

# Omer Sezai Madra

Ex-Olive Oil and Soap Factory





**Politecnico  
di Torino**

Master of Science Program / Arcitecture for Heritage

**Adaptive Reuse Design Approaches in Industrial Heritage  
Buildings: The case of Omer Sezai Madra Olive Oil and Soap  
Factory, Ayvalik, Turkey**

Thesis Supervisor:  
Prof.Matteo ROBIGLIO

Damla Esaspehlivan  
Msc.Architecture for Heritage  
s315494

*February 2026*

## ABSTRACT

This study proposes strategies and design approaches for the adaptive reuse of industrial architectural heritage, with the aim of preserving historical continuity while reintegrating disused structures into the contemporary urban fabric. Within this scope, the Ömer Sezai Madra Former Olive Oil and Soap Factory was selected as the case study. Constructed in the last quarter of the 20th century, the building reflects the architectural characteristics shaped by its period and geographical context and currently stands as an abandoned industrial structure. Located in Ayvalık, Turkey, the site holds significant historical value, as the city emerged as a major center for olive oil and soap production during the 20th century by utilizing its geographically driven natural resources. The proliferation of factory buildings from this period formed a distinct industrial fabric that continues to define Ayvalık's urban identity. In recognition of this heritage, Ayvalık was inscribed on the UNESCO World Heritage Tentative List in 2017 under the title "Ayvalık Industrial Landscape."

The primary objective of the project is to adapt the building to contemporary use through new design approaches without compromising its characteristic features that involve the traces of industrial architecture of its era, thereby reintegrating it into the present-day urban planning. In accordance with the newly proposed function, the study explores architectural and structural interventions that respond to current needs while remaining compatible with the building's original identity and spatial definition. The reprogramming of the structure is determined in relation to the needs of residents and its potential contribution to the urban life of Ayvalık.

Within the design approach, proposed interventions to both the building and its interior organization are developed to avoid permanent damage to the original fabric, while acknowledging the transformations that occurred during the building's operational life as part of its layered history. Newly introduced architectural elements are designed to coexist harmoniously with the historic fabric, simultaneously enhancing the legibility of the original structure and clearly articulating the contemporary interventions. The overarching aim of the proposed design strategies is to improve the building's functional capacity while emphasizing that new additions act as "guests" within the existing structure, reinforcing a clear distinction between old and new within the adaptive reuse framework.

## ABSTRACT (IT)

Questo studio propone strategie e approcci progettuali per il riuso adattivo del patrimonio architettonico industriale, con l'obiettivo di preservare la continuità storica e al contempo reintegrare le strutture dismesse nel tessuto urbano contemporaneo. In questo quadro, l'ex Fabbrica di Olio d'Oliva e Sapone Ömer Sezai Madra è stata selezionata come caso studio. Costruito nell'ultimo quarto del XX secolo, l'edificio riflette le caratteristiche architettoniche plasmate dal periodo storico e dal contesto geografico e attualmente si presenta come una struttura industriale abbandonata. Situato ad Ayvalık, in Turchia, il sito possiede un rilevante valore storico, poiché la città si è affermata nel corso del XX secolo come importante centro per la produzione di olio d'oliva e sapone, grazie allo sfruttamento delle risorse naturali determinate dalla sua posizione geografica. La proliferazione degli edifici industriali di questo periodo ha dato origine a un tessuto produttivo distintivo che continua a definire l'identità urbana di Ayvalık. In riconoscimento di questo patrimonio, Ayvalık è stata inserita nel 2017 nella Lista Propositiva del Patrimonio Mondiale dell'UNESCO con la denominazione di "Paesaggio Industriale di Ayvalık."

L'obiettivo principale del progetto è adattare l'edificio a usi contemporanei attraverso nuovi approcci progettuali, senza comprometterne le caratteristiche peculiari che racchiudono le tracce dell'architettura industriale della sua epoca, reintegrandolo così nella pianificazione urbana attuale. In linea con la nuova funzione proposta, lo studio esplora interventi architettonici e strutturali che rispondano alle esigenze contemporanee, rimanendo al contempo compatibili con l'identità originaria dell'edificio e con la sua definizione spaziale. La rifunzionalizzazione della struttura è definita in relazione ai bisogni dei residenti e al suo potenziale contributo alla vita urbana di Ayvalık.

Nell'ambito dell'approccio progettuale, gli interventi proposti sia sull'edificio sia sulla sua organizzazione interna sono sviluppati in modo da evitare danni permanenti alla materia originaria, riconoscendo al contempo le trasformazioni avvenute durante la vita operativa dell'edificio come parte della sua storia stratificata. I nuovi elementi architettonici introdotti sono concepiti per coesistere in modo armonioso con il tessuto storico, migliorando al contempo la leggibilità della struttura originaria e rendendo chiaramente riconoscibili gli interventi contemporanei. L'obiettivo generale delle strategie progettuali proposte è potenziare la capacità funzionale dell'edificio, sottolineando al contempo che le nuove aggiunte agiscono come "ospiti" all'interno della struttura esistente, rafforzando una chiara distinzione tra antico e nuovo nel quadro del riuso adattivo.

# TABLE OF CONTENTS

## Chapter 1: Project Site and Context

|  |    |
|--|----|
| 1.1 Geographic Location                        | 01 |
| 1.2 Historical Background of Ayvalik           | 03 |
| 1.3 Urban Context and Surroundings             | 07 |
| 1.3.1 Site Analysis                            |    |
| 1.4 Industrial Historical Buildings of Ayvalik | 13 |

## Chapter 2: The Omer Sezai Madra Ex- Olive Oil and Soap Factory

|   |    |
|---|----|
| 2.1 Historical Background of the Building | 18 |
| 2.2 Architectural Documentation           | 24 |
| 2.2.1 Plans                               |    |
| 2.2.2 AA Section                          |    |
| 2.3 Analytical Diagrams                   | 29 |
| 2.3.1 Shearing Layers                     |    |

## Chapter 3: Definition of the New Function

|                           |    |
|---------------------------|----|
| 3.1 Site Analyses         | 41 |
| 3.2 Architectural Program | 43 |
| 3.3 Concept Narrative     | 44 |

## Chapter 4: t

|                                       |    |
|---------------------------------------|----|
| 4.1 Design Approachs                  | 48 |
| 4.2 Additional Structures             | 61 |
| 4.3 Adaption of Function Requirements | 67 |

|                           |    |
|---------------------------|----|
| References / Bibliografia | 75 |
|---------------------------|----|

# 1

## Project Site and Context

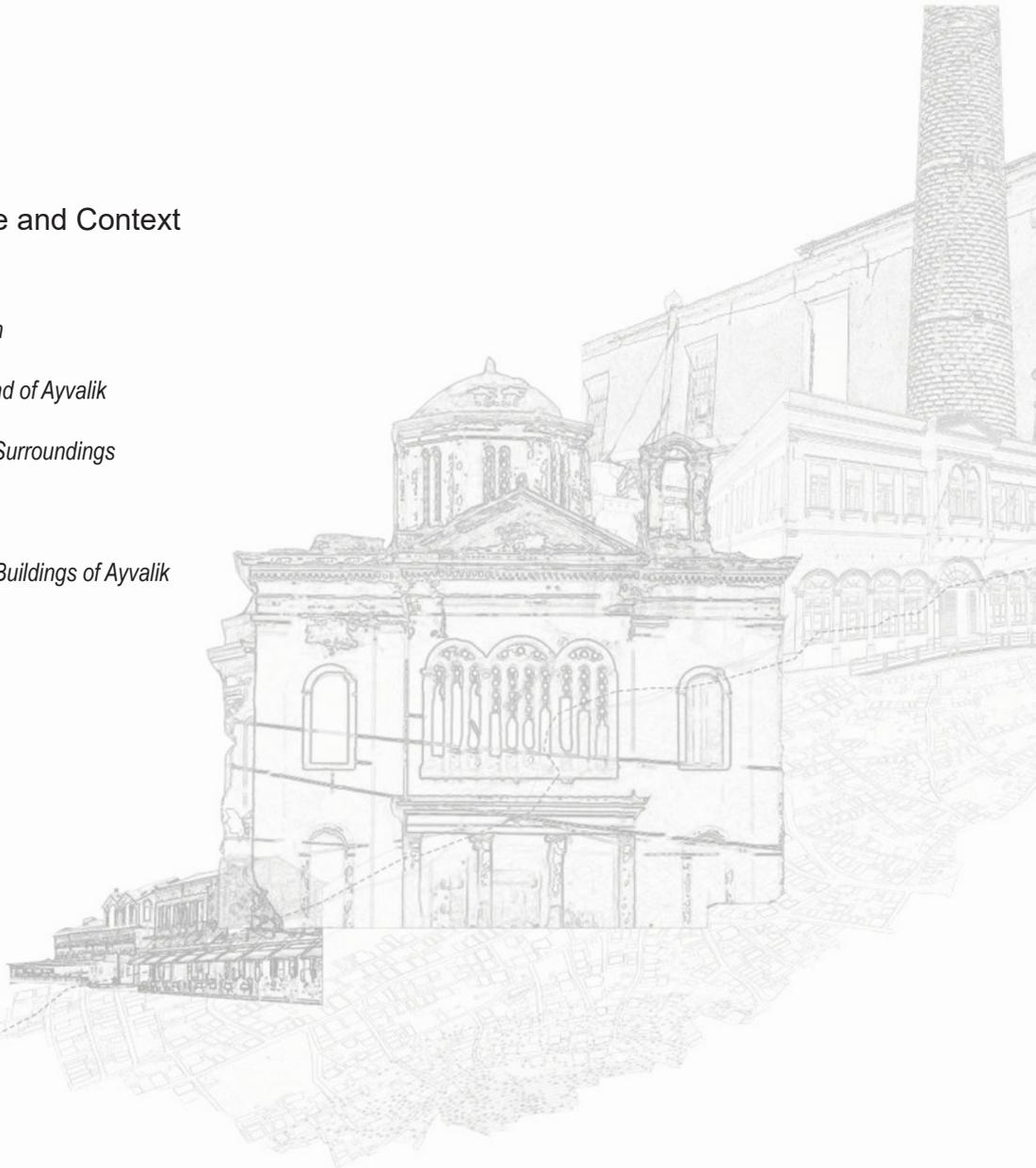
*1.1 Geographic Location*

*1.2 Historical Background of Ayvalik*

*1.3 Urban Context and Surroundings*

*1.3.1 Site Analysis*

*1.4 Industrial Historical Buildings of Ayvalik*



## 1.1 Geographic Location



## Cunda Island Connection

- 1 Kirlangic Ex-Olive Oil Factory | Kirlangic Shopping Mall
- 2 Ertemler Ex-Olive Oil Factory | Ayvalik R Koc Museum
- 3 Omer Sezai Madra Ex-Olive Oil Factory
- 4 Cafe Kanelo
- 5 Taksiyarhis Church
- 6 Saatli Mosque ( Agia Ianni Church)
- 7 Cinarli Mosque (Aya Yorgi Church)
- 8 Little Inn
- 9 Portaitissa Church
- 10 Georgola Han

- Coastline
- Historical City Center

- Lisbos Ferry Pier
- Cunda Ferry Pier (Main Sea Transportation Point)
- Ayvalik Setur Marina ( Private and Commercial Use)

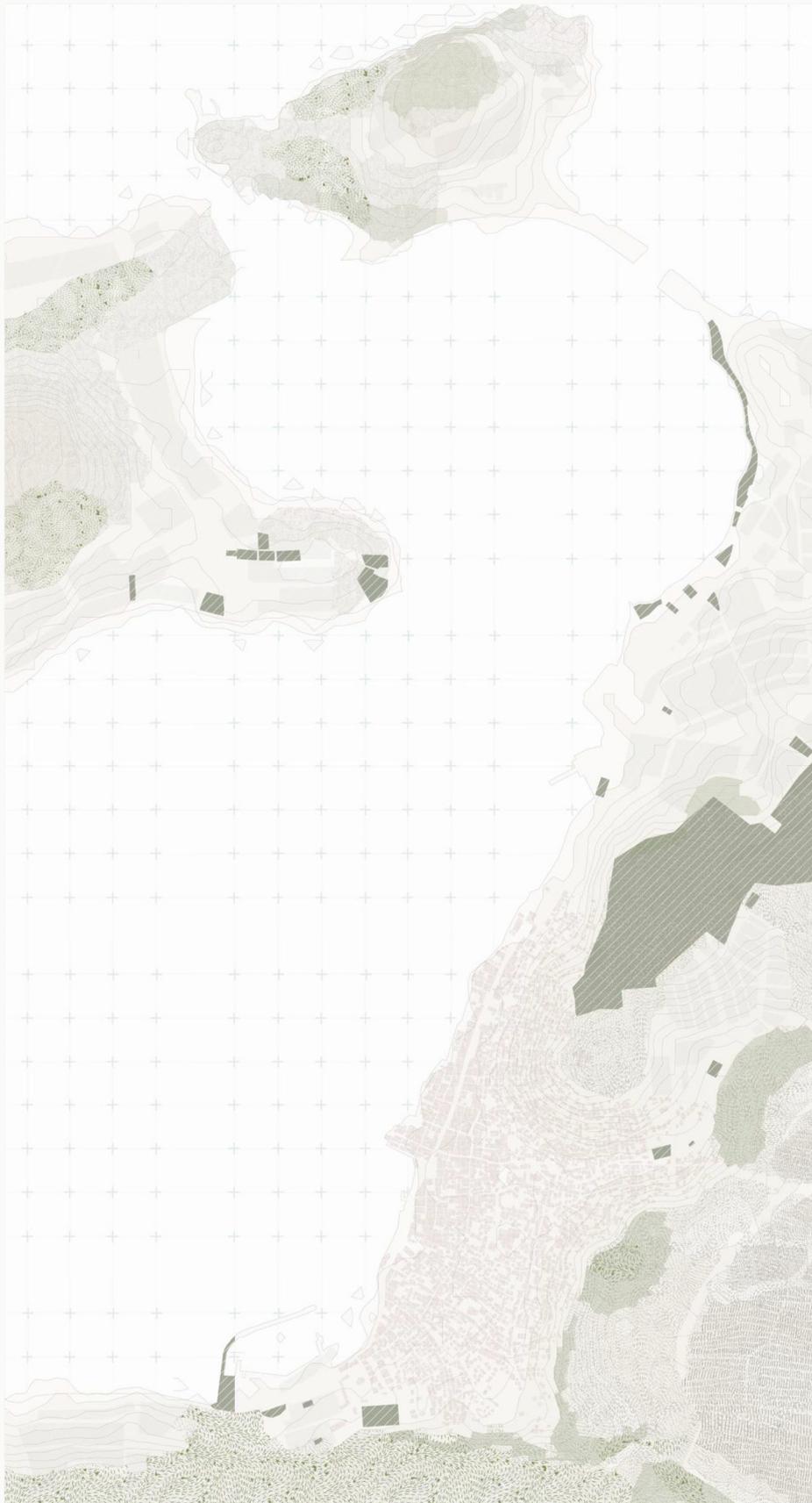
Ayvalik, a coastal district in the Aegean Region of Turkey, is part of the province of Balıkesir and stands out for both its natural beauty and strategic location. Its proximity to many archaeological sites, including the important ancient city of Bergama to the south, makes the district culturally and touristically valuable. With its rich greenery, fertile soil, and favorable climate, it is well-suited for agricultural production, particularly olive cultivation. As a coastal city, Ayvalik also benefits from transportation advantages, being easily accessible by sea to the island of Lesbos and by land to major cities such as Izmir and Balıkesir. The district, which attracts attention with its tourist areas such as Cunda Island and Sarımsaklı Beach, is one of the prominent settlements in the Aegean region, combining natural and historical values. Despite facing challenges such as unplanned urbanization, a significant increase in population during the summer months, and earthquake risks, Ayvalik remains one of Turkey's important districts in terms of production, tourism, and culture.

## 1.2 Historical Background of Ayvalik



Cunda Island, located opposite Ayvalık, is actually an island and the first—and so far only— island in Turkey that can be reached by road. The point connecting the two lands features Turkey’s first strait bridge, built in 1960 and later modernized. By linking Ayvalık’s historic center to Cunda Island, this connection has significantly contributed to the social and economic development of the region. Moreover, it has enabled Cunda Island, and indirectly Ayvalık, to shift from a focus on seasonal tourism to a more permanent year-round destination.

Ayvalık is one of the coastal cities distinguished by its historic city center, natural beauty, layered cultural history, and well-preserved urban fabric. The city reflects a rich cultural heritage, shaped over centuries by various communities that contributed to its architectural character, traditions, and urban identity. This cultural richness has positioned Ayvalık as a prominent center of trade and craftsmanship in the Aegean region, making it a unique example of a city where history and cultural continuity are visibly preserved in the urban landscape.



-  Sparse Vegetation
-  Green Urban
-  Olive Grove
-  Urban Parks
-  Agricultural Occupation
-  Urban Built-up
-  Historical Urban Texture



The examples of civil architecture in the historic city center of Ayvalık demonstrate a strong harmony with the natural environment through the choice of building materials and colors. Local stone, tile, wood, and volcanic tuff, commonly used in the region are well suited to the climatic conditions and reflect the color tones of the surrounding landscape.

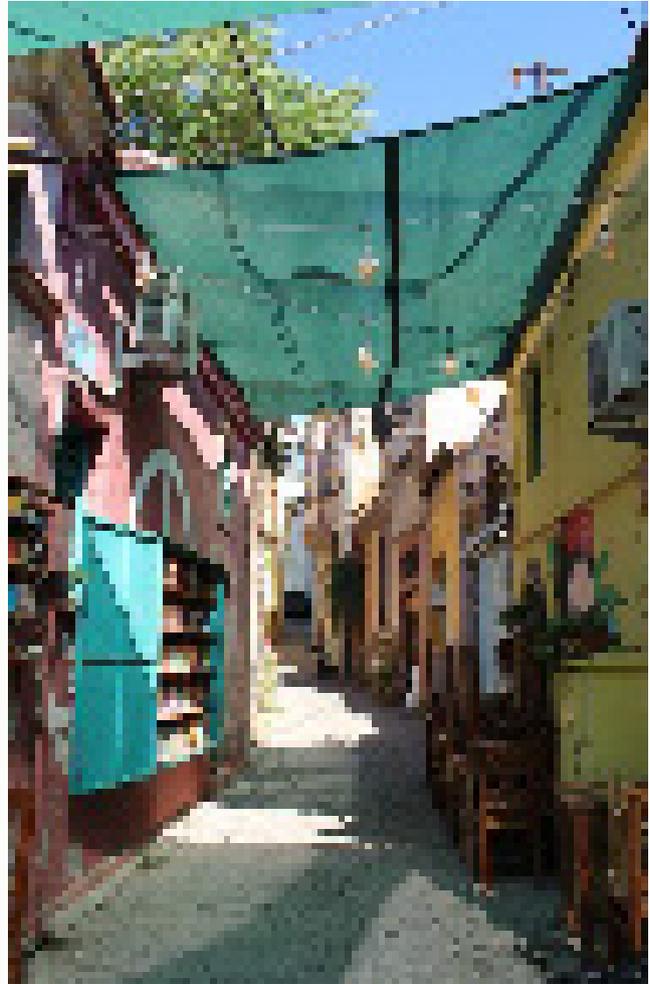


The facades, rendered in earthy tones, create a visual continuity with the green of the olive trees and the blue of the sea. This architectural fabric fosters an urban atmosphere that integrates seamlessly with nature rather than competing with it, making Ayvalık one of the most distinctive and unique settlements on the Aegean coast.

### 1.3 Urban Context and Surroundings



The architectural character of Ayvalık's city center has been strongly influenced by the Orthodox Greek population that settled in the region from the late 18th century onwards. The surviving buildings from this period are primarily stone houses adorned with neoclassical and baroque elements.

