

# HEDEGELUGS

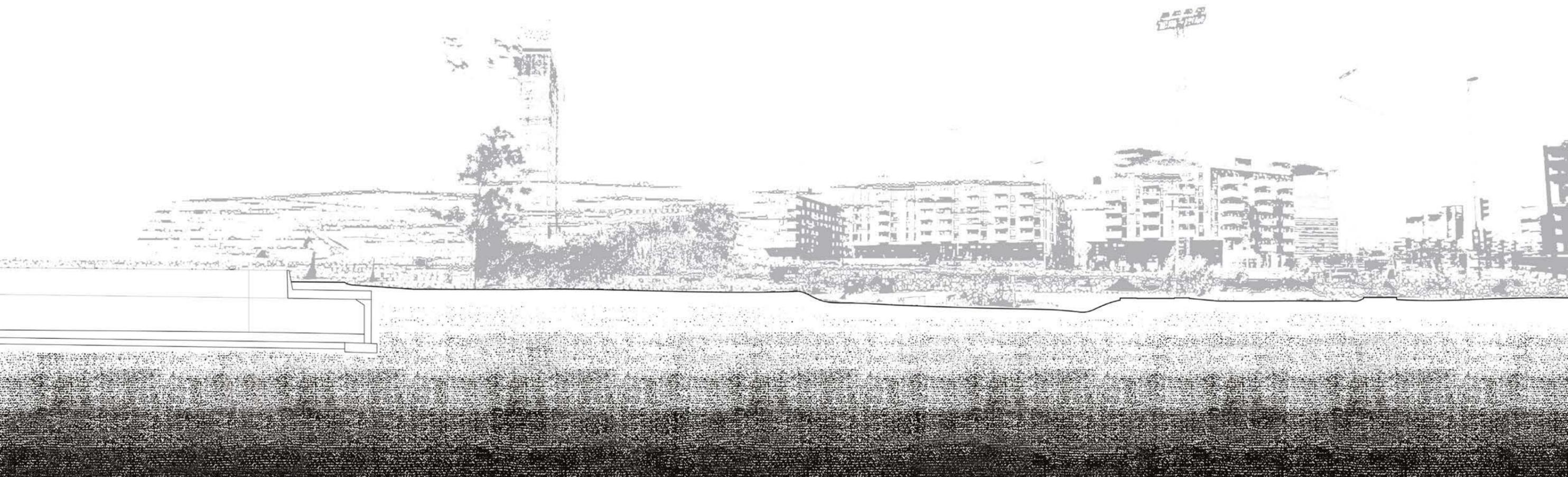
## An Alternative Future for Loallmenningen

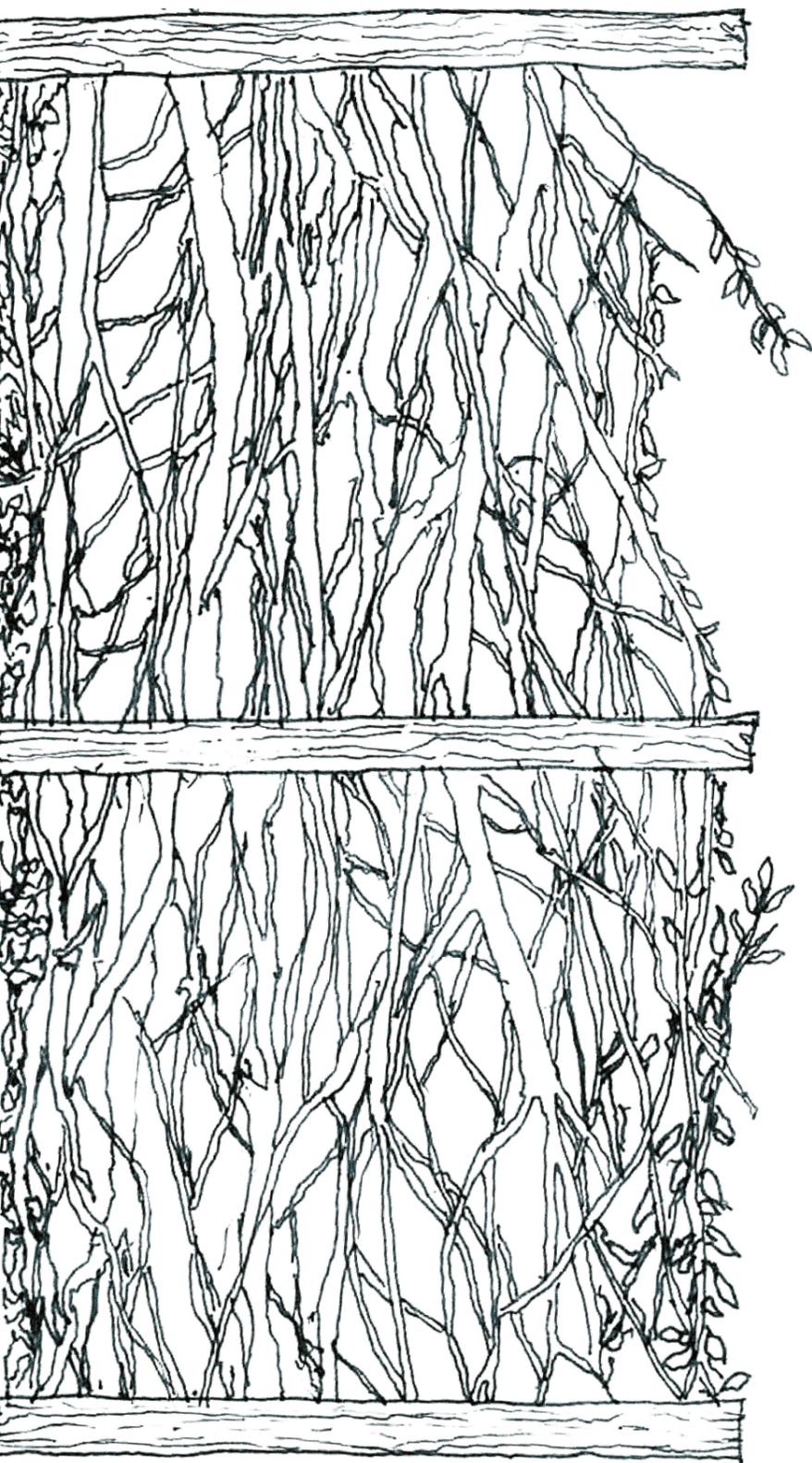
Mathias Sagvik  
Diploma Spring 2024

Supervisors  
Eirik Stokke & Espen Heggertveit

The Oslo School of Architecture and Design  
Institute of Architecture

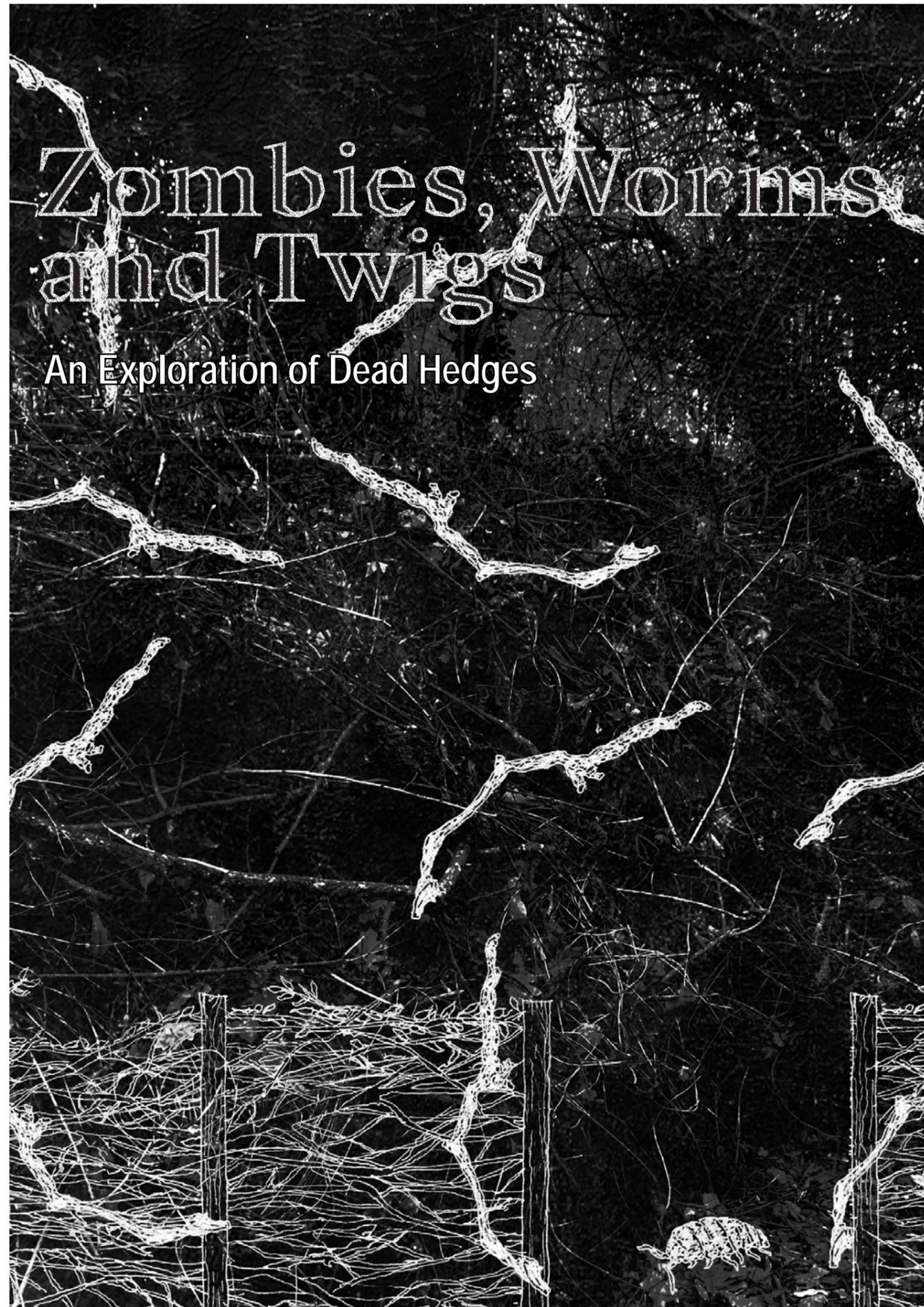
Binder 2





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## Introduction

In Mary Shelley's canonical 1818 novel, Dr. Frankenstein composes chunks of flesh and bone into the shape of a man. After months of trial and error, a monstrosity of life and death opens his eyes and arises. The success of the gothic story shows human's fascination with the macabre, the gross, the buzz of vitality in otherwise dead material. A similar phenomenon, however a lot less acknowledged in popular culture, is the ecology of dead hedges.

Disguised as a mound of waste, dead hedges are composed of woody prunings framed by timber piles or smaller shrubs, and are most often found on the perimeter in areas where forestry is practised.<sup>1</sup> A more accessible example for London residents, however, can be found in Bethnal Green Nature Reserve situated in Tower Hamlets borough. As a locus of biodiversity and social engagement, the nature reserve contains a plethora of ecological experiments, one of them being a glorious dead hedge. Within the sheltered gaps of leaves and branches, worms, invertebrates, fungi, mammals, insects and plants thrive through the decay of matter.

Understanding the value of dead hedges deeper, we have to explore the tumultuous history of hedgerows. In the time of self-sufficiency through hunting and gathering, a practice similar to dead hedges was the only established form of hedgerow, which was constructed as protection.<sup>2</sup> In a British context, land was owned by nobility from the 12th century, whereby peasants attended to the fields. This mutual agreement between workers and aristocracy functioned as a relatively effective organisation of common land until the 1600s, when Parliament passed laws that formed legal property rights to land that was previously considered common. This enclosed nearly 7 million acres of land, changing the nature of land cultivation. The enclosure of the commons was a war of existence where ownership of the soil was the subject of conflict. Enclosures have been called a revolution of the rich over the poor, and hedgerows became a tool of power.<sup>3</sup> Therefore, traditional hedge laying is historically related to inequitable power dynamics. Dead hedges, however, do not embody the same oppressive story, they have merely been a practical tool with monumental unforeseen ecological value. To demystify the macabre allure of dead hedges, let's decipher the practical composition of matter.

# Flesh

There are three stages of Dr. Frankenstein's experiment: the gathering of dead flesh, the stitching of matter, and the resurrection of dead material. In the case of dead hedges, the sinister doctors are the German Benjes brothers, experimenting and formalising the science of construction in the 1980s. The flesh of dead hedges is cuttings from deciduous trees and bushes, layered in ascending thickness 1-1.5m wide and 1-1.5 metres tall.<sup>4</sup> The stitches are fence posts placed approximately 1-2m between each other. Then you wait for the process of life and death to unfold as critters move into the gaps and eggs start to hatch.

Dead hedges are the antithesis to decorative hedges in both historic and contemporary gardening. They are not quite hedgerows; not quite compost piles; not quite land art. And that's the beauty of them. They are at the margins of landscape hegemony in their brown fecundity. It is important to point out, however, that there has been a reprioritization of landscape values the past 50 years, spearheaded by garden designers such as Piet Oudolf through the 'New Perennial'-movement. Pretty is not enough anymore.

Approaching the one acre enclosure of ecological delight, Bethnal Green Nature Reserve is frequented by caretakers of the land, local residents, their children, and their other-than human residents among the green and brown. In this environment, you are overwhelmed in the best way by a sense of wilderness. The dead hedge disappears into the background despite being twenty steps long and over half a human tall, whereby it would stick out like a sore thumb in Middleton Green, the carefully maintained public park right next to the nature reserve. This composition of matter is nestled between young birch trees and fences, and there is a certain gradient of colour formed by the process of addition of matter. As you approach and take a look into the nooks and crannies, you start to see movement, textures and colours otherwise easily overlooked. It is truly a five star hotel for creepy crawlies. The nature reserve is closed off to public access most days through a tall metal fence, but experiencing the spatial construction of the dead hedge, there is potential to construct a more porous threshold between inside and outside. If dead hedges were a functional protection element hundreds of years ago, can they take on the same role today? Or does the potential span even wider?

# Eyes Wide Open

The Benjes brothers' experiment of spatial ecology was a fruitful endeavour. Current gardening practices that employ dead hedges as a way of utilising waste, improve biodiversity through this specific spatial device, and the Bethnal Green Nature Reserve is a prime example of this. Walking through this space, or similar densely planted areas consisting of deadwood, bugs and critters greet you in their lurid dwelling. Approximately 40% of wildlife, from the hoverfly to the mighty owl, depend on deadwood matter for creating habitats. Furthermore, 2000 invertebrate species are saproxylic, which means reliant on decaying wood for their life cycle.<sup>5</sup> This attracts woodland birds, hedgehogs and bats, thus increasing the biodiversity of the area. Letting old trees live and die on their own volition may contribute to the protection of ecologically valuable areas, whereby 'bird biotopes' that rely on the dead trees are taken into account in city planning.

In Bethnal Green Nature Reserve, it has been used as a political tool to protect the site from developers. The resident ecologist, Olly Edmonds, has facilitated multiple workshops focused on connecting bat habitats, and a monument of this can be found on the nature reserve.<sup>6</sup> Moreover, deadwood is a paradise habitat for lichen and fungi, such as the candlesnuff fungus.<sup>7</sup> Therefore, establishing dead hedges as an intrinsic part of a publicly accessible space has great benefits to local ecology. The aforementioned protected species lament the position of the nature reserve as something that cannot be discarded in political action, which in turn maintains the communal role of the place.

.On the notion of overgrown and 'undesirable' landscape in urban places, lecturer in environmental geography, Dr. Marion Ernwein, reflects on the horticultural paradigm. She points out that urban greenery is predominantly designed as a still life, with annual and biennial flowers among its most important features.<sup>8</sup> Furthermore, she claims that "these horticultural compositions evidently leave little room for agency, spontaneity, or dynamism" which also demand a large amount of labour and maintenance.<sup>9</sup> Shifting toward an approach of landscaping that requires less watering, trimming, and supervision, dead hedges fit into this toolbox of designing an environment more in tuned with contemporary values of diversity.

Ernwein highlights an essential point in her essay "From undead commodities to lively labourers: (re)valuing vegetal life, reclaiming the power to design with plants"

that these approaches are not merely convivial experiments with no goal, but embody a particular practice of valuing plant life within the urban political economy of horticulture.<sup>10</sup> The tools of which we evaluate ecological values of areas must also be critically addressed if this approach is to be successful. Geographer Matthew Gandy argues that the sense of what 'fits' or 'belongs' in a place clearly relies on repetition, familiarity, and naturalisation, which routinely ignores "the complexity of lived space occasioned by the interpolation of difference".<sup>11</sup> An example of this is how non-native species and weeds are disregarded in established botanical methodologies such as the transect. In other words, there are plenty of contemporary scholars that suggest more inventive and inclusive landscapes that do not shy away from engaging with the undesirable.

These narratives of ecologically threatened yet thriving areas are gaining trust among the public as well as municipalities, as they start to intermingle with socio-cultural notions of nature. Gothenburg is an example of a city that has made efforts to convey concepts of ecology and value in dead matter to the wider public. A recent public scheme highlights this through informative signs on trees that state "Life in dead wood. Here, tree trunks have been left to benefit biodiversity. Many insects, fungi, mosses, and lichens depend on old dying or dead trees for their survival."<sup>12</sup> The project was a success from the perspective of the municipality, reporting that local people became more willing to accept a certain degree of non-traditional landscapes in urban context. This highlights an important factor within ecological practice: you have to know about it to care about it. The Bethnal Green Nature Reserve's resident cultural institute, Phytology, has a public programme that actively engages with the environmental and social complexities of urban landscapes. Furthermore, they have formed partnerships with educational institutions where children can explore the site and learn about ecology. This is one of the few opportunities local children in London have to immerse themselves in an environment not dominated by concrete, asphalt and noise. Therefore, a practical handbook of dead hedges could be a helpful addition to the programme of Phytology, or in general to convey the act of 'making an ecology'.

## Frankenstein's Walk

Exploring dead hedges as a tool and metaphor, how can architects, gardeners, planners and landscape architects facilitate this agency and aesthetics of botanical margins? A shift within views on 'waste' and 'decay' could be a start. Plants, as well as invertebrates, insects and fungi have their own agency irrespective of human intentions.<sup>13</sup> Let's think about the tree as an organism with its own agency: "While growing, trees provide habitat, create local cooling through shade and moisture transpiration, prevent soil erosion and fix carbon."<sup>14</sup> I would argue that this applies to a tree's decomposition as well. Landscapes of the UK provide a plethora of varied environments for different species of trees to thrive, which provides an extraordinarily rich construction palette. However, the British research organisation, Material Cultures, points out that "there are very few production facilities focused on turning UK timber crops into useful construction products, although some projects are underway which seek to expand the range of timber types we use."<sup>15</sup> Although this mainly considers commercial timber, branches and organic waste could be added to this palette, whether that is within new material composites or constructing habitats to support local ecology. There has been an increase in the interest and use of timber construction the past 20 years; however, the challenges span practices of design, engineering, forestry, as well as policy regulations for maintaining a sustainable framework.<sup>16</sup> I would also add to that list the social and spatial opportunities of timber waste, where dead hedges prove an interesting, low skill method of building value. It can also be incorporated with timber production facilities as a way of engaging with ecosystem services and social activities.

Taking a step back from the social and ecological implications of dead hedges, the spatial opportunities are exciting in themselves. As explored earlier, hedgerows were used to divide plots of land spatially through this physical boundary. This would define accessible space for humans and mammals alike. In contemporary gardening, both professional and informal, they come in all shapes and sizes, from a 'wild' bush to an ornate topiary flamingo. The physical logic of the dead hedge constitutes a process of layering within a framework, which can be multiplied in length and width to form an expansive element. Rethinking the formula of the Benjes brothers, two factors can be considered anew: verticality and relations to other architectural elements. The matter relies on a framework to achieve a sense of verticality, which can be even further explored through supplementary structures such as timber frames or brickwork.

Cuttings from deciduous are not particularly heavy by themselves, but moisture, growth and inhabitation changes this factor over time. Climatic conditions weigh the structure of organic matter down as the decomposition process also commences. This compacted quality has structural potential. Imagine a dead house! The modern 'green wall' suddenly has an ugly duckling brother, the 'brown wall'. Comparing the two, some critical defect of the dead hedge should be addressed: the notion of air purification and flammability. When a green wall is successfully designed (which is not a given), one of the main benefits beside the allure of the vivid 'green-ness' is their ability to improve congested urban spaces through providing fresh air. This is not an immediate quality of dead hedges. The 'brown wall', however, could mark a shift which critiques current greenwashing-tendencies in a lot of modern cities.

## Smiling Toward The Grave

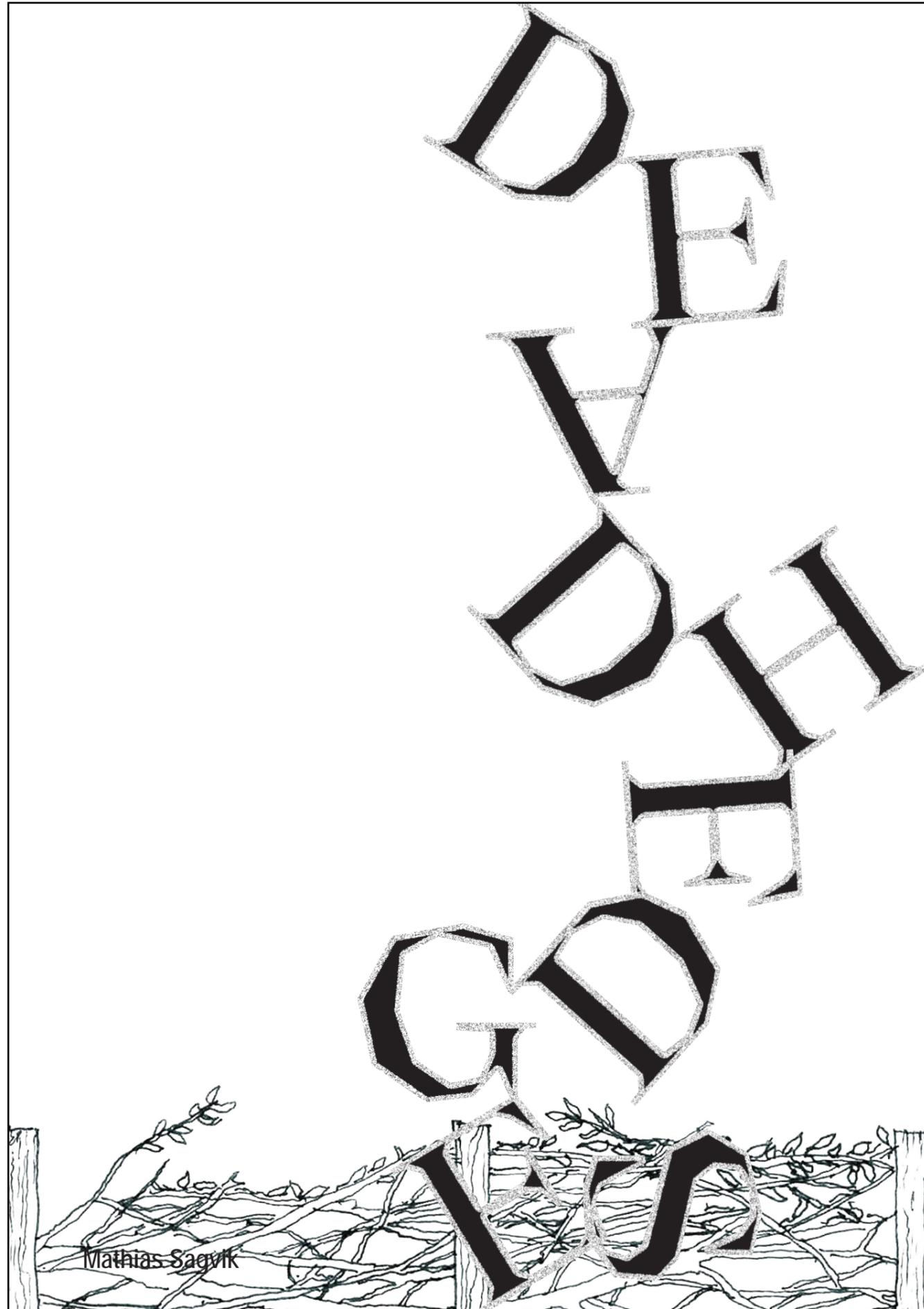
What if we performed a collective act of fecundity? In 1982, German artist Joseph Beuys initiated a work of social land art called "7000 Oaks - City Forestation Instead of City Administration" whereby 7000 oak trees were planted over five years in Kassel, Germany. Each tree was paired with a black basalt stone, initially piled outside the Fridericianum museum. As a tree was planted by Beuys and volunteers, a basalt stone was removed from the pile. The project was a response to the extensive urbanisation of the city which negatively impacted ecological systems. Therefore, the 7000 oaks provided ecosystem service and became a tangible marker for a movement vouching for sustainable futures. It was certainly provocative. This Situationist legacy is still highly relevant; however, their ethos that "everyone can be an artist" can take on even more forms. I hereby propose: "everyone can be an ecologist". The first action will be a collective ritual of cutting, cathering, and composing: "7000 Dead Hedges - City Decay Instead of City Growth". It will start from Bethnal Green Nature Reserve and continue toward the city centre of London, filling in gaps and corners of the city with branches and soil: a radical act of rewilding. Dr. Frankenstein would be pleased.

## Endnotes

1. "Dead wood and compost heap habitats," RHS, accessed December 7, 2022, <https://www.rhs.org.uk/wildlife/dead-wood-compost-heap-habitats>.
2. "A history of hedgerows," RSPB, accessed December 7, 2022, <https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/advice/conservation-land-management-advice/farm-hedges/history-of-hedgerows/>.
3. Marv Waterstone and Ian G. R. Shaw, *Wageless Life: A Manifesto for a Future beyond Capitalism* (Minneapolis: University of Minnesota Press, 2019), [muse.jhu.edu/book/73173](https://muse.jhu.edu/book/73173).
4. Deng Lehuai and Xing Fangyu, "A shelter for wildlife: Benjes Hedge", CGTN, July 19, 2019, accessed December 7, 2022. <https://news.cgtn.com/news/2019-07-19/A-shelter-for-wildlife-Benjes-Hedge-Isa6AarDHO/index.html>
5. "The Nature of Deadwood", Hertz Wildlife Trust, June 1, 2021, accessed December 7, 2022, <https://www.hertswildlifetrust.org.uk/blog/wider-landscapes-team/nature-deadwood>.
6. "Bat Sanctuary", Phytology, accessed December 7, 2022, <https://phytology.org.uk/projects/bat-sanctuary/>.
7. Hertz Wildlife Trust, "The Nature of Deadwood".
8. Matthew Gandy and Sandra Jasper, *The Botanical City* (Berlin: Jovis Verlag GmbH, 2020), 237.
9. Gandy and Jasper, *The Botanical City*, 238.
10. Gandy and Jasper, *The Botanical City*, 240.
11. Gandy and Jasper, *The Botanical City*, 167.
12. Gandy and Jasper, *The Botanical City*, 235.
13. Gandy and Jasper, *The Botanical City*, 11.
14. Amica Call and Material Cultures, *Material Cultures: Material Reform*, 56.
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16. Amica Call and Material Cultures, *Material Cultures: Material Reform*, 65.

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## What is a dead hedge?

Disguised as a mound of waste, dead hedges are composed of woody prunings framed by timber piles, and are most commonly found in private gardens and on the perimeter in areas where forestry is practised.

The German Benjes brothers described and promoted the practice of laying dead hedges in 1986, which is why they are also referred to as Benjes hedges.

Dead hedges consist of cuttings from deciduous trees and bushes, layered according to size. They are kept in place by timber stakes placed approximately 1-2m between each other. Soon after the hedge is laid, the process of life and death unfolds as critters move into the gaps and eggs start to hatch.

Dead hedges are the antithesis to decorative hedges in both historic and contemporary gardening. They are not quite hedgerows; not quite compost piles; not quite land art. And that's the beauty of them. They are at the margins of landscape hegemony in their brown fecundity.

**Exploring dead hedges as a tool and metaphor, how can architects, gardeners, planners and landscape architects facilitate this agency and aesthetics of botanical margins?**

# History of Hedgerows

## Iron and Bronze Age



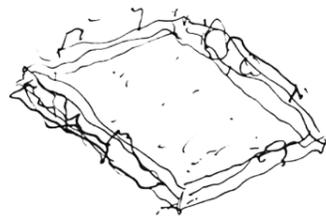
'Assart hedges'  
Land clearing  
Stripes of woodland kept

## Saxon and Roman Era



'Infield outfield'  
One large infield cropped  
The outfield was grazed  
Little need for hedgerows

## 12th Century



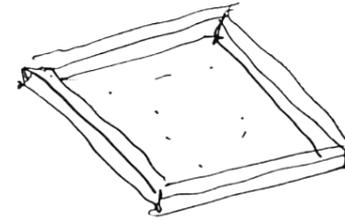
Hedgerow enclosure  
Newly planted hedges  
Loss of common grazing  
Privatised  
Mixed species

## Revolt



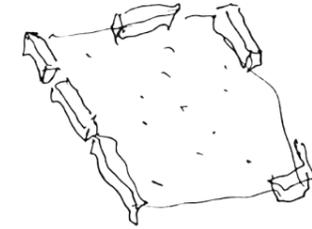
Hedgerow opposition  
Citizens removing enclosures  
Democratise land

## Enclosure Acts



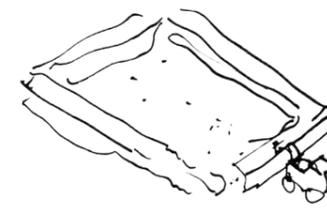
Official bills of enclosure in  
England 1603, 1801  
Mostly hawthorne

## Modern Removal



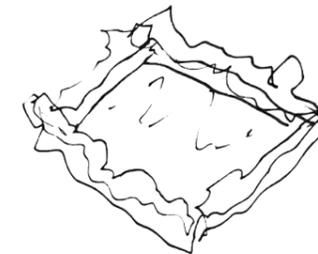
Large scale hedgerow  
removal  
After WW2

## New Management



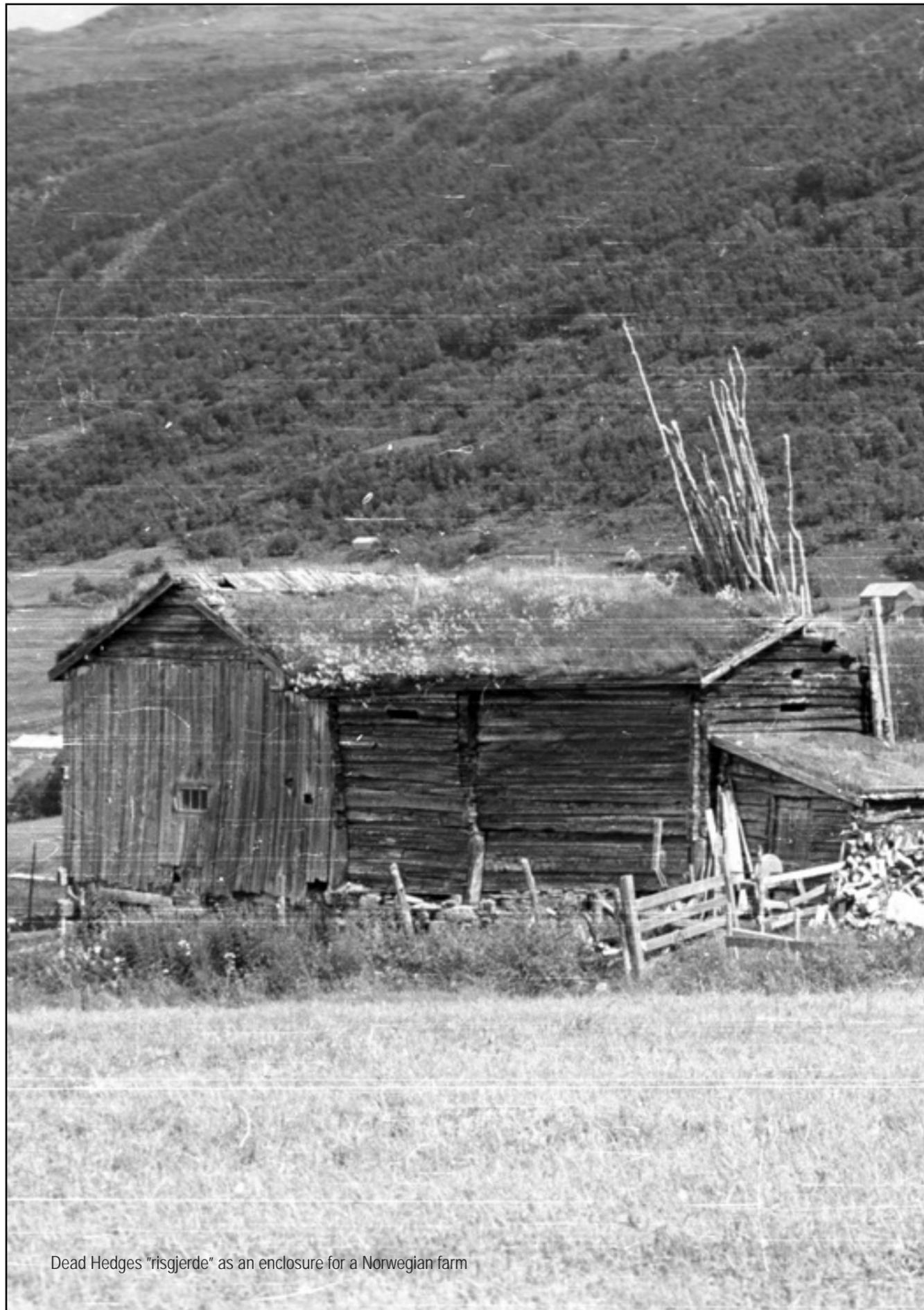
Mechanical trimming  
Health deterioration  
Mixed species

## Today

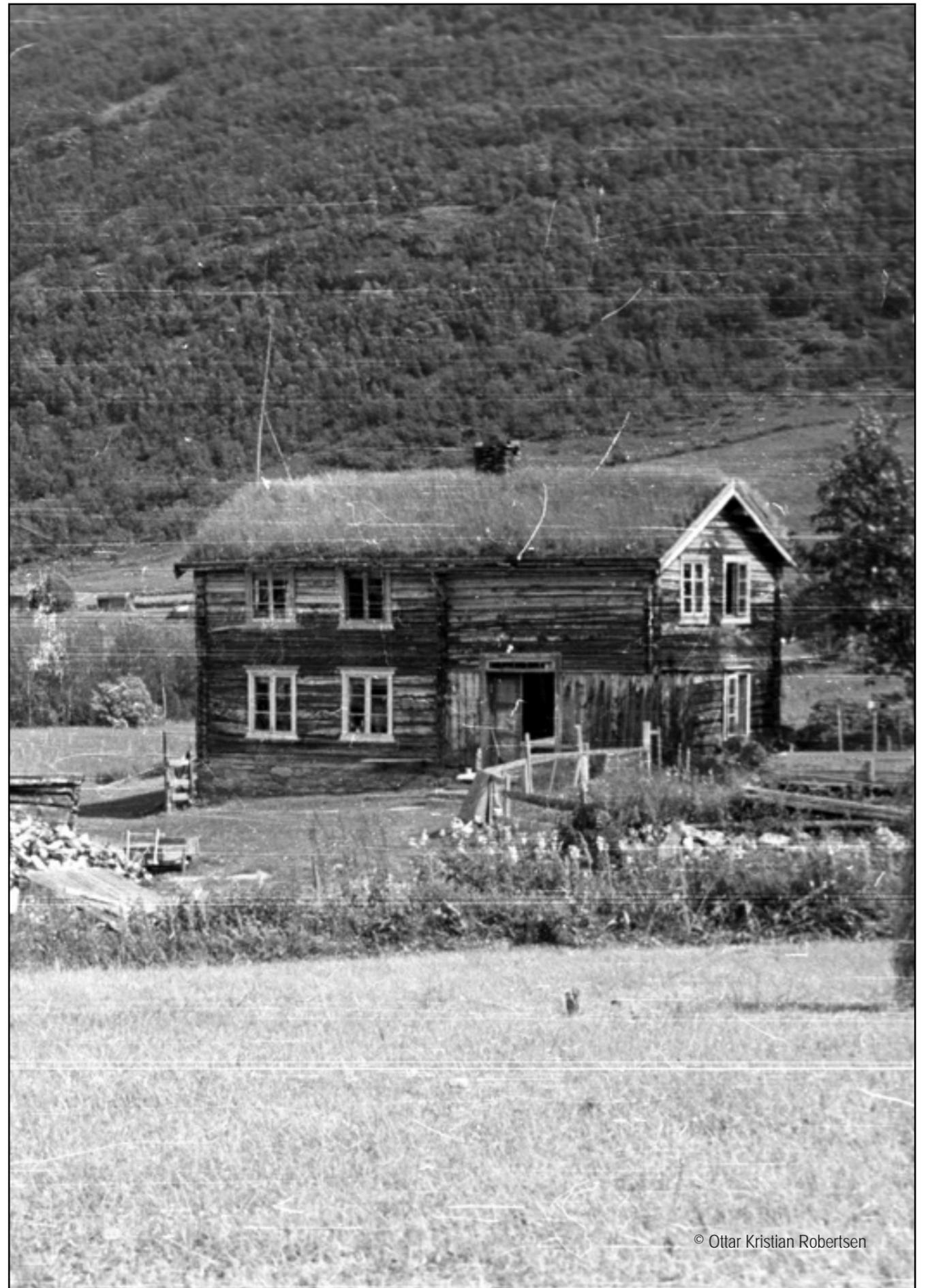


Protected status  
Efforts to plant new  
hedgerows and maintain  
existing

**Dead hedges operated on the fringes  
of these common practices**



Dead Hedges "risgjerd" as an enclosure for a Norwegian farm



© Ottar Kristian Robertsen

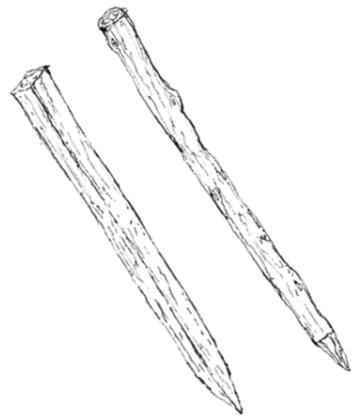
# Components



Branches



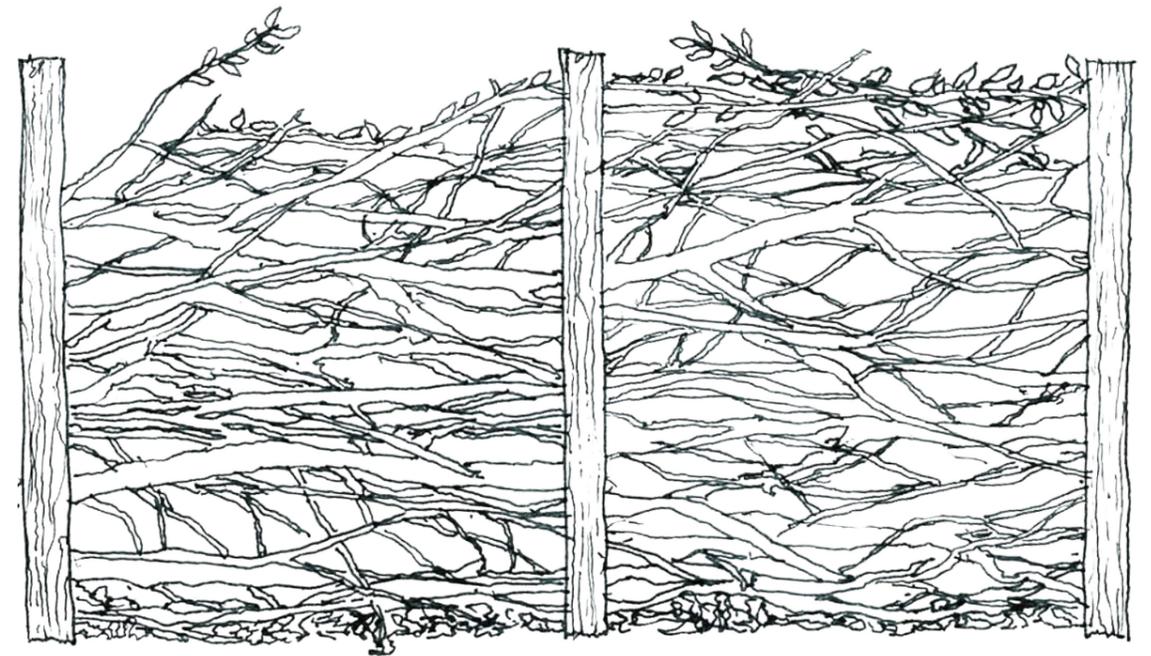
Twigs



Timber stakes



Leaves



# Ecological Benefits

Current gardening and maintenance practices that employ dead hedges as a way of utilising waste, improve the biodiversity of the area immensely.

Approximately 40% of wildlife, from the hoverfly to the mighty owl, depend on deadwood matter for creating habitats. Furthermore, 2000 invertebrate species are saproxylic, which means reliant on decaying wood for their life cycle. This attracts woodland birds, hedgehogs and bats, thus increasing the biodiversity of the area. Letting old trees live and die on their own volition may contribute to the protection of ecologically valuable areas, whereby 'bird biotopes' that rely on the dead trees are taken into account in city planning.

Deadwood is a paradise habitat for lichen and fungi, such as the candlesnuff fungus. Therefore, establishing dead hedges as an intrinsic part of a publicly accessible space has great benefits to local ecology. The protected species can function as agents of protecting sites as places that cannot be discarded in political action, an example of which is Bethnal Green Nature Reserve in London.

The substances released during decomposition also benefit the soil and plant life. Water is stored in the soil longer, as the dead wood protects the soil from erosion and water evaporation, which positively affects the microclimate. Additionally, it improves the soil structure itself through the build up of humus.

