















**Politecnico  
di Torino**

Architectural Master's Thesis  
Master's Program in Architecture for Sustainability

## **Scarscapes**

An Adaptive Design Strategy  
Beyond the Abandonment of Tripoli's Railway Infrastructure

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## **ABSTRACT**

Having been always recognised by its crossing of culture, history, and innovation, Lebanon was famous for its once-thriving railway network which marked it as a forward-thinking nation in the Middle East. After its complete stop due to the civil war, all of the stations within the country have been left abandoned, deteriorating with time as result of the architectural and urban neglect as well as the lack of cultural and historical heritage preservation.

Among the railroad's main remnants, The Tripoli Train Station stands today as a forgotten landmark within an increasingly fragmented urban fabric in the historical city. Tripoli is one of the most important cities not only in Lebanon but also in the Middle East, it has a rich and unique urban fabric with fascinating architecture spreading from its old historical centres passing through its Souks and reaching its picturesque seaside. Tripoli represents a treasure trove of historical and modern sites, many of which have been victims of continuous war conflicts and instability and therefore left as abandoned and



underutilised hidden gems. This neglect in such a significant city gave this particular Train Station an advantage in terms of revival opportunities through visionary proposals and agreements.

Thus, the following thesis explores adaptive strategies investigating how architecture can reengage with abandoned ruins of the Lebanese infrastructure, by addressing urgent societal needs and urban demands while preserving the historical legacy and cultural memory of the site. The dissertation combines historical analysis, current observations, urban mappings, architectural studies, and finally reaching a dual-phase proposal: The first serves urgent community needs creating a realistic vision of the site during the tough situation of our present days, the second is a prospective approach envisioning various uses of the buildings within the site while allowing future transport reintegration.

The primary purpose of this thesis is to develop a repurposing plan of the Train Station in Tripoli implementing contextual and socially responsive design strategies, in order to highlight the importance of recognizing such neglected sites and emphasise their roles as means for community regeneration and heritage reclamation.

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Finally, I dedicate my work to Lebanon, my beloved country. Throughout this process, you have not only been the subject of my work, but a constant inspiration of strength. May you rise, again and again.





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# 01. INTRODUCTION

## 1. Overview and Research Question

*“Urban artefacts are not merely elements of a city’s form, but persistent witnesses to its evolving memory and identity”*

In his seminal book, *The Architecture of the City* (1982), Aldo Rossi discusses new ways of understanding the city describing it as the locus of collective memory, encompassing urban artefacts, whether monumental or mundane, that have been shaped by the city’s dynamics in terms of historical, political, and social dimensions. Rossi presents the theory of permanence in his work, which is directly related to the city’s changes throughout time and its development. Artefacts can be altered with time into monuments holding a significant value as a landmark in the city, which makes them defined and characterised by their permanent forms not by their function which can be modifiable and sometimes lost over the years. Hence, the phenomenon of decay appears, which can be described as the incompatibility of a certain building or a certain zone with the dynamics of the city and its land use.



Rossi therefore opposes to modern approaches in terms of architecture and functionality as it disregards the locus it belongs to: the correlation between the site, the city, and the historical essence. In that context, Francesco Garofalo's notion of "Critical Grounds" provides a lens to view these spaces not as ruins, but as places in transition, where history, memory, and urban transformation intersect in contested narratives. It is a thoughtful, contemporary architectural reflection that complements Rossi's interpretation: While Rossi focused on the permanence of urban form and memory, Garofalo emphasizes the fluidity, contingency, and ecological potential of ground and territory in architectural thinking.

Garofalo reframes the concept of ground, not as a static neutral base for architecture, but as a critical and active element in the design process. He also argues that landscape is not just the background for buildings, but a shaping force of urban form and architectural meaning.

*"The ground is not only the place on which architecture rests, but the material of an ever-changing narrative between the natural and the artificial"*

There's a particular relevance between Rossi's theoretical approach and the Railway Infrastructure in Lebanon. Encompassing abandoned tracks and disused stations, It can thus be understood as a critical ground.

Infrastructures, transportation particularly, are not limited to the functional systems of city life in terms of ensuring the physical flow of people, goods, and information, they have far more important role within the city, they play a significant role in reflecting the hidden histories and journeys of the city they belong to. Historically, railways around the world showcased the progress of the cities, the more developed the lines are, the more power the city holds, as they created nodes within the world linking various parts within a country as well as crossing its borders reaching other economies leading to local and international growth. However, many of these systems have come to a fall and now hold within them a collection of memories. Other than falling in terms of functionality, some may have become nothing but ruins neglected in various cities.

Established in the 1890s, the railways in Lebanon formed a regional and global network connecting various cities in the country as well as crossing borders and reaching neighbouring countries and at its peak it eventually reached Europe. Today, the country features abandoned tracks and stations offering not only a reminder of a golden era of modernization and economic growth in Lebanon, but also a reminder for all the interruptions, conflicts, and political disturbance that crossed the country.

Being in their current situation, these remnants hold the potential for revitalization and continuity. Many initiatives have reached a dead end rather than being implemented due to political, social, or economical problems, and many other are still being held, waiting for studies to begin. One of the most

promising agreement is between Lebanon and Turkey, which guaranteed to fund a project once well proposed and studied for the Tripoli Train Station as it is one of the three major stations in the country.

Scarscapes frames the thesis as a study negotiating decay, memory, and future use, it follows the architectural and historical traces of the Lebanese railway system over the years, during which the country has witnessed economic, political, and social fluctuations reaching the actual situation of our current time. Echoing Rossi's theoretical observation of the urban development and the artefacts within a city, alongside Garofalo's emphasis on the layered relationship between architecture, ground, and temporality, this thesis explore the train line not just as an outdated infrastructure but as an urban artefact that encapsulates the significant memories it holds. It dives deeper into the Tripoli Train Station, a silent monument to a once vibrant past, seeking to understand how it can address broader development through various strategies in order to meet the present social needs and honour its legacy, acknowledging the intertwined histories of territory, memory, and urban transformation.

This dissertation is therefore guided by the following question:

**How can the remains of the Lebanese railway system, focusing on Tripoli train station, be revitalised in order to address current urban and societal needs while preserving their cultural heritage and historical legacy?**

Specifically, the following sub-questions will be addressed in order to reach the purpose of the study:

- *How did the Lebanese railway system contribute in shaping national cultural, urban, and economic development over an extended period of time?*

- *How can the station be contextualised within Tripoli's urban fabric to face challenges posed by its socio-economic and political state to identify potential renewal?*
- *What strategies can be implemented in the station in order to meet humanitarian needs while preserving its significance, maintaining flexibility within spaces for future functional adaptations?*

## 2. Urban Infrastructure: Historical Significance and Enduring Legacy

*"The most difficult questions of urban performance are often inseparable from the functioning and design of urban infrastructure" – Stephanie Carlise and Nicholas Pevzner (2013)*

Cities around the world consist of an assemblage of infrastructures that can either be working individually or in harmony to provide the necessary urban needs. It reflects social and historical evolution forming a collection of memories embodying various urban aspects.

Over the past years, interest in urban development has emerged and is directly related to infrastructure as it represents a central concept in urbanism. Urban infrastructure transforms space, operating at all scales within a city as a substantial structural system. Its role isn't just defined by a physical arrangement of connected networks, however, it goes beyond that by shaping

cities socially, culturally, and economically.

Behind every threatening infrastructure lies a legacy of an emerging structure back in the days, which came to an end as a result of historic challenges and urban fluctuations. Some old infrastructures reached a state where they have no use aligning with their original functions, or simply abandoned with no use at all. The functionality of these structures can alter with respect of the changes a city undergoes over time, accordingly, it stays in line with what the city requires and stays in operation respecting its importance as a central landmark in its environment.

For instance, New York's City High Line sets a great example for repurposing an old infrastructure into modern use. In the 1930s, it served as an elevated train track in a large industrial district, until its functionality fell apart as it was threatened for demolition. However, visionary organisations proposed other solutions and managed to turn it into a public green space which reached great success and inspired other initiatives to be considered on abandoned railways, roads, and other sites.

In the specific example of the Lebanese railway, this infrastructure played a vital role in the country's development as well as shaping its major cities. Serving as a backbone for the country's economy, it not only ensured trading goods and transporting people, but also exchanging cultures and ideas. As the country was emerging, the tracks were extending reaching various cities in different parts in Lebanon, creating interconnected nodes which lead to urban growth in both, coastal and peripheral areas.

"Nodes... may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to

another.” – Kevin Lynch, *The Image of the City*, 1960, page 41

Stations, in Lebanon, echo the idea proposed by Lynch, as they serve as nodes linking cities and converging paths through trade and exchange. Tripoli Train Station, like others in the network, acted as a main point of action throughout its operation. It also defined the identity of the city and improved its relevance within the area, as it reflected its cultural, societal, and urban fabric.

The station, however, was then severed and neglected, as the rest of the structures related to the railway system in the country, as a result of the never-ending conflicts and wars witnessed in Lebanon. All remnants were left as abandoned sites imbued with historical legacy.

### **3. Witnesses of Time: The Role of Urban Ruins in Cultural Memory**

*“A Friche is a piece of land left to itself. In it resides the possible”*

*- Gilles Clément, *Éloge de la Friche*, 2014*

As a result of a natural urban phenomenon, ruins represent a recollection of past events a city has witnessed, storing various memories and connecting society with its ancestors, making them artefacts of history. However, it holds far more than just the past, these buildings can be re-imagined in many ways in order to revive the legacy of what once was, leading to significant

improvement of the urban fabric shaping the city. These structures have survived local and regional circumstances on all social, political, and economic scales. That said, they should not surrender to the fast urban development which led to their abandonment, following rapid modernization approaches in both architecture and urbanism. What is now referred to as “destroyed rubble of the past” should follow the path of cultural value-making, to then be known as a prominent landmark honouring its legacy.

Perceived as dysfunctional buildings and, by some, useless building polluting the urban fabric, urban ruins reached a state of degradation which led to their abandonment and the loss of their functional value due mainly to political and economic reasons. If kept in their current state, they will continue to be disused sites causing morphological harm to their environment, and decaying more with time turning into social and economic parasites within the city. Instead, urban ruins should be appraised and given the chance to share the messages they hold as a materialization of urban memories and shift their image from violent ruins to assets for urban revitalization.

Infrastructure, particularly railway systems, though in many cities develop and spread further within a country even crossing borders with others, has come to a halt in other countries, joining the infrastructural artefacts while gradually degrading and silently reaching neglect. These buildings will forever be holding narratives of their establishment, their peak, their resilience, as well as their decline. Nevertheless, deserted stations, just like other remnants, would not tell their stories if kept unaltered and empty. Rather than standing as wild nodes at different sites in a country, that once were vibrant active places serving economic and national development, they can still play that same role of progress for societal and urban scales, even with functional alterations.

This thesis will focus on studying the Lebanese railways as a non-operating system spreading within the country, and more specifically on its remnants which served as connective nodes back in the days and are now awaiting opportunities to honour their resilience and their past. Tripoli's Train Station, as one of the three main stations in Lebanon, will be the focus of the dissertation, which might lead for future inspirations for further working on the other ruins, in order to revive the line for it to reclaim its legacy. The station played a critical role in shaping the fabric of Tripoli, where it spread the city's culture to the wider region extending to international networks, which made it the symbol of Tripoli's strategic importance. Walking through its corridors today not only shows how neglected the buildings are, but also sheds light on urban possibilities that can honour its legacy, by creating not only a space of decay but also of latent potential, where future architectures may emerge.

## 4. Methodology

This thesis uses a methodology that is based on architectural traces spread along the country of Lebanon. It stems from the idea that ruins still pose challenges worldwide and deserve to be honoured and to be further studied in the field of architecture and urban conservation. The dissertation focuses also on the theme of sustainable and social use and reuse of historical remnants having the aim to find balance between the old legacy that the ruins held among the years, and the modern social and economic needs of the urban fabric and the public.

The methodology of my research is informed by the perception of infrastructural ruins as a collective memory representing a versatile artefact in which potential



opportunities for economic, social, and urban development prevail. On one hand, an infrastructural ruin is a physical portrayal of the past, showcasing the journey it witnessed throughout the history, on the other hand, my study demonstrates how revitalising it can reclaim its privilege as an important landmark in its environment, while at the same time reshaping the urban fabric and serving the societal needs for future economic and urban progress. Therefore, my thesis contributes to a growing body of work that concentrates on the interface between historical narratives expressed through architectural ruins and their integration into the contemporary urban dynamics.

Targeting the country of Lebanon and its infrastructural system, the thesis will go through the historical overview of the railway, from the opening of its first track to its decline, diving deeper into all renewal architectural or urban initiatives through time. It will then focus on the case study of Tripoli train station and analyse it on an urban, historical and architectural scale, finally leading to design strategies and proposals for its revitalization. Thereby, within the research, both primary and secondary sources will be used, which helped in forming the foundation of the research through data and observations and providing interpretations and context to though theoretical frameworks and architectural urban approaches.

As for the primary sources I examined archival and historical documents of the Lebanese railway system visualising maps, blueprints, and photographs dating from the Ottoman and French mandates as well as new drawings analysed from governmental reports or proposals for rehabilitation or development. I planned various site visits to the Tripoli Train Station in order to understand the space and document the current conditions of the buildings in the site in terms of architectural elements and the state of decay, taking photographs and notes from the site and talking to the guards and some locals around.

I continued by interviewing local architects from Tripoli interested in the field of preservation and adaptive reuse to gather insights about the station's significance and the community as well as the municipality's perspectives and future vision. As for the secondary resources, I read books written by architects and urban planners to get inspired by different theoretical and practical approaches in what concerns the importance of infrastructure, the artefacts and the ruins of the cities. The main books I got inspired from were "The Architecture of the City" by Aldo Rossi and "The Image of the City" by Kevin Lynch, while the arguments of Francesco Garofalo in "Critical Grounds" broadened the vision into modern architecture and landscape. I also read academic publications and reports studying the Railway Lines in Lebanon, as well as governmental articles which helped gathering information about the initiatives or proposals that concerned the subject of my study.

In fact, other sources were needed to be used in my research, during the outbreak of the war in the Middle East at the middle stage of my studies. Following the news was a must in order to understand the social and economic decline in Lebanon which affected the social and urban needs in the country.

The approach used in the case study aims to shed a light on the importance of considering the urban ruins in architecture and the importance of rethinking the infrastructures on an urban scale. It reconstructs links between the past and the present on both, micro and macro scale, that is the abandoned historic buildings, in this case the train station, and its connection with the country, the infrastructure and its legacy. The fragmentary nature of my research process is also mirrored in the writing of my thesis. The following pages combine text and visual materials narrating the journey of the Lebanese Railway System with the urban analyses and the design proposal related to the case study concerning the Train Station of Tripoli.

## 5. Case Study Presentation

For over fifty years, the railway system in Lebanon, rich in culture and heritage, have been left abandoned with deserted tracks and stations. Even though many studies and attempts for its revival have been propose, none of them reached the full implementation, they were mainly cut off due economic and financial issues. However, some plans of refurbishment and refunctionalisation have been done, and other proposals are still left on hold.

One of the most recent and auspicious proposals was based on an agreement between the Lebanese Railways and Joint Authority and the country of Turkey for the station in Tripoli, the 2nd largest city in Lebanon: once a project is done and proposed for the refurbishment of the station in Tripoli, Turkey will allocate its necessary funds for the plan, and for the restoration, as long as the project falls within the framework of social and economic projects. Therefore, in my case study, I will be focusing on the Tripoli Train Station through urban analysis of the city, reaching a design proposal that responds to the socio-economic needs of the city.

Established by a local initiative, the Tripoli Train Station became operational in 1911. It was them severely affected during the First World War and was then gradually getting damaged until it was cut off with the rest of the railway line in the country in 1976. The site consists of many buildings, all damaged and abandoned, along with the facilities of the station, trains, and trailers, all perched among barren orchards along the coast of the city's harbour.

The brought-up question, however, is: Why re-purposing the station rather than proposing a revival project of the train line?

Many consider that altering the function of the stations into something other than its original use means that it would eliminate all kinds of hopes that the train would function again and bring back its true meaning. However, in my opinion, focusing only on proposals targeting the original function of the station, in other words reviving the trainline, is unreasonably optimistic, impractical, and far from the realistic situation and the challenges that Tripoli, as well as Lebanon as a whole is facing. Restoring and modernizing old tracks, wagons, and infrastructures as well as the maintenance of the system require an immense amount of money, and the current economic state in Lebanon isn't capable of investing in such a project. Moreover, the country is also facing a political decline, with a weak governance and unstable state, which makes it infeasible to even think about addressing transportation hub. More recently, Lebanon is witnessing ongoing conflicts with its surroundings which led to a direct shift in the country's priorities, focusing on basic public services, humanitarian needs, and urban and economic development.

That said, the thesis honours the history of the trainline as well as its function and significance in the past, however, in our recent times and in this specific context, it is imperative to explore adaptive reuse strategies, transforming the spaces into functions that address to the needs of the city and the environment, as well as the humanitarian and societal demands.

Furthermore, my design proposal will be based on the approaches of flexible design and adaptable spaces, in order to make the functions easily adjustable with time, modifying in parallel with the urban and social transformations, in order to make the "dream" of the revival of the train line and its re-operation an attainable project in the future.

## 6. Structure of the Thesis

The study is divided into 2 main parts, gradually building a narrative that ties the history of the railway to the designed proposal. The first part, chapter 02, delves into the rich history of the Lebanese Railway system, from its inception during the Ottoman Empire, following its journey and evolution, reaching the eventual decline. This part serves as the foundation for understanding the social, economic, and political challenges faced by the country that led to the abandonment of its infrastructure. Furthermore, it discusses the initiatives that were proposed after its fall in purpose of the renewal of the train lines throughout the country, as well as the projects of refunctionalisation of certain stations, the unimplemented studies and the completed ones.

The second part, chapters 3, 4 and 5, of the thesis delves into the case study. This part builds progressively, starting from a macro level, the urban analysis, to a micro level, the proposal focused on the station in Tripoli:

Chapter 3 zooms into the city of Tripoli, providing an understanding of its urban fabric, its governance, and its special characteristics. It then shed the light on the Train station and how it occupies a significant point within the city, emphasizing its historical and strategic importance, implying its potential for development.

Chapter 4 examines more closely the site of the Tripoli train station, focusing on the architectural and cultural importance, emphasizing the necessity of understanding its legacy. It goes on by highlighting the site's unique features and buildings, such as the Train Workshops, the Traveller's Building and the

Lions' Tower. This chapter sets the foundation for understanding the space and the architectural characteristics in order to start with the design proposal.

Chapter 5, integrates the framework of the previous chapters to present a project proposal, which is in itself divided into 2 phases: the first phase addresses immediate social and urban needs of Tripoli, which I refer to as "Designing for Resilience", and another phase envisioning the station's future as an adaptive flexible space, which I call "Designing for the Tomorrow". This dual approach ensures the project remains relevant both in the current situation of the present and for the future blossoming possibilities, balancing between the current survival necessities and the promising future hope.









## 02. HISTORICAL OVERVIEW

### 1. Lebanon's Geospatial Context

Holding a strategic position at the threshold between Europe, Africa, and the middle East, a small land covering just 10452 km<sup>2</sup> occupies a portion of the eastern Mediterranean coast, giving it a particular geopolitical significance in the region. This country is none other than Lebanon.

Having earned the title “the Pearl of the Middle East”, Lebanon’s regional and global influence has historically been shaped by trade, facilitating the export of oil, grain, metalwork, textiles, and pottery to Western markets. This thriving role helped in developing the country’s major coastal cities like Beirut, the capital, Sidon in the south, and Tripoli in the north.

Despite gaining an important aspect due to its location, Lebanon has always been the centre of the conflicts in the region, as its northern and eastern borders are bounded by Syria and its southern borders by occupied Palestine. Lebanon’s is renowned for its striking terrain and topography, consisting of a narrow coastal strip lies on the west with most of the country’s major cities, a fertile plain, the Bekaa Valley, which falls between the two mountain chains, Mount Lebanon range and Anti Lebanon range. The diverse landscape plays a significant role in the development of settlements, agriculture, and trade routes.



EUROPE

AFRICA

Figure 01: Identifying Lebanon's Geographical Location



## **2. The Significance of Infrastructure in Shaping National Development**

Alongside its particular location in the region, Lebanon's economical, political, and geographical significance is largely affected by the country's infrastructure. A network over 8000 km of primary and secondary roads, with three main highways all branching out from Beirut, and one system connecting Lebanon to Syria. The country's infrastructure has always been a target in conflicts in order to forbid any link with adjacent countries, as it is considered a link with the Arab World opening up to Europe. For Instance, in 2006, during the war, Israel targeted more than 60 bridges linking major cities, including the link between Beirut and Damascus, as well as Beirut's International Airport and several Ports.

Although road transportation constitutes the main functional system in Lebanon nowadays, a vital link connecting the different cities of Lebanon with one another as well as Lebanon with neighbouring countries was once another important asset of the country: The Railway System of Lebanon

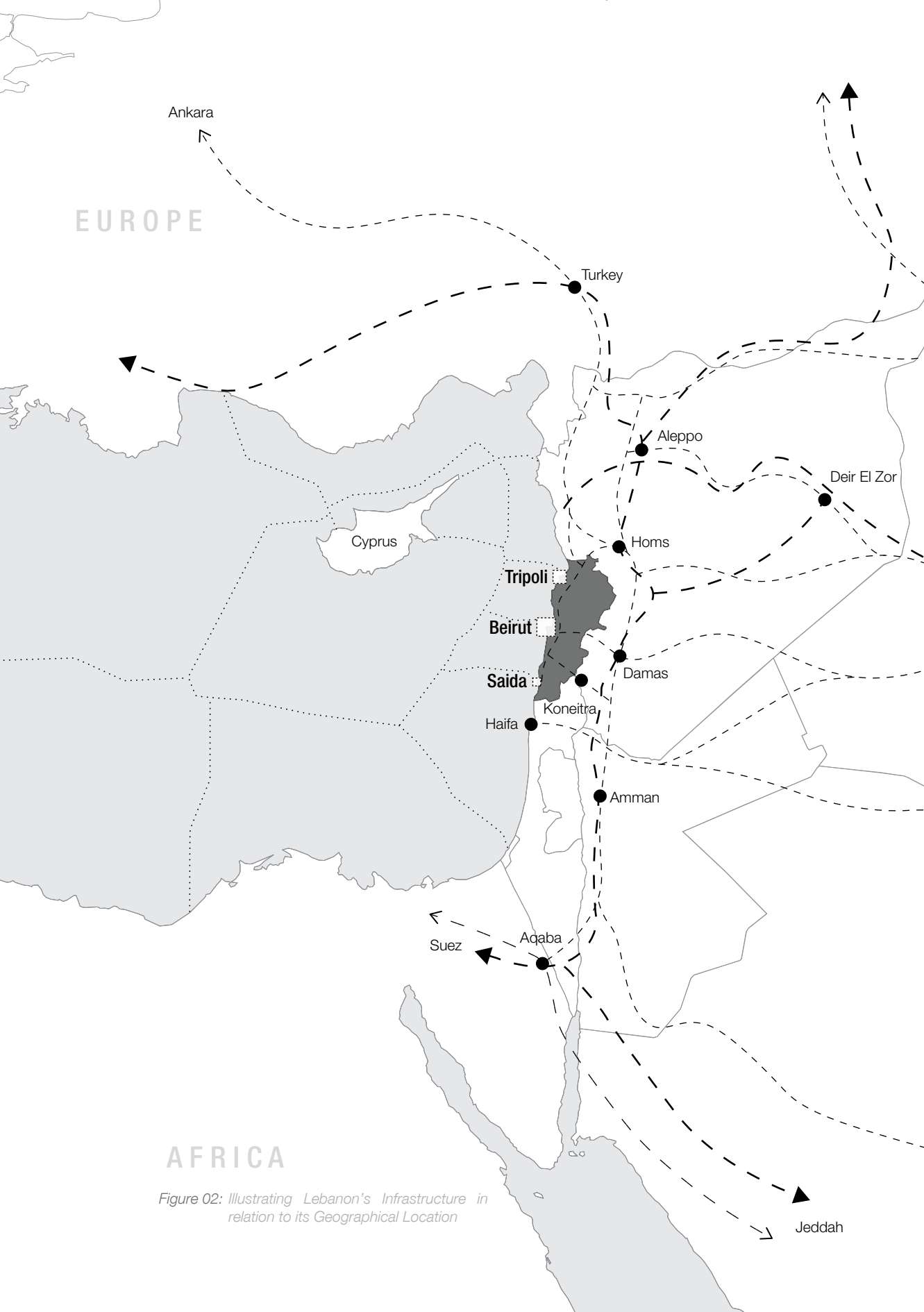


Figure 02: Illustrating Lebanon's Infrastructure in relation to its Geographical Location



### **3. The Railway System: A Hidden Gem**

A thriving railway system connected Lebanon to the wider world, making it one of the first countries to adopt train travel in the Arab World, Prior to the Lebanese Civil War (1975 - 1990).

Today, train stations appear frozen in time leaving remnants of the railways lying behind tall fenced walls, with remaining trains stuck in their position after their last journey in 1976. These trains are no longer operational, while railroads are still visible throughout Lebanon, trains transporting people or goods between cities and countries are not, even though around 350 employees still have their jobs and get paid until today.

### **4. From Concept to Implementation: The Inception of the Lebanese Railways**

In the early 1860s, transportation and trading among the cities in Lebanon as well as with Syria has been important, however it required an average of three to four days to arrive from one city to another, due to the fact that merchandise was transported by mules. Since then, the idea of vehicle-friendly roads within the city and with Syria to facilitate the transportation began to be discussed. A former French naval officer, Comte Edmond de Perthus, obtained a concession from the Ottoman government to build such a road, providing transportation from the city of Beirut to Mount Lebanon, which led to significant growth of trade within various areas.



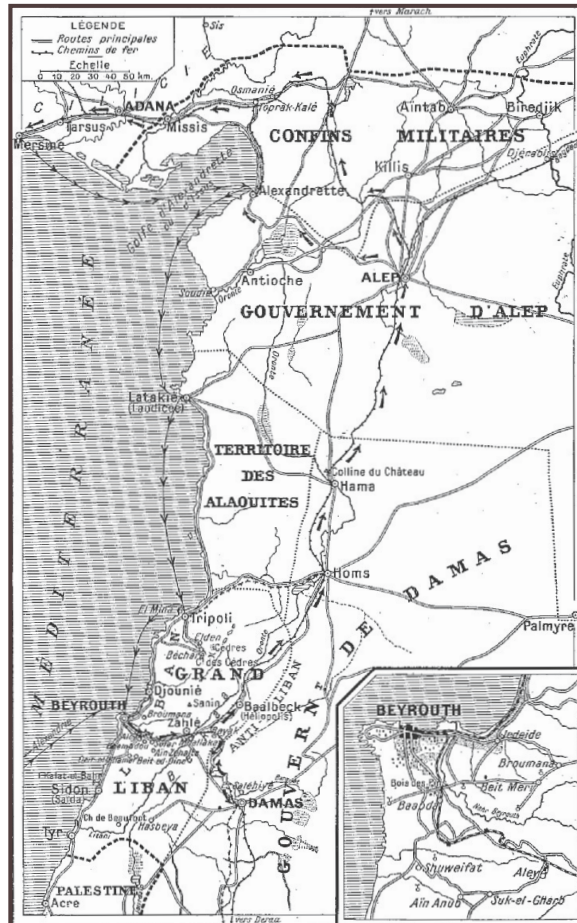


Figure 03: Map of the Lebanese Infrastructure in 1921

## **5. The Rise and Fall of the Lebanese Railway Network**

### **1. Lebanon's Colonial Experience: The French and Ottoman Empires**

After being declared an Ottoman province in 1888, Beirut became the capital of Mount Lebanon and the gateway to the Levant. De Perthuis started negotiating with French companies to build the capital's port in 1889, which, along with the volume of goods traded and the quality of services offered by the city, made the city a flourishing major commercial centre.

