

# RITUALS OF STONE

Reactivating a Granite Quarry Through Spa Architecture



LUCAS HALD & GABRIEL KANT / MASTER THESIS 2026

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/ EXAMINER: MIKAEL EKEGREN / SUPERVISOR: ISABELLA ERIKSSON



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Lucas Hald & Gabriel Kant  
Chalmers School of Architecture  
Department of Architecture and  
Civil Engineering  
Examiner: Mikael Ekegren  
Supervisor: Isabella Eriksson  
MPARC  
Building Design and Transformation  
Booklet

# Abstract

Abandoned granite quarries along the west coast of Sweden are cultural landscapes shaped by the historic stone industry. On Bohus-Malmön, these excavated terrains carry spatial, material and historical values that offer potential for new forms of public use. The project investigates how architectural interventions can amplify the experience of the landscape and use it as a setting for wellness, where stone, water and movement structure a sequence of rituals. The study focuses on Uddestensbrottet, a quarry with dramatic excavations and proximity to the sea providing conditions for a site specific spa environment. The research was conducted through a research-by-design methodology combining site analysis, prece-dent studies and iterative spatial exploration. The physical and cultural context of Bohus-Malmön and Uddestensbrottet was studied through historical research of stonemasonry on the island, photographic documentation, 3d modelling and on-site observations. Architectural references including Leça da Palmeira Swimming Pool, Therme Vals, Amangiri Resort, Quarry No. 8: Book Mountain and the Fuen-te Santa Spa competition proposal were examined to understand how architecture can interact with landscape, choreograph bodily movement and frame sensory experiences of water and stone. From this case analysis, an iterative design process was conducted using sketches, drawings and 3d-modeling. These methods helped understand the quarry as a geometric structure, as well as its material qualities and spatial connection to the adjacent context. The resulting proposal aims to demonstrate how the quarry's existing geometry, material presence and landscape can structure a sequence of ritual spaces embedded within the

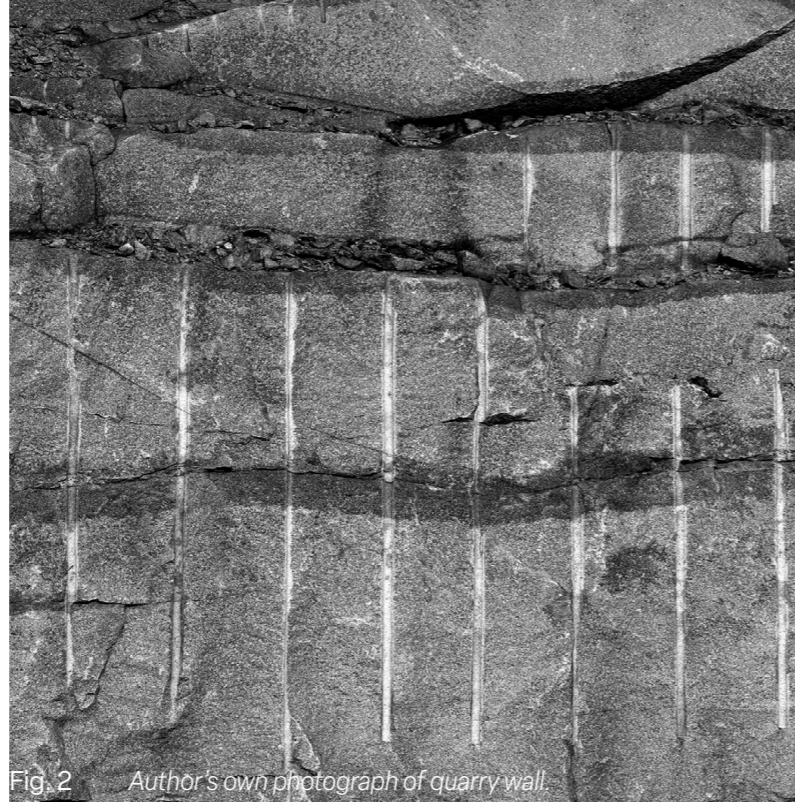


Fig. 2 Author's own photograph of quarry wall.

## GRANITE; LANDSCAPE INTEGRATION; QUARRY; SPA; BOHUS-MALMÖN

quarry. The movement through the spa unfolds as a series of spaces guiding movement by an axis, framing interior and exterior spaces. The thesis illustrates how architecture can reinterpret abandoned industrial quarry landscapes by building upon their spatial logic rather than erasing it. In Uddestensbrottet, the quarry excavations become the framework and demonstrate how abandoned quarries can be transformed into destinations for recreation and reflection, while preserving the historical traces and material character that define the cultural landscape of Bohus-Malmön.

**RITUALS OF STONE:** REACTIVATING A GRANITE QUARRY THROUGH SPA ARCHITECTURE

**BUILDING DESIGN AND TRANSFORMATION**

**GABRIEL KANT; LUCAS HALD**

**MIKAEL EKEGREN**

**ISABELLA ERIKSSON**

# Table of Contents

<b>Introduction</b>	<b>7</b>
PURPOSE	8
AIM	8
THESIS QUESTIONS	8
METHOD	9
DELIMITATIONS	9
READING INSTRUCTIONS	9
<b>Background</b>	<b>11</b>
STONEMASONRY ON BOHUS MALMÖN	12
TOOLS AND METHODS USED IN QUARRYING	13
SPA RITUALS AND TRADITIONS	14
GANBANYOKU (岩盤浴)	14
STONE MASSAGE	14
DRY SAUNA	15
STEAM BATH	15
HYDROTHERAPY	16
FOOT BATH	16
COLD PLUNGE	17
SEAWEED - BOHUSLÄN	17
REFERENCE PROJECTS	18
XLII, FUENTE SANTA SPA COMPETITION FINALIST	19
AMANGIRI SPA AND RESORT	20
THE THERME VALS	21
QUARRY NO. 8: BOOK MOUNTAIN	22
LEÇA DA PALMEIRA SWIMMING POOL	23
<b>Main Material</b>	<b>25</b>
CONTEXT	26
MUNICIPALITY OF SOTENÄS	26
BOHUS-MALMÖN	28
UDDESTENSBROTTET	30
CONCEPT	34
PROGRAM	38
OUTDOOR SPACES	40
ZONING	40
CONNECTIONS	41
POOL TEMPERATURE	41
PHASE I / arrival	44
PHASE II / retreat	48
PHASE III / spa	52
RITUAL I - enter	54
RITUAL II - sense	56
RITUAL III - cleanse	58
RITUAL IV - gather	64
RITUAL V - contrast	66
RITUAL VI - confront	68
PHYSICAL MODELS	72
<b>Discussion</b>	<b>78</b>
<b>Extended List of References / Bibliography</b>	<b>80</b>
List of Figures	82
<b>Student Background</b>	<b>84</b>

# Introduction



Fig. 3 *Author's own Photographs from site visit.*

PURPOSE

AIM

THESIS QUESTIONS

METHOD

DELIMITATIONS

READING INSTRUCTIONS

## PURPOSE

The west coast along Sweden, recognised for its vast barren granite landscapes, has been an important extraction area of granite over history. The quarries along the coastal line have served their purpose and been left abandoned for several decades. These unique landscapes have great potential to serve as recreational areas attracting tourism.

Initiatives of creating new purposes for quarries are many, one of which is located on Bohus Malmön: an island with an extensive legacy of stonemasonry. Stallebrottet has become a unique venue for theater and concerts, and the idea of the quarry as a protagonist should be further developed for other activities.

Other interventions in the quarries of Bohus Malmön could be made to make the quarries a venue for other types of facilities such as a spa that let the visitor experience the quarry in a new way. This intervention would in turn have the potential to increase tourism over the year and activate the island of Bohus Malmön trans-seasonally.

## AIM

This thesis will investigate how to redefine the use of abandoned granite quarry Uddestensbrottet with a spa program and intensify its dramatical landscape.

## THESIS QUESTIONS

How can architecture convert an abandoned quarry into a venue of wellness and intensify the spatial and ritual qualities of stone?

How can a spa resort be rooted in the quarry so that rock, water and movement choreograph a sequence of bathing rituals?

## METHOD

The development of the thesis has mainly been conducted through a research through design method. By developing existing ideas further through an iterative process, analysing projects, distilling their spatial and tectonic qualities. Conventional drawings, 3d models, visualisations and sketching are used as a design tool to investigate ideas and develop the research through the process.

## DELIMITATIONS

The thesis investigates how an industrial quarry can be used as a base for contemporary architecture by exploring its spatial, material and cultural potentials. Through site study, theoretical review and spatial exploration, the research demonstrates how such abandoned landscapes can be redefined through adaptive design interventions. Through these analyses, the study results in a site specific design proposal for a spa resort in Uddestensbrottet.

The design proposal does not attempt to solve technical aspects for pool maintenance nor HVAC systems, only dedicates space for such functions.

## READING INSTRUCTIONS

The thesis is intended as a sequence of rituals, starting with history and traditions before proceeding to site analysis, spatial concept and actual design proposal. Lastly, the architectural intervention and its relation to the research questions is evaluated.

# Background



Fig. 4 Author's own Photographs from site visit.

## STONEMASONRY ON BOHUS MALMÖN

### TOOLS AND METHODS USED IN QUARRYING

### SPA RITUALS AND TRADITIONS

GANBANYOKU (岩盤浴)  
STONE MASSAGE  
DRY SAUNA  
STEAM BATH  
HYDROTHERAPY  
FOOT BATH  
COLD PLUNGE  
SEAWEED BATH - BOHUSLÄN

### REFERENCE PROJECTS

XLII, FUENTE SANTA SPA COMPETITION FINALIST  
AMANGIRI SPA AND RESORT  
THE THERME VALS  
QUARRY NO. 8: BOOK MOUNTAIN  
LEÇA DA PALMEIRA SWIMMING POOL

## STONEMASONRY ON BOHUS MALMÖN

C. A. Kullgren on Bohus-Malmön began to extract granite in 1842 to supply the construction of the Trollhätte canal. Stone from Bohus-Malmö was also used in the 17th century to supply stone to the construction of Carlstens fortress (Rehnberg, 1973).

The stone of Bohus Malmön is mostly fine grained, light grey granite best suited for paving and curb stones. A skilled stonemasonry was able to make a daily production of around 1000 small paving stones, sized as 8-10cm on all sides (Lidbeck, n.d., Stensorter – produktion).

The stonemasonry in Bohus Malmön had a peak in 1931 but it stagnated and shrank until quarries were all abandoned in 1977 (Lidbeck, n.d., Stenbrytningen).



Fig. 5 Photograph from Bohusläns museum (UMFA53014:0021), depicting a stonemason cutting paving stone. Public domain.



Fig. 6 Figure X. Photograph of stonecutters working on Bohus-Malmön, Sweden (UMFA54695:0036). Public domain.

## TOOLS AND METHODS USED IN QUARRYING

”Svallen” and ”Klyven” are the two cleavage directions. Svallen is the horizontal cut and Klyven is the vertical cut with an approximate direction northwest - southeast. Quartz veins define where the Klyven were to be located (Lidbeck, n.d., Klyvningen). During the formation of the terrain, voids in the bedrock would be filled with silica rich waters and thus creating quartz veins. These veins give a hint where the stone is the weakest.

”Rundkil och slägga” Plug and feathers. It is a traditional method where a hole is drilled. Two bent metal plates are placed inside the hole. Then a metal rod or also called plug is placed between them. When hammering with a sledgehammer the stone cracks. The extraction of stone is controlled with several plugs and feathers in a line. The cuts had to be of high precision, only a deviation of 1,5mm were acceptable (Lidbeck, n.d., Stenbrytningen).

## SPA RITUALS AND TRADITIONS

### GANBANYOKU (岩盤浴)

Ganban-yoku or heated stone beds is a spa treatment with roots from Japanese hot springs. The treatment has been studied to reduce effects from anxiety and improve mood. The stone heats the body from within and slows the body through ritualized rest.



Fig. 7 Adapted from *Kotohira Kadan, Kotohira, Japan* (Kotohira-kadan20n4592.jpg). Cropped and color adjusted. CC BY 2.5 and GFDL.

### STONE MASSAGE

Dating back centuries, hot stone massage is an ancient technique. The stones are traditionally heated in river water and were originally used to treat digestion and improve internal organs.

The element of heat has several bodily benefits, including relieving muscle tensions and reducing pain. Using hot stones improves blood flow, loosening the joints and increasing flexibility. Also, hot stone massage can be anti-inflammatory.

Most importantly, hot stone massage helps to put the body in a state of calmness, easing stress and anxiety (Vallie, 2024).



Fig. 8 Adapted from *Hot stone massage* (2006). Wikimedia Commons. Cropped and color adjusted. CC BY 2.0.

### DRY SAUNA

Sauna bathing has a strong tradition and culture all around the world and has been found to have several health benefits. Regular sauna use has been linked to improved circulation, immune defence and endothelial functions (Newson et al., 2026).

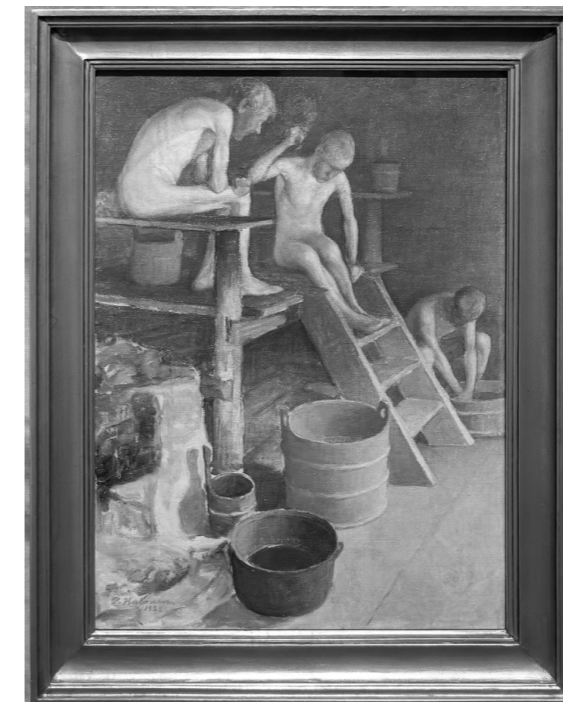


Fig. 9 Adapted from *In the Sauna* from the series *An Ode to Finland* by Pekka Halonen (1916). Cropped and color adjusted. Public domain.

### STEAM BATH

A steam sauna, also known as a wet sauna is a thermal bathing space characterized by high moisture and moderate temperatures. Unlike traditional dry saunas, steam saunas generate moist heat through steam generators or heated water, creating much more prevalent humidity. The combination of heat and moisture promotes relaxation, circulation, and respiratory comfort (Jacuzzi, n.d.).



Fig. 10 Adapted from *Interior of a hammam steam bath with stone seating*. Cropped and color adjusted. CC BY-NC-SA 2.0.

## HYDROTHERAPY

Hydrotherapy is a collective term for different types of activities such as water jets, temperature shifts and baths. Hydrotherapy may support muscle relaxation and can cause temporary pain release, but it's more of an experienced based ritual which promotes social relaxation (Cleveland Clinic, 2022).



Fig. 11 Photograph of the Maurice Bathhouse in Hot Springs National Park, Arkansas, United States (2023), by Larry D. Moore. CC BY 4.0.

## FOOT BATH

Foot baths is a wellness feature that involves immersing the feet in warm or cold water to promote relaxation and heighten circulation. Footbathing increases blood pressure and heart rate and improves sleep (Saeki, Nagai, & Hishinuma, 2007).

