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Genius Loci

Rehabilitation Scenario for Camialti Imperial Shipyard

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und Raumplanung von

Busra Koroglu | 0827250

Wien, Jänner 2017



Either I conquer Istanbul or Istanbul conquers me. | Fatih Sultan Mehmet

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Abstract.....

The site Golden Horn Arsenal in Istanbul has embraced for many decades one of the leading examples in naval shipbuilding industrial complex, called "Tersane-i Amire". In the present days the region consists of three separate shipyards; Halic, Camialti and Taskizak. Halic Shipyard is the only one still in use, whereas the other two shipyards are abandoned. Taking identity loss of the Camialti Shipyard into consideration, this diploma thesis dedicates itself to an analysis of the industrial heritage of Imperial Shipyard with the purpose to redefine its importance to this day as a revived cultural center for the locals.

Up to the end of the 20th century the shipyards Taskizak and Camialti maintained their function despite the uncontrolled changes and interventions. However in 1993 they were handed over to a private sector. Consequently they were closed to the public and can only be observed from passerby ships. The aim is to transform this historical Camialti shipyard on the seafront to a public space by revitalizing it with new features, to cement and preserve its essence. This place possesses immense value for the Turkish industrial history and should be commemorated. It can offer opportunities for the future generations, hence should be active with new cultural and production use before it loses its genius loci and becomes a no man's land. Thus, it is essential to preserve the existing structure as much as possible, in order to maintain the general atmosphere and prevent the ambience from disappearing.

The concrete idea is to devise for the hangar within this site a multi-functional cultural space for any kind of exhibitions or events. Further, the existing warehouses on the site are to be preserved and converted into working-living spaces for the creative community; Art-in-Residences. This project aims to conduce an exemplary field study with a proposal for sites with such valuable assets.

Das Arsenal am Goldenen Horn in Istanbul wurde im Jahr 1453 gegründet und zählt zu den wichtigsten Werftanlagen in der Industriegeschichte des Osmanischen Reiches. Heute umfasst das Arsenal „Tersane i Amire“ die drei Werften Halic, Camialti und Taskizak. Während die Werften Camialti und Taskizak im Laufe der Zeit eingestellt wurden, ist die Halic Werft auch heute noch in Betrieb.

Bis zum Ende des 20. Jahrhunderts blieben die Werften Camialti und Taskizak trotz unkontrollierter Veränderungen und Eingriffe in ihrer ursprünglichen Funktion erhalten. Mit der Übernahme durch private Unternehmen im Jahr 1993 wurde das Areal für die Öffentlichkeit geschlossen und kann seither nur mehr vom Wasser aus ersichtlich.

Ziel dieser Diplomarbeit ist es, die historische Camialti Werft durch neue Funktionen/durch Umnutzung in einen öffentlichen Raum zu verwandeln und somit das Wesen/den Charakter des Ortes zu erhalten und zu stärken. Die Camialti Werft ist von unschätzbarem Wert für die türkische Industriegeschichte und soll den Menschen auch in Zukunft in Erinnerung bleiben. Sie stellt einen Ort mit vielen Möglichkeiten für künftige Generationen dar. Durch die neue Nutzung als Kultur- und Arbeitsstätte wird eine Revitalisierung des Areals erzielt bevor der Genius Loci verloren geht und der Ort zum Niemandsland wird. Besondere Bedeutung kommt dem weitgehenden Erhalt bestehender Bauten zu, da die Atmosphäre und Stimmung des Ortes dadurch weiterhin erlebbar bleibt. Die konkrete Idee ist, auf dem Gelände der Camialti Werft eine Multifunktionshalle zu entwerfen, die Raum für unterschiedliche Ausstellungen und Veranstaltungen bietet. Die bestehenden Lagerhallen am Grundstück bleiben weiterhin erhalten, werden jedoch zu gemischten Wohn- und Arbeitsräumen für die Kreativszene umfunktioniert.

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01 PROLOGUE

Unfortunately today ports are regarded as undesirable sites worldwide due to their location in the heart of the cities and occupation of a profitable urban space. The historical shipyards in Istanbul left behind haunted silhouettes in their former location. The shipyards contributed and influenced the development of the communities where they have developed new spatial morphology. It can offer opportunities for the future generations, hence should be active with new cultural and social production.

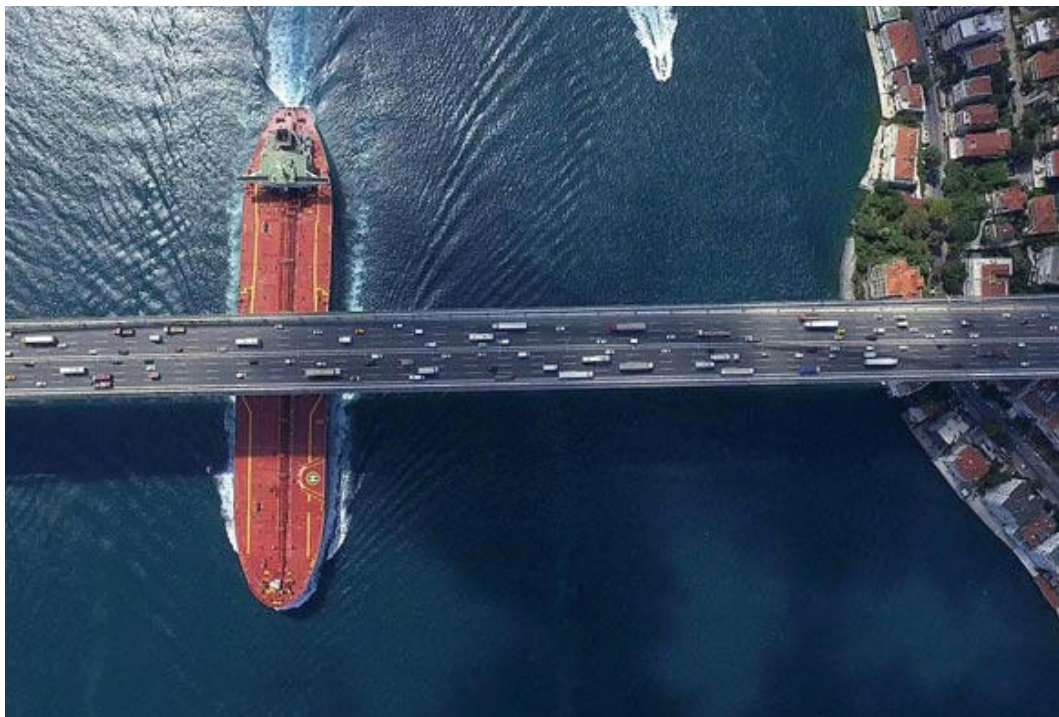


Fig 1
Aerial View | Bosphorus

Motivation

*"The waves coming from Sweet Waters of Europe follow a delicate curve. No it's no illusion; the banks that hold them are curved like an enormous cornucopia emptying itself into sea across Asia, whose mountains are spread out like the placid horizontal smile of a Buddha in the shadow of sanctuary covered by a gold luster"*¹

In this quotation, the impression of Le Corbusier about this city one of a kind is very unique. This impression opened another perspective for me approaching the city from the sea which is very unique and not often possible.

My initial motivation for this diploma thesis was to redefine the identity of the disregarded industrial heritages of Istanbul, which is a decayed shipyard. While passing through the Golden Horn on a ferry its existence evoked my interest. The imperial Arsenal is considered to be a pioneer of naval history concerning the developed technologies in shipbuilding and naval warfare for decades. However limited information is presented to Istanbulites about its history. . The entrances to the sites are closed to the public, however, it is impossible to overlook it from the waterfront and not be curious. It is for this reason that I took an interest in this shipyard and motivated me to further analyze the site and my native city

Industrial wastelands are "Places of Memory" and they play an essential role in the urban development of any city. The historical arsenals of Istanbul were built for industrial purposes. Over the years they have lost their true meaning. They were either left vacant or extinguished completely. Today, the relics located in the Golden Horn Arsenal hardly resemble the original structures from the Byzantium and Ottoman period. In the near future, the traces will be completely eradicated. This may be due to the fact that revitalization of industrial buildings in the framework of cultural and architectural heritage is a new topic for Turkey. This causes an obstruction between the site and the public. Additionally as time passes by any attempts in preserving the site results in a lower chance of protecting it. Hence, the following analysis, aims to demonstrate how to approach an industrial heritage site in order to reestablish it's importance for the public. I will first begin with an overview of the historical and cultural importance of Camialti shipyard. Then I will discuss the importance of the industrial heritage of the site along with the port and city relationship. Finally, I will conclude it with my site research and design proposal. Most importantly the aim is to conserve them as much as possible rather than to leave them to be demolished or be replaced, which is an often occurring issue for Istanbul's historical ensembles.

¹ Feyen, Shannon & Neville (2009), Water and Urban Development Paradigms, Taylor and Francis Group, London p.177



Istanbul | Turkey

2 continents 1 city

Area 5.461 km²

Population 14,025,646 [31 December 2015]

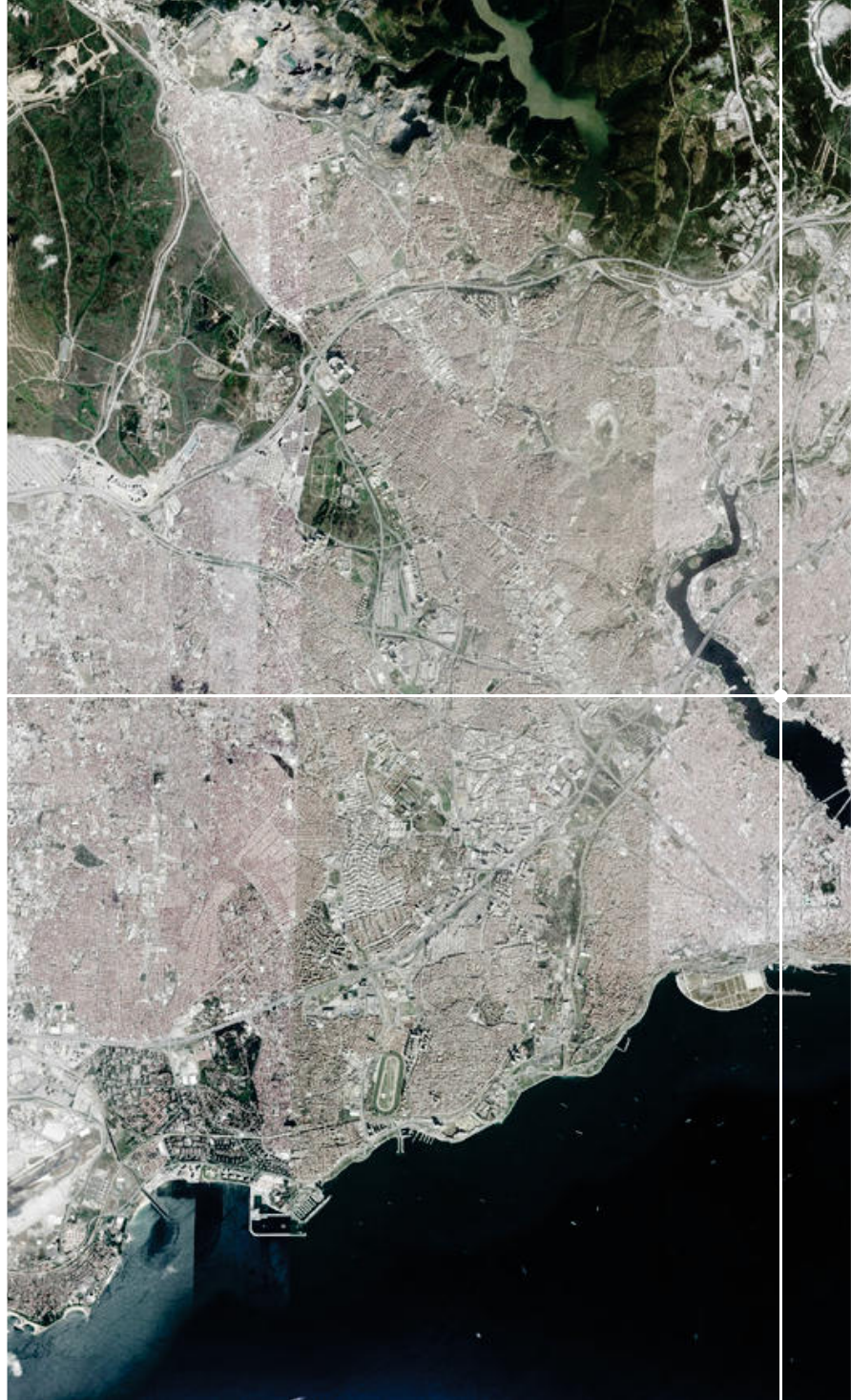








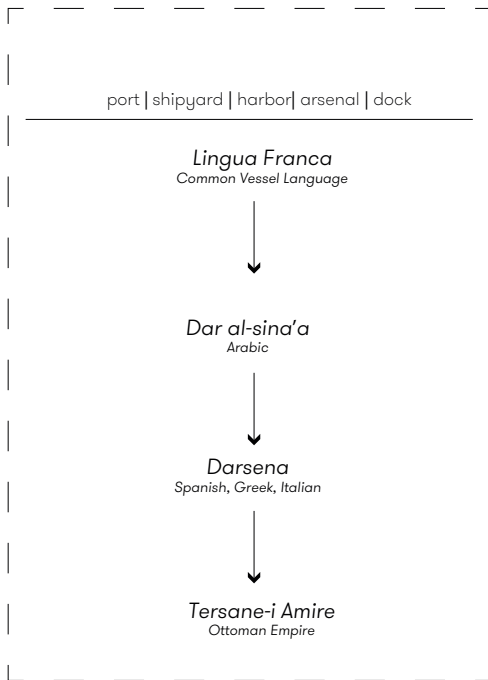


Fig 2
The launch of frigate from Valide Kizak Dock | Taskizak Shipyard

Etymology

Today different expressions exist when discussing naval activities such as port, shipyard, harbour, arsenal, dock etc. However, in the past a common vessel language was developed among the mariners of the Mediterranean to bridge different natives and cultures with one another. Thus, the common terminology helped merchants and seamen to understand each other although they did not speak the same language. The aim was to develop a mutual communication language among the maritime frontiers: the so-called **lingua franca**.

From the 11th to the 19th century, “**dar al-sina’a (place of industry)**” was used by the maritime frontiers of the Mediterranean, originating from Arabic.¹ All of the terminologies of different cultures activities have derived from an Arabic word when referring to shipbuilding: Dar - **House** | sina’ah - **Art, Craft, Skill**. In the 14th century Italian-Latin language included the expressions such as *terzana*, *arzana*, *arcenatus*, *tersanaia*, *terzinia*, *darsena*. By the 15th century the Mediterranean nations took the word as *darsena*. The Ottomans were using the word “harbour” instead of arsenal. The term “tershane” was introduced to the naval facilities of the Ottoman Imperial Arsenal for the first time in the year 920. Soon it became an official expression.² It was a similar term to the Italian “*darsena*”, meaning in Ottoman period and today, a place for ships to be built, repaired and maintained. *Tersane-i amire* was used in 1514 when the construction of industrial complex along the Golden Horn was started during the reign of Sultan Selim I (1512-1520). *Tersane-i amire* was not only a naval base, it was an administrative center for the Ottoman naval forces.³



1 H. (n.d.). Imperial Arsenal, Eİ3. Retrieved January 08, 2017, from <https://www.academia.edu/10082489/Imperial-Arsenal-EI3>

2 H. (n.d.). Imperial Arsenal, Eİ3. Retrieved January 08, 2017, from <https://www.academia.edu/10082489/Imperial-Arsenal-EI3>

3 Suna ve İnan Kirac Vakfı (2009), Pera Muzesi, edited by Ekrem Isin, *The logbook of the Ottoman Navy Ships, Legends, Sailors*, p. 18

02 HISTORICAL OVERVIEW

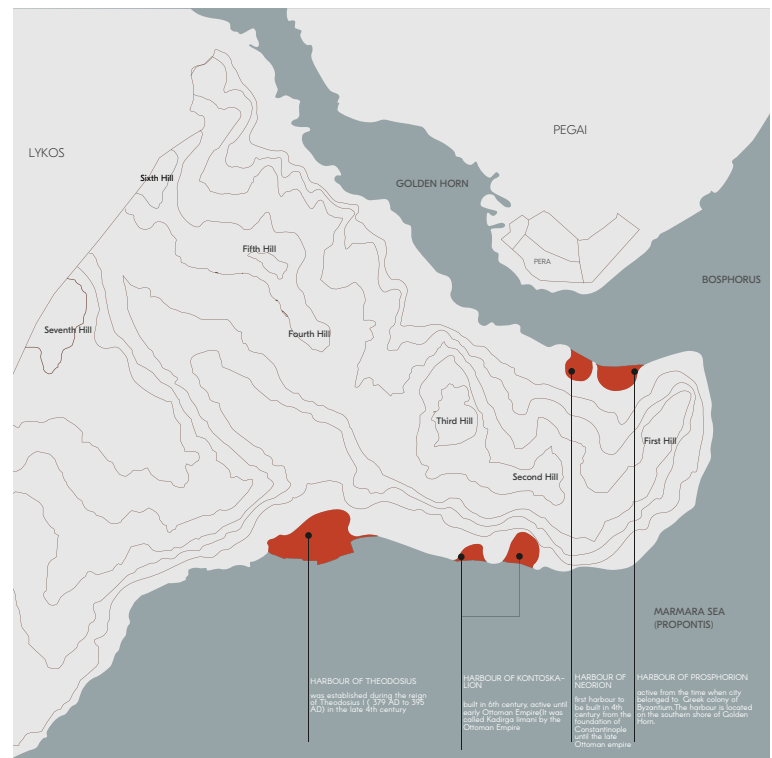
Istanbul has been an essential shipping port and a transportation hub not only today but also for different Empires. The Golden Horn Arsenal is one of the most significant technological and industrial foundation of Turkey, which was established by the Ottoman Empire. However first harbours were established by the Roman and Byzantine Empires in Constantinople.

Quarters of the Naval Arsenal History

Phase I | Byzantium Period (330 AD - 1453)

From the very beginning Istanbul profited from its geographical location immensely. Two continents Asia and Europe are separated by the Bosphorus strait, connecting the Black Sea and the Sea of Marmara. The Golden Horn meets the Bosphorus Strait at the point where the Sea of Marmara meets forming a natural harbor. Thus the city has been an essential shipping port and a transportation hub for many centuries. According to the historian Paul Magdalino, the location of the Byzantium harbours was located majorly on the Marmara Sea (Propontis) unlike the Ottoman harbors, who were centered on the Golden Horn.¹ For Constantinople, the maritime defence was a major issue due to possible threats from the opponents, strong winds and incendiary outbreaks. Therefore, the harbour locations were shifted from the Propontis to the Golden Horn over the period of the Byzantine Empire. The Golden Horn offered an enclosed harbor, which was a significant military advantage to use.

The historic shipyards of the Byzantium Empire were composed of four naval arsenals; **Theodosius, Kontoskalion, Neorion and Proshphorion**. However, the location and the foundation of these four different harbours have differed during the Byzantine Empire. Before the foundation of Constantinople, the ancient Greek colony was the reign of this region.² The *harbour of Proshphorion* was first ever-established naval base, located on the southern coastline of the Golden Horn. After the foundation of the city of Constantinople by the Roman Empire, the first harbour to be established was the *harbour of Neorion*, which was located in the southern entrance of the Golden Horn. Additionally this harbour was maintained even after the collapse of the Byzantine Empire and it was used by the Ottoman Empire. After the reconquering of Byzantium from the Latins in 1261, two harbours located on the Golden Horn were abandoned. Meanwhile, two new naval shipyards were founded, located on the Southside of the Peninsula, directly on the shoreline of the Propontis. They were called *Harbour of Kontoskalion and Theodosius*. The enclaved site of the *Kontoskalion* was ideal against possible assaults by Latin raids. The naval activities were exported from the Golden Horn to this site. However the harbours along the Marmara shore were unprotected against the storms coming from the southwest wind and also repeating fire outcomes (559, 1040, 1203).³ After experiencing such issues against the unsafe guarded navy, the port activities on the southern area of the Marmara Sea were moved back to the old harbors and west coastline of the Golden Horn.



¹ <http://jfa.arch.metu.edu.tr/archive/0258-5316/2011/cilt28/sayi-1/197-227.pdf>

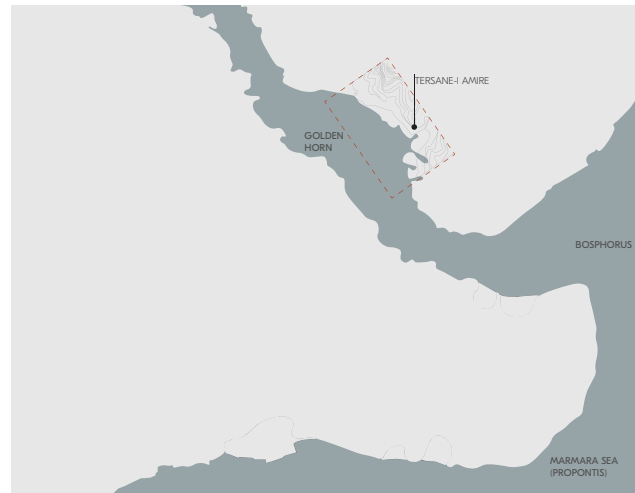
² Revolvly, L. (n.d.). "Byzantium". on Revolvly.com. Retrieved January 08, 2017, from <https://www.revolvly.com/topic/Byzantium&item-type=topic>

³ Muller-Wiener, W. (1998), *Istanbul Limani* (The Harbors of Byzantium Constantinopolis, Istanbul), trans., E.Ozbek, Istanbul, page 16

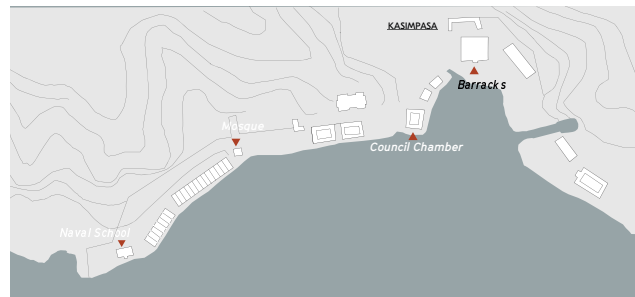
Phase II | Ottoman Empire (1453-1925)

On May 29, 1453 Constantinople underwent a regime change and it was renamed to "Istanbul". The takeover by the Ottoman Empire had no effect on the harbours. Kontoskolian harbour on the southern side of the city maintained its function, now called Kadirga Limani until the construction of a new Imperial Arsenal called Tersane-i Amire.¹ Additionally, the Ottomans already owned other shipyards in Anatolia in Gemlik, Gallipoli, Edincik, Izmit. However, the Imperial Arsenal, which later acquired its current state, was first founded by Mehmed II the Conqueror (r. 1444-46, 1451-81) in the course of his takeover of Constantinople from Byzantines. It was later completed under the reign of Sultan Bayezid II (r.1481-1512) in 1510.²

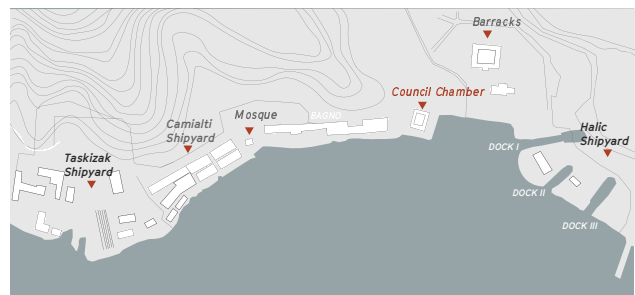
The Golden Horn now called Halic was a natural harbor and its entrance was protected by a large chain pulled across the two coasts to prevent opponent ships from entering into the horn. All of this was advantageous for the Ottoman Empire and a reason for the naval base to be located there. The Imperial Arsenal was requested to further expand by the Sultan Selim I in winter 1513-14 with new additions of architectural layers, in which the shipbuilding activities were transferred from Gallipoli to Istanbul. The expansion included protective masonry walls against possible fires and to keep it away from the unwanted observers.³ Thus, these structures were positioned behind the shipsheds along the shorelines. Soon the site became an industrial complex with admiralty, shipyards, docks, and social facilities such as hospital, religious complexes and a prison. Furthermore, the "divanhane" (council house of the emperor) was built during the reign of Sultan Suleyman (r. 1520-1566), which was located on the western bay of the Golden Horn. These unique elements will be explained in further detail in the following pages.



Year 1600



Year 1800



Mid 19th century

Historical development of
Tersane-i Amire (Imperial Shipyard)⁴

¹ Muller-Wiener, W. (1998), *Istanbul Limani* (The Harbors of Byzantium Constantinopolis, Istanbul), trans., E.Ozbek, Istanbul, page 45

² Imperial Arsenal (Ottoman Empire). (n.d.). Retrieved December 08, 2017, from [https://en.wikipedia.org/wiki/Imperial_Arsenal_\(Ottoman_Empire\)](https://en.wikipedia.org/wiki/Imperial_Arsenal_(Ottoman_Empire))

³ <http://psi424.cankaya.edu.tr/uploads/files/Agoston%20and%20Masters,%20Enc%20of%20Ott%20Empire.PDF>

⁴ see Muller-Wiener, W. (1998), page 81

Timeline of the Imperial Arsenal



14th century BC.

Golden Horn becomes the core of the harbours, maintained its importance until 19th century

15th century BC.

Ottoman continues to use the Kontaskalion harbor, renames **Kadirga Limani**

16th century BC.

In 1513-14 beginning of the construction new **Imperial Arsenal** (Tersane-i Amire) on the Golden Horn.

After fire outbreak in 1539, the shipyard is further extended with masonry walls.

18th century BC.

In 1797-1800 **first dry dock** was built during the reign of Selim III.

19th century BC.

Second dry dock was built in 1821-1825

Third dry dock was built in 1857-1870 **Halic Shipyard**

Ottoman Siege in 1453

Figure 2
Kadirga Limani and its arsenal

A new council house, namely **divanhane** was constructed at the western tip of Kasimpasa bay - Sultan Suleiman reign. Functioning as the **admiralty** of Ottoman naval forces



The view of the Imperial Arsenal with **107 Shipsheds** along the Golden Horn

Figure 4

Republic of Turkey 1923

Late 19th century, the dock was covered with a wooden structure in the **Taskizak Shipyard**

Figure 5



Festivities of the Golden Horn - 1720

Figure 6



Figure 3

Architectural elements in the Arsenal

Shipsheds //

The sheds were aligned perpendicular to the Golden Horn with sidewalls and a pitched roof out of tiles. There were two different facades used: wooden pediment or masonry pediment arches either used for launching vessels or as workshops for carpenters, caulkers, cotton wasters and metalworkers.¹ The size of the sheds varied according to the vessel size.

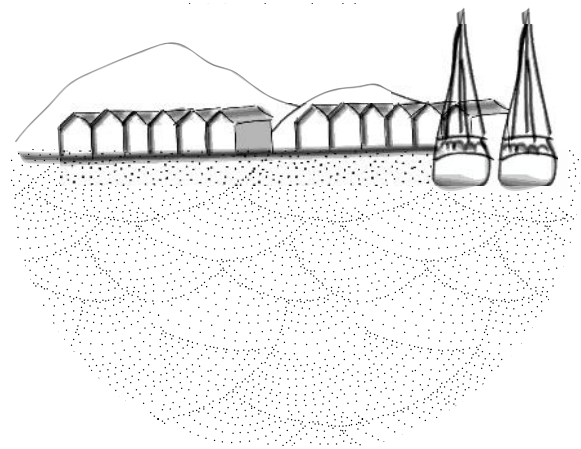
Unfortunately traces of the original shipsheds cannot be found today. Only from the illustrations of the shipsheds by Piri Reis and the works of various mappers can the architecture and materials of the shipsheds be determined. The Arsenal is illustrated as a continuous line of docks facing the open sea on the map of Piri Reis, 1526. The Golden Horn arsenals were historically depicted to be aligned with masonry walls separated by arched openings.² The sheds were arranged in a row of 20-40 meters deep and 5-8 meters wide. The shipsheds resembled an eye as their name given by the Ottomans suggests: “göz”(eye). They acted like a frontier barrier to the opponents. The number of shipsheds reached 154 by 1590. There were in addition next to and behind the shipsheds rows of storage spaces used for materials necessary in shipbuilding, such as *kürekhane* (oar depot) and *baruthane* (powder magazine).³

Slipways //

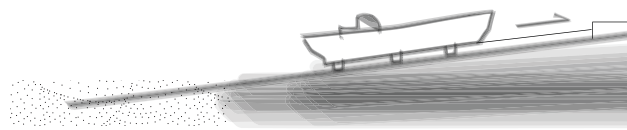
A method used for launching vessels was the slipways. These structures were either made out of wood or stone with a slope descending to the sea. The launching of the ships on to the slipways required manpower, and sometimes the wooden structures would breakdown due to the immense weights of the vessels. The arsenal had hundreds of wooden slipways in early 1530s. The slipways located in Taskizak and Camialti Shipyards today are made out of stone.

Divanhane //

The Council house was a place where the state affairs were discussed and the cases were finally adjudicated with the Emperor. Another Divanhane was built in the 16th century during the reign of Sultan Ahmed I (r. 1603-1617). The first ever council house called Divanhane was constructed by the Sultan Mehmet the Conqueror functioning as the admiralty of the Ottoman naval forces.



The aligned shipsheds on the waterfront



Slipways method for launching vessel

¹ see Darzana: Two Arsenals, One Vessel, p. 15

² see Darzana: Two Arsenals, One Vessel, p. 15

³ Suna ve İnan Kırac Vakfı, Pera Müzesi, edited by Ekrem İsin, 2009, The log-book of the Ottoman Navy Ships, Legends, Sailors, p. 22

The second divanhane was built during the reign of Sultan Suleyman (r. 1520-1566) with the developing Ottoman economics. It was located at the western edge of the Golden Horn. There were overall five divanhane built on the site in different periods. Only one of them was preserved until today. It was first built as the headquarters of the Ministry of the Navy (*Bahriye Nezareti*) acting as Admiralty during the reign of Sultan Abdulaziz (r. 1861-1876). Today, the building is preserved and is used by the Turkish Navy as Northern Sea Area Command.

Dockyards //

During the reign of Sultan Selim III (r. 1789-1807), an important naval development was introduced to the arsenals, which was the construction of dry docks. Swedish engineer A. E Rhode was given the task of implementing this new technology. Dry docks were a better solution than the traditional ship launching method. Furthermore two more docks n1 and n2 were constructed during the reign of Sultans Mahmud II, Abdulmecid and finally Abdulhamid.

A dry dock is a narrow basin that can be controlled by the closing and opening of the gate for loading and draining of the seawater. Thus, ships can be launched into the dock with water and then the water is drained for ship construction and repair. Within Halic Tersane three dockyards still exist and are used.

Prison | Hamam //

Inside the arsenal another major architectural element exists, separated by a wall on the eastern part - Beylik Zindani (Imperial Prison). The prison acted also as a bagno, which means hamam, bath for the prisoners and slaves.

Mosque //

In the beginning of the 18th century during the reign of Sultan Ahmed III (r.1718-1730), Tersane-i Amire underwent reconstruction. A mosque was constructed next to the Imperial Prison by the grand vizier Corlulu Ali Pasha and was named Camialti, which became the actual name of the shipyard area as well.

Hendesehane //

The Tersane-i Amire played an important role in education for maritime, craft and shipbuilding. Among the shipsheds and dockyards, the imperial arsenal gave place to an engineering school, founded in 1775. A school of mathematics called *Hendesehane* was established here under the assistance of Baron de Tott (taught until 1776). The aim was to strengthen the knowledge of the navy officers about modern mathematics and new techniques for the Ottoman navy.

