



Revitalizing the Olympic landscape of Sarajevo

A design for the abandoned Olympic
bobsleigh and luge track

Sven van Ooijen
MSc Landscape Architecture

Revitalizing the Olympic landscape of Sarajevo

A design for the abandoned Olympic bobsleigh and luge track

Sven Gerard van Ooijen

Flowscales Studio - Design of the Urban Fabric
MSc Landscape Architecture
Faculty of Architecture and the Built Environment
Delft University of Technology

With the guidance of

First mentor
Dr. ir. G.A. Verschuure-Stuip

Second mentor
Ir. L.P.J. van den Burg

Examination committee
Ir. Y.J. Cuperus

P5 report
27/11/2024
Delft, The Netherlands

* All drawings and photos were made by the author, unless noted otherwise.

Abstract

Keywords: Sarajevo, Olympic Landscape, Olympic Winter Games 1984, Bobtrack, Landscape Architecture, Revitalization

This thesis examines the dramatic transformation of Sarajevo’s Olympic landscape following the Bosnian War, which erupted just eight years after the city hosted the 1984 Winter Olympics, an event that initially symbolized unity and international cooperation. The war led to the destruction of both physical infrastructure and the cultural and social values that characterized the city. The primary objective of this research is to contribute to the revitalization of this landscape.

The Olympic landscape is understood as a layered entity, comprising physical, social, and cultural components. Sarajevo continues to struggle with social and cultural divisions, underscoring the need for initiatives aimed at bridging these gaps and fostering community spirit.

Central to this study is the redesign of the abandoned bobsleigh track on Mount Trebević, which serves as a symbol of both glory and devastation. By incorporating sports and cultural programs, the revitalization efforts seek to rediscover the Olympic spirit, restoring social cohesion.

Ultimately, the thesis argues that landscape architecture can play a vital role in revitalizing Sarajevo’s Olympic landscape by restoring physical elements and creating spaces that could heal the social and cultural scars of war, thereby helping the city reclaim its identity as a symbol of peace and unity.

	CONTENTS	
	Abstract	07
01	INTRODUCTION	
	1.1 Personal motivation	12
	1.2 Setting the Scene	14
	1.3 Problem Statement	18
	1.4 Research Statement	20
	1.5 Scope and Relevance	22
02	METHODOLOGY	
	2.1 Research Framework	26
	2.2 Methods and approach	28
	2.3 Theoretical Framework	30
03	OLYMPIC LANDSCAPE SARAJEVO 1984	
	3.1 Sarajevo 1984 Winter Olympic Games	34
	3.2 What is an Olympic landscape?	38
	3.3 Physical landscape	40
	3.4 Social landscape	52
	3.5 Cultural landscape	62
	3.6 Conclusion Olympic landscape Sarajevo 1984	70
04	THE ECLIPSE OF THE OLYMPIC DREAM	
	4.1 Siege of Sarajevo	76
	4.2 Destruction Olympic landscape Sarajevo	82
	4.3 Current Olympic landscape Sarajevo	90
05	SITE ANALYSIS	
	5.1 Defining the design location	94
	5.2 Olympic bobtrack Sarajevo 1984	96
	5.3 Mountain Trebevic	112
06	DESIGN	
	6.1 Design Objectives	122
	6.2 Design Strategies	124
	6.3 Design Concept	132
	6.4 Design	136
	6.5 Masterplan	142
	6.6 Zoom-in desin	144
	6.7 Design conclusion	172
07	CONCLUSION	
	7.1 Conclusion	180
	7.2 Reflection	184
	REFERENCES	

01

Introduction

This introductory chapter outlines my personal motivation for the chosen topic, followed by a brief overview of the location and the issue to be investigated. This sets the stage for defining the research objective and formulating the research questions. The chapter concludes with a description of the project's scope and relevance.

1.1 Personal motivation

1.2 Setting the Scene

*Winter Olympic Games
Sarajevo*

1.3 Problem Statement

1.4 Research Statement

*Research Aim
Research Questions*

1.5 Scope and Relevance

*Scope
Relevance*

1.1 PERSONAL MOTIVATION

Since my youth, I have had a great passion for sports, especially for the Olympic Games, the largest sporting event in the world. Additionally, within my field, I am interested in heritage and history, and the various ways in which they can be managed.

While reading an article by CBS News, which focused on abandoned Olympic facilities and the various reasons behind their deterioration (CBS News, 2022), I noticed a clear connection between my two fascinations, the Olympics and the handling of these neglected historical sites.

One location that immediately caught my attention was the bobsleigh track in Sarajevo, built for the 1984 Winter Olympics (fig. 1). The image of a concrete structure, brightly colored by graffiti and winding through a densely overgrown forest, instantly captured my interest.

12

■ Figure 1: The abandoned Olympic bobsleigh track used in the Winter Olympics of 1984 in Sarajevo covered in graffiti (Nomandingnerds, 2022).



1.2 SETTING THE SCENE

Winter Olympic Games

The bobsleigh track was one of the sporting venues during the 1984 Winter Olympics in Sarajevo, one of the largest sports event for winter sports in the world.

The Winter Olympics are an international sports competition held every four years. This event, also known as the Winter Games, includes cold-weather events on snow (skiing, snowboarding, biathlon) and ice (figure skating, hockey, speed skating, curling, bobsleigh, luge, skeleton). The Winter Olympics symbolize international cooperation and athletic achievement, attracting both athletes and spectators from around the globe (History, 2021).

Hosting such a large sporting event brings significant changes to the landscape, creating an entire Olympic landscape. In 1984, it was Sarajevo's turn to showcase itself to the world.

14



■ Figure 2: Gold medalists Wolfgang Hoppe and Dietmar Schauerhammer of East Germany as they approach the finish of their two-man bobsled run (Associated Press, 2022).