**What would the ecological effects be if we introduced dead hedges into the urban realm?**



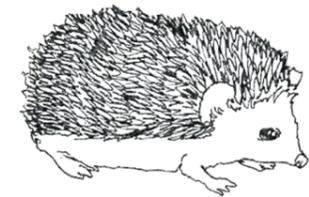
Invertebrates



Fungi and lichen



Amphibians



Small mammals



Woodland birds

# Tree Tales of Dead Wood



Urban Trees



Municipal maintenance



Garden Trees



Personal maintenance



Christmas Trees



Seasonal inhabitation



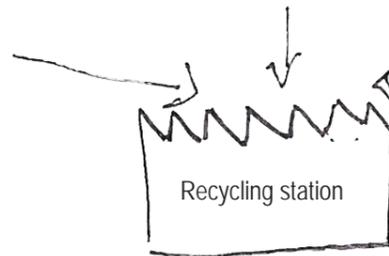
Pulp



Neighbourhood collection



Municipal collection



Recycling station



© Per Gjørder

# How to Make a Dead Hedge

## 1. Find a Placement



Make sure the soil is well drained

It is recommended to have one sunny side and one shady side

It is not recommended to place it under a deciduous tree

## 2. Acquire Trimmings

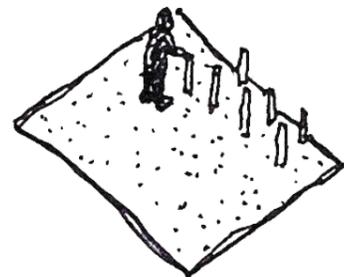


Use clippings from your trees or shrubs

Use only native plants

Do not use treated wood

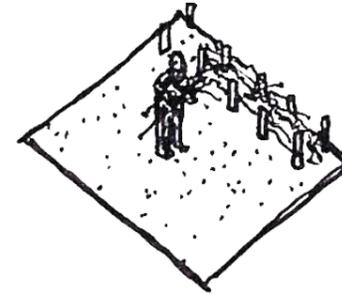
## 3. Lay the Structure



Use larger branches or timber stakes to support the trimmings

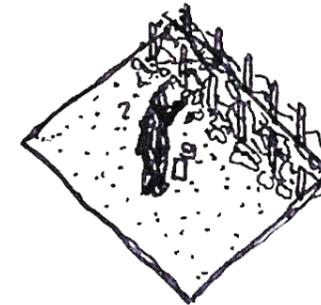
Place two rows of stakes into the ground about 0.5-1.5m wide and 1-2m apart

## 4. Fill the Gap



Place larger branches at the bottom, smaller twigs in the middle, and leaves on top

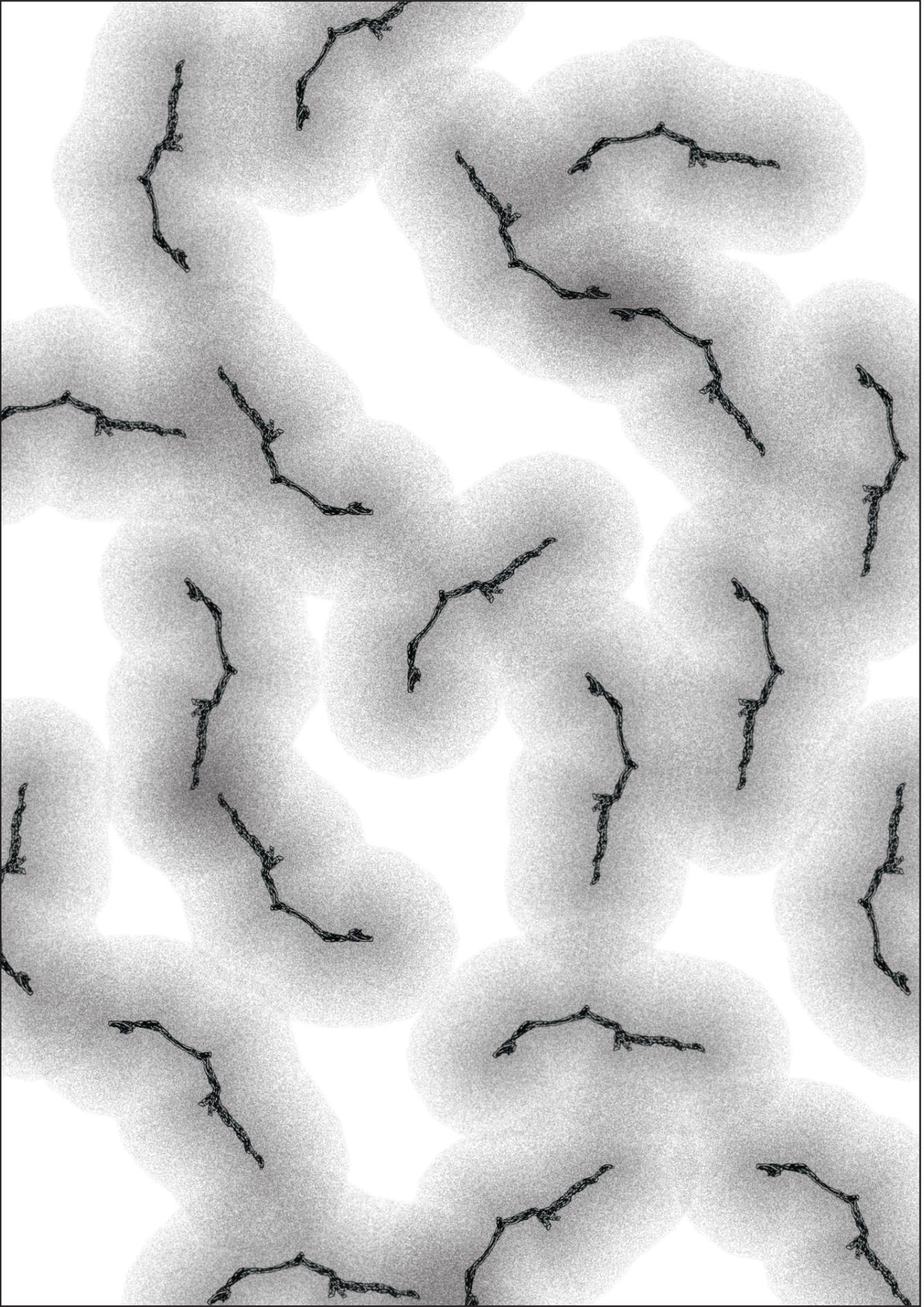
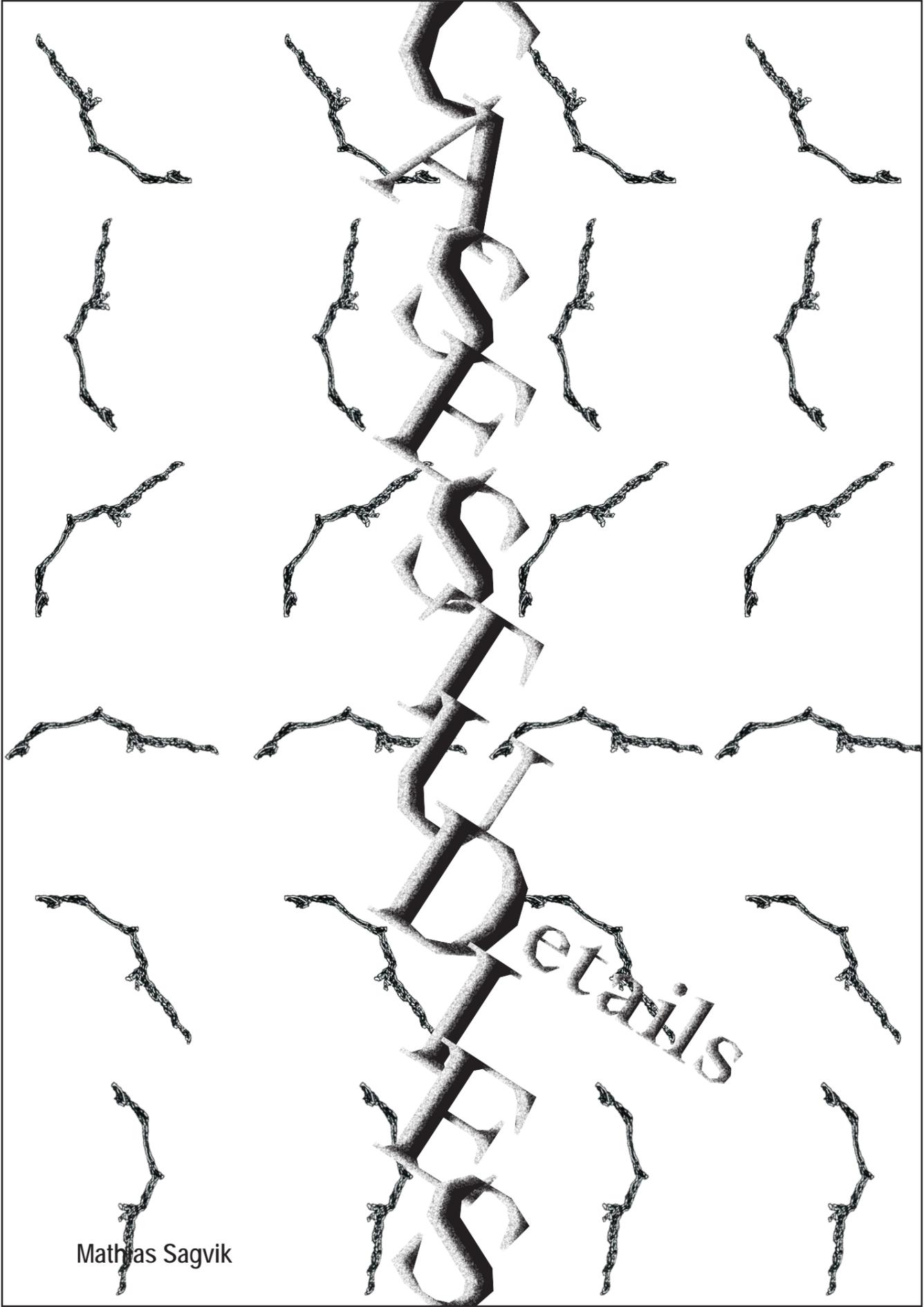
## 5. Plant your Dead Hedge



If you want, you can plant a variety of shrubs, climbing plants, flowers and ground cover

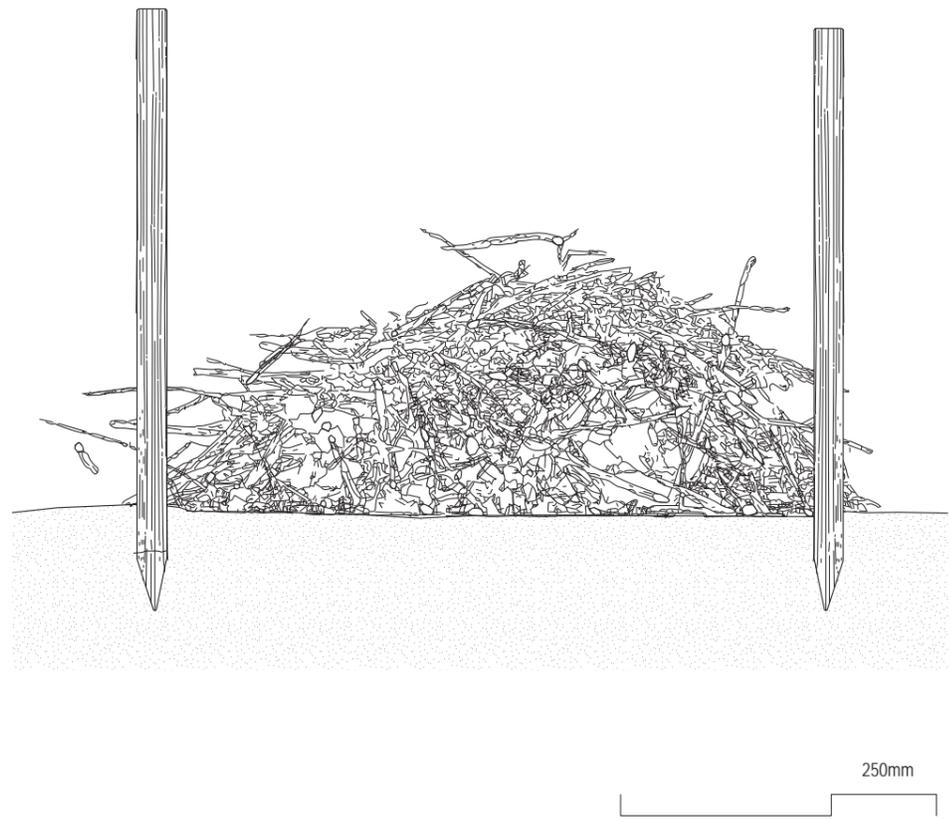
But I suggest letting it flourish on its own

**If dead hedges were a functional protection element hundreds of years ago, can they take on the same role today? Or does the potential span even wider?**



# Dead Hedge: Traditional Composition

Establishing the traditional way of laying dead hedges is essential before developing the material and structural application possibilities. The section clearly shows the three components: timber stakes, dead wood and soil. It also has the quality of forming a vertical, spatial device that can be repeated. Therefore, similar systems are drawn and understood to further develop the project.

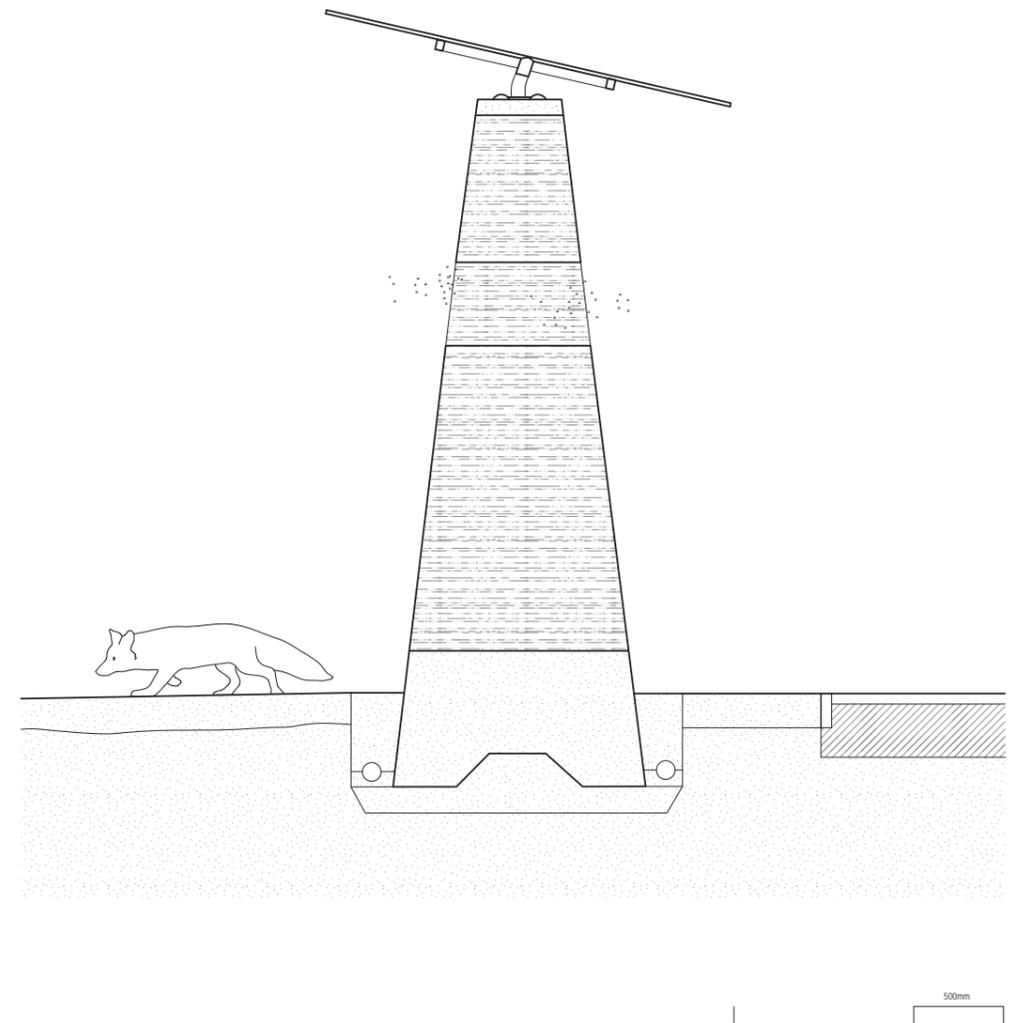
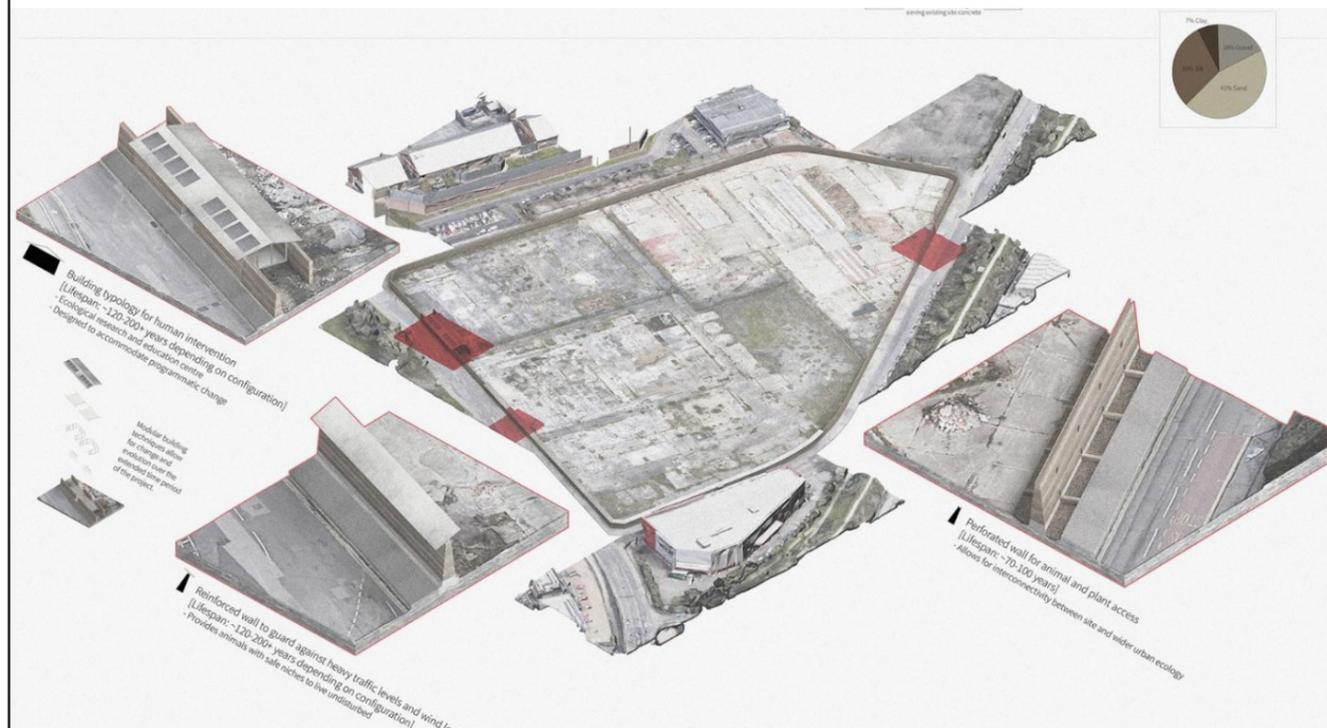


# Fecund Vacancy: The Architecture of Succession

James Emery - 2022

The student project proposed an enclosure of a brownfield site to allow for non-human activity to flourish over time. It consists of three wall systems: one being a noise barrier toward the busy road, one allowing animals, birds and insects to enter and exit the space, and one which is a space for human occupation. They consist of rammed earth with a more permanent foundation and various coverings.

Over time the enclosure erodes and the ecosystem expands. The project is an example of an occupation of land as a method to improve biodiversity and resist development. Time is a central design tool, where the space, use and inhabitation change over time.

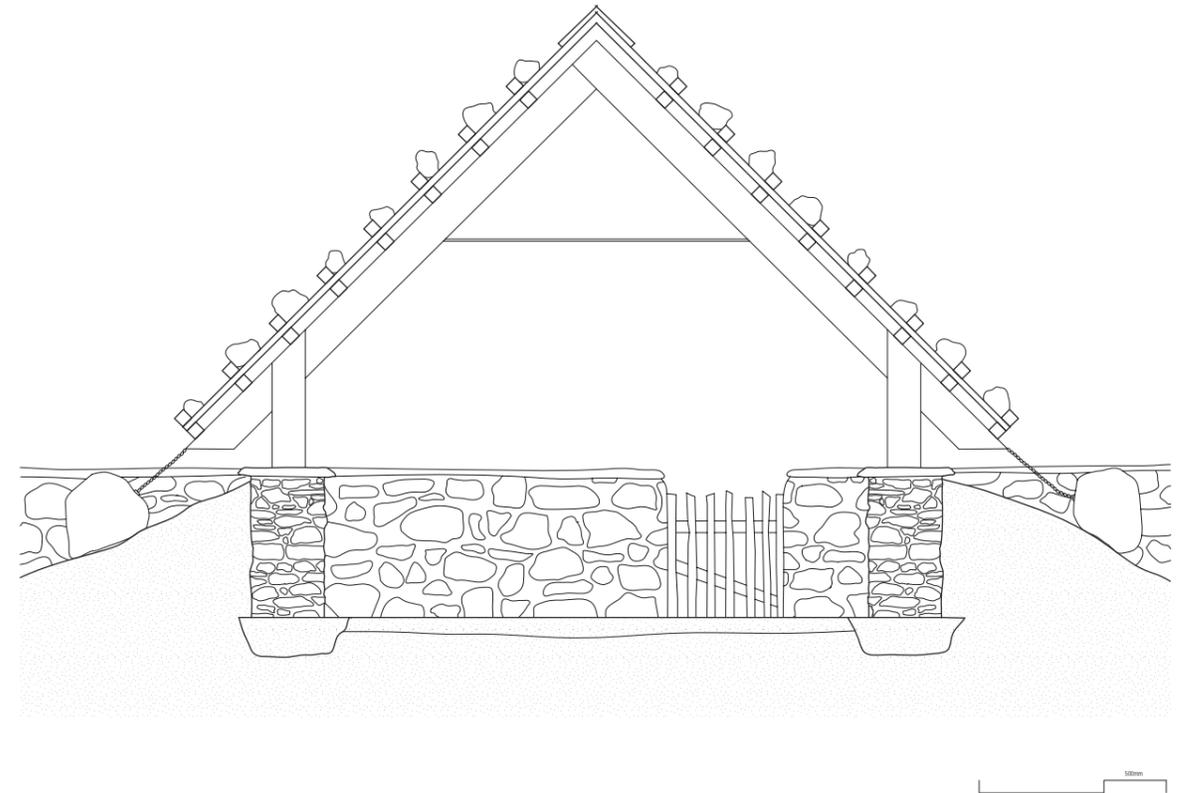


# Rock Hut

## Material Cultures - 2020

The small structure is a culmination of a gathering of local materials to erect a covered space, referencing vernacular building techniques in a new way. Larch, stones, a transparent fluted roofing supported by larger stones, and two steel rods are the materials present in the structure.

It shows another, simple way of creating a semi-enclosed space with suggestions of use rather than over-determination of programme.

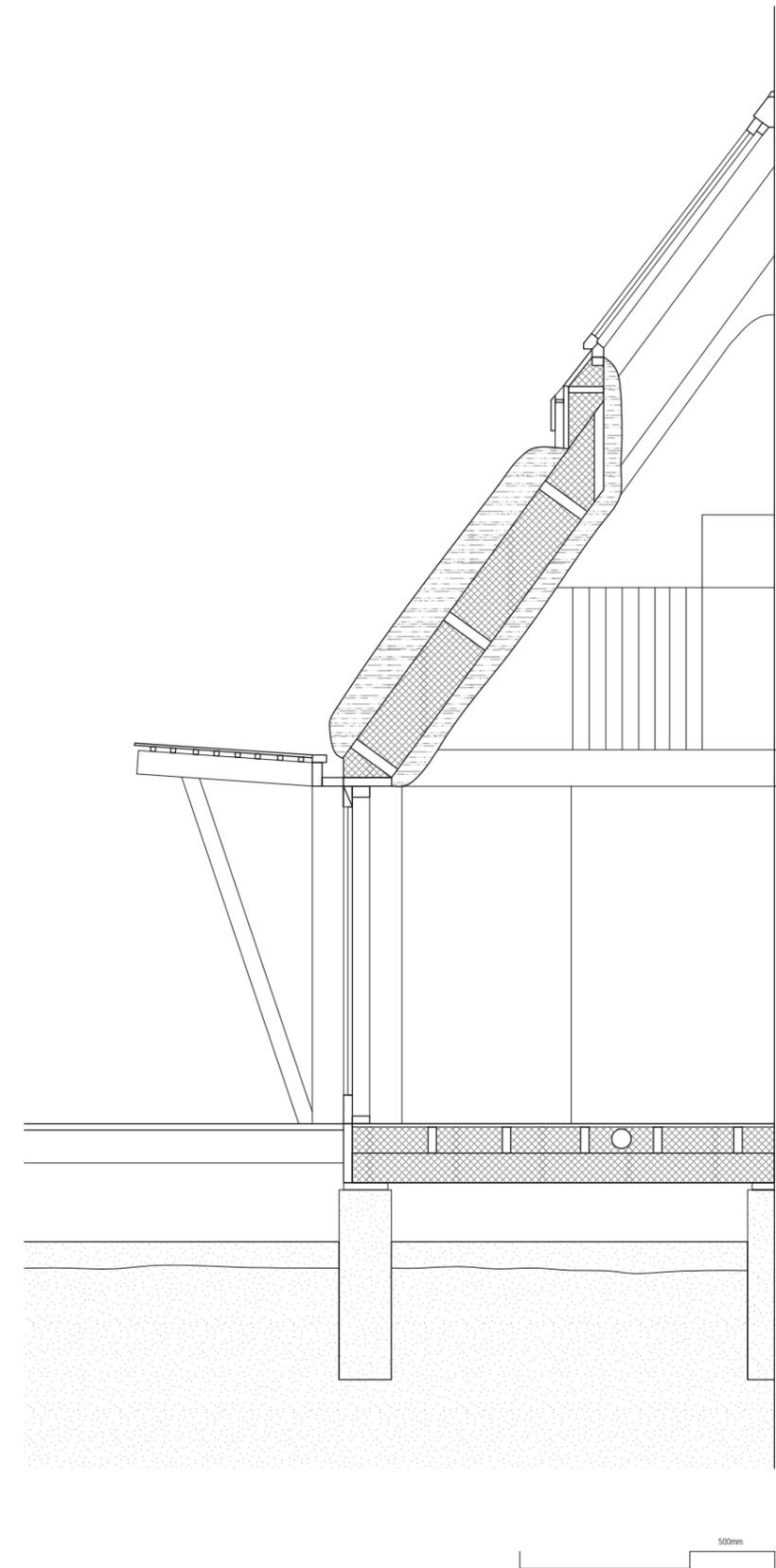


# Modern Seaweed House

Vandkunsten Architects - 2013

Re-interpreting the local tradition in Læsø of using eelgrass as a roofing material, the project develops a material strategy for a bio-based material. The material's insulating property is highlighted, placed between loadbearing structures in the floor, the facade and the roof, which has the insulating capacity similar to mineral wool.

Eelgrass is collected locally, wrapped in nets typically used to store sheep's wool, and becomes the main character in a contemporary home. The result is beautifully strange, and inspires a similar approach to other bio-based, regenerative materials in all components of the building.

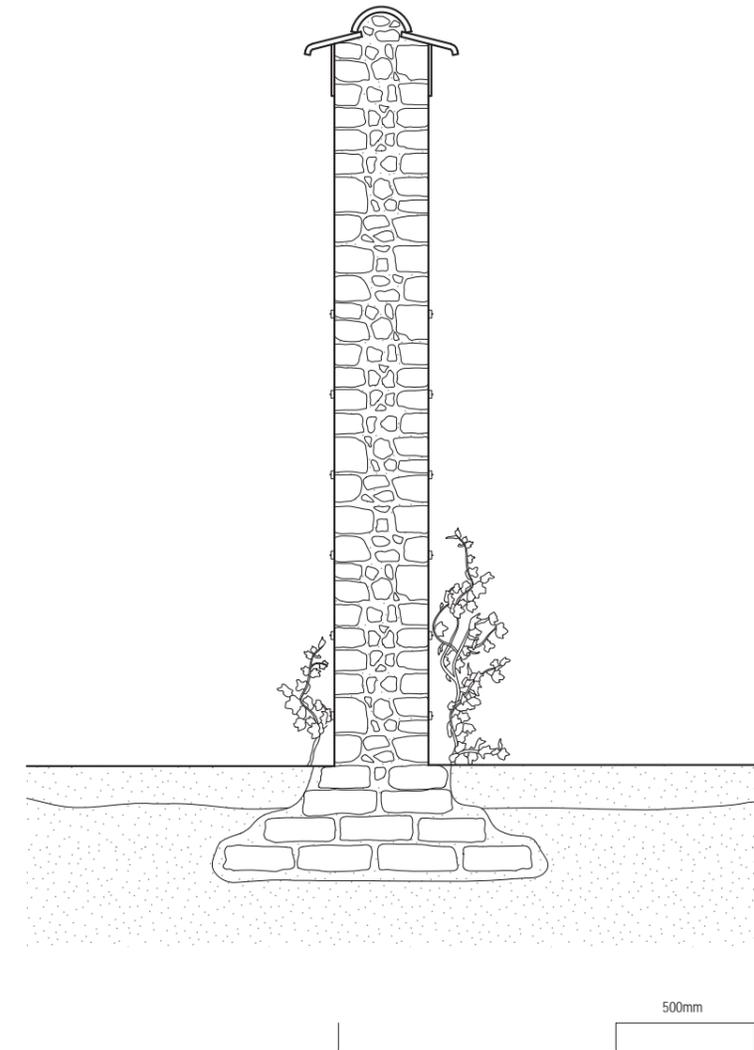


# Thomery Horticultural Walls

1850s

The wall typology is found in Thomery, France, which is used for the growing of a local wine grape. Erected in the 1800s as a large system of production, remains can still be found today. High espalier walls built from hard stone queried nearby, held together with earth mortar and plastered with sand and lime are spaced around 10m apart, standing 3m tall.

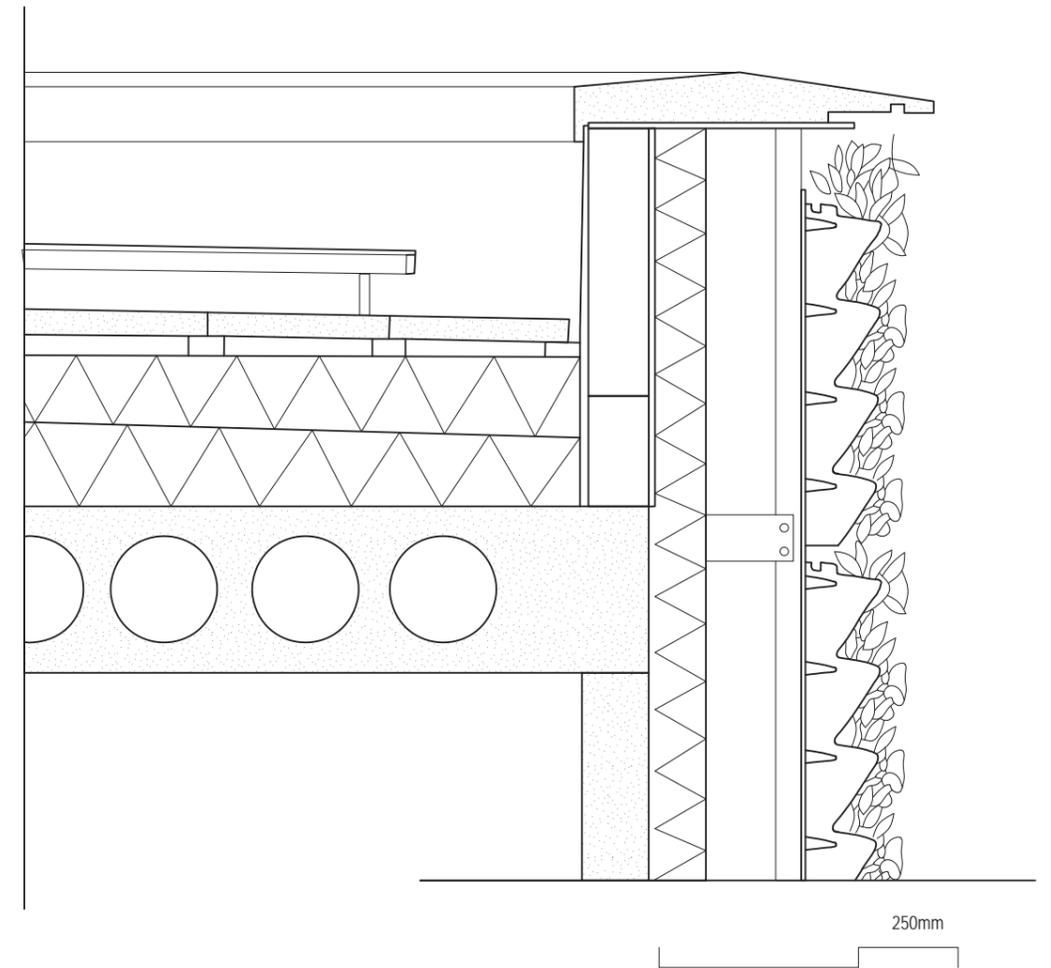
This shows an example of a local wall system used in horticulture which forms enclosures of production. Maintenance is another important aspect of the practice connected to the typology, where bunches of vines are trimmed for optimal growth.



# Venlo City Hall

Kraaijvanger Architects, 2016

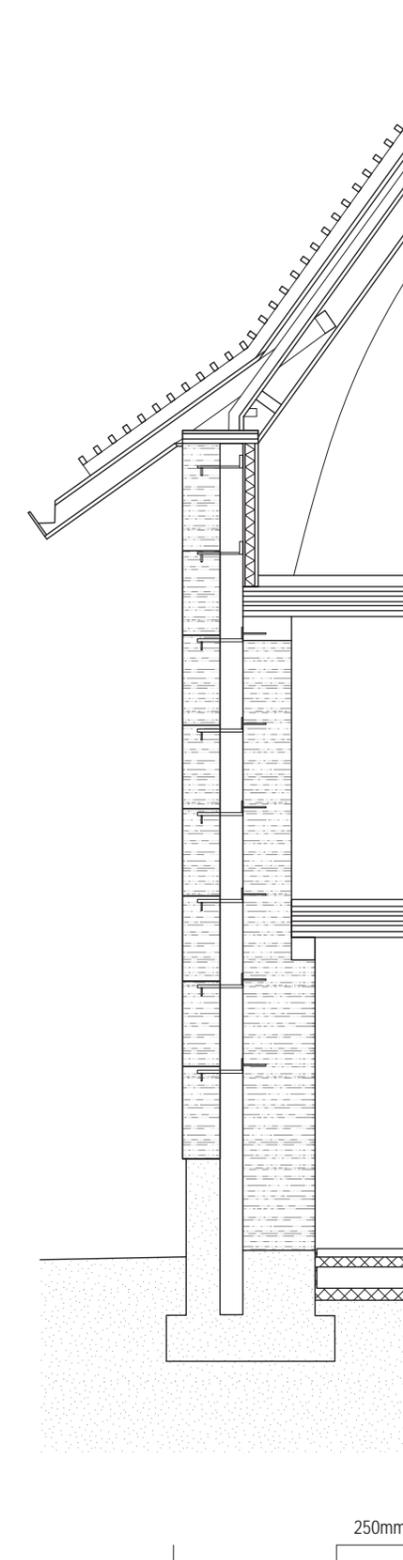
This is not necessarily a project that should be replicated. It is, however, important to understand the current practice of 'green building design' when challenging it. Therefore, the case study shows a functional green facade, attached in modules to the main structure.



# La Villa Archeological Centre

Nunc Architects, 2014

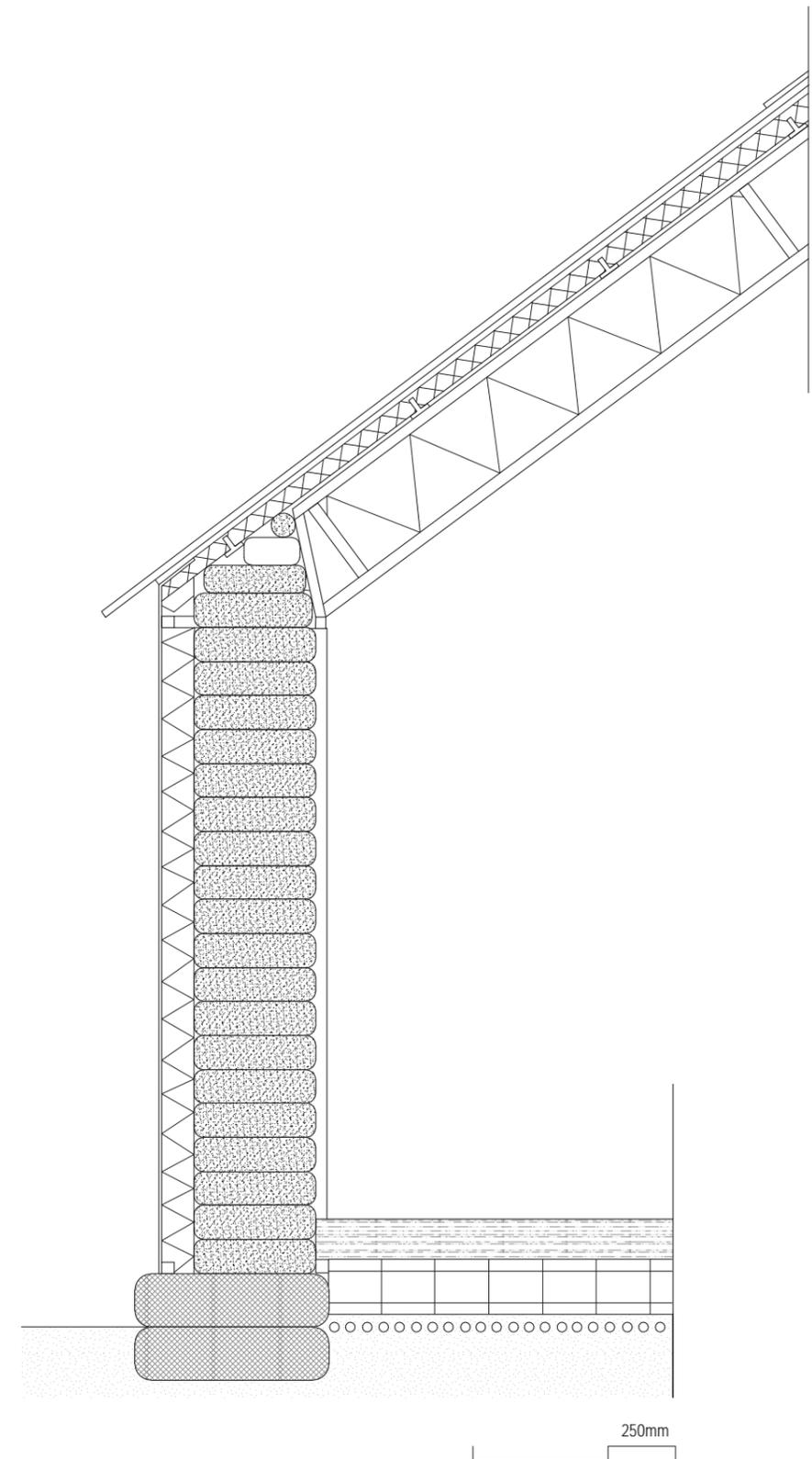
Two clay building techniques are used: a mixture of straw and clay for the north facade and rammed earth elements for the south facade. The earth was excavated 5 km away and compacted in individual layers. To enhance passive solar heating, the rammed earth is doubled up with a curtain glass facade. The project is an example of a building that takes materials and techniques important for the area to create a contemporary piece of architecture.



# Nasma School for Refugees

Najjar Najjar Architects, 2014

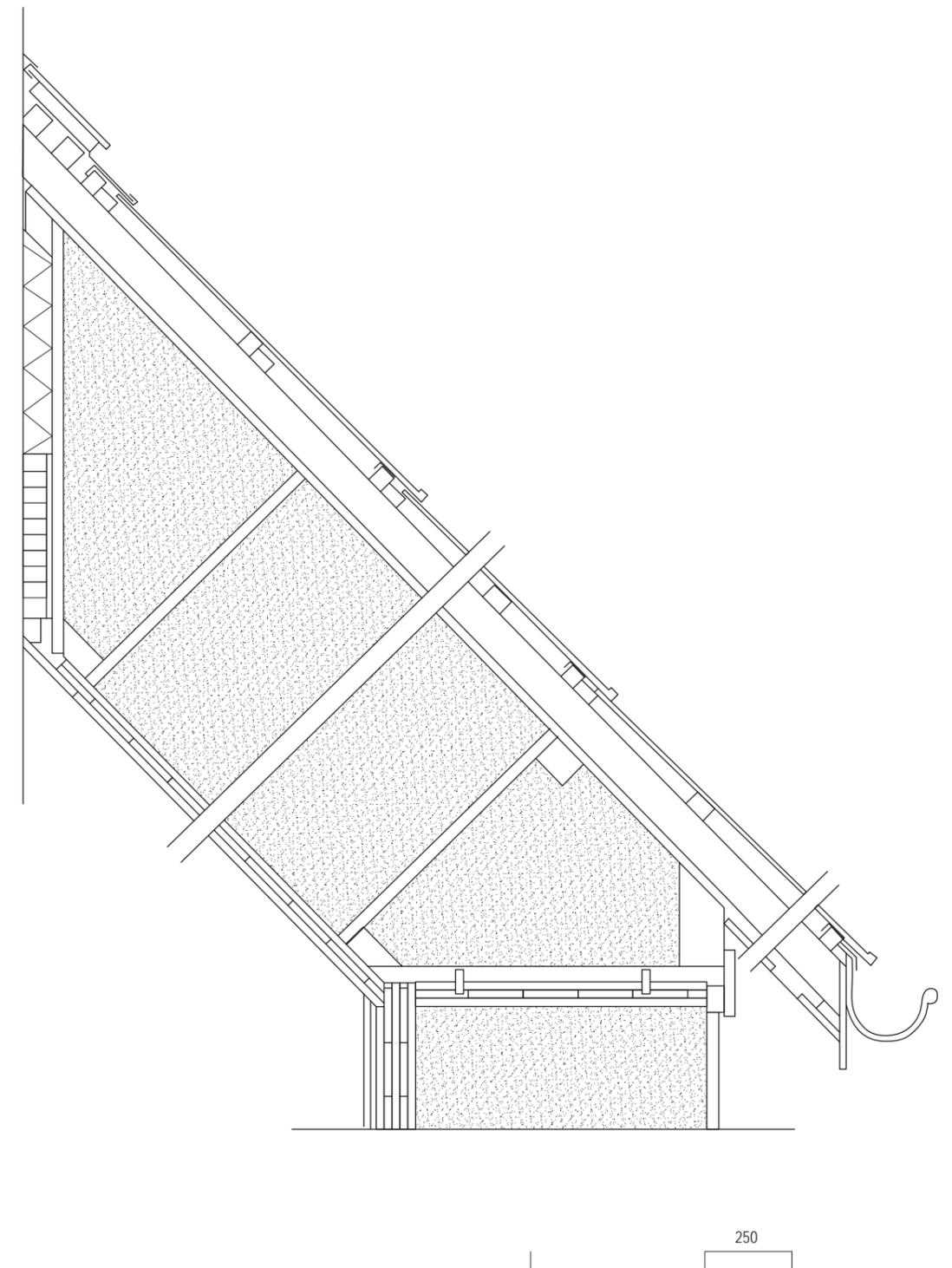
Exterior walls are made of stacked-earth bags assembled on site and braced by eco-beams. This provides sufficient thermal mass to regulate the impact of the widely varying weather conditions. The project involved refugees in the construction process in order to give them a sense of ownership. The facade buildup consists of a transparent cladding that exposes the pine needle insulation, which is supported by PP bags filled with local earth.



# Überbauung Bombasei-Areal

Atelier SCHMIDT, 2020

Wanting to find a project that employs the use of straw, the project combines the thermal qualities of the material with timber in a climate similar to Norway. The result is over 900mm thick walls, simply clad and supported by a timber structure. The elements are prefabricated, and the result does not expose the straw beside the depth of the wall.



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Mathias Sagvik

## Waste Streams

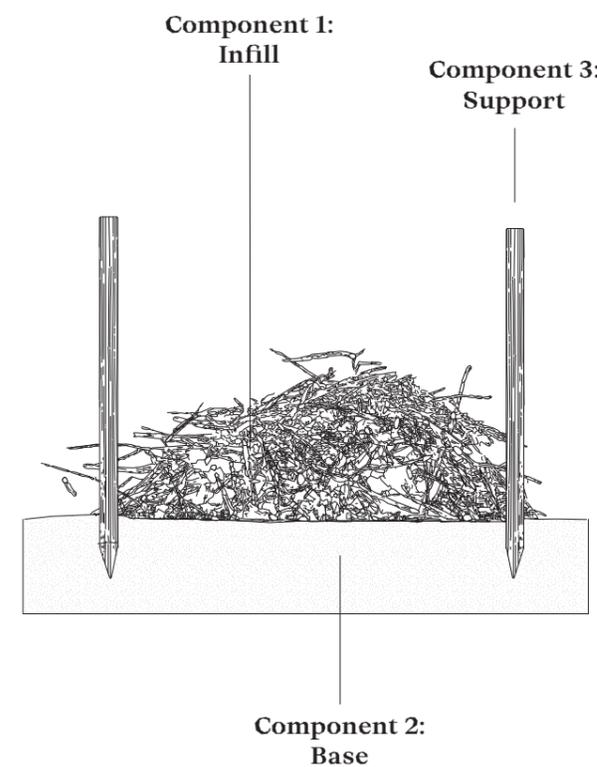
The thesis explores potentials to access the city's surplus resources. Waste streams are reconsidered as a common good beyond utilitarian use within strict regulatory frameworks. The intention is to design structures that piggy-back on existing infrastructures of excess, and seeks to democratise the city's resources into a continuation of the commons at Loallmenningen.

Through the lens of the dead hedge, three central components are identified and translated into materials that become tools for reinterpretations of the typology.

Tree cuttings from municipal and private maintenance is redistributed to invision a building system benefitting local ecology and collaborative practices.

Soil from ongoing tunnel excavations in Oslo becomes a material bank for growth.

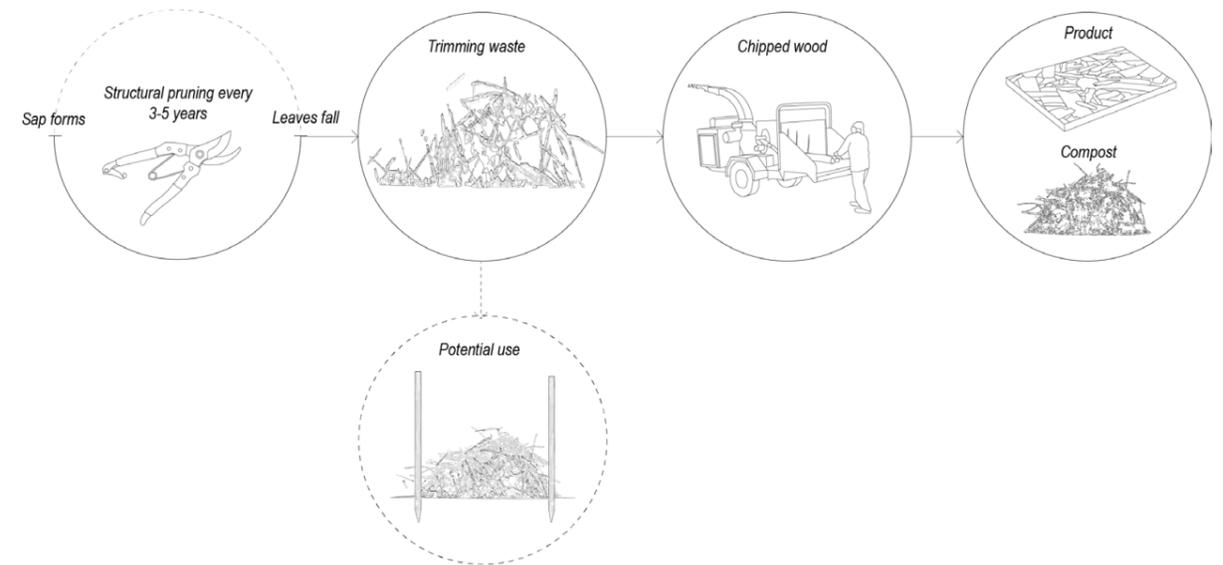
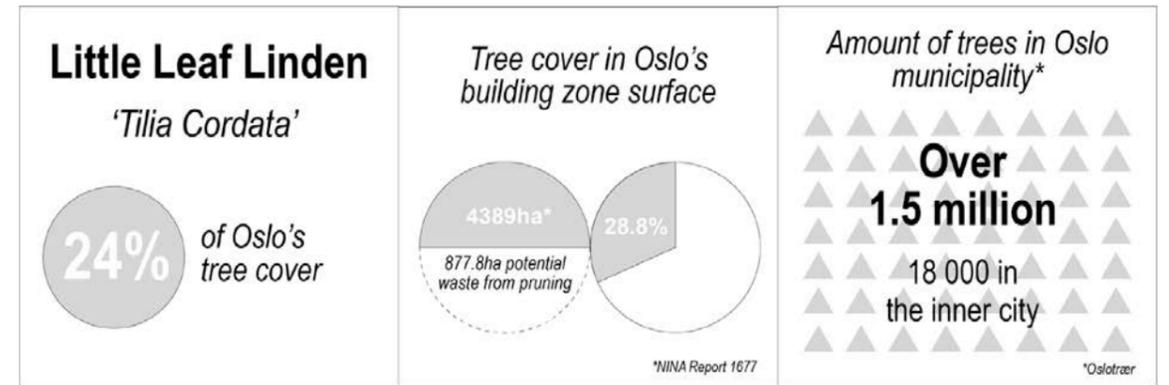
Formwork from the planned school adjacent to Loallmenningen is stored and re-used as a building material supporting the infill.

