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DEPARTMENT OF ARCHITECTURE AND CIVIL ENGINEERING

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URBAN DESIGN

BUILDING DESIGN AND TRANSFORMATION

MASTER THESIS 2024

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ABSTRACT

Architecture is rarely conceived with one pair of hands. Communication is one of the most important tools for an architect. During the development of projects you constantly have to mediate your choices. As students of architecture you often find yourself making complex choices based on your own knowledge and taste. When the choices aren't questioned, you lose a sense of why you're making those choices.

We have studied a selection of the most influential theories about architectural criterias. All with the common goal of trying to define good architecture. In the current discourse some are problematizing the whole idea of this, pointing at standardizations, or that theory would counteract the practice while others are encouraging the discussion itself.

However, the evaluation of architectural qualities is inevitable when it comes to competitions. Therefore, we decided to analyze a selection of jury criterias from recent competitions together with the theory that became the basis for our manifesto.

The intention with this thesis was to investigate the research question through both a theoretical and practical point of view, firstly by formulating our manifesto and secondly, applying these criterias to our design process. The investigation was carried out by text analysis and a research by design approach, where design ideas have been valued and concluded.

The design project of this thesis is a rowing club set out in Lundbyhamnen, connected to Göta älv, a central location of Gothenburg. Aiming to strengthen the public's relation to Göta älv and bring back a rowing club to the city center. Acknowledging the lack of interaction with water despite its proximity, the aim has been to make the waterfront more accessible for the inhabitants.

The work has resulted in a manifesto divided into four main principles; Durability, Usability, Beauty and Atmosphere. The aim of the manifesto is not to seek an absolute answer nor exact guidelines for what makes good architecture. But rather a guiding document of important aspects that can be evolved or interpreted over time.

Keywords: Manifesto,
architectural values, joinery,
timber, rowing club

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INTRODUCTION

At the final semester of our five year architectural education, we have the opportunity to investigate a subject more in depth through this master thesis, than any other project so far.

While the process of creating architecture is often complex and the leading factors somewhat abstract, we wanted to understand our values within the field, while taking the chance of creating our own manifesto based on previous theories of what makes good architecture.

PURPOSE

Writing a manifesto upon theories that are in line with our own values to explore and analyze our process of creating architecture and to guide us along the way. The manifest is not viewed as a recipe for good architecture in general, but merely a document of our thoughts explaining our path of choices.

AIM

To clarify critical steps in the process of making architecture. Evolving a method for securing that main ideas follow through from thought to product.

This will be demonstrated through a design proposal of a new rowing club located in the central Gothenburg, with high focus on detail and material.

THESIS QUESTION

How can defining our architectural values help shape the process when designing a new rowing club in Lundbyhamnen?

DELIMITATIONS

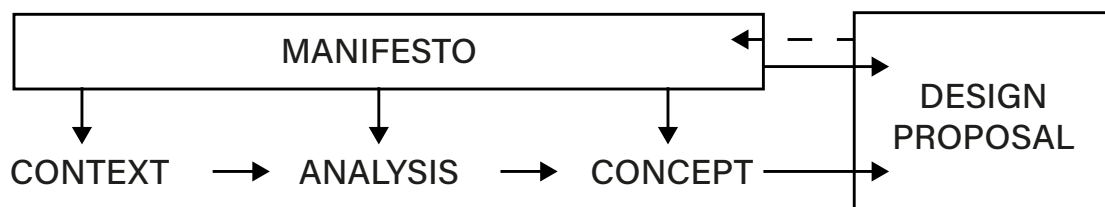
This thesis does not seek an absolute answer nor exact guidelines for what makes good architecture, but is rather investigating the creative process and formulating a document leading our project in a desired direction.

The project does not adapt to future city planning of the area, but would rather be seen as an alternative of what could be done instead. The site's environmental status of today has also been disregarded.

METHOD

This thesis is carried out by two parallel processes where one of which is the making of our own manifesto as a supporting document for our design process with a set context. Combined, this process becomes a research by design approach, where design choices lean on the theory gathered in the manifesto.

The manifesto takes its form from an iterative process based on both written literature on the topic of valuing architecture but is also formed and sorted by our personal values applied on this specific project and in a broader sense.



VALUING ARCHITECTURE

The following theory consists of a selection of works briefly presented in a chronological order by the year of publication.

20-30 BC. Vitruvius, the Roman architect, wrote *De architectura*, Ten Books on Architecture, a handbook for Roman architects, about 2000 years ago, a tool with principles to follow. A book that has since then been cited in most architect's education (Brophy & Lewis, 2011). Vitruvius described the fundamental principles of architecture through *firmitas*, *utilitas* and *venustas*, often translated as firmness - structural stability, commodity - functional fulfillment and delight - beauty. The latter, delight, being a more ambiguous term with ideologies that has changed over time (Fazio et al, 2014).

1570. In 1570, Andrea Palladio published *The Four Books of Architecture*, a comprehensive guide to classical architectural principles, emphasizing harmony, proportion, functionality in design. The book has had a lasting impact on architectural theory and practice, influencing generations to come.

Palladio emphasized the importance of proportions and symmetry in architecture. He believed that buildings should be harmoniously proportioned according to mathematical ratios, such as the golden ratio, to achieve aesthetic balance and beauty.

Palladio was deeply influenced by the architecture of ancient Rome and classical Greece. He believed that buildings should be harmoniously proportioned according to mathematical ratios, such as the golden ratio, to achieve aesthetic balance and beauty. His work were heavily influenced by the writings of Vitruvius. He embraced Vitruvius's three principles, viewing them as essential aspects of architectural design (Ekelund et al, 1985).

1851. The German architect Gottfried Semper, published the work *The Four Elements of Architecture* 1951, where he presented some of the ideas that he would later evolve in his main work ten years later. Semper illustrates a universal theory of architecture consisting of four elements, each relating to certain materials and production methods. These are The Hearth, The Roof, The Enclosure and The Mound.

In a proposal for a museum building, Semper had a classificatory approach dividing the objects by materials and production methods. The hearth, relating to mud and ceramics, the mound, could be read as foundation, related to stone and masonry, the roof to wood and timber craftsmanship and the enclosure to textiles and weaving (Caldenby & Nygaard, 2011).

1983. Dom Hans van der Laan was a Dutch architect and monk who developed an architectural theory known as "The Plastic Number".

His theoretical thoughts about architecture were deeply rooted in his understanding of proportion, space, and the fundamental principles of aesthetics.

At the core of van der Laan's architectural theory was the idea of numerical relationships governing spatial composition. He believed that certain ratios and proportions, derived from natural forms and mathematical principles, could create harmonious and timeless architecture.

Van der Laan's theory emphasized the importance of a universal architectural language, based on a set of geometric rules. He sought to create a system of architectural design that was both rational and intuitive, allowing for the creation of spaces that resonated with human perception and experience (Voet, 2019).

2006. "Quality in architecture does not - not to me anyway - mean inclusion in architectural guides or histories of architecture or getting my work into this or that publication. Quality architecture to me is when a building manages to move me." (Zumthor, 2006).

What Zumthor suggests is that the buildings that move him are the ones that succeed in enacting an atmosphere. He explains atmosphere through a number of different aspects, for example the Tension between interior and exterior, The temperature of a space and The sound of a space. All aspects that emphasize the sensory exchange with architecture (Zumthor, 2006).

VALUE OF THE DISCUSSION

COMPETITIONS

2013. The Dutch journal for architecture, OASE published an issue titled "What is good architecture?" in 2013. Nearly 40 architects, historians, theorists and critics were asked the question, and 14 of them took on the task, giving an answer from their own personal position. Others found the question pointless, or even too alarming to answer, problematizing the question itself.

Steven Holl, architect and professor at Columbia University, when asked about what good architecture is describes how architecture, more than any other form of art, directly engages our sensory perception.

"Space is a quality bound up in perception". Further, Holl describes the architectonic experiences to be linked to phenomenological experiences that correspond to the tactility of material and detail, rather than to be compared to emotional experiences (Patteeuw et al, 2013).

Andrew Leach takes a cautious or skeptical stance on stating criteria for what defines good architecture. While the author acknowledges the difficulty in clearly defining such criteria and criticizes the lack of clear standards within the architecture profession, he also advocates for the importance of engaging with these questions (Patteeuw et al, 2013).

Architects from Alberti to Mies van der Rohe have opposed towards an excessive use of theory in architecture, as theory would counteract the practice, and not compliment it (Caldenby & Nygaard, 2011).

However the evaluation of architectural qualities are inevitable when it comes to competitions. Therefore, we decided to analyze a selection of jury criterias of recent competitions held in a local nordic context.

In five recent architectural competitions held in a nordic context the years between 2022-2024, many jury criterias were recurring. Almost all of them could be divided into three main areas; function, sustainability, and architectural expression. In function, criteria regarding logistics, flexibility and technical solutions were mentioned. In sustainability, the main focus was on efficient use of resources, maintenance and circularity. While in architectural expression the aspects were more subjective, mentioning identity, beauty and "verkshöjd" meaning that the proposal has to reach a certain level of originality.



FIGURE 1

THEORY IN SWEDEN

1931. The manifesto *Acceptera* was published in relation to the Stockholm Exhibition 1930, by a group of eminent architects of that era. The exhibition is often described as the introduction of functionalism in Sweden.

The publication summarizes the functionalist social and cultural ambitions and its aesthetic ideals. The authors argue that the social and aesthetic shapes had remained even though the society had changed. The author's main notion was that we had to accept reality in order to change it (Sandhill, 2022). To evolve the design has to be anchored in the present, shaped by function, engineering and materials (Caldenby & Nygaard, 2011).

New buildings were supposed to be functional, stripped from ornamentation, true to their materials and cheap and accessible to live in (Sandhill, 2022). In the manifesto, the writers advocate a clear distinction of what is new and old, for a clear sequence of epochs giving a greater diversity and richness.

Every time epoch has its own expression, while the authors are cautious with the term style, they mean that style is not only a result of aesthetic choices but also forced by material and ideal conditions. Throughout the manifesto there is an assenting approach towards modern technique and an encouragement to make use of it, as a tool for rational thinking. Here they argue standardization and industrial building as a solution to the Swedish housing situation (Asplund et al, 1931).

1980. Hans, son of Gunnar Asplund, one of the founders of functionalism in Sweden, was also a modernist architect with many praised works. He later became more critical of the movement, and in 1980 he published *Farväl till funktionalismen*, where he systematically sorts out shortcomings of functionalism, though ten main aspects. In conclusion, he proposes his own manifesto for Tradinnovism, counter augmenting the same ten aspects.

Instead of "acceptism", hinting at *Acceptera*, Asplund suggests not to accept the present and rather question it, and look for alternatives. Try to anticipate consequences for buildings a 100 years and for cities a 1000 years.

Instead of "teoreticism" the author argues that architecture is first and foremost art, then engineering and lastly theory.

Instead of "materialism" Asplund argues that you should build "more beautiful", smaller, slower and sometimes even more expensive.

Instead of "teknokratism" you should "treat technique as servants not lords". Use more hand craft, more natural materials and less high refined materials like concrete, pavement and metal.

Instead of "infinitism" shape the spaces between buildings firstly, buildings secondly. Create readability, density and wind protection in cities.

Instead of "internationalism" regionalize architecture through material, form and tradition (Asplund, 2022).

2023. In hope of getting more young practicing architects in Sweden to write about architecture and to push the general debate, Spark published a collection of manifestoes where 15 offices shared their own versions of what's guiding their architecture practice. The manifestoes are based on the definition that a manifesto only describes what should be obtained, and not how it is obtained (Gerthel & Torisson, 2023).

DISCUSSION

There is a more personal tone in these manifestos compared to earlier mentioned. Themes such as experience, craftsmanship and sustainability are mentioned in several of the manifestoes. Fabel Arkitektur writes that the conversation gives form to the architecture, the conversation between people as much as the conversation between materials. And that you should always be able to create the architecture by hand. Helgesson Gonzaga follows up by stating that architecture should grow out of the ground, and that the material has an inner will and you should let it lead.

Ateljé Ö emphasizes the importance of presence, "Conduct over 100 site visits", the context is the playing field and unique qualities are found in every location. They also write about the importance of each interaction with colleagues in the field, for example blacksmiths, masons and carpenters. One of the first things they write is to have fun, and they aren't the only ones mentioning joy. The importance of having a touch of sprinkle in your eye when exploring architecture. Norell/Rhode displays this when they write "Architecture is about being profitable, or not" (Gerthel & Torisson, 2023).

The selection of theory can be subjected to criticism - as well as the outcome of this thesis as whole. However, the intent was not to present all possible definitions and criterias of good architecture. But rather build upon a few, combine and redefine through our framework and perspectives.

You can observe a clear shift of focus over these 2000 years, the rules of what good architecture are, were much more prominent in the past. Good architecture was measured in proportion, numbers and reference. Today the majority of the conversation is about your experience of architecture.

APPLYING THE MANIFESTO

It's always been an interest of ours to add beauty to the city. A Rowing Club both adds idle beauty and beauty in motion at the same time. We come from different cities and came here on different occasions for different reasons, but individually we have acknowledged the absence of relation to the water in Gothenburg. The issue lies in accessibility to the waterfront.

The naivete of a Rowing Club where most of the people you talk to have a somewhat clear and almost nostalgic image of what you are talking about is what made us choose this typology to apply our manifesto on.

MANIFESTO

The adaptation of our manifesto can be followed in Appendix "Applying the Manifesto". Here the design process and selection of iterations are shown.

DURABILITY

Performance

The choice of materials regarding their performance and longevity and the building's way of handling the elements of nature, based on theory spanning back to Vitruvius and Palladio.

Disassemble

Circular approach for design with reuse and disassembly. Criteria that have grown stronger in recent years architectural competitions.

Statement

Buildings or elements that stand in contrast to its surroundings. Design choices that make a statement and change the context.

Adaptation

Minimal change in nature with adaptation to its cultural, biological and social context. "...celebrate the relationship between architecture and the surrounding environment" (Gerthel & Torisson, 2023).

USABILITY

Functional

To solve the specific requirements of the program. Logistics, flow and orientability are also important aspects.

Flexible

Generality for a change over time. The ability for the building to adapt to new conditions.

Intention

The strength of the concept and the level of guiding elements towards the user. As Kersten Geers put it; "Good architecture is intentional" (Geers, p.12, 2013).

Unpredicted

Freedom of use and movement.

BEAUTY

Proportion

Measurable aspects of design, like proportion, ratio composition and repetition, building on theories from Vitruvius to Van de Laan.

Identity

Non-measurable aspects, often articulated as architectural expression in competition criteria or as coherence in Zumthor's theory.

Rational

Tectonic design, true to their materials, with rationality and simplicity in focus. Some of these theories grew strong during functionalism, for example proclaimed by the author's of Acceptera.

Multilayered

Valuing complexity, tradition and decorative elements of design.

ATMOSPHERE

Tactile

Phenomenological aspects of architecture like temperature, sound, light and the composition of detail and material. "Space is a quality bound up in perception" (Holl, 2013).

Poetic

The added *esperi*, art or enlightenment to the whole that may not fill any practical functions. Norell/Rodhe expressed that all architecture should have *esperi*, temperament, humor and stance (Gerthel & Torisson, 2023).

Intimacy

The level of intimacy is about what we experience and not experience in different relations to the building, from afar, up close, inside etc. As Zumthor puts it; "It all has to do with proximity and distance" (Zumthor, 2006).

Craftsmanship

A sense of the origin of material and how they have been produced. Showing the human touch and all its imperfections. Architecture should be personal and materials be handled with our hands, Fabel arkitektur suggests (Gerthel & Torisson, 2023).

S	M	L
1	2	3

S / M / L - Small / Medium / Large - Detail / Building / Context
1 / 2 / 3 - Version 1 / Version 2 / Version 3

Durability

			Performance
			Disassemble
			Statement
			Adaption

Usability

			Functional
			Flexible
			Intention
			Unpredicted

Beauty

			Proportion
			Identity
			Rational
			Multilayered

Atmosphere

			Tactile
			Poetic
			Intimacy
			Craftsmanship

THE SPORT OF ROWING

Rowing is a simple sport, not easy but simple. The main objective is to move a boat as fast as possible from one point to another with one or several oars. You often use two oars per person but sometimes you only have one oar in competitions where you are more than one person in a boat. These are the two major categories of rowing. Holding two oars is called Sculling and holding one oar is called Sweep. You can Scull with 1, 2 or 4 crew without an extra person sitting in the stern (the back of the boat) looking forward while steering - also called a Cox, short for Coxswain.

In Sweep you often have a Cox for boats with 2, 4 and 8 crew (Roddsvrige). 2000 meters is the most common distance of a race. There are also sprint competitions which go down to 500 meters and much longer races called "headraces". The headraces usually follow a canal or river and can go on for many kilometers (Uddevalla Roddklubb).

SWEDISH ROWING HISTORY

The Swedish Rowing Association (Svenska Roddförbundet) was founded in 1904 which makes it one of the oldest sport associations in Sweden. The sport of modern rowing came to Sweden in the latter half of the 19th century after it was introduced in 1829 in England. The sport was made famous by teams from Cambridge and Oxford who raced along the Thames (Uddevalla roddklubb).

The sport is often associated with elitism and tradition, however after the first world war the sport took a rise in popularity and modernized. The sport became more technical which made the rowing boats more efficient. At this point, Swedish rowers made an impact on the rowing scene. But it wasn't until after the second world war that the sport became democratized.

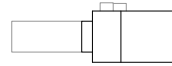
This allowed the general public to access the sport in a new way, youth activities and education was now something that the Rowing Clubs invested in and soon rowing was accessible to every social class.