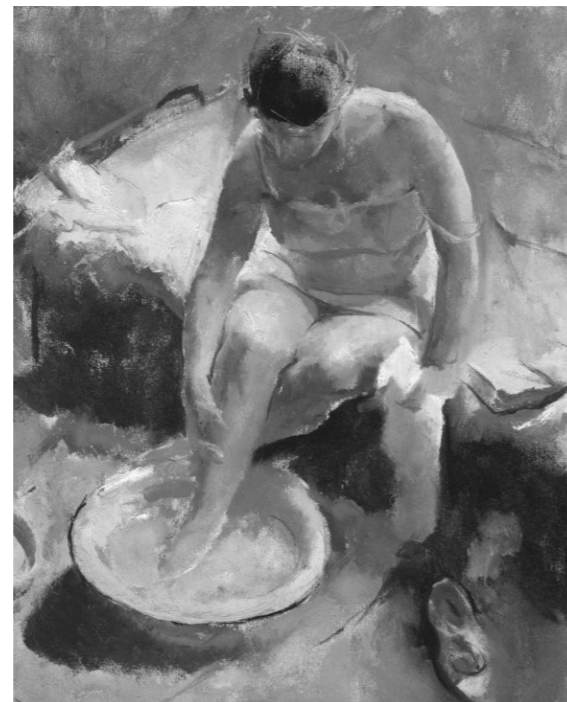


Fig. 12 Adapted from Foot Bath by John R. Frazier (1917–1923). Oil on canvas. Cropped and color adjusted. Public domain. Photograph courtesy of Brooklyn Museum..

## COLD PLUNGE

Cold plunges and various forms of cold water immersions are a common feature in contemporary spas. Cold-water immersion spaces are often integrated into spa facilities to create a contrast between heat and cold, enhancing both sensory and physical experience for the user. The concept of cold plunges has been common in many different cultures throughout history, for example being a common feature in Roman Bathhouses. In Sweden, cold plunges have a strong connection to bathing culture, nature and architecture. The ritual of alternating between heat and cold is believed to improve circulation, strengthen the body, and promote mental well-being.



Fig. 13 Adapted from Japanese winter bathers by Bain News Service (1926). Cropped and color adjusted. Public domain. Photograph from Library of Congress.

## SEAWEED BATH - BOHUSLÄN

Seaweed bath has been a part of the seaside culture on the west coast of Sweden since the 1800s. Spas in Bohuslän offered medical baths with various additives, commonly seaweed, mud or minerals. Seaweed treatments are known to have health-promoting effects associated with skin rather than with relaxation alone. Due to its high content of oils, vitamins and minerals, research suggest that seaweed is beneficial for the skin (Bohusläns museum, n.d.).



Fig. 14 Photograph of Gustafsberg bathhouse, Uddevalla, Sweden (UMFA53014:0022), taken in June (as noted in the archive record). Public domain

## REFERENCE PROJECTS

### XLII, FUENTE SANTA SPA COMPETITION FINALIST

Project year: 2015  
Category: SPA  
Architects: Lecumberri & Cidoncha,  
Gaztelu Jerez Architects



Fig. 15 XLII – Finalist proposal for the Fuente Santa Spa competition, Spain (ground floor plan).  
Note. From XLII (2015), ArchDaily. © XLII / ArchDaily.

XLII, Fuente Santa Spa Competition finalist, is a spa facility located on the coast of Fuente Santa, Spain. The building structure seals a gap in a stone landscape. The hotel rooms are detached in a separate building.

The plan has a rhythmic logic with horizontal concrete walls. The walls connect the landscape from both sides sealing the gap. The project creates a set of sequences. The first being the open landscape free of program. An axis going through the spa is consciously disrupted by different spaces, creating a distinct set of spatial sequences spanning through the interior of the spa. The program is divided into 2 parts, the entrance zone and the spa. The entrance zone consists of a restaurant, conference hall, gallery hall and a multifunction space, reception staff quarters, dressing rooms and treatment rooms. The changing rooms are located to transition the visitor in towards the axis that leads through the second part the spa.

## AMANGIRI SPA AND RESORT

Project year: 2013  
Category: SPA  
Architects: Marwan Al-Sayed, Wendell Burnette  
and Rick Joy



Fig. 16 Adapted from *Amangiri Pool at Sunset (2014)*, photograph by Steve Jurvetson. Cropped and Color adjusted. CC BY 2.0. Retrieved from Wikimedia Commons

Remotely located in Canyon Point of Utah, Amangiri resort is embedded in a valley setting protected by the rock. The hotel is carefully designed against the landscape with a minimalistic appearance, to avoid stealing attention from the surrounding rock formations. Made of locally sourced sand particles, the wall structures attempt to mirror the contours and contrasts of the rock on site.

At arrival, the attention is drawn to the mountain rather than the architecture that appears more discreet. The main feature of the resort is the pool adapted to the contour of the terrain, respecting the landscape as well as bringing the visitor closer into it. Courtyards in between the building blocks form recreational spaces when moving through the complex. For the interior, windows and doorways are composed to frame views of the red cliffs.

## THE THERME VALS

Project year: 1996  
Category: Thermal Bath  
Architects: Peter Zumthor



Fig. 17 Adapted from *Untitled photograph (May 1999)*, photograph by jpmm. Cropped and color adjusted. CC license. Retrieved from <https://www.flickr.com/photos/jpmm/4178076787>

The Therme Vals is a spa hotel resort built upon thermal springs in the Graubunden Canton in Vals, Switzerland. Made of locally extracted stone slabs, the spa building is submerged into the hillside. The hotel rooms are detached in a separate building.

Besides acting solely as a wellness center, the Therme Vals acts as an architectural journey of sequences with different sensory experiences. Initiating the ritual is a corridor, guiding the visitor to the changing rooms. This narrow passage serves as a sluice, slowing down the visitor and transitioning the body into a calm state of being. Upon the transition, the spa uncovers a series of smaller spaces, such as warm baths, cold plunge and quiet areas. In turn, these niches define a more open and social bathing area and work as pauses in the journey. The movement at Vals is deliberately not linear, but rather circular, giving the visitor a free choice of orientation. Through these architectural interventions, Therme Vals is not only a spa but rather a movement through space defined by controlled compression and release, dark and light, and the physical presence of stone.

## QUARRY NO. 8: BOOK MOUNTAIN

Project year: 2022  
Category: Library  
Architects: DnA\_Design and Architecture



Fig. 18 Adjusted from Quarry No. 8: Book Mountain by DnA, Lishui, China. Photograph by Wang Ziling. Cropped and Colour adjusted. Used with permission

Minimal insertions with stone, steel, and wood stabilize, light, and furnish the excavated space while keeping the quarry's rough interior intact. The project creates a new public space inside the bounding box of the quarry (ArchDaily, 2022). The entrance to Quarry No. 8 is a vertical cave passage, creating a dramatic atmosphere. Small light installations lit up the walls of the entrance.

## LEÇA DA PALMEIRA SWIMMING POOL

Project year: 1965  
Category: Bathing Facility  
Architects: Álvaro Siza



Fig. 19 Adjusted from Swimming pools Piscinas de Marés, Leça da Palmeira, Portugal, by Álvaro Siza. Photograph by Christian Gänshirt. Cropped and colour adjusted. CC BY-SA 4.0.

Leça da Palmeira Swimming Pool is a bathing facility located in Matosinhos Portugal. The building is infused into the natural stone formations on the beach along the Atlantic ocean.

The pools are designed to reach out into the ocean and blend with the natural stone formations. The built structures and the landscape are in harmony, with the color of the concrete is in a close shade to the natural stone creating a soft transition between the building and the exterior. The project is built around its environment and plays with views. The building divided the experience in a set of sequences. The entrance blocks the ocean view which is later revealed. The experiences created with spatial divisions are set in a way that amplifies the experience of the landscape.

# Main Material



Fig. 20 Author's own Photographs from site visit

## CONTEXT

MUNICIPALITY OF SOTENÄS  
BOHUS-MALMÖN  
UDESTENSBRÖTTET

## CONCEPT

### PROGRAM

OUTDOOR SPACES  
ZONING  
CONNECTIONS  
POOL TEMPERATURE

### PHASE I / arrival

### PHASE II / retreat

### PHASE III / spa

RITUAL I - enter  
RITUAL II - sense  
RITUAL III - cleanse  
RITUAL IV - gather  
RITUAL V - contrast  
RITUAL VI - confront

## PHYSICAL MODELS

## CONTEXT

### MUNICIPALITY OF SOTENÄS

Sotenäs municipality is located in the middle of Bohuslän in Västra Götaland County, furthest out towards the Skagerrak between Gothenburg and Oslo. The municipality is a summer destination that attracts a lot of seasonal tourism, with approximately 300,000 commercial guest nights, June-August (Tillväxtverket, n.d.). Holiday accommodation varies from hotels like Smögens Hafvsbad to cabins, camping and municipal guest harbours for example inside Smögen, Kungshamn, Hunnebostrand and on Bohus-Malmön. The municipal cultural environments are characterized by stonemasonry era and bohusgranite. The municipality emphasizes its unique environment, where the sea, the landscape and the buildings together create a cultural landscape of national interest which has a strong attraction potential for year round residents, part time residents and visitors (Sotenäs kommun, 2024).



Fig. 21 Author's own photograph.

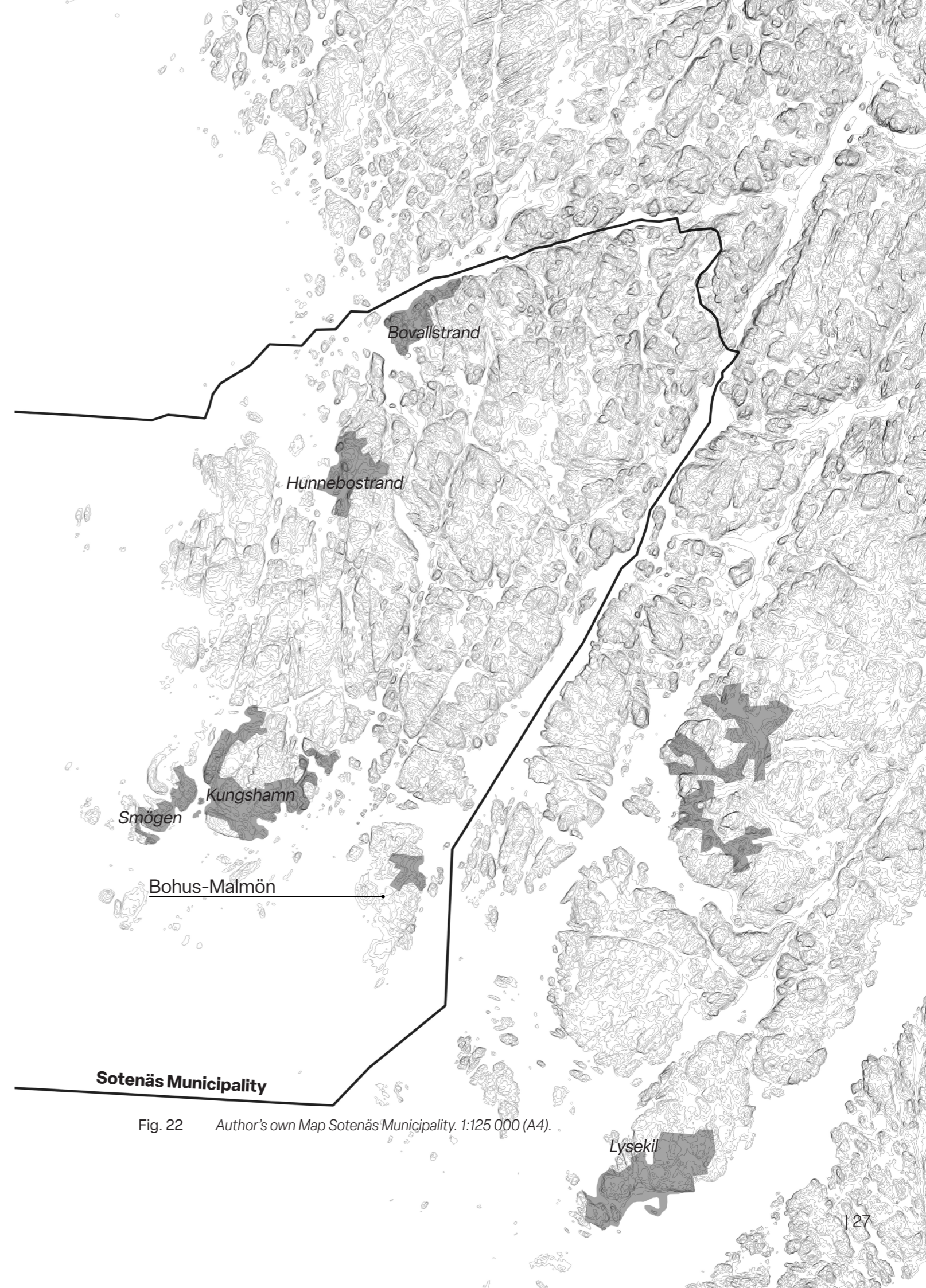


Fig. 22 Author's own Map Sotenäs Municipality. 1:125 000 (A4).

## BOHUS-MALMÖN

Bohus-Malmön is a granite island in Sotenäs Municipality, historically shaped by stone quarrying and today characterised by a high share of seasonal dwellings. The island has during history transformed from a fishing village into a stonemasonry community. Fishing dwellings go back to the 16th-century and are concentrated in the centre of today's settlement (Nordell & Rydbom, 2009). The quarries stand as evidence of hard labor that sustained local livelihoods and as monuments to a key era in Sotenäs. Together, Bohus-Malmöns quarries tell a distinctive story of how the granite industry evolved, its phases and extraction methods, from the 1840s through the 1960s (Nordell & Rydbom, 2009).

A free car ferry provides the sole road connection to the mainland. Settlement is concentrated on the sheltered east shore, with the densest fabric along the central east coast where the grocery shop, guest harbour and places to eat are located. The public realm supports everyday recreation. Marked walking paths cross the granite outcrops and follow the shoreline, with short loops starting near the harbour. At the northern end, the former Stallebrottet quarry functions as an open-air venue for theatre, concerts and other public events, acting as a cultural anchor for the island. Overall, the island presents a compact, weather-exposed settlement with clear seasonal peaks, strong cultural landscape values and limited access capacity via the ferry.



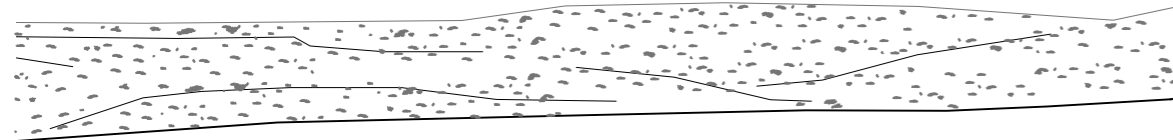
Fig. 23 Author's own photograph of Stallebrottet.



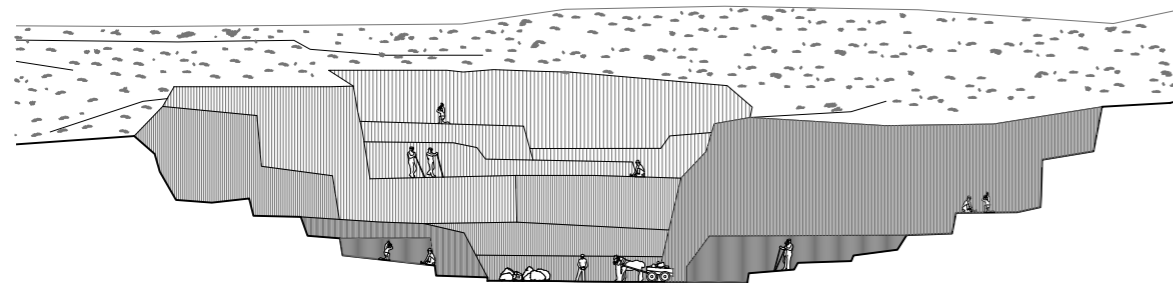
Fig. 24 Author's own Map Bohus Malmön. 1:20 000 (A4)

## UDESTENSBRÖTTET

Pre 1880



Active stone quarry.



Current situation.