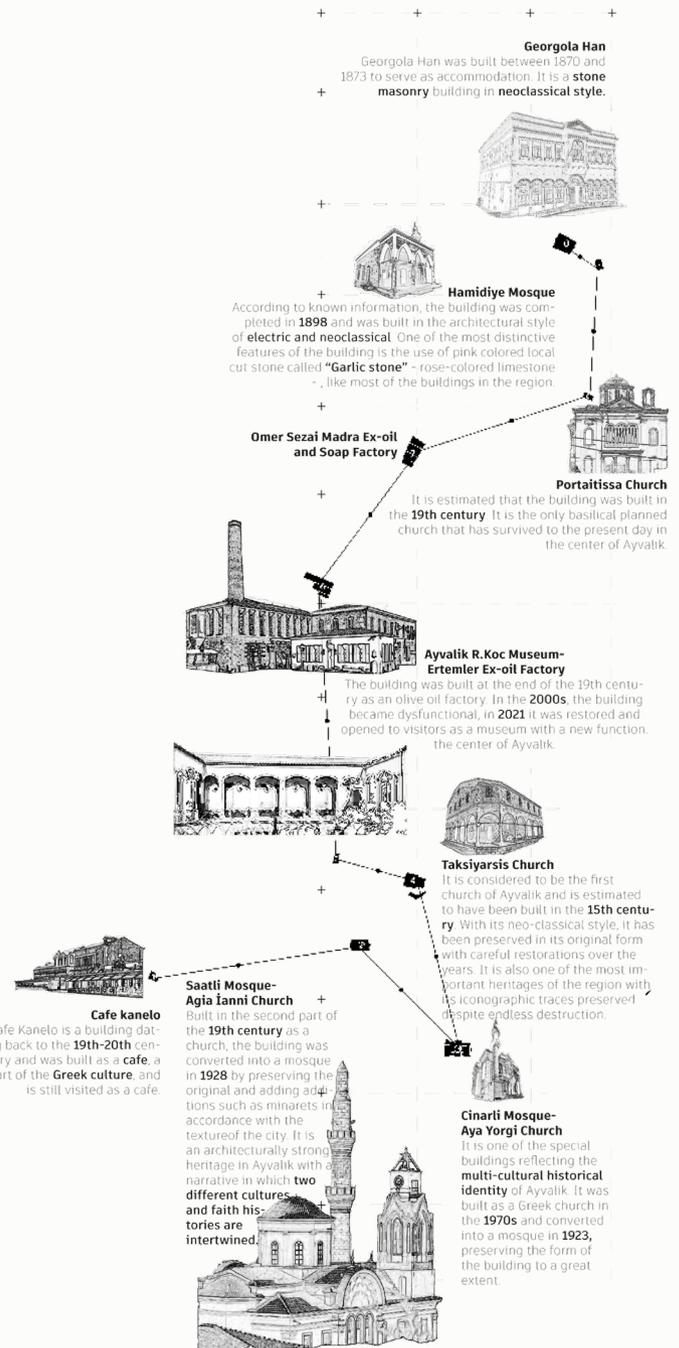




These include houses with bay windows aligned along narrow, sloping streets, facades constructed of volcanic tuff stone, wooden shutters, and stone-arched entrances. Together, these features define the distinctive architectural identity of Ayvalık's historic center. Symmetrical window arrangements, combined with wooden shutters, provide both light control and aesthetic appeal to the facades. Bay windows (projecting floors) often create shade over the streets while contributing to the distinctive character of the buildings. The influence of local Aegean architecture is evident in the climate-responsive building design and the simplicity of the facades. A balanced relationship between functionality and ornamentation, characteristic of late Ottoman civil architecture, is maintained throughout. Additionally, the human-scale proximity between houses facilitates social interaction and reflects the impact of urban densification on the socio-cultural structure.



The architectural heritage of Ayvalık plays a crucial role in defining the city's urban identity. This built heritage not only preserves the city's historical and cultural memory but also enhances the urban fabric by maintaining human-scale proportions, promoting social interaction, and integrating harmoniously with the natural environment, thus reinforcing Ayvalık's distinctive character along the Aegean coast.



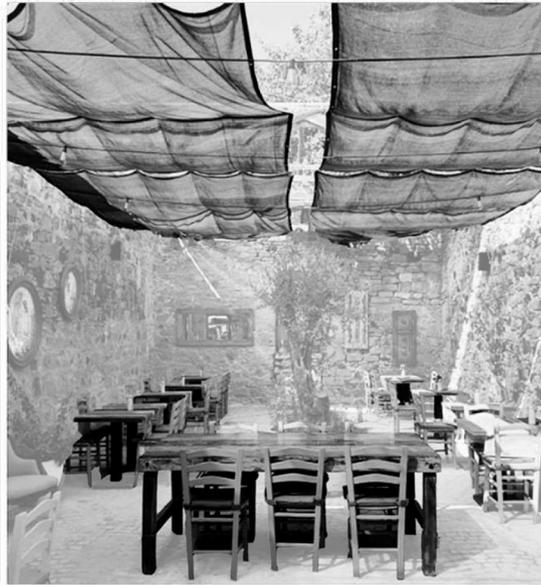


### **Fevzipasa-Vehbibey Neighborhood**

This neighborhood, adjacent to the historic city center, hosts the highest concentration of artisans and boutique hotels, resulting in the greatest daytime urban density. This activity enhances the vibrancy of the historic core and shapes the urban fabric by influencing pedestrian flows and social interaction.

## Macaron Neighborhood

This area attracts attention not only for its historic streets but also for the traditional patisseries located within them. These establishments, serving the authentic flavors of Ayvalık, are among the most popular destinations for both locals and tourists. Architecturally, they are particularly notable because many are housed in vernacular Rum structures, which contribute to the preservation of the city's cultural and urban heritage.



## 1.4 Industrial Historical Buildings of Ayvalik

01

**02** Omer Sezai Madra  
Ex- Olive Oil and Soap  
Factory

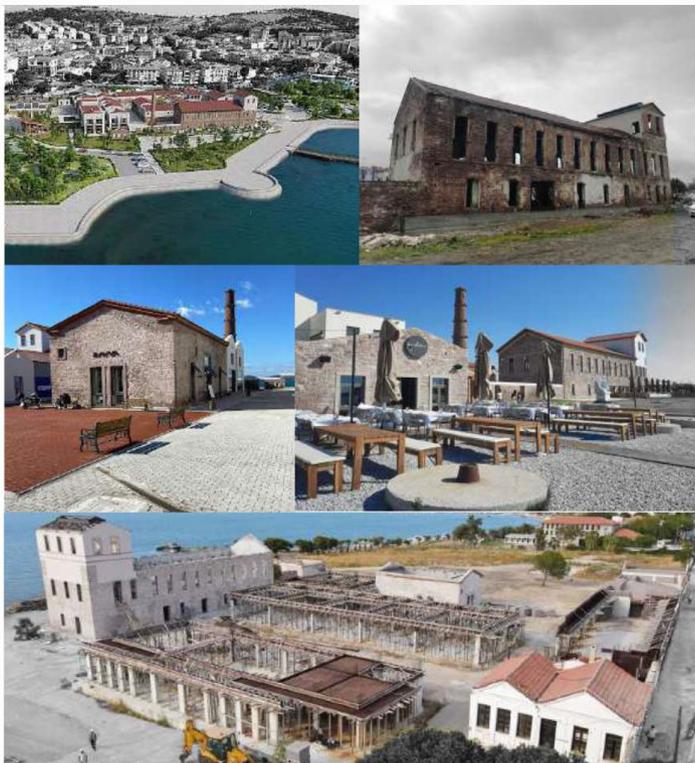
03

04

05

06





## 01

### **Kirlangic Ex-Olive Oil Factory I Kirlangic Shopping Mall**

The construction of the building was completed in 1890, and production began the same year. Operations ceased in 2001, leaving the facility idle until 2018, when restoration and re-functioning works commenced. The building was reopened for use in 2022. Although the restoration project aimed to open the area for social use, create urban spaces, allocate areas for socio-cultural activities, and preserve the building's original character without compromising its industrial identity, these objectives were not fully realized. During implementation, the project shifted toward more commercial use.

03



### **Ertem Ex-Olive Oil Factory| Ayvalik R.Koc Museum**

The building was constructed at the beginning of the 19th century. During the 20th century, the factory reached its peak production. However, as industrial activities in the region gradually moved away from the settlement area, the building lost its original function. Restoration work began in 2017, and the building was reopened to visitors in 2024.

## 04

### **Emin Suner Ex-Olive oil Factory**

The construction of the building was completed in 1925, and production commenced shortly thereafter. Towards the end of the 1990s, the factory became inoperable as the machinery became obsolete. The building was originally designed in accordance with the functional requirements of a factory, featuring high ceilings and large window openings to ensure adequate airflow. In 2016, the structure was renovated and converted into a boutique hotel, while preserving key elements such as the original chim-

## 05

### **Komili Ex-Olive Oil Factory**

The building was active from the 19th century until 2001, functioning as one of the oldest factories in Ayvalık for approximately 110 years. After ceasing operations, it was abandoned and left idle, reflecting the broader decline of industrial activity in the area.

## 06

### **Sabuncugil Ex-Olive Oil Factory**

Constructed in the first quarter of the 20th century, the building served as the first production site of the old Kırlangıç Factory. It was later abandoned when a larger facility was built. According to estimates, the structure is a single-storey building, typically constructed with a masonry wall system using a combination of local stone and bricks. This building is considered significant as it represents the early stages of the industrialization process in Ayvalık.



# 2

## **The Omer Sezai Madra Ex- Olive Oil and Soap Factory**

*2.1 Historical Background of the Building*

*2.2 Architectural Documentation*

*2.2.1 Plans*

*2.2.2 AA Section*

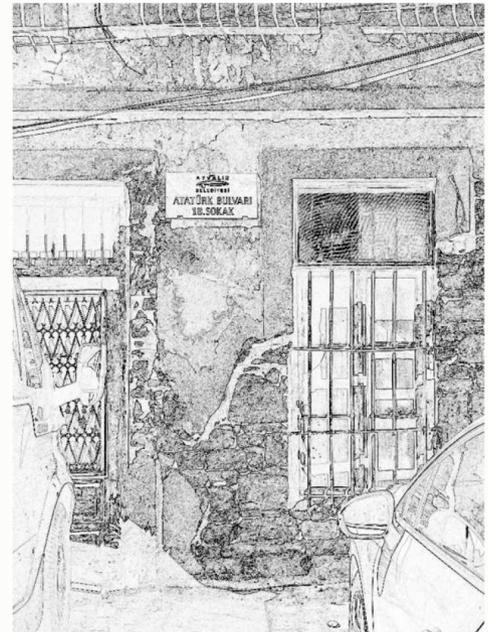
*2.3 Analytical Diagrams*

*2.3.1 Shearing Layers*

## 2.1 Historical Background of the Building

Omer Sezai Madra Olive Oil and Soap Factory, located on the coast of Ayvalik, is one of the most important buildings of Ayvalik's industrial heritage and history. Although it is known that the building was built in the last quarter of the 19th century, it became an active production center between the 1920s. It is a heritage that closely reflects the economic and social structure of the period. The factory was built in 1919 on the coast of Ayvalik, close to the port and transportation. During this period, soap production began to gain more economic value than olive oil, and the factory reached a significant capacity by processing both products together. The updating and modernization of the technologies used in production over time ensured that the factory remained active throughout the 20th century. Especially between 1950 and 1980, when olive oil and soap exports intensified in Turkey, the factory played a central role in the regional economy by operating for both domestic and foreign markets. The factory, established by the Madra family, was a private property and is currently in the process of being sold . By the beginning of the 1990s,

the factory's production capacity began to decline, and the business gradually ceased operations due to the weakening of management, changing economic conditions, and shifts in industrial production. By the first quarter of the 21st century, the factory was completely out of production and gradually became abandoned.





This factory constitutes an industrial landscape not only as an individual production site but also in relation to other olive oil factories located along Ayvalık's coastline. With their chimneys visible from the sea, these structures collectively form an "industrial silhouette" that reflects Ayvalık's historical economic character. The preservation of such buildings within Ayvalık's urban conservation area, which is included on the UNESCO World Heritage Tentative List, is of great importance for sustaining regional identity and ensuring historical continuity.

Although the building is a place of production, its architecture reflects the industrial aesthetics of the period. Like many historical industrial buildings in the region, local stone craftsmanship and industrial architecture coexist. The building was largely constructed using local stone, fired bricks, and partial concrete reinforcements. The facade walls are reinforced with brick elements within the stone masonry. Windows with large openings are designed to provide both natural light and ventilation for the interior. The upper floor spaces contain soap drying areas, storage rooms, and worker rest areas. In some parts of the building, especially in the load-bearing columns and roof systems, a structural system reinforced with wooden beams is used. It is observed that the roof was originally covered with natural tiles, but collapses and material losses have occurred over time. In the central high-ceilinged section, the load-bearing system appears to have been designed to accommodate large openings while also facilitating heat evacuation.



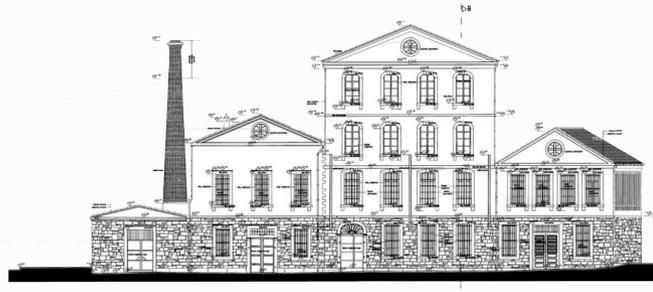


While the factory's facade reflects a combination of simplicity and functionality, it is enriched with certain artistic ornaments. In particular, the triangular pediment on the entrance facade features decorations with symbolic meanings. Elements such as the moon and star, olive branch motifs, and soap mold symbols are featured on the pediment. The olive branch relates to the factory's production and symbolizes peace and fertility, reinforcing local identity. The crescent and star refer to the owner's religious and national identity, and some sources interpret this pediment type as reflecting socio-political changes of the period.

The tall chimney, one of the building's most distinctive elements, is both functional and symbolic. Originally used for smoke evacuation in steam-powered production, it also contributed—together with other factory chimneys—to Ayvalık's characteristic industrial coastal silhouette.

Distinctive and simple ornaments

Neat, original cemented stone wall

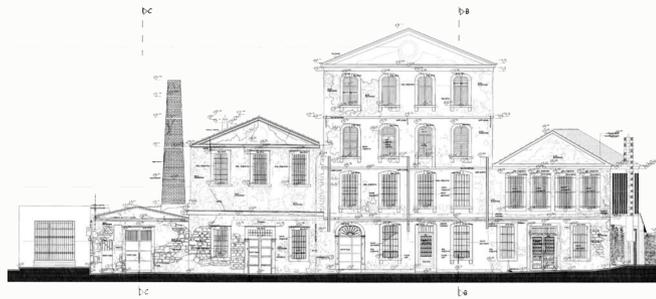


Restoration Project | Cüneyt Timurçin 2010

Worn and wiped decorations

Subsequently added plasters, cracks, plaster spillage, complete exposure of the stone surface in places

Stone deformations in places where plaster deterioration

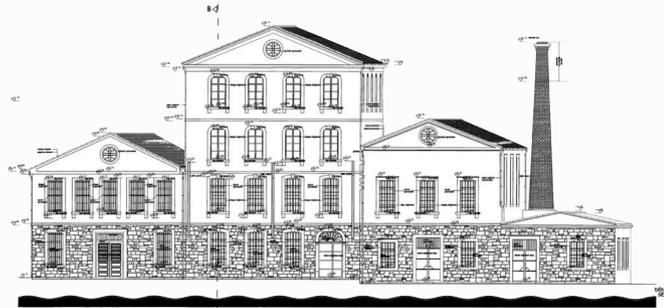


Architectural Survey | Cüneyt Timurçin 2010

Today, although the Ömer Sezai Madra Factory has lost its original production function, it continues to hold a significant place in Ayvalık's cultural heritage. Over time, the building has suffered various forms of deterioration, including partial roof collapse, crumbling walls, and damaged windows, largely due to long-term abandonment and lack of maintenance.

Distinctive and simple ornaments

Neat, original cemented stone wall

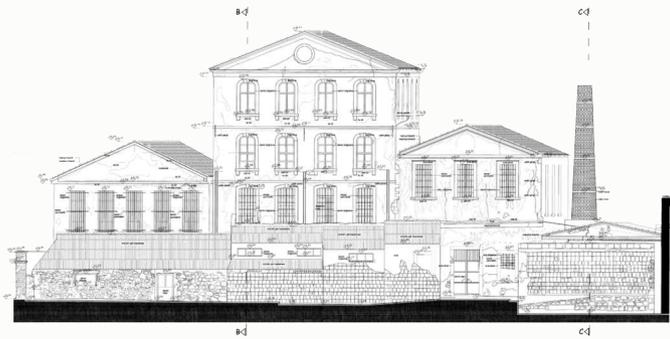


Restoration Project I Concept Timurin 2010

Worn and wiped decorations

Cracks, plaster spillage, complete exposure of the stone surface in places

Subsequently added masonry-concrete structure



Architectural Survey I Concept Timurin 2010

Despite its current physical condition, the factory remains a valuable example of the region's industrial past. For this reason, it is widely regarded as a structure that requires careful preservation and documentation, both in terms of industrial archaeology and architectural heritage, as it represents an important layer of Ayvalık's historical and cultural continuity.