Later in 1891, a French company started working on a railway system connecting Beirut to Damascus, Syria. The first track was opened in 1895 creating a 147km trip that used to take 9 hours passing through Baabda, Aley, Bhamdoun, Sofar, and Dahr Al-Baidar, then descending into the Bekaa towards the Syrian border.

The Port of Beirut witnessed a significant enhancement as a regional hub with the introduction of new railway lines which brought substantial benefits, stimulating commercial and industrial activities in the areas through which they passed. The wine industry was also developed in the Bekaa, with the French family, Brun, who was the first to establish wineries in the area. Lebanon was then considered as one of the most modern and innovative countries in the Middle East on the global stage with a boost of the tourism sector.

The Tramway Libanais, the coastal railway connecting Beirut to Jounieh began to operate, and by 1906, a second track was constructed, linking Rayak with Homs, Hama, and Aleppo, having 90km of it passing through Lebanon. The establishment of the railway system not only served as a form of transportation for the civilians, but it constituted a part of a broader political and sometimes military strategy. In 1911, the French Société Ottomane des Libanais Nord et Sud de Beyrouth acquired the concession for the Tripoli – Saida line including a branch line to Tripoli which was later connected with the Aleppo Railway at Homs.

## **2. World War I**

During World War I, all foreign-owned railways in the regions were under the Ottoman control, including the railways on Beirut and Tripoli. The Ottoman Empire was then dissolved after the war, which required other European countries to colonise:

France took the mandate over Lebanon and Syria, reinstating ownership of the Damas – Hamah et Prolongements (DHP), while the British took control over Palestine and Jordan. These colonial powers continued with the projects that were planned by the Ottomans.

By the eve of World War II, it was then even possible to travel from Beirut to London through indirect lines. The peak span of the Lebanese railways reached 408 km at its height, almost the same as the length of today's London Underground.

### 3. World War II

The Lebanese railways played an important role during World War II. The British planned to extend the network from Haifa to Rayak but abandoned the project in 1941 due to the difficulties. There has always been a competition between both ports, the port of Beirut which represented the transport hub of the Middle East, and that of Haifa, when in 1942, engineers from the commonwealth completed a line linking both cities and then extending it to Tripoli. The HBT line, Haifa – Beirut – Tripoli line, was under the military control of the British until late 1948, when the Jewish insurgencies in Palestine destroyed the bridges near the tunnels close to the borders.

### 4. The Golden Age

The Lebanese Independence was declared on November 26, 1943 by General Georges Catroux, a delegate general under de Gaulle. The Naqoura – Tripoli railway was acquired by the Lebanese government by the year 1946. A reorganisation of the railways across the country was then implemented, becoming the “Chemins de Fer de l’Etat Libanais” (CEL).

Lebanon’s Golden Age represents the 1960s, when Lebanon was marked by a flourishing transportation system including 26 tram stations connecting various areas of Beirut and its surroundings, as well as 32 train stations throughout the country, two airports, and an international trading port. Beirut was then considered as the business and touristic capital transforming into a megalopolis, Rayak evolved during this period from a small agricultural town into a significant touristic, educational, and industrial centre. The country at

that time represented a touristic attraction for people all around the world including Arabian Peninsula who owned homes in picturesque locations around the country, all easily accessible by train.



Figure 04: Photo of Lebanon's Train, 1967



Figure 05: Photo of Beirut's Tramway, 1960s

## 5. The Civil War

Internal religious ideological conflicts and foreign interventions lead to the eruption of the Lebanese Civil war in April 1975, which mainly involved religious militias that fractured the country and its capital, Beirut. Syria invaded Lebanon in 1976, then Israel in 1982, which only lead to further deterioration of the country. The Civil War, lasting for 15 years, inflicted severe damage of the railway system across Lebanon leading to gradual cessation of its operation. The Beirut – Damascus line was closed in 1976, the year where Syrian forces transform the Rayak Station into a military base. The Israeli army finished what was remaining of the line to Beirut while Syrians sold dug up parts of the railway to Pakistan.

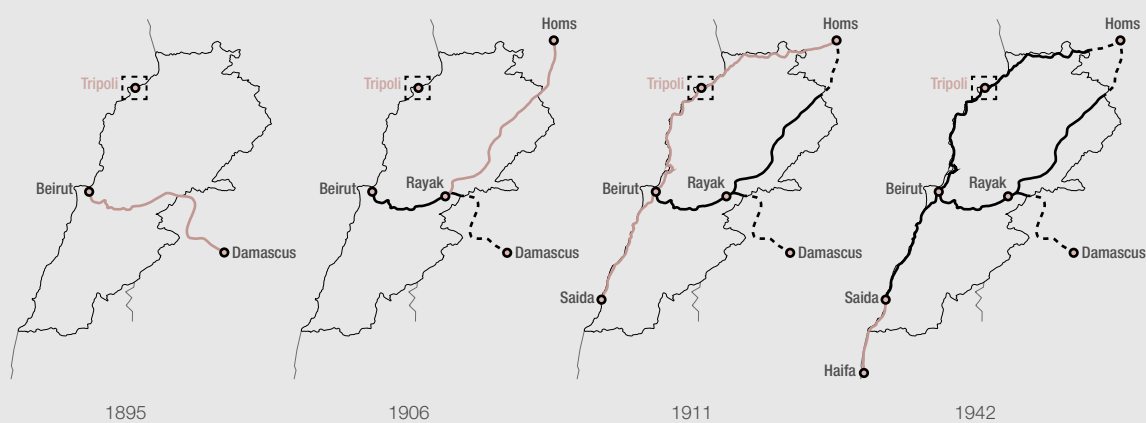


Figure 06: Mapping the evolution of the Railway System in Lebanon

A visual representation of the construction stages of the different tracks in the Lebanese Railway system throughout the years. From the line connecting Beirut to Damascus, to the full network: adding a line connecting Rayak to Homs, then a line along the coast, and finally crossing the borders reaching both Homs from Tripoli and Haifa from Saida.



Figure 07: Map of Lebanon's complete Railway System and its main stations

### **6. The Unfortunate Reality of the Current Situation**

The outbreak of the Lebanese civil war brought passenger train services to a halt, however, trains continued to transport goods and resources on an irregular basis. Especially throughout the war, railway operators maintained limited operations on the southern part of the line which helped prevent widespread power outages by delivering fuel to power plants. As a result of the continuous fighting, the railway infrastructure including facilities, equipment, buildings, vehicles, and machinery, all witnessed severe damage. Bomb explosions and gunfire along several parts of the tracks impacted the railways, disrupting train movement among major cities as well as leading to track theft. These incidents also affected numerous public properties held by the railway association.

Seventy years ago, it was possible to travel by train from Rayak to Trieste, or from Beirut to Damascus, however, in our current time, no trains in the Middle East cross borders. Many carriages and engines were abandoned, most railway lines and tracks were dismantled, and lots of the remaining materials were sold or melted down for bullets and sword used during the wars. The train stations across Lebanon also suffered, many are either destroyed, abandoned, or occupied.

Having been a significant cultural heritage, the Lebanese railway has been neglected for over fifty years. Due to political and economic instability, numerous discussions about restoring the tracks were constantly being stalled.





*Figure 08: Photo of Tripoli's abandoned Train Station*

## 6. Chronological Overview: Key Events at a Glance

**1860s**

Vehicle-friendly road construction providing transportation and enhancing trade

**1895**

Operation of the 1st track of the railway, from Beirut to Damascus

**1911**

Concession of the Tripoli Saida Line, then its connection with Homs



**1889**

Building the Port of Beirut, making the capital of the country a flourishing city

**1906**

Construction of the 2nd track, linking Rayak with Homs

**1914**

World War I

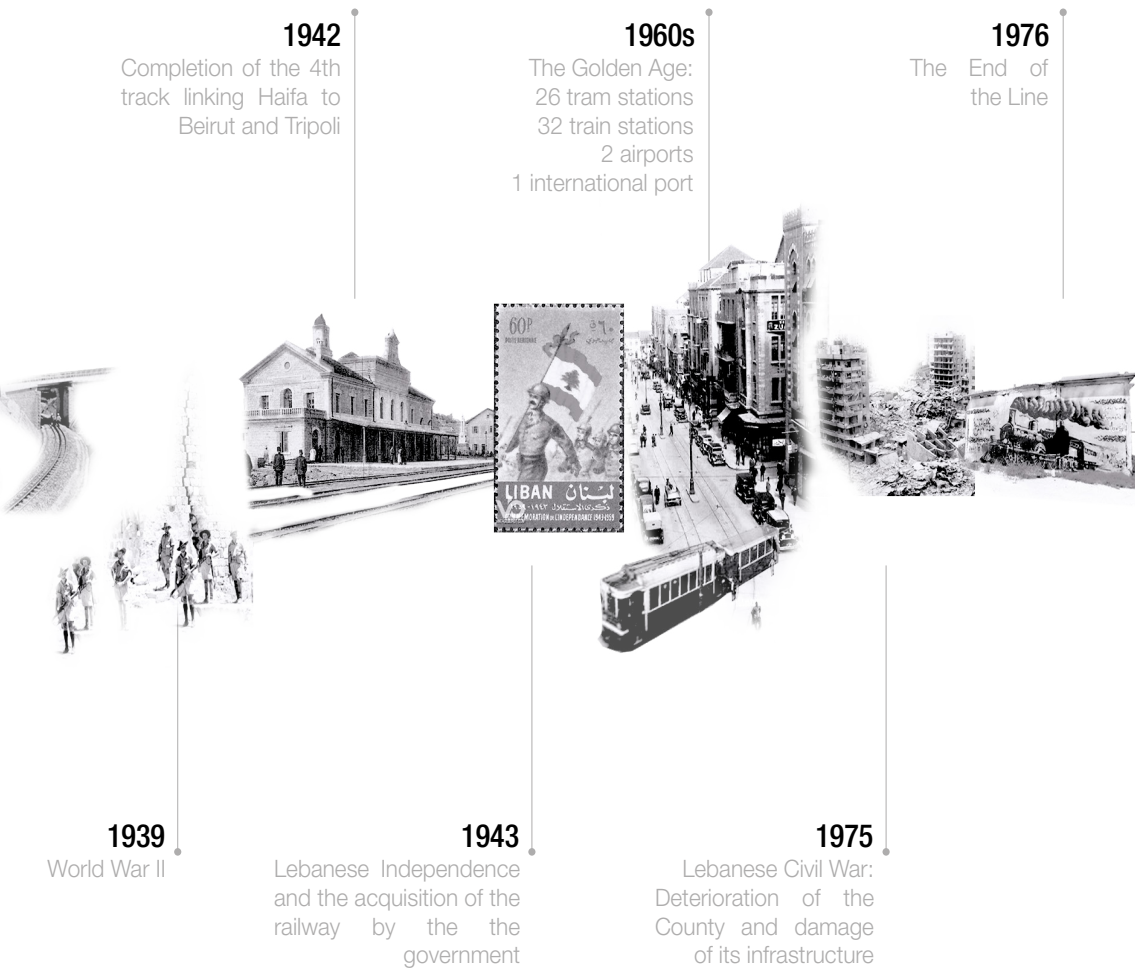


Figure 09: Collage showcasing the time line of the Lebanese Infrastructure

## 7. Then and Now: A Visual Contrast

### Rayak Station

Photographs of the Rayak Station in the 20th century and today.  
All that remains in the site is empty warehouses and rusted trains surrounded by empty unmaintained land.



Figure 10: Rayak Station's transformation over time

## Ma'allaka Station

Photographs of the Ma'allaka Station when it was first built in 1895 and today. A hospital replaced the train station and all that remains today is the water tower.



Figure 11: Ma'allaka Station's transformation over time

### Djellala Bridge

Climbing above the town of Saadnayel, the train crosses the Djellala Bridge. Today, the river that once ran below the it has been replaced by a vehicular main road.



*Figure 12: Djellala Bridge's transformation over time*

## Train Track

The Train tracks in Lebanon were also built between the mountains due to the topographical variations of the country. Nowadays the railways are left abandoned and covered with domestic vegetation.



*Figure 13: The Train Tracks' transformation over time*

### Khan Mrad Bridge

Built in the late 19th century near the summit, the Khan Mrad Bridge was destroyed at the end of the Civil War. It was stipulated that the structure was purposely destroyed for political reasons.



Figure 14: Khan Mrad Bridge's transformation over time



## Tunnels

Near the summit from the East, a series of cement tunnels were constructed in the 1930s to protect the tracks from snow accumulation. Today, remains of these structures are left.



*Figure 15: The Train Tunnels' transformation over time*

### Dahr El Baidar Station

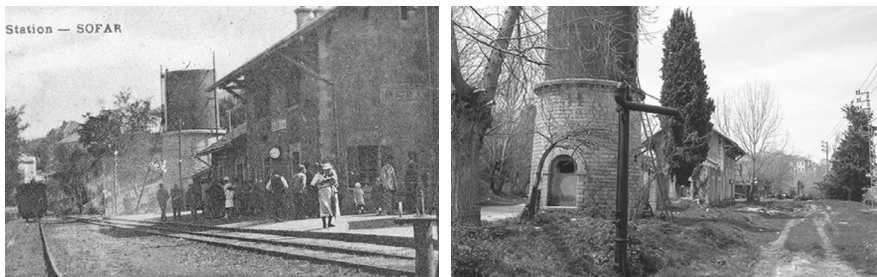
Photographs showing the Station of Dahr el Baidar then and now. Today the building is demolished and left under bad conditions without any maintenance of its structure.



Figure 16: Dahr El Baidar Station's transformation over time

## Ain Sawfar Station

Photographs showing the Station of Ain Sawfar in its heyday alongside today. Ruins of the buildings as well as the water tower are the only remains of this station.



*Figure 17: Ain Sawfar Station's transformation over time*

## Routes

Photographs showing a train route in the 1940s and now.  
Entering the town of Aley, the train track that once lined the town to other parts of the city now serves as a pedestrian route covered by vegetation.



*Figure 18: The Rail Routes' transformation over time*

## Aley Station

Photographs showing the Aley Station in the early 20th century and today. The Station is used for government offices and the tracks around it are removed in order to make the route vehicle friendly.

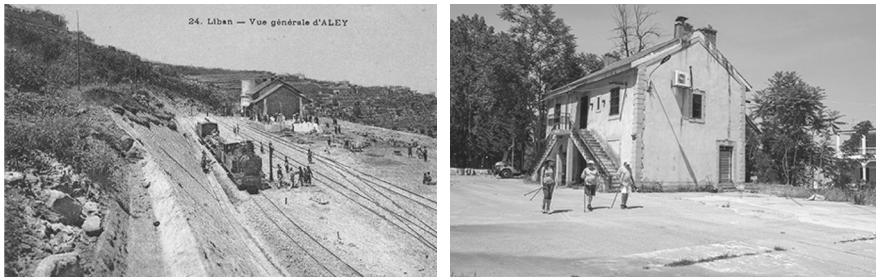


Figure 19: Aley Station's transformation over time

## Araya Station

Photographs showing the Araya Station in the 1960s and today. The main building of the station is now covered by vines and has fallen into disrepair.



*Figure 20: Araya Station's transformation over time*

## Jamhour Station

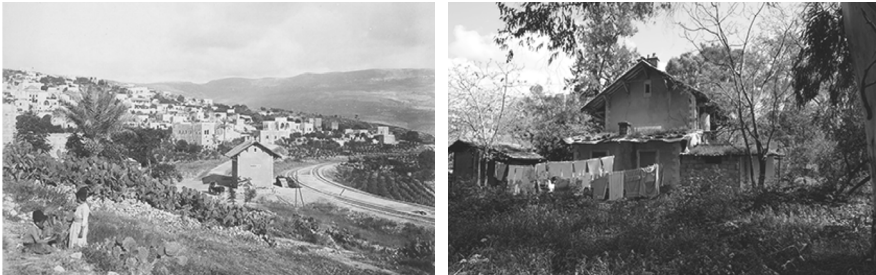
Photographs showing the Jamhour Station in 1910 and today.  
Ruins of main building of the station remain today alongside the water tower and asphalt roads cover parts of the tracks.



Figure 21: Jamhour Station's transformation over time

### Baabda Station

Photographs showing the Baabda Station in 1895 and today.  
Laundry hangs in the yard of the site surrounding the station as a sign that it is illegally occupied.

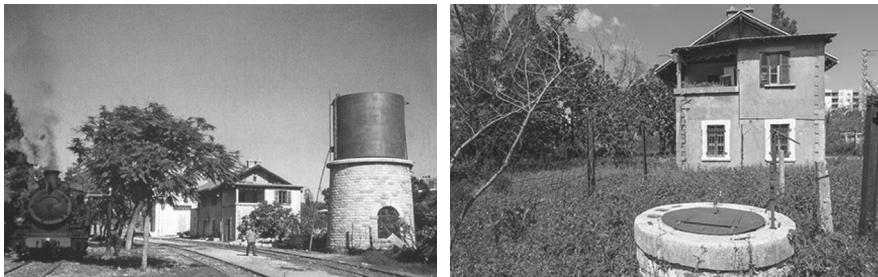


*Figure 22: Baabda Station's transformation over time*



## Hadath Station

Photographs of the Station in Hadath in the early 1970s and today. The main building of the station is left abandoned today and the water tower is demolished. The tracks are unseen due to the wild vegetation.



*Figure 23: Hadath Station's transformation over time*

## **8. The Aftermath: Rehabilitation Initiatives**

### **1. Attempts and Failures**

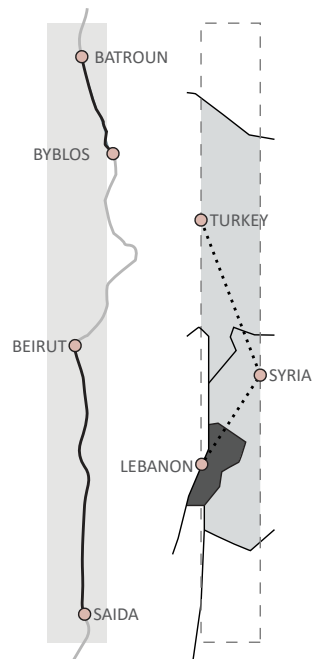
Despite all the setbacks, the Lebanese government remained committed to rebuilding the damaged railways, having plans to re-operate the trains once again.

In 1983, the OCFTC (Office des Chemins de Fer et des Transports en Commun) commissioned Sofrerail, a French company, to study the reconstruction of the line Beirut – Saida for passenger transport. Implementations of the project were even initiated such as purchasing new trains, providing colour light signals, and acquiring six used trains from Germany. The project was subcontracted in a public bid, giving the French the task to restore the railway tracks and a Lebanese – British company the task to install the new signals. The project was put to an end after the Israeli invasion of Beirut, keeping behind all the equipment in the OCFTC warehouse.

In a separate initiative, in early 1983, the government also tried to reoperate a passenger line between Beirut and Batroun, however, it was disrupted ten years after services. Maintenance works were then stopped after the mountain war in the later 1983, however the only railroad that remained in acceptable conditions was the Beirut – Tripoli line, which was only used to transport fuel from one area to another but the passenger transportation services were prevented.

In 1985, plans to improve the infrastructure in Lebanon were still being studied even with the ongoing war. A proposal to establish a subway line both on a national and an international scale was proposed by Bernard Definglant, a French expert, linking Lebanon to Syria and eventually Turkey. Definglant's study emphasized the project's importance while considering the population density in the country as well as the topographic barriers. It showed that building such a railway would be far more cost-effective than restoring and rebuilding the international lines between the countries.

Unfortunately, with the estimated cost being around 3 Billion USD, the Lebanese government considered the project to be too expensive, especially with the absence of the funds necessary to implement it.



## 2. The Peace Train

With the start of the “Battle of Liberation” in the 1989, train operations were completely suspended, however with the Lebanese government’s announcement of the initiative known as the “Peace Train” on the 1<sup>st</sup> of October 1991, it was declared that trains would again function and transport passengers between Dawra and Byblos.

The interior Minister Shawki Fakhoury stated that six to seven trips a day would be scheduled to provide transportation to the destinations of the workers and employees. The effective activation of this line was on October 7<sup>th</sup>, and for over 49 working days, it successfully hosted 14727 passengers. After around a year of success, the tracks started to get deteriorated and required lots of maintenance and repairs, which was a reason to prevent passengers services. However, it continued to transport goods until 1994.

With the return of “Peace”, the idea of further rehabilitating and reactivating Lebanon’s railways emerged, particularly as Beirut had solidified its role as the country’s main administrative and economic hub. Among these plans was restoring the Tyre –



Beirut – Tripoli railway line, which would connect the major coastline cities. However, just like previous initiatives, after the study held by the French company Sofrerail, this plan remained stalled in the parliament due to the inability to pay the necessary funding, estimated at approximately 600 million USD.

### **3. The Tripoli - Abboudieh Line**

Hopes of reviving Lebanon's railway system resurfaced in 2005 with a plan to establish a 35km railway line connecting the port of Tripoli with the Lebanese – Syrian border at Abboudieh. The line would have served as an extension of the Syrian network with Iraq and Turkey, which would thereby facilitate exports and enhance the trading with the neighbouring countries. However, after the assassination of former Prime Minister Rafic Al Hariri in 2005, the political relations between both countries deteriorated, which lead to the abandonment of the project.

More recently, another project has not even reached a serious discussion stage. It was proposed by the Directorate General of Land and Maritime Transport, and presented a restoration of the Beirut – Tabarja line with an estimated price at most 250 million USD, and an estimated cost coverage within mere 7 years.

### 4. The Arab Railway Foundation

In order to enhance the market and strengthen the interconnections within the Arab countries, a project aiming to build the “Middle East Rail and Metro” was proposed to create a regional network. Currently 11 Arab countries have railway systems, totalling approximately 25000km of tracks – Lebanon, Syria, Iraq, Jordan, Saudi Arabia, Egypt, Tunisia, Algeria, Sudan, Morocco, and Mauritania. The idea of creating an organisation to foster cooperation among these countries was agreed on by representatives from several Arab countries back in 1979, after the establishment of the “Foundation of Arab Union Railways”.

Inspired by the importance that advanced nations place on railways and their role in economic development, Arab governments have been encouraged to modernise and expand their rail networks, in other words creating a unified transportation in the context of international trade. In 1999, a special meeting was held to plan its development across the Arab World, from Morocco to Oman, encompassing the Levant and the Gulf. Each country was tasked with developing separately its internal rail network, in order to reach the targeted level of unified regional system.

The proposal includes nine railway tracks:

1. 17000km connecting Syria with Iraq, and the Mediterranean Sea with the Arab Gulf
2. 1860 km connecting Iraq and Oman via Kuwait and Saudi Arabia
3. 2560 km connecting Saudi Arabia and Jordan
4. 1700 km connecting Saudi Arabia with Syria via Jordan

5. 4000 km connecting Oman and Saudi Arabia via Yemen
6. 2300 km connecting Egypt and Sudan
7. 6200 km connecting Egypt and Mauritania via Libya, Tunisia, Algeria and Morocco
8. 3000 km connecting Algeria and Mauritania
9. 1500 km connecting Somalia and Djibouti and on to Yemen via Red Sea ferry

Unfortunately, due to the ongoing political and economic instabilities as well as the wars in the area, both Lebanon and Syria were excluded from the process because no studies or initial works were presented. As opposed to some other countries like Saudi Arabia and the United Arab Emirates who started developing their internal connections serving them at a country scale for now, with hopes to enlarge the scale towards the whole region.



Figure 24: The Beirut Damascus Railroad, 1895



Figure 25: The map of the proposed Arab Railway Project





**Lebanon**

Syria

Iraq

Palestine

Jordan

Kuwait

Bahrain

Qatar

UAE

Oman

Yemen

Djibouti

Somalia

Egypt

Sudan

### Legend

— Existing railroads

- - - Planned railroads

## **5. Implemented Solutions and Visionary Proposals**

### **1. Mar Mikhael Station**

Located in Mar Mikhayel area, Beirut's main station, the second largest station in the country after Rayak, has been transformed into an outdoor nightclub in 2013, where the Lebanese people, known for their vibrant night life, have embraced the project paying little attention to the damage inflicted on the trains and the tracks, while dancing between the remaining locomotives, in which the DJ set is placed. Architect Bernard Khoury envisioned the project as an experience between the train lines and between the remaining wagons. the open air nightclub was closed in 2019 due to ongoing instability.

### **2. Saadnayel Station**

Other attempts to honour the railway's history include transforming stations into museums. For instance, found in the small town of Saadnayel, about 50 kilometres away from the bars in Mar Mikhael, the station offered visitors a glimpse into the golden era of Lebanese railways, allowing them to experience the previous times, during which Lebanon was moving forward.

Today, Lebanon's only train station that still functions as a public space is found in this town. In 2011, Saadnayel's municipality started the restoration of its old station and an antique locomotive. In June 2015 the abandoned building was transformed into a library and reopened to the public.



*Figure 26: Showcasing the transformation of the Mar Mikhael Station into an outdoor nightclub*



*Figure 27: Showcasing the transformation of the Saadnayel Station into a Public Space*

### 3. The Rayak Station

In the biggest train station in Lebanon, the Rayak station, another proposal was also to transform it into a train museum aiming to preserve the country's history and heritage. In his proposal, Mr. Elias Maalouf describes the project saying:



*"A considerable of Lebanon's income is provided by tourism, but still, we lack museums especially those that preserve and reveal the country's modern history. By transforming the train stations, and train factories into one big museum, all the history and beauty of the location can attract thousands of tourists from all over the globe. It could become the biggest train museum in the region. Rayak railway played an important role in the country's history, just like time played a big role on the railway's beauty. What's left of the 110 years old railway reminisce its glorious past. In an area which is approximately 170,000 m2 stand hundreds*

*of metal sculptures taking the forms of trains, thousands of tools and equipment which are scattered all over the place, and big old building surrounded with rails. Lots of trees have concurred the area some of which are more than ten meters tall. Also, strange animals have taken refuge in this station like foxes and owls. Some of the trains in Rayak lived more than a century. They are trains that survived the World War one and two. They carried the stories of soldiers with their battles, and those of civilians with their journeys and their love stories. There are more than thirty locomotives in the Rayak factory, and approximately two hundred wagons."*



Figure 28: Photograph of the Rayak Station in 1936

Maalouf continued his description by stating the fact that the remaining tools that were once used during the railway's operational days, primarily made from iron and wood, are nowadays considered as antiques and collective items. Having been designed by French Architects in the 1980s, the buildings, once serving as hotels, factories, and stations, add a distinctive charm to the site. As for the landscape surrounding these buildings, nature has since reclaimed much of the space, with trees and plants growing throughout the site, with random places such as inside locomotives, climbing on the walls, or also atop some buildings. These transformations have given the site a park-like atmosphere, attracting various species of birds and animals. What the space needs is restoration of the area to ensure a secure and clean environment for visitors, which would make it an attractive destination for tourists from all around the world.

