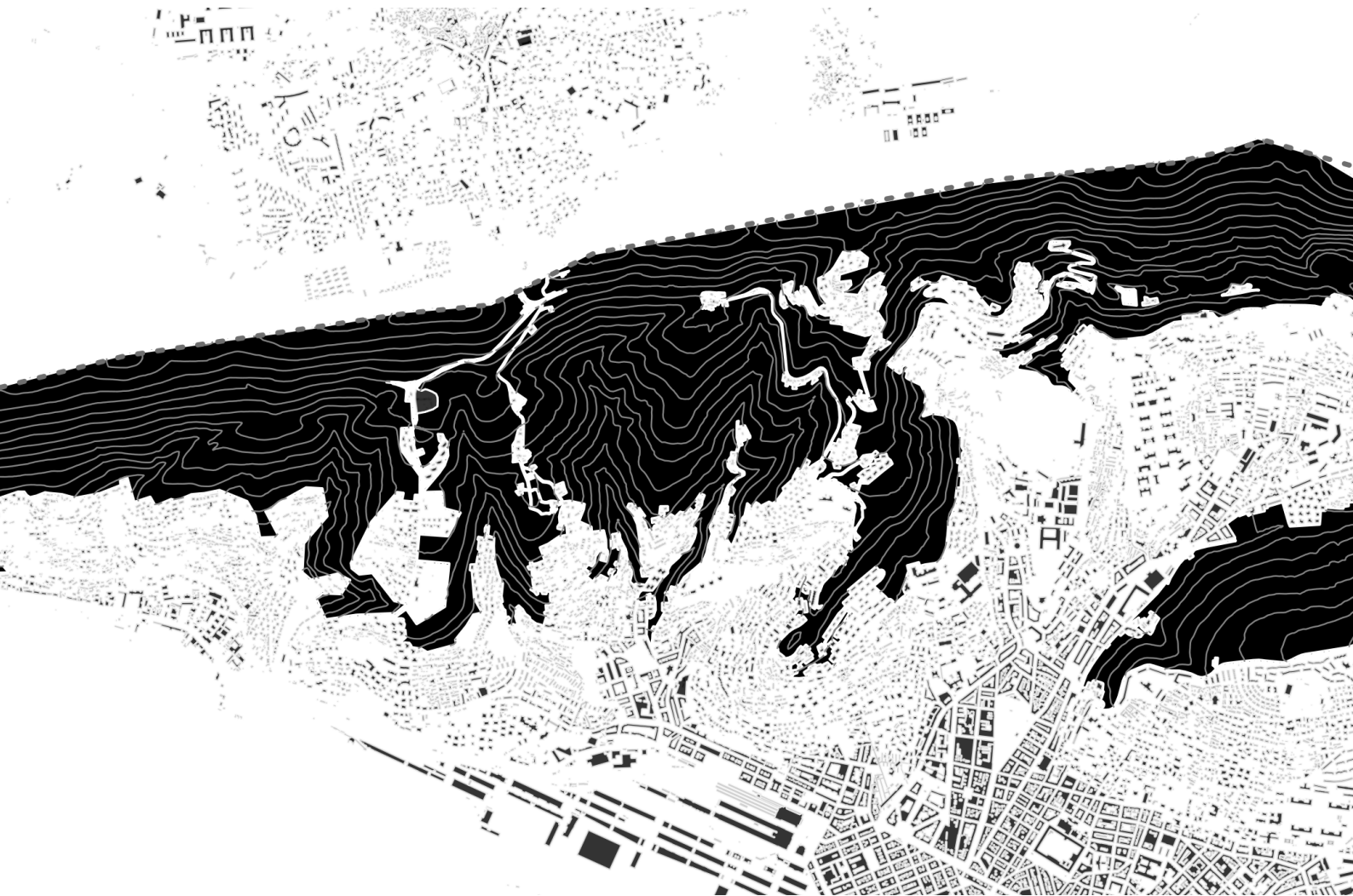


REVITALIZING THE  
**PERI-URBAN**

IN TRIESTE, ITALY



Juulia Jääskeläinen | Master graduation project  
5402514

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Faculty of Architecture and  
the Built Environment  
Delft University of Technology



graduation project  
Msc Architecture Urbanism and Building sciences  
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Revitalizing the peri-urban in Trieste Italy

Julia Jääskeläinen  
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Mentors

Filip Geerts  
Stefano Milani  
Piero Medici  
Mauro Parravicini

Delft University of Technology  
Borders and Territories studio



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*“Since architecture nowadays operates within highly complex and differentiating spatial conditions, Borders and Territories probes the agency of architecture through its spatial bordering practices in emerging territories. By studying these conditions, architects will gain insight into how borders are produced, controlled, coded and maintained within territorial entities, and how spatial sets of (cross-border) relationships thus also produce territories. Borders & Territories cultivates these architectural edge conditions with design experiments that challenge theoretical concepts, design procedures as well as representational techniques.”*

In the academic year 2021-2022 the Borders and Territories graduation studio investigated the New Silk Road, with focus on spatial transformations due to spatial planning, intercontinental infrastructure, politics, border conditions and global capitalism. Trieste, a city in the north-eastern Italy, at the border of Slovenia, was chosen due to its unique geopolitical history. Today it is relevant in the context of the New Silk Road due to the city's free port.



Trieste is located in the north-Eastern part of Italy in the Friuli Venezia Giulia Region. The city has a contested identity, due its unique geopolitical history. Trieste has a roman origin, but it has also been part of the Habsburg empire, which made Trieste a significant port city. In the 1918 Trieste became part of Italy, but after the World War II, Trieste became a free territory for seven years. Despite the city being Italian, the surrounding hinterland of the city is Slavic due to the proximity to Slovenian border. The hinterland is known as the Karst region with its unique hydrogeological condition.





## PROJECT DESCRIPTION

The peri-urban zone of Trieste can be identified as a transition zone between the city and the Karst hinterland. The zone is located on hillsides surrounding the city and has a lower housing density compared to the city. It is a liminal space between two distinct areas of the city and due to its difficult accessibility, it seems to be only an area in between.

During the research phase, the zone was investigated through four main lenses: land management, housing, recreational facilities, and transportation infrastructure with the following research questions.

RQ1: How to maintain the eroding landscape?

The hills and the natural landscape pose the question of how to maintain the landscape. The hills are subject to erosion and landslides. Traditionally the hillsides had pastinis, terraced landscapes for cultivation, which worked also as a land management system. Today they are a labor-intensive cultivation method that is hardly profitable and thus practiced only on a small scale. This has led to the abandonment of the pastinis and questioning on how the landscape should now be managed. Can pastinis be anymore utilized in modern-day land management? What spatial qualities do the different land management options offer? How the land management challenges should be addressed at the level of architectural design?

RQ2: How peri-urban living can enable alternative lifestyles?

The hillsides with their valleys, nature as well as a view overlooking the city, offer a great living environment with a reasonable distance from the city. The lower plot prices can allow people to get houses better fitting for them than in the city and help to pursue their idea of an ideal lifestyle. How can be further supported on a scale of architecture? What does flexible design mean in the peri-urban environment? What potential bigger private greenspaces offer for architectural experiences when compared to the city?

RQ3: How improving the accessibility can feed the formation of recreational peri-urban?

How can the peri-urban be made more accessible for the residents of the city? The area beyond the hills, the Karst region, is known as the weekend destination for people who live in the city. But the proximity of the peri-urban has the potential to be a daily destination with beautiful tracks, views, and nature. The area of interest has an old tram line, that cuts through the peri-urban hillsides and connects the city with a village Opacina located on top of the hills. By restoring the tram connection, the area in between could be also well accessible. This leads to the question of where should the tram stops be located in the peri-urban zone? How could the tram line make the recreational nature areas more accessible and attractive destinations?

## METHODS

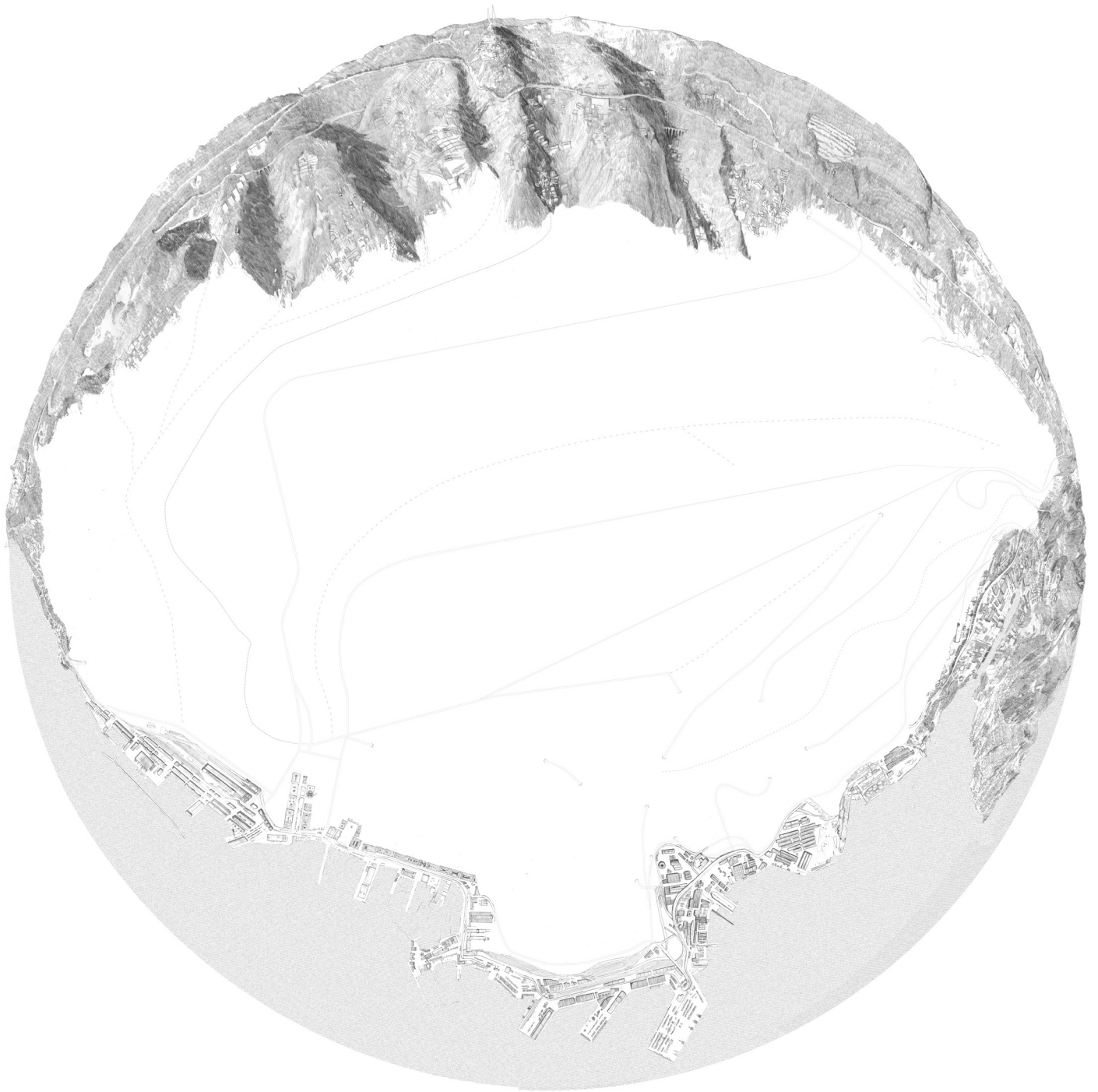
During the research phase, the urban analysis was done through collective city mappings and explored further smaller individual mappings on the area of interest. Theoretical and historical research on the site conditions was approached through the academic literature, mappings, governmental data sources, historical sources as well as a site visit. A theoretical framework for the project was established with a theory essay Peri-urban: the landscape of alternative opportunities, which expresses own stance on the design project and its relevance on a city and global scale. The modi operandi model workshop introduced first takes on bridging the theoretical research and the design. Besides the models, speculative drawings were done to introduce the first ideas on design approach, scale, and atmosphere.

At the start of the design phase, I did another site visit. This allowed me to experience the chosen site in detail and find the specific locations for the interventions. This phase was also vital in understanding the sites in terms of the human experience. This was then followed by site analysis and initial sketches, and studies on materialization and the landscape. The corner workshop organized by the chair helped in creating a logic of construction as well as a climate strategy. At P3 I presented sketch designs of all the three interventions, after which all were finalized and further detailed. The three interventions were worked on side by side, allowing me to draw inspiration from each other, which also helped in creating cohesion between the three. From P4 onwards, I focused on finalizing the designs and working on the visual communication. In the end I decided to draw everything by hand using Procreate to continue to style of the initial mappings from first semester all the way to the technical details of the interventions.



COLLECTIVE MAPPING  
territory map

The territory map aims to represent the characteristics and experience of the city. The patchwork as a method is used in understanding the territory while examining the potential in disassembling, reassembling, deconstructing, and reconstructing the city's elements. The fragments of Trieste include; the Karst Plateau, the urban fabric, and the port. Trieste is marked by overlapping territories and many in between. The Karst as a natural territory correlates with it being an ethnographic one, a Slavic hinterland, while the city is cosmopolitan. The urban fabric disassembles further into fragments like strict Austrian urban fabric, medieval city, and sub-urban fringes adapted to the contours of the landscape. The port on the other side is defined as a strategic territory. During the process of the mapping these fragments are disconnected and decontextualized from each other, allowing examination of the proper scale and representation - after which they are again evaluated by weaving them together by the infrastructural flows. The representational technique is hand-drawing in order to capture the characteristics of the territory. In the process of fragmentation different lenses are tested for the elements. The karst is drawn in elevation, revealing it as an important geographical border. The port is drawn as a plan view in order to emphasize it as a territory of its own, a zone rather than a line. The differences in representation are linked by a gradual change from a planar view to a perspective and further into the elevation.



Legend

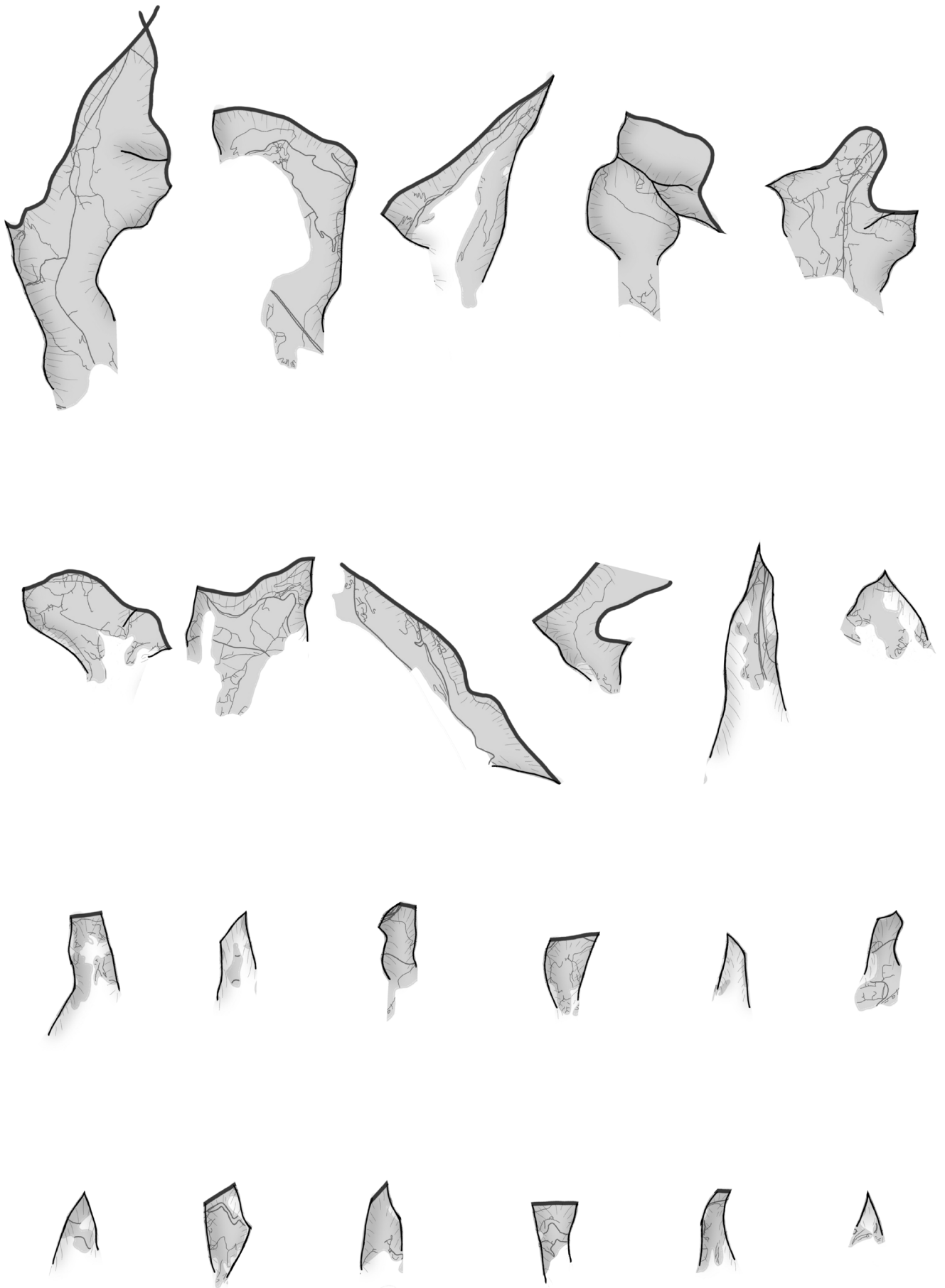
- 1. Harbor
- 2. Buildings
- 3. Streets
- 4. Waterfront
- 5. Perimeter





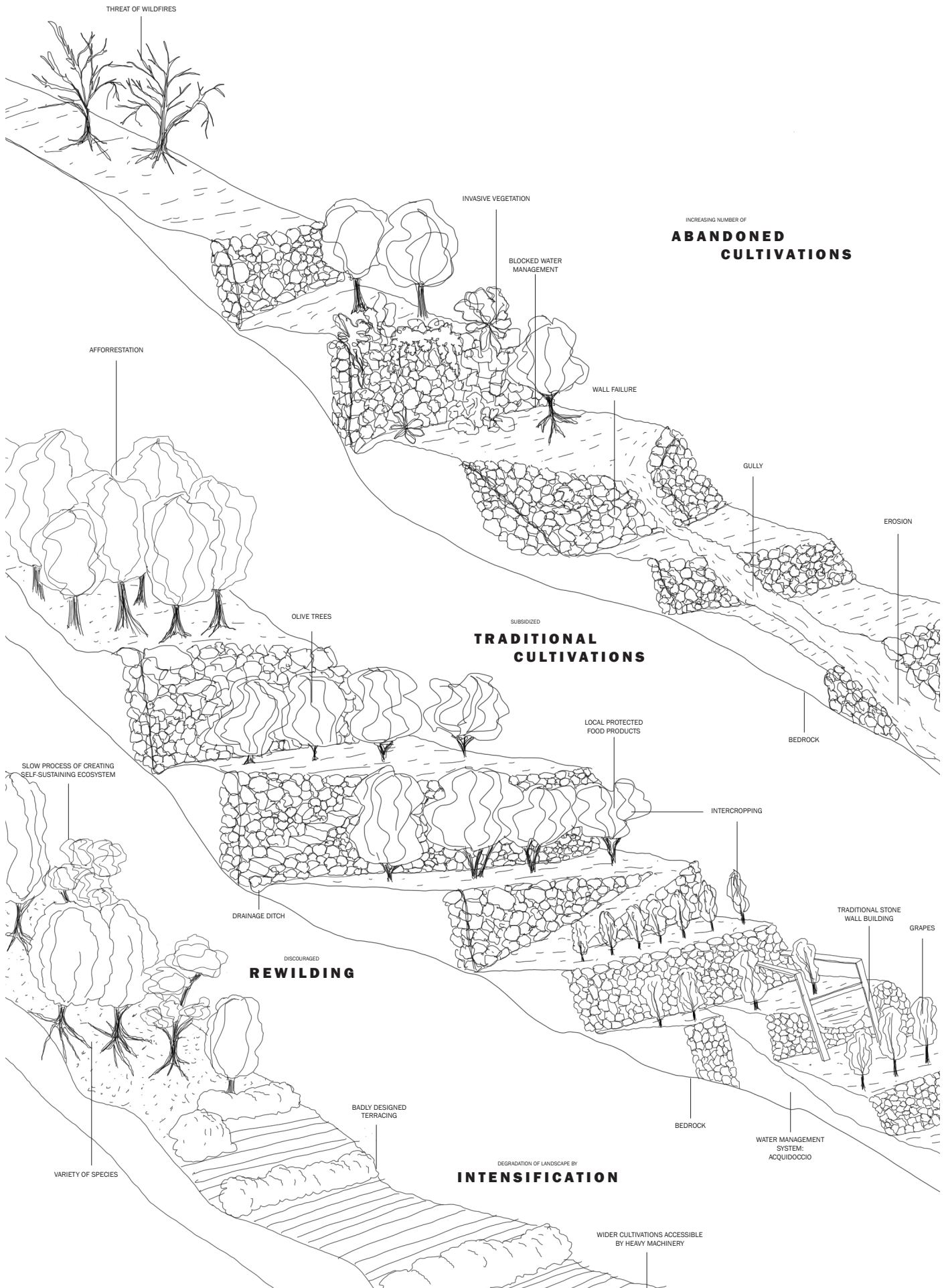
INDIVIDUAL MAPPINGS  
analysis drawings and  
formulation of interventions

The hillsides of Trieste are a zone that surrounds the whole city. It is a transition zone, which you move through to get in and out of the city. The elevation of the landscape has limited the urban sprawl, making it less dense than a suburban neighborhood and thus peri-urban. The zone is fragmented in terms of accessibility. It consists of multiple valleys and hills, making the zone a collection of isolated valleys from each other.



Atlas of peri-urban valleys

Trieste's traditional agriculture has involved using terraced landscapes, which locally are called pastinis. Besides the pastinis being a cultivation system they are also a land management system that directs water flows, prevents landslides and erosion. However, the importance of agriculture in the city has decreased and the standardization of modern agriculture has made pastinis less competitive as agriculture forms. This has led to the abandonment of cultivations, and thus the abandonment of the land management system. When unmaintained, the system is likely to disrupt and thus making the land even more prone to erosion than it would be in a natural situation. However, abandoned cultivations are inevitable even despite the heavy subsidies directed towards the traditional methods. It sparks questions on which alternative land management systems are sustainable options and to what extent the pastinis should be protected.



Pastinis - local terraced landscapes

Trieste has culturally an interesting location. While the city is mainly Italian, its hinterland is Slavic. In a short distance from the city, the architecture is different, telling a contrasting story of the territory. The Karstic conditions, like presence of limestone and lack of top soil and water, have had an impact on the architecture and how the villages have been shaped.