Sarajevo

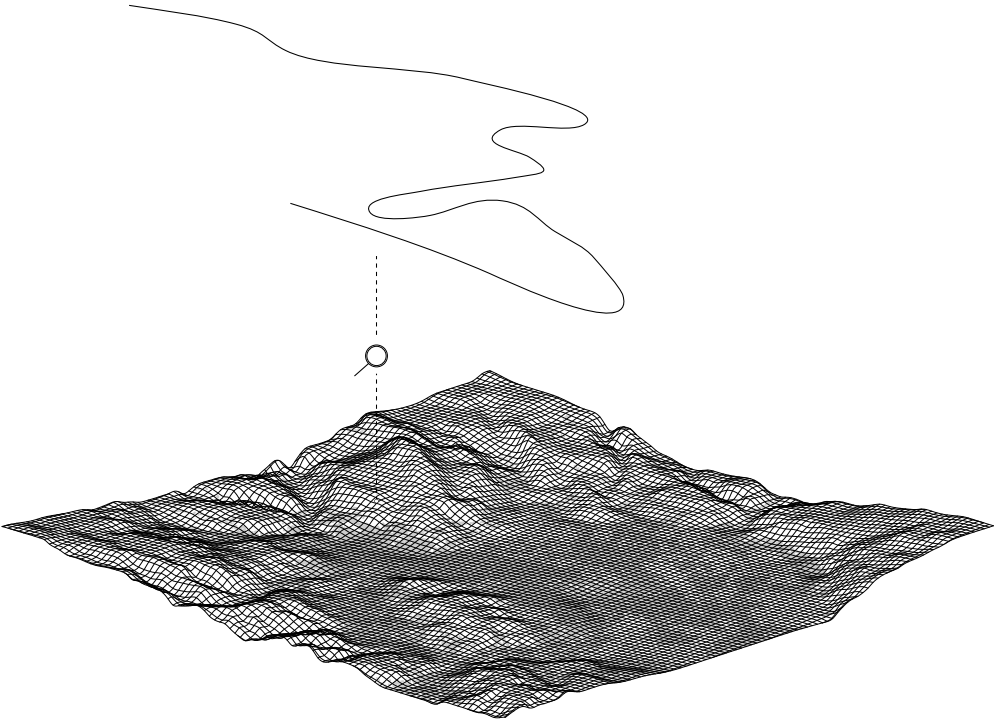
Sarajevo is the capital of Bosnia and Herzegovina, located in Southeast Europe (fig. 4). Bosnia and Herzegovina is bordered by Croatia to the west, Serbia to the east, and Montenegro to the southeast. These countries were all part of the former Yugoslavia (Malcolm et al., 2018).

Sarajevo is centrally located in the country, nestled in the valley of the Dinaric Alps. Due to this unique geographical location, the city is surrounded by hills and mountains, including Bjelasnica, Igman, Jahorina, and Trebević (Metych, 2024). All of these mountains played a role during the 1984 Winter Olympics.

The bobsleigh track was located on Mount Trebević, the mountain closest to the city (fig. 3). This track was one of the many components of the Olympic landscape of Sarajevo 1984 and remains an important symbol of the sport in Sarajevo to this day.



■ Figure 4: Map of Europe which indicates the location of Bosnia and Herzegovina and Sarajevo [2024].



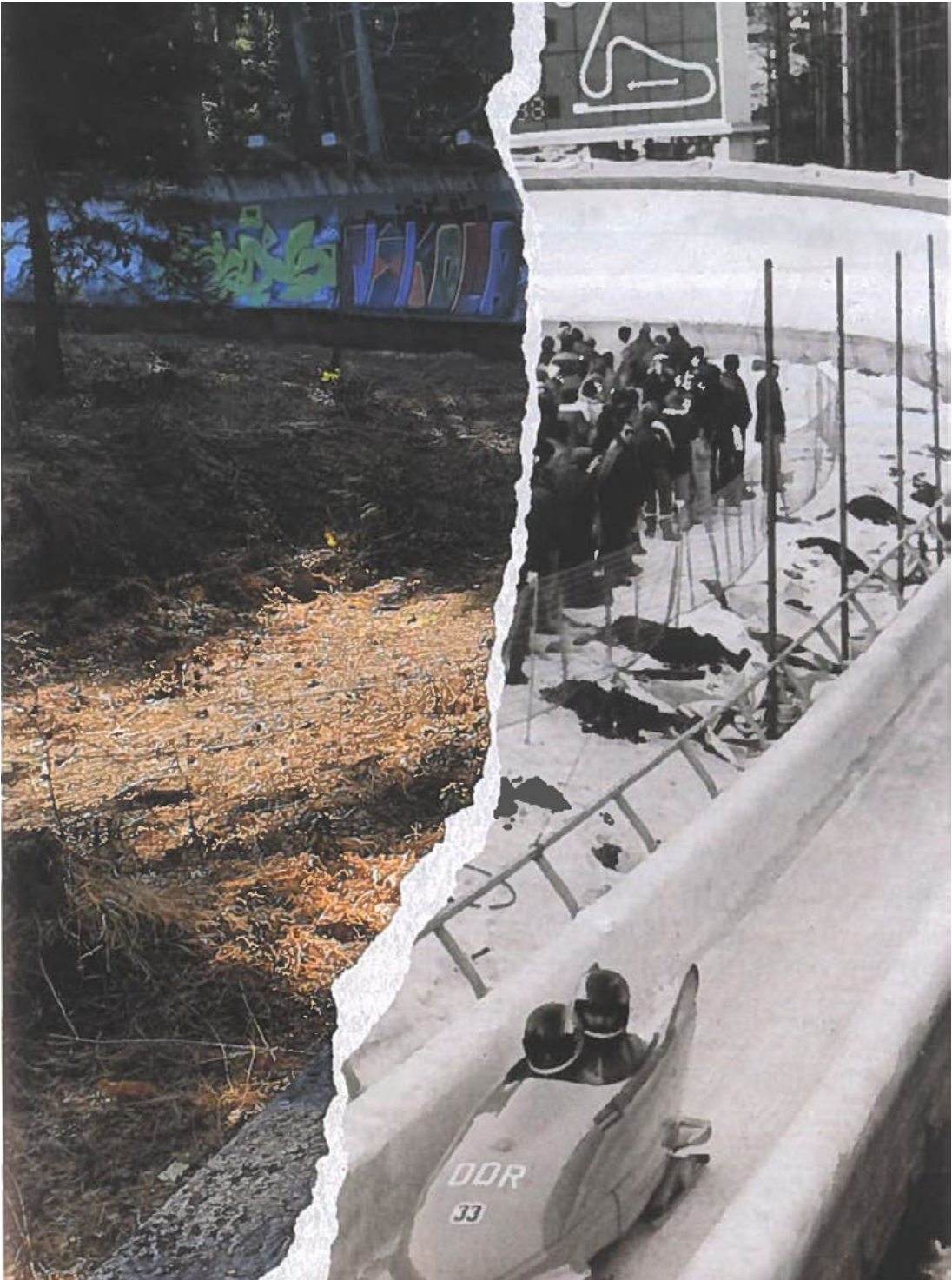
■ Figure 3: The location of the bobtrack in relation to the city of Sarajevo [2024].

1.3 PROBLEM STATEMENT

Just eight years after the highlight in Sarajevo's history, when the city hosted the 1984 Winter Olympics, a tragic reversal followed. The joy and unity brought by the Games gave way to a period of profound division and violence (Buric, 2015). In 1992, Yugoslavia disintegrated, leading to the outbreak of the Bosnian War. Sarajevo, once celebrated as a symbol of international cooperation, endured a siege that lasted more than three and a half years, during which the city was heavily shelled (Swift, 2022).

During this siege, not only was the city destroyed, but so was the Olympic landscape, which had once been a source of pride. The Olympic facilities, which during the Games were at the heart of the international sports world, were reduced to rubble (fig. 5) (Husukic & Zejnilovic, 2023). What had once been a place of athletic achievement and joy was turned into a battlefield (Buric, 2015). The bobsleigh track on Mount Trebević, for instance, became a military outpost and symbolized the city's transformation from hope to despair (Husukic & Zejnilovic, 2023).