#### **4. Italy and UNESCO: Rehabilitating Beirut's Iconic Train Station**

As a part of UNESCO's flagship initiative, LiBeirut, UNESCO and the Italian government have signed an agreement to fund the restoration of Beirut's Mar Mikhael Train Station in July 2023. The project aims to preserve and revive the industrial heritage of the station, which dates back to 1894 but then abandoned since the Civil War. The station witnessed further damages brought by the Beirut port explosion on August 4, 2020.

Attended by key officials including Sarkis Khoury, Director General of Antiquities, representing the Minister of Culture, Ziad Nasr, Head of Railway and Public Transport Authority, representing the Minister of Transportation, and Taina Christiansen, Head of the UN-Habitat Lebanon Country Programme.



Figure 29: The signing of a proposal for Mar Mikhayel's Station by the Italian Government

The project's aim, funded by Italy, is to safeguard the historical significance of the Mar Mikhael Station and make it accessible to the public. The first phase of the intervention will be executed by UN-Habitat, focusing on creating a green public space within the station area for Beirut's residents. The second component of Italy's fund will ensure the preservation of the station's original function and cultural significance.

The goal is therefore to create a dynamic platform for social interaction, cultural experience, and artistic creativity, fostering social cohesion and providing a space where artists can work and showcase their creations.



### 5. A Lease Agreement for Tripoli's Railway Site

In 2024, The heritage railway station of Tripoli has returned to the spotlight again, following controversy and protests sparked against a decision from Ziad Nasr, the Director General of Lebanon's Railways and Joint Transport Authority. Nasr granted a license to a transport company allowing the station to serve as a parking lot for its trucks, which raised concerns that the historical landmark located near the port might be repurposed as a truck stop.

Further protests came after another request by the company to build a truck road which passes through the station. Civil activists and organizations like "Tripoli Heritage" and "Train-Train" have objected this decision, prompting the acting mayor of the port municipality to submit a formal protest to the railway authority.

The book emphasized that the railway station is a significant part of the city's heritage and is situated next to one of its oldest archaeological landmarks, Burj Al Sebaa – The Lions' Tower. It further stated that many events and social activities were held in the site urging the truck company to search for



*Figure 30: A photo of the ruins of Tripoli's Train Station*



an alternative location for its operations away from the historic site.

Jumana Chahal Tadmoury, president of the Tripoli Heritage Association – Lebanon, issued a statement in coordination with activists and associations in this field, saying:

*“We are very surprised how the director general behaves on state-owned land that includes the most important railway network and heritage buildings built in the early twentieth century in the French style.” I asked: “Doesn’t Tripoli have vast areas that can be turned into parking lots as they want? Rather, the station is located in the vicinity of the quarantine, where there are many empty spaces and barracks, so why the attempts to obliterate and distort the aesthetics of our archaeological centres, and how long can we remain silent about this crime against Tripoli?”*

Any attempt of tampering with the geographical area of the railways means that the dream of returning to the reactivation of the railway is eliminated.



Figure 31: A photo of the Main Train Workshop Buildings of Tripoli's Railway Station, 2022

### 6. Turkey's Commitment to Revive Tripoli's Historic Train Station

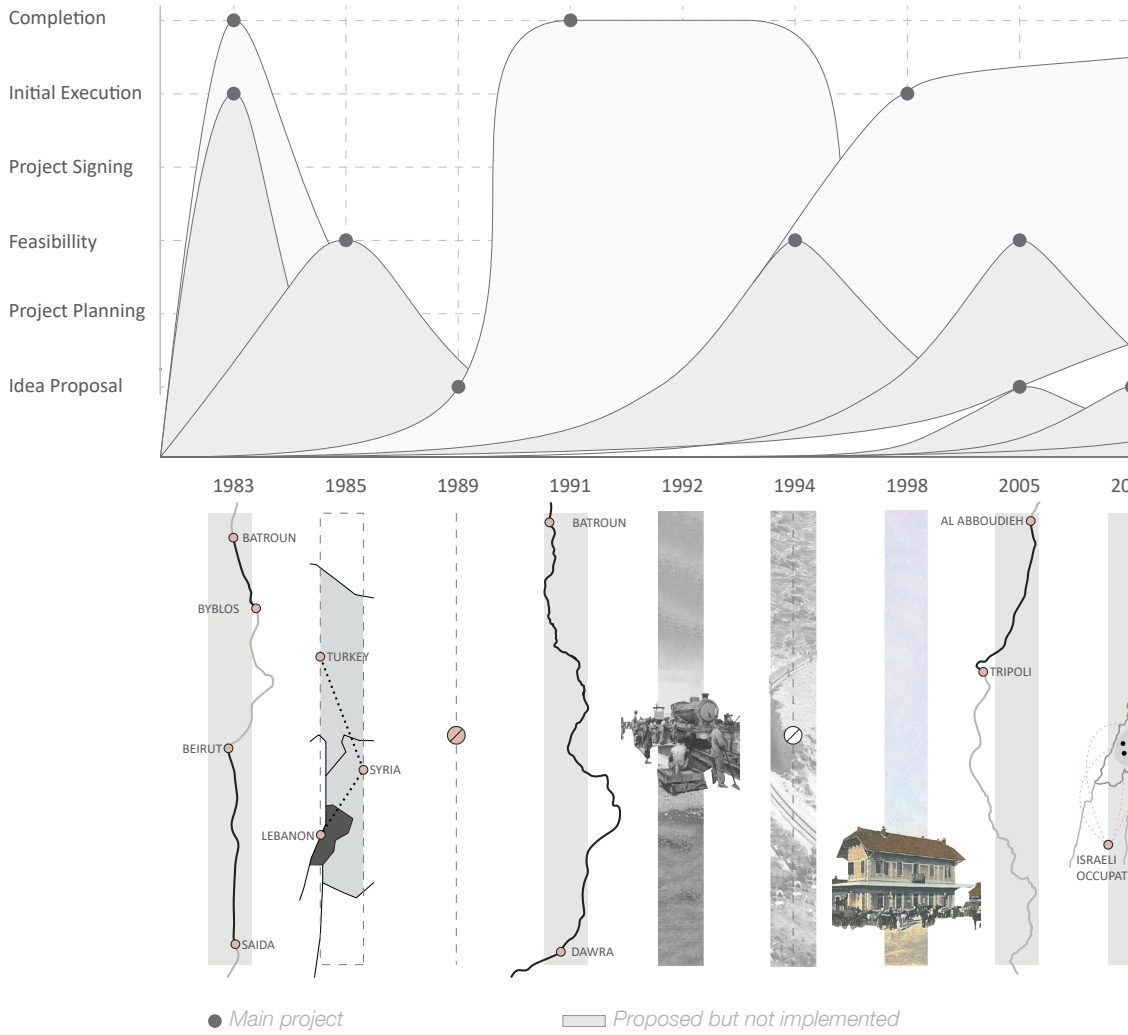
The Tripoli Heritage Association took different initiatives to draw attention to the importance of the station, holding annual concerts in the site, one of which was entitled “My Heritage Is Yours”, it happened after cleaning the site wiping a lot of dust that was corroding equipment, trailers, and locomotives. Dr. Khaled Tadmoury, the head of the Antiques and Heritage Committee in the municipality of Tripoli, said that the Municipality of Tripoli has many ties with the Turkish Municipalities and official institutions in the endeavours made throughout the years, adding:

*“In the Heritage and Antiquities Committee in the municipality, we launched several projects in cooperation with Turkey, including the project to rehabilitate the train station, which will include all buildings and railways extending over a wide area, starting from the buildings of the current station, and reaching the borders of the port of Tripoli, and there will be a comprehensive study to turn it into a museum and an oasis that includes a garden and cafés, all funded by the Turkish Ministry of Culture, which allowed the laws introduced a year ago to implement such projects outside Turkey and after the Balkans, the first Arab country was Tripoli. After the completion of the studies, the Turkish government will cover the implementation of the work at the station to become a cultural, heritage and tourist site of interest to all.”*



*Figure 32: Highlighting the Wild Vegetation in the site of Tripoli Train Station*

## 02. HISTORICAL OVERVIEW



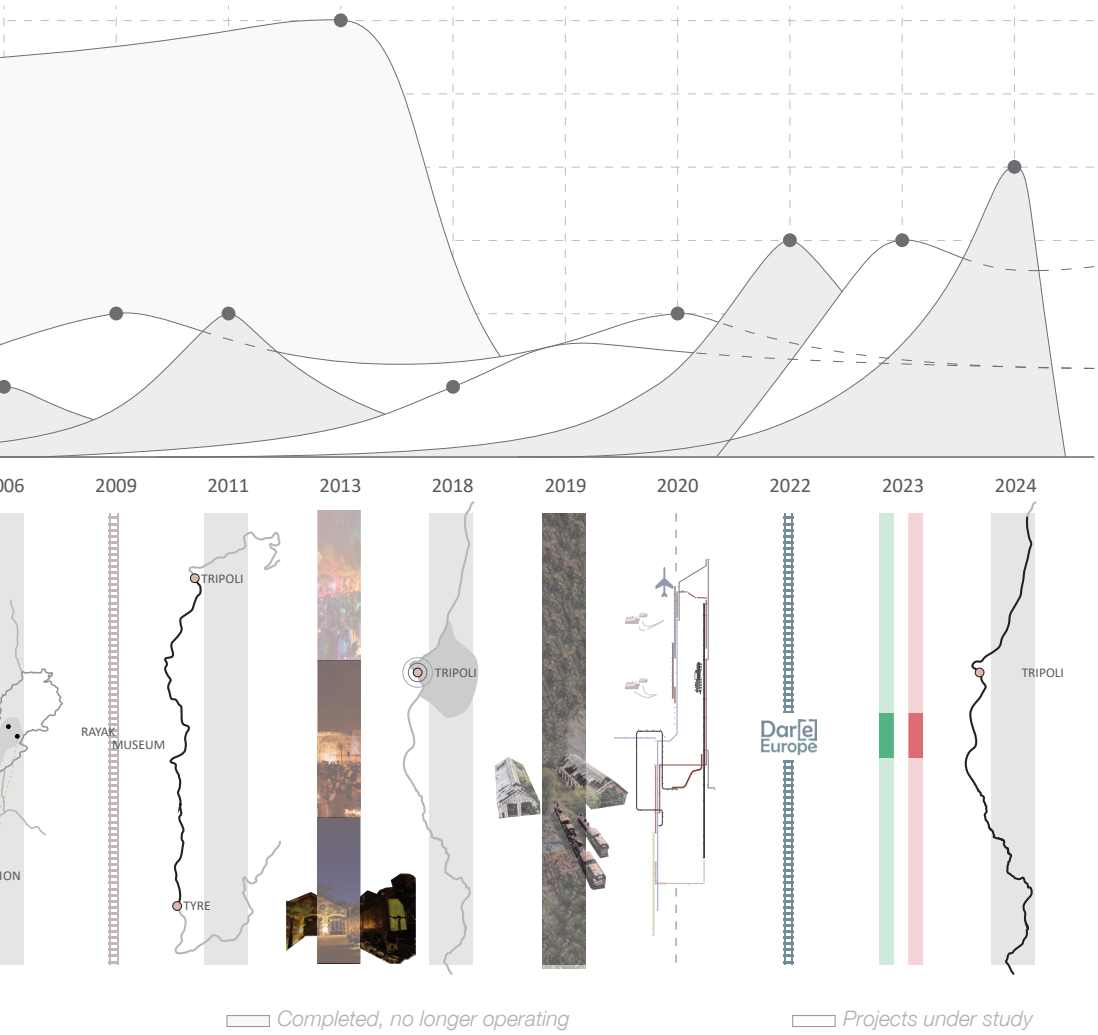


Figure 33: Railway rehabilitation initiatives and proposals and their level of development





## 03. URBAN ANALYSIS

### 1. Tripoli Within Lebanon: A Geographical Overview

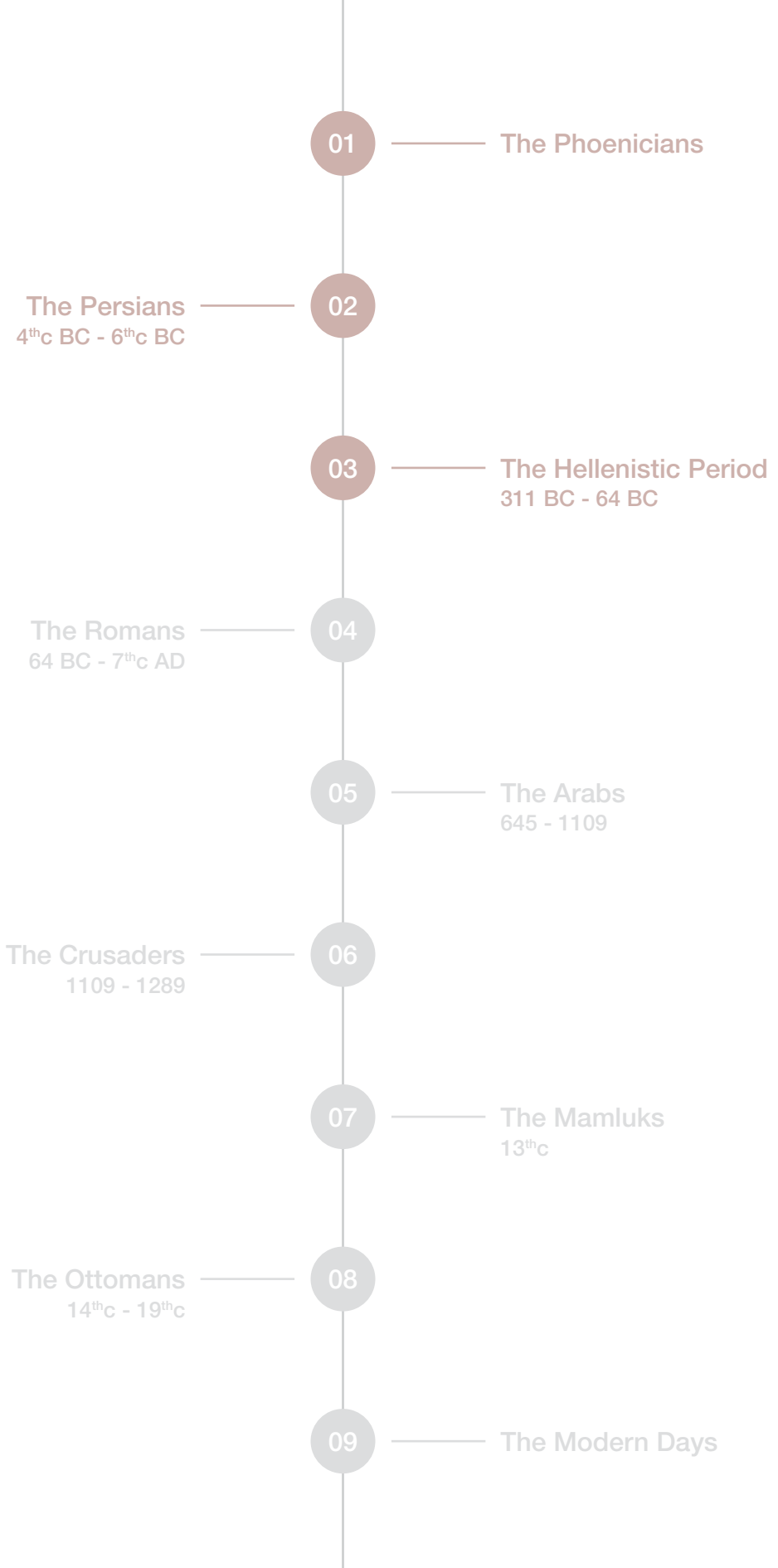
The city of Tripoli, located on Lebanon's northern coast, is primarily a legacy of the Mamluk period. It consists of two main sections: the small harbour, called the Mina, and the main city proper, called the Madinah. These two main parts are separated by orchards occupying the land where once stood the ancient and the medieval city of Tripoli.

Today, Tripoli, Lebanon's second largest city known as the "Capital of the North", is situated along the eastern Mediterranean coast about 85 km from Beirut. It serves as the second largest seaport of the country anchoring the northern section of Lebanon's coastal economic corridor. Its location near the sea but also close to the mountains with ample access to water and natural resources makes it an optimal point for trade between the northern and southern parts of the Middle East. The urban area of the city covers 27 km<sup>2</sup>, 13 km of which are along the coastline. Its boundary echoes the topographical relief, which rises towards southern and eastern Lebanon no more than 10 m above the sea level, a natural result of the city's historical expansion.





Figure 34: Tripoli's Location in relation to Lebanon



## 2. Historical Timeline: A Former Regional Capital

### 1. The Phoenicians

Originally, Tripoli was considered a small village until 358 B.C., when it became the administrative centre for the Phoenician Federation, a city alliance including Tyre, Sidon, and Arwad, which then into a single city. Tripoli can be considered the first United Nations Canter of the ancient world hosting different civilizations and cultures that have enriched its history and brought great cultural, ethnic and religious diversity.

### 2. The Persians

In the years 550-530 B.C., the whole Phoenicia was under the Persian Empire and Tripoli was the financial centre and main port of northern Phoenicia, a centre of maritime trade between the eastern Mediterranean and the west as well as a centre of land trade between northern Syria and the surrounding areas. It lasted for almost 2 centuries until year 351 B.C, when a revolt started in Tripoli quarter and then spread across the Lebanese coast.

### 3. The Hellenistic Period

Tripoli served as a significant shipbuilding hub and an export of cedar wood. It then became independent by the first century B.C. and citizens were allowed to mint their own coins, from which several from Tripoli remained.

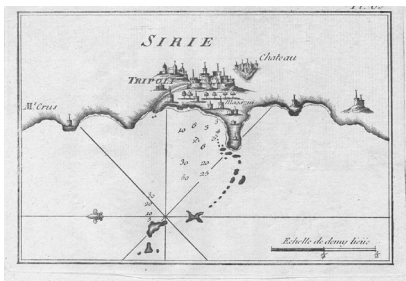


Figure 35: Plan of the Port of Tripoli

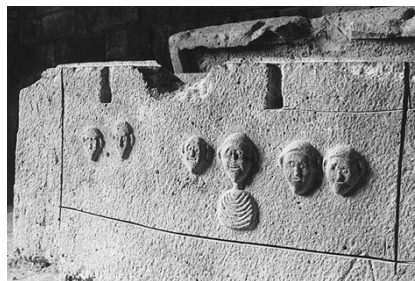
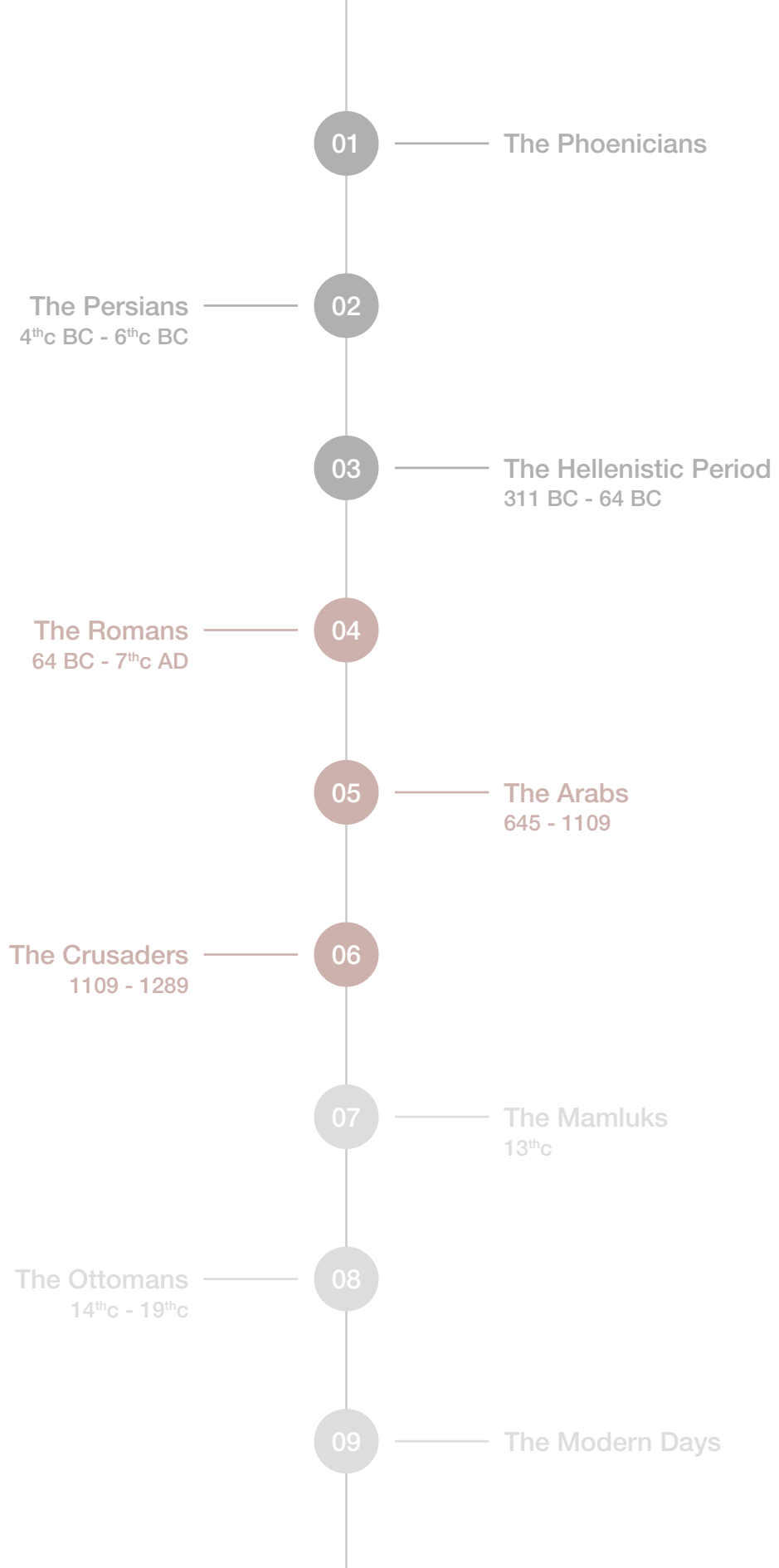


Figure 36: The ancient Phoenician tomb



## 4. The Romans

Tripoli expanded its territory becoming able to host large buildings and temples, among which many unique peers were built and depicted on minted coins, including the Temple of Zeus, as well as a temple dedicated to the imperial cult, giving Tripoli a privilege no other cities in the region seemed to have shared. The city was then destroyed by an earthquake and very few of this period remains.

## 5. The Arabs

Among the years 705-715, Tripoli was rebuilt and kept developing until it was seen as superior to Beirut in 985. Travellers described Tripoli by its lush fields and gardens, as well as it being surrounded by the sea. The city's port attracted ships from Greece, France, Andalusia, and the Maghreb, and also exported goods to Byzantium, Sicily, and the West.

## 6. The Crusaders

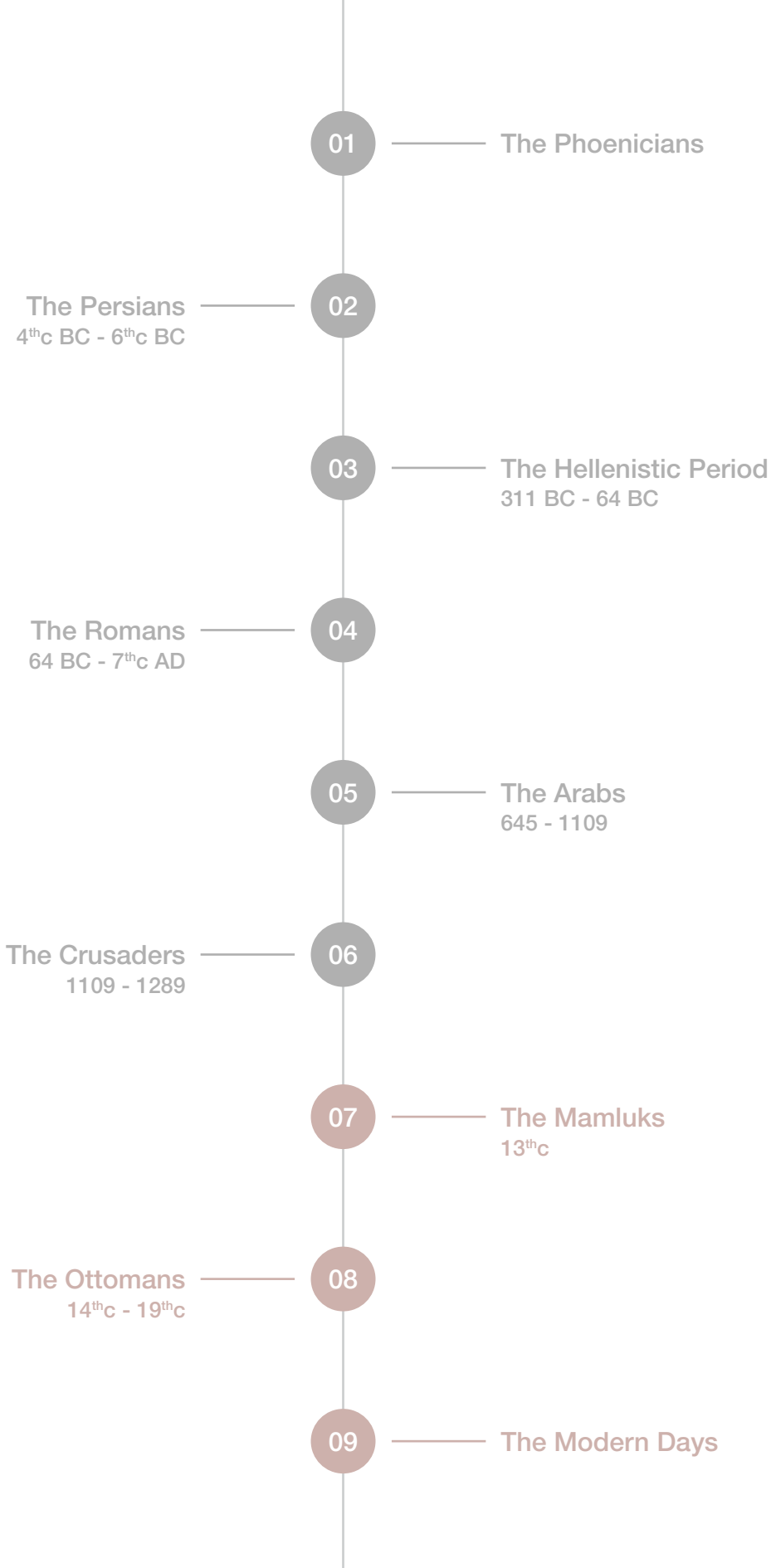
In 1103, the construction of the citadel Began. Tripoli became the Capital of the “Latin State of the Levant”, one of the main Crusader states. Tripoli witnessed a quick reconstruction and fortification which led to it regaining its commercial importance. Churches, convents, and hospitals were built as well as educational services, and it expanded beyond its walls. By the thirteenth century, the city was populated densely which led to the flourishing of its commerce and industry, boasting a large amount of oil presses and silk looms, immersive public buildings, and numerous palaces.