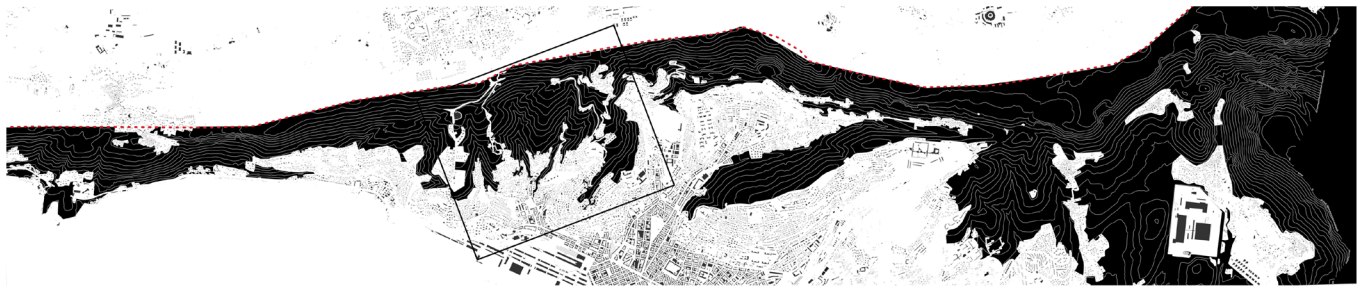


Karst vernacular architecture

The project site focuses on part of the peri-urban where the quality of being in-between is very evident. It is located in between the city center of Trieste as well as the nearby village, Opacina, that is located on top of the ridge. These two are connected with the only tram line of the city, making it also a landmark of the city. The site around the tram line has multiple different villages, which the smaller ones are Slavic. The elevation rises 250 meters from the city to the village. The changes of the elevation give the site its specific character as well as distortion of distances and accessibility.

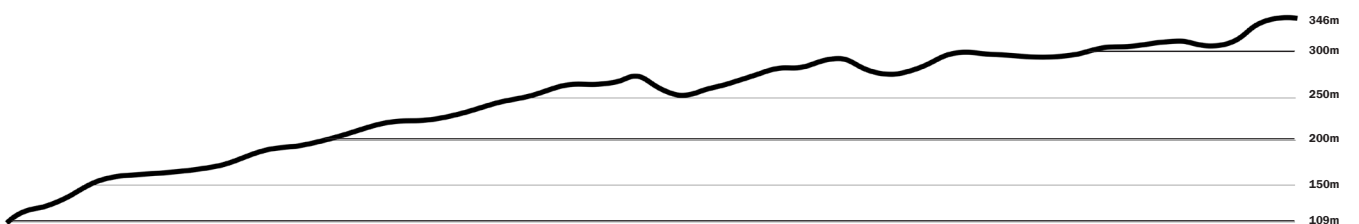
In the mappings of the site, the most important aspects of the zone were identified. These include villages in the area, the tram line, nature tracks, and natural areas. In the revitalization design, these will be also the aspects of focus.



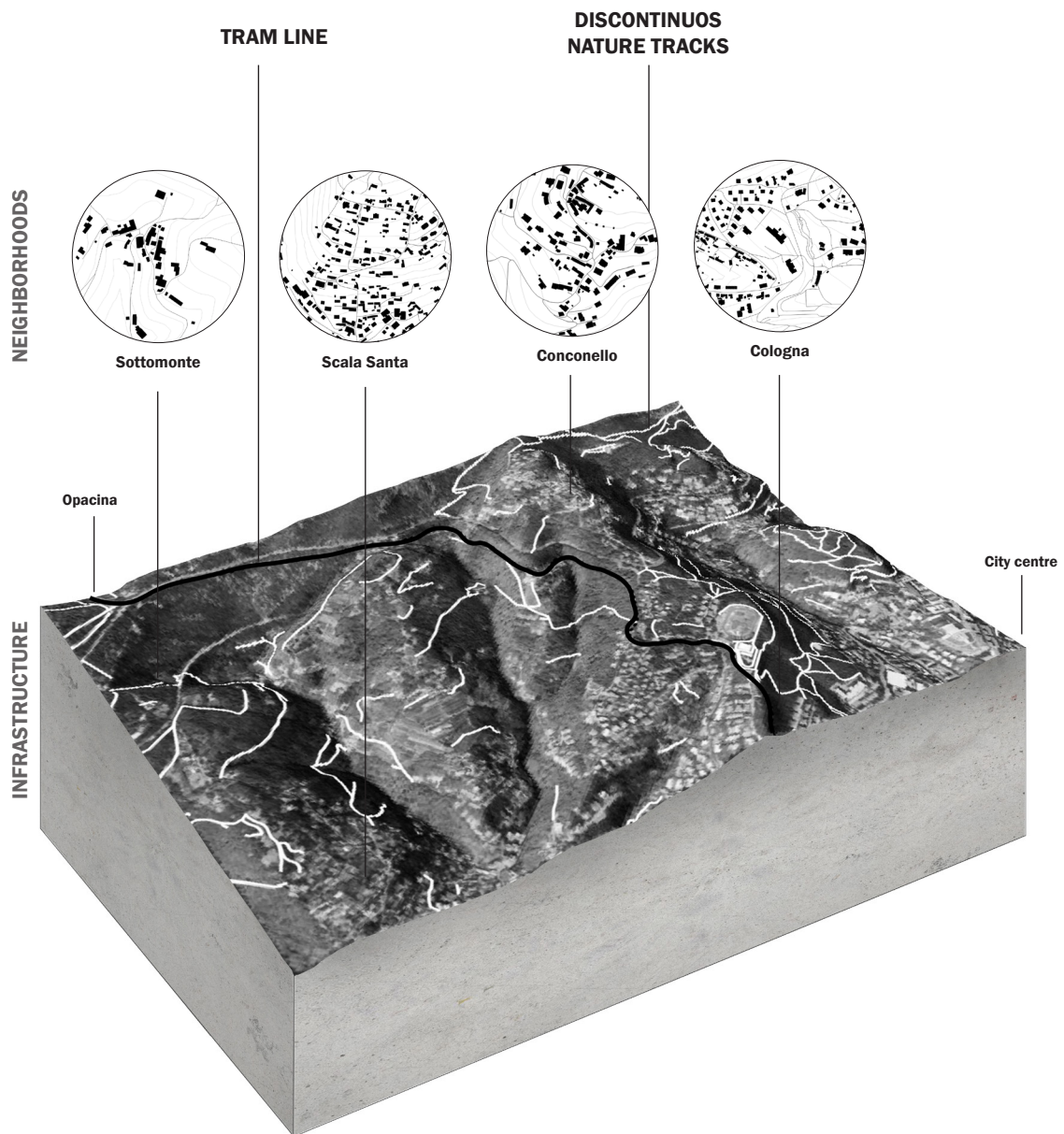


tram line

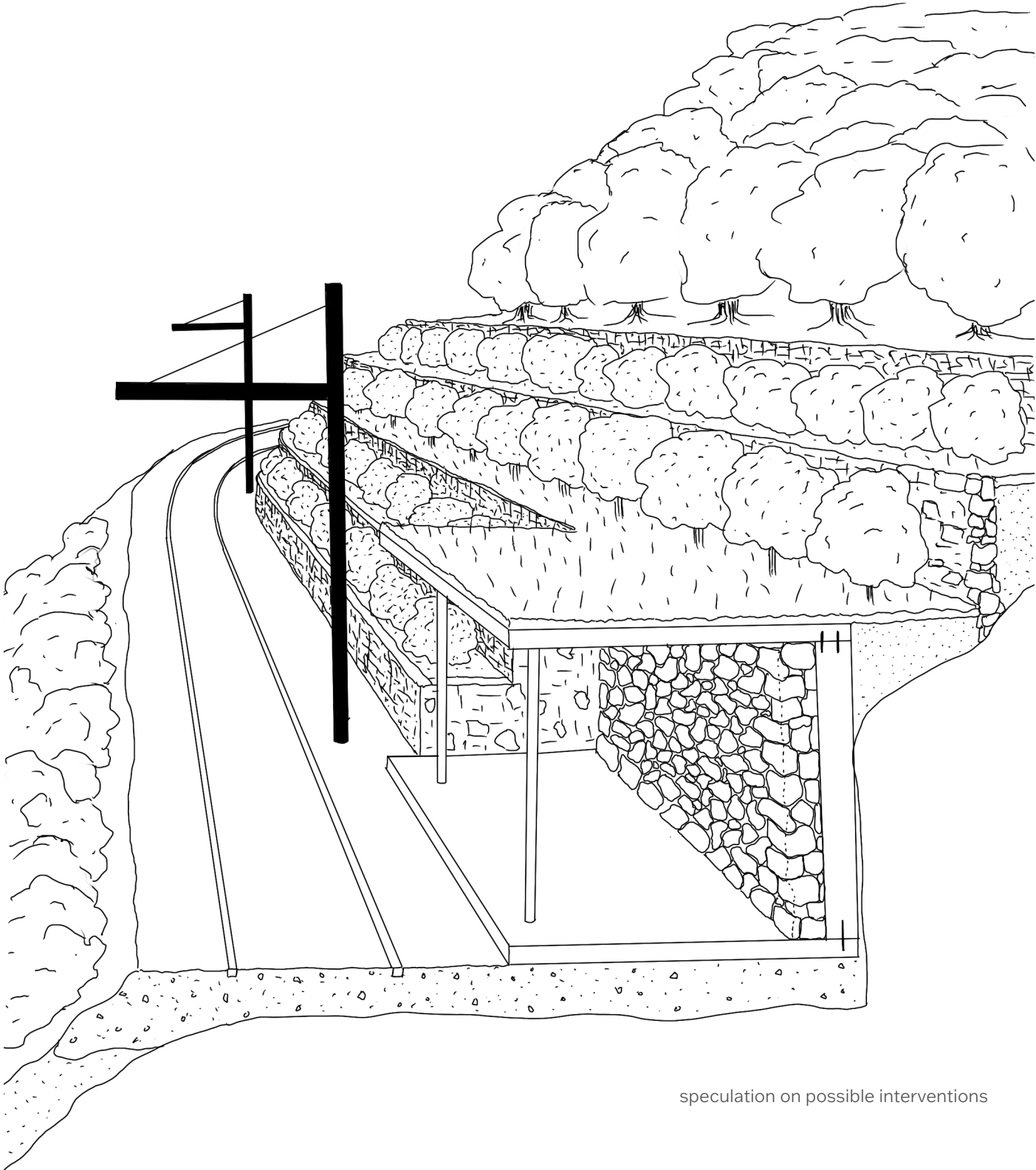
1 : 5000



selected focus area around the tram stop



main elements of the focus area



speculation on possible interventions

The result of the research phase was the intention to continue to design:

1. Nature view platform: As a part of the master plan, a structure acting as a hiking destination is designed into a forest. Its goal is to act as an attraction point as well as a piece of architecture that gives attention to its surroundings.
2. Tram stop: As a part of restoring the tram connection, one tram stop is designed. It works together with the hiking infrastructure and thus should be attractive as well as easily accessible. The tram stop should respond to its immediate conditions.
3. Private housing: Related to research question 2, the private house addresses the qualities of living in the peri-urban. The design has a strong connection to its surroundings and represents what living in the Trieste's peri-urban zone can be like. The main challenge is to create flexibility within the house, that can facilitate different socio-demographic groups and different lifestyles.
4. Land management principle: As a part of all the design assignments the land erosion is to be addressed in a cohesive principle. This will take a stand in referring to the old and new methods of land management principles. The assessment besides efficiency is done also in terms of architecture, spatial experience, and landscape preservation.

Land management system



Hiking trail

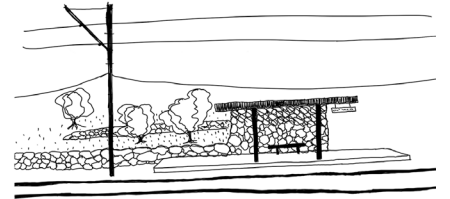


Private housing

Housing infrastructure

Recreational infrastructure

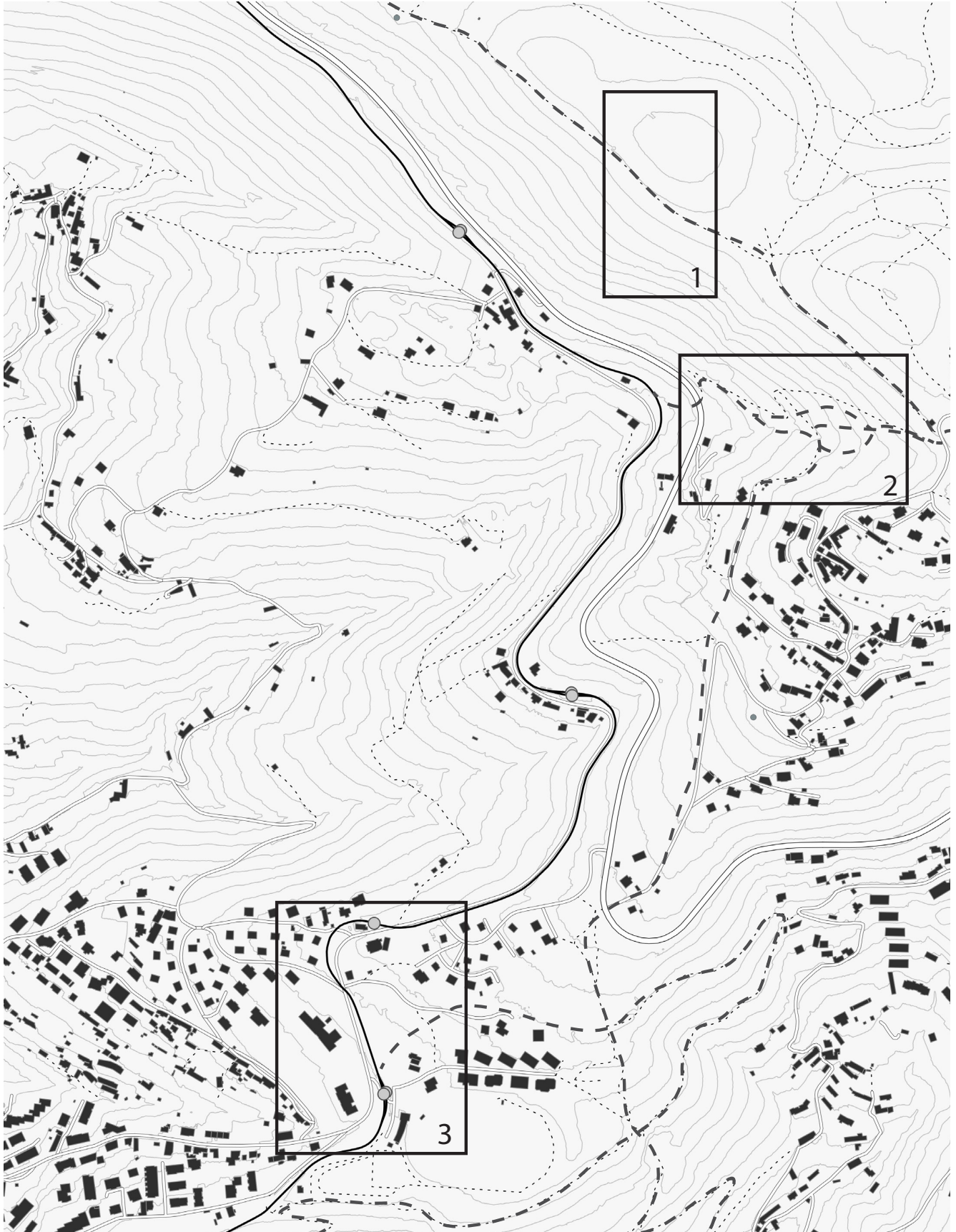
Transportation infrastructure



Tram stops

overview of interventions





selection of sites

- — hiking track
- 1. view platform
- 2. private housing
- 3. tramstop





MODI OPERANDI  
modeling workshop

In the modi operandi workshop, the first steps from research towards the design were taken. The models experimented with knitting. The intention was to play with layering, planes, stitching, tearing, interweaving as well as puncturing.

The first model explores the land condition creating layers of different porosity. The exposed underlayers have been eroded and ripped. The additional layers of sticks are punctured through the knit as if to stitch together or reinforce the underlayer. The hemp yarn is used to set the dark top layer, the topsoil, onto the underlayer. to hold it in place. It draws parallels to the eroding landscape of Trieste where the lack of topsoil is leaving the bedrock exposed in many places and making it prone to eroding.



The model of assemblage is the first attempt to define the different territories of interest. The model also explores their relationship to each other as well the porosity of the realms. Here the knitting plays with different textures to illustrate the changes on the border of the habitat. Places, where the different private and public realms come together, are places of interaction, places of surprise. The idea of mobile has also the concept of balance and movement to it. The mobile moves in the space slowly with the changes in the airflow or more vigorously when interrupted. This changes the relationship of different places, taking them further or closer to each other but still keeping the balance of the overall system. It sparks questions of what forces play in the chosen site, where does these overlaps of territories can be located in the physical space and how porous and where the porosity of the territories appear.



The last model introduces the first ideas of the scale by exploring a potential composition for a tram stop. The use of materials is similar to the site model with white ground and black vegetation. Openings in the forests and materiality of stones and how they are attached and woven into the knitting, let us speculate with the spatial composition and the architectural expression. The contrast of the knitted silver wire and the roughness of stone, start to play with the ideas of traditional and modern methods and the identity of the site, being peri-Trieste as well as peri-Karst.







THEORY PAPER  
on peri-urban living



PERI-URBAN the landscape of alternative opportunities

— *We live our lives of periphery; we are marginalised and there are many things in which we prefer not to participate. We wanted silence and now we have silence. We arrived here covered in wounds and sores. Our system had stopped working, broken down with the smell of copy machines, letter paper and the interminable stress of jobs with no objective in which one works unwillingly and nobody thanks us. We suffered conditioning that led us to confuse going shopping with creativity, to take anti-depressants and to think that renting a video on a Saturday night is enough. But now things are going a lot better.*

— *Either our lives have history, or we have no way of fulfilling them.*

— *I agree. We know that that was why we left the lives we were living behind us and that we came to the desert — in order to tell stories and thus turn our lives into novels worth telling*<sup>1</sup>

## 1. Introduction

“It has become an enormous cliché that half of mankind now lives in the city and that this proportion is only increasing. This has, ironically, been a pretext for architects to focus only on the city. My office OMA/AMO was perhaps partly responsible for the initial shift, but not for the maelstrom that followed: we are bombarded in architecture books with statistics confirming the ubiquity of the urban condition, while the symmetrical question is ignored: what did those moving to the city leave behind?”<sup>2</sup>

This is how Rem Koolhaas started his lecture on the countryside on February 13, 2020. With his lecture, he talks about the tilted focus of architecture and how the potential of the countryside has been left vastly unexplored. He further explores this in a New York Guggenheim exhibition called *Countryside, The Future* and a book *Countryside, a Report* in 2020.

With this talk, Koolhaas shifts attention away from the city towards the countryside. But instead of the countryside-city binary, there is a whole spectrum of conditions in between. Have we paid enough attention to this spectrum as a whole? Are conditions such as suburban and peri-urban as forgotten as countryside? What kind of potentials do these other conditions have?

## 2. Peri-urban as a place for alternative lifestyle

One of the conditions on the spectrum is the peri-urban zone. It can be classified as a zone between rural and sub-urban. It enjoys the proximity to the city and depends on it for the jobs and amenities, but due to the lower housing density, it has more nature than sub-urban.

Just like suburban, peri-urban is not always associated with a prosperous living environment. It has been regarded as a periphery concentrated by “underprivileged and socio-occupationally vulnerable middle-class inhabitants”.<sup>3</sup> The prominent typology of detached houses has been perceived as a trap of mortgage payment for an infinite future, an unfortunate place result of urbanization.<sup>4</sup>

But people can be just as trapped in the peri-urban as in a city. Vidal de La Blache, a French geographer, introduced a concept *genre de vie*. It refers to land as landscapes of lifestyles and the way of life people have to adapt to their environment. Individuals can live certain kinds of lifestyles in certain environments. He believed that landscapes do not constrain people, but instead host different possibilities. It is up to an individual to realize the wanted lifestyle and create their reality. This challenged the theory of Environmental Determinism and created Environmental Possibilism.<sup>5</sup>

According to De La Blache's theory, different environments provide different possibilities. Therefore, the feeling of being trapped infers that the possibilities that the environment is providing are not fitting for the individual in question. But this does not mean that the environment would not be suitable for anyone else. This is further supported by the authors of the article *The peri-urban question*, where they examine the peri-urban zone in the vicinity of Paris. They conclude that despite the assumptions of homogeneous demographics, the peri-urban areas are middle-mixed neighborhoods.<sup>6</sup> Peri-urban is an environment where alternative lifestyles are likely to be unfolded, thus being important landscapes of possibilities to the city.<sup>7</sup> In the book *Countryside, a Report*, the authors found several surprising lifestyles outside a city. One example is an anarchist community living in Tarnac, France, where they have organized themselves into a community living off sheep herding and their life free from the demands of city life.<sup>8</sup>

One can live in a closer connection to the natural landscape by living in the peri-urban. For some, it might also open a way to live more sustainably than in the cities, even though peri-urban areas are more car-dependent. The cities are often filled by the commercial realm with advertisements and stores, normalizing capitalist overconsumption, efficiency, and stress. Sustainability means living in balance with your environment. In peri-urban, the presence of natural areas and private green spaces can create a strong relationship to nature and encourage people to take more frequent walks and other physical activities. The study *Do cities or suburbs offer higher quality of life? Intrametropolitan location, activity patterns, access, and subjective well-being*, concludes that when comparing focus groups living in a city versus suburban, the ones outside the city, were indeed likely to experience a higher level of well-being.<sup>9</sup>

During the current pandemic of Covid-19, there have been significant migration trends towards the countryside as well as other areas outside of a city. In Finland, especially towns nearby bigger cities, have benefited from the pandemic as they have experienced a greater flux of people moving in them.<sup>10</sup> In Vietnam, workers fled cities due to uncertain work prospects and returned to villages for example to practice farming.<sup>11</sup> This raises the question of how sustainable are these trends? Will these people remain living outside cities or are they likely to return to cities and why?

This is where it is also important for the architectural and other built environment professionals to realize that for them to provide and design pleasant living environments, we need to create a variety of them for diverse needs even in different areas. It is also vital that we enable people by presenting possibilities. The following questions are central in designing neighborhoods and zoning plans: Who is allowed to live in these neighborhoods? How can we make peri-urban areas even more mixed? What kind of housing is provided within this zone and how can it support different life stages? How can we allow people who are trapped in cities to also have an opportunity to live in the peri-urban?

Realistically everyone should not and cannot live in the peri-urban and nor is this wanted. But these areas can still provide for the city beyond the residents of their own.<sup>12</sup> It is important to think about how green spaces in the peri-urban can be made more attractive to the people living in the cities. With architecture and investing infrastructure like building better tracks, benches, and view spots, we can blur the border of the rural and the urban and make them more accessible and attractive for a wider audience. Cities usually have public transportation allowing smooth travel within the city, but it is important to also connect its residents to the recreational nature locations outside of the city. By investing in transportation, we can make the peri-urban areas less car-dependent as well connected to the city. By securing the continuity of green spaces we can create greenways that through the peri-urban link the cities with countryside and forests.

### 3. Peri-urban and alternative building form

In the book *Countryside*, a report Koolhaas and AMO discover the new countryside. "While the city becomes more itself, the countryside is transforming into something new."<sup>13</sup> The countryside is changing rapidly, with its new forms and types, rationalization and mega-scale of farming, data centers, new more efficient transportation infrastructure. "These past five years of research into the countryside have brought us to unexpected places. Places we had never imagined existed. – Countryside appears to be our frontier for humanity's transitional challenges regarding nature, climate, energy, politics, technology and culture. If the city is the engine of modernity, the countryside is the bodywork."<sup>14</sup> This all should be creating debate on how we want our landscapes to transform and to what extent do we want to limit it. *Countryside* hosts a part of our vernacular local identities but without our interest there, it can be threatened and even lost without us even realizing it. Samir Bantal, one of the authors of *Countryside*, a report fears the effect of urbanization and globalization on the countryside and wonders whether the "force of the (urban) trends" can also sustain the local structures.<sup>15</sup>

An example of this is vernacular farms. With standardization and modernization, a lot of old farming typologies become impractical and not needed. What do we think about this? Does the loss of the need for these also mean loss of typology? Or can we find new purposes for these buildings?

