

DIPLOMA PROGRAM

2021

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IMPORT / EXPORT

ABSTRACT

Odda fascinates us because of its rich history, both from pre-industrial time and from the industrial period. Today Odda is in possession of a cultural heritage from the industrial period. A proportion of these buildings have been standing empty since the closing of the factory and the question of what to do with these buildings is still relevant eighteen years later. Parts of the Odda Smelteverk were listed in 2011 in accordance with section 15 of the Cultural Heritage Act. Several buildings from the pre-industrial time have been demolished and the physical traces of this era are gone. Some areas of Smelteverk are at the time being about to be transformed and some buildings restored.

After a study trip to Odda we went to the harbor area to have a closer look at the import and export quay of the factory. We discovered that this area, with its great location and spectacular view towards the fjord, has been partly degraded by large parking areas for camping cars. The remaining buildings, number 37, 127, 36 and 5, have been standing empty since the factory was declared bankrupt in 2003. Building nr. 37 and the west part of building nr. 5 are in the process of being regulated for housing which means that the area could be privatized in the near future. Due to its local identity and its history as a terminal for import and export of goods, we believe it is important that the buildings and the site continue to be attractive meeting places available to the public. The site has an undiscovered potential for again being a place of importance.

The export and import quay by the fjord positioned Odda as a suited place for trade and industry, and was an entrance area for tourists exploring the surrounding nature. We believe that transforming this area can make this part of the town a vibrant starting- and ending-point of Odda. A place to be and visit where the past of the industry can be experienced.

RESEARCH QUESTION

How can a transformation of the former import and export quay in Odda, seen in the light of import and export generate new flow in our chosen buildings which have been at a standstill for the past 18 years?

ARCHITECTURAL PROGRAM

Our site consists of different elements that we wish to work with in our project. These elements consist of two quays, a bridge connecting the two quays and industrial buildings. Our architectural approach will be transformation of these remaining structures and the area surrounding these buildings. We are also interested in designing new structures to connect this part to the city center of Odda.

The dicyl-storage is characterized by a traditionally historicizing design language with emphasis on decor. The structure of the building is general which means that the building can adapt to a wide range of programs. The limestone silo has a more modern and functional structure, where the building was designed for a specific function.

A footbridge at the end of the river used to connect the import and the export quay. In 2014 the bridge got damaged and was removed due to its bad condition. We want to reintroduce this bridge in our proposal and adapt it to the new waterfront.

Our site consists of different types of buildings from various time periods, which was designed for particular functions. Our approach to restoring these buildings is to include the changes in time and allow for new structures, spaces and materials to intervene with the existing structure.

FUNCTIONAL PROGRAM

The functional program will derive from our research on the theme "Import & Export". Both from an overall research and as a research on this theme for Odda. We also want to use the history of Odda and the region of Hardanger when defining a potential program. Our further studies will help us choose a suited program or see whether a specific program is the right answer for the project.

We want to keep the site publicly available and therefore work with a program where visitors and inhabitants of Odda have the possibility to use the whole waterfront.

STRATEGY/WORKING METHOD

Our aim is to develop a project based on the study of the materials, construction and history. By doing so we want to build models of the different buildings and use these models as tools when developing the project. Parts of our studies will be to continue working with archival materials as a resource for restoring the atmosphere and the lost traces of the site.

We want to combine these two methods with photo collages by linking the past, the present and the future of this site.

WORK FORMATS/DELIVERED MATERIAL

DRAWINGS

Situation plan	1:1000
Plans and sections	1:200

MODELS

Working models	
Elevations	1:50

ILLUSTRATIONS

Illustrations
Photographs of models

Abstract

IMPORT EXPORT

Diploma submission / Fall 2021

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Odda - Then and now

In this diploma, we have focused on Odda, the administrative center of the municipality Ullensvang and the largest urban area in the region of Hardanger.

Odda has throughout history had a flow of people and goods due to its position as a district center for the region of Hardanger. First being the flow of tourists in the late 19th century, which was generated due to the exportation of its landscape and waterfalls through paintings.⁰¹ This time period imported tourists to the region and exported local products and services. Secondly, the same waterfalls were the main reason industrial pioneers constructed an industrial melting plant by the end of Sør fjorden in Hardanger.⁰² The industrialization imported labor and exported manufactured goods. In 2003 the melting plant was declared bankrupt, but this does not mean that Odda as an industrial city is history.

Odda is in possession of both an industrial heritage and a vibrant industrial culture.

Put bluntly, one can say that imports and exports have created Odda. There has been a flow of imports and exports throughout history but after the closure of the melting plant the former import and export quay of the plant has been left fallow due to its listing status.

Through our diploma we have explored how the transformation of the former import and export quay in Odda, seen in the light of import and export, can generate new flow in our chosen buildings which have been at a standstill for the past 18 years. This point of interest came from a curiosity of how the concepts and dualism of import and export could generate and evolve into an architectural project.

Import and export generate energy and friction. The terms represent a duality, the duality of something coming and something going. Without input and output, or import and export, one will experience stagnation and or imbalance. A well functioning and profitable factory or a society is reliant on both import and export in order to not stagnate. This can also be said about the field of preservation and how we have transformed these buildings, as it is impossible to transform a place or a building without taking something out and putting something in.



fig. 1



The melting plant

Industrial buildings are built to function for a specific task or operation. The buildings are often designed by engineers and are not built to undertake a different use in the future, or built with the idea of being transformed. Today many industrial buildings are identified as cultural heritage, which means that the buildings should be preserved in order to tell the history of the industrial era and the highly technical processes that went on in these buildings, with the melting plant in Odda being categorized as such a site.

In 2007, a referendum was held on whether or not Odda should apply to be included on the UNESCO World Heritage List. This question became a bitter and upsetting conflict in the community of Odda, where they have been struggling with finding a balance between cultural heritage, commercial interest and subject-specific interests. The location and size of the melting plant is one of the reasons this has become a heated debate, due to its presence in the urban context, by upholding a third of the city center's square meter.

The melting plant was important for the development and growth of the society, but it also represented dirt, smoke, environmental challenges, bad smells, heavy and dangerous work, uncertain future, struggles and conflicts.⁰³

Industry is connected to belief in, and visions of the future, and this can therefore stand in contrast to nostalgia and memory, which is an essential part of cultural heritage.⁰⁴ Without giving industrial buildings new functions they will become industrial ruins that have lost their function and connection to their place.

Industrial buildings can also be seen as monuments preserved in its original form. An example of this is Tyssedal Hydroelectric Power Station, where the industrial building has become a museum. We wanted to use our diploma to see how industrial heritage can become a resource for its community, both economically and socially. Instead of creating another museum, we wanted to create a vibrant space with daily use from both local inhabitants and tourists. We believe that it is possible to transform these buildings into places and spaces that again can be important for the growth of its society while preserving the values of the buildings and the stories they represent.

The boundary between what is "import" and what is "export" is today more fluid than what it was during the operating years at the factory. The melting plant imported raw materials and exported manufactured goods, such as carbide and cyanamide.⁰⁵ Import and export of raw materials and industrial goods were two separate operations joined together by the production taking place at the melting plant. In order to maintain balance is the need of both "import" and "export". We have chosen to look at these buildings as places reliant on each other, joined together by the activity taking place in the region of Hardanger.

People and goods can be seen as both an import and an export asset for the region of Hardanger. The history repeats itself and as the German painters lured affluent people from Europe to travel to Odda, is social media and selfies now attracting people to experience the same landscape. The landscape is also characterized by the region's fruit production. The area accounts for 40 percent of all fruit production in Norway, with the cultivation of apples, sweet cherries, pears and plums.⁰⁶ In addition to cultivating fruit, the district is one of the main centers for the production of apple juice and ciders in Norway with a geographically protected designation, like Champagne. The growing

03 Sandal (2017)

04 Eva Røyraane (2011, s.6-7)

05 Schjelderup, «Odda Smelteverk - Vurdering av verneverdier» 2006

06 Visit Norway 2021

industrial factory Boliden, a major zinc and zinc alloy producer, is a big exporter in the region. Both the industrial factory and the fruit production are reliant on imported labour. In the last decades cultural events have also flourished, attracting people to visit Odda.

Both Odda and Hardanger have a higher amount of imports and exports from April to October, with a high season for tourism, fruit production, and cultural events. This means that a program connected to the imports and exports of Odda and Hardanger needs to have flexibility in order to meet the range of demand from summer to winter and vice versa.

Preservation

Transformation is to understand the values and lacks of a building or a place and see how we can amend the situation while keeping the appointed values of what is already there.

The two quays represent the movement from one state to another. The different components that facilitate the change of material can be separated from each other, but to function as a process the components must be put in a systematic order. A process is referred to as a systematic sequence of activities that together create the desired result. The import quay consists of two concrete constructed silos and the export quay consists of a storage building. Today the storage building is listed, and only one part of the silo building is protected. We believe that these buildings should be seen in relationship to one another in order to tell the history of the processes that went on in these buildings.

We have registered different qualities we want to emphasize and prolong. In addition to addressing the qualities of the buildings, we have also addressed the values of the site and the buildings we found important, which is a common working method when working within the field of preservation. The two buildings have different spatial characters, different materiality, and different architectural typologies.

The import quay consists of two buildings constructed of reinforced concrete built to facilitate the specific task of performing as a silo.⁰⁷ The buildings are connected to each other by a ropeway that transported raw materials to the factory site. The eastern part of the building, dated 1956, is a modernized extension to the western part of the building, dated 1949. The buildings are rigid in their form and the concrete construction gives the buildings a permanent expression.

The storage building at the export quay is constructed of half-timbered walls with 1/2-stone bricks and its function was to store manufactured goods ready for shipping.⁰⁸ A quality of the building is the long open space which gives the building a flexible and adaptable character.

We have worked with the buildings in models of scale 1:50 to facilitate studying, experimenting and understanding the built mass. Our studies of the buildings through physical models, in combination with archival research and the use of import and export as an architectural and programmatic concept, lead us to what has become our proposal in this diploma.



07 Schjelderup, «Odda Smelteverk - Vurdering av verneverdier» 2006.

08 Schjelderup, «Odda Smelteverk - Vurdering av verneverdier» 2006.

Proposal

In our diploma, the import quay will continue to function as a place of import for people and goods traveling by sea. Even though the silo buildings are experienced as one building from the inside, we have decided to give the buildings a programmatic division. Due to its construction, size, possibilities, and limits, we have decided to maintain the oldest silo building as a port for physical goods. Our studies done on the 1:50 models showed that this part of the building was best suited for becoming a reception and logistic area for physical goods. The structure of the silos in this part has been transformed into a tribune that makes it possible for visitors and workers to experience the silos from above. This space can also be used for different events outside working hours.



The construction of the silos in the modernized part provides the space with a particular light that we wanted to emphasize in order to tell the history of its former function. Every shaft is staged with different furnishings to make the visitors see the shafts in different ways. This part of the concrete building is programmed as a reception area for people traveling to Odda and Hardanger. The second floor of this part of the building accommodates a sleeping area. The most important function of the import quay is to facilitate the further transportation of people and goods within the region.

The storage building at the export quay is still functioning as a storage and workshop place

We want to prolong its character as a place of storage and workshops, but also as a place of export and showcase what Odda and its region have to offer. The building has a history of being a meeting place for the workers during the industry and for the inhabitants after the closure. Because of this, we have made the nave of the building into a public space that can be used for different arrangements, expos, and markets. To make the building more usable, and to prolong the qualities of the building, we have installed new cores along the length of the building, containing toilets and kitchens, and also showers for the camping guest.



The project is designed in a way that makes it possible to use only parts of the buildings during the wintertime due to the decreasing amount of activity during these months.

A place of import and export requires a connection to the existing infrastructure to maintain efficiency and flow. The location by the fjord enables both people and goods the opportunity to make greater use of the sea as a traffic lane in a landscape characterized by an insufficient road network. Additional structures, such as a bridge and a pier, will help to achieve a balance between the two quays and make the site more accessible.

Hence, in this project, we want to play with extraction and addition of materials and mass as a way to achieve balance and flow - as a reference to the terms import and export. Working with both extraction and addition of mass within the different buildings, and through the connection of the two buildings and quays. At the same time, in this diploma we are also trying to take into consideration a bigger context of Odda - both now and then - within its region and with a focus on creating a vibrant location for both its inhabitants and visitors. All within a working method to exemplify that something comes in and something comes out - import and export.

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Schjelderup, «Odda Smelteverk - Vurdering av verneverdier.» 2006. Rapport utført for Hordaland Fylkeskommune / Norsk Vasskraft- og industrimuseum

Fig. 1

Knudsen, Knud. Imperial ships and tourist ships in Sørfjorden. Unknown date
Digitalt museum / Voss og Hardanger Museum.
<https://digitaltmuseum.no/011012822446/keisarskip-og-turistskip-i-odda>



IMPORT EXPORT

DIPLOMA FALL 2021
HANNA EIMOT & HEDDA UKKESTAD



SITEPLAN 1:1000



SÖRFJORDEN, HARDANGER. PHOTOGRAPHED BY KNUD KNUDSEN, 1880-1906.



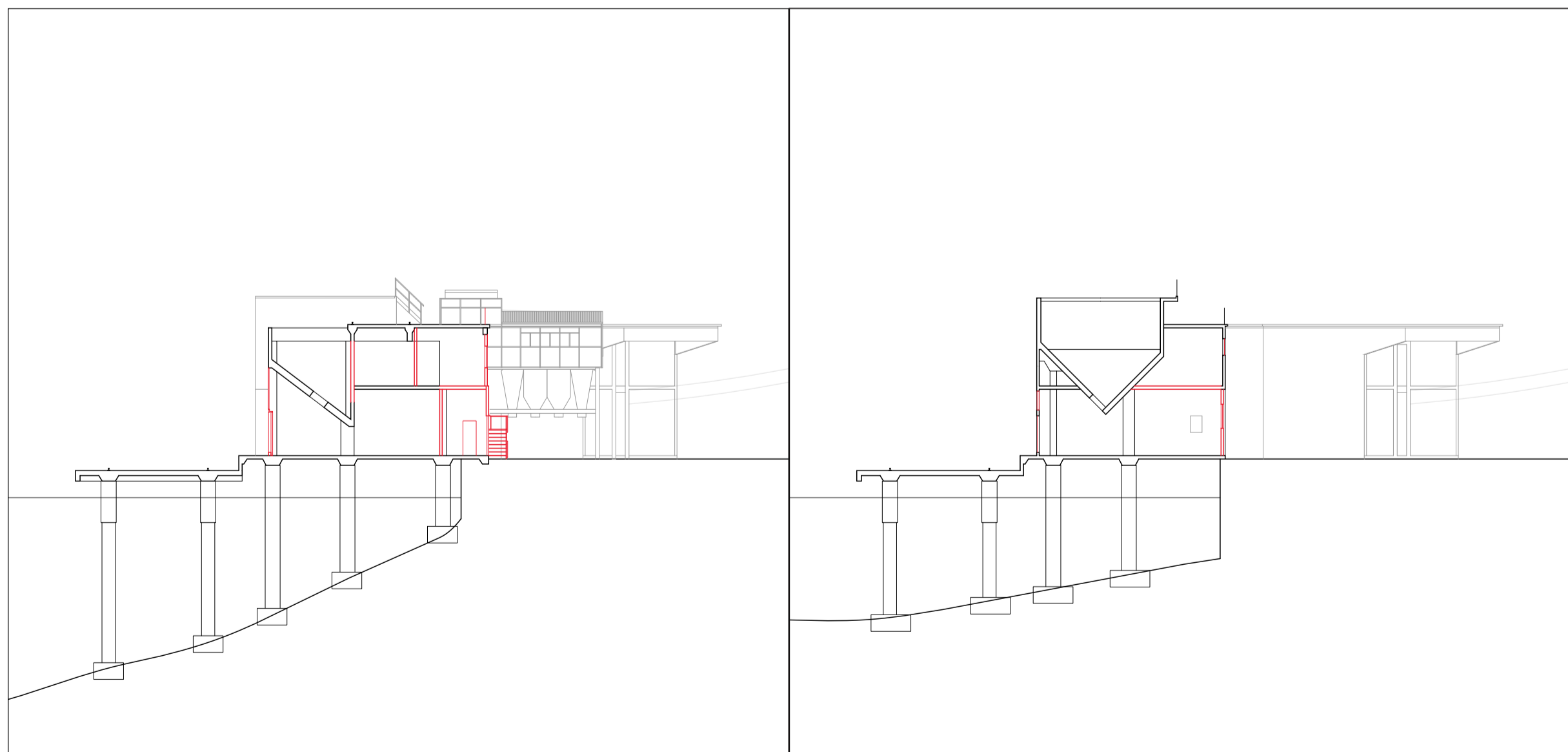
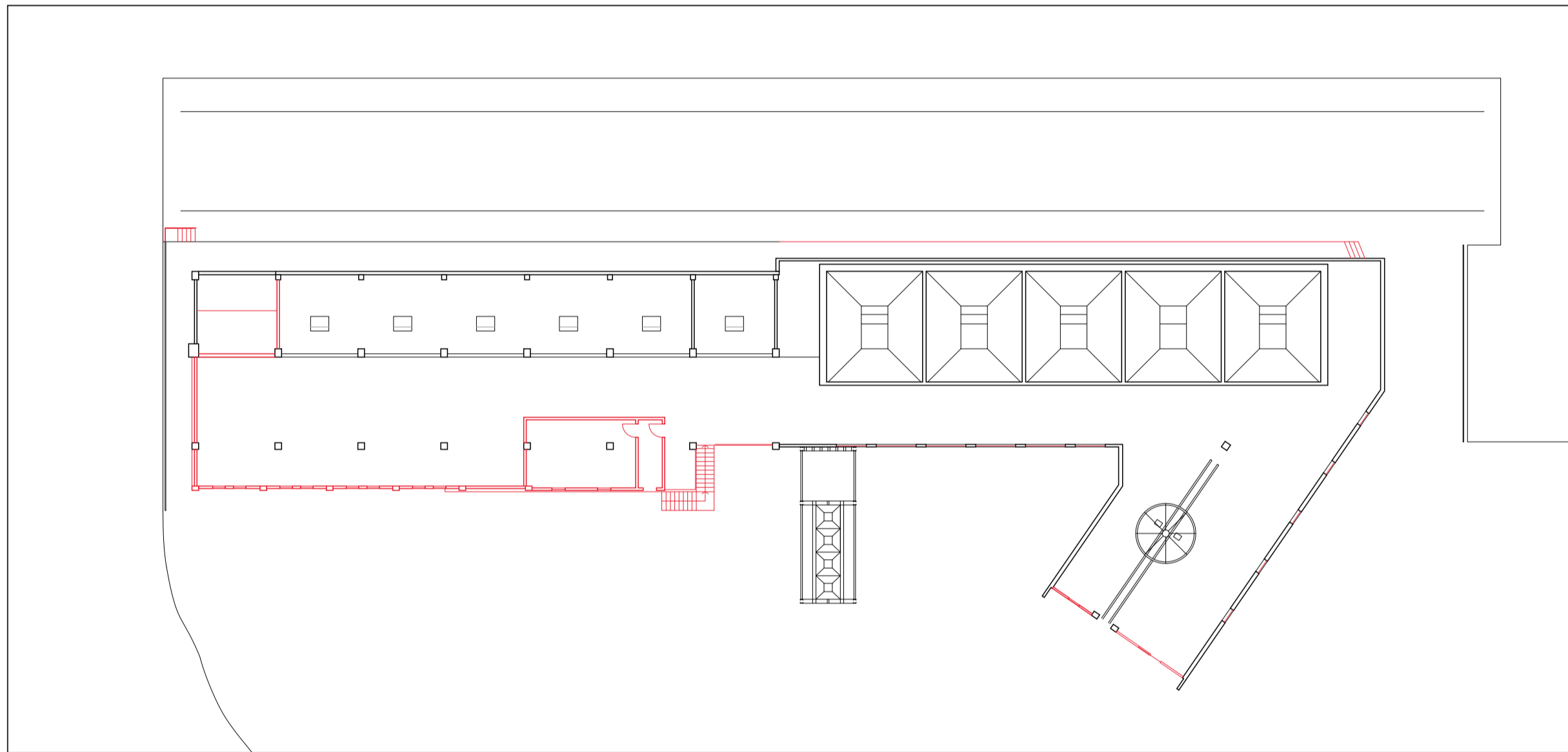
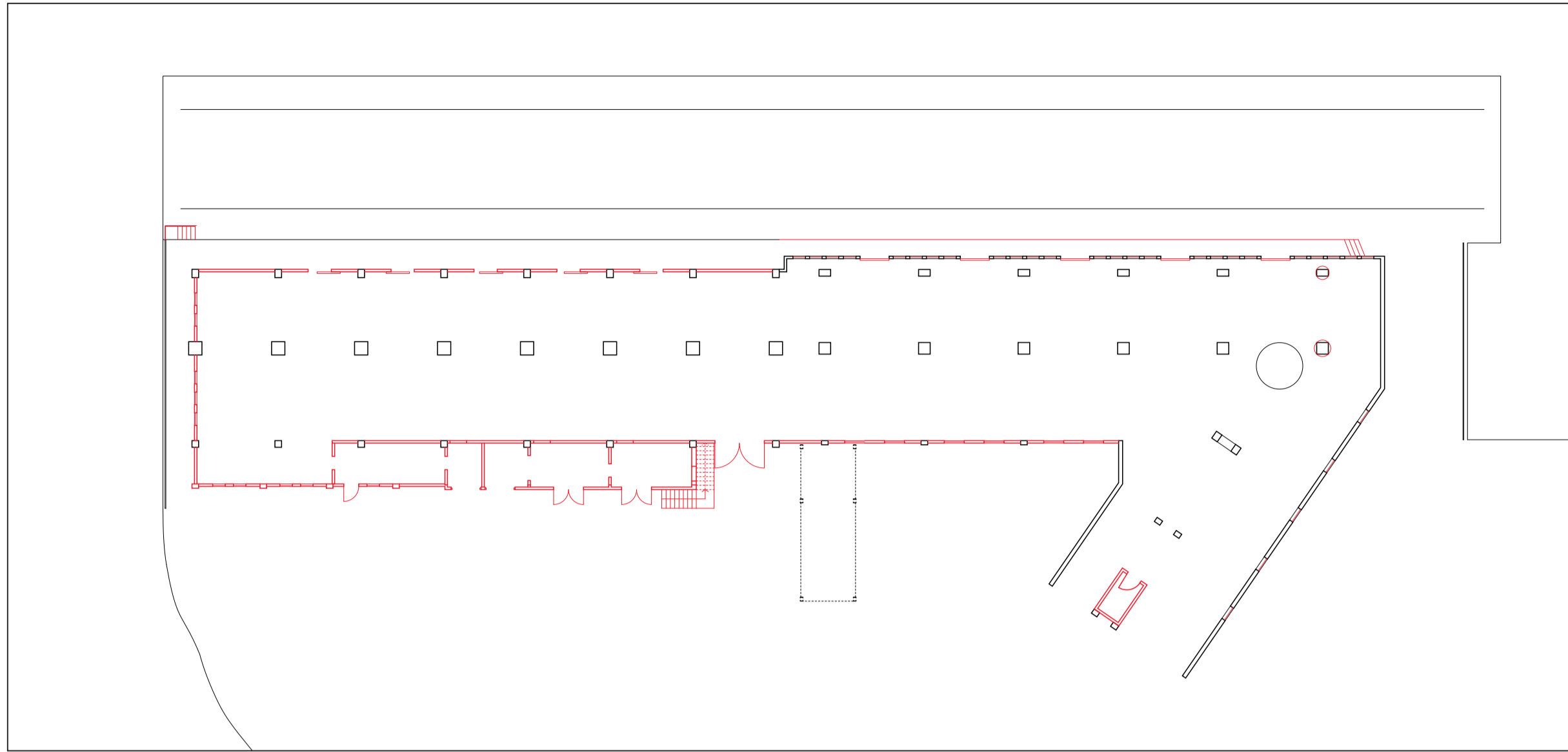
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THE SILO BUILDING

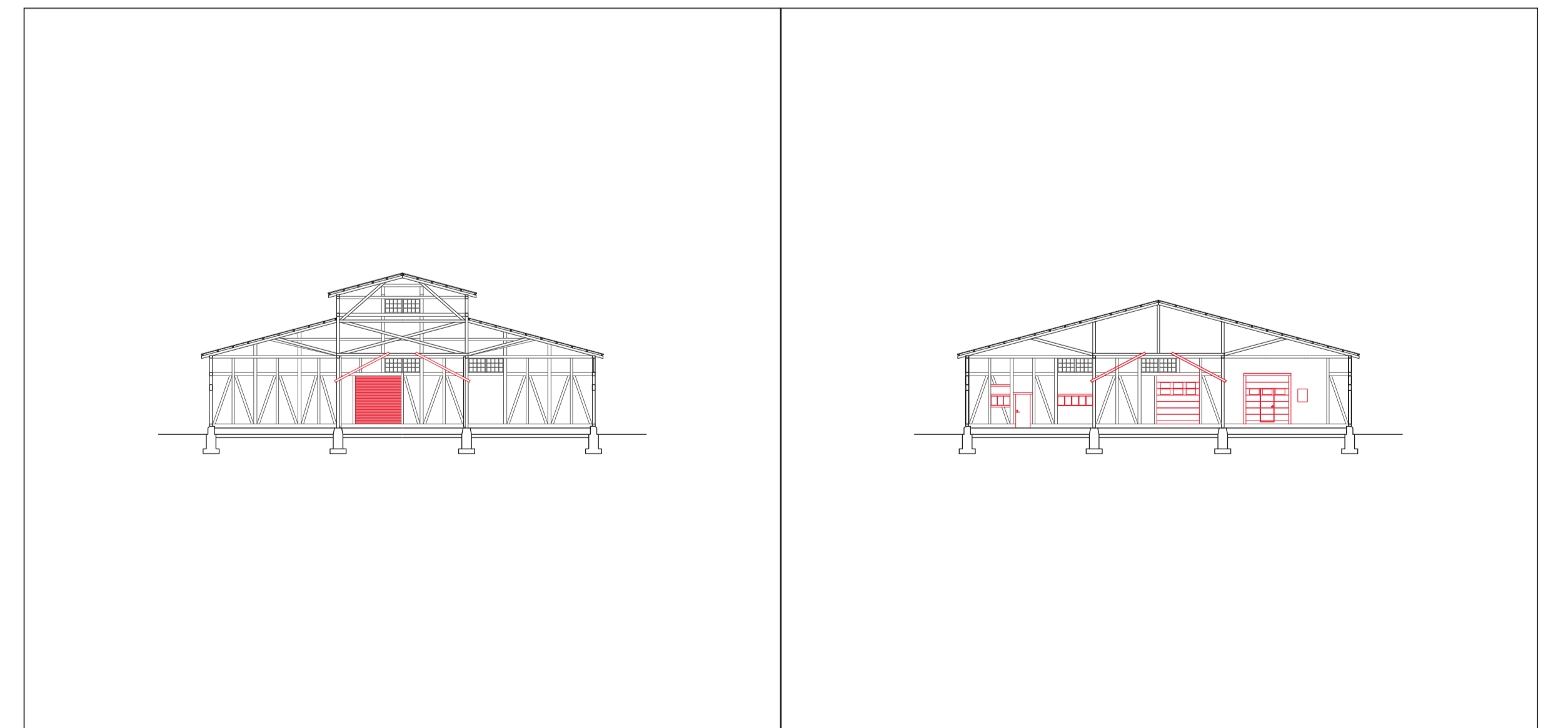
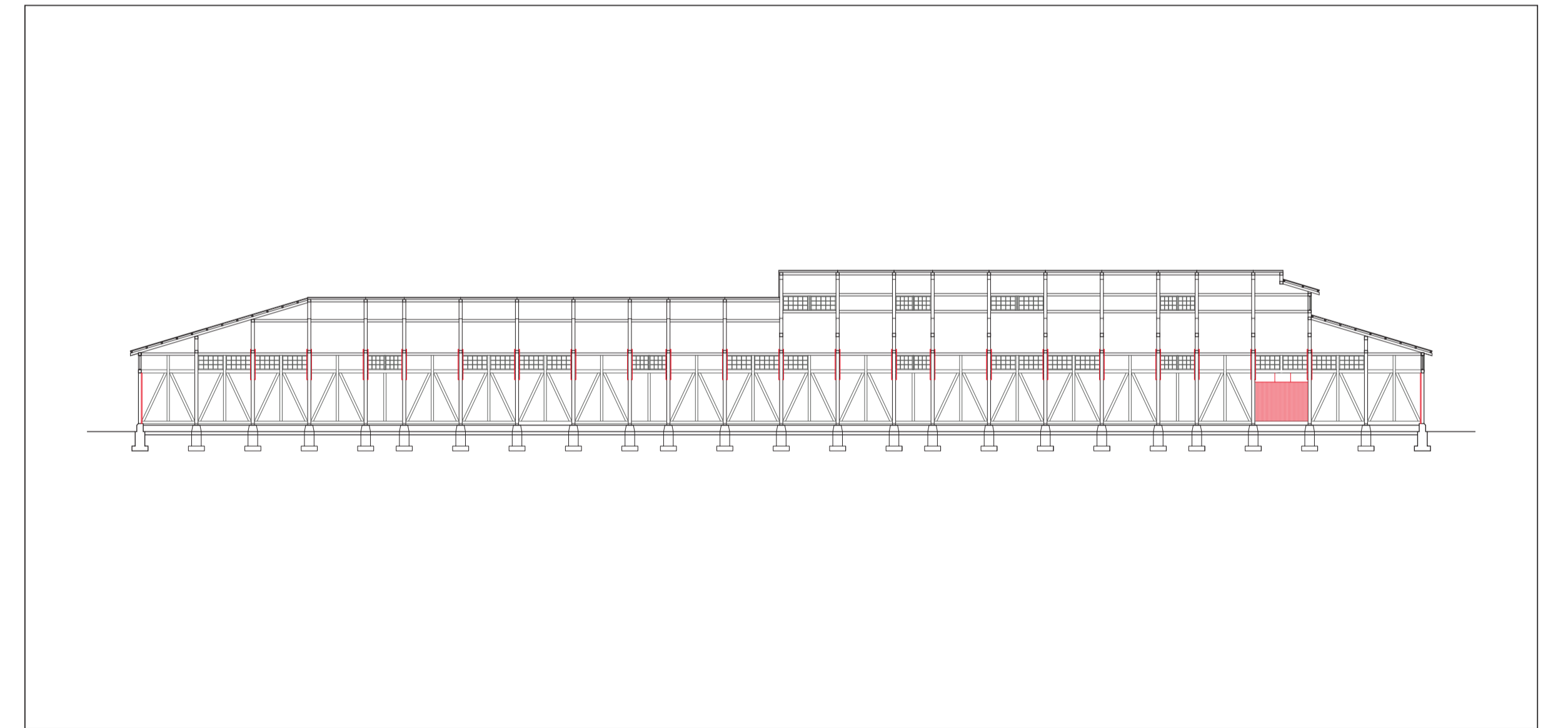
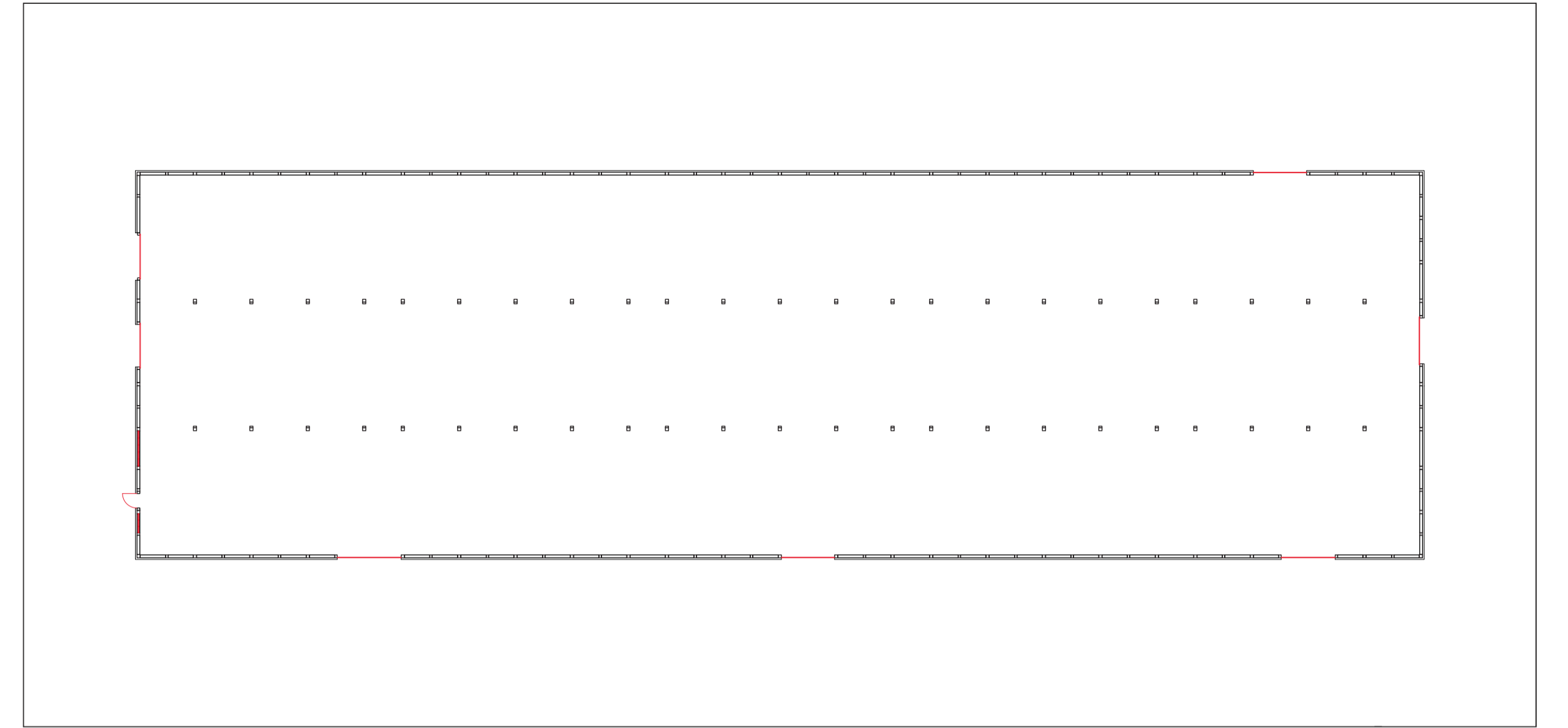


THE DICY BUILDING



■ REMOVED

THE SILO BUILDING



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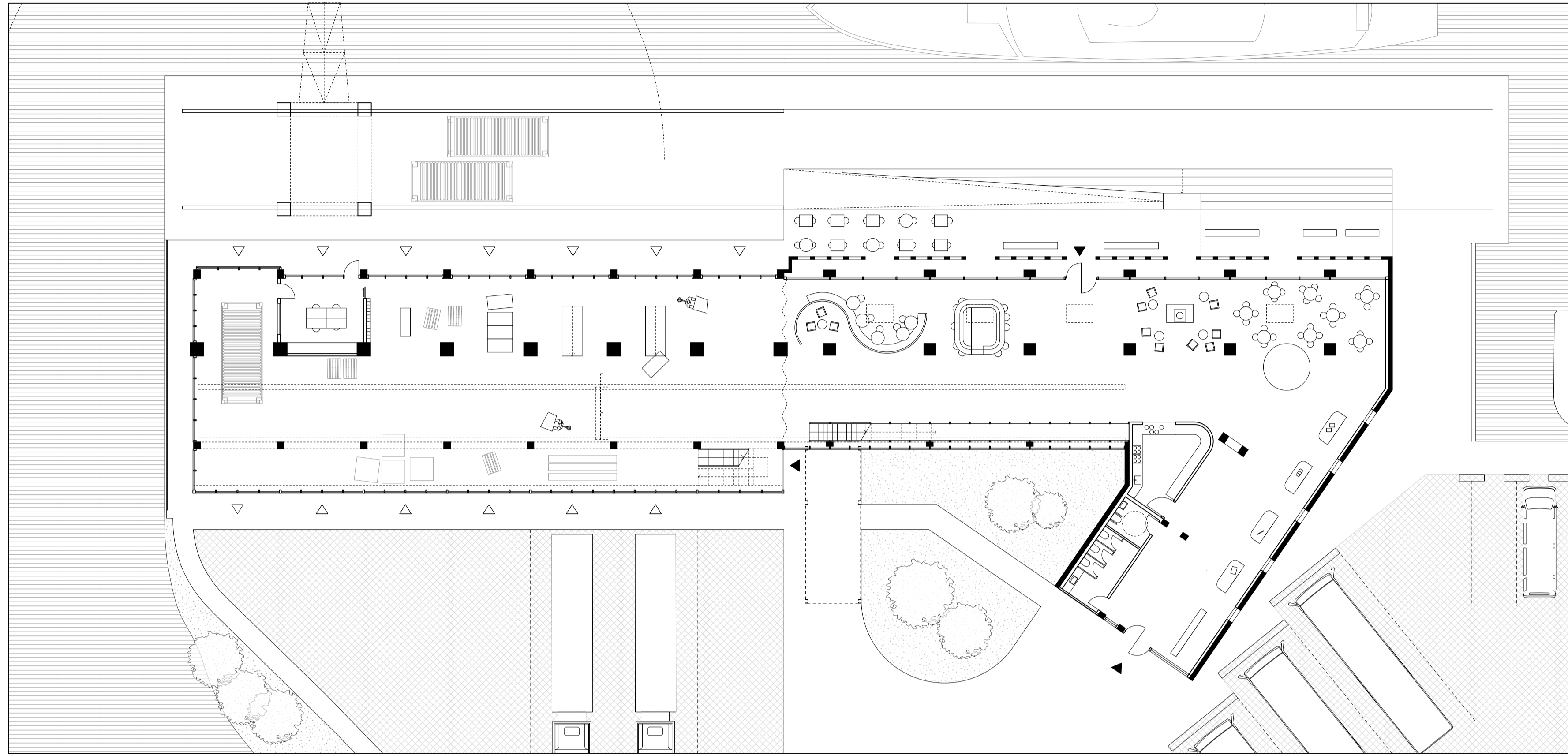
THE DICY BUILDING

IMPORT QUAY

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A ┌



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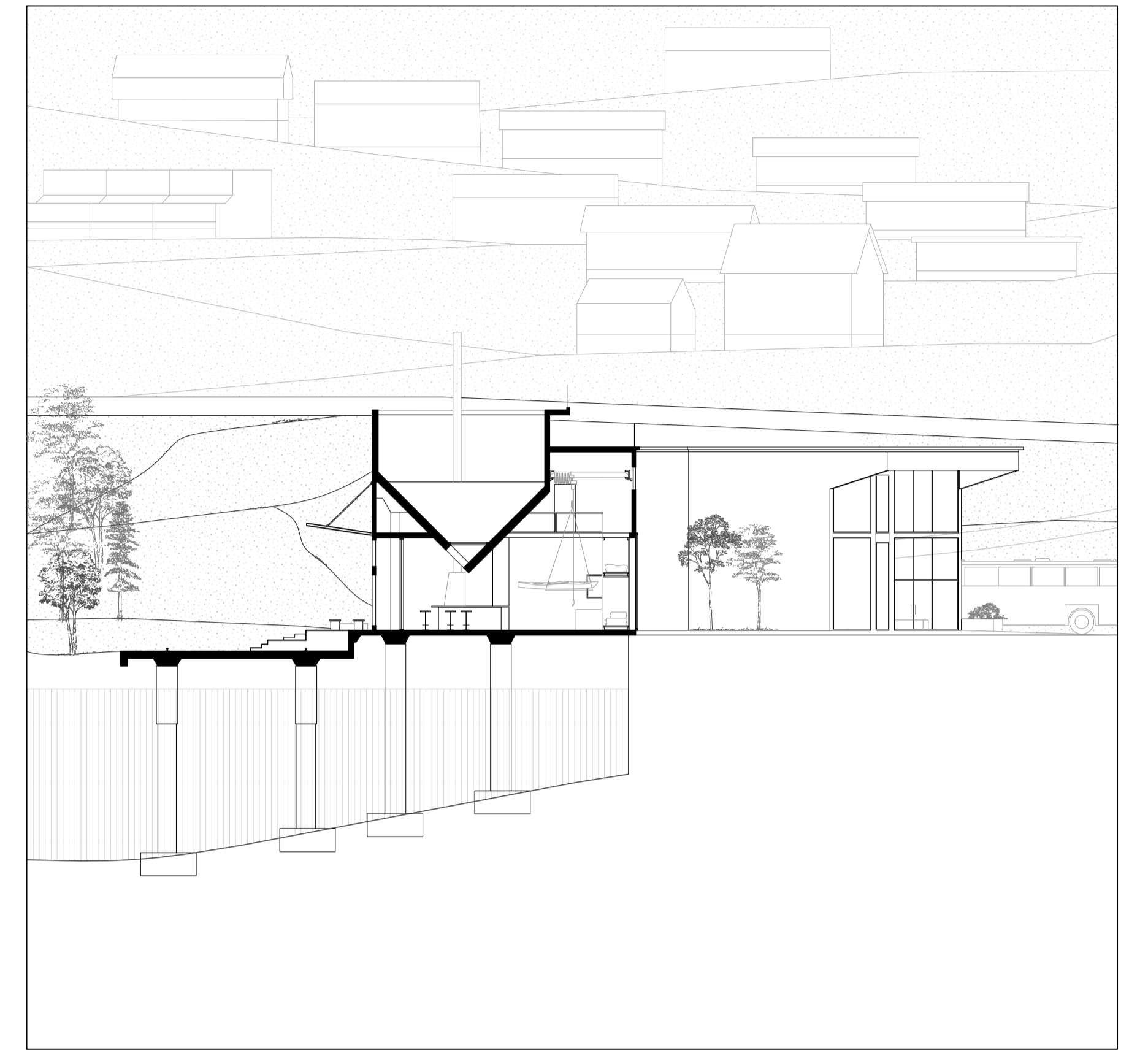


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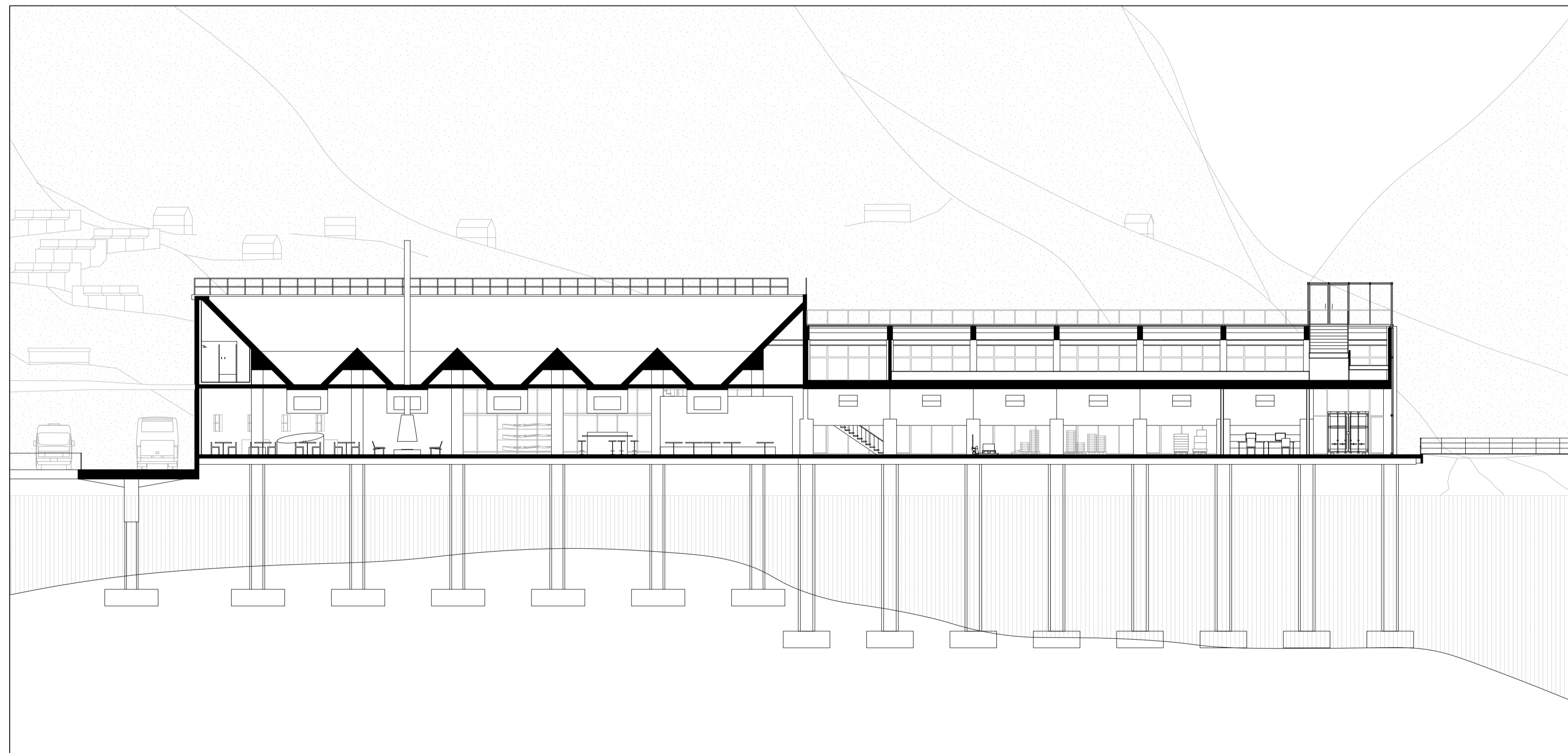
GROUND FLOOR

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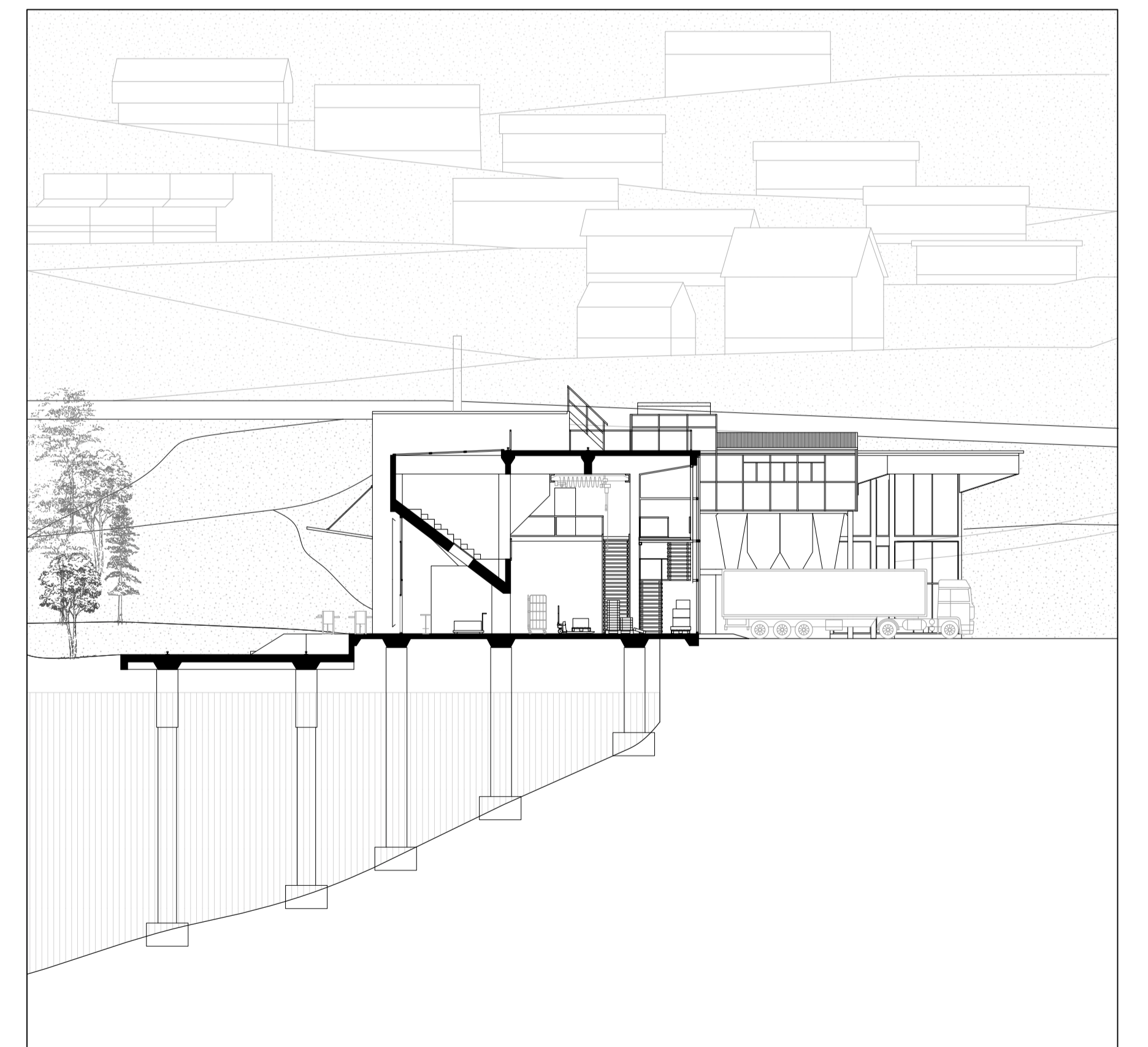
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SECTION B-B



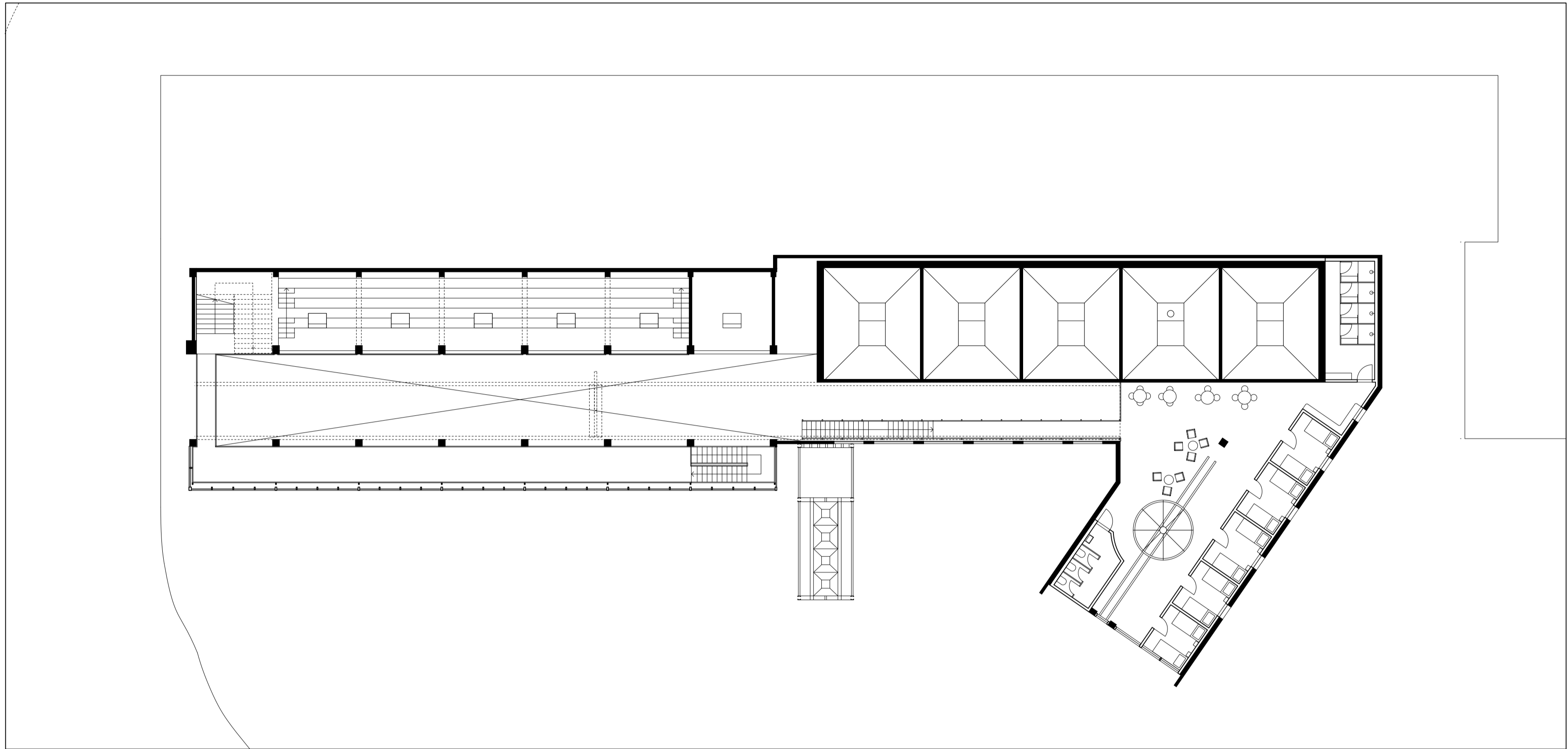
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SECTION A-A



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SECTION C-C



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SECOND FLOOR

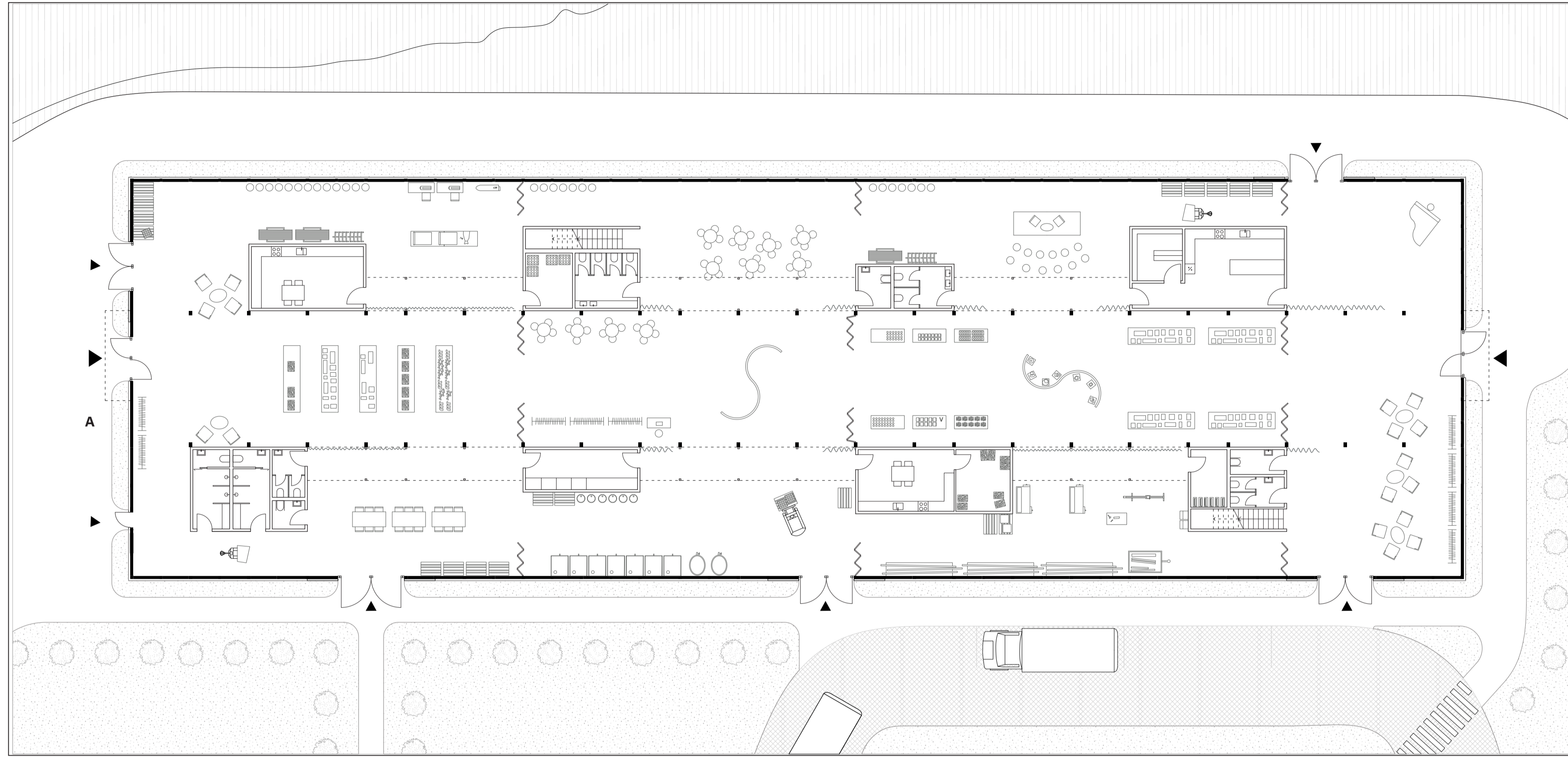


EXPORT QUAY

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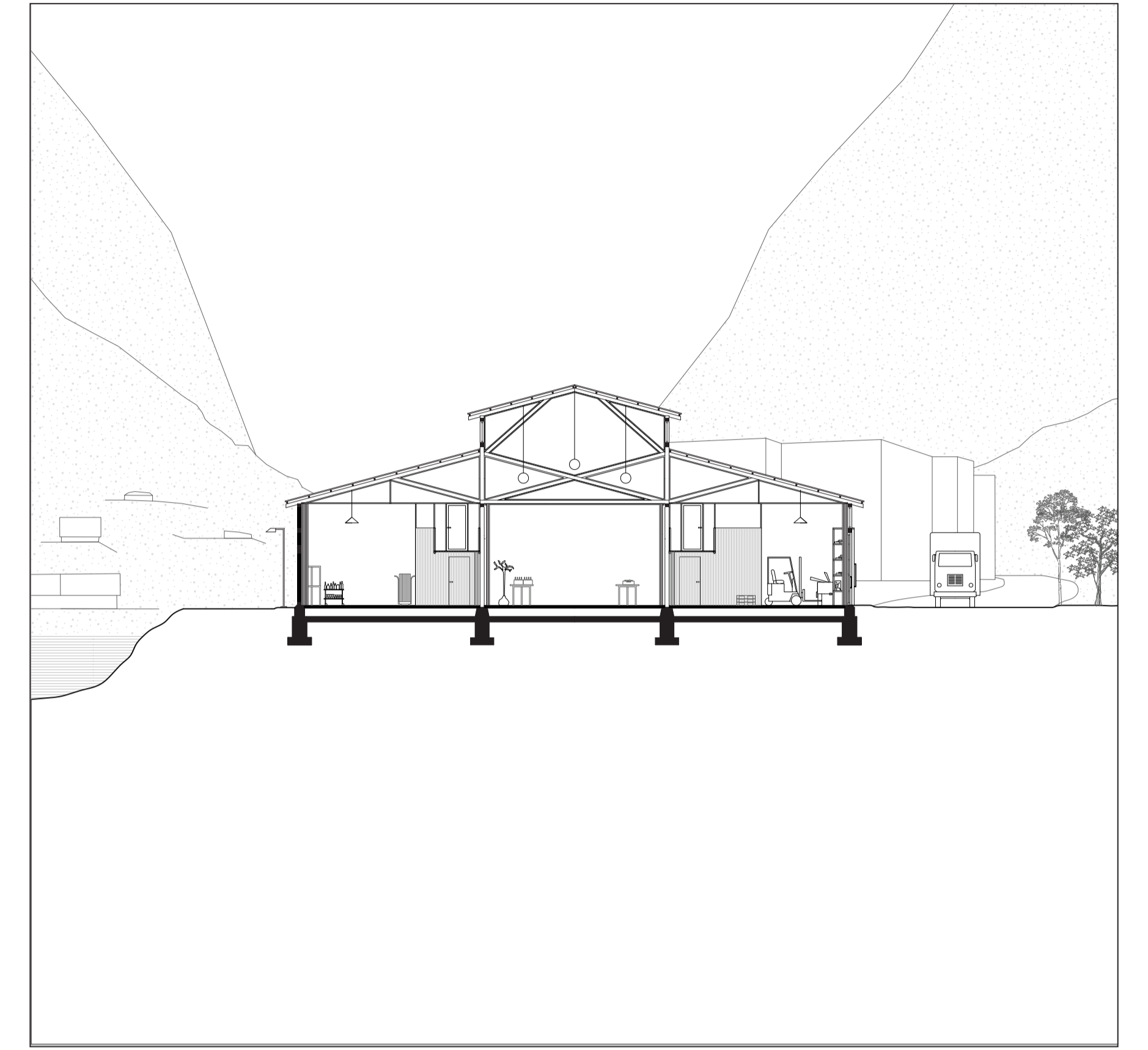
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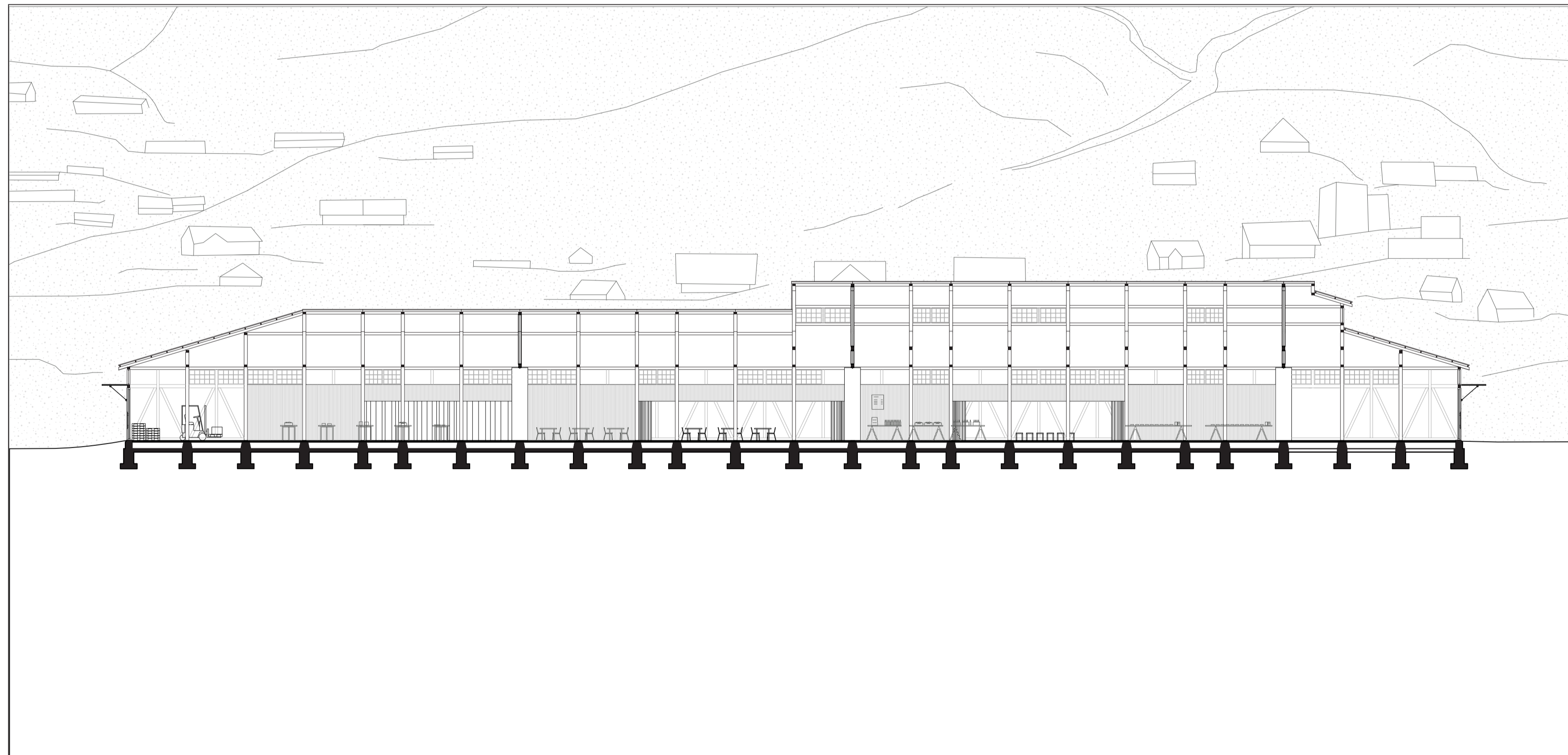
GROUND FLOOR

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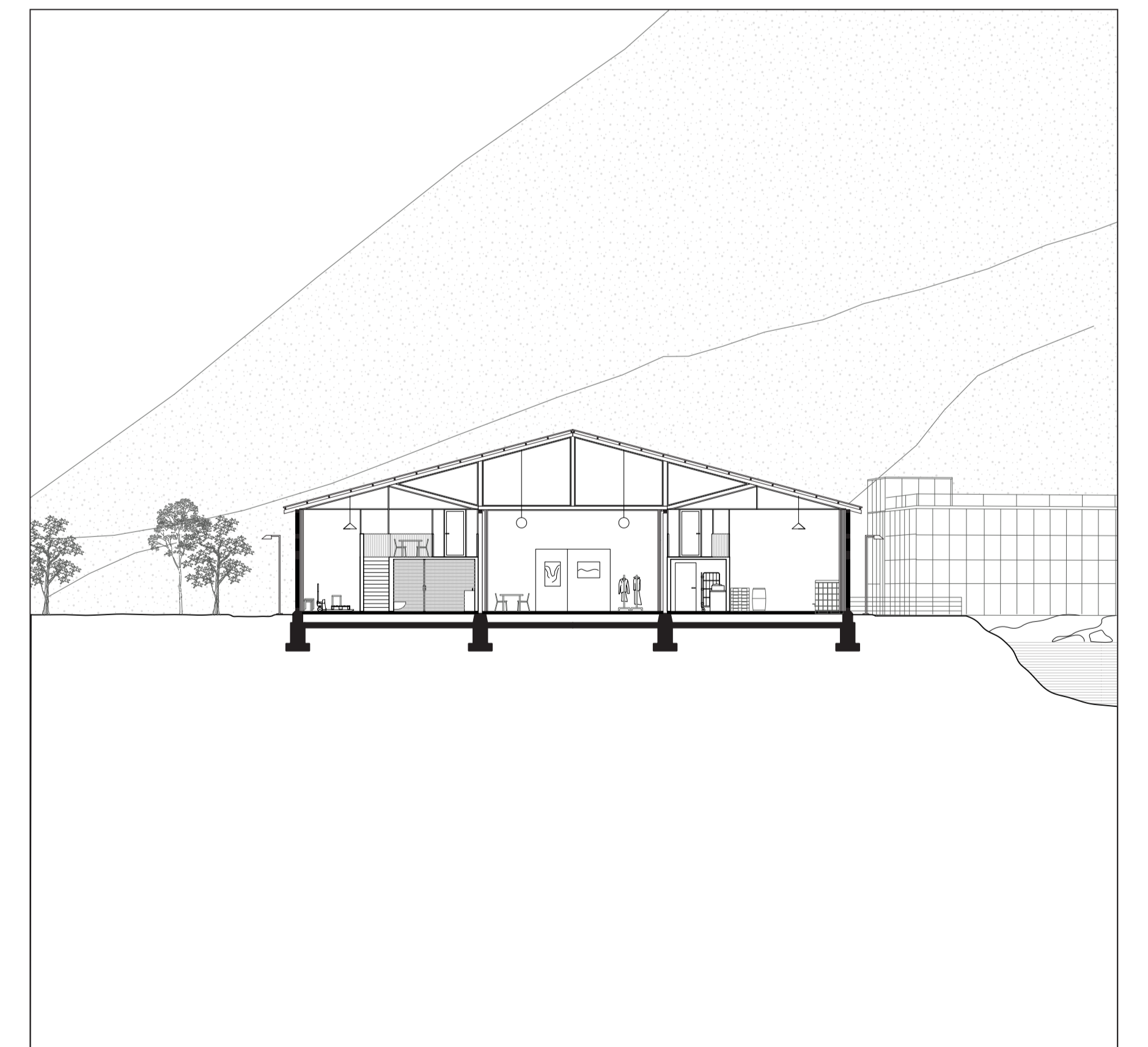
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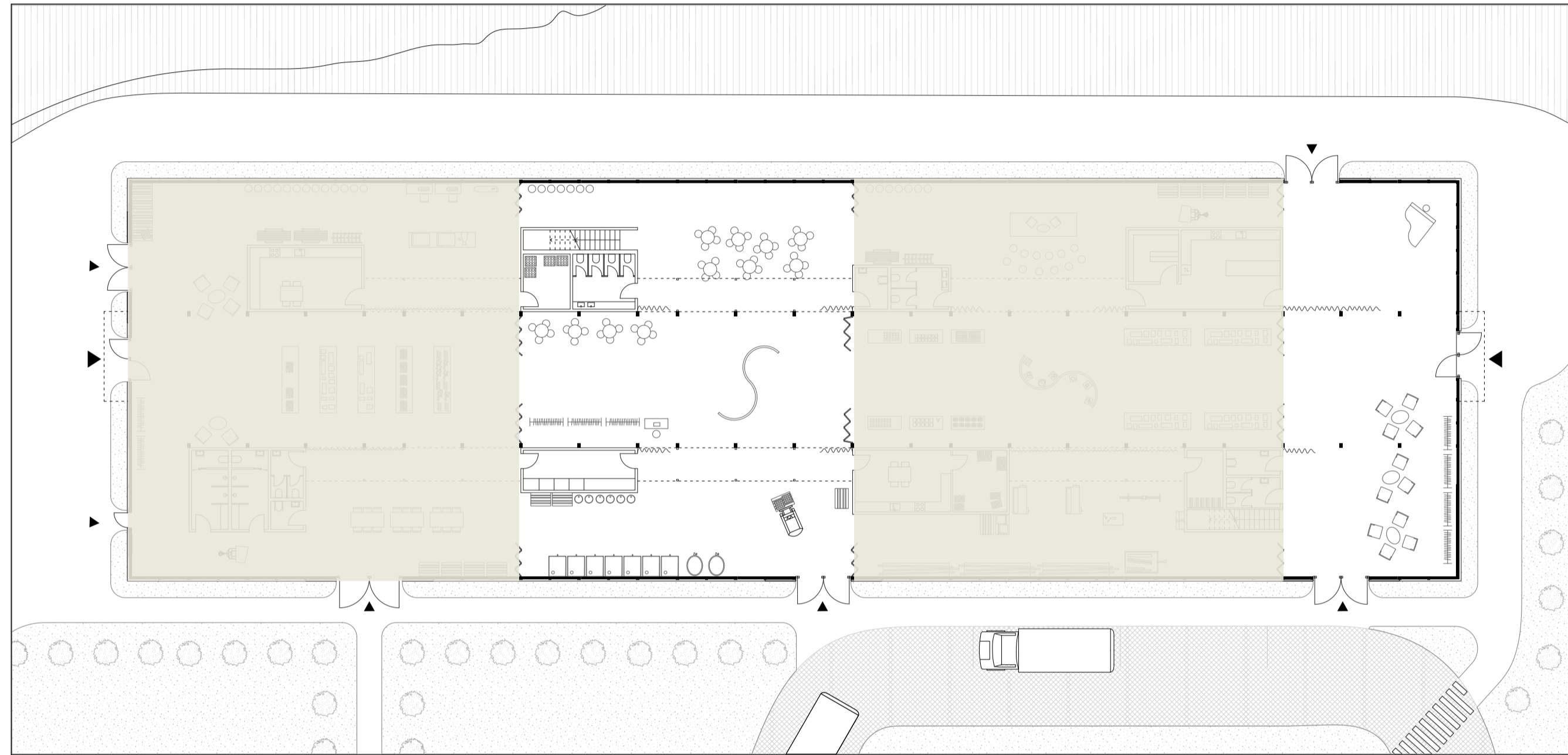
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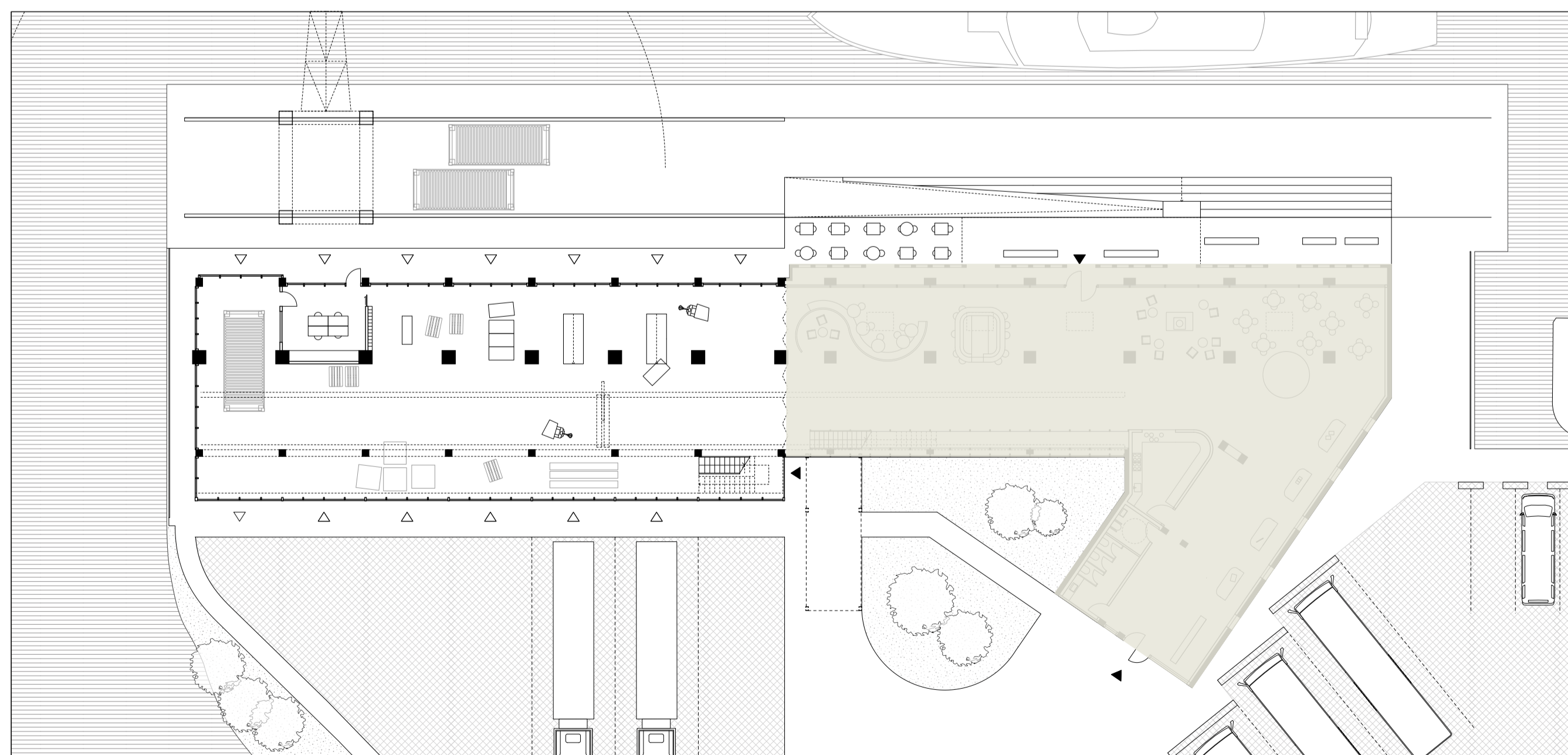
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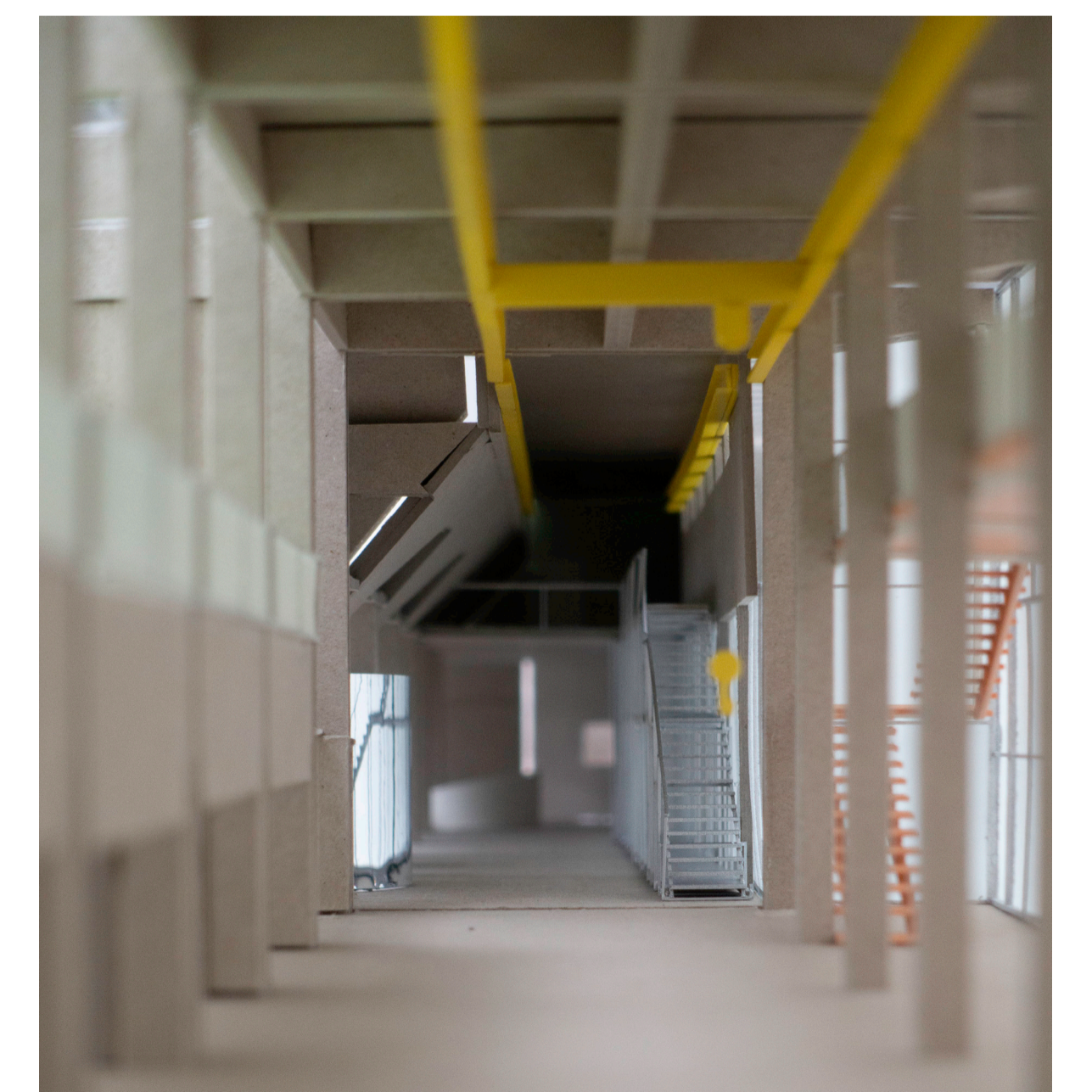
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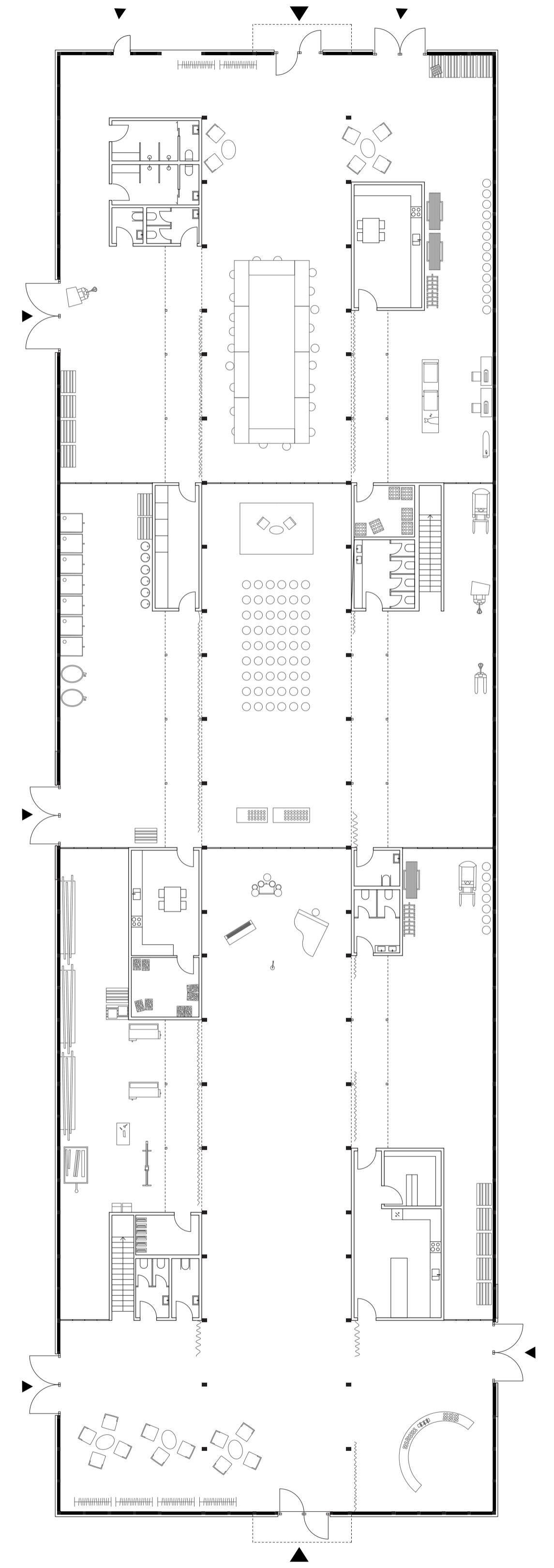
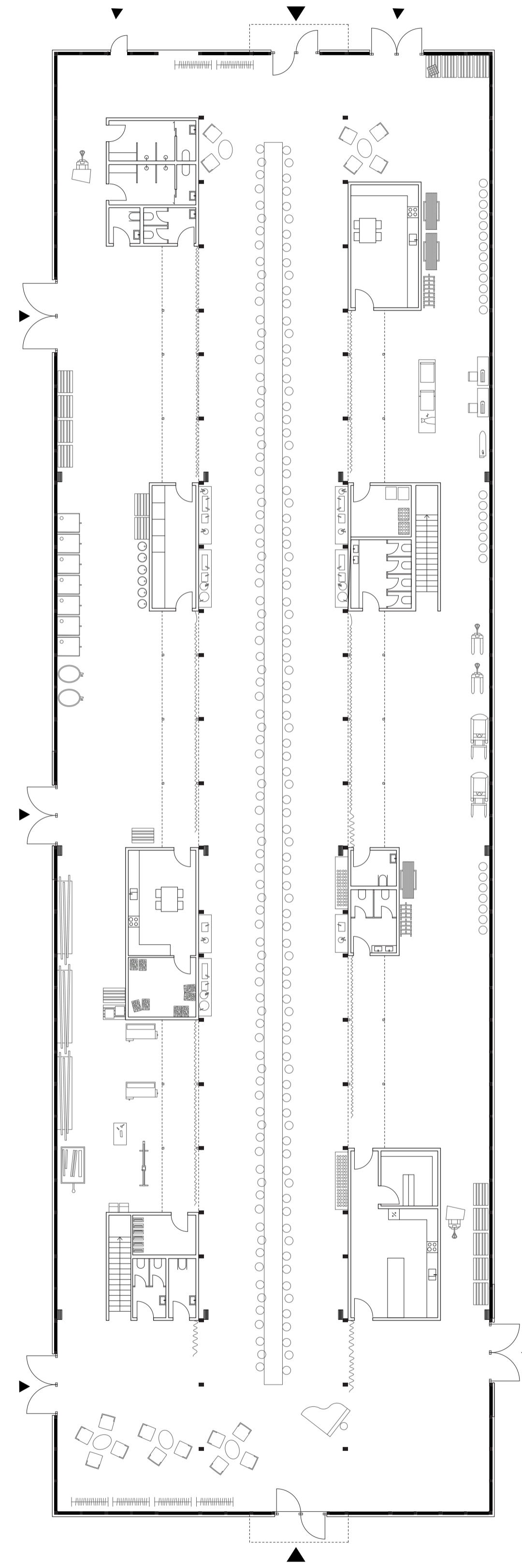
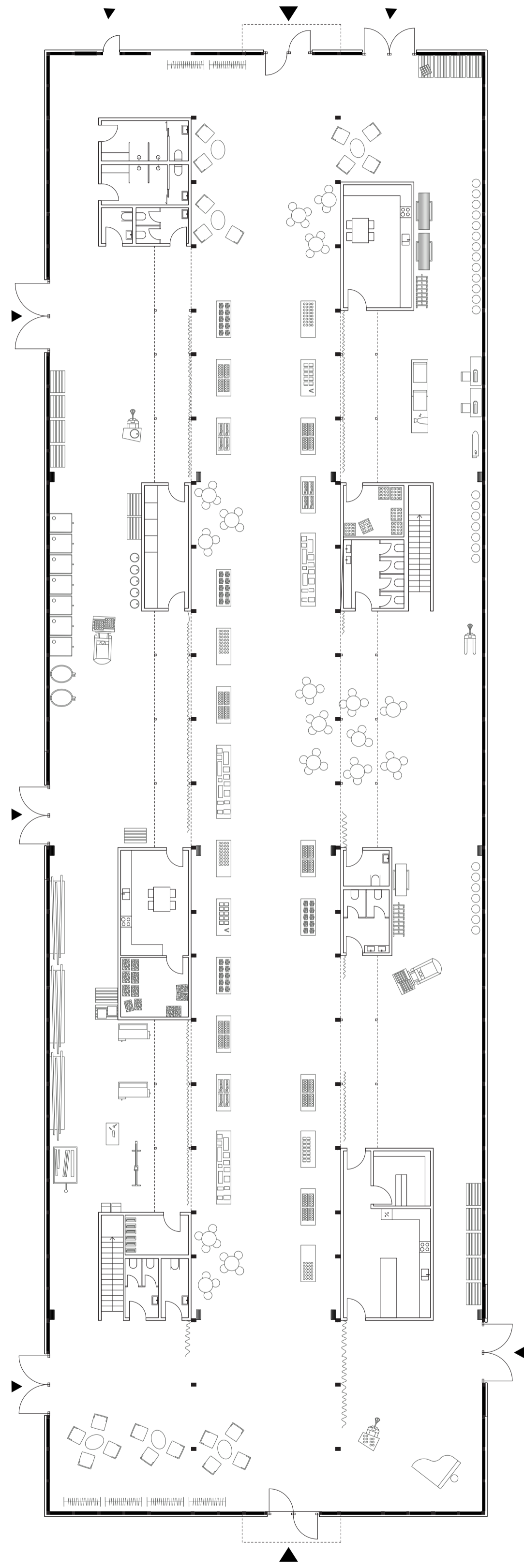
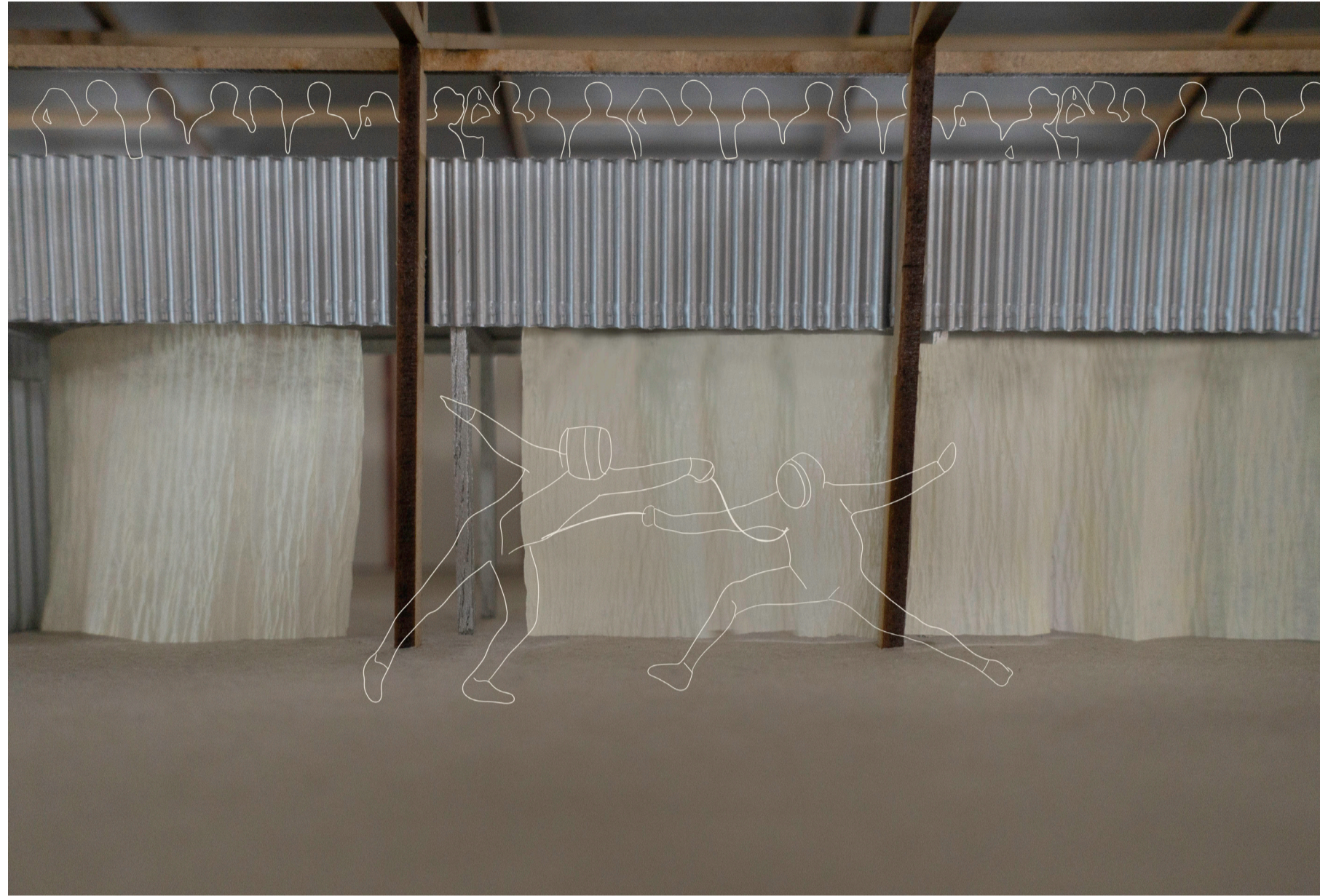