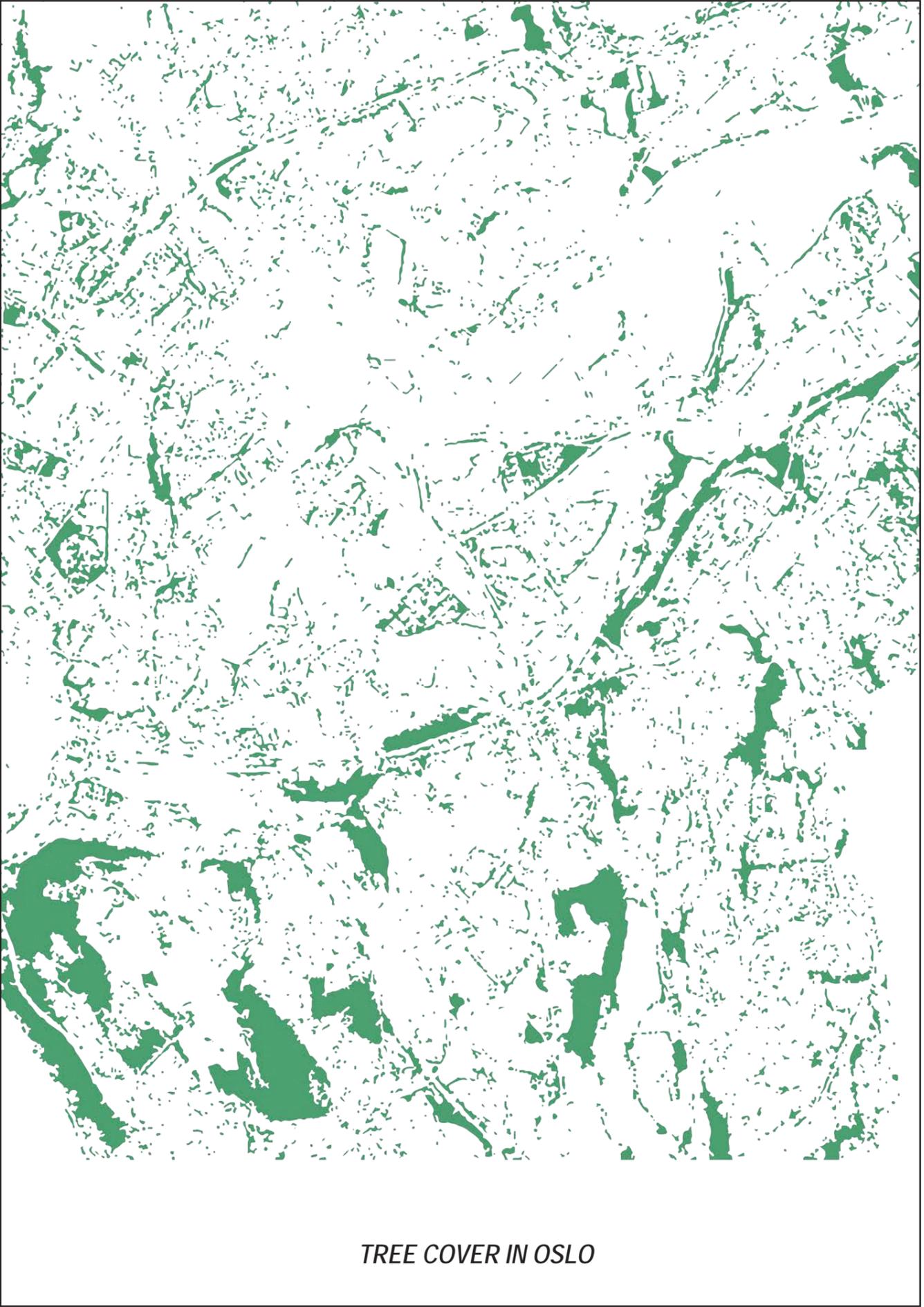


**Dead hedges function as spatial devices and habitats in the perimeter of fields or gardens today. But what if they were integrated into the urban fabric? What if they became the protagonist for a new material strategy of the built environment? What if they became a catalyst for a new common urbanity?**



# Component 1: Cuttings

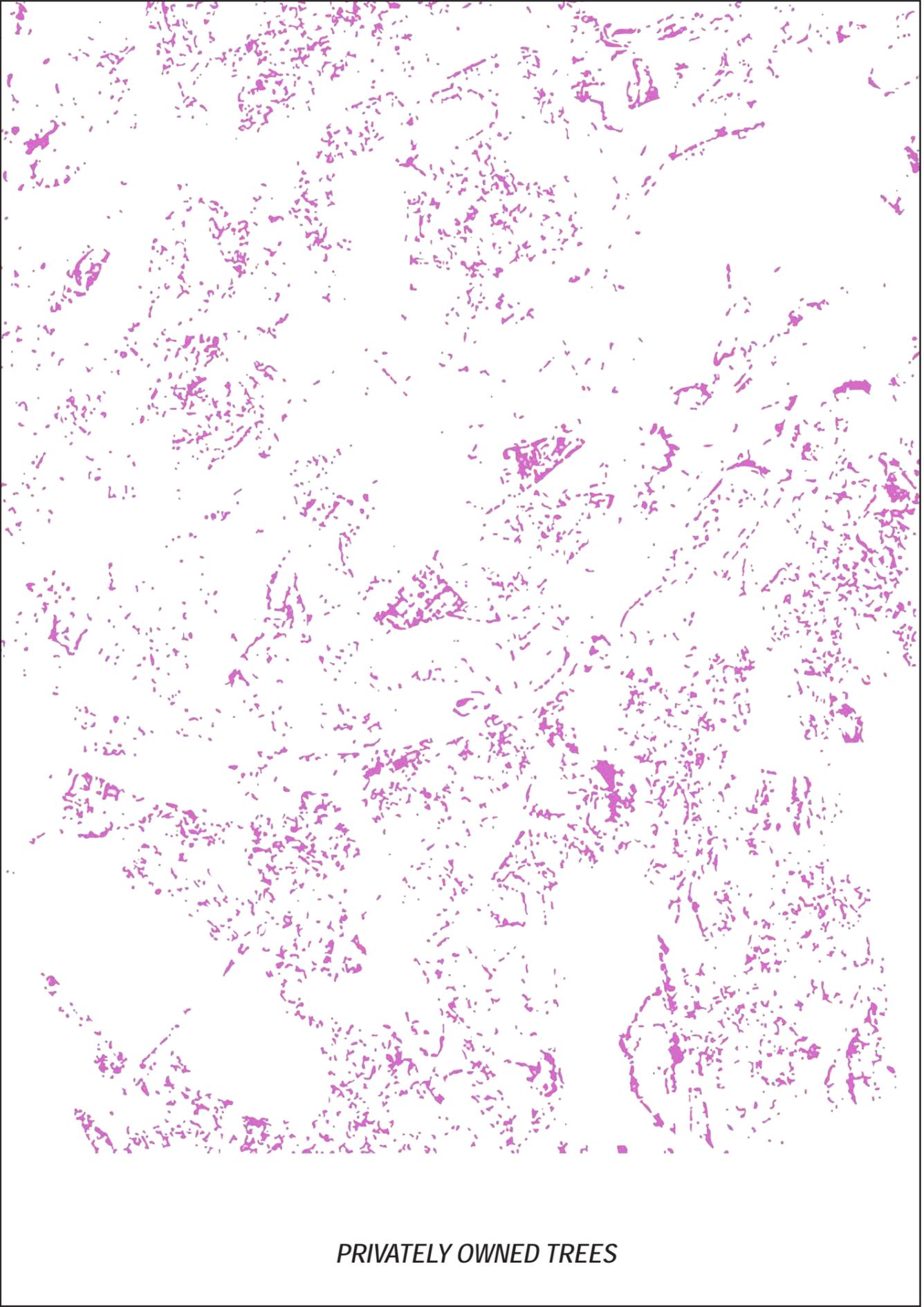
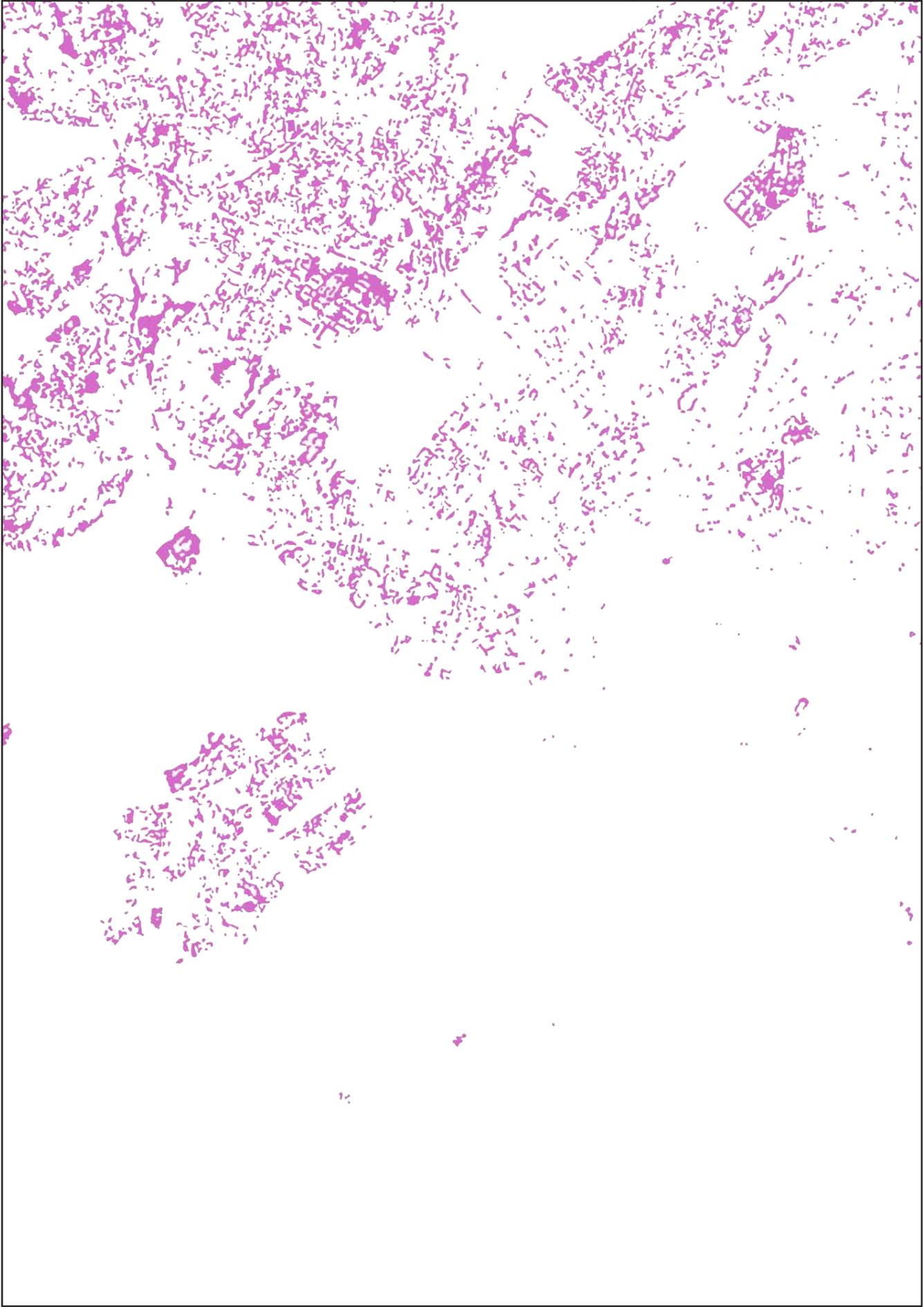


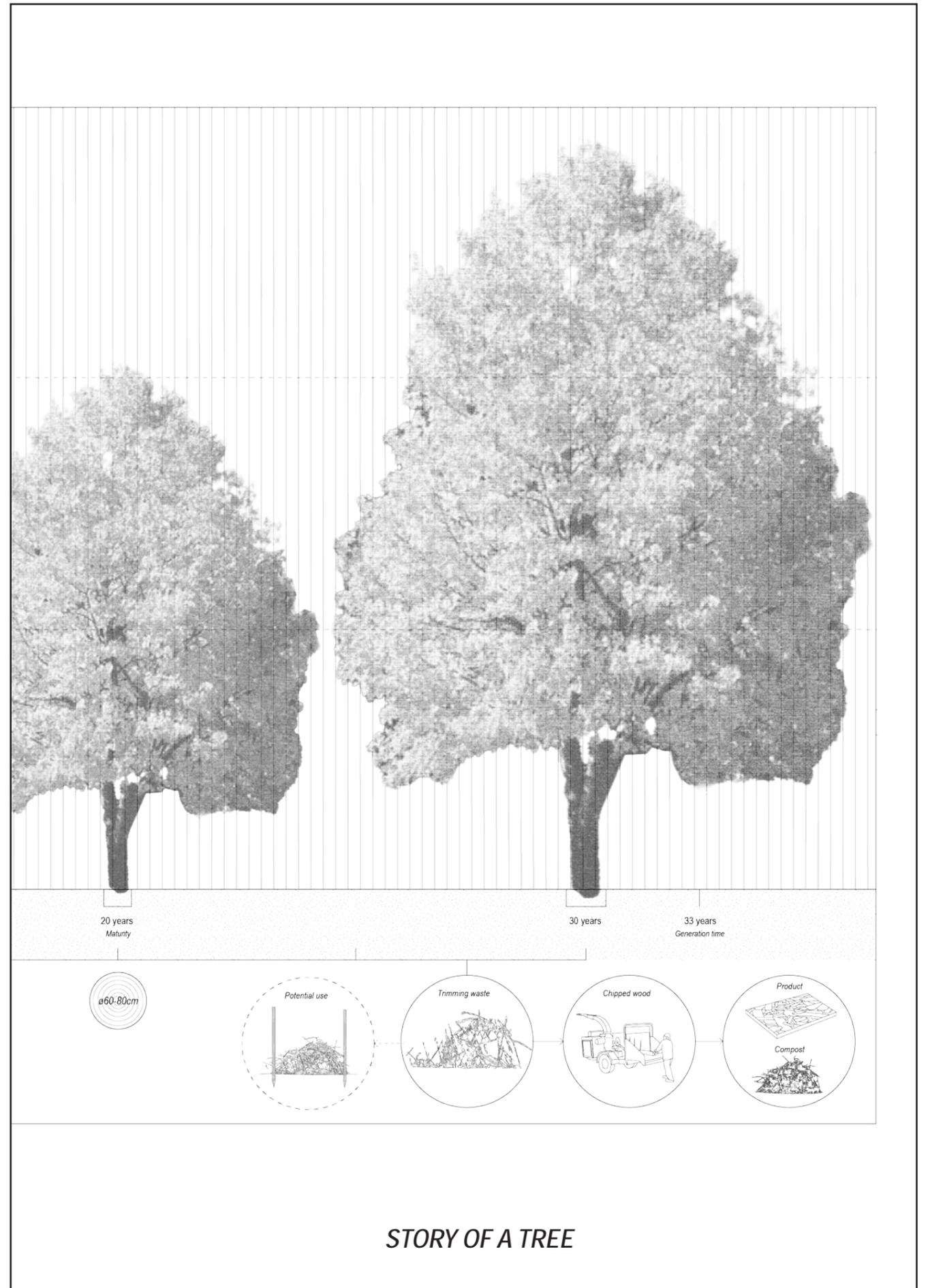
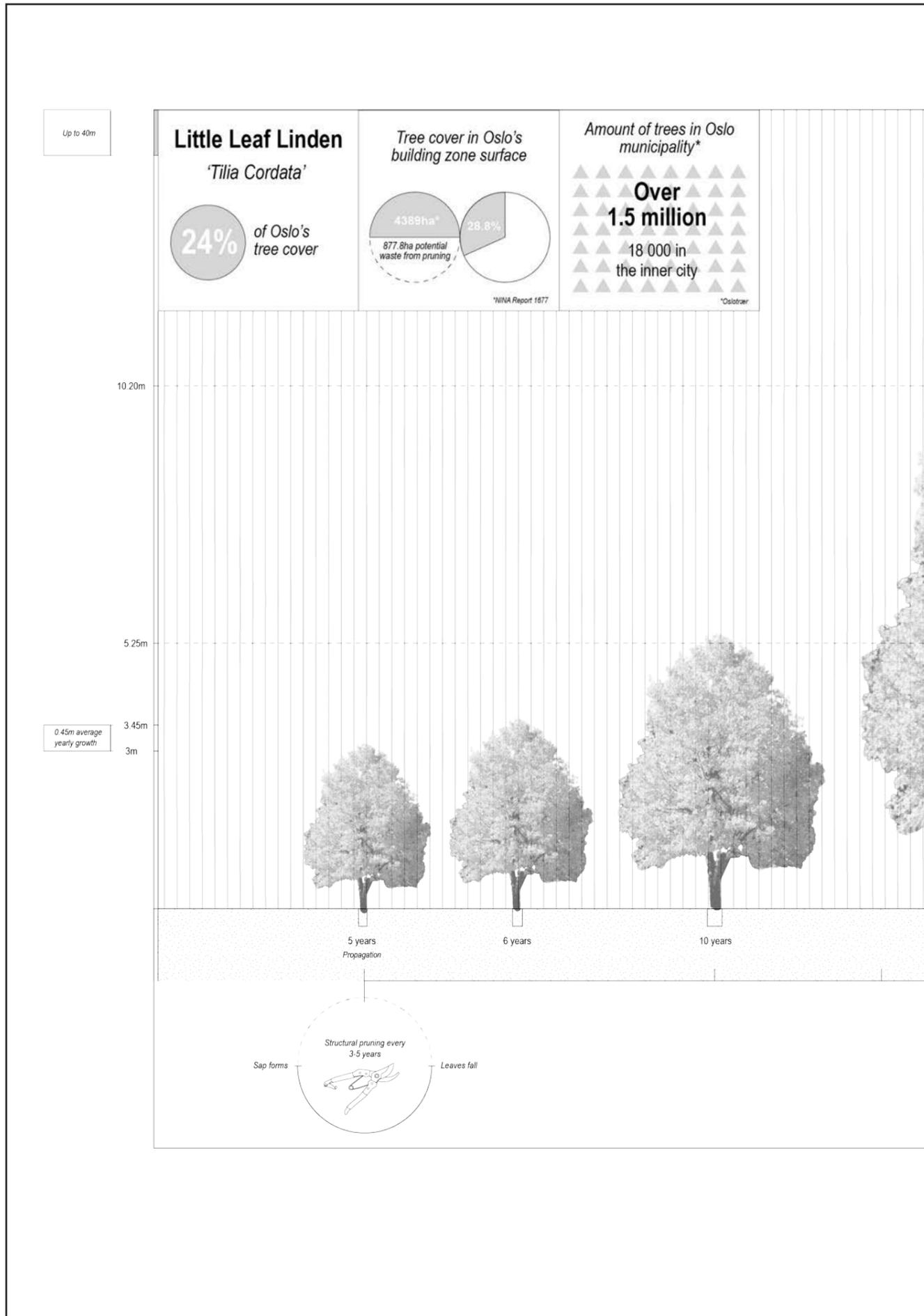


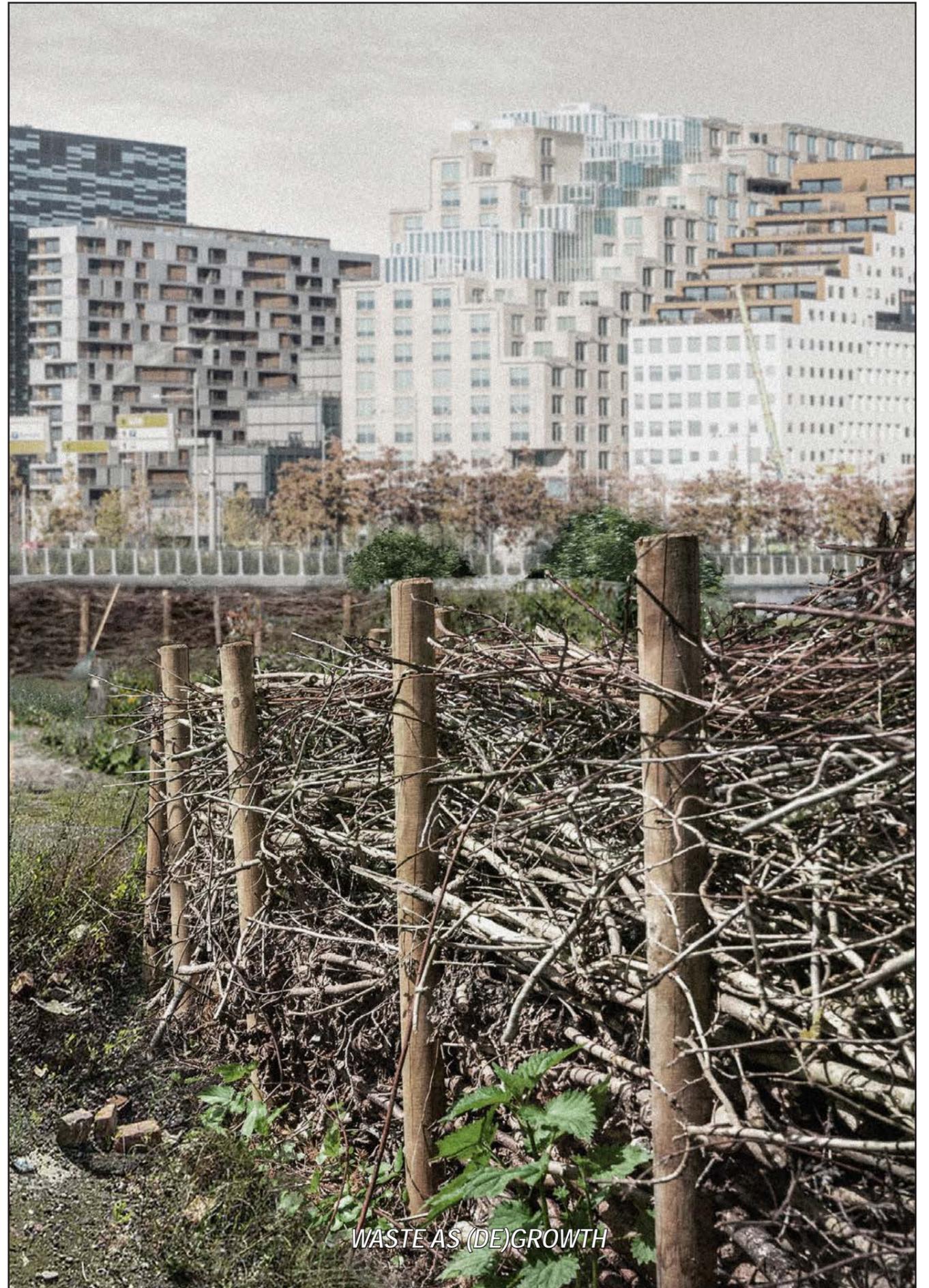
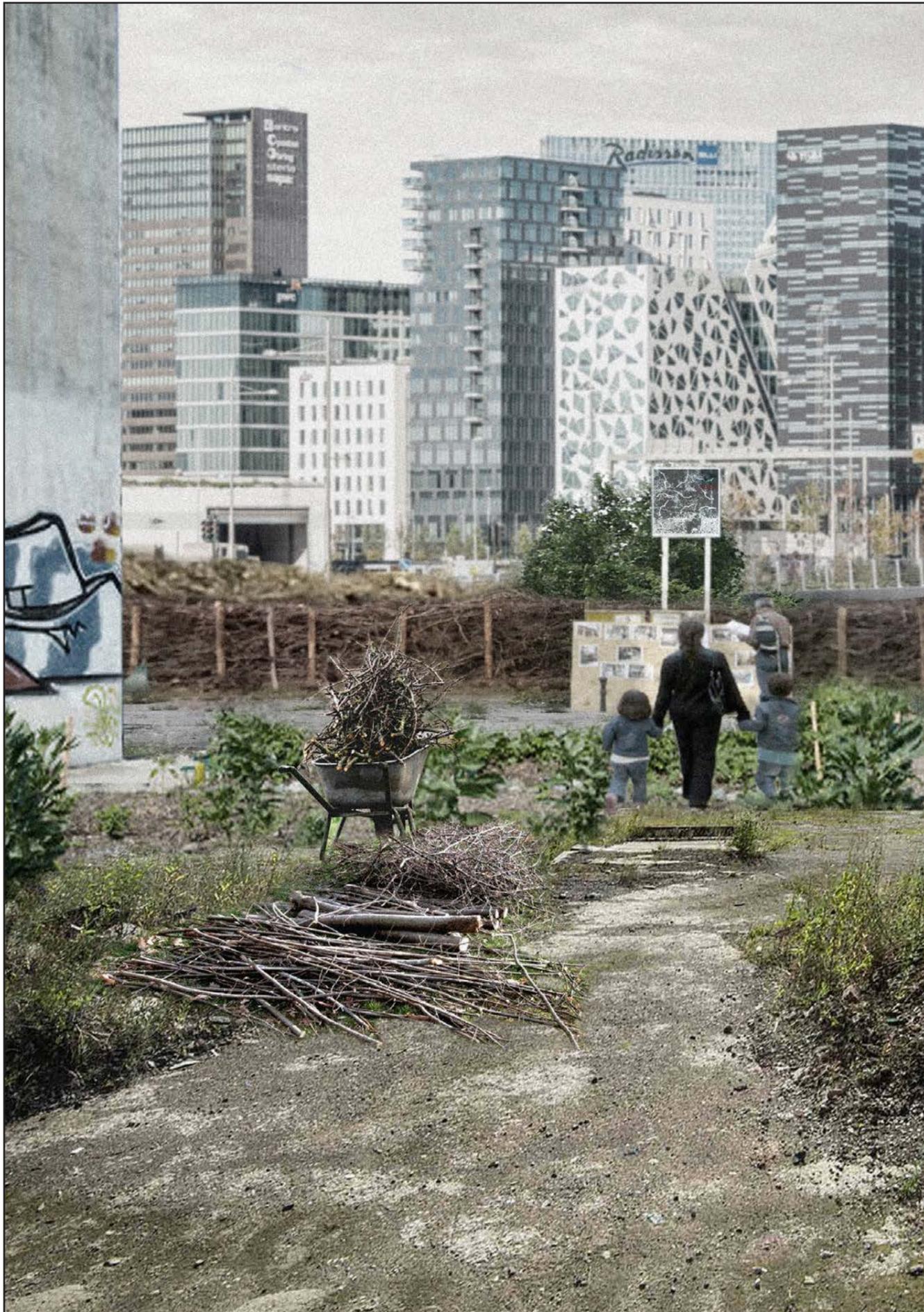
*TREE COVER IN OSLO*



*MUNICIPALLY OWNED TREES*



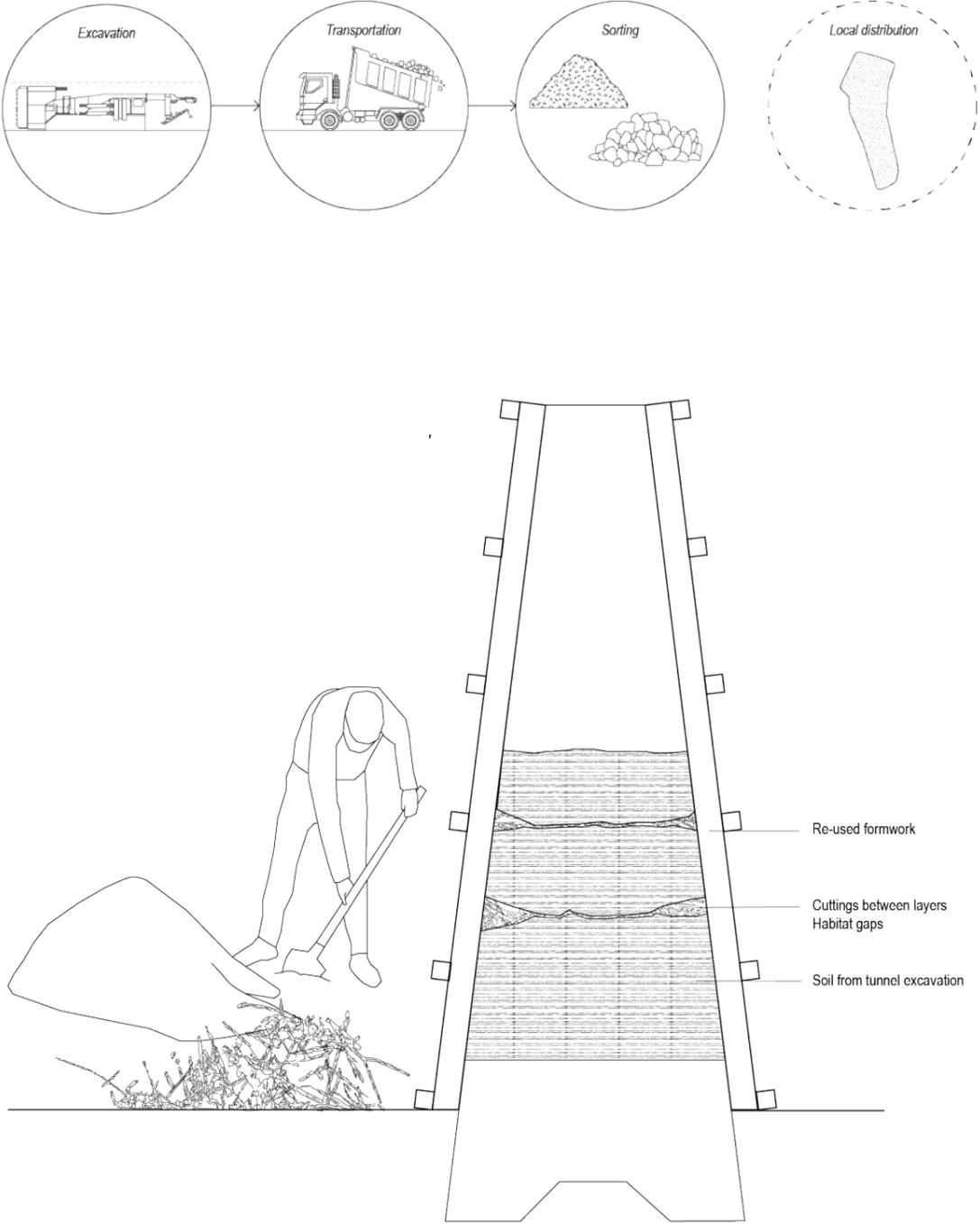


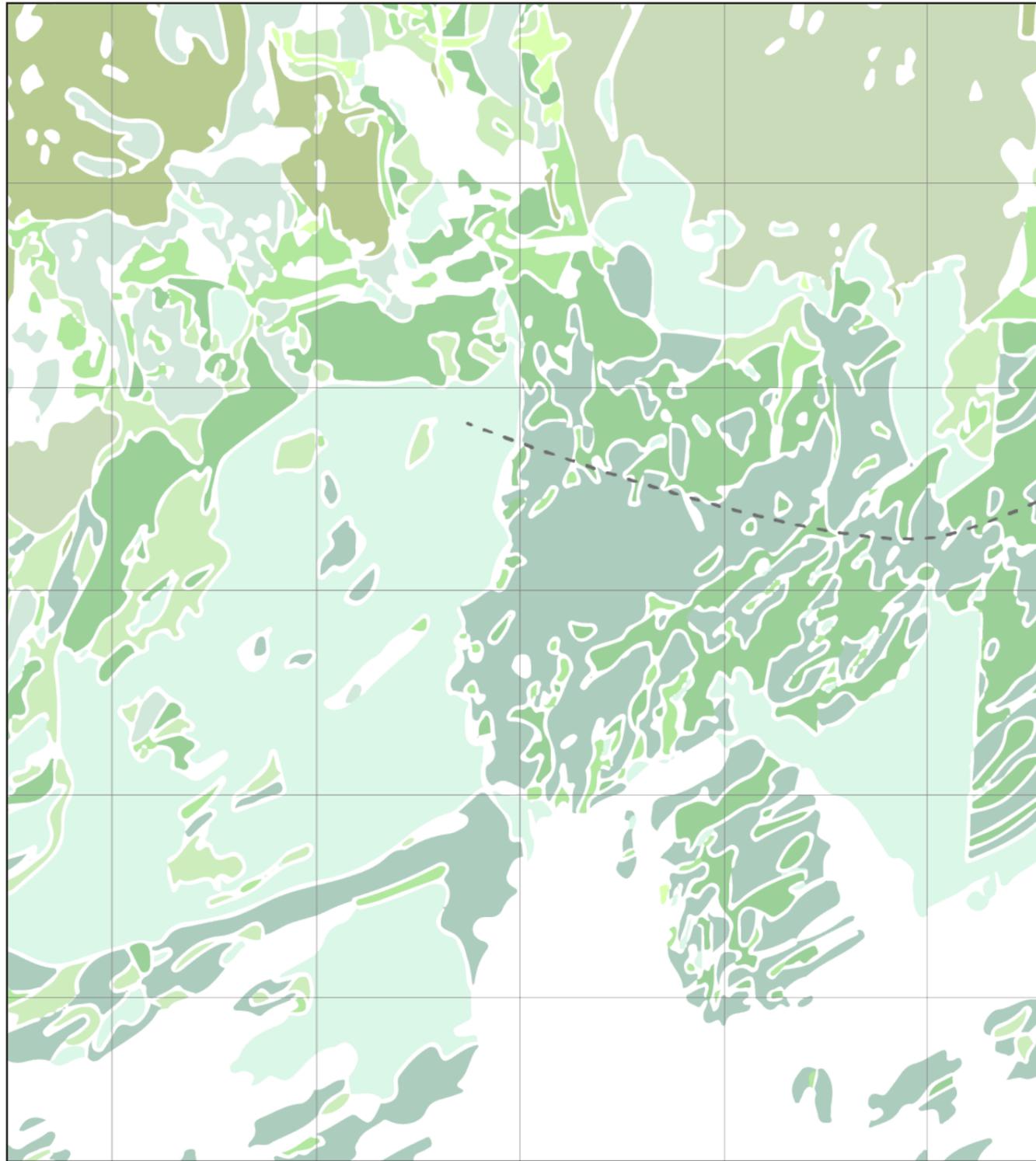


WASTE AS (DE)GROWTH



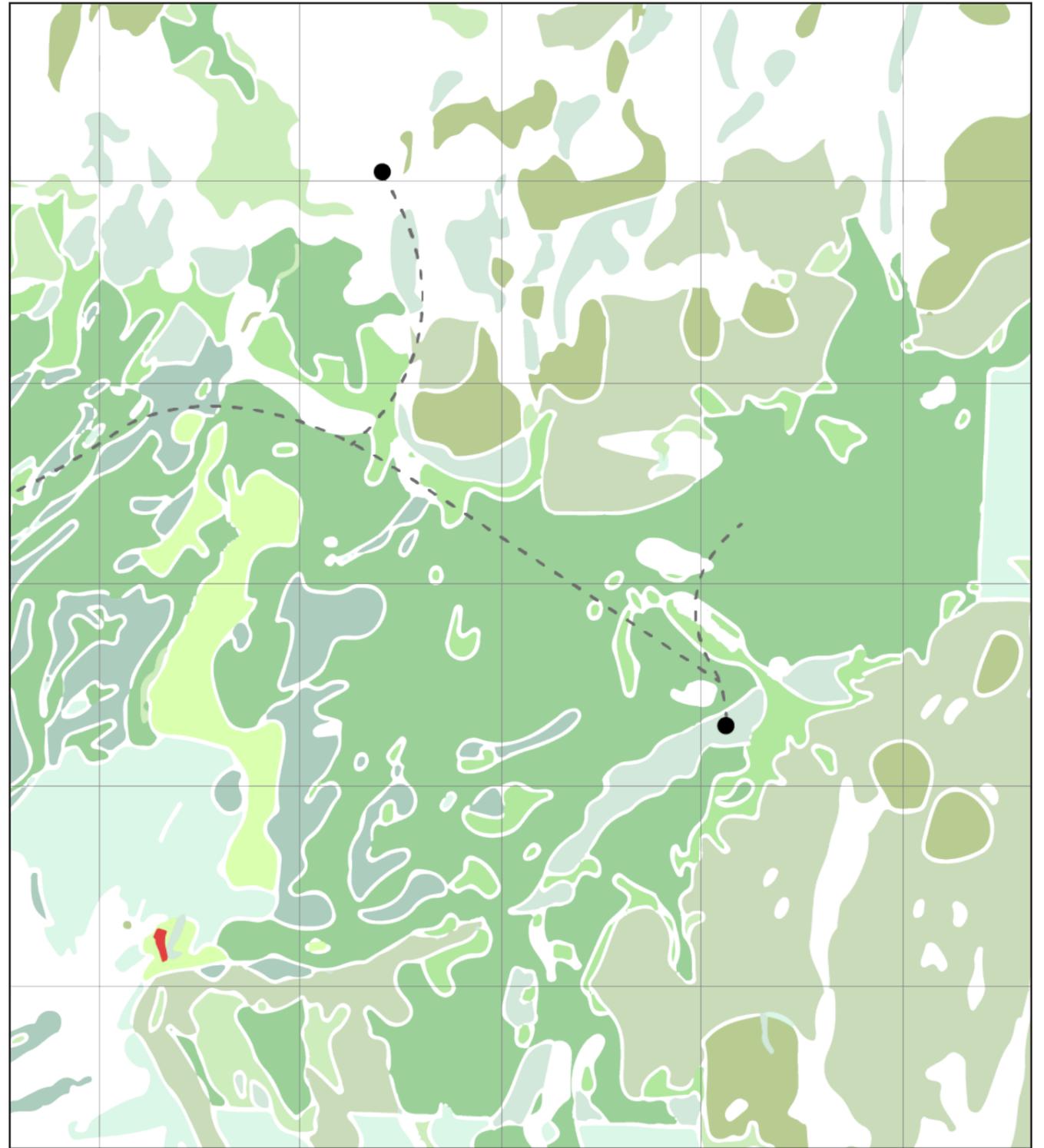
# Component 2: Soil





20km

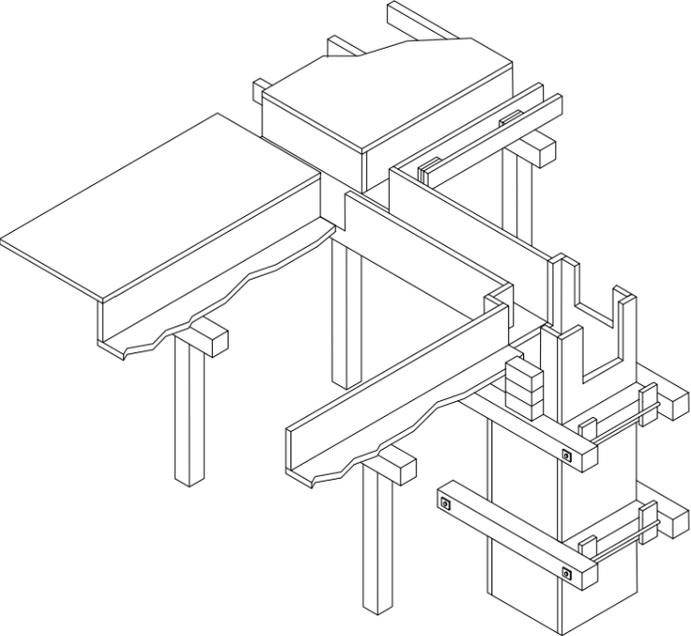
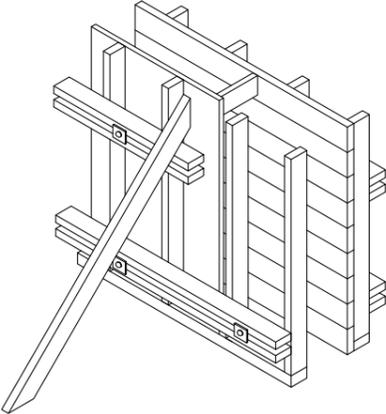
- Anthropogenic material
- Marine sediments
- Bedrock sediments
- River sediments
- Exposed rock
- Tunnel excavation
- Loallmenningen
- Extraction points

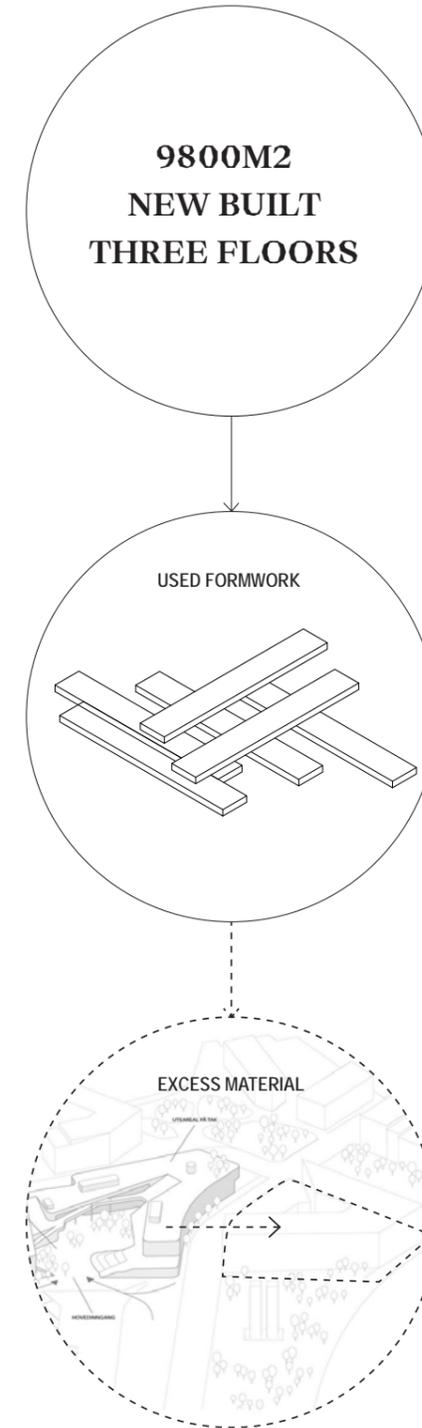


ONGOING TUNNEL EXCAVATION



# Component 3: Formwork





*LOCAL RE-USE OF FORMWORK*



What if we performed a collective act of fecundity? In 1982, German artist Joseph Beuys initiated a social land art called Foresta in the City Administration oak forest. Each year, five black basalt stones are piled outside the museum. As a tree was planted by Beuys and volunteers, a basalt stone was removed from the pile. The project is a response to the extensive urbanisation of the city which negatively impacted ecological systems. Therefore, the 7000 oaks provided ecosystem service and became a tangible marker for a movement vouching for sustainable futures. It was certainly progressive.

This Situation is still highly relevant to their ethos. It can be an even more propose: "ecologist" be a collective act of gathering, and composing: "7000 Dead Hedges - City Decay Instead of City Growth".

It will start from Loallmenningen and continue toward the city centre of Oslo, filling in gaps



Mathias Sagvik

## 0. Preface

The intention of this booklet is to pause and reflect after a period of production - deliberate following if you will. Thinking about the feedback from my mid-review, I want to summarize the core of the project, highlight theory that has influenced the research, and imagine life within the spaces designed.

# Reviving Dead Hedges

March 2024, AD

This thesis uses the 'dead hedge' as a spatial, social, and ecological tool to imagine an alternative future of Loallmenningen.

Learning from contemporary theory on urban ecosystems, architectural applications of bio-based materials, and a selection of public typologies, the project weaves into the fabric of urban exceptions in an area of rapid growth.

Expanding the practice of laying dead hedges, excess tree cuttings and repurposed formwork is incorporated into the the architecture of the site.

The aim of the proposal is to increase urban bio-diversity, create new social spaces, and resist private development of the established commons.

## 1. Concepts

Let's pause on three central concepts that will be relevant for the thesis.

### **Waste Stream**

Current building practices generate an inconceivable amount of waste, some recycled, some reused, most discarded. Surplus materials from processes of building and maintaining should be considered anew.

My approach to this investigation is to work within existing structures of excess, uncovering loop-holes and opportunities of how to rethink applications within a material stream, rather than inventing a new structure for 'improved' material use, which requires excessive time, knowledge, and money.