Figure 37: The Dam of Tripoli



Figure 38: Plan of Tripoli Historic Centres



## 7. The Mamluks

The Mamluks demolished the Crusader city then constructed a new developed city, now the old town. Various infrastructure and public works were built. The climate and the topography affected the form of the city. No fortifications or walls were built, but instead dense urban grid with narrow and winding streets. The architectural style was characterized by the decoration of the façades with carved stones, by the alternation of light and dark stones in the portals and windows, and by load-bearing walls that supported cross vaults. Visitors and travellers were impressed by its mosques, schools, markets, and luxurious baths, all featuring the city's distinctive whitewashed stone architecture. They were mostly impressed by its advanced water system, with running water supplied to each home with extensive network of channels sourced by the nearby hills reaching even the top stories of high buildings. Agriculture, small industries, and commerce contributed to Tripoli's economy, making it a flourishing centre of East and West trade under the Mamluks.

## 8. The Ottomans

After the defeat of the Mamluks by the Ottomans, they have left a deep mark on the architecture of the city. The city kept on growing but in a slower pace. It remained initially as a major commercial and trading hub, however, by the seventeenth century, internal conflicts caused Tripoli to lose its standing as Beirut emerged as the new administrative centre.

## 9. The Modern Days

Tripoli experienced a period of prosperity and invested in urban planning and renewal. The centre of the modern city follows the Ottoman and Mamluk construction in its entirety and is surrounded by a modern metropolis in continuous evolution between periods characterized by growth and periods of contraction.

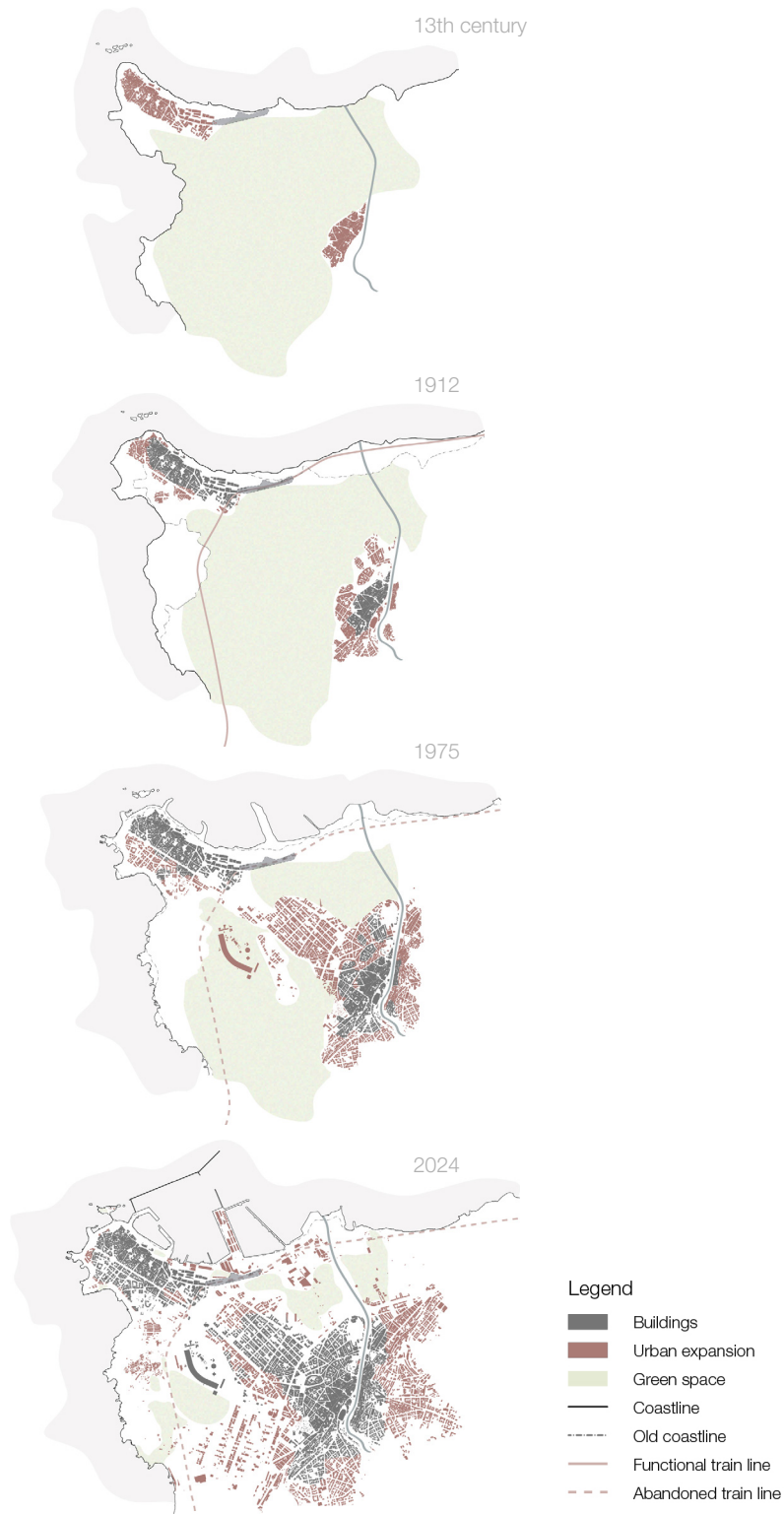


Figure 39: Illustrating Tripoli's Urban Expansion



Founded by the Phoenicians, Tripoli witnessed the presence of various cultures and empires. Landmarks of these periods can be seen today withing various parts of the city, however, over the time, the historical sites of Tripoli became endangered, leaving the city at risk of losing its cultural heritage.



### 3. The Anatomy of Tripoli's Governance: Structure and Jurisdictions

Territorially, Lebanon is divided into eight governates, known as “mohafazah”, which are further subdivided into 25 districts, or “qada’”. Tripoli is considered the capital of the North Governate, which compromises six districts, T5, and 141 municipalities, also known as “baladiyah”. The Urban area of Tripoli itself spans across two of the six districts within the North Governate: Tripoli and Minnieh Dennieh.

The Cadastres in Lebanon can sometimes refer to a municipality, however sometimes they can also include various ones. In the urban boundary of Tripoli are encompassed 18 cadastral areas, 12 of which form the modern urban core of the Tripoli municipality, the Baddaoui and Mejdlaya municipalities consist of a single cadastre each, and finally El Mina municipality, encompassing the peninsula and surrounding inland areas, is subdivided into four cadastres.



Figure 40: Mapping Tripoli's Cadastres and Urban Area Boundary

### 03. URBAN ANALYSIS

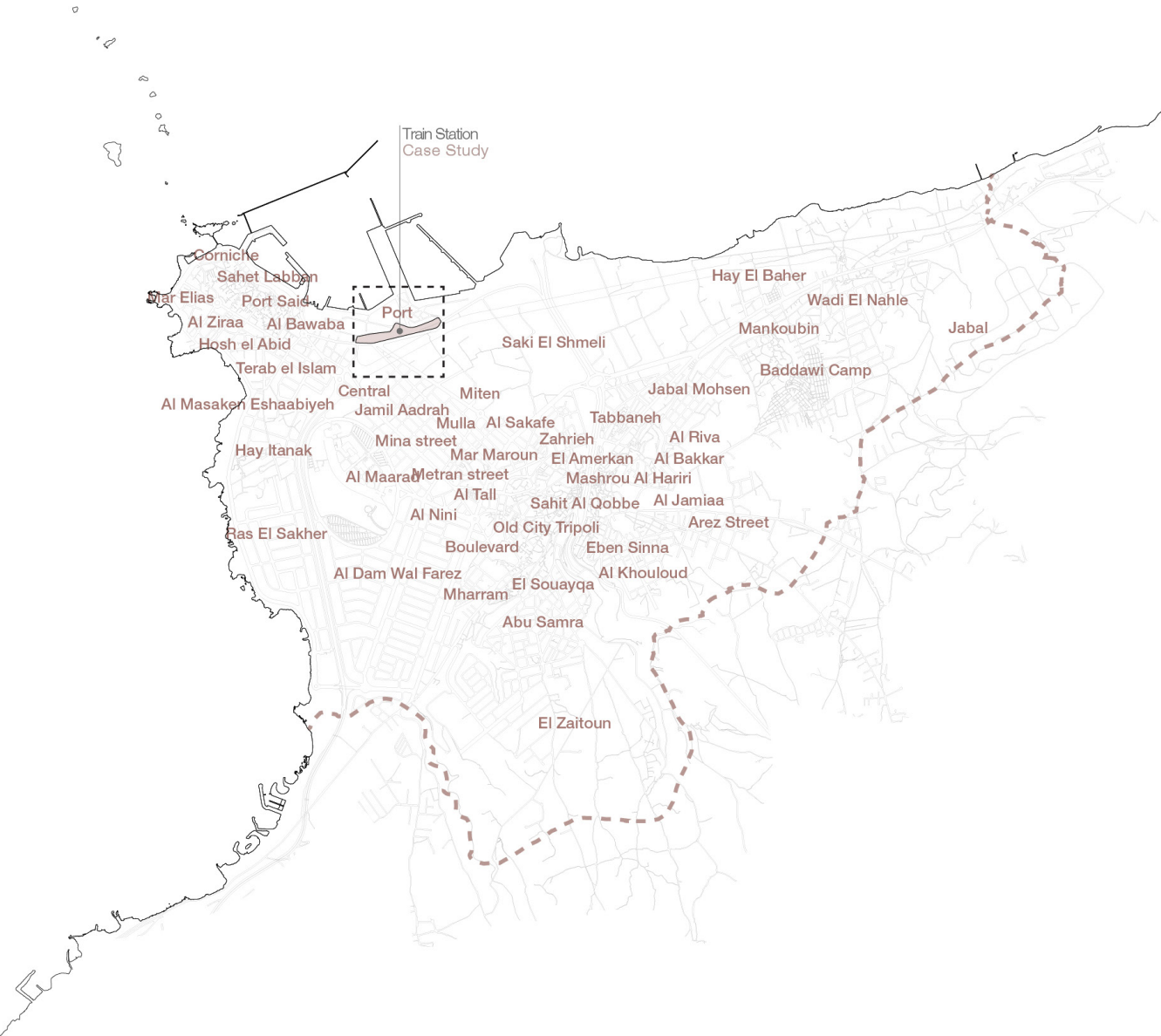
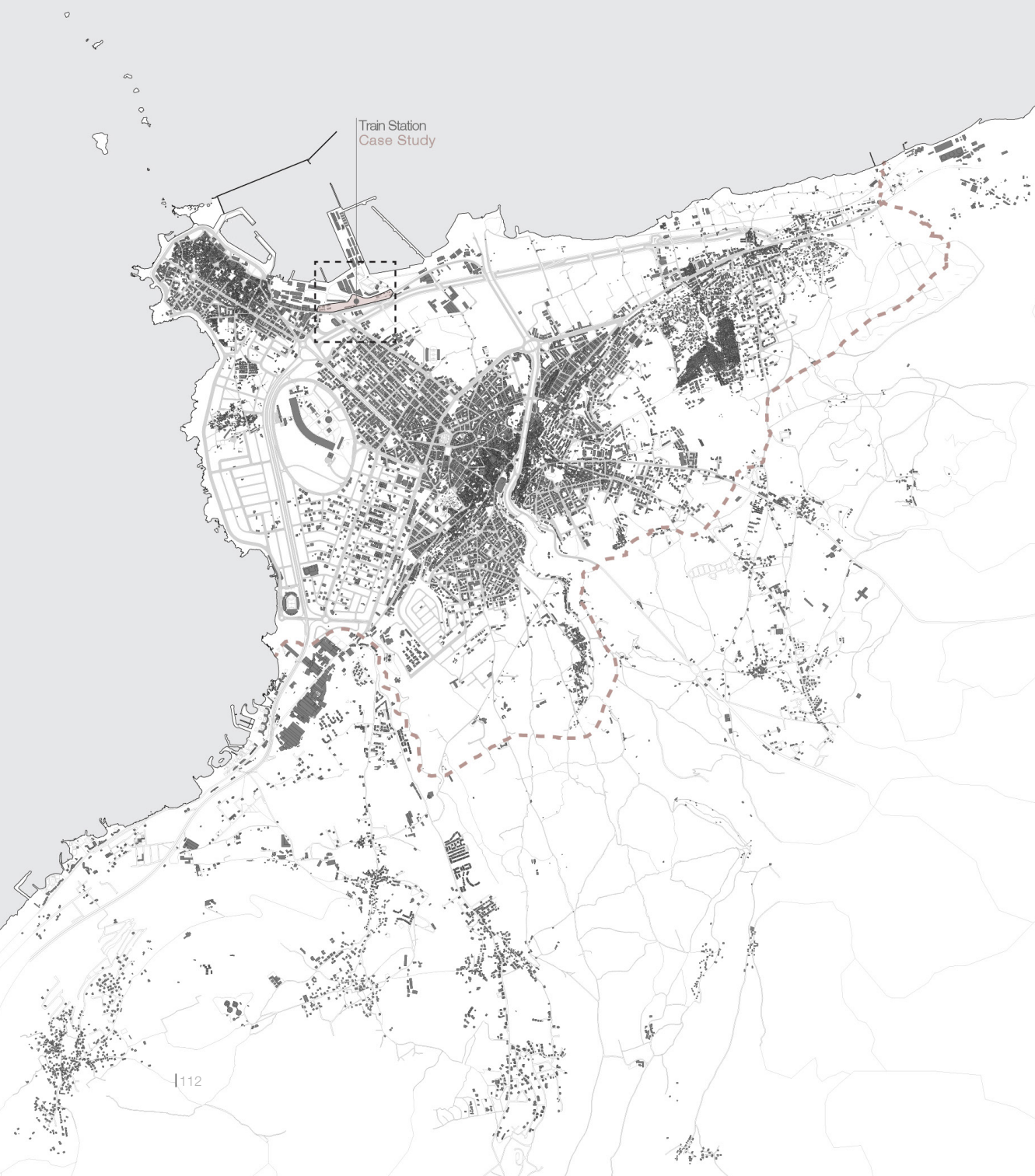


Figure 41: The Neighbourhoods and Sub-Neighbourhoods of Tripoli

Neighbourhoods and sub neighbourhoods have been increasingly growing with time between the old centre of El Mina and the historic centre of Tripoli, and further segregation has been evident, dividing the city into the rich new city and the poor old city. The newer neighbourhood faced a wave of western style modernization and introduced a new vibrant life in the area. On the other hand, the historical city centres maintained their cultural aspects, traditions, and architectural characteristics.



Train Station  
Case Study



## Legend

- Built area
- Roads
- - - Border of Tripoli

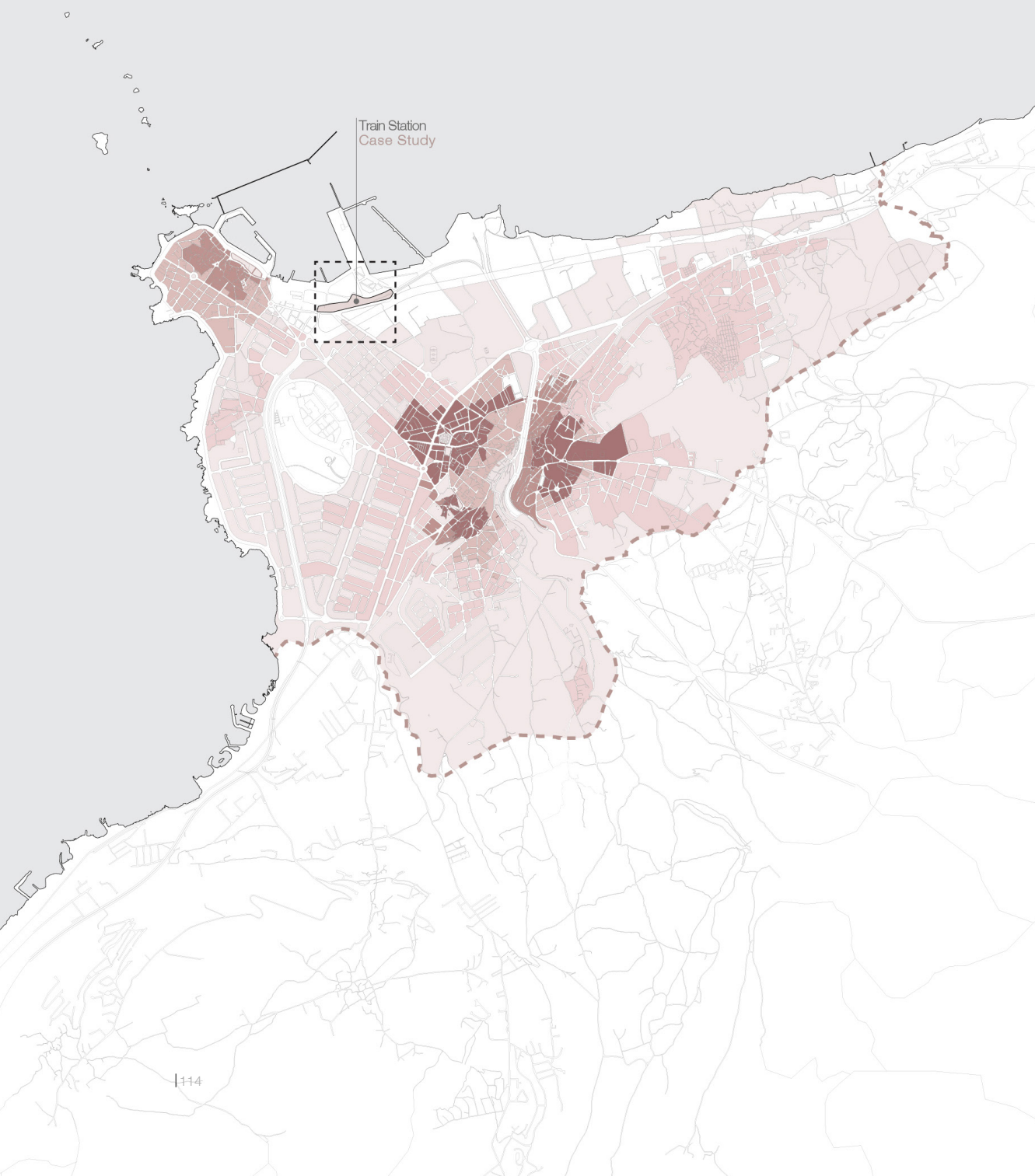
## 4. The Constructed Landscape: Traces of History and Change

The map of Tripoli's Built Environment reflects the development of the city and its growth. The densest parts are the historical centres of the old city, and it fades gradually while getting further from these cores.

While an average area of negative spaces can be seen between various parts of the city, they represent abandoned and unused areas. This said, many advantages and opportunities are taken for granted, while small initiatives improve and ameliorate the city's state on different levels.

Figure 42: Tripoli's Built Environment

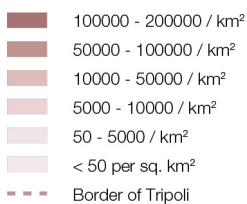




Train Station  
Case Study



## Legend

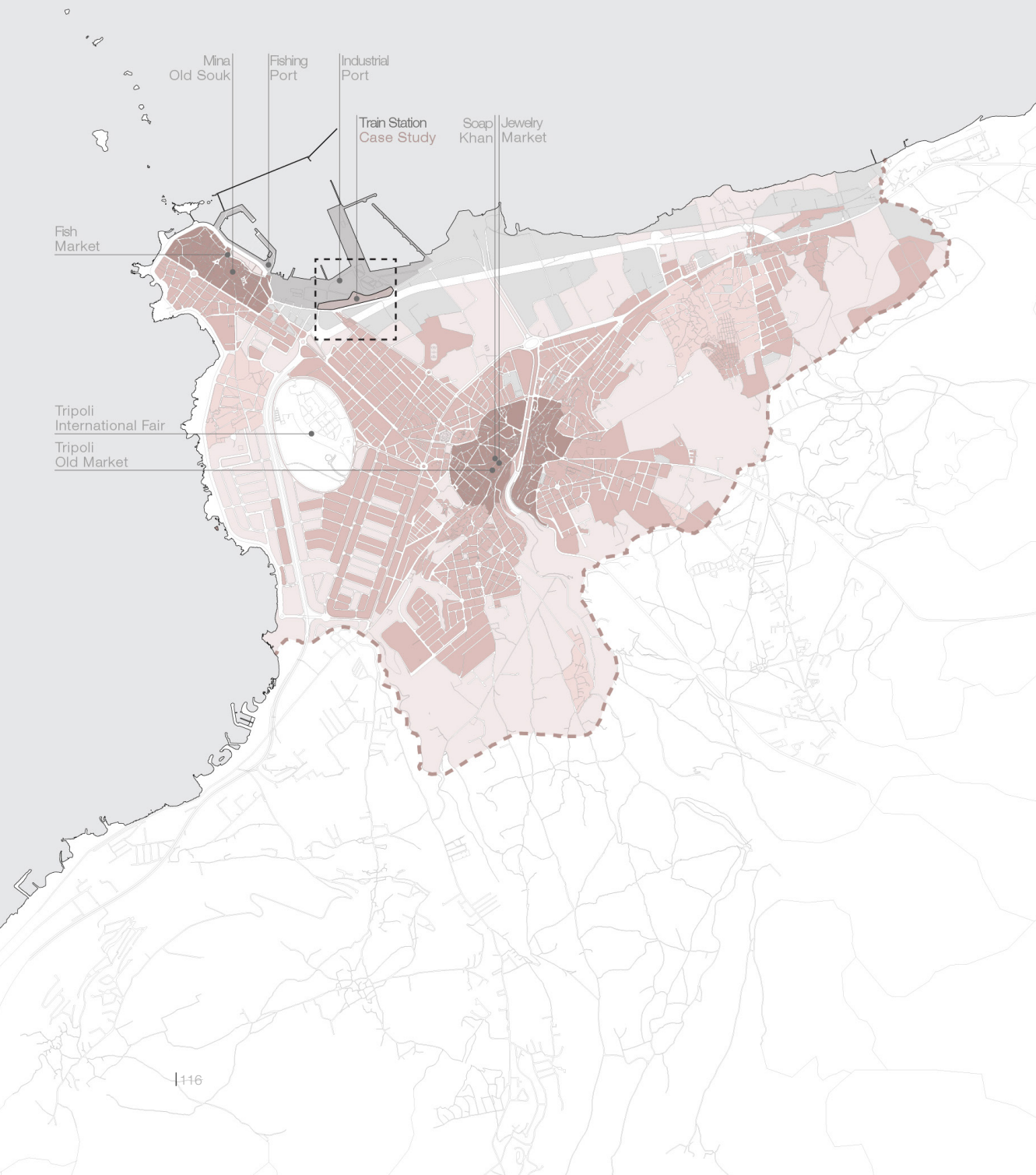


## 5. Population Fabric: Distribution within the City

Due to the historical economic prosperity and industrial development of Tripoli throughout the years, migrants were attracted to the city as it expanded prompting residents to move from the centres to the neighbourhoods. However, overcrowding conditions in the old city led the people to relocate in suburban areas.

Today, Tripoli represent the second largest urban centre, following Beirut, and the largest share of population among North districts in Lebanon.

Figure 43: Mapping Population Density in Tripoli



## 6. Patterns of Land Coverage and Utilization in Tripoli

Land cover analysis shows a concentrated built-up area spanning the Abu Ali River, which connects the old city centre of Tripoli with the peninsula in the northwest and Beddaoui in the northeast, which are all interconnected by a main road network within the city.

The main urban area is separated from the industrial zones, which are largely spread along the northern coastline near the harbour, by large areas of land, few of which are agricultural and the rest is undeveloped creating potential areas of interventions and growth.

Furthermore, the unused north western and western coastal strip has high potentials of attracting tourism related regeneration, local amenities, and employment activities to boost the area's appeal.

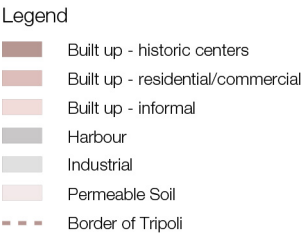
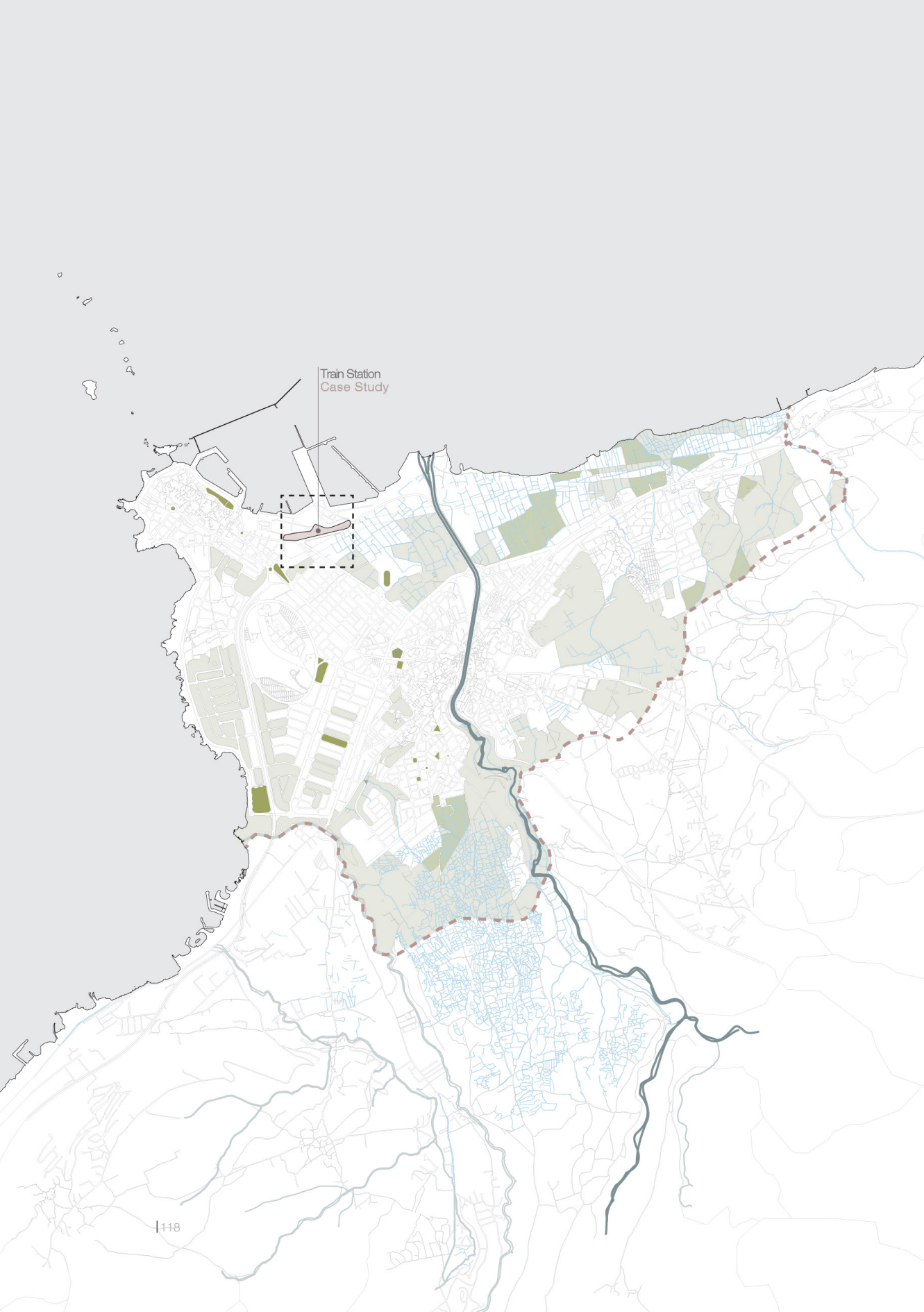


Figure 44: Tripoli's Land Use and Coverage



Train Station  
Case Study

## 7. Green and Blue Infrastructure

This map highlights the natural land use within Tripoli. Water channels and streams are fairly spread within the built environment, reaching the unbuilt areas in the city. The use of these lands however ranks as poor, since very few public spaces can be named, agricultural areas are below average in comparison with the large unused lands.