The war in Bosnia and Herzegovina, however, went beyond physical destruction; it was also an attack on the culture, history, and identity of the region. Various ethnic groups, who had previously lived peacefully side by side, were pitted against each other by the conflict. The fall of Sarajevo, from Olympic glory to devastation during the war, represented the loss of physical structures as well as the loss of cultural and social values (Husukic & Zejnilovic, 2023).



■ Figure 5: Comparison of the bobtrack during the 1984 Winter Olympics and in current state (Redzepagic, 2023).

1.4 RESEARCH STATEMENT

Research Aim

The Olympic landscape of Sarajevo was almost completely destroyed during the Bosnian war (Husukic & Zejnilovic, 2023). The aim of this research is to contribute to the revitalization of this landscape.

To achieve this goal, it is first important to define what the term “Olympic landscape” precisely means. This leads to a framework that can be applied to all different editions of the Olympic Games. In this research, the framework is tested on the Olympic landscape of Sarajevo 1984, to gain a clear understanding of what this landscape entailed at the time and how it has changed during the war and the years that followed.

The results of the analysis of Sarajevo’s Olympic landscape provide guidance for the design process. The final design will demonstrate how landscape architecture can contribute to the restoration of Sarajevo’s Olympic landscape.

Research Questions

The problem in this research is highly complex, as it is not only a physical issue but also a social and cultural issues. The main research question (MRQ) aims to provide insight into this complex problem, with a focus on our field: landscape architecture.

To answer the main research question, six derived research questions (DRQ) have been formulated that help to achieve the design objective. These questions are divided into three categories: analysis, design, and reflection.

How can landscape architecture contribute to the revitalization of the Olympic landscape of Sarajevo?

Analysis

- DRQ1. What is an Olympic landscape?
- DRQ2. What does the Olympic landscape of Sarajevo 1984 entail?
- DRQ3. What is the current state of the Olympic landscape of Sarajevo after a period of destruction and recovery?

Design

- DRQ4. What design objectives and strategies can be derived from the analysis of the Olympic landscape of Sarajevo?
- DRQ5. How can the design strategies be applied on the design site?

Reflection

- DRQ6. How does the design contribute to the revitalization of the Olympic landscape of Sarajevo?

1.5 SCOPE AND RELEVANCE

Scope

During my visit to Sarajevo, it quickly became clear that there are still tensions between the different ethnic groups. These tensions are felt in daily life and are reinforced by the memories of the Bosnian war. Additionally, there is widespread dissatisfaction with the current government. Many residents are frustrated by the lack of progress and the limited opportunities for reconstruction, both socially and economically.

This makes the problem in Sarajevo very complex. It is not only about restoring the physical landscape that was destroyed during the war, but also about social and cultural recovery. Because the issue is so complicated, this thesis cannot solve the entire problem. Therefore, the goal is more modest: to contribute to the restoration of Sarajevo's Olympic landscape. While this is only part of the solution, landscape architecture can, through design, contribute to the broader social and cultural recovery of the city.

Relevance

There is extensive literature dedicated to the Olympic Games, with sufficient attention given to the decay of Olympic facilities. However, an Olympic landscape, which focuses not only on the physical elements but also on social and cultural characteristics, is never described. In this thesis, the emphasis is precisely on these social and cultural aspects of the Olympic landscape, especially due to Sarajevo's unique history.

Although this thesis focuses on the Sarajevo 1984 Olympic Games, there are many other examples where the Olympic landscape has been damaged or destroyed after the event (CBS News, 2022). One such example is Athens 2004 (fig. 6 & 7).

This thesis demonstrates how landscape architecture can contribute to the restoration of an Olympic landscape. The approach presented here could also be applied to other cities that have hosted the Olympic Games.



■ Figure 6: The abandoned beach volleyball stadium at the Faliro Olympic coastal zone in Athens (Tzortzinis, n.d.).



■ Figure 7: The abandoned former Olympic Village in Athens, Greece (Bicanski, n.d.).

02

Methodology

This chapter discusses how the thesis and research were developed, the methods used to answer the research questions, and the theories that form the basis of the study.

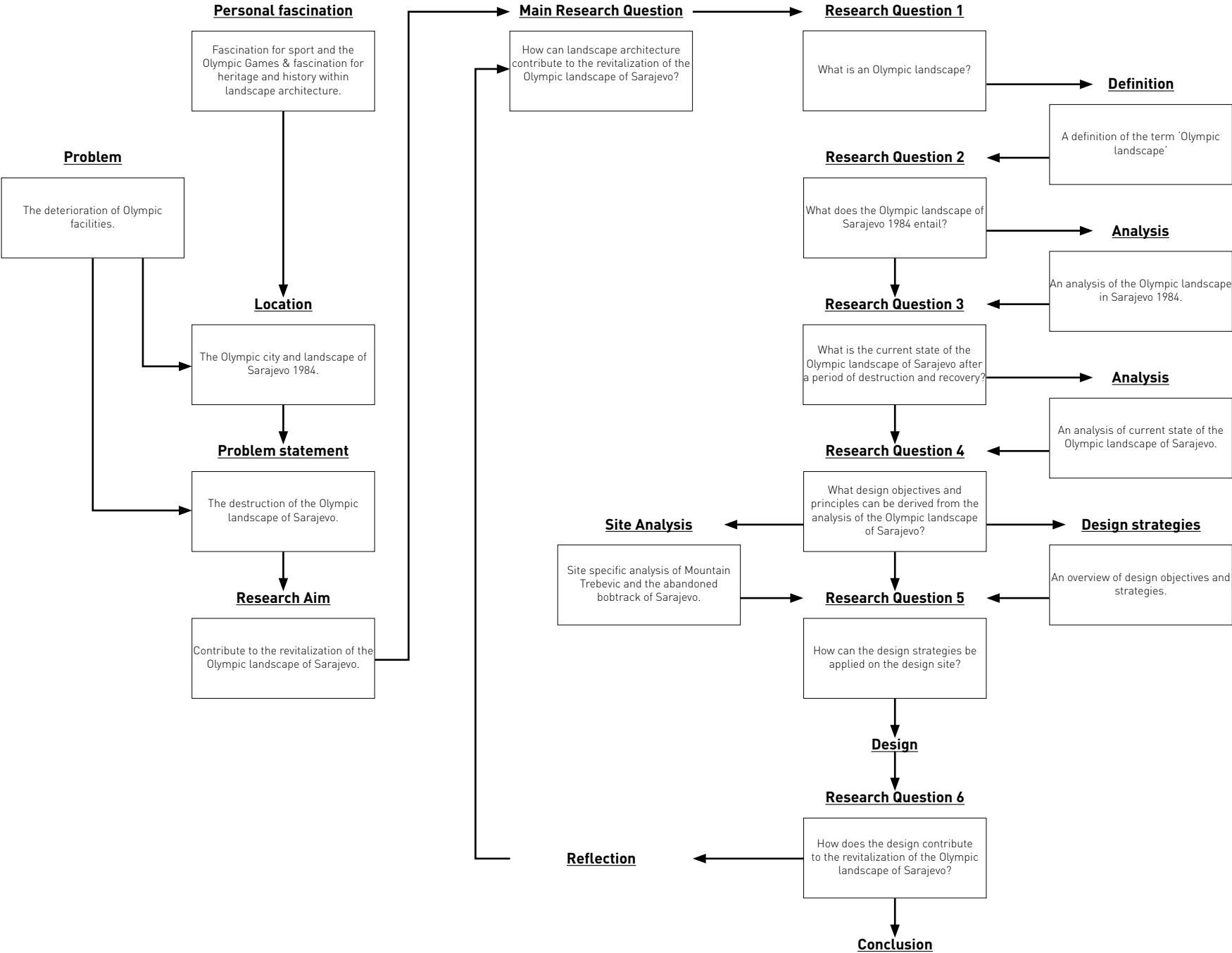
- 2.1 Research Framework
- 2.2 Methods and Approach
- 2.3 Theoretical Framework