"When we inquired about buying a working farm, their availability, and cost, the real estate agent raised her eyebrows. She only dealt in residential farms (€<sup>300,000</sup>–1.5 million). Her clientele are Amsterdammers, who want a farm but don't actually want to farm. Most of her inventory is either historicized new buildings or renovated farms

with old oak doors, luxury kitchens, extra bathrooms, and trampolines in the garden. Whereas the design of a functioning modern barn is dictated by the most scrupulous and standardized efficiency, the residential “farm” must be infinitely unique and typical, oozing vernacular “RUSTICITY.”<sup>16</sup>

The way these farms are repurposed for these “Amsterdammers” can be questioned. Turning the farmhouses, traditionally places of work, into luxury estates and places of leisure, shows how radical the change is. But even if these repurposed farms represent the utopian version of the countryside and life there, the experimentation is good. To support alternative lifestyles, there must be a variety of architecture. Without experimentation and repurposing, a lot of the buildings will be without use and soon too damaged to be preserved. Pre-industrial banal architecture and agricultural building types like farmhouses, sheds and animal shelters cannot all be turned into monuments and traditional yards. We need to find practical purposes fitting for today's needs. This kind of experimentation must not be too careful. The countryside must be as much an architecture's playground as the city.

#### 4. Peri-urban and private housing

Another reason to experiment with the architecture in the peri-urban is to create better houses. Peri-urban along sub-urban has received critique due to its housing. In the book *Extrastatecraft The power of infrastructure* Space, Keller Easterling gives an example of suburban housing: “In the case of the US suburb of Levittown, the developer did not set out to make 1,000 individual houses, but adopted a kind of agricultural method of house building—1,000 slabs, 1,000 frames, 1,000 roofs, and so on. The site was effectively an assembly line separating the tasks of house building into smaller activities each of which could be applied across the entire population of houses in sequence. -- The developer, William Levitt, turned the site into an assembly line and the homes into a population of commodities, from their frames and roofs to their TVs and washing machines.”<sup>17</sup> Sebastien Marot in his book *Sub-urbanism and the Art of Memory* states that the suburban is often forced with the program. The houses end up being only a commodity aiming for maximum profit just like in the example of Levittown. Marot believes that there should be more attention towards the landscape. In his book, he introduces designs, where the designer has been familiar with the environment. Memories from the same or similar places give the designer sensitivity to understanding the landscape and result in a design intricately connected to its surroundings.

The stronger presence of nature in the peri-urban is the strength of the housing. Thus, creating copy-pasted houses is a dismissal of the potential of the landscape. Juhani Pallasmaa says that “Architecture is essentially an extension of nature into the man-made realm, providing the ground for perception and the horizon of experiencing and understanding the world. It is not an isolated and self-sufficient artifact; it directs our attention and existential experience to wider horizons. Architecture also gives a conceptual and material structure to societal institutions, as well as to the conditions of daily life. It concretises the cycle of the year, the course of the sun and the passing of the hours of the day.”<sup>18</sup> With the lower plot prices outside the cities, peri-urban can be an answer for housing demands of a variety of demographic groups. A big house with a private garden is a good example of the setting peri-urban offer for more people than the city can.

## 5. Conclusion

With the exhibition and book, Koolhaas has been successful in reminding a wide audience how in architecture the countryside has been neglected. The profession has been so occupied with the city that areas outside of it are not fully understood. The spectrum outside and the peri-urban as one of the conditions are not places where people move only when forced by their economic situation. By understanding the potential of peri-urban, the zone becomes much more interesting for the architectural profession. The presence of nature and distance from the city offers a place where people can pursue lifestyles suitable for them. The housing designed there must not be only copy-pasted houses, but instead, there is a chance to create housing tied to its surroundings, that supports individuals' wellbeing.

The refocus on the peri-urban is not a critique towards the city, but instead, areas outside cities must be considered as viable options as the city. The whole spectrum from city to countryside and areas in between creates a continuous landscape of different opportunities and lifestyles, all supporting each other. For the architects, it means that it is important to think about who can live in certain areas. Are there invisible boundaries preventing people from living in the neighborhoods of their choice? And if yes, how could they be removed? How could we create more equal living environments where the individual is free to live where they want and pursue lifestyles of their choice?

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- 13 Koolhaas, R. (2020, February 13). *Countryside (part I)*. Retrieved January 9, 2022, from <https://032c.com/countryside-rem-koolhaas>
- 14 AMO, Rem Koolhaas. (2020). *Countryside, a report*. Köln: TASCHEN GmbH. p. 69
- 15 AMO, Rem Koolhaas. (2020). *Countryside, a report*. Köln: TASCHEN GmbH. p. 69
- 16 Koolhaas, R. (2020, February 13). *Countryside (part II) Case studies*. Retrieved January 9, 2022, from <https://032c.com/countryside-rem-koolhaas-case-studies/>
- 17 Easterling, K. (2014). *Extrastatecraft: The power of infrastructure space*. New York: Verso. p 62
- 18 Pallasmaa, J. (2012). *The Eyes of The Skin: Architecture and the Senses* . Wiley.







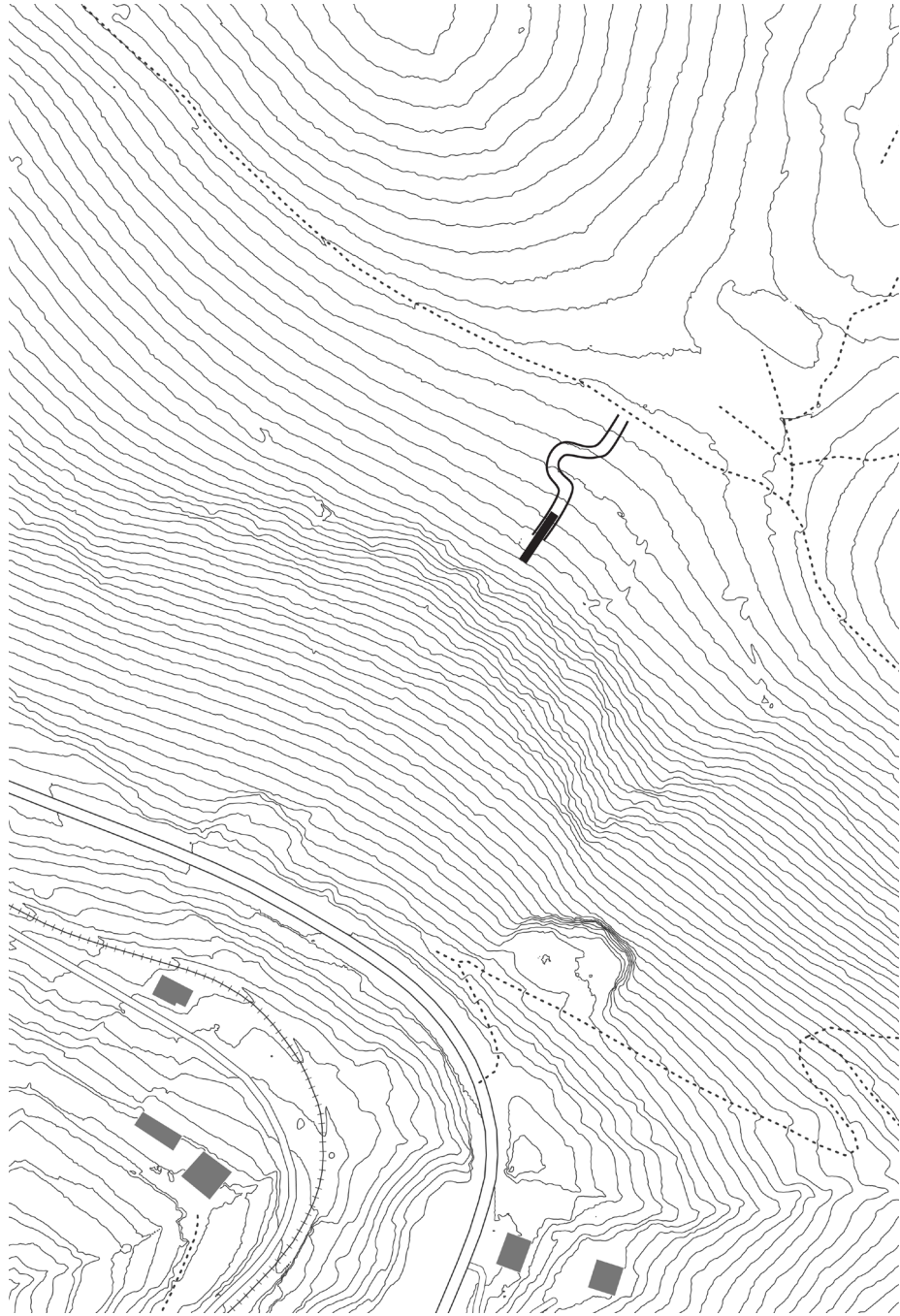
VIEW PLATFORM



The structure is a minimalistic open-air structure, which' form is derived from the existing hiking path and stone walls along the paths. It is located by a hiking path on the ridge of the hill and it is easily accessible from a tramstop at the ridge of the hills. The platform deviates from the path and by elevating the hiker above the treeline, giving a view to the Adriatic sea.

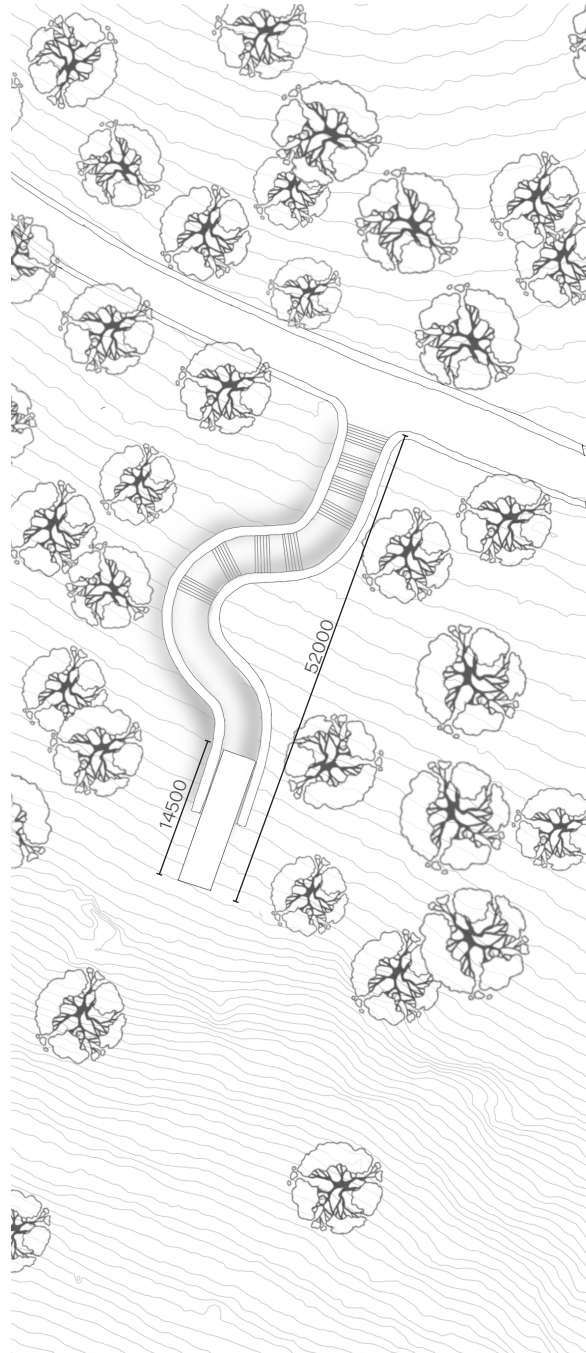
The design consists of two simple stone walls, that momentarily isolate the hiker from the surroundings. The curvy shape of the walls restrict the view until the hiker eventually arrives to a wooden overhanging structure with a simple stone block for seating. From here the view to the Adriatic sea is finally revealed and the hiker can enjoy a break from the height.

The materiality of the structure consists of timber and local stones, that are used in all three interventions.