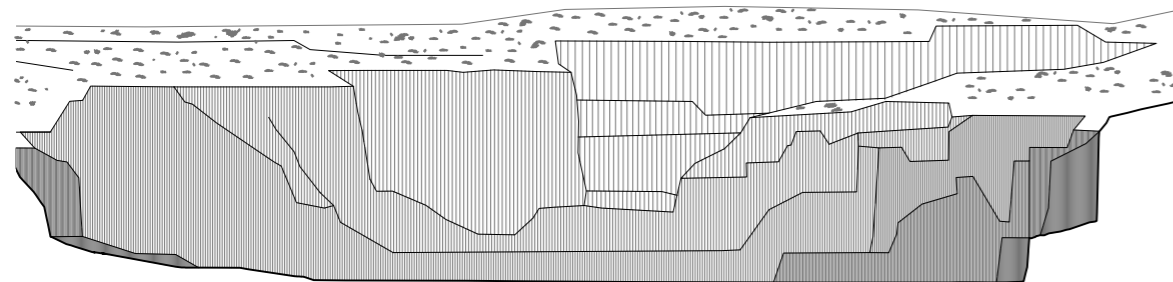


Fig. 25 Author's own Section Through site, 3 stages of change. 1:500 (A4)

On the western side of Bohus-Malmön a sequence of excavations run north-south parallel to the shoreline. The quarry named Udestensbröttet was active between 1897 - 1930. Its location on the western cape "udde" gave it its name. A walking path used for recreation named Kuststigen crosses the untouched granite landscape in the south and turns east and continues south parallel to the quarry. A gravel path begins where Kuststigen turns and goes through the site south-north, along the coastline.

The largest excavation happened in the center of the quarry. The space appears as carved in a rectangular shape. Because the terrain slopes and subsides towards the sea, the inland cuts become successively dramatic. The further inland of the excavation the more defined the space becomes, because the terrain's depths amplify the edges. The rectangularity of the main excavation introduces a form of order against the surrounding irregular slope of granite. From the path the journey into the excavation becomes a descent into an increasingly defined space.



Fig. 26 Author's own Siteplan Udestensbröttet. 1:2000 (A4)



Fig. 27 Author's own Photographs from site visit.



## CONCEPT

The spa complex originates from an idea of a carved intervention within a stone quarry. Massive walls functions as room dividers but also help highlight the solid rock walls. In plan, the building is inspired by excavation marks, resulting in a distinct spatial sequence.

A horizontal mid axis cuts through the vertical walls, creating rhythmic rituals that almost brush against the rock surface.

The central axis ends with an outdoor pool - allowing the visitor to finally confront the granite surface and feel the history embedded within it.

Set within the quarry, the architecture is shaped by the landscape - not the other way around.

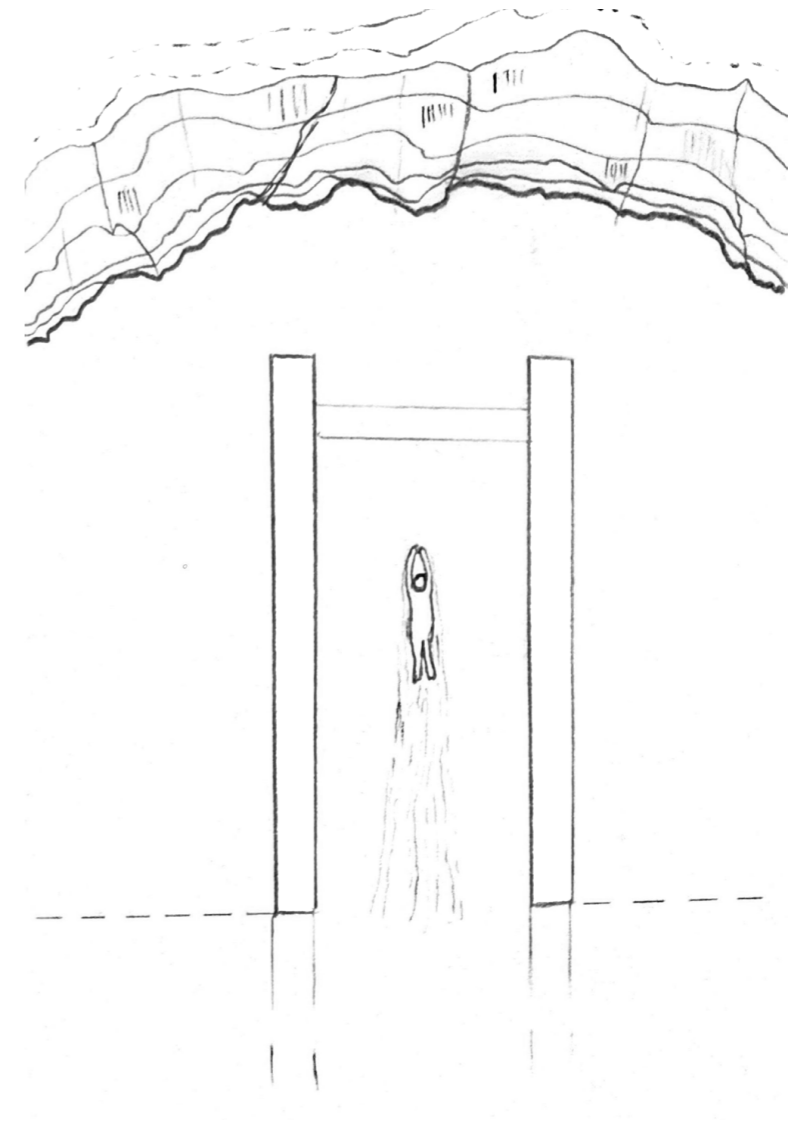


Fig. 28 Author's own Concept sketches.

”The site is the architect’s first gesture”

- Álvaro Siza



Fig. 29 *Author's own render of view from sea.*

**PROGRAM**



**PHASE I / arrival**

- 1. reception
- 2. staff changing
- 3. staff lunch
- 4. lounge
- 5. WC
- 6. wardrobe
- 7. seating
- 8. service bar
- 9. preparation
- 10. freezer/fridge
- 11. dry storage
- 12. scullery (dishes)
- 13. waste

**PHASE II / retreat**

- 14. suite

**PHASE III / spa**

- RITUAL I - enter
- 15. booking desk
- 16. laundry
- 17. cleaning
- 18. treatment rooms
- 19. lockers
- 20. private changing
  
- RITUAL II - sense
- 21. sensory walk
- 22. foot bath
- 23. jacuzzi (hydrotherapy)
- 24. sensory pool
- 25. sensory showers

- RITUAL III - cleanse
- 26. WC
- 27. shower
- 28. cleansing/exfoliating
- 29. ganbanyoku (岩盤浴)
- 30. water fountain
- 31. seaweed bath

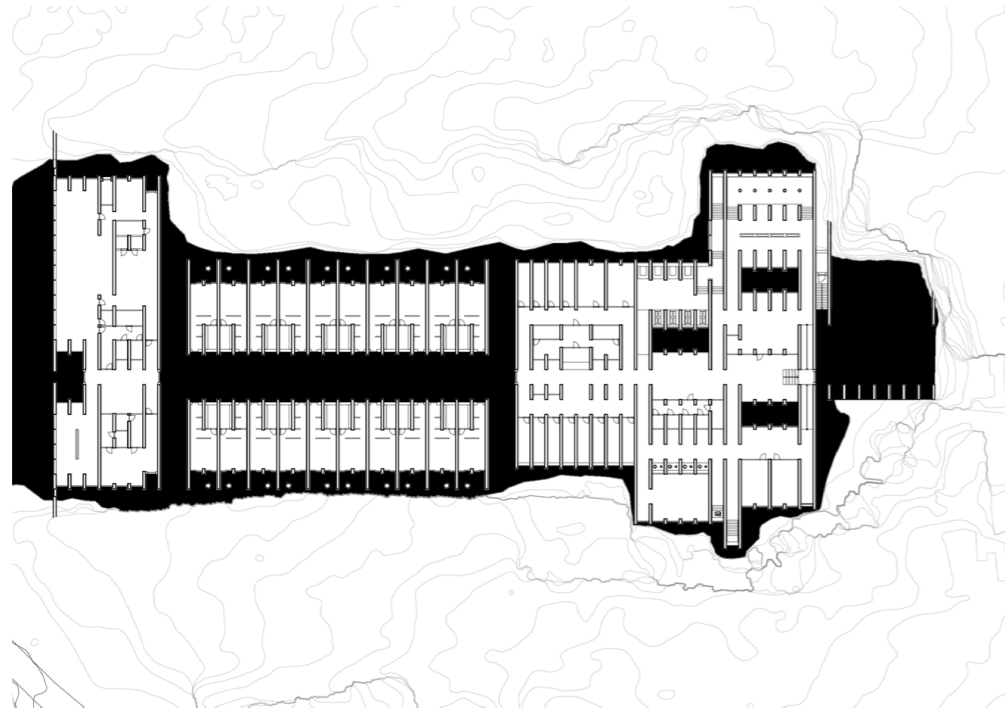
- RITUAL IV - gather
- 32. preparation
- 33. wellness bar
- 34. seating
- 35. fireside daybeds
- 36. grand bath

- RITUAL V - contrast
- 37. relax
- 38. steam sauna
- 39. finish sauna
- 40. cold bucket shower
- 41. cold plunge

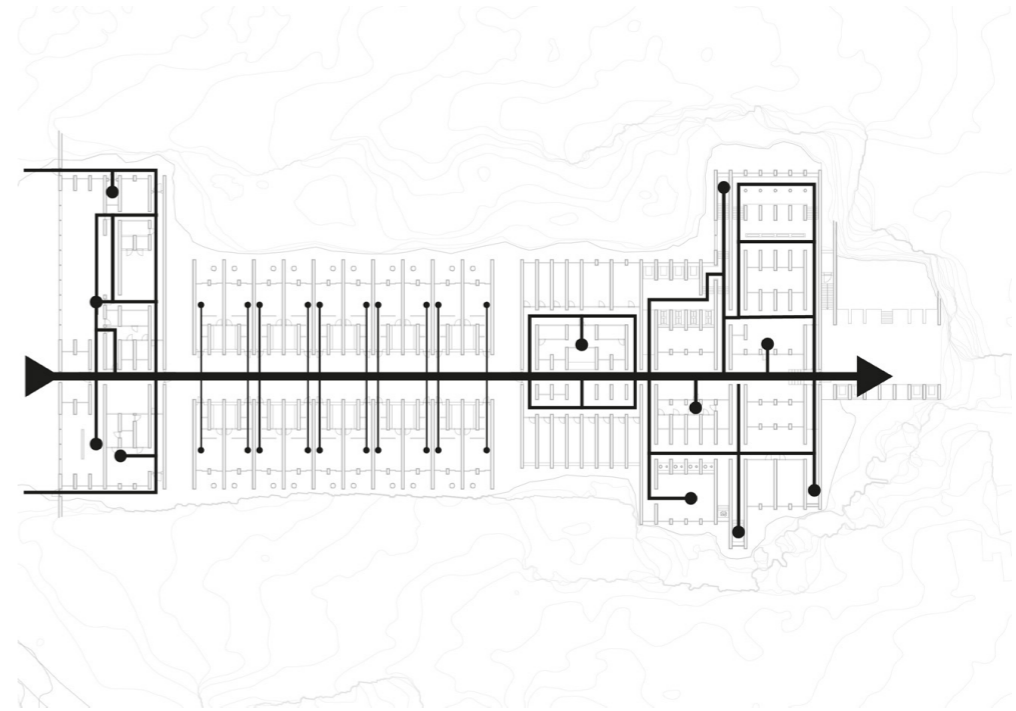
- RITUAL VI - confront
- 42. jacuzzi
- 43. outdoor shower
- 44. service stairs
- 45. quarry pool

Fig. 30 Author's own Master Plan. 1:500 (A3).

OUTDOOR SPACES

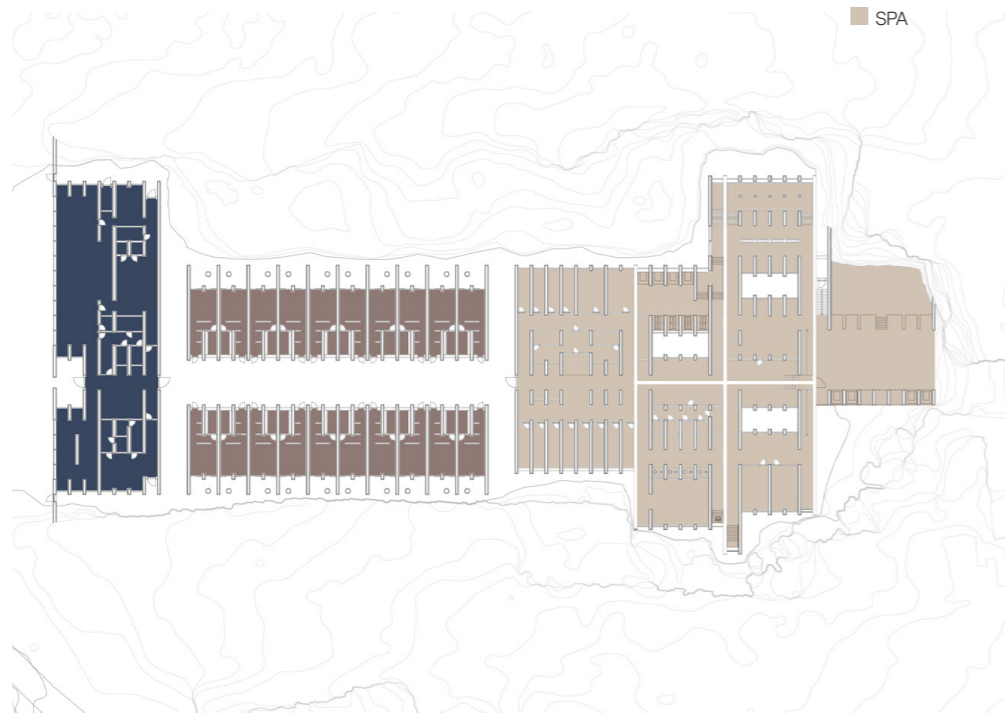


CONNECTIONS



ZONING

- RESTAURANT/LOBBY
- RETREAT
- SPA



POOL TEMPERATURE

- 8 °C
- 37-40 °C
- 28-32 °C

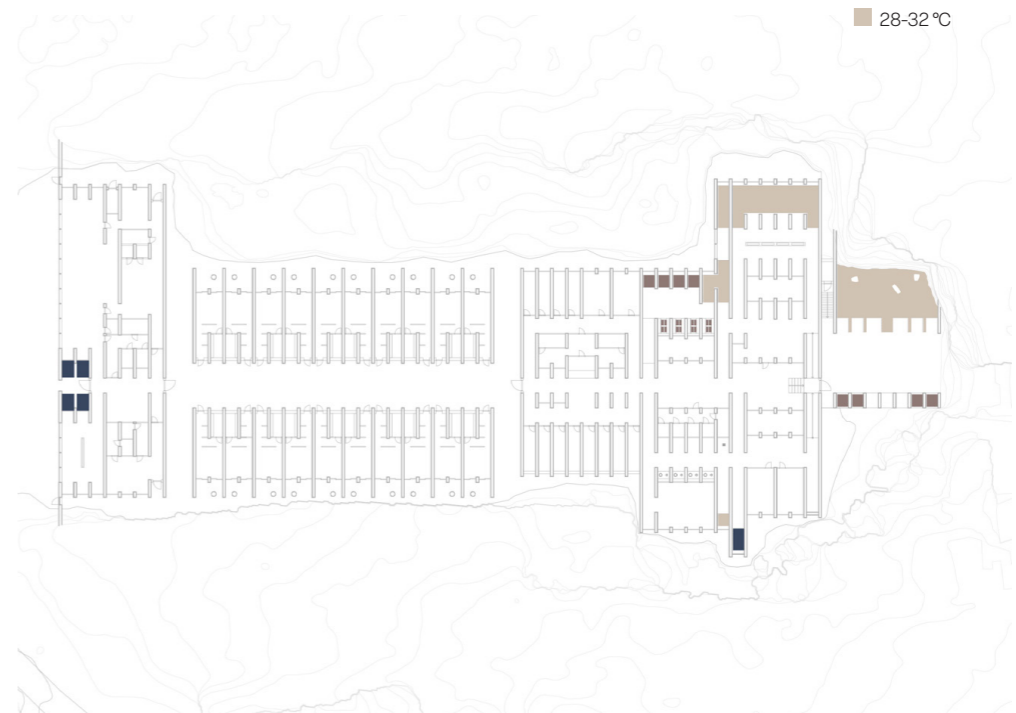


Fig. 31 Author's own diagrams. free scale.