Today there is still an aura around rowing which extrudes elitism, often mentioned in the same sentence as elite schools. But here in Sweden its very easy to access if you find yourself interested (Rodd i Sverige).

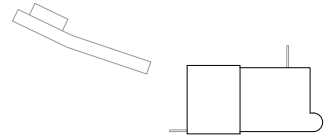
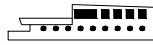
ROWING CLUBS (selection)

Year of start and number of members as of 2022 data

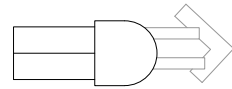
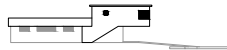
Göteborgs Roddklubb	1851	152 medlemmar
Göteborgs Roddförening	1879	48 medlemmar
Stockholms Roddförening	1880	294 medlemmar
Norrköpings Roddklub	1883	35 medlemmar
Malmö Roddklubb	1884	144 medlemmar
Hammarby Roddförening	1889	216 medlemmar
Uddevalla Roddklubb	1904	68 medlemmar
Akademiska Roddföreningen	1929	163 medlemmar
Möndals Roddklubb	1946	268 medlemmar
Brudpiga Roddklubb	1971	245 medlemmar
Styrsö roddare	1988	40 medlemmar
Uppsala Akademiska Roddklubb	1992	120 medlemmar



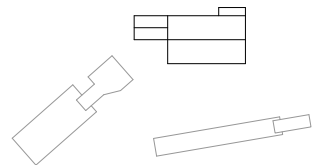
Uddevalla Roddklubb



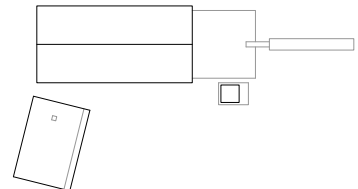
Malmö Roddklubb



Norrköpings Roddklub



Stockholms Roddförening



Göteborgs Roddförening

STOCKHOLMS RODDFÖRENING

Stockholms Roddförening is Sigurd Lewerentz very first project, it is located along Djurgårdsbrunnskanal immersed in the recreational park of Royal Djurgården in Stockholm. The ground floor has an obvious front and back, towards the water you have multiple choices for seating and a cover from the upper extruding floor.

You arrive in the east and this is also where the big garage-like openings are located for loading the boats in and out of the open ground floor that is dedicated to storing the rowing boats. The upper floor has an almost uninterrupted view towards the canal that can be visual from the social gathering rooms.

On the other side, more private functions like dressing rooms and showers are facing the backside towards the road and the hilly landscape. This project has elements which we've come to understand is its own typology of architecture, the swedish rowing club. We've then taken these elements into concern when creating our program and the programming of the space (Stockholms Roddförening).



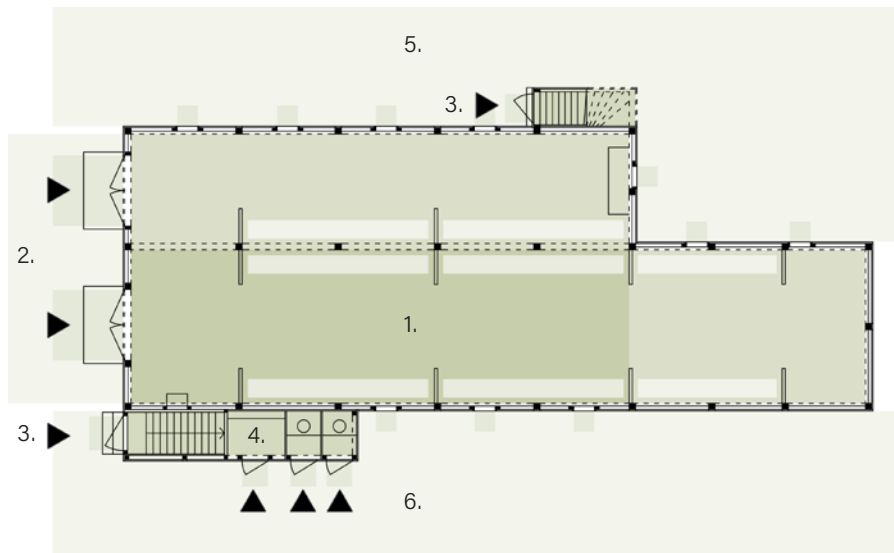
CORE FUNCTIONS

Identified core functions of a rowing club

- Storage of rowing boats and equipment
- Workshop for maintenance
- Club room for different usage
- Office for administration
- Locker Rooms
- Gym
- Kitchen

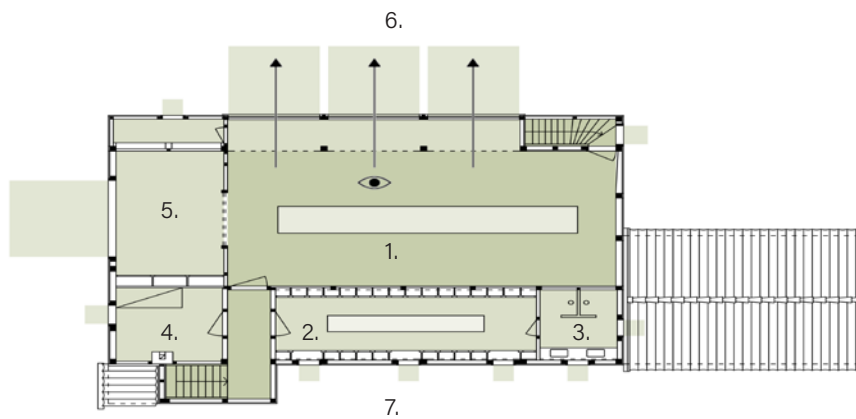
Additions in our proposal

- Sauna
- Café
- Outdoor kitchen



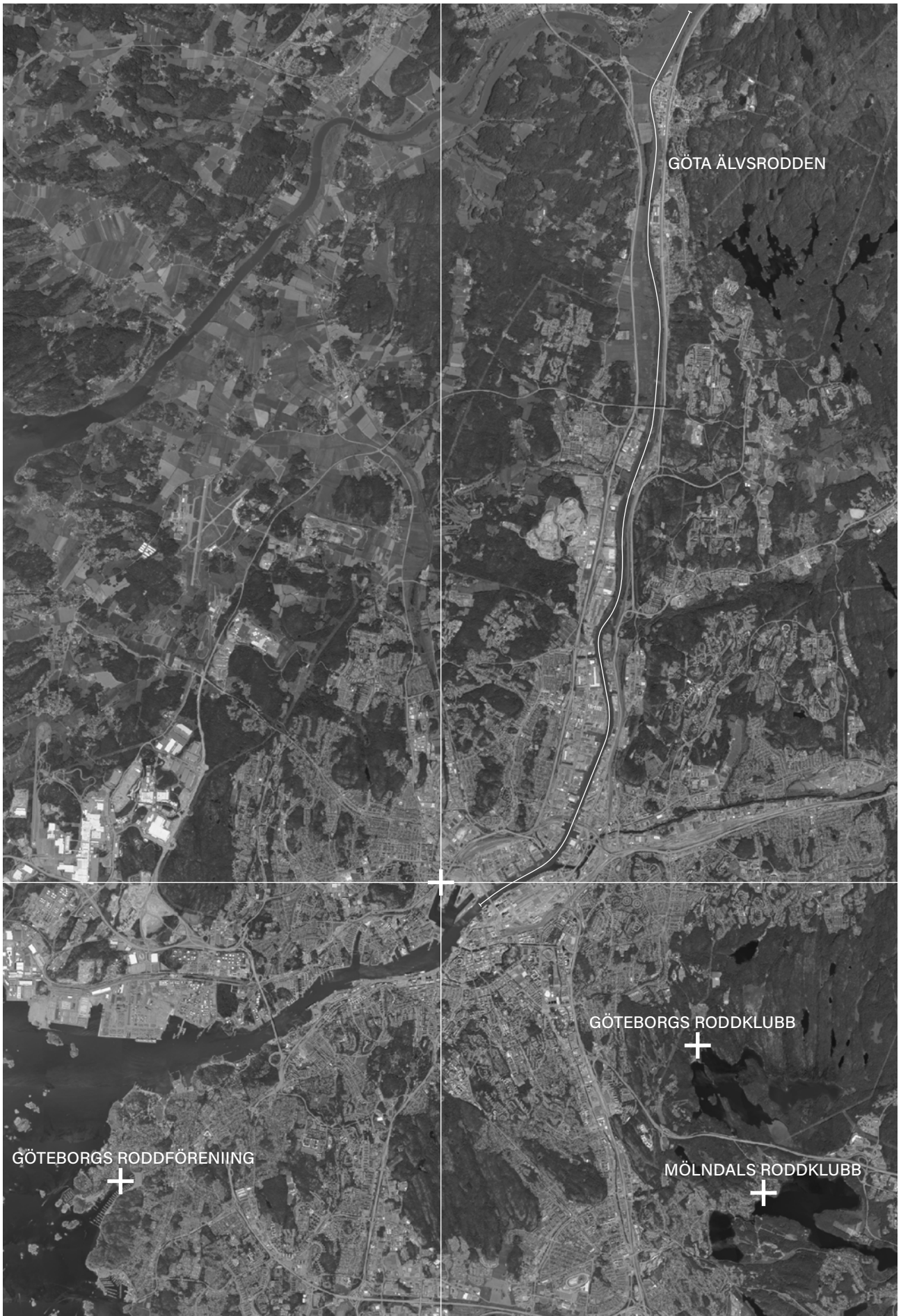
Ground floor

- 1. Boat storage
- 2. Garage doors
- 3. Access 2nd floor
- 4. Removed WC
- 5. Water side
- 6. Back side



2nd floor

- 1. Club room
- 2. Locker room
- 3. WC / Shower
- 4. Remade kitchen
- 5. Office
- 6. Water side
- 7. Back side





SITE

The three major Rowing Clubs near Gothenburg are Gothenburg's Rowing Club with 152 members located inland at a lake called Delsjön and Gothenburg's Rowing Association with 48 members located on a small island close to Saltholmen outside of the city. And the third one being Mölndal Rowing Club, with 268 members, not too far away from the one in Delsjön.

Gothenburg's Rowing Club is Sweden's oldest Rowing Club and dates back to 1851. The Club's very first boat house was built at the north west side of Göta Älv, on Hisingen close to Kvillebäcken. Today there are no active Rowing opportunities in Göta Älv, despite the history of the sport in the heart of Gothenburg.

The design project of our thesis is a rowing club set out in Lundbyhamnen, connected to Göta älv, here in Gothenburg. Aiming to strengthen the public's relation to Göta älv and bring back a rowing club to the city center. Acknowledging the lack of interaction with water despite its proximity, the aim has been to make the waterfront more accessible for the inhabitants (Hallén, 2024).





AN OASIS



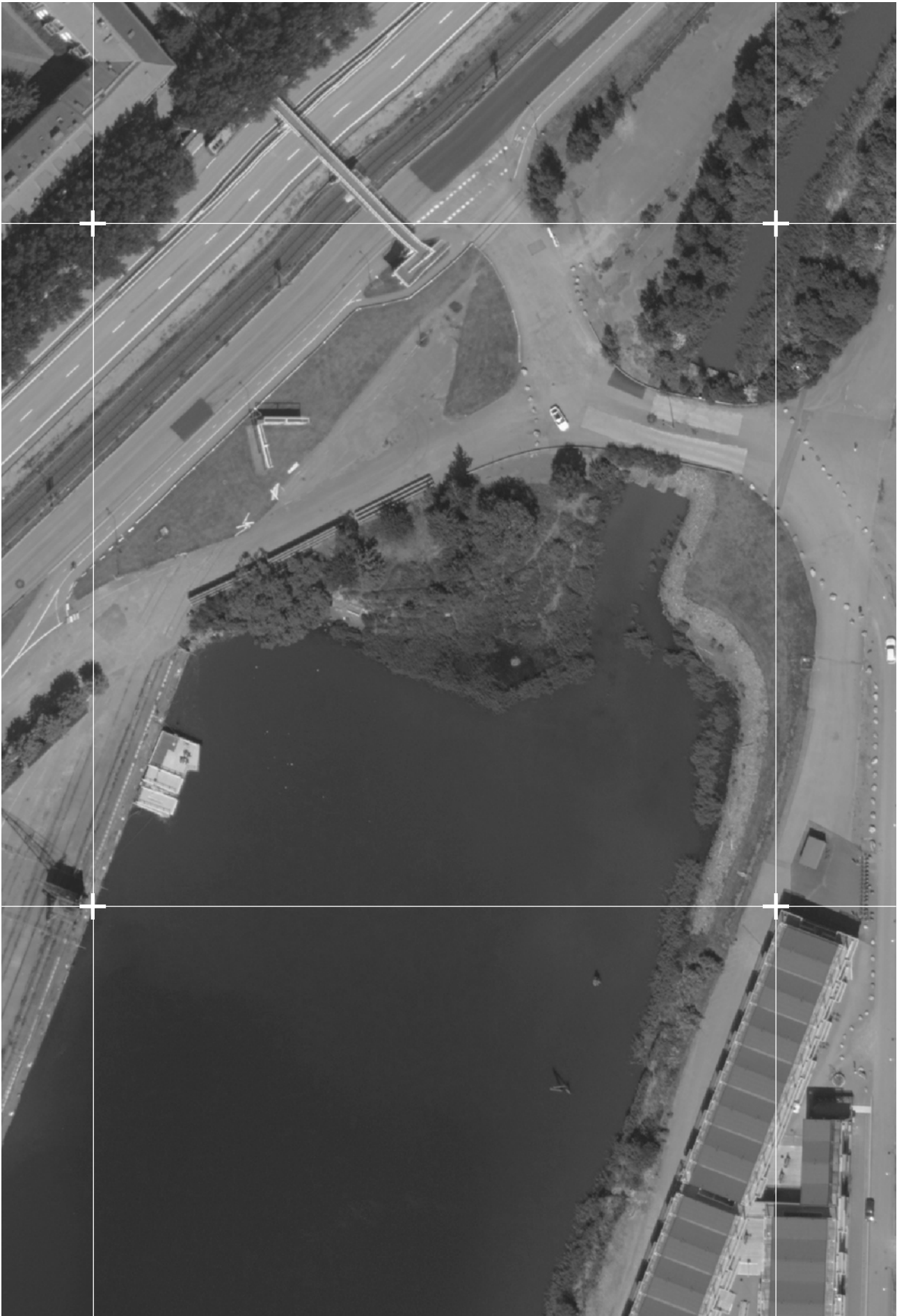
FACING SOUTH TOWARDS SITE



FACING NORTH TOWARDS SITE



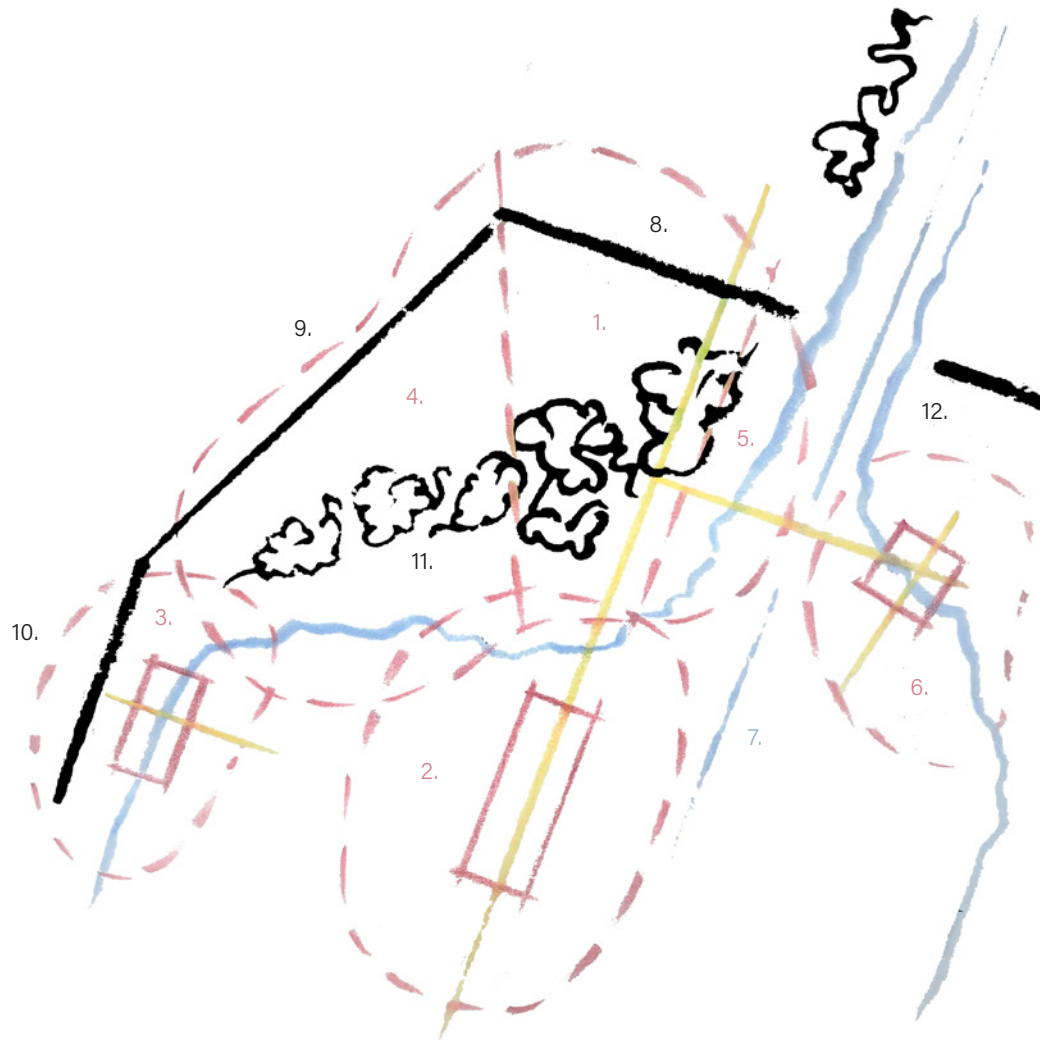
OVERLOOKING THE PORT



PINK - Zones for function

YELLOW - Lines of direction

BLUE - Water boarder and direction



- 1. Clubhouse core location
- 2. Boat storage water access
- 3. Café overlooking activity
- 4. Gym encloses area