### **Fallow**

Fallowing means facilitating a deliberate pause. Active land is put on pause to replenish, to grow, to rest, before resuming activity again. This supports the agency of other-than-human activity over time.

The value of idleness is the opposite of speculative urbanisation, creating a gap in time and space for other forms of governance, use, and experimentation to unfold. What if a transient space in the city was framed by dead hedges, only allowing other-than-human movement and inhabitation?

### **Commons**

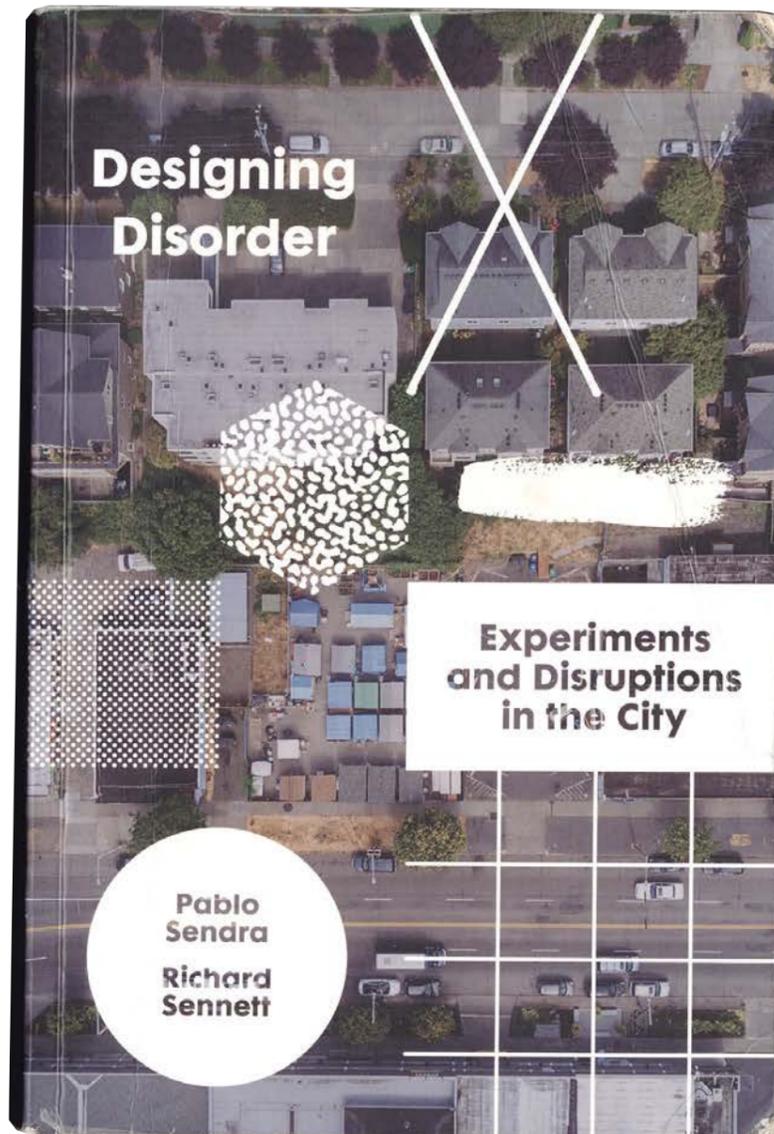
Commons can be described as collective and local ownership of land, resources, or ideas that are held in common, often in opposition to private property rights. They pave the way for collective self-organisation outside the logic of capitalism.

In Norway, Lov om Bygdeallmenninger, describe **official rights for forestry and agricultural commons**. There are no equivalent laws in urban areas where private property laws are most prevalent. Therefore, urban commons must be viewed as being under development where practice, laws, and discourse is formed over time.

Ecosystem services and bio-diversity should also be considered under the umbrella of 'protected goods' within a common. Commons should encourage interaction and

inclusion of humans and other-than-humans.

We are losing our urban commons to development. We need an alternative balance between private and public, accessible and unaccessible, natural and human made. The municipality should have a stronger voice in carving out non-commercial gathering spaces for humans and other-than-humans.



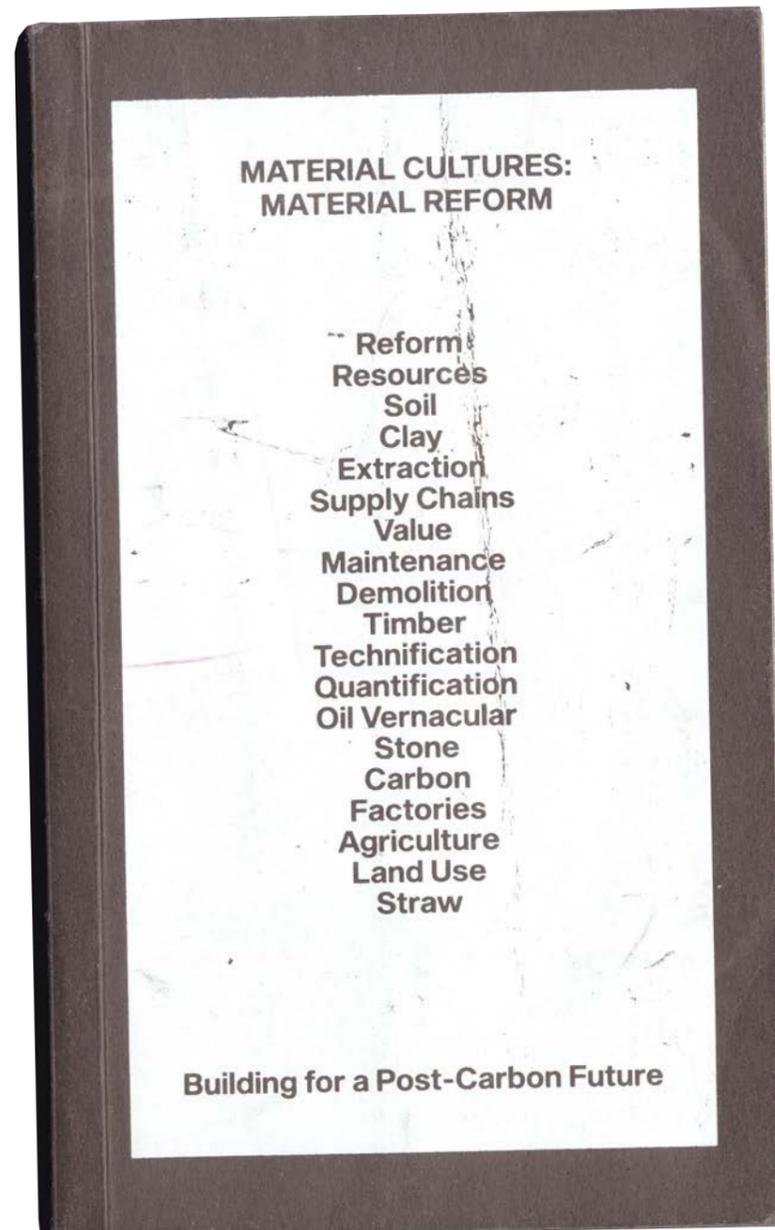
## Designing Disorder: Experiments and Disruptions in the City

Pablo Sendra, Richard Sennett, 2020

Sennett highlights borders as liminal spaces where organisms become more interactive.

Hedges manifest porous walls where other-than-human groups cross territories and habitats outside human access. Therefore, the edge can be designed as a space of protection in which access changes over time.

The approach of this thesis is also connected to the idea of designing disorder. That is a critique of overdetermined, static urban spaces which seek to impose order. Experimentation, informality and multi-species coexistence is essential for inclusive urban realms.



## Material Cultures: Material Reform Building for a Post-Carbon Future

Material Cultures, 2023

*"Whenever we build we either contribute to or counteract dominant forces of change" (16)*

'Loallmenningen' is located by the rapidly developing harbourside in central Oslo, . I want to propose an alternative that values bio-diversity and public access rather than commercial gain.

*"For construction to make a genuine contribution to the regeneration of eco-systems an resources, we need to engage with the whole material chain". (18)*

My proposal engages with excess resources, storage, and redistribution. The components for the revived dead hedge are tree cuttings and repurposed formwork. They are not products for instant assembly, but requires maintenance over time through collective effort.



## New Geographies 10 Fallow

Harvard GSD, 2019

Michael Chieffalo,  
Julia Smachylo

*"The moment of pause - of fallowness - is pelete with potential to forge new social and ecological relations in agriculture. Fallowing is understood as a process of restoring latent ecological capacity through periodic idleness" (6)*

*"It is in these places - at moments in between devaluation and reevaluation - where new boundaries can be drawn between humans and nature, and new social vectors initiated"*

I am proposing a pause in the rapid development of Loallmenningen to make room for other ways of constructing and being among species. Carving out a space without human access using dead hedges as a tool can allow spontaneous ecologies to develop over time.

2. Theory

*"Planning's fundamentally social-reproductive function should be reactivated, to bring back its unrealized drive to synchronize the economy with the place of environmental recuperation and the cultivation of both individuals and communities."* (22)

Alvaro Sevilla-Buitrago

Fallow can be a lens to organise space in time, to **value slowness, to reconfigure** relations among public apparatuses, and address different agencies in a state of rest.

*"The framing of land implies that a process of resource extraction has previously occurred."* (73)

Christopher Marlinkoski

It implies that after a pause in activity, the land will continue to be productive or extracted in a **reconfigured way**.

Idleness also connects with the idea of 'dead matter', which in reality bursts with life.

Urbanization is often understood as the manufacture of a saleable product, whether **physical or financial, rather than** structuring a process that can facilitate a variety of uses for a variety of species.

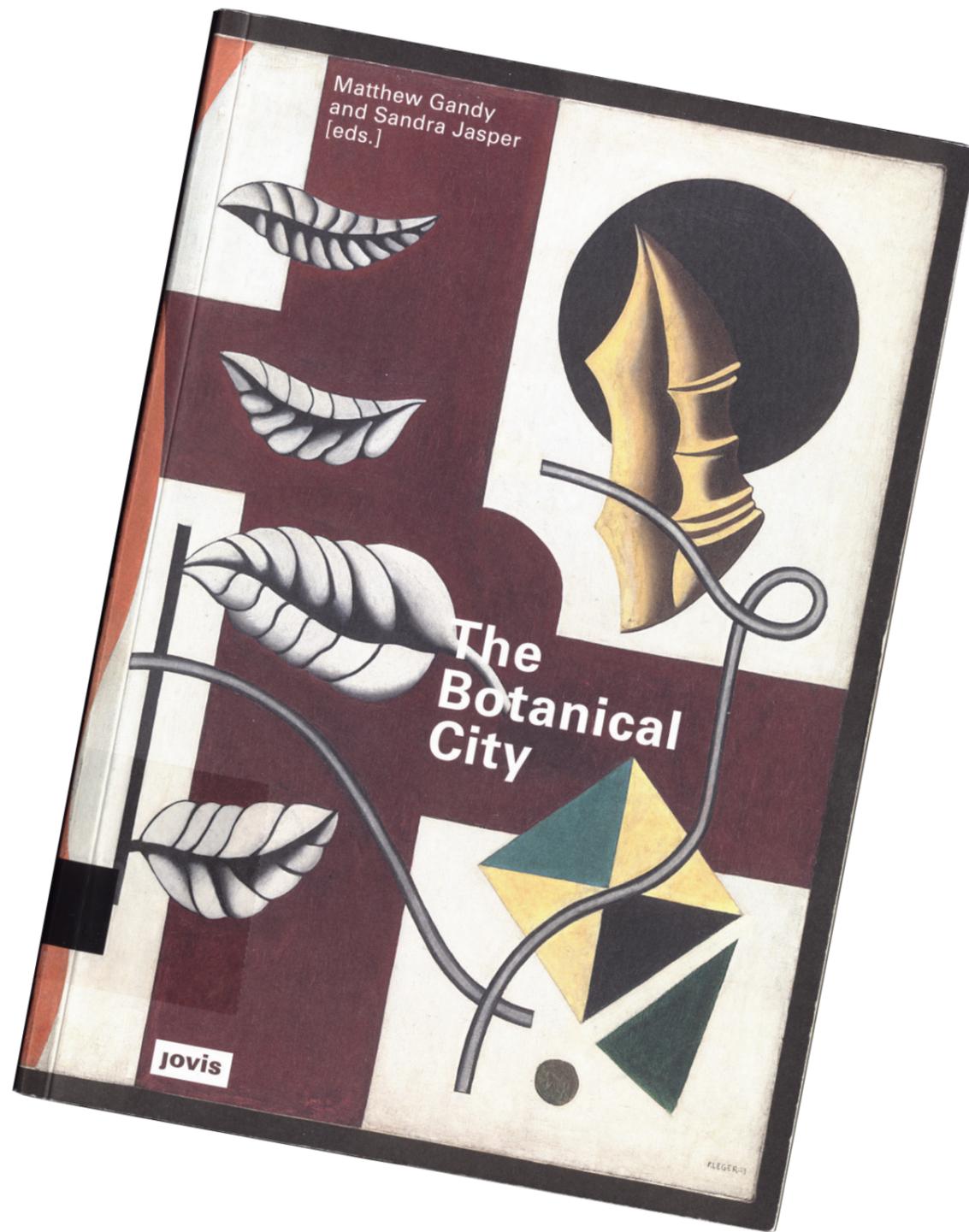
*"Wildness, in fact, is one of the untapped potentials of land left fallow."*

The concept of urban wildness can structure a part of the project over time.

Thomas Sieverts

*"In the city, today, one can typically find: fugitive flora and fauna from industrialized agricultural landscapes; many well structured urban biotopes; natural, if poor, soils nevertheless dense with **flowers, insects and beehives; and finally, a warm urban microclimate that serves as a laboratory for a future of climate change**" (116)*

This highlights the current ecological conditions of many urban realms.



## The Botanical City

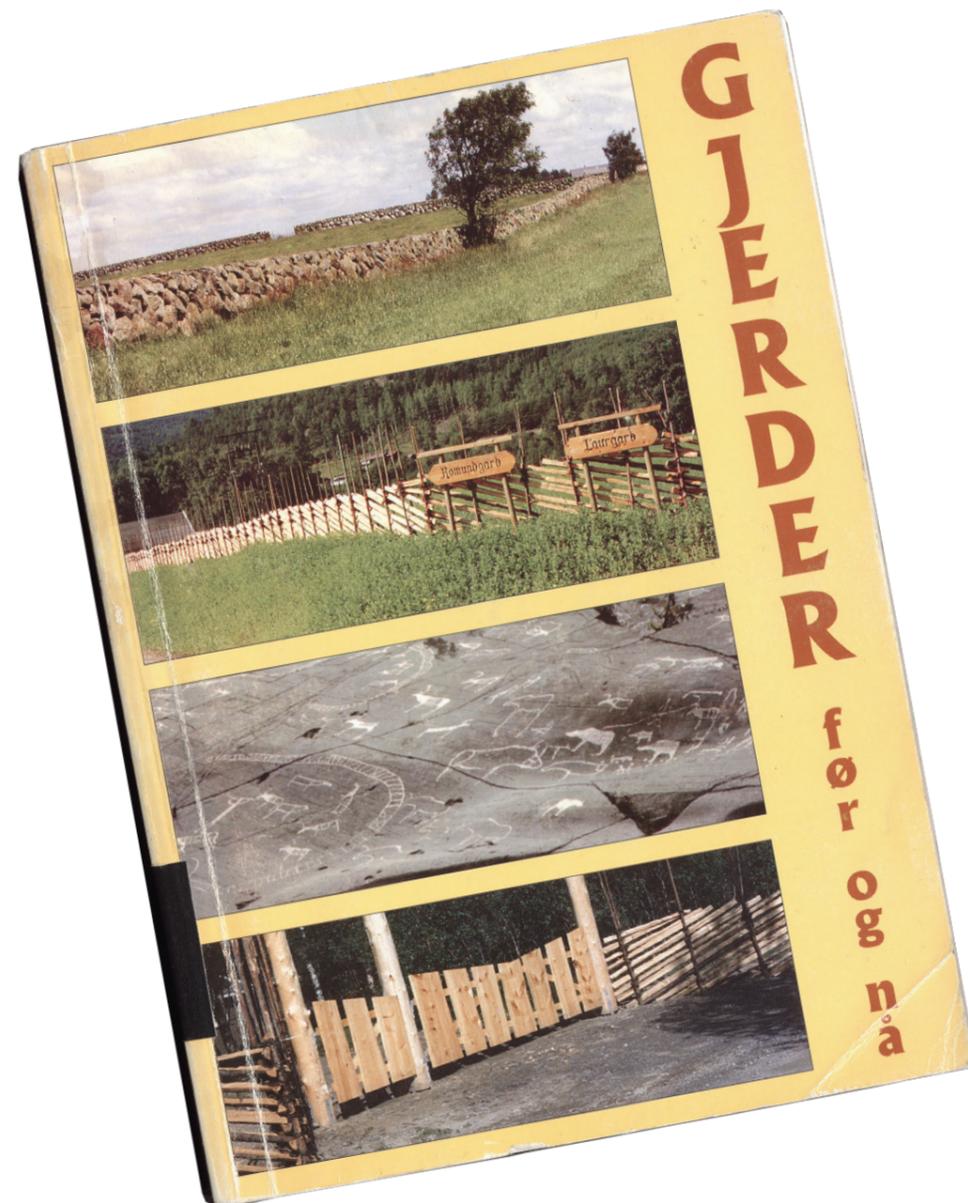
Matthew Gandy, Sandra Jasper, 2020

Mathilda Rosengren

**Reflecting on the dead wood** present in Gothenburg's Högåsberget, Rosengren describes the site as an add-on, a margin, becoming of the unplanned. (230)

The continued growth and death of the urban woods continue to protect the area from exploitation, hosting red listed species settling in the dead wood, thus resisting private development. (234)

Can a similar situation be designed? I would argue that designing inter-species habitat through expanded practices of dead hedge laying will be an act of ecologically informed resistance toward increased bio-diversity and public engagement.



## Gjerder Før og nå

Magnus Sandberg, 1997

*Risgard*

Dead hedges were prevalent in all of Norway up until the 1920s.

*Ratgar*

Both deciduous and evergreen **matter were used as infill for laying dead hedges.**

*Trasgali*

*Ratutgar*

When land division acts were implemented in Norway in the mid 1800s, dead hedges became a popular way of marking land in rural contexts alongside dirt roads.

*Garvonn*

*Vondagar*

*Stek og skat*

*Pasgar*

In the early 1900s, dead hedges were not regarded as a 'proper' practice. However, they required a lot of manual labour, but no money.

*Buskegard*

*Risgal*

*Fellegard*

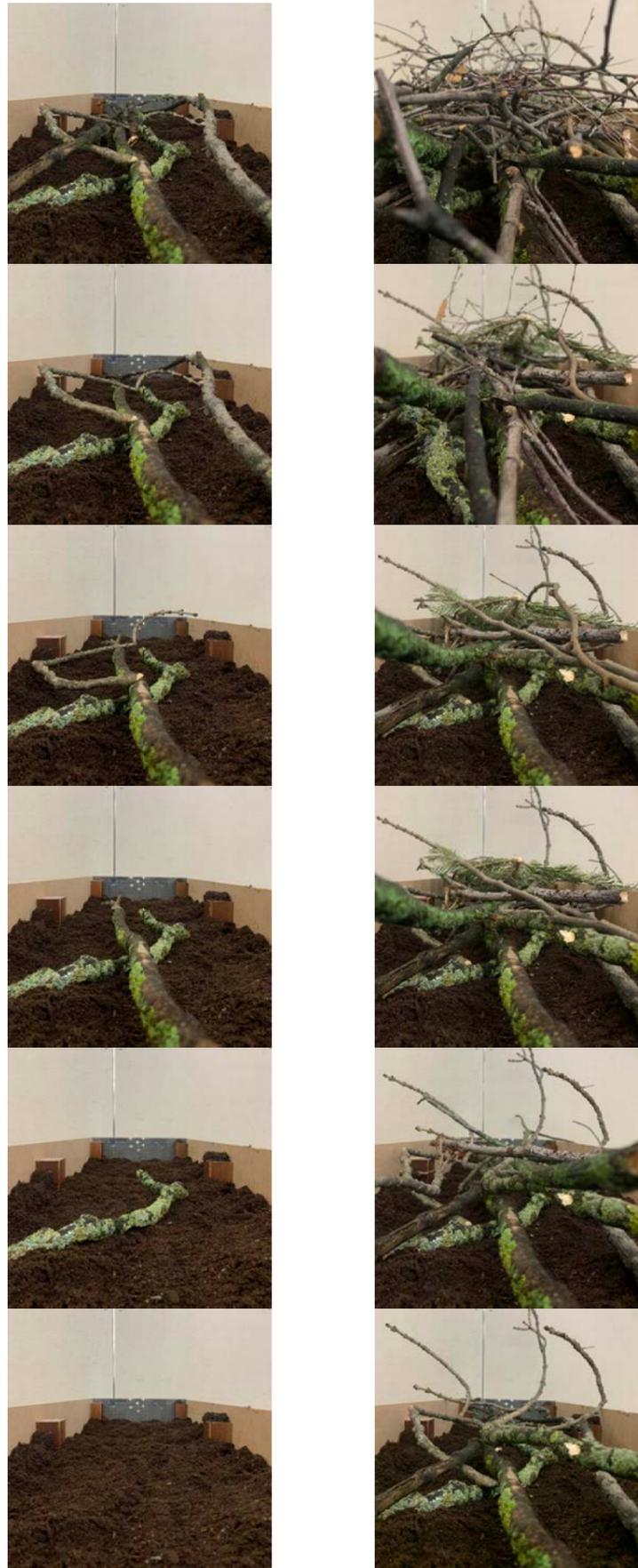
A large variety of local variations of the dead hedge have been documented, with corresponding names.

*Hafelle*

*Kvistegard*

*Lurvegard*

## 2. Model Studies



## Dead Hedge

Within the sheltered gaps of leaves and branches, worms, invertebrates, fungi, mammals, insects and plants thrive through the decay of matter.

Dead hedges are the antithesis to decorative hedges in both historic and contemporary gardening. They are not quite hedgerows; not quite compost piles; not quite land art. And that's the beauty of them. They are at the margins of landscape hegemony in their brown fecundity.

Approaching the one acre enclosure of ecological delight, Bethnal Green Nature Reserve is frequented by caretakers of the land, local residents, their children, and their other-than human residents among the green and brown. In this environment, you are overwhelmed in the best way by a sense of wilderness. The

dead hedge disappears into the background despite being twenty steps long and over half a human tall, whereby it would stick out like a sore thumb in a formal park. Nestled between young birch trees and fences, and there is a certain gradient of colour formed by the process of addition of matter.

As you approach and take a look into the nooks and crannies, you start to see movement, textures and colours otherwise easily overlooked. **It is truly a five star hotel for creepy crawlies.**

The hedge separates, but you can see over it and through the gaps. It is a spatial fence that decreases in height over time. It is dirty, grimy, moist, allowing direct contact with organic matter and other-than-humans.



## Dead Collage

The first attempt of a configuration of matter is an arranged landfill of scrap timber, twigs, and soil. The scrap glulam and formwork create a supporting structure, and the twigs are places within two walls and between two columns.

I imagine this as a spatial landscape that can expand infinitely, being enclosed in parts and open in others, allowing equal access for all species.



## Dead Alley

The alley is an ordered typology of framing a linear space. I wanted to envision what a similar space could be with vertical timber elements and **infill of cuttings**. A 'super column' is proposed with four columns encasing layers of twigs and branches, sometimes interconnected. This space can serve as a public entrance, or support a covered space within that uses the columns as a load bearing structure.

*They were nothing like the trees or the gargantuan steel monuments I have ventured before. Approaching the base, I found a branch touching the soil, and started ascending the tower of rot. Now I am taller than the humans walking to and fro, holding hands hesitant to touch the towers. A small human reached out her hand toward me with a smile. I was tempted to retreat into the web of twigs, but shook her hand gently with my whiskers before she trotted over to the next. I could follow a long branch onto the next tower and greet my neighbours, onto the next, onto the next. And so I found my home.*



## Dead House

The common-house serves as a fascinating case that serves **collective benefit**. They are usually built collectively and inexpensively in more rural settings, with a variety of formal expressions according to place and need. The design includes a large open space, and an elevated stage space, supported by glulam columns and beams. **Walls are filled with trimmings** and allow inhabitation of other-than-humans over time.

*The dusk settled onto the field. I walked carefully toward the muffled sounds coming from a wall of matter. Through the gaps I saw humans contorting their bodies in all sorts of formations. They did not see me, but I sat down comfortably with my head on my tail for a little while. Suddenly, it was quiet, and I jumped swiftly through the wall and onto the roof, still peeking down. Half a dozen winged creatures flew away as I found my spot. The humans also crouched down facing each other, taking turns to share stories. Dusk turned into night, so I snuck down and closed my eyes on the spot still warm from the circle of bodies.*



## Dead Garden

The garden functions as an enclosed, open, and semi-covered space of gathering. I am interested in the idea of a protected space to explore different types of agencies between human and non-human, and how access can change over time. The design is an enclosure with a covered perimeter, a few access points, and an earth garden allowed to grow freely.

*I followed my nose toward the gap in the blank wall just ahead. With senses sharpened and claws ready to emerge, an empty field of soil appeared. Happy days! Wiggling joyfully toward the mound of earth and waste, I started to dig for supper and a hole to nestle my body into. I could barely hear the footsteps approaching the gap in the wall. A pack of humans emerged, circling the field under cover from the rain. We could not see each other over the mounds of matter. I got used to their little noises. After a while, I walked silently through the gap on the other side and continued my city adventures.*



## Dead Square

The most public typology of my investigations is the square. Stortorget in Kalmar was used as a reference point to think about a framed open space, with a variety of textures **horizontally**. The floor functions as patchwork of materials that invite different inhabitation and movement. Paths in timber go around the perimeter and lead toward a central structure in the centre, typical of formal squares.

*The constant murmur from neighbours and the odd visitor is about to explode again. I am preparing to vacate my favourite spot and migrate in **synchronicity with the fleeting** above-ground stompers. First, the pecking of birds looking for breakfast, then the erratic pawsteps of much-too-eager dogs on leashes and their human companion. An interlude of mechanical rumblings from the tunnel below accelerated my six-legged endeavour from the soil to the rocks. Only the bravest child dared to venture here, and only the bravest beetle dared to cross the timber paths. This is what mum warned **be about moving to the big field**, but I have no regrets, this is the vitality I love.*

#### 4. Site



## Loallmenningen

The site has developed rapidly over time, from industry, expansion of the harbour, development of motorways, establishing a tunnel, developing a residential neighbourhood adjacent, becoming planted, founding Losæter park in 2011, and most recently the northern part becoming parking and dwelling supporting development.

Losæter is part of Bjørvika Utvikling public art program, and it is commissioned and produced by Bjørvika Utvikling in collaboration with the international art collective, Futurefarmers. There are several organisations and collectives running activities in the public 'baking house' as well as the productive land surrounding.

Loallmenningen is one of **seven 'official' commons** by the Oslo harbourside despite its heavy infrastructure. The site marked to the left is **planned as a new office building**. Just north of this site is Kongsbakkenallmenningen, which is being developed as another commons disconnected from Loallmenningen.

I propose that Loallmenningen must continue its role as an urban commons supporting important ecosystems and community functions in the area.

I want to continue the idea of the site as an urban exception which already holds great value communally and ecologically, rather than developing it for **commercial profit**.

# LOALLMENNINGEN





















I Vannkunsten Syd blir det gode boliger med funksjonelle planløsninger og høy kvalitet på alt av interiør og materialer.





Husenes saltak muliggjør spennende toppleiligheter med ekstraordinær takhøyde og store vindusflater. Noen boliger går over to plan, mens andre har privat utgang til vannkanten fra egen brygge.









1947



2004



2014



1971



2007



2016



1997



2012

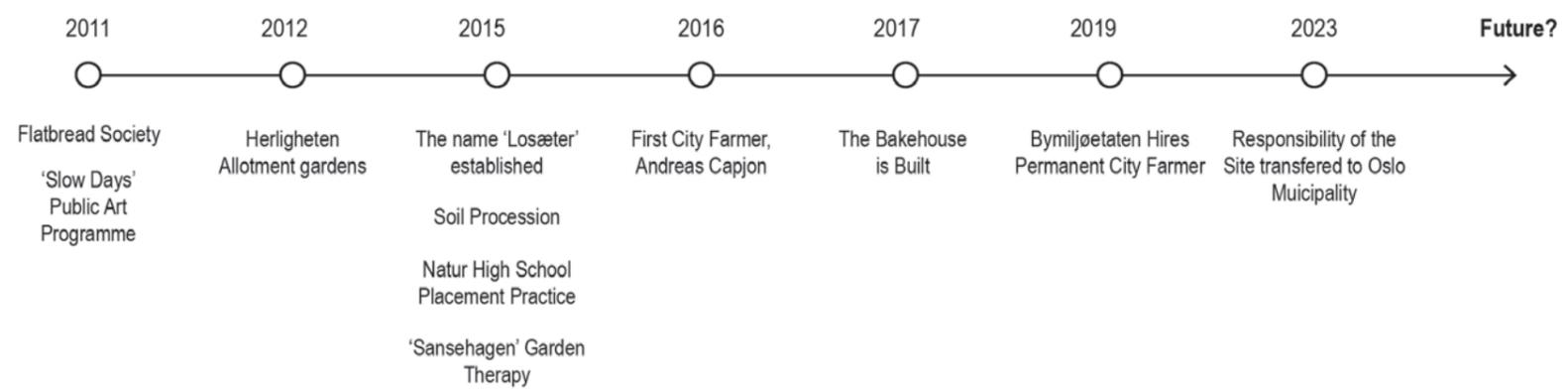


2023





**Bjørnvika Development  
Future Farmers**



**Aftenposten** Nyheter Oslo Meninger A-magasinet Vink E-avis **Bli abonnent**

Kommentar | Byutvikling

## Aktivister og velforeninger er byens nabokjerringer

Nazneen Khan-Ostrom  
Kommentator



Dette bygget har stått tomt i flere år. Hva skal skje med det? Gamlebyen sport og fritid (GSF) mener ungdom i Gamlebyen trenger et sted å være. Bane Nor Eidsvoll vil heller bygge 20 leiligheter. Foto: Monica Strømstad

Hva har en del folk på Grefsen, Skillebekk, Vålerenga og i Gamlebyen til felles? De driver med skamløs bortblanding.

**OSLO** Bli abonnent Logg inn Din bydel Nyhetsbrev Hvorfor abonnere? Meny



Alta Bravéby tvi og Are Fjellstad i Gamlebyen sport og fritid på stedet som etter planen skal bli et kulturcenter i Oslo år. Foto: Anders Høiland

## Under en bru i Gamlebyen bygges en kulturarena i verdensklasse. Bak Krakabøla aktivitetspark står lokale frivillige

La frivilligheten få spillerom, mener Gamlebyen sport og fritid. Ressursene finnes hos folk som bor i Gamlebyen.

Anders Høiland

Publisert: Torstok 13. september 2018 - 00:23

**Aftenposten** Nyheter Oslo Meninger A-magasinet Vink E-avis **Bli abonnent**

Oslo | Byutvikling

## Den forbannede kremtomten

Brann. Okkupasjon. Politiaksjoner. Konkurser. Flukt. Og en eier ingen får tak i. Kremtomten i Gamlebyen har ligget mer eller mindre brakk siden 1980.



En stor tomt svært sentralt i Oslo har stått tom i mange år. Foto: Morten Uglum

Hilde Lundgaard Journalist  
Trond J. Strøm Journalist/researcher  
Morten Uglum Fotograf

Publisert: 03.11.2022 22:46 | Oppdatert: 04.11.2022 09:46

**OSLO** Logg inn Din bydel Nyhetsbrev **Bli abonnent** Meny



Oslo kommune ønsker å overta drift av Losætra i Bjørvika fra Bjørvika Utvikling. Foto: Kristian Velkovic

## Bybonden er en suksess. Nå vil kommunen sørge for at prosjektet ikke blir nedlagt

Kommunen ønsker å overta ansvaret for Losætra og bybonden i Bjørvika for å forsikre seg om at prosjektet ikke blir nedlagt når Bjørvika er ferdig utviklet.

Christian Boger



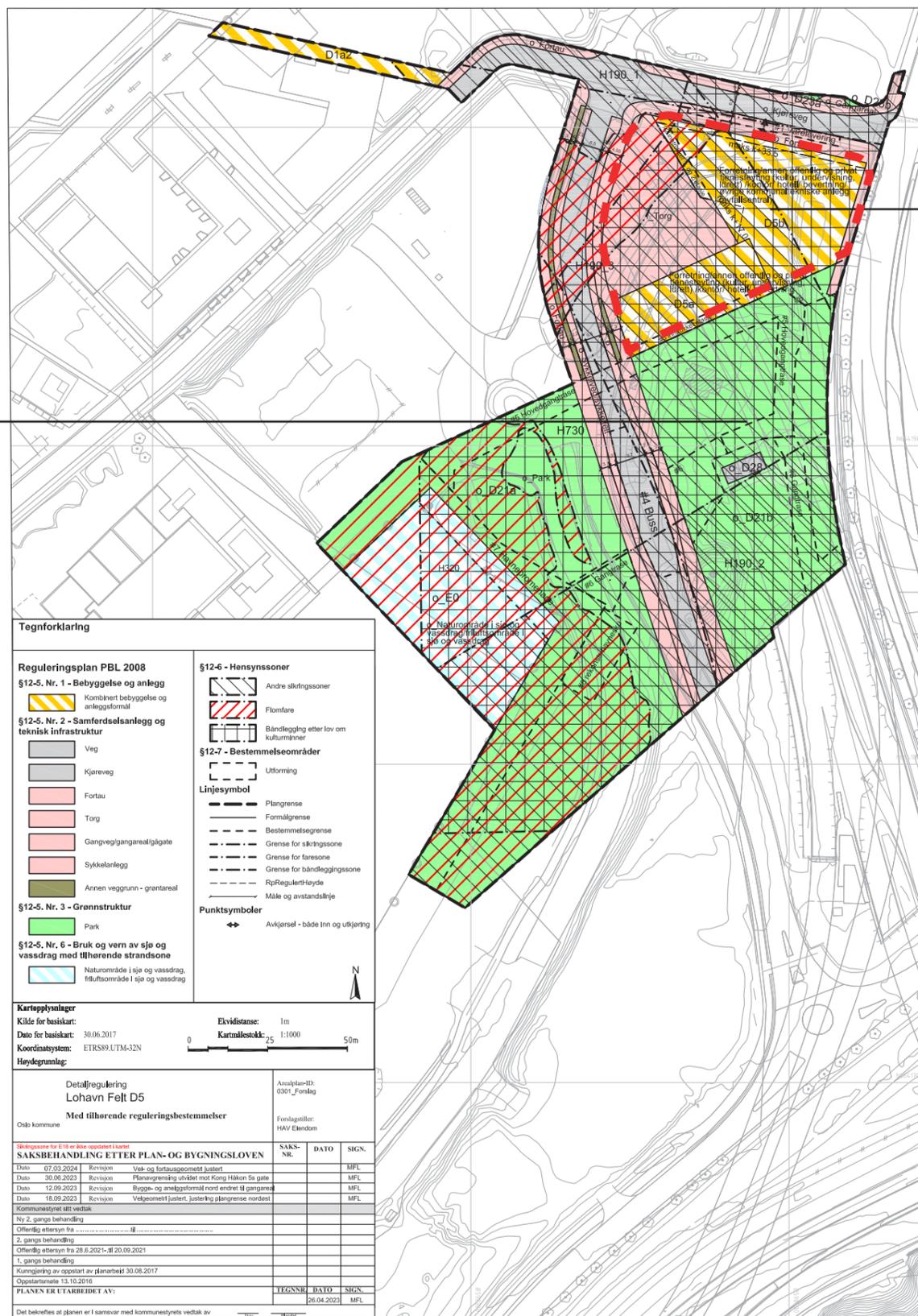

## Mysteriet i Gamlebyen: Hvem eier den 30 år gamle spøkelsesbroen?

For over 30 år siden ble det bygget to broer til 25 millioner i Lodalen. De er aldri blitt brukt. Kun én står igjen.

Maria T. Petrién  
Journalist

Publisert: 10.11.2021 12:54 | Oppdatert: 10.11.2021 14:48

Losæter Farm: Park



Commercial and Residential  
Reduced building area over time  
(2004-2024)

Land ownership  
Bane Nor Eiendom AS  
Statens Vegvesen  
D5 Lohavn AS

**Felt D5:**

Formål: boliger, forretning, kontor, hotell, bevertning, allmenntillegget formål (kultur, undervisning, idrett, serviceanlegg småbåthavn) og garasjeanlegg.

Høyde: k+ 26,37

Utnyttelse: 21 000 m<sup>2</sup> T-BRA / TU 428 %

Minst 20 prosent av T-BRA skal være boliger.

Forretningsarealer skal maksimum tilsvare 50 % av 1. etasjes bruksareal.

**I kommunedelplan for torg- og møteplasser (2009) er Loallmenningen vist som annen overordnet møteplass (allsidig, varierende rekreasjonsbruk, med vekt på ikke-organisert bruk).**

FLATBREAD SOCIETY  
**SOIL PROCESSION**

LIST OF FARMS:

Alhaug, Helgøya | Alm Østre, Stange | Aschim  
Vestre, Brandbu | Bakkan, Tromsø, Kaldford ("California") | Bergsmyrene, Hurum | Bogstad, Oslo | Botanisk Hage, Oslo | Bygdø Kongsgård, Oslo | Bøgedal, Denmark |  
Den Norske

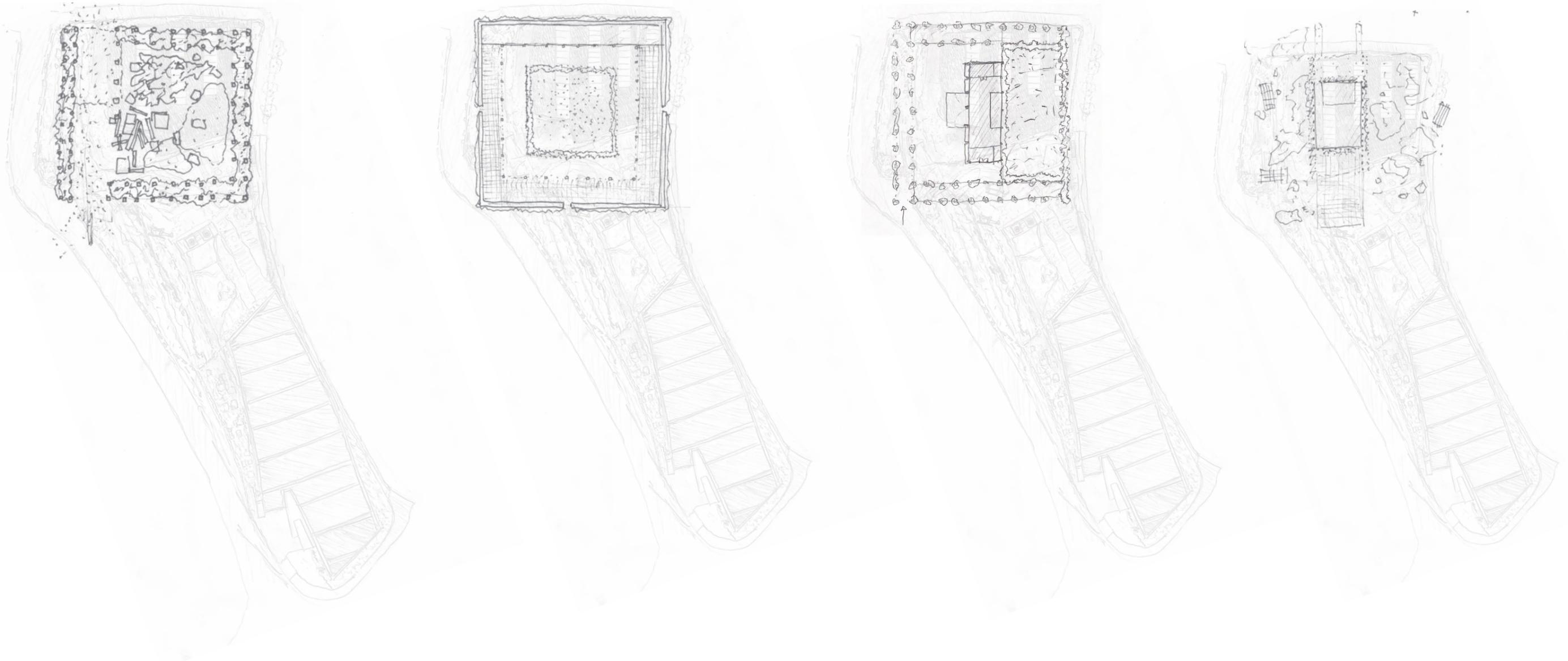
Opera og Ballett, Oslo | Dysterjordet, Ås | Ekebo, Nesodden | Energigården, Brandbu | Evje Gård, Prestfoss | Fjellvik, Øvre Eiker | Fokhol, Stange | Geitmyra Skolehager, Oslo | Grette, Hov | Grøset Seter, Nedre Eggedal | Hegli, Nannestad |

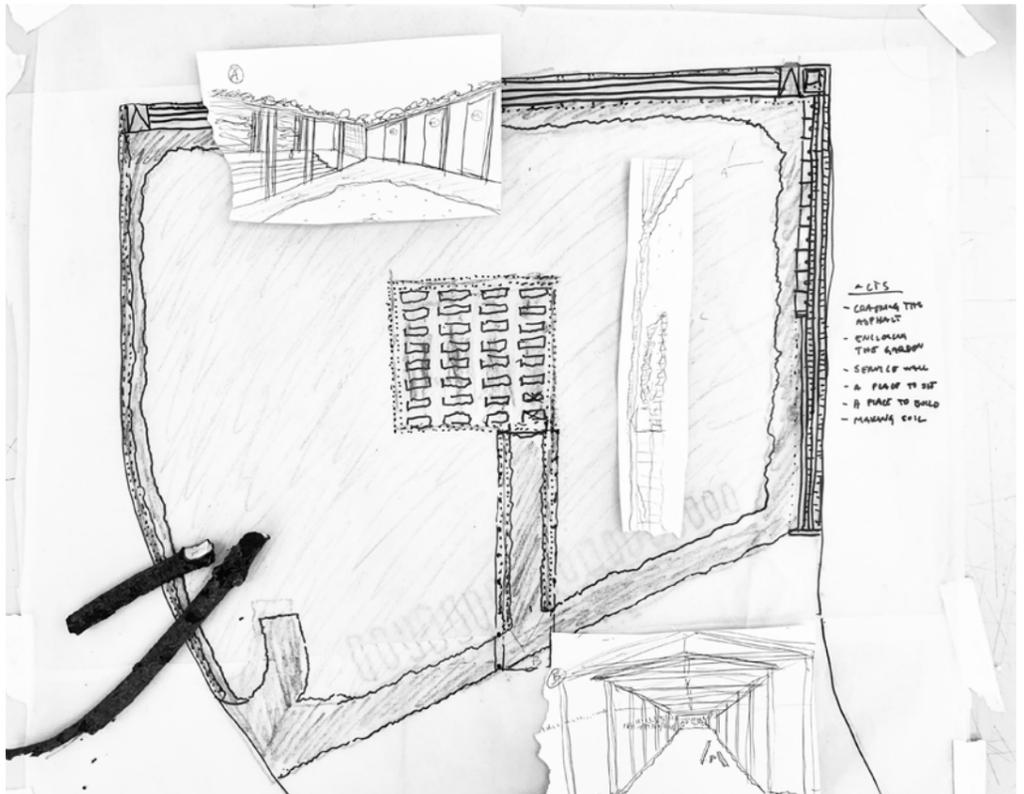
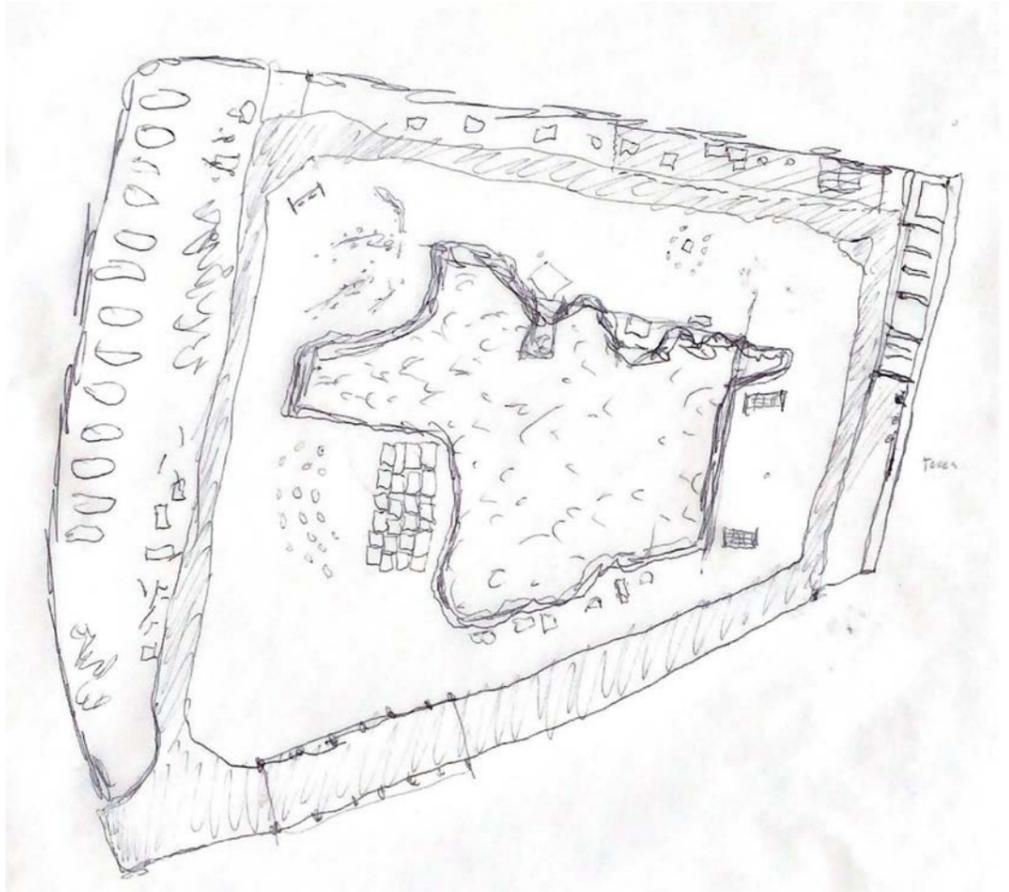
Heinrich Jung, Solør | Holli, Spydeberg | Horgen, Nes | Hov, Prestfoss | Hovlandsmoen, Prestfoss | Kampen Økologiske Barnebondegård, Oslo | Kulturstua i Ro, Vestre Gausdal |