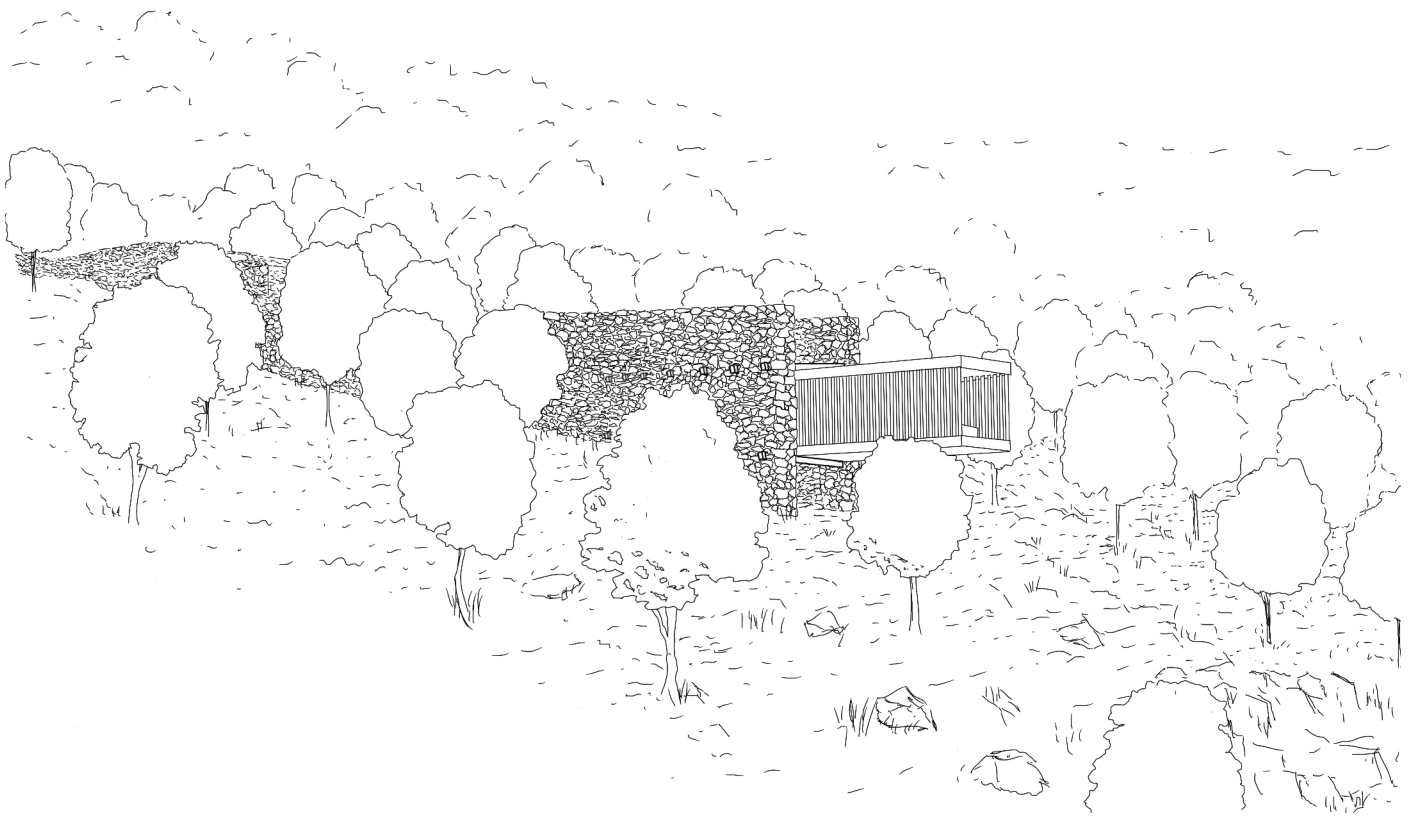
↑ N

general site plan



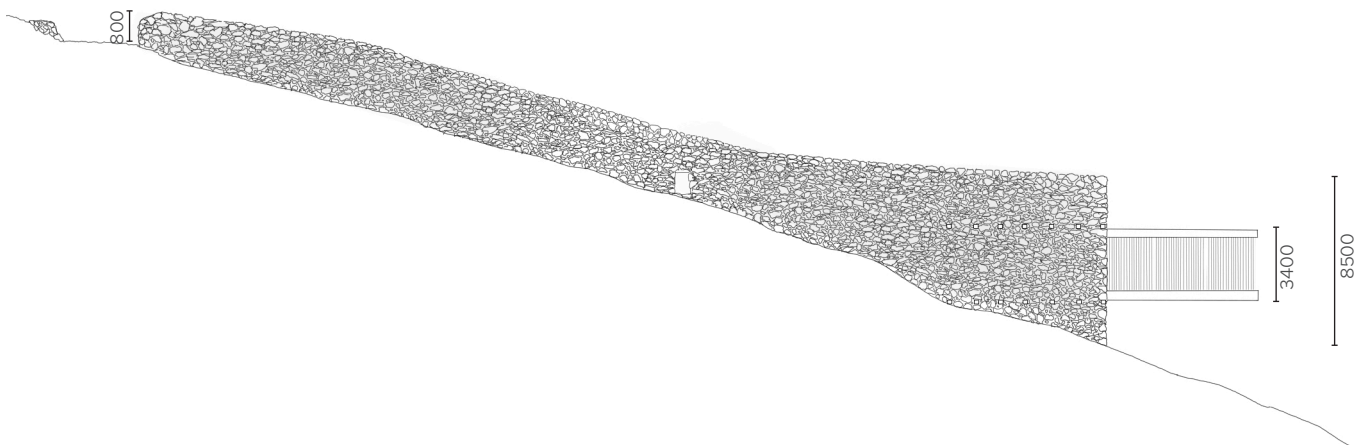
↑ N

zoomed in site plan

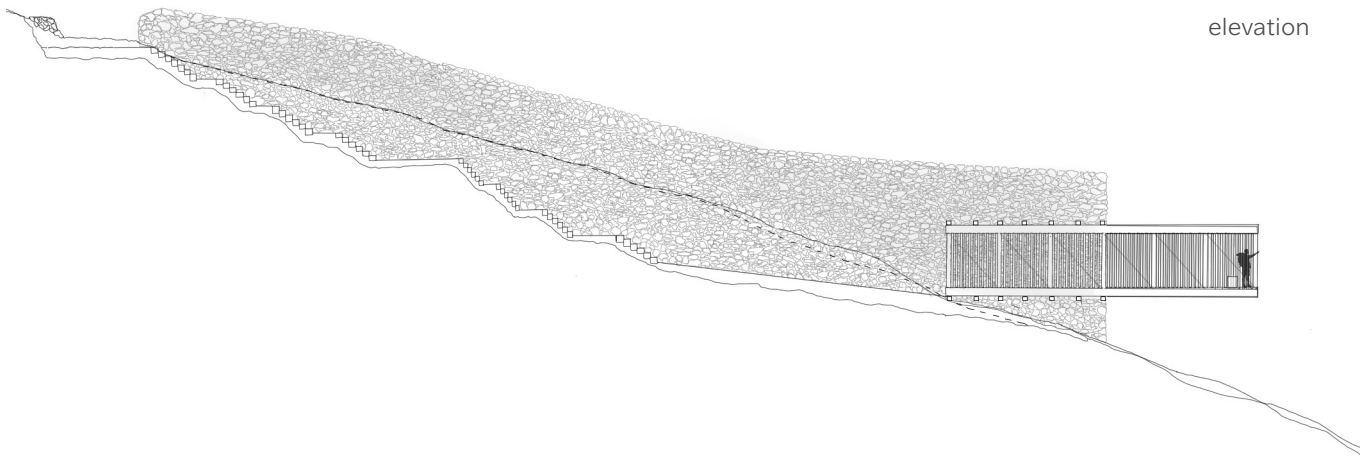


view platform outside perspective

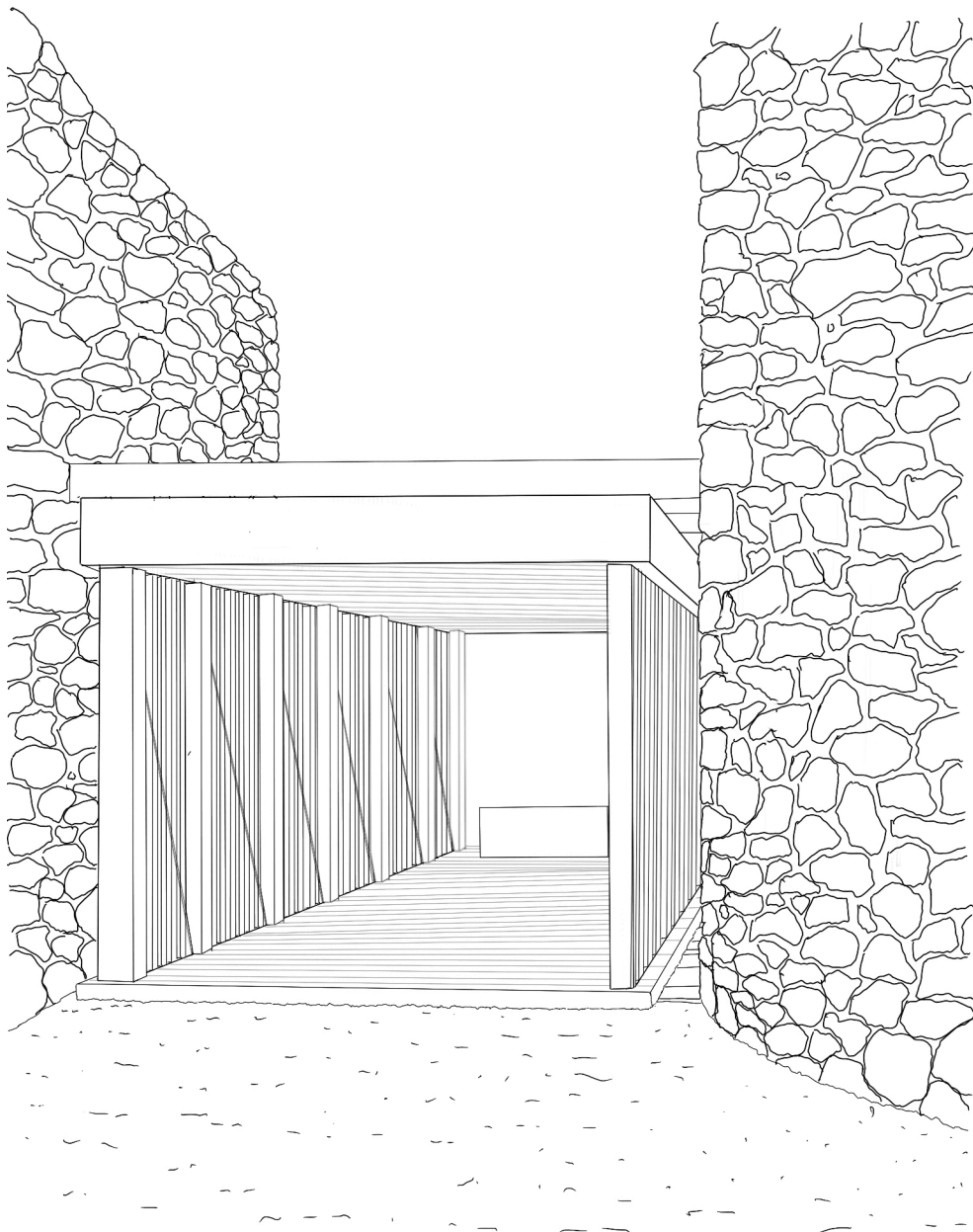




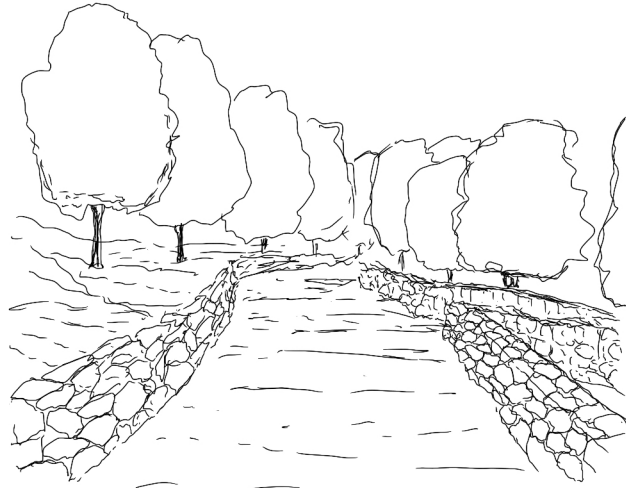
elevation



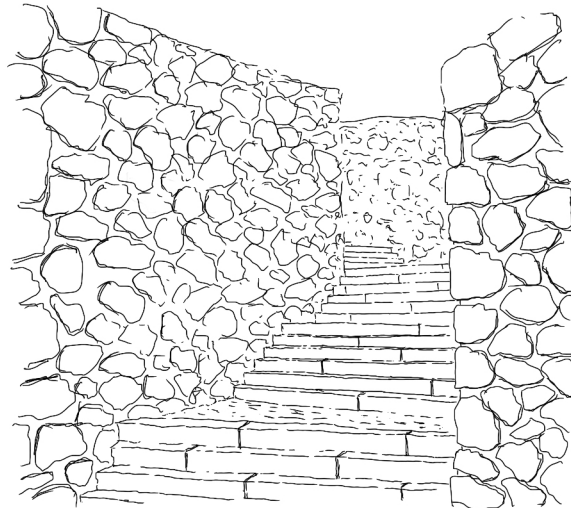
section



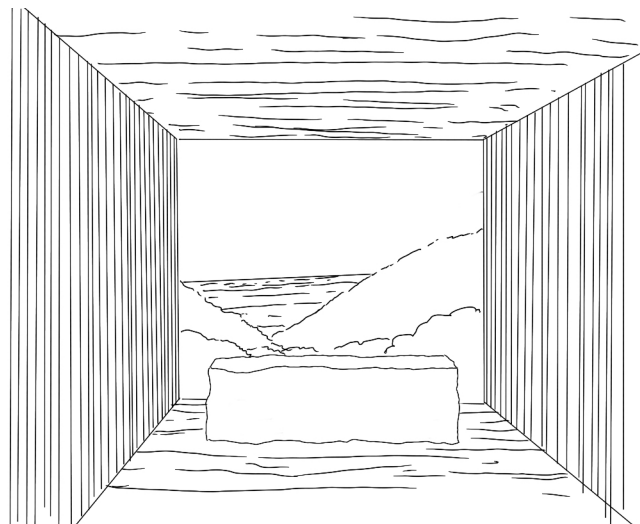
view platform inside perspective



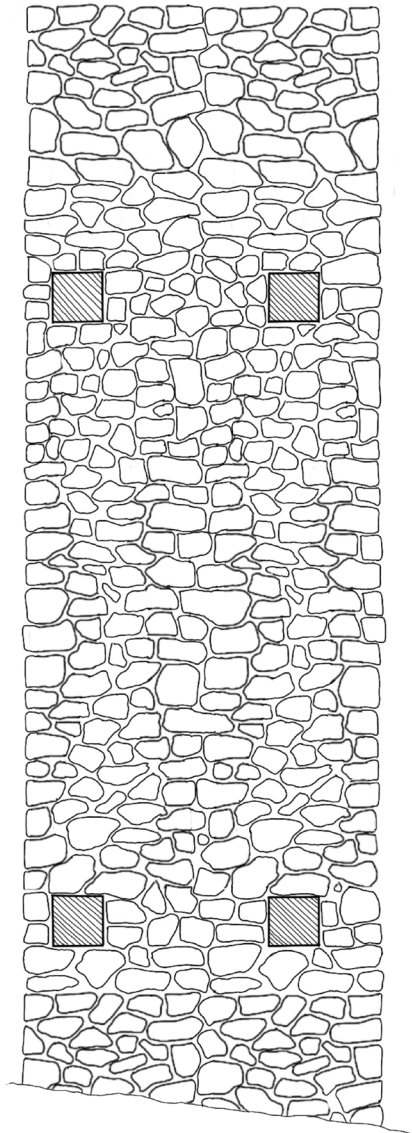
view from the path



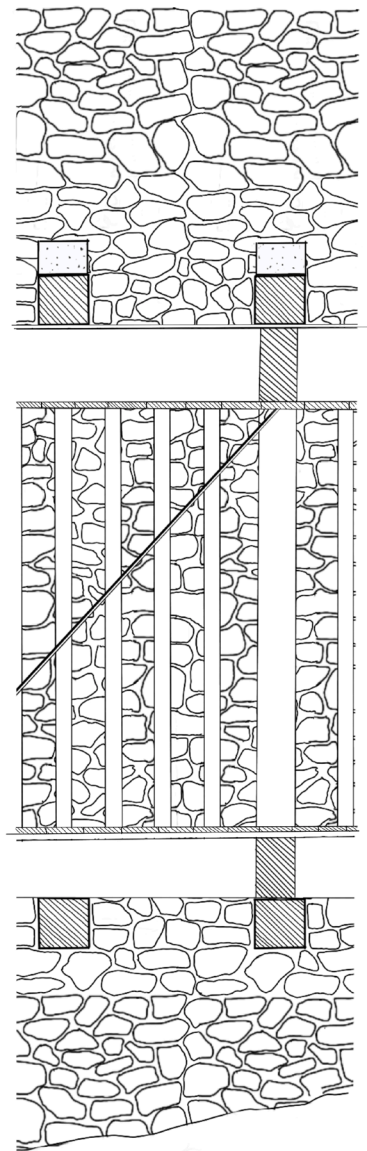
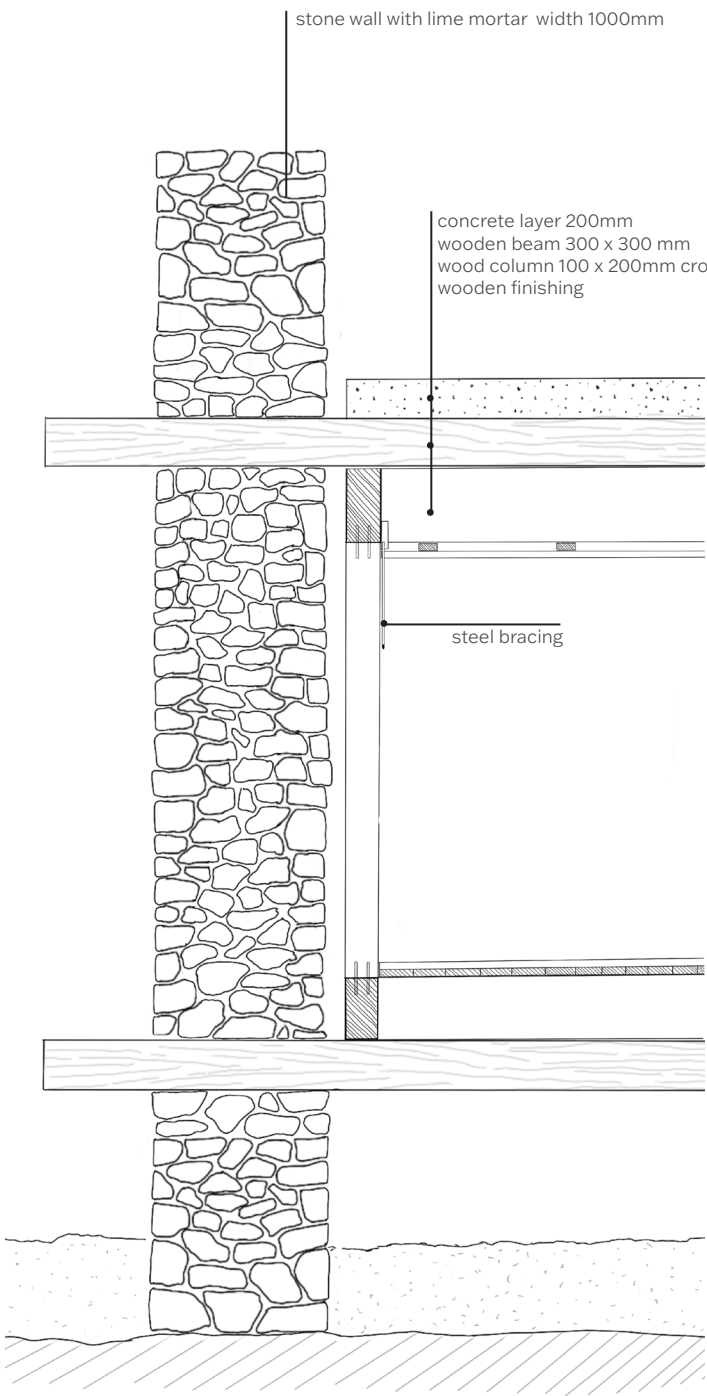
stairs between the walls



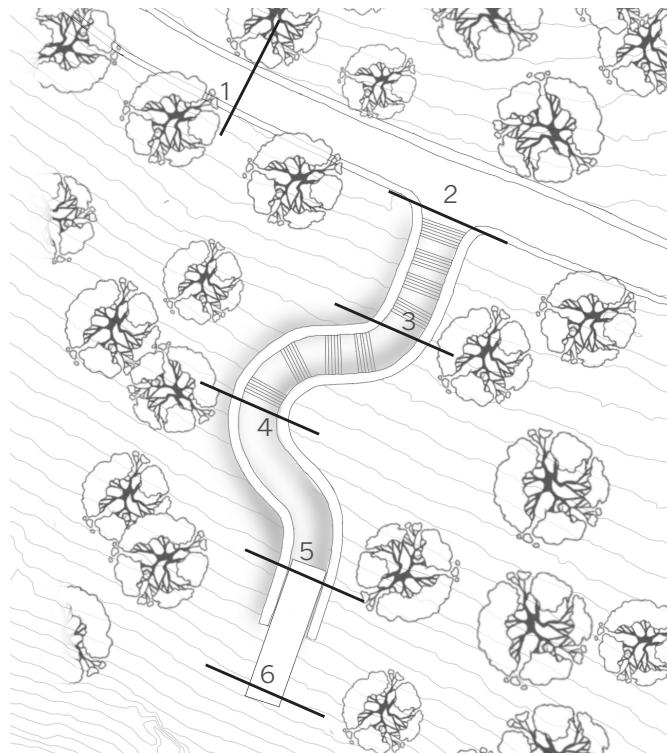
view to the sea over the valley



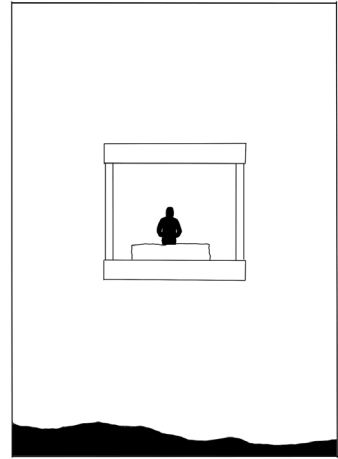
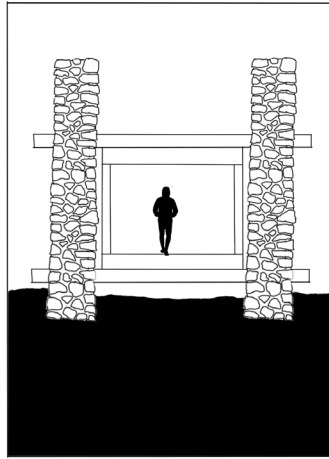
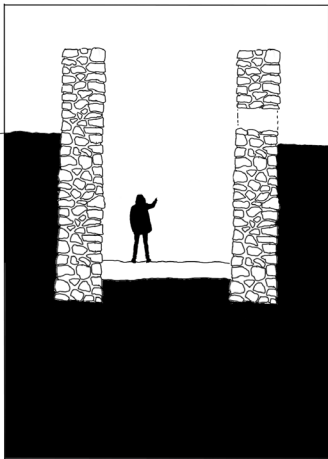
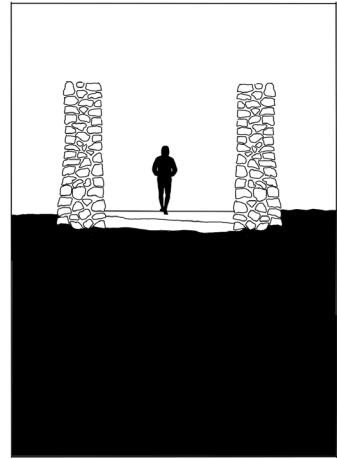
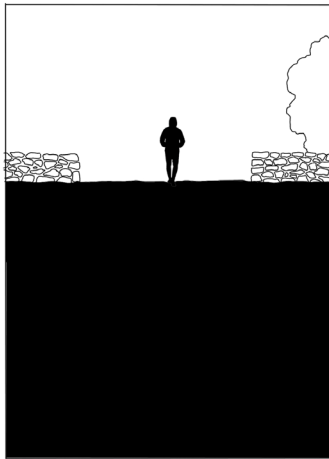
view platform detailed elevation



view platform sections



view platform section series





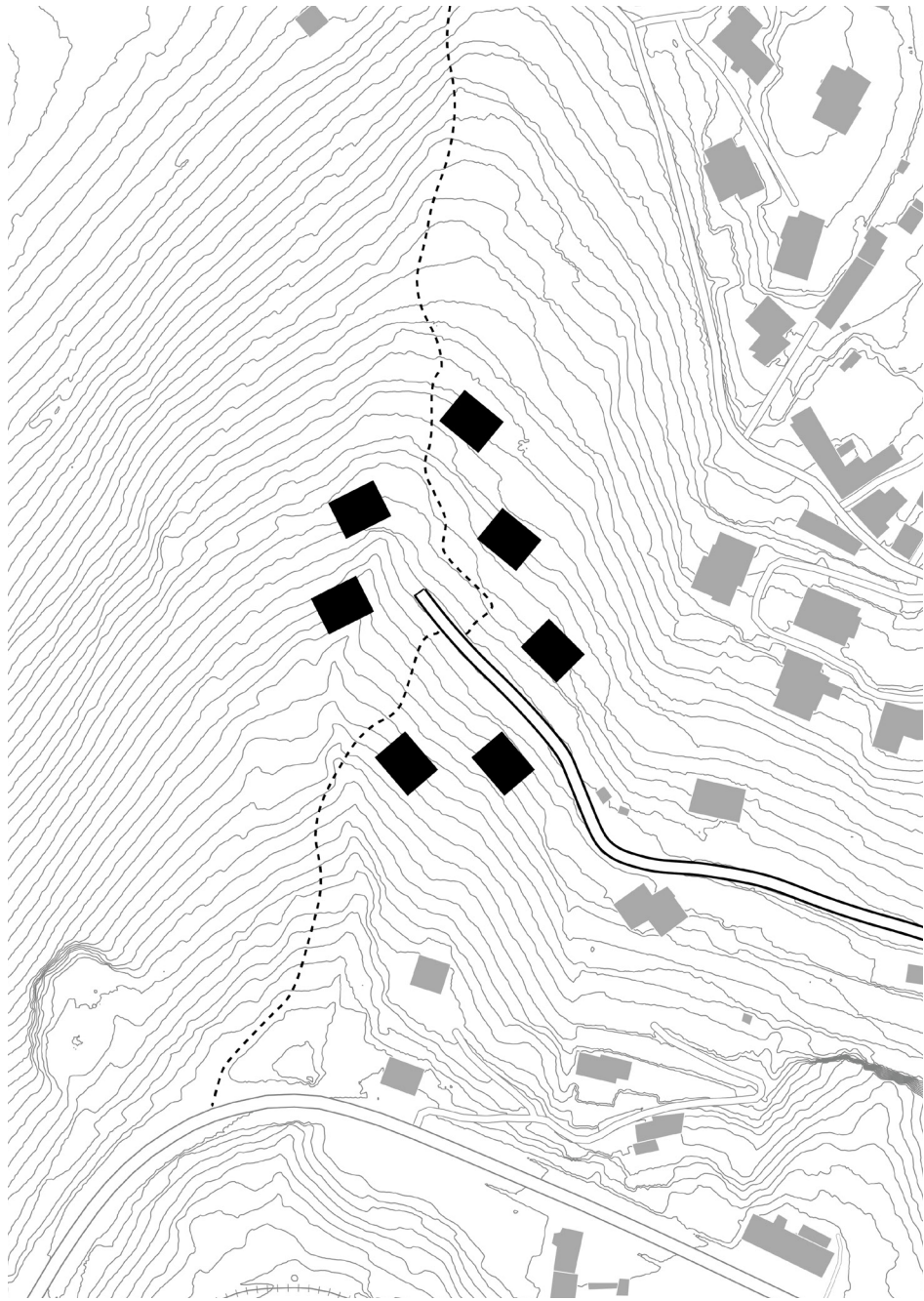


## VALLEY HOUSES



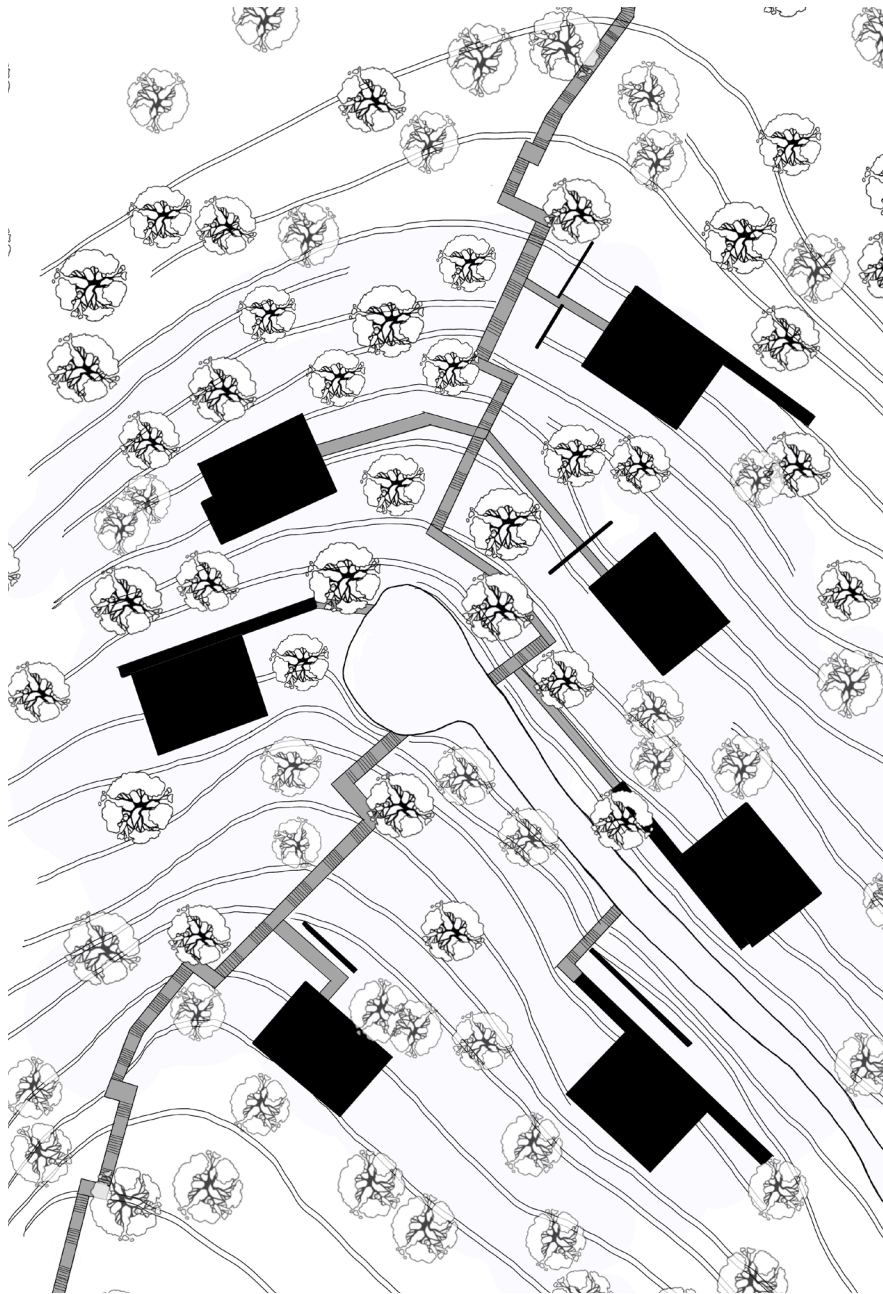
The site has old pastinis and it has been completely forested, but the shape of the terraced landscape remains. The houses of the area use a lot of retaining structures and material in stabilizing the land. The new design uses the forest as natural way to stabilize the land. The houses are scattered in the forrest around a one access road, which minimizes the need for extra land retaining.

The house designed in detail has two floors with views over the trees from the top floor. The house follows the terracing of the pastinis giving also place for the space defining walls. The materiality continues using wood and local stones. Besides this, Misapor insulating concrete is used in the walls.