2.1 RESEARCH FRAMEWORK

This thesis originated from my personal fascination with the Olympic Games, as well as heritage and history within landscape architecture. These interests have been combined with the issue of deteriorating Olympic facilities, which led to the choice of location: the Olympic landscape of Sarajevo, used for the 1984 Winter Games.

However, the Olympic landscape of Sarajevo was destroyed during the Bosnian War, which broke out shortly after the Games. This serves as the basis for the research goal of this thesis: *to contribute to the revitalization of the Olympic landscape of Sarajevo.*

To achieve this goal, six derived-research questions have been formulated. These questions serve as a guide to answer the main research question, “*How can landscape architecture contribute to the revitalization of the Olympic landscape of Sarajevo?*” The results of the research ultimately lead to a design, a conclusion, and a reflection, revisiting the main question of this thesis.



■ Figure 8: Research framework of the thesis [2024].

2.2 METHODS AND APPROACH

Each question in the thesis has been thoroughly analyzed using a combination of different research methods and various types of data. The attached table (fig. 9) specifies for each research question which data is required, where this data can be collected, which research methods or strategies are applied, and what the intended goal or expected outcome of the research is (Luiten & Cattoor, 2023).

	Research question	Data that is needed	Where to find this data	Research strategies	Expected outcome
Analysis					
Research Question 1	What is an Olympic landscape?	Landscape theories and information about the Olympic Games.	Landscape architecture articles and documents, and documents and websites about the Olympic Games.	Description, Interpretation [discourse analysis]	A definition of the term 'Olympic landscape'.
Research Question 2	What does the Olympic landscape of Sarajevo 1984 entail?	Definition of the term 'Olympic landscape' (SRQ1) and information about the Olympic Games in Sarajevo 1984.	Interviews with local people, books, articles, documents, maps, photographs and video's about the Olympic Games in Sarajevo 1984.	Description, Engaged action, Interpretation [ethnography, iconography, historiography]	A complete analysis of the Olympic landscape in Sarajevo 1984 in text, photographs and maps.
Research Question 3	What is the current state of the Olympic landscape of Sarajevo after a period of destruction and recovery ?	Analysis of the Olympic landscape of Sarajevo 1984 (SRQ2), information about the bosnian war, and about the current physical, social and cultural landscape.	Site visit, interviews, articles, documents and photographs about the Bosnian war and the current landscape of Sarajevo.	Description, Engaged action, Interpretation [ethnography, iconography, historiography]	A clear analysis of the current state of the Olympic landscape of Sarajevo
Design					
Research Question 4	What design objectives and strategies can be derived from the analysis of the Olympic landscape of Sarajevo?	Analysis of the Olympic landscape of Sarajevo (SRQ2).		Classification, Modelling	An overview of design objectives and strategies, which should form the basis of the design.
Research Question 5	How can the design strategies be applied on the design site?	An overview of design objectives and strategies (SRQ3) and a site specific analysis	Site visit, QGIS maps, historical documents, photographs and video's about Mountain Trebevic and the abandoned bobtrack.	Design projection, Engaged action	A design in which the design objectives and strategies are implemented on site.
Reflection					
Research Question 6	How does the design contribute to the revitalization of the Olympic landscape of Sarajevo?	Analysis of the Olympic landscape of Sarajevo (SRQ2) and the design		Evaluation	Conclusion and reflection

■ Figure 9: Framework of all methods and approaches used during the thesis to answer the research questions (2024).

2.3 THEORETICAL FRAMEWORK

This thesis makes use of the existing layer approach used in urbanism (fig. 10) as a basis for developing a unique concept for the Olympic landscape. The layer theory described by Taverne, Dembski, De Klerk, and Ramakers is an analytical framework from urban planning and landscape theory that helps to understand the complex dynamics of urban and landscape development. The theory uses three layers to describe different dimensions of the city and the landscape:

1. Urbs:

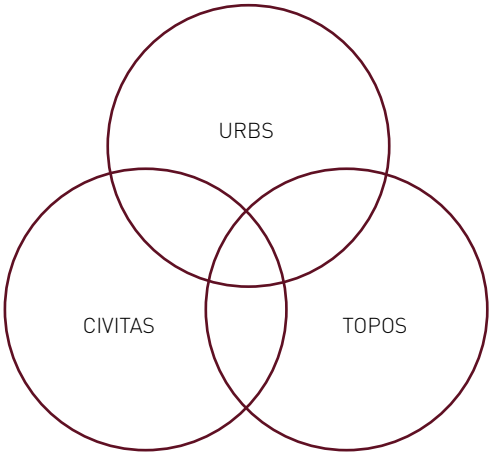
Urbs refers to the physical structure and morphology of the city or landscape. This includes the material and spatial aspects, such as buildings, infrastructure, roads, and other tangible elements. The physical landscape forms the foundation and shapes how people use space [Taverne et al., 2012].

2. Civitas:

Civitas focuses on the social and societal dynamics within the city. This includes the community, interactions, networks, norms, and practices that emerge within the physical space. Civitas is about the people who inhabit the city, their relationships, and how they experience the urban environment [Taverne et al., 2012].

3. Topos:

Topos refers to the cultural and symbolic dimension of the landscape or city. This includes the identity, history, meanings, and values attributed to specific places. Topos emphasizes how spaces acquire cultural character and meaning over time [Taverne et al., 2012].



■ Figure 10: Conceptual diagram of the layer approach [Author, 2024. Based on Taverne et al., 2012].

This thesis divides the Olympic landscape into three layers: physical, social, and cultural, with this classification based on the existing theory within urbanism. The translation to the Olympic landscape provides a new way to dissect this complex concept (fig. 11)

1. Physical landscape - Urbs:

The physical landscape encompasses infrastructure, sport venues and transportation networks associated with the Olympic Games. Like urbs, this focuses on the concrete, tangible changes in the landscape.