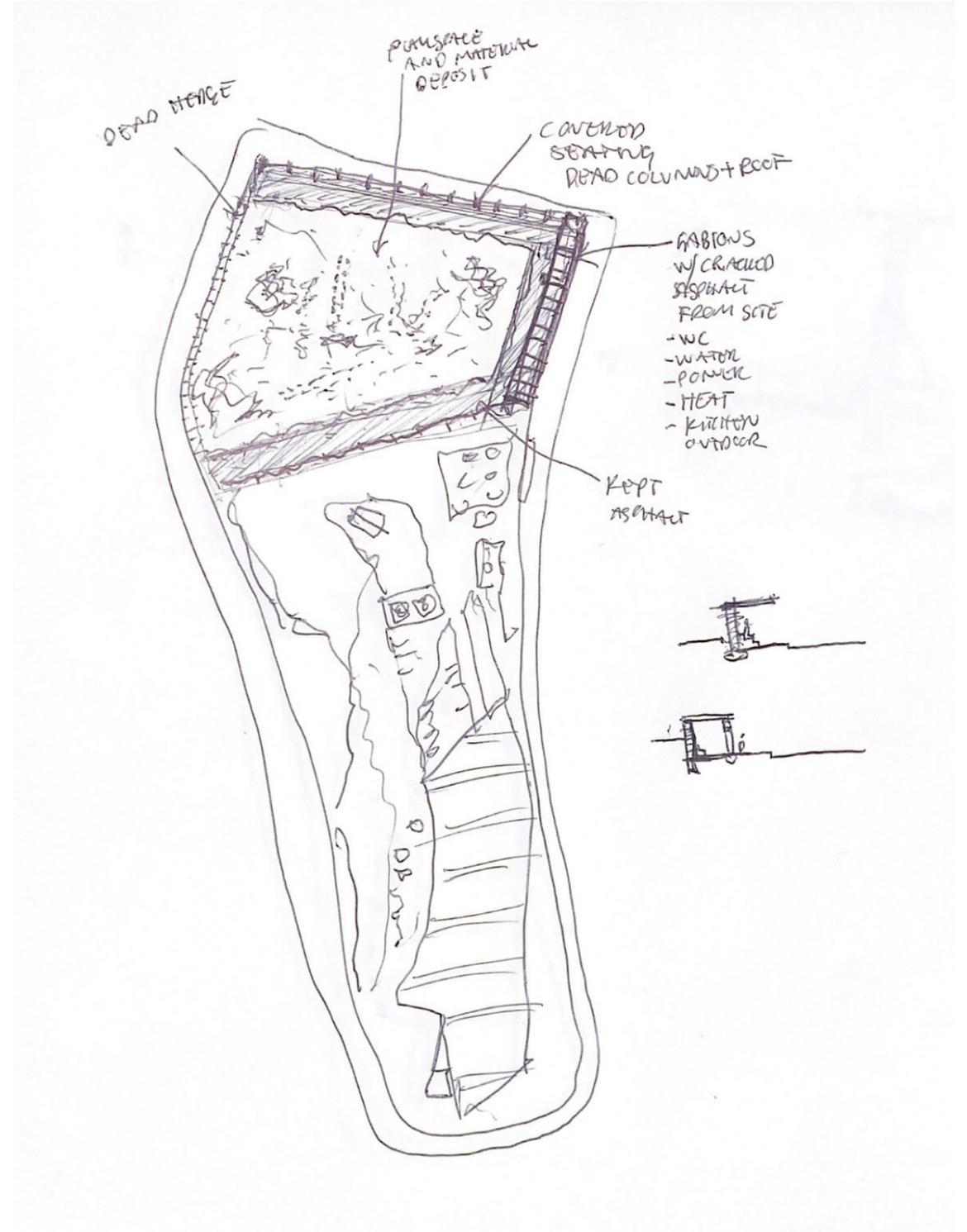
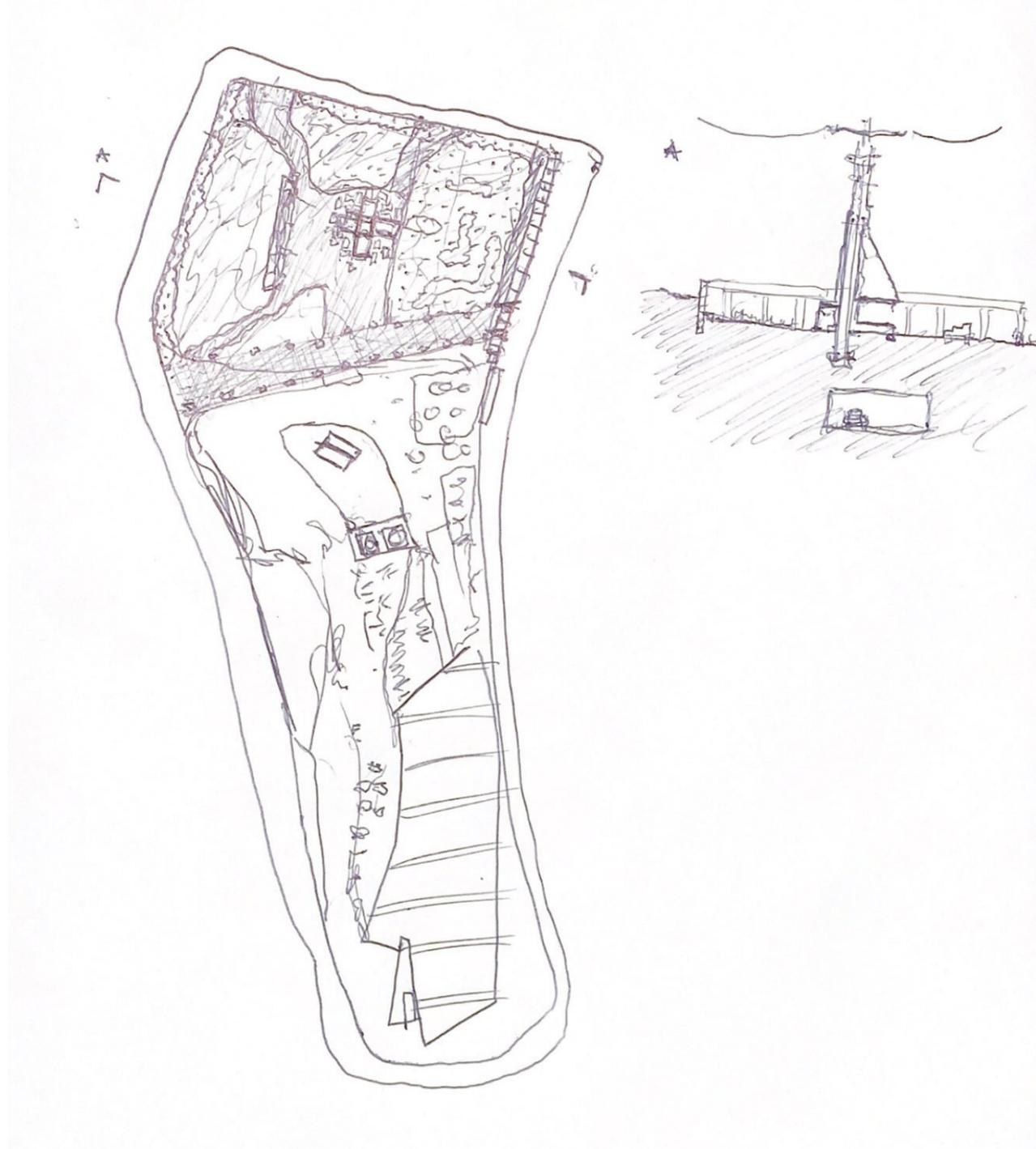
Lislerud, Eidsberg | Nedre Båsum, Prestfoss | Nes, Rolvsøy | Ommang Søndre, Løten | Ramstad, Prestfoss | Solhagen, Ådalsbruk | Solheim, Holmestrand | Solli, Stokke | Sø-strøm, Nittedal | Uksum, Vestre Gausdal | Vikabråten, Valdres | Ødeverp, Øvre Eiker | Øverland, Bærum | Øvre Haugan, Prestfoss | Øvre Ringstad, Skiptvet

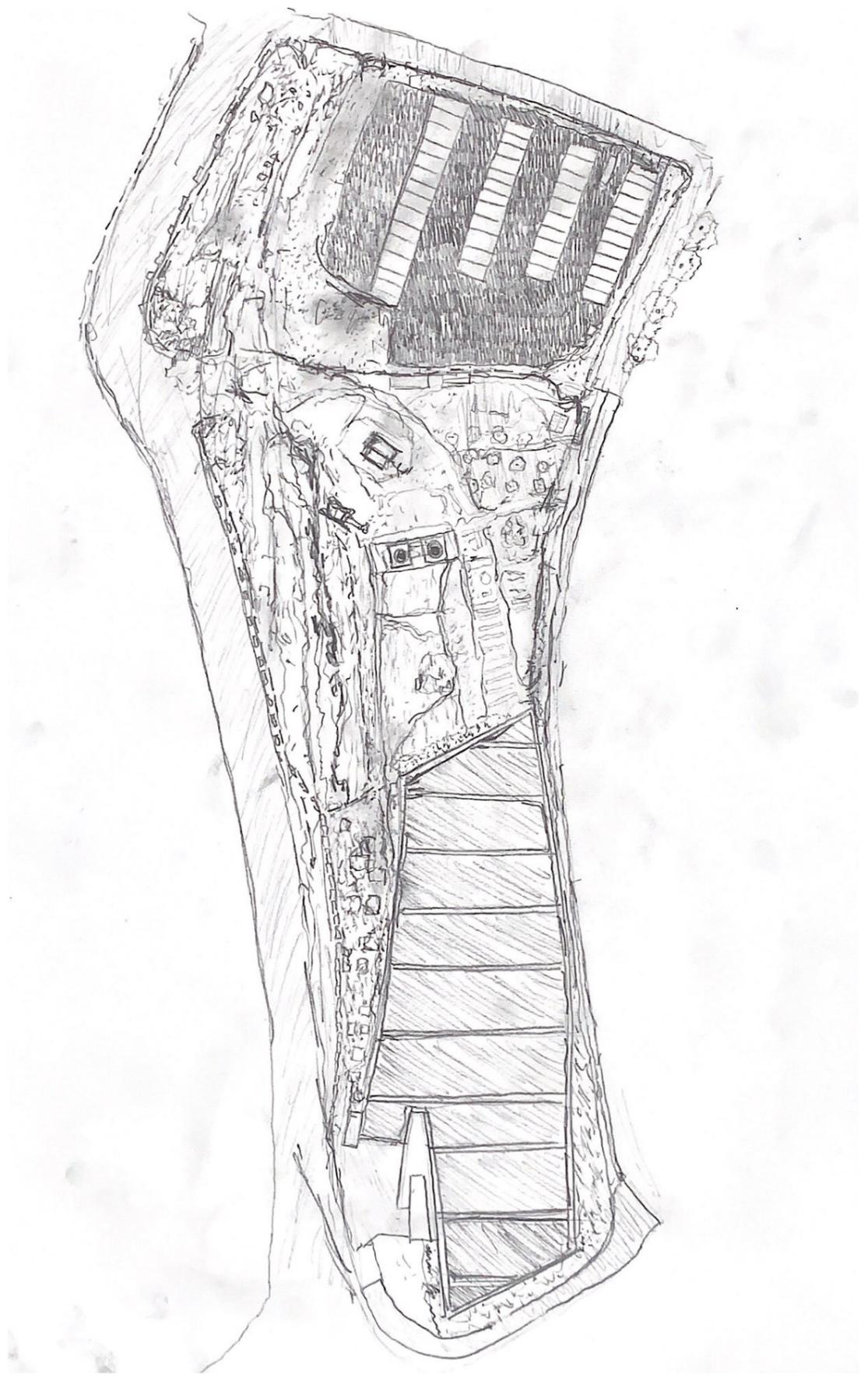
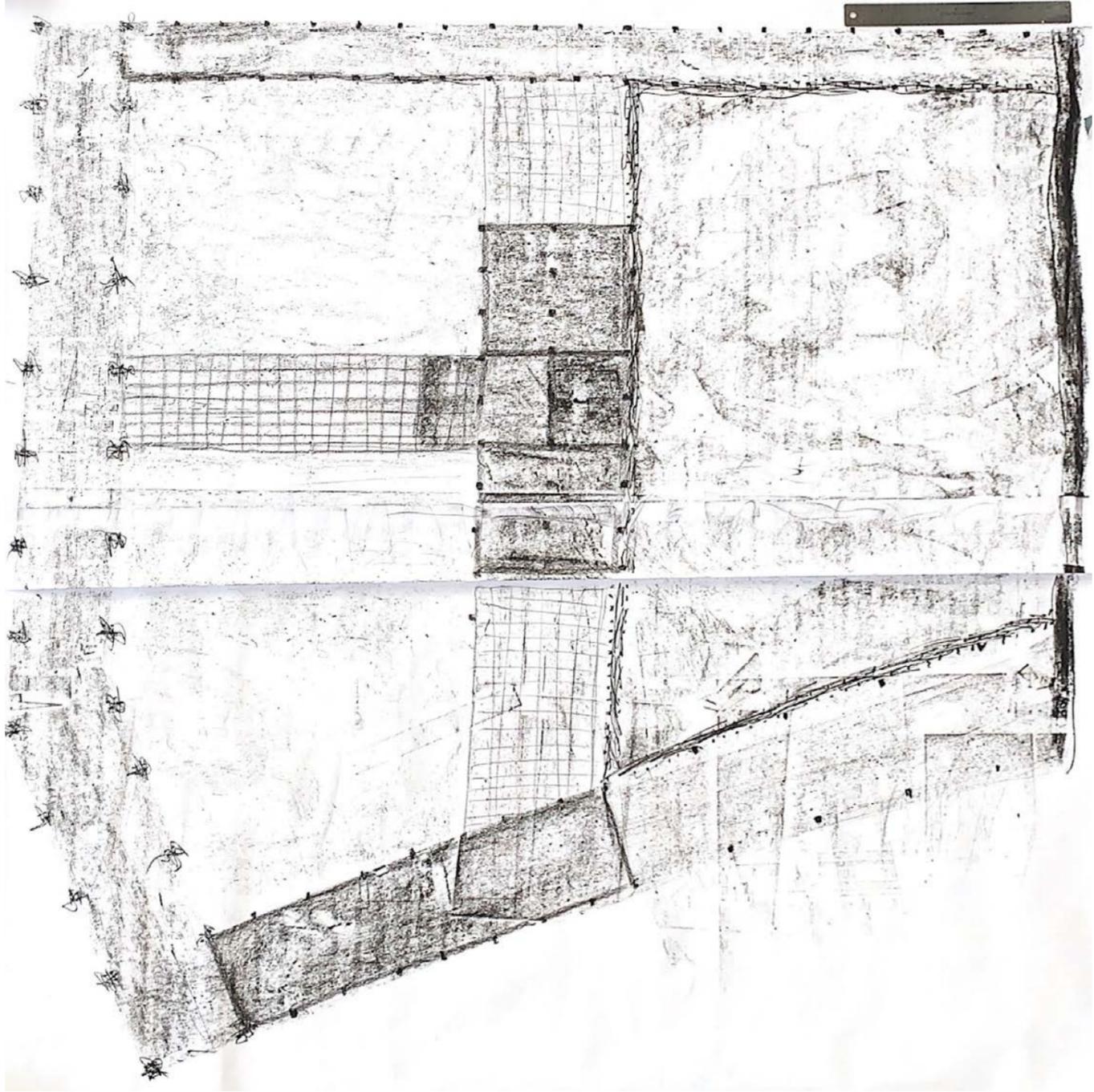


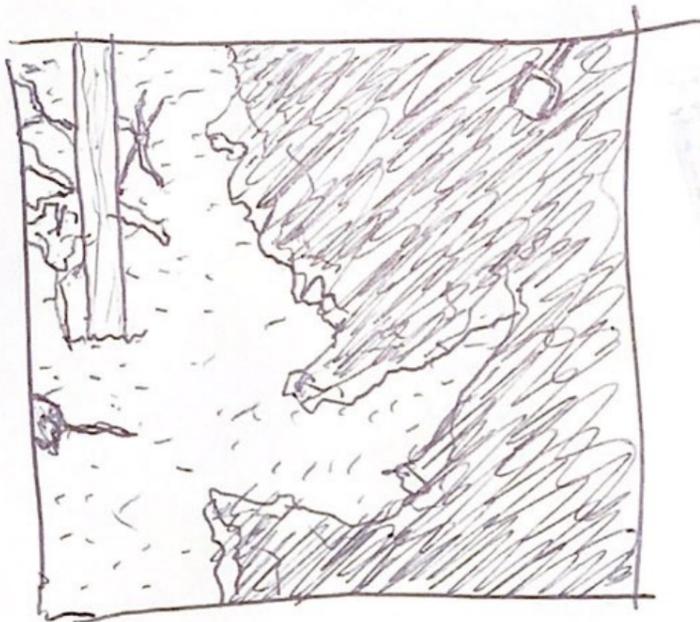
# PROCESS MATERIAL



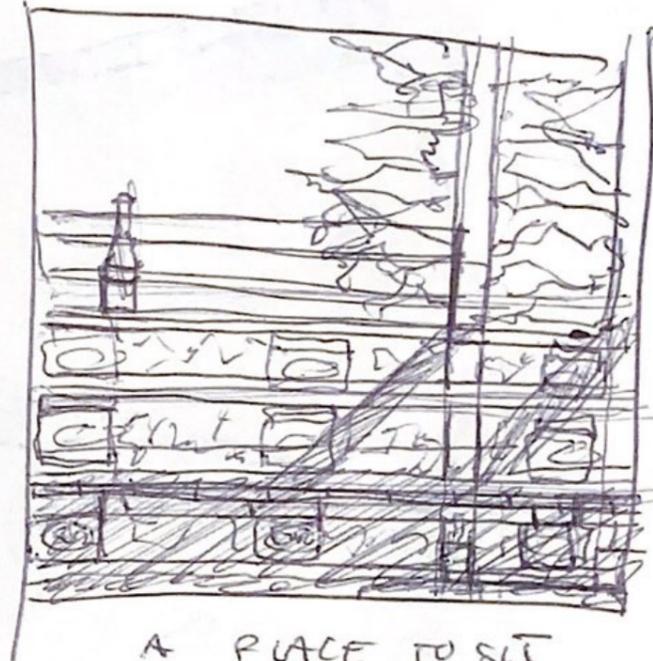




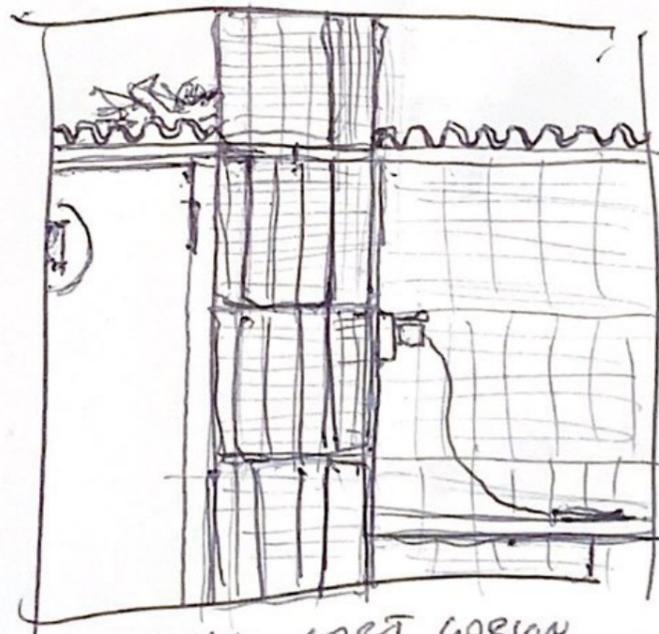




MEETING BETWEEN  
ASPHALT AND GRAVEL  
GARDEN



A PLACE TO SIT



SHOPPING CART GARDEN  
WALLS SUPPORTING  
ESSENTIAL SERVICES

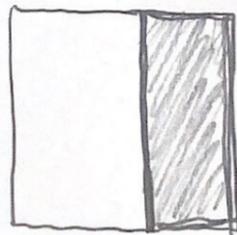


MAKING

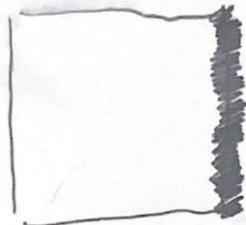
# PRINCIPLES



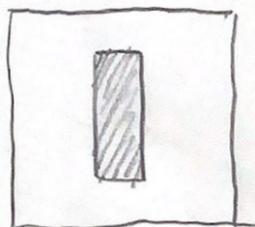
POROUS ENCLOSURE



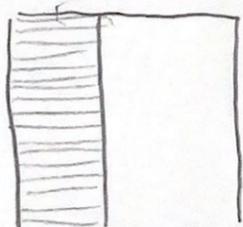
OTHER THAN HUMAN SPACE



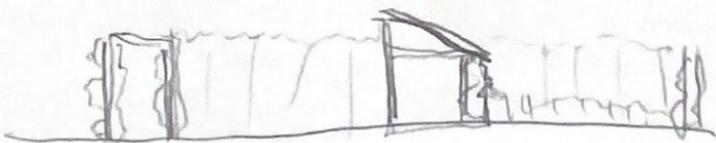
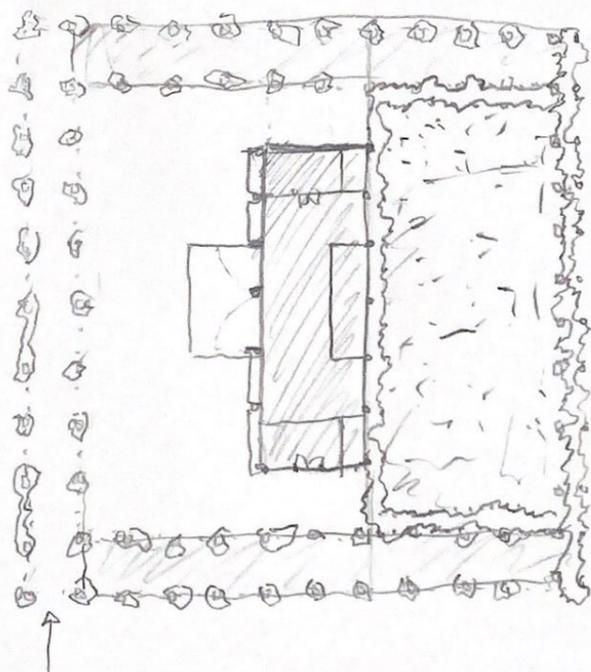
NOISE BARRIER



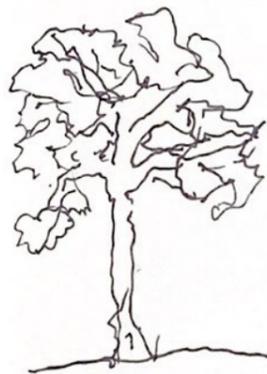
CENTRAL GATHERING SPACE



LANDSCAPE OF MATERIALS



# TREE TALES



PARK



MUNICIPAL MAINTENANCE



PULP



GARDEN



PERSONAL MAINTENANCE



COMMUNAL COLLECTION



CHRISTMAS



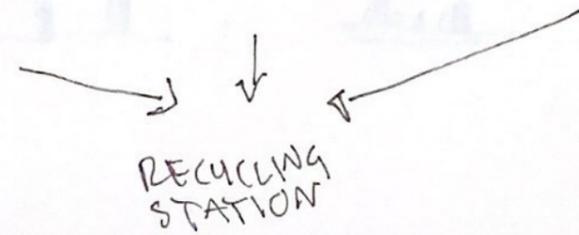
SEASONAL INHABITATION



MUNICIPAL COLLECTION

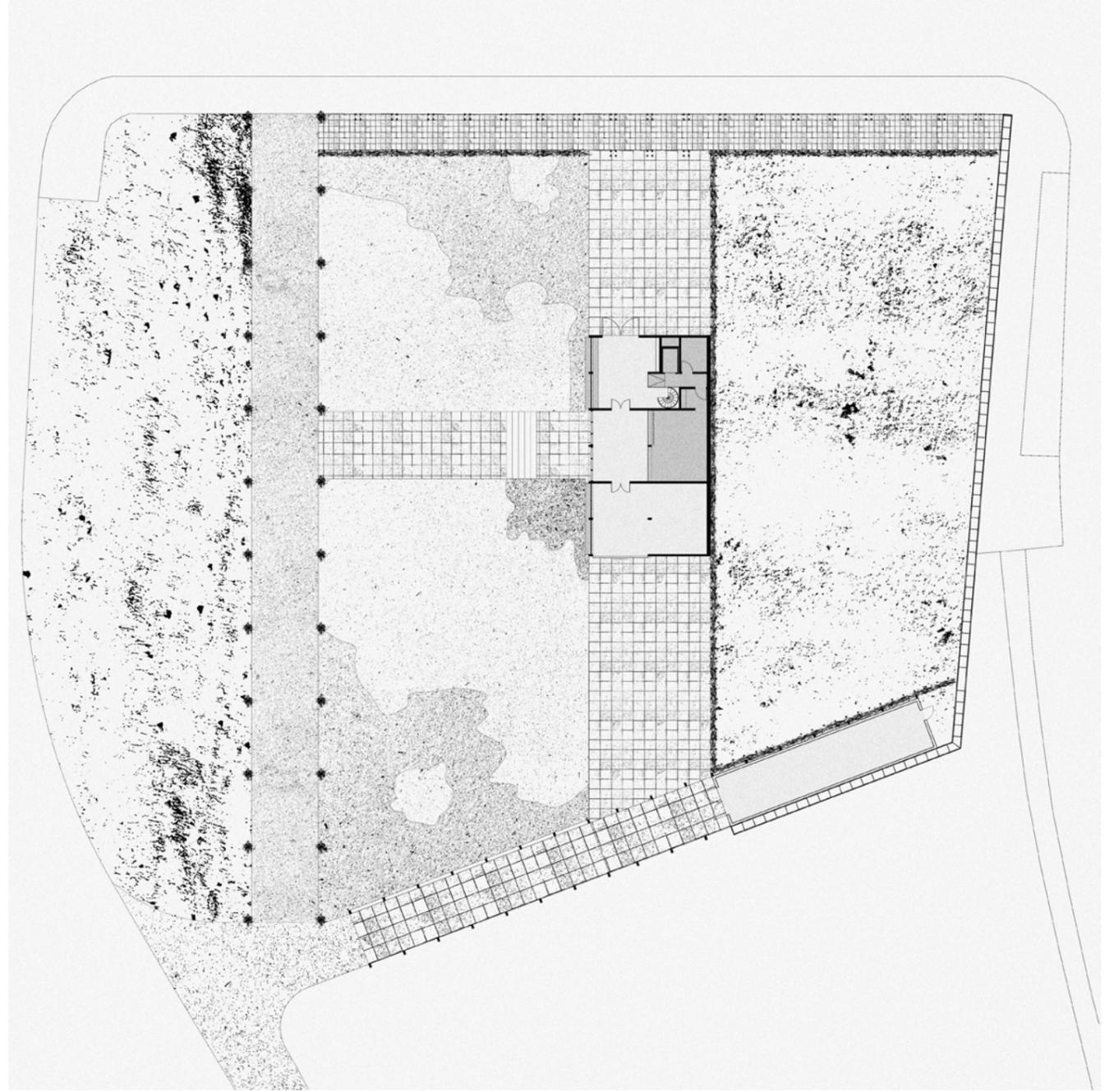
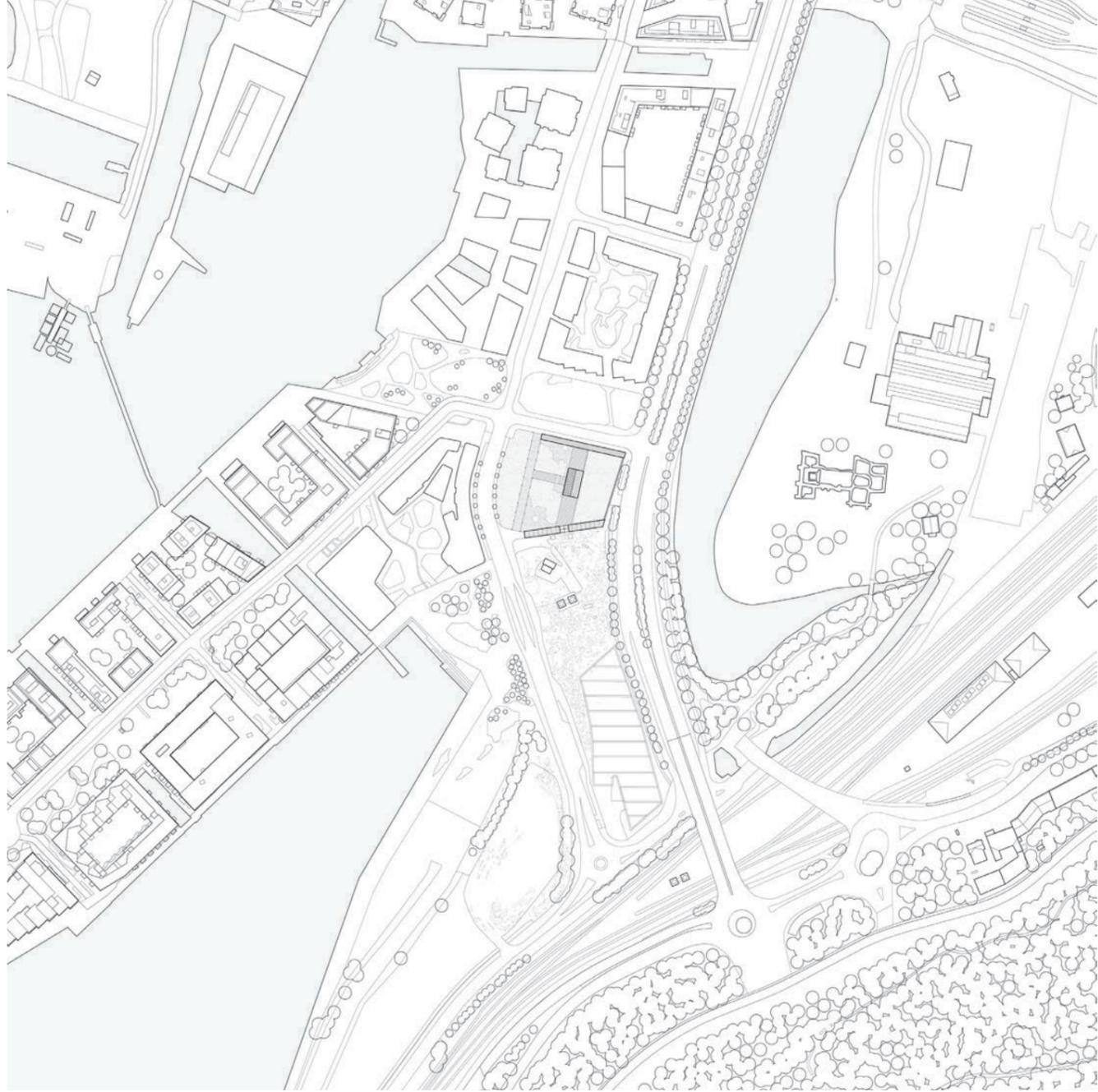


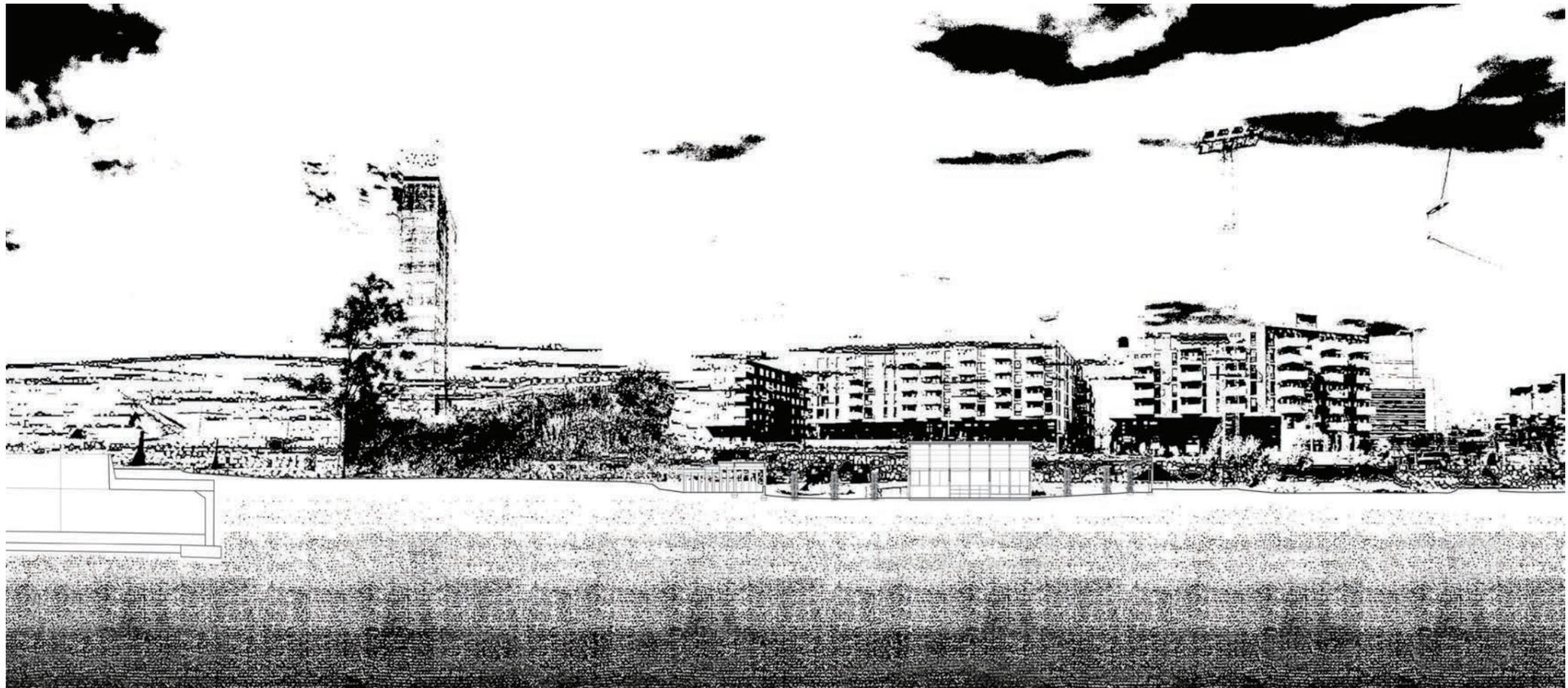
NEW MATERIAL FLOW

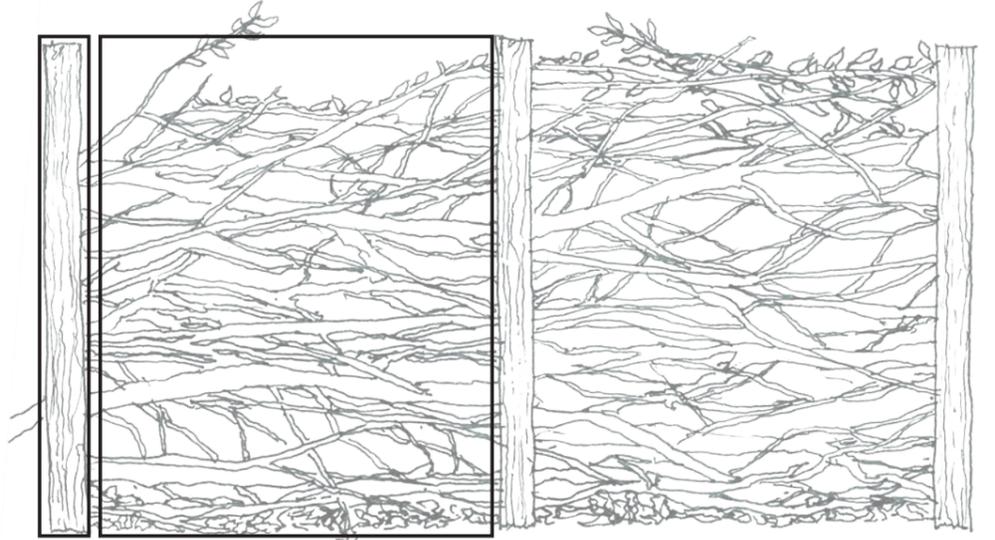
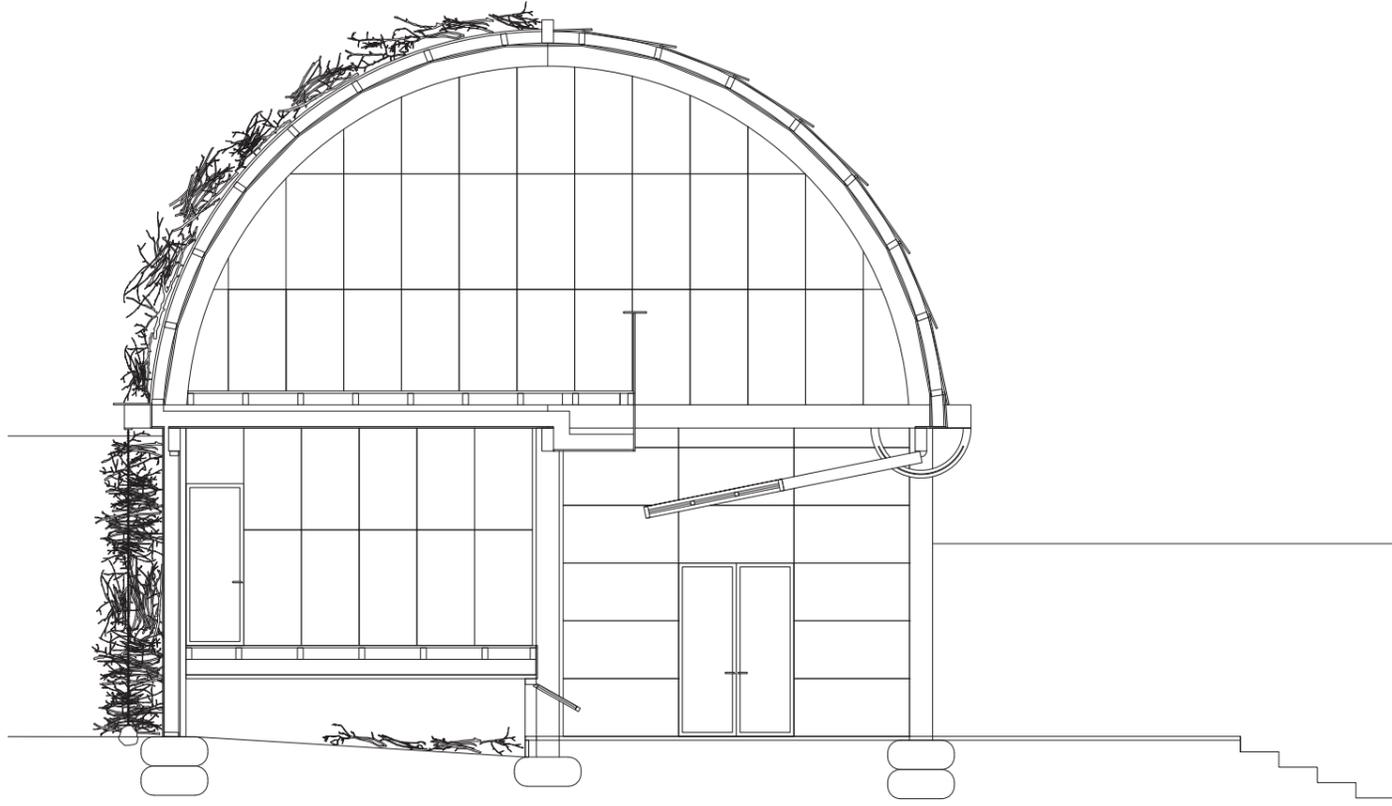