## 2.2 Architectural Documentation



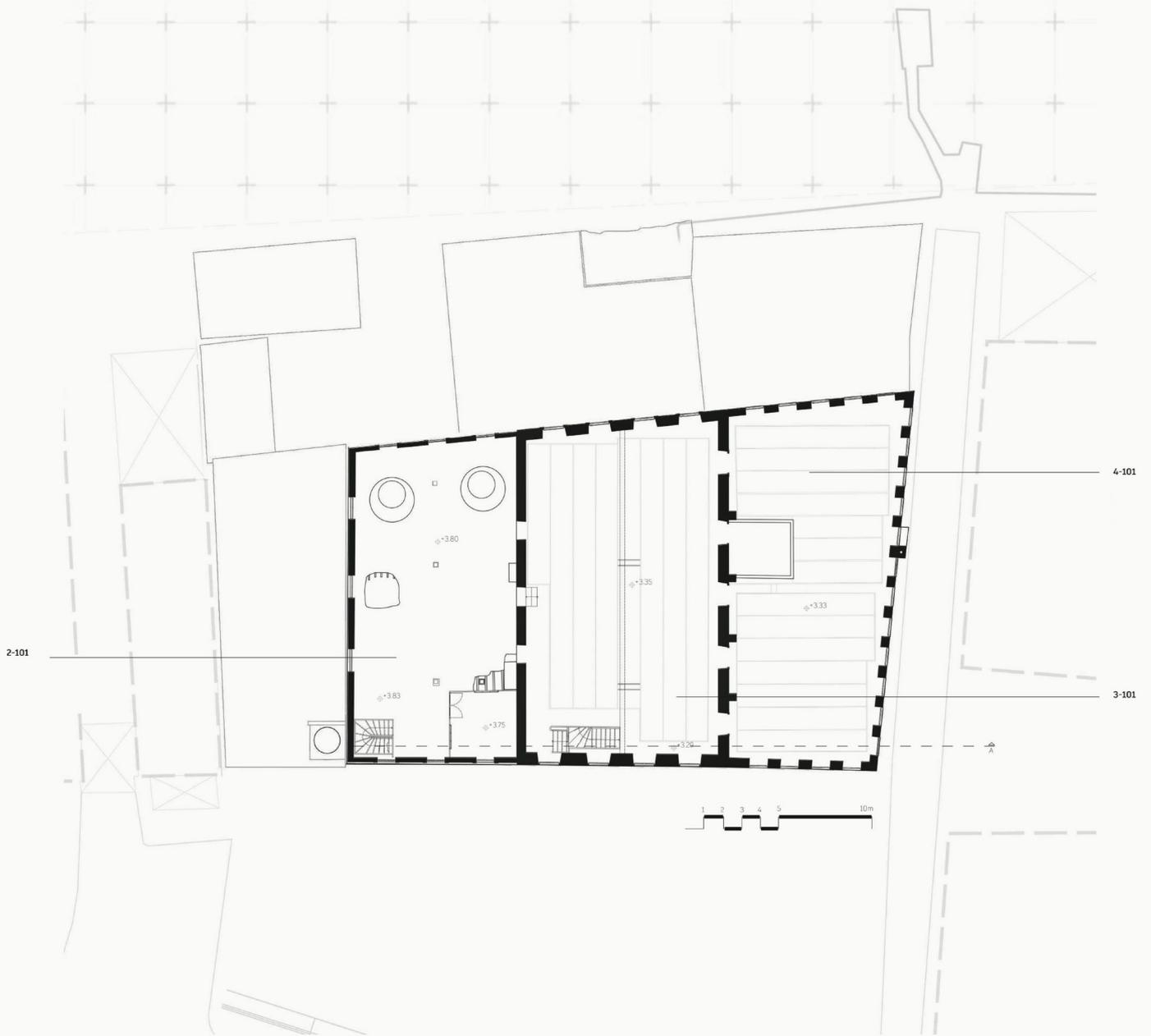


- 0-004**  
WC  
Area: 1.8 m<sup>2</sup>
- 0-003**  
WC  
Area: 4.2 m<sup>2</sup>
- 0-002**  
WC  
Area: 3.0 m<sup>2</sup>
- 0-001**  
WC  
Area: 1.9 m<sup>2</sup>  
Walls: Plastered and painted  
Ceiling: Plastered and painted
- 2-001**  
Production Area  
Area: 137.03 m<sup>2</sup>  
Floor: Cement screed  
Walls: Plastered and painted  
Ceiling: Wooden finish
- 1-001**  
Production Area  
Area: 85.84 m<sup>2</sup>  
Floor: Cement screed  
Walls: Stone masonry  
Ceiling: Corrugated bitumen sheets over steel structure

- 0-009**  
Dining Pool  
Area: 15.85 m<sup>2</sup>  
Floor: Reinforced concrete  
Walls: Brick masonry with plaster finish  
Ceiling: Eternit panels over structural support
- 0-010**  
Area: 57.74 m<sup>2</sup>  
Floor: Cement screed  
Walls: Plaster and paint  
Ceiling: Metal panel
- 0-007**  
Area: 14.87 m<sup>2</sup>  
Floor: Cement screed  
Walls: Plastered  
Ceiling: Wooden structure with roof
- 0-006**  
Area: 14.37 m<sup>2</sup>  
Floor: Cement screed  
Walls: Plastered  
Ceiling: Wooden structure with roof
- 1-002**  
Room  
Area: 30 m<sup>2</sup>  
Floor: Long wooden parquet  
Walls: Plastered  
Ceiling: Wooden panels

- 3-001**  
Production Area  
Area: 126.48 m<sup>2</sup>  
Floor: Stone flooring  
Walls: Plastered and painted  
Ceiling: Wooden finish
- 3-003**  
Hall  
Area: 13.14 m<sup>2</sup>  
Floor: Timber strip flooring  
Walls: Plastered  
Ceiling: Plywood panels
- 4-002**  
Storage  
Area: 25.43 m<sup>2</sup>  
Floor: Cement screed  
Walls: Brick and stone masonry  
Ceiling: Wooden finish
- 4-001**  
Production Area  
Area: 123.22 m<sup>2</sup>  
Floor: Terrazzo tiles  
Walls: Plastered and painted  
Ceiling: Wooden finish

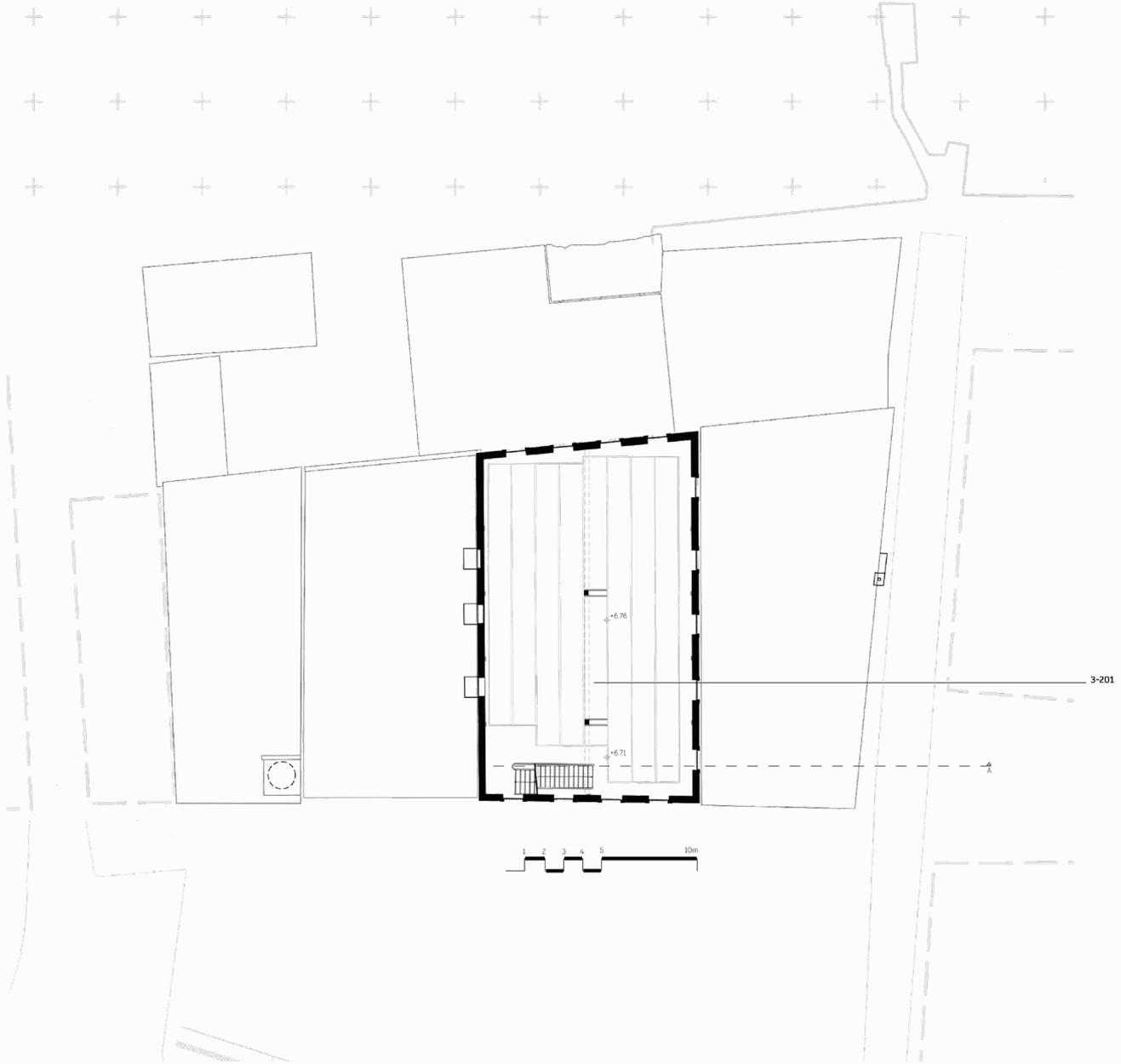
- 0-012**  
Storage  
Area: 15.50 m<sup>2</sup>  
Floor: Cement screed  
Walls: Stone and brick masonry, painted finish  
Ceiling: Fiber cement panels
- 0-011**  
Production Hall  
Area: 70.1 m<sup>2</sup>  
Floor: Cement screed  
Walls: Stone and brick masonry, painted finish  
Ceiling: Fiber cement panels
- 3-004**  
Room  
Area: 17.03 m<sup>2</sup>  
Floor: Timber strip flooring  
Walls: Plastered  
Ceiling: Plywood panels
- 3-002**  
Entrance Hall  
Area: 13.66 m<sup>2</sup>  
Floor: Stone flooring  
Walls: Plastered and painted  
Ceiling: Wooden finish



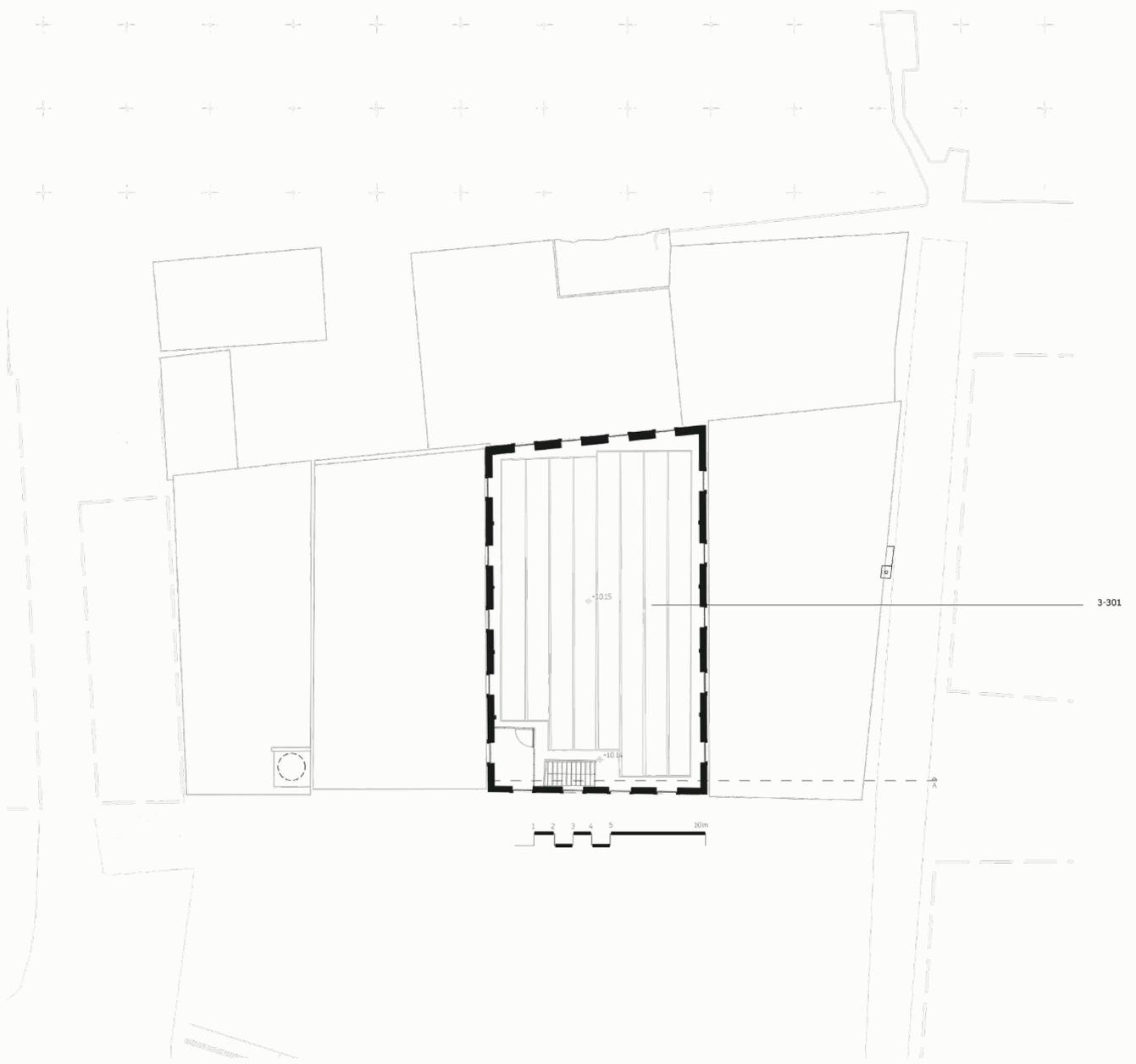
**2-101**  
 Production Room  
 Area: 141.87 m<sup>2</sup>  
 Floor: hardwood parquet  
 Walls: plastered and painted  
 Ceiling: wooden cladding

**3-101**  
 Production Room  
 Area: 173.42 m<sup>2</sup>  
 Floor: hardwood parquet  
 Walls: plastered and painted  
 Ceiling: wooden cladding

**4-101**  
 Production Room  
 Area: 154.80 m<sup>2</sup>  
 Floor: hardwood parquet  
 Walls: plastered and painted  
 Ceiling: wooden cladding

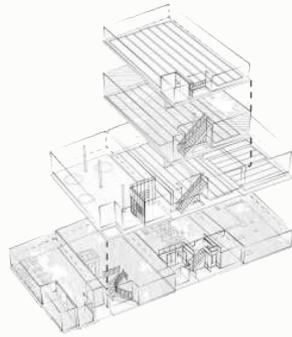


**3-201**  
 Production Room  
 Area: 184 m<sup>2</sup>  
 Floor: hardwood parquet  
 Walls: plastered and painted  
 Ceiling: wooden cladding



**3-301**  
 Production Room  
 Area: 184 m<sup>2</sup>  
 Floor: hardwood parquet  
 Walls: plastered and painted  
 Ceiling: timber truss

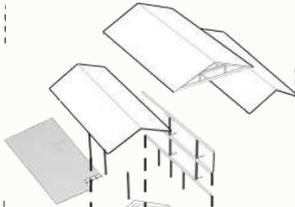
## 2.3 Analytical Diagrams



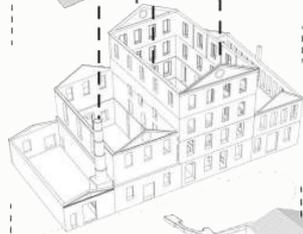
**Space Plan**



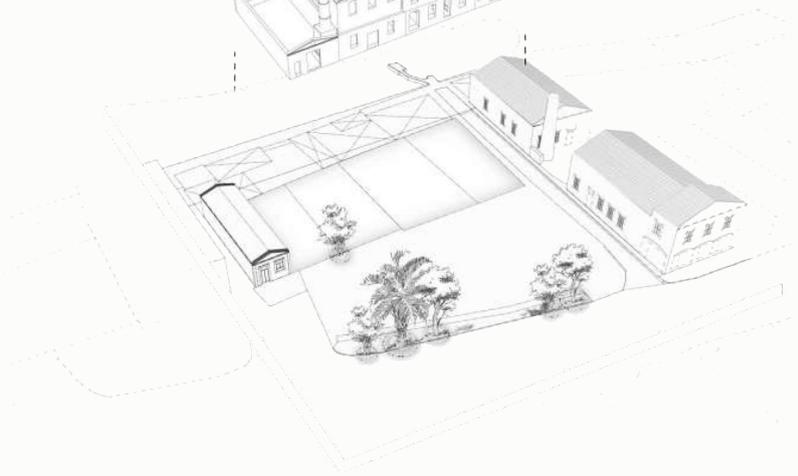
**Skin**



Wooden Crossbeam System

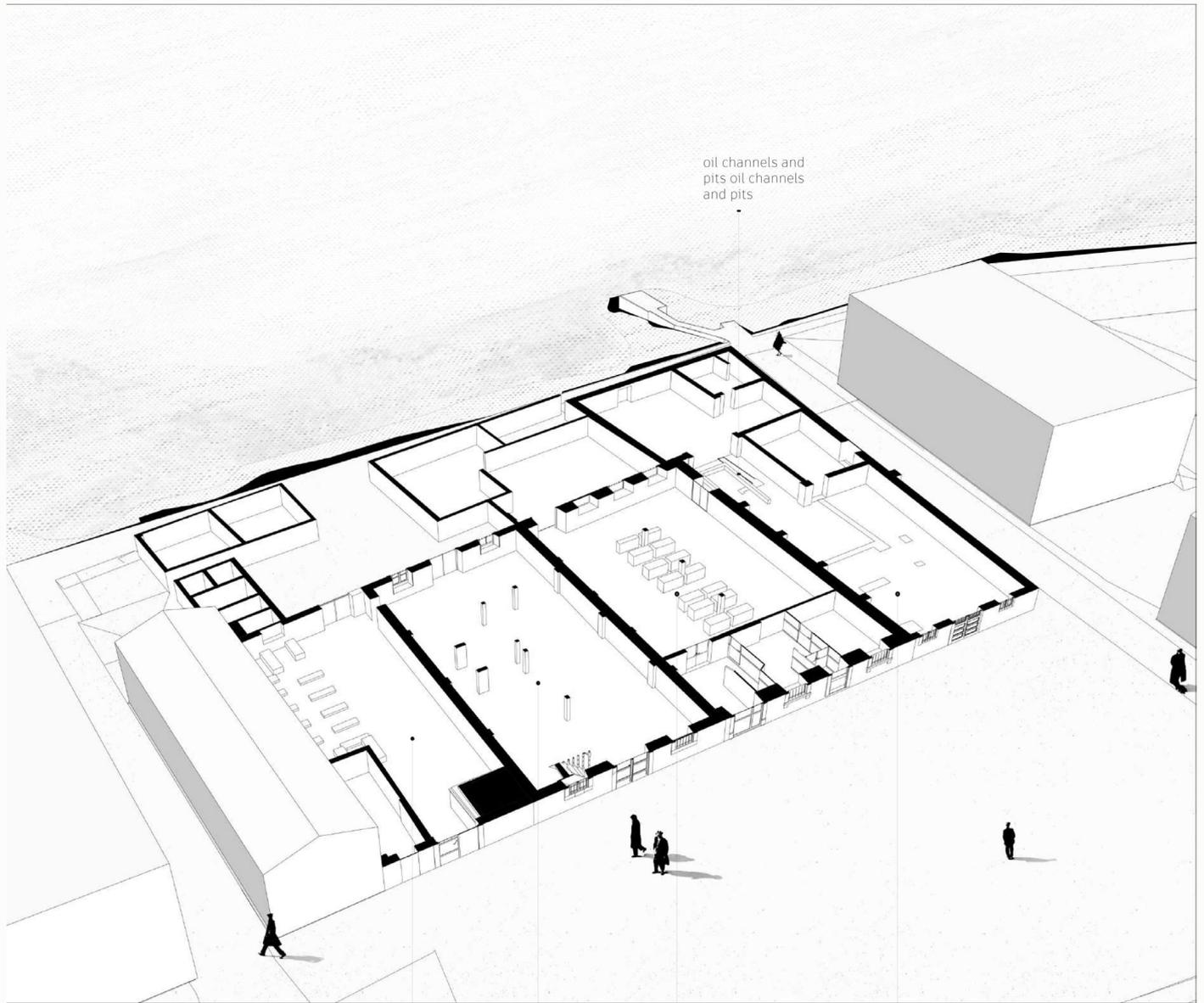


**Structure**



**Site**

The structure of the building is based on the traditional brick wall and wooden beam system of the period. Reinforced concrete supports have also been used in some areas. The spaces have been designed to suit the production process, with storage and processing areas directly connected to each other. Large, high windows have been constructed to provide both natural light and ventilation. The red brick frames used on the facade are local stone, commonly found in the region and frequently used in other buildings. This creates a facade that reflects the urban fabric of the region.



oil channels and pits  
oil channels and pits

1.

**Production Area**  
It has generally been used as a workbench or cauldron placement area for soap production.

2.

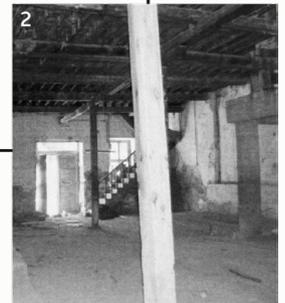
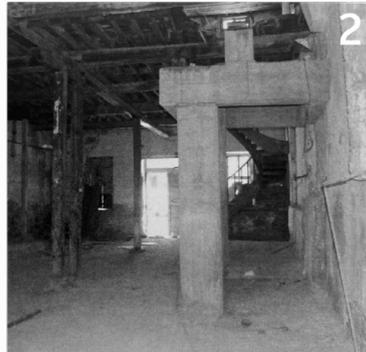
**Production Area**  
Olive oil production area. Area where heavy production equipment is installed and boilers are located.