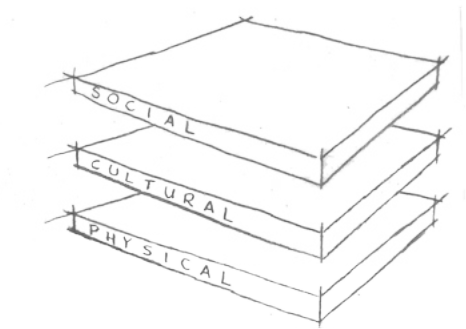
2. Cultural landscape - Topos:

The cultural landscape describes how the Olympic Games assign symbolic value and identity to places. This aligns with the dimension of topos, which examines the cultural meaning of spaces.

3. Social landscape - Civitas:

The social landscape focuses on the interactions between people, communities, and how they experience space during and after the Olympic Games. This mirrors the role of civitas in analyzing social dynamics.

This concept is unique in its explicit focus on the context of the Olympic landscape. While the original layer approach has broad urban applications, this theory specifically addresses the spatial and social transformations resulting from the temporary yet often long-lasting influence of the Olympic Games. This allows the model to highlight the interplay between the temporary nature of events and their enduring impact on physical structures, cultural significance, and social cohesion.



■ Figure 11: Conceptual diagram of the layers within an Olympic landscape.

03

Olympic landscape Sarajevo 1984

This chapter begins with a brief introduction to the Sarajevo Olympics, followed by a definition of the term "Olympic landscape." Using this definition, the physical, social, and cultural landscape of Sarajevo during the 1984 Olympics is analyzed, concluding with a summary of what the Olympic landscape of Sarajevo entails.

In this chapter, the first two sub-research questions are addressed: "What is an Olympic landscape?" and "What does the Olympic landscape of Sarajevo 1984 entail?"

- 3.1 Sarajevo 1984 Olympic Winter Games
- 3.2 What is an Olympic landscape?
- 3.3 Physical landscape
 - Natural environment*
 - Sport facilities and Infrastructure*
 - Urban infrastructure*
- 3.4 Cultural landscape
 - Symbolism and Rituals*
 - History and Heritage*
 - Arts and Culture programmes*
- 3.5 Social landscape
 - Communities and Citizens*
 - Interactions and networks*
 - Social inclusion and participation*
- 3.6 Conclusion Olympic landscape Sarajevo

3.1 SARAJEVO 1984 WINTER OLYMPIC GAMES

The 1984 Winter Olympics in Sarajevo marked a historic moment, not only for the city but for the world of sports. As the first Winter Games hosted in a socialist country, Sarajevo embraced the challenge of organizing a global event (Husukic & Zejnilovic, 2023), with athletes from 49 nations competing in a range of winter sports (IOC, 2018). The city, known for its rich history and cultural diversity, was transformed into a stage where world-class athletes showcased their skill and determination against the stunning backdrop of the Dinaric Alps (Jalbert production, 2019).

The heart of the Games was the sports competition, from skiing and figure skating to ice hockey and bobsledding, the Games delivered exciting moments of athletic excellence and close competition. Athletes from all over the world came to compete for Olympic medals and to celebrate the true essence of the Olympic spirit —international friendship and sportsmanship (IOC, 2018).

In addition to the sports, the 1984 Winter Olympics brought the world together in Sarajevo, creating a sense of unity (Moll, 2015). Both athletes and spectators were excited for a memorable celebration of winter sports, marking a special chapter in the city's history.

”

There are many significant days and dates and many significant events that Sarajevo has had in its long and turbulent history. It is difficult to list them in order of importance because they all have their own origin and their own permanent color and strength. One thing is certain, however: 18 May 1978 was a turning point in the development of this city; the day Sarajevo was declared an Olympic city, the world turned to Sarajevo and Sarajevo to the world

Aziz Hadzihanovic



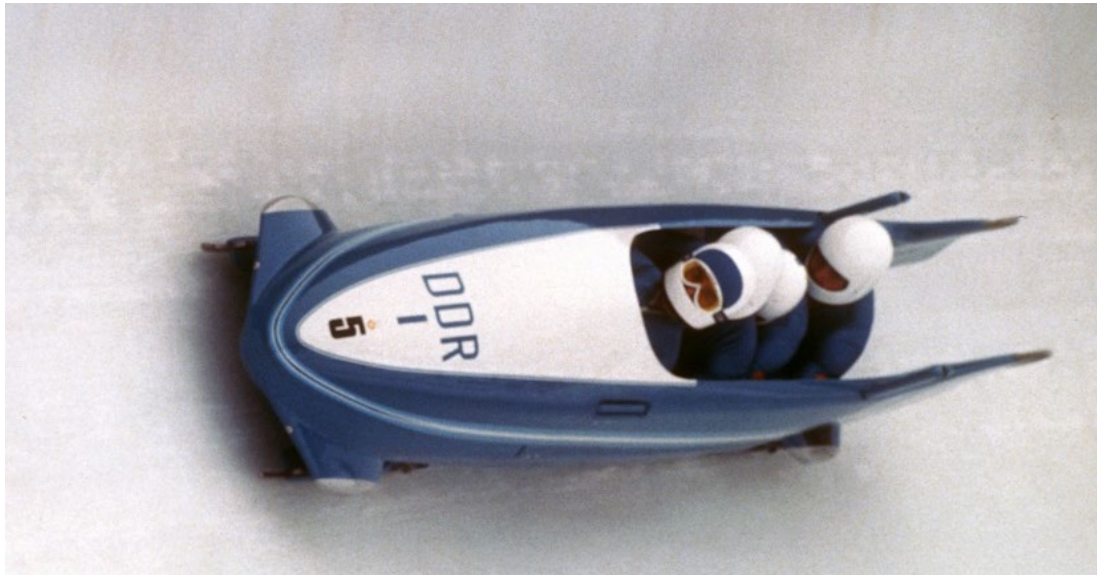
■ Figure 12: Photograph during the Opening Ceremony of the XIV Winter Olympic Games in Sarajevo 1984 (IOC, 1984).



■ Figure 13: Janet Goldman (USA) in the Women's Speed Skating competition held at the Zetra Ice Rink (Madison, 1984).



■ Figure 15: Gold medalist Bill Johnson (USA) during the men's downhill event at Bjelasnica (Madison, 1984).



■ Figure 14: East German Bobsled Team in the four-men bobsleigh competition held at Trebevic (McNamee, 1984).



■ Figure 16: Gold medalist Matti Nykanen (Finland) during the 90-meter ski jump event at Igman (Madison, 1984).

3.2 WHAT IS AN OLYMPIC LANDSCAPE?

An Olympic landscape encompasses various elements that together form the physical, social, and cultural landscape in which the Olympic Games take place. This landscape is dynamic and evolves during the different phases of the Games: preparation, the Games itself, and the post-Games period.