### Legend

- Public Spaces
- Agricultural
- Unused lands
- Main water stream
- Seasonal water streams
- Water channels
- Border of Tripoli

Therefore, the distribution of abandoned lands within vast areas in the city suggests physical development capacity on all three: the coastal side of the city, the internal urban density, and the bordering areas connected to the other districts.

Figure 45: Showcasing Tripoli's Ecological Infrastructure



Train Station  
Case Study



**Legend**

- Tripoli highway
- Main roads
- Secondary roads
- - - Border of Tripoli

## 8. Layers of Connection: Mapping the City's Transportation Grid

The Road Network in Tripoli clearly reflects its urban expansions, as it is seen in the historic centers that the streets were organic and webbed, as in the newer neighbourhoods, the grid shifted to rectilinear and more regular. The coastal highway in Tripoli which was only completed recently in 2014 creates an urban division between the seaside Al-Mina and Tripoli.

Figure 46: Mapping Tripoli's Road Networks

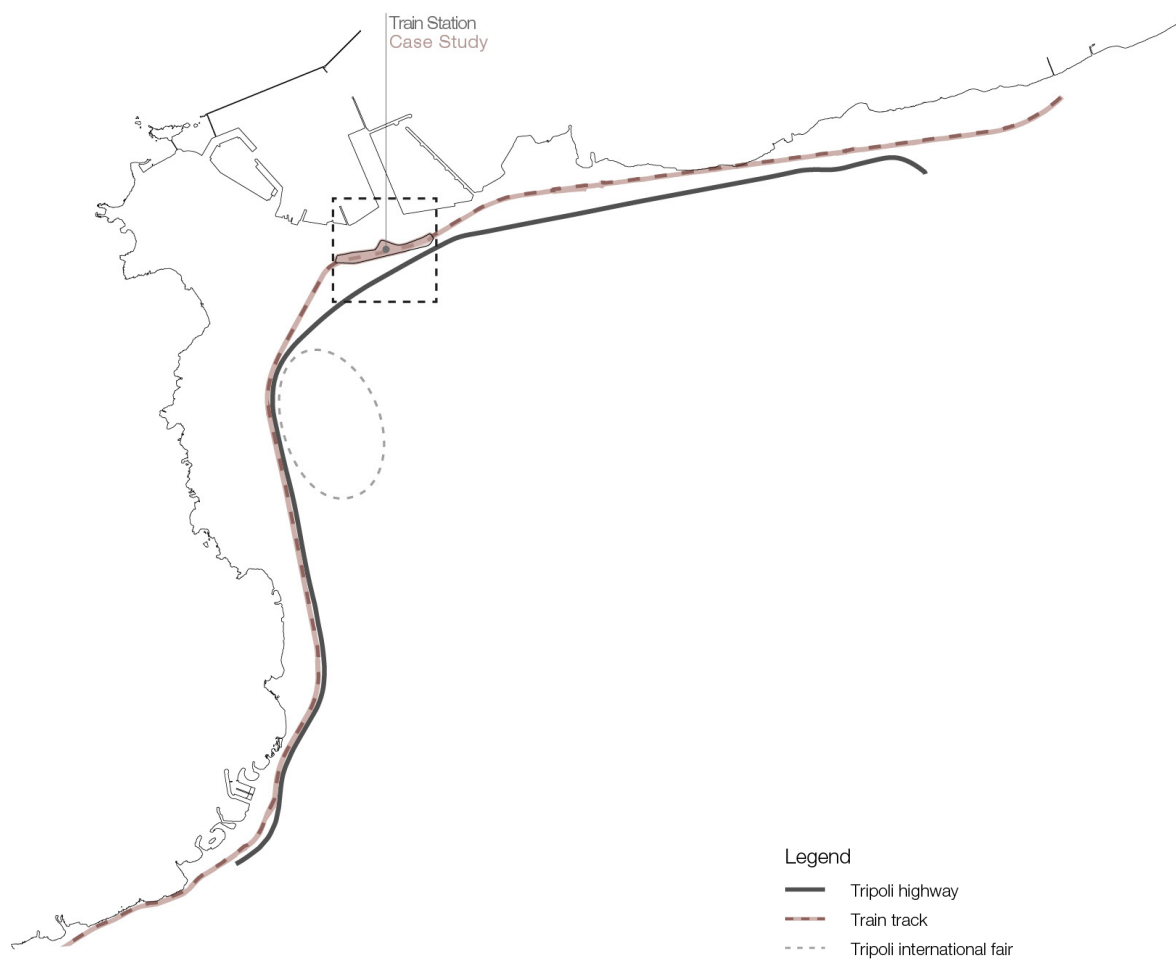


Figure 47: Highlighting the Railway Line



Infrastructural changes has been witnessed throughout the years, some of which represent urban development and expansion, while others represent legacy and history. The once thriving railway station connecting Tripoli to other cities in Lebanon as well as the neighbouring countries, Today the Tripoli Train Station remains frozen in time leaving nothing but abandoned buildings, tracks as well as wagons stuck in space and time after their last journey.





## 04. ARCHITECTURAL ANALYSIS

### 1. Introduction of the Site

#### 1. Tracing the Historical Journey of Tripoli's Station

The Tripoli Train Station is among the country's three major stations, alongside Mar Mikhael and the Rayak Stations. It represents a significant historical landmark deeply intertwined with the city's past and its community. It's a reflection of the history and heritage of Tripoli and the active role played by the citizens to preserve what is remained.

Unlike other stations in the country, which were established under the Ottoman and French concession, Tripoli Train Station, dating back to the early 1900s, was driven by a private initiative. A Tripolitan company composed by notable families and influential figures launched the project through raising the necessary funds, making them the principal stakeholders. This company was registered as an anonymous entity in the Tripoli Chamber of Commerce under the name "Chaussée", it focused on establishing rail transport and expanding the Tripoli port by constructing a pier for goods transshipments.

The Ottoman government issued an imperial decree granting concession for the construction of the Tripoli – Homs railway, which started operating by June 1911. It benefited both cities with the flourishing of the trades and

capabilities of the countries, exporting and importing goods through the connection of the Akkar Plain in Lebanon and the grain production lands in Syria. However, the line was dismantled for military purposes during World War I.

The Station was then nationalised in 1920, after the establishment of the French mandate in Lebanon and Syria, leading to a turning point in its history. It became the terminus for the Taurus Express, a line connecting it to the famous Orient Express from the 1920s to the 1940s, until its disruption during the World War II. After Lebanon gaining independence in 1943, the Tripoli Station was then owned by the country, which then initiated development projects expanding the port using reclaimed land from the old pier as well as boosting trade by connecting the station to Beirut's central station in Mar Mikhael which was completed in 1945.

After the Lebanese Golden Age, the line was then interrupted shortly due to the Civil War in the country in 1975. The Tripoli Station became a battle ground for 15 consecutive years of war until it fell under the Syrian control in 1983. The damage in the buildings is still visible, showing bucket holes, destroyed walls and roofs, war graffiti and blocked railways.

After the Civil War, like all other station in Lebanon, the Tripoli Station fell into further disrepair and was marked by rust and overgrowth. The government failed to restore the railway which led to decaying all over the land and

preservation of the historical destruction. However, proposals were brought up throughout the years. In 2002, there was a plan to restore the railway services between Tripoli and Homs. In 2005, the government has acquired new tracks and cleared obstructions along the line to the Syrian Borders which was then halted and left the newly purchased tracks unused and abandoned in the port of Tripoli. In 2008, the Friends of Tripoli Community (FTS) lead by Elias Khlat began to propose initiatives in order to protect the train station and its historical legacy in light of the nearby port developments that posed potential threats. They targeted the preservation of the station's designation as a cultural monument and wanted to transform it into a museum and a research centre. FTS then collaborated with the Heritage Association of Tripoli and organized an event celebrating the station's centennial in 2011. Unfortunately, the project was then halted and left behind without reconsidering it. These initiatives made the citizens of the city further value the importance of the landmark they have and cemented the site as a cultural asset in their hearts.

Today, the buildings remain abandoned in ruins. It still, however, draw the attention of enthusiast, historians, artists, architects, and lots of other people, who often visit the site and enjoy its historical heritage and the scenic views it used for backdrop for wedding and graduation photoshoots. The lack of official heritage status makes it vulnerable to further decay in the future.

In 2024, the director of the Lebanese railway and public transport authority (OCFTC) leased the station to a private trucking company as a parking lot, the same year Tripoli was named Arab Capital of Culture by UNESCO. This decision sparked community outrage and led to various protests from civilians and experts. Thankfully the director cancelled the lease in response to the negotiations. The community's advocacy shed a light on the station and was then committed to preserving its history, aspiring for its restoration and reintegration into both national and local heritage.





Figure 48: Photograph showing the Remaining Wagons in Tripoli's Station

### **2. The Architectural Significance and Description**

The Tripoli Train Station covers an impressive area of around 50000 square meters stretching for almost a kilometre from north to south. It holds an important value through the historical, social, and architectural reflection within its buildings. The architectural design showcases the French style, similarly with the other stations in the country, which was popular at that time, under the French empire.

Today, the important landmark is left abandoned, where nature gradually reclaimed much of its architecture and its remains from the old times. Within the Tripoli Station Complex, there were once four residences for engineers and high-ranking staff, alongside the essential amenities: offices, a buffet area, a cafeteria, a post and telegraph room, and administration offices.

The site also featured two workshops and a warehouse for tools and spare parts, as well as wagons and locomotives dating back to the late 19th and early 20th centuries, providing a tangible link with Tripoli's link to its railway heritage.

What added to its historical richness and value was a guard tower built by the Mamluks in the 14th and the 15th century, it is known as Burj al Sibai – the Lion's Tower, which protected the city from sea attacks.

The Train Station is surrounded by mainly by the harbour and the industrial area from the north and the east, and residential from the south and the

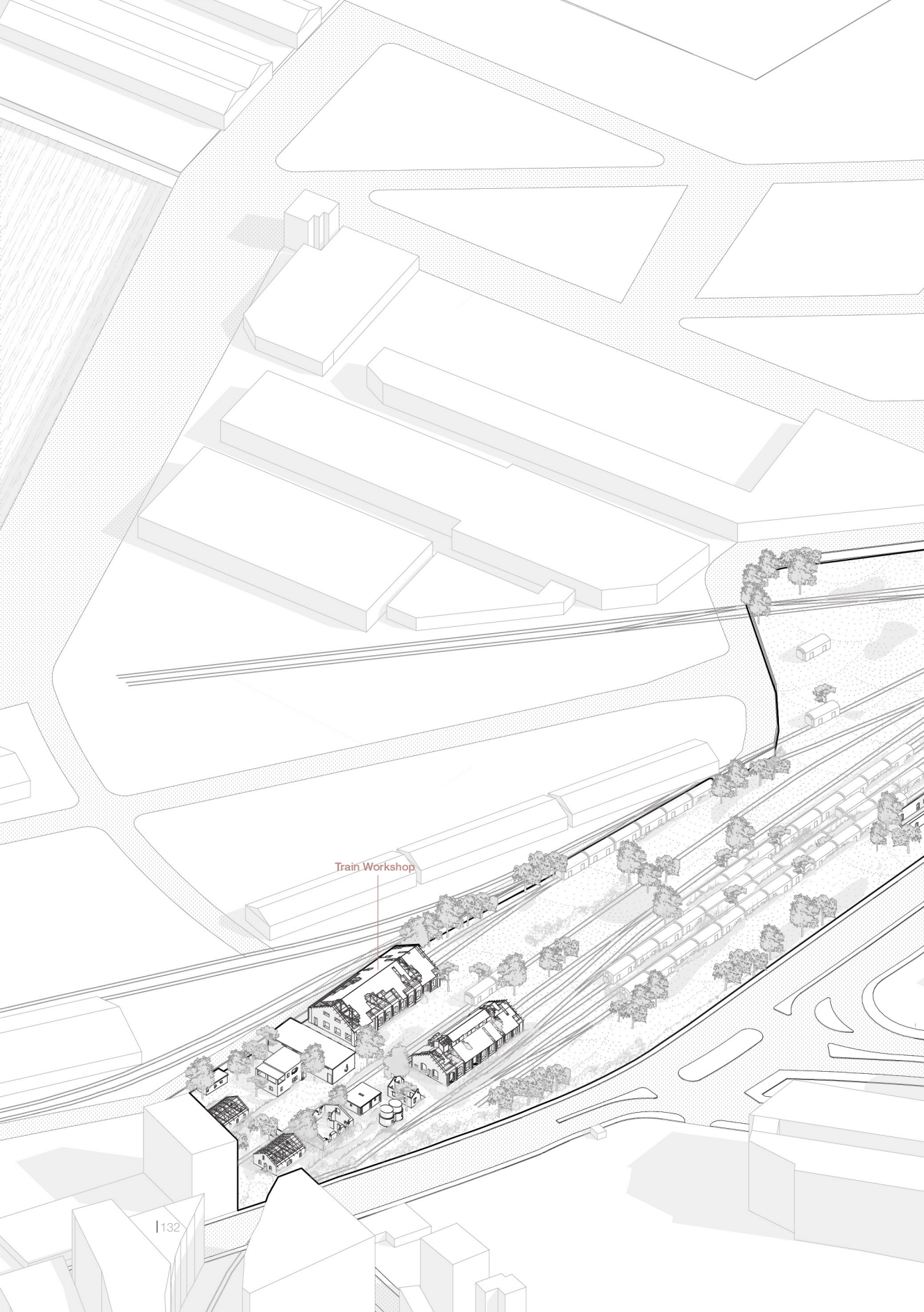


west. However, a wide range of lands remain unbuilt and left abandoned and undeveloped are spread within the area.

Concerning the urban connection and accessibility of the site, it is directly linked with the main road to its southern side, however, only 3 main entrances can be highlighted due to the growing wild vegetation that creates a threshold preventing the accessibility to the site, as well as added fences alongside the sidewalks. Other roads surround the northern and eastern borders of the site, however these roads are considered to be the main access to the port of Tripoli, which is separated from the Station by a 2.5m wall. Therefore, as there are no other accessible points to the site, connections to the surrounding context and the city overall are missing.

Though the site appears to be nearly flat, a gradual slope of around 3 meters across its 780m length introduces a slight elevation difference. This gentle topography provides subtle opportunities for direct circulation as well as easily articulated landscape zones without the disruption of visual continuity.

Although officially considered abandoned and unused, the site has become with time an informal space of overlapping and temporary uses. Other than its academic value, where architecture and engineering students or professionals conduct site visits to study the site and its significance, the spaces within the site host unprivileged children and offer them a passage or play area and serves as a shelter for homeless individuals. Sheep shepherds take their flocks for a walk in the sites landscape, while wild dogs roam across the grounds.



Train Workshop

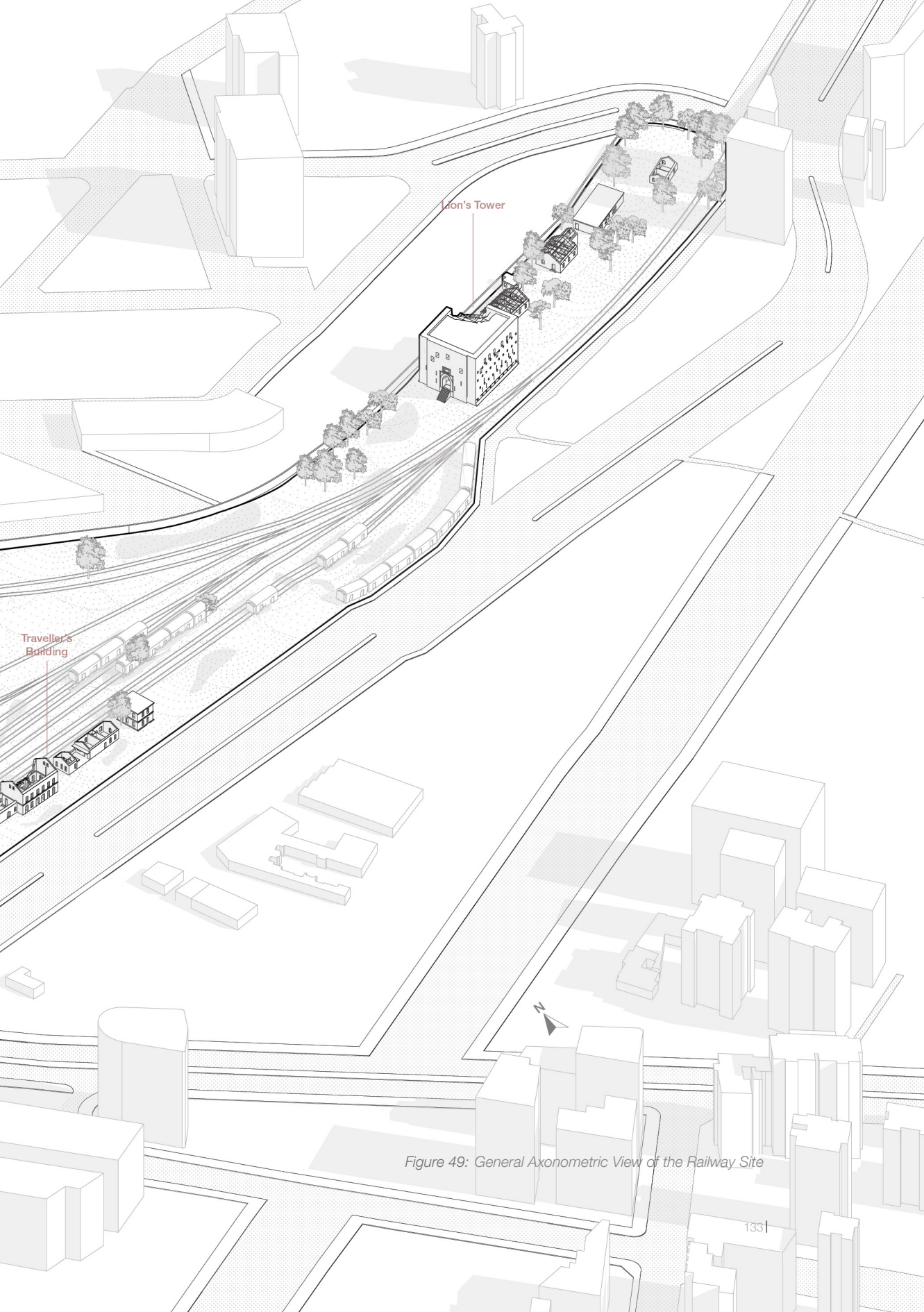
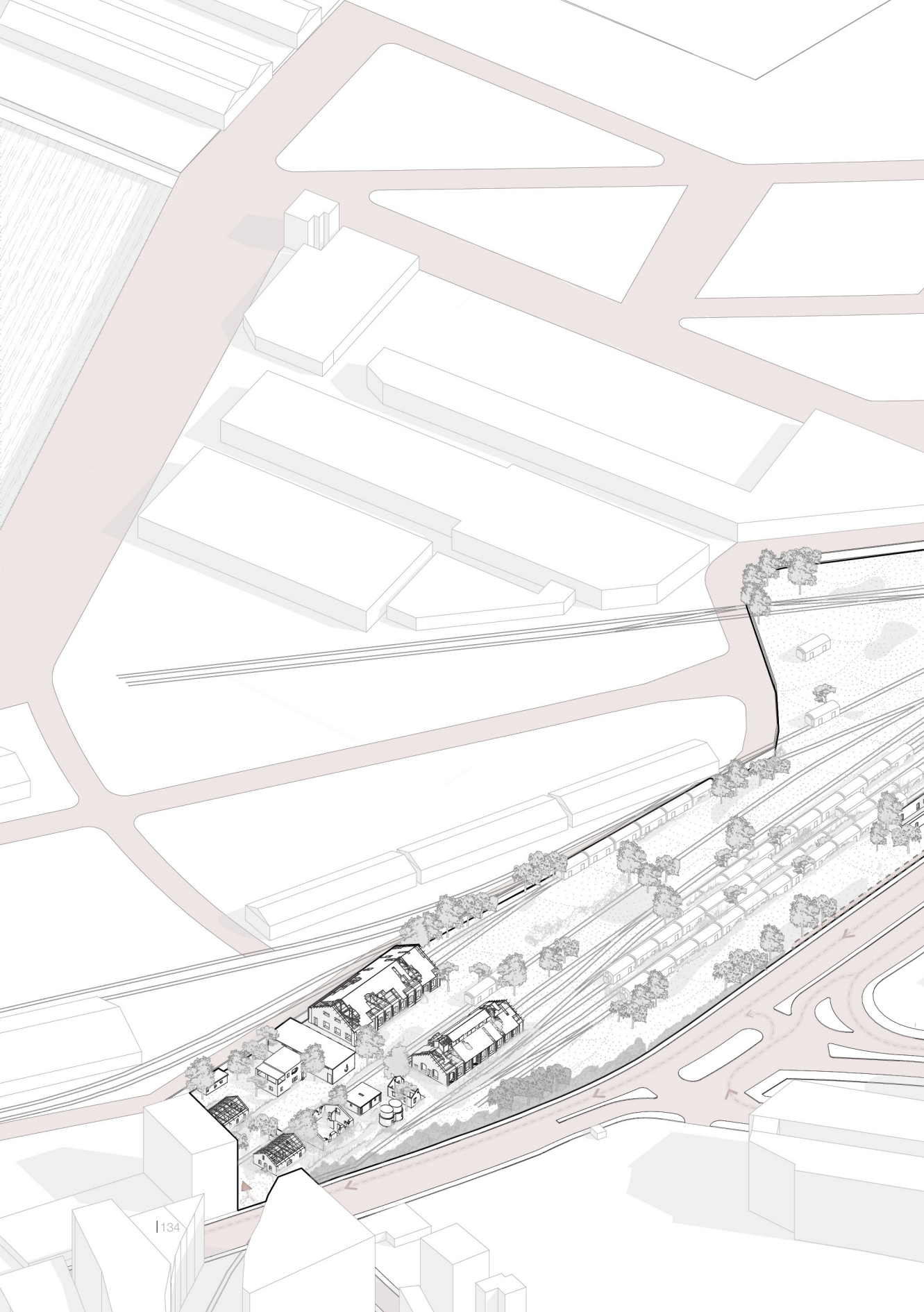


Figure 49: General Axonometric View of the Railway Site





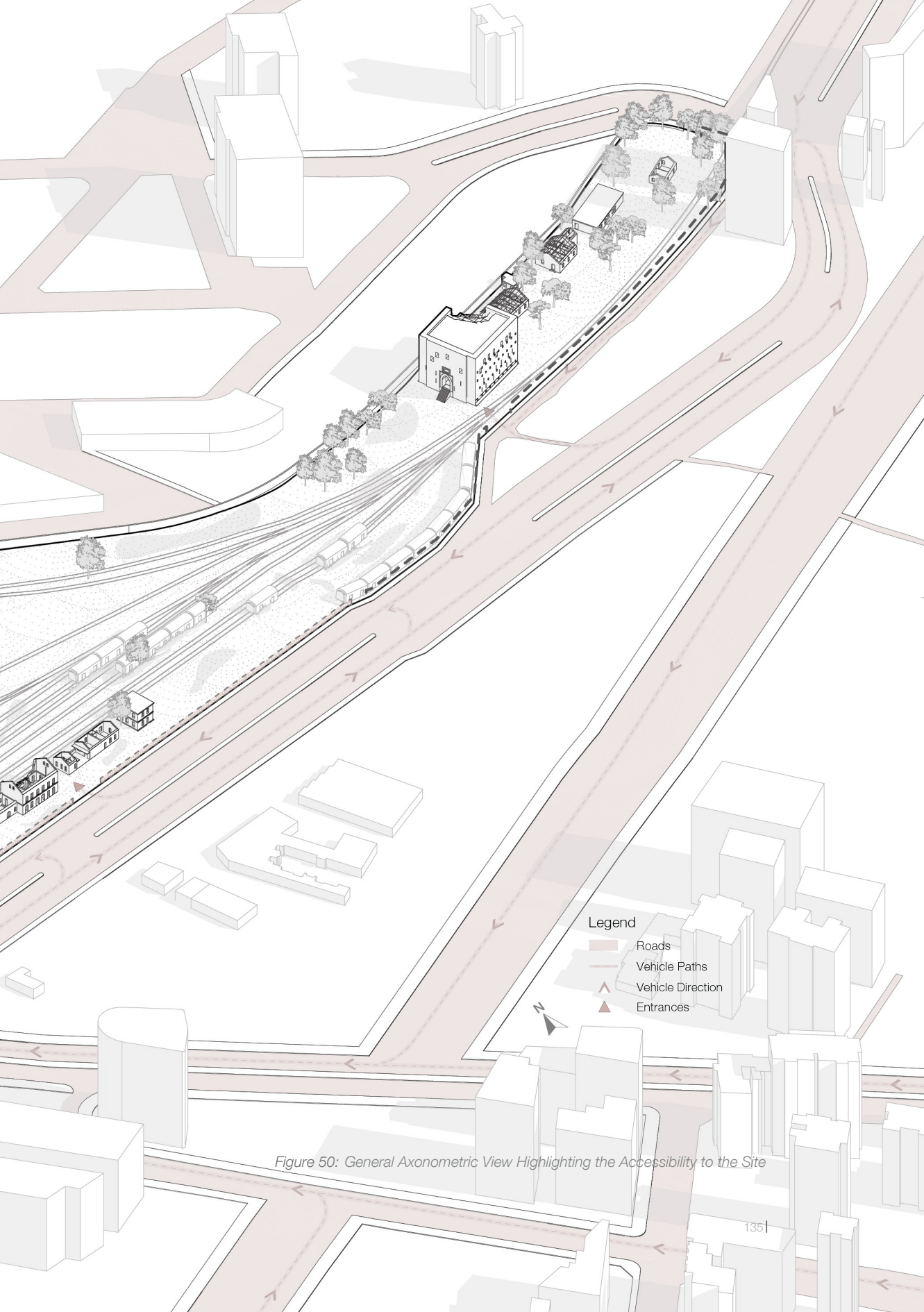
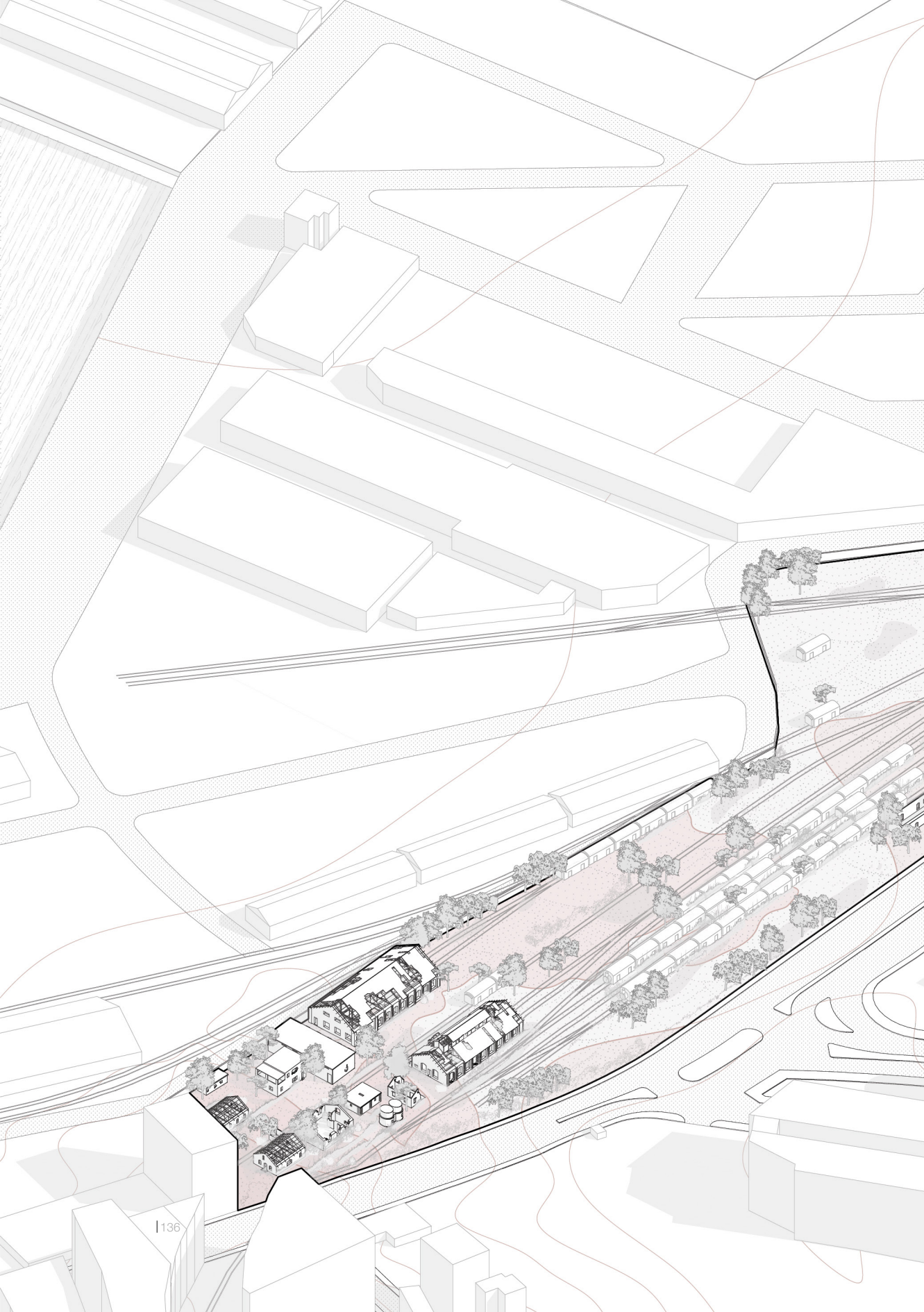