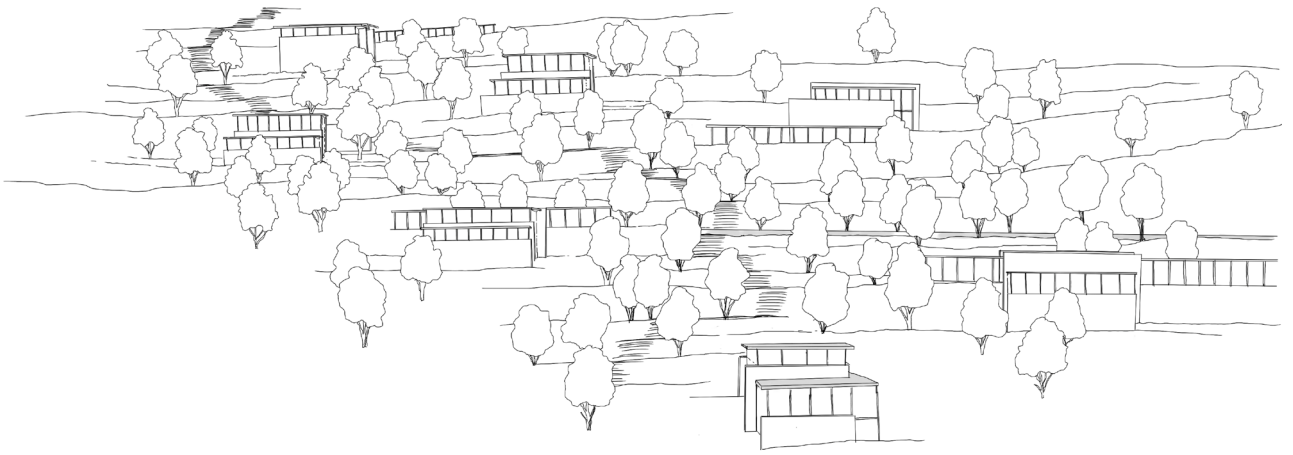


valley site plan

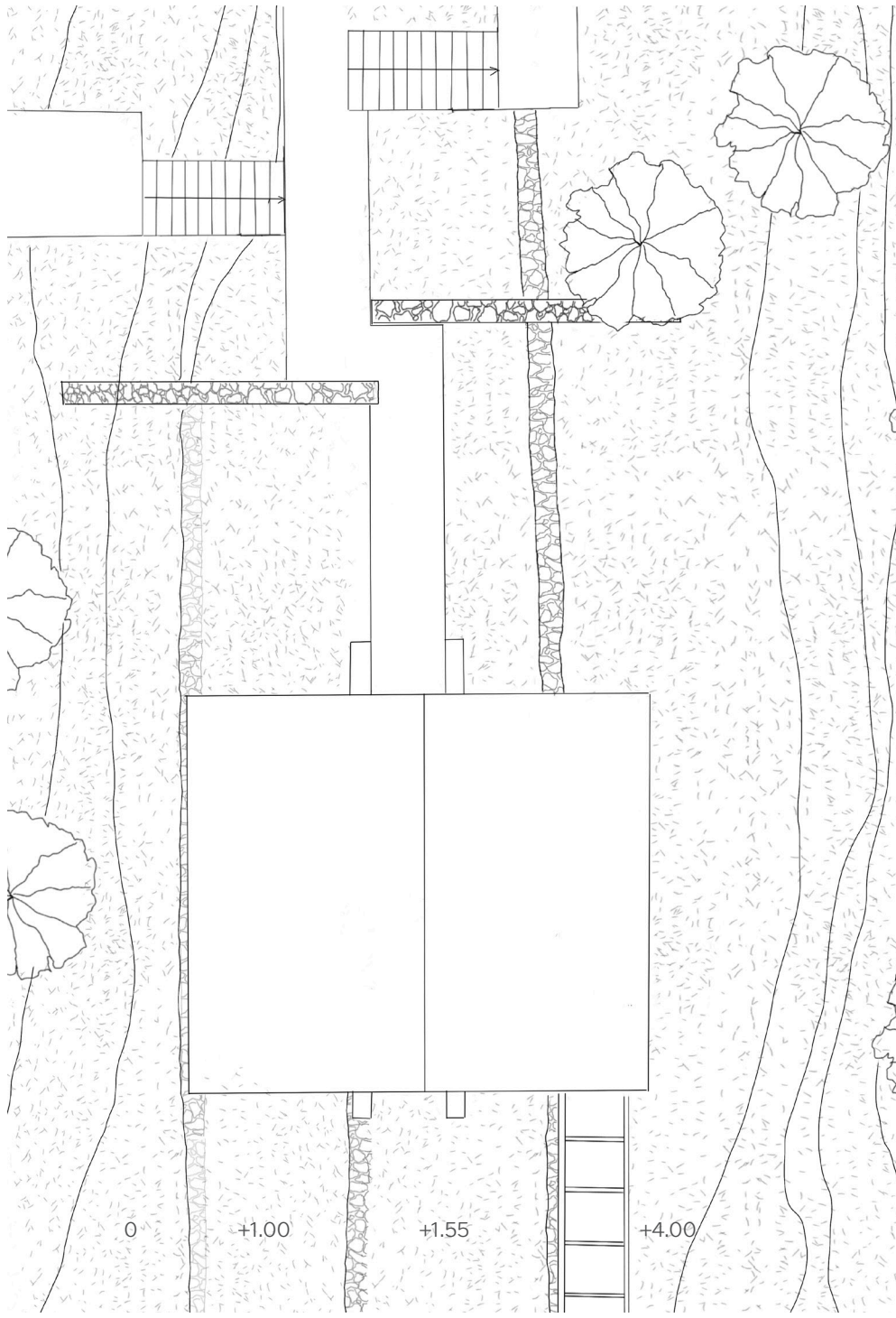




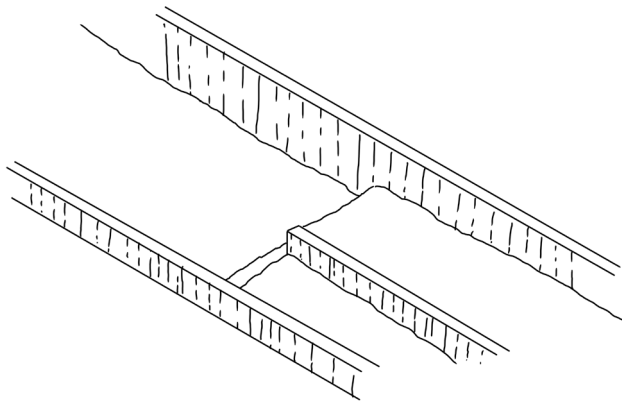
valley site plan zoomed in



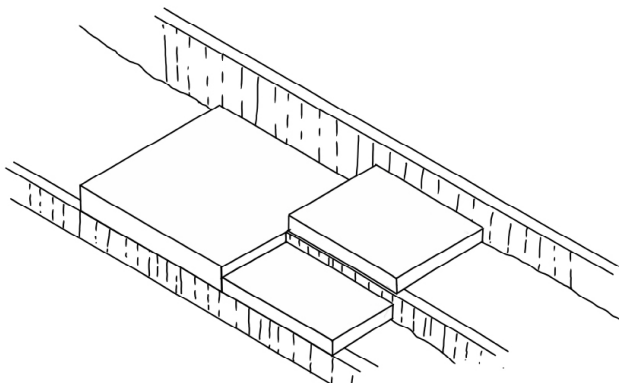
houses of the neighborhood



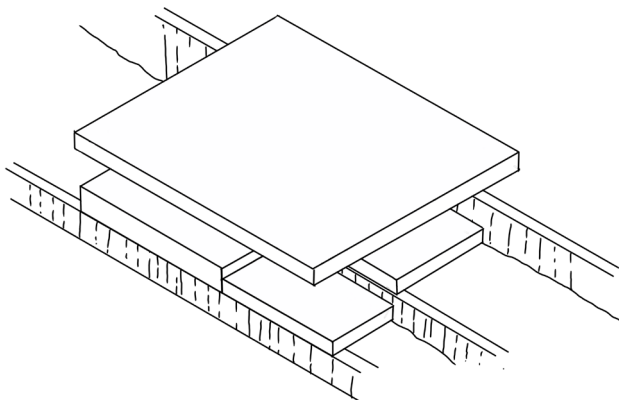
single house



existing levels and  
terrace walls

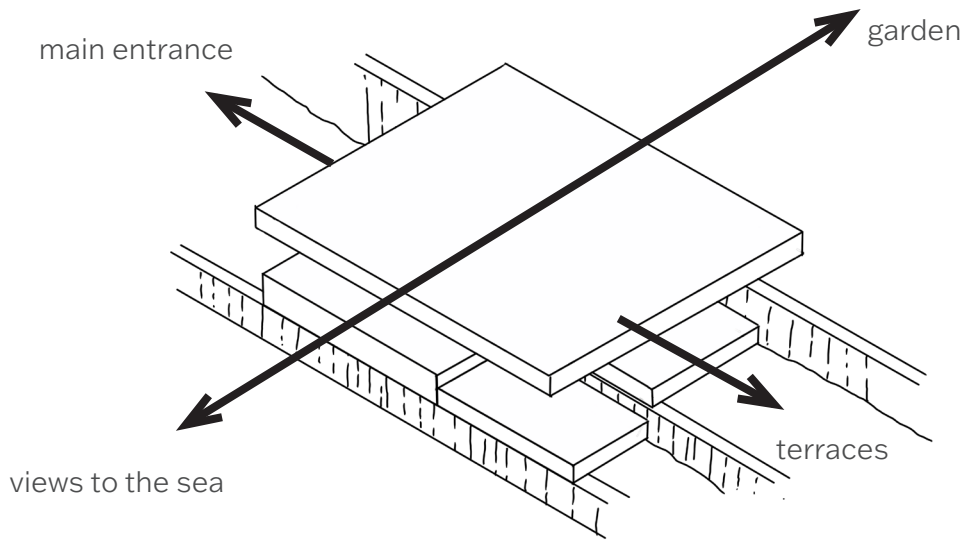


floor levels for the  
ground floor

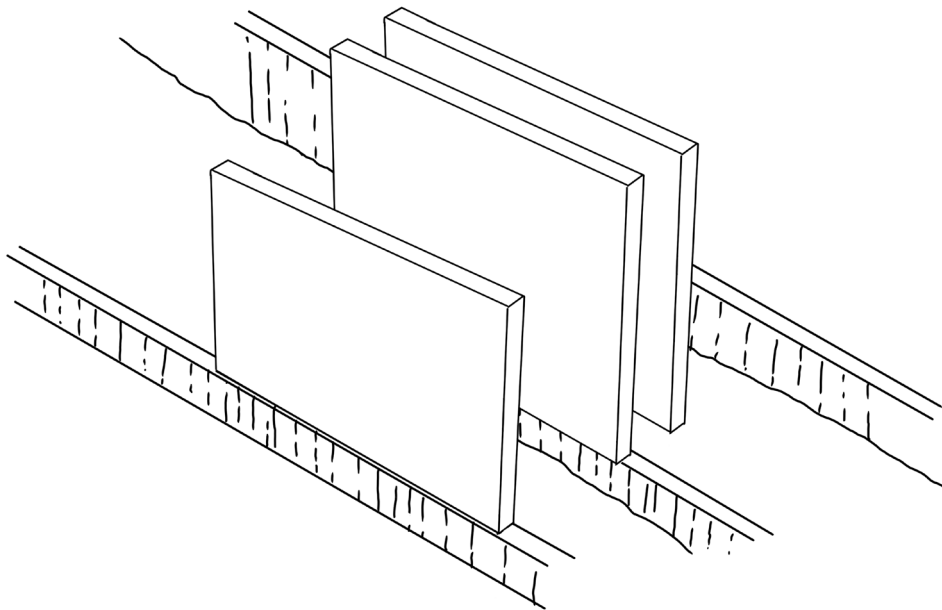


1st floor

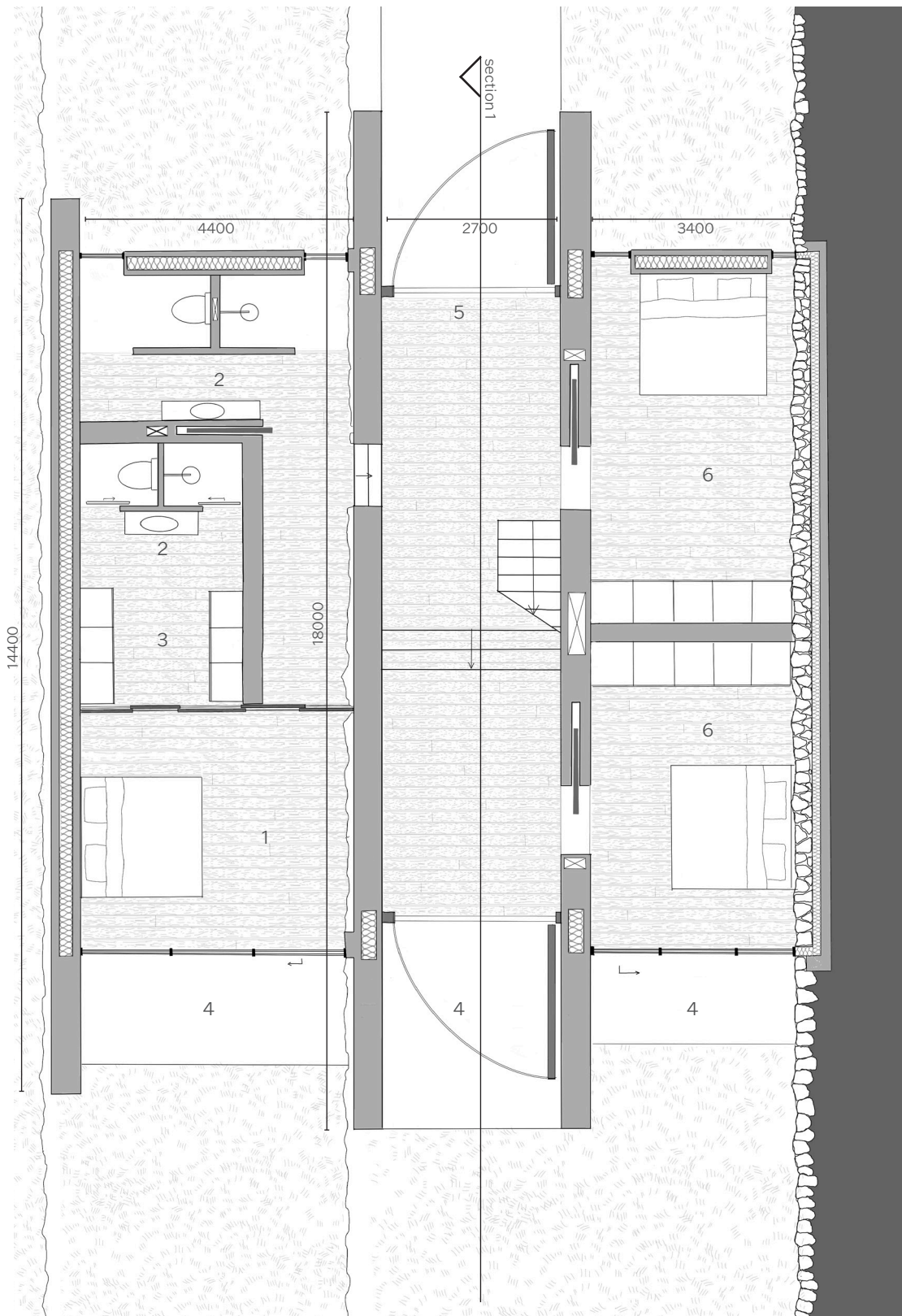




directionality of levels

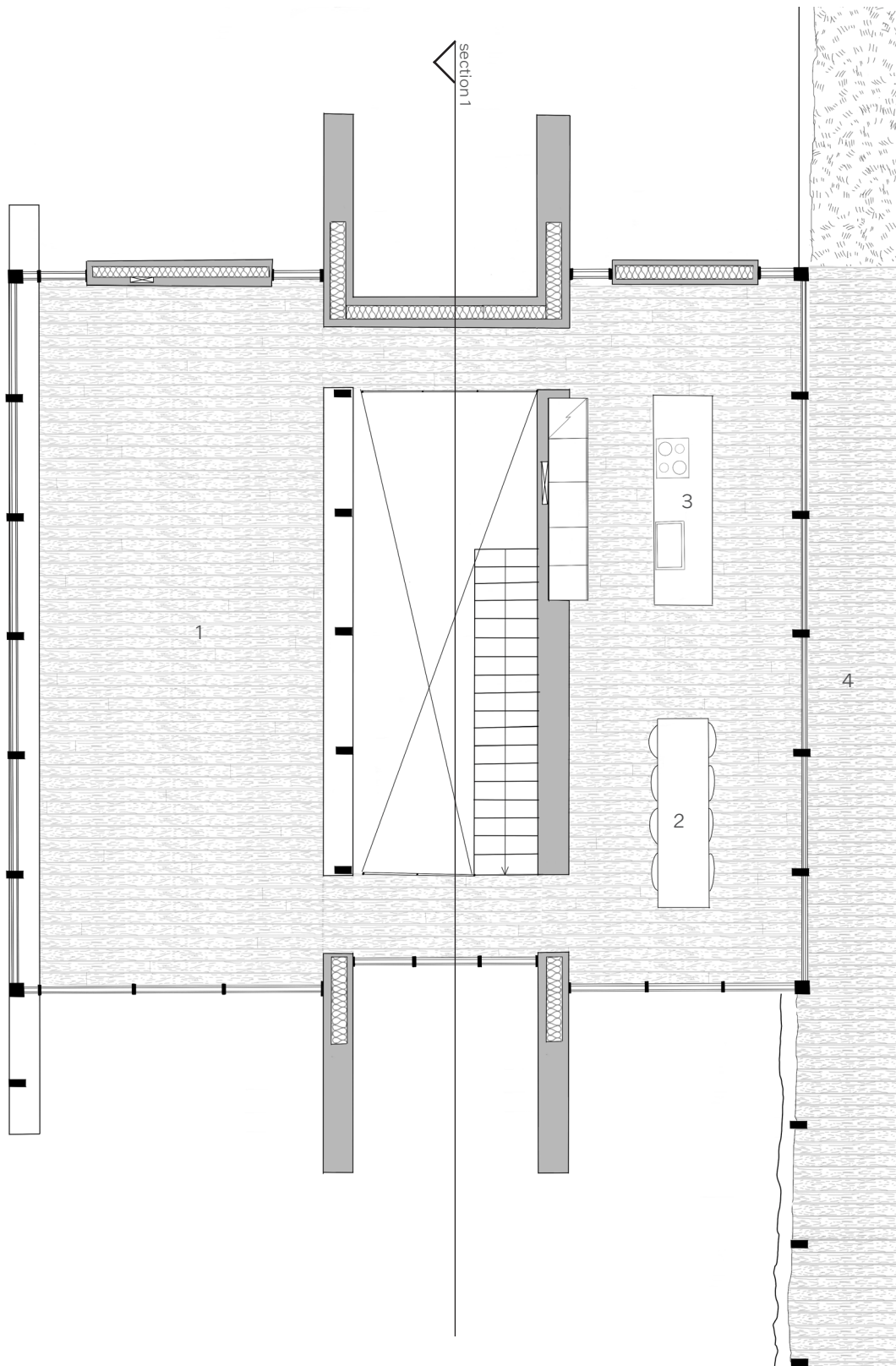


placement of space defining walls



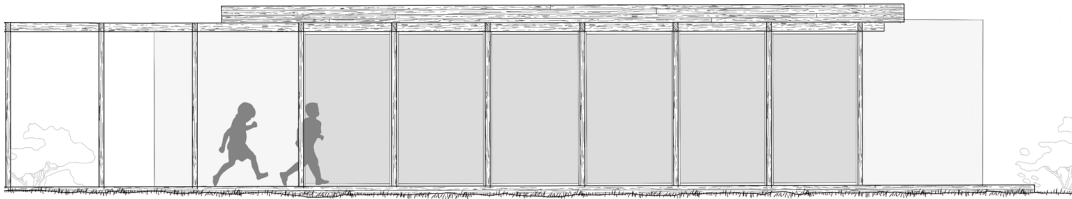
- 1 master bedroom
- 2 bathroom
- 3 walk-in closet
- 4 terrace
- 5 main entrance
- 6 secondary bedroom