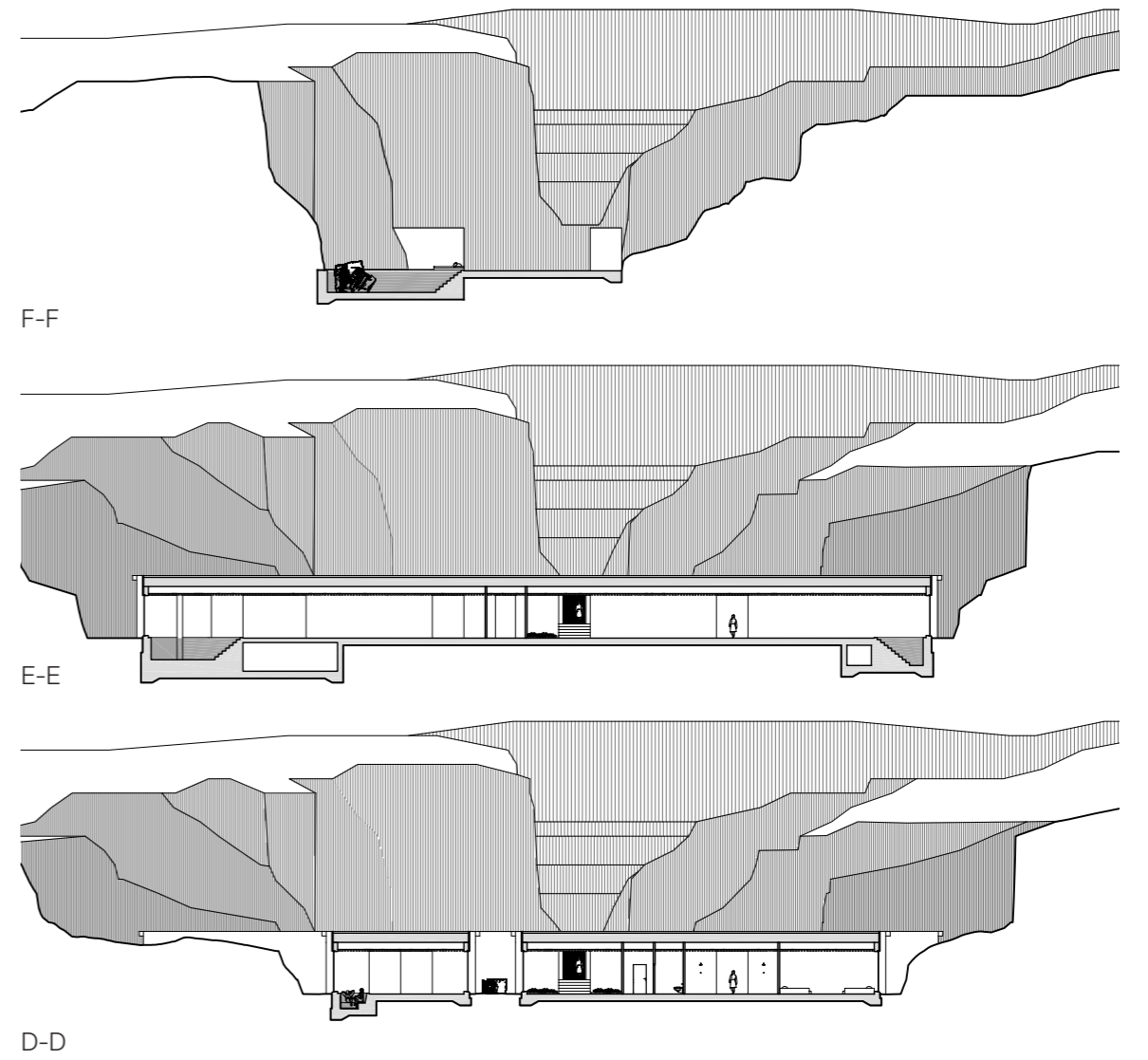
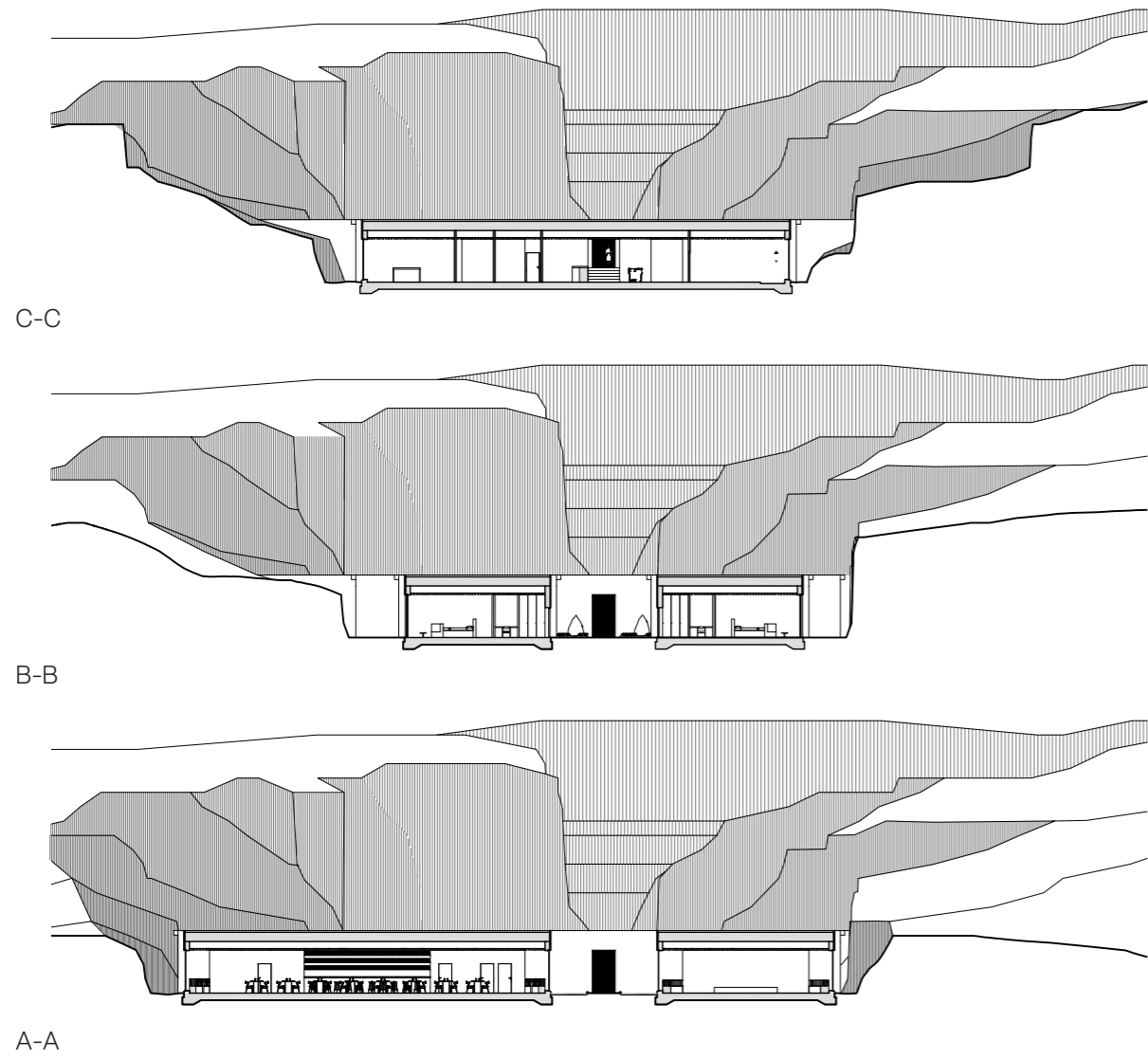


Fig. 32 Author's own Sections through phases / rituals. 1:500 (A4).

PHASE I / arrival

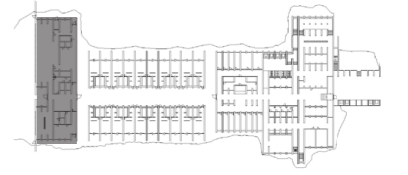


Fig. 33 Author's own render of restaurant interior.

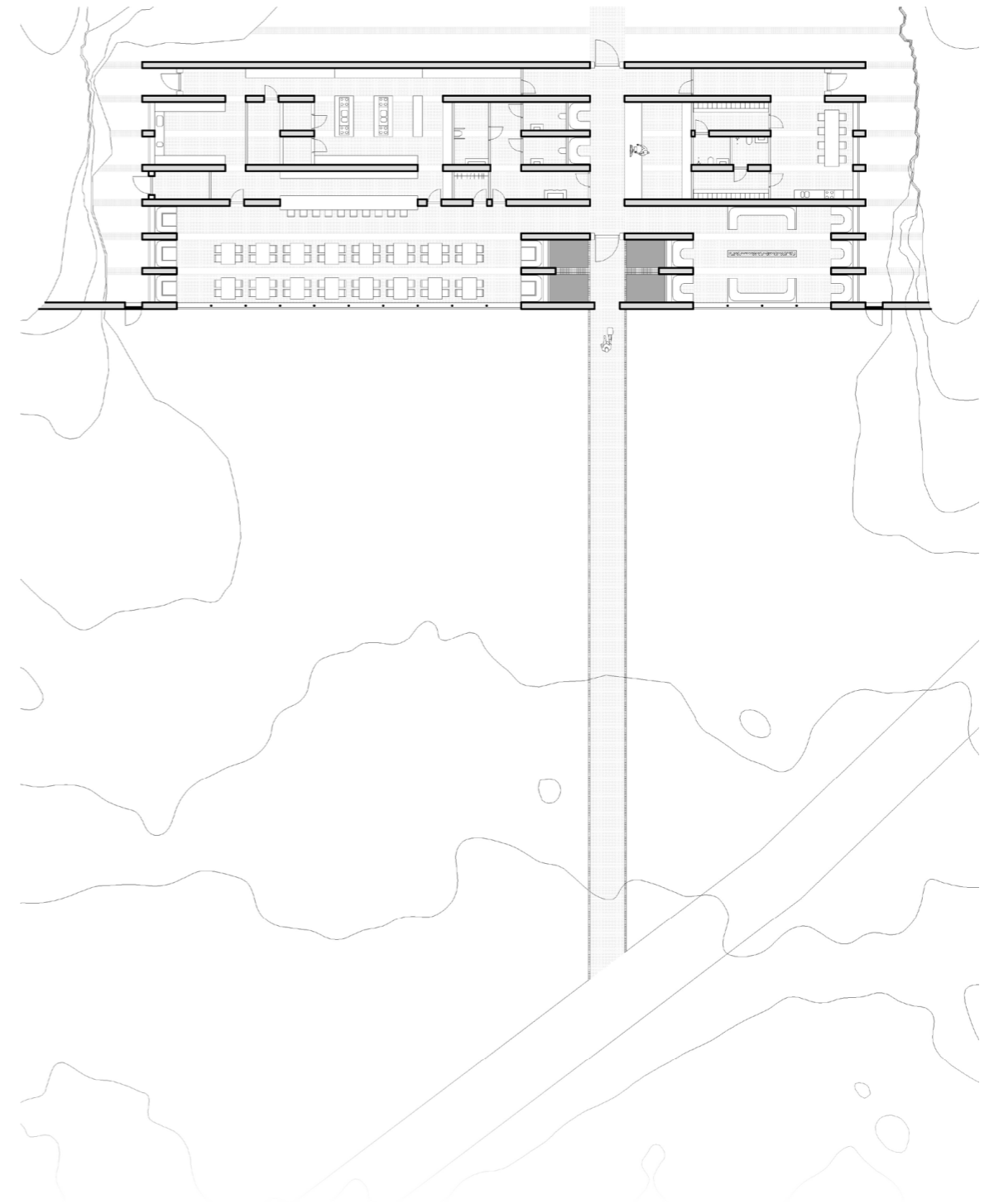


Fig. 34 Author's own Plan of PHASE I. 1:400 (A4).



Fig. 35 Author's own Render of Elevation..

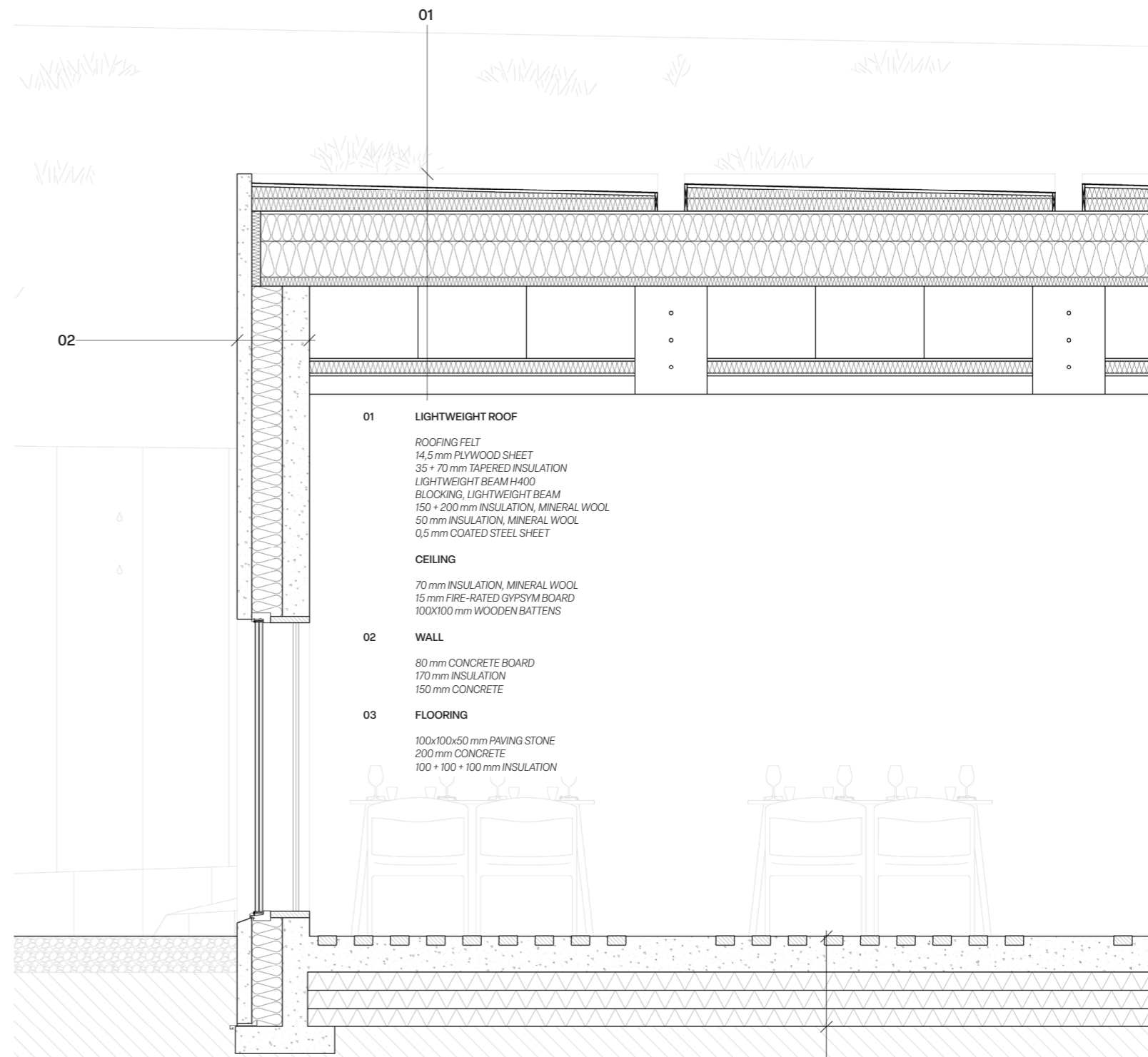


Fig. 36 Author's own Detail drawing. 1:30 (A4).

PHASE II / retreat

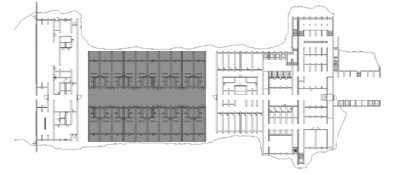


Fig. 37 Author's own Render of Exterior axis.