- 5. Workshop outdoor defining
- 6. Sauna bridging the other side
- 7. Direction of water
- 8. Perpendicular to water

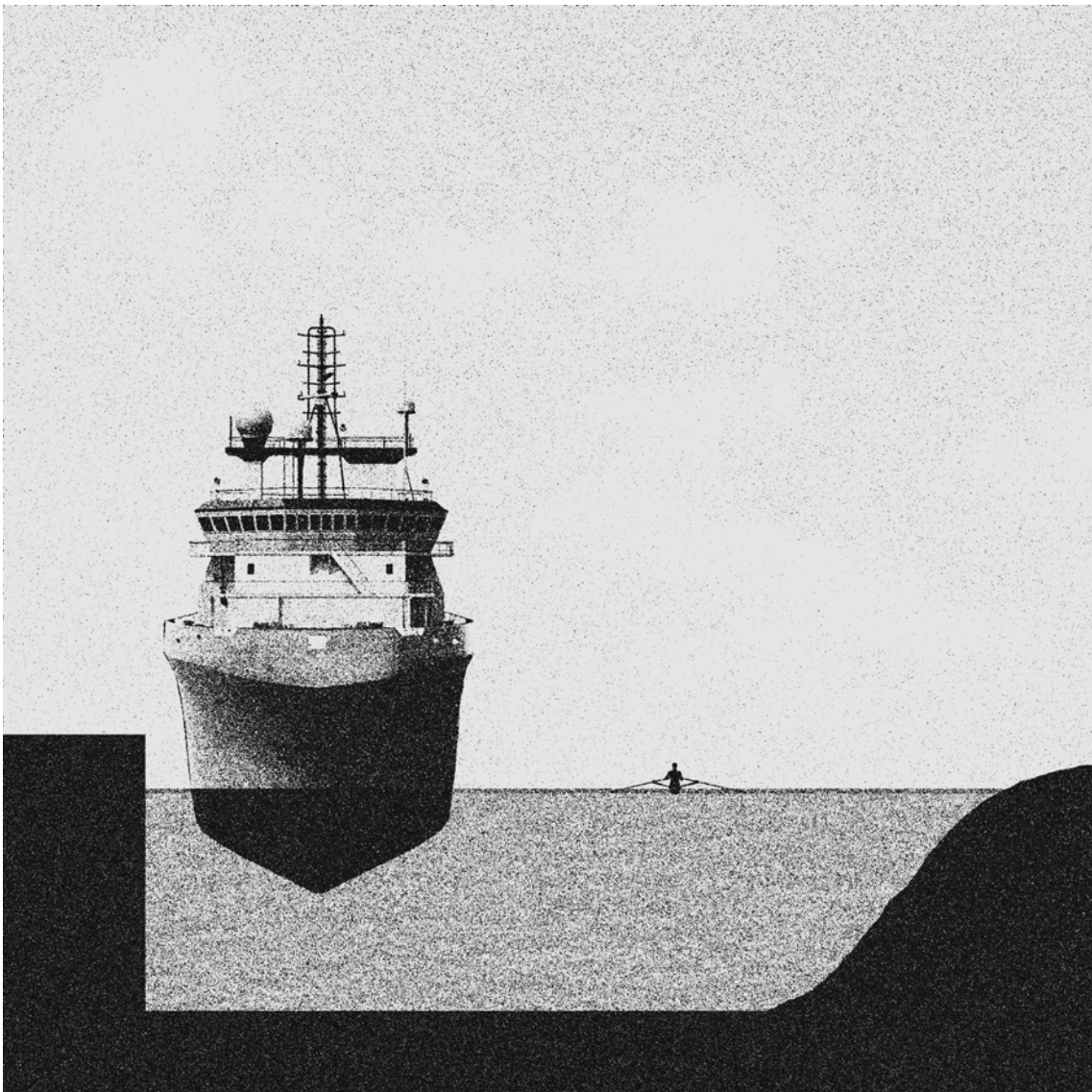
- 9. Parallel to the highway
- 10. Quayside direction
- 11. Trees to keep
- 12. Continuation over water

SCALE

Lundbyhamnen is of a different era, and of a different scale. The port withheld vessels for transport of different kinds. These vessels had varying length, width and depths and the port where made to handle them all.

These were the parameters for the port's dimension. Lundbyhamnen is over 600 m long. Our approach to a Rowing Club has a very different scale.

To bridge this gap between these two very different scales, we decided to break up our program into different volumes that sit on different heights in between the water level and the quayside.



CLUSTER

This results in what we call a Cluster, where the different volumes change in scale and height but still read as a whole.

A kin-ship between them all, referencing an old fishing port. Some volumes are lighter in materiality, housing one function each.

Some are made heavier to screen off the unwanted surroundings. They function as support buildings, strengthening the solitaires.





TRADITION AND MODERNITY

DURABILITY

The contrast of something that's traditional together with something that is modern, lays as a foundation for this masterthesis. Side by side stands the high performing corrugated metal roof with the traditional post-and-plank disassemblable wooden framework.



HISTORY OF INDUSTRY

USABILITY

Form follows function is the methodology of the industrial aesthetic. The usage is highly intentional yet comes with a standardisation that makes it flexible when the area of use changes. The unintentional design that your left with is often of great graphical value.



CONTRAST OF AGEING

BEAUTY

Authenticity of materiality can both be simple and complex. Treated or untreated, cut or fallen, old or new, they can all be honest. Weather its done by a measurable proportion or made intuitively in a non measurable way the outcome can still be beautiful.



RELATION TO WATER

ATMOSPHERE

Paying attention to different scales throughout a build could create intimate moments close up and futher away for someone who is experiencing the architecture. Giving the experencer a chance to interact with the project in a more tactile and personal way.

TERABE GUEST HOUSE

Terabe Guest House is a coastal home and workspace located on the coastline in Nishio, central Japan. It's a contemporary take on traditional Japanese architecture built by Tomoaki Uno. The key feature of the building is that it is elevated one floor with the help of 32 columns of solid tree trunks (Demetriou, 2024).

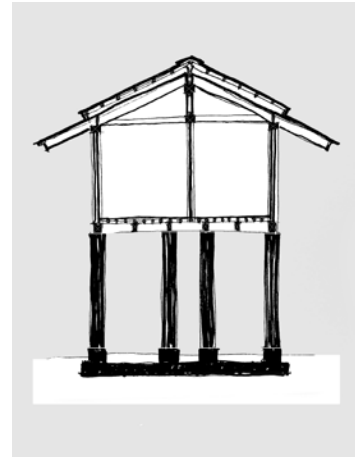
Even though Uno's working with other conditions in another part of the world, we strive for his level of enthusiasm towards craftsmanship, material and proportions. As far as it was possible the work on Terabe Guest House was carried out by hand and the craftsmanship shines through in every single detail.

The project was being constructed in real time as we were starting our master thesis. It was a pleasure to follow the process that was shared from day to day and it inspired us immensely.



The simplicity of the result may come across as basic geometries. But understanding and executing the complexity of these joints and assemblies may take a lifetime to master.

As seen in the section, every aspect of the build is highly understandable and rational, still it's obvious that Uno is a master of construction.

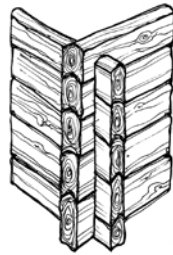


WOOD FOR SUSTAINABILITY

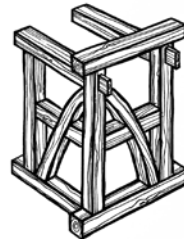
Building with wood has almost become synonymous to building sustainably. With a strong traditional history, timber has been a primary source of building construction spanning back for more than 10 000 years (Woods, S, 2016).

A transition within the building and construction sector is crucial for a low carbon society (IPCC 2014). Worldwide, the sector accounts for about a third of

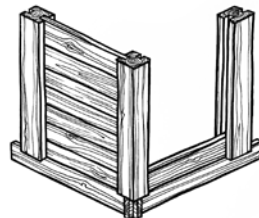
the energy use and almost 40 % of the energy-related carbon dioxide (CO₂) emissions (IEA, 2018). Numerous studies show that using wood as a replacement for fossil materials like steel and concrete in building structures is an efficient way to reduce energy usage and emissions (Dadoo et al. 2014).



DOVETAILED



HALF TIMBER



POST-AND-PLANK

POST-AND-PLANK

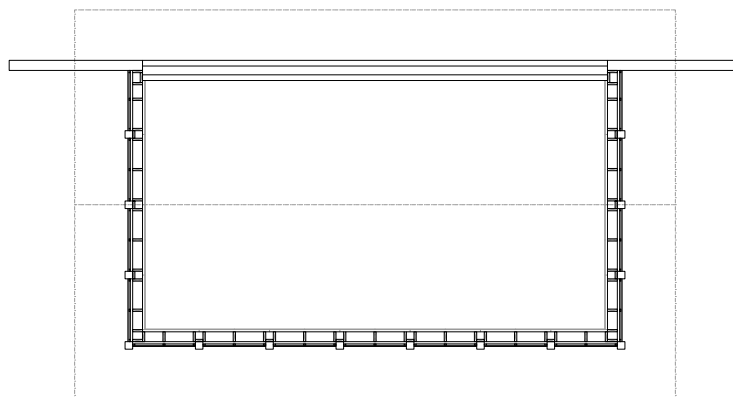
In Sweden there are 3 major types of building techniques when it comes to traditional wooden structures. Dovetailed, half timber and post-and-plank. Dovetailed timber houses have their Swedish origin in areas where the resources for straight grown pine were high, in contrast to the half timber houses that could be found in areas where not enough timber were obtainable, typically in the most southern parts of the country.

However, the post-and-plank buildings are found in a broader area due to several factors. Originally out of oak, they naturally appeared in areas dense with leaf forests. In the 1750s the demand for a more rational and cheap way of building started to grow.

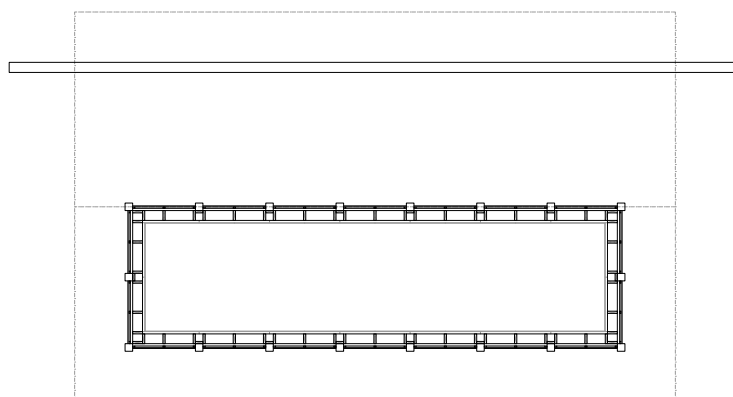
Therefore propagations by Carl Wijnblad were made for building sheds and barns out of the post-and-plank technique, a more efficient use of wood than the dovetailed technique. The change from oak to pine and spruce were also made in this era, which made it into a very common building technique in all of south Sweden (Byggnadsvårdsföreningen, 2019).



UNINSULATED



INSULATED CONNECTED

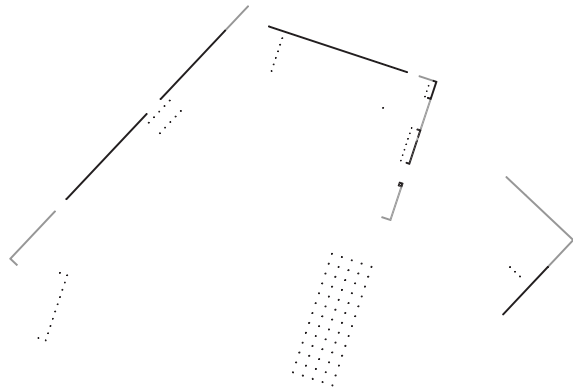


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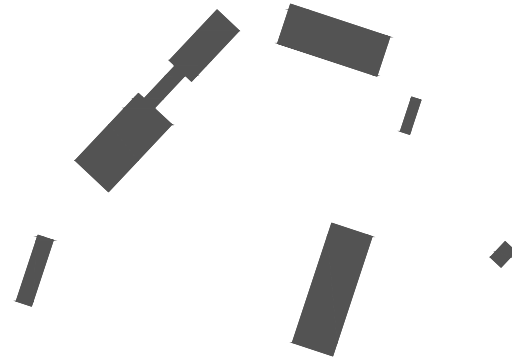
CONCRETE WALLS

The site is a small sanctuary immersed in the middle of a heavily industrialized area. A "backbone" is constructed to screen off the noise and enhance the focus to the qualities of the site. This in the form of a heavier wall that hugs our site. Connecting the different areas are raised walkways that land light on the ground.



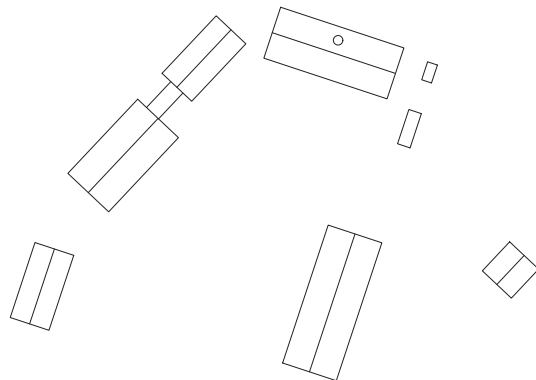
WOODEN VOLUMES

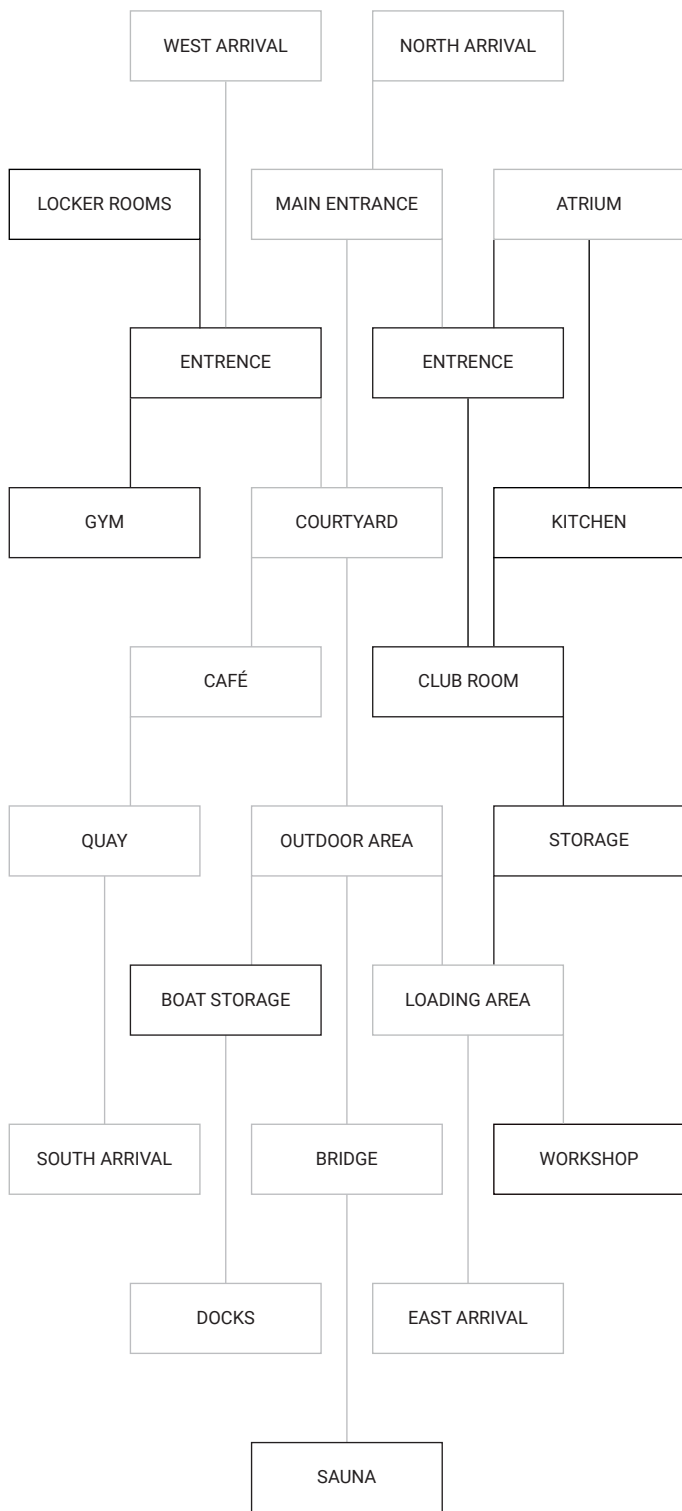
The volumes house different programs that are connected to the whole. Sometimes connected by the walls and roofs otherwise as solitaires. They aim to have simple shapes that vary in height and mass.