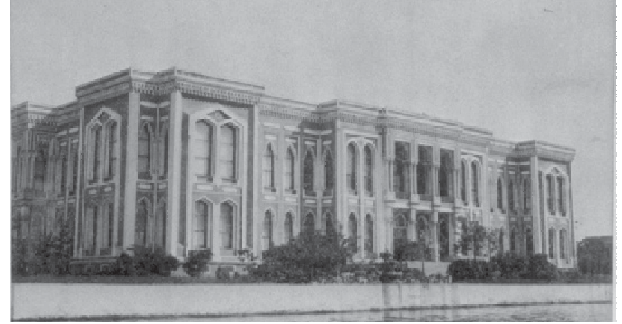
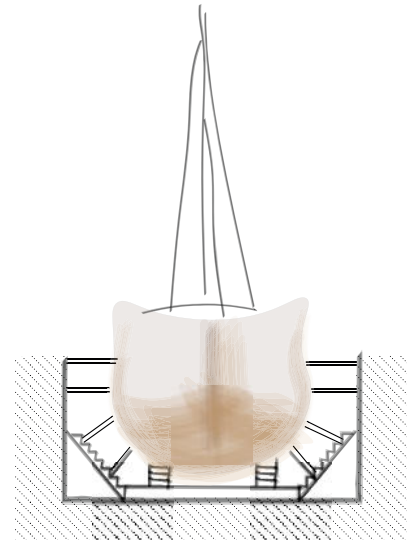


Fig. 9 The Admiralty on the western bay of the district Galata, 1869



A dry dock basin for ship repair and construction



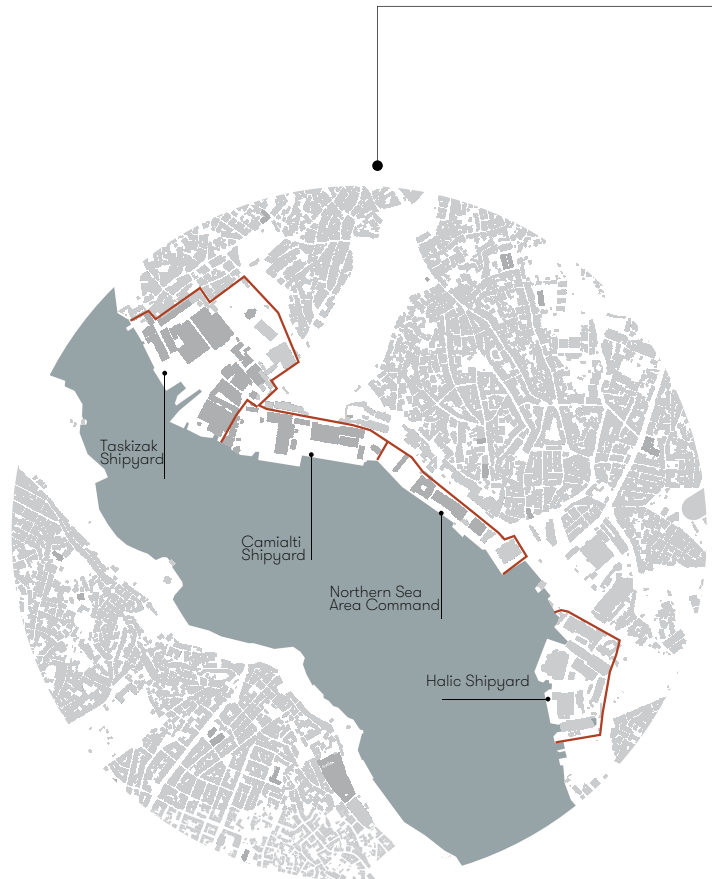
Fig. 10 Students from engineering school founded in the shipyard

Last phase of the Imperial Arsenal | 20th century

The naval arsenal underwent several reconstructions with the changing reigns. However the financial crisis in 1870 paused restoration aims of the Imperial Arsenals. Rapid change in modern naval ship technology became challenging for the Ottoman Empire.¹ A particular building was the admiralty, reconstructed in 1860, which still exists today as the Northern Sea Area Command. Even though the Arsenal was altered, it managed to preserve its imperial appearance into the 19th century. With all its glory the shipyard was aligned up in a row with the admiralty, military school and the dry docks. This order presented an awe-inspiring appearance on the waterfront²

Foundation of Republic of Turkey 1923 //

When the Republic of Turkey was founded in 1923, an international treaty was signed in which the control over ships entering the Strait was taken from the Republic of Turkey. This agreement caused Bosphorus to be a zone outside of the national sovereignty until the Montreaux Convention was signed in 1936. With this new agreement, Turkey was fully given the control over the naval warships and the Bosphorus Straits. However, before the convention, the arsenal on the Golden Horn was inaccessible, as the entrance through international waters was not permitted.³ Eventually the naval base could not regain its function. This was triggered more when parts of arsenal were handed over to the state enterprise. The result was three fragmented sites on the western part of the Arsenal in 1950s: **Taskizak and Camialti Shipyard, Northern Sea Area Command and Halic Shipyard.** After 1980s, the deindustrialization took place and the harbour functions were removed from the Golden Horn. Only the dockyards in Halic Shipyard in the eastern part were preserved and are still functioning in the present day.



1 see Darzana: *Two Arsenals, One Vessel*, p. 30

2 see Darzana: *Two Arsenals, One Vessel*, p. 28

3 see Darzana: *Two Arsenals, One Vessel*, p. 33

Taskizak - Camialti - Halic Shipyards //

In the first years after the Republic of Turkey was founded, shipyards did not have the capability to construct new vessels. After 1930 new equipment was purchased and repair capacities were developed. Additionally by extending the slipways, the shipyard was able to construct a city-line ferry quay. Due to the Second World War, the shipyard activities were interrupted and after 1942 the shipyards have resumed manufacturing goods. All three of the shipyards were now under the control of Turkish Maritime Organization.

After the agreement on the Bosphorus Straits, **Taskizak Shipyard** was reactivated in 1941 and started to function with very small number of engineers and workers. The manufacturing of small tonnage vessels took place, which were used for more pooling and repair purposes. After 1960s the shipyard has developed rapidly, new workshops were opened and the old buildings were restored. In 1953, **Camialti Shipyard** gained its official name and was able to make new construction, maintenance and repair of all kinds of mechanical, non-machine vessels. Modernized machinery, electricity, carpenters, construction and foundry workshops were reinforced and made into a new construction shipyard. The construction of the 4500 ton cargo ship **Abidin Daver** has begun and launched with a ceremony in 1955. In 1965, the capacity of the Camialti shipyard was enhanced up to 15.000-18.000 DWT.¹ The shipyard continued to construct other ships until the new bridge of Halic prevented the entrance and exit of larger cargo ships. After 1980s Camialti and its waterfront started to be polluted with waste. The shipyard continued working partially until May 15, 2002. Since then it was inactive and became the backyard of the junks. Finally on 4th of January in 2013, the Camialti and Taskizak Shipyards were agreed upon to be shut down to the public completely due to the reasons of damage to its surrounding.

After the fragmentation of the arsenal in 1950s, the eastern dry docks were renamed to **Halic Shipyard**. The shipyard was restored with new sheds for workshops and slipways. The architectural elements such as slipways, dry docks and sheds of the former Tersane-i Amire are still conserved today. In 2006, the site was delivered to Istanbul Metropolitan Municipality to be used by the city line ferries for repairing and maintaining.²

¹ <http://www1.mmo.org.tr/resimler/dosya-ekler/2eb734903575495-ek.pdf>

² Pelin Dervis, Bulent Tanju, Ugur Tanyeli (2008), *Becoming Istanbul*, Gul Koksai, Garanti Galerisi, p.132

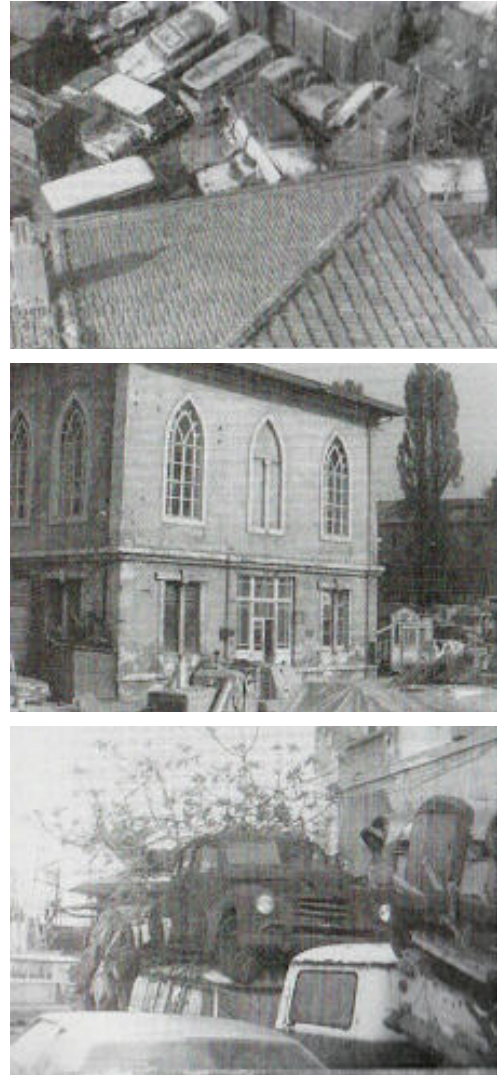


Fig. 11 Camialti Shipyard in 1970 used as disposal area

Ports of Istanbul | Today

In 1980s, as a result of the Istanbul Municipality passing a law to clean-up the Golden Horn and the Bosphorus, partial shipyard activities were moved to Tuzla Bay. Tuzla is a headland located on the Asian side of Istanbul. From 2001 onwards, the shipyard started to rapidly develop new ship construction technology. Turkey also began to provide overhaul services. Ship production increased annually, and reached up to 20000 DWT (ship's carrying capacity), all types of ships were constructed such as bulk-cargo ships and chemical tankers.

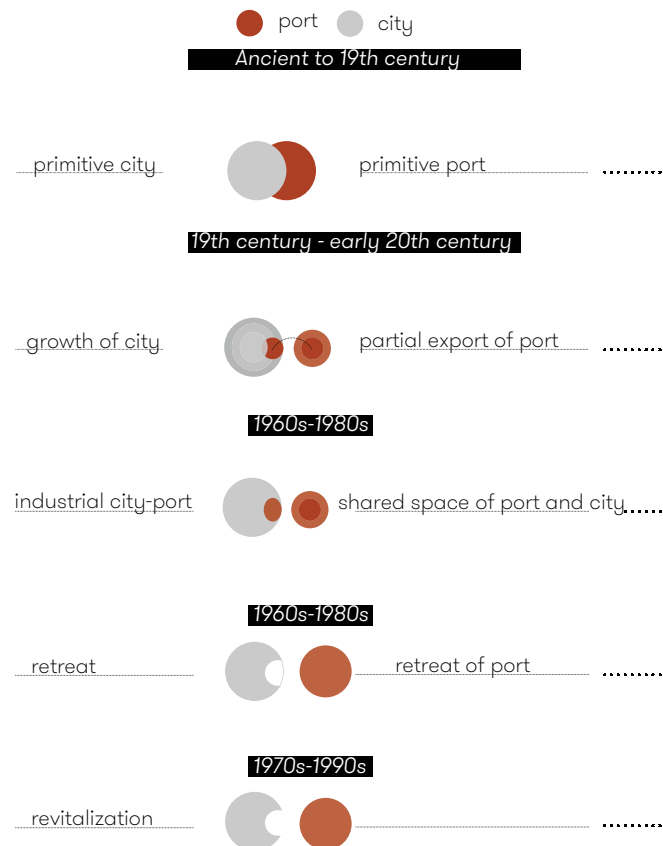
Pendik Shipyard is one of the largest shipbuilding facilities, stretching over an area of 953.000 m². It is located on the northeastern coast of the Sea of Marmara in Tuzla. The shipyard has the largest dry dock in the country, with dimensions of 300x50x8.5 m. The 450-ton crane and dry dock allows the shipyard to construct ships up to 170.000 DWT.¹

Today the relationship between the city and the shipyards is very restricted. In fact this was reduced when the ports were exported from the city center and were moved to urban boundaries. The diagram on page 24 demonstrates how the relationship between the port and the city has evolved over the time in stages according to **Hoyle's model**.

At the beginning the port and the city had a symbiotic relationship, dependent on one another. However with the increasing population and developing technologies, ports were unwanted areas from the city core. They were obliged to move out of sight areas. Hoyle's model describes this change in five stages. The relationship between the port and the city is weakened gradually in every stage.

The **first stage** shows a relation from a primitive port city in which they are tied to each other. In the **second stage**, the port activities start to expand beyond the urban boundaries in the nineteenth and early twentieth century with the development of technology and industry. In the **third stage**, the port and the city are facing spatial separation due to increasing need of space. Cities are expanding with increasing population, infrastructure and spatial development. On the other hand, ports are also expanding with increasing petroleum refinery, container terminals and economy. Eventually in the **fourth stage** the relationship between port and city is cut instantly, ports start to develop individually in their own location independent from their host city. Finally in the **fifth stage**, the areas which are left over are having problems being functional within the city.

Diagram showing the development phases of port-city relationship¹



¹ Koncavar, Metin, (2001/3) ,Istanbulun Tersaneleri (Shipyards of Istanbul) 413, TMH - Türkiye Muhendislik Haberleri, p. 40-42



Map of active ports in Istanbul

spatial and functional relationship

exporting of ports from the city core beyond the urban boundaries due to environmental issues, growth of the city, technological, industrial developments

ports retreat to individual locations and function separately from the host city

ports and cities develop separately due to the growth maritime technology

the large scale of areas left by the industrial areas after 1970s, urban renewal of the former industrial sites

¹ Hoyle, B. (1988). Development dynamics at the port-city interface. In B. Hoyle (Hg.), *Revitalising the waterfront. International dimensions of dockland redevelopment*, (London, Belhaven Press)

How important were/are ports for cities?

Ports have always been a vital node of communication, commerce and exchange of cultures throughout history. They were created as a result of humanity's curiosity to discover and connect with the outside world. Water in this case was like a road, connecting people from different parts of the world. According to Josef Konvitz (head of the OECD urban affairs programme from 1992 to 2003) cities possessing ports are at an advantage not only in terms of economy but also in terms of access globally with regard to diverse cultures. Furthermore ports evolved cities into a distinctive maritime culture.¹

The location of the ports in history has always been an important issue, in order to mitigate potential threats from the opposing nations and to benefit from trade. They were highly protected by continuous strands formed of shipsheds. The Golden Horn in Istanbul for instance was a natural harbor offering an ideal position for a port. The ports were located at the heart of the development of many cities, establishing successful transfer of goods and manufacturing. However with the industrial revolution new conditions emerged. Many ports required expansion not only of their available pier space along the sea but also the land next to the piers to support port operations. The symbiotic relationship between ports and cities changed and started to deteriorate. These changes were revolutionary rather than evolutionary.² The uncertainty for the future of ports has been an important and similar issue for many cities. This is because today ports are losing their historical importance, which they previously possessed. Traditionally ports were located in close proximity to the city center, with changing conditions however this became undesirable for the people living in the city. With an increase in population, the need for land, water and transport infrastructure became a priority. Therefore port areas were surrounded by non-port related uses, which offered fewer opportunities for increasing ship and container sizes. This challenge forced the ports to move out from the core of cities. As a result, they left behind industrial pollution and waste. Eventually the city-port relationship became more critical than ever.

Various improvements were undertaken by leading port cities such as Antwerp, Rotterdam and Helsinki in order to create a synergy between port and city. Therefore the quality of solutions neither depend the size of the port on the size of the port nor its ranking. Today in former harbor areas abandoned structures like cranes, bollards and railways are to be found. As the cityscape is changing, these elements remain as collective memory for the inhabitants. Cities like Antwerp, Rotterdam, Genoa still keep these sculptural elements in the public space and integrate them into new urban planning without isolating or removing them.

3

¹ Konvitz, Josef (1978) *Cities and the Sea. Port City Planning in Early Modern Europe*, Baltimore

² Hoyle, Brian S. 'The port-city interface: trends, problems, and examples', *Geoforum* (1989), vol. 20, n° 4, pp. 429-425. Quoted in Cesar Ducruet, 'A metageography of port-city relationships', *Ports, cities and global supply chains* (London, Aldershot, Ashgate, 2007).

³ *The port and the city*. (n.d.). Retrieved August 06, 2016, from <https://theportandthecity.wordpress.com/>

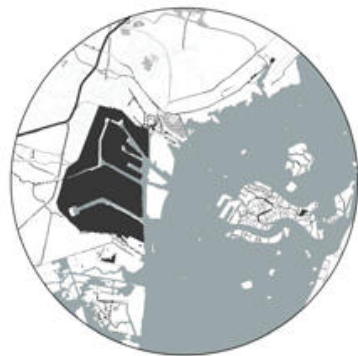
Mapping of existing ports today | comparing cargo capacity



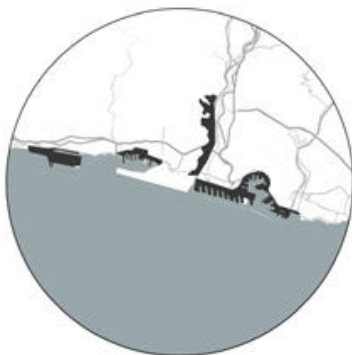
Istanbul | Container
2,830 TEU



Antwerp | Container
8,578 TEU



Venice | Container
1,400 TEU



Genoa | Container
1,988 TEU



Rotterdam | Container
11,621 TEU



Barcelona | Container
1,720 TEU

¹ List of busiest container ports. (n.d.). Retrieved December 17, 2016, from https://en.wikipedia.org/wiki/List_of_busiest_container_ports

Reference | Industrial Heritage

Reference | Learning from the existing

Fondazione Prada | Industrial heritage transformed into cultural centre within the metropola

The future of industrial heritage has been a common issue recently, whether it will stay obsolete or be assigned for a role of reutilization. The industrial vestiges of collective memory offer chances to underline and expose the qualities of existing architecture. Industrial sites are large-scale sites of dereliction nowadays. Rather than demolishing what is given, architects embrace the theme of preservation.

The architectural firm OMA led by Rem Koolhaas conserved a former distillery into series of gallery spaces for Fondazione Prada in Milan. Another ingenious act is the old tower shining in gold leaf, which became the preliminary symbol of the site. According to Rem Koolhaas the material gold was used as a way of promoting an element of less importance. Most importantly the golden building remarks itself as a first visual effect. In addition a nine-store tower will be built as a landmark, offering an environment suitable for artists and curators alike. Much of the existing structure of the complex was in good state, which only required structural support. However the cinema was restored to its original size and appearance. For the architects the conversion was a successful demonstration of a strategy of as minimal intervention as possible.

The result of the transformation of the distillery is a seamless display of existing and new buildings, so that one cannot differ old from new.¹ The new Fondazione is not a preservation project and not new architecture. *"It is about respect for what was here, there were a number of conditions and needs that were missing, so we added those into the new architecture"*² Rem Koolhaas states in his interview. The transformation of the distillery displays a very good reference to the Camialti Shipyard even though this example is located in the city of Milan.

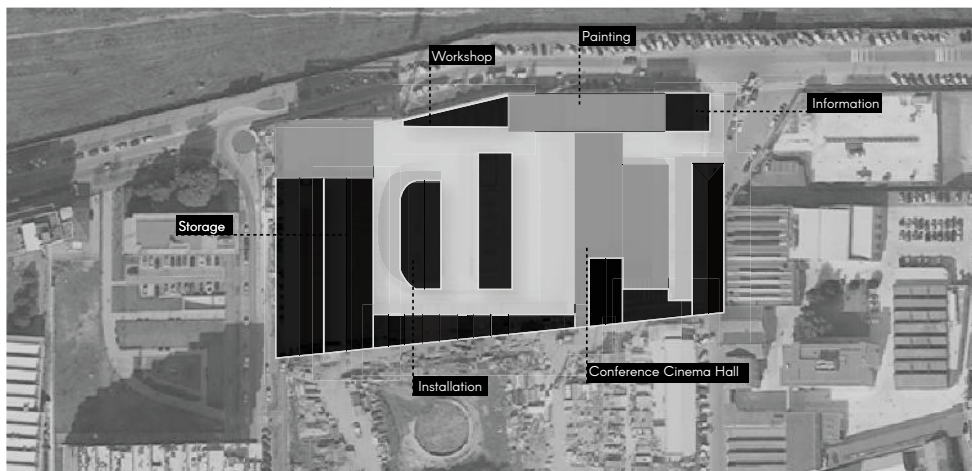
Designer	OMA
New Function	Art Gallery-Fondazione Prada
Location	Milan
Completion	2015
Characteristic of the Project	Revitalization
Industrial Typology	Distillery Factory

¹ Koolhaas Talks Prada. (n.d.). Retrieved December 17, 2016, from <http://www.metropolismag.com/July-August-2015/Koolhaas-Talks-Prada/>

² Koolhaas Talks Prada. (n.d.). Retrieved December 17, 2016, from <http://www.metropolismag.com/July-August-2015/Koolhaas-Talks-Prada/>



Fig. 12
Fondazione Prada



Reference | Port – City Relationship

Reference | Learning from the existing
Antwerp MAS Museum | Cultural landmark in the port

The Port of Antwerp is larger than the city itself ¹ which is located on the northern side of the city. The city itself began its transformation into a port area in the mid sixteenth century. Hence this triggered the port to develop alongside the river Scheldt. The oldest port site of Antwerp is Het Eilandje, dating back to 1550s.

Antwerp, just like other historic ports, has searched for methods to merge centuries of heritage from one generation to another. Het Eilandje became an isolated area for the inhabitants, so they started moving out. This resulted as a barrier between port and city. In addition the location of the port in the hub of city took valuable urban waterfront space from the locals. With the master plan planning process the area underwent crucial changes, causing ports to move out of the city. The first significant step was opening of the marina at Willemdok in 2000, the refurbishment of the Saint Felix warehouse in 2006 and finally the opening of MAS Museum in 2011 (Museum aan de Stroom). In this context, the MAS museum was a major attraction point for the visitors, strengthening the relationship between port and city. This example is a very good reference for Istanbul with a common situation and history.

¹ **Isocarp**, (2007), "Urban Trialogues. Co-Productive Ways to relate visioning and strategic urban projects", Review 03, Belgium

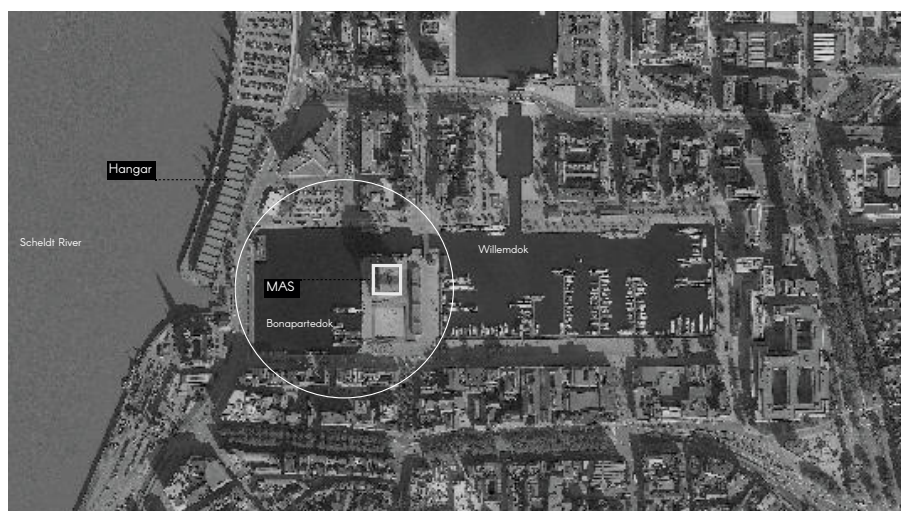
Designer	Neutelings Riedijk Architects
New Function	Museum
Location	Antwerp
Completion	2011
Characteristic of the Project	Waterfront development
Industrial Typology	Harbor



Istanbul and Antwerp are both gateway cities, however equal comparison between them is not possible, due to different geographical conditions and social history.¹ Antwerp as a port city has developed over the centuries and became the leading port of the world. Whereas Istanbul has always been part of this network of trade, it did not evolve as much as other port cities. Istanbul was fundamentally based on receiving imported goods rather than exporting. After the deindustrialization of the Golden Horn (Istanbul) and Eilandje (Antwerp), abandoned objects like cranes, warehouses and railways remained behind. Today both cities do not situate their port industry in the city center, however the relics stayed in the collective memory of the inhabitants.

Antwerp took it a step further and succeeded to develop a new identity of the heritage. On the other hand, the uninhibited shipyards of Istanbul persisted as a monument of the maritime heritage. The maritime activity may not be visible in the city center anymore, but there is one thing that has not changed. The passing large-scale oil tankers, ships, ferries on the Bosphorus continue to be part of the city's silhouette.

¹ Tabanlıoğlu Architects, Bilgin Ihsan, (2015), Port City Talks Istanbul. Antwerp, p.38, Graphius Gent



03 SITE RESEARCH

ISTANBUL | HALIC | CAMIALTI SHIPYARD

Golden Horn is a route of urban inlet that divides the city into three separate regions and is called Halic in Turkish. It has been important for Istanbul over the centuries because the urbanization of the city started at this point. In many artistic depictions Halic is displayed as a romantic stroll place for the locals. Unfortunately in the 19th century this place became attractive for many industrial facilities. The historical urban pattern of the coastline was destroyed and was replaced by factories for manufacturing ships, fez (hat), tobacco, brick factory and a weaving mill.

After the deindustrialization in 1980s, Halic required a strategy to replace these large landfill areas with new functions. Today along the coastline, universities, congress center and museums are to be found. The shipyards and naval headquarters are the only sites that are waiting for a transformation.



Industrial sectors on the
Golden Horn in 1980s



Gentrification of industrial sectors on the Golden Horn in 2000s



Today 2016 existing buildings and in-process projects

Remake of Halic

-○ 1980

The Golden Horn is expressed in Turkish as ***Halic***, meaning “estuary”, originating from the Arabic word “khaleej”. Interestingly, it possesses a strategic position offering a highly secured natural harbor and deep water for ships to drive in. For this reason, the Golden Horn became the main location for shipyards and trade ports, leaving traces in the silhouette of the city even after their demise.

Until the beginning of the twentieth-century, Istanbul maintained its historical footprint. However after the World War II migration took place, accelerating uncontrolled changes in the city. With increasing population, industrialization grew rapidly, introducing a long term issue for the future of Istanbul. Istanbul's first industrial settlement was built on the Halic waterfront. Every possible agglomeration for a city such as living, working, education, religion had settled down in the Golden Horn.¹ Hence this part of the city was the magnet for many people as well as for the industrial establishments. For this reason the region owns plural characters due to different types of neighborhoods and cultures. The redevelopment plan of Henri Prost in 1930s enhanced the transfer of Istanbul's center from the Historic Peninsula to the Golden Horn. By courtesy of this plan, heavy industry was positioned along the coastline, causing pollution in the area.² The waterfront was occupied by a variety of industrial spectrums, such as shipyards, Fez factory (hat maker), brick factory and a weaving mill.

Between 1950-80s the area became the backyard of Istanbul, resulting in industrial pollution and low quality lifestyle. The sewage caused by the factories was released directly into the water, resulting in both visual and waft pollution. Another problem that occurred during this rapid change was the emergence of informal settlements, the so-called (Gecekondu - gece means at night kondu settled down) houses. People from all around Turkey started migrating to Istanbul for job facilities. Dense settlements started to dominate the landscape. The region started losing its identity in which no strategies or planning rules were followed. In the end all that mattered for the people was a roof over their head to find refuge in.

1 Pelin Dervis, Bulent Tanju, Ugur Tanyeli (2008), *Becoming Istanbul*, p.128, Garanti Galerisi

2 Feyen, Shannon & Neville (2009), *Water and Urban Development Paradigms*, Taylor and Francis Group, p. 177, London

Revitalization process of Halic

The Mayor Bedrettin Dalan planned a vision of "Culture Valley" along the shore in 1983. The plan was successful in the clearing process of the waste in the Golden Horn. However different typologies were juxtaposed next to each other without any respect to its surrounding and scale.

Tobacco Factory (**Kadir Has University**) in 1997 and formerly a Power Station of the Ottoman Empire (**Istanbul Bilgi University**) in 2007 were adapted into universities. Furthermore **Koc Industry museum** in 1994, a theme park (**Miniaturk**) in 2003, culture and convention center (**Sutluce Mezbahasi Congress Center**) in 2009 were established on the shoreline of the Golden Horn. These renovations were done in the beginning as temporary solutions causing long-term boundary issues with its surrounding and discouraging people from engaging. The Taskizak and Camialti shipyards were unfortunately omitted during this phase and were left behind to allow to decay. Halic Shipyard on the eastern part was not vacated and is still in use today. Walking by the waterfront today is not possible, the former industrial buildings are either occupied by the military forces or are abandoned and closed to the public.

Furthermore, while both sides of the Golden Horns waterfront underwent significant preservation efforts, the informal settlements were ignored. For the next step, it is essential to figure out how to integrate the overpopulated and informal neighborhoods to the public and cultural spaces without any borders between them. Solving the smell and waste issue solely was not enough. A land(city)scape without any urban vision was left behind.



Military security zone entrance forbidden

During the analytical research of the site it occurred to me that walking from Haskoy (quarter located in the northern bank of the Golden Horn) ferry station to Kasimpasa (quarter located in the northern bank of the Golden Horn) waterfront was impossible for one to enjoy the view of the sea. Private sectors had built high walls, which blocked the scenery. In fact, there are only some green public areas in-between, which allow one to access and enjoy the sight of the water.

Istanbul Metropolitan Municipality developed a strategy for the regeneration of this area. Sadly a master plan was not developed in order to foresee the future scenario of the region, while the industrial facilities and port activities were removed from the Golden Horn. This rapid process ignored the historical characteristic and identity of the city. Therefore, the Golden Horn still faces the risk to lose its urban identity because each generation imposes a new layer of identity, which is independent from one another. The vast open green spaces were applied everywhere offered people Sunday activity for picnics and strolls. People exhausted from the rush of Metropolitan life fulfill their need for outdoor activities here. Most importantly the Golden Horn became to be more active and open to the public than before.

Halic owned a dominating typology by industry and residences for workers until the mid 20th century. However transferring these factories and its associated functions completely derived identity loss. The former industrials are either to be revitalized or demolished. The harmony of the space was now fragmented. The mutual issue in many industrial waterfront cases is that they existed as eyesores.

2016



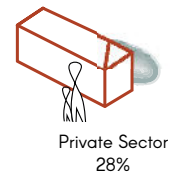
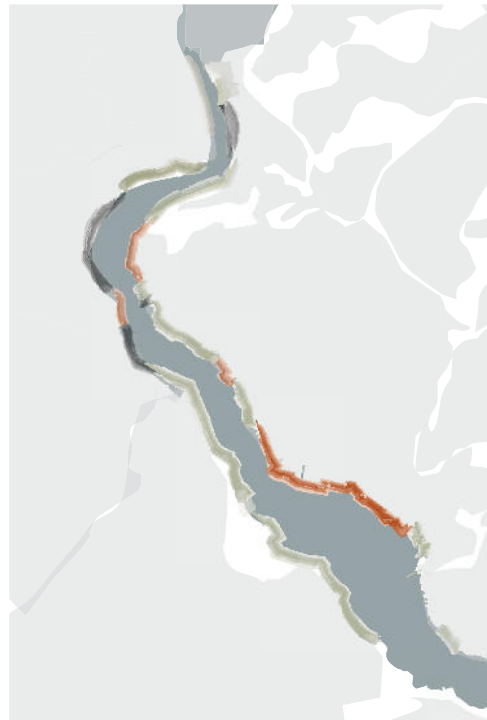
Rahmi Koc Industrial Museum (Ottoman anchor house)

Public green space

Potentials of Halic

The Golden Horn and its surrounding areas have a significant historical advantage. The region has a prosperous history which goes back to four empires namely Roman/Byzantine, Latin and lastly the Ottoman empire. Traces are still to be found today, which makes it even more special compared to other regions of Istanbul. In comparison to the Bosphorus, the Golden Horn area has a soothing effect on its environment, even though it is the center of Istanbul. The water enables a central transportation route.

A beneficial aspect of this location is that it restricts entrance for larger transporter ships; instead it is open to the public transport ferries. Additionally the topography consists of various levels, which validates diverse outlooks, enriching the urban identity. The 53% public space of the Halic waterfront allows easy access to water for the city inhabitants in comparison to the restricted use of the city centre waterfront. Contradicting private land use on the coastline which is only 28%, offering larger urban spaces for the inhabitants that is hard to find in a metropolis like Istanbul.



Mapping of Zones on the Coastline of Halic¹

¹ <https://issuu.com/arkitera/docs/bes-bakis,p.97>



Old Galata Bridge (disuse)

Public green space

Taskizak Shipyard

Panaromic View Series of the Northern Shoreline Halic



Halic Coastline

The western part of the Halic Arsenal was split up into three sites despite their proximity to each other as follows - Taskizak, Camialti Tersane (Shipyard) and the Northern Sea Area Command (Admiralty). The two shipyards **Camialti** and **Taskizak** found along the coastline of Halic were decommissioned in 1995, apart from the **Halic Shipyard** a small sector located on the eastern quay. The only functioning shipyard **Halic Tersane** today preserved the three docks, carpenter workshops and the walls enclosing the site from the Ottoman period. Additionally slipways, shed and ateliers were built to extend the site.