RECYCLING STATION



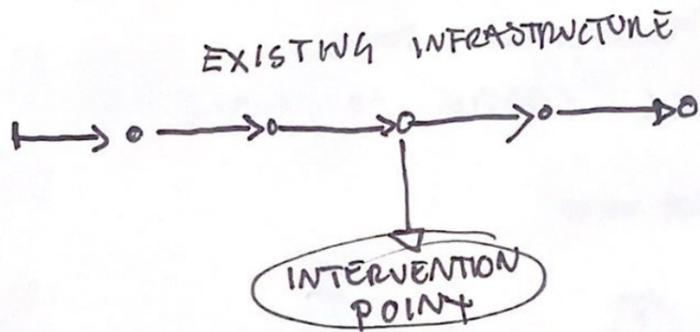






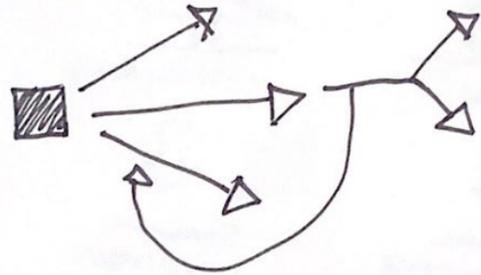
# METHOD

①  
APPROACH

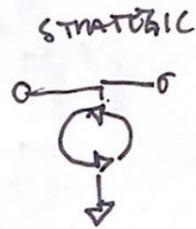


②  
POSITIONING

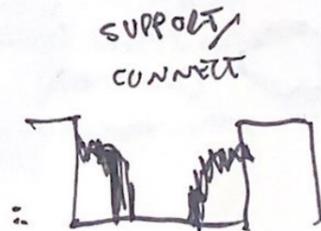
UNPACK SOCIAL, HISTORICAL, MATERIAL IMPLICATIONS THROUGH A TYPOLOGY



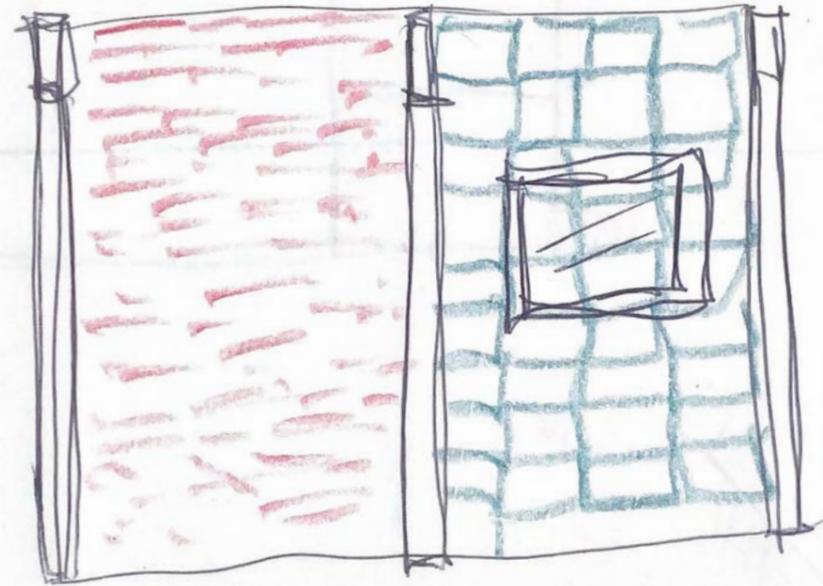
③  
INVESTIGATIONS



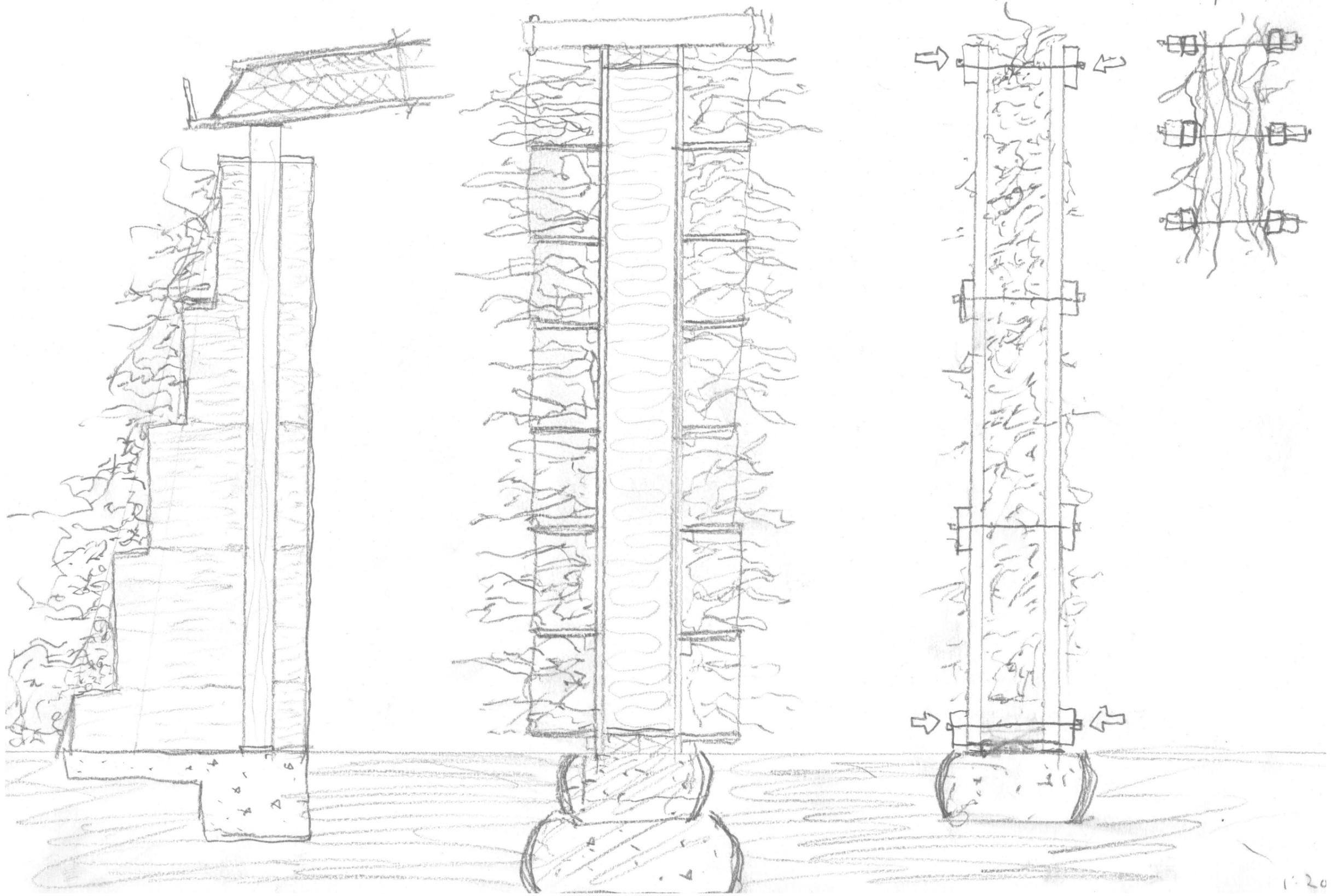
④  
SITE



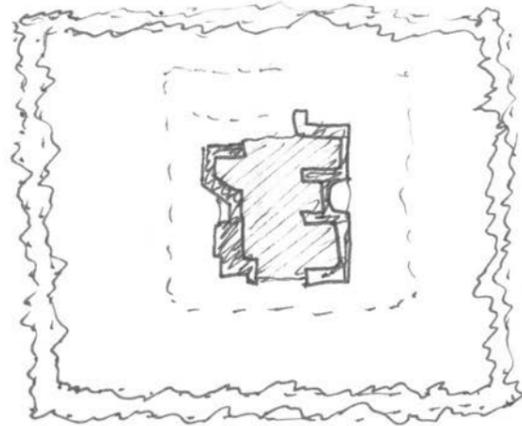
FRAME SYSTEM OF EXCESS



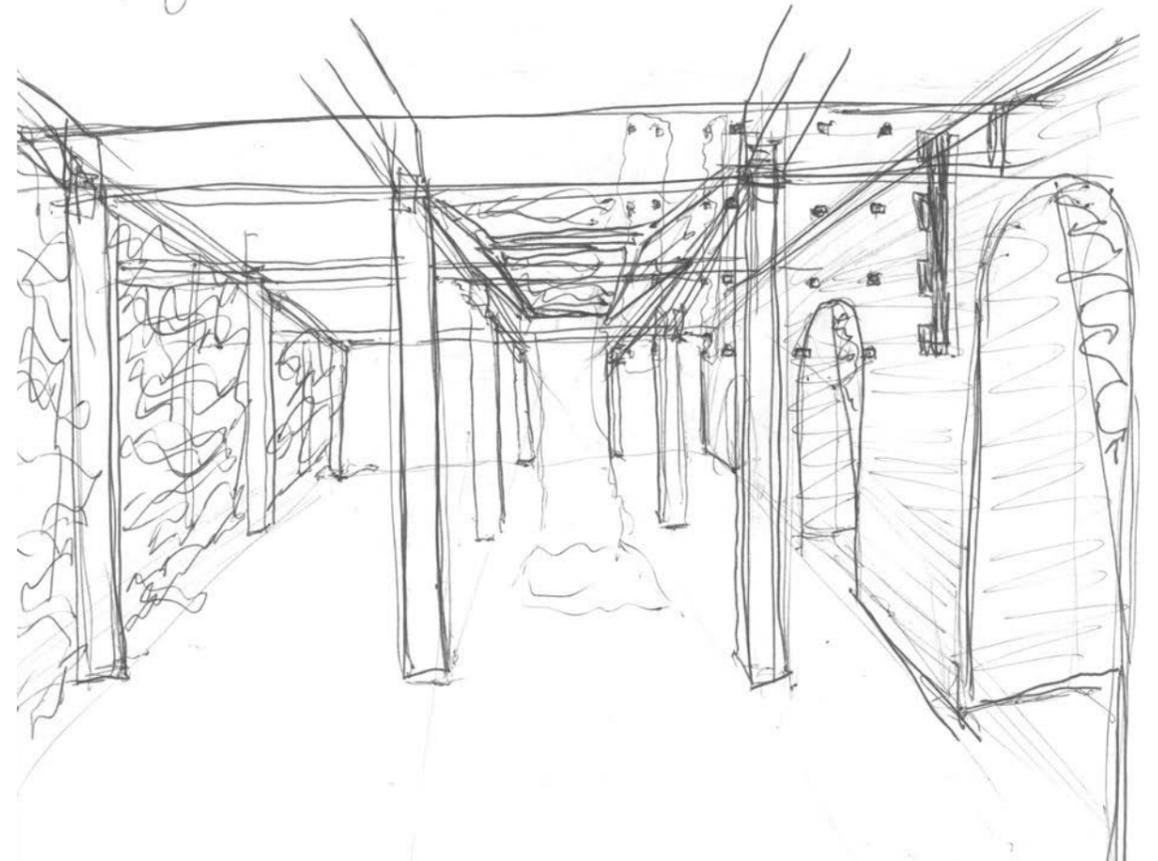
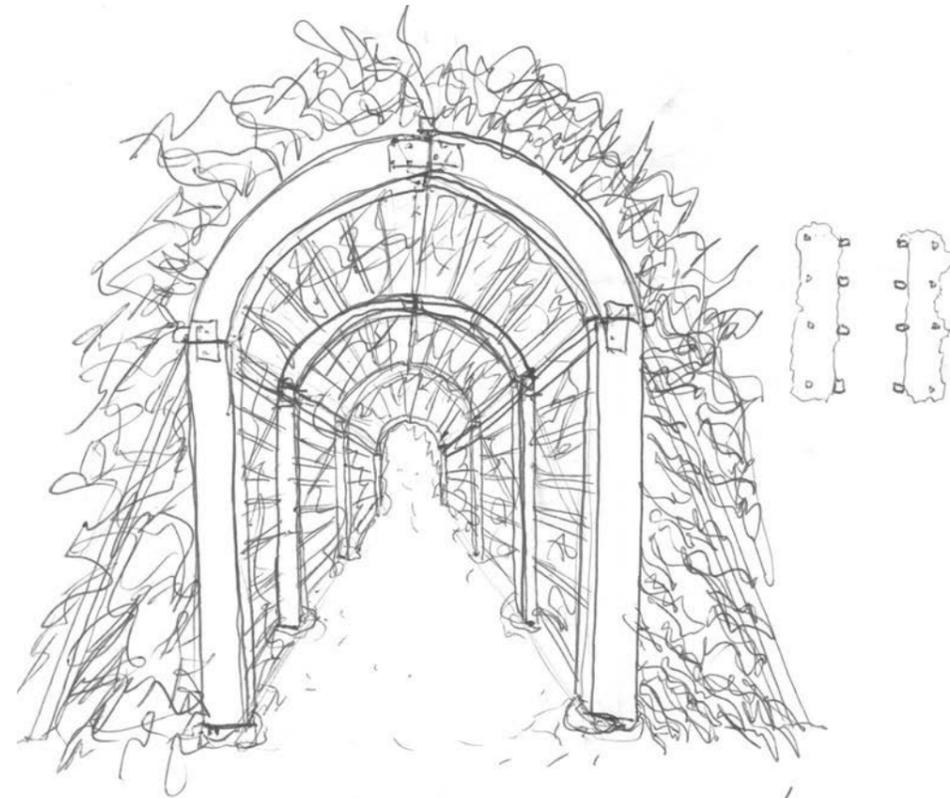
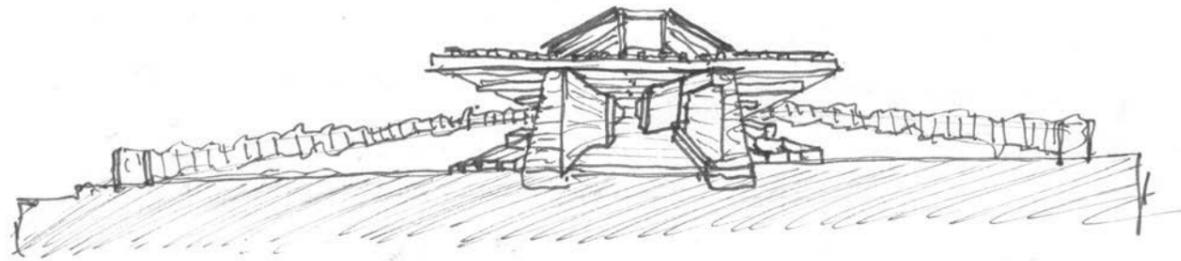
ADJUNCT TYPOLOGY



1:20

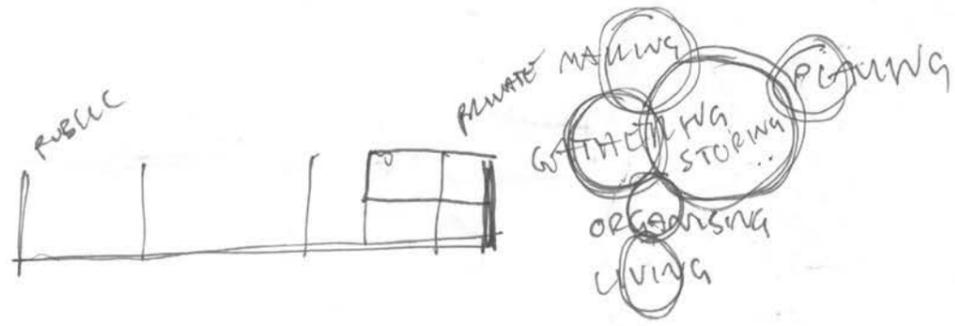
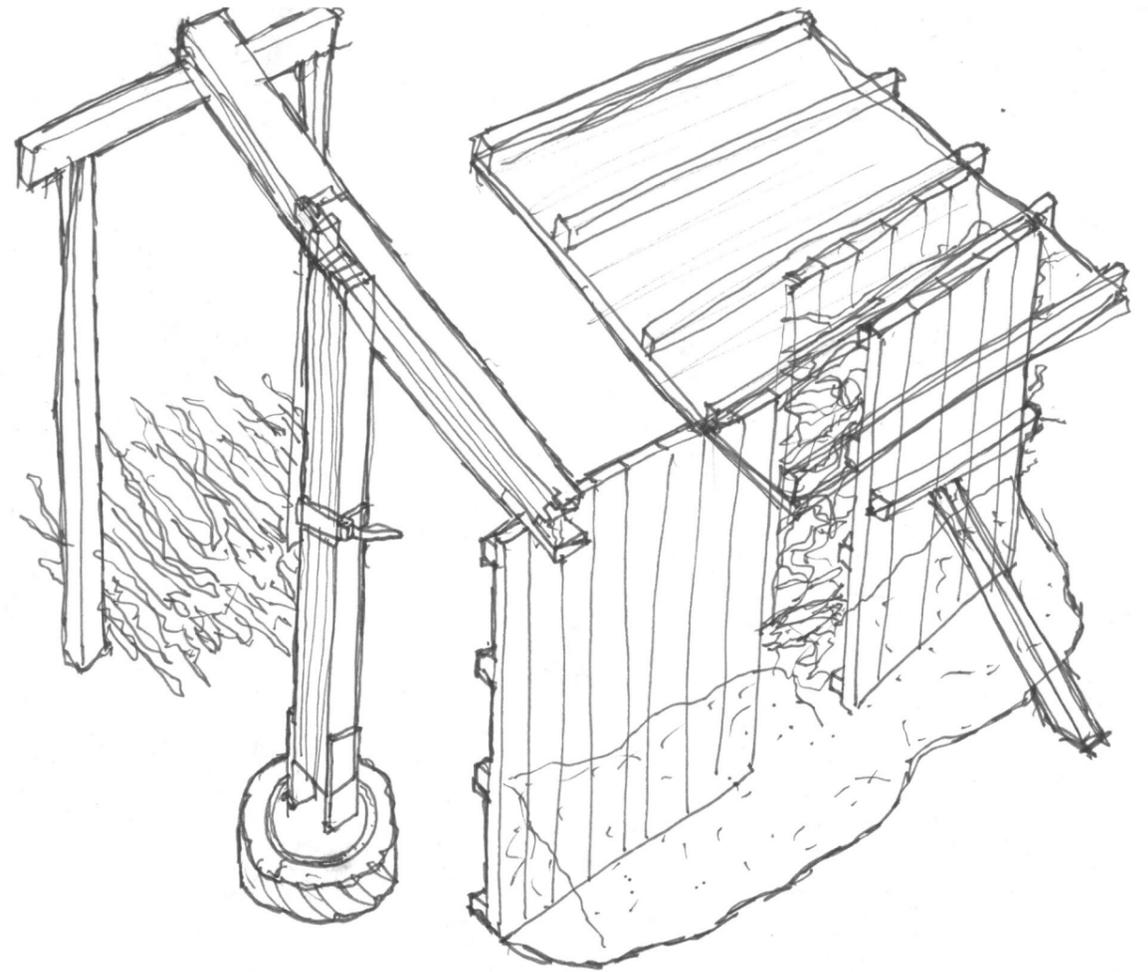
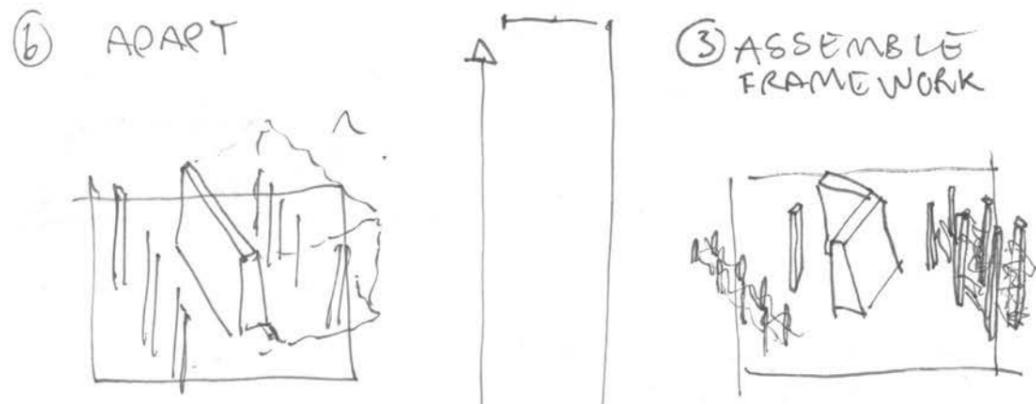
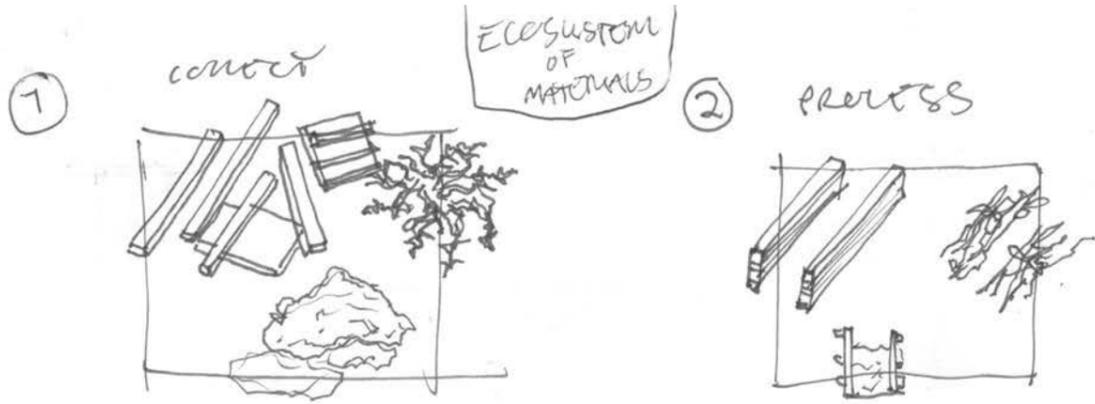


CENTRAL  
STRUCTURE

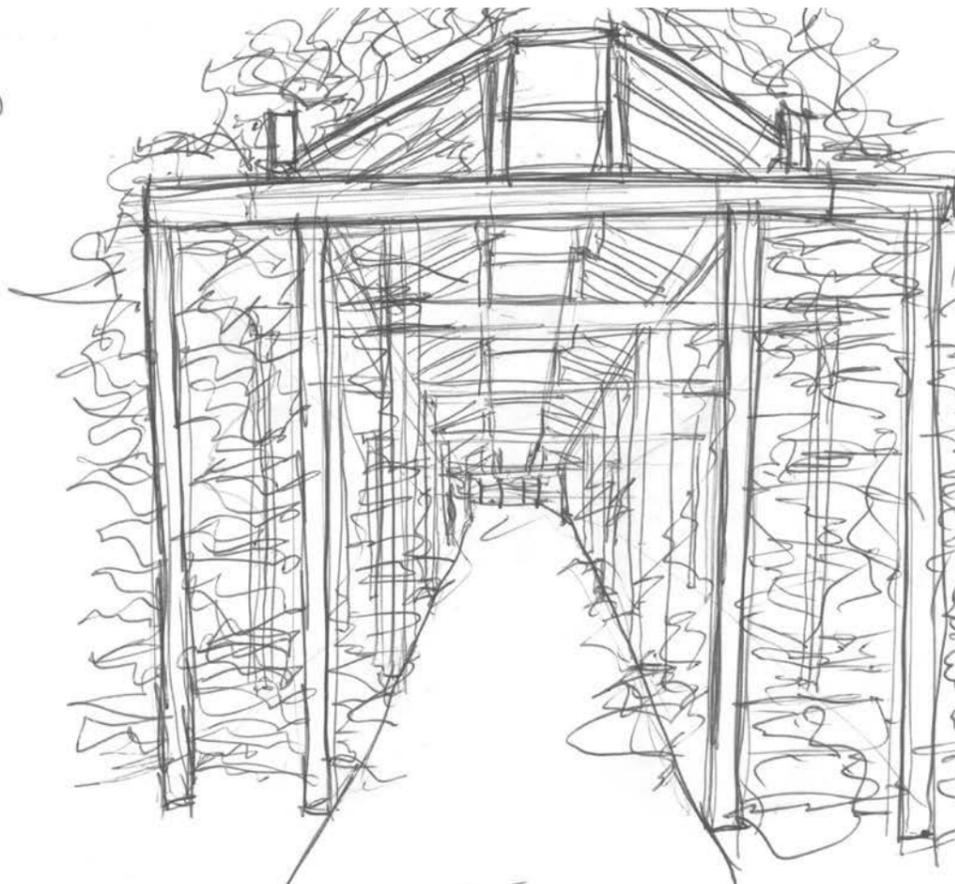
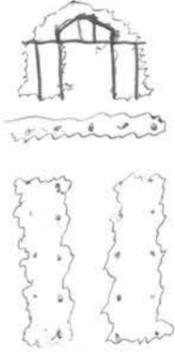


ESSENCE

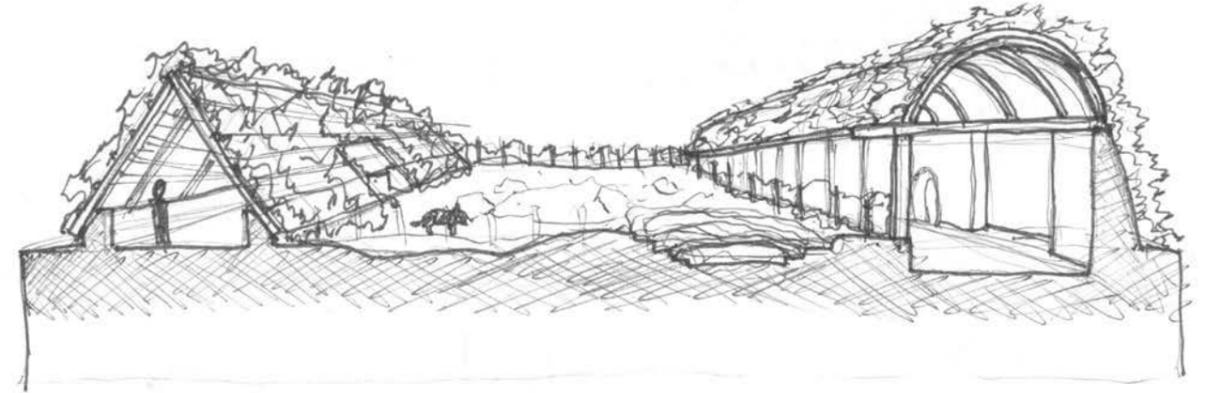
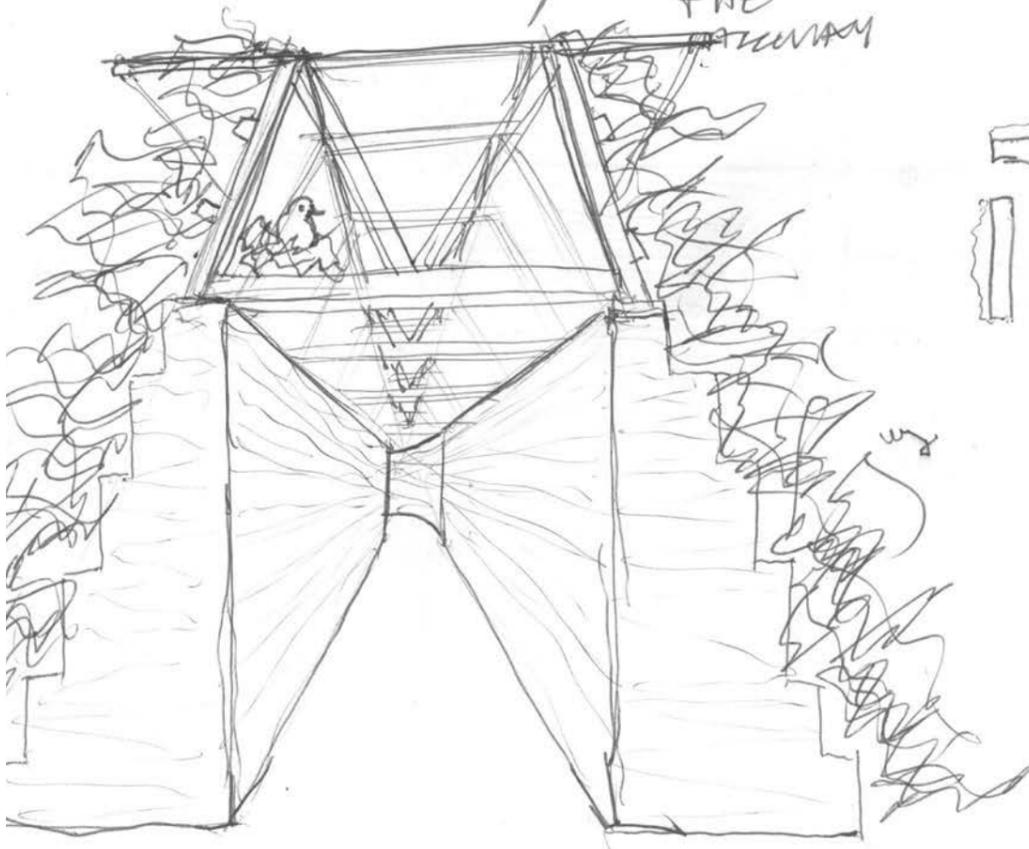
- MAKING ARCHITECTURE OUT OF EXCESS MATERIALS WITHIN A WASTE STREAM
- PROPOSING A DEVELOPMENT FOR PUBLIC USE IN THE COMMONS
- EXPLORING BUILDING SYSTEMS OUT OF EXCESS CUTTINGS, SOIL AND FORMWORK
- MAKING ARCHITECTURE THAT DEVELOPS ACCORDING TO TIME, ECOLOGY AND COMMON BENEFIT
- CREATING SPACE FOR CREATIVE STORAGE AND ~~GENERAL~~ <sup>AND COMMON</sup> BENEFIT
- VALUE HUMAN AND NON-HUMAN HABITATION EQUALLY



GUAM  
CUTTINGS

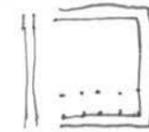


THE  
PASSWAY

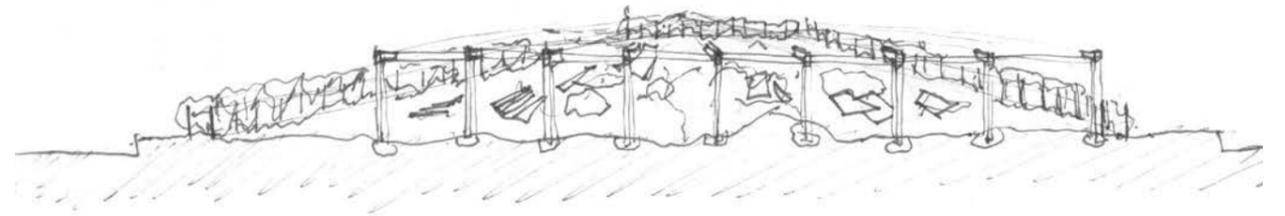


① COLLECTING

STORAGE

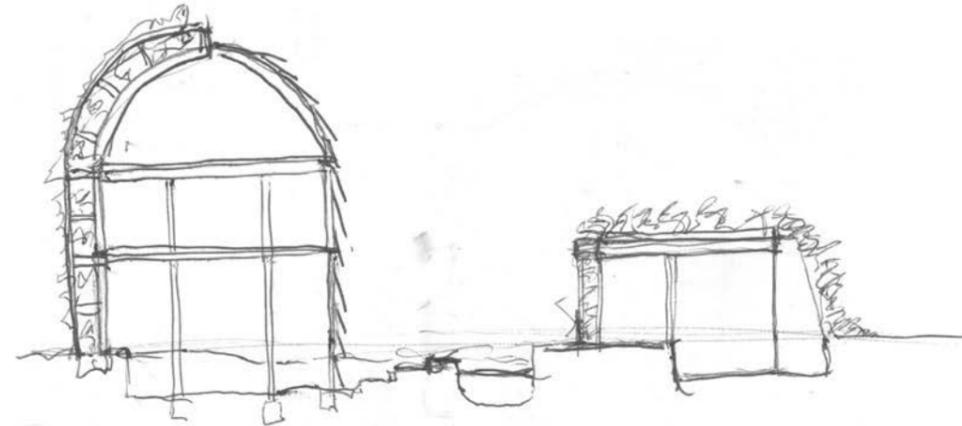
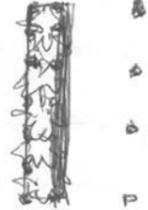
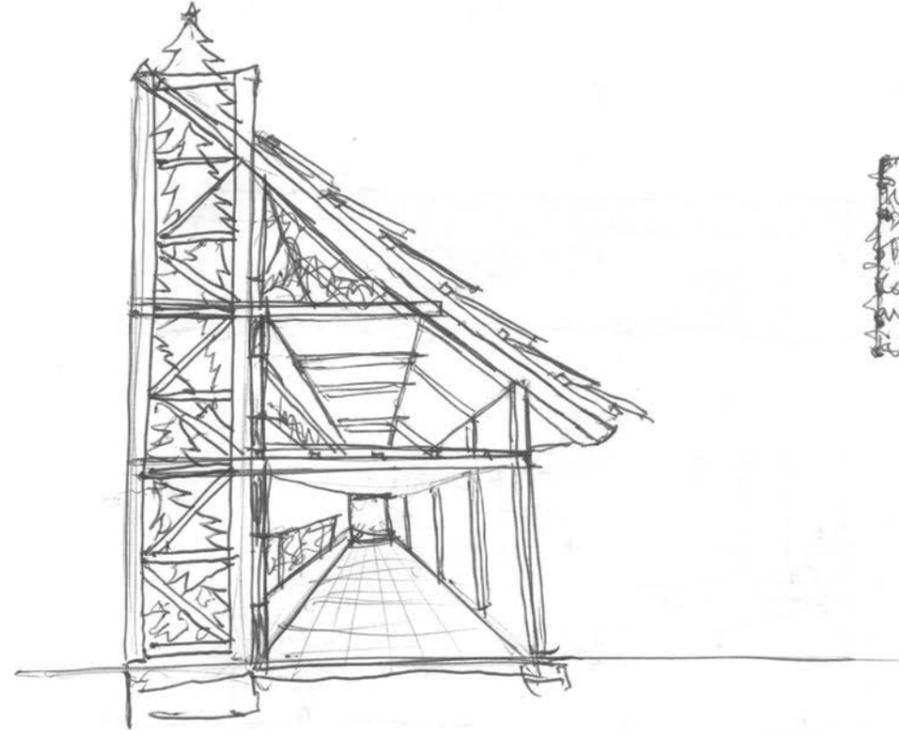
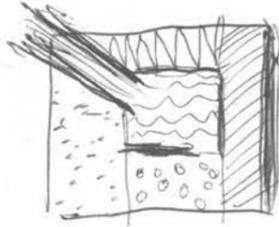


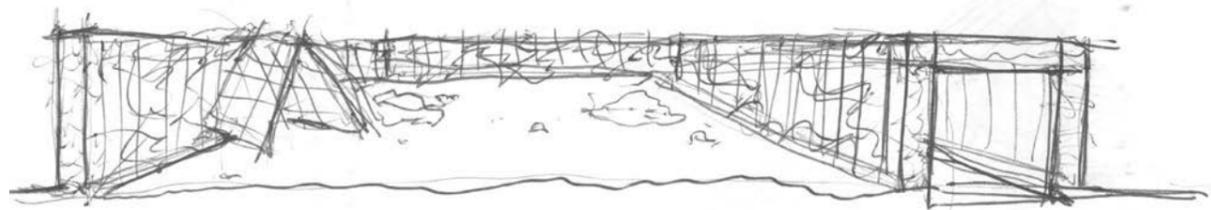
- PERIMETER
- UNTOUCHED GROUND
- SHELTERED OUTDOOR SPACE



ROOF → COVER, GATHER, HABITATION  
 WALL → HABITATION, FILTER  
 FLOOR → WATER COLLECTION, ACCUMULATION OF WATER, EXCAVATION

- ENTERING
- GATHERING
- MAKING
- PLANNING
- STORING





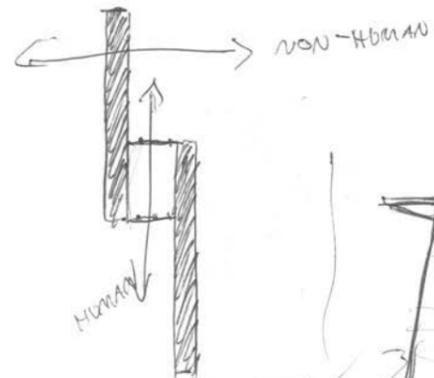
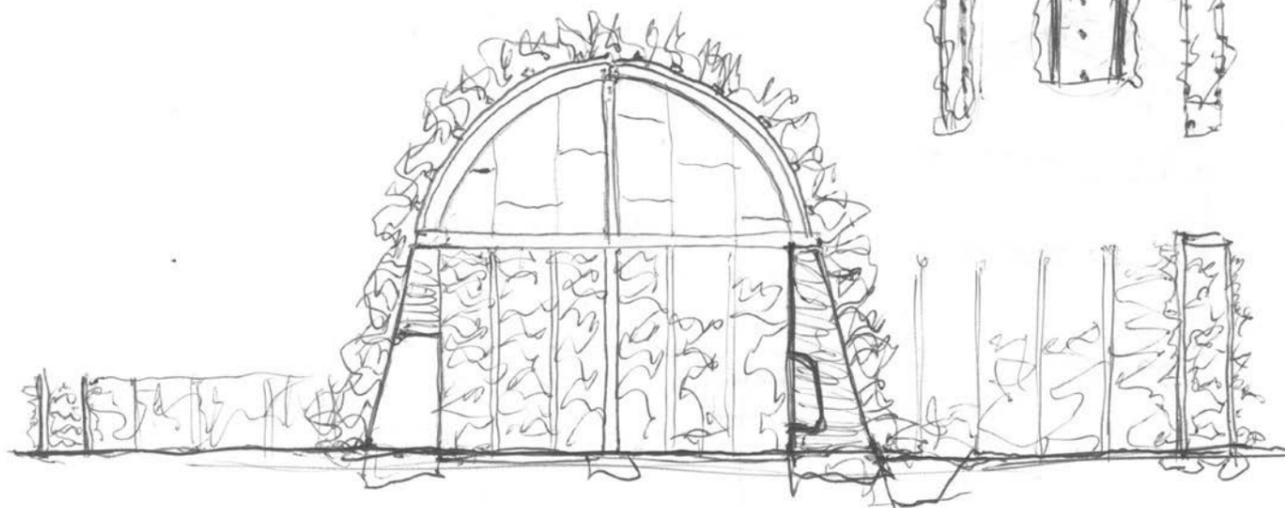
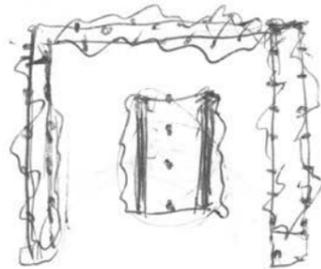
ACCESS & VIEWS  
CHANGE OVER  
TIME



MAINTENANCE?

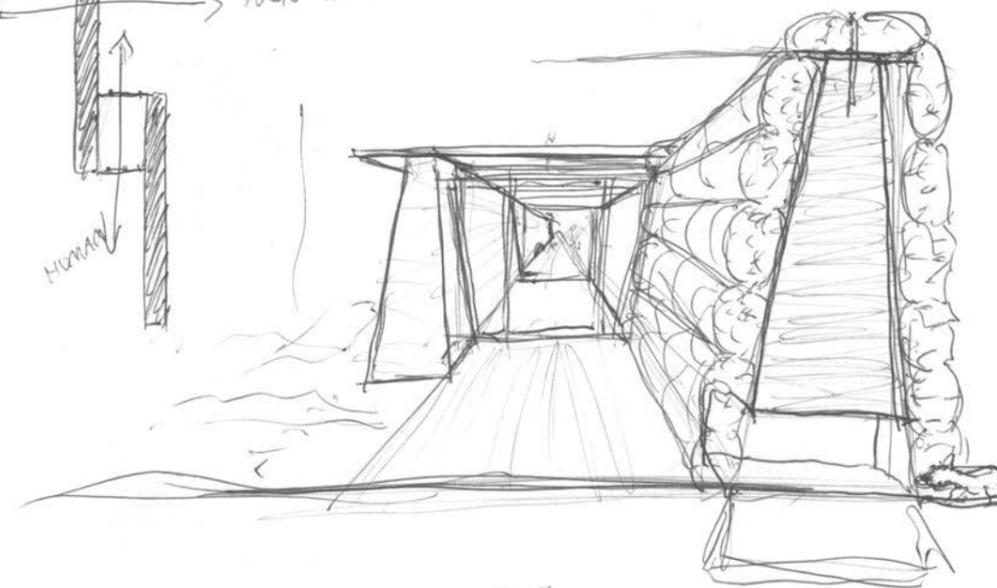


SLOW CHANGING

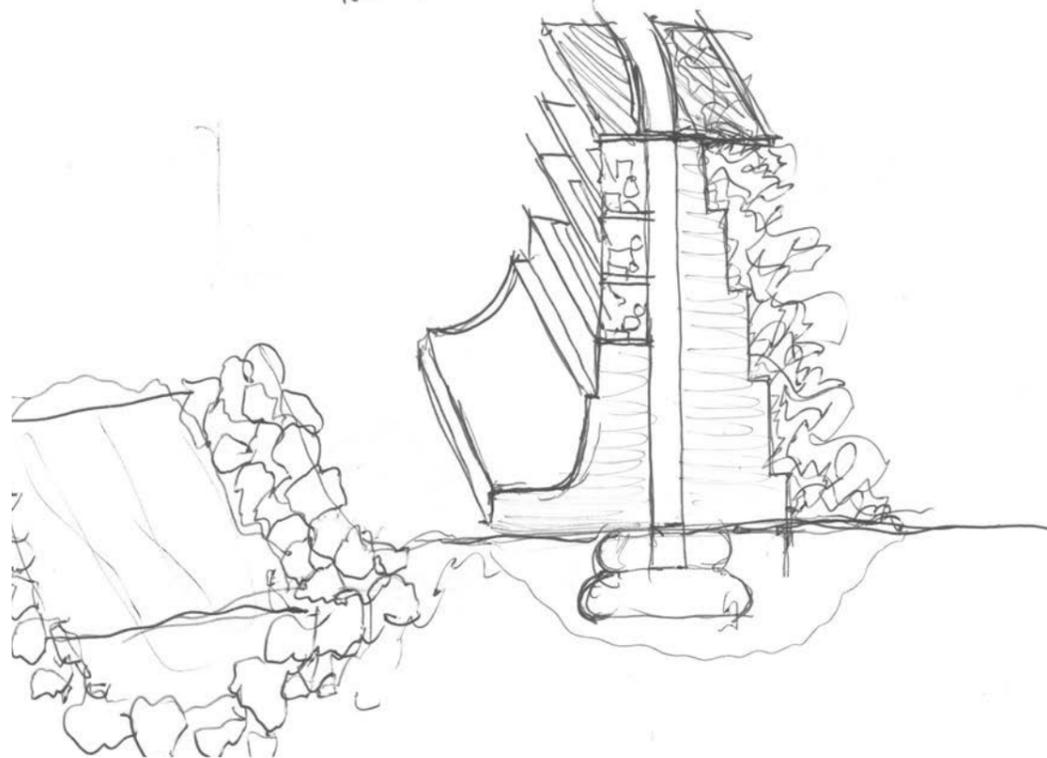


NON-HUMAN

HUMAN

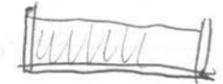


IN HABITATION  
MATERIAL STORAGE  
SEATING  
NON-HUMAN HABITAT



JORD HAGEN  
 KUUSTHAGEN  
 TRÉHAGEN

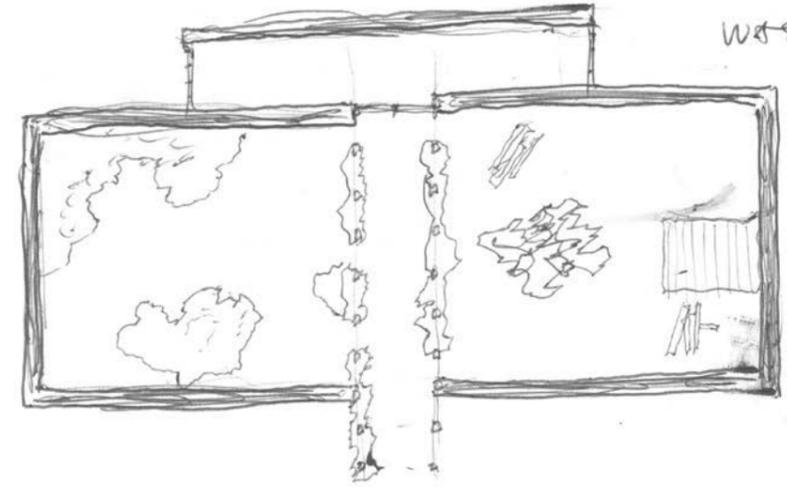
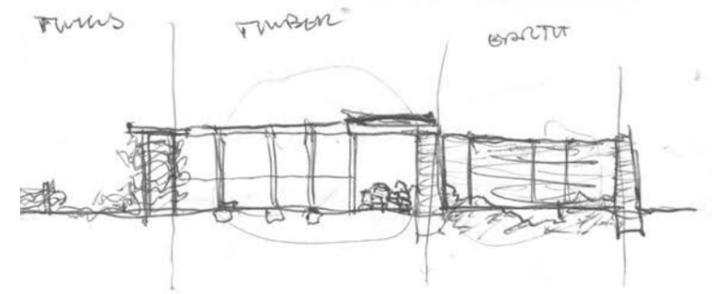
STORAGE



AVUAPP  
 OVERSMOS

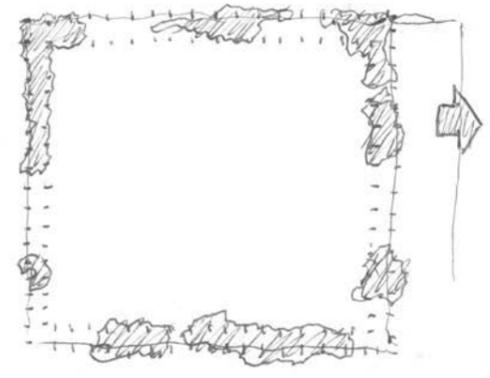
JORD  
 FOLSKATUNE  
 KUST

ELEMENTS  
 THAT DIE  
 -----  
 ELEMENTS  
 THAT ARE  
 MAINTAINED



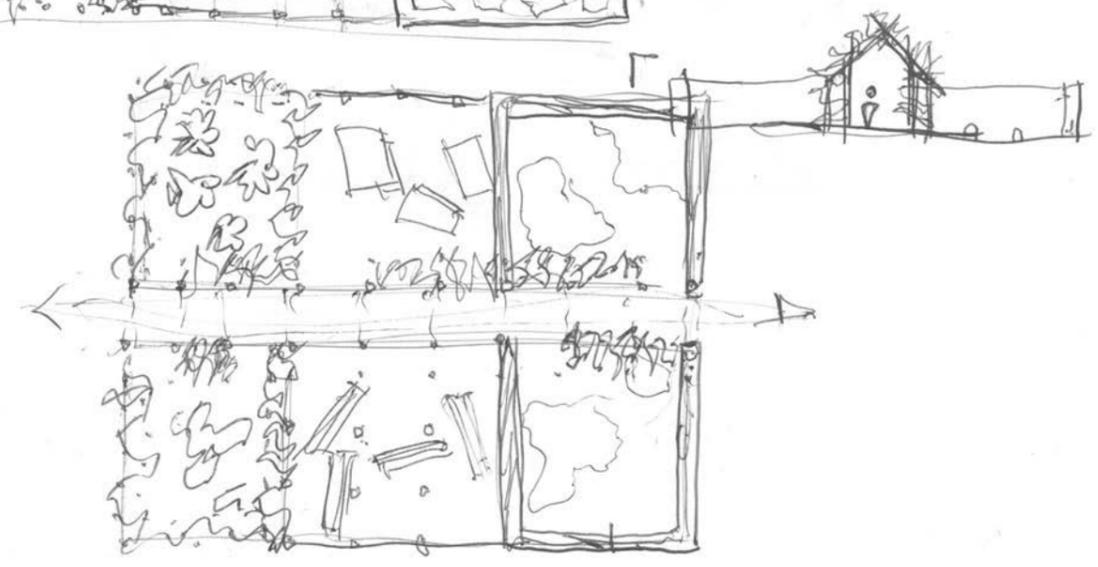
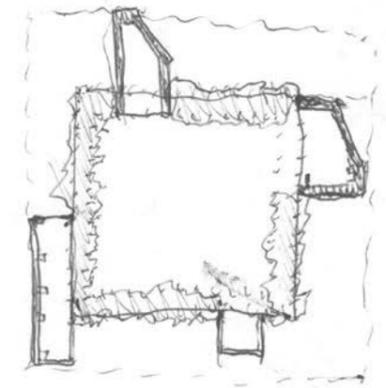
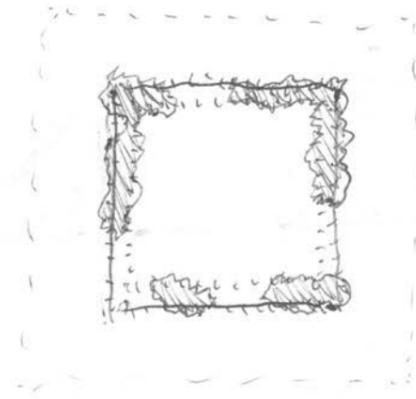
FIRST OCCUPATION