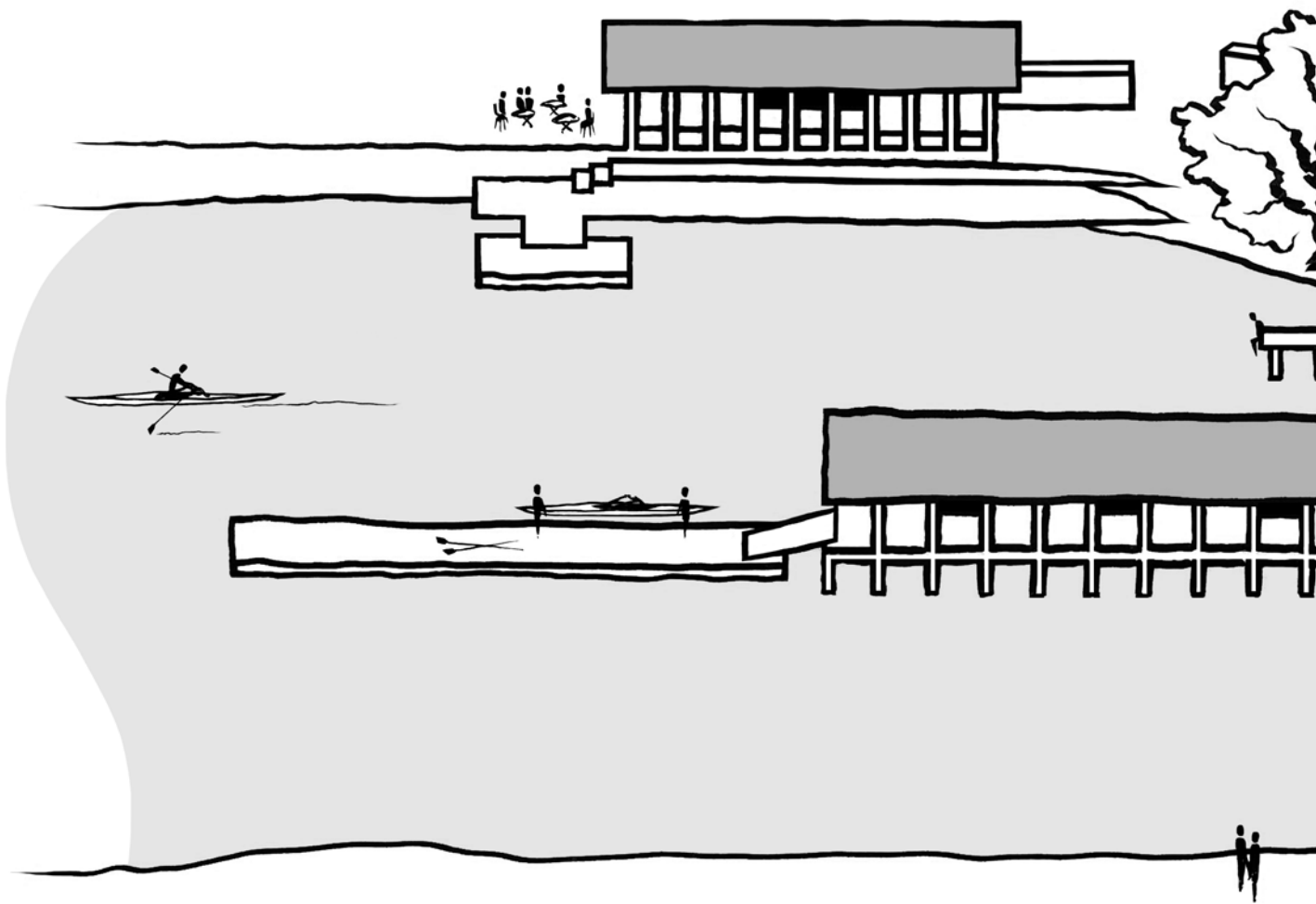
METAL ROOFS

The corrugated metal roofs either sit traditionally on the volumes or rest on the connecting walls. With low angles they help to ground the buildings to the site.

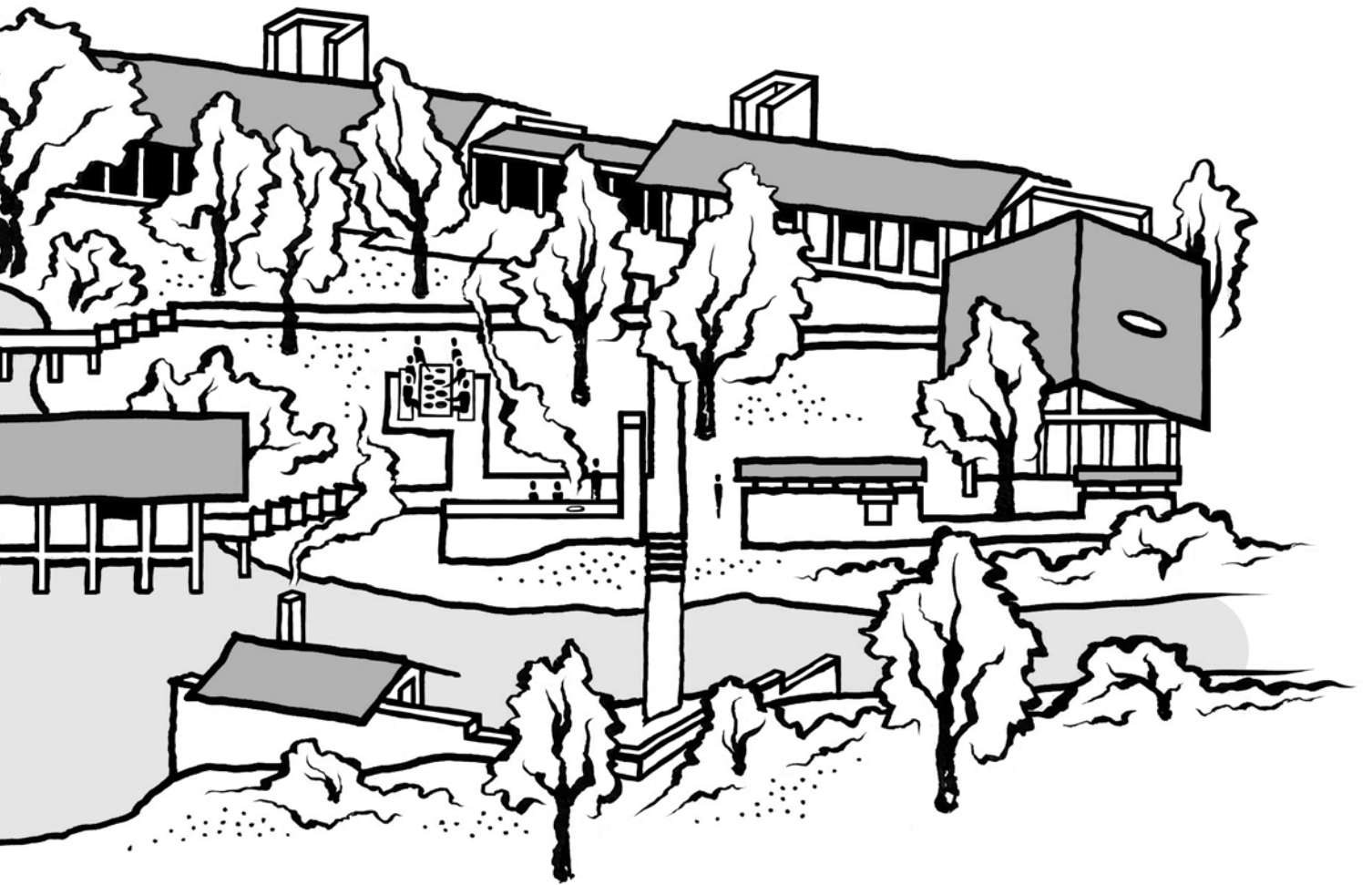


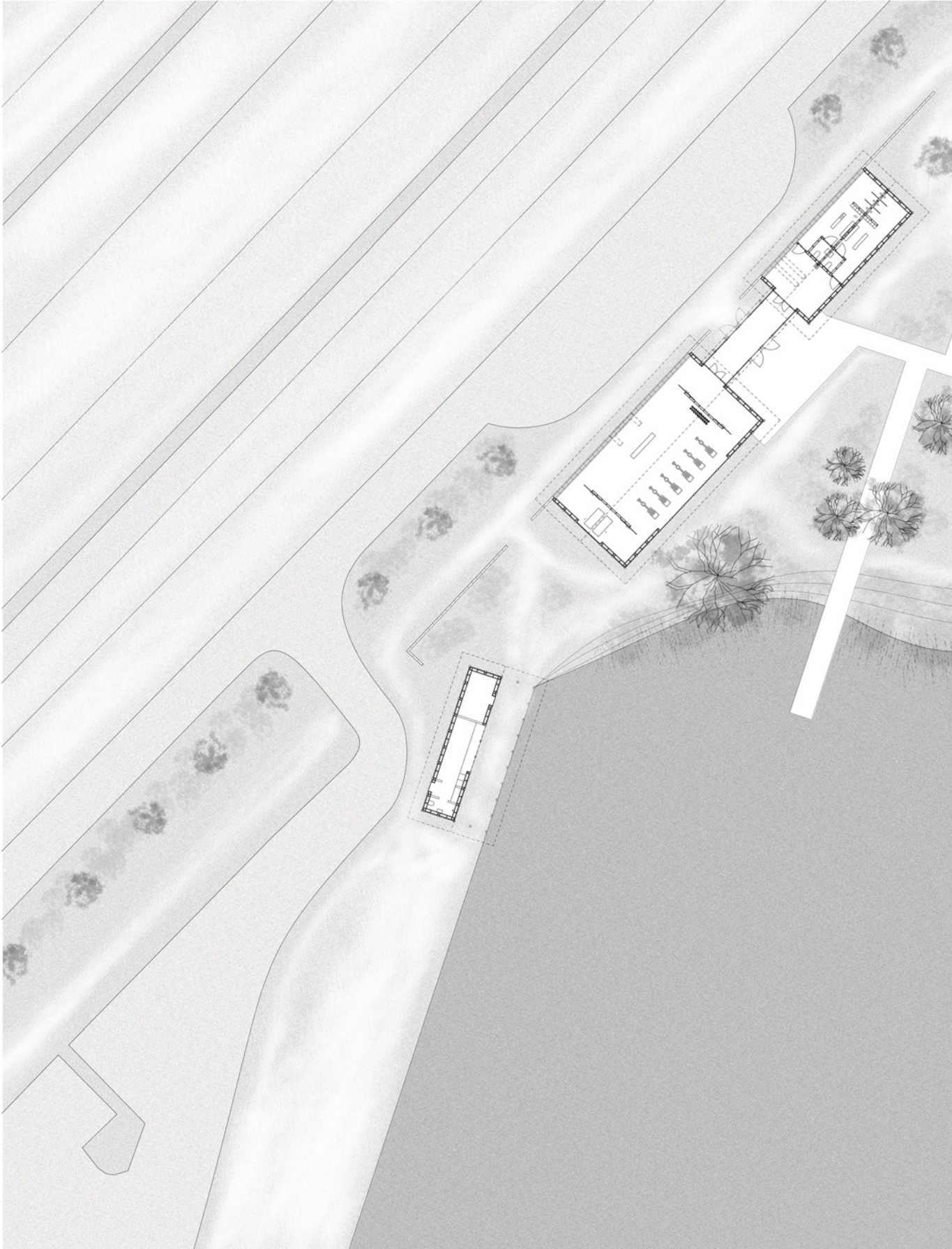


PROGRAM	SQ M
BOAT STORAGE	222
CLUB HOUSE	157
CLUBROOM	80
ATRIUM	12
KITCHEN	12
STORAGE	14
WC	6
WC	3
LOUNGE	16
OFFICE	14
GYM & LOCKERS	273
LOCKER ROOM	23 X 2
WC	2,5 X 2
ENTRANCE	26
LINK	28
GYM	168
SAUNA	9
CAFÉ	37
WORKSHOP	12
TOTAL	710



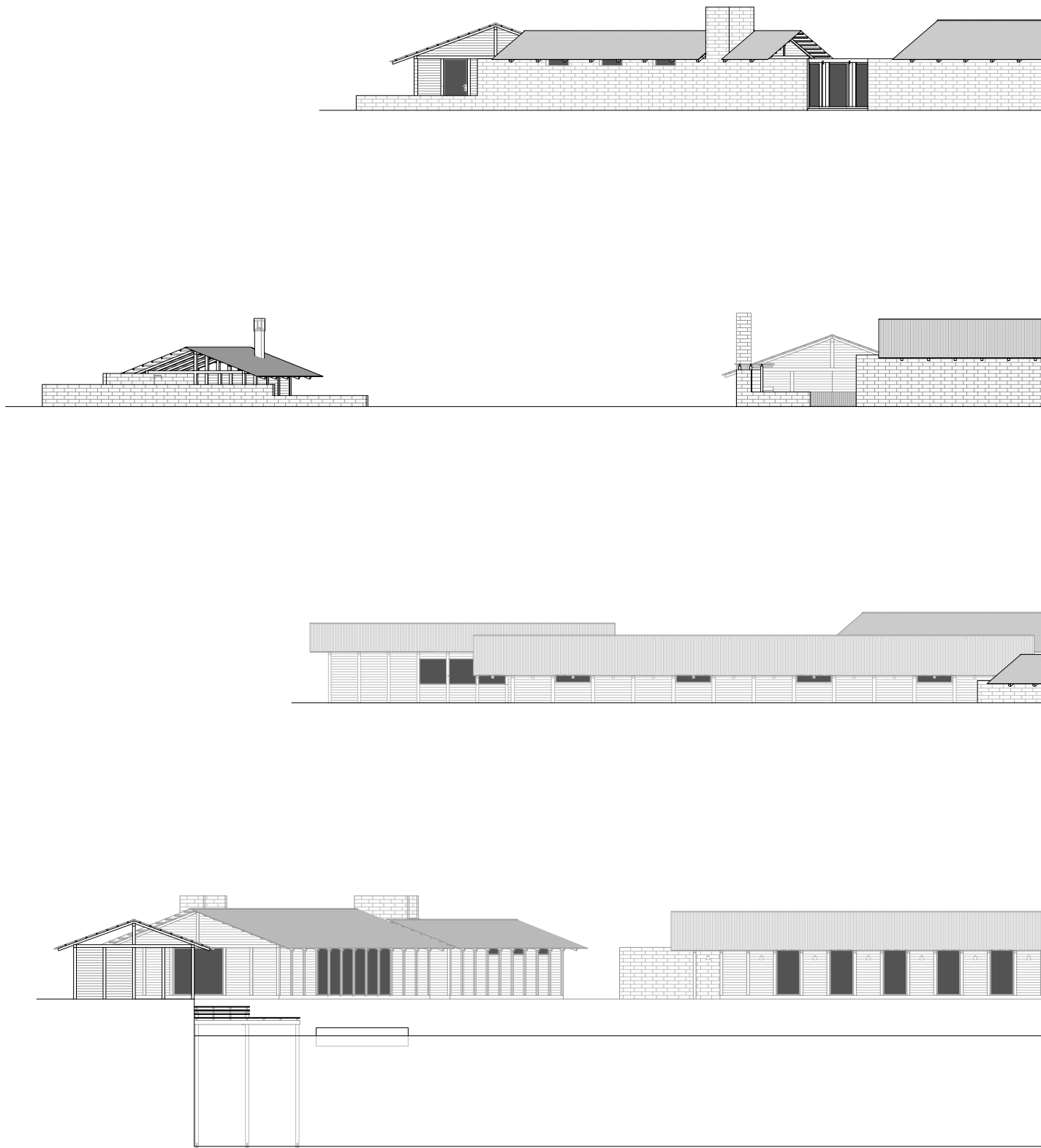
SITE ILLUSTRATION
RODDKLUBBEN



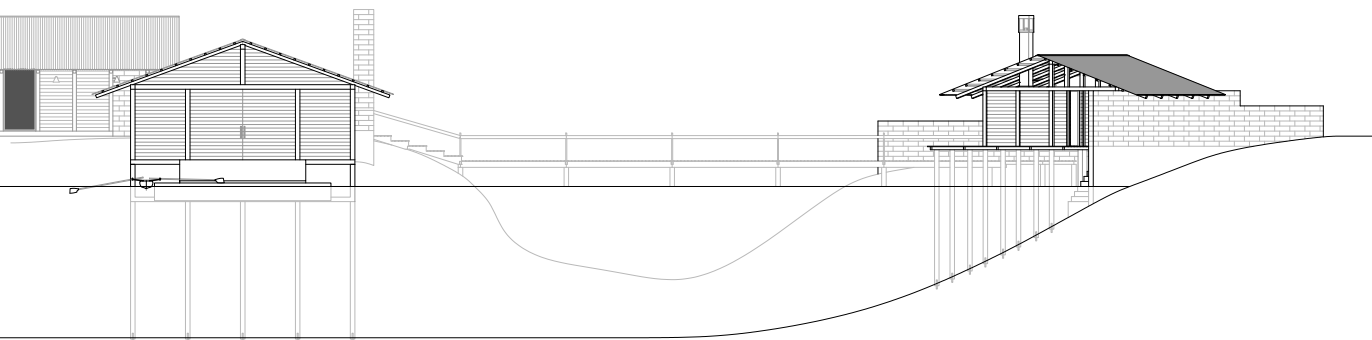
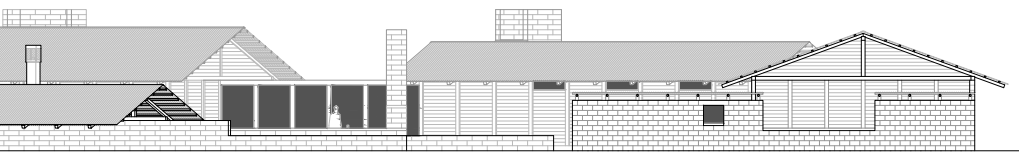
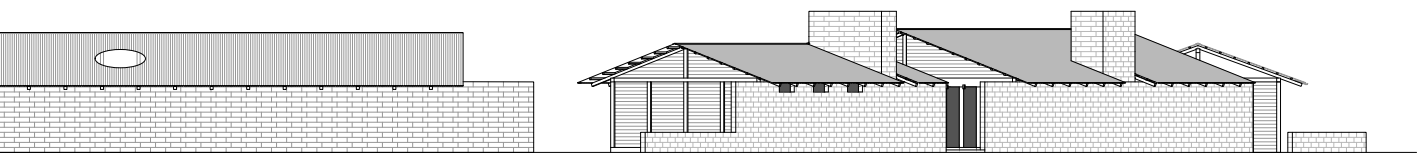
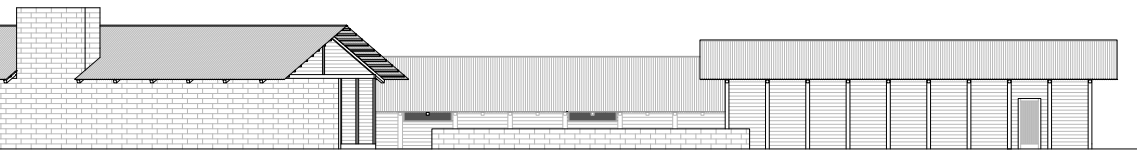


SITE PLAN
RODDKLUBBEN





WEST, NORTH, EAST AND SOUTH ELEVATION
RODDKLUBBEN





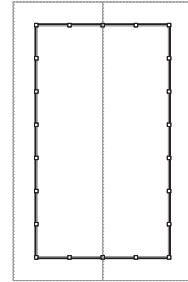
LINK
RODDKLUBBEN



BOAT STORAGE

The boat storage is the most important function in a Rowing club. The building is used for the club members to store the rowing boats together with the equipment secured and away from the elements. It has easy access from both water and land. This is in many ways the simplest building, but also the most complex. Standing over the water a rigid foundation of pillars is needed.