1 Camialti Shipyard



2 Taskizak Shipyard



3 Northern Sea Area Command (Admiralty)



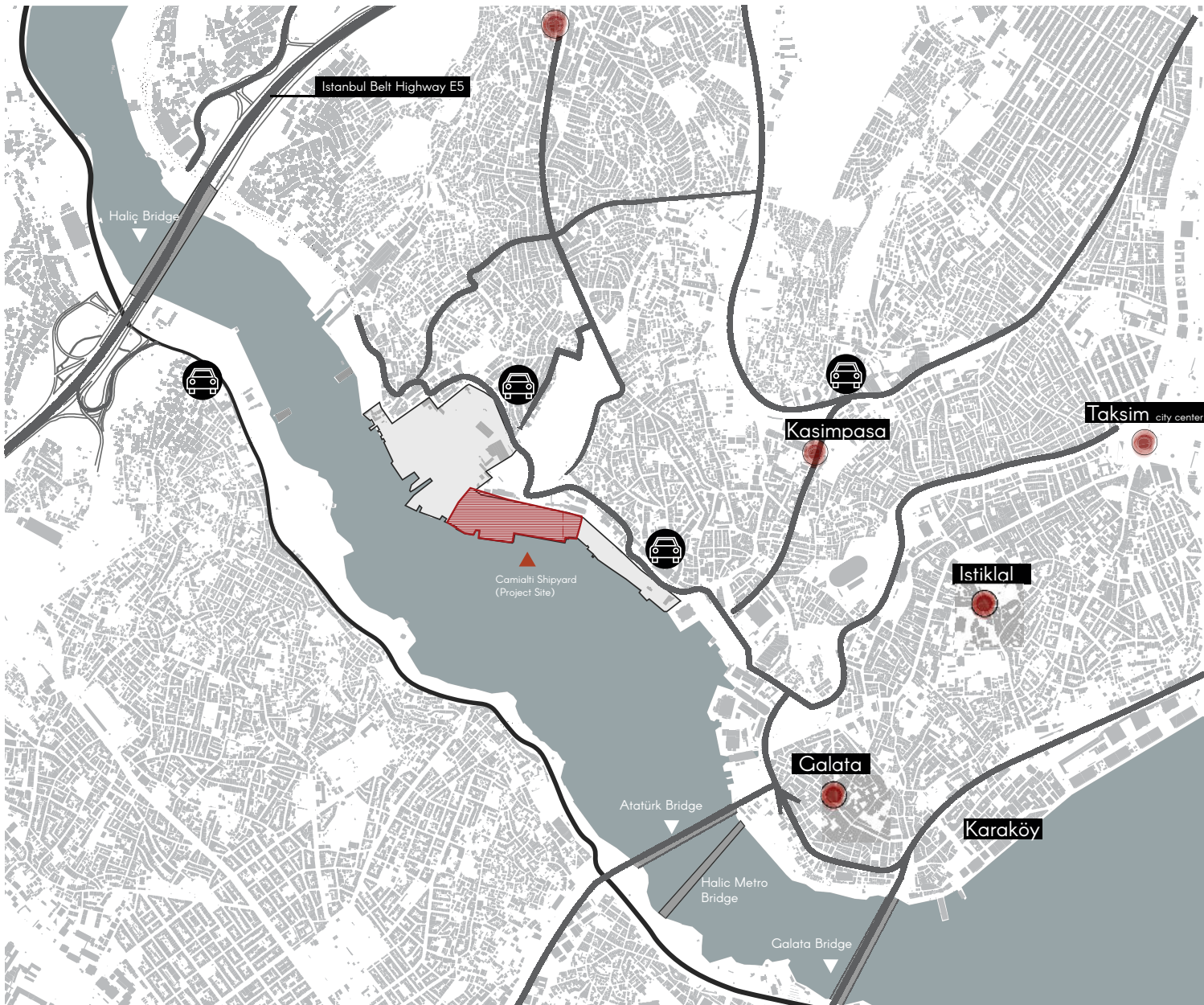
4 Northern Sea Area Command (Admiralty)



5 Northern Sea Area Command



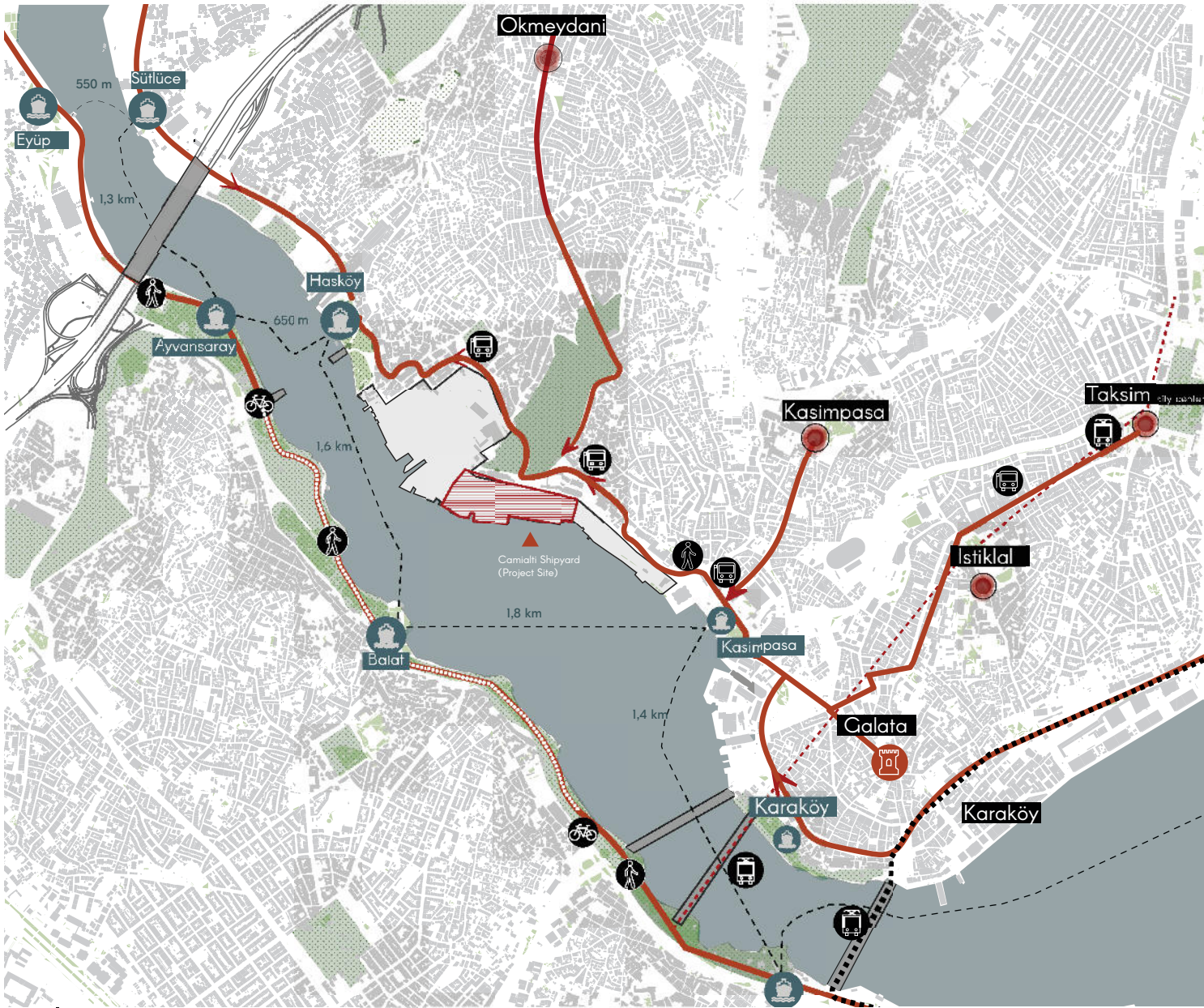
6 Karakoy pier



Vehicle network

Istanbul Map | 1 : 10 000

The accessibility for cars in Halic surrounding is easier than for the pedestrians. The tunnel under construction between Kasimpasa and Haskoy will be a further opportunity for cars and public transport. The shipyards and headquarter of Turkish Navy are closed to vehicles. There will be a new connection for the users to access the site from east to west



Pedestrian – Public Transportation

Istanbul Map | 1 : 10 000

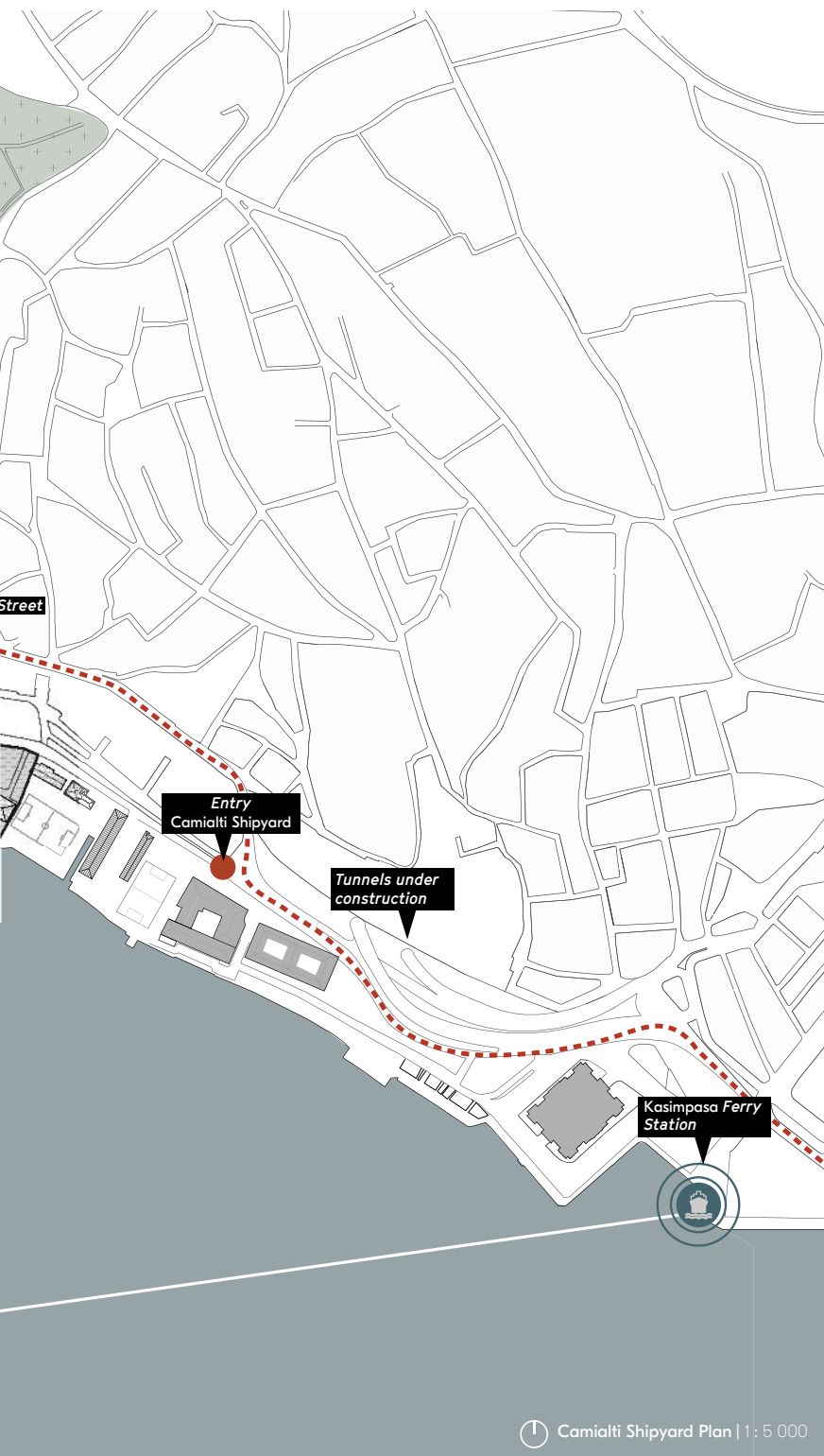
The southern coastline of the Golden Horn underwent a huge transformation in terms of its accessibility. On the contrary, the northern shoreline rarely permits one to walk along the Golden Horn, without being disrupted by the private sector buildings. Today Camialti Tersane can be accessed through various routes. The minibuses drive along the coastline from the east to the west. The Halic metro bridge and the old Galata bridge can be another option for the pedestrians to reach the area with a distance of 2.7 km.

Due to the occupation of the Northern Sea Area Command and road for transport, the sidewalk for pedestrians is very narrow in its current state. The military zone is surrounded by security high walls, which makes it very unpleasant for the pedestrians. In my project I will be only concentrating on the Camialti Shipyard, however for the urban context a new route starting from Hasköy station to the shipyard will be offered in order to create a cutoff for pedestrians to walk along the Golden Horn.



Existing Site Plan

There are currently two entries to the shipyard complexes, which are controlled and closed to the public. One of the entrances is located on the western edge called Haskoy and Kasimpasa. The distance inbetween the two fields is 2,4 km. The site is visible from the huge cemetary on “Donanma Street” or from the ferries driving across the shipyards. It is vital to consider how to specialize and seperate the pedestrian bicycle path from vehicular connection.



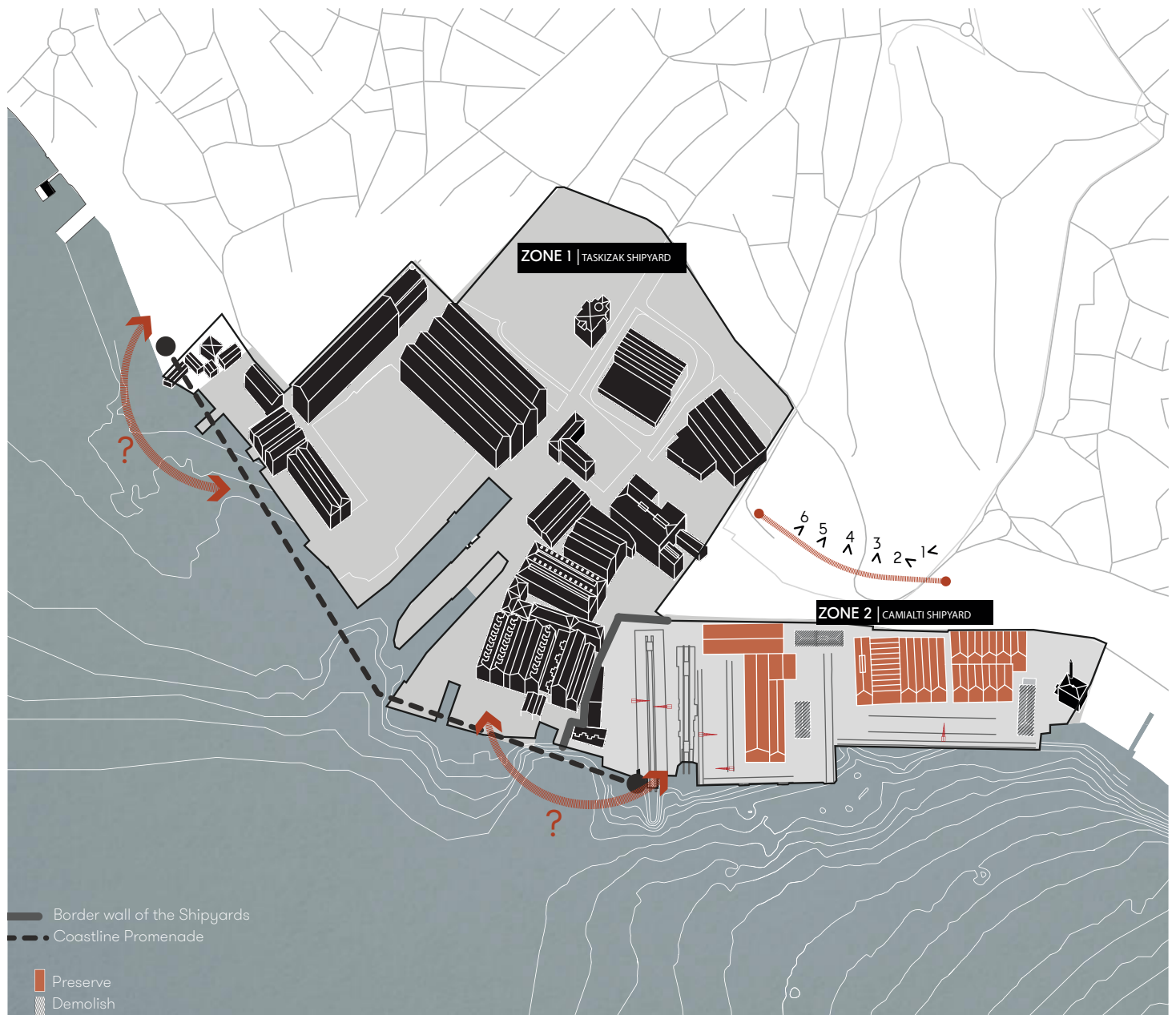
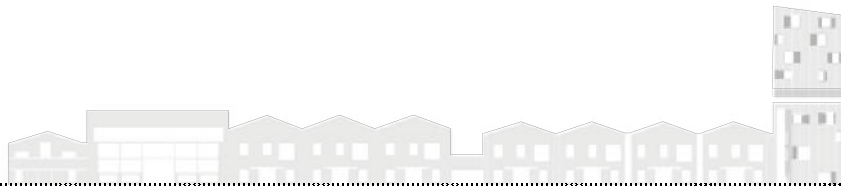


Diagram to show possible pedestrian connection
between the shipyards Taskizak & Camialti

123456

Site photos taken from the cemetery behind the shipyards | see. p.43

CREATIVE LAB C°17



The former warehouses are consisting of 17 blocks in a row. The warehouses are restored with changes in interior while preserving the structure as a whole. The new program engaged is Artist in Residences, where they explore and share ideas within this environment. The addition of a tower is meant to mark and make the site more visible than ever.

Defining Industrial Heritage

Cities are dynamic entities which are facing constant transformations with changing society. A number of buildings which were once functioning in the core of the city are displaced to the periphery or vice versa. In fact, the morphology of the city changes challenging the existing structures to adapt. This is a natural process occurring due to inconstant necessities of a city with growing technologies and facilities. However Istanbul is one of the cases that owns a discontinuous urban fabric since the 1960s. One thing is certain, the rapid growth of population from different areas of Turkey and foreign countries has tripled the challenges for the city.

Today the city is losing its historical identity with unrelated addition of architectural layers. Yet, the abandoned maritime and industrial heritage sites from the previous centuries become the issue of interest. The question is how to deal with a heritage descent from an ancient empire and reactivate it up to date modern? Pierre Thibault (architect from Montreal) questions this in the following way *"What can be done with buildings looking for new use - a fortress without an army, a chateau without a lord, a workshop without an artisan, a factory without workers, or even an abbey without monks or a church without a congregation."*¹

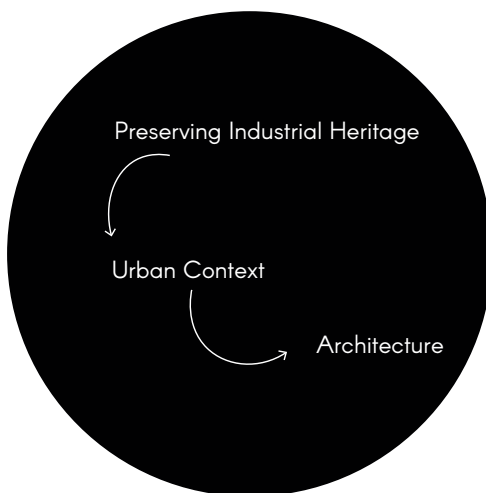
In my opinion, industrial heritages are not to be subjected to their former functions. Losing its original function does not mean for a structure to become obsolete. In fact they offer flexibility in their transformation. However the spatial programme for such structures is to be chosen carefully.

¹ Thibault Pierre, (2007), Old Buildings Looking for New Use, 61 Examples of Regional Architecture Between Tradition and Modernity, Edition Axel Menges

Strategy and Criterias

It is very important to preserve the main atmosphere of the vestiges as it is during this project. The industrial sites with their characteristic urban fabric and scale stand out from their surrounding, which gives them uniqueness and high potential for future developments. These buildings were once used for industrial purposes and transforming them into a completely different function is the challenge in the design process. The beneficial aspect of preserving is that an important memory will be revived after being omitted. The site offers various types of structures with different forms of scales. As minor changes are not possible to save the existing structure, however issues of height, size, iconic facade are the main hints while rethinking the project.

There are three aspects to be considered in this study such as industrial heritage, urban planning and architectural solutions.







C*17 Creative Lab |
Artist-in-Residence







Perspective 3 | see p.46-47
The workshop hangar view from the ferry



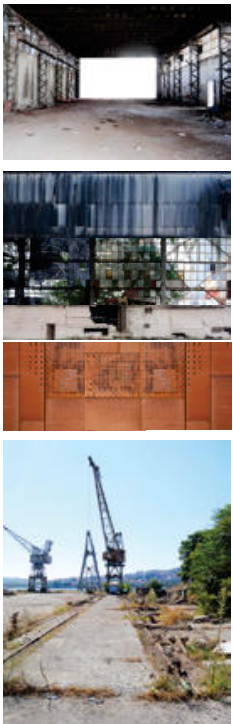
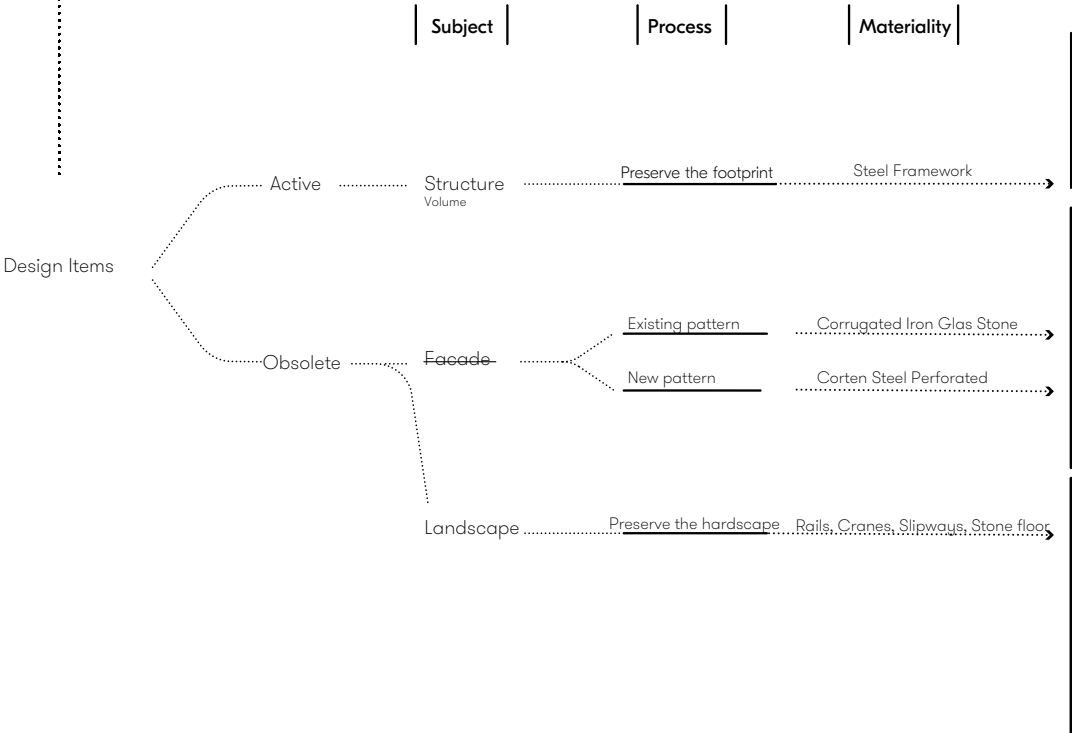
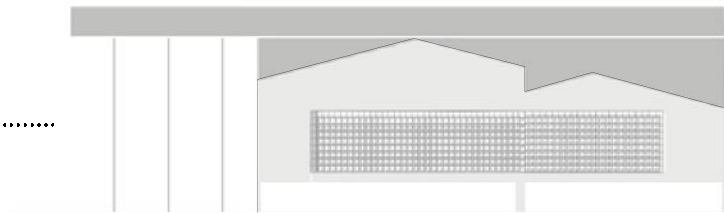
Perspective 4 | see p.46-47
"The workshop hangar view and slipway"



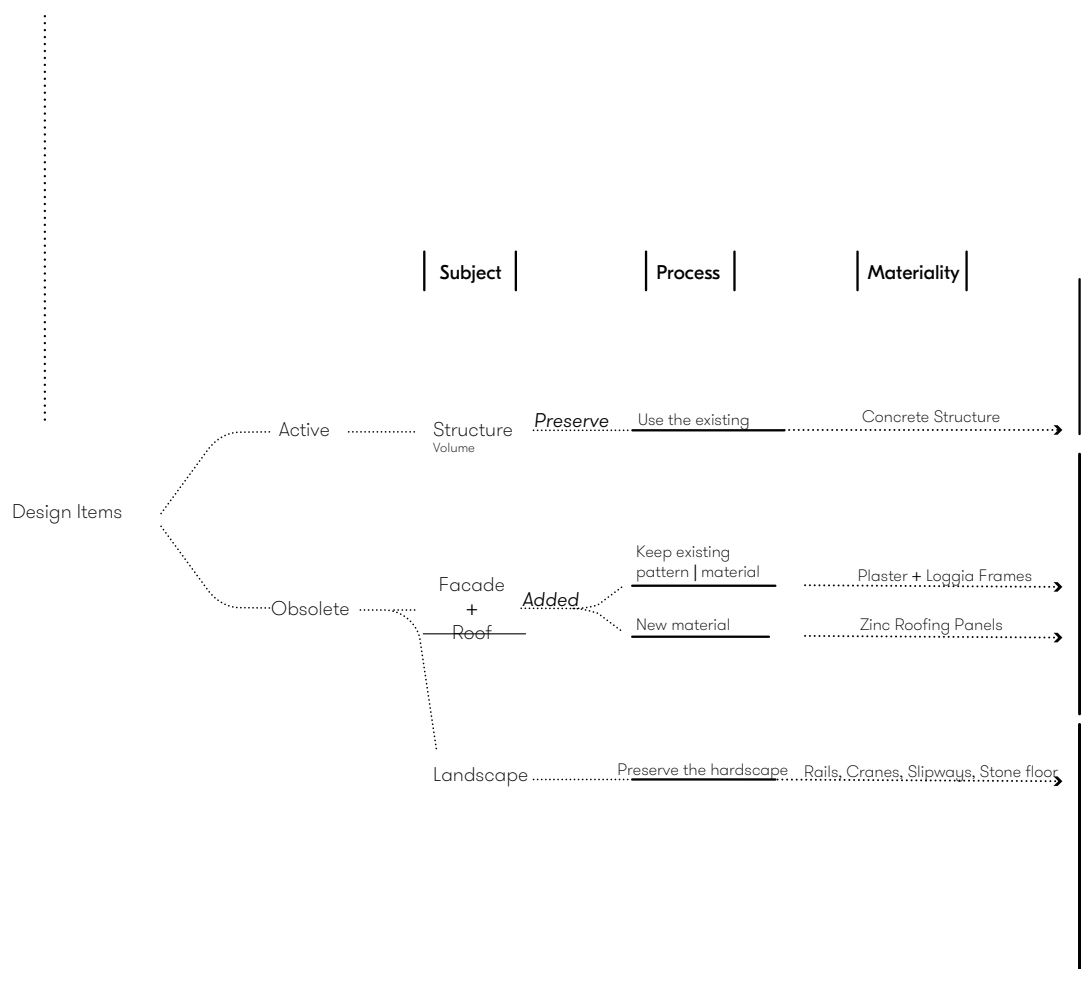
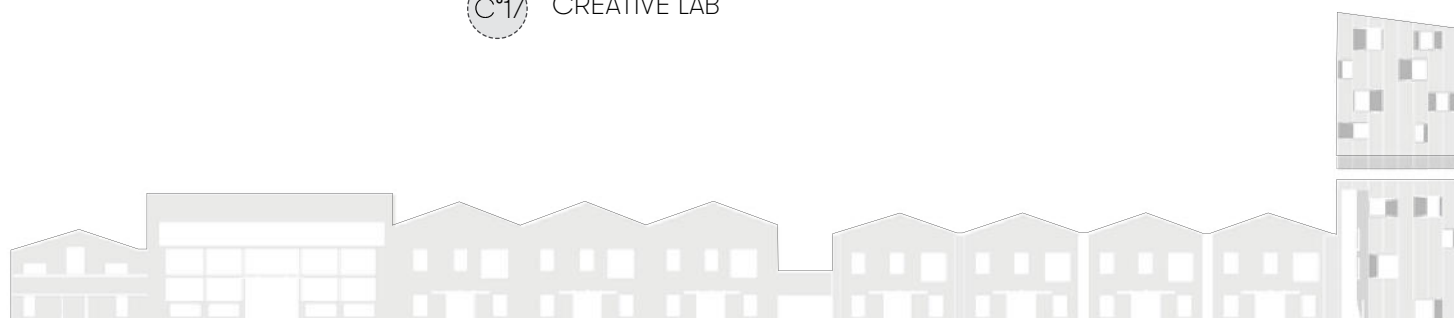


The warehouses along the coastline of Halic

C1 CULTURE HANGAR



C°17 CREATIVE LAB



CULTURE HANGAR C°1

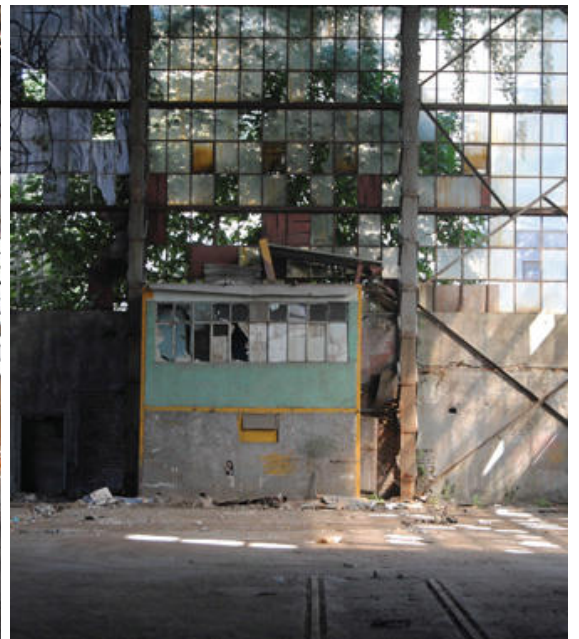


The former galley sheds in Camialti Shipyards offer flexibility for a new program of functions. However the sheds are externally in very bad conditions with falling off facade and roof. The only architecture that can be passed on to the new architecture is the supporting structure made out of beams and steel frameworks. Thinking of it as a skeletal of the body, it will wrapped up by a new cover and is regarded as vital footprints of the existing. The facade which is in very bad conditions is to be maintained only on the front side of the shed because it is the only side that can be directly observed when driving on the ferry in order to reminisce the old look.

