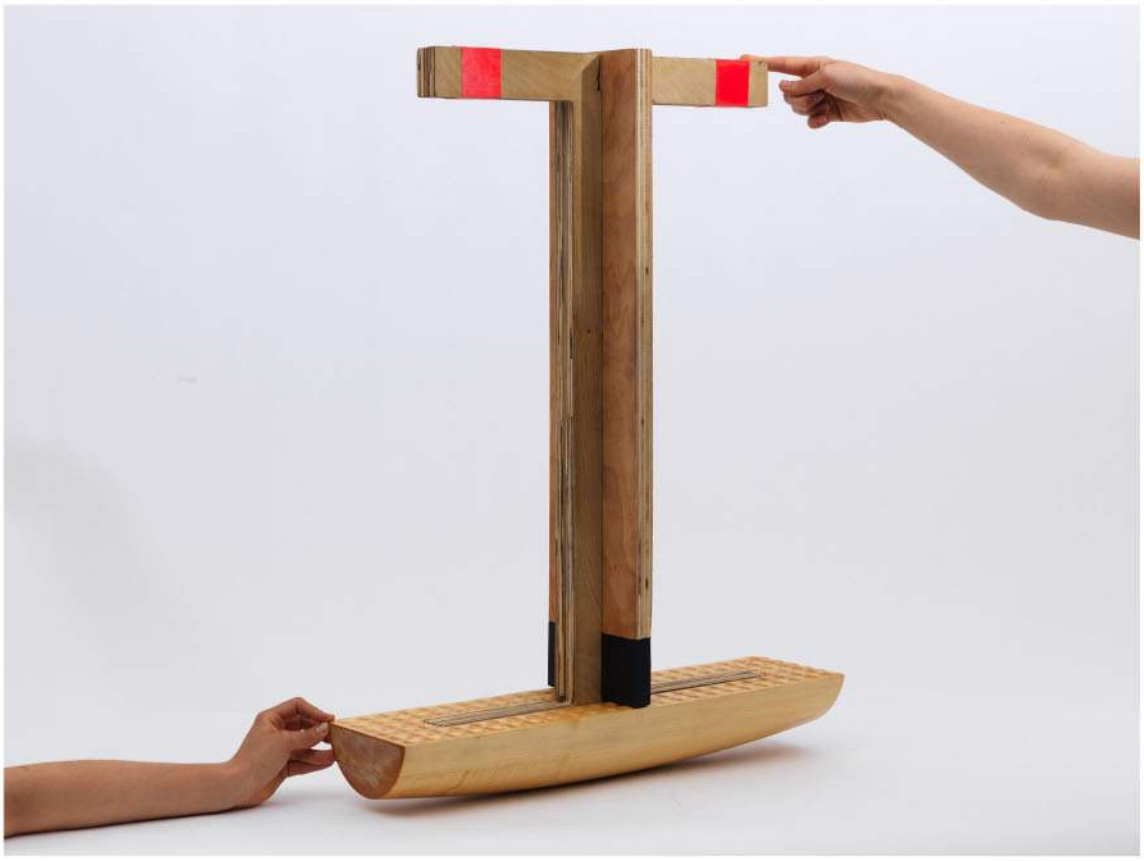
location: belgrade, serbia
instructor: ana miljacki
project type: collective studio
collaborators:
christopher allen
jenna schnitzler
lauren gideonse
sloan aulgur
susan williams
ina wu

Our "Commoning Devices" made in conversation with Yugoslav New Art Practices and their ways of addressing self-management were first introduced to the public at Kolektiv Gallery in Belgrade, Serbia. They are meant as devices that instigate relationships, conversations, and may render joyful some forms of codependency.