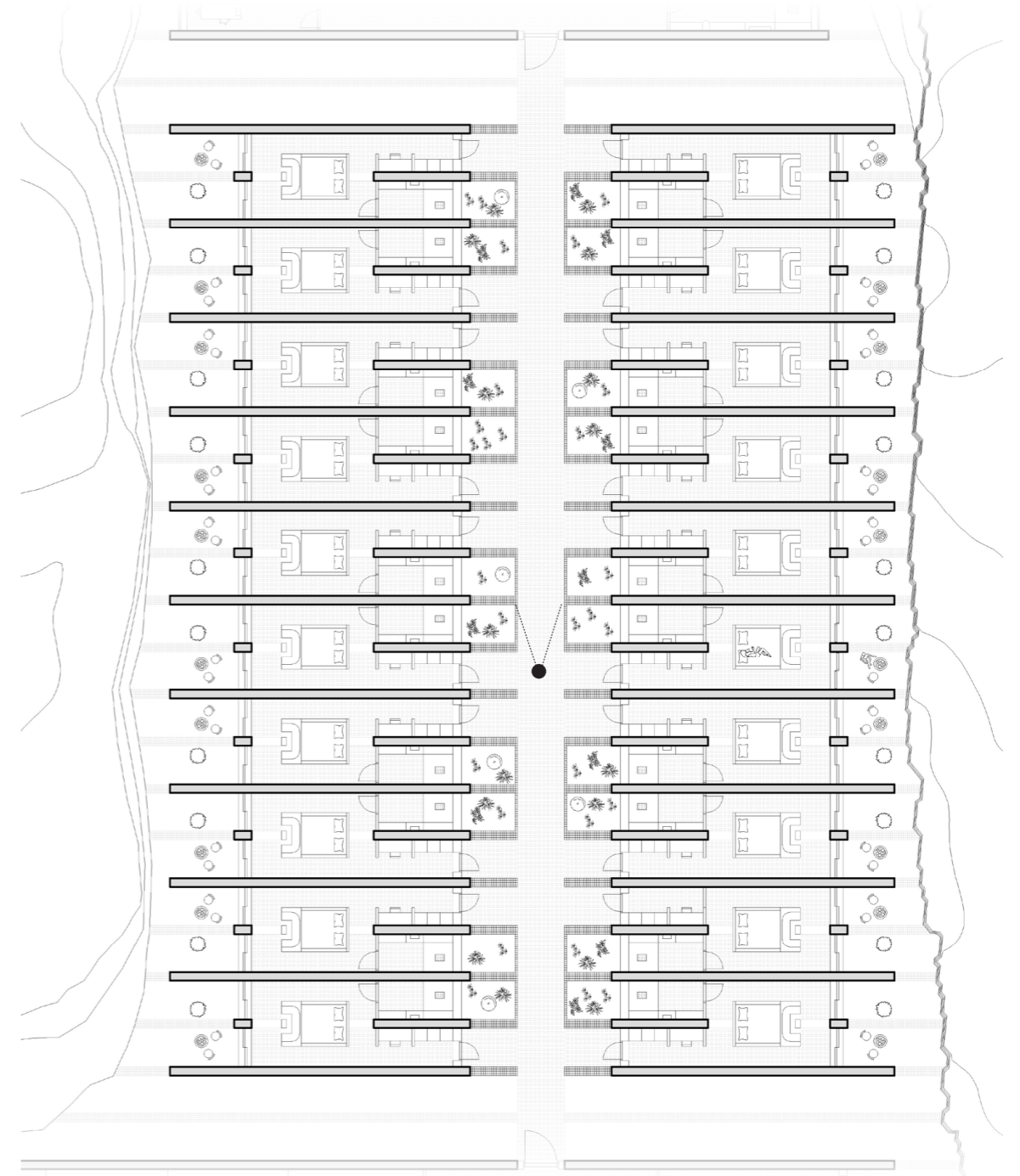


Fig. 38 Author's own Plan of PHASE II. 1:300 (A4).



Fig. 39 Author's own Render of view from Suite.

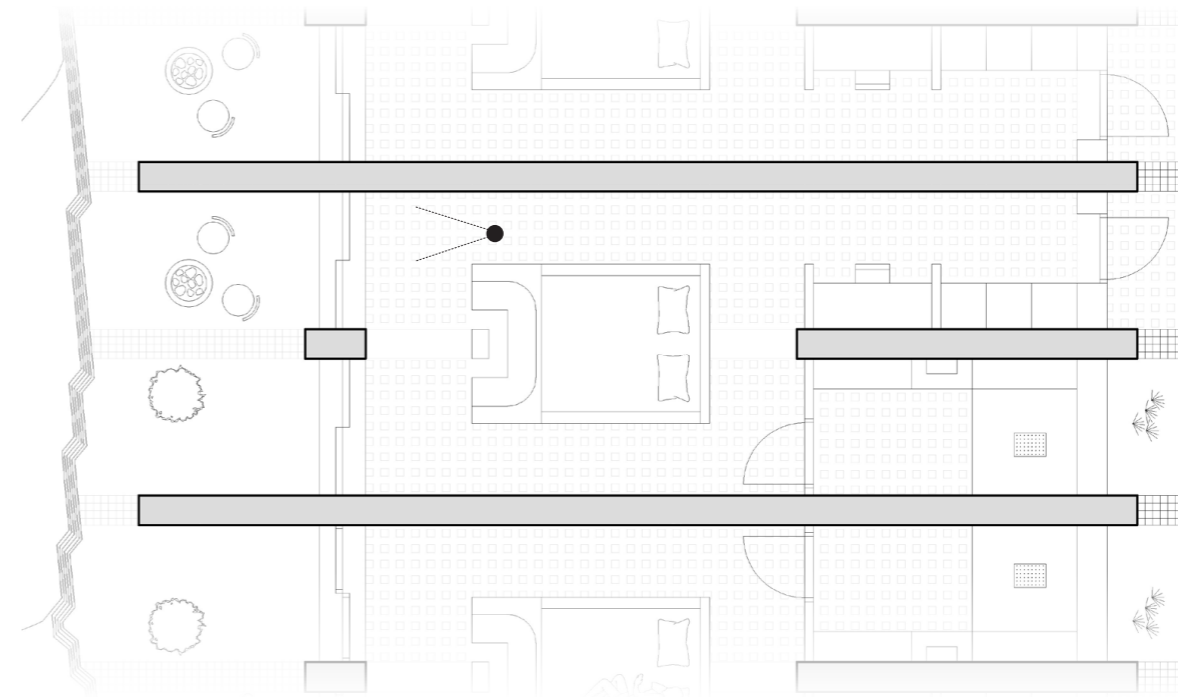


Fig. 40 Author's own Plan of Suite. 1:100 (A4).

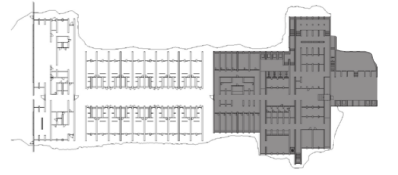


Fig. 41 Author's own Render of Interior axis.

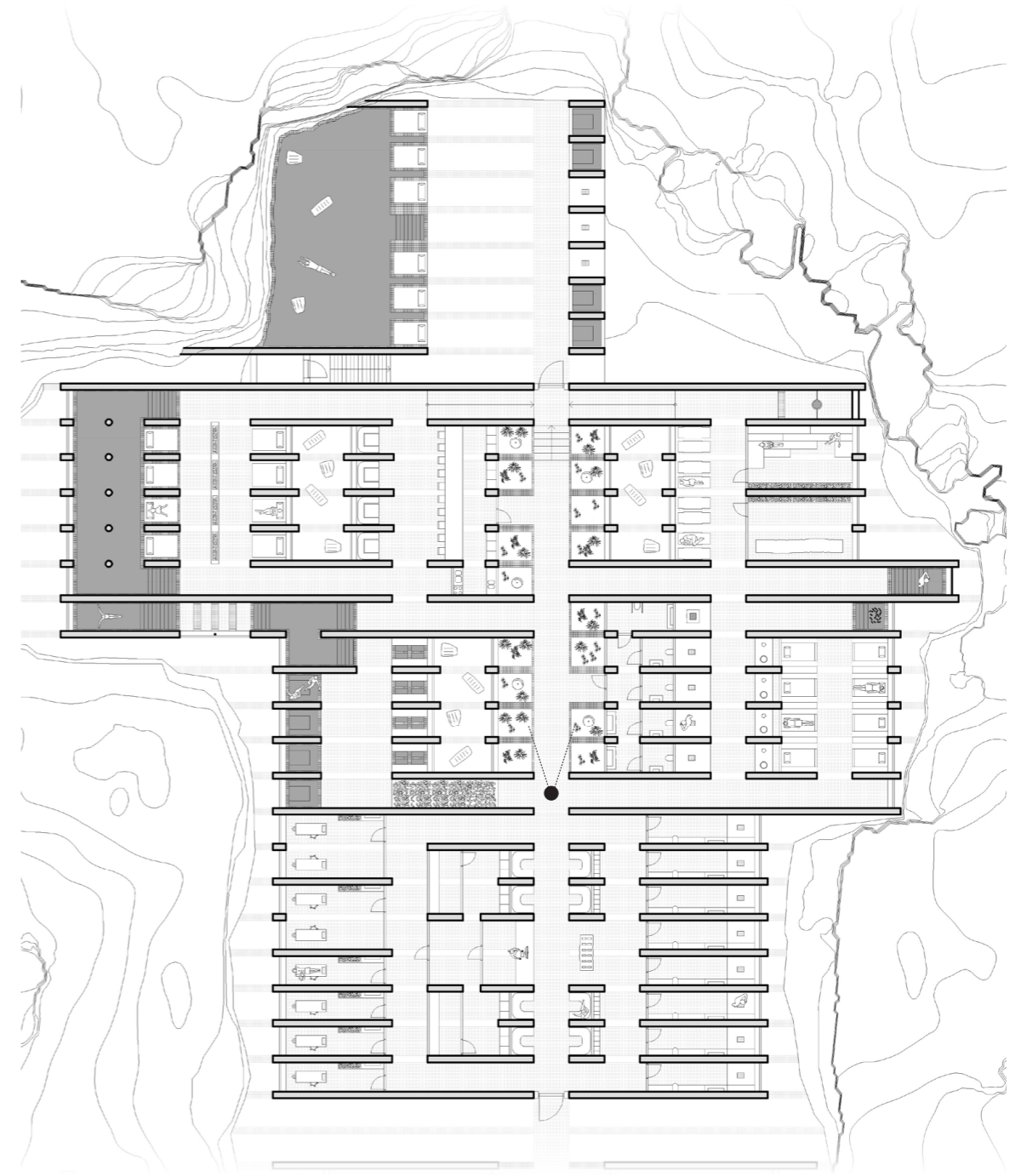


Fig. 42 Author's own Plan of PHASE III. 1:400 (A4).

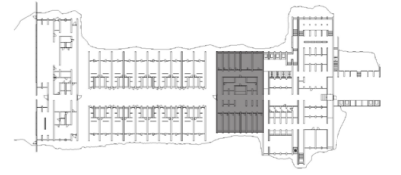


Fig. 43 Author's own Render of private changing room.

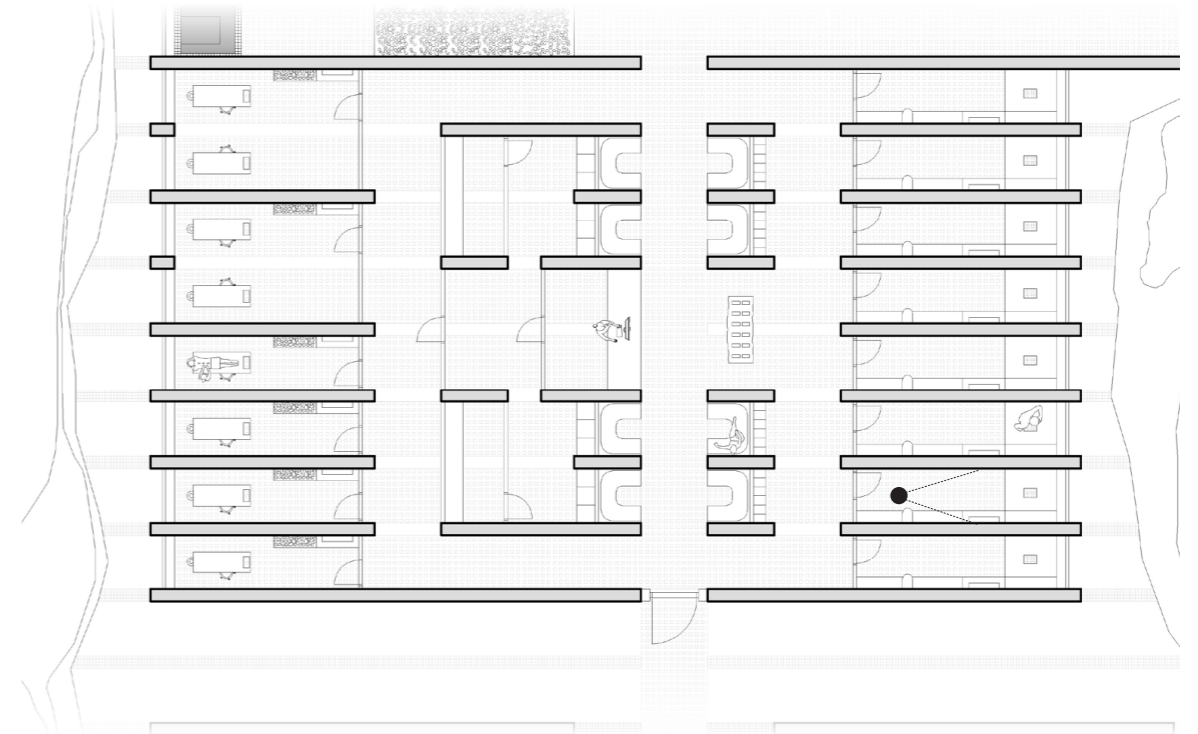


Fig. 44 Author's own Plan of Ritual I. 1:250 (A4)

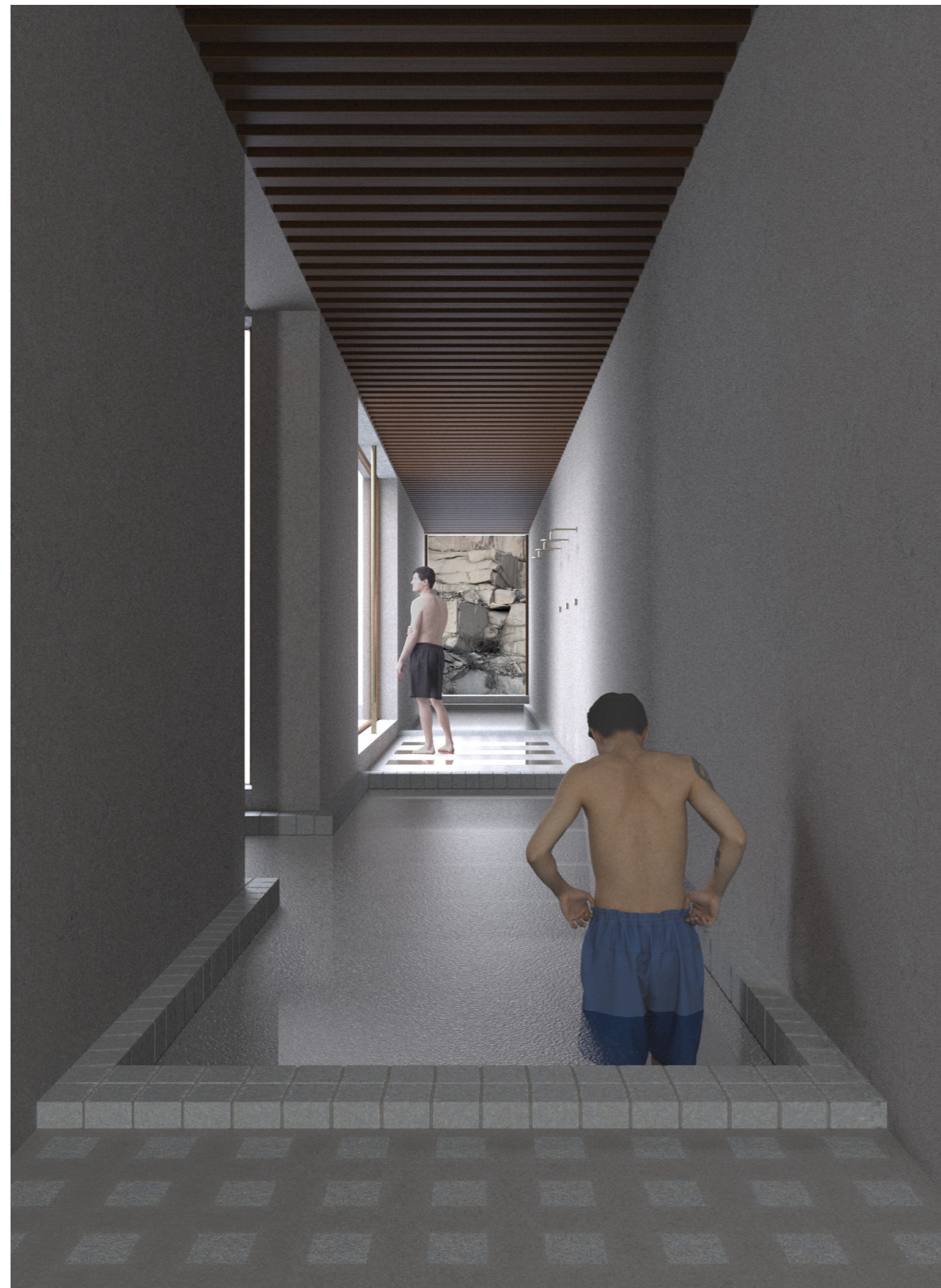


Fig. 45 Author's own Render of sensory pool.