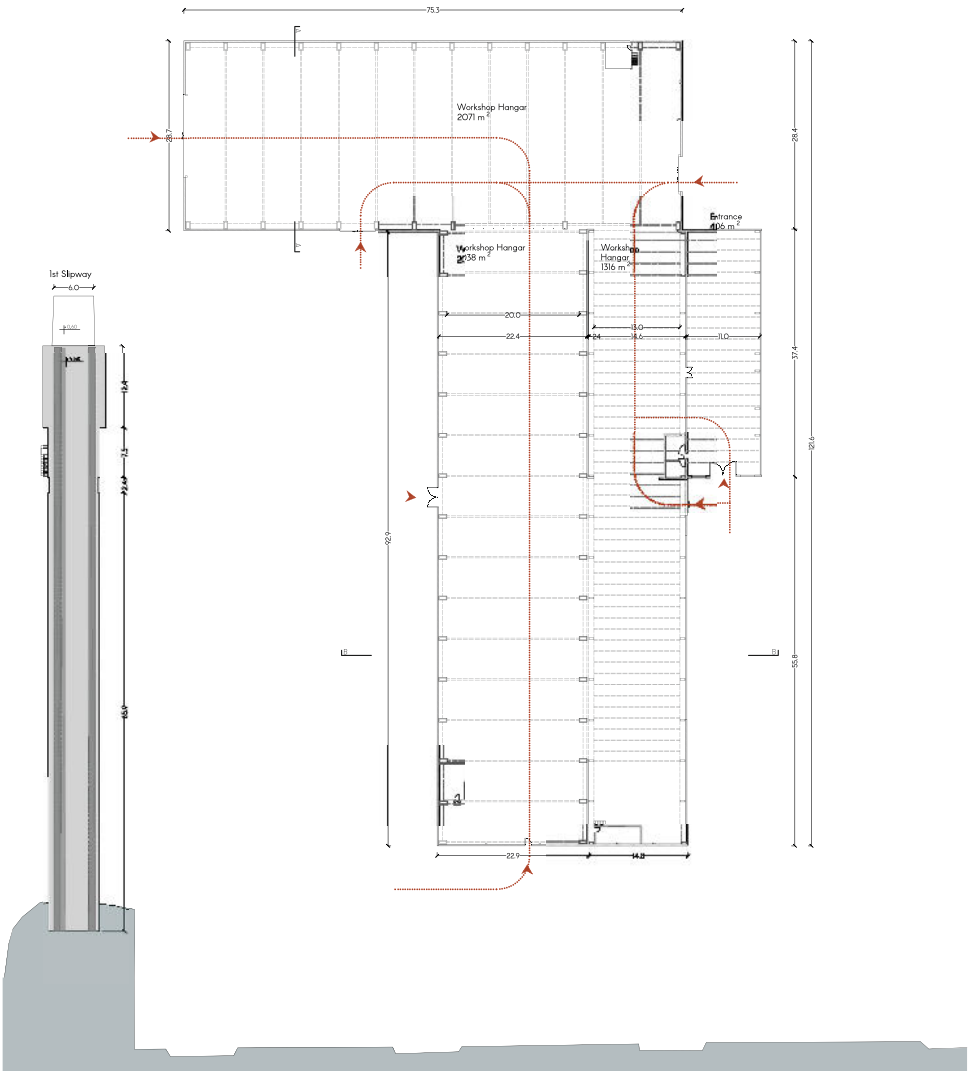




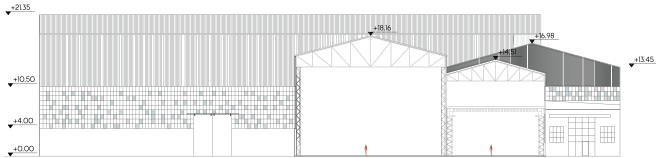




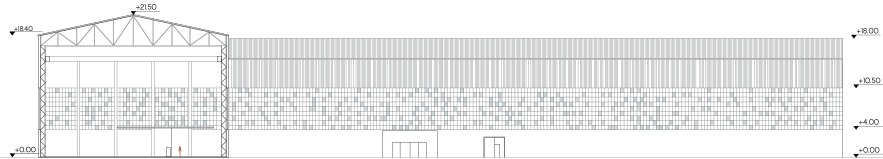
The workshop hangar perspective from inside



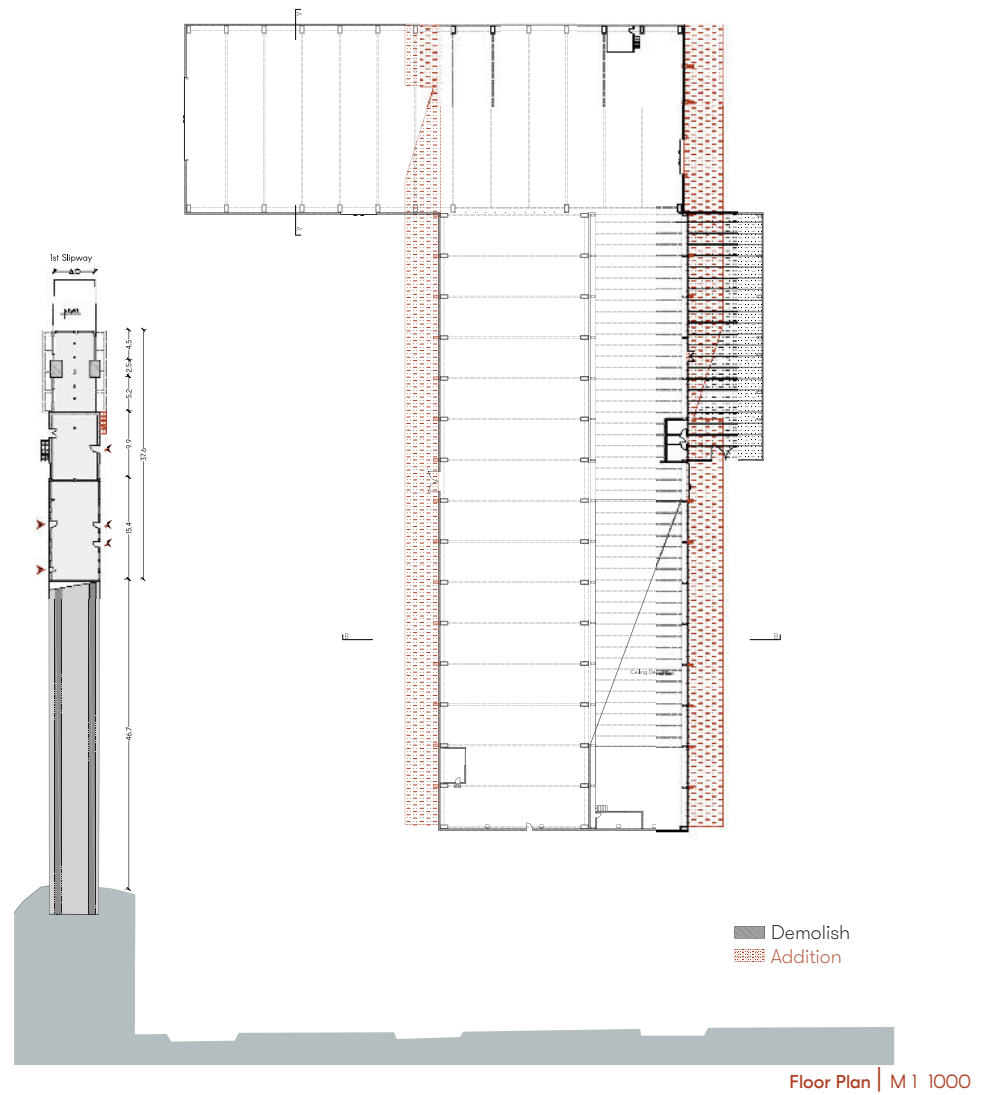
Floor Plan | M 1 1000



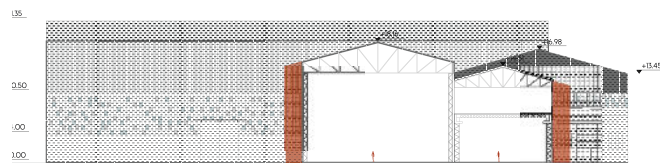
Section A-A



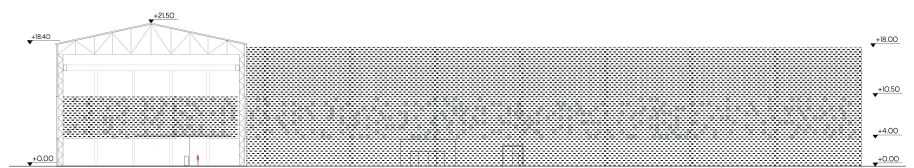
Section B-B



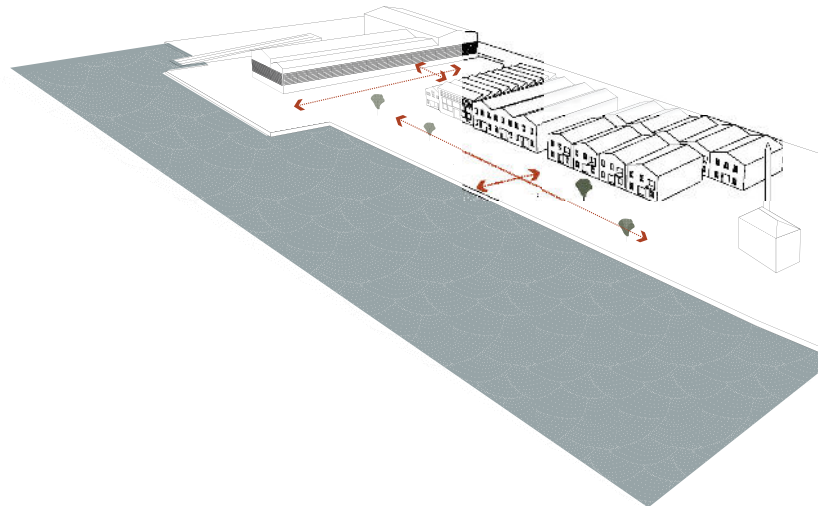
Floor Plan | M 1 1000



Section A-A

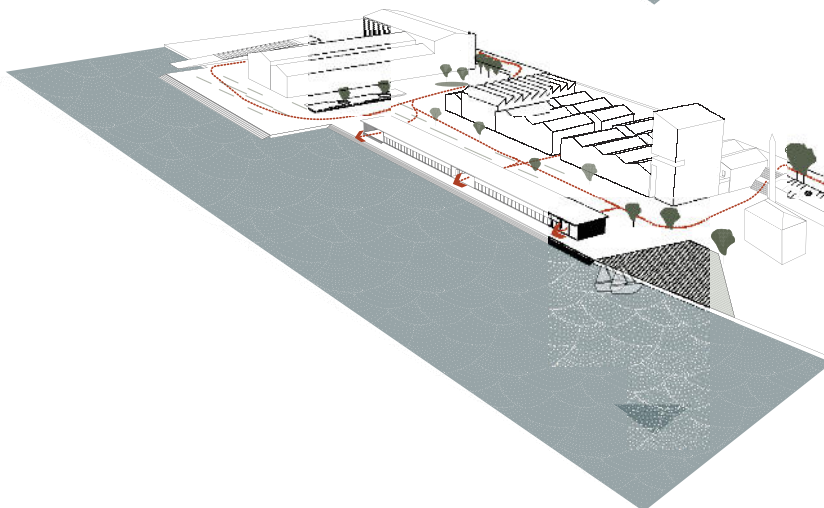


Section B-B



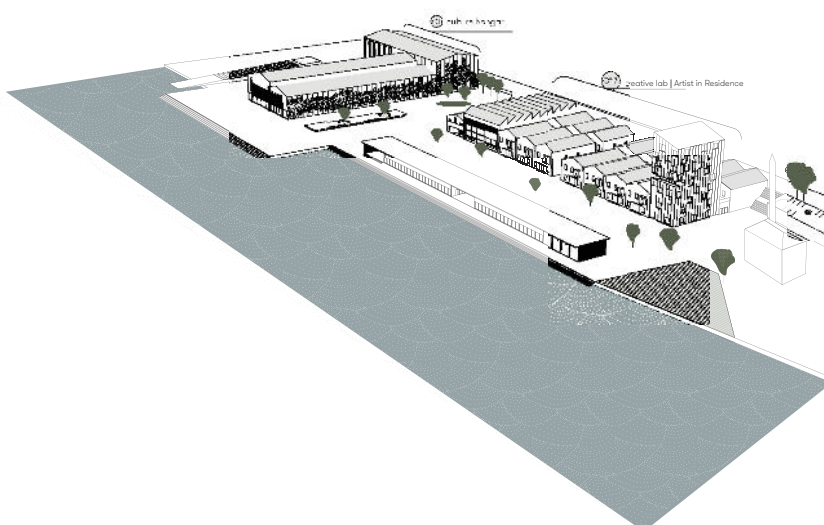
Current Situation

There are many undefined spaces in the existing structure and landscape. The relationship between the buildings and waterfront is very weak. Although the site is organized in the same complex, there is a distinctive separation between the warehouses and the longitudinal sheds.



Accessability

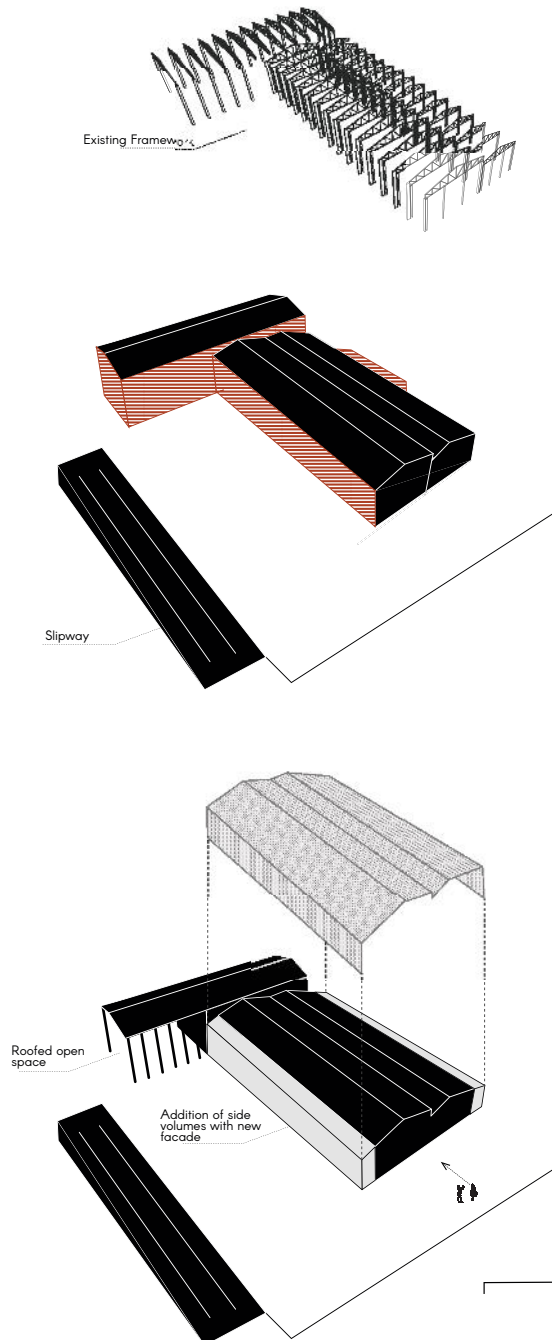
Two entrances allow the accessibility, one from the Camialti Mosque. The second one is located between the Hangar and the warehouses.



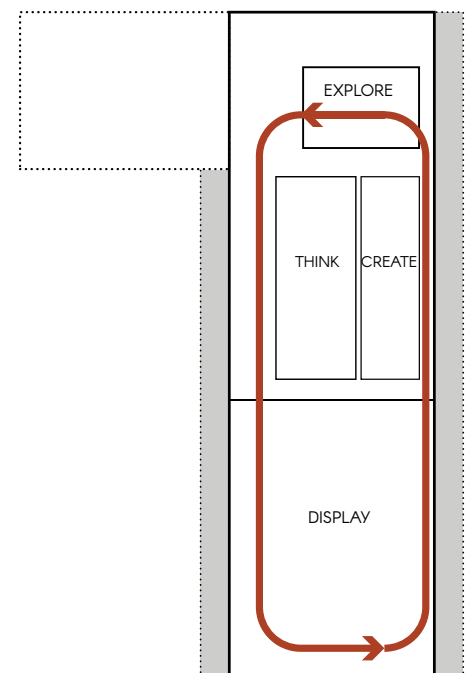
Site as a complex

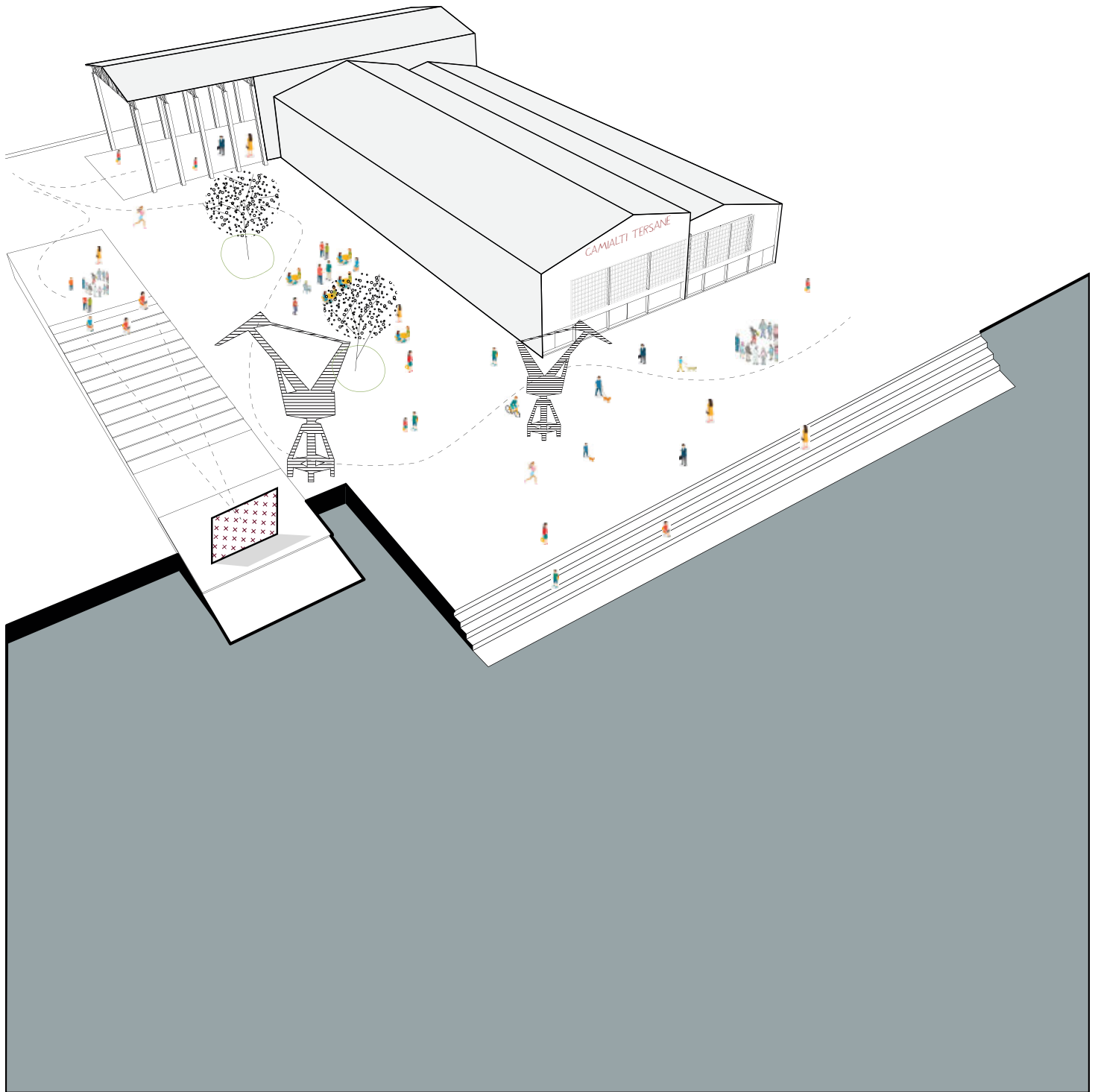
The site is reactivated with addition of two new structures. It is divided into public and semi public floors (Artist-in-Residence). Along the waterfront is a restaurant and multifunctional space which upgrades the unused large space in front of the warehouses. The volume consists of openings to frame the scenery.

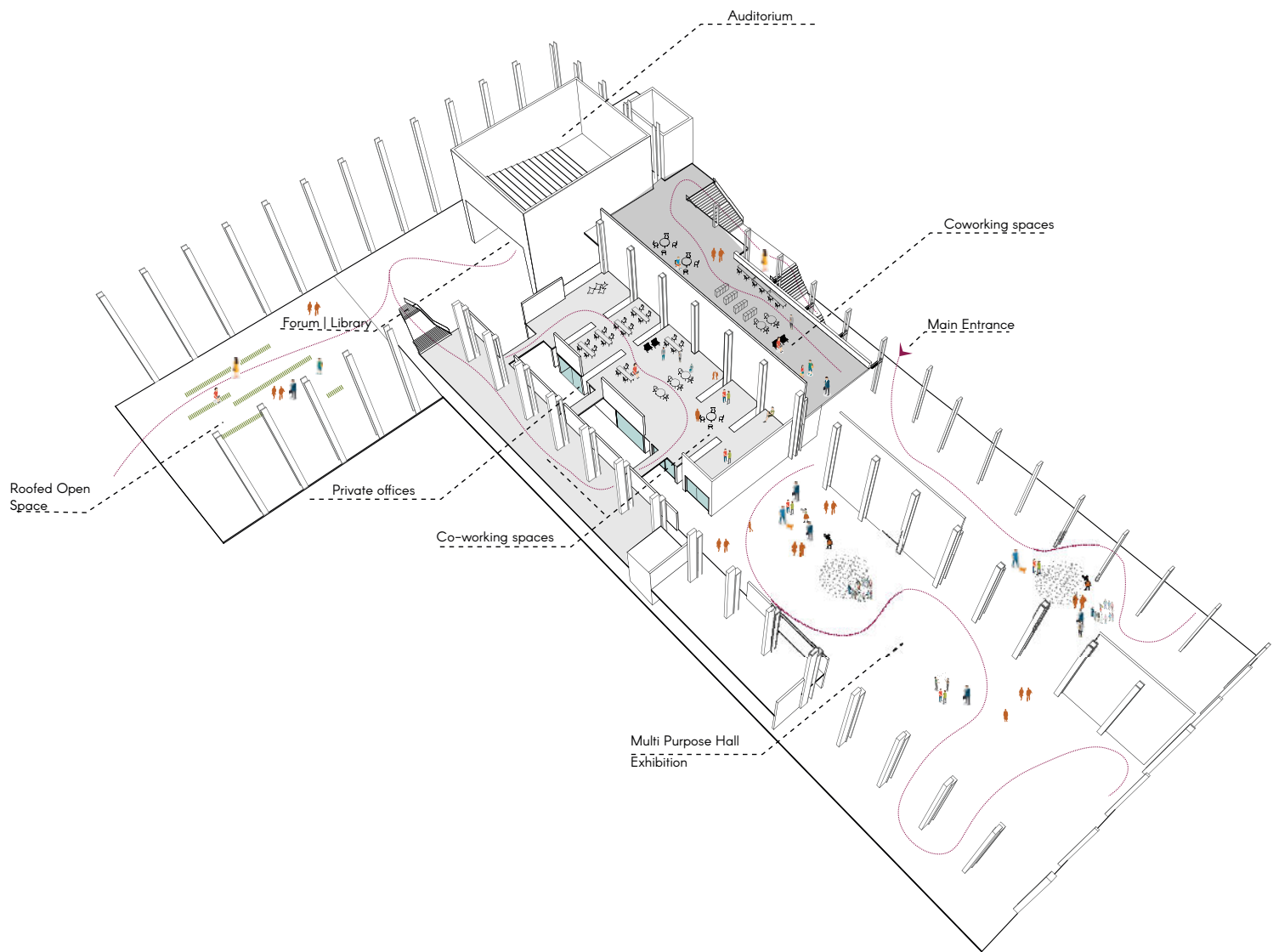
Design Process - C^oI | Culture Hangar



This place is designed to be a center for creative minds producing their ideas. Most important is to make this place open to public where one can observe others and share ideas with each other which is not easy to find. The distribution of spaces are organized according to the process “**think-create-display-explore**” within the same complex. There are three main spaces Exhibition Hall, Workshop Spaces, Auditorium and a Library. This place is a cycle of different types of functions which are interconnected with one another.



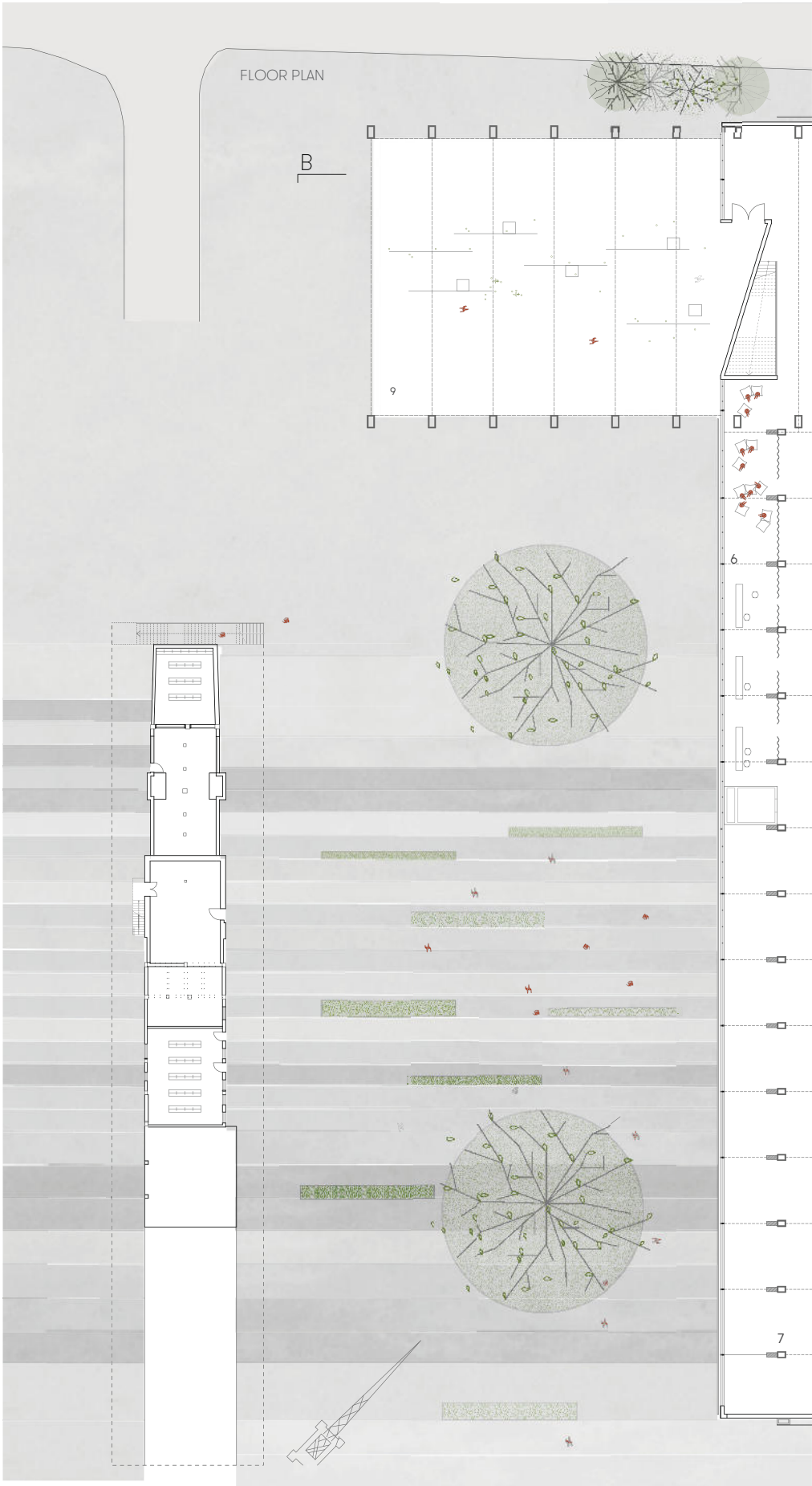


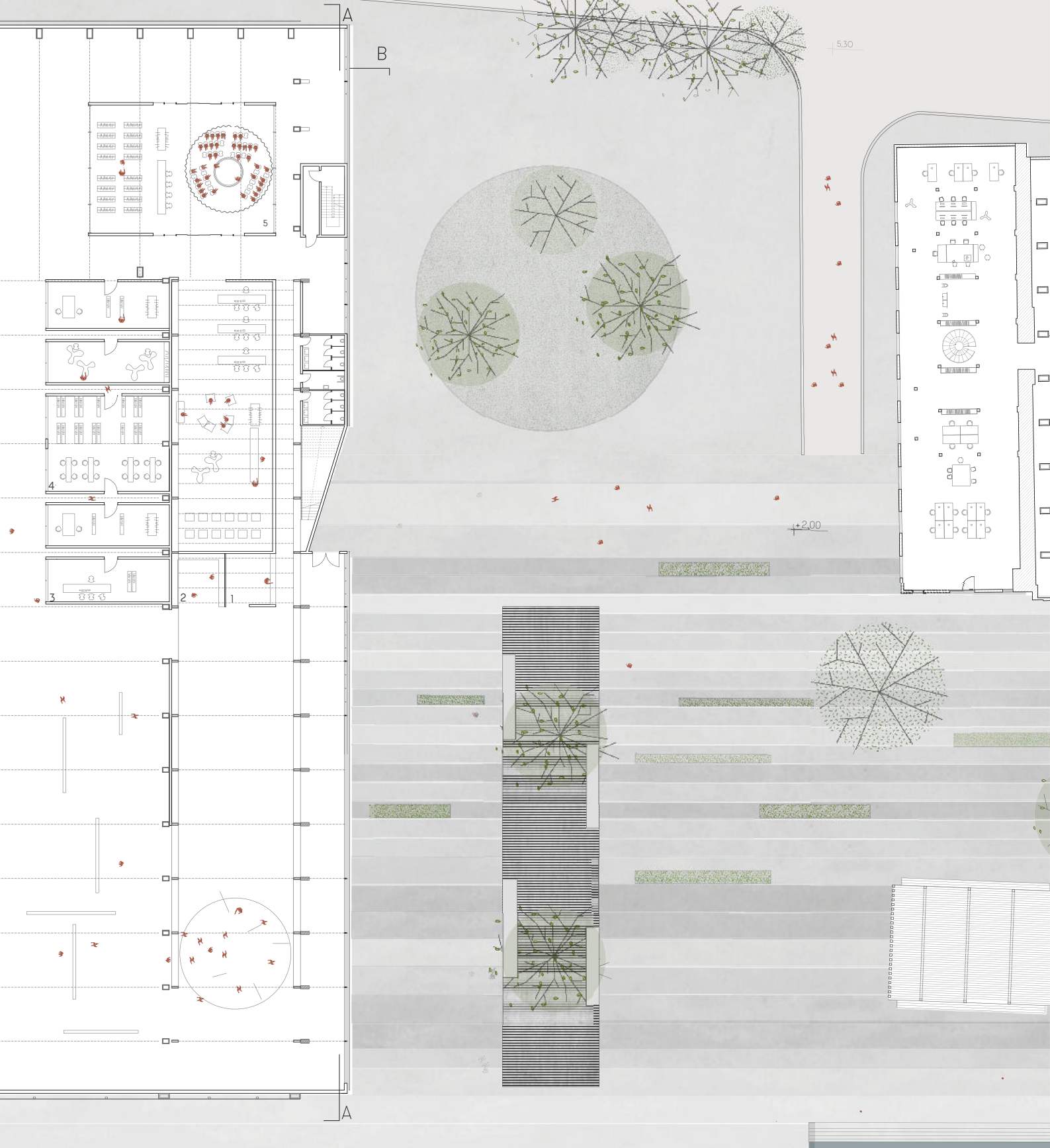


Axonometric View of spaces

Level 0 | M1 500

- 1 Foyer
- 2 Garderobe
- 3 Private Office
- 4 Common Room
- 5 Forum
- 6 Open Space Workshop
- 7 Exhibition Hall
- 8 Storage
- 9 Roofed Open Space