balance board

seesaw to bench transformation

as exhibited at kolektiv gallery, belgrade, serbia



wobble-spinner

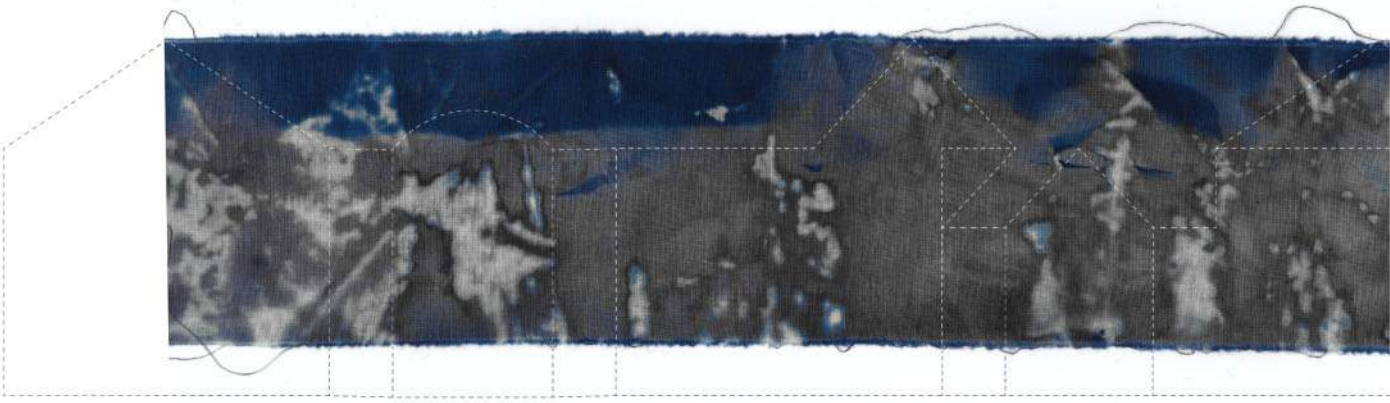
see-saw

08 UNBUILDING TERRITORY

location: boston, ma
instructor: brandon clifford
mohamad nahle
project type: mit core
year 01

The built environment is peppered with devices, which filter the world so as to make it appear whole or uninterrupted. Spanning from the picturesque to Ultra Clear Glass to Green Machine eco-fantasies, humankind continuously invents mens through which to own landscape. If modernism was about the "solarization" of space – at an architectural and urban scale – and through it, the daylighting of industrialization's stranded assets, the contemporary is about vegetation. Vegetation elevated as the alleviation of urban toxicity. Yet, what if one considers a different relationship to the non-human?

"The Three That Owns Itself" – an oak tree in Athens, Georgia was given "personal" and territorial legal ownership of the land it sits on. What if one extended legal ownership to all trees? If a tree owned not only the land on which it sits, but the land ascribed to all the ways it occupies space – its root system, height, canopy and shadow; the carbon dioxide it consumes and the oxygen it produces. If so, what would the parameters of its territory imply for the built environment?

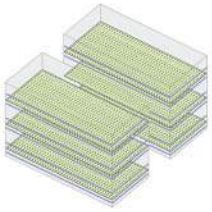


tree, as territorial entity "blueprints" for unbuilding | *cyanotype on fabric; sun exposure over neighborhood home with tree shadows reflected in white*

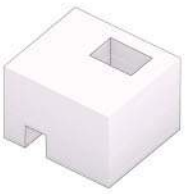
location: boston, ma
instructor: christoph reinhart
project type: mit building tech.
year 01
collaborators: tj bayowa

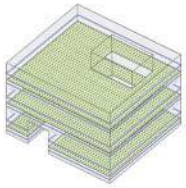
An experimental school in Boston, this building imagines the circulation as a continuously ramping surface along the perimeter of the building. Conceptually wrapping the building, the circulation serves both to center play, and to devise an alternative trombe wall. A space where heat is generated through movement is pushed to the exterior as a way to reduce internal energy loads.