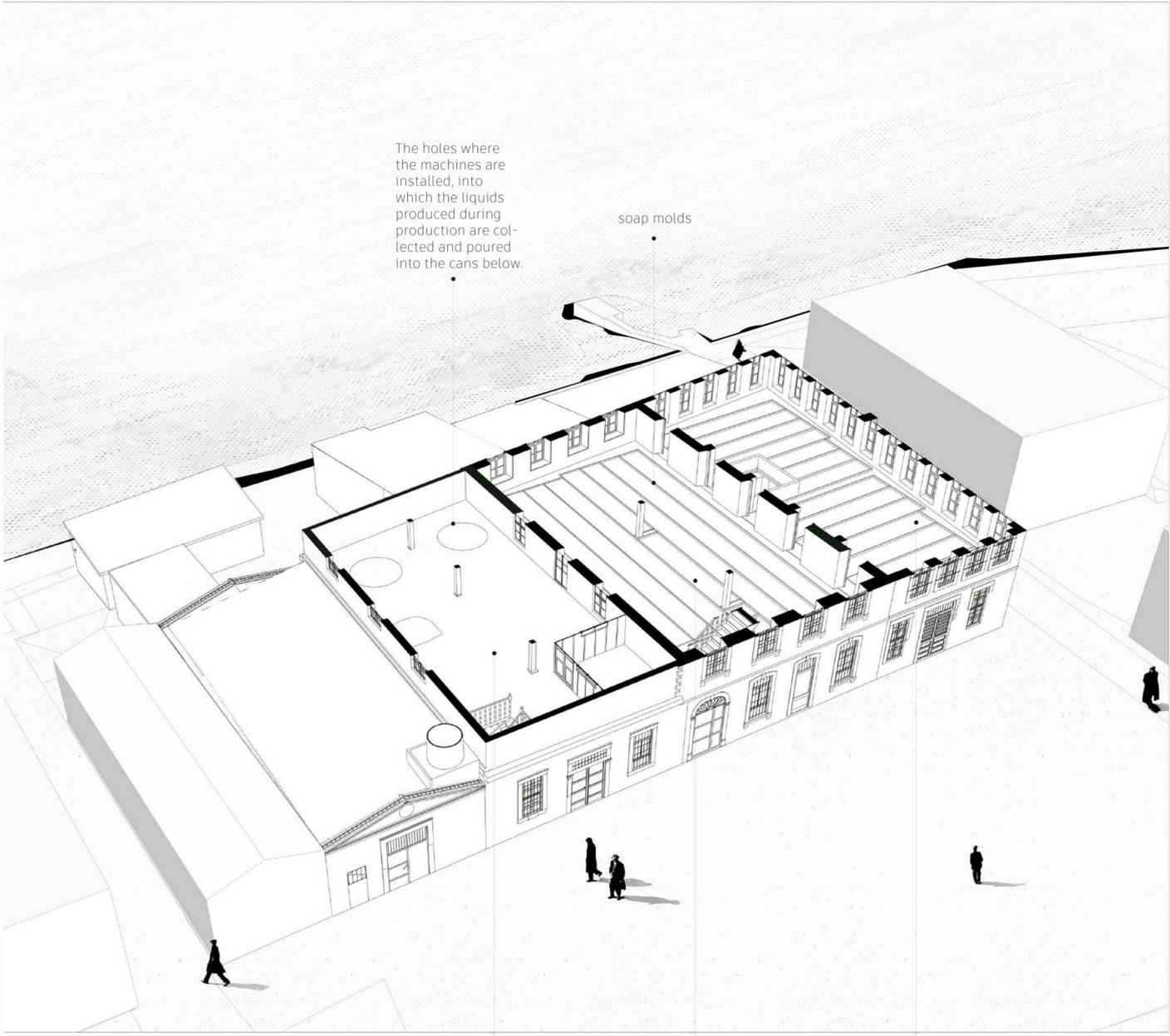
3.

**Production Area**  
Olive oil production area. The blocks in the middle are grooves where olive press machines are placed.

4.

**Production Area**  
Production area where oil and water separation is carried out in olive oil production.





The holes where the machines are installed, into which the liquids produced during production are collected and poured into the cans below.

soap molds

**Production Area**

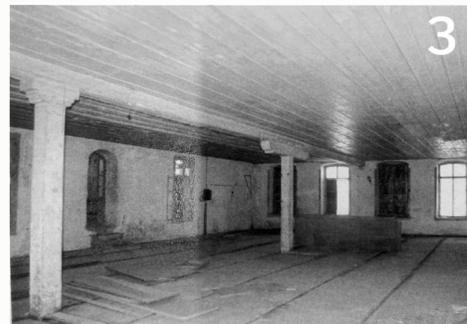
The area where olive oil production press machines and liquid collection machines are

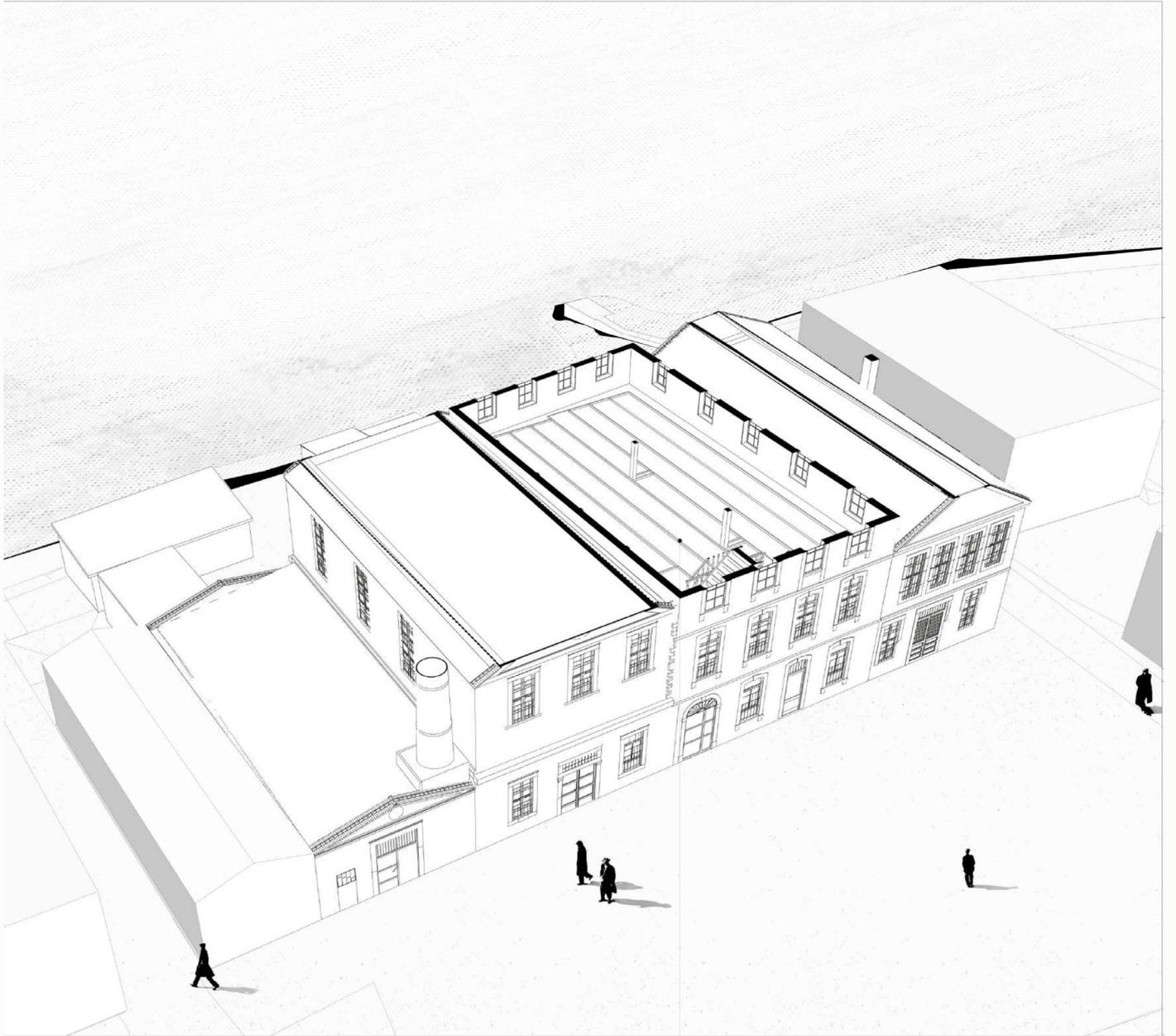
**Production Area**

The area used for drying and molding the soap produced

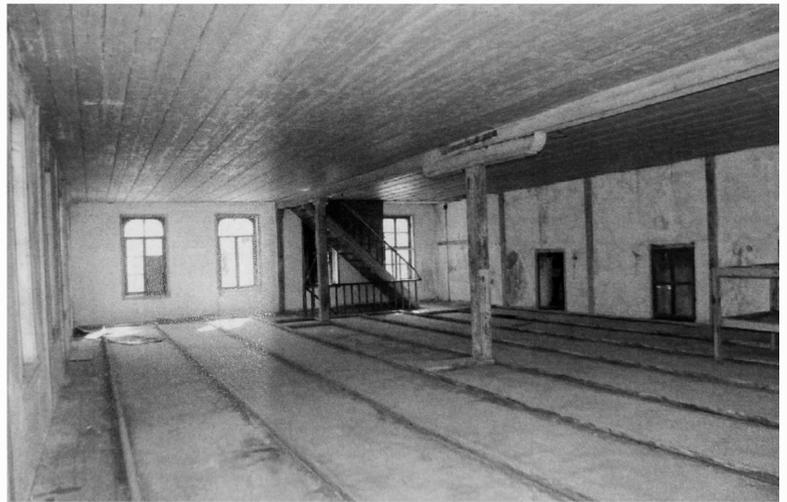
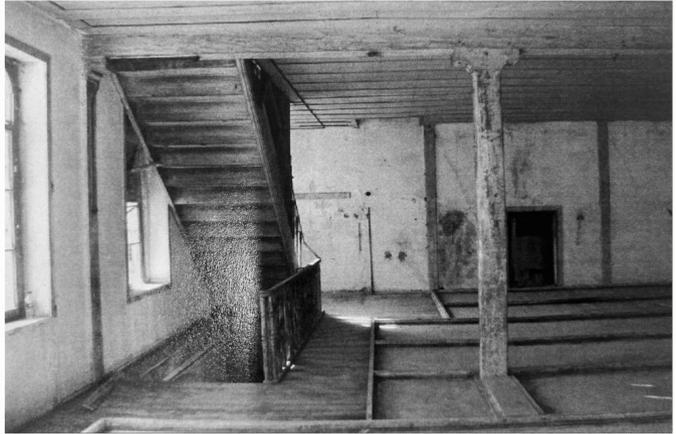
**Production Area**

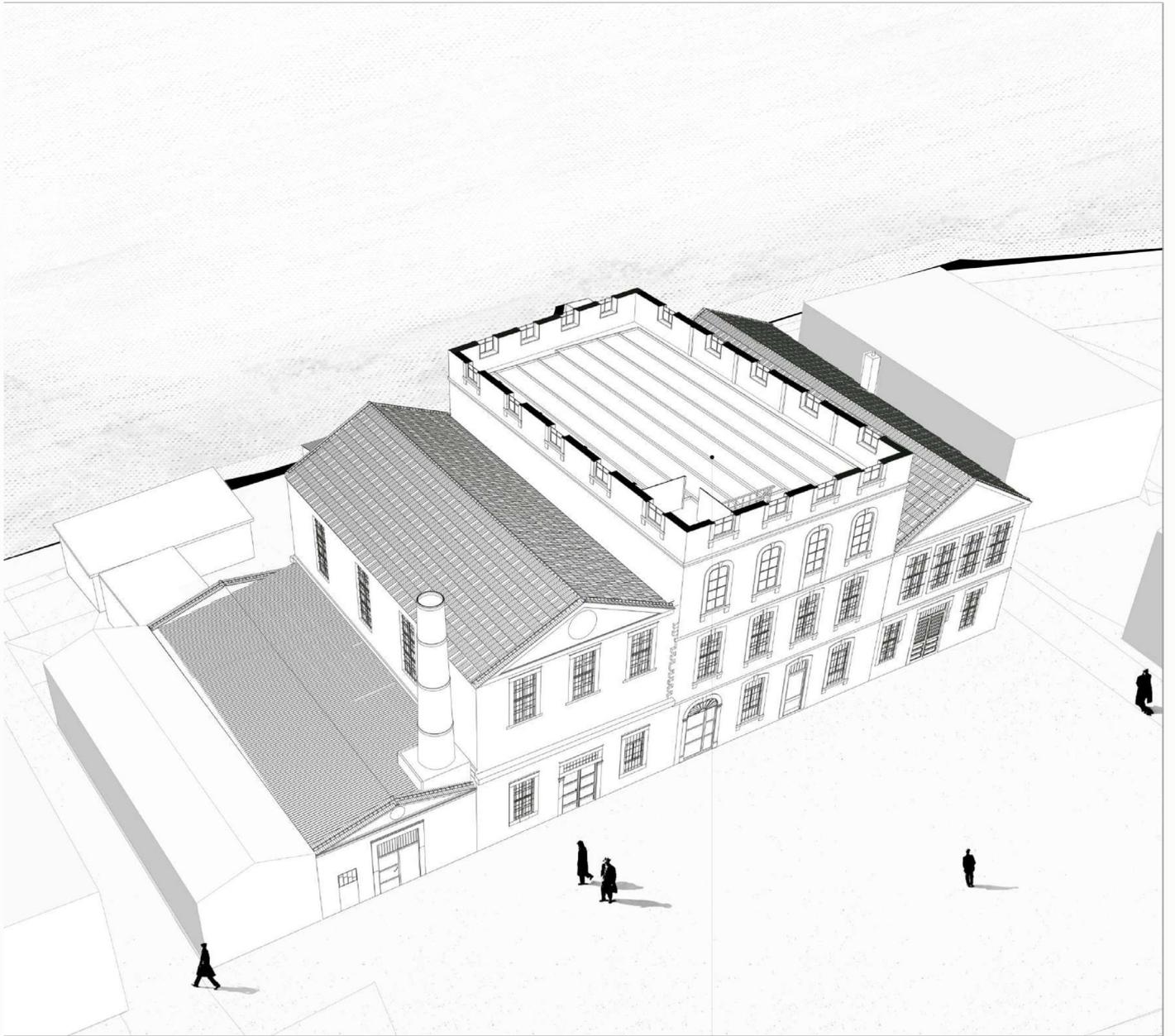
The area used for drying and molding the soap produced



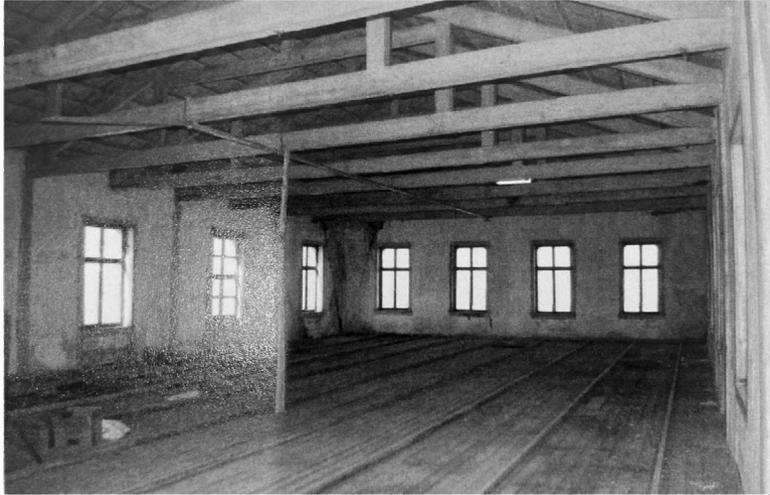


**Production Area**  
The area used for drying and molding the soap produced.

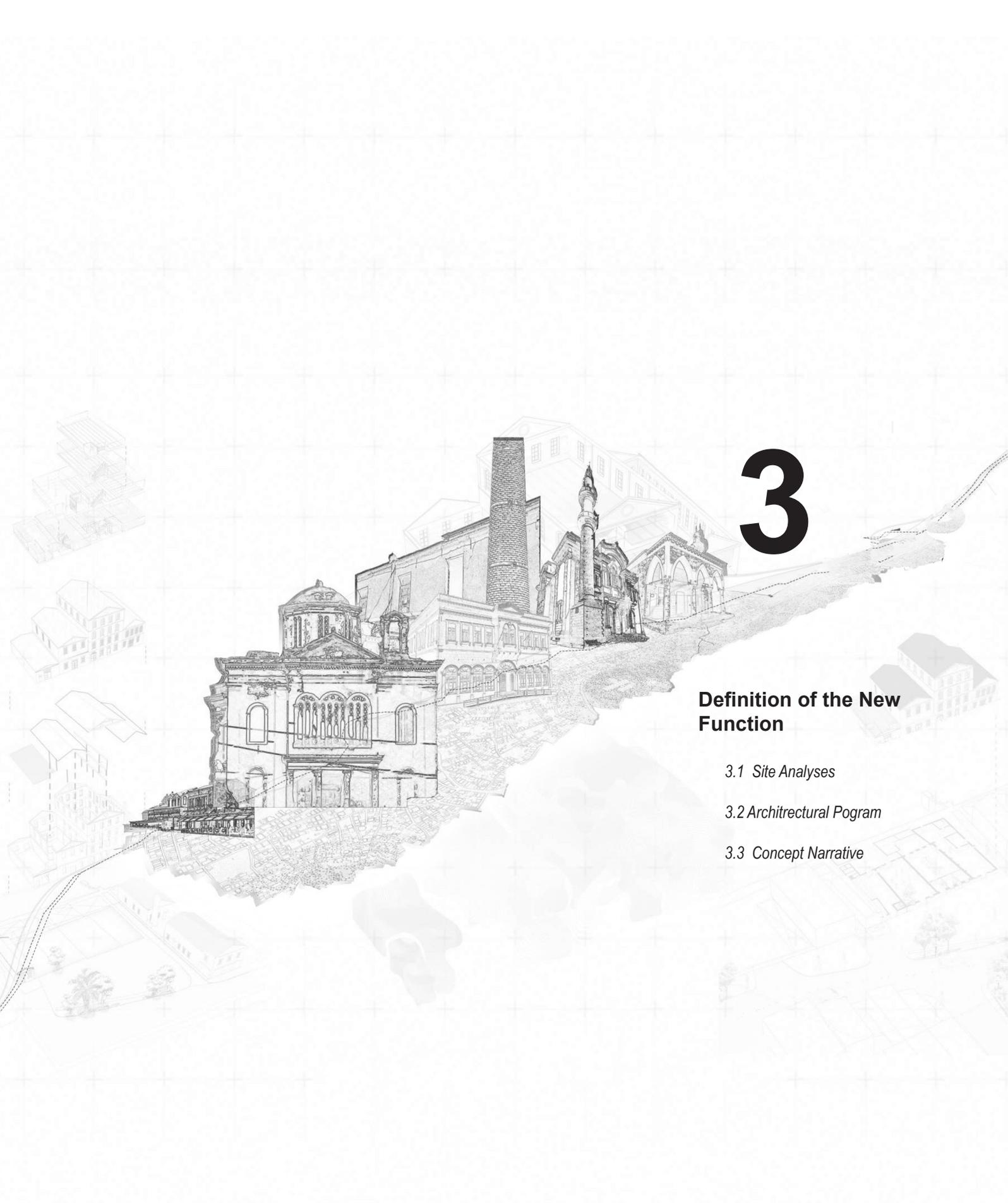




**Production Area**  
The area used for  
drying and molding  
the soap produced.





A large, stylized number '3' is positioned on the right side of the page. The background is a complex architectural collage. It features a central, detailed line drawing of a large, multi-story building with a prominent dome and classical architectural elements. This central drawing is surrounded by various other architectural sketches, including smaller buildings, a tall brick chimney, and a street grid. The sketches are rendered in different styles, some as simple wireframes and others as more detailed line drawings. The entire composition is set against a light gray grid background.