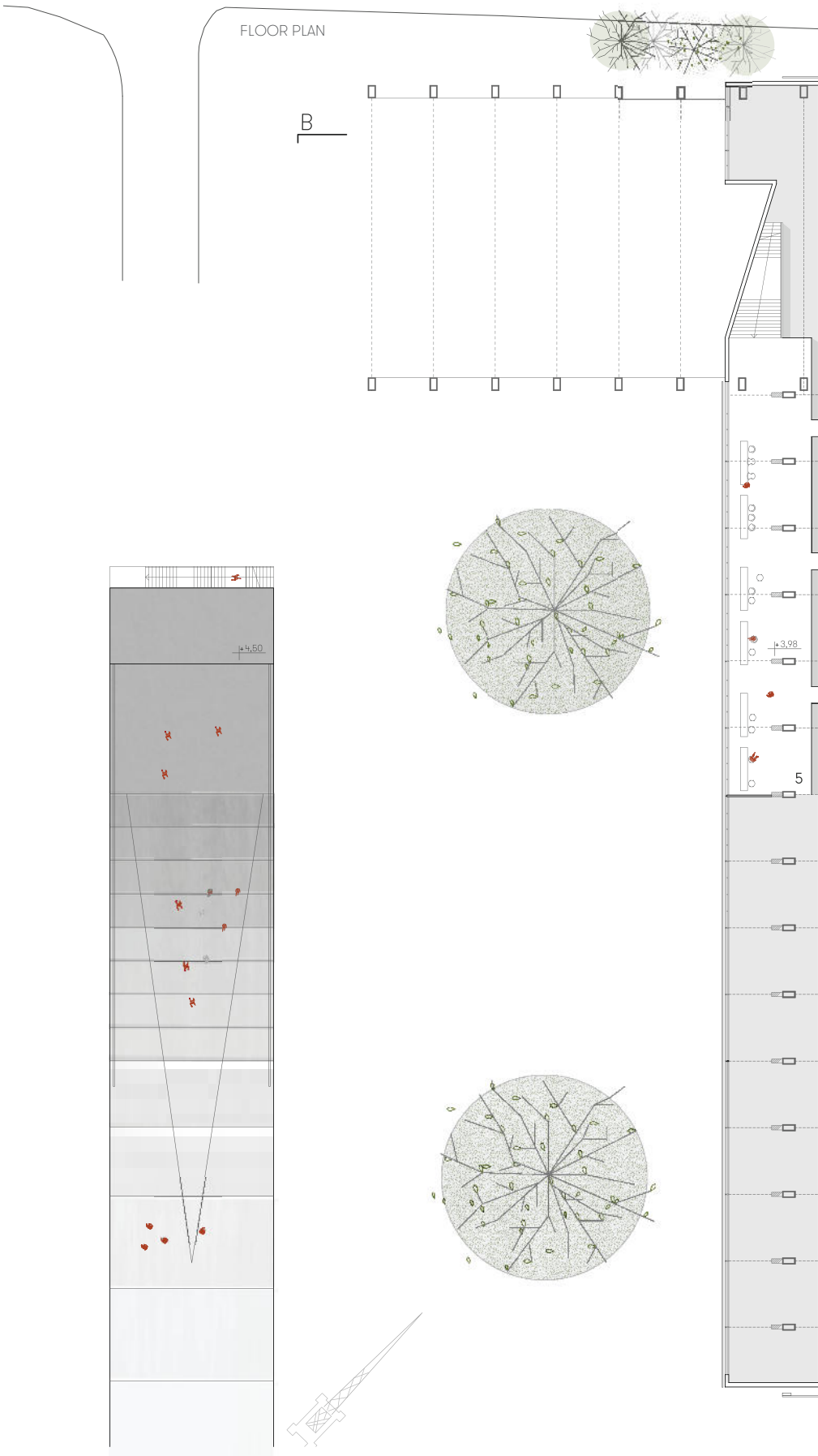


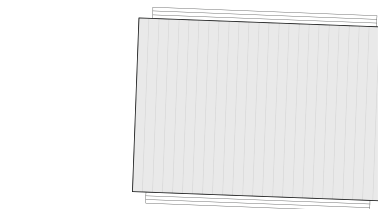
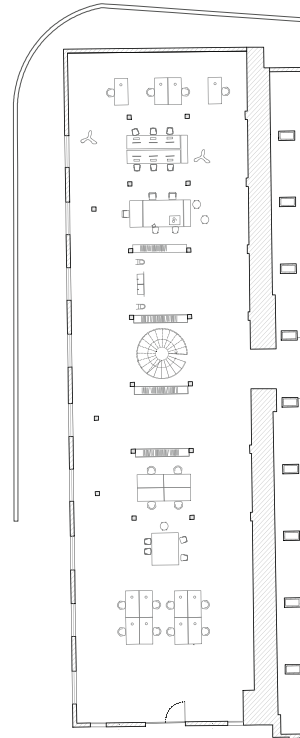
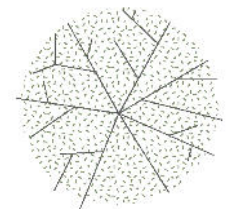
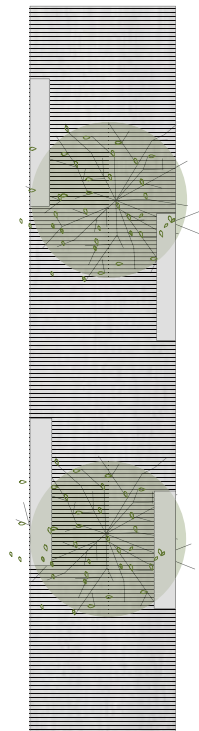
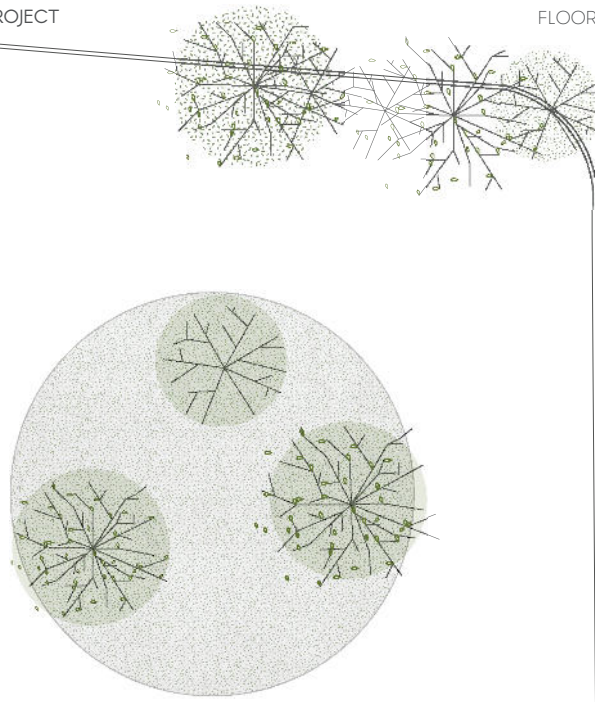
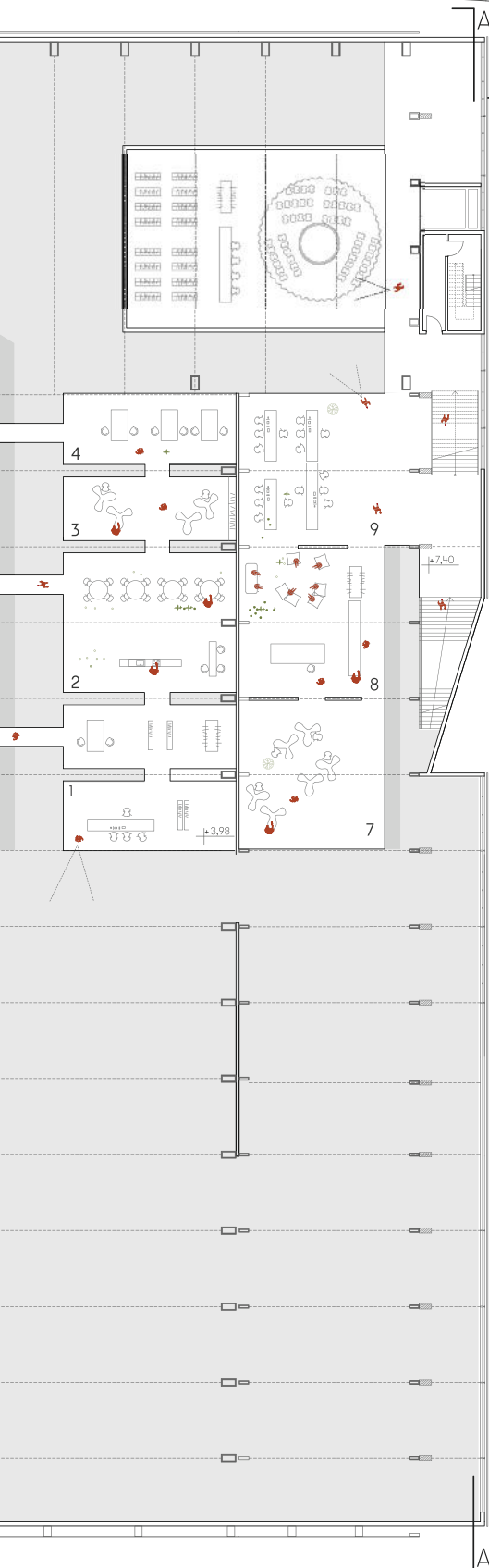


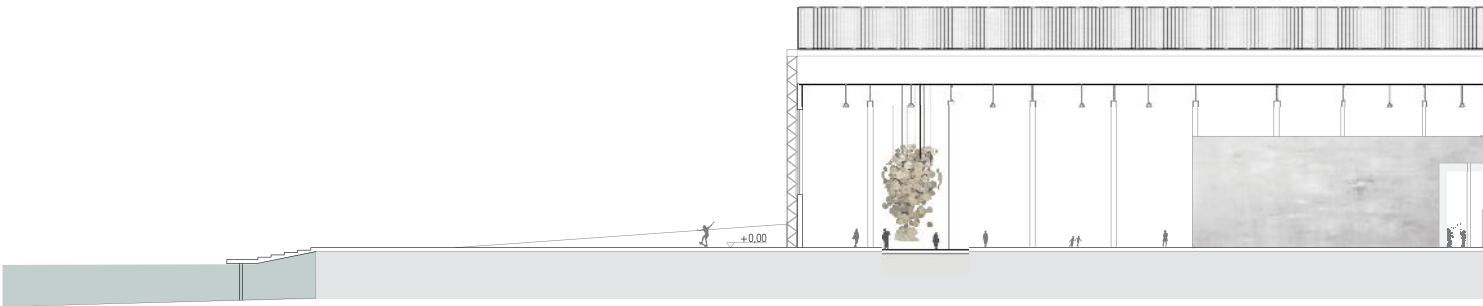
B

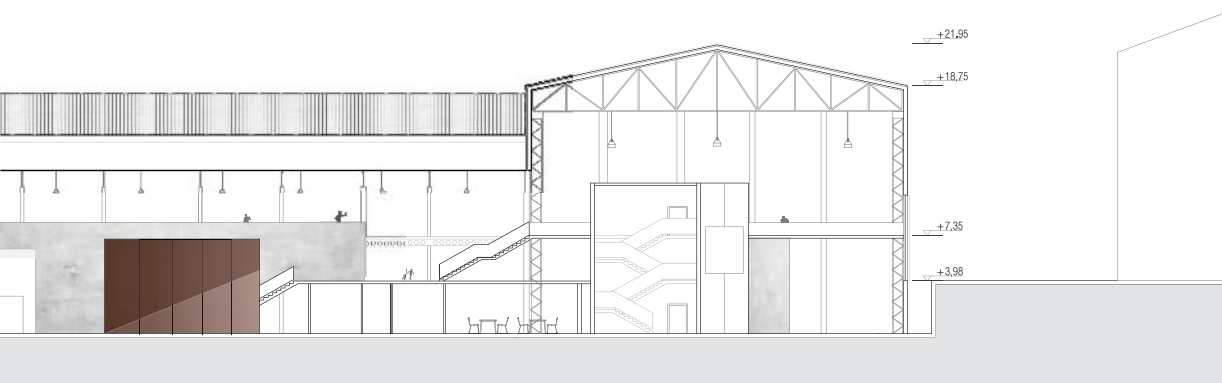
Level 1 | M 1 500

- 1-4 Atelier
- 2 Community Space
- 5 Open Space Working
- 6 Showroom
- 7 Multimedia Space

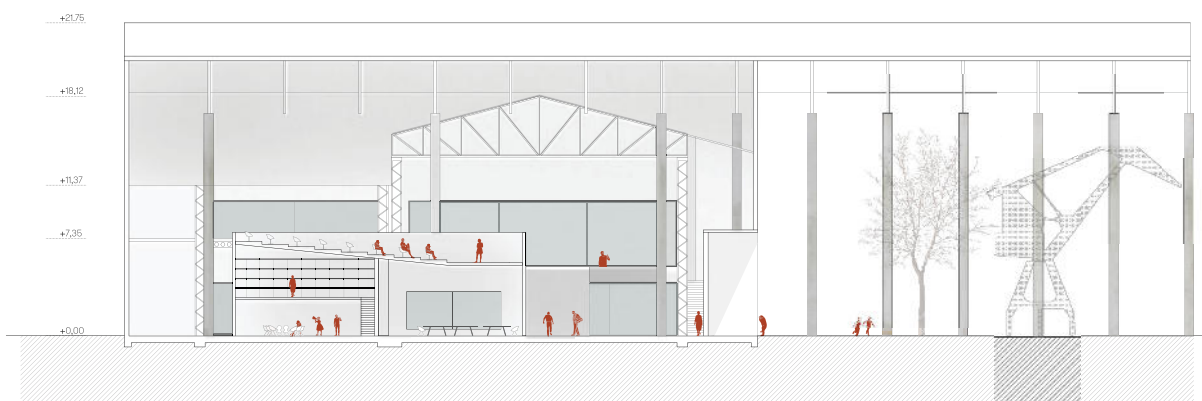




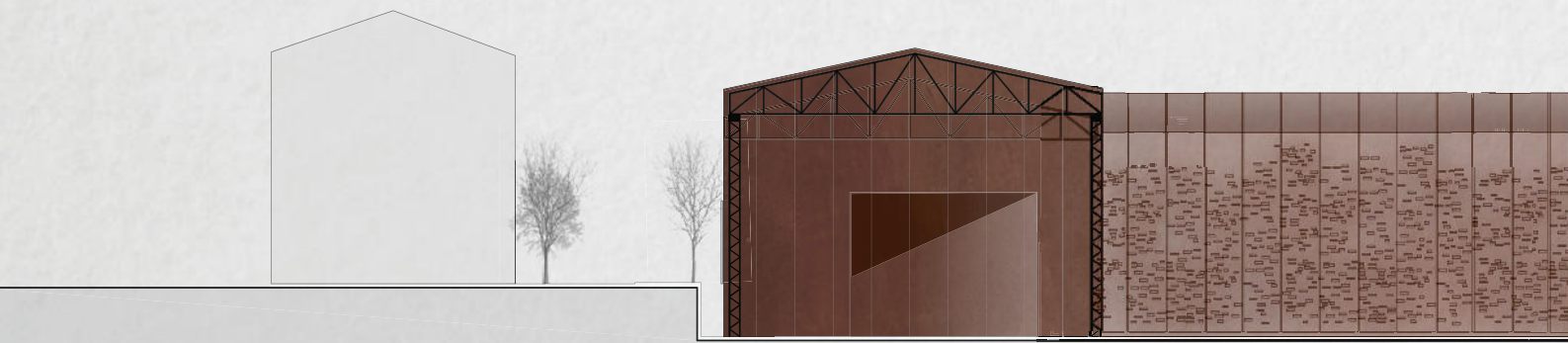


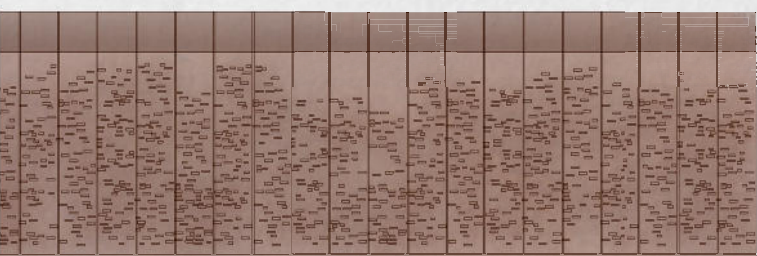


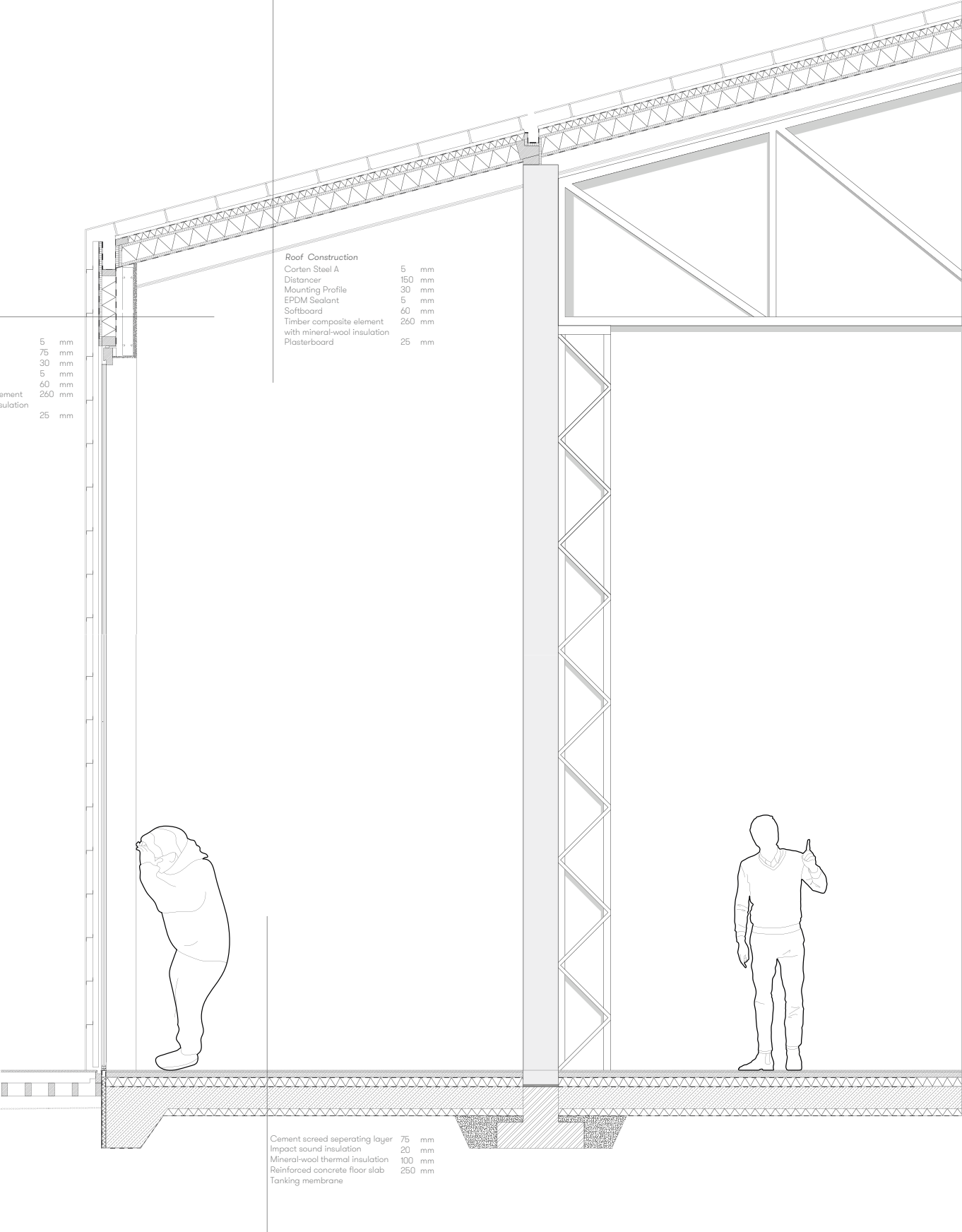
Section A-A | M 1 500

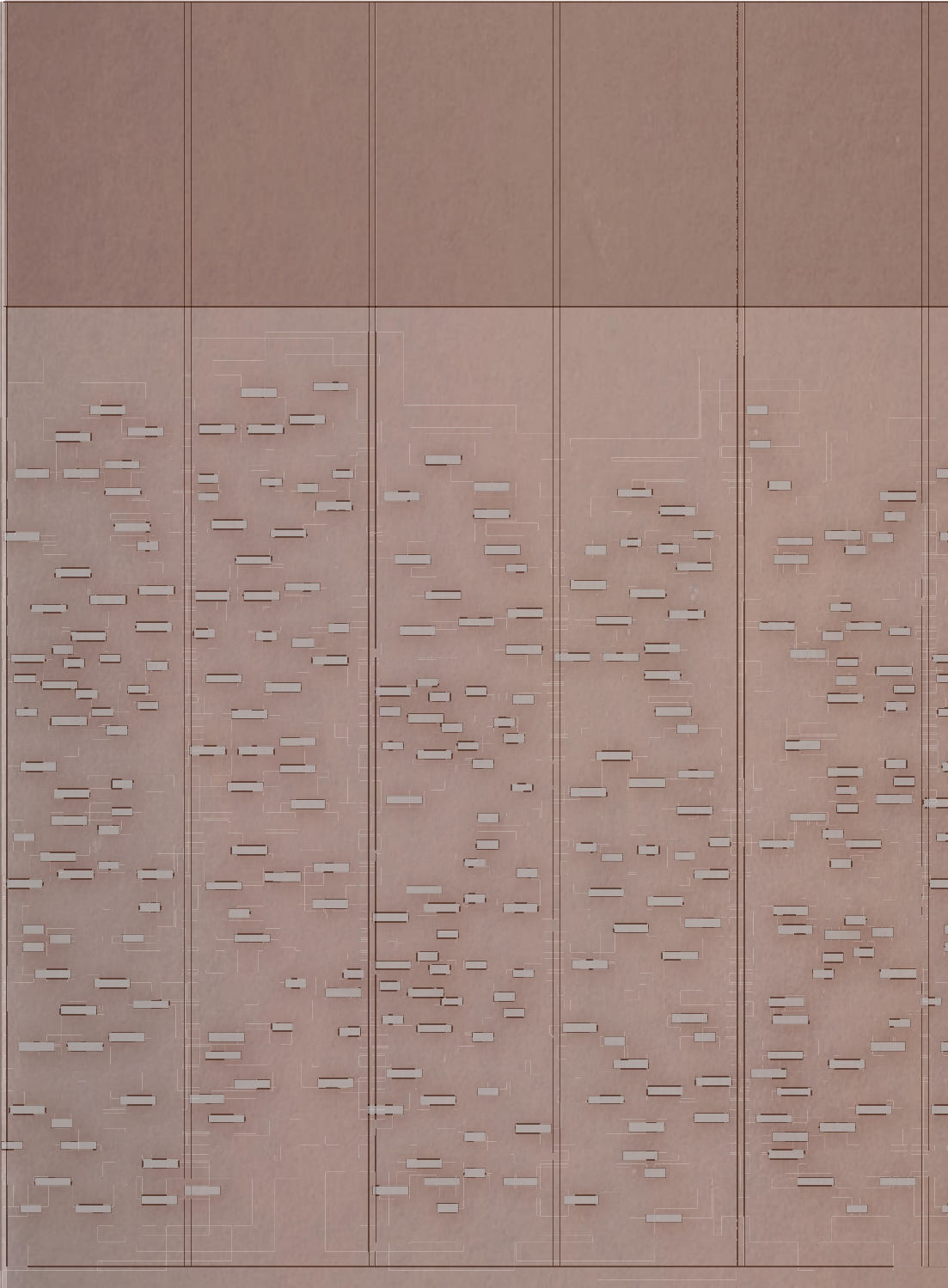


Section B-B | M 1 500









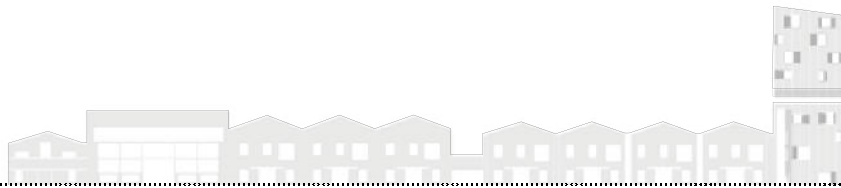








CREATIVE LAB C°17



The former warehouses are consisting of 17 blocks in a row. The warehouses are restored with changes in interior while preserving the structure as a whole. The new program engaged is Artist in Residences, where they explore and share ideas within this environment. The addition of a tower is meant to mark and make the site more visible than ever.



Perspective I | see p.45-46



Perspective 2 | see p.46-47
Today the shipyard is used as
disposal area



Perspective from inside a warehouse



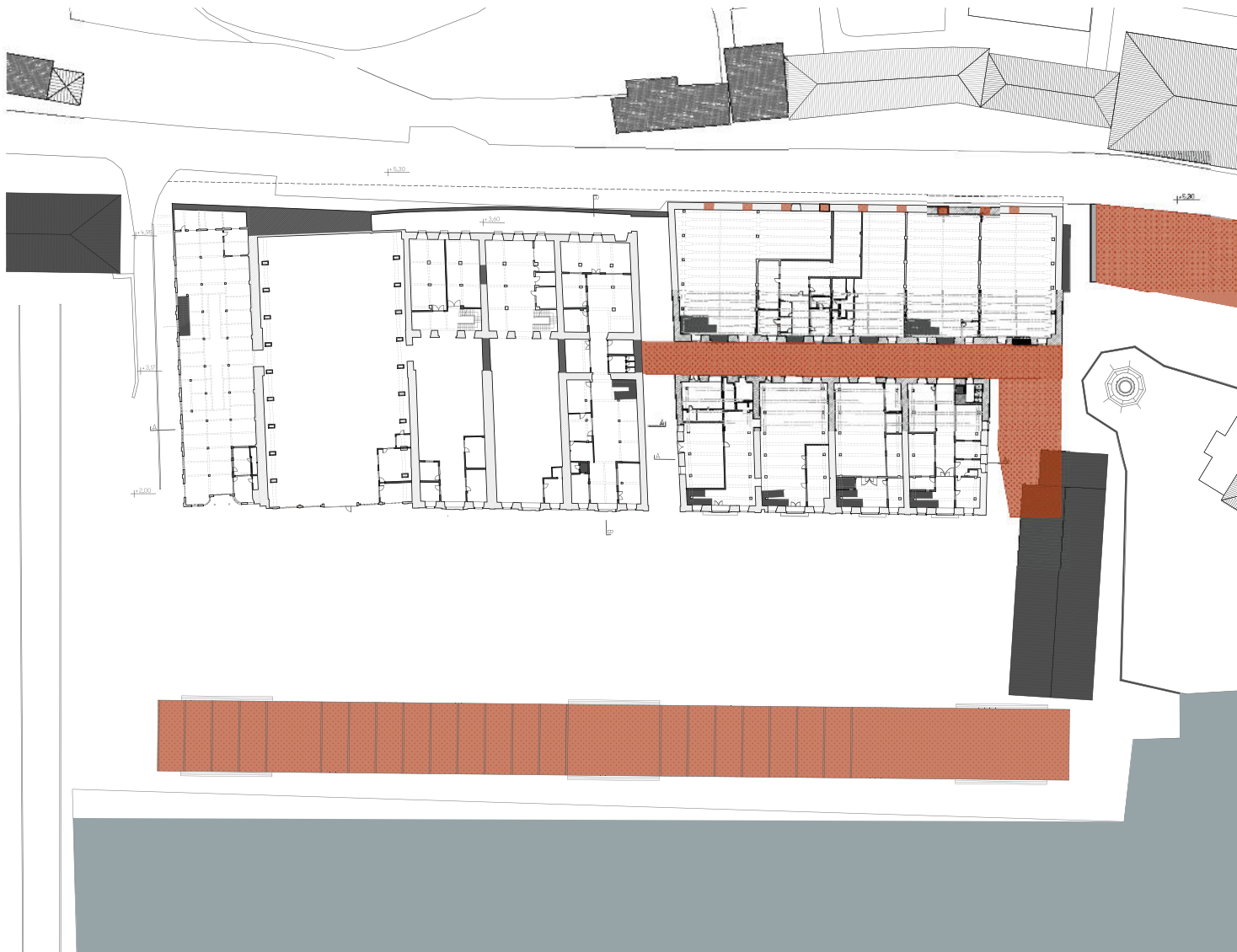
Perspective from inside a warehouse



Floor Plan | Level 0
M 1 1000

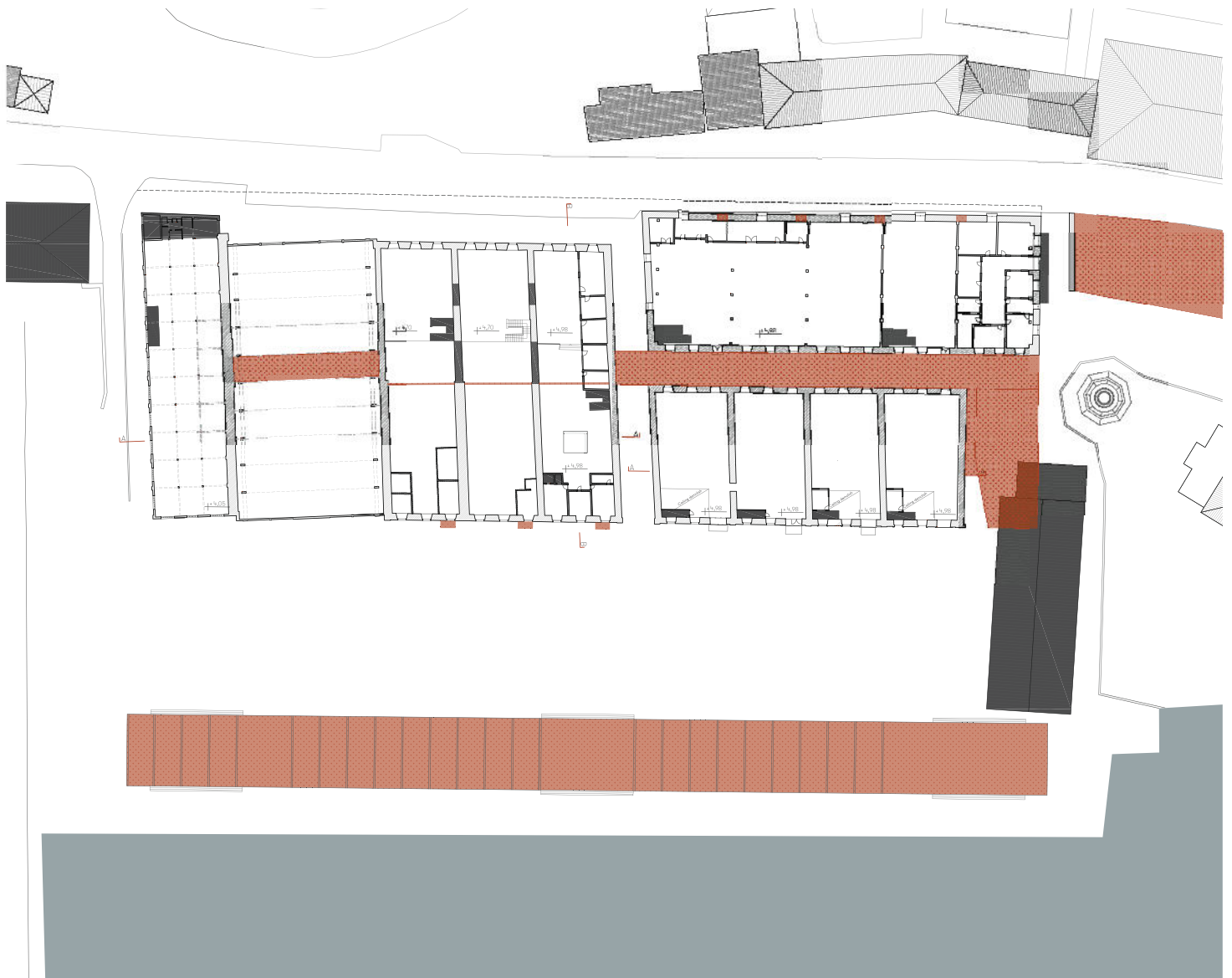


Floor Plan | Level 1
M1 1000



Demolition
Addition

Floor Plan | Level 0
M 1 1000



 Demolition

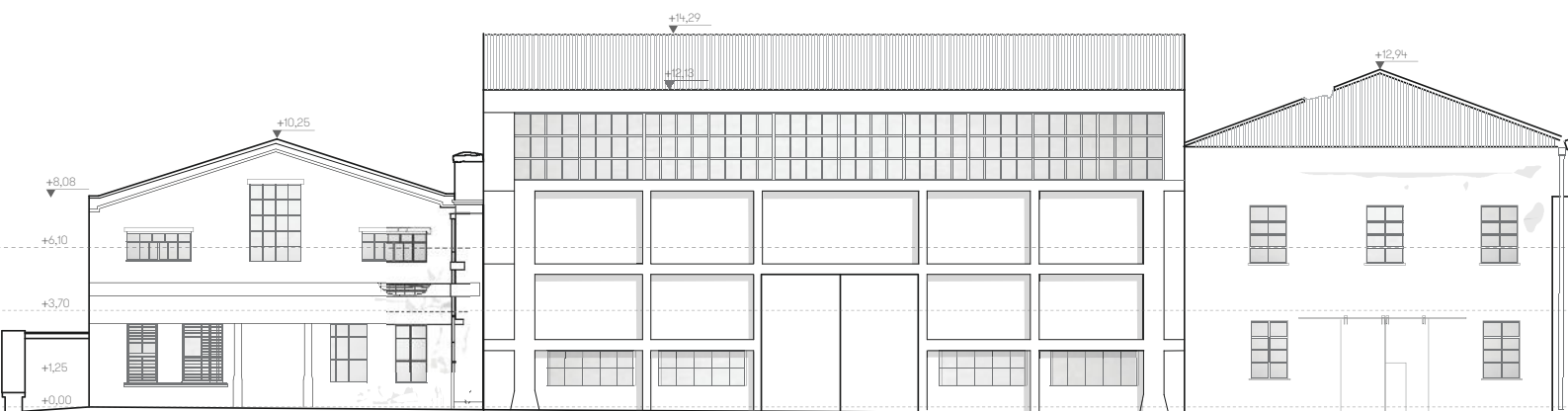
 Addition

Floor Plan | Level 1
M1 1000

Sections + Southern View | Current Situation

Existing Structure Situation

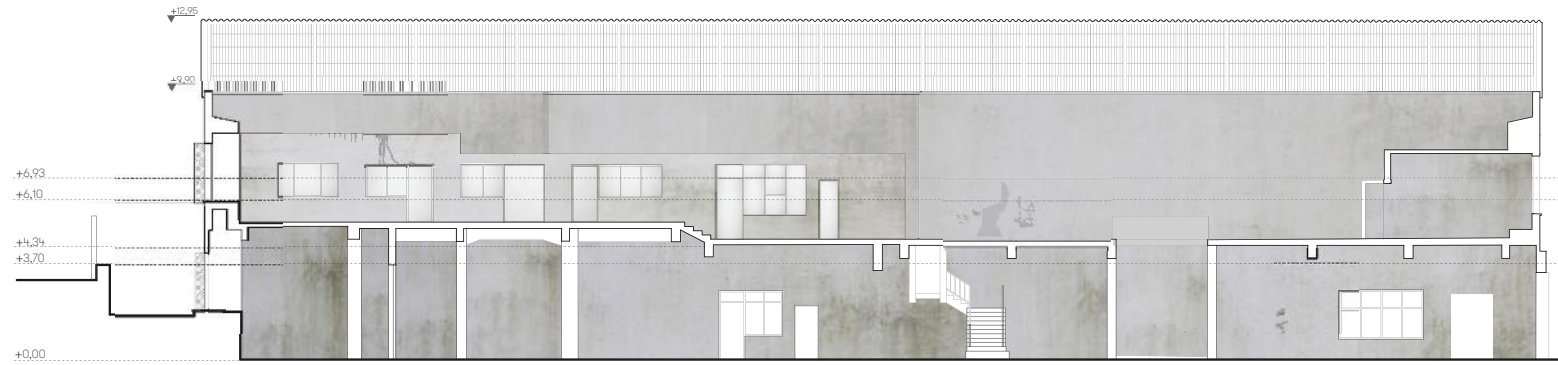
Structure I – These block of buildings were used as workshop spaces and fire station which are interconnected with one another. The main walls of the interior are composed of masonry walls and the steel scissors span on these walls carrying the roof. The roof structure is out of corrugated plate in very bad condition. Additionally plaster and corrugated plate were used for the facades. The structure and the exterior of these blocks maintained their conditions until today. However there are some plaster spots and holes in the corrugated plate, which require restoration.