1



2





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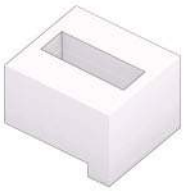
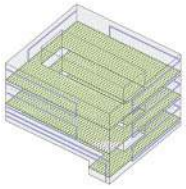




1

$sDA_{300\ LUX}$ (50%) : 100 %

ASE : 42.7 %

Average Lux : 2884 lux

2

$sDA_{300\ LUX}$ (50%) : 100 %

ASE : 61.3 %

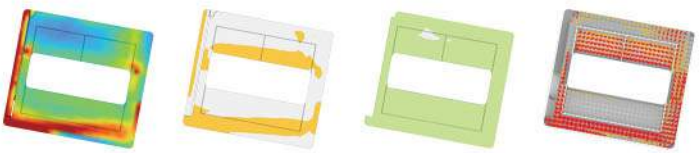
Average Lux : 12189 lux

3

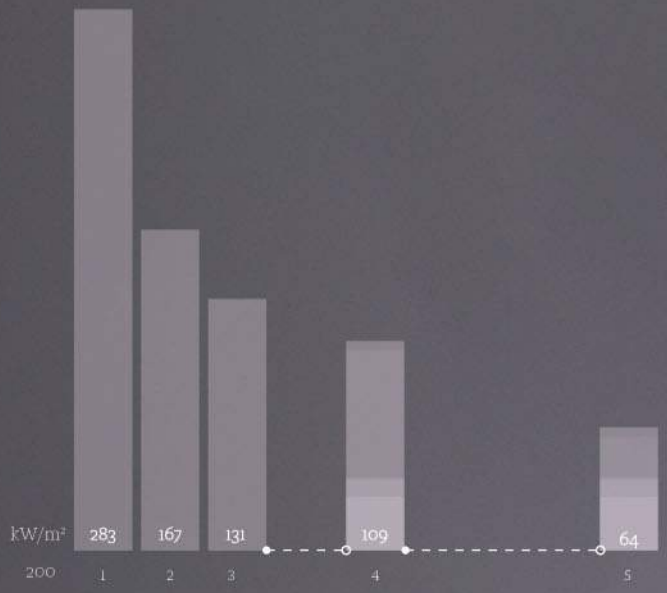
$sDA_{300\ LUX}$ (50%) : 98.9 %

ASE : 55.6 %

Average Lux : 3776 lux



sDA, ASE, and Average Lux per floor plate



EUI OPTIMIZATION :

We proceeded to isolate each of the available modifications, in order to determine which carried the biggest weight towards reducing the EUI, and what combination might prove to be most optimal. The most significant reductions from the baseline EUI occured when we added an ERV with an economizer and a limited flow rate. The near half reduction in heating occured when the ERV was paired with a heat pump.