IN HABITATION



ACT 1: LAYING THE HEDGE

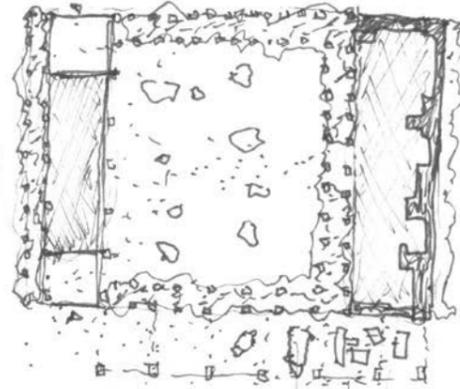
ACT 2: SUPPORT  
 STRUCTURES



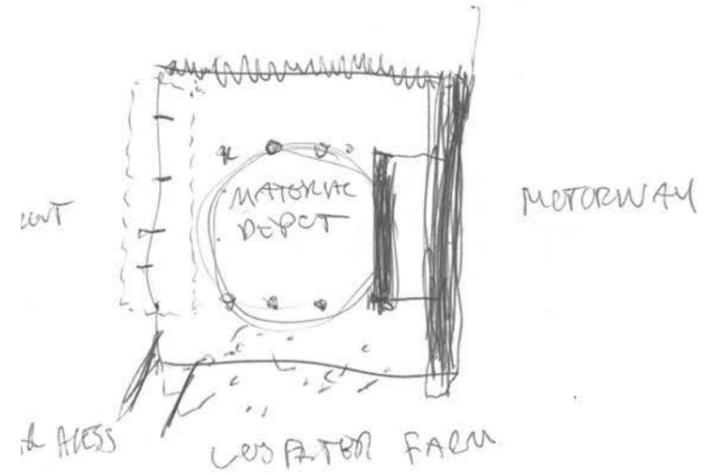
① PERIMETER, ESTABLISH ACCESS POINTS



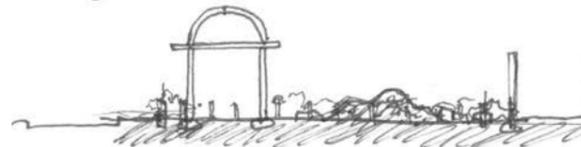
② ENCLOSE, EXPAND, CONNECT



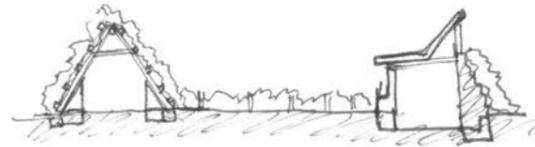
All existing



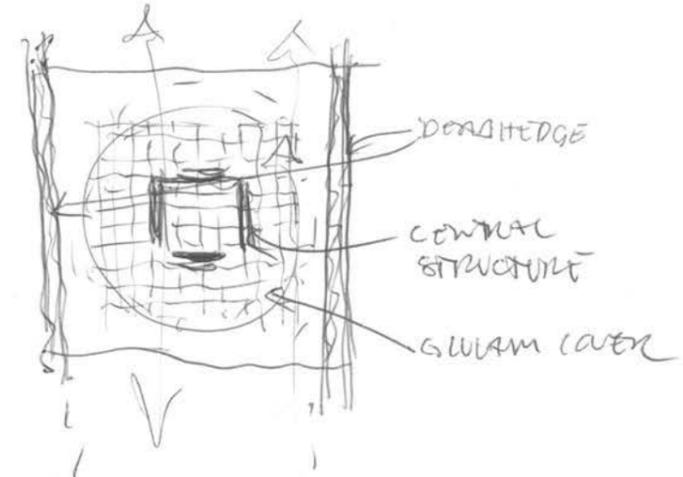
① UNFINISHED



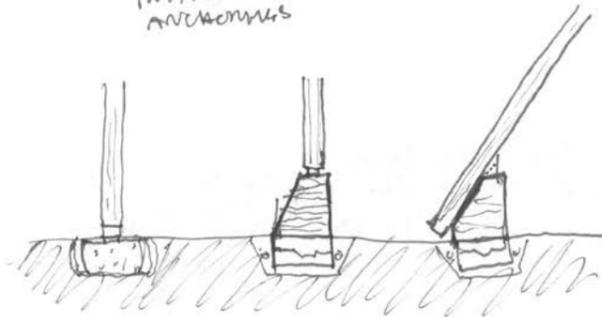
②



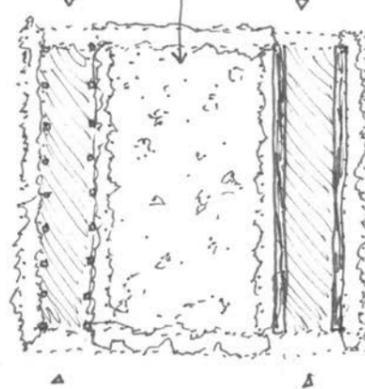
SECTION MODEL



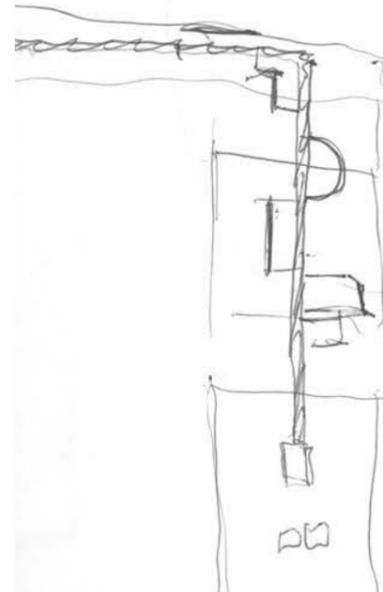
INITIAL ANCHORS



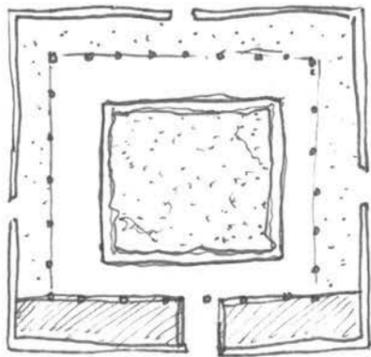
NON-HUMAN SPACE



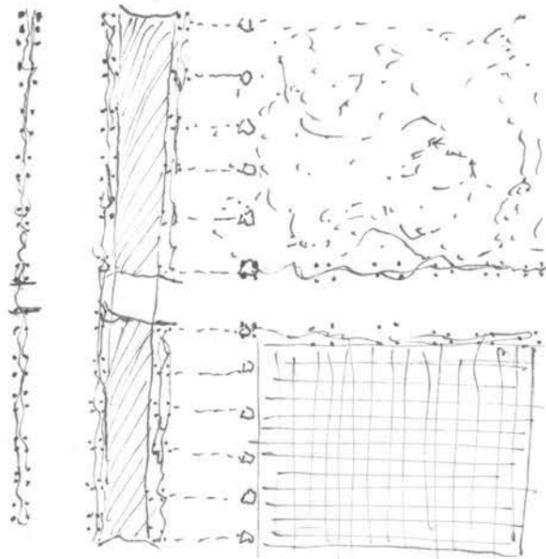
CENTRAL WALL



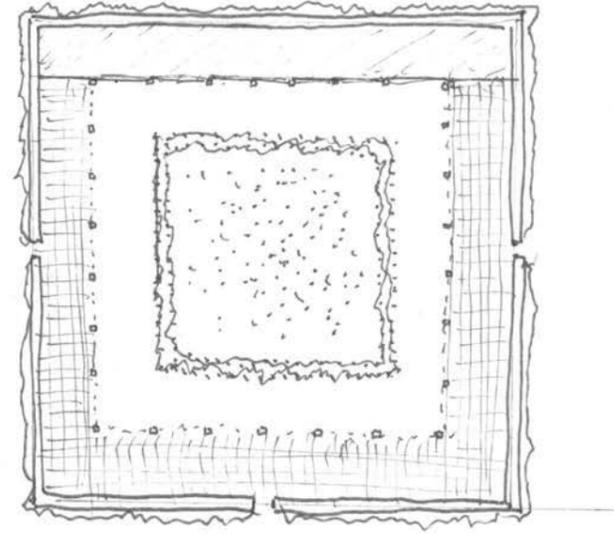
DOUBLE ENCLOSURE



PASSAGES AND TWO FIELDS

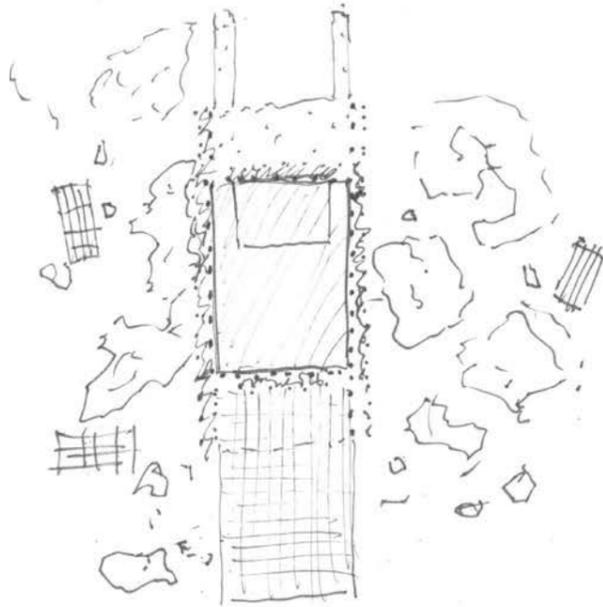


DOUBLE ENCLOSURE

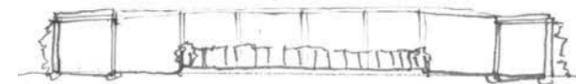
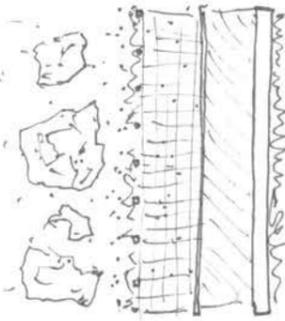


1:500

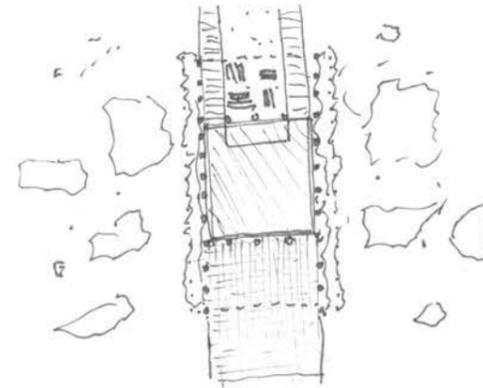
CENTRAL SPACE



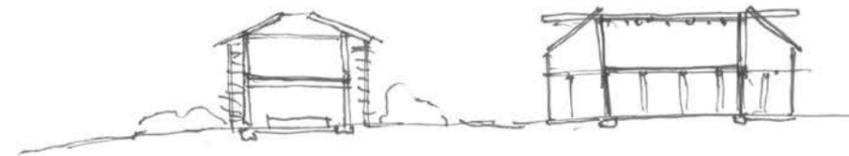
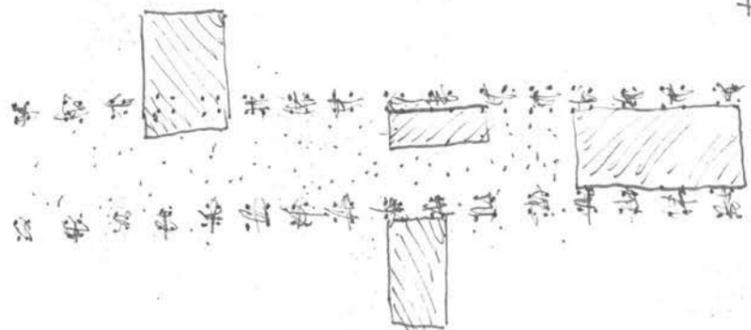
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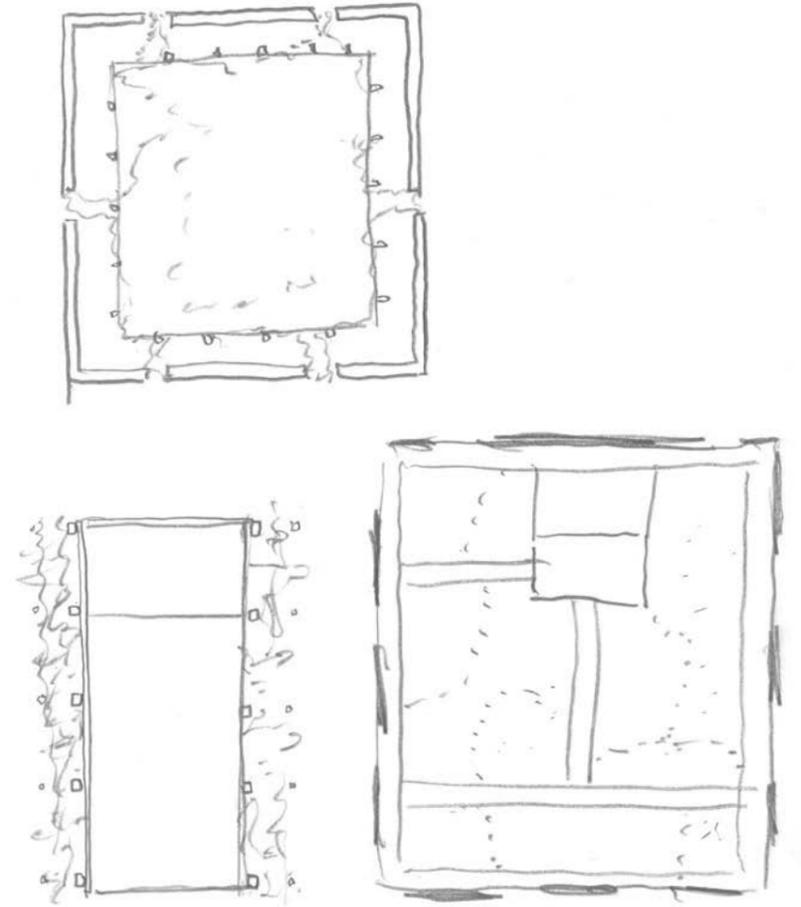
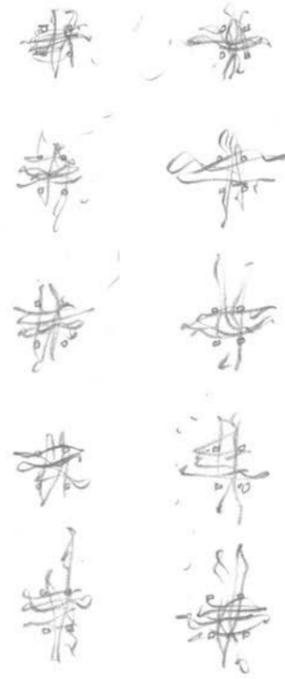
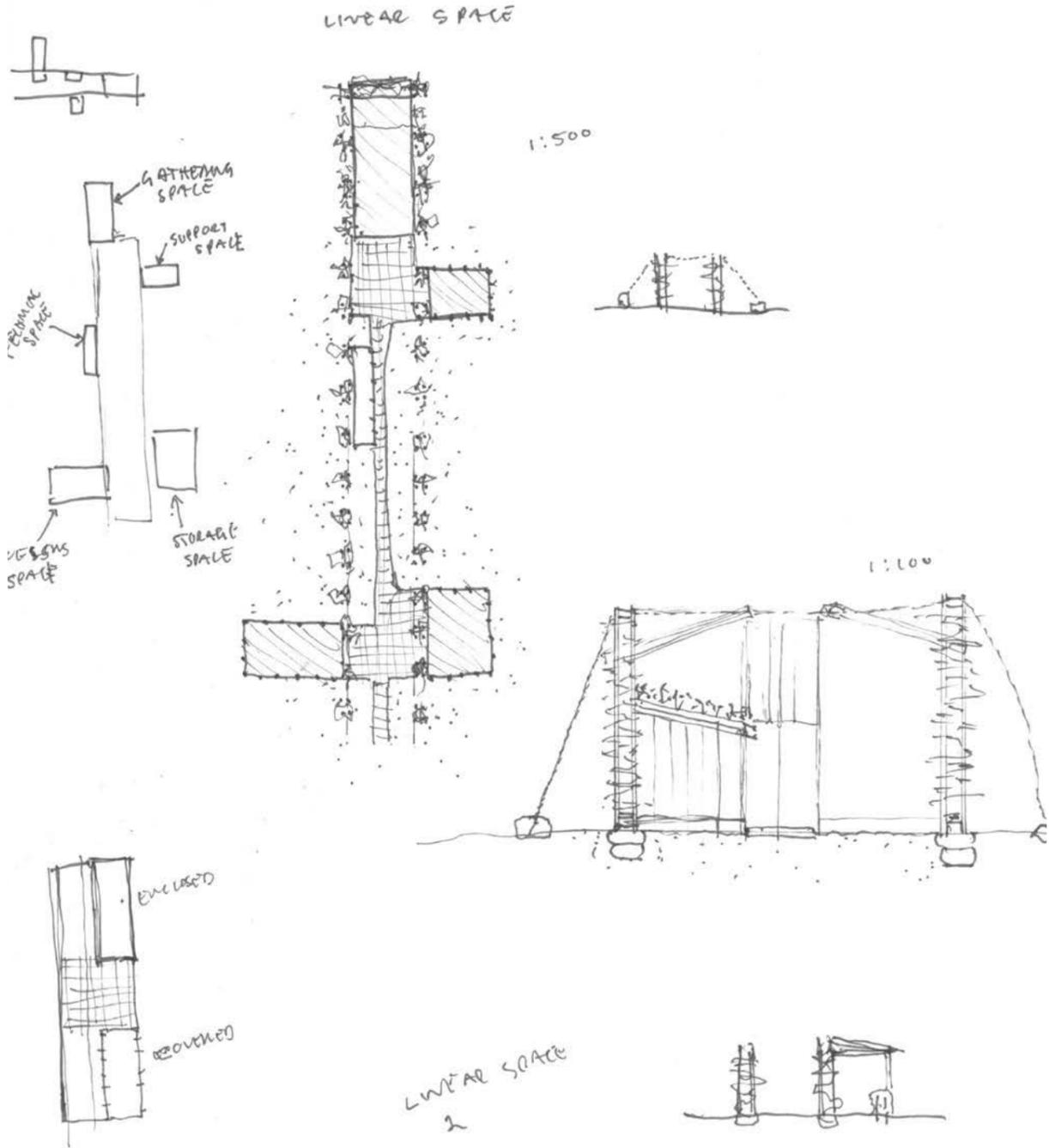


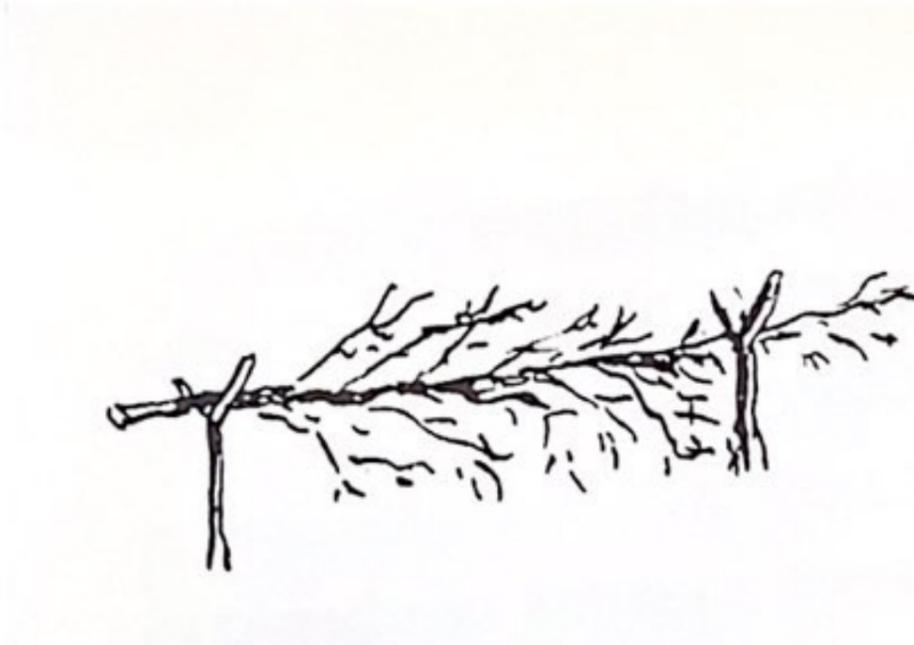
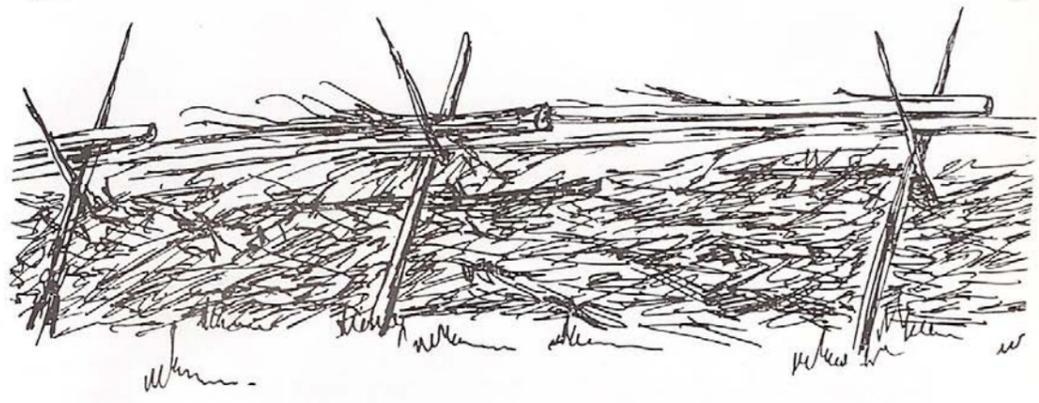
CENTRAL SPACE



LINEAR SPACE







*Risgard*

*Ratgar*

*Trasgali*

*Ratutgar*

*Garvonn*

*Vondagar*

*Stek og skat*

*Pasgar*

*Buskegard*

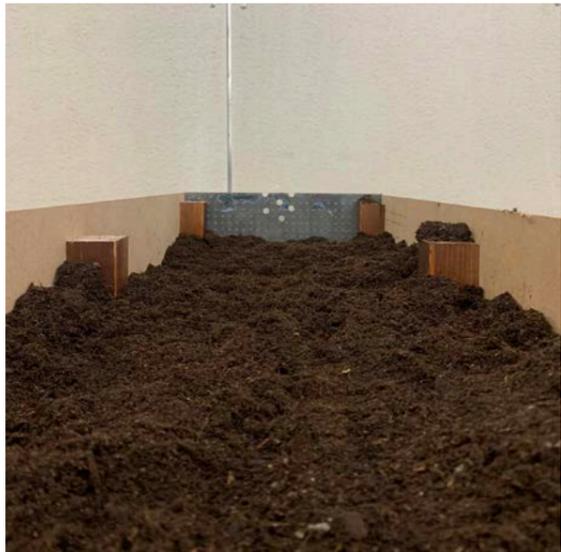
*Risgal*

*Fellegard*

*Hafelle*

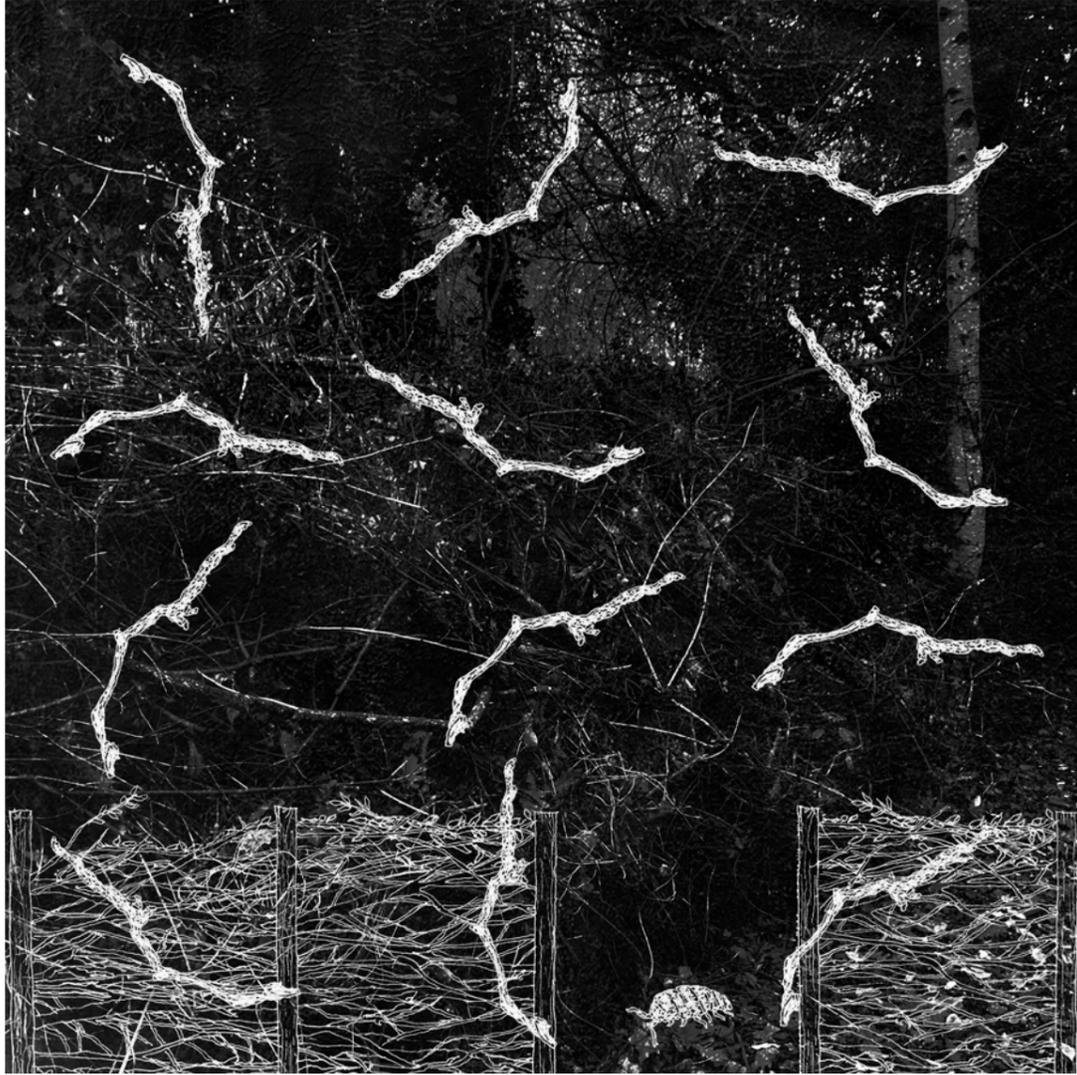
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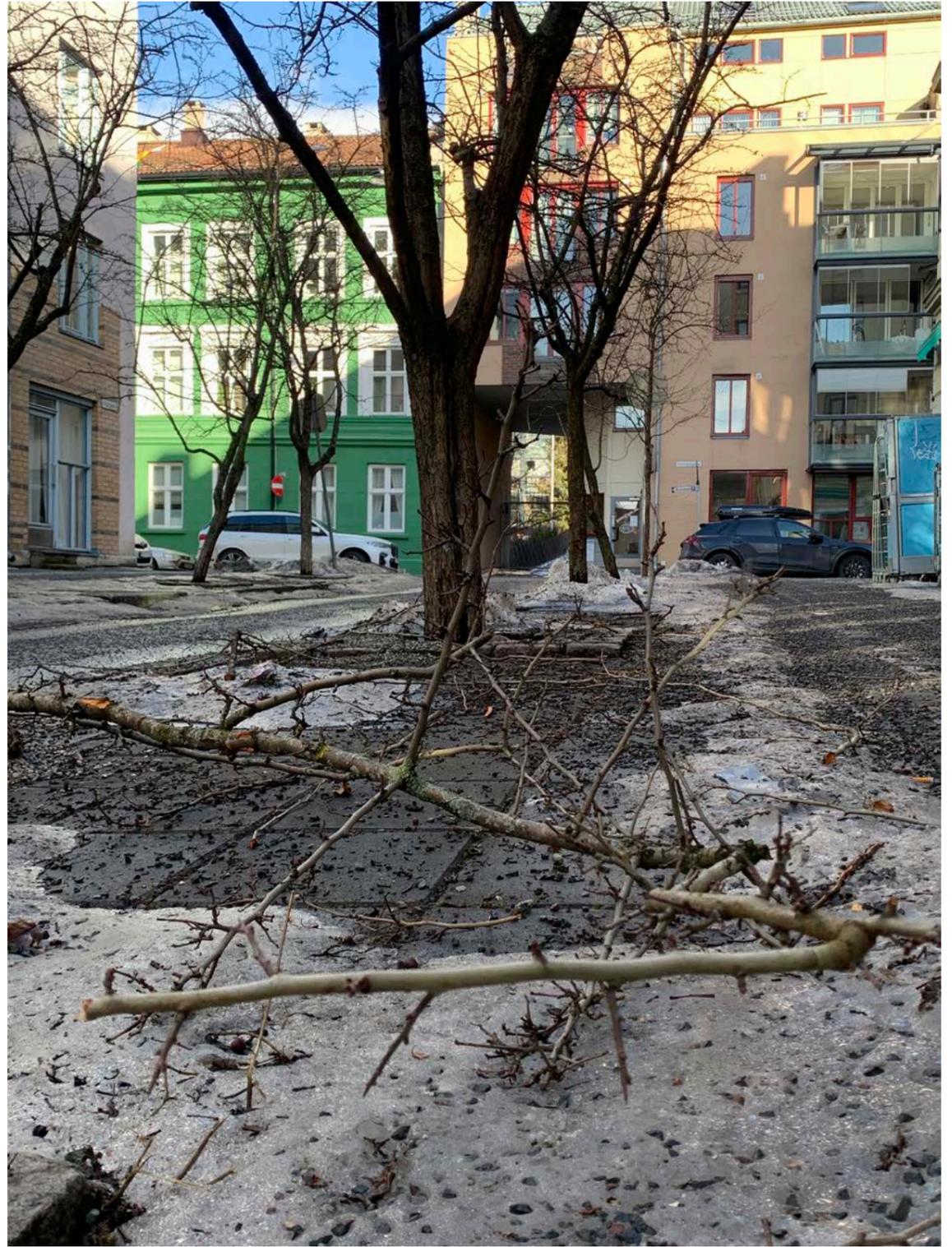
*Lurvegard*



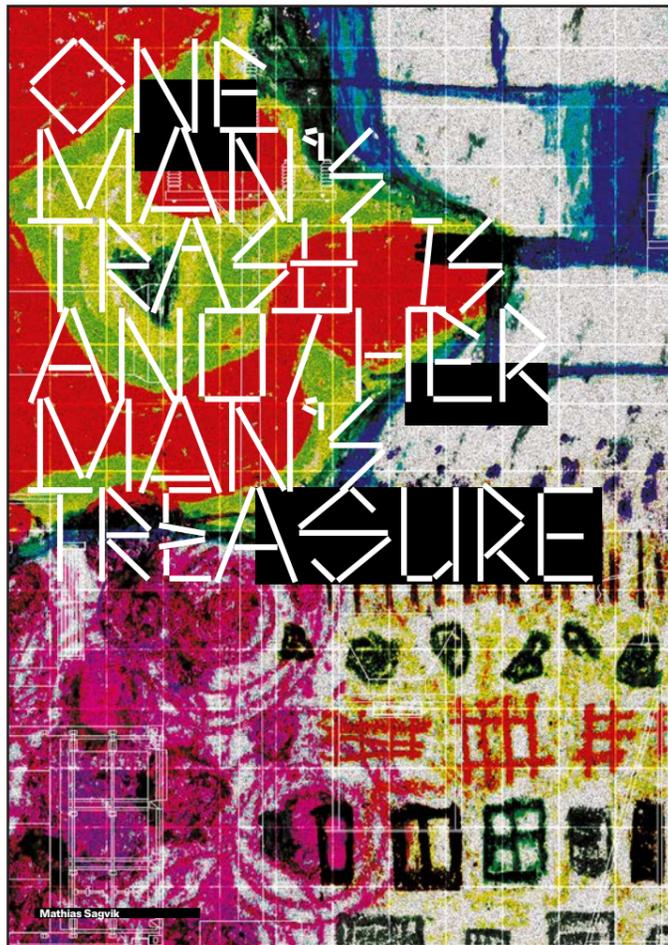
Laying the Dead Hedge











**Mathias Sagvik**  
Pre-Diploma  
Autumn 2023  
**Supervisors**  
Eirik Stokke & Espen Heggertveit  
**The Oslo School of Architecture and Design**

Images courtesy of author if not otherwise stated  
Typeface: Anthony, designed by Sun Young Oh, Velvetyne  
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ONE  
MAN'S  
TRASH IS  
ANOTHER  
MAN'S  
TREASURE



Guerilla gardening is a movement about the desire to beautify to make a healthier environment, communal spaces, to express oneself or to simply garden.

## ABSTRACT

ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE explores potentials to access the city's surplus resources. Waste streams are reconsidered as a common good beyond utilitarian use within strict regulatory frameworks.

Hidden networks, hacks, and waste are lenses through which to discover inclusive and subversive agency opposed to overdetermined urban configurations.

Infrastructures typically invisible in Oslo are hacked, reconfigured, and become sites for architectural design that consider excess resources anew.

Through the lenses of heat, water, power and materials, the intention for the diploma is to design structures that piggy-back on existing infrastructures of excess, and seeks to democratise the city's resources into communal and public space.

The scope of the thesis is both strategic and spatial, with an acupuncture approach, using the opportunities framed in the pre-diploma as a point of departure for detailed design.

My aim with this pre-diploma is to position myself within the realm of alternative architectural practices, and develop an approach for transforming common infrastructures based on case studies.

The following research is a continued investigation into non-normative structures that operate on the fringes of the city, from the perspective of a queer person interested in both the banal and the fantastical.

Figure 1: Pavement guerrilla gardening. © Josef Bray-All



The post-industrial structure's rooftop in London is an open, generous space inhabited by residents and the public.

## CONTENT

8	<b>Context</b>
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	Designing Disorder: Experiments and Disruption in the City, Richard Sennett and Pablo Sendera (2022)
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Figure 2: Haringey Warehouse District, 2011. © Ossi Piispänen.

ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE      CONTEXT

THE  
PROBLEM  
AT  
HAND

### OVERDETERMINATION OF USE

The Athen's Charter divided cities into functions, fragmenting them into predetermined zones.

More recently, 'mixed use' development still carries the idea of predetermined rules to a space, often demolishing neighbourhoods and displacing communities.<sup>1</sup>

The problem can be condensed into the act of overdetermination of the city's visual forms and social functions. Order and control is promoted over experimentation and informality, essential for the vitality and inclusion.

When zoning and regulations are the tools for creating vibrant spaces, communities are not provided the time and space to grow and establish meaning to a place.

The urban design strategies proposed should contest these current forms of imposed order: rigid designs which commodify local culture, produce hostile environments, and lead to processes of social exclusion.

### RESOURCE CONSUMPTION

Infrastructures that make cities and communities work are often invisible. Water purification, heating, data networks, and material waste allocation occur through private and municipal forces without much engagement. The idea that the system just takes care of things in cities like Oslo leads to overconsumption of resources and disengages the active citizen.

If these systems were to stop, undergo updates, or workers go on strike, the smooth experience of daily life would be drastically shifted.

Exploring scenarios where resources were distributed more informally would create new spatial and social conditions for the city, to make better use of the excess.

### PUBLIC AGENCY

The active municipality is not as prominent in cities like Oslo as they used to be. It mainly deals with issues of regulation and distribution, rather than being an active agent of change and care.

The agency of people to engage with development is also a limited practice, having to accept predetermined, profit driven solutions.

Therefore, the opportunity to experiment with alternative governance and making of spaces is difficult to make happen, especially in the public realm

## THEORETICAL CONTEXT

To position the research, I want to highlight books and practices that have formed my interest in the development of more equitable cities. Rebel Cities framed the goal of my approach, namely the right to reinvent the city and its resources in a collective and democratic manner.

### REBEL CITIES

Collective forms of urban development formed is inherently connected to the way we want to enact on our lifestyles, desires, and social needs. The right of the city is a right to change and reinvent the city, rather than an individual access to the city's resources.<sup>2</sup>

"The right of the city does not arise out of intellectual fascination, it primarily rises up from the streets, the neighbourhoods, as a cry for help and sustenance by oppressed peoples in desperate times"<sup>3</sup>

Commons are not constructed as a fixed entity, but a malleable and changing relation between a self-defined group and the existing or yet to exist.

Harvey reinstates that quality of life has become a commodity for those with access and capital, which results in cities increasingly divided, fragmented, and conflict prone.<sup>4</sup> This opens up an opportunity for moments of creative disruption which piggy back on the economy of dispossession.

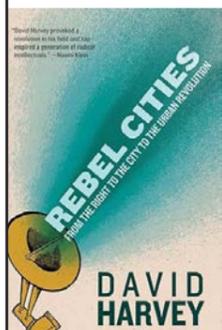


Figure 3: Rebel Cities, 1967. ©Verso Books,

### DESIGNING DISORDER

The planners of today have an abundant arsenal of technological tools at hand, but they are not that creatively employed.<sup>5</sup>

The Brittle City is a concept that explains the perils of overdetermination of programme. When the use of these spaces change, they are destroyed rather than adapted.<sup>6</sup>

Boundaries are defined as an edge where the interaction of different groups occur. The border, on the other hand, are places where they become more interactive.<sup>7</sup>

Life of a community is usually identified through its centre, whereby the edges are often areas for development, sealing off, or destruction. This is an issue because it removes porosity and networks of exchange between people.<sup>8</sup>

In more recent activism, community action range from occupying empty buildings, engaging with the planning process where the community forms a land trust to obtain dwellings from the local authority, which provides their own statutory framework.<sup>9</sup> Examples of these cooperative practices are Teyen Boligbyggelag, La Borda Cooperative, and the historic Frestonia.

Two tactics of putting alternative urban ideas framed in the book are: 1. Municipalism: How to transform existing institutions to become more open and democratic. 2. Networks: Local initiatives forming alternative governance.

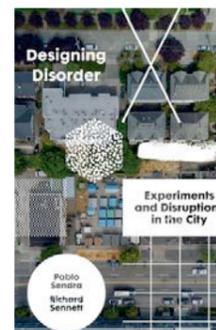


Figure 4: Designing Disorder, 2022. ©Verso Books

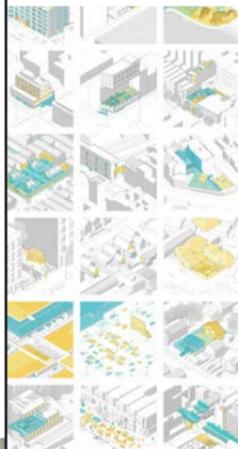


Figure 5: 27 piggybacking cases, 2023. ©Brian Holland

### PIGGY BACKING PRACTICES

The Piggybacking Practices Virtual Exhibition and Symposium is an ongoing research project by Brian Holland, investigating alternatives within current inequalities in the built environment.

"These practices are emerging in response to the intensifying pressures of contemporary market logics, and alongside widespread increases in social and economic inequality. Would-be piggybackers scan the urban landscape for vacancy, waste, and un- or underexploited niches. Potential opportunities may be spatial—in, on, or in-between buildings and sites, but may also be temporal, existing within the daily, weekly, seasonal, or overtime gaps between use and non-use."<sup>10</sup>

27 case studies are used to create a catalogue of historical and existing attempts at these non-normative structures valuing community, re-use, and equity, categorised into three tactics:

Capture a Waste Stream

Inhabit a Niche

Share a Resource to Multiply Use

### MAKE. DON'T MAKE DO

The project by Assemble from 2013 examines the history, current conditions, and future possibilities of the area south of the Olympic Park in London.

It presents a series of interventions within this specific built environment, which are evaluated economically, socially, and time-wise, based on a set of design principles.

The future study imagines realistic scenarios that pose alternatives to contemporary exploitation of people and spaces.

The principles can be looked at carefully to find transferrable applicability in other contexts:

- Make the barrier a destination
- Make uses visible on the High Street
- Make the most out of passing traffic
- Make a coordinated public realm which retains diversity
- Use of vacant spaces
- Make better links to Bromley By Bow
- Make social spaces
- Make the most of existing buildings, institutions and heritage
- Make more affordable workspaces
- Make use of the process of change"



Figure 6: Make, don't make do, 2013. ©Assemble

### URBAN LOOPHOLES: CREATIVE ALLIANCES OF SPATIAL PRODUCTION IN SHANGHAI'S CITY CENTER

Ying Zhou investigates the idea of 'urban loopholes' in the context of Shanghai, which provides an invigorating range of finding opportunities within given frameworks of governance.

"Urban loopholes are mechanisms of urban spatial production, which results from gaps, absences, or exceptions in the larger urban system," pointing out that these usually occur during periods of rapid economic change. "Their resultant spatial products are sometimes physically anomalous, other times physically conventional but procedurally anomalous"<sup>12</sup>

The book is relevant because it defines when and how alternative development of cities can be employed, in times of rapid change, in gaps and planning frameworks.

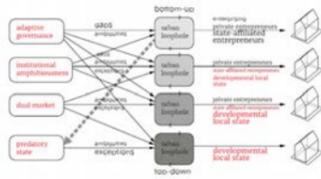


Figure 7: Stakeholder diagram, 2017. © Ying Zhou

### DISSIDENT PUBLICS

Dissident Publics is a very recent example of how working with transformation of existing urban objects - 'artefacts' - can serve an open communal purpose.

"Dissident Publics: Future Artefacts of Queer Methodologies" (2022-2023) is a collective critical investigation by Exutoire, NOGOODS, a total of 7 artists and architects. It is a co-creation project that aims at uncovering the social and spatial potentials of public space when seen from queer and intersectional feminist perspectives.<sup>13</sup>

The project was carried out through an extensive public programme functioning as a social hub of exchange in Oslo. It was based on creative, collective processes, looking at the impact of public space and the bodies that surrounds it.

A 'dissident public' is defined by the project as a co-governed and co-regulated environment where active transgressions of norms can happen and be represented, in critique to hostile and clinical urban spaces today.

Queer methodologies were developed through workshops, resulting in an exhibition, a spatial project, encompassing the involved's varied practices.

The exhibition was a site for investigation built upon future artefacts: choices and reference points that are formed by acts of reconstruction, and tools of marginalised voices. Urban and domestic furniture was 'hacked' whereby people would have their own right to appropriate the space. Openness, softness, facilitated for queer community organisations in Oslo. They were made to be an infrastructure for these communities, such as tools for knowledge sharing.



Figure 8: Dissident Publics event, 2022 ©Bui Qui Son



The Karaoke Bar is a historical, recent historical, and digging civil rights struggles and justice movements, as well as the material traces they leave behind through an inexpensive, visible, structure open for all.



### Hand drawn map of Batcave club - Jon Klein

1980s, London, UK

#### What?

Hand drawn map of Soho, London showing the locations of the Goth club 'Baticave' in the early from 82-86. It was likely distributed locally among the community.

#### Who?

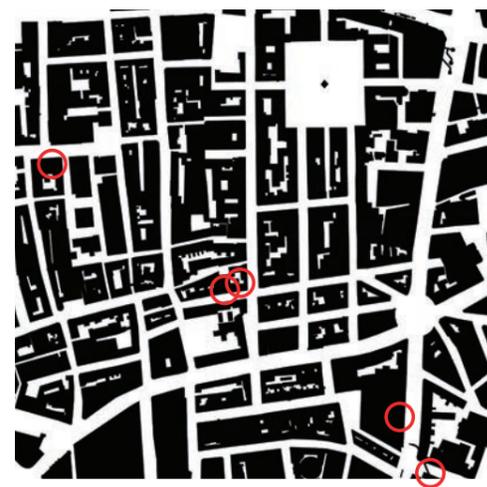
Jon Klein, member of the English Goth band Siouxsie Sioux and the Banshees, an active member in the scene. A membership card was needed to enter.

#### How?

Klein and friend did a public service for the underground scene in London, opening Batcave for the first time in 1982. The map is drawn with black and red markers showing the locations of Batcave throughout the four years.



Map overlay showing the mental abstractions



Current urban configuration, Batcave no longer exists

### BREAKING THE THERMAL SILENCE

The project is based in Halifax, one of the hotspots of the UK's energy crisis. Looking ahead to net zero 2050, cities such as Halifax will need to address heating infrastructure at a domestic, as well as an urban scale, as the energy transition from fossil fuels to renewables takes shape. Lica Anic, 2023.

Exploring infrastructures that seem utilitarian, but can actually be designed to have a large communal impact, the project is a relevant example of hidden network that addresses resource distribution. What if public infrastructure was hacked to allow widespread public access?