ground floor plan

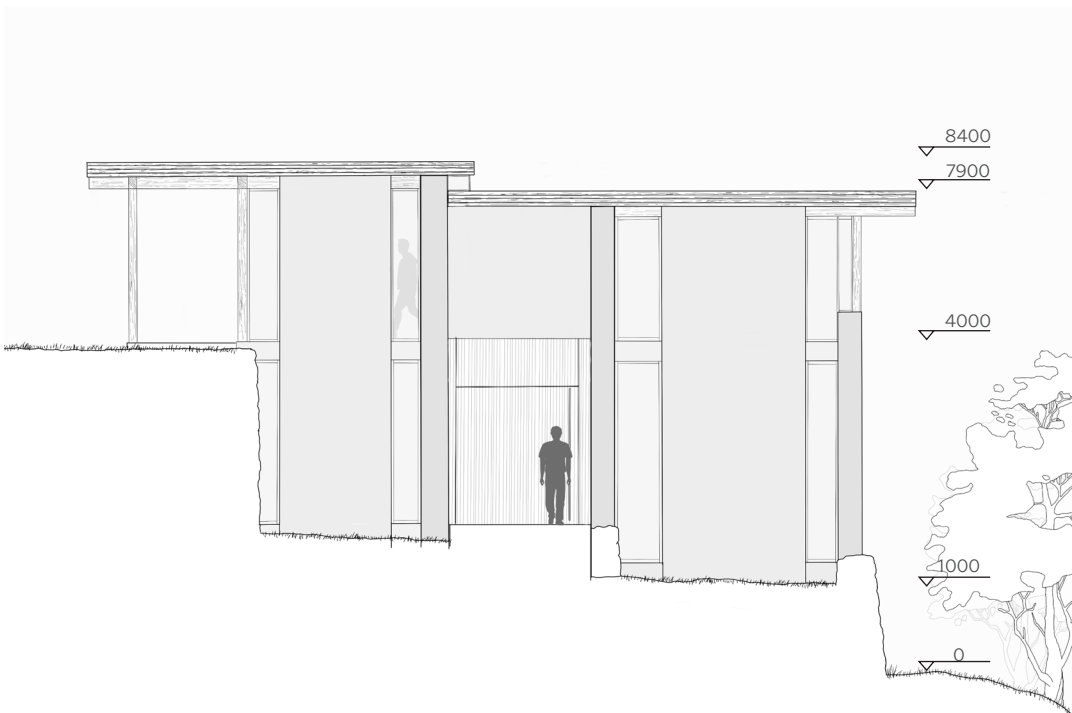


- 1 living room
- 2 dining space
- 3 kitchen
- 4 terrace

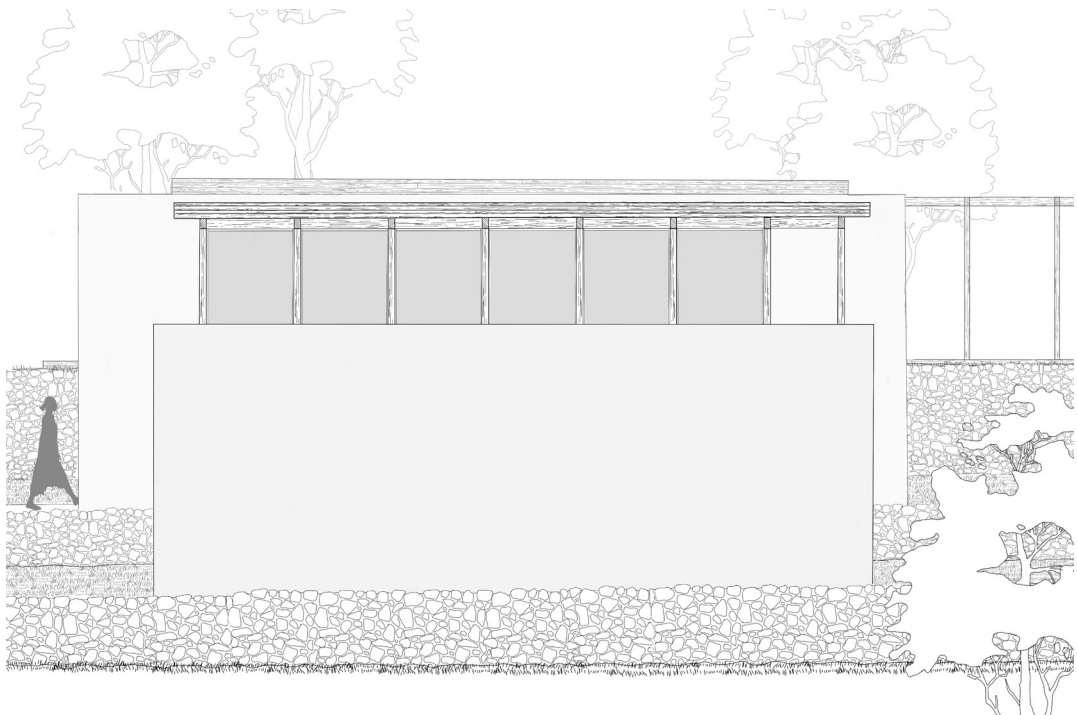
1st floor plan



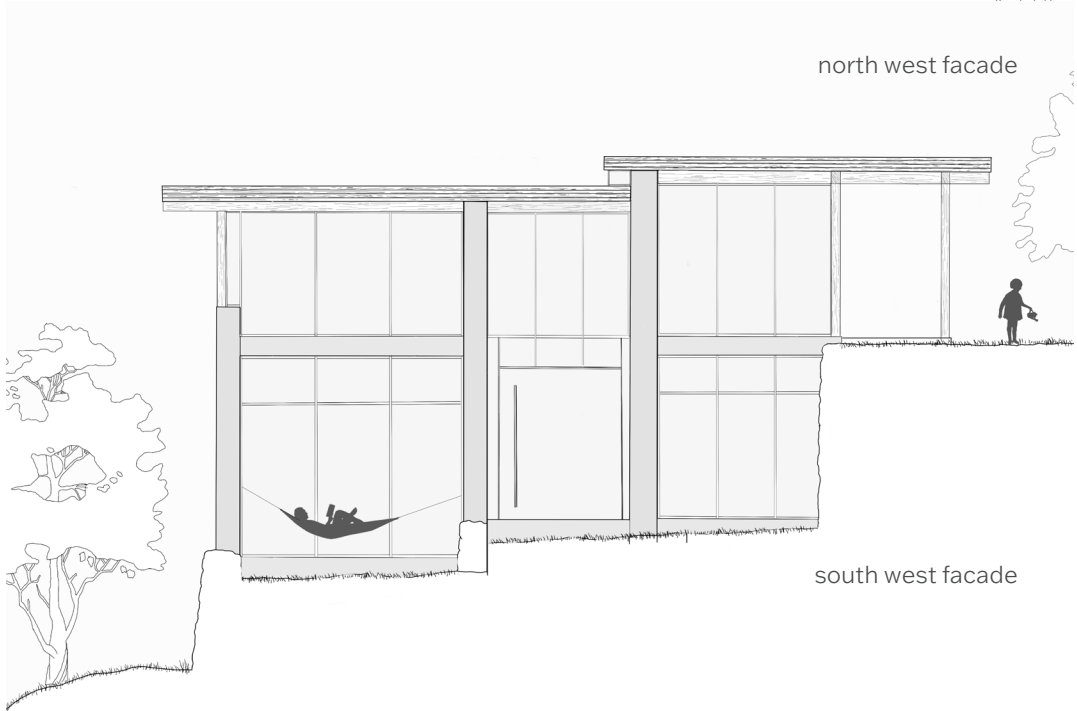
south east facade



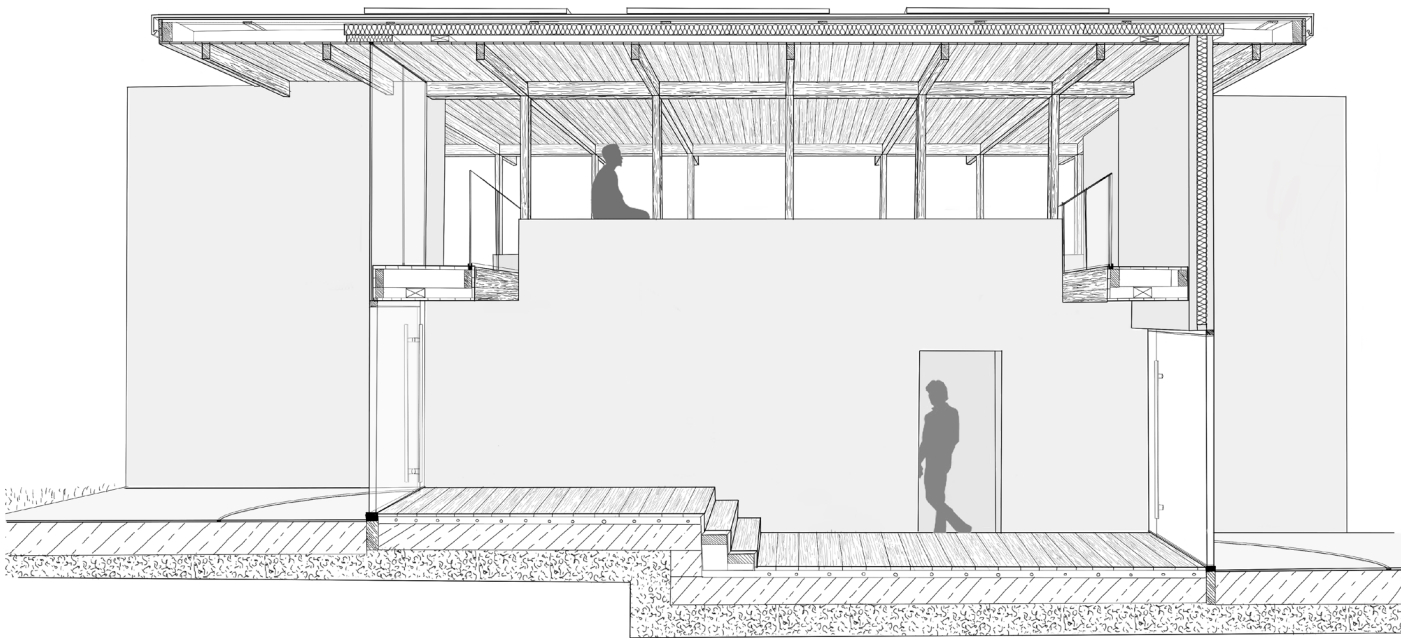
north east facade



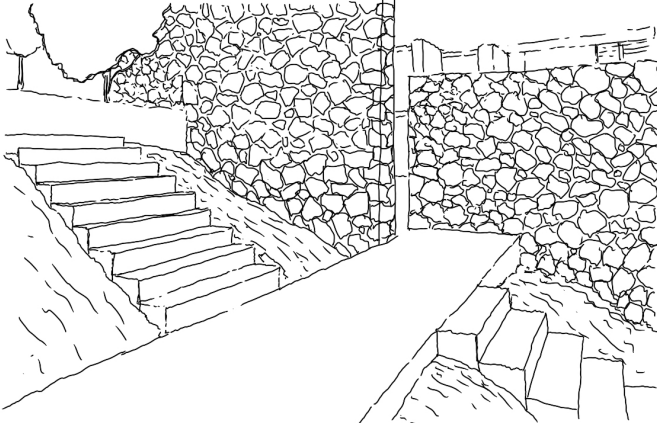
north west facade



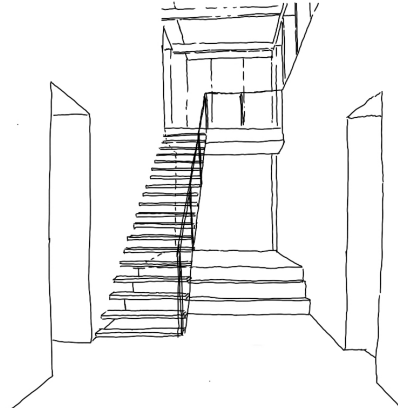
south west facade



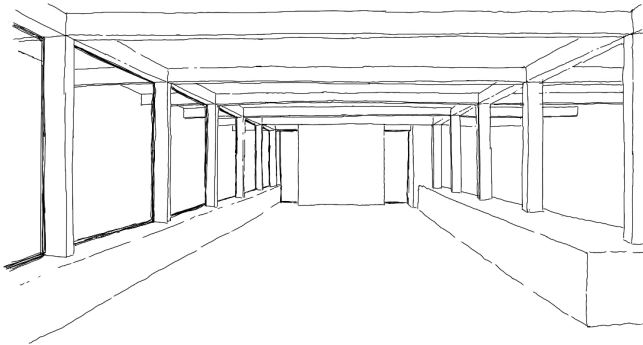
section through the entrance space



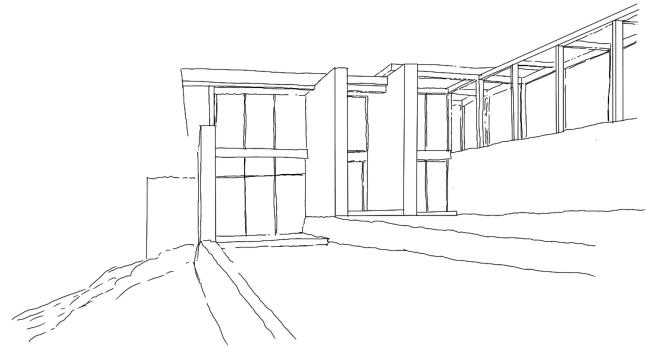
entrance to the private yard



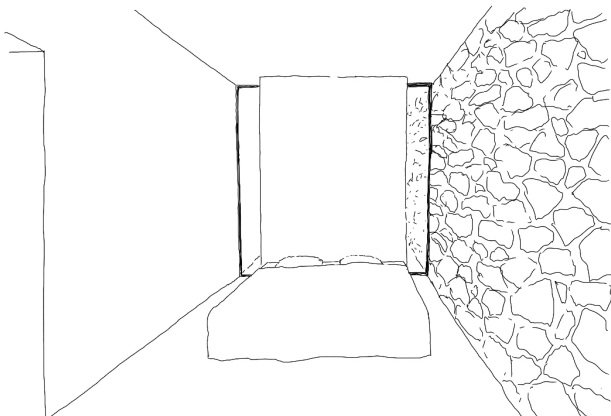
entrance space



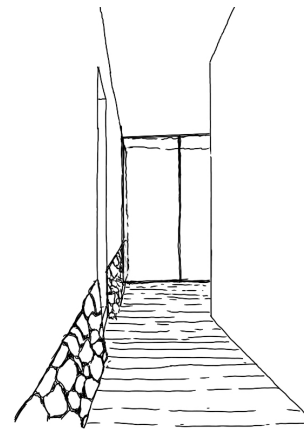
living room



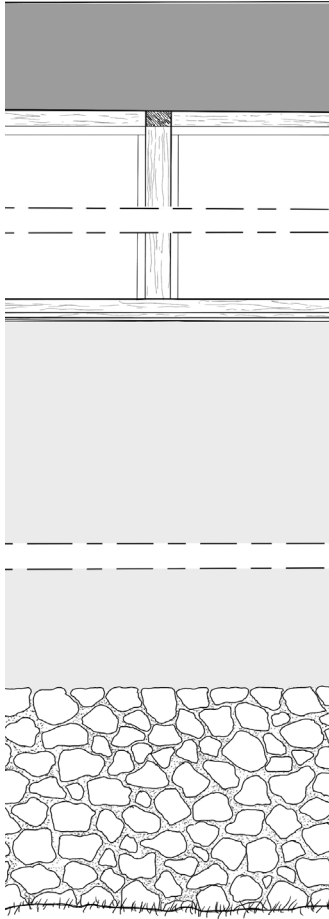
house from the south lawn



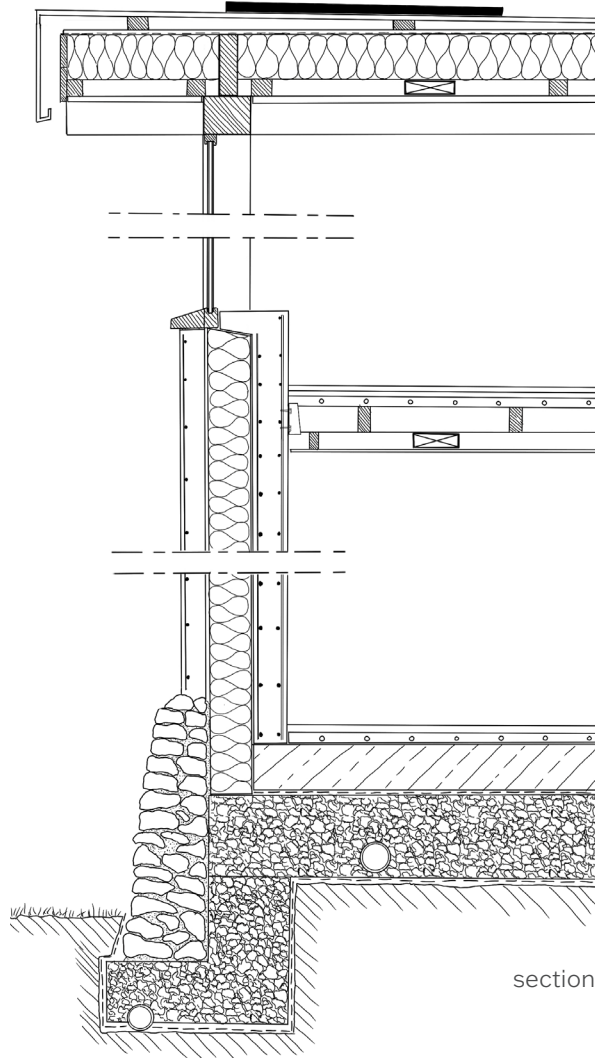
secondary bedroom



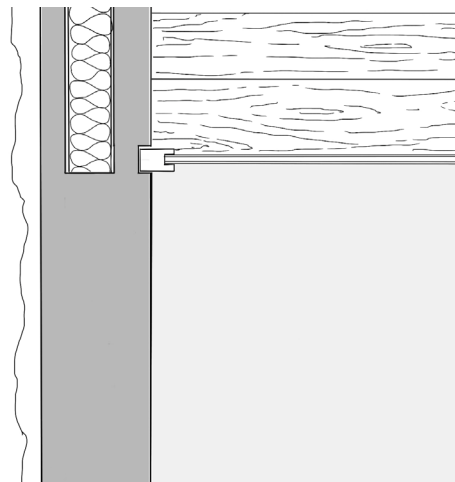
corridor to the main bedroom



elevation

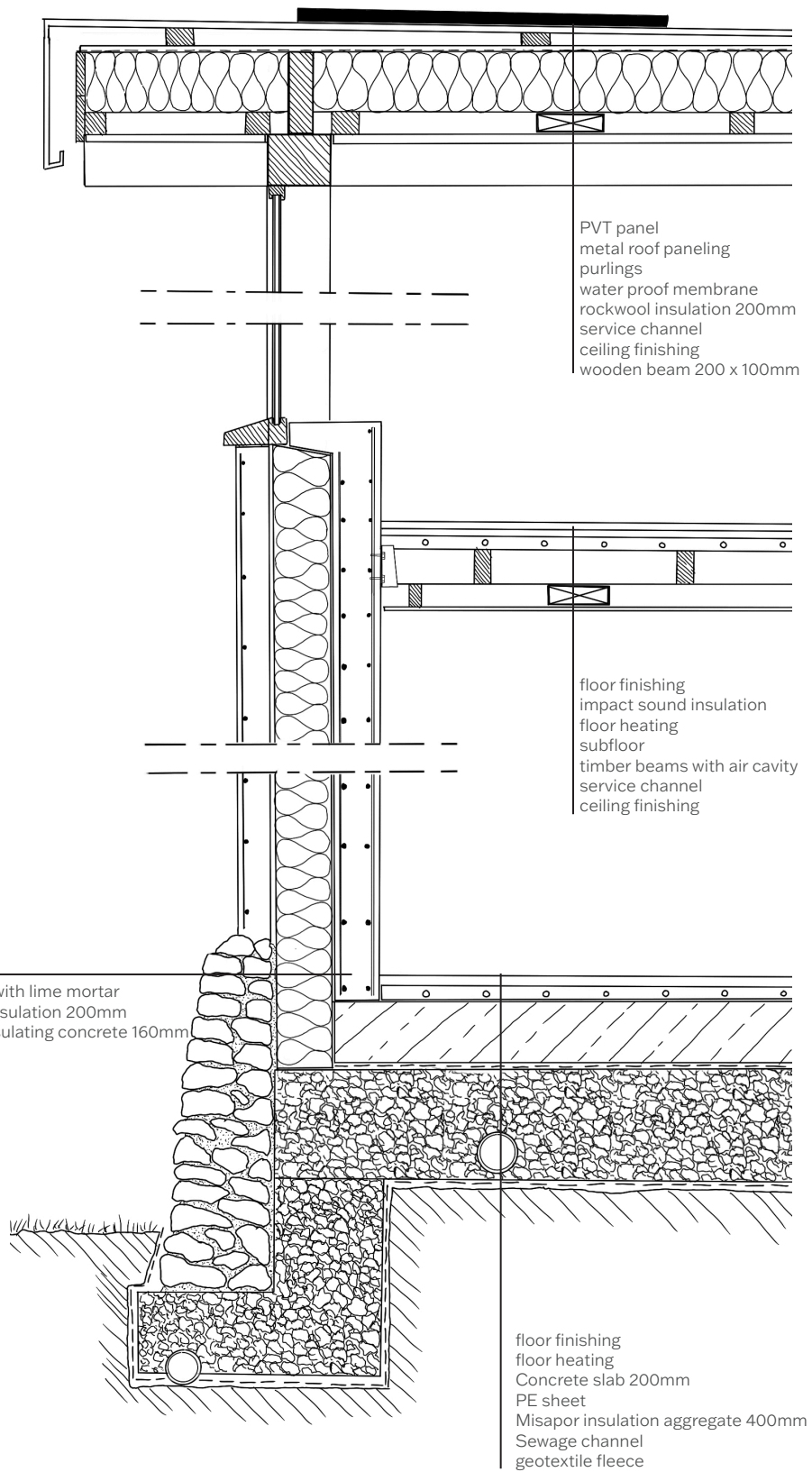


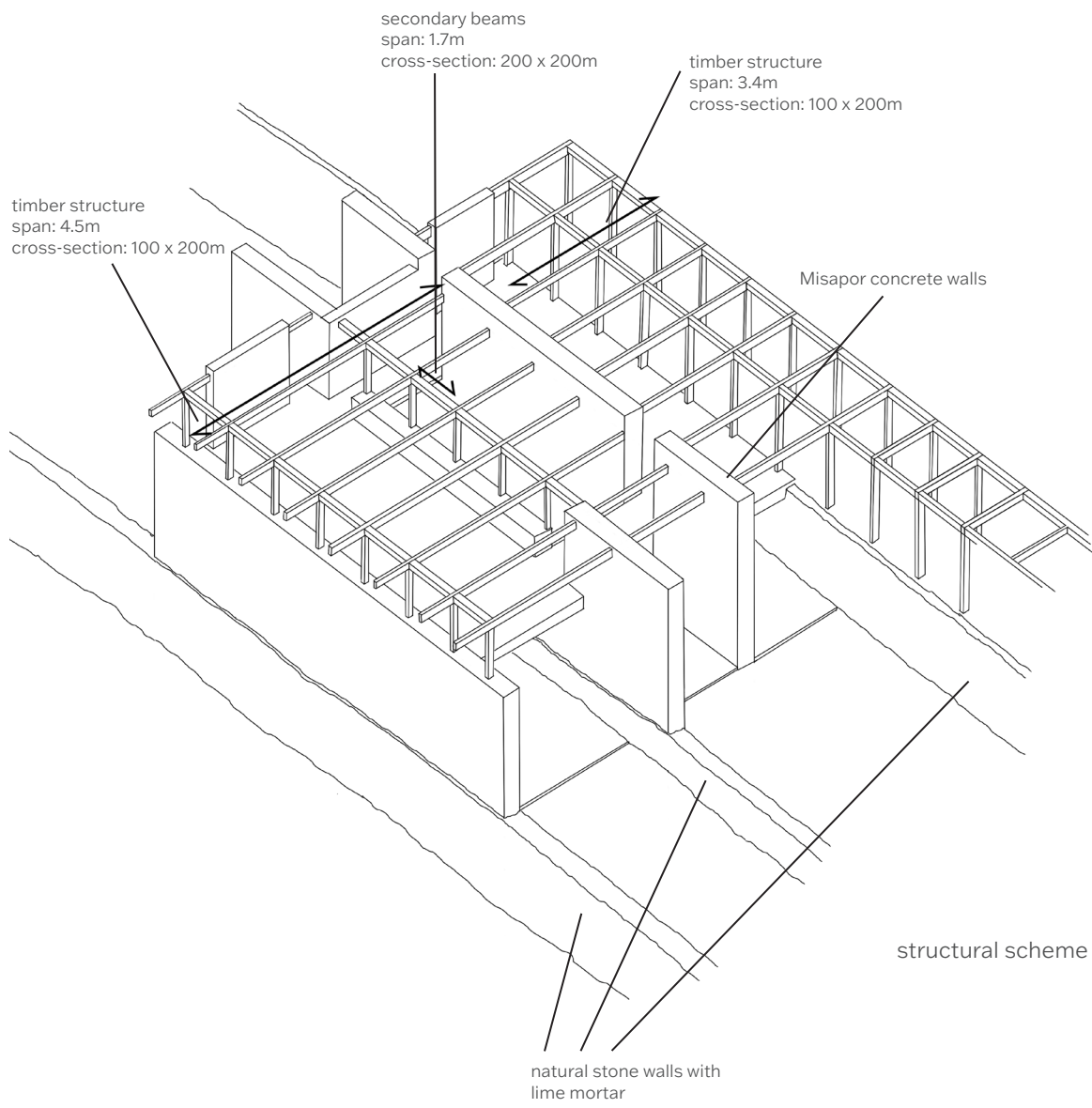
section

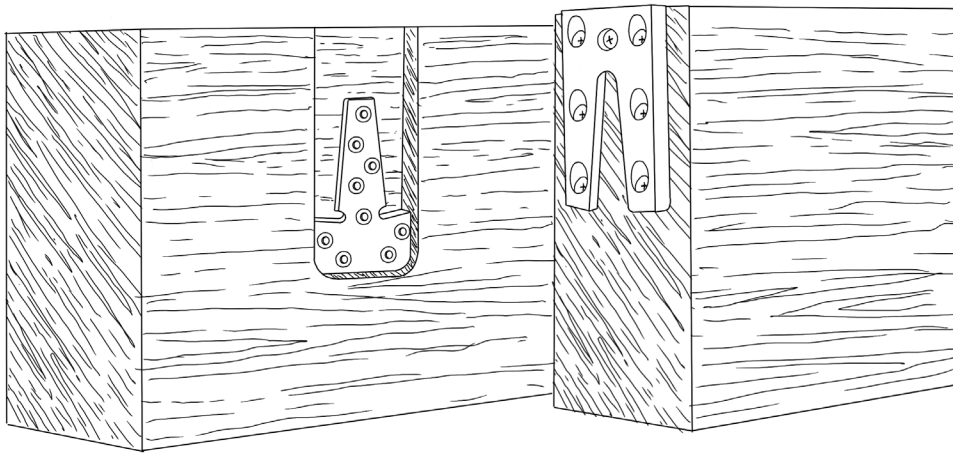


plan

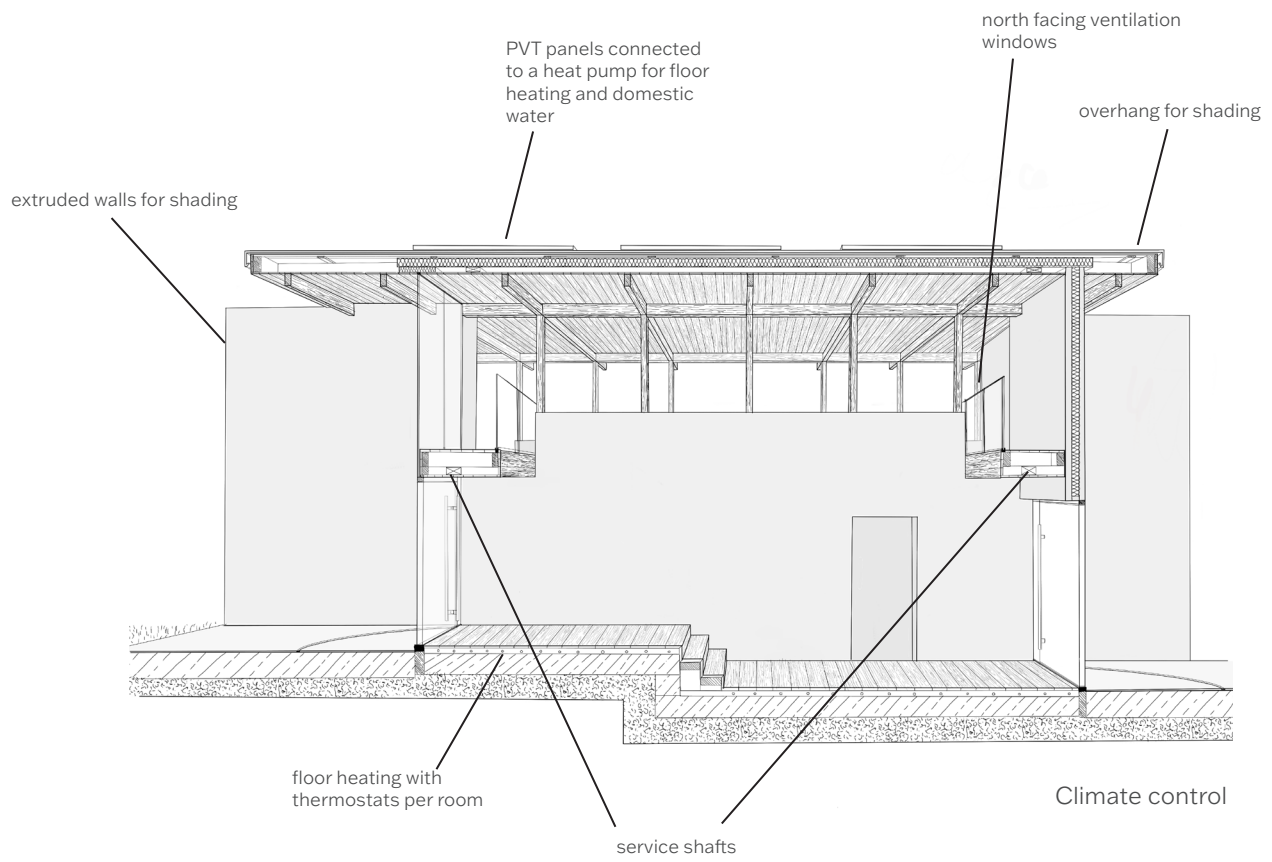








Concealed beam hanger connection  