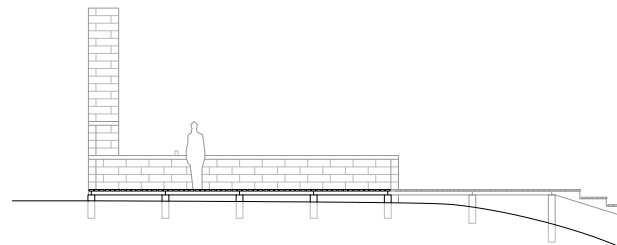
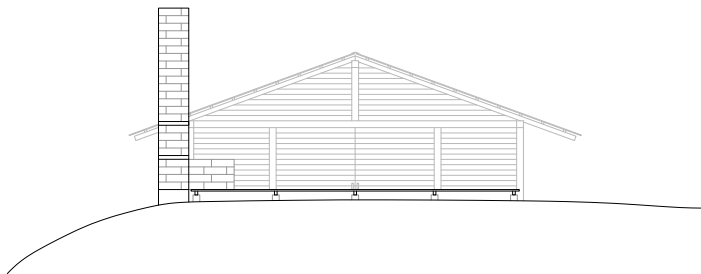
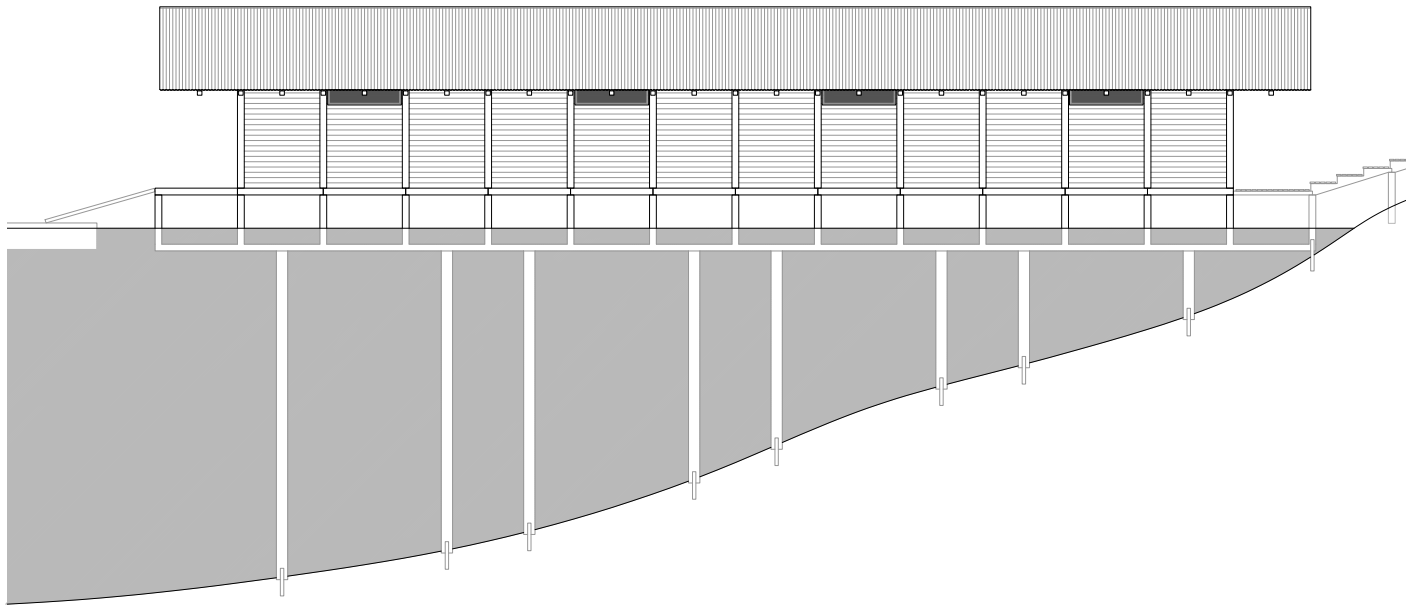
As it is only used for storage it is uninsulated with just a layer of horizontal wooden panels for wind protection. Having so few layers to it, the building allows for temporary floodings just like the docks surrounding it. It's a building dedicated to function, inspired by the boatsheds across the Swedish shoreline. The building is rooted in tradition and honesty.

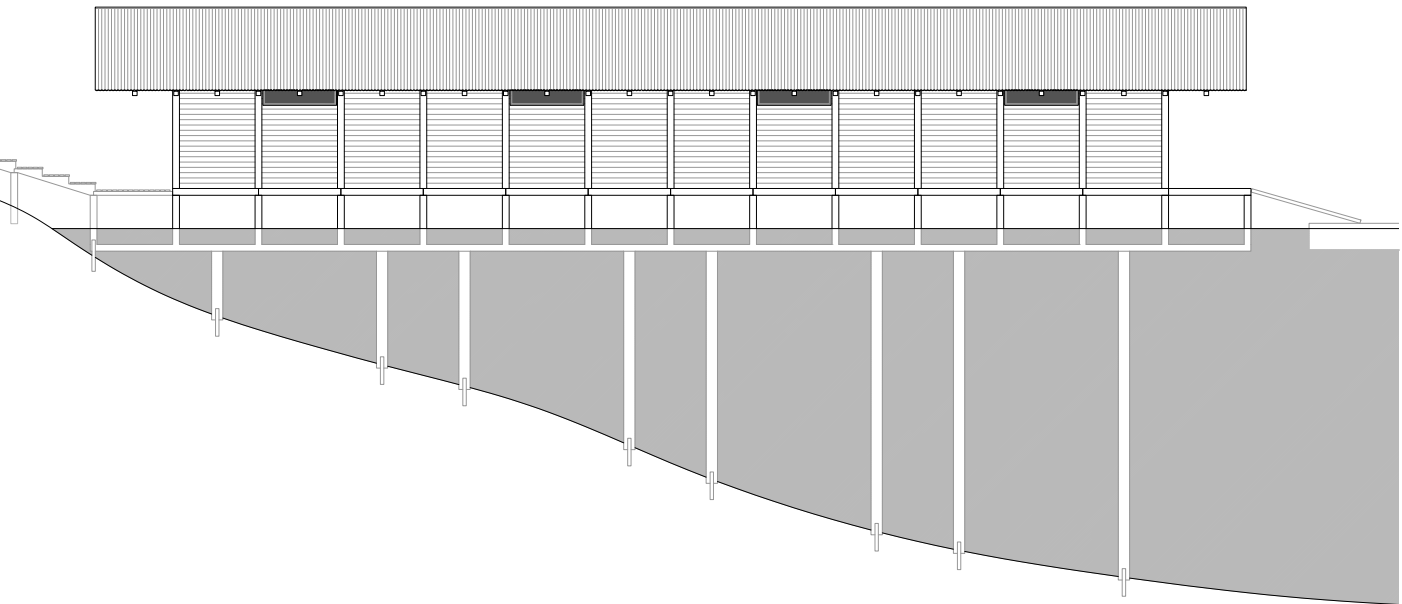
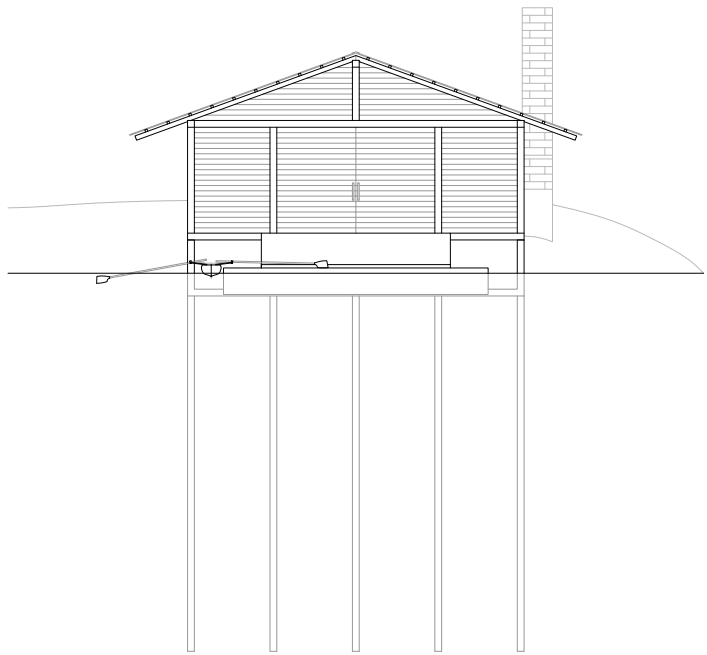
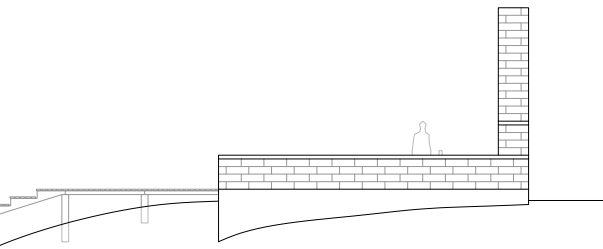


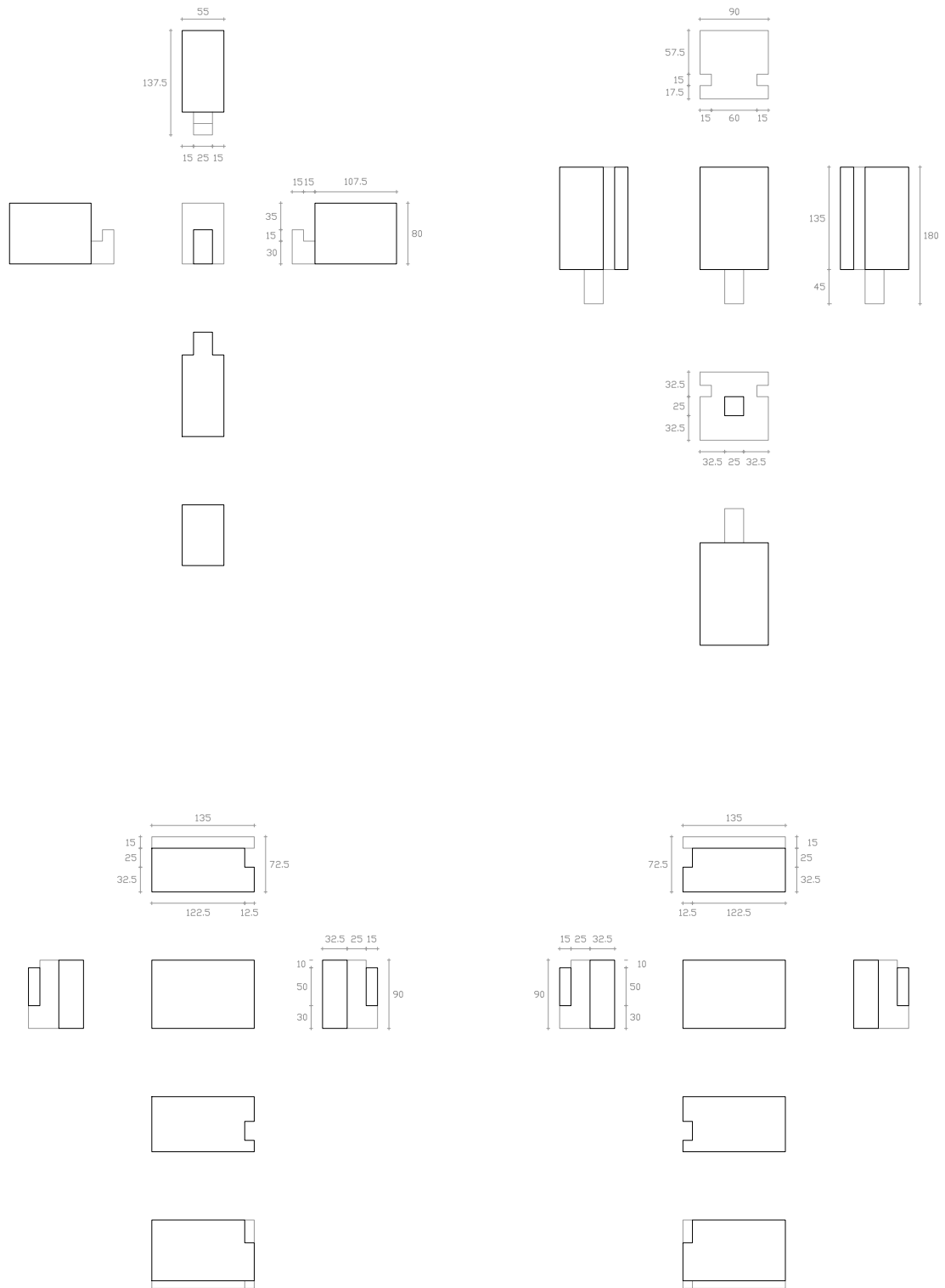
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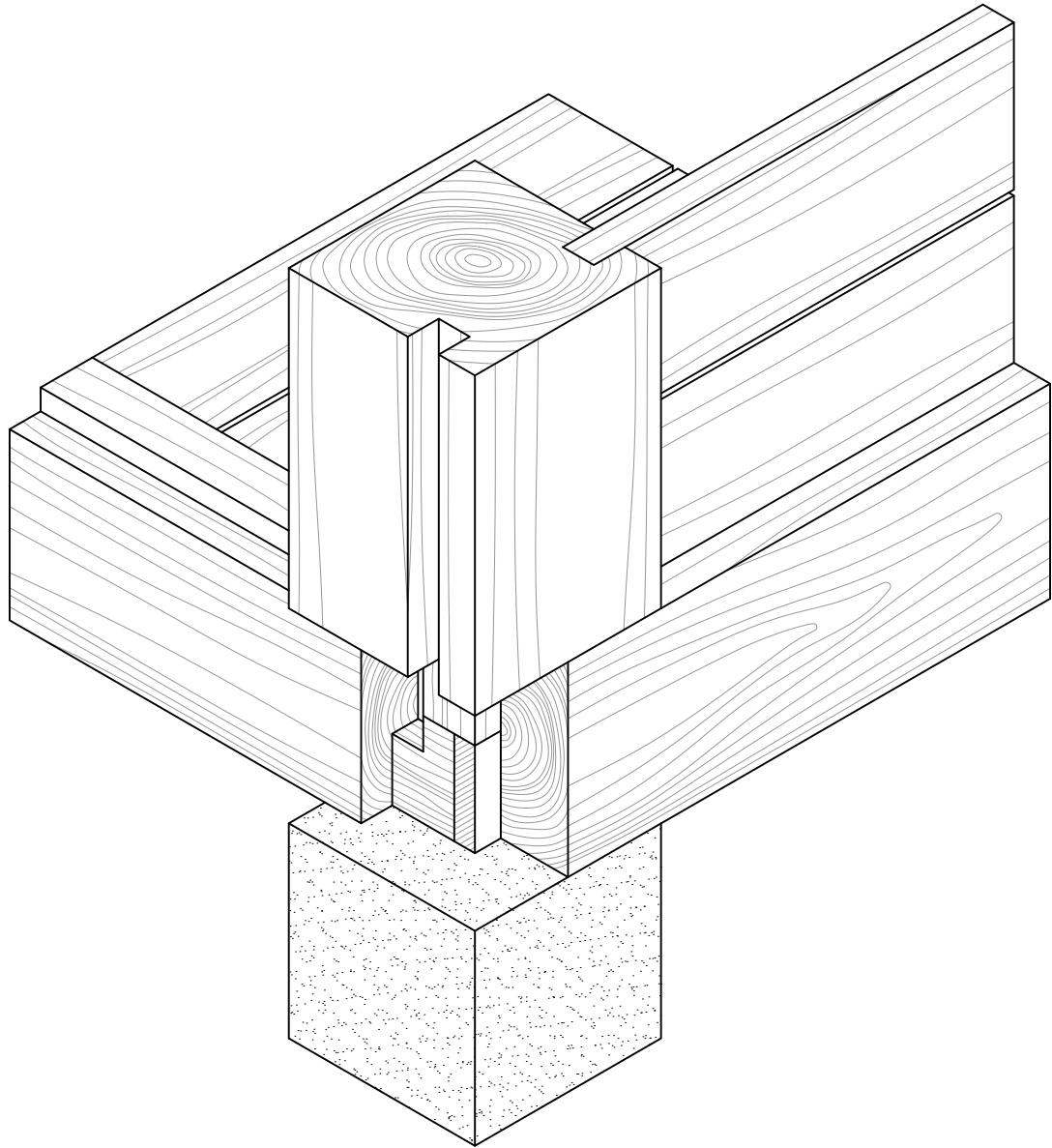