Figure 50: General Axonometric View Highlighting the Accessibility to the Site





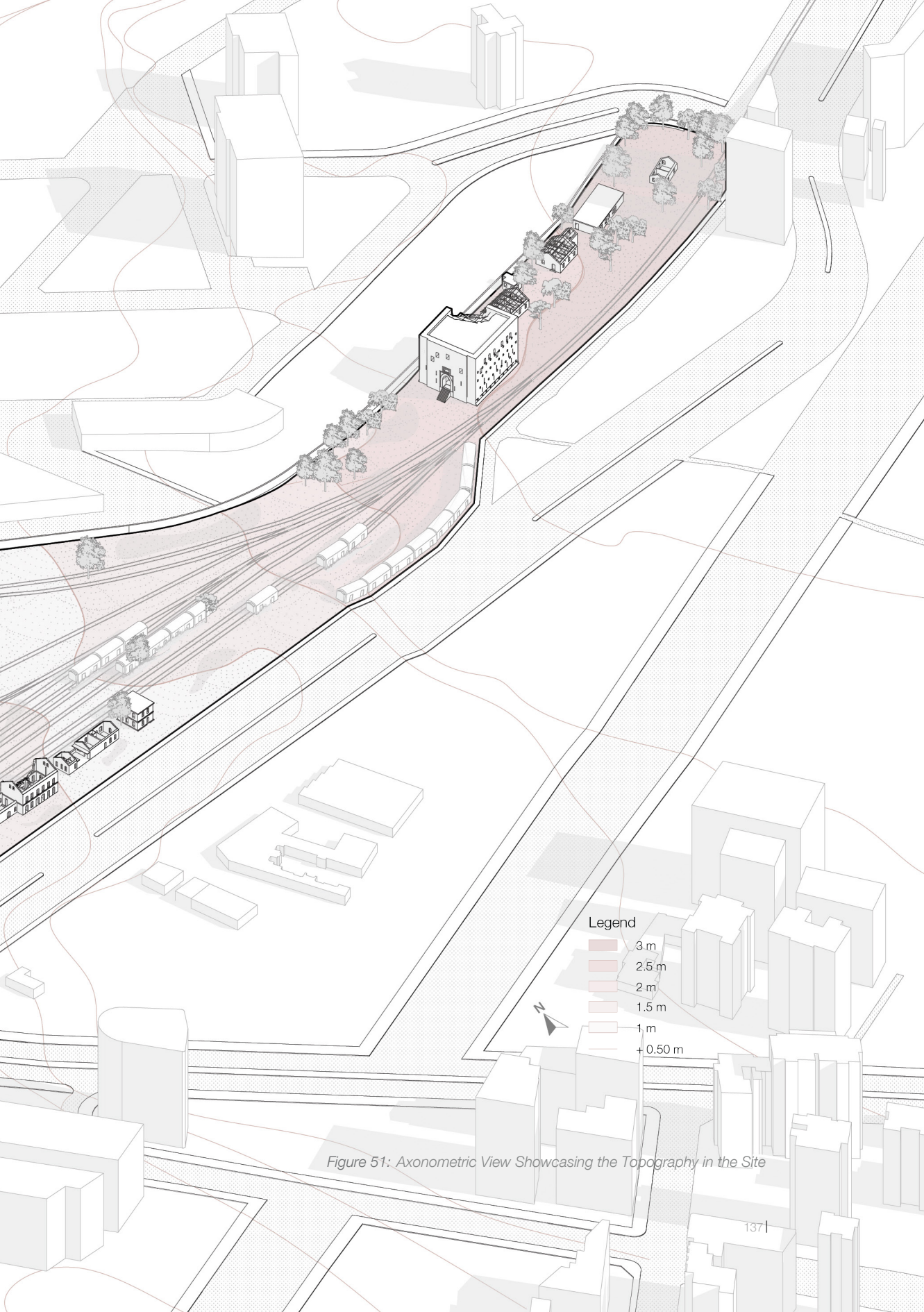
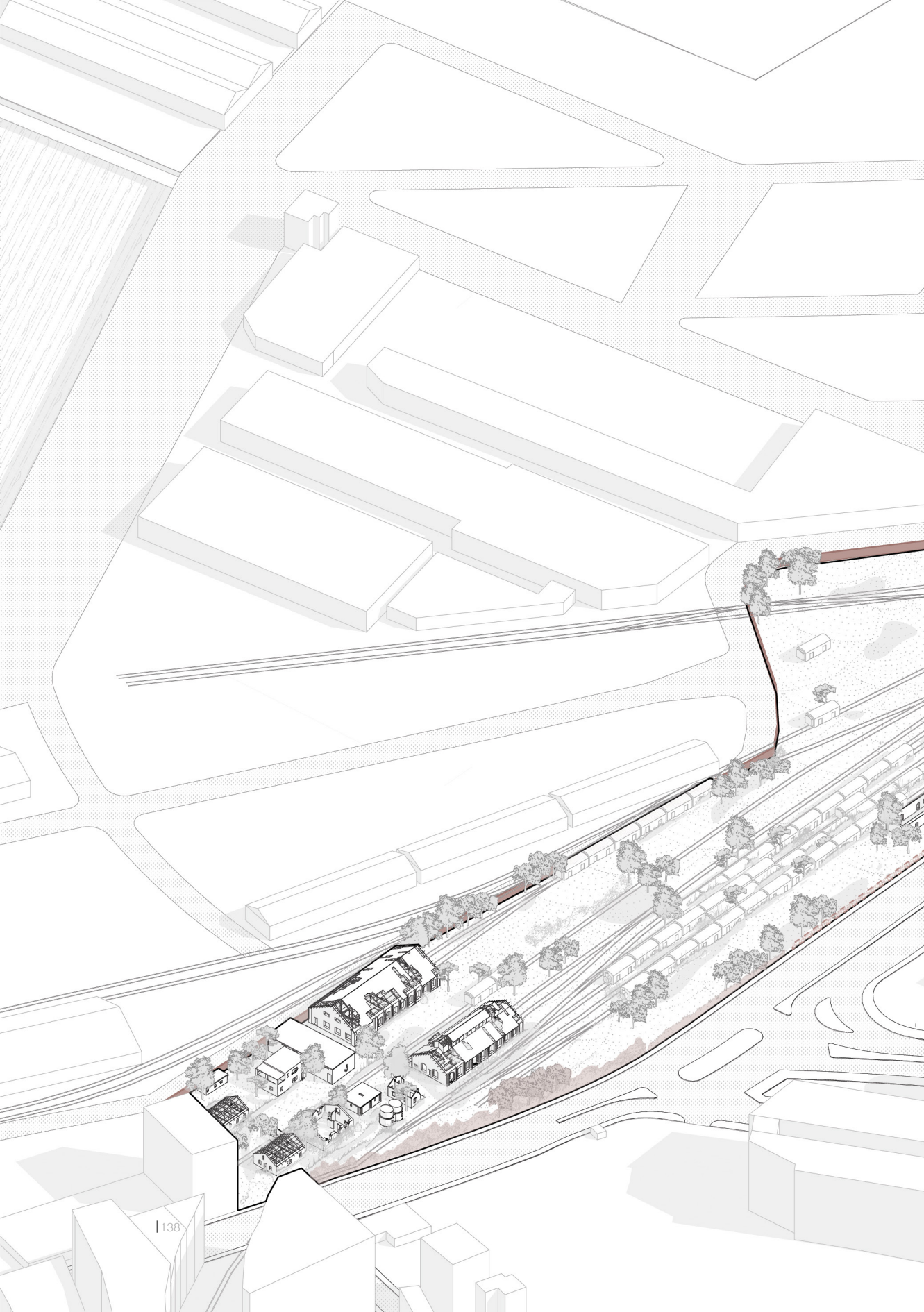


Figure 51: Axonometric View Showcasing the Topography in the Site







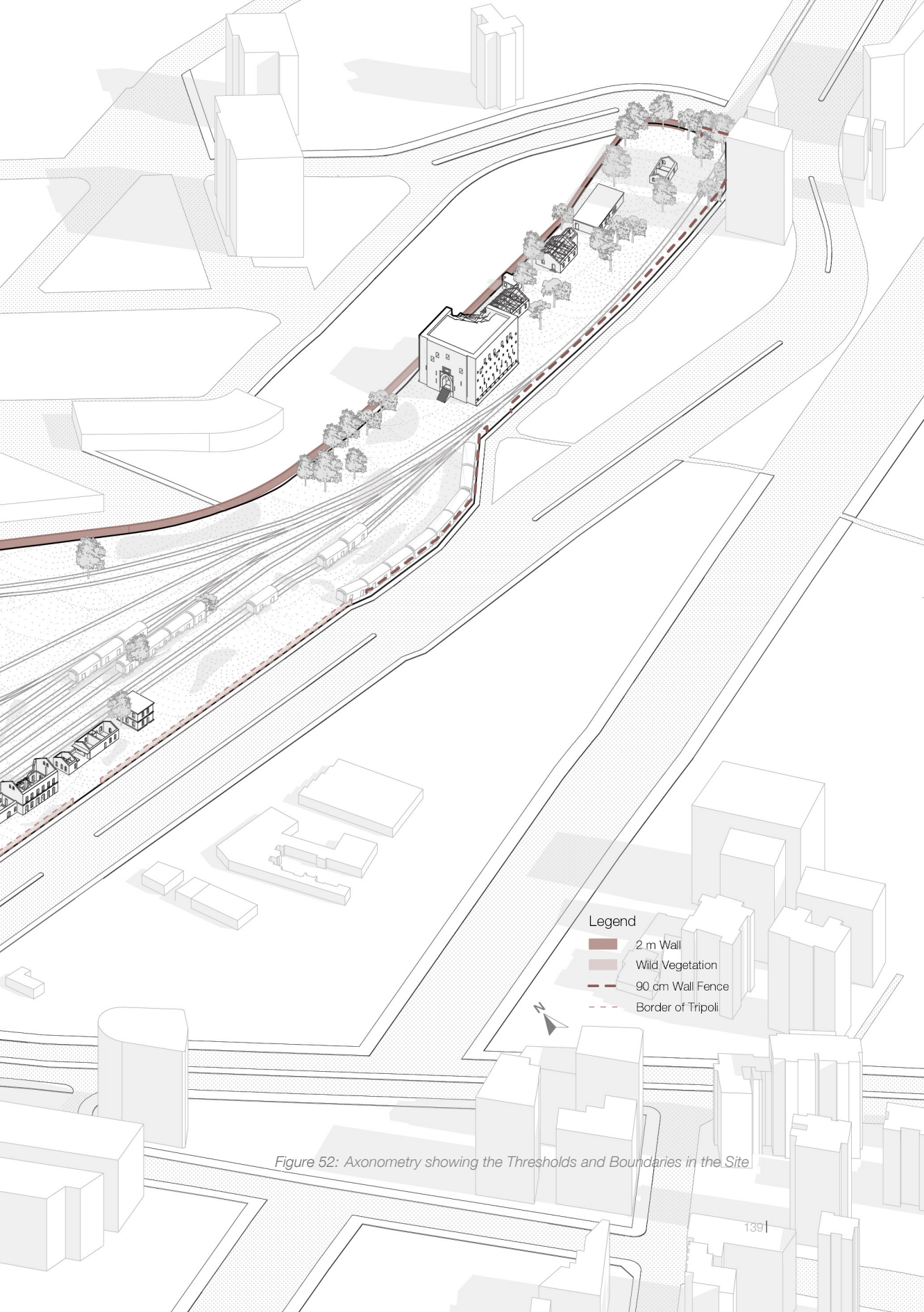


Figure 52: Axonometry showing the Thresholds and Boundaries in the Site



Collages of the Current Informal Uses of the Site







Figure 53: Illustrating the Site being used by Underprivileged Children









Figure 54: Demonstrating Steel Theft from Abandoned Tracks in the Site









*Figure 55: A Collage showcasing a Site Visit held by Architecture Students*









Figure 56: Illustrating a shepherd with his sheep on a walk in the Landscape









Figure 57: A Collage showing the presence of Wild Animals in the Rail Site



### 1. The Train Workshops

Alongside many other buildings present in the site, some date back to the 20th century as they are directly related to the Train Station and its original buildings and functions, while other buildings were then illegally added to the site using concrete structures and elements for residential uses.

However, two of the main Railway buildings within the sites are the train workshops: The main workshop and the auxiliary workshop.

The main workshop represents a large industrial structure used to repair and maintain the trains - the locomotives and wagons. It featured wide spans and high ceilings, thus the explanation of the use of the steel-truss structure. Train Tracks led directly to the interior spaces of the workshop allowing easy access and entrance.

The Auxiliary workshop is similar to the main one but a smaller building. It served for secondary mechanical maintenance for the trains. It shared identical structural features as the other workshop.

Today, both buildings can be found abandoned in the site, with deteriorating roof and missing structures. They both stand as quiet remnants of the industrial processes that once supported the functionality of the train line.

Even when left abandoned, both buildings share a not only a significant external structure and architecture, but also a particular inner space making it a valuable structure for considering adaptive reuse ideas and development proposals in order to open the site to the public and tell the story of what was once the animating the station in Tripoli.



Figure 58: A photo from the Inside of one of the Workshops in the site





Figure 59: Axonometric View of the Train Workshops



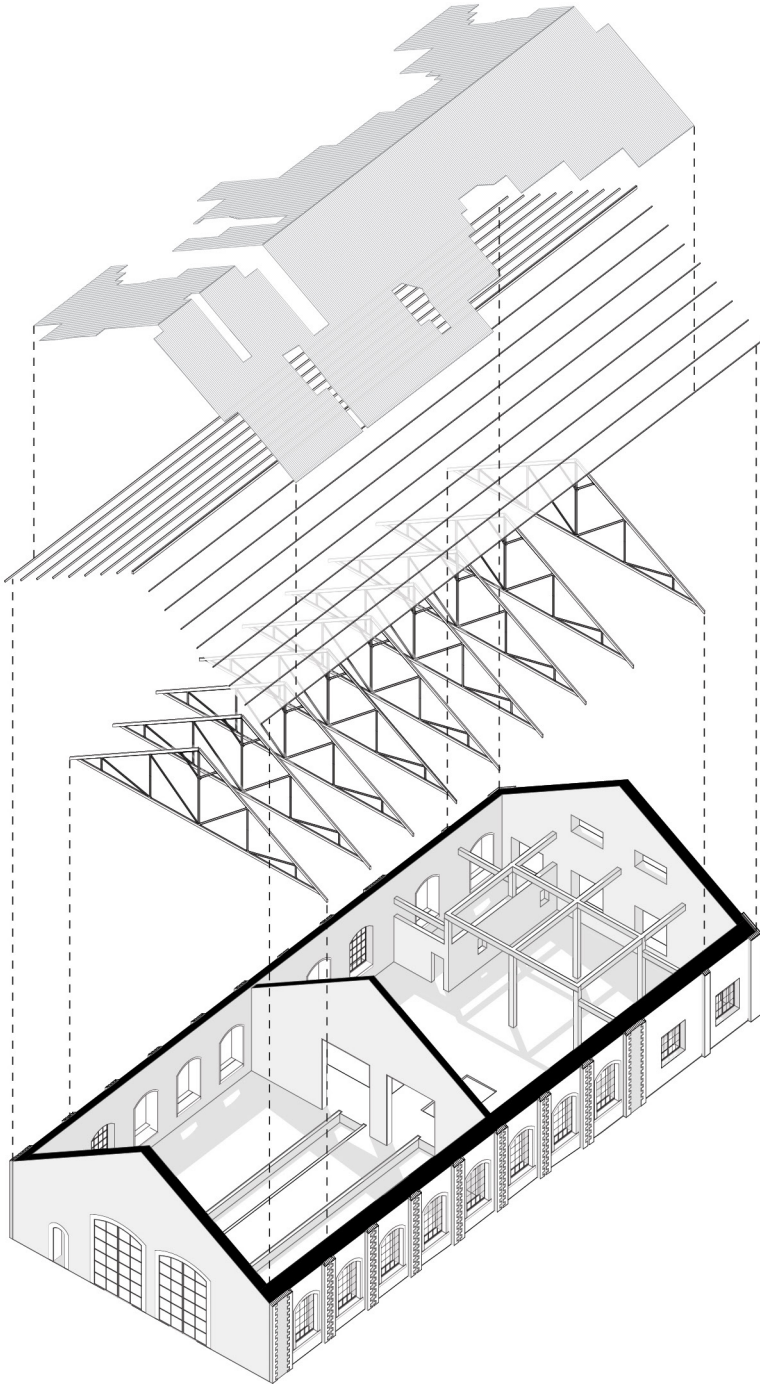


Figure 60: Exploded Axonometry of a Train Workshop

### 2. The Traveller's Building

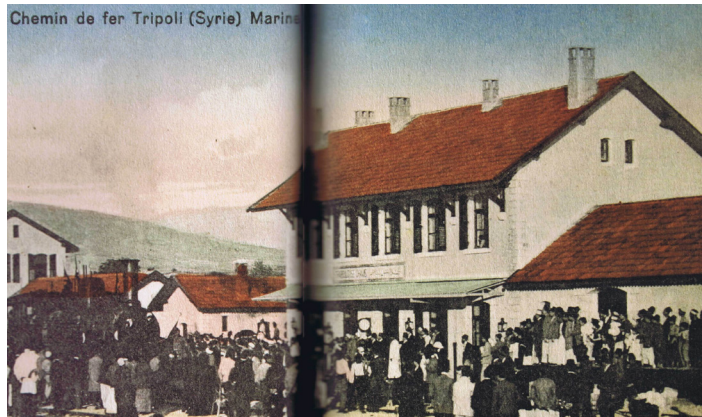
The Traveller's Building in Tripoli, as well as in other stations, holds both historical and architectural significance. It represents a model built in other stations across the country with a similar style. It was built based on a standard plan proposed by "le Service de la Construction de la Compagnie des Chemins de Fer de Paris à Lyon et à la Méditerranée" (PLM). This plan was applied uniformly to all stations from Beirut to Damascus without alterations.

The Traveller's Building measures 21m in length and 8m in width, it's classified as a 2nd class station by the PLM standards, which allowed the accommodation for only 30 to 80 passengers per day. This building type known as the station-house combined railway services on the ground floor with the station chief's residence on the upper floor.

In the ground floor and upon entering the central vestibule, travellers would find the ticketing office and baggage drop off desk to their right, while the left side consists of a welcoming area.

The first floor, on the other hand, diverges from the typical plan, pointing out clear inspiration from the Lebanese traditional style. The floor heights also vary for about 1m from the original PLM design for climate control considerations. An extension to the shell was also added in order to balance the building's overall appearance.

Despite all these alterations, the building retains the architectural characteristics of the French plan, featuring framed openings, contouring the façades, highlighting the central section with its three openings, the detailing of the shelter, the mechanics of the roof system, etc...



*Figure 61: Original Conditions of the Traveller's Building in Tripoli*



*Figure 62: Current Conditions of the Traveller's Building in Tripoli*



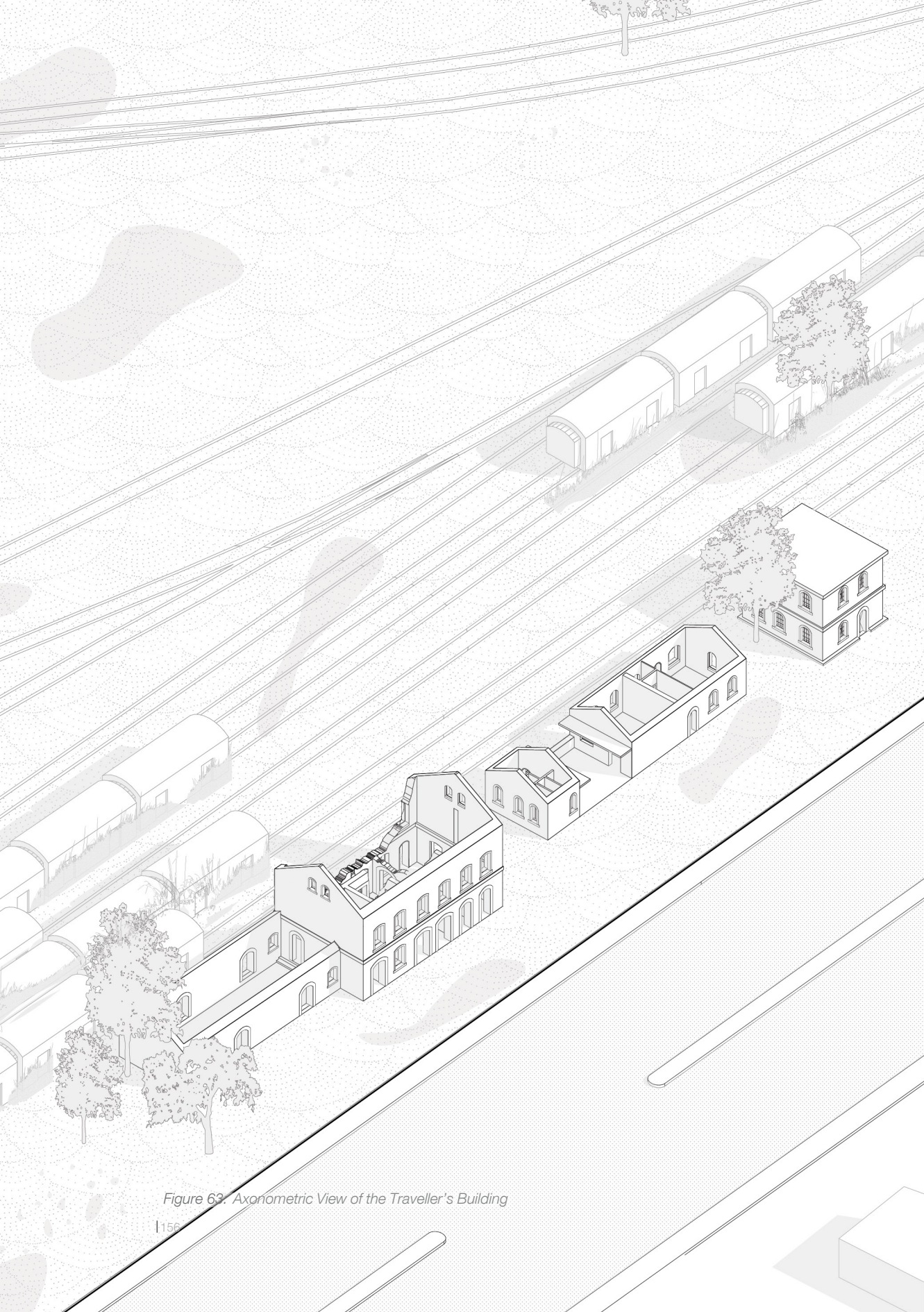


Figure 63. Axonometric View of the Traveller's Building

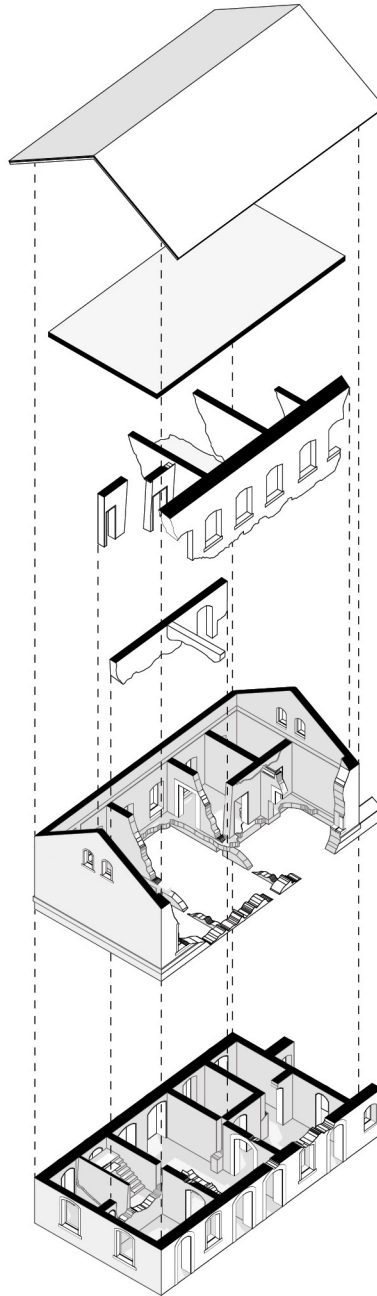


Figure 64: Exploded Axonometry of Traveller's Building

### 3. The Lion's Tower

With the never ending attacks back in the 15th century, the Lion's Tower was one of the seven towers built by the crusaders in order to defend the city along the coast. Also known as Basrbay Tower, it is the most famous among all seven and the only one left standing until today.