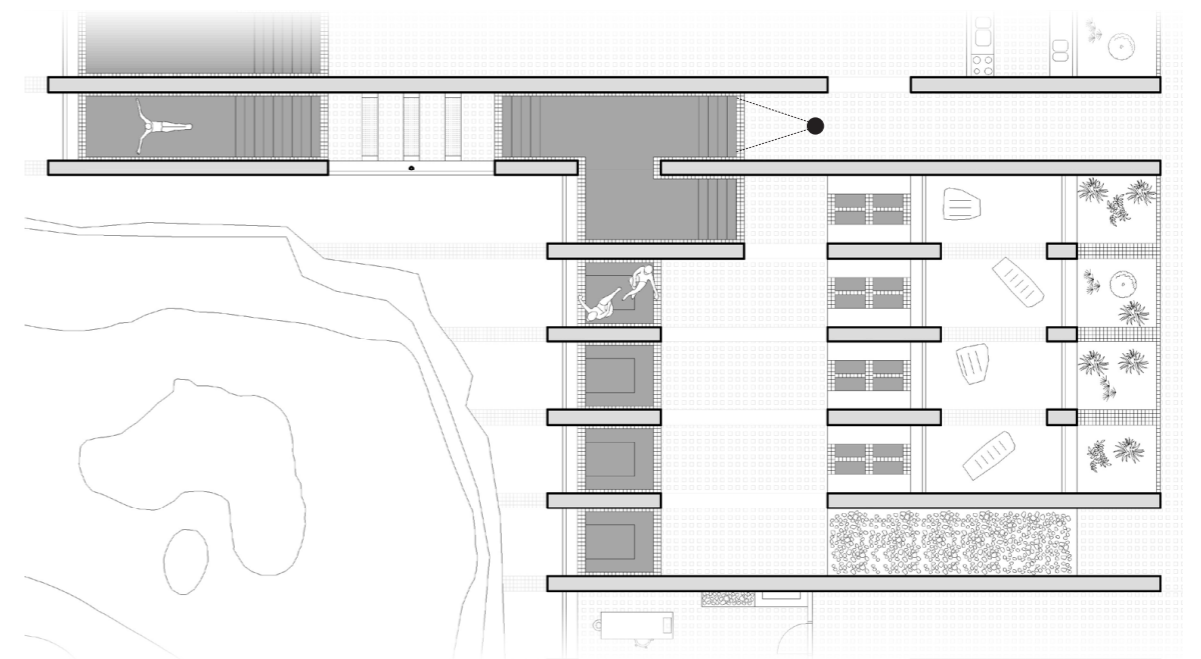


Fig. 46 Author's own Plan of Ritual II. 1:200 (A4)

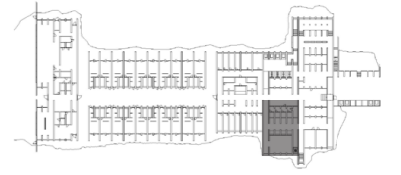


Fig. 47 Author's own Render of ganbanyoku beds.

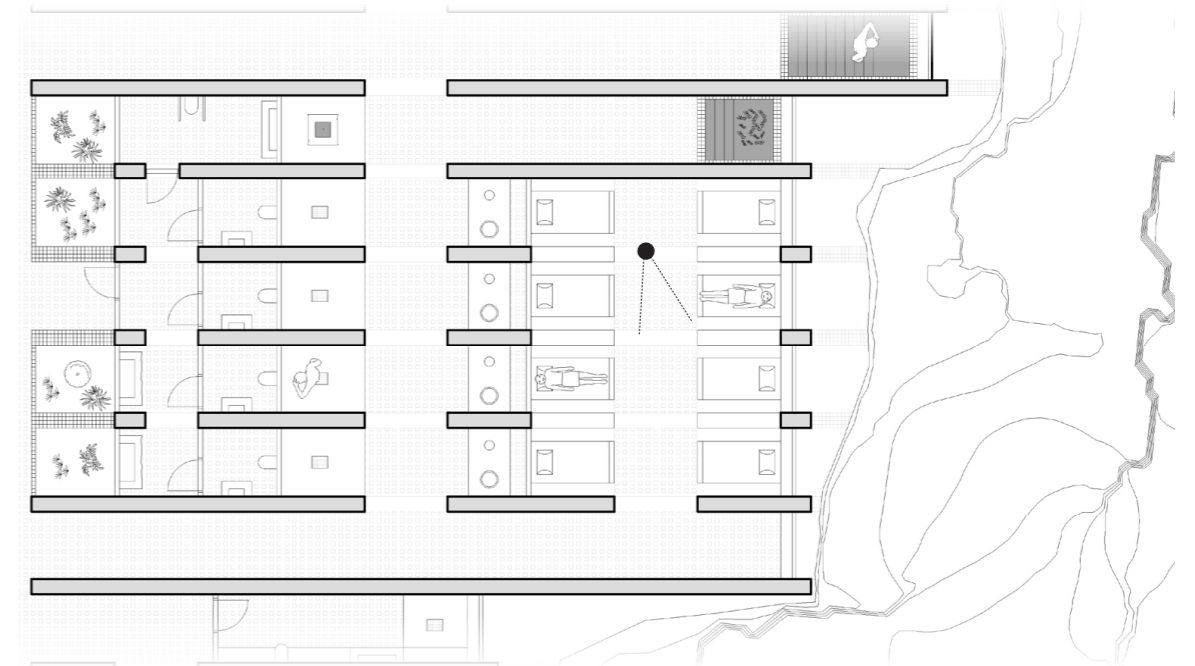


Fig. 48 Author's own Plan of Ritual III. 1:200 (A4)



Fig. 49 Author's own Render of Elevation.

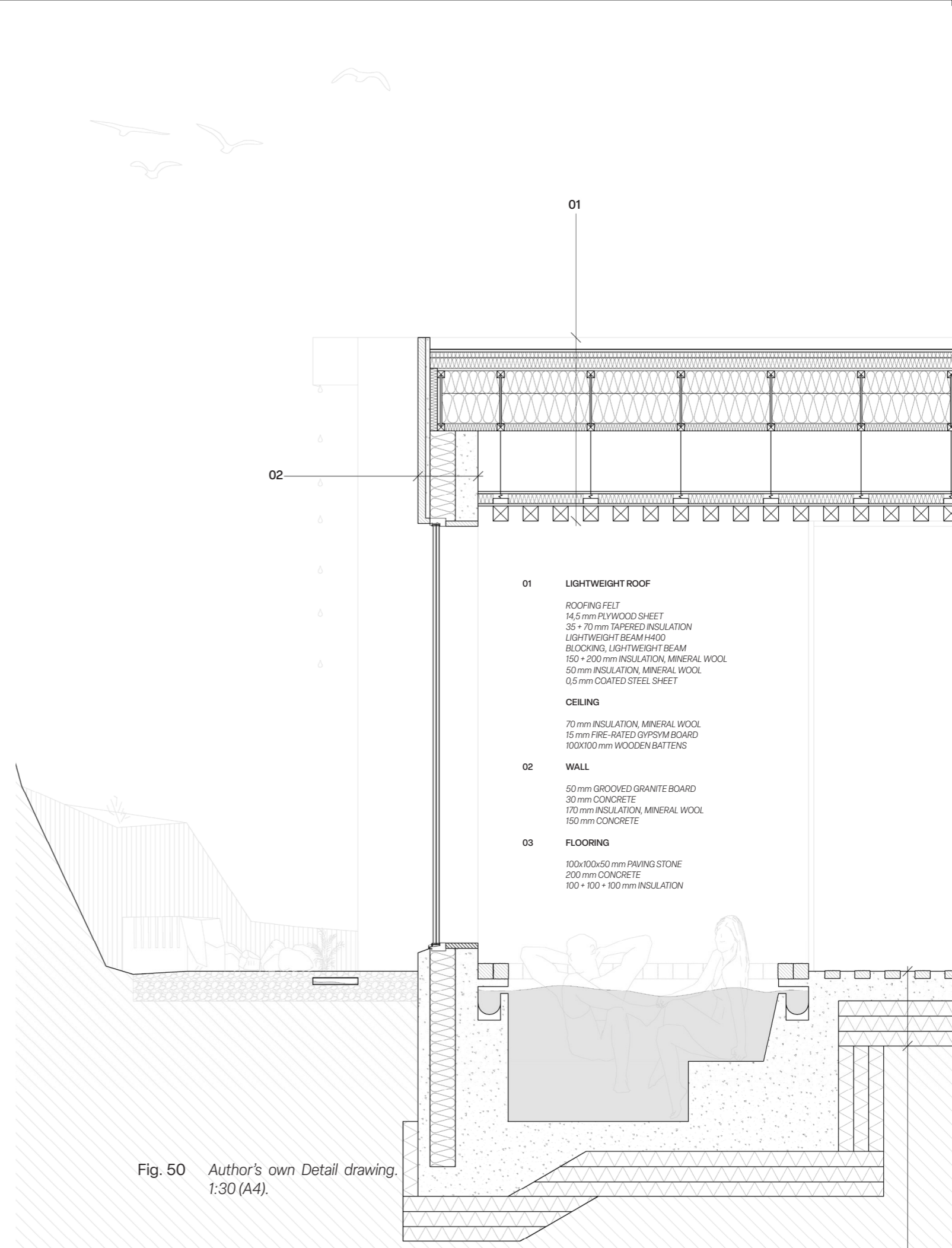


Fig. 50 Author's own Detail drawing.  
1:30 (A4).

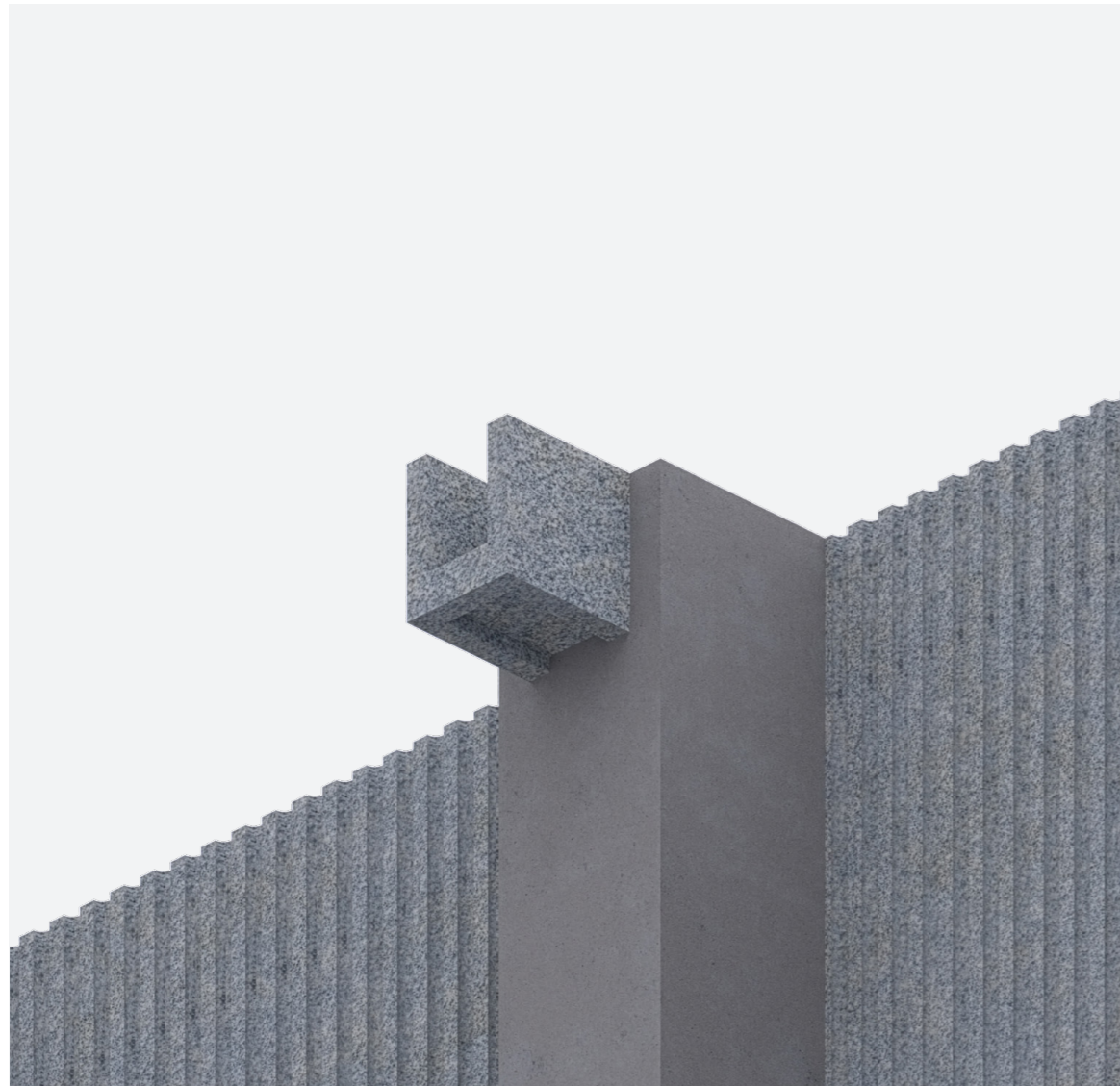


Fig. 51 Author's own Render of Granite grip groove.