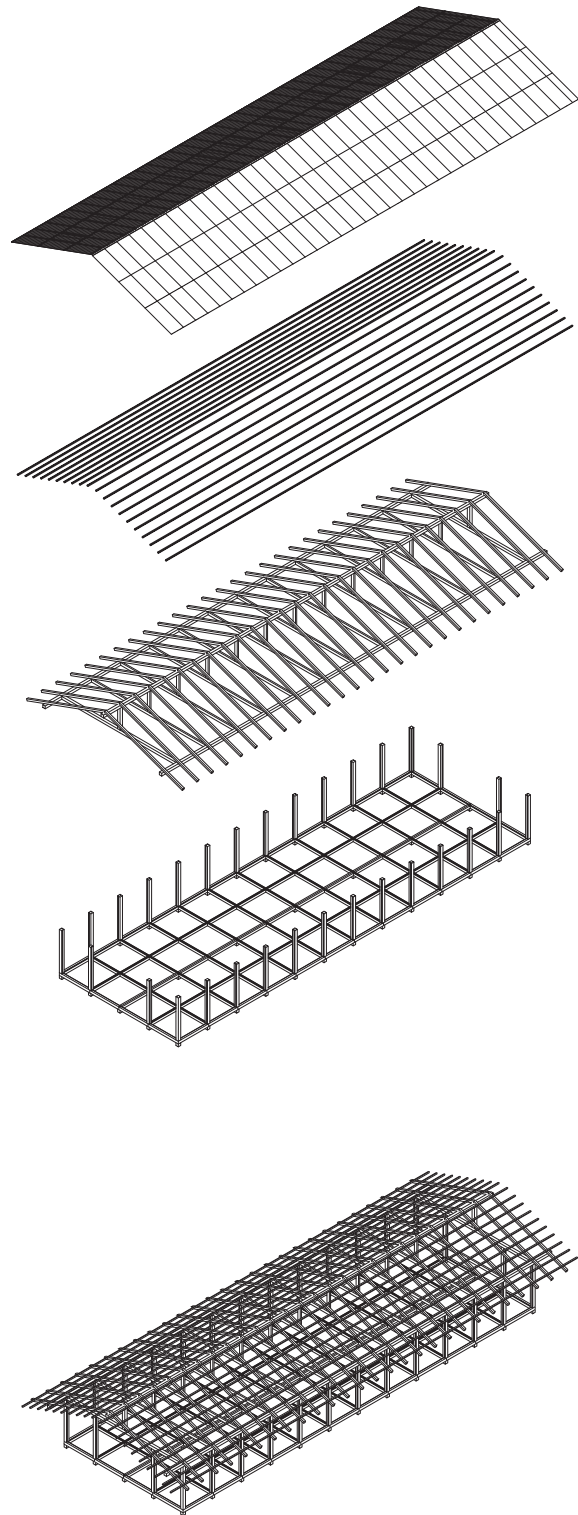


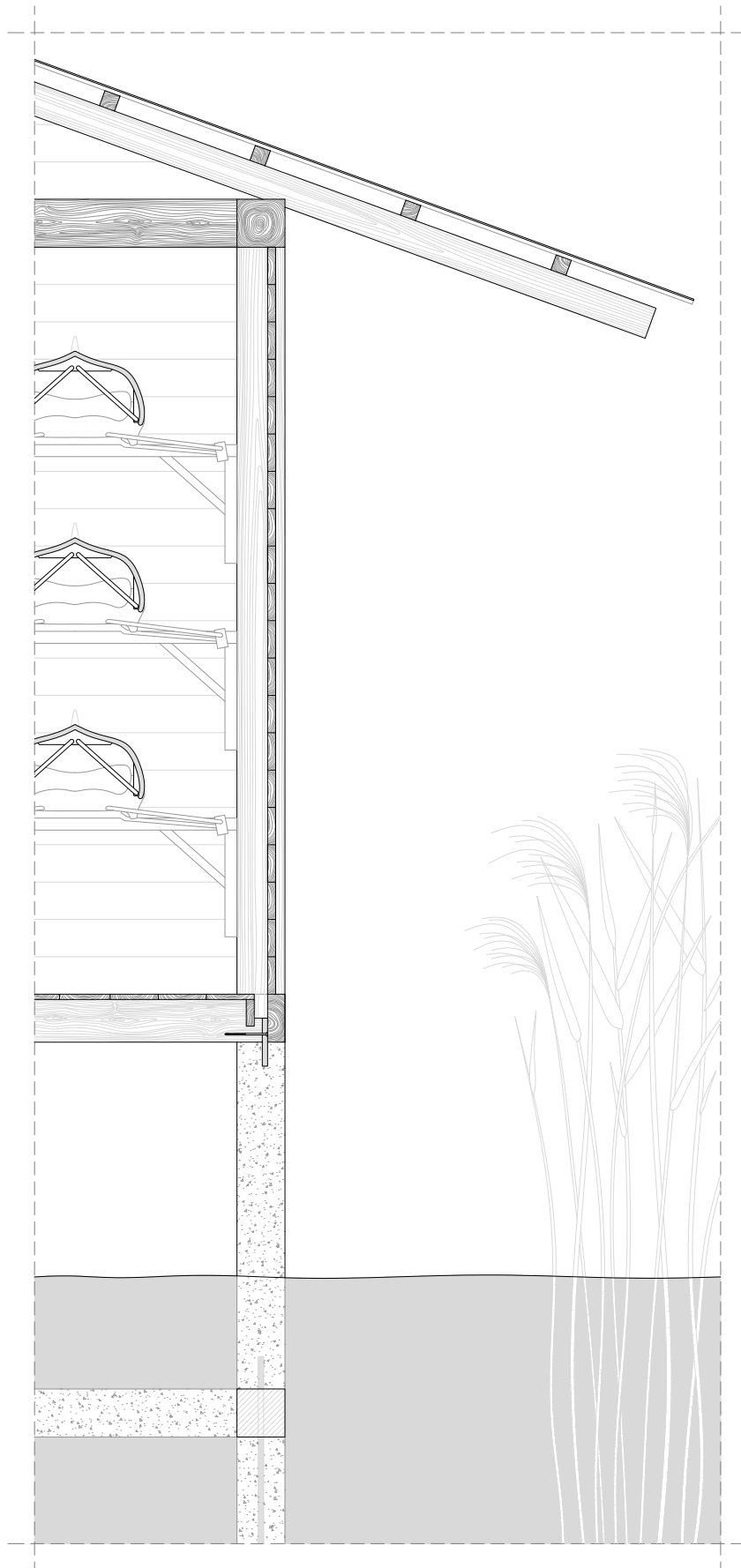








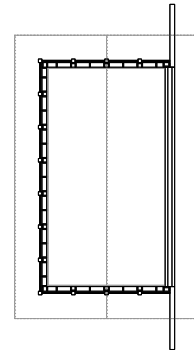




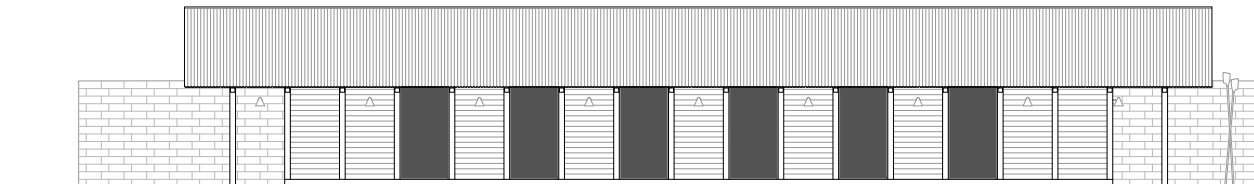
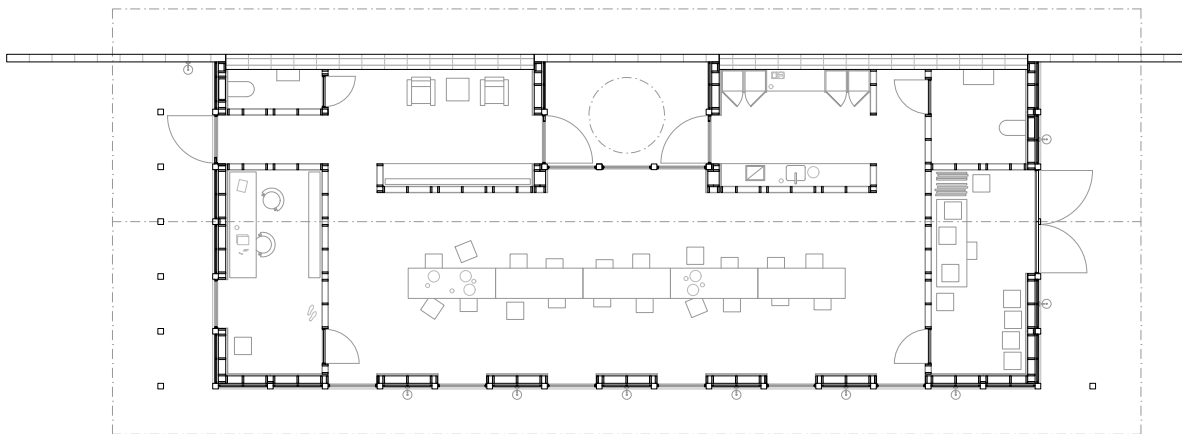
CLUBHOUSE

The clubhouse is the main building for the rowing club, householding activities like theoretical lessons, club meetings, administrative work and festivities. The clubroom is a large space for gatherings with exceptional views of the port. It's a flexible, spacious room, which could be rented by the locals. An important building for the unity of the members.

The placement is arranged with the gym and locker room building to create an embracing impression on the courtyard, while also shielding off sounds and visual clutter from the motorway. A smaller courtyard is found within the walls of the clubhouse, it floods the entrance, kitchen and clubroom with soft northern light.



INSULATED CONNECTED

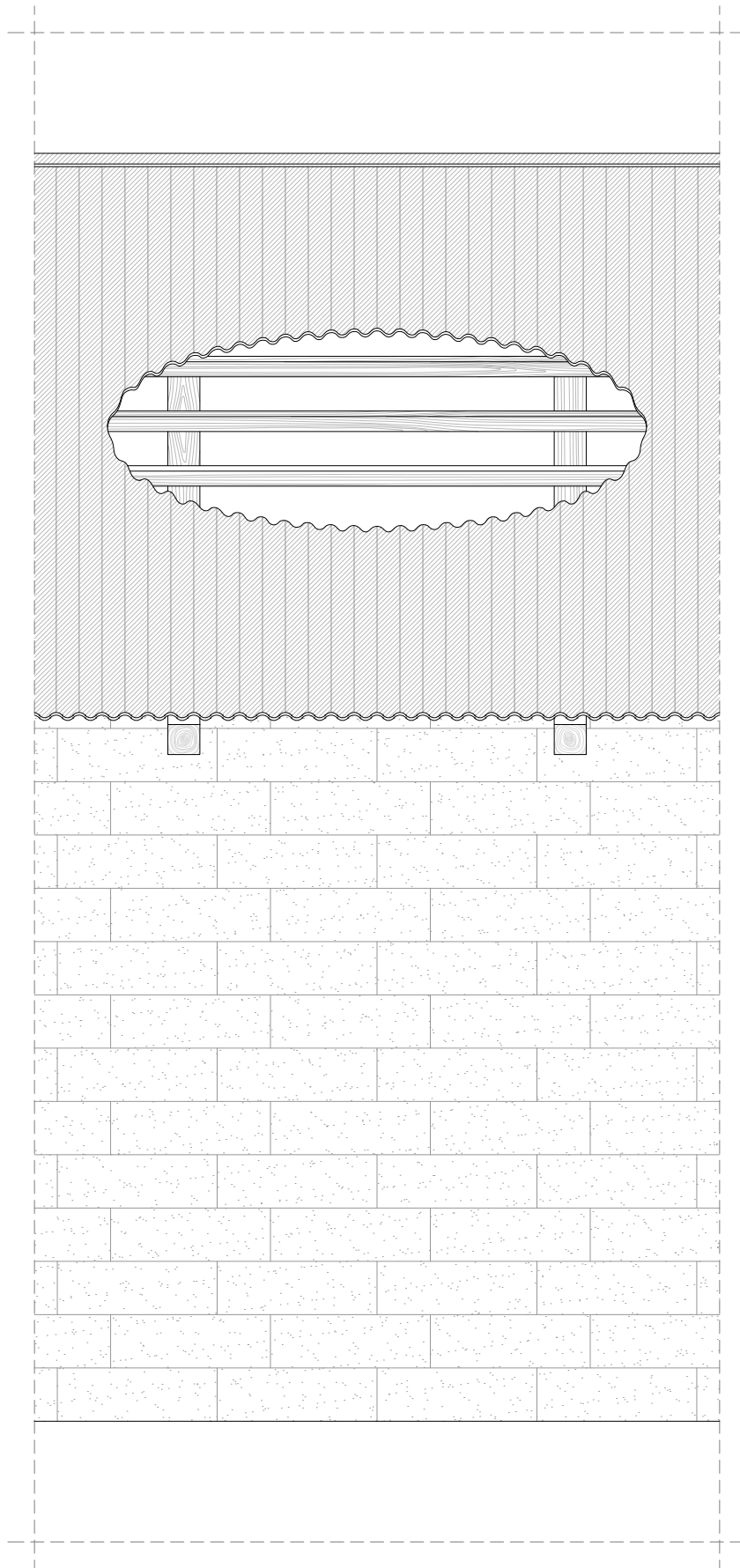


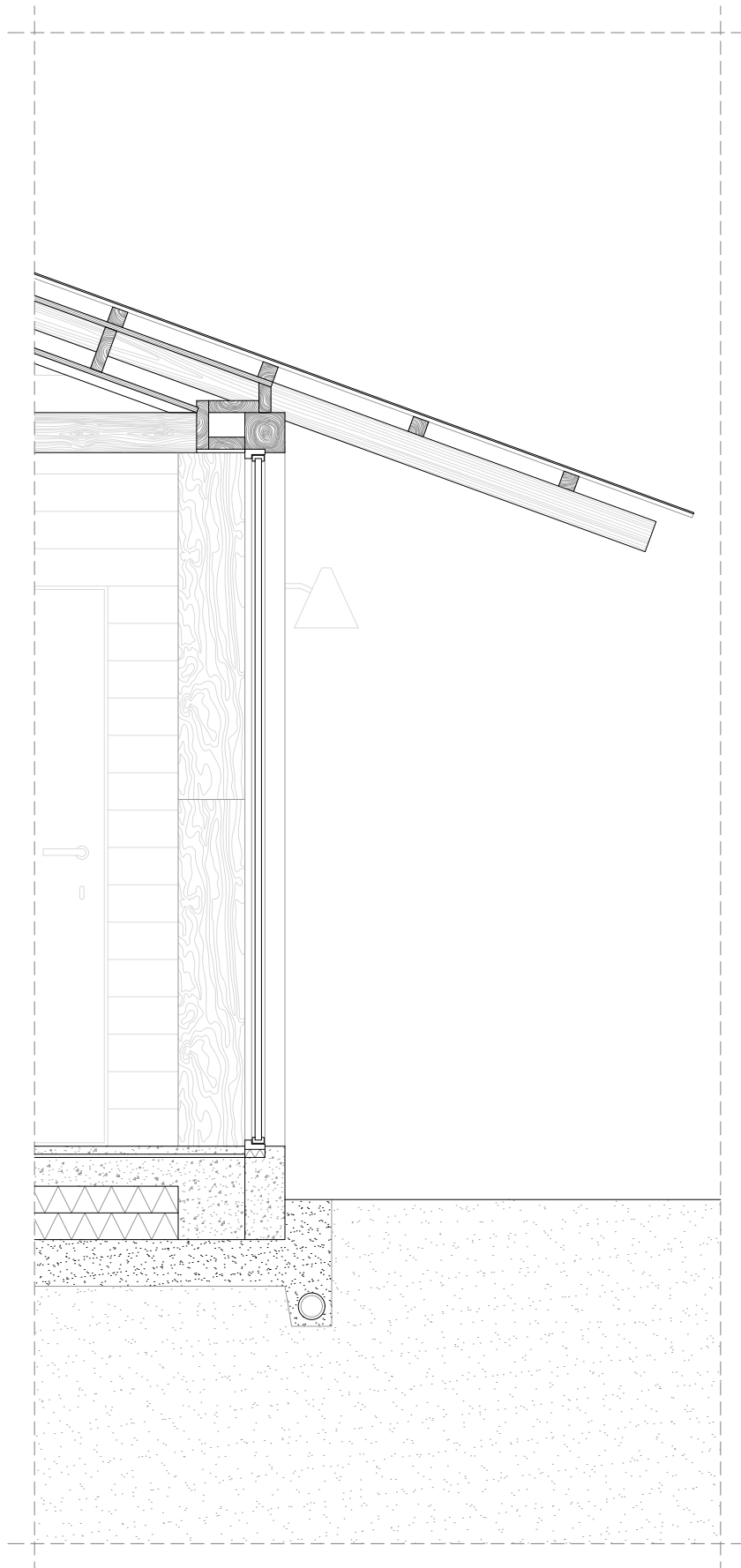




CLUB ROOM
CLUBHOUSE



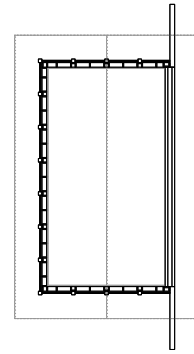




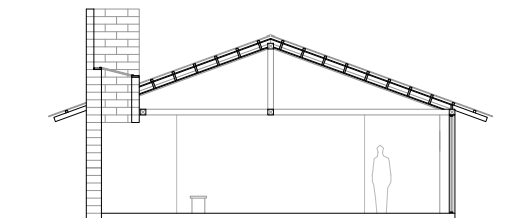
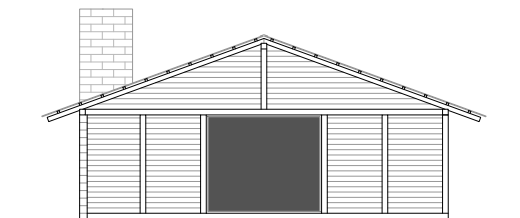
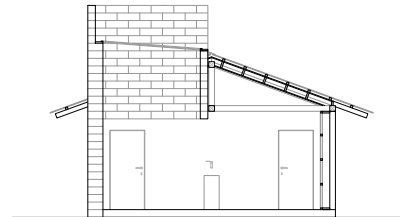
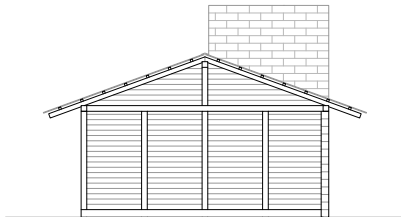
GYM AND LOCKERS