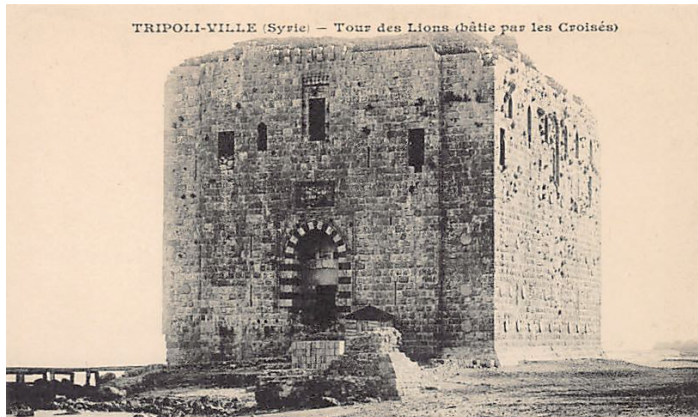
The tower is an architectural reflection of the Crusade Architecture with features characterising it dating back to its origins. Granite Columns planted horizontally in the walls and arrows outlets defending its structure. A curved arch decorated with black and white stones surrounds the main gate of the building.

The Building consists of two floors made of old stones. The ground floor features six rows of groined vaulting which rest on two huge pillars leaning on the buildings' external wall buttresses as a side support. A stone staircase reaches the second first floor passing inside the double wall of the facade. Arriving to the upper floor, over the main entrance, a multi-vaulted central hall is surrounded by eight rooms. The Roof of the building is also accessible through another staircase on the opposite side of the tower.

The tower had been restored during the years 1441 and 1442 with extensive repair works. Today the Building stands still within the site of the Train station and is kept in good conditions with regular maintenance. However, it is kept unused as a hidden building with such a legacy within the city of Tripoli.

The building's interesting structure and architectural elements as well as its important history create a variety of opportunities for the building to be adaptively reused in order to revive its significance creating a landmark in Tripoli.





*Figure 65: An Old photo of the Lion's Tower in Tripoli, 1895*



*Figure 66: A photo of the Lion's Tower in its current conditions*

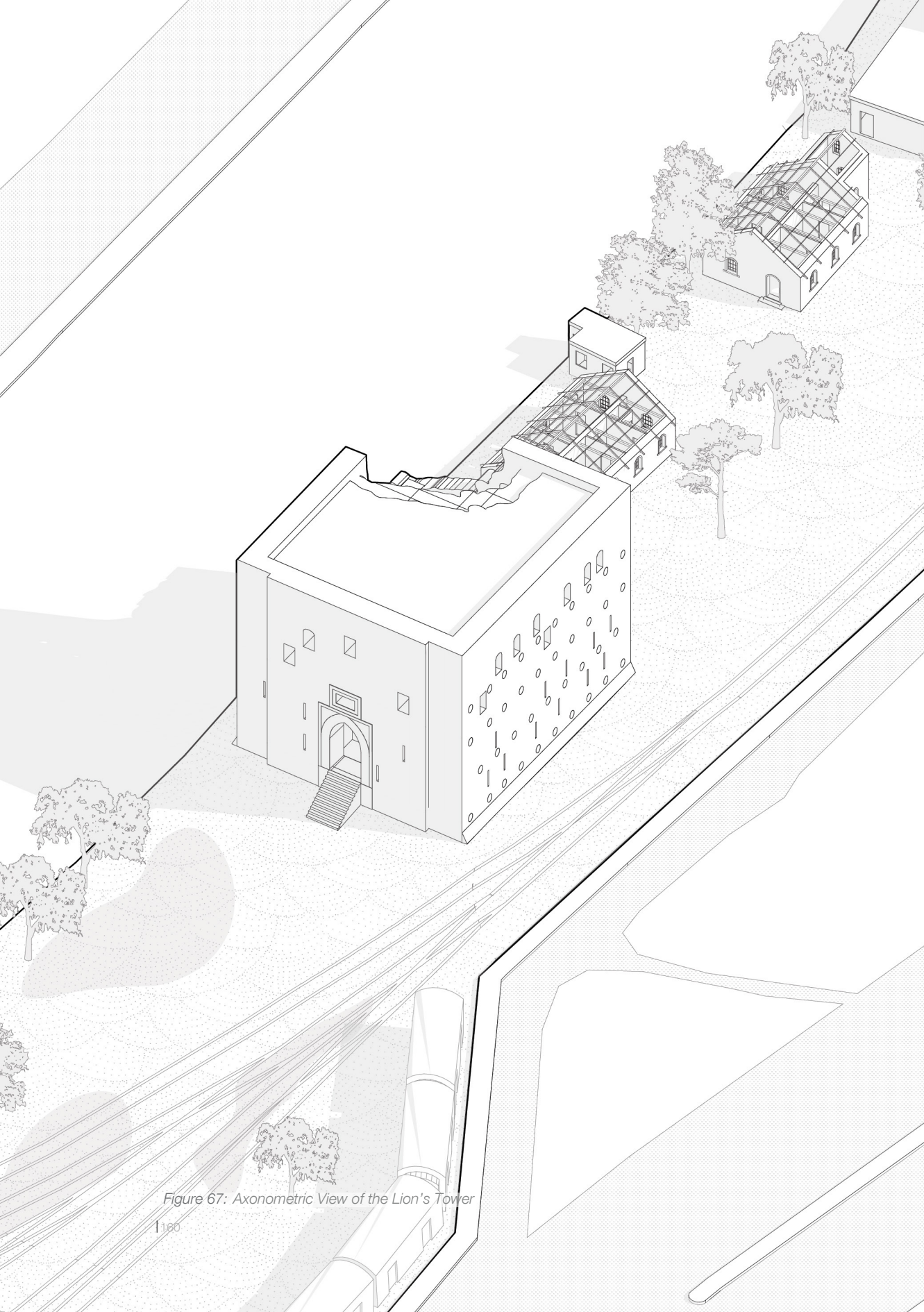


Figure 67: Axonometric View of the Lion's Tower

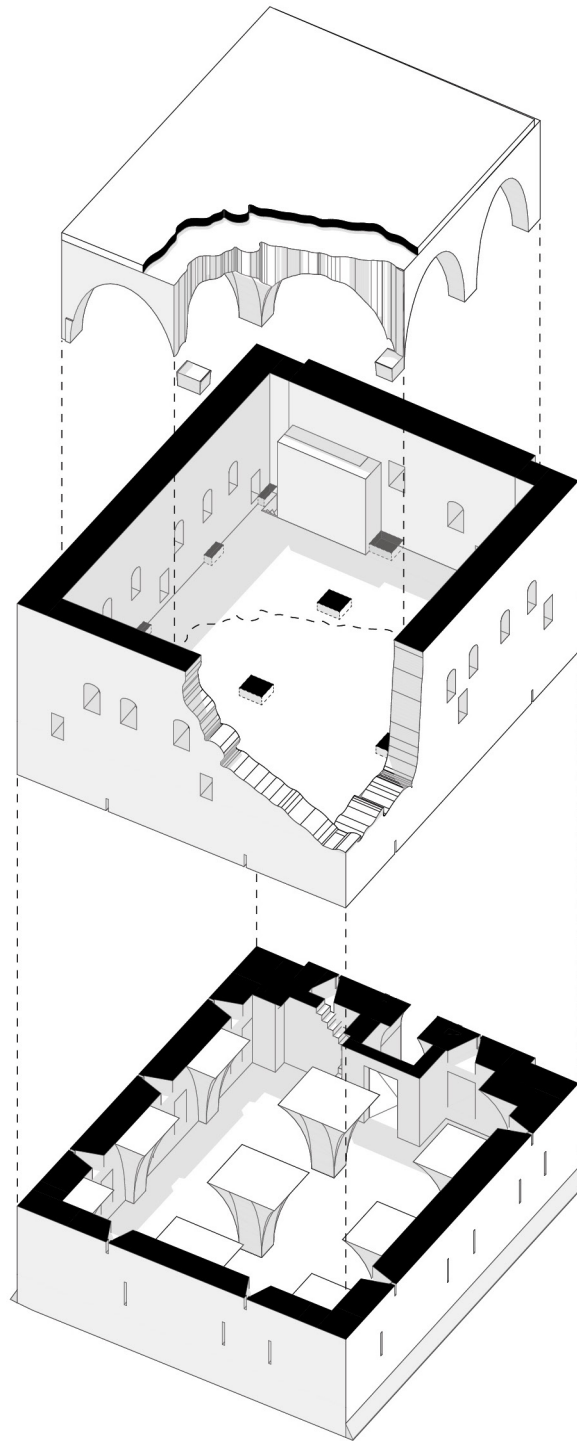


Figure 68: Exploded Axonometry of Lion's Tower







## 05. DESIGN PROPOSAL

### 1. Designing For Resilience: A Vision for Survival

#### 1. Project Overview and Strategic Framework

Over the past years, Lebanon has faced a multitude of crises inflicting the most profound damage in its modern history. These overlapping challenges have led to severe decline across the country's social, economic, infrastructural, and political landscapes.

Today, Lebanon is in the centre of ongoing conflicts in the region altering the realities of everyday life. The resulting damage has had immediate adverse effects for the local population in all of the country. Key Effects Include:

- Infrastructural Decay
- Destruction of Buildings and Public Assets
- Abandonment of Productive Lands
- Environmental Degradation
- Large Scale Displacement
- Limitation of Economic Activities
- Employment Loss and Labour Shortage
- Insufficient Agricultural Output
- Financial Instability

Among the most critically affected assets are agricultural lands, foundational components of livelihood and resilience. This condition not only represents a state of decline, but poses an urgent question about how to reoccupy space and redefine the role of architecture.

Therefore, this thesis emerges as a response to reality. Its original intent was to develop a heritage-sensitive adaptive reuse of the Tripoli Train Station with a proposal focused on the cultural preservation. Yet as the survival priority has overtaken long-term planning, it has become an architectural necessity to act in response with what the country is witnessing today. The proposal prioritizes needs and survival, then continues by hinting its primary goals.

Thus, the dual-layered response:

Phase 1: acknowledges the survival mode as an architectural responsibility

Phase 2: holds space for a hopeful future

Together, these proposals aim to implement immediate uses and transformation architectural strategies while responding to the layered conditions of abandonment, memory, and potential embedded in the site, what this thesis refers to as Scarscapes.

Two intersecting and interdependent forces, Community and Nature, create the foundation base upon which the design proposal is grounded. These are treated as operative frameworks shaping both the spatial logic and the social ambition.

On an urban scale, they guide the reclamation of neglected lands in the city and their reintegration within the urban fabric, allowing connectivity and ensuring that the proposal is not isolated, but instead a part of a broader regenerative strategy.

On an architectural scale, community and nature create the program and the atmosphere of each intervention. Where community participation influence the design of outdoor shared spaces, flexible gatherings, and applied training programs implemented in the natural landscape. Together, they guide the ideas related to biodiversity, agriculture, and regeneration while fostering resilience, enabling the citizens to redefine their relationship with the space and nurture their sense of belonging with the city.



Figure 69: Conceptual Diagram for phase 1 of the proposal

## 2. Urban Vision and Ecological Intervention

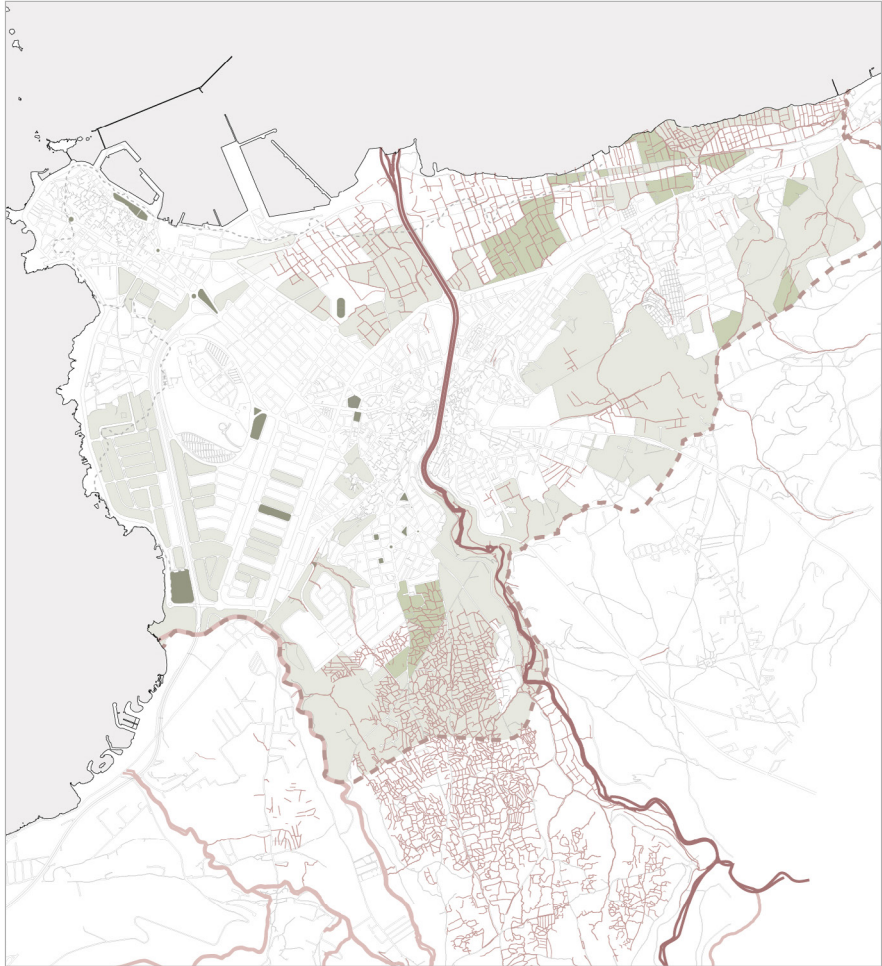


Figure 70: Mapping the Green and Blue Infrastructure in Tripoli

### Legend

- |       |                        |   |               |
|-------|------------------------|---|---------------|
| —     | Main water stream      | ■ | Public Spaces |
| —     | Seasonal water streams | ■ | Agricultural  |
| —     | Water channels         | ■ | Unused lands  |
| - - - | Border of Tripoli      |   |               |





Figure 71: Highlighting the Neglected Lands in Tripoli

Before focusing on the site itself, the proposal views the terrain as an important node within the urban fabric of the city. Tripoli features a fragmented green and blue infrastructure spread within its built environment. However, neglected lands dominate its landscape while having the potential to unite and create ecological corridors operating as a multi-layered strategy enabling urban regeneration, social connectivity, environmental repair, and psychological relief, while also reframing the site of the Train Station as vital gateway for urban renewal.



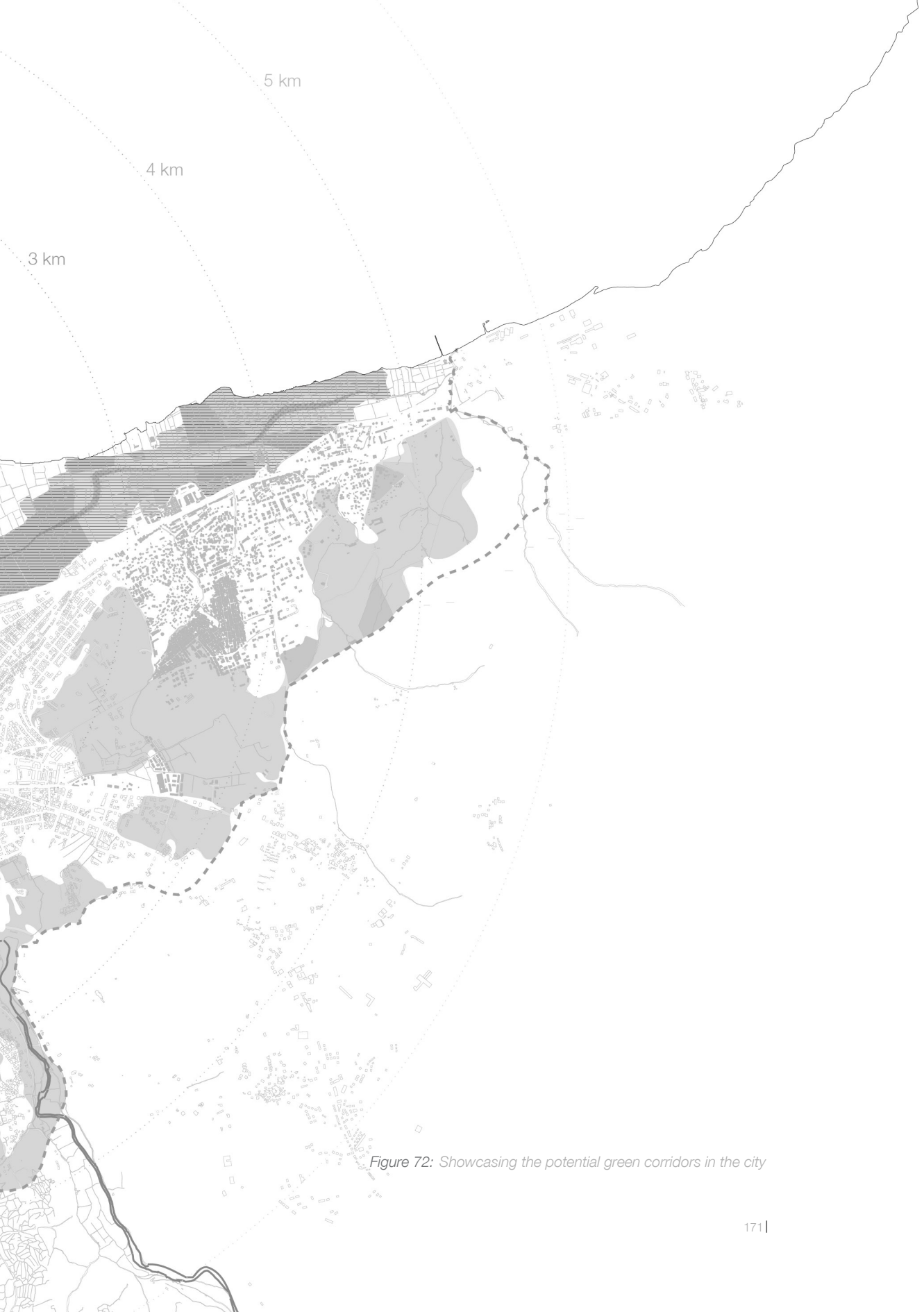


Figure 72: Showcasing the potential green corridors in the city









Figure 73: Highlighting the Ecological corridor passing through the Train Station



### 3. From Ideation to Implementation: Translating Ideas Into Design

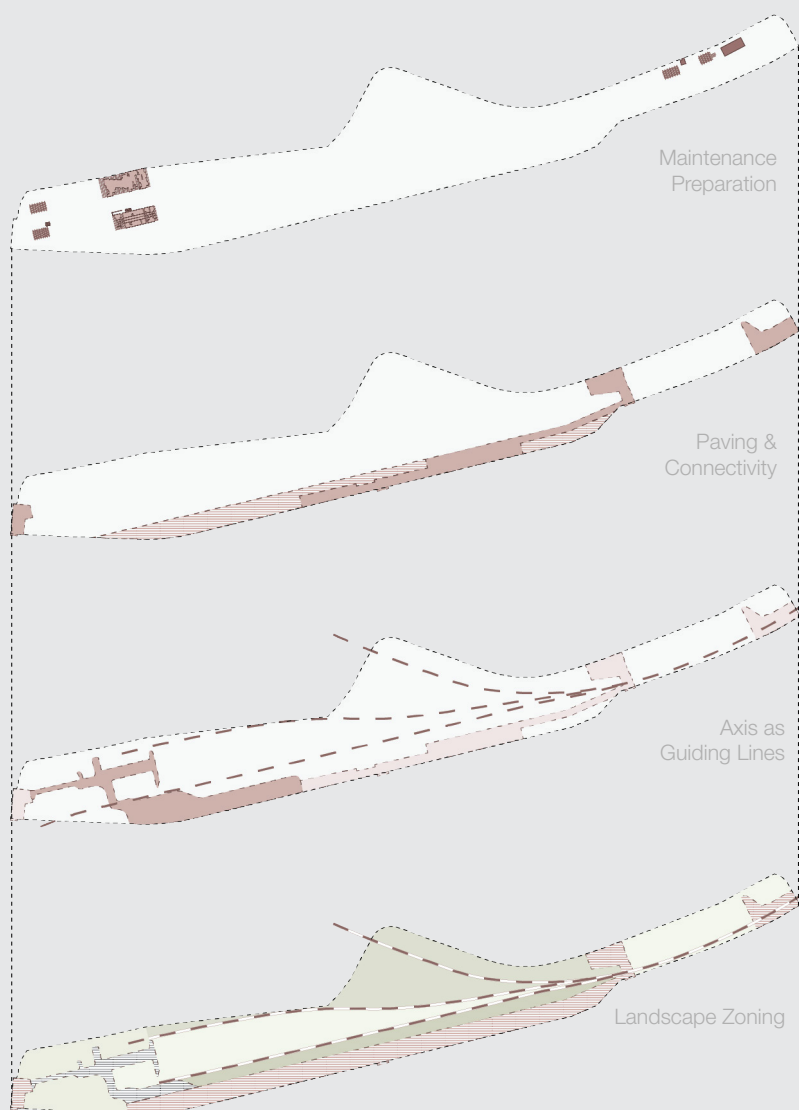
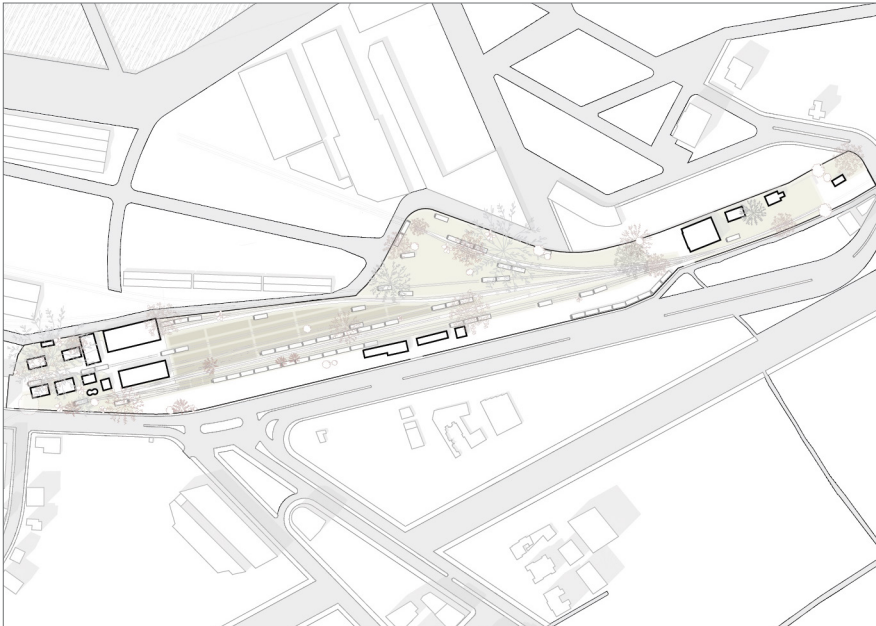


Figure 74: Implementation steps and landscape zoning



*Figure 75: General landscape plan of the proposal*

This phase of the project serves as a continuation of the urban green corridor strategy through a site-specific application, zooming in on the site of the station and proposing its transformation into agricultural zones, urban farming spaces, public parks, and open gathering spaces. The zoning within the project follows the traces of the existing axis present within the terrain, from rail tracks to the repeatedly walked paths, enabling flexible and inclusive public use. The main aim is to offer the citizens community spaces prioritizing accessibility, inclusion, food production, education, and recreation.

#### 4. Visual Narratives: Collages of the Exterior Landscape







Figure 76: Showcasing Productive Fields within the Railway Landscape









Figure 77: Green pockets between the various Buildings in the Train Site









Figure 78: Park Edge Adjacent to the Lion's Tower









Figure 79: Tracks as circulation and Cultivation paths









Figure 80: General bird eye view of the proposal









Figure 81: Open Gathering Space in front of the Train workshop







Figure 82: View Towards the site from inside the Traveller's Building









Figure 83: Interior View of the Train Workshop in phase 1









Figure 84: View from the inside of the Train Workshop







*Figure 85: Existing wall opening facing Landscape renewal*

## **2. Designing for Tomorrow: A Vision of Hope**

### **1. Design Approach and Spatial Reuse**

The second phase of the project extends the vision beyond survival, presenting a forward-looking approach that preserves memory while adaptively using the previously selected buildings within the site introducing lightweight structures. It aims to serve the community and honour historical legacy, while offering new narratives specific to the character and the past of the existing ruins.

The Train Workshops build upon the foundation of the survival proposal in phase 1, they are reactivated with complementary programs: one becomes an urban greenhouse and agricultural hub with a locally sourced kitchen, the second extends the park to an inner garden café, both supporting sustainable cultivation and continuing the ecological rhythm of the first phase, promoting farm-to-table practices and engaging a circular economy model that brings benefit to the project. The design integrates essential service spaces, including kitchen utility rooms enclosed with translucent partitions with private access from the rear of the building. Nearby structures are also designated to accommodate shared sanitary facilities, offering restrooms for visitors across the site.

The Traveller's Building, originally partially damaged, is rehabilitated through a structural intervention that reintroduces its missing floor, preparing the space for future flexibility. The building becomes a multi-purpose cultural hall, hosting community events, temporary exhibitions, and showcasing local talents, retaining the base memory of travel, gathering, and exchange.

The Lion's Tower, once a watchtower, regains its symbolic role as an overseeing anchor. The proposed spaces house an administrative core using lightweight and flexible partitions, enabling management of the site, while using the other spaces as an archive museum, narrating the significant past of the site. Light viewing extended platforms are introduced to offer panoramic views over the site as well as the city of Tripoli offering moments of pause and reflection continuing the tower's role as a spatial observer.