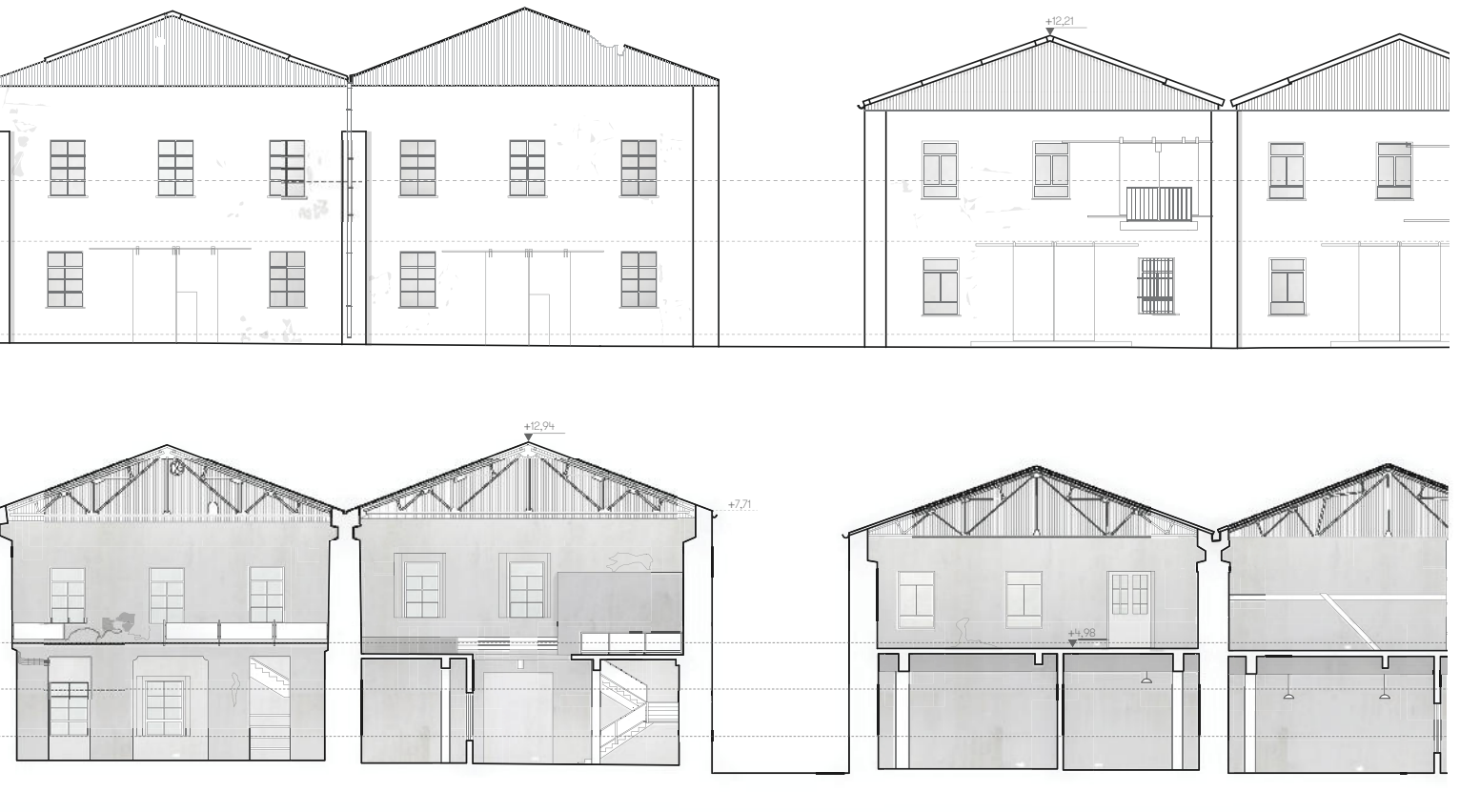
View from South | M 1 250



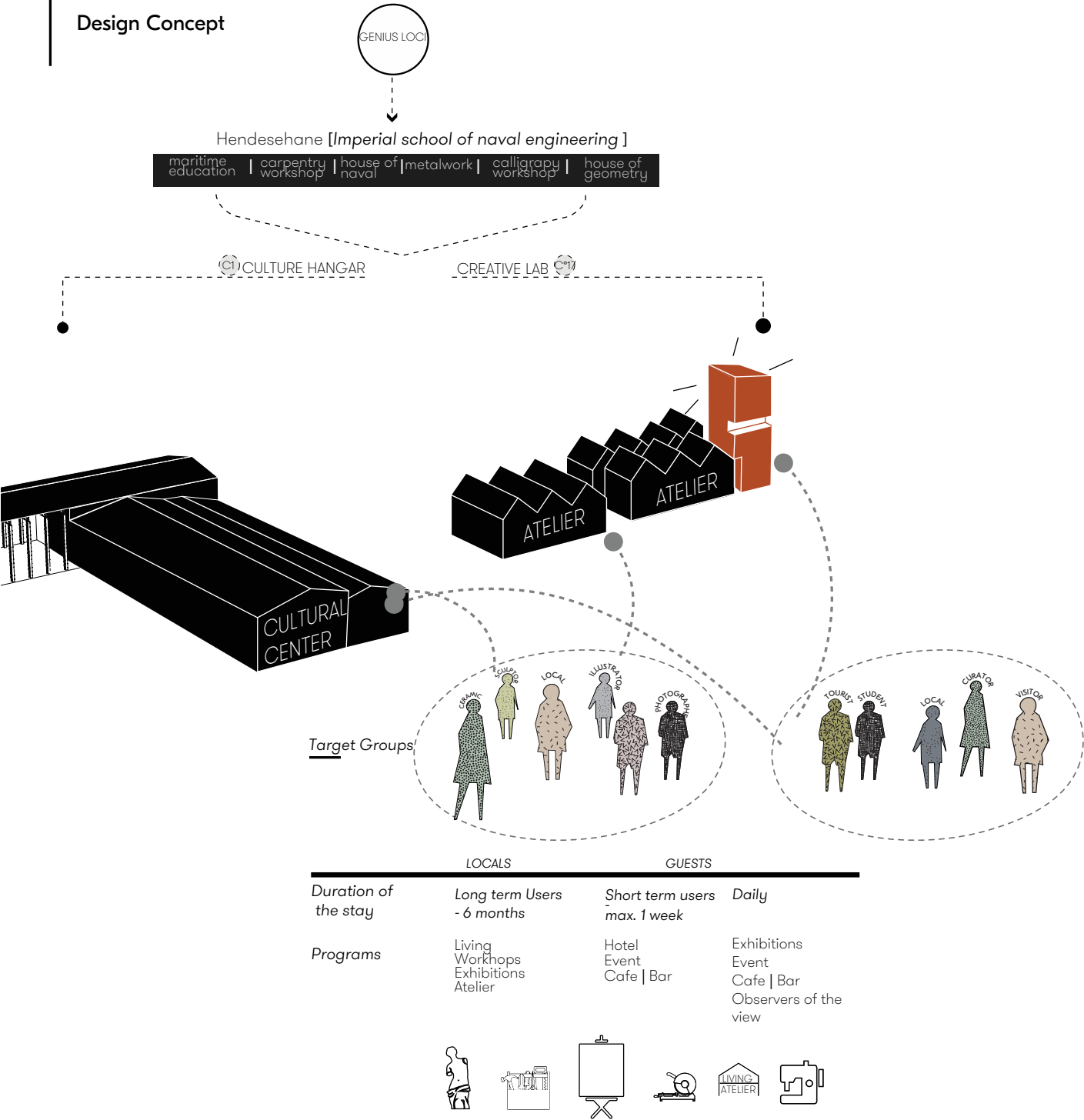
Section A-A | M 1 250

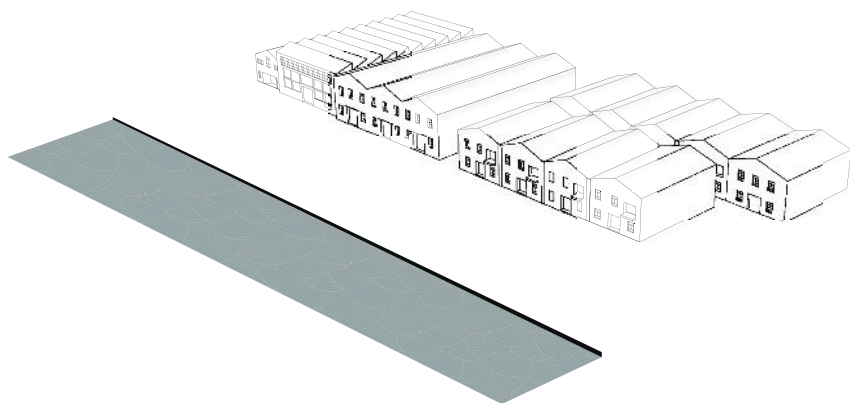


Section B-B | M 1 250



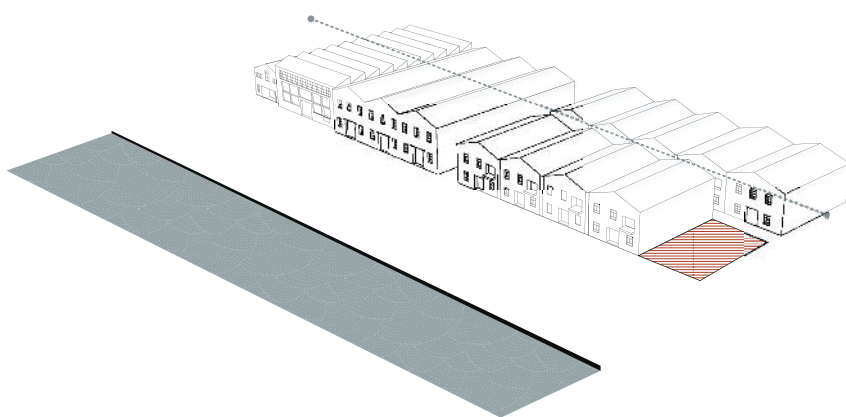
Design Concept





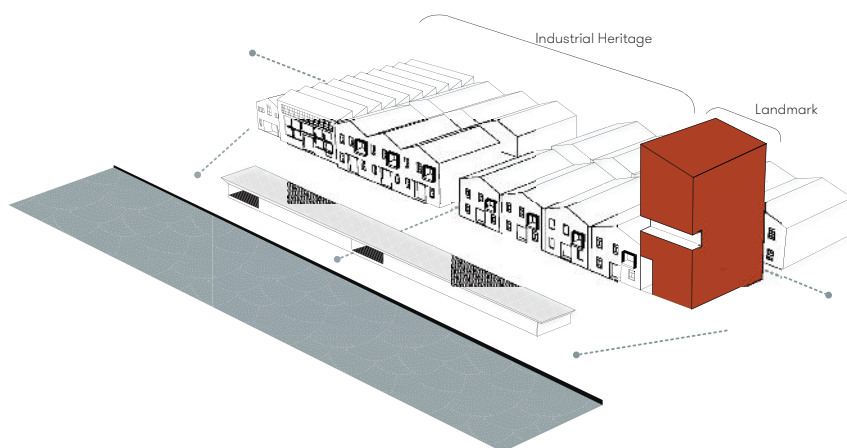
Preserve | Existing Structure

The warehouses are aligned in blocks next to one another. The facade consists of repetitive windows and doors pattern.



Rethink | Landmark

The aim here is to change as little as possible for the site to maintain the genius loci character. Warehouses on the site offer flexibility for a different function and target groups. The gap in the existing structure is inhabited by a landmark in order to catch the eye and change the silhouette of the site.



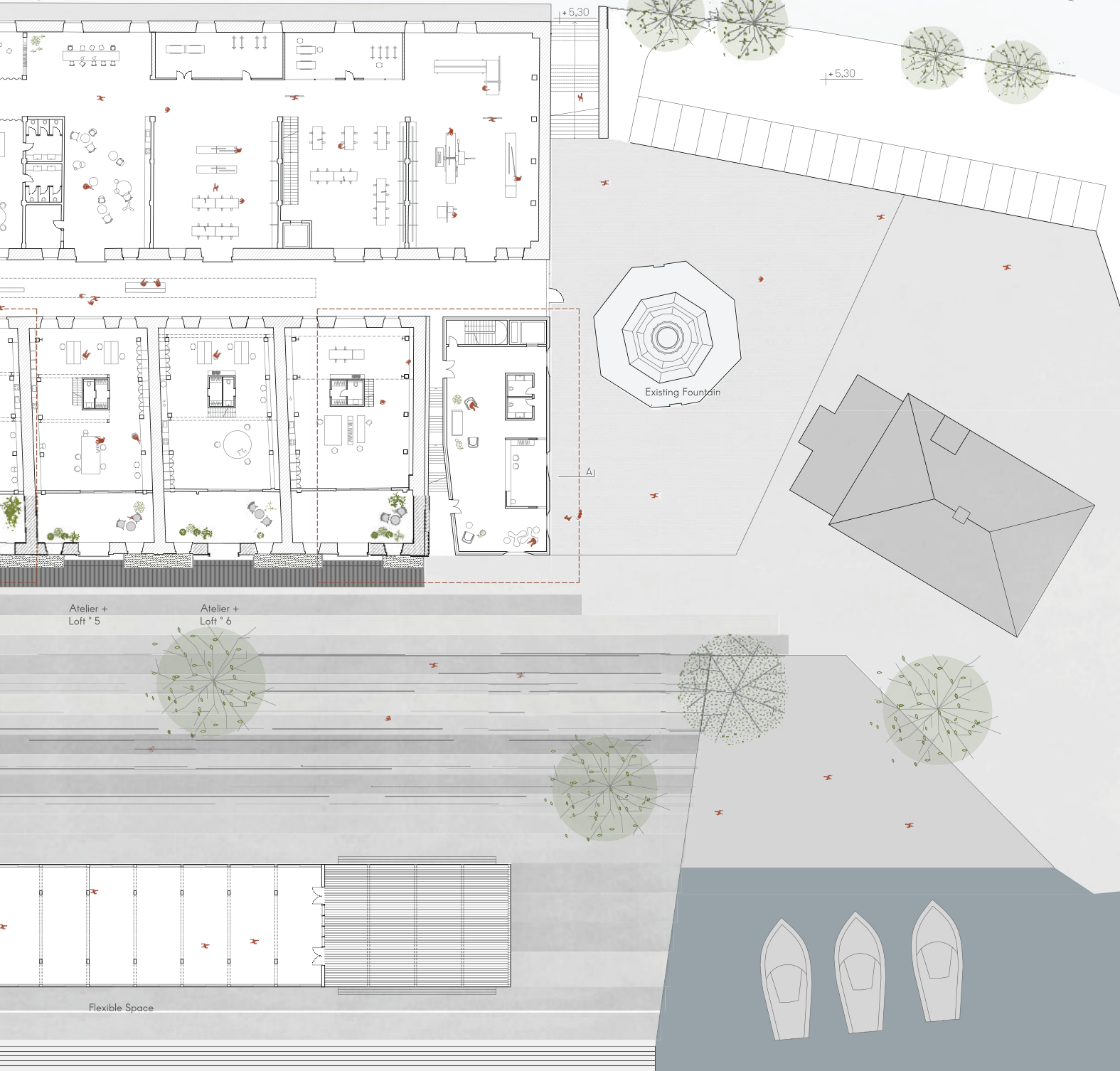
Addition | Tower

The addition of a high building means to be a landmark for this site. As the site owns the perfect panorama, which should be observed from above. The art residences on the higher floors should enable this.

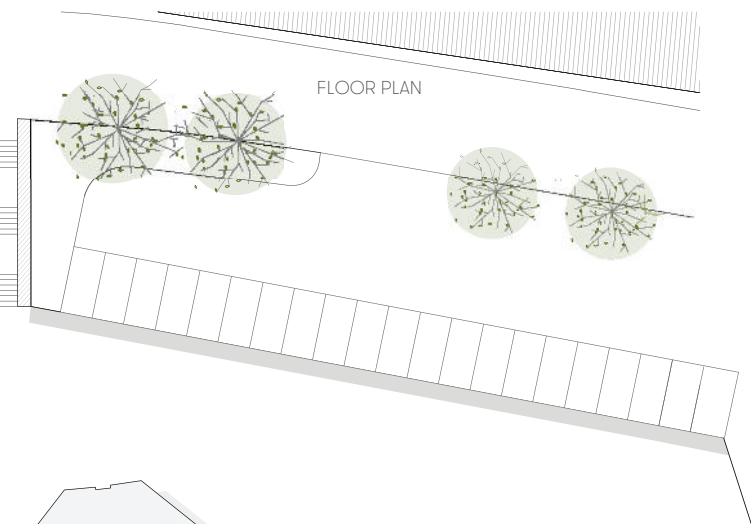


04 DESIGN PROJECT

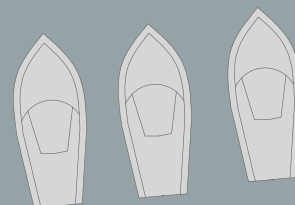
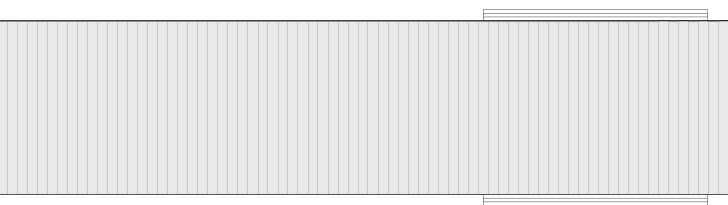
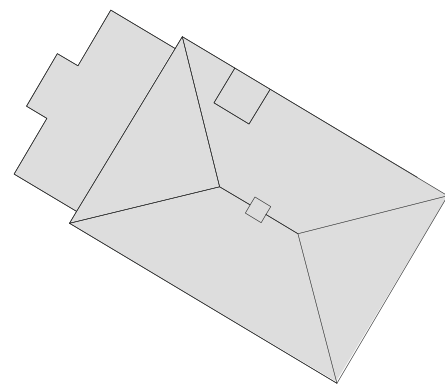
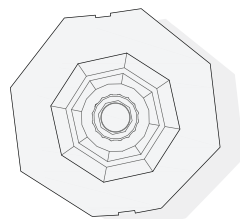
FLOOR PLAN



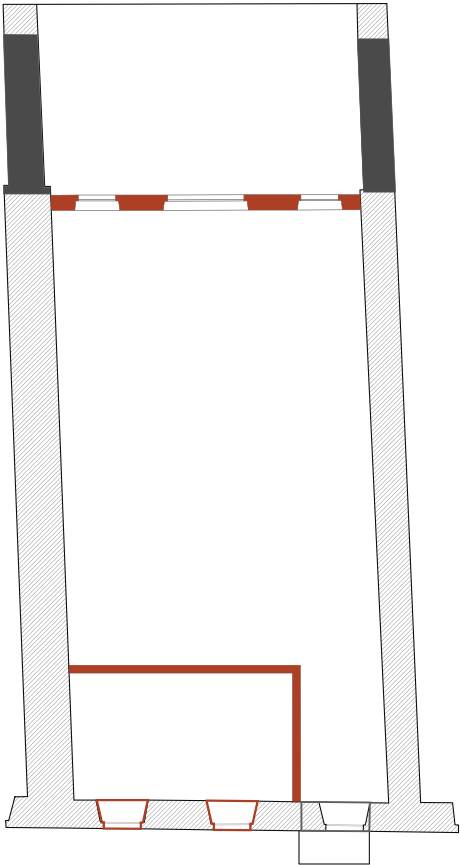
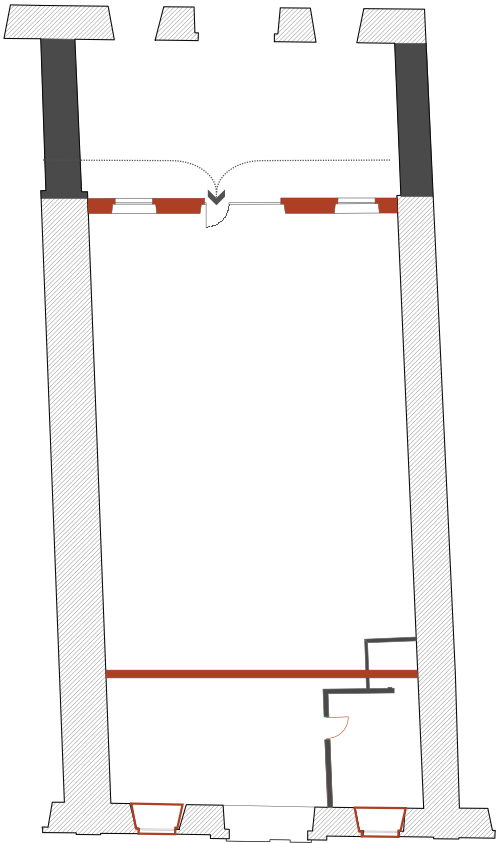




FLOOR PLAN



Floor Plan Zoom
Warehouse Typ A

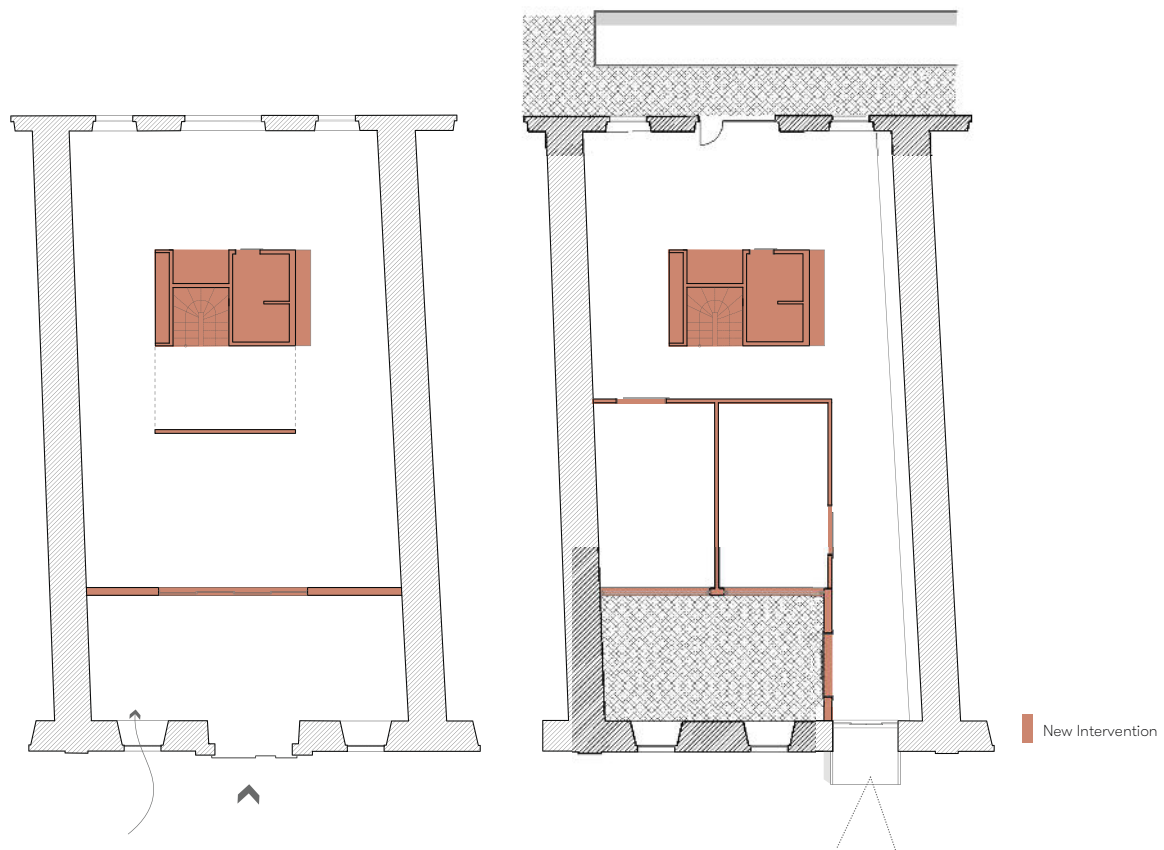


Demolish
Addition

Current Floor Plan | M 1 250

Level 0 | Workshop Space 372,90 m²

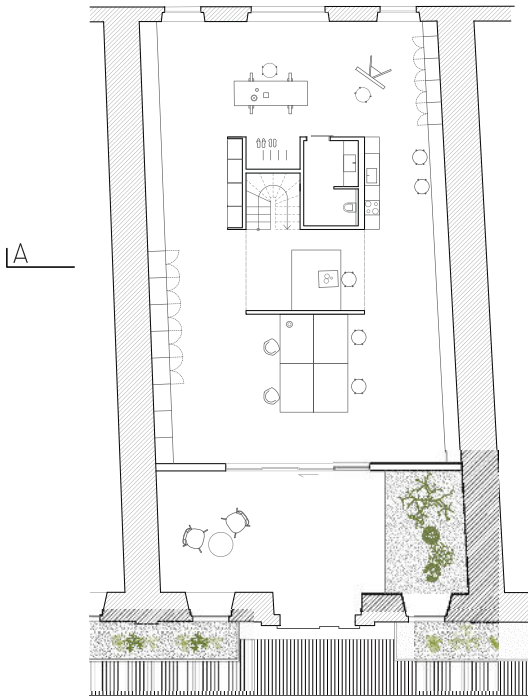
Level 1 | Airspace



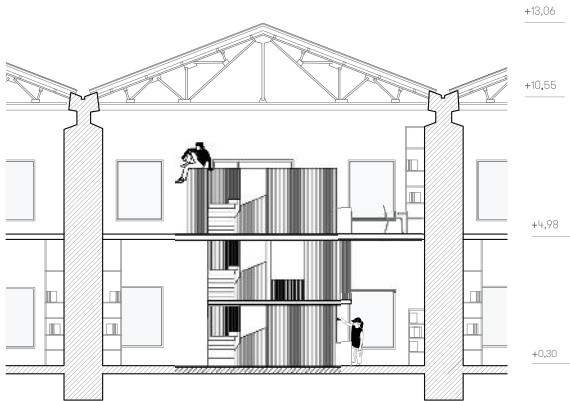
Intervention Floor Plan | M 1 250

Level 0 | Workshop Space 197,14 m²

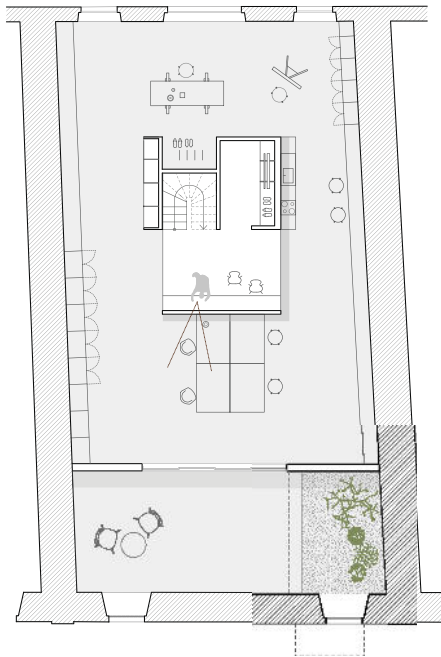
Level 1 | Living + Kitchen 120,15 m²
 Bedroom 33,83 m²
 Bedroom 31,48 m²
 Terrace 44,24 m²



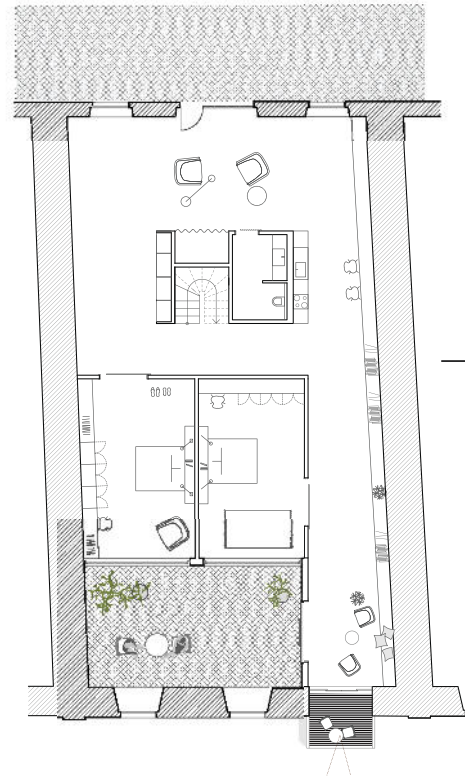
Level 0 | Atelier



Section A-A



Level 1 | Mezzanine
+ 2,15



Level 2 | Loft
+ 4,98

Warehouse Loft

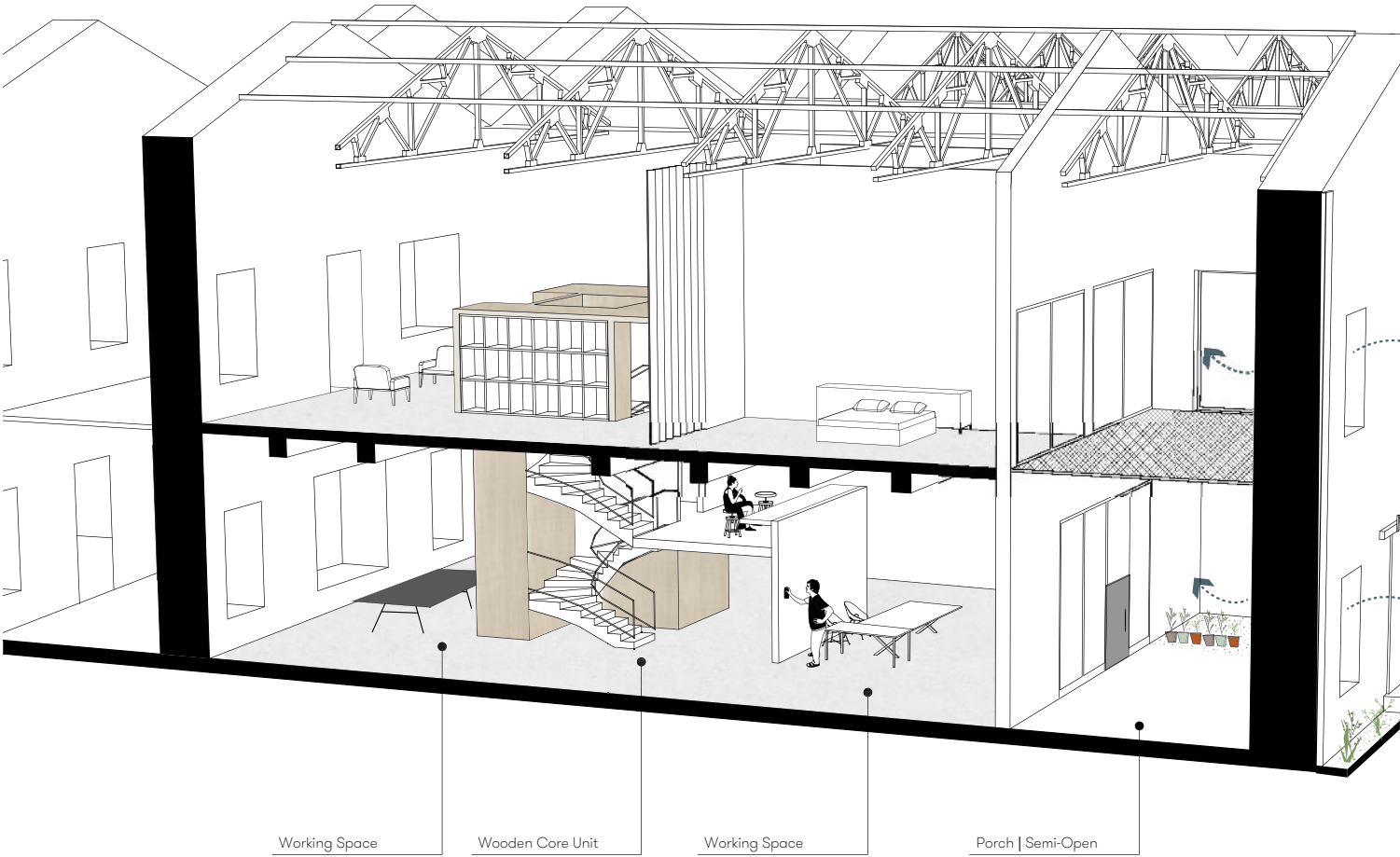


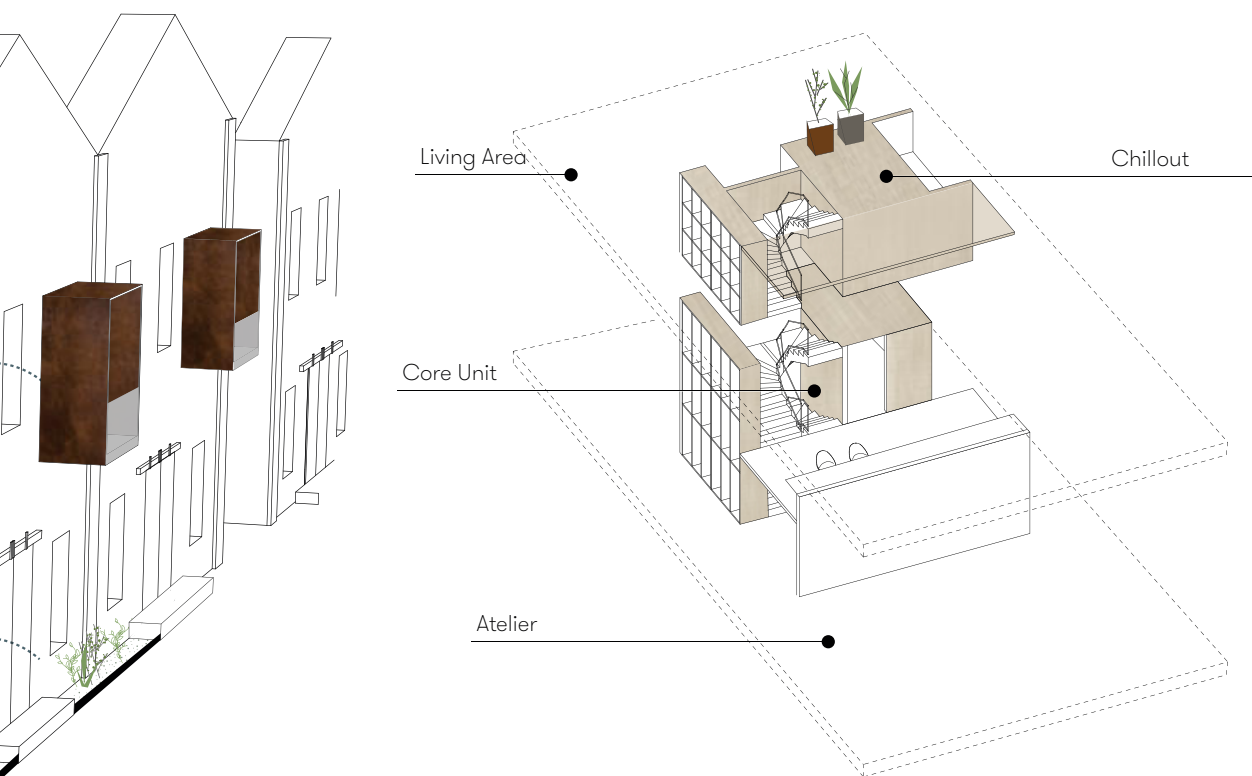
This warehouse type is meant to function for similar users. However this place can be rented by two different people so they can co-live and share working spaces.