To enter this building you either access it from outside of the area or you come from the inner courtyard. The entrance room is a connecting passageway in the form of a glassed arcade which takes you either to the locker rooms or to the gym. The locker rooms have a mutual space before the private, the room is backlit with a light shaft to the northwest and this is where you fill up your water before activity. The locker rooms themselves

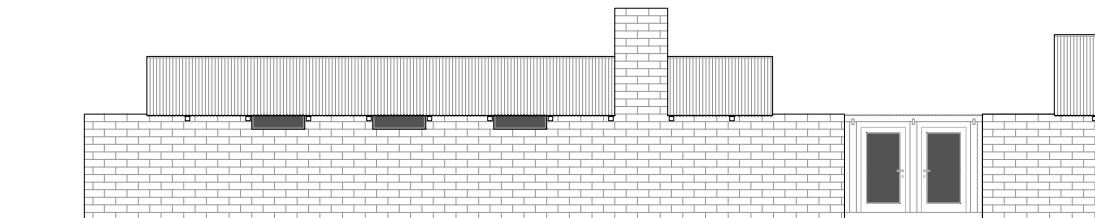
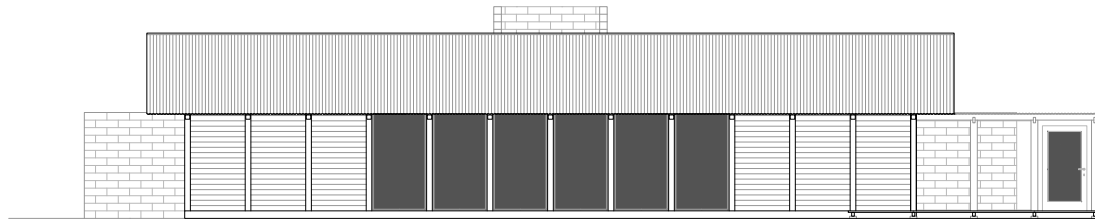
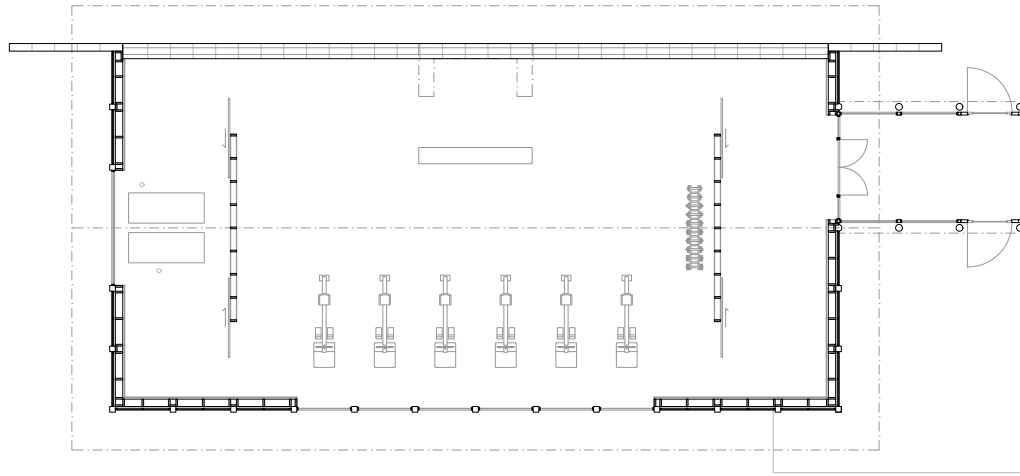
are mirrored elongated rooms with windows located just under the foot of the roof. They are equipped with WCs, showers and lockers. The gym is located on the other side of the building, in a slightly longer, wider and higher volume. There are two smaller rooms dedicated to weights and calmer activities flanking the major workout space. This room is backlit by a large light shaft and filled with rowing machines that overlook the courtyard and port.

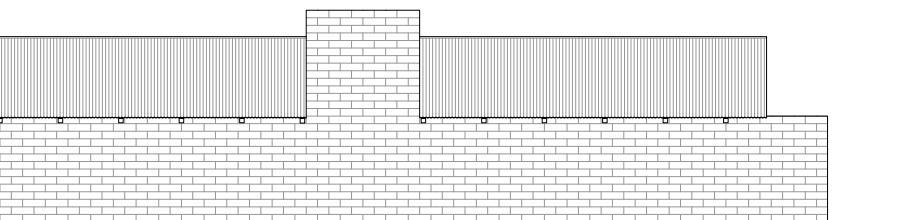
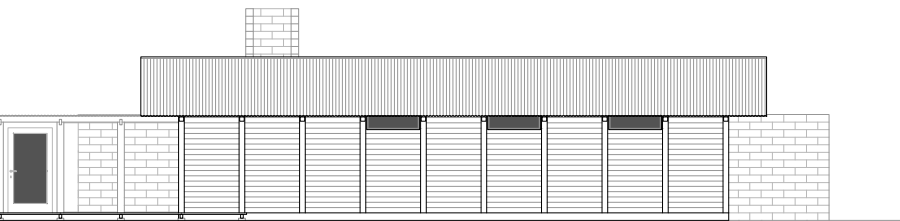
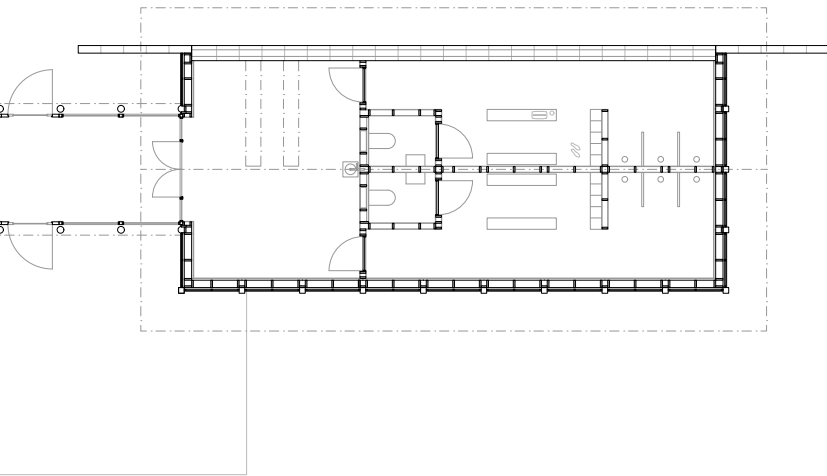


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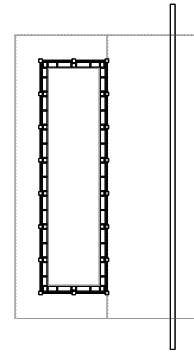




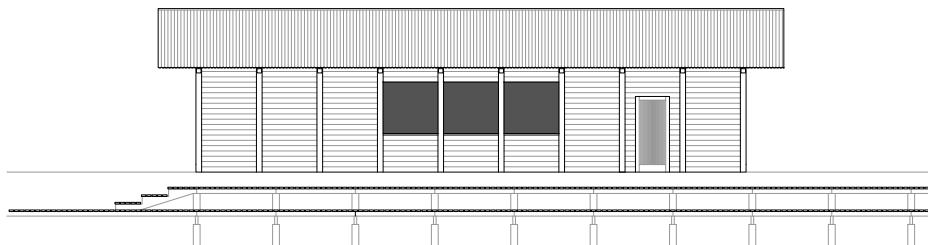
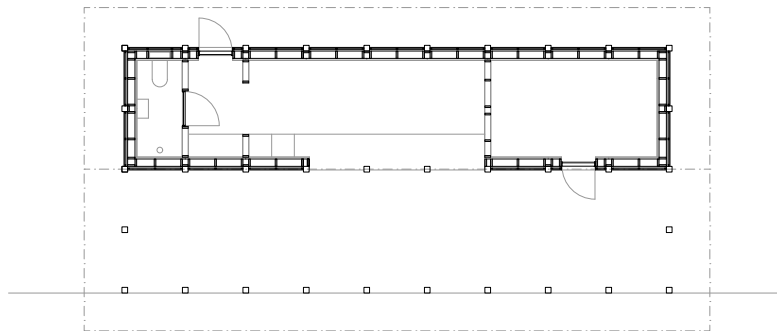
CAFÉ

The summer café is run by the association otherwise externally. The building is completely made out of wood except for the corrugated roof, just like the Boat storage. This building is isolated whilst the Boats storage isn't. All the other buildings are contrasted with a wall that acts as a barrier. The barrier evident for the boat storage is the water and the harsh quayside acts as a barrier for the café. It is visually connected to the rowing club but also separated

with a stronger public access. The arcade gives shade in the summer and in the rest of the year it acts as a funnel into the inner courtyard. It's the only building that is placed directly on the quayside, the placement and orientation gives good sun conditions for the outdoor seating all day long. Placed at this spot, the building will also have as many bypassers as possible, with the walkway passing right by.



INSULATED DISCONNECTED

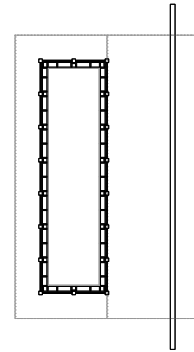




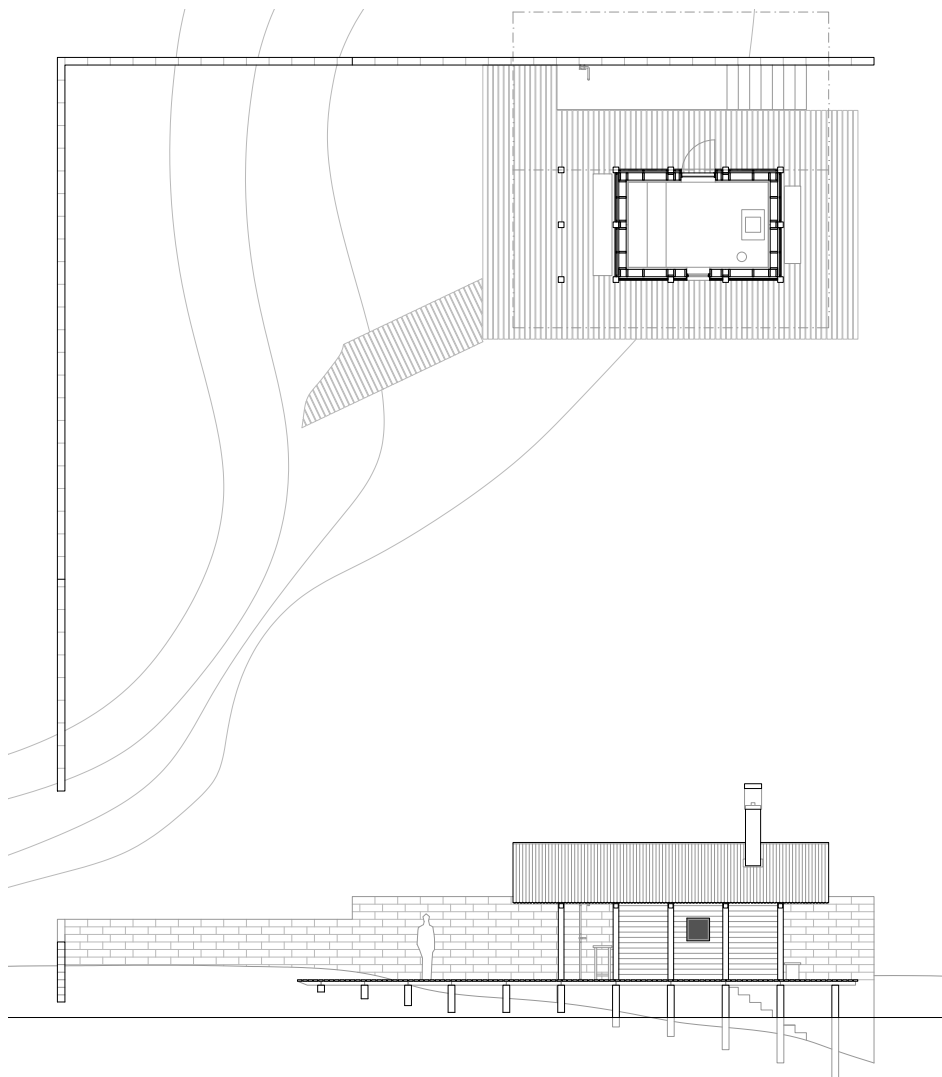
SAUNA

The sauna acts as an outpost, connecting the east side to the west by a bridge. It is conceptually the clearest building, with its wall, volume and roof as the three main building elements. The wall hugs and defines the total area, the sauna is encapsulated inside the isolated volume and the roof ties them both together.

The area between the volume and the wall is where you shower and enter the water. A small windsor overlooking the courtyard overlooking the courtyard together with a striking chimney reveals that this is actually a sauna.



INSULATED DISCONNECTED







VIEW TO THE WEST FROM THE COURTYARD
RODDKLUBBEN



GYM & LOCKERS
RENDER

DISCUSSION

For us, this project has led us to a further understanding of our common architectural vision, it has also become a tool for valuing different stages of the design process. It's clear what personal value this Master Thesis has given us, but in a broader sense we hope that this work can spark the discussion and underline the value of it, especially considering that many buildings today arise from valued criterias set out by juries in different situations.

In retrospect, when analyzing how well our design proposal has answered the manifesto, our conclusion is that some principles have had a greater impact than others. Some design choices have for example been more supported by the Beauty and Atmosphere of the project than the Durability. Working continuously with the manifesto, some aspects will most often stand in contrast to each other, even if the goal is to fulfill them all. Another learning from this work was the aspects missing in the manifesto, for example the economy of the project. This however, would have been a quite arbitrary aspect to weave into a speculative master thesis, but could have a greater importance in the practicing field of architecture.