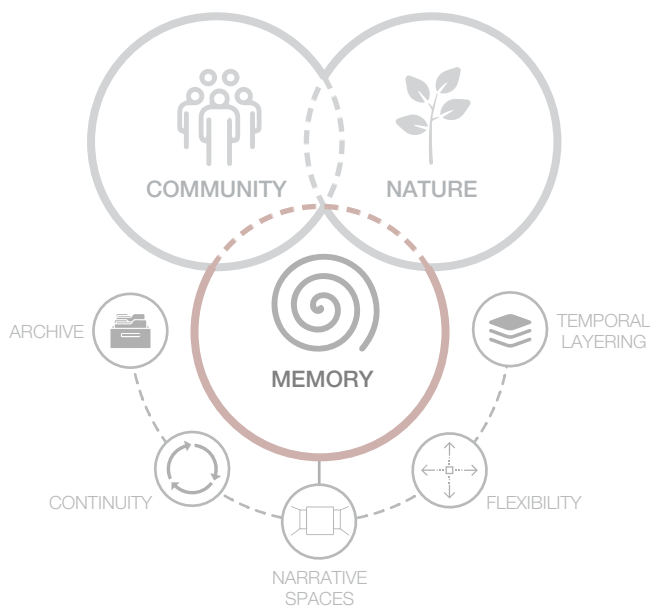


Figure 86: Conceptual Diagram for phase 2 of the proposal

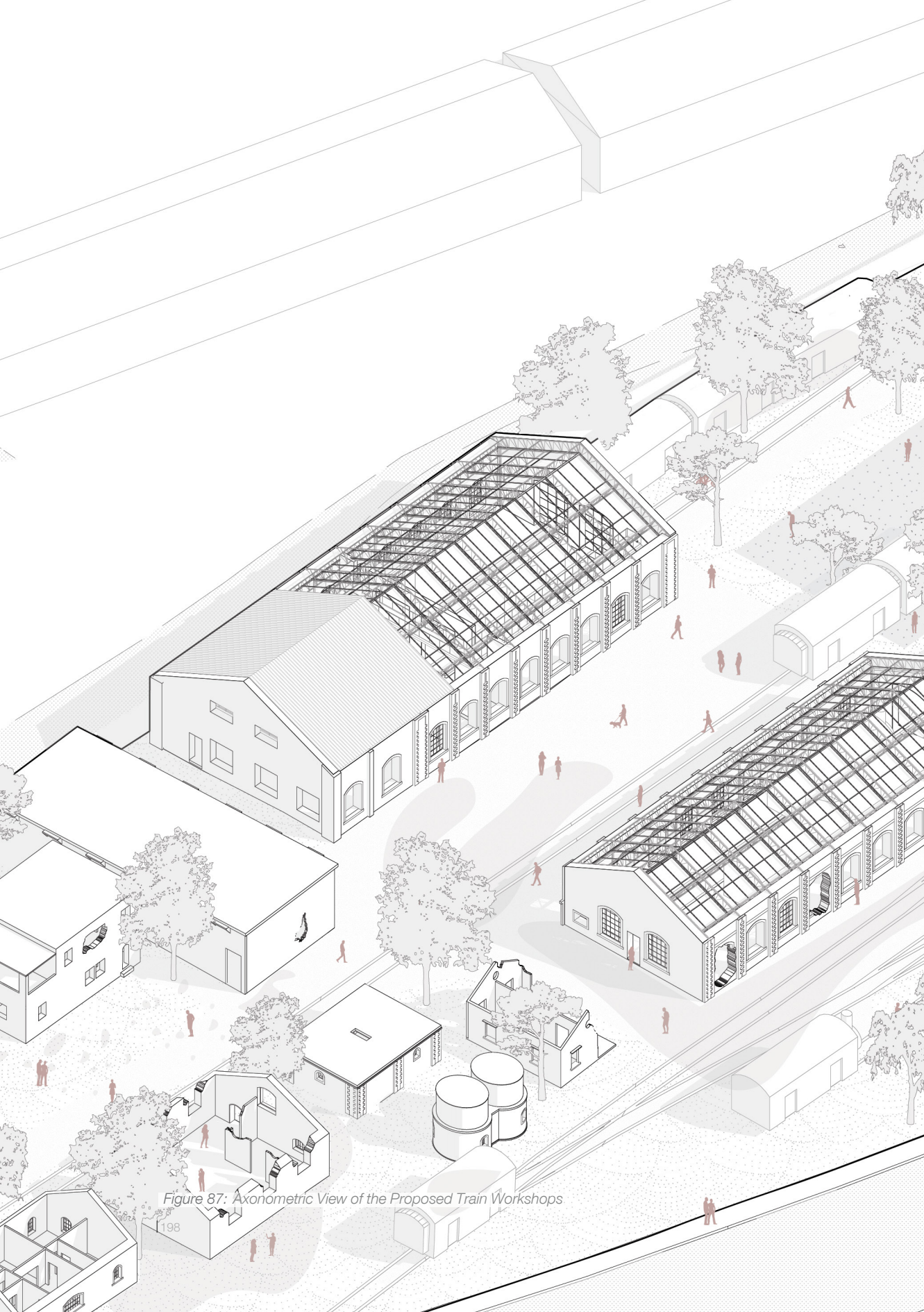


Figure 87: Axonometric View of the Proposed Train Workshops



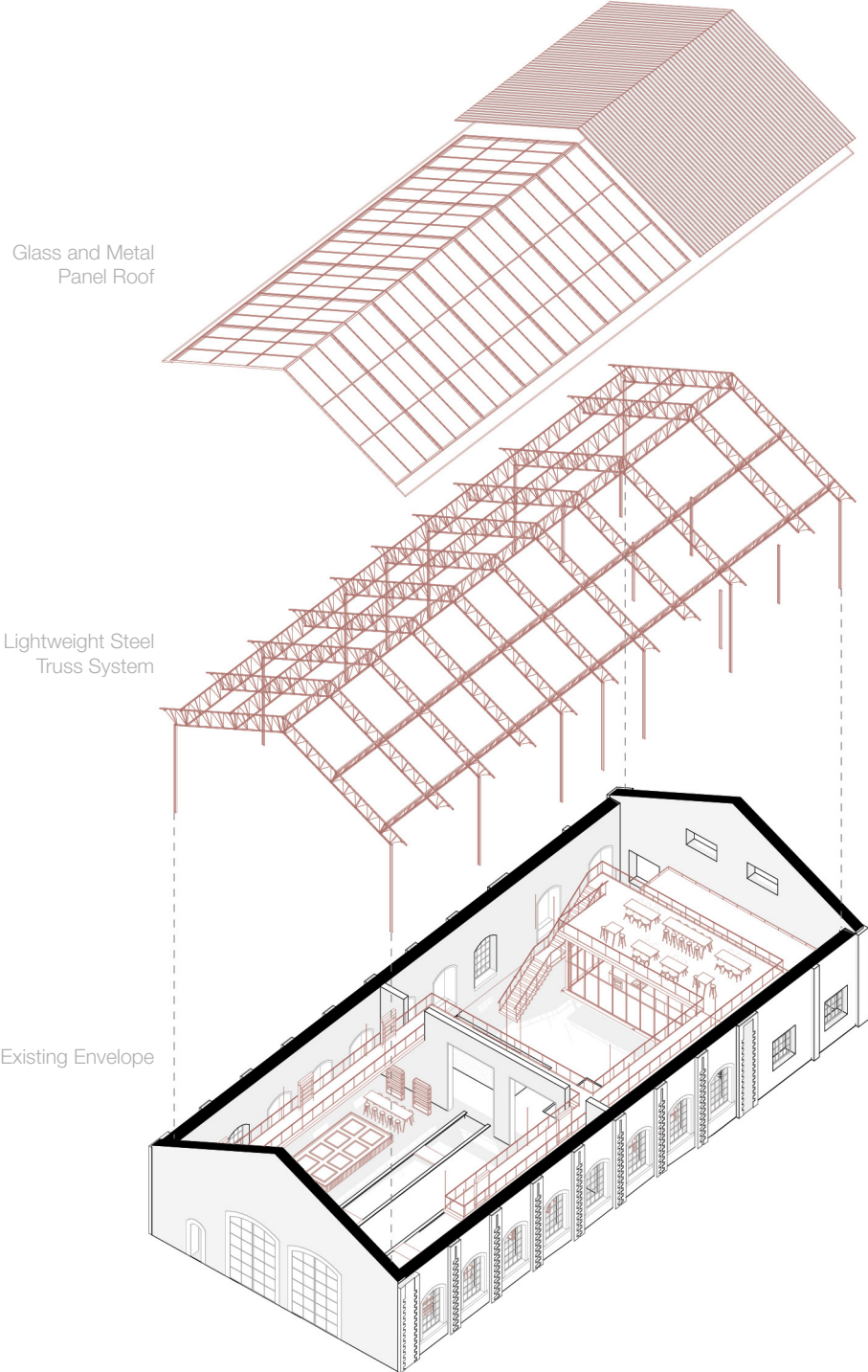


Figure 88: Exploded Axonometry of a Proposed Train Workshop

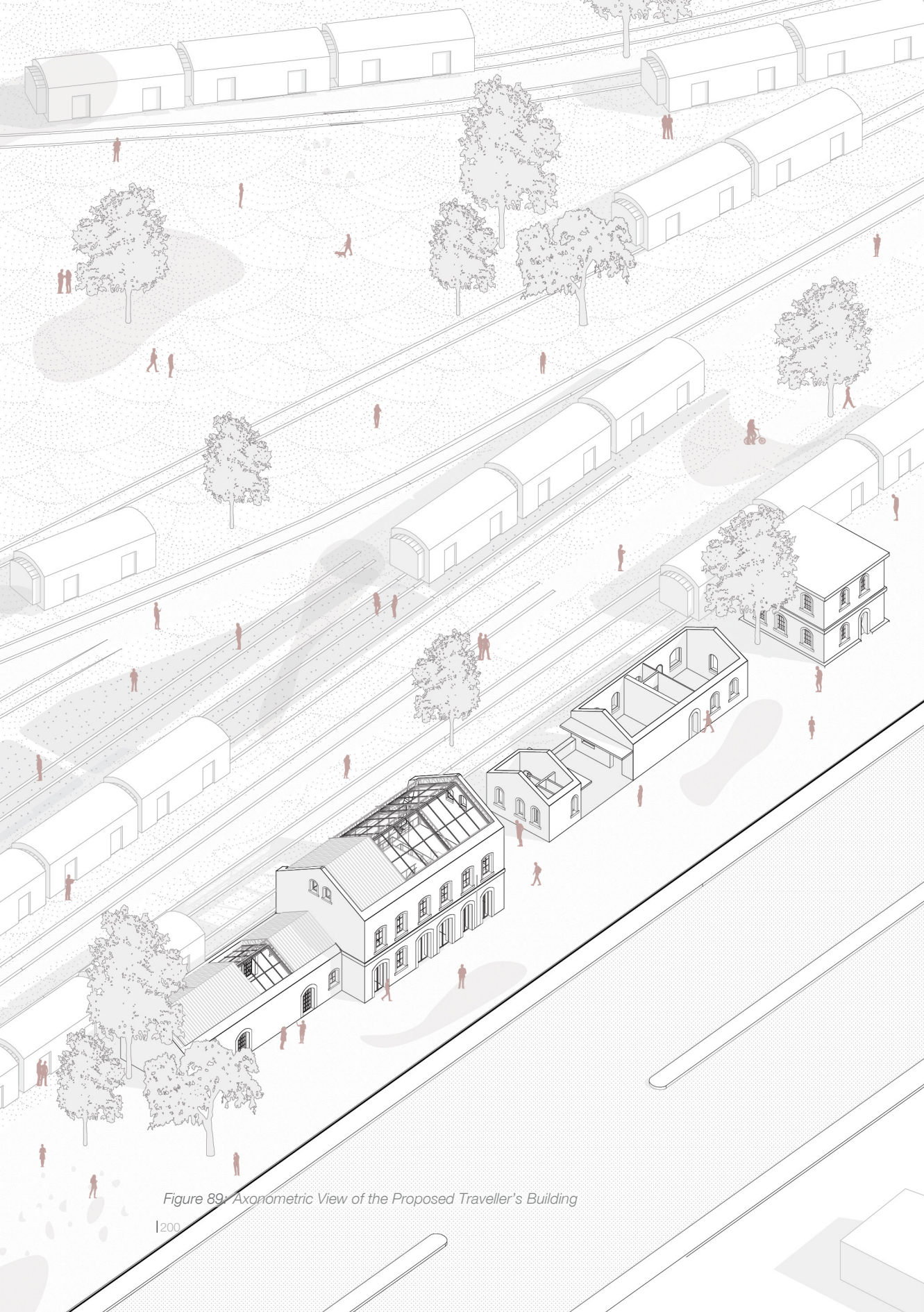


Figure 89: Axonometric View of the Proposed Traveller's Building

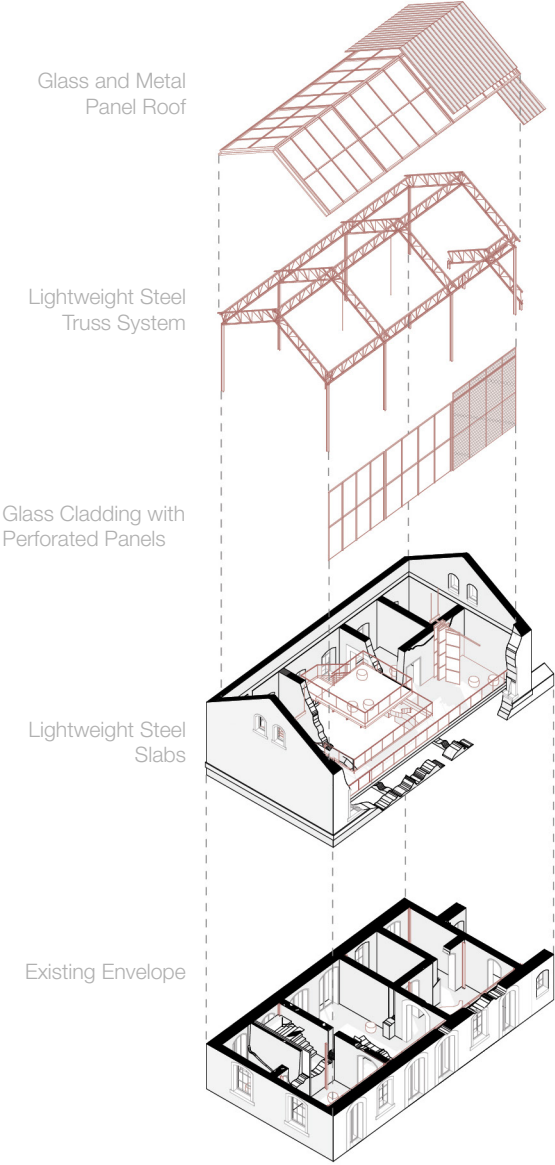


Figure 90: Exploded Axonometry of a Proposed Traveller's Building



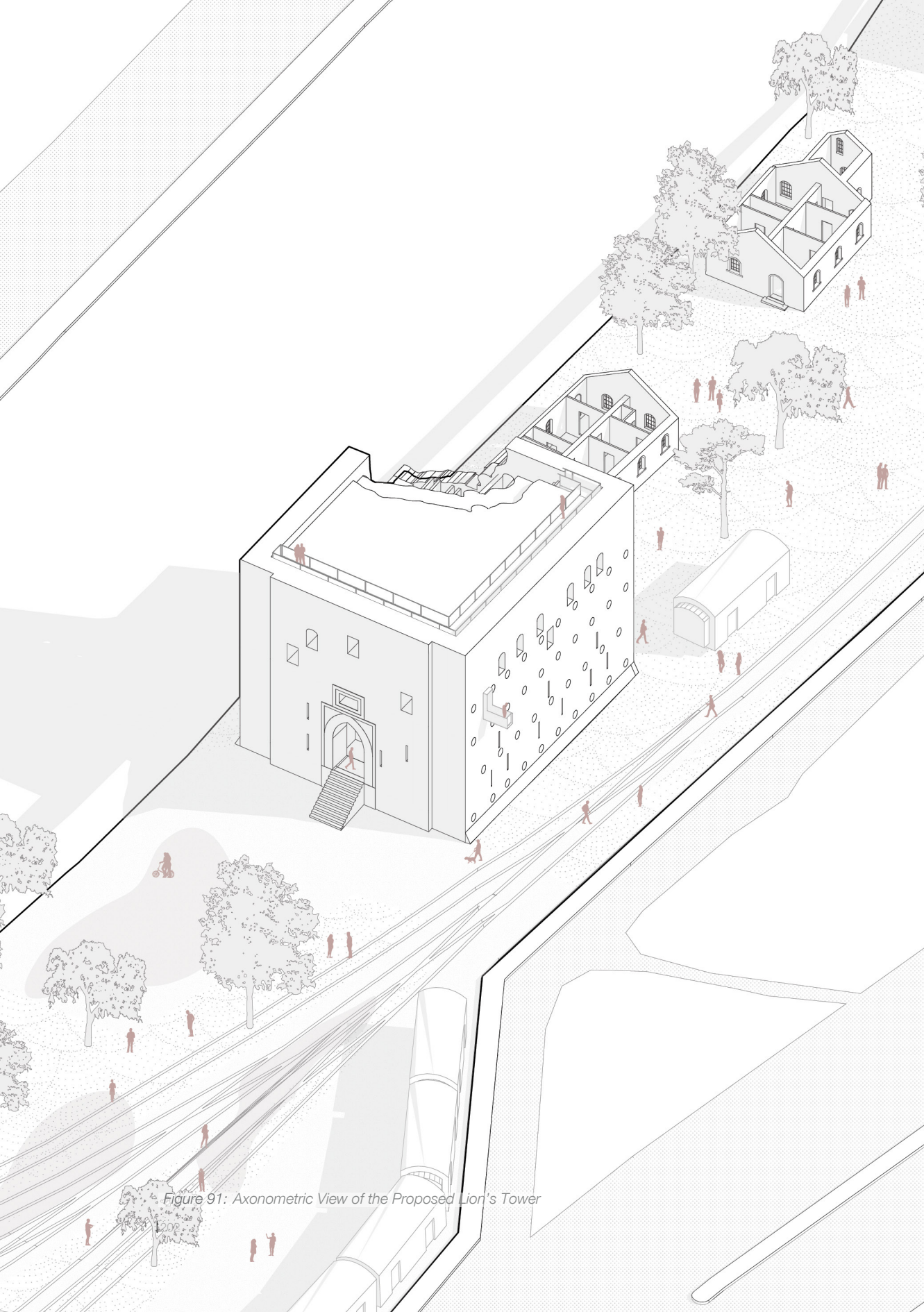


Figure 91: Axonometric View of the Proposed Lion's Tower



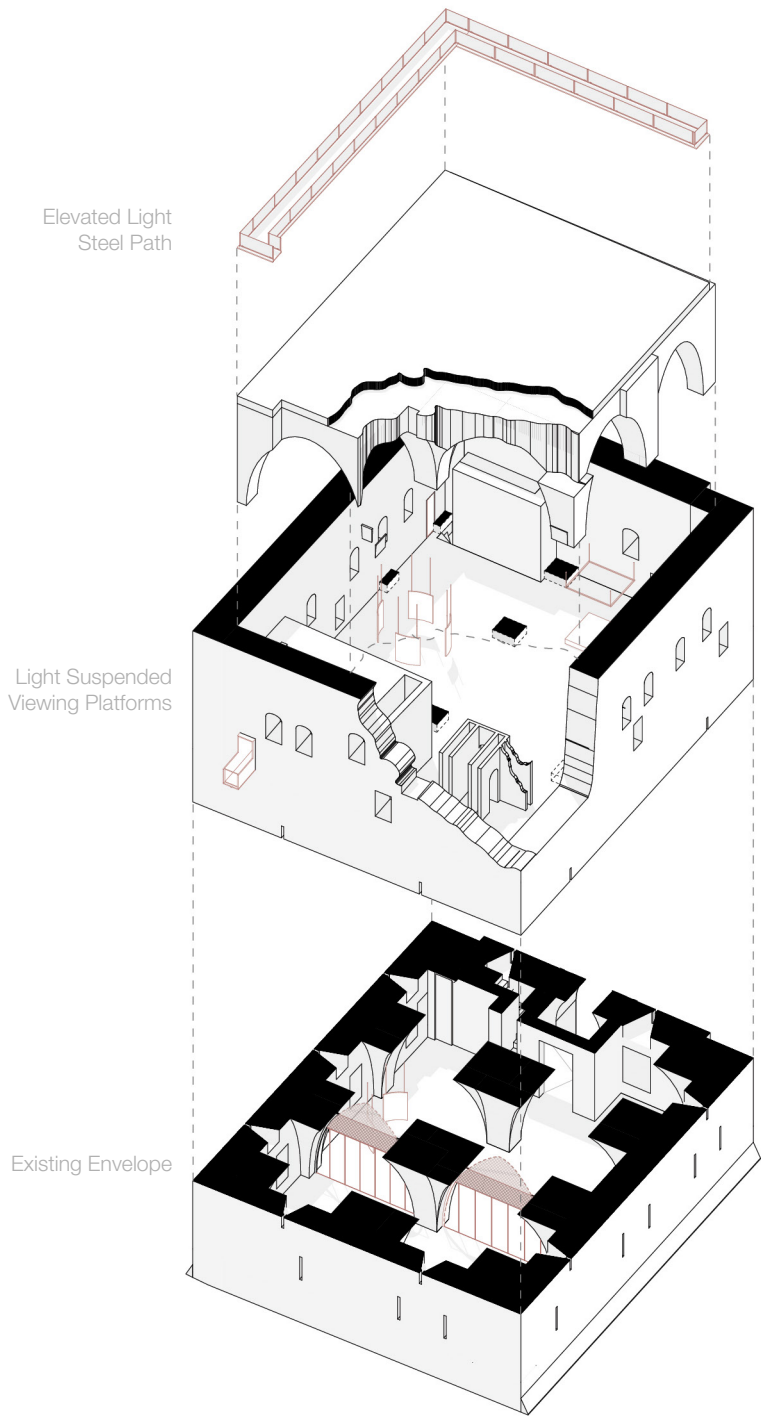


Figure 92: Exploded Axonometry of a Proposed Lion's Tower



## 2. Visualising the Future: Collages of the Interior Spaces







Figure 93: Collage of the Interior Space of the Workshop as an Agricultural Hub









Figure 94: Highlighting the Locally Sourced Kitchen proposed in the Workshop









Figure 95: Showcasing the inner Garden Café implemented in the Workshop







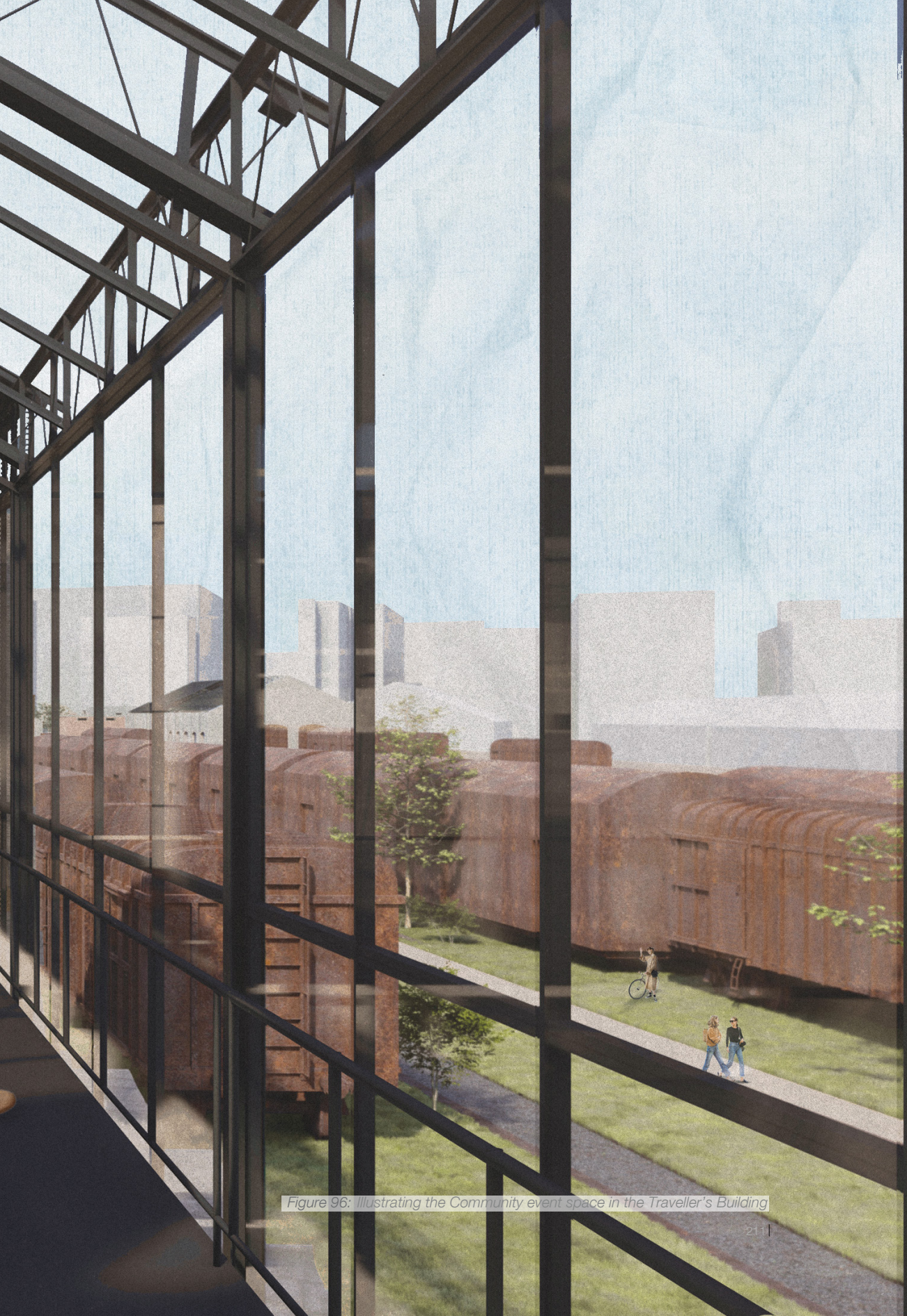


Figure 96: Illustrating the Community event space in the Traveller's Building









Figure 97: Collage Highlighting the Different Levels in *The Traveller's Building*









Figure 98: Perspective View from inside the Traveller's Building





*Figure 99: Framing the Landscape through new shaded Cladding*





*Figure 100: Looking out from within the Traveller's Building*



*Figure 101: Inner Quiet Space for memory inside the Lion's Tower*





*Figure 102: View of the proposed museum in the Lion's Tower*









## 05. DESIGN PROPOSAL

*Figure 103: Temporary Exhibition Spaces in the Traveller's Building*





Tripoli Train Station





## 05. DESIGN PROPOSAL

*Figure 104: Project Maquette Displayed within the Ruins of the Lion's Tower*







## 06. CONCLUSION

The thesis has explored the complex intersection of urban abandonment, collective memory, and architectural resilience through the lens of Tripoli's historic railway station.

The journey of this dissertation began by tracing the scars of Lebanon's once thriving Railway Infrastructure, which used to carry people, goods, and hope, but now remains as a silent hidden memory spread within the country. The research identifies the railway system not merely as a forgotten network but as a powerful cultural artefact. These residual landscapes marked by decay became the foundation for what this thesis refers to as Scarscapes, where memory, ruin, and opportunity coexist.

Through a dual-phase design strategy, the project responds to the main question posed at the beginning of the study. Firstly, with the Design for Survival, it prioritized immediate urban, societal, and environmental needs of

the city of Tripoli, proposing accessible and sustainable interventions grounded in agriculture, public infrastructure, and community spaces. Secondly, with the Design for Future Hope, the proposal envisions a long-term adaptive reuse of a selection of architectural remains within the site. It introduces new cultural and civic functions within various structures, including flexible programming, lightweight interventions, and adaptable systems.

Together, the proposed two phases introduce an alternative architectural methodology, one that does not seek to erase traces of conflict or decay, but rather to engage with them critically and constructively. In reactivating Tripoli's site of its historic Train Station, the thesis offers a broad reflection on how architecture can operate in contexts of loss: by anchoring memory, serving present needs, and opening space for a hopeful, adaptive future.

Scarscapes is not just a site-specific proposal, but a call to engage with forgotten spaces, aiming to set an example for how architecture can respond to abandonment through adaptive, socially grounded, and contextually sensitive action.

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