The existing columns are preserved in their original forms, the additions are not attached to the existing elements to indicate a distinction between old and new structure. The interior is reshaped by adding a porch in order to create a semi open working environment for recreation purposes.

Floor Plan | M 1 250

5 10 20 50

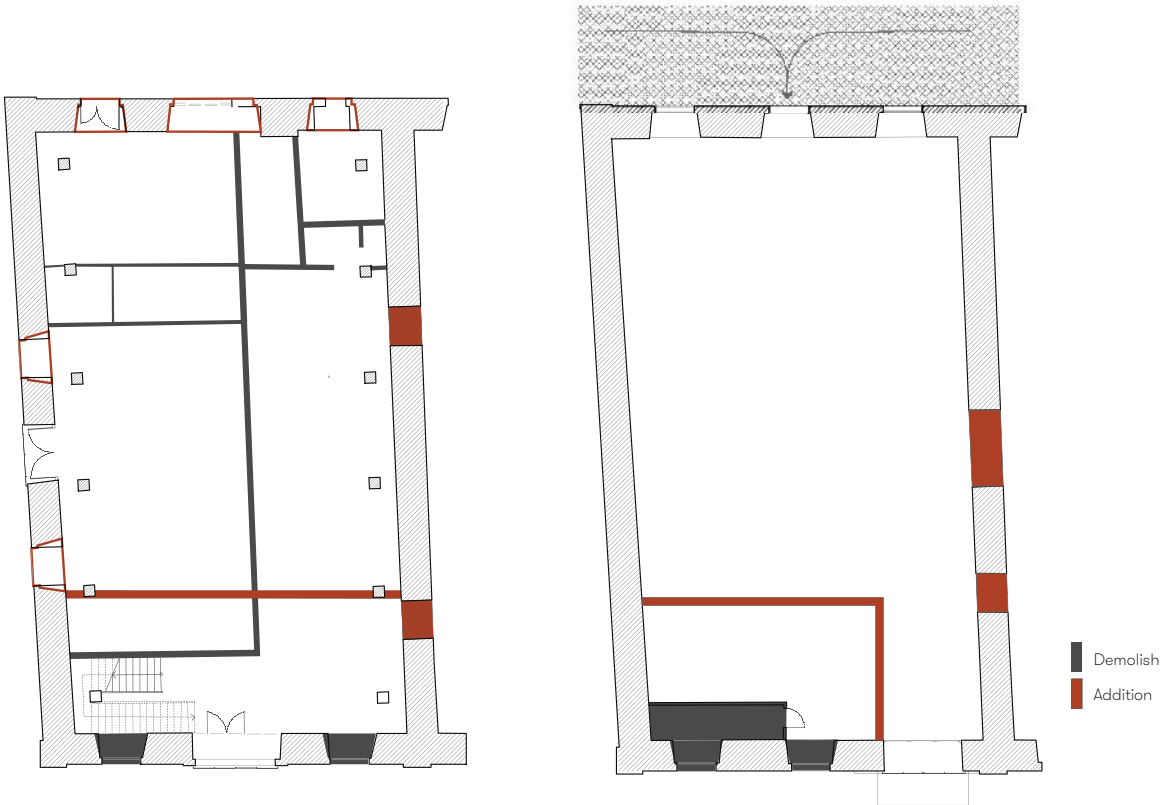




Plywood Core Unit

A core unit at the center of the ground floor runs through. This large piece of furniture with stairs assembles the needs of the users. It is a service box with integrated *kitchen, bed, toilet, shelves, storage*. The material is out of plywood. The rest of the space the so called negative space is organized around this box.

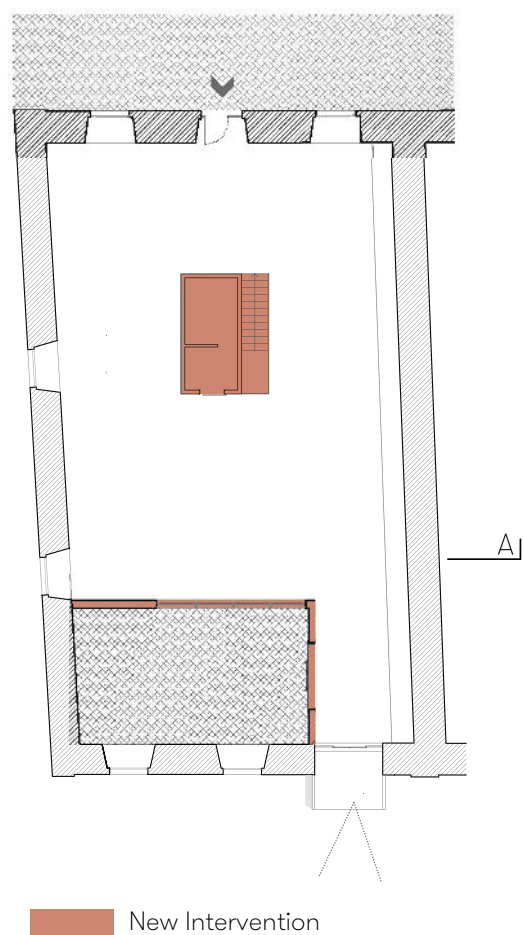
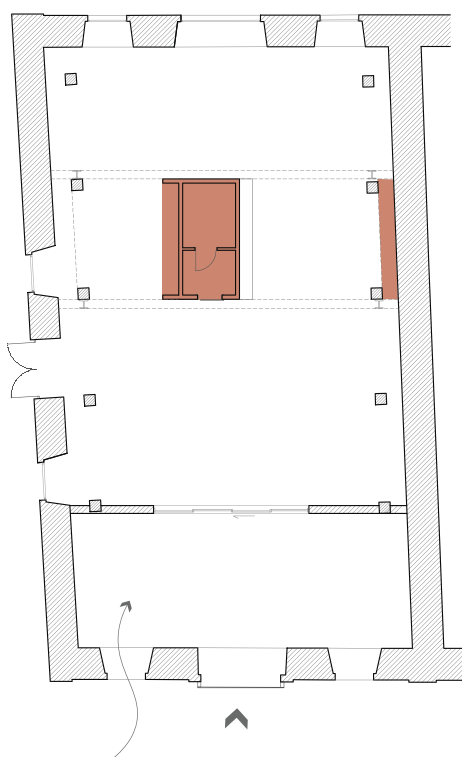
Floor Plan Zoom
Warehouse Typ B



Current Floor Plan | M 1:250

Level 0 | Workshop Space 291,71 m²

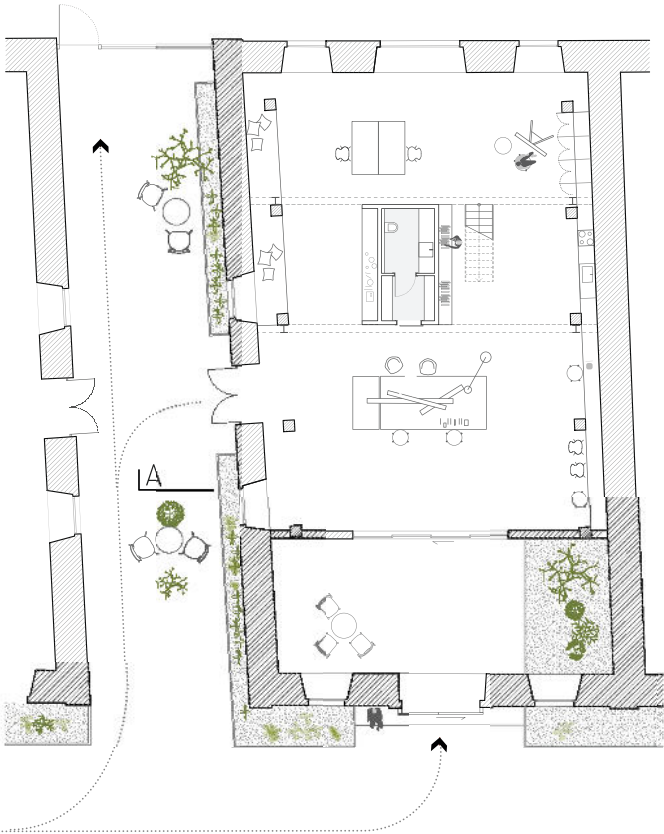
Level 1 | Workshop Space 300,10 m²



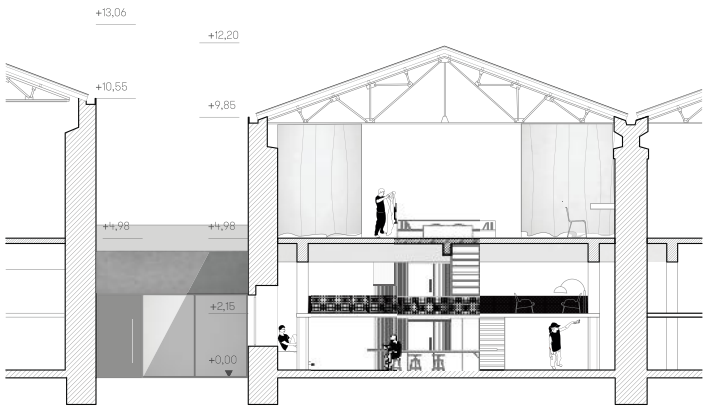
Intervention Floor Plan | M 1 250

Level 0 | Workshop Space 208,61 m²

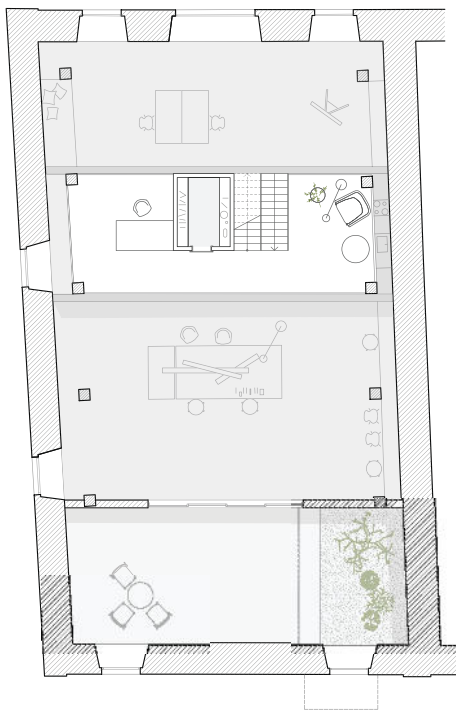
Level 1 | Living + Kitchen 115,44 m²
 Bedroom 100,19 m²
 Terrace 44,24 m²



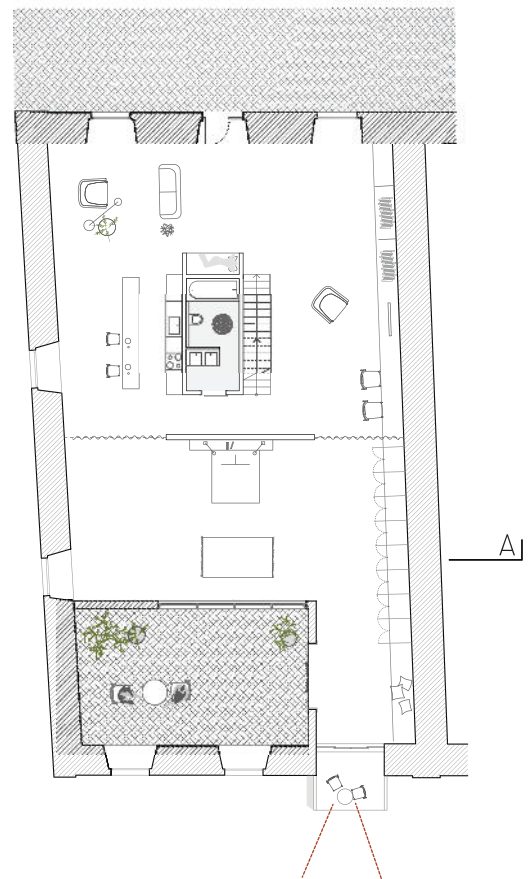
Level 0 | Atelier



Section A-A



Level 1 | Mezzanine
+ 2,15



Level 2 | Loft
+ 4,98

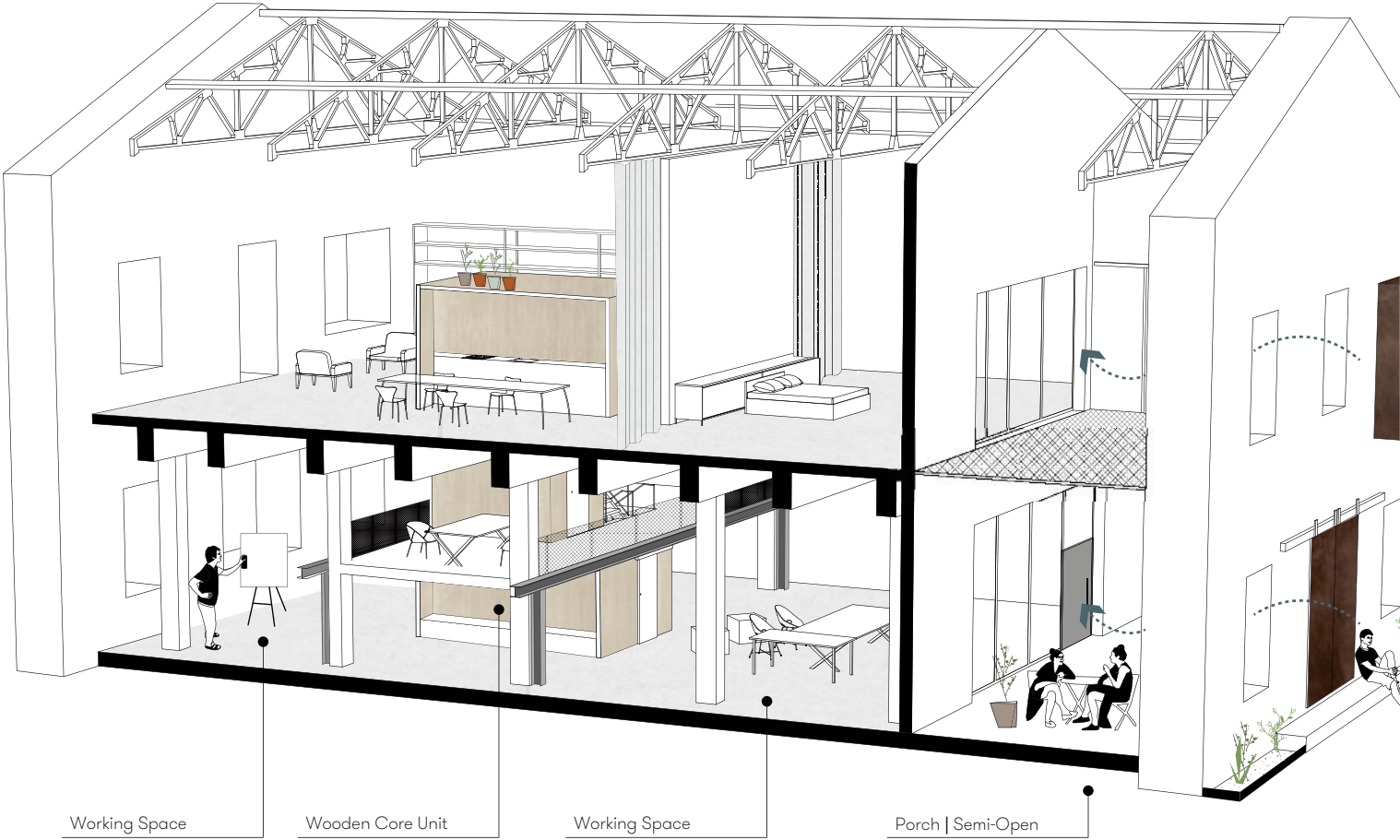
Warehouse Loft

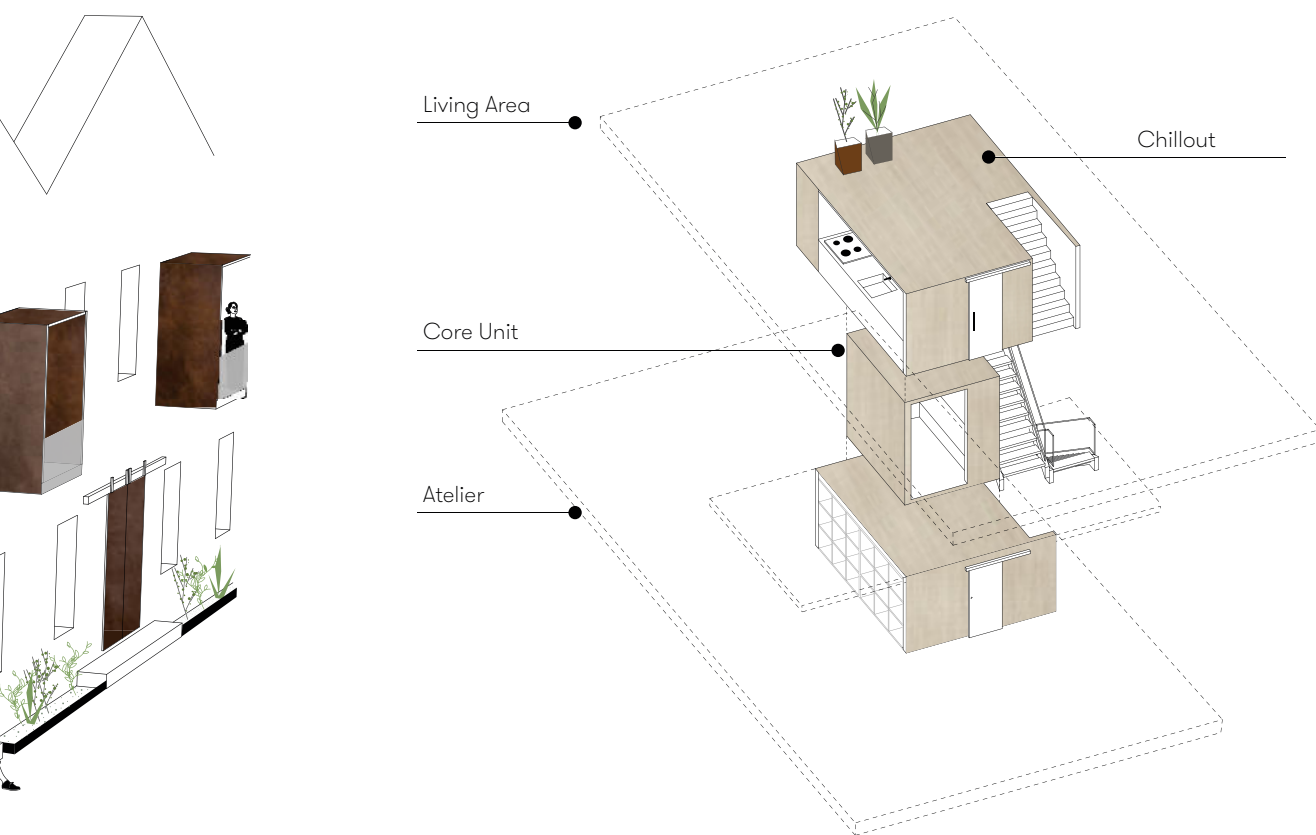


The former warehouses are reused for accommodation and working space. The idea is to rent this loft for a certain amount of time ie. max. 1 year. The interior is reshaped by adding a porch in order to create a semi open working environment for recreation purposes. The existing columns are preserved in their original forms, the additions are not attached to the existing elements to indicate a distinction between old and new structure.

Floor Plan | M 1:250

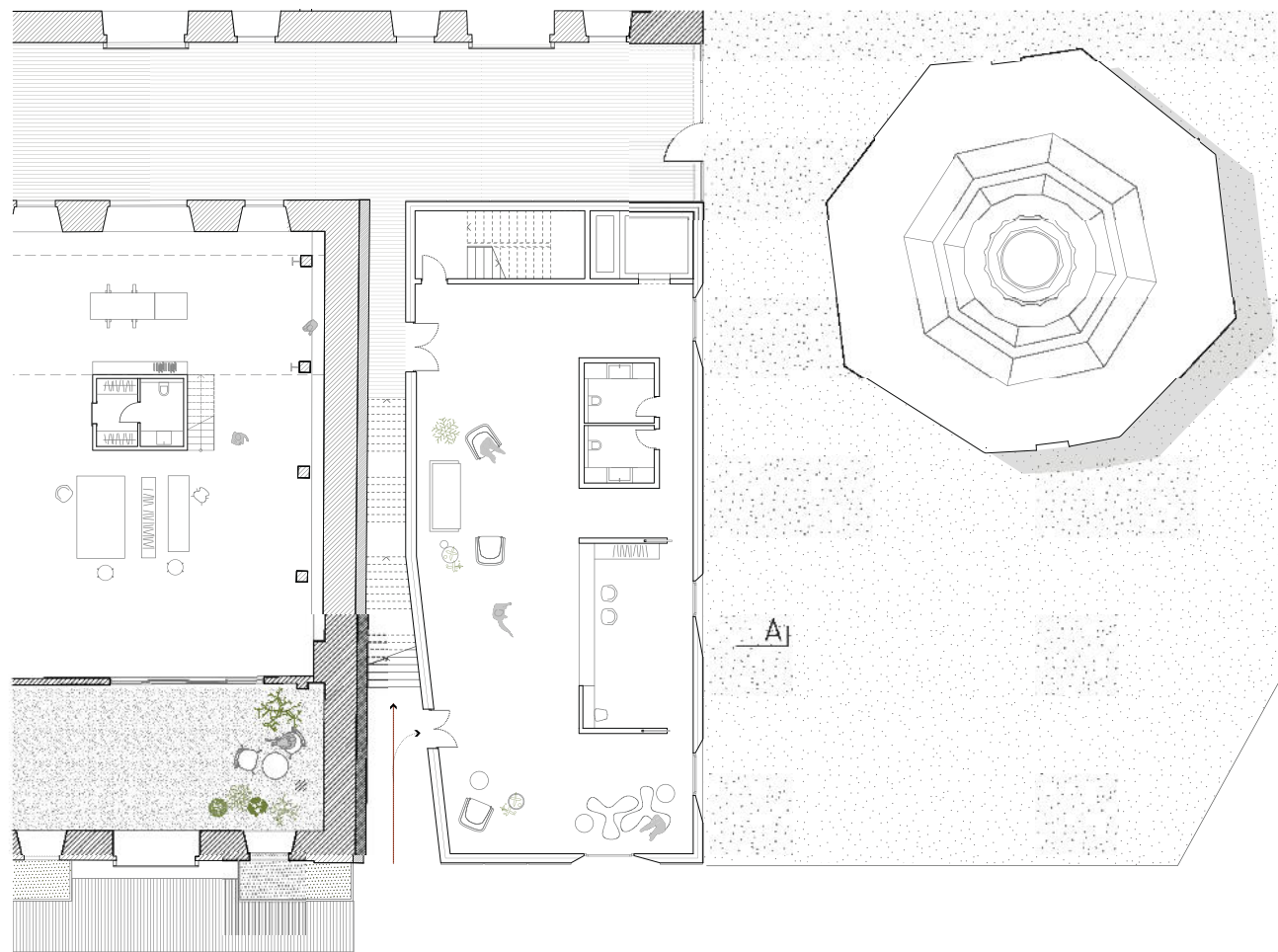
5 10 20 50





Plywood Core Unit

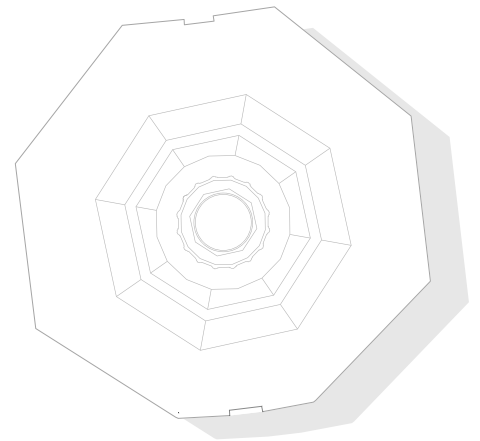
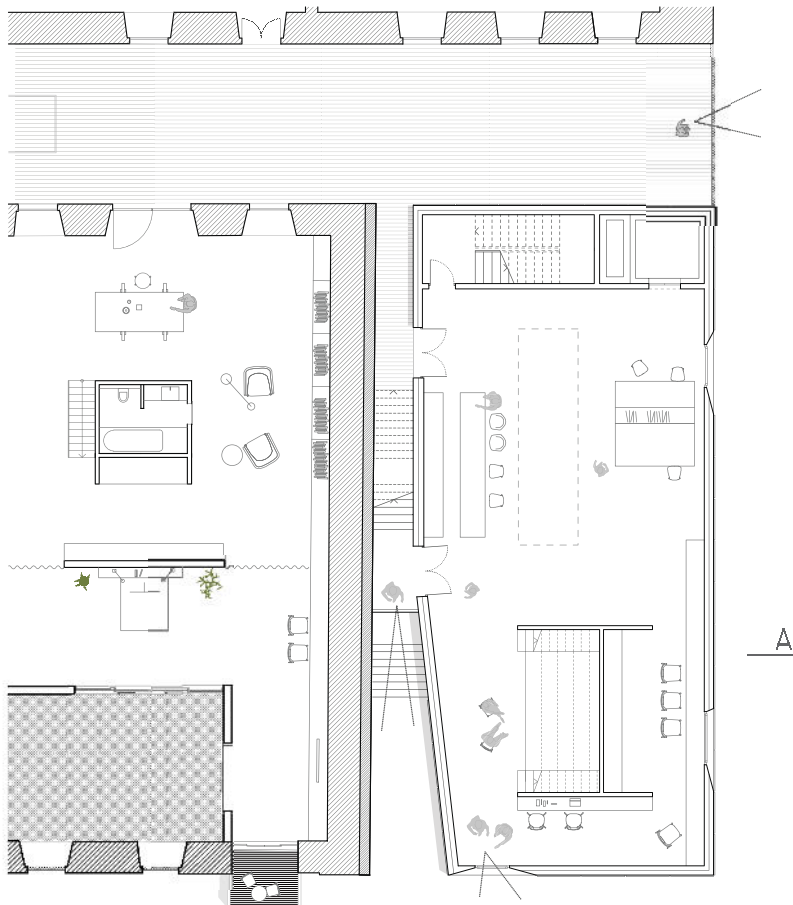
A core unit at the center of the ground floor runs through. This large piece of furniture with stairs assembles the needs of the users. It is a service box with integrated *kitchen, bed, toilet, shelves, storage*. The material is out of plywood. The rest of the space the so called negative space is organized around this box.