1. Physical landscape:

This refers to the material and geographical aspects of the landscape. In the context of an Olympic landscape, this includes:

- Natural environment:
The terrain, topography, climate, and other natural features that may influence the sporting events.
- Sports facilities and infrastructure:
Competition and event locations, training facilities, and other sports infrastructures that have been built or renovated specifically for the Olympic Games.
- Urban infrastructure:
Roads, transport networks, accommodations, and other urban amenities necessary to host and facilitate athletes, spectators, and staff.

2. Social landscape:

The social environment refers to the human and community aspects within the Olympic landscape:

- Communities and residents:
The impact of the Olympic Games on local communities, including social cohesion and socio-economic effects.
- Interactions and networks:
The social dynamics between athletes, coaches, volunteers, spectators, and other stakeholders. This also includes the international dimension of meetings and exchanges among people from different countries and cultures.
- Social inclusion and participation:
Programs aimed at engaging diverse population groups, including minorities and disadvantaged communities, in the Games.

3. Cultural landscape:

This concerns the aspects related to traditions, values, and heritage present in the Olympic landscape:

- Symbolism and rituals:
Olympic symbols such as the rings, the flame, the opening and closing ceremonies, and other cultural elements that make the Games unique.
- Heritage and history:
The cultural heritage of the host city or country, including museums, monuments, and historical sites that play a role in the Olympic story.
- Arts and cultural programs:
Programs and events that take place alongside the sporting events, such as exhibitions, festivals, and other cultural expressions that reflect the diversity and history of the host country.

3.3 Physical landscape

Natural environment

Sarajevo is a city nestled among four significant mountains in the Dinaric Alps (fig. 17). Located in a narrow valley and surrounded by towering peaks, more than 28% of the city's territory lies at altitudes above 1000 meters, with 2.7% reaching heights above 1500 meters (Husukic & Zejnilovic, 2023). Thanks to this unique geography, Sarajevo was regarded as one of the most attractive locations in Europe for the development of winter sports and inland tourism. This ultimately led to the idea of hosting the Winter Olympic Games (Organizing Committee of the XIV Winter Olympic Games, 1984).

"If you opt for Sapporo, the Japanese will offer you a plane to visit Tokyo. If you opt for Gothenburg, the Swedes will allow you to see the fjords and icebergs. If you choose Yugoslavia and Sarajevo, you will be greeted by open hearts and friendly faces, beautiful mountains and breathtakingly beautiful snowy terrains."

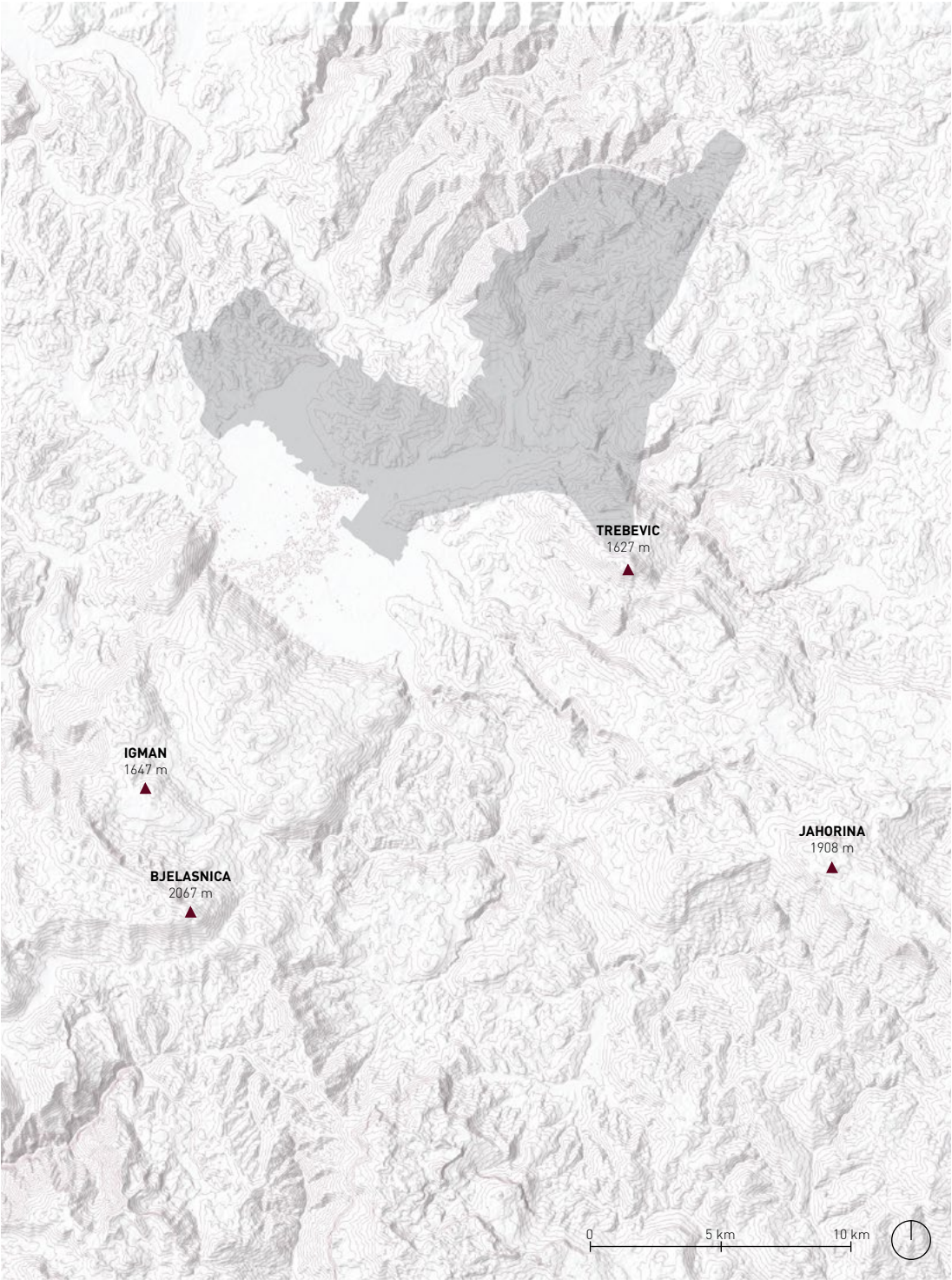
Pat Bedford - British Journalist, 1978



■ Figure 17: The city of Sarajevo situated in the valley of the Dinaric Alps [Brauer, 2015].

Each of the four mountains surrounding Sarajevo has a distinct relationship with the city and a unique character in terms of usage. Jahorina, the most developed for winter sports, was still underutilized despite its potential. Bjelasnica and Igman, known for their untamed natural forests, were considered 'wild' due to the complete lack of infrastructure and minimal development (Rehnicer & Hrisafovic, 1989). In contrast, Trebevic had a much closer connection to Sarajevo's urban life. Located just 10 kilometers from the city center, Trebevic has always been an integral part of daily life for Sarajevans (Hukic & Klaric, 2018).

During the planning phase for the Winter Olympics, all the planning documents portrayed the city and its surrounding mountains as a single, interconnected system – a biological organism designed to function as a unified whole (Trumic & Wenzler, 1989).