used between primary and secondary beams





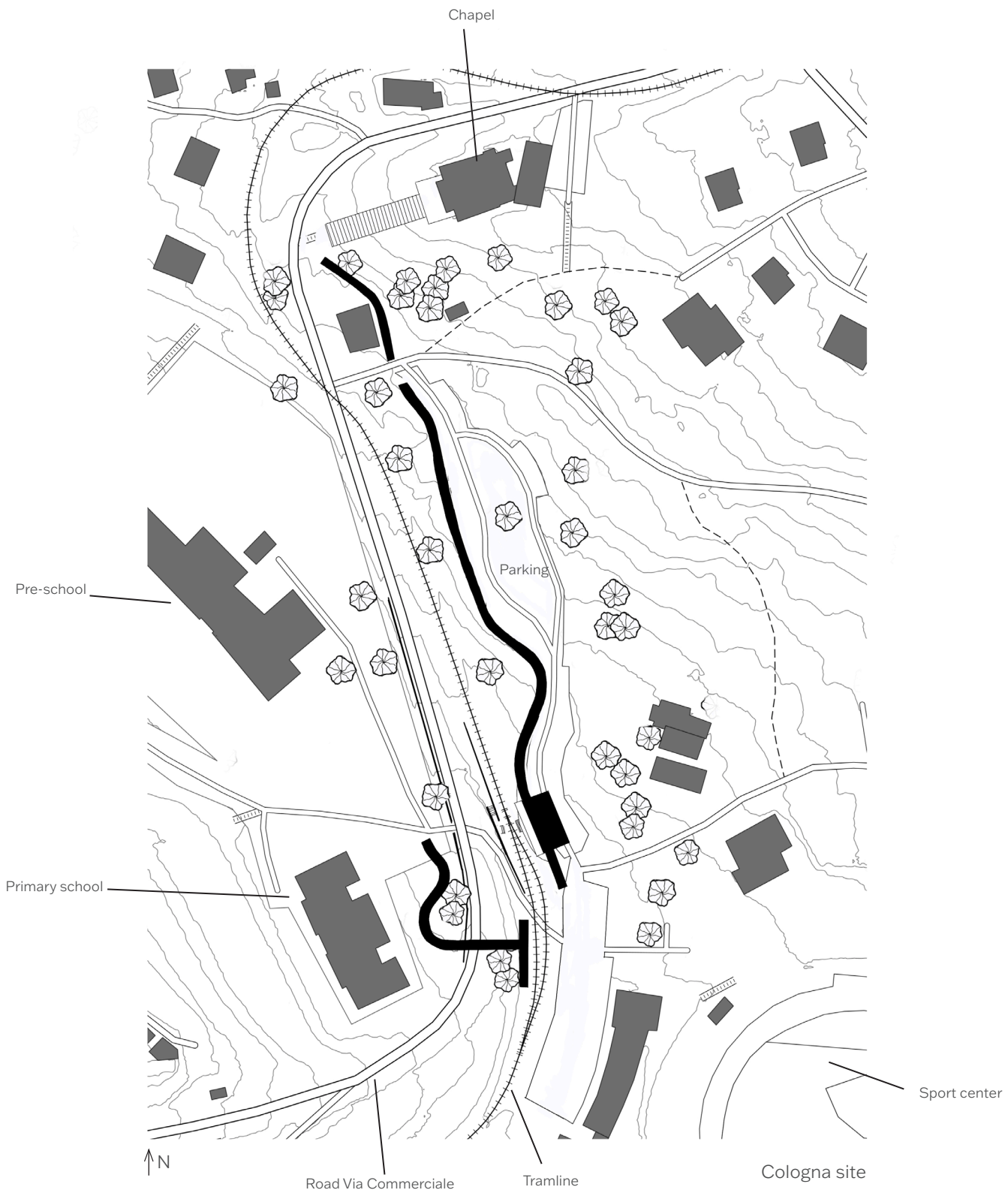


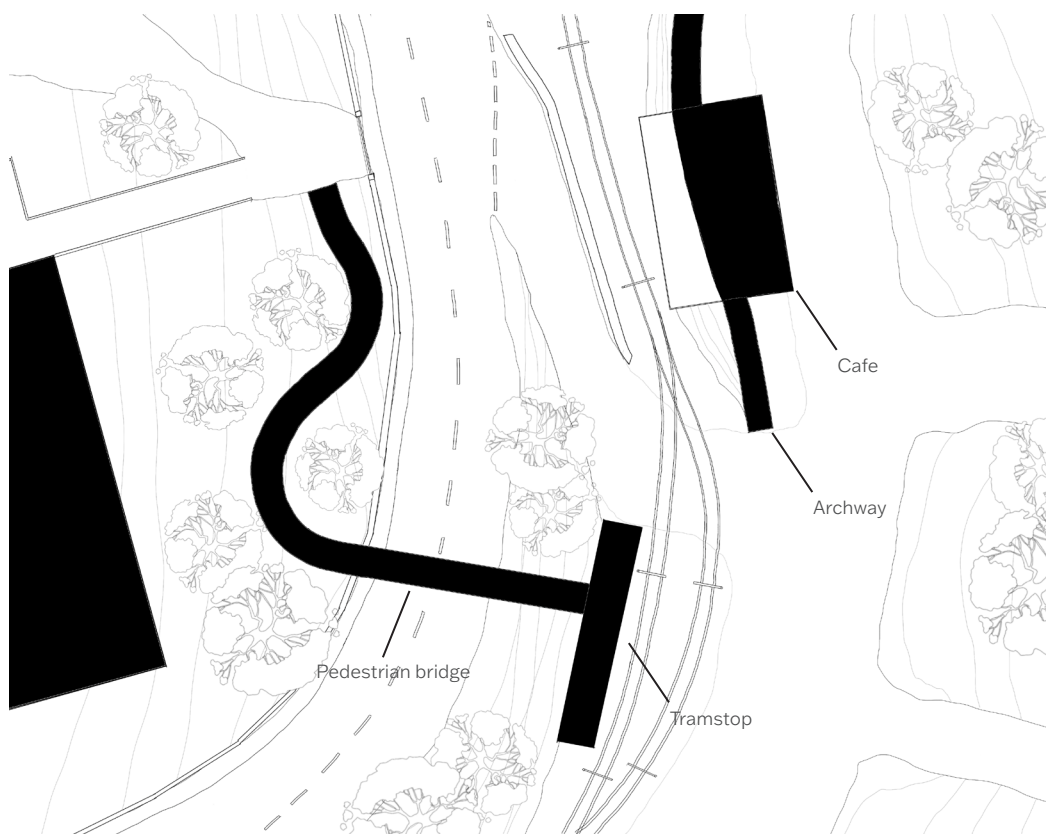
COLOGNA TRAMSTOP





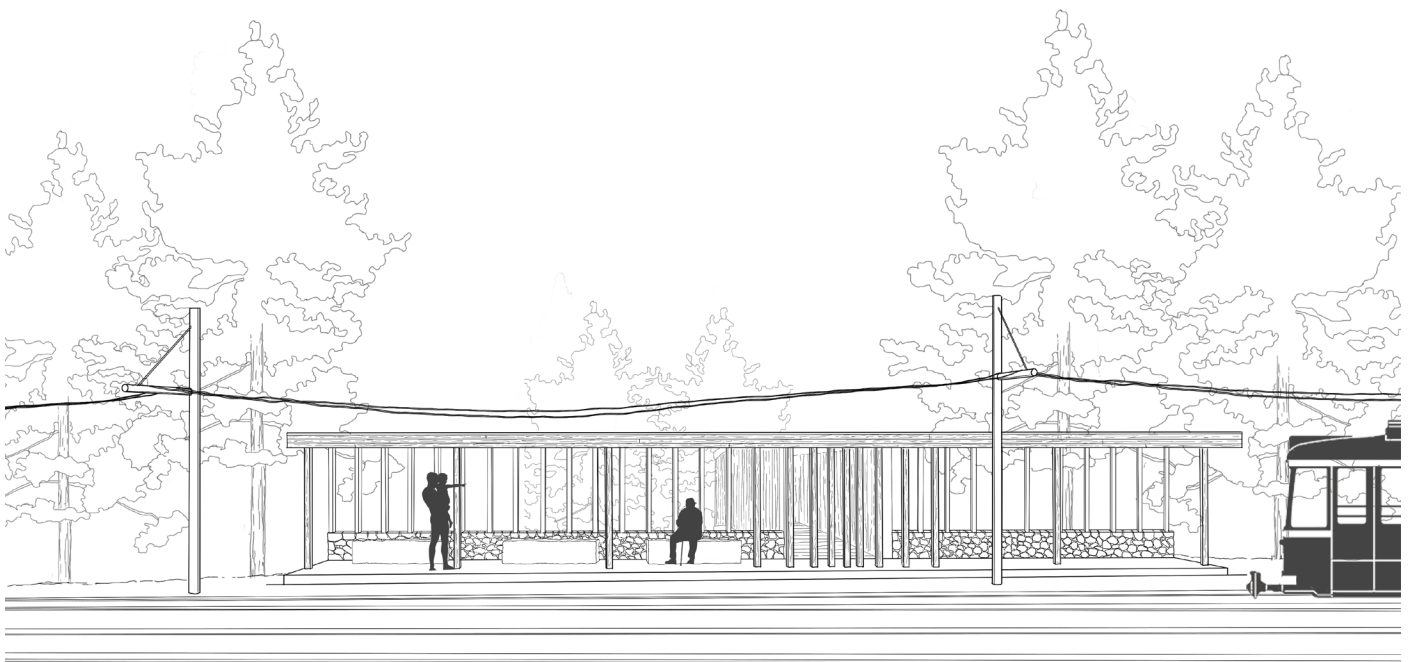
The third site is located around an existing tram stop, next to three schools, a sports center, and a chapel in district called Cologne. Besides redesigning the tram stop, the design introduces a walk bridge and a covered archway to create better pedestrian connections. At the intersection of all these elements, a tiny café is placed. The design connects different levels and sides of the site as well as responds to the land management on a micro-scale. The materiality follows the two other interventions.



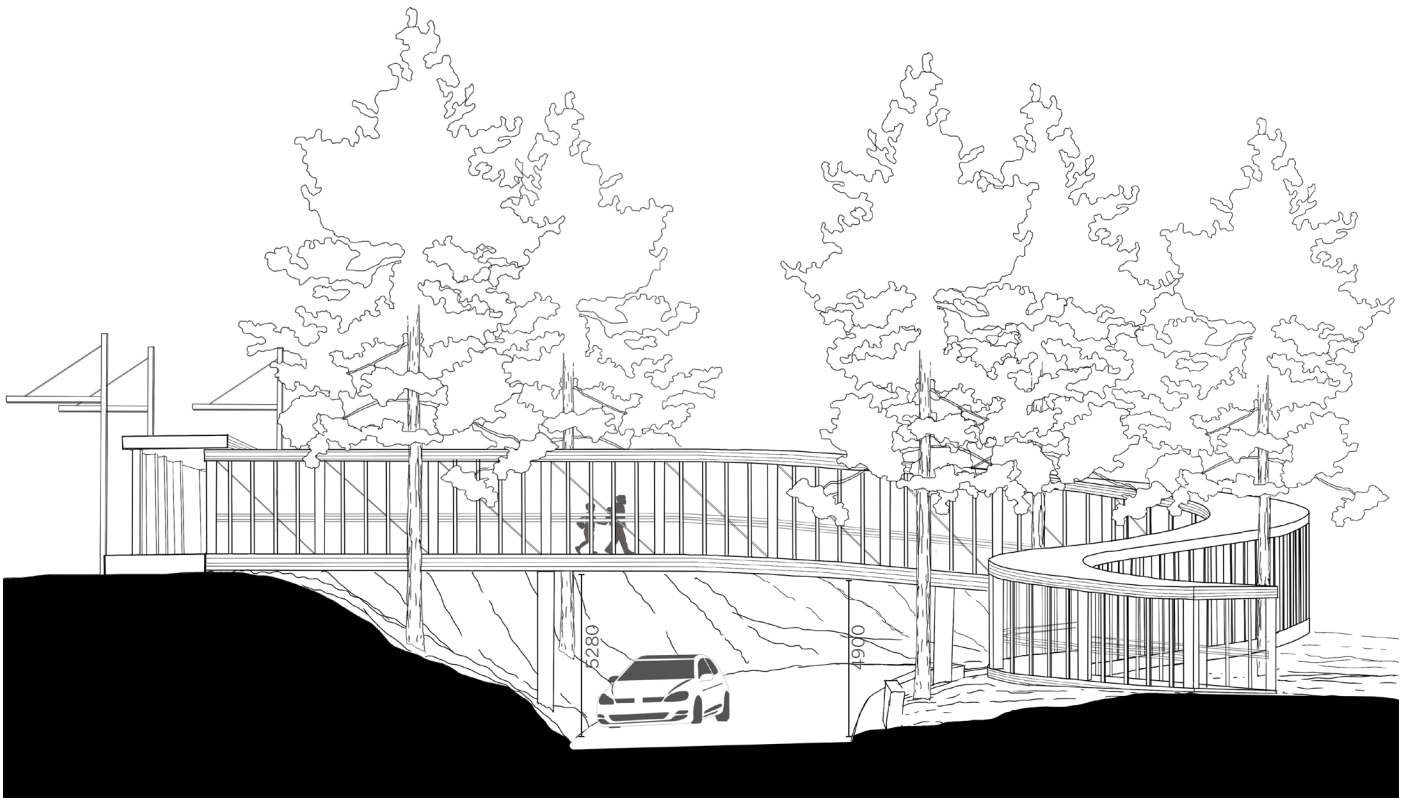


↑N

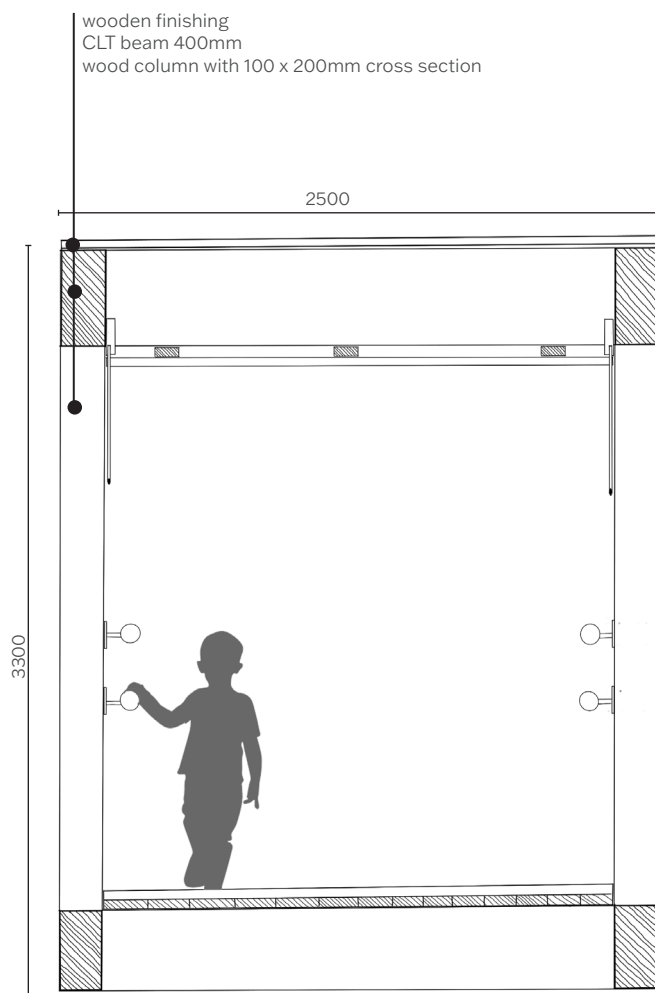
Cologna focus area



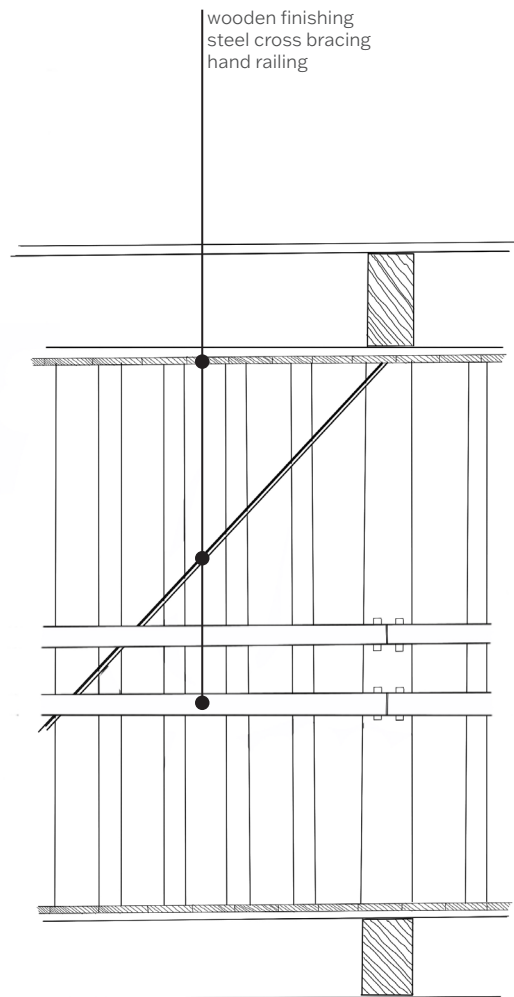
tram stop



pedestrian bridge



cross section

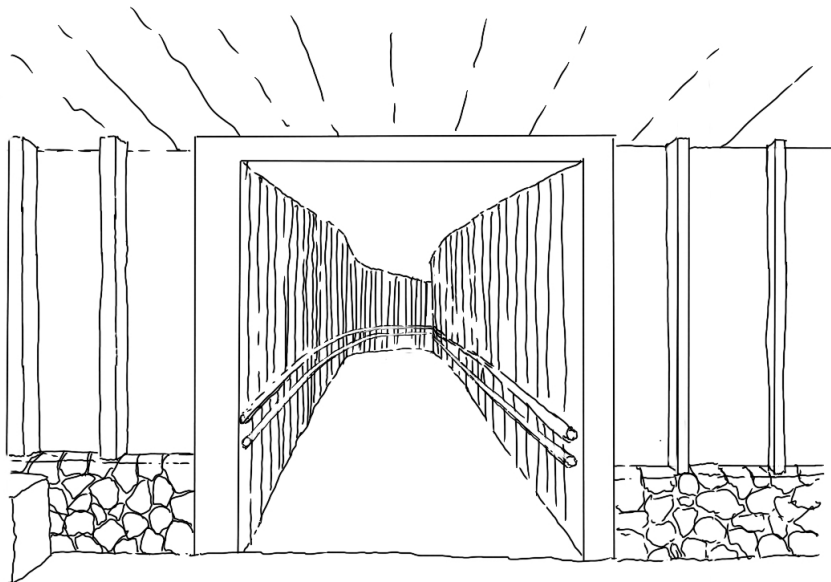


longitudinal section

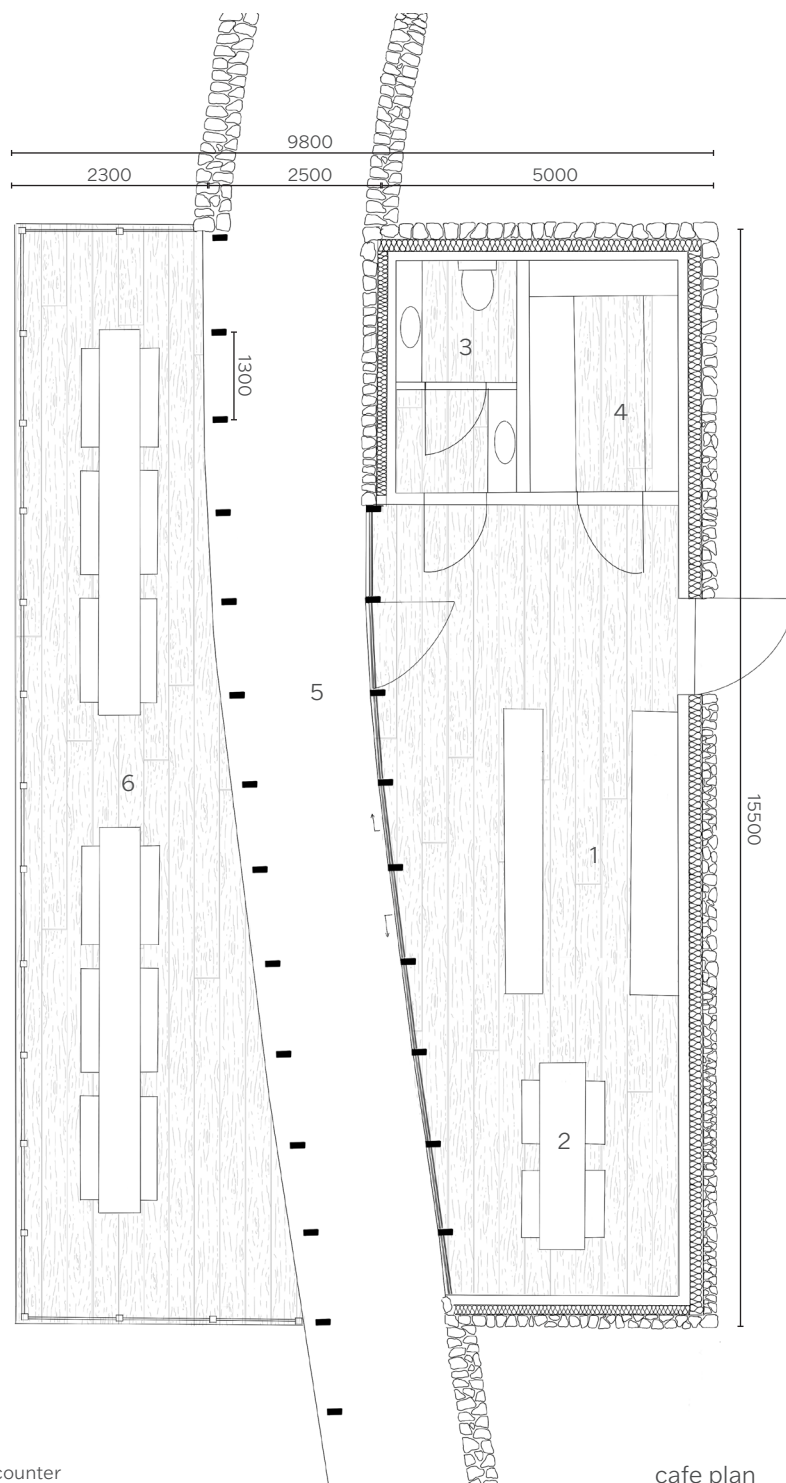
pedestrian bridge



view of the bridge from the road



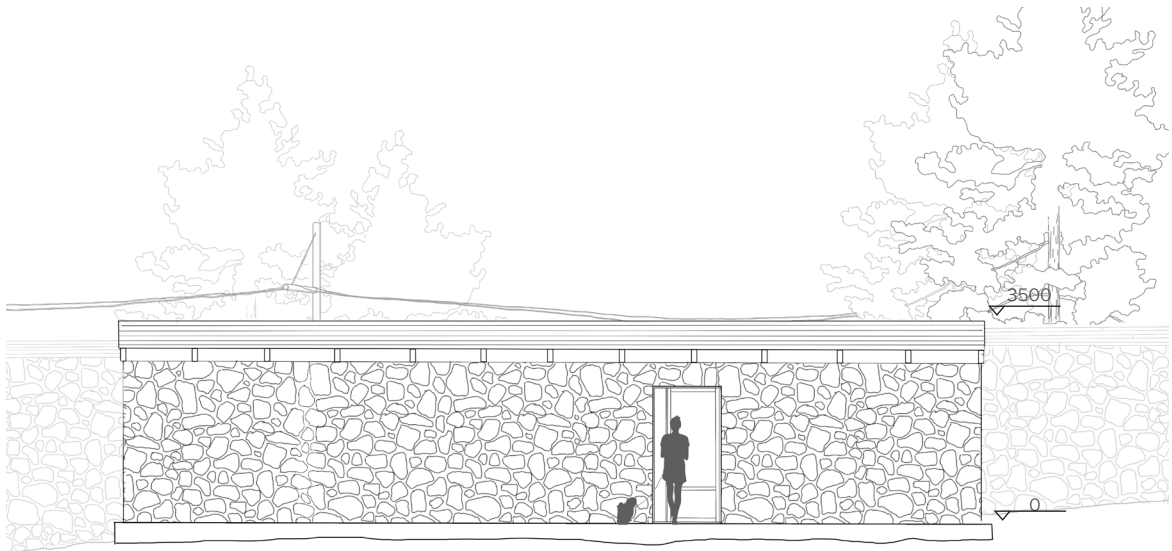
entrance of the bridge from the tramstop