1 BASELINE EUI

2 OFFICE EUI

3 K-12 EUI

4 ERV, COP 0.97 EUI

5 ERV, COP 3 EUI

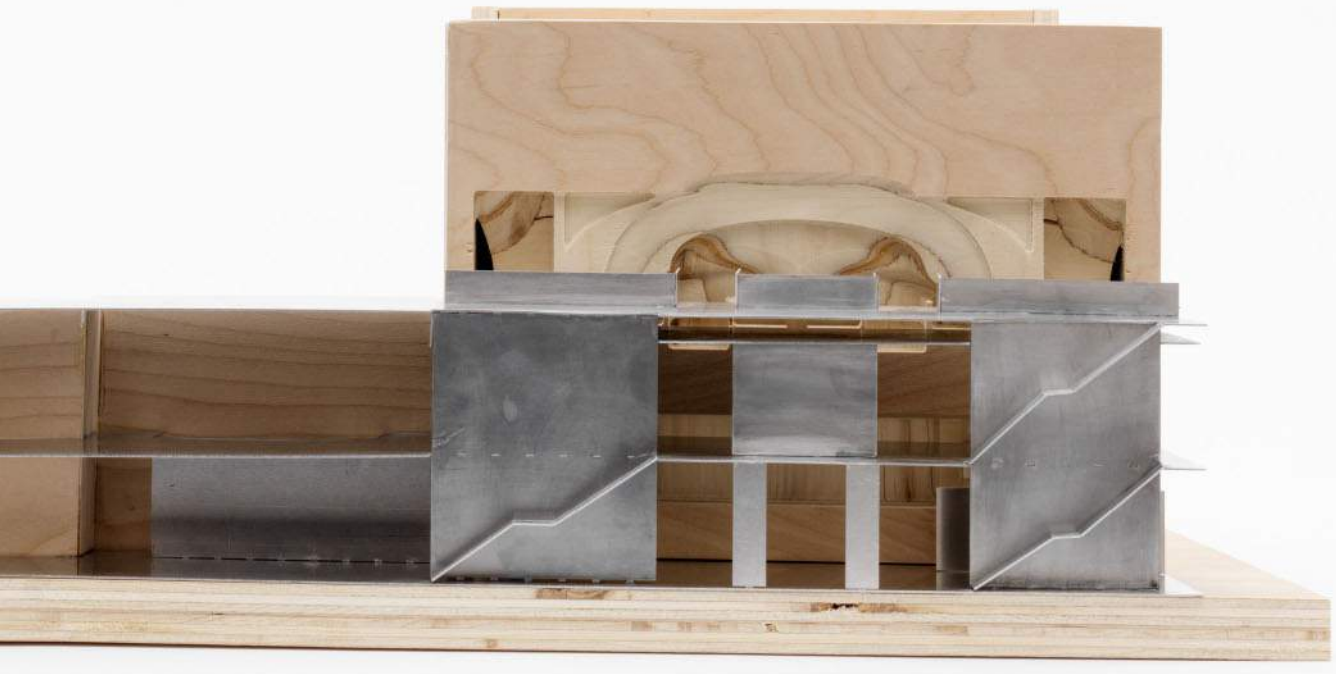
10 PROCESSIONAL PARADIGMES

location: boston, ma
instructor: cristina parreno
project type: mit core 02, m.arch year 01
collaborators: charles janson, sloan aulgur

The processional paradigm of The Strand Theater takes on that of a proscenium-style theater. A compact, yet rich facade, feeds the public through an elongated and compressed entry sequence.

This model studies this relationship by rendering the entry sequence in light-gauge metal. The otherwise thick, dense and convoluted space is rendered planar, and easily removable in service of an alternative proposition.

A routed bah-relief of the stage byond became the backdrop to the swapping "processional paradigmes."



representational model, 1: 100 | using a split wood with fungal overgrowth to CNC existing theater

11 TECTONIC MEMORY

location: boston, ma
instructor: j. jih
project type: mit geometric discplines
year 01

The following hyperbolic paraboloid – an infinitely double ruled surface in three dimensions – defines the basis for the development of a series of construction maquettes in pursuit of a novel form of casting at an architectural scale. I was interested in producing an indexical form of casting, one which simultaneously inscribes an underlying geometry and a method of production. Taking on concrete's malleability, I transformed the formwork classically deployed to imprint surface texture. The object seeks to reveal material qualities, which could be misread for those of other materials. Perhaps the most compelling qualities of these iterations was the dichotomy between the resolution present in the process – the result of precise parts, orchestrated and sequenced with care – and that of the outcome; the dichotomy between definition and translation. Each component and its method of production embed an 'offset' from the qualities of the digital model, allowing the final object to disassociate from its digital form, yet apprehend tectonic qualities through its coming into being.

square discretization, cast in woodchip

casting bed

charred surface

shingled surface

intersecting square discretization, cast, surface b

square discretization | *cast in woodchip, burnt surface*

tiled surface

square discretization, cast, surface a

MARA V DIAVOLOVA

WORK SAMPLE 2023 MIT SA+P