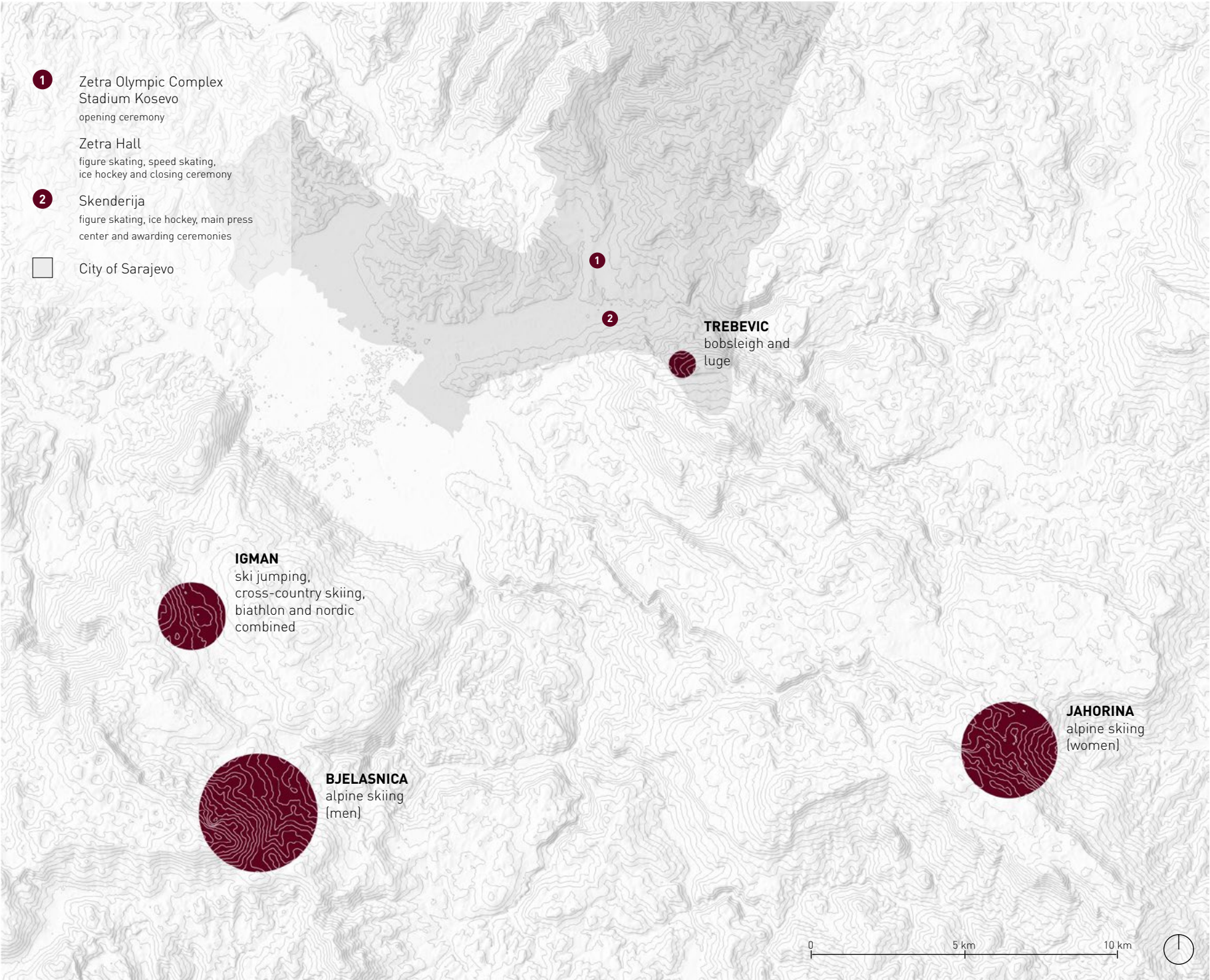
■ Figure 18: Topographic map of Sarajevo and its surrounding mountains [2024].

Sportfacilities and Infrastructure

When Sarajevo was selected to host the Winter Olympics in 1978, the city lacked the sporting facilities necessary for such a global event. To address this, some of the most renowned planners, architects, and engineers from across Yugoslavia were tasked with designing venues and iconic structures that would match the significance of the occasion (Husukic & Zejnilovic, 2023).

In just five years, Sarajevo underwent a remarkable transformation, laying the foundation for a city that would continue to evolve over time. A wide range of architectural and engineering projects were completed, most notably the sports facilities: stadiums, arenas, ski slopes, bobsled tracks, and ski jumps (Oorganizing Committee of the XIV Winter Olympic Games, 1984).

These large-scale urban projects included key structures and venues both in the city center, such as the Zetra Hall and Skenderija complex, and in the surrounding mountains of Bjelasnica, Igman, Jahorina, and Trebevic.



■ Figure 19: Map of Sarajevo showing the sport venues of the 1984 Winter Olympics (Husukic & Zejnilovic, adapted by author, 2024).

Skenderija

The Skenderija Cultural and Sports Center, originally built in 1969, was renovated for the Olympics. A notable example of Yugoslav modernism, it hosted figure skating, ice hockey, and the main press center, as well as medal ceremonies (Husukic & Zejnilovic, 2023).



■ Figure 20: View at Skenderija Center in the 1970's (Focanskidani, n.d.).

Zetra Olympic Complex

The Zetra Olympic complex, including the refurbished Kosevo stadium, a new multipurpose arena, and a speedskating rink, became the centerpiece of the Sarajevo Olympics. It symbolized the modernization of Sarajevo and remains a key architectural and cultural landmark (Organizing Committee of the XIV Winter Olympic Games, 1984).



■ Figure 21: View at Zetra Olympic complex, at the front the ice rink and the Zetra Hall and behind the Kosevo Stadium (1983).

Mount Igman

Igman saw extensive changes, with Veliko Polje hosting biathlon and cross-country skiing events, and Malo Polje featuring 70- and 90-meter ski jumps, considered highlights of the Games (Organizing Committee of the XIV Winter Olympic Games, 1984).



■ Figure 22: The 70-meter and the 90-meter ski jumps at Igman (Znidarsic, 1984).

Trebevic Mountain

Trebevic was developed for bobsleigh and luge events, featuring an innovative combined track that was praised as a unique contribution to the Games (Jovanovic, 2021). This venue, known for its natural integration, was recognized globally as a model of 'Olympic Sarajevo' (Husaric et al., 1984).



■ Figure 23: Photograph of the bobsleigh track at Trebevic, during the men's single luge event (Madison, 1984).

Bjelasnica

Bjelasnica was transformed to host men's alpine skiing events, with new courses and infrastructure for downhill, slalom, and giant slalom competitions. A sports and recreation center was also established (Organizing Committee of the XIV Winter Olympic Games, 1984).



■ Figure 24: View at the ski-course at Bjelasnica (Zavičajac, 1984).