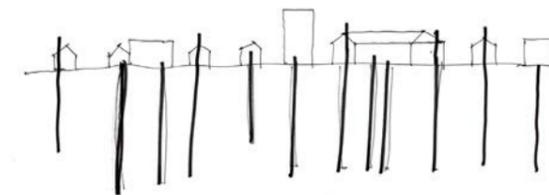


Figure 13. Underground Landscape of Chimneys, 2023. © Lica Anic



Figure 14. Civic Hearth Scenarios, 2023. © Lica Anic

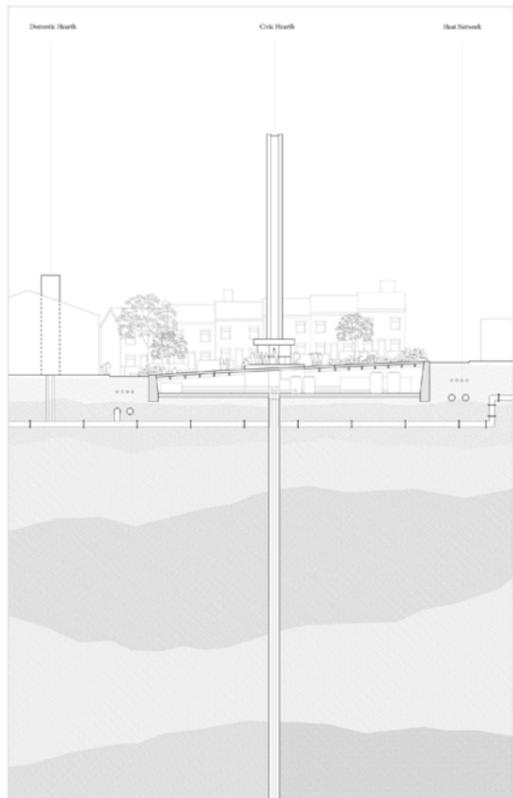


Figure 15. Section - Civic and Domestic Hearth, 2023. © Lica Anic

### EXAMPLES OF HIDDEN NETWORKS

Undocumented life

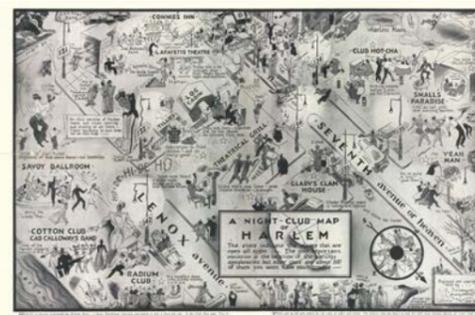


Figure 16. A Night Club Map of Harlem, 1932. © Elmer Simms Campbell

Community

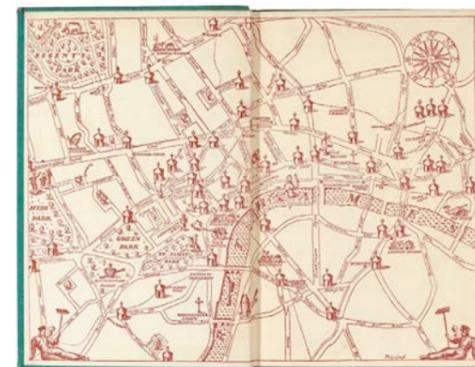


Figure 17. 1937. © Daniel Crouch Rare Books

Alternate route

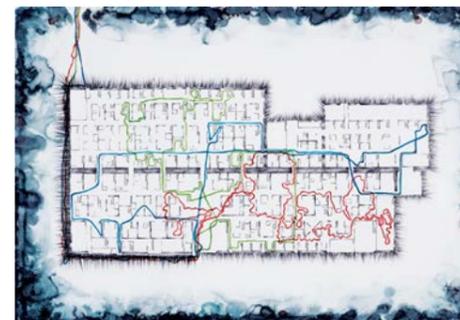


Figure 18. Night Shift, 2004. © Adam Chodsko

Memory

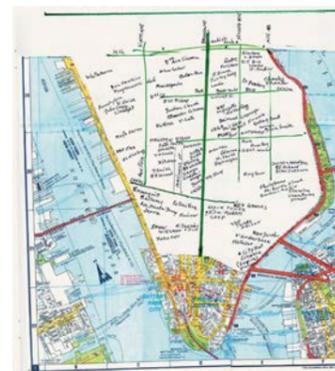
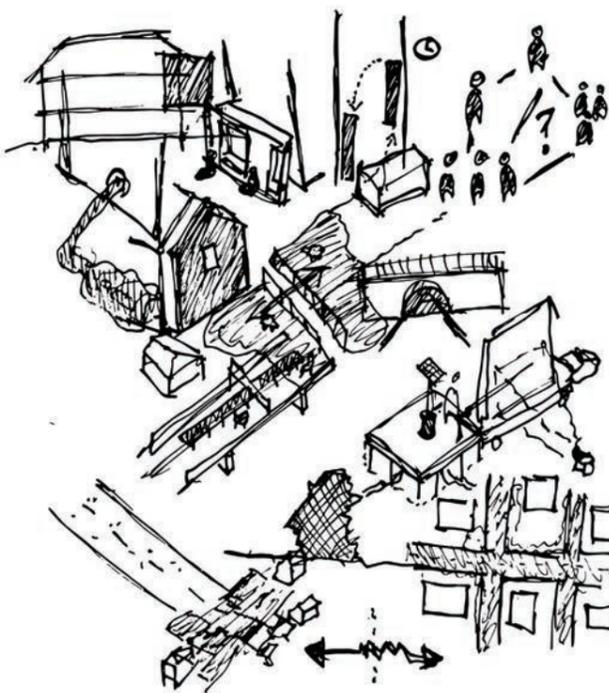


Figure 19. Map of 1980s New York drawn from memory. © Jonas Mekas



# HACKS

Processes of exploitation and extraction are deeply ingrained within our current social context. We are at an impasse and require to discover points of weakness and exploit them ourselves.

Looking for opportunities, shortcomings, contradictions, and loopholes within local planning regulations and infrastructures, the status quo should be challenged to explore more inclusive spatial actions.

Utilitarian infrastructure should be readdressed and hacked to uncover social, spatial, and ecological potentials.

In which ways can we hack the city?



Figure 20: Scaffold, 1997. ©Recetas Urbanas

## SCAFFOLDING - Santiago Cirugeda 1998. Seville, Spain

### What?

An extension of a space masked as scaffolding, accessible from the public space beneath.

### Who?

Santiago Cirugeda, in conversation with the local planning and heritage department. He contacted the local press to make this DIY strategy widespread to other inhabitants.

### How?

Cirugeda applied for a temporary scaffolding permit from the local planning department, to repaint the façade of a protected building. Being a listed building, he had to specify that he would paint the façade the original color (white), however, he did not need to present any document of ownership or relationship with said building. His true intention, however, was to use the scaffolding as an extension of the dwelling unit it attaches to. Following the expiration of one permit, another could be secured for a different building site, and the process could begin again.<sup>14</sup>

### Key insights

One permit can allow another use.

Extensions do not have to extend the footprint of the original building.

Involving people and press is a method for disseminating methods of urban hacks.

### HOW TO MAKE AN URBAN RESERVE USING SCAFFOLDING

1. Apply for a minor alteration licence from the local Urban Planning office (or the equivalent) to paint the facade of the building you want to enlarge or to which you want to attach a structure.
2. Ask a friend or a family member who is an architect (there are plenty of those around) to sign the scaffolding project. When it comes to talking about their wages, a few beers will do.
3. Once you have paid for the licence for a minor alteration (some €18) and the local authority's permit for the project (some €24), you can actually apply for the licence to install the scaffolding.
4. Design your own urban reserve using your favorite materials and styles.
5. Once you have the licence (approximately one month afterwards), install the scaffolding together with the urban reserve.<sup>15</sup>

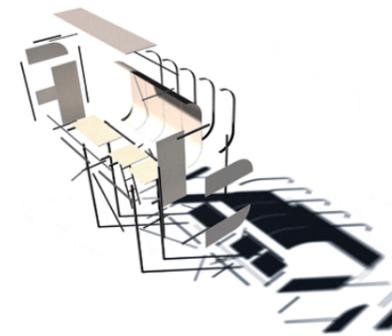
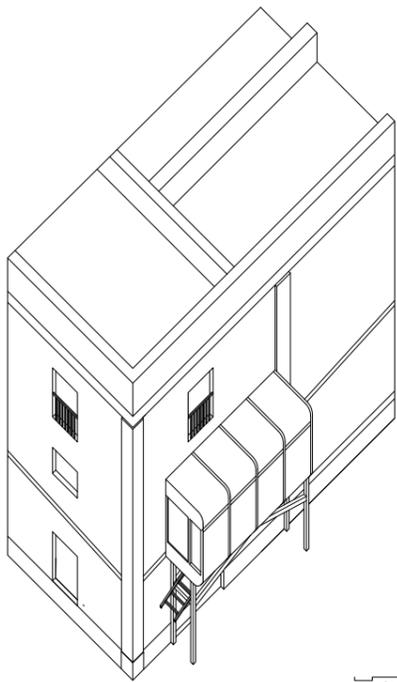


Figure 21: Scaffold. ©Recetas Urbanas



1m



Figure 22: Måken, 2018. ©Timur Kovacevic

## FLOATING SAUNA. Oslo Badstuforening 2016. Oslo, Norway

### What?

Oslo Badstuforening was established in 2016, building the first floating sauna Måken in that year.

### Who?

Oslo Badstuforening is a non-profit association today consisting of 40 members. They are a member of Frivillighet Norge, Bad, Park og Idrett og Virke.

### How?

The association was established by a group of anarchists that collaborated with diplomats from the foreign affairs ministry. The first sauna was built by them from drift wood, but today, architectue practices are eager to design more.

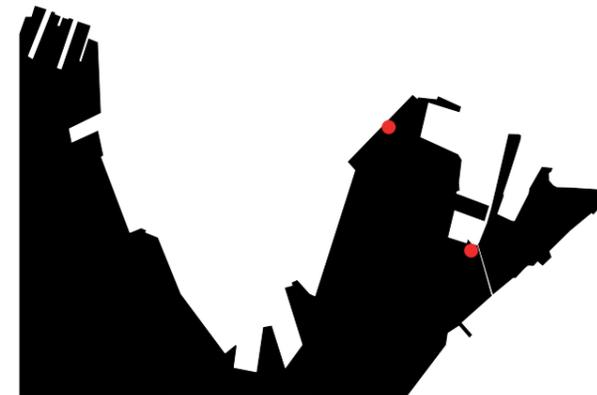
They managed to find a loophole in what was considered a 'vessel', and moored temporarily, shifting sites of mooring to remain permanent.

### Key insights

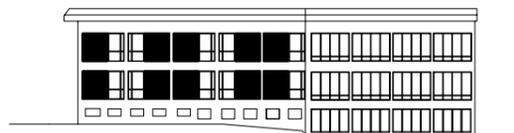
The edges of the city, in this case the fjord, is an opportunity area for urban loopholes.

Collaboration with a group of volunteers and formal institutions can be successful.

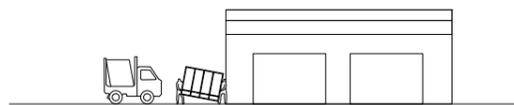
One becomes many and commodified when it becomes popular.



**The process of building Bademaschinen Sauna**  
ACT1 • Brhaven Arkitekter, 2022



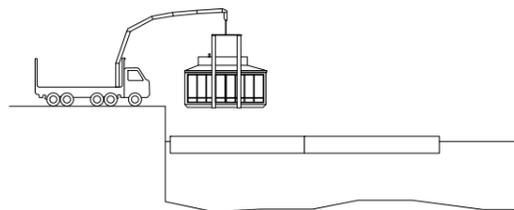
1. Drabak Grande Sykehus is the material source



2. Windows from the hospital is transported to Bryn



3. Windows are refurbished and prefabricated into sauna towers



4. Finished sauna transported to the Oslo Fjord

**§ 9-6. Avfallsplan**

For følgende tiltak skal det utarbeides en avfallsplan som gjør rede for planlagt håndtering av byggavfall fordelt på ulike avfallstyper og -mengder:

- a. oppføring, tilbygging, påbygging og underbygging av bygningen dersom tiltaket overskrider 300 m<sup>2</sup> BRA
- b. vesentlig endring, herunder fasadeendring, eller vesentlig reparasjon av bygningen dersom tiltaket omfatter mer enn 100 m<sup>2</sup> BRA av bygningen
- c. riving av bygning eller del av bygning som overskrider 100 m<sup>2</sup> BRA
- d. oppføring, tilbygging, påbygging, underbygging, endring eller riving av bygninger, konstruksjoner og anlegg

**§ 20-5. Tiltak som er unntatt fra søknadspålegg**

For følgende tiltak som nevnt i § 20-4, er søknad og tillatelse ikke nødvendig dersom disse er i samsvar med plan:

- a. mindre frittliggende bygning som oppføres på bebygd eiendom, og som ikke kan brukes til beboelse
- b. frittliggende bygning som er større enn bygninger som nevnt i bokstav a, som oppføres på bebygd eiendom, og som verken skal brukes til beboelse eller annet varig opphold, og som ikke underbygges med kjeller
- c. mindre frittliggende byggverk knyttet til drift av jordbruks-, skogbruks- og reindriftsområder
- d. mindre tiltak i eksisterende byggverk
- e. mindre tiltak utendørs
- f. fasadeendring som ikke fører til at bygningens karakter endres, samt tilbakeføring av fasade til tidligere dokumentert utførelse

**Usable materials after demolition or renovation can be transported to a common material archive for future use.**

**Structures under 15m<sup>2</sup> with temporary dwelling or use can be build without application.**

**Replicating a facade as an inhabitable wall can add an extension that does not change the use of an existing building**

INTERNATIONAL HACKS

**Ecobox**

A series of self-managed projects in the La Chapelle area of northern Paris which encourage residents to get access to and critically transform temporary misused or underused spaces. These projects initiated in 2001 valorise a flexible and reversible use of space and aim to preserve urban 'biodiversity' by encouraging the co-existence of a wide range of life-styles and living practices.



Figure 23: Ecobox, 2001. ©aaa

**paraSITES**

ParaSITE shelters are custom built inflatable structures designed for homeless people that attach to the exterior outtake vents of a building's heating and ventilation system. The warm air leaving the building simultaneously inflates and heats the double membrane structure. Designed by american architect Michael Rakowitz in 1989.



Figure 24: paraSITES, 2000. ©Michael Rakowitz

**§ 28-7. Den ubebygde del av tomta. Fellesareal**

Utareal på tomta skal gjennom størrelse, utforming og beliggenhet mv. sikre forsvarlig oppholdsted i det fri for beboerne og i nødvendig utstrekning muliggjøre lek, rekreasjon, avkjøling og parkering av biler, motorsykler, sykler o.l. Opparbeidet utareal på tomta skal kunne brukes av alle innenfor tillatelsens formål. Kommunen kan godta at fellesareal avsettes for flere eiendommer.

**§ 28-7. Den ubebygde del av tomta. Fellesareal**

Hvis ikke annet er bestemt i plan etter kapittel 11 eller 12, skal byggverk ha en avstand fra nabogrense som angitt i forskrift eller som minst svarer til byggverkets halve høyde og ikke under 4 meter.

Kommunen kan godkjenne at byggverk plasseres nærmere nabogrense enn nevnt i andre ledd eller i nabogrense:

- a. når eier (fester) av naboieiendommen har gitt skriftlig samtykke eller
- b. ved oppføring av frittliggende garasje, uthus og lignende mindre

**§ 27-5. Fjernvarmeanlegg**

Hvis et byggverk skal oppføres innenfor et konsesjonsområde for fjernvarme, og tilknytningsplikt for tiltaket er bestemt i plan, skal byggverket knyttes til fjernvarmeanlegget.

Kommunen kan gjøre helt eller delvis unntak fra tilknytningsplikten der det dokumenteres at bruk av alternative løsninger for tiltaket vil være miljømessig bedre enn tilknytning.

**Vacant areas of a private housing plot can be made into a common area for several properties.**

**Garages and structures not meant for permanent dwelling can be build closer than the 4m limit to the neighbour.**

**The 4m limit can be abolished if there is a written agreement between the property owners.**

**Buildings do not have to connect to a central heat supply network if an alternative proposal is more environmentally efficient.**

OSLO HACKS

**Blitz**

Blitz is a youth house in Pilestredet 30C, squatted after a police raid forced them in 1982.

Oslo Municipality was the owner of the building, and negotiated with the squatters to let them occupy.

Stein Lillevolden, one of the squatters, was hired by the municipality to take care of the building and the people.

A financial contract with a symbolic sum was proposed if the dwellers would maintain the building.

From this point onwards, Blitz functions as an important youth house, cultural venue, and social hub among subcultures in Oslo.<sup>17</sup>

Maintenance and negotiation were keys for occupation.



Figure 25: Blitz, 2020. ©Blitz Booking

**Losøter Farm**

Losøter was established as early as 2011 as an art project, and evolved to be a common with edible plants.

On June 13th, 2015 they gathered farmers from over 50 Norwegian farms, as far north as Tromsø and as far south as Stokke, in Oslo with tractors, wagons, and wheelbarrows full of soil. Together with city dwellers, farm animals, shovels and musical instruments they went in a procession through the city streets to this site, which was declared on that day as "Losøter."<sup>18</sup>

Art project made permanent



Figure 26: Losøter Gård, 2022. ©Sébastien Dahl

PLAN AND BUILDING LAW 2023: ALTERNATIVES

**§ 31-4. Kommunens adgang til å gi helt eller delvis unntak fra krav**

Ved tiltak etter § 20-1 på eksisterende byggverk kan kommunen gi helt eller delvis unntak fra tekniske krav, dersom det vurderes som forsvarlig ut fra sikkerhet, helse og miljø. Ved vurderingen skal kommunen legge vekt på følgende:

- a. byggverkets alder, formell vernestatus, type, formål, plassering, varigheten av tiltaket og nåværende tekniske tilstand
- b. forhold som kan redusere negative konsekvenser ved at det

**Technical requirements do not have to be fulfilled if it is regarded as safe and sustainable.**

**§ 19-2. Dispensasjonsvedtaket**

Kommunen kan gi varig eller midlertidig dispensasjon fra bestemmelser fastsatt i eller i medhold av denne lov. Det kan settes vilkår for dispensasjonen.

Dispensasjon kan ikke gis dersom hensynene bak bestemmelsen det dispenseres fra, hensynene i lovens formålsbestemmelse eller nasjonale eller regionale interesser, blir vesentlig tilsidesatt. Fordelene ved å gi dispensasjon skal være klart større enn ulempene.

**'Pros' have to clearly outweigh the 'cons', but this is a matter of rhetoric.**

**§ 28-5. Orden på og bruk av ubebygde areal.**

Ubebygde areal i bebygde områder skal holdes i ryddig og ordentlig stand. Kommunen kan forby lagring eller annen bruk av ubebygde areal, når det etter kommunens skjønn vil gjøre opphold eller ferdsel farlig, virke sterkt skjæmmende eller være til vesentlig ulempe. Der forhold ved lagring og annen bruk eller terreng i nærheten av byggverk kan gjøre opphold og ferdsel farlig, kan kommunen pålegge eier å gjennomføre sikringstiltak.

**Areas without built structures are intended to be tidy and safe. Does that only apply to the ground? Can suspended or raised structures of storage or disorder be erected?**

**Småhusplanen: §10 Bebyggelse, høyder og grad av utnyttning**

Anlegg under bakken kan være ett sammenhengende anlegg, eller oppdelt i flere anlegg. Hoveddelen (>50%) av anlegg under bakken skal ligge under bygningenes fotavtrykk. Har bygninger kjeller skal dette arealet regnes med i anlegg under bakken. Underetasjer skal også regnes med for den delen av etasjen som ligger mer enn 0,5 meter under planert terreng.

**Basements below 1.5m ceiling height is not counted toward total area.**

**Underground structures should be reduced because of sustainable concerns, but material alternatives can be explored.**

**5/2023 Vacant buildings in Oslo**

I juni 2022 sto ifølge oversikt fra Eiendoms- og byformvervesstaten 88 av Oslo kommunes eiendommer med 170 kommunale bygg helt eller delvis tomme.

**There are 170 municipal buildings registered as vacant in Oslo.**

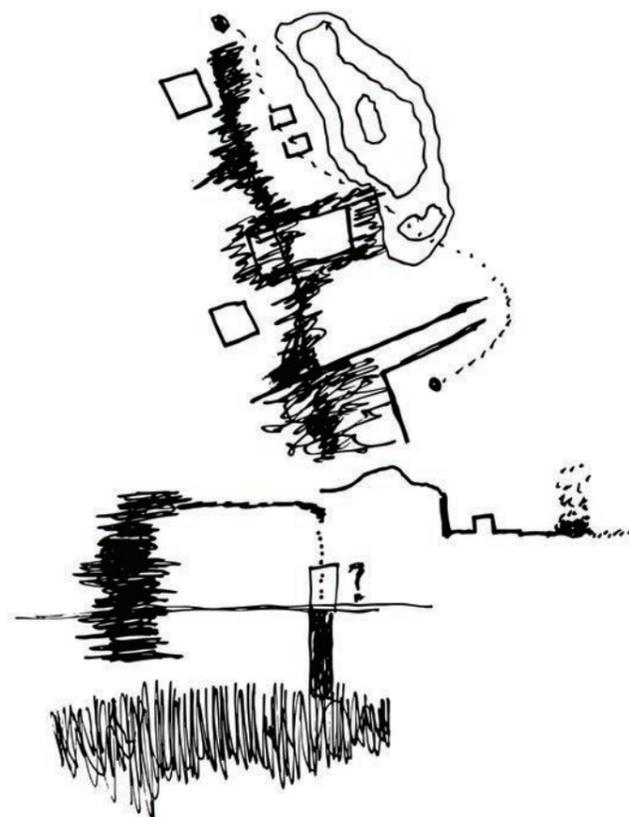
**There is a need for a clear maintenance strategy for vacant municipal buildings.**

**This opens up an opportunity for a co-operative collaboration between existing materials, the municipality, and the public.**

Kommunen hadde et system for å avklare videre bruk av tomme kommunale eiendommer som trolig har bidratt til avklaring av tomme bygg. Systemet var likevel ikke tilfredsstillende. Over halvparten av byggene på kommunens oversikt hadde stått tomme i mer enn 5 år, og det synes som det ikke har blitt gjort et tilstrekkelig arbeid for å avklare videre bruk for flere av disse.

Det var tomme bygg som ikke var med i oversikten, eller som hadde kommet inn på listen betydelig tid etter ledigstilling. Bygg som inngikk i konsekvensutredninger, ble låst for andre permanente formål. Det bidro ikke til avklaring innen rimelig tid. Arbeidet med å kartlegge vedlikeholdsbehov, utarbeide vedlikeholdsplaner og iverksette vedlikeholdstiltak for utvalgte bygg var ikke tilstrekkelig.

Flere av byggene var bevaringsverdige, noe som gjør det ekstra viktig at verdibevarende vedlikehold blir utført. Konsekvensen av manglende arbeid med vedlikehold er at bygg forfaller, at verdien forringes, og at bygg med betydelig kulturell verdi i verste fall må rives.<sup>19</sup>



# WASTE

Waste is an umbrella term to describe excess resources, both physical and non-physical, that affect our physical experience.

The production of cities generate an inconceivable amount of waste, and our understanding of the resources cities and beings consume is lacking.

Some waste streams are more visible and intertwined with our every day experience, such as garbage, recycling and storm water.

Others, however are worth looking more closely at, namely the potentials of excess heat from infrastructure, material peripheries of construction sites, and redistributions of centralised power supplies.

The case studies invisions how we can intervene into waste streams to create new modes of producing, re-using, and governing.

How can waste become a common value?



Figure 27: Passage 56 entrance, 2009. © aaa

## PASSAGE 56 - atelier d'architecture auto-gérée 2006, Paris, France

### What?

The project is a transformation of a passageway in a dense Parisian neighbourhood into an ecological hub where local youth groups can practice ecological construction.

### Who?

The urban and spatial practice atelier d'architecture auto-gérée initiated the project, receiving local funding. It was a collaboration with a local youth organisation running training programmes in eco-construction.

### How?

Recycled materials were collected by local residents, participatory processes were enacted, and a collaboration between the local government and a youth organisation was facilitated. The structure stores energy through solar panels, stores rainwater, and composts waste from planting in the back structure.

### Key insights

Disused passageways can be sites for community engagement.

Recycled materials for structures designed can be collected by local residents.

The open ground floor allows for a partially open structure allowing the public to engage.

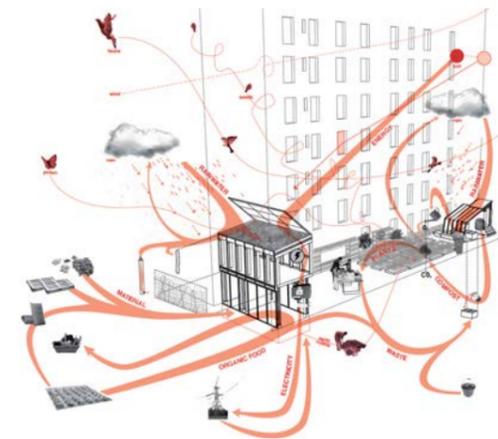


Figure 28: Ecosystem, 2009. © aaa

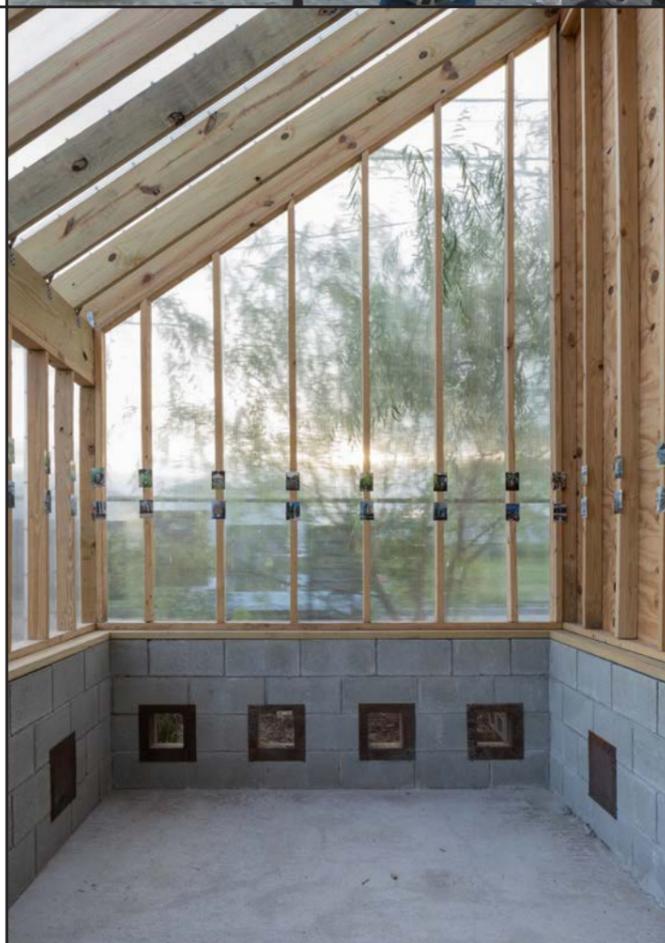
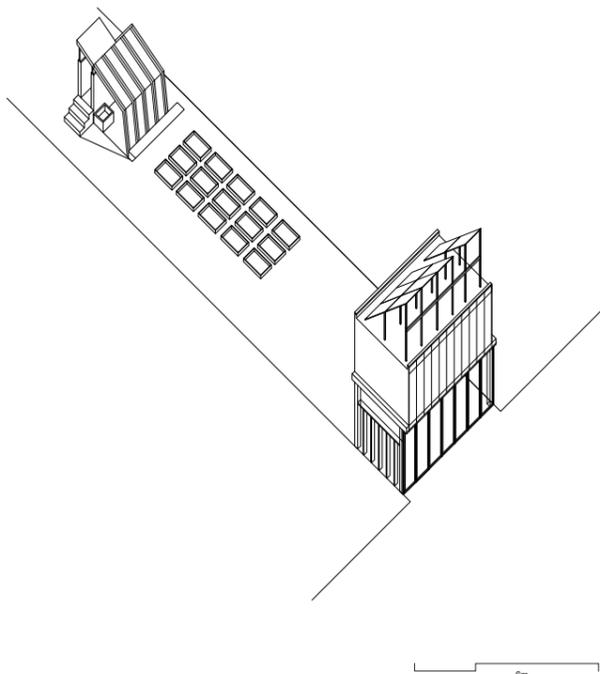


Figure 29: Pilot Project, 2022. © New Affiliates

## TESTBEDS - New Affiliates 2019, New York, USA

### What?

Imagining architectural mockups as something to be repurposed into new community spaces instead of being discarded.

### Who?

A collaboration between the construction industry, developers and New Affiliates, which utilised excess architectural fragments in community gardens in New York.

### How?

The pilot project began with a mockup we received from the developer, Cape Advisors, which was built to test custom concrete facade panels for their residential building, 30 Warren, in Tribeca. They transported the mockup from Tribeca to Edgemere, where it would anchor a new community structure for local gardeners.

### Key insights

Waste streams can be found in unexpected places.

The building industry's waste production can be utilised in many creative ways.

Large structural fragments can also be repurposed, not just small material pieces.

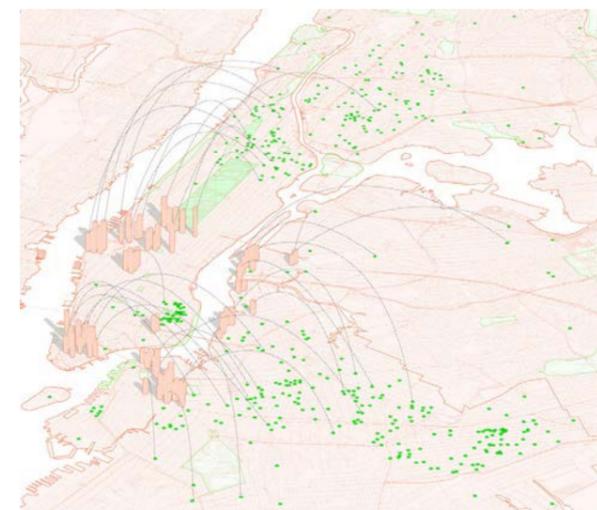


Figure 30: Testbeds network, 2019. © New Affiliates

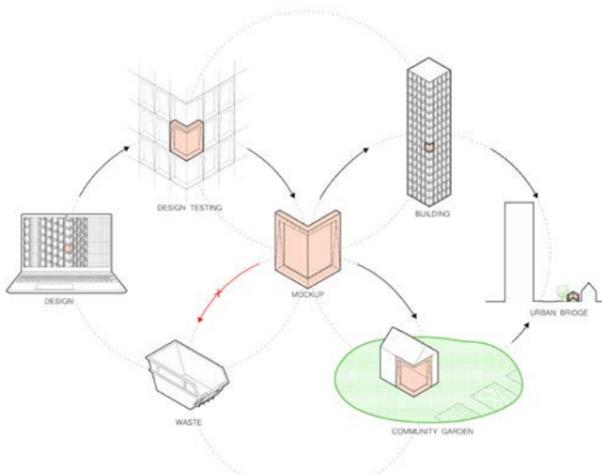
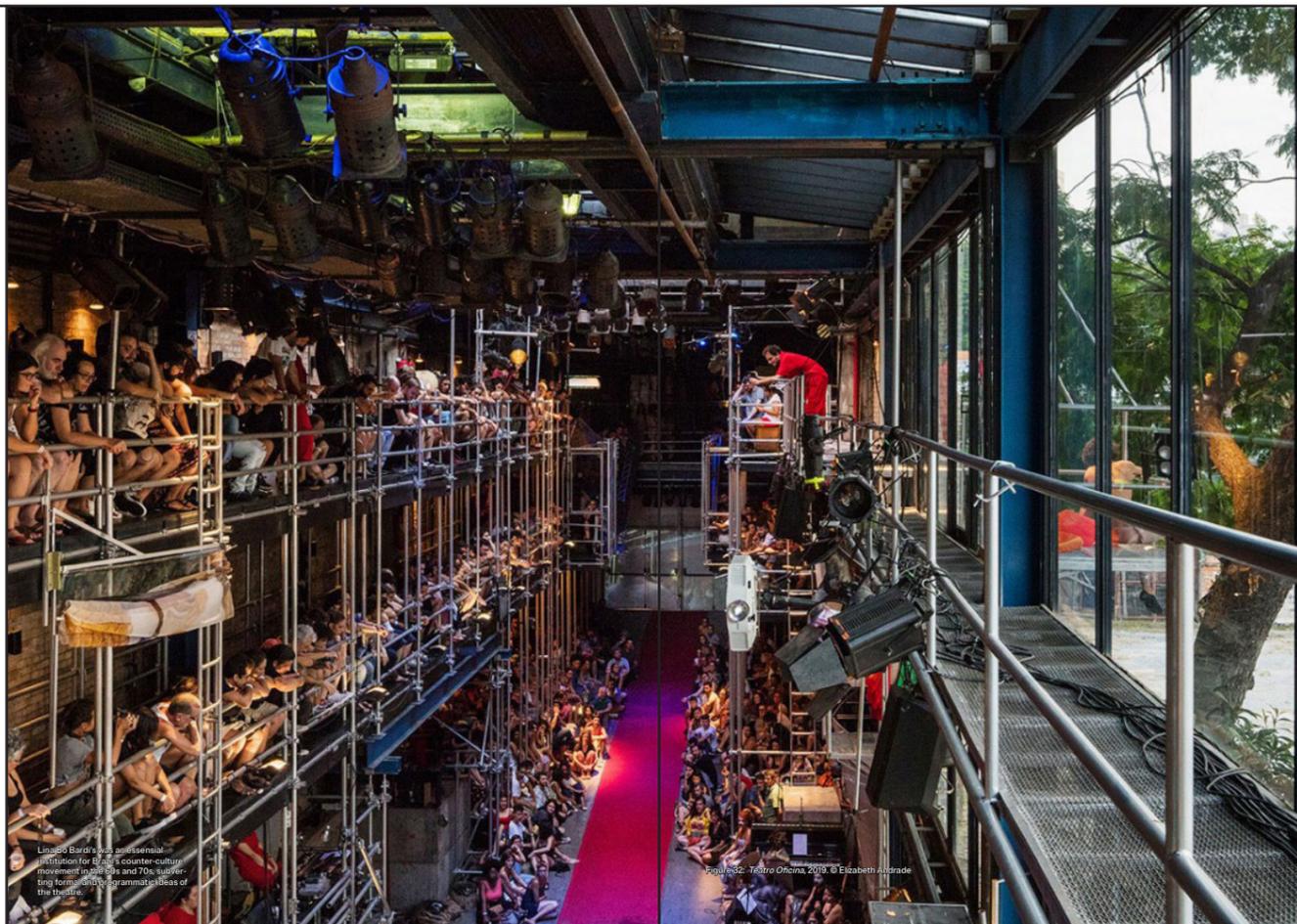


Figure 31: Testbeds diagram, 2019. © New Affiliates



Lincoln Center's 100th anniversary... institution for the city's counter-cultural movement in the 60s and 70s, sustaining forms of the program ideas of the theater.

Figure 32: Teatro Oficina, 2019. © Elizabeth Andrade

Brandhuber + Emde, Burdon's extension from a building plan uses the fire regulations as a way to create a common space for the inhabitants.

# THREE APPROACHES

With the research and case studies in mind, the thesis can move in different directions according to approach. They all have in common the interest in alternative practices, the strategic scale as well as the small scale, and the interest in common access. They are also not mutually exclusive.

1

## CATALOGUE OF HACKS

Utilise the findings from reading building law regulations between the lines, and propose a catalogue of alternative interventions.

The catalogue will serve as an initial design exercise to begin imagining alternative ways of building on the fringes in Oslo.

2

## FRANKENSTEIN

Define a set of common urban typologies. Use hacks derived from readings of plan and building law to transform the typology to the extreme.

Examples of typologies are kiosks, filling stations, fountains, lamp posts, benches, stoops, scaffolding, etc.

This becomes a new catalogue of spatial structures that subvert the use of common elements in the city.

3

## HACK A WASTE STREAM

Identify systems in Oslo that produce excess resources, and which structures these operate within. Design accessible spaces that utilise these excess resources for the common good.

Water, heat, power, materials.

Which typologies and regulations in Oslo are most relevant to allow this transformation?

Figure 33: Brunnenstrasse 9, 2010. © Nathan Willock

**"In the city grid, if you are looking, you can find forgotten fragments of land and buildings. These gap sites are stumbled upon, discovered or arrived at by walking the streets of cities, peering around corners and examining backland sites."**

**"The city is peppered with these small sites, all of which are improvable. [The] emptied structures - the remains - become opportunities for imaginative development and reconfigurations; a new category of independent development. Old structures combine with new opportunities, while the results counter larger scale developers whose corporate buildings and commercial interests currently dominate the city skyline."**

**"The scale and diversity of these projects encourage the introduction of patient capital. Crowd-funding, intervention and philanthropy can contribute to both the project development and retention of community interest."**

# ON GAPS, CRACKS AND EDGES

Architect and developer Roger Zogolovitch argues for the value of gaps in the city as sites for creative development.

I would argue that the same arguments can be made for structures and apparatuses of which resource streams are connected.

The potential of these sites is limitless. They can serve a range of communities and address a range of needs through creative disruption and resource allocation.

An alternative reading of the city is proposed, uncovering cracks, gaps and edges, and their latent potential.

Let's begin to assemble these spaces.

# ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE

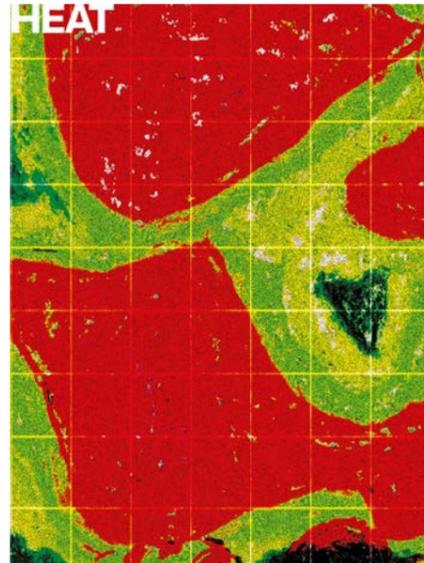
# INTENTION

ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE investigates the opportunities to enhance public access and ownership to excess resources.

Waste is an umbrella term to describe excess resources, both physical and non-physical, that affect our physical experience.

The production of cities generate an inconceivable amount of waste, and our understanding of the resources cities and beings consume is lacking.

Through the lenses of heat, water, power and materials, the intention for the diploma is to design structures that piggy-back on existing infrastructures of excess, and seeks to democratise the city's resources into communal and public space.



Outlet from the building's organs



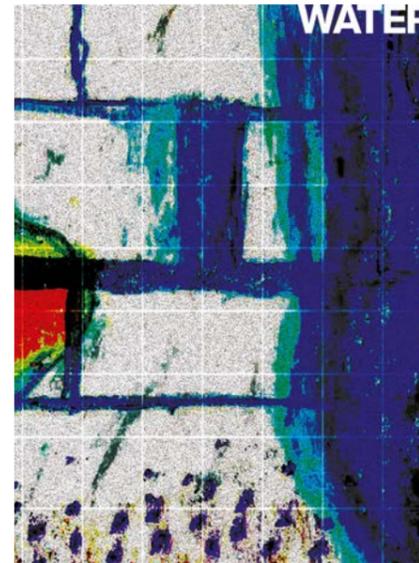
Building pores



Infrastructural landscape



Heat signifier



Mediator between the stink



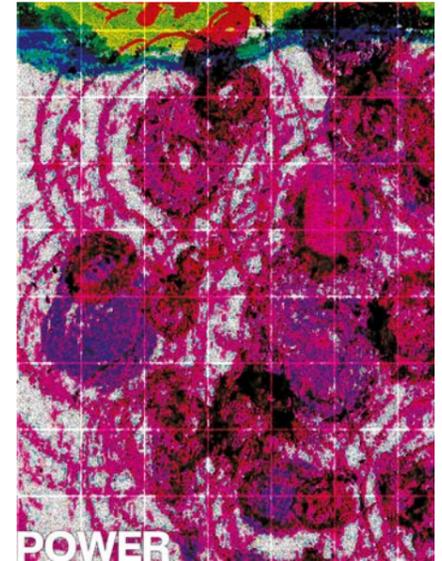
Exoskeleton



Ground arteries



Oasis



Cabinet of curiosities



House of curiosities



Supporting the supports



Resting place



Use and discard



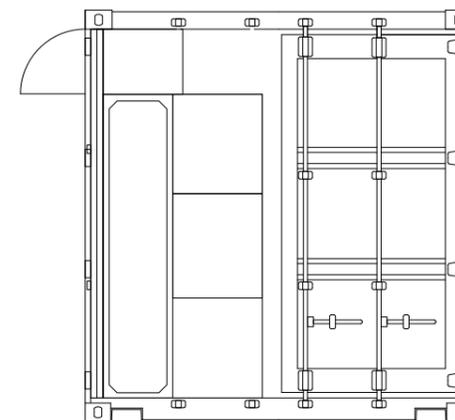
Waiting for their turn



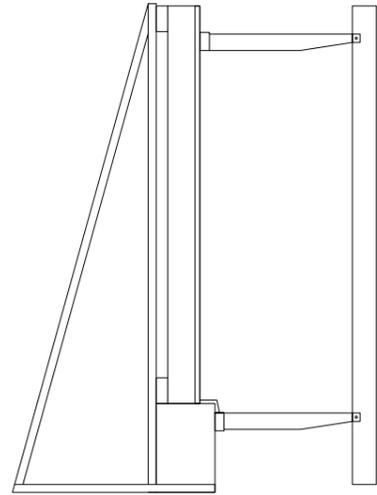
Excess gravel for the winter



Dust and cigarette sieve



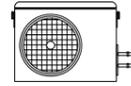
Container data centre 1:20



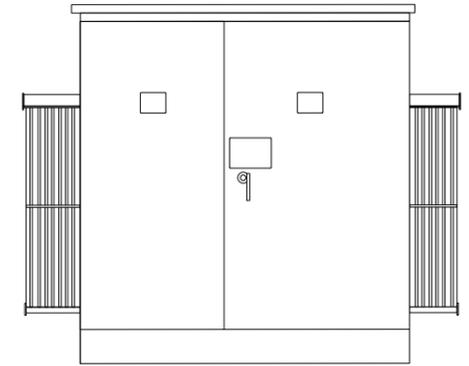
Architectural mock up 1:20



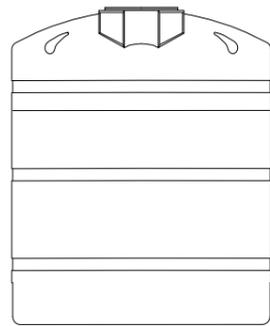
Pre-fab sewer pipe 1:20



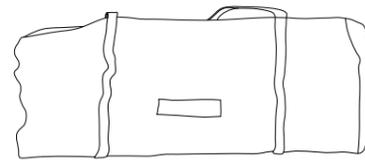
Air condenser 1:20



Transformer cabinet 1:20



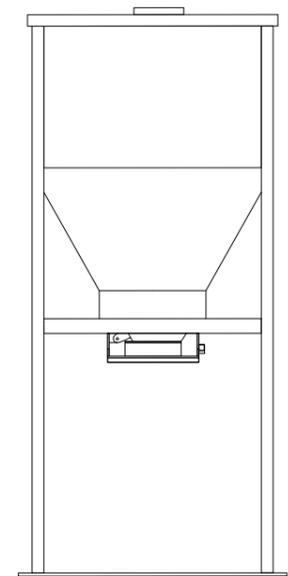
Grey water tank 1:20



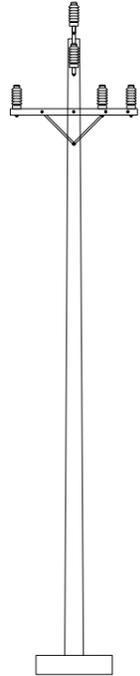
Waste material bag 1:20



Concrete fluted gutter 1:20



Gravel dispenser 1:20



Utility pole 1:50

# CONVULSION REMARKS

# PROGRAMME

ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE is intentionally not driven by programme or a specific site; it explores spatial and social opportunities within existing waste streams in the city, and will attempt to reconfigure these infrastructures to generate new architecture for communal and public benefit.

Therefore, it attempts to highlight opportunities to intervene applicable for many different contexts. The context for this exploration is Oslo, whereby its resources and climate is considered into detailed design proposals. These spaces should be generous, flexible and economical to ensure longevity.



Sanja Gungor's redefined ideas to the elements of play within the streetscape.

# DIPLOMA SCHEDULE

WEEK	DATE	ACTIVITY	COMMENTS
2	08.01-12.01	Research waste streams	Drawings 1:50
3	15.01-19.01	Derive photography	Collages
4	22.01-26.01	Scenario building	Drawings, text
5	29.01-02.02	Survey potential sites	Drawings 1:100
6	05.02-09.02		
7	12.02-16.02	Technical understanding	Drawings 1:20
8	19.02-23.02	Waste model experiments	Unscaled models
9	26.02-01.03		
10	04.03-08.03	Possible design strategies	Drawings 1:100
11	11.03-15.03	Synthesise work	Interim presentation
12	18.03-22.03	London trip	Photography
13	25.03-29.03	Charrette	Iteration models 1:50
14	01.04-05.04		
15	08.04-12.04	Fragment model	1:10
16	15.04-19.04		
17	22.04-26.04	Synthesise work	Presentation and text
18	29.04-03.05	Proposal production	Final models, drawings, images
19	06.05-10.05		
20	13.05-17.05	Diploma hand-in	
21	20.05-24.05		
22	27.05-31.05		
23	03.06-07.06	Diploma review	
24	10.06-14.06	Diploma ceremony	

Figure 34: Taking the Street. Skips, Dumpsters. © Recetas Urbana

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# ENDNOTES

# ONE MAN'S TRASH IS ANOTHER MAN'S TREASURE

# HEARDNESS

## An Alternative Future for Loosmenningen

Matthias Svavik  
Diploma Spring 2024

Supervisors  
Eirik Stokke & Espen Hedgerveit

The Oslo School of Architecture and Design  
Institute of Architecture

Binder 2

**Additional supervision:**  
Matthew Anderson  
Benjamin Sjöberg  
Matthew Dalziel