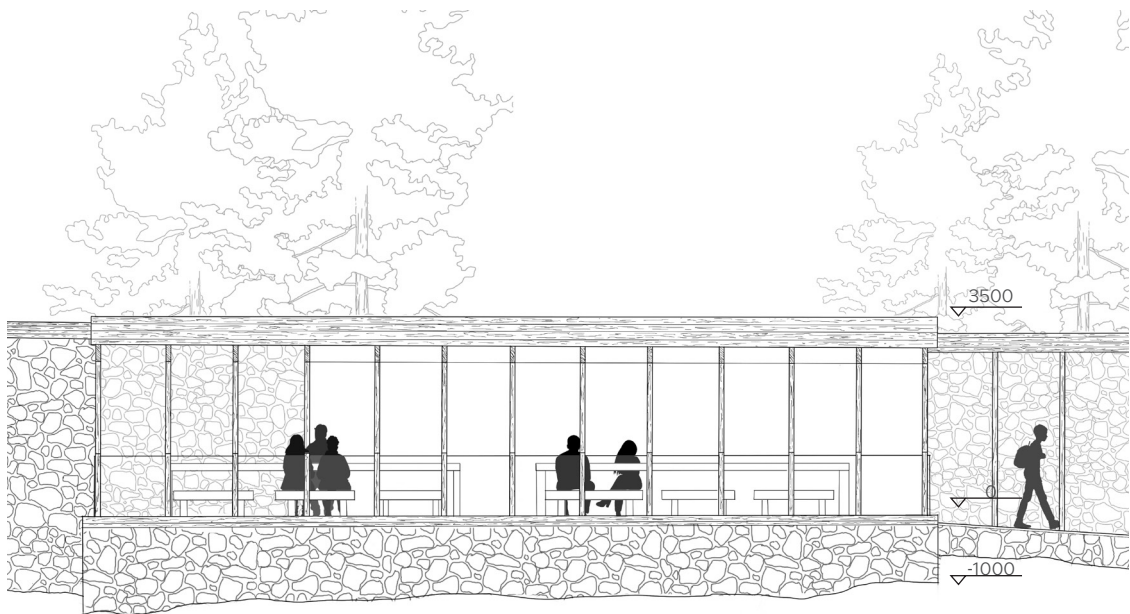
- 1 counter
- 2 seating area
- 3 rest room
- 4 storage
- 5 archway
- 6 terrace

cafe plan

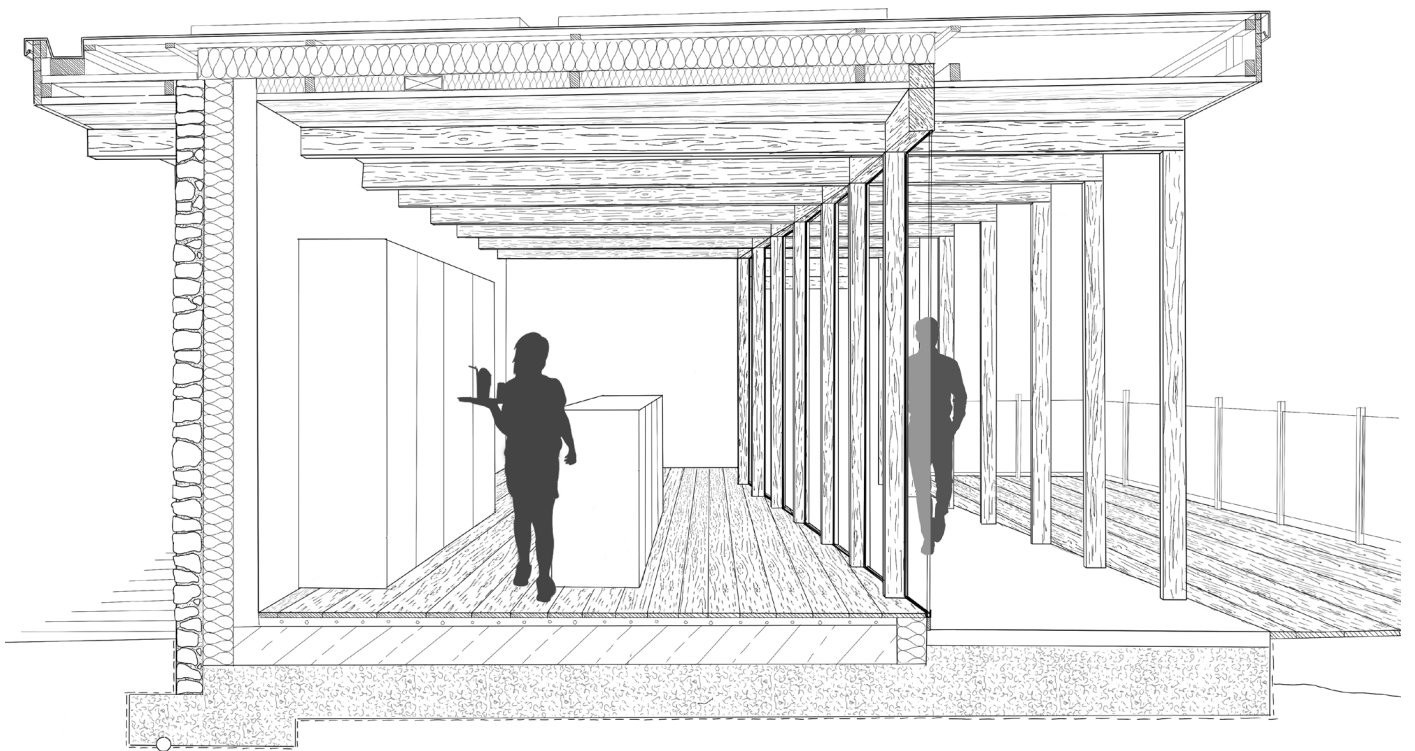




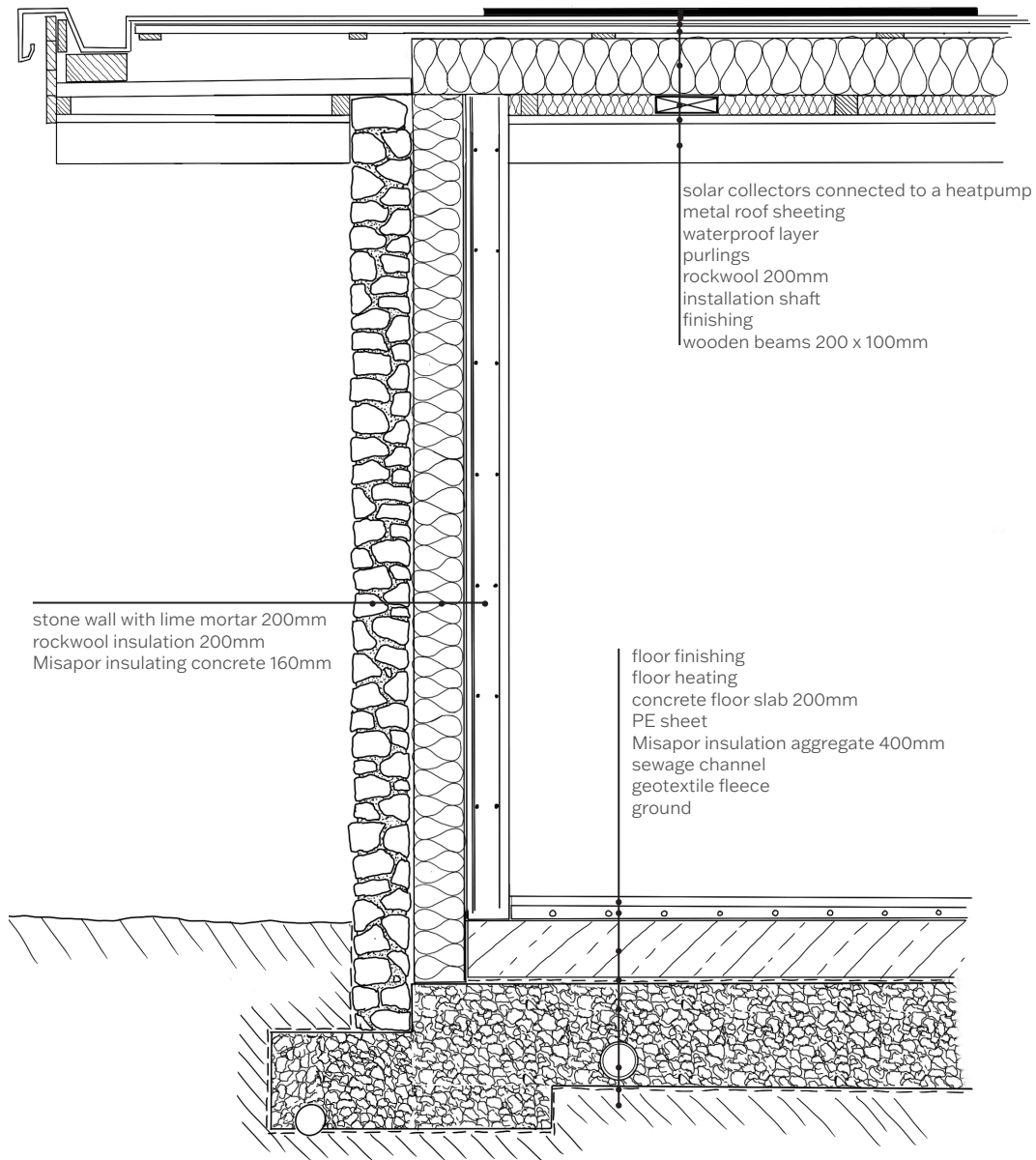
cafe east elevation



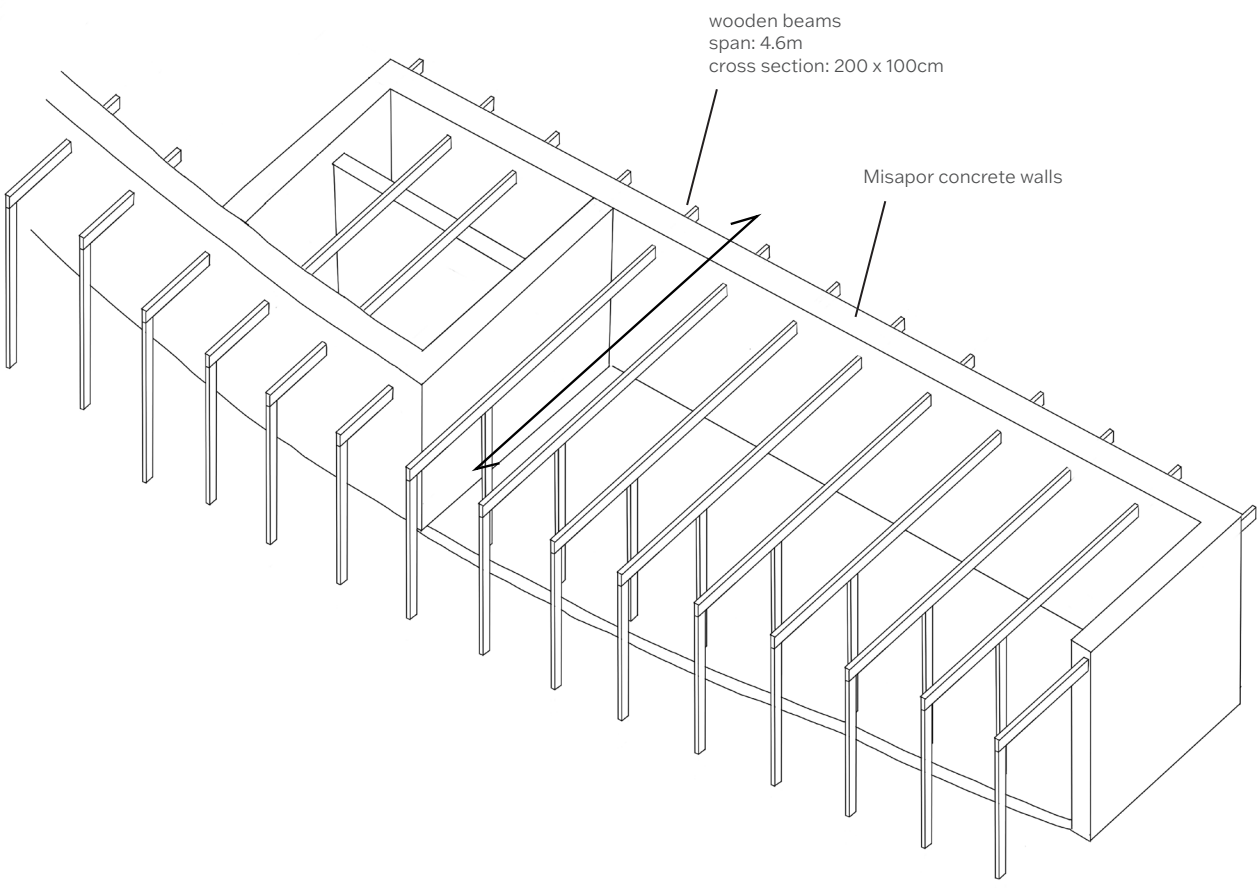
cafe west elevation



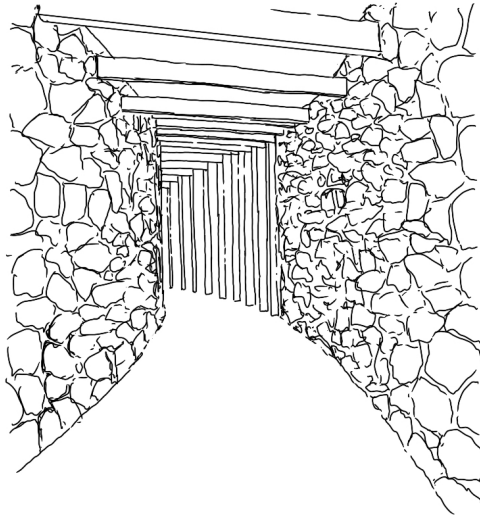
cafe section



cafe - section



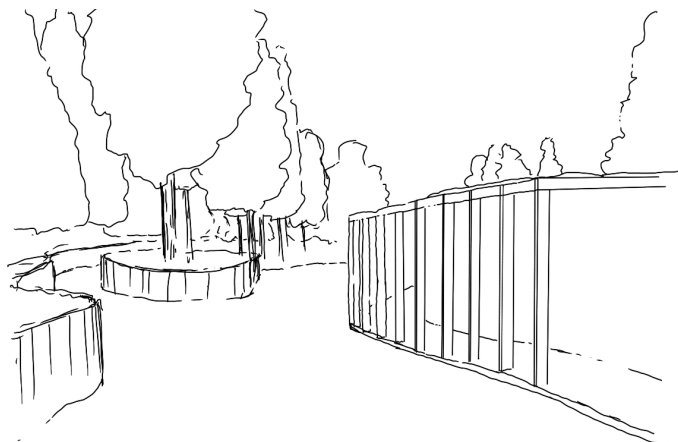
structural scheme



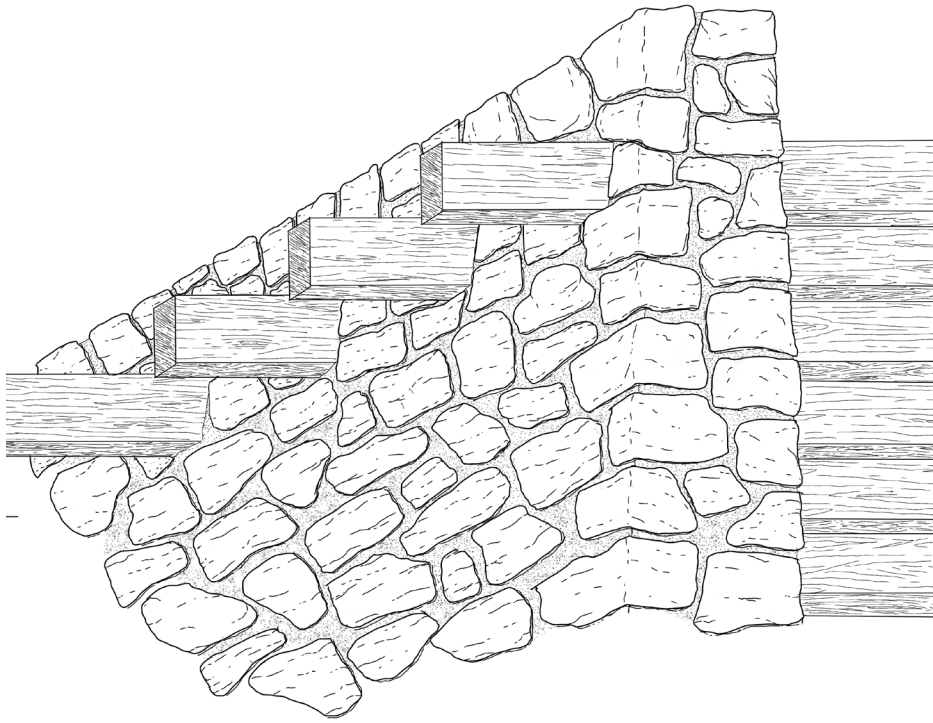
inside the archway



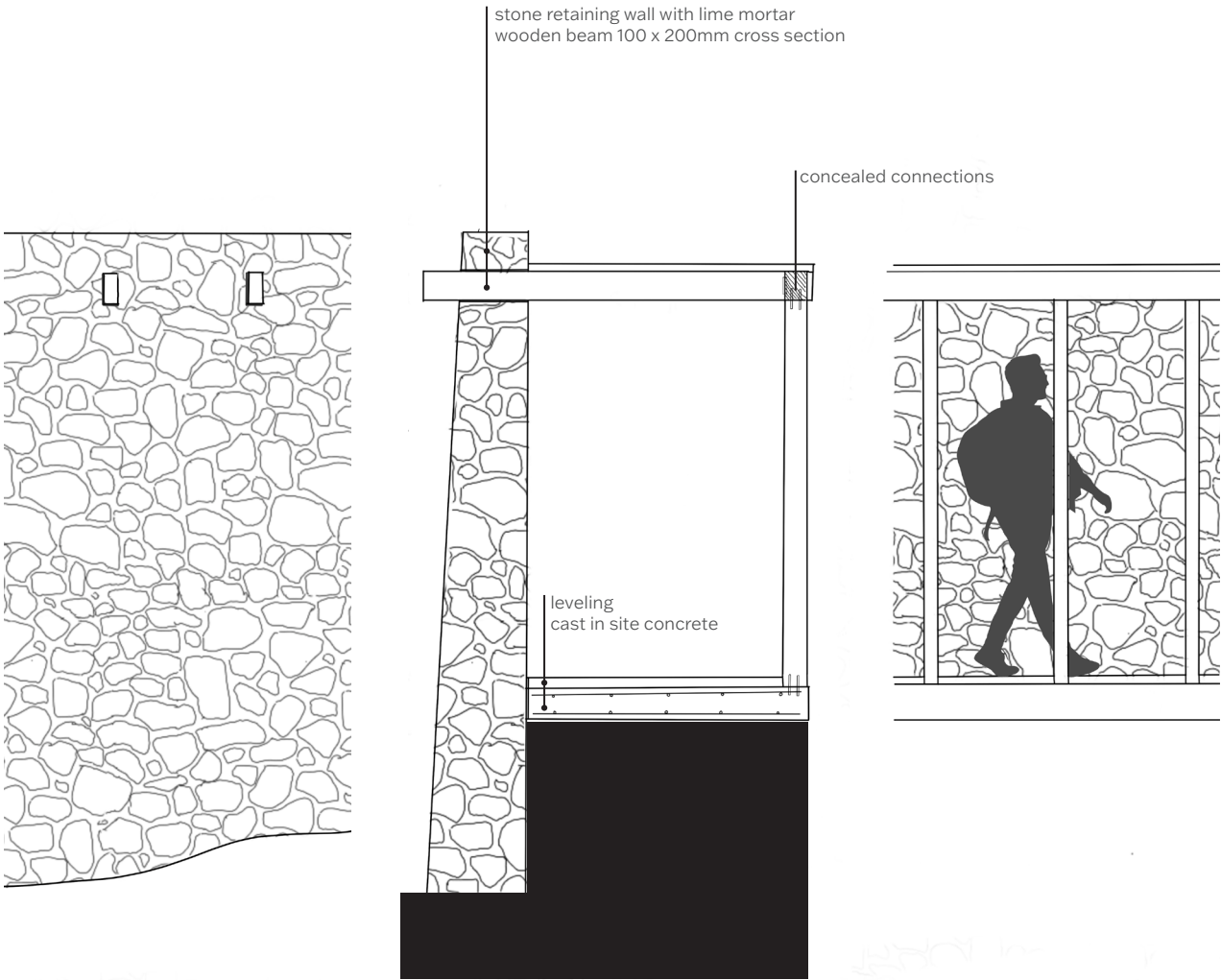
archway by the chapel



archway by the parking



construction principle



retaining archway





## REFLECTION

Overall, I find that my method throughout the project has been cohesive. This has created a solid foundation for my project and allowed me to work on a rather straightforward method. This has been very important for me as the studio of Borders and Territories gives a lot of freedom to the students. I feel that the framework I set for myself, kept me on track. The peri-urban area is still a great interest of mine, and thus I have found the project motivating. I also got to focus on other topics of interest such as landscaping, vernacular and banal architecture. My mentors have been a great help in shaping my project and their advice has helped me, especially with finding the methods and the logic of the project. For example, working on three different interventions was challenging for me, but with the help of my teachers, I learned to see this as an advantage. My peers have been also vital in my project giving support and in changing ideas.

During this project, I have gained and improved my skills for example in terms of mappings, software, sensibility towards landscapes as well as drawing by hand which I have become more confident about. I have also learned more about time management with a project of this length.