Jahorina

Jahorina, a historic alpine skiing resort, expanded for the Olympics to host women's alpine skiing. The facilities included training and competition courses, enhancing its reputation as a premier skiing destination (Organizing Committee of the XIV Winter Olympic Games, 1984).

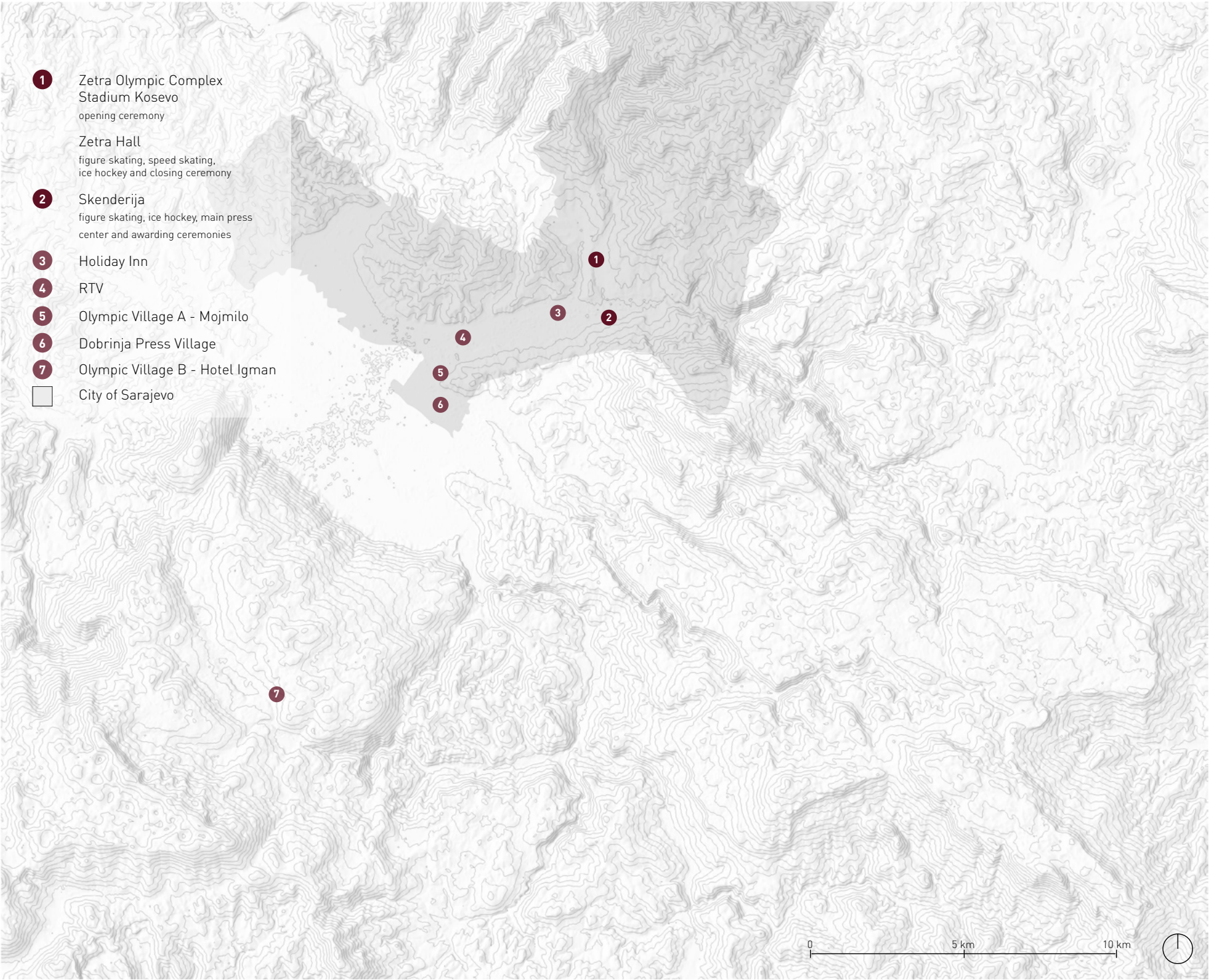


■ Figure 25: View at the ski-course at Jahorina (Puksic, 1984).

The Olympic venues of Zetra, Skenderija, Trebevic, and Igman were celebrated architectural achievements, while Bjelasnica and Jahorina stood out for their stunning natural landscapes. Designed to promote tourism and recreation in Sarajevo, Bosnia and Herzegovina, and Yugoslavia, these sites served a dual purpose: the city's sports facilities encouraged public participation in activities like ice sports, while the mountain venues, known as 'stadiums of snow,' were created for widespread use by skiers. The infrastructure developed for the Olympics not only improved the region but also played a vital role in fostering a lasting interest in sports culture (Husukic & Zejnilovic, 2023).

Despite the rapid growth of housing stock, Sarajevo did not bid for the Winter Olympics before 1977 due to a lack of adequate accommodation. To meet the high expectations for the XIV Winter Olympics, the National Olympic Committee set ambitious goals, promising that the planned Olympic residences would provide all the necessary services and facilities. These accommodations were designed to cater to the growing number of participating nations, sports delegations, media outlets, companies covering the Games for TV, and especially spectators from both Yugoslavia and around the world. The Olympic residences were strategically located, independent of the main Olympic venues but closely connected to the city's existing urban fabric and future expansion plans (fig. 26) [Organizing Committee of the XIV Winter Olympic Games, 1984].

Construction on the Olympic sites began in the summer of 1979 and concluded with 163 major projects completed more than a year before the Games. The architecture of the Sarajevo Olympics, while not extravagant, highlighted technical innovation. These new structures were integrated into the city's extension program, blending old and new elements to create new landmarks and identities, without relying on excessive symbolism or monumentality (Husukic & Zejnilovic, 2023). Most Olympic facilities were completed ahead of schedule, without delays, setting a positive example of successful Olympic development (Zejnilovic & Husukic, 2020).



■ Figure 26: Map of Sarajevo showing the facilities of the 1984 Winter Olympics, and its relation to the sport venues [Husukic & Zejnilovic, adapted by author, 2024].

The two largest projects for the Olympics were the construction of the Olympic Village in Mojmilo and the press village in Dobrinja. In 1983, the National Olympic Committee (NOC) decided to build a completely new Olympic Village in the Mojmilo area to meet the needs of the athletes (fig. 27) (Organizing Committee of the XIV Winter Olympic Games, 1984).. Similarly, accommodation for the largest and most diverse operational group, including media personnel, was provided in part of the Dobrinja urban complex (n.b., 1989).

In addition to the existing hotel capacity, nine new hotels were built across Sarajevo, Jahorina, Igman, and Bjelasnica, while six more hotels were renovated in preparation for the Olympics (Organizing Committee of the XIV Winter Olympic Games, 1984).

Sarajevo gained significant benefits from the infrastructure developed for the Olympics. The Games led to major road improvements, including the creation of a new 100-mile road network. This extensive development also brought various other projects, such as the construction and equipping of the RTV building for telecommunications, the