ATRIUM
CLUBHOUSE
MODEL 1:20

WALL & PILLARS
SAUNA
MODEL 1:20

JOINERY
BOAT STORAGE
MODEL 1:2





ATRIUM
CLUBHOUSE
MODEL 1:20



ATRIUM
CLUBHOUSE
MODEL 1:20



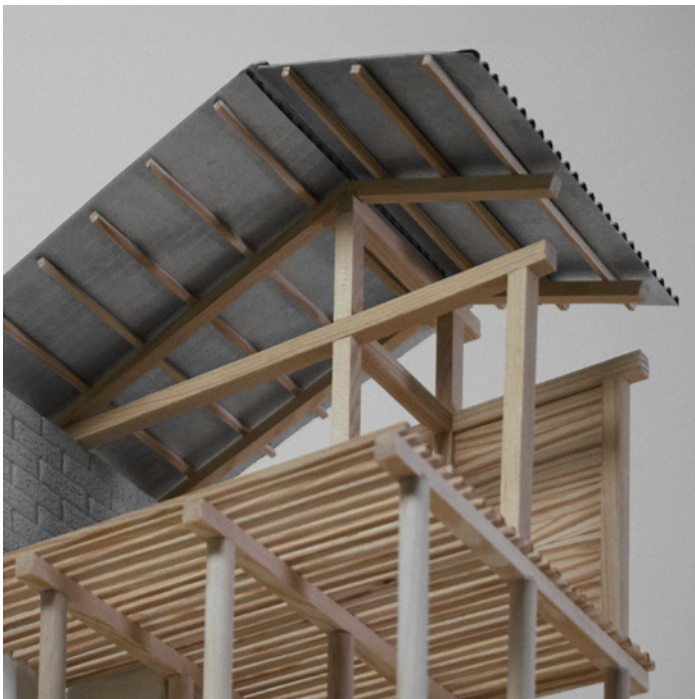
LIGHTSHAFT
GYM & LOCKERS
MODEL 1:20



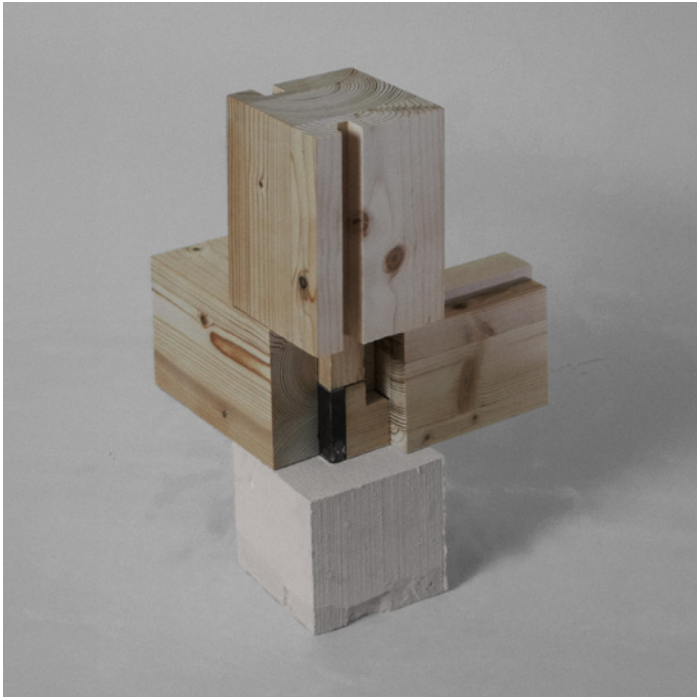
LIGHTSHAFT
GYM & LOCKERS
MODEL 1:20



WALL & PILLARS
SAUNA
MODEL 1:20



WALL & PILLARS
SAUNA
MODEL 1:20



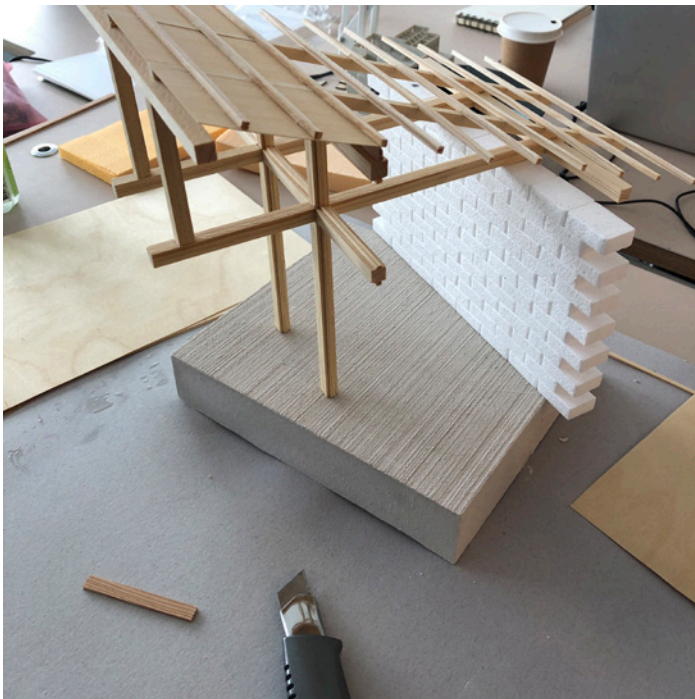
JOINERY
BOAT STORAGE
MODEL 1:2



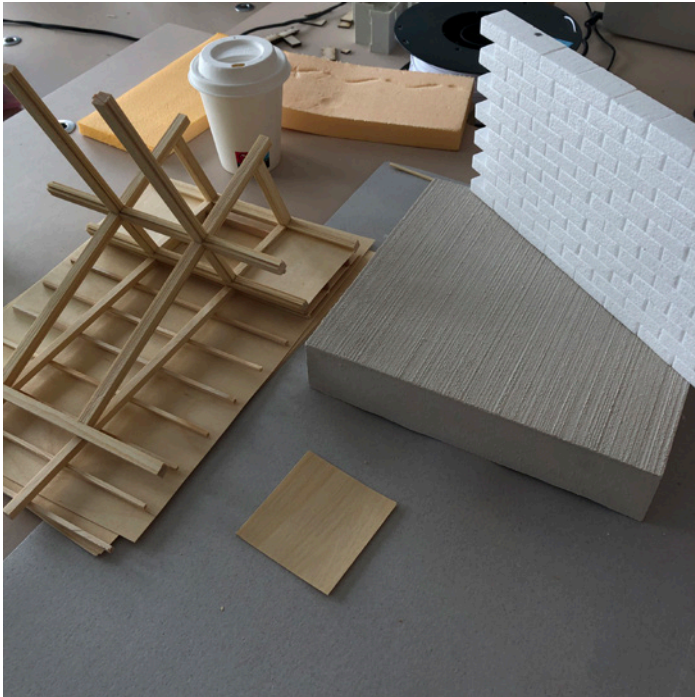
JOINERY
BOAT STORAGE
MODEL 1:2



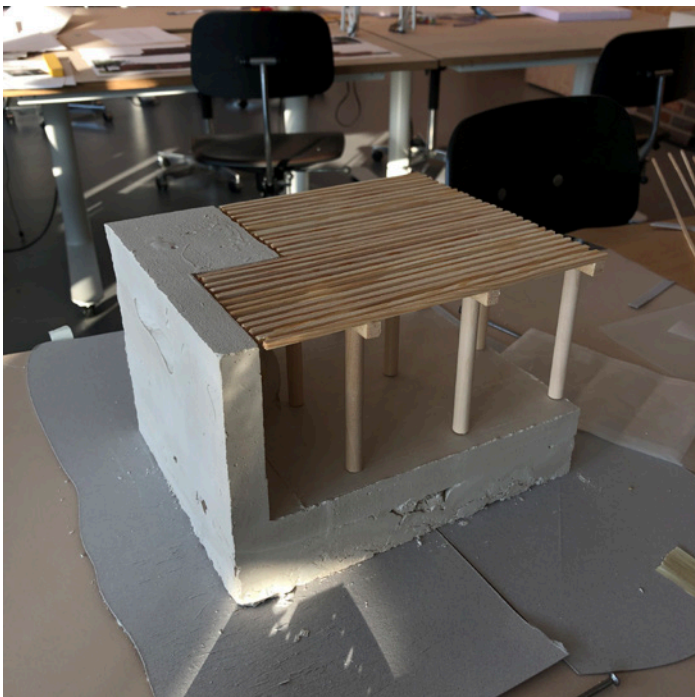
WALL & PILLARS
SAUNA
MODEL 1:20



ATRIUM
CLUBHOUSE
MODEL 1:20



ATRIUM
CLUBHOUSE
MODEL 1:20



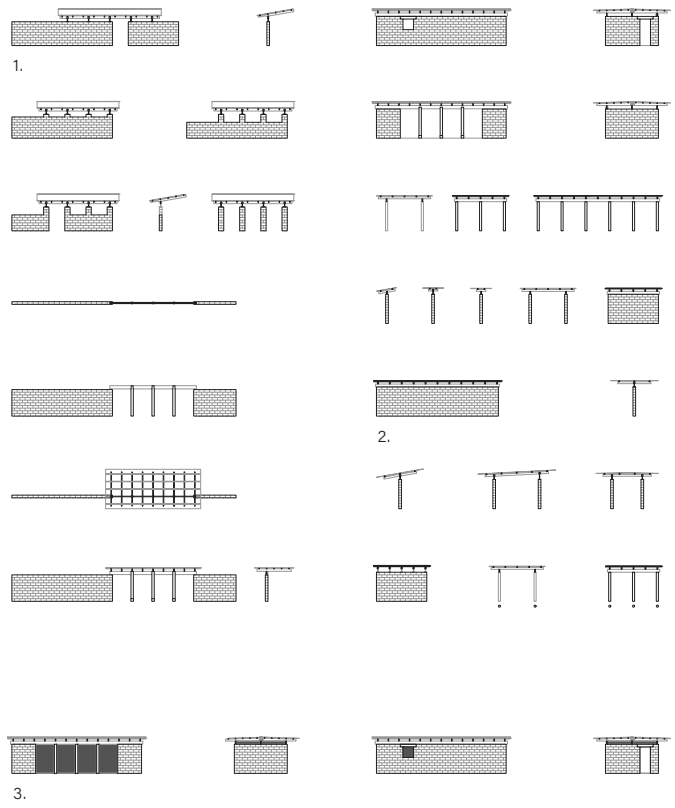
WALL & PILLARS
SAUNA
MODEL 1:20

S	M	L	
1	2	3	
			Durability
			Performance
X	X	X	Disassemble
	X	X	Statement
			Adaption

			Usability
X		X	Functional
			Flexible
X	X	X	Intention
			Unpredicted

			Beauty
			Proportion
			Identity
			Rational
			Multilayered

			Atmosphere
			Tactile
			Poetic
			Intimacy
			Craftsmanship



PRINCIPLES

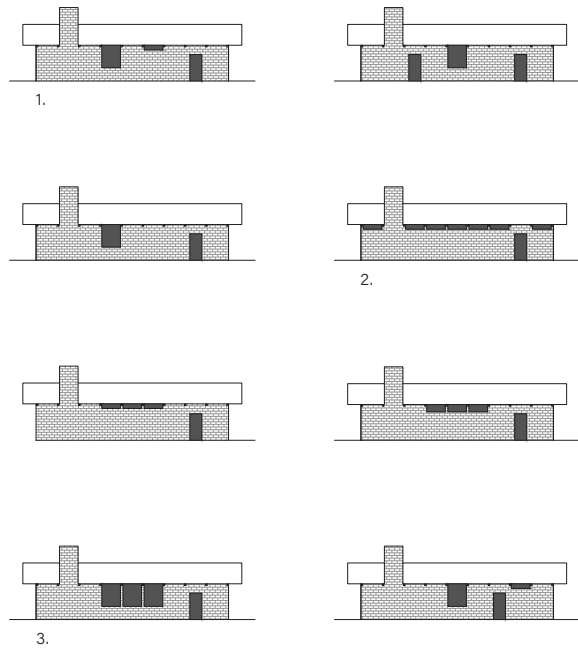
WALL & ROOF

S	M	L	
1	2	3	
			Durability
			Performance
			Disassemble
			Statement
			Adaption

			Usability
			Functional
			Flexible
			Intention
			Unpredicted

		X	Beauty
		X	Proportion
X		X	Identity
	X	X	Rational
	X		Multilayered

			Atmosphere
			Tactile
			Poetic
			Intimacy
			Craftsmanship



ITERATIONS

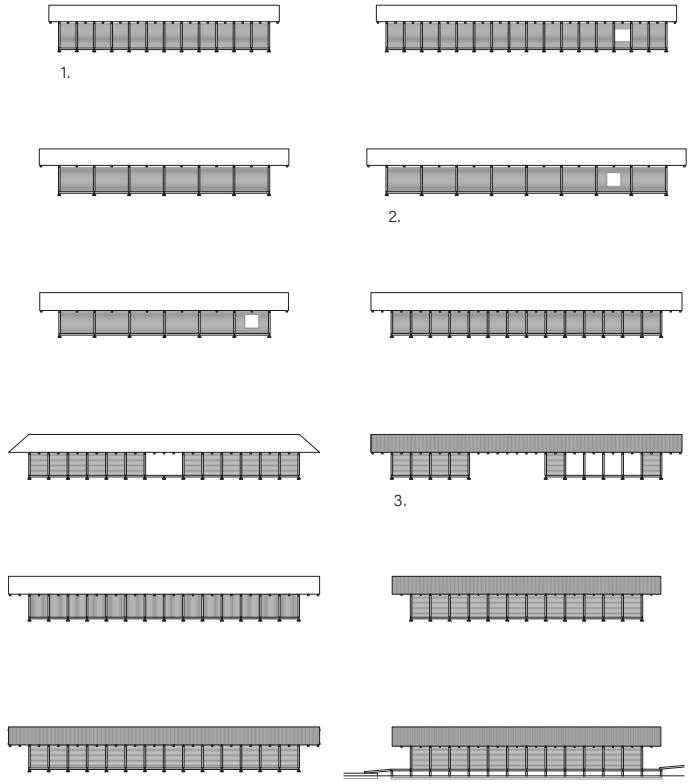
WINDOW PLACEMENT CAFÉ

S	M	L	
1	2	3	
			Durability
			Performance
			Disassemble
			Statement
			Adaption

S	M	L	
			Usability
			Functional
			Flexible
			Intention
			Unpredicted

S	M	L	
			Beauty
X			Proportion
	X	X	Identity
X	X		Rational
		X	Multilayered

S	M	L	
			Atmosphere
			Tactile
			Poetic
			Intimacy
			Craftsmanship



ITERATIONS

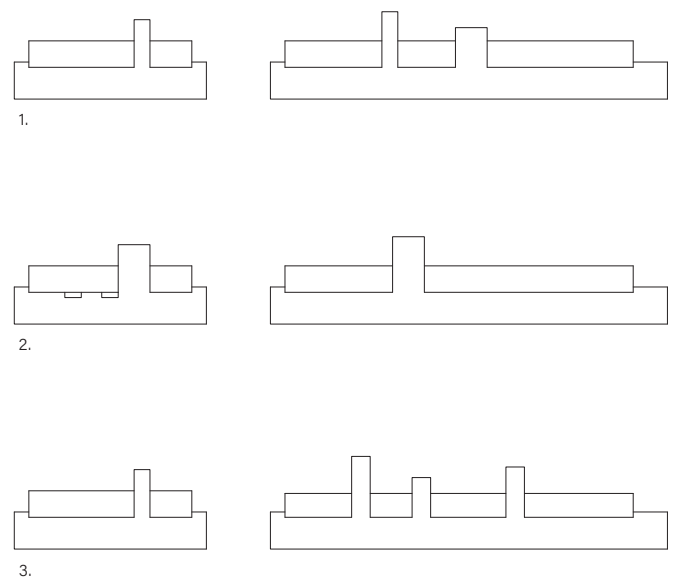
REPETITION BOAT STORAGE

S	M	L	
1	2	3	
			Durability
			Performance
			Disassemble
			Statement
			Adaption

S	M	L	
	X		Usability
			Functional
			Flexible
	X	X	Intention
X			Unpredicted

S	M	L	
		X	Beauty
	X	X	Proportion
	X		Identity
	X		Rational
X			Multilayered

S	M	L	
			Atmosphere
			Tactile
			Poetic
			Intimacy
			Craftsmanship



ITERATIONS

LIGHT SHAFTS GYM & LOCKER

BIBLIOGRAPHY

Asplund, G., Gahn, W., Markelius, S., Paulsson, G., Sundahl, E., & Åhrén, U. (1931) *Acceptera*. Stockholm: Tidens förlag.

Asplund, H. (2022) *Farväl till Funktionalismen!*. Norrköping: Pharos Media Productions.

Brophy, V., & Lewis, J. O. (2011). *A Green Vitruvius: Principles and Practice of Sustainable Architectural Design*. Routledge.

Byggnadsvårdsföreningen. (2019, February 26). Skiftesverk - när - var - hur. Svenska Byggnadsvårdsföreningen. <https://byggnadsvard.se/skiftesverk-nar-var-hur/>

Caldenby, C., Nygaard, E. (2011) *Arkitekturteoriernas historia*. Stockholm: Formas.

Demetriou, D. (2024). RIBA Journal. <https://www.ribaj.com/buildings/tomoaki-uno-terabe-guest-house-nishio-aichi-japan-all-timber>

Dodoo, A., et al. (2014). "Lifecycle carbon implications of conventional and low-energy multi-storey timber building systems." *Energy and Buildings* 82: 194-210.0..

Ekelund, C., Nordlund, S., & Widbom, M. (1985). *Palladio idag: En bok om arkitektur*. Liber.

Fazio, M., Moffett, M., & Wodehouse, L. (2013). *A World History of Architecture*.

Hallén. (2024). Göteborgs Historia. <https://goteborgshistoria.com/2024/02/05/nytt-bathus-for-goteborgs-roddklubb/>

Patteuw, V., Teerds, H., & Van Gerrewey, C. (2013). *OASE #90: What is Good Architecture*. Nai010 Publishers.

Rodd i Sverige. (n.d.). <https://www.roddsverige.nu/>

Sandhill, L. (2022) *Att Acceptera - eller inte?: Funktionalismens genomslag som mediehändelse 1931–1933*. [C-uppsats, Uppsala Universitet] DiVA. <https://www.diva-portal.org/smash/get/diva2:1661747/FULLTEXT01.pdf>

Stockholms Roddförening
<https://www.stockholmsroddforening.se/About>

Uddevalla Roddklubb. (2022). <https://uddevallaroddklubb.se/vad-ar-rodd>

Voet, C. (2019, February 13). Dom Hans Van Der Laan. <https://domhansvanderlaan.nl/theory-practice/>

Woods, S. (2016). *A History of Wood from the Stone Age to the 21st century*. https://www.architectmagazine.com/technology/products/a-history-of-wood-from-the-stone-age-to-the-21st-century_o

Zumthor, P. (2006). *Atmospheres*. Basel: Birkhäuser.

IMAGE SOURCES

Figure 1:

Author's own photographs of book covers.

Figure 2:

Lantmäteriet. (2022). Flygfoto. (Online image) Retrieved from <https://minkarta.lantmateriet.se>

Figure 3:

Lantmäteriet. (2022). Flygfoto. (Online image) Retrieved from <https://minkarta.lantmateriet.se>

Figure 4:

Lundbyhamnen från ovan. (1978). Pinterest.

<https://se.pinterest.com/pin/547398529708048567/>

Figure 5:

Lantmäteriet. (2022). Flygfoto. (Online image) Retrieved from <https://minkarta.lantmateriet.se>

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