# 3

## **Definition of the New Function**

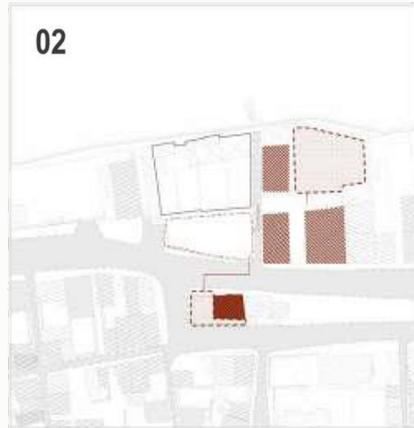
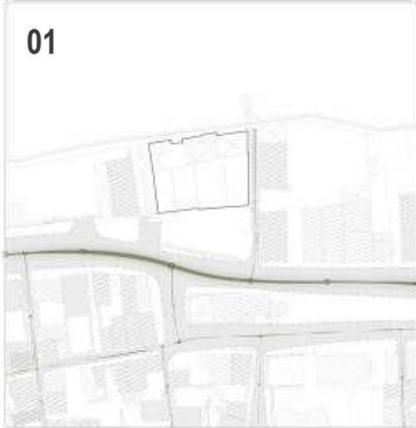
*3.1 Site Analyses*

*3.2 Architectural Program*

*3.3 Concept Narrative*

### 3.1 Site Analyses





## 01 Transportation

The main vehicle and pedestrian route most frequently used for entering the historic city center. The project is located along the city's primary and one of the widest routes leading to the historic center and a corridor of both high accessibility and urban significance. Its placement along this key axis not only enhances the site's visibility and connectivity but also offers the potential to serve as an entry threshold to the historic urban landing. The site's proximity to major public transportation routes reinforces its capacity to become an active urban node and a natural point of convergence for both locals and visitors.

## 02 Social Spaces

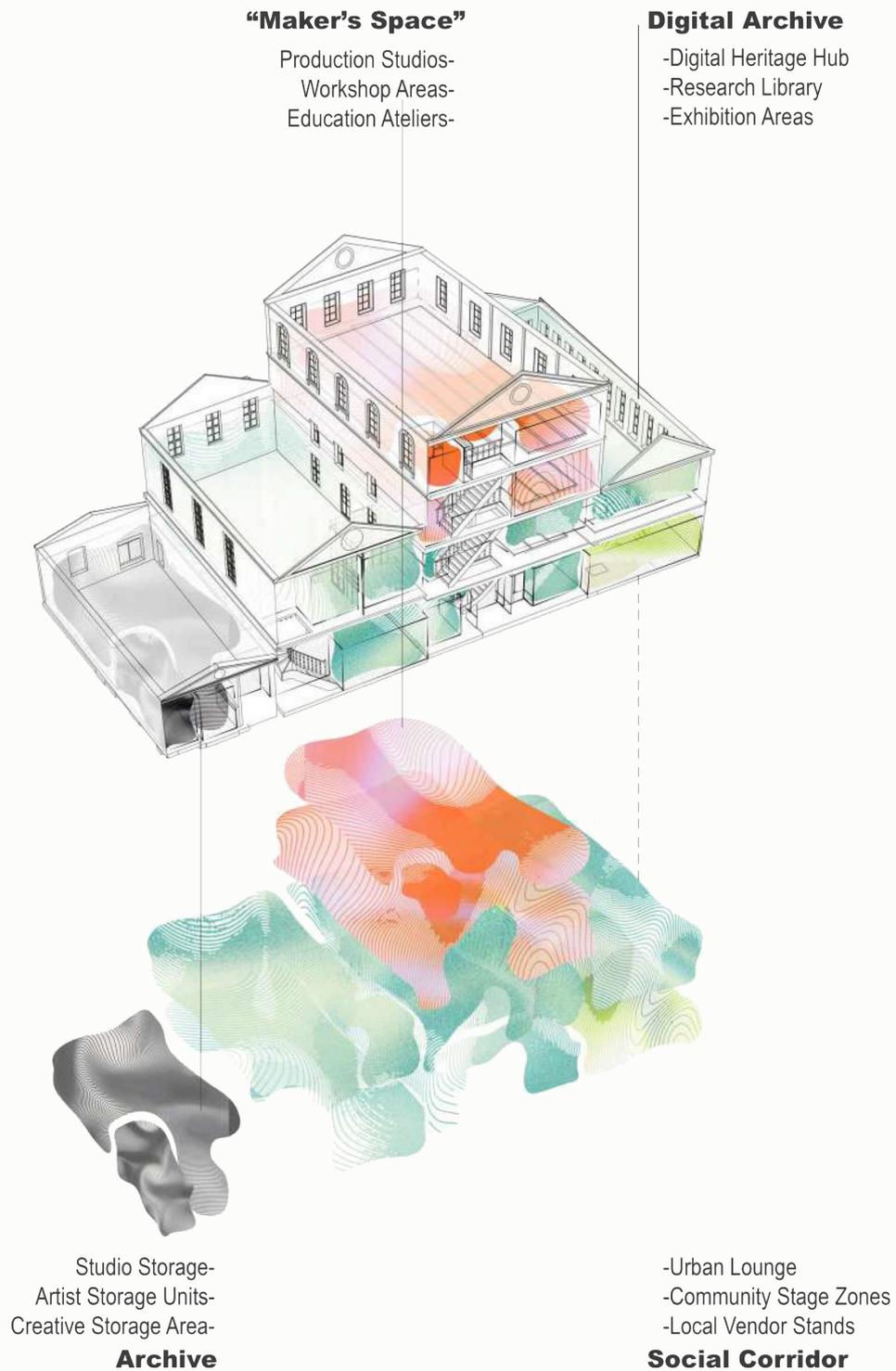
The surrounding buildings enhance the social character of the area. The open space in front of the factory currently serves as a parking lot, while the adjacent restaurant and local café activate the site throughout the day. Their courtyards, furnished with tables, function as semi-public social spaces that connect visually and spatially to the forecourt. This continuity has the potential to transform the area into an extended social zone, supporting both urban vitality and the local economy.



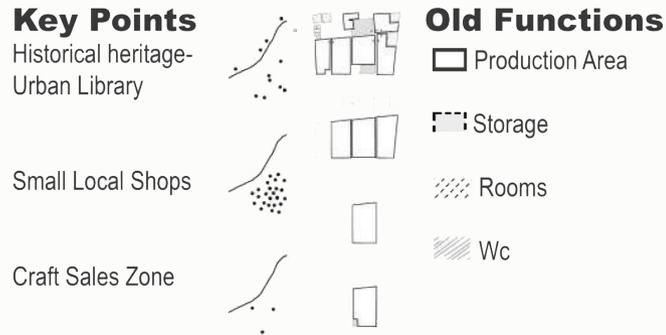
## 03 Accessibility to Sea

The building is positioned to allow direct access to the waterfront, although public access to the shoreline is currently limited by private structures and restaurant terraces occupying much of the coastal edge. In this context, the project site has strong potential to reopen the waterfront for public use, creating a new urban interface between the city and the sea. Its location offers an opportunity to enhance both visual and physical continuity, strengthening the dialogue between the built environment and the natural landscape.

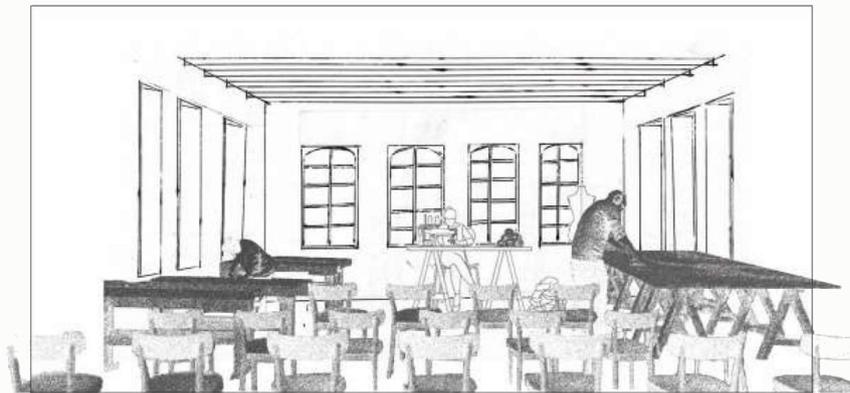
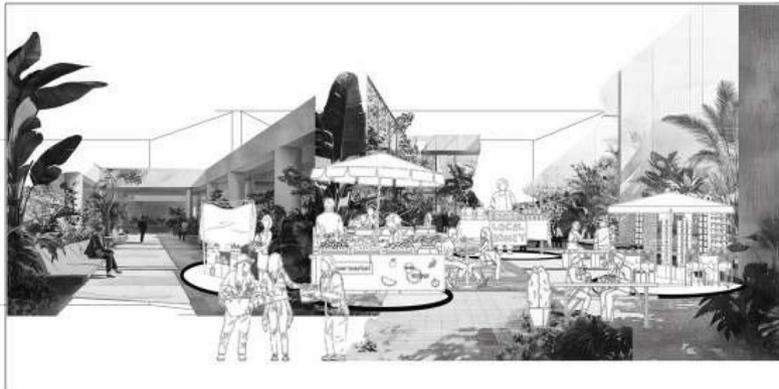
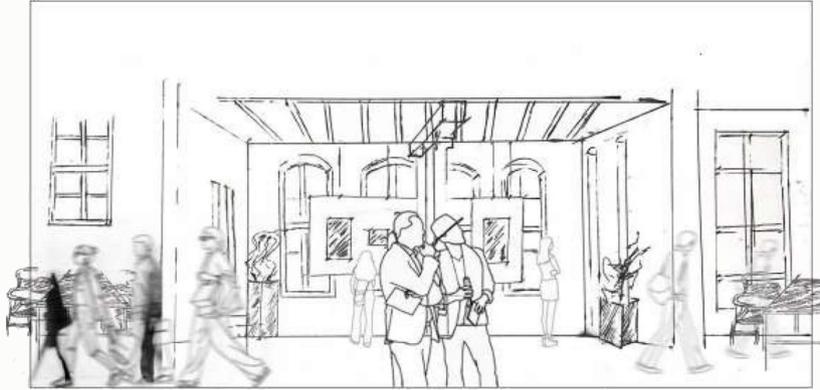
## 3.2 Archirectural Pogram



### 3.3 Concept Narrative



Based on the identified needs of the area and the observations of local residents, several urban and social deficiencies were defined. Despite the district's rich historical background and its dense architectural heritage, there is a clear lack of adequate library facilities and spatial opportunities that enable the discovery and preservation of the city's collective memory. Discussions with the municipality further revealed the absence of exhibition and storage spaces for independent artists, as well as the need for a dedicated urban memory center.



The proposal envisions a Digital Heritage Archive - a place where both locals and visitors can explore, learn, and engage with the city's layered history. Complementing this archive, exhibition areas are designed to host works by local artists, creating an active cultural dialogue between past and present. The upper levels of the building are planned as production and workshop spaces for women artisans who contribute to the local economy by producing and selling handmade goods through municipal support programs. These spaces will also accommodate training sessions and creative workshops, encouraging social and economic empowerment. At ground level, a social activity zone is designed to connect the building's public forecourt with the waterfront, enhancing urban flow and integrating nearby commercial areas.

Together, these spatial strategies aim to create a multilayered cultural hub that preserves the city's memory, supports local creativity, and revitalizes the social and economic fabric of the historic district.

# 4

## Desing Approaches | The Urban Archice Ayvalik

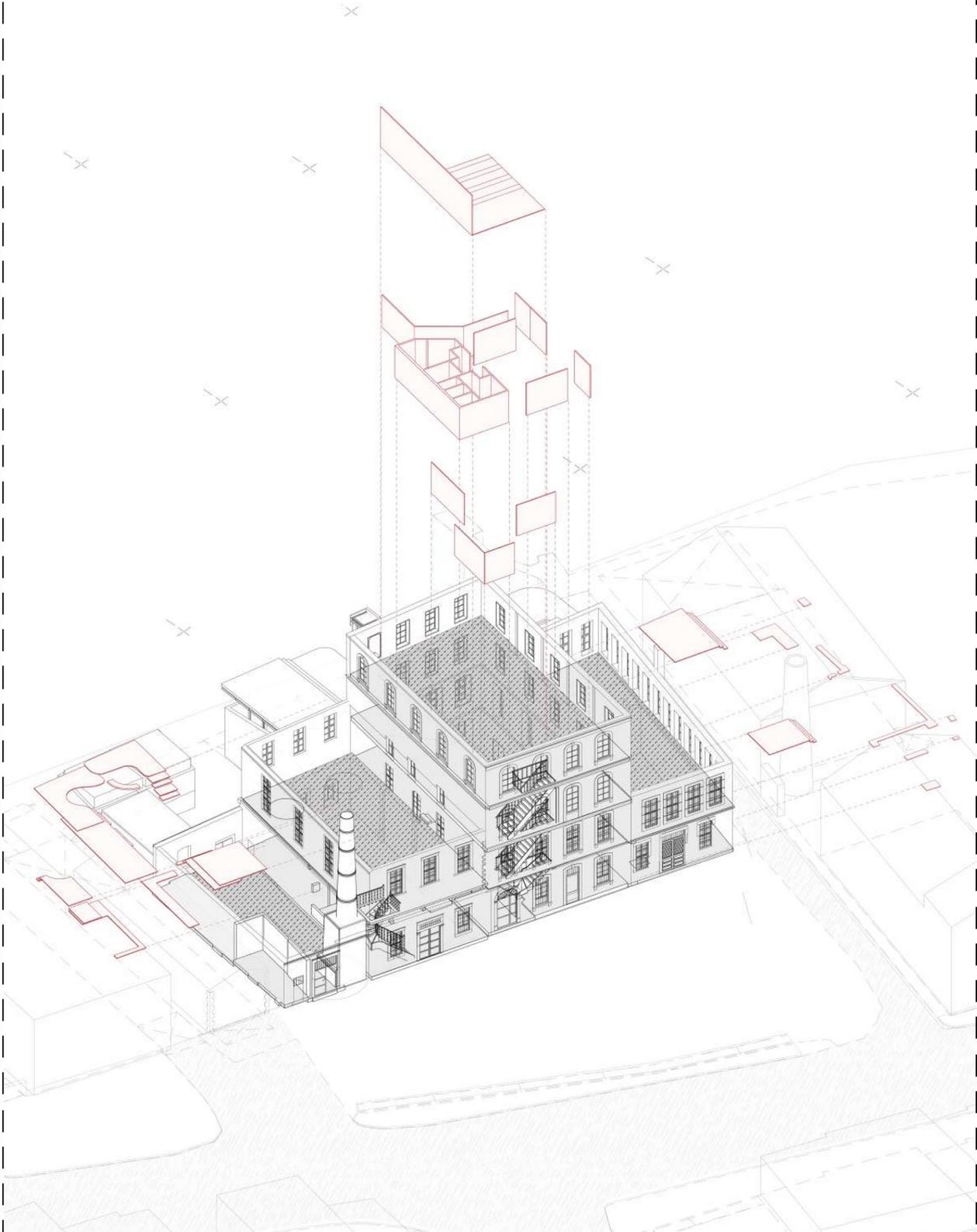
4.1 *Design Approachs*

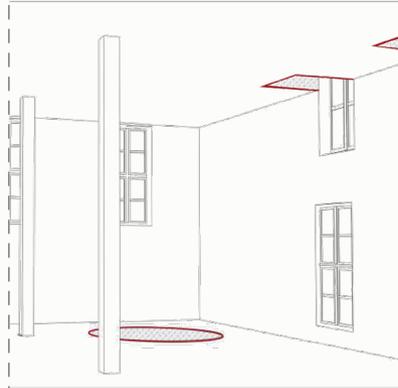
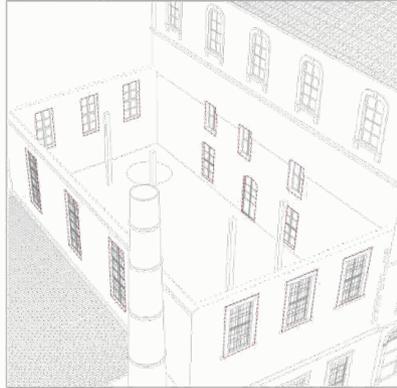
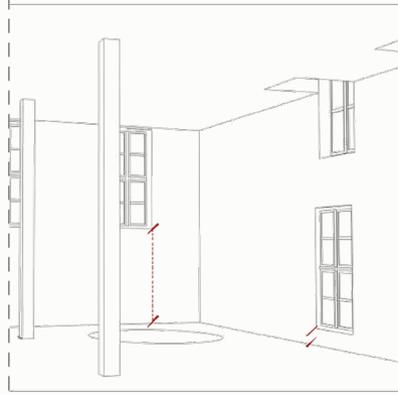
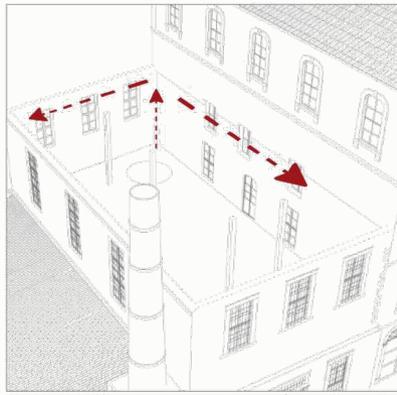
4.2 *Additional Structures*

4.3 *Adaption of Function Requirements*



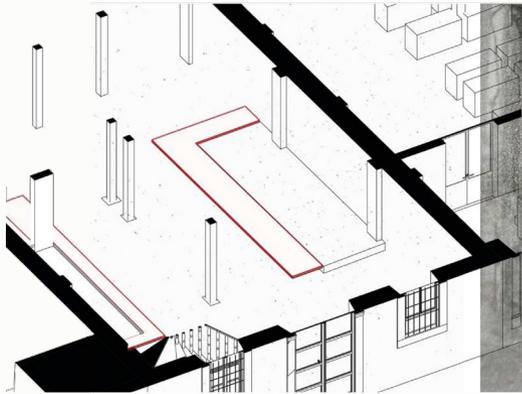
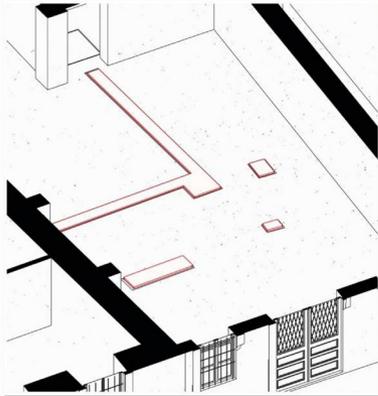
4.1 Design Approachs





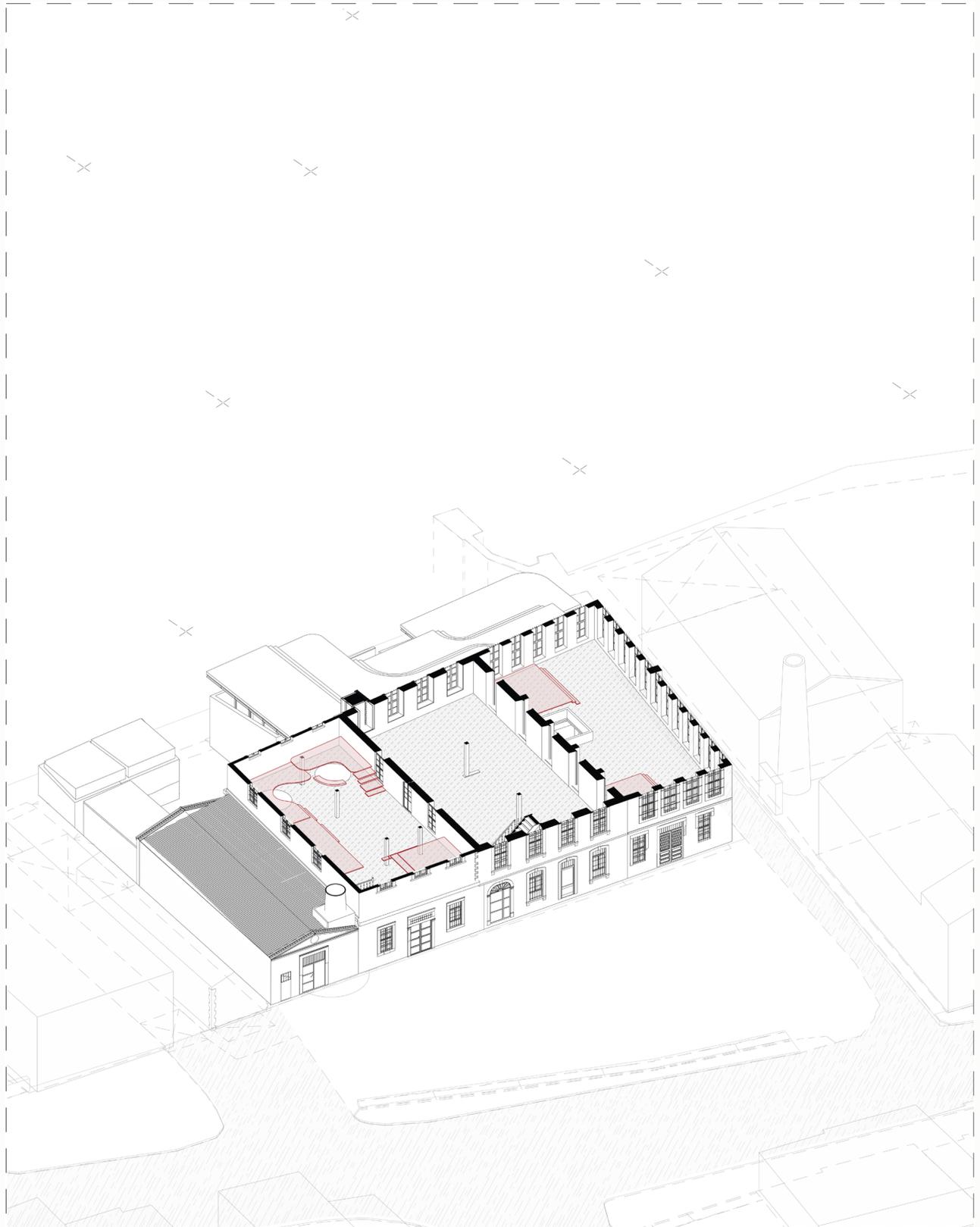
The existing complex is fundamentally divided into four main building volumes, each characterized by high ceilings and large, open-plan spatial configurations—one of the most distinctive features of industrial factory architecture of its period. These spatial qualities were originally conceived to accommodate flexible production processes and uninterrupted operational flows. Similarly, the frequent and elongated window openings on the facades constitute a defining element of the factory's architectural language, designed to maximize the penetration of natural daylight and to facilitate effective natural ventilation within the interior spaces.