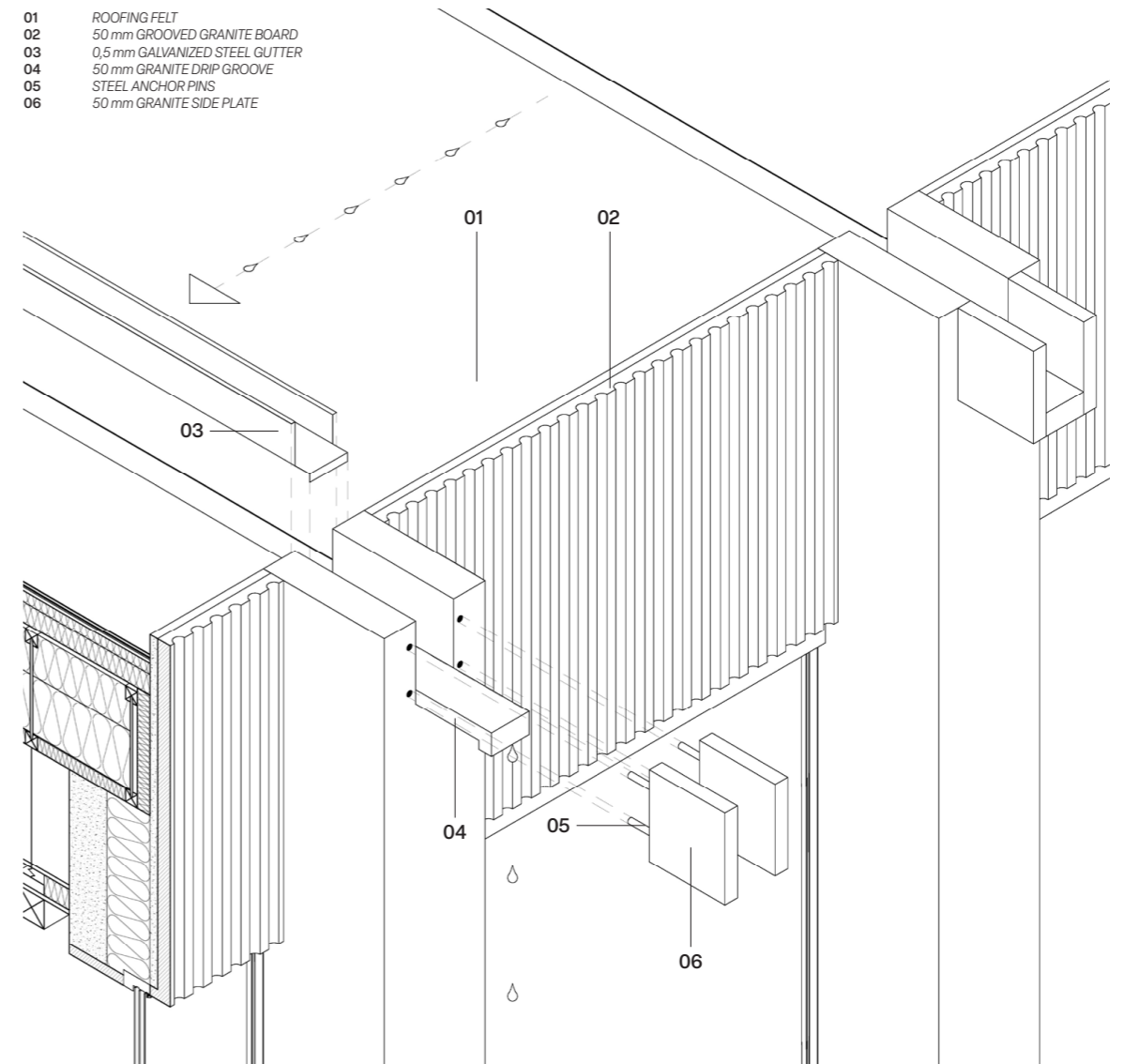


Fig. 52 Author's own Axon detail. 1:20 (A4)

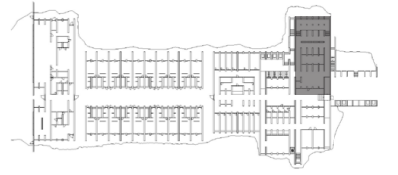


Fig. 53 Author's own Render of Grandbath.

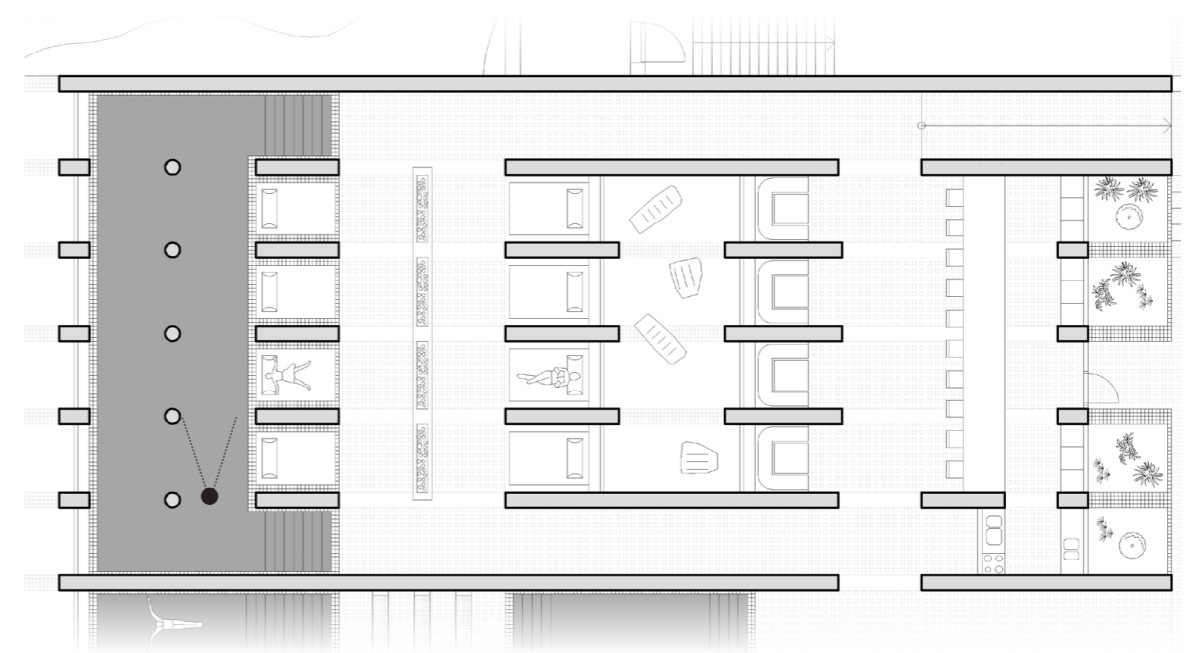


Fig. 54 Author's own Plan of Ritual IV. 1:200 (A4)

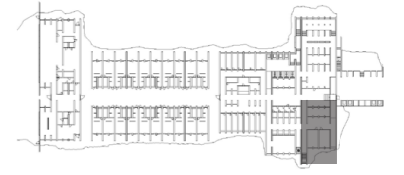


Fig. 55 Author's own Render of path to Cold plunge.

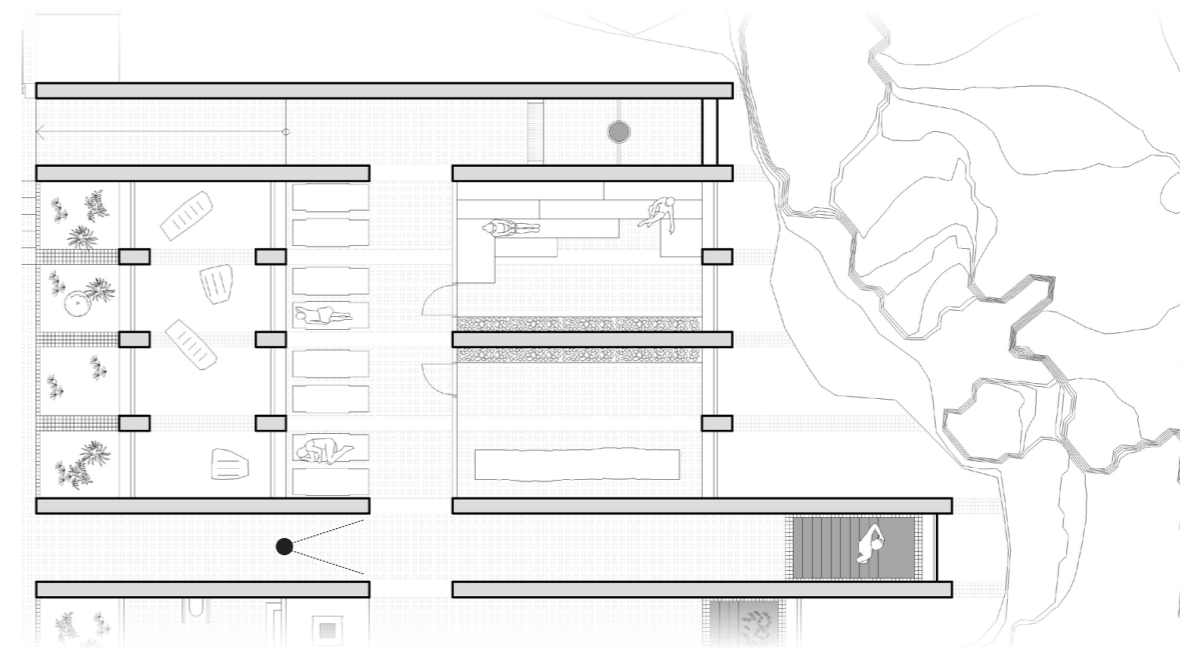


Fig. 56 Author's own Plan of Ritual V. 1:200 (A4)

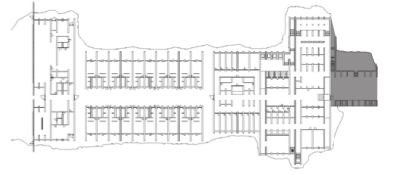


Fig. 57 Author's own Plan of Ritual VI. 1:200 (A4)

“Architecture is bound to situation.”

- Peter Zumthor

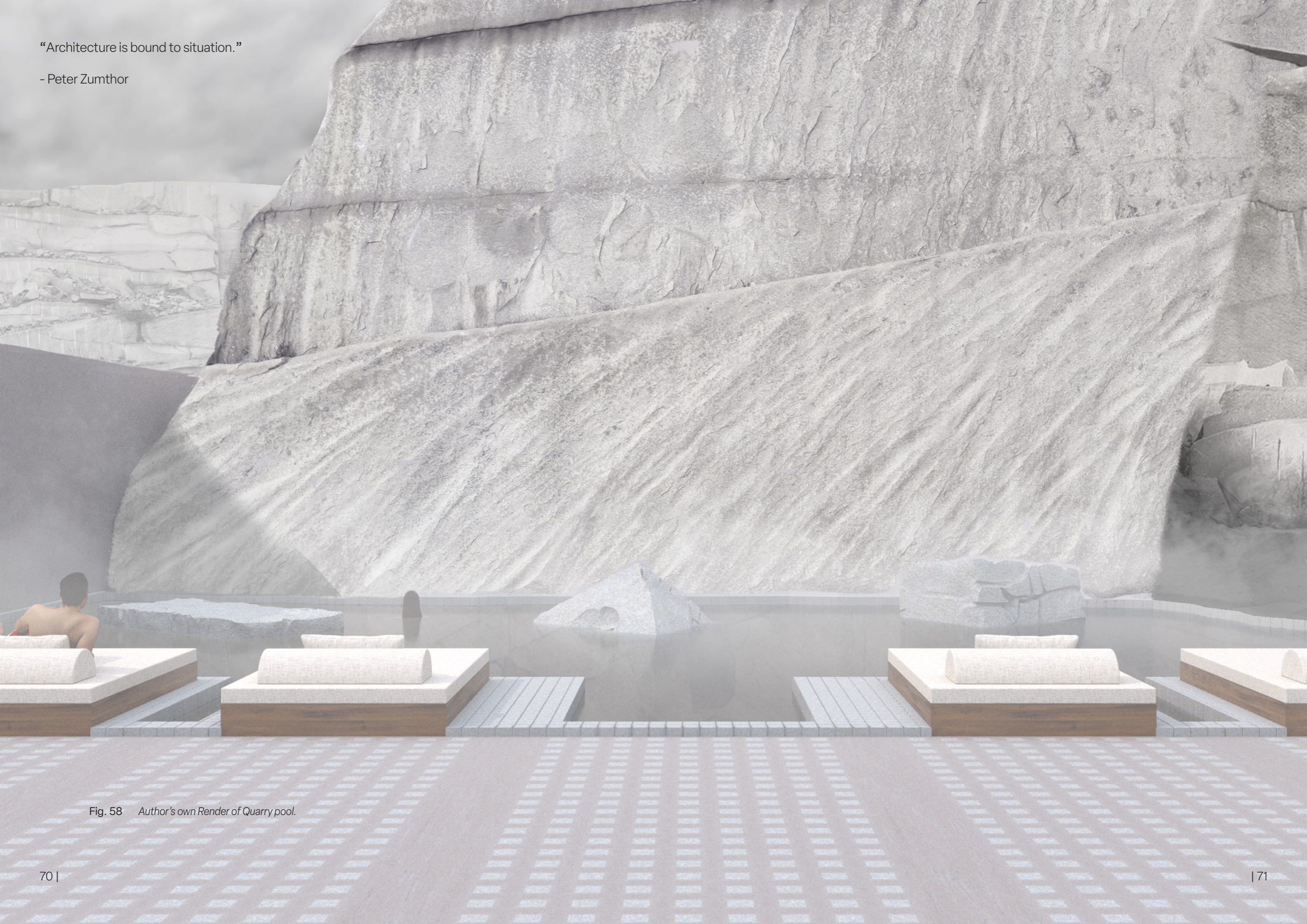
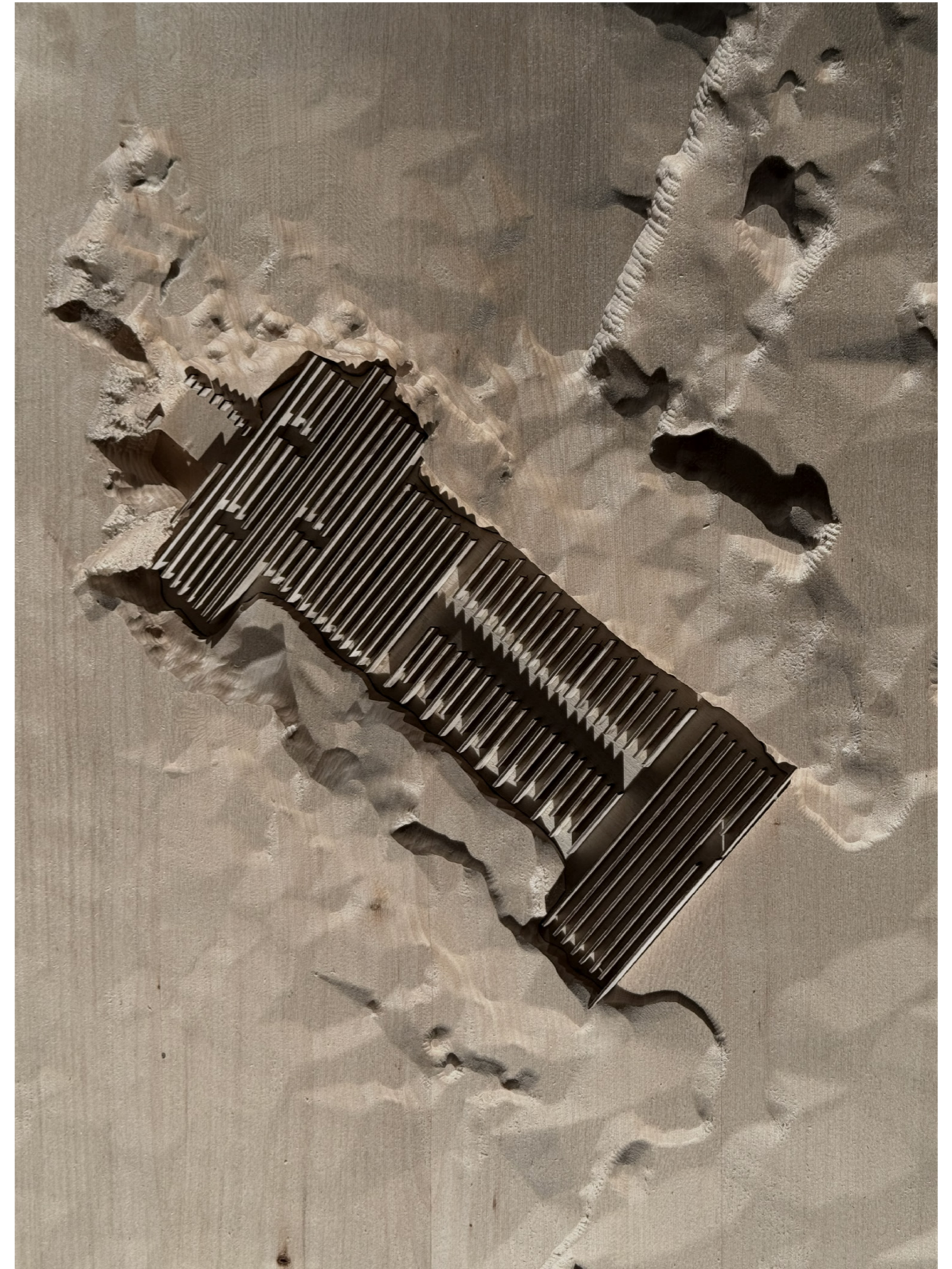


Fig. 58 Author's own Render of Quarry pool.