Floor Plan | M 1 250



Level 0 | Lobby
+ 0,00

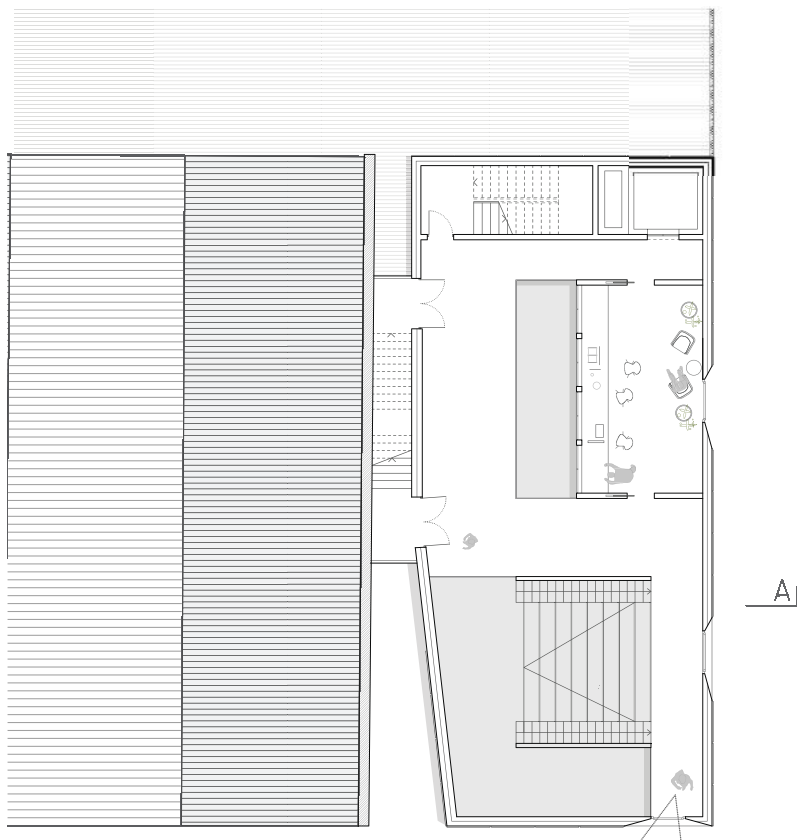


Floor Plan | M 1 250

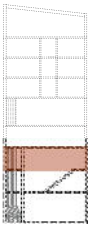
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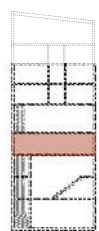
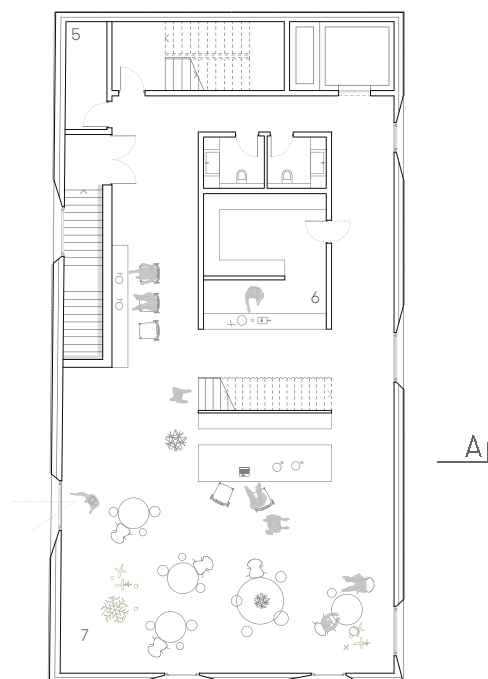
Level 1 | Open Workshop Space
+ 5,00



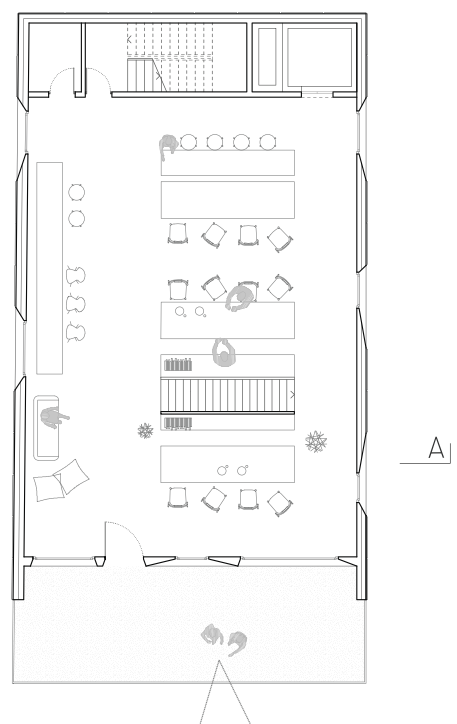
Floor Plan | M 1 250



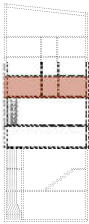
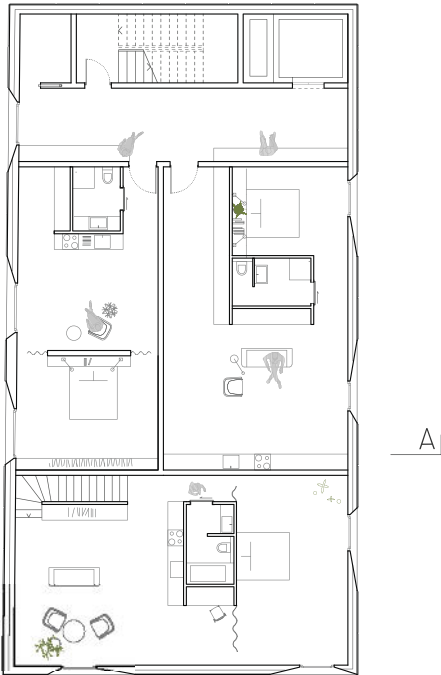
Level 3 | Office
+ 8,40



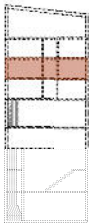
Level 4 | Cafe
+ 11,40



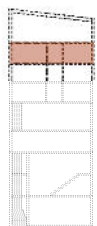
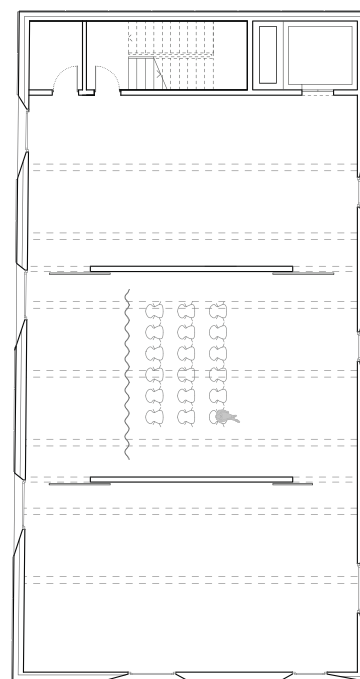
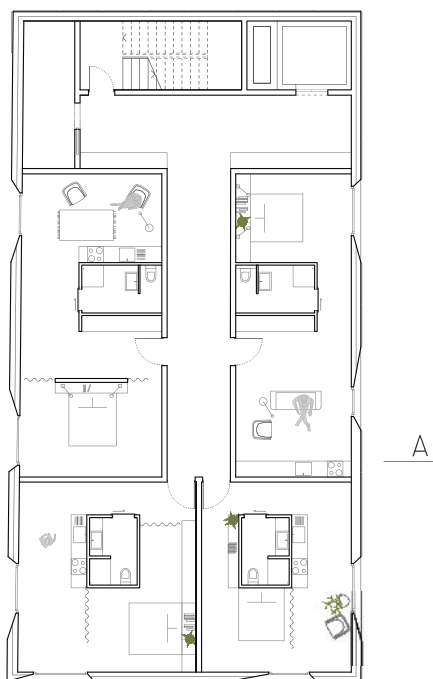
Level 5 | Cafe
+ 14,90



Level 6 | Artist in Residence
+ 18,40



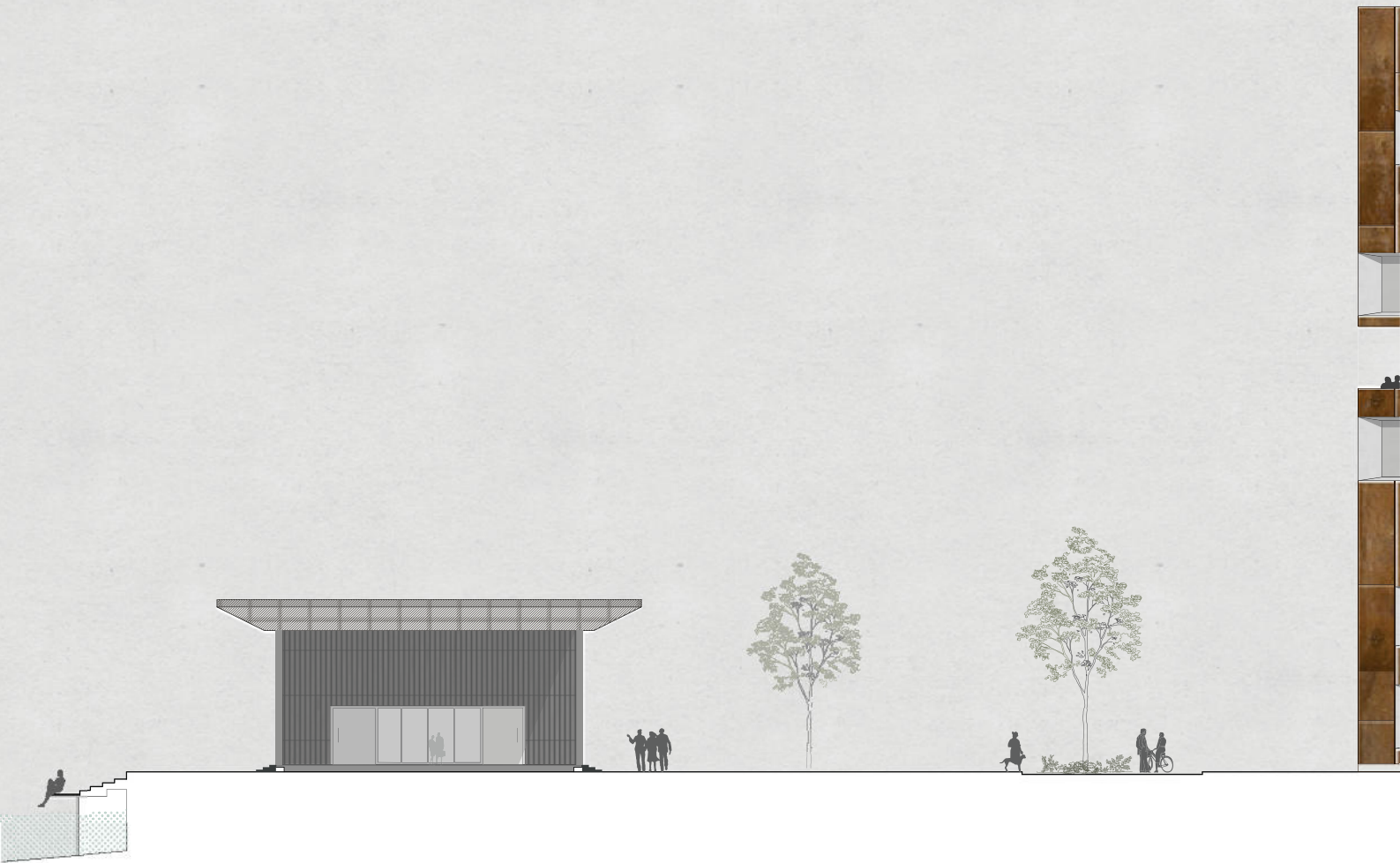
Level 7 | Artist in Residence
+ 21,60



Level 8 | Artist in Residence
+ 24,80



Level 9 | Multi-functional space
+ 28,00

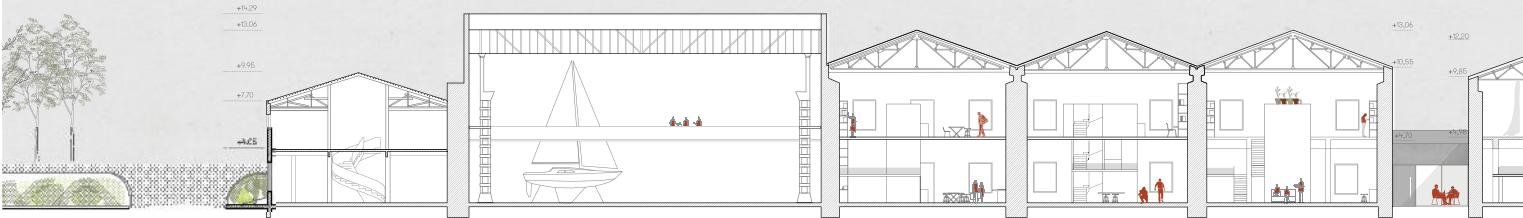


View from East | M 1 250







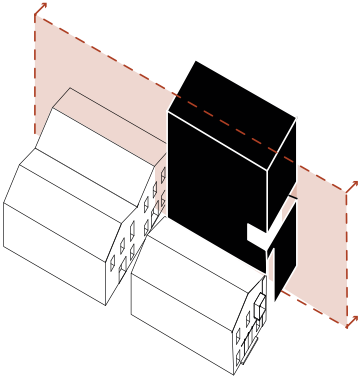


Section A-A | M 1 500



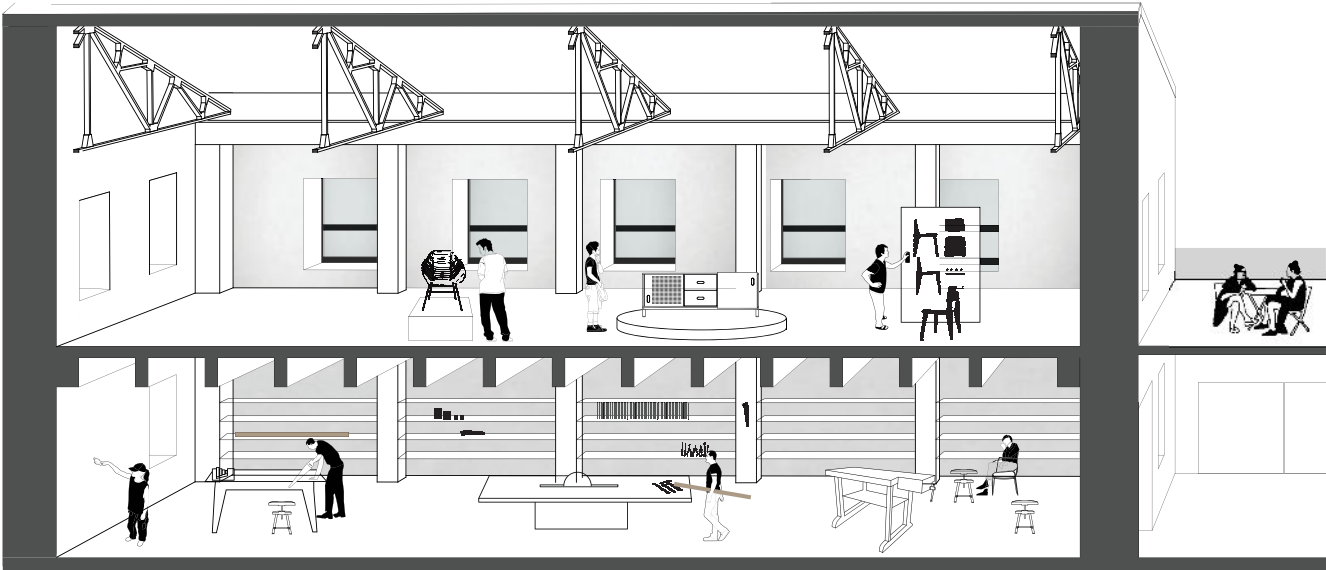


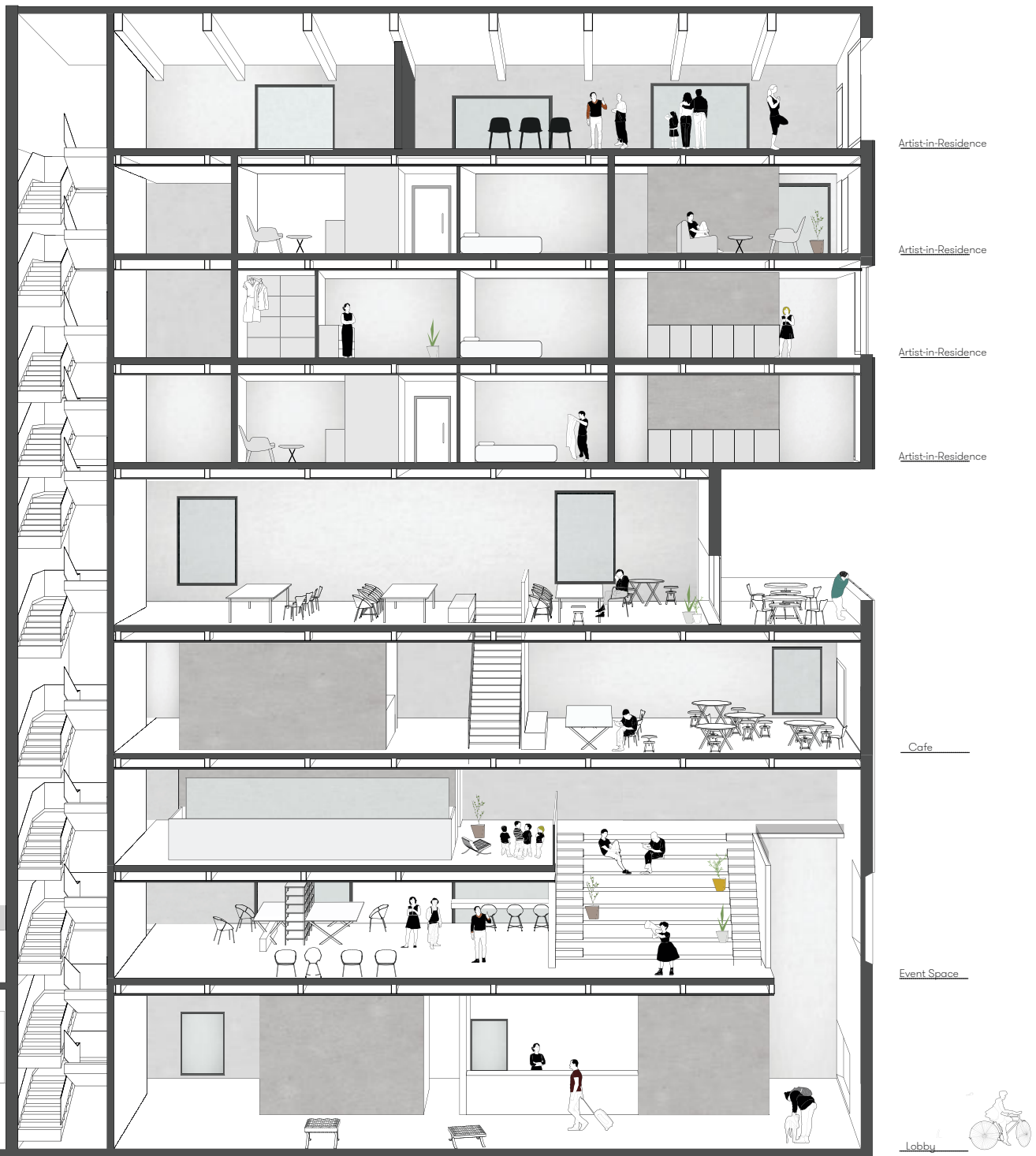


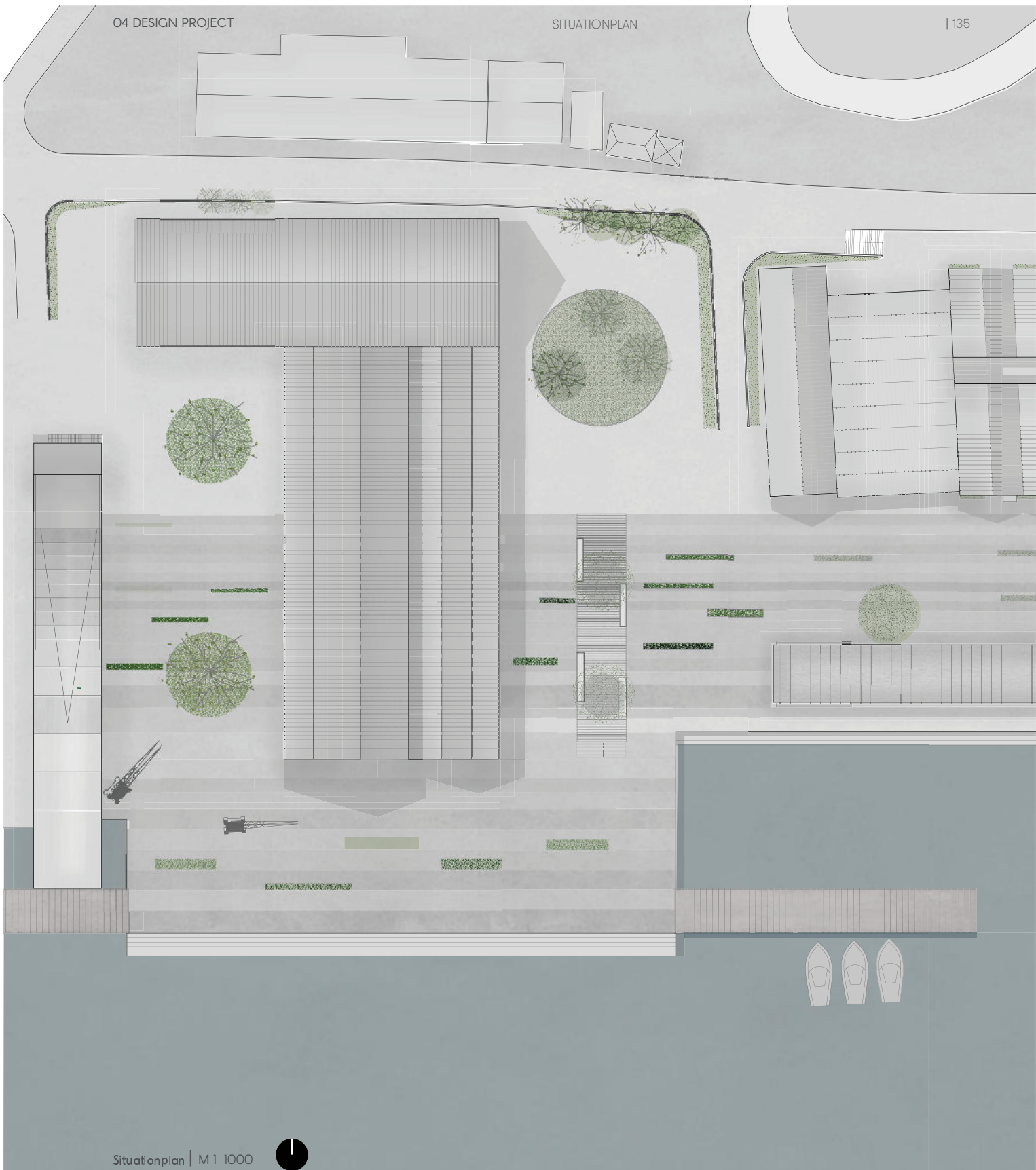


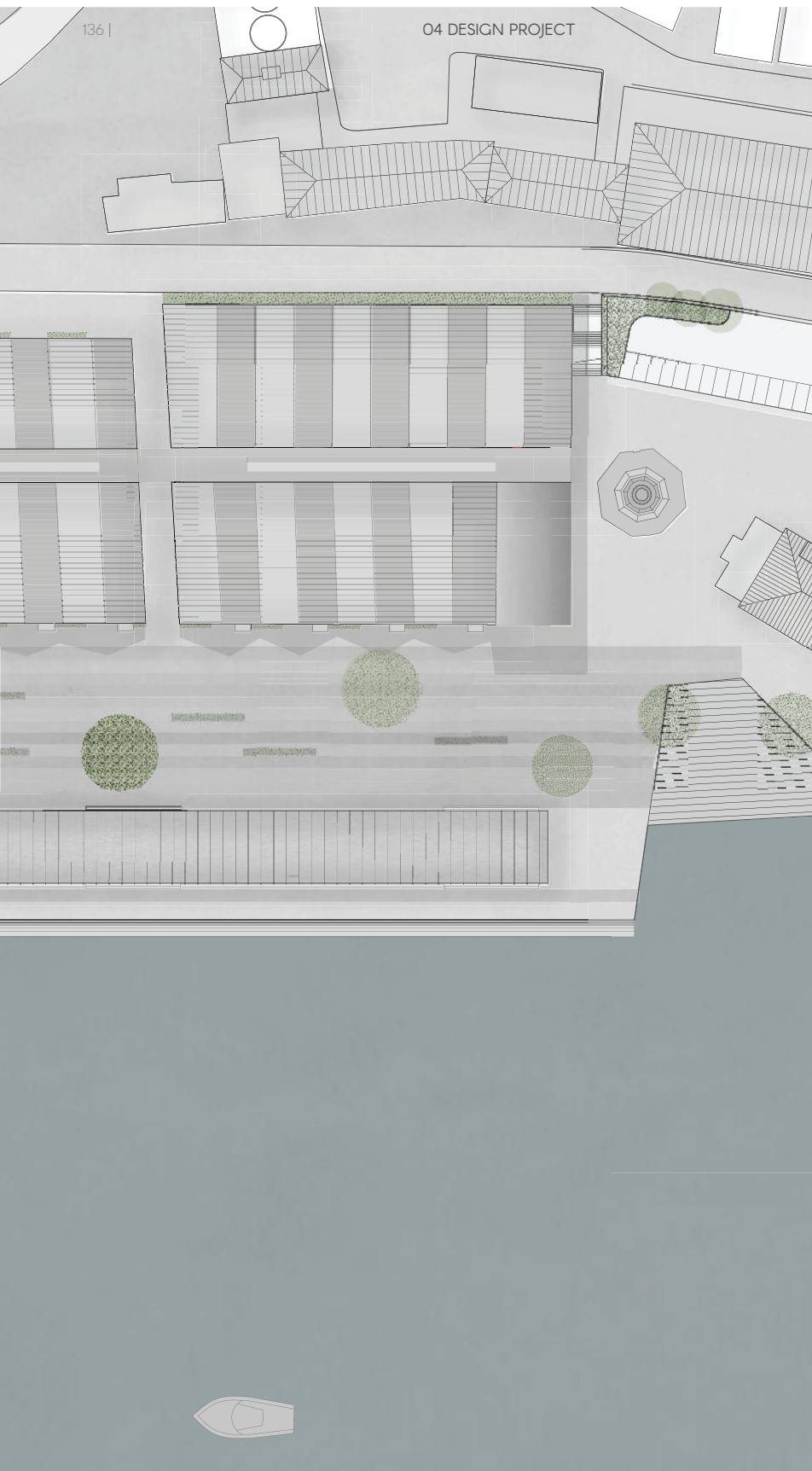
Atelier | Showroom

Atelier | Carpenter









SITUATIONPLAN



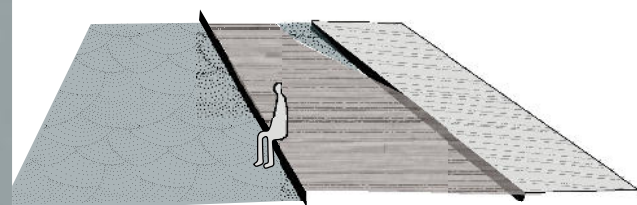
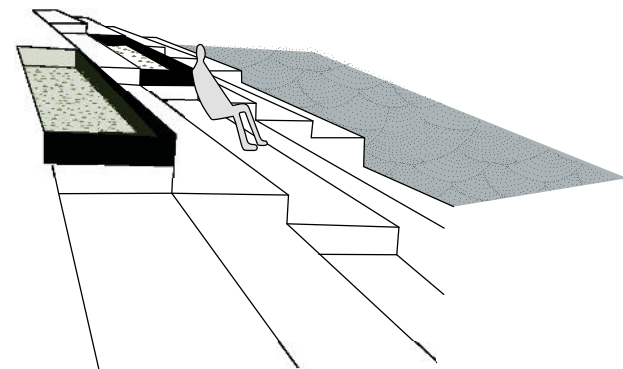
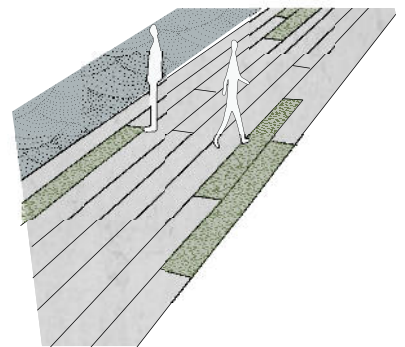
Fig 14



Fig 15



Fig 16



Waterfront usage



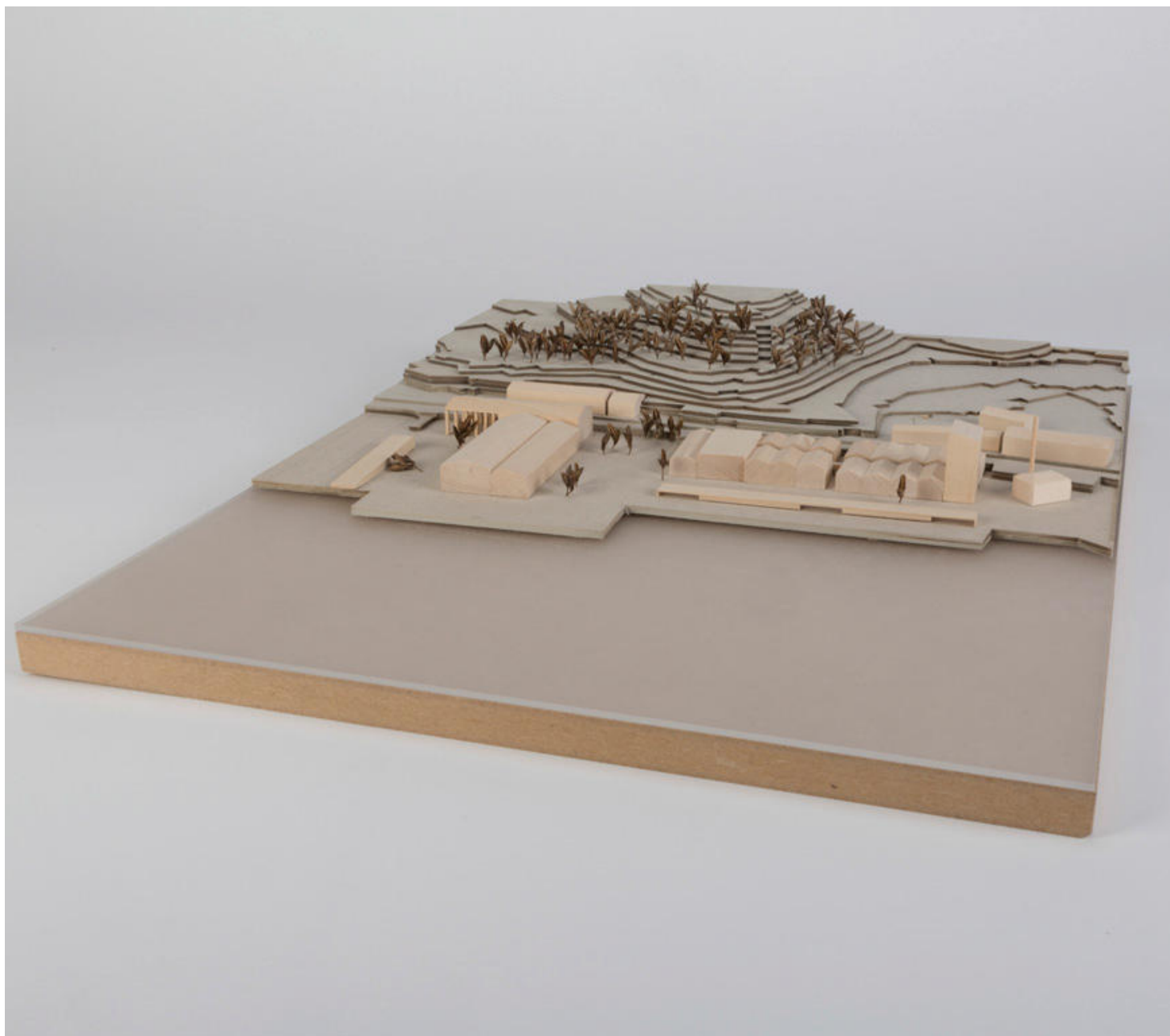


The issue with an industrial heritage is that there is no clearly defined strategy in terms of preserving a structure. Because the approach to the project depends majorly on its location, historical background, the type of structures on the site, scale and its former function. These are criterias which vary from one to another and guide us when designing. Unfortunately, buildings cannot keep up with the passing time and technology, as a result they are either obliged to adapt to changes or to be abandoned.

When approaching the site Camialti Shipyard, it was very important for me to have respect to everything that managed to exist until today. Because this place of memory owns significant elements of the industrial history of Turkey, which should not be wiped away in the collective memory of people. Instead their existence should be passed on to the next generations, by virtue of a well-preserved heritage empowers new generation to find out their cultural history.

The main challenge in this project was to deal with different types of existing buildings of a large surface area. The new program had to be balanced with the large scale of the structures. However this actually offered a lot of flexibility and was easier to shape. Especially the hangar offered with its huge horizontal and vertical dimension an easier distribution of functions. This design proposal should display a possible scenario how the spatial relation between old and new can be redefined and function as an ensemble. Preservation

Another issue that needs to be pointed is that these sites were once restricted areas from the outside world. They owned an organization with its own working people, administration and functions. Today, as these sites are rehabilitated besides the individual buildings to consider is also how to make the waterfront a public space. One of the significant value of the site is its urban fabric and its co-existence with the surrounding. The aim was to open this space not only for the creative industry but also for the locals who are living in this city. The imperial arsenals occupy a huge space of land, because they are closed to the public an unnecessary interruption occurs within this part of the city. Camialti shipyard in between two industrial heritages is intended to be the branch point that opens up and contributes a solution to this issue.















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IMAGE INDEX

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Figure 1 online under: <https://www.flickr.com/photos/museastadantwerpen/22051391735/in/photostream/>

Figures 1, 4, 5, 8, 9 on page 21–22 are from
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Figure 2 author unknown, The launch of frigate from Valide Kizak Dock, 1890 (Istanbul Naval Museum)

Figure 3 online under: https://en.wikipedia.org/wiki/Prosphorion_Harbour#/media/File:Constantinople_Braun_Hogenberg_Golden_Horn_01.JPG

Figure 4 author unknown, "Panaroma of Galata" continuous row of shipsheds at the waterfront, Codex Vindobonensis, 1590s (Österreichische Nationalbibliothek, folio 161)

Figure 5 online under: [https://tr.wikipedia.org/wiki/%C4%B0stanbul_Surlar%C4%B1#/media/File:Map_of_Constantinople_\(1422\)_by_Florentine_cartographer_Cristo_foro_Buondelmonte.jpg](https://tr.wikipedia.org/wiki/%C4%B0stanbul_Surlar%C4%B1#/media/File:Map_of_Constantinople_(1422)_by_Florentine_cartographer_Cristo_foro_Buondelmonte.jpg)

Figure 6 online under: <http://kilyos.ee.bilkent.edu.tr/~history/Pictures1/im47.jpg>

Figure 7 online under: <http://eski.istanbulium.net/post/103064791045/hali%C3%A7-tersanesi>

Figure 8 Levni, "Festivities of the Golden Horn" Surname-i Vehbi, 1720 (Topkapi Palace Museum Library, A. 3593, folio 92b–93a)

Figure 9 online under: https://tr.wikipedia.org/wiki/Dosya:Abdullah_fr%C3%A8res_Ottoman_Dept_of_Navy_1880s.jpg

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Figure 12 online under: http://www.fondazioneprada.org/wp-content/uploads/Fondazione-Prada-Bas-Princen_1-800x640.jpg

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Figure 14 online under: http://www.west8.nl/projects/spadina_wavedeck/?s=Wave

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Figure 16 online under: <http://pinbrowse.net/photo/506655026801545610>

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