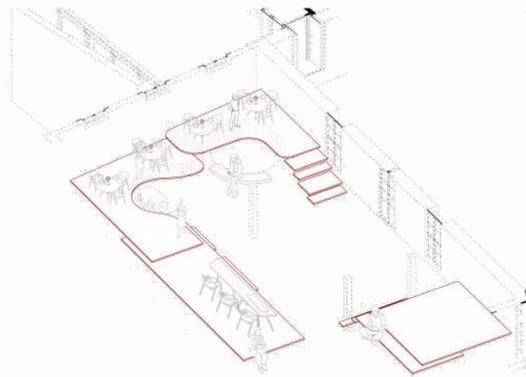
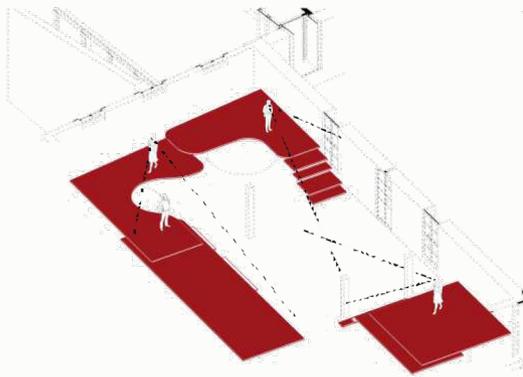
Within the scope of the project, the approach to spatial reconfiguration is developed in direct response to this context, aiming to define new spatial organizations without altering the original perception of space. Rather than introducing rigid partitions or new enclosed masses, the design proposes the use of horizontal and vertical surfaces as spatial definers, allowing new programs to be articulated while preserving the openness, continuity, and legibility of the existing industrial structure.



The horizontal surfaces introduced in the project are primarily designed to integrate the existing level differences at the ground floor. These surfaces operate as complementary elements within elevated areas that have become functionally underutilized, enabling the formation of diverse programmatic zones. Certain voids that remain within the structure—originally used as oil pits during the building's former function as an oil production facility—constitute some of the most distinctive spatial remnants that recall the building's industrial past. Within the scope of the adaptive reuse strategy, horizontal surfaces inserted into these voids act as spatial infill elements, simultaneously completing the gaps while allowing for functional enrichment through like lighting interventions and conceptual architectural integrations.

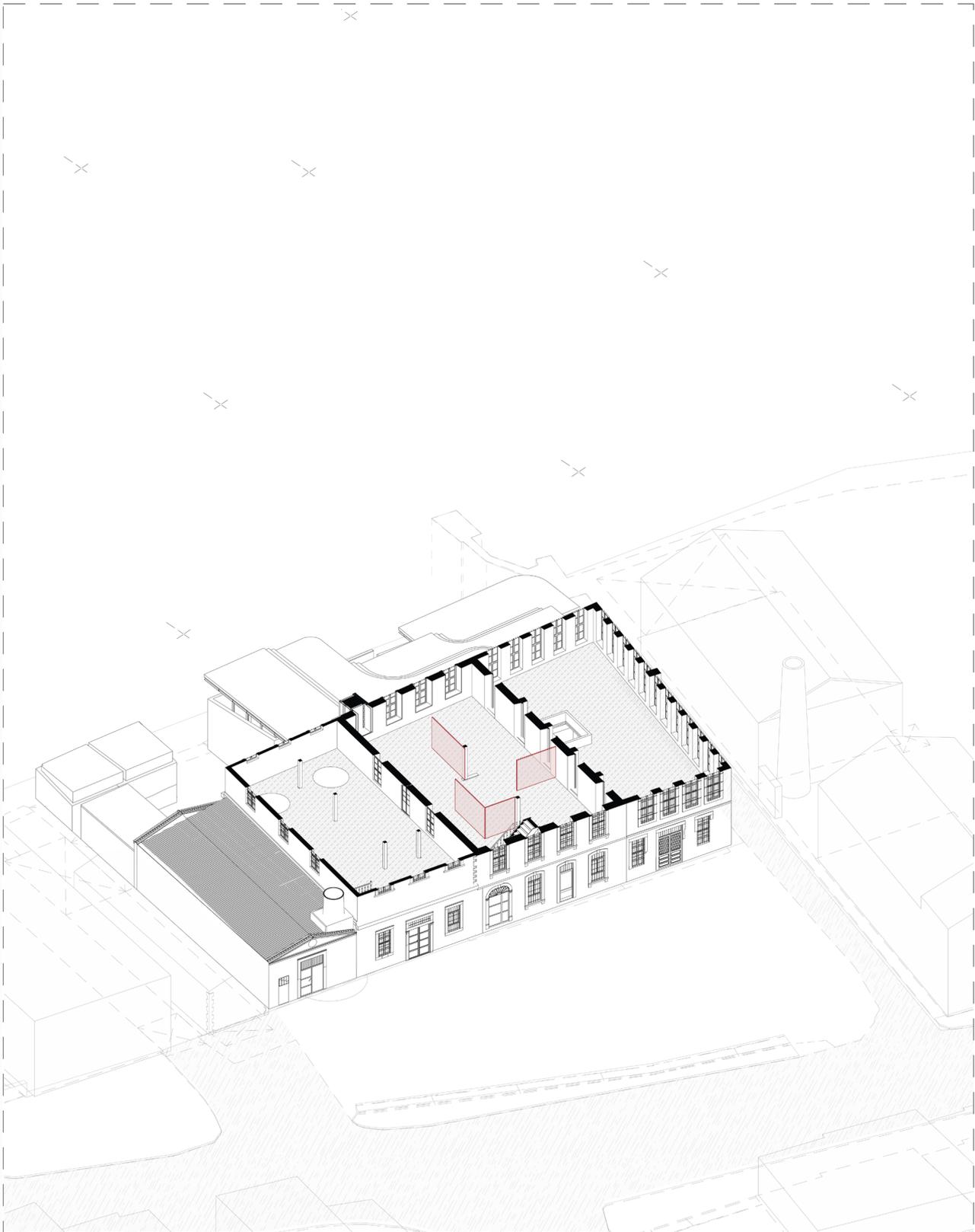
Through the use of these complementary surfaces, the project aims to generate solution-oriented architectural components without causing permanent damage to the building's organic fabric, while ensuring that new interventions remain legible and visible by framing, rather than obscuring, the original structure.

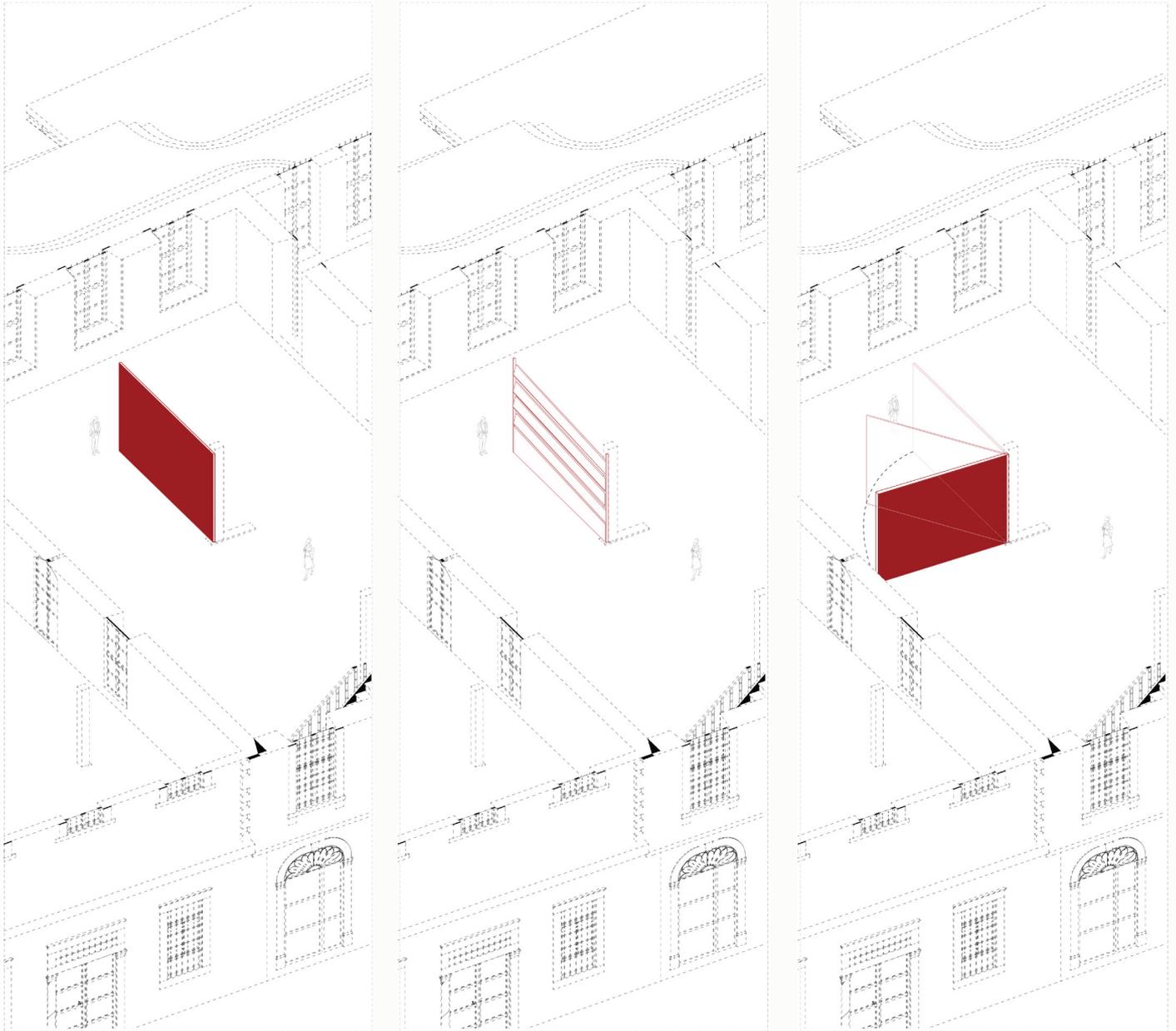




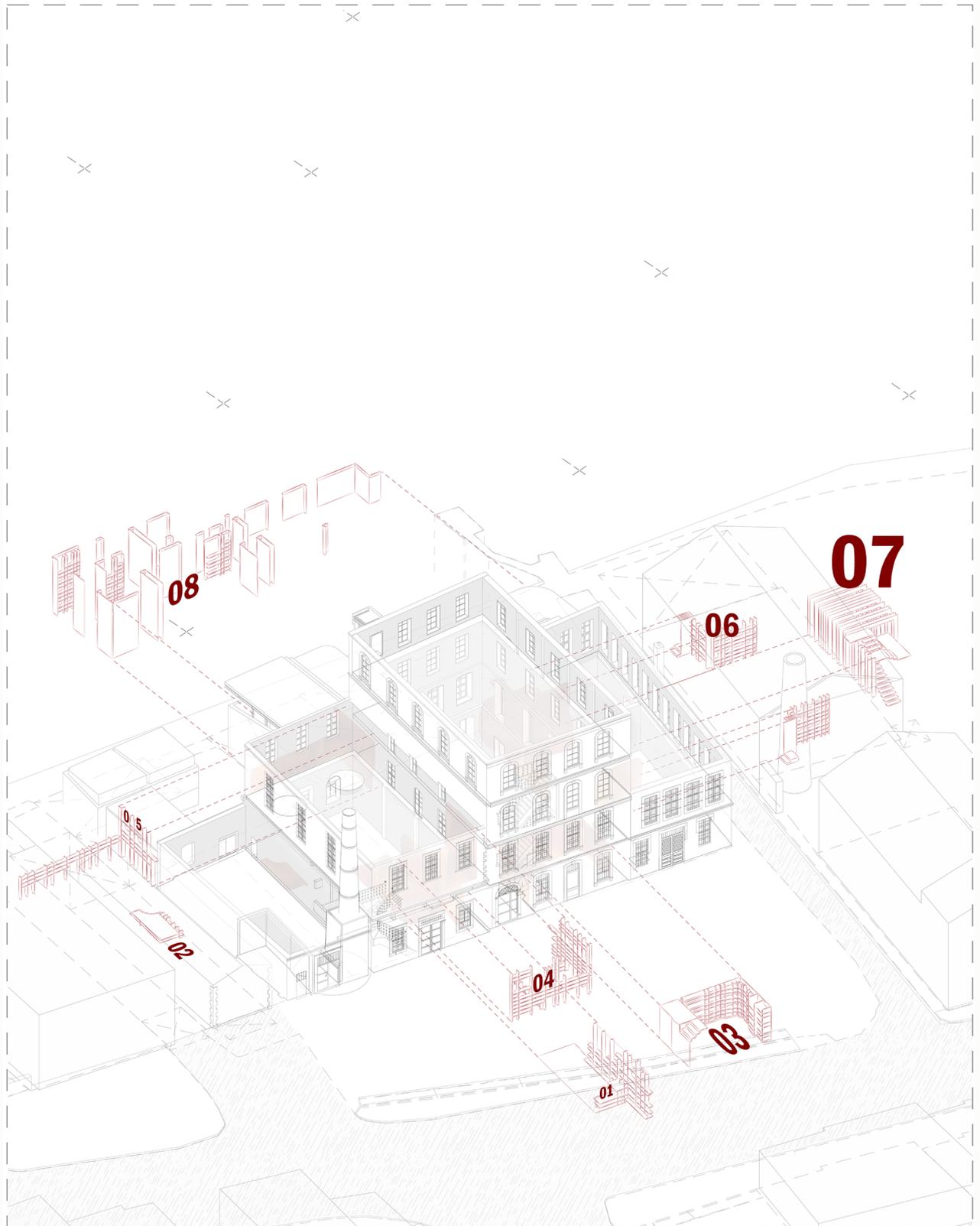
At the upper levels, the use of horizontal surfaces is primarily conceived as an interior reinterpretation of observation terraces. Horizontal elements positioned at varying elevations are articulated as platforms, each supported by an independent structural system. Similar to an observation terrace, these platforms enable a comprehensive perception of the interior space from multiple heights. Functionally, the introduction of new surface layers over areas subject to intensive use allows the most worn floor surfaces to be redefined through an added architectural layer,

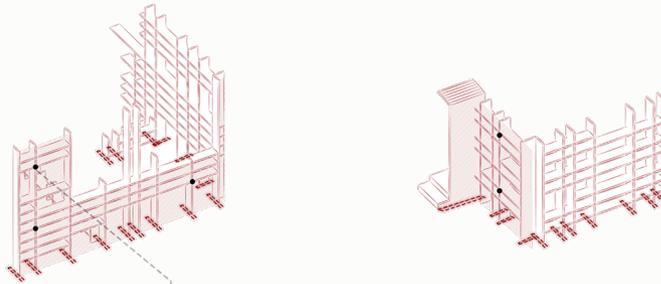
thereby contributing to the protection of the original building fabric against further deterioration. Within this design approach, spatial differentiation is achieved not through partition walls but through semi-open, semi-enclosed, or fully open platforms at different levels. In this way, spatial definition is established through changes in elevation rather than through heavy or permanent masses. Additionally, the use of varying heights is intended to perceptually correct certain asymmetries in the existing façade rhythm.





Vertical surfaces, conceived as lighter structural elements, are designed to offer greater flexibility and adaptability according to programmatic needs. While solid surfaces are employed within exhibition areas, multi-functional solutions such as shelving systems are proposed for archive spaces. Some of the envisioned vertical elements function as movable partitions, enabling the defined areas to remain flexible, adaptable, and capable of accommodating different spatial variations in response to changing requirements. The use of lightweight framing systems for these spatial delineators allows the characteristic details of the existing structure to be contoured and framed, thereby enhancing the visibility and legibility of the historic fabric.





Connection points to the interior facade can be established at specific locations as required from a structural engineering standpoint.

#### **01 | 04 | 05**

They accommodate the furniture requirements introduced by the new function largely within their own structural system.

#### **02 | 06 | 07**

While functioning as furniture elements, they also transform into circulation elements in certain areas.