PHYSICAL MODELS



Fig. 59 Author's own Photographs of: Landscape model 1:500.



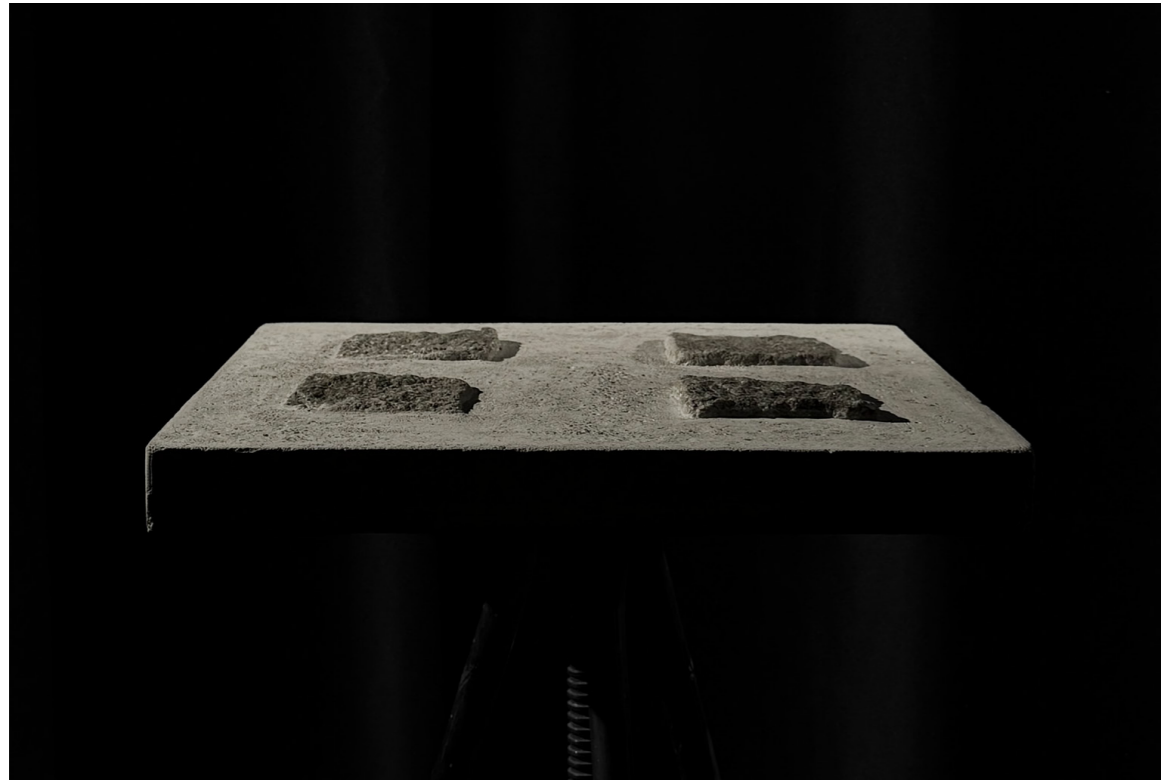


Fig. 60 Author's own Photographs of: Floor prototype. 1:1.

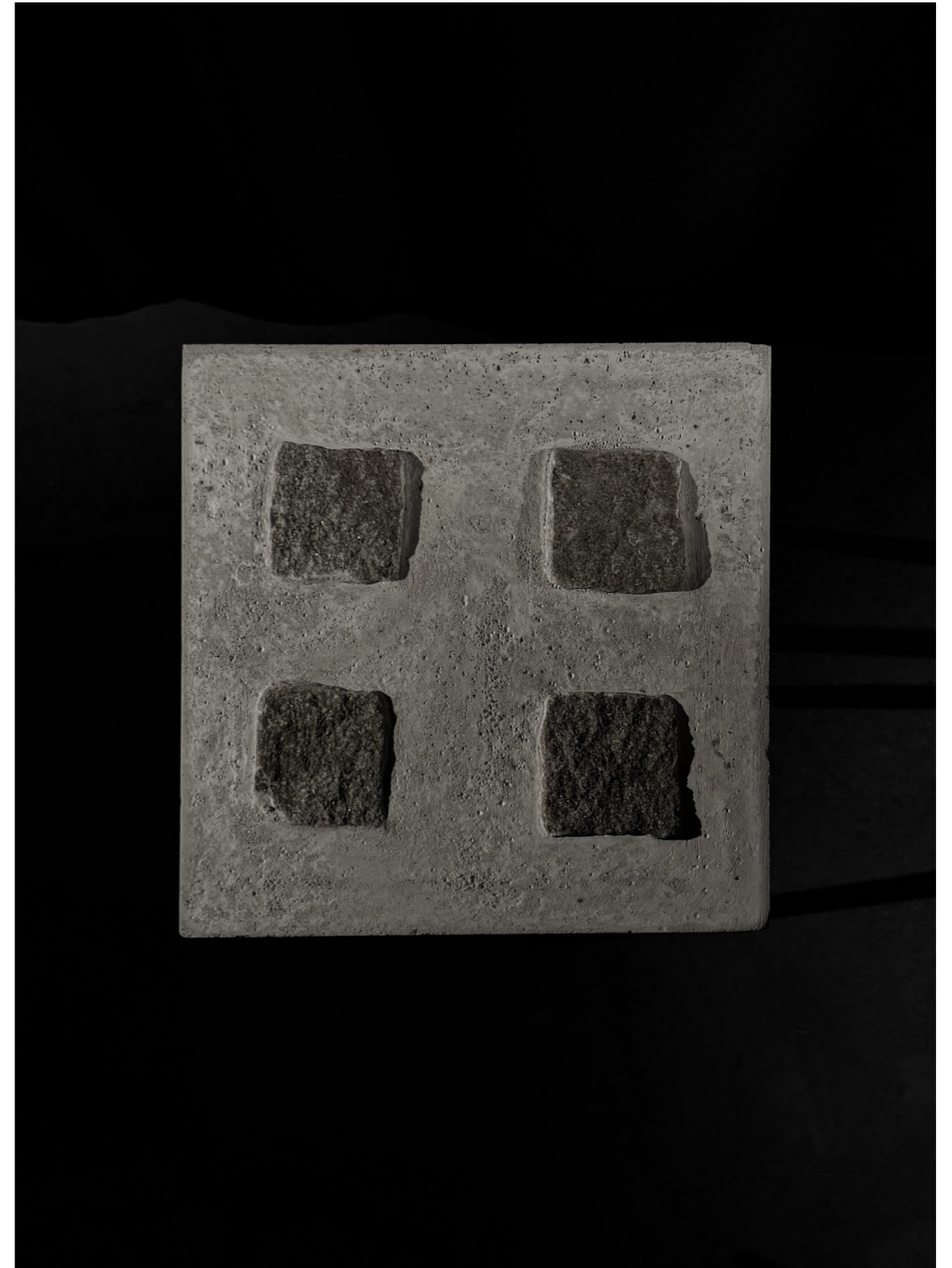
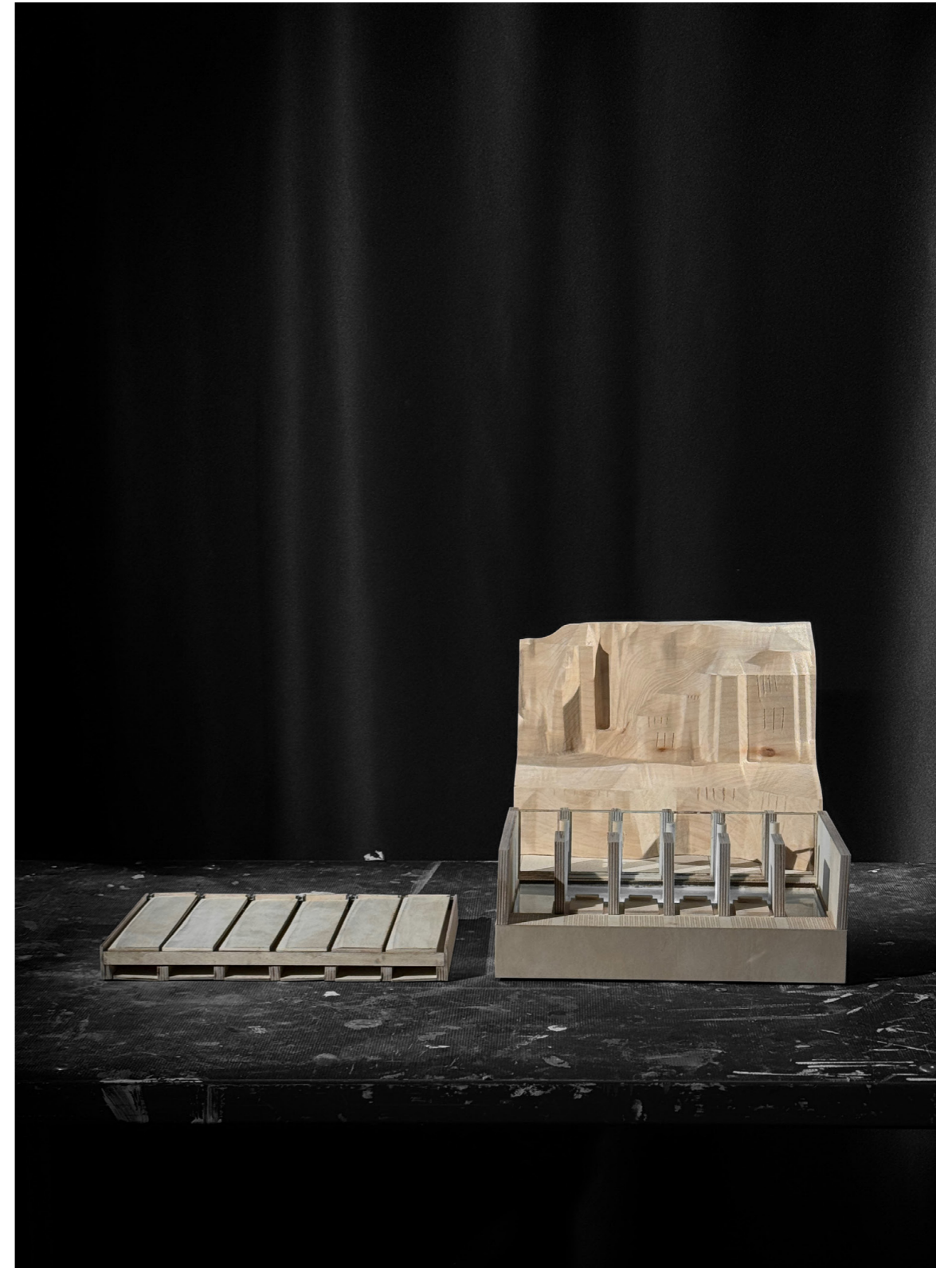




Fig. 61 Author's own Photographs of: Cut-out model. 1:50.



# Discussion

This thesis investigates how an abandoned quarry could be transformed into a contemporary venue of wellness while intensifying the spatial and ritual qualities already present within the excavation. The quarry is an extreme and artificial landscape, shaped over decades of extraction. One challenge throughout the thesis work was determining whether the project should preserve the quarry in its found condition, avoid larger interventions, or further continue the landscape's transformation, creating a new layer in time.

The project ambition was to confine the project within the excavated walls, using the quarry's subtracted shape as a three-dimensional boundary. Despite being altered by human activity, a decision was made to respect its presence as a beautiful landscape. Whether it is the correct response to approach the quarry with such restraint was a recurring question raised althrough the design process.

To avoid drawing too much attention from the landscape, the project aims to respond respectfully to the existing landscape and allow the quarry to preserve its monumental character.

Early on, the scale of the project was discussed and often reconsidered several times. What started with a two story scheme gradually resulted in a more restrained and low-scale intervention, successively shaped by a growing respect for the limits of the contained geometry.

Deciding a lower scaled project came with its difficulties, directly influencing the spatial organisation of the building. The long and narrow shape of the quarry, together with the restrained scale in height, forced us to plan a central axis through the whole complex in order to solve the communication needed for a now much more elongated plan. Although the mid axis formed clear rhythmic sequences for the rituals in the spa, it presented a problem with long monotonous passages needing solving. To create variation, we drew inspiration from our reference projects to build expectations along the corridor through moments of compression and release, together with surprising breaks in the flow.

The walls establish a distinct rhythm through the axis, reinforcing orientation and ceremonial character. However, establishing a strong central axis raises questions regarding termination and end destination. In our monumental landscape, the axis couldn't simply end. The challenge was to define what architectural moment could justify and complete it within the quarries defined space.

In the early stages of the thesis, the use of natural stone extracted directly from the site was argued back and forth as to whether it would be too conceptual or not. This raised questions regarding how realistic and feasible the project would be. Replacing the stone was concrete, which in turn also raised a few concerns. Naturally, the amount of concrete used in the proposal does not align comfortably with climate goals. However, this is also not an ordinary site nor a conventional project. Sacrificing these walls in the striving for higher material efficiency would also mean compromising the very spatial and ritual experiences that carry through the entire project.

Reflecting on the quarry as a landscape, together with aspects such as scale, feasibility, spatial qualities and materiality, the project raises concern about resistance and future intervention. If our walls still stand in 500 years, the architecture might no longer be perceived as an intrusive act, simply as another layer of the quarries story. Whether our traces will be conceived as a meaningful gesture to the quarry or an intrusive scar is hard to know. We believe such uncertainty is inevitable when designing a building within a site already shaped by strong historical and cultural value.

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## List of Figures

- Fig 1-4 Authors own images.
- Fig 5. Stonemason cutting paving stone
- Fig 6. Stonecutters at Bohus-Malmö
- Fig 7. Kotohira Kadan, Japa (adapted, cropped and colour adjusted) n
- Fig 8. Hot stone massage (adapted, cropped and colour adjusted)
- Fig 9. In the Sauna (from An Ode to Finland) (adapted, cropped and colour adjusted)
- Fig 10. Interior of a hammam steam bath with stone seating (adapted, cropped and colour adjusted)
- Fig 11. Maurice Bathhouse, Hot Springs National Park
- Fig 12. Foot Bath (adapted, cropped and colour adjusted)
- Fig 13. Japanese winter bathers
- Fig 14. Gustafsberg bathhouse in June
- Fig 15. XLII – Finalist proposal for the Fuente Santa Spa competition (ground floor plan)
- Fig 16. Amangiri Pool at Sunset (adapted, cropped and colour adjusted)
- Fig 17. Untitled photograph (May 1999)
- Fig 18. Quarry No. 8: Book Mountain by DnA, Lishui, China (adapted, cropped and colour adjusted)
- Fig 19. Piscinas de Marés, Leça da Palmeira, Portugal, by Álvaro Siza (adapted, cropped and colour adjusted)
- Fig 20-61. Authors own images.

# Student Background / Information

LUCAS HALD



**Master of Science (MSc)**  
Architecture and Urban Design  
Chalmers University of Technology

2024-2026

*ACE350 Building Climatology*  
*ACE485 Housing Inventions 1*  
*ACE520 Residential Healthcare: Housing for Seniors*  
*ACE410 Managing Design Projects*  
*ACE490 Building on Context and Buildings*

**Bachelor of Science (BSc)**  
Architecture  
Chalmers University of Technology

2021-2024

GABRIEL KANT



**Master of Science (MSc)**  
Architecture and Urban Design  
Chalmers University of Technology

2024-2026

*ACE465 Urban Prototypes*  
*ACE355 Color and Light in Spatial Contexts*  
*ACE445 Design Systems*  
*ACE520 Residential Healthcare: Housing for Seniors*  
*ACE490 Building on Context and Buildings*

**Bachelor of Science (BSc)**  
Spatial planning  
Blekinge Institute of Technology

2021-2024

**Okidoki**  
Summer Internship

2022, 2025

Lucas Hald  
                      
LH