■ POSSIBILITY TO BE CLOSED DURING LOW SEASON



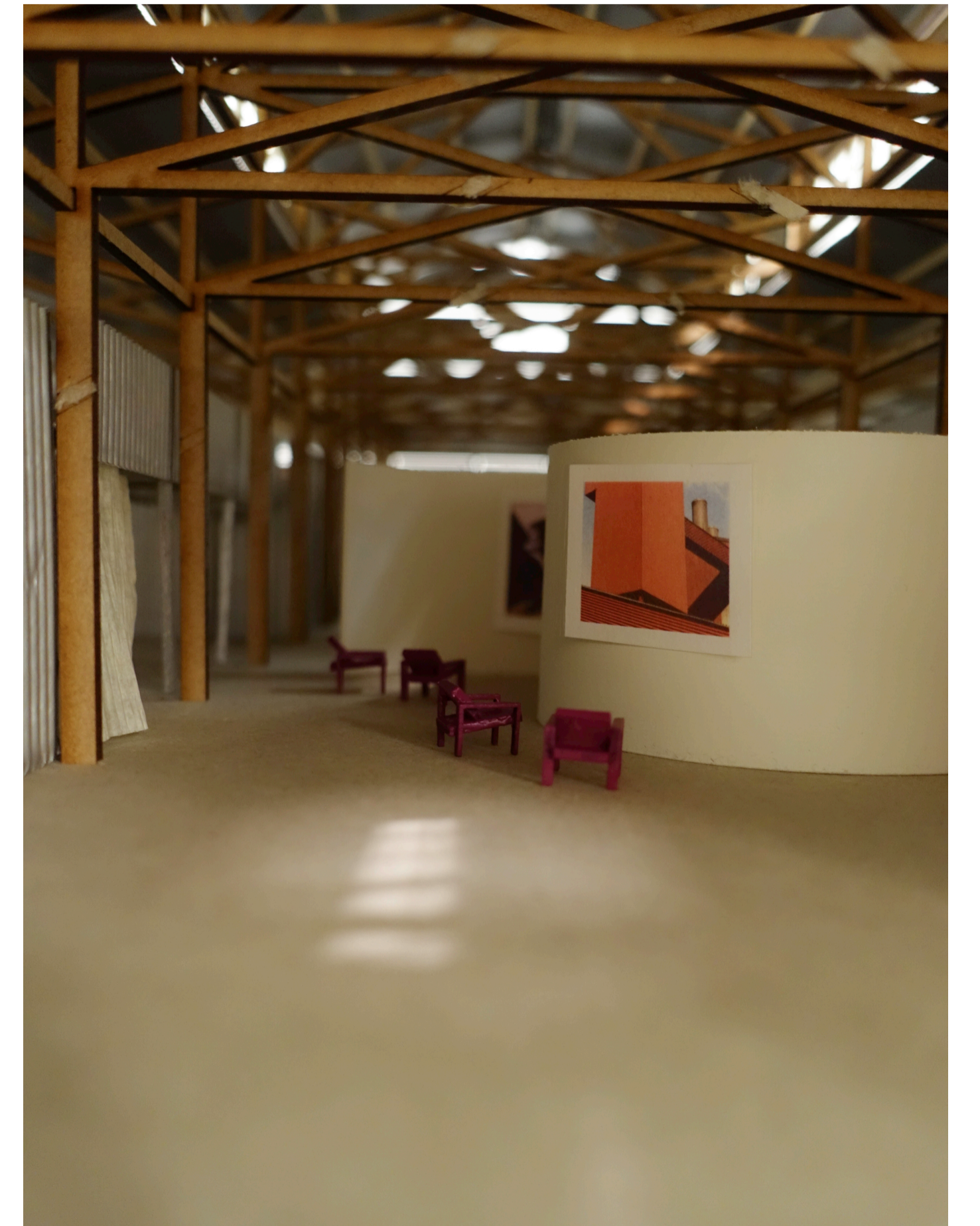
■ POSSIBILITY TO BE CLOSED DURING LOW SEASON





FLEXIBILITY TO ACCOMMODATE DIFFERENT TYPES OF EVENTS

EXPORT QUAY



IMPORT QUAY