#### **03**

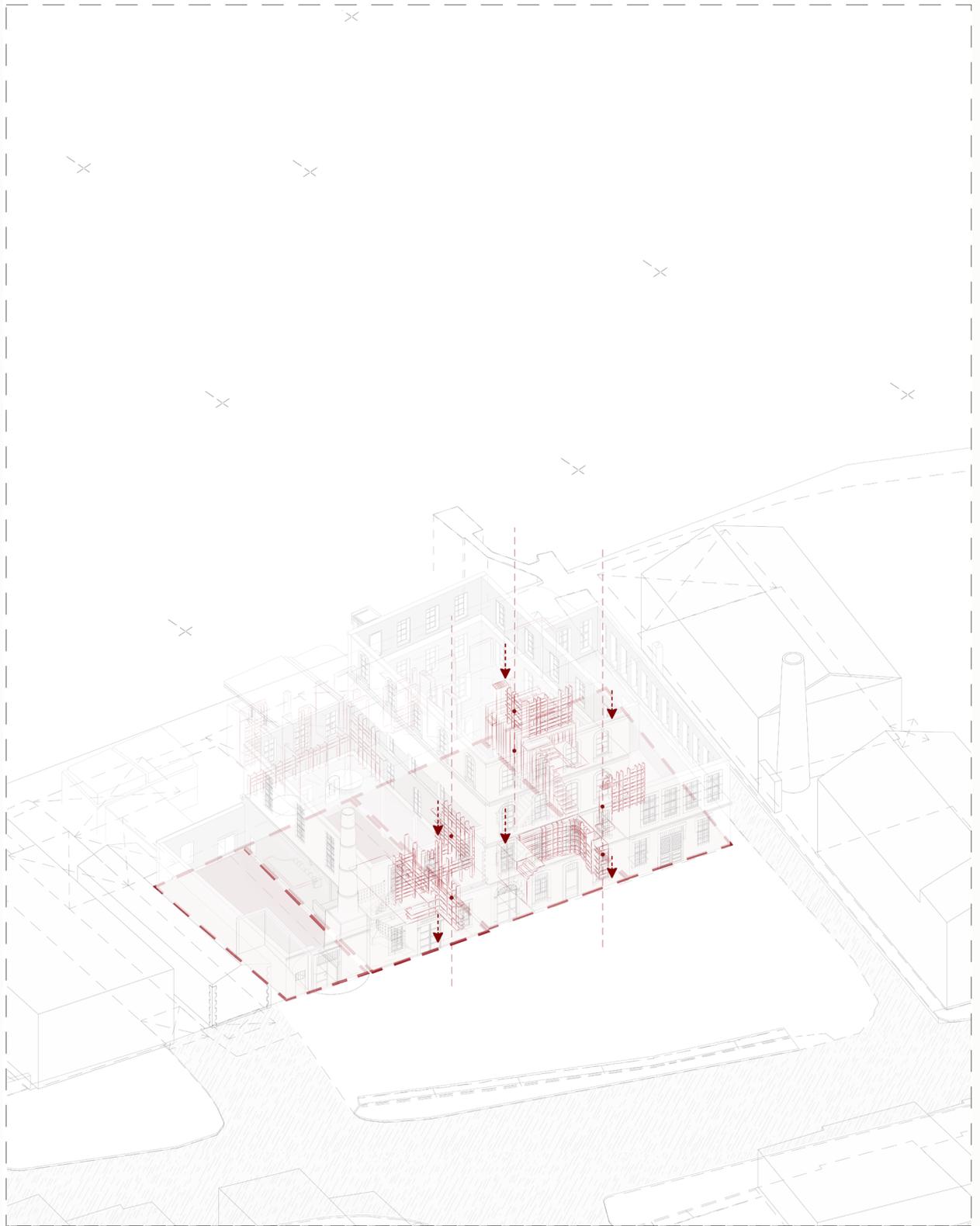
In place of the partition walls that have lost their original quality over time, a shell-based spatial organization is introduced, tracing the structural grid and articulating the space accordingly.

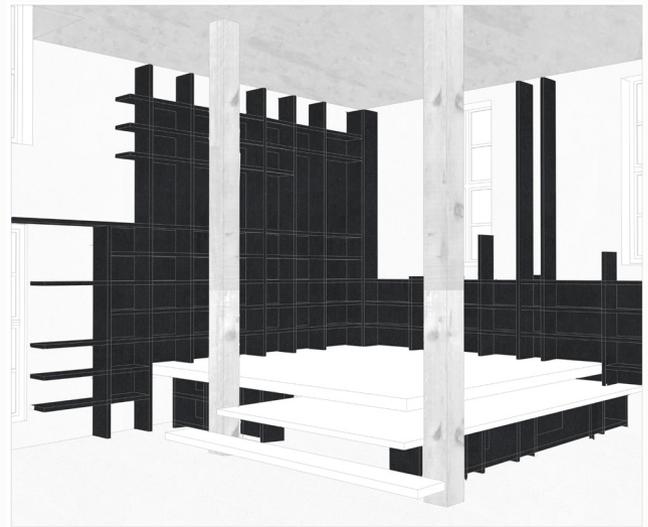
#### **08**

Shell systems ensure the continuity of the function while, through their material choice, allowing the structural system to remain visually concealed.

Architectural elements defined as “shells” are employed in the project. These shells are formed using natural materials and are designed to trace the contours of the historic structure without directly intervening in its fabric. Depending on functional needs, they operate at times as furniture and at times as circulation elements.

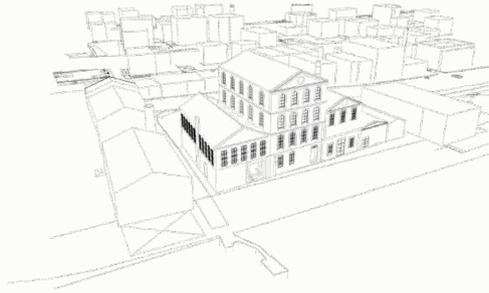
The primary aim of the shells is to carry the loads introduced by the new function within their own structural system, transferring them to the ground wherever possible. Contact with existing walls is kept to a minimum unless structurally necessary. In this way, the relationship between the historic structure and the newly introduced architectural elements enhances the visual perception of the building while prioritizing the conservation of the original fabric.





The shell elements have been meticulously aligned across identical vertical axes to establish a continuous structural logic. This rhythmic synchronization ensures that the gravitational demands of the new program are not merely borne in isolation, but are harmoniously transferred to the ground through a collaborative structural dialogue, where each shell reinforces the other in a unified tectonic descent.

## 4.2 Additional Structures



01

Original Building - 19th Century



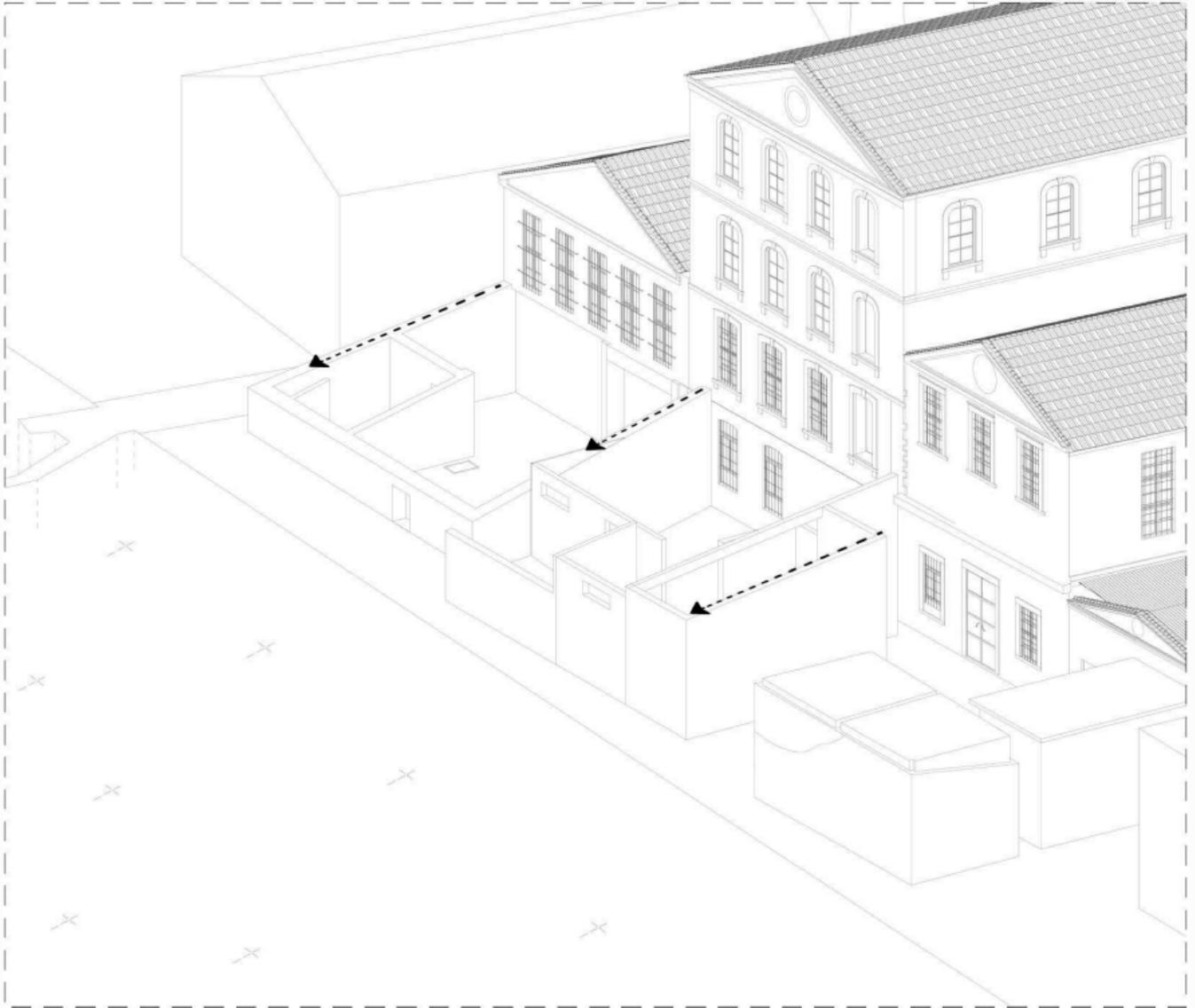
02

additional structure built due to  
increased production

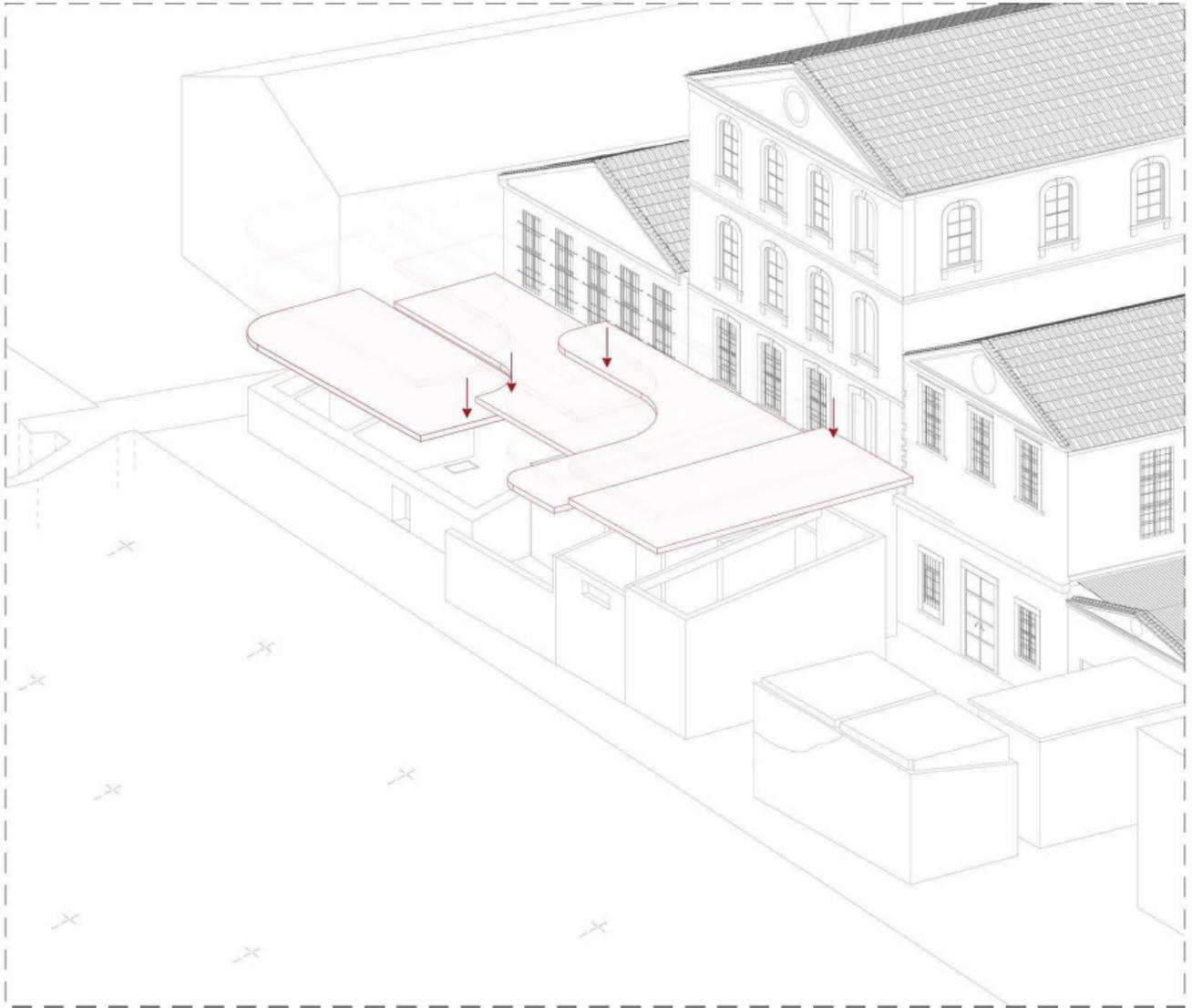


03

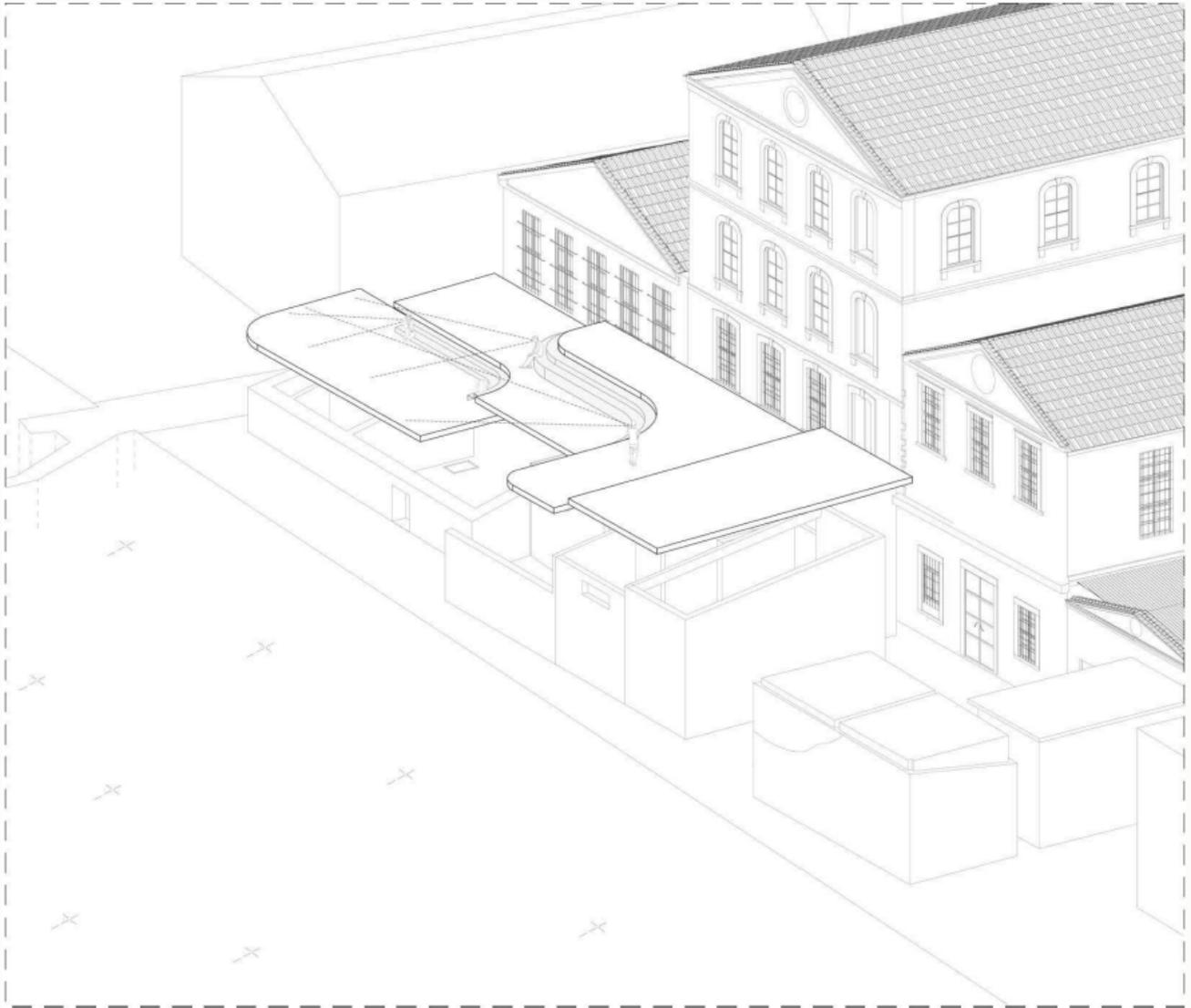
the part that deteriorated and  
ruined over the years



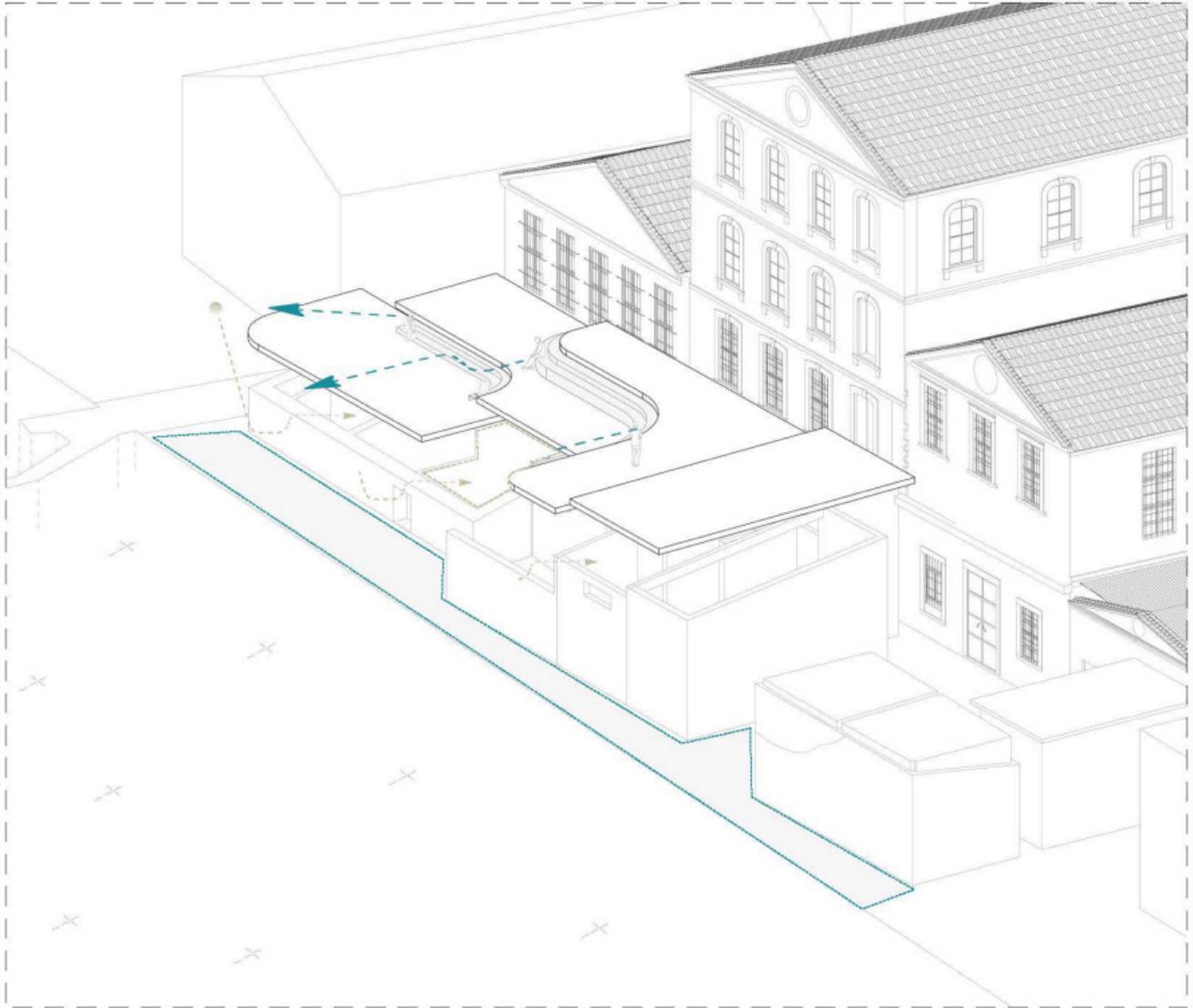
The rear structure of the complex represents an addition that was not part of the original building but was constructed during its operational period to fulfill emerging functional needs.



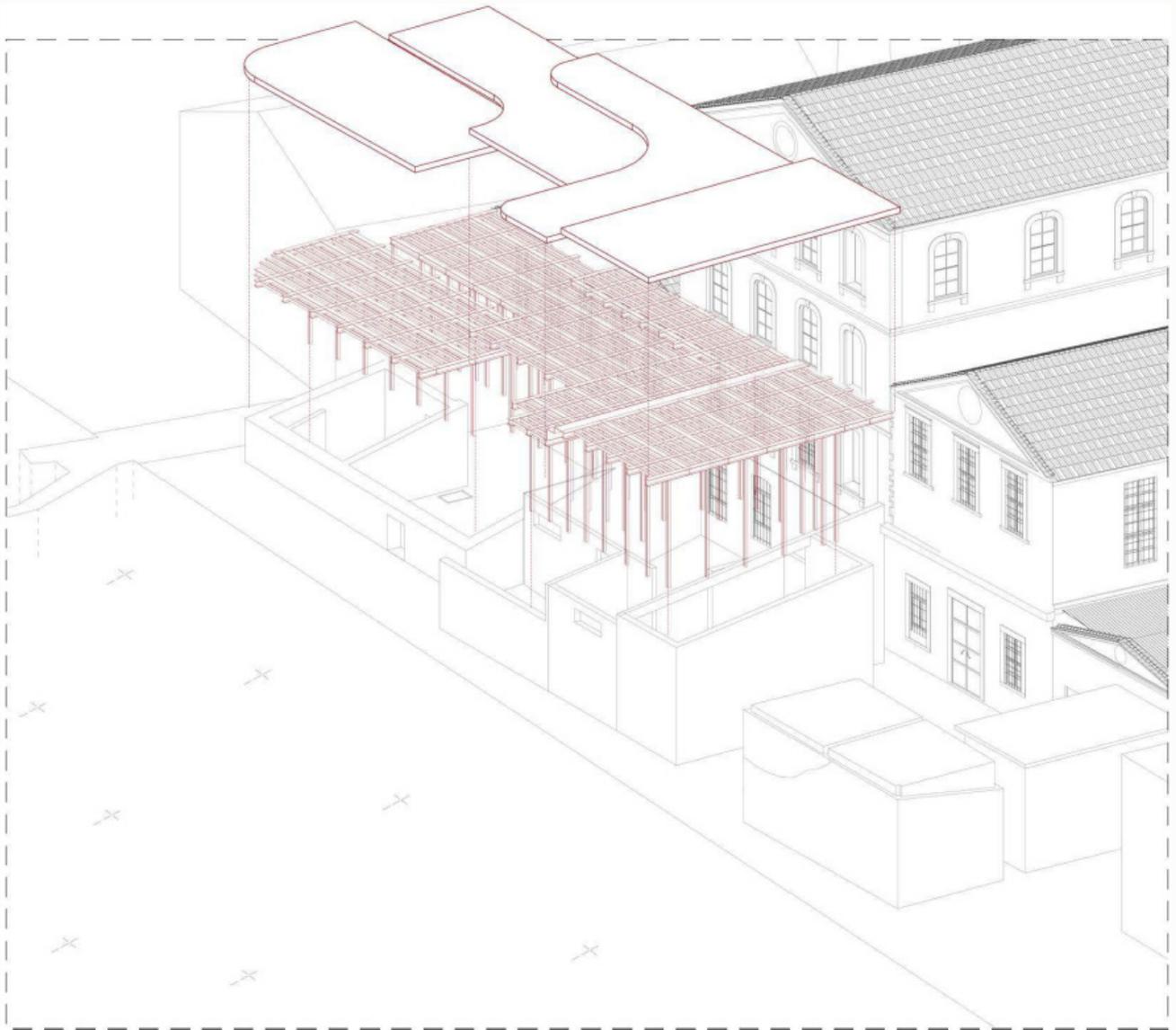
Despite its non-original status, over time it became an integral part of the complex, and its preservation was therefore considered essential to maintain the continuity of the building's historical and spatial narrative.



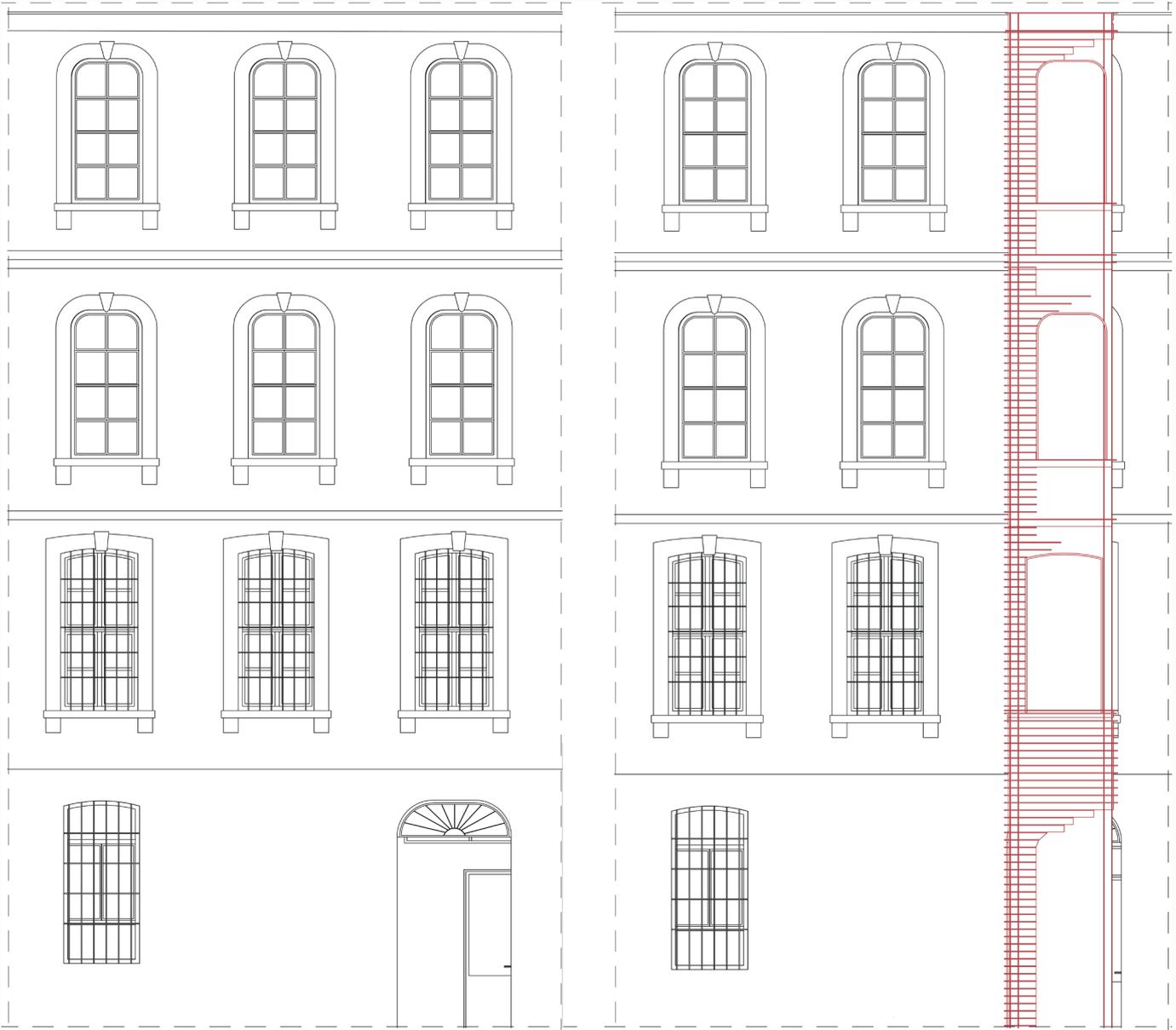
In the proposed intervention, the existing stone walls are treated playfully, while a lightweight steel-framed interior shell defines a series of platforms, roof terraces, and multi-level surfaces. These surfaces are arranged in response to the slope of the existing roof, creating layered spatial sequences that resemble a natural cascade or flow.



The design allows for diverse programmatic activities within this rear structure, while also enhancing the building's relationship with the sea, which could not be fully established at ground level due to spatial limitations. The vertical gaps between the new surfaces and the existing structural frame create semi-open and semi-enclosed voids that not only articulate the new interventions but also allow natural light to penetrate the lower levels, enriching the interior environment.

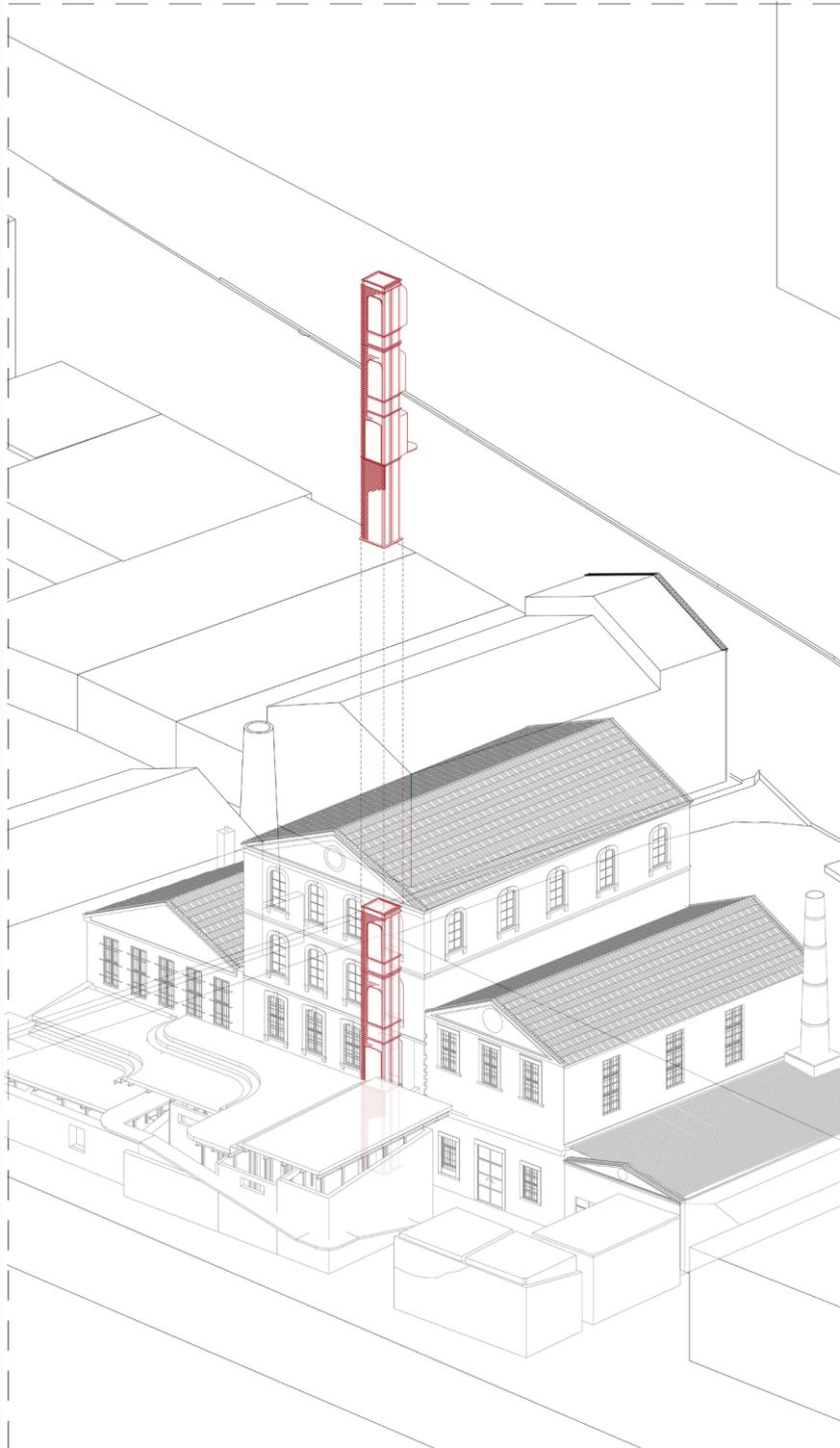


### 4.3 Adaption of Function Requirements



To meet functional requirements, a new elevator has been strategically positioned in the courtyard at the rear façade of the building, designed to be installed or removed without causing any damage to the original structure. The sufficient height of the existing window openings allows for the integration of an elevator supported by an external steel framework, ensuring minimal intervention in the historic fabric.

In order to preserve the rhythmic alignment of the facade—a defining characteristic of the building and of similar factory structures in the area—the elevator is conceived as a semi-transparent, steel-framed carefully designed so that it does not disrupt the architectural harmony of the exterior while providing full functional accessibility. This intervention ensures accessibility while remaining visually light and legible within the historic context.



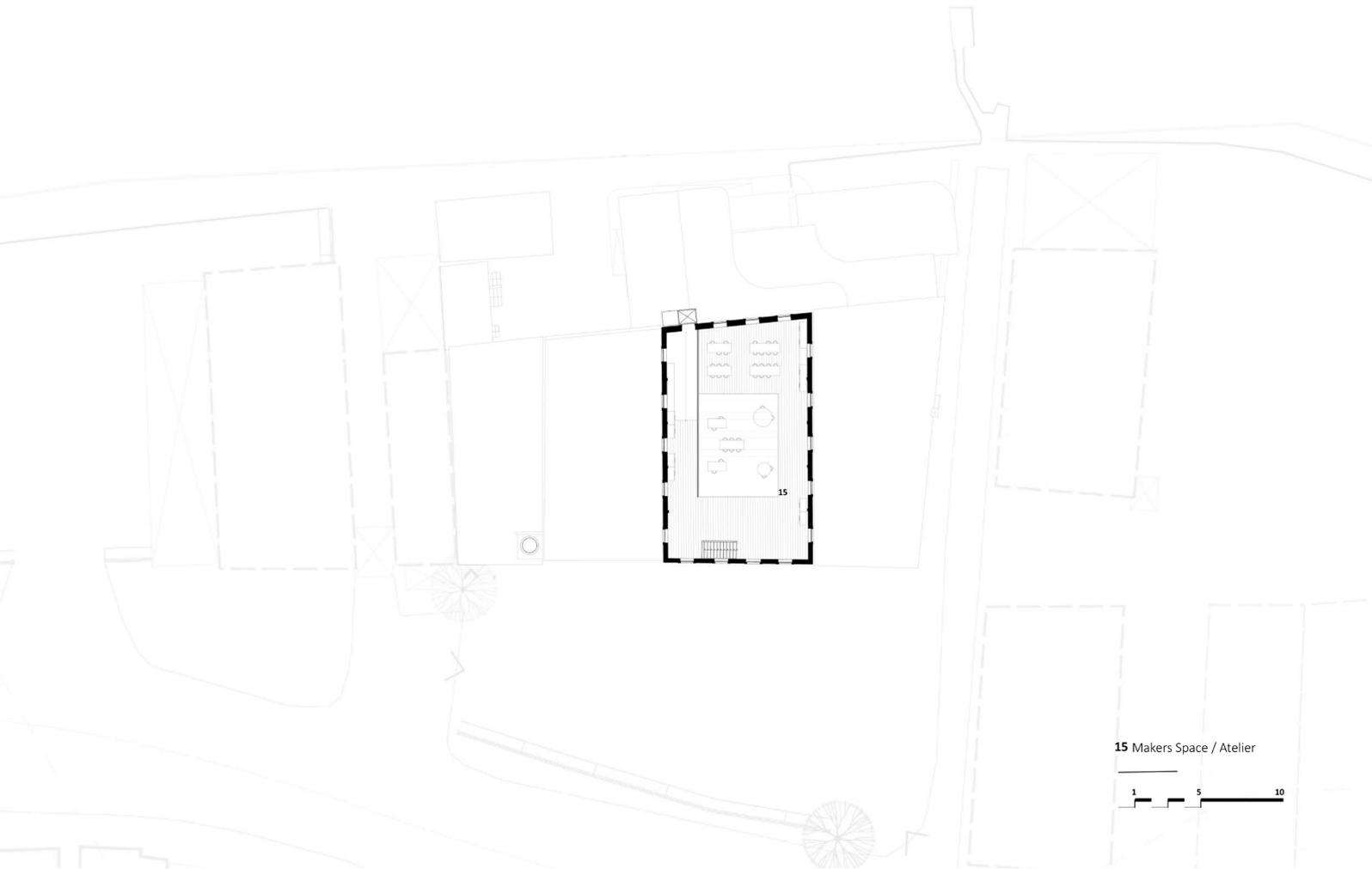


- 01** Storage
- 02** Archive Storage
- 03** Bookstore / Second-hand Bookstore
- 04** Digital Exhibition Area
- 05** Ticket Office
- 06** Leasable Kiosk Space
- 07** Exhibition + Social Courtyard
- 08** Storage









15 Makers Space / Atelier





In terms of material selection, contemporary materials are employed selectively, while steel elements are left exposed and components in contact with the ground are made from more natural materials. This approach visually emphasizes the suspended nature of the new interventions, making it clear that these elements are guests within the building rather than original components of the historic structure.

## References / Bibliografia

*Ayvalık Alan Başkanlığı. (n.d.). Ayvalık's UNESCO World Heritage process. Retrieved February 2026, from <https://www.ayvalikmiras.com/unescodunyamirasi/ayvalik-in-unesco-dunya-mirasi-sureci/>*

*UNESCO World Heritage Centre. (n.d.). Ayvalık Industrial Landscape (Tentative List). Retrieved February 2026, from <https://whc.unesco.org/en/tentativelists/6243/>*

*Kale, E. (2019). Sustainable regeneration of post-industrial landscapes: Local strategies for the city of Ayvalık (Master's thesis, Politecnico di Milano). Politecnico di Milano Repository.*

*Uçar, H. (2014). The role and significance of olive oil production, storage, and sales buildings in the history of Ayvalık. *Trakya University Journal of Engineering Sciences*, 15(2), 19–28. <http://dergipark.ulakbim.gov.tr/tujes>*

*Kabukçu, G. (2018). Investigation of industrial heritage sites in the context of industrial landscape: The case of Ayvalık (Master's thesis, Istanbul Technical University, Graduate School of Science and Engineering). Istanbul Technical University Repository.*

*Bottero, M., D'Alpaos, C., & Oppio, A. (2019). Ranking of adaptive reuse strategies for abandoned industrial heritage in vulnerable contexts: A multiple criteria decision aiding approach. *Sustainability*, 11(3), 421. <https://doi.org/10.3390/su11030421>*

*Donnarumma, G. (2015). Abandoned industrial buildings: Methodologies and technologies for a sustainable recovery. *Rivista TEMA*, 1(1), 25–37. <https://doi.org/10.17410/tema.v1i1.25>*

## Adaptive Reuse Case Studies

*Estación Enológica / Oenological Station, Bovenbouwwerkplaats, Utrecht – Studioninedots*

*Ayvalık Rahmi M. Koç Museum – EMR Mimarlık*

*Hasanpaşa Gasworks Restoration, Landscape Design and Adaptive Reuse Project – EMR Mimarlık*

*Can Ribas Community Center – [Architect/Studio if known]*

*Kohila Paper Factory Transformation – Kadarik Tüür Arhitektid*

*Bastard Store – Studiometrico*

*Espai Barberí – Flores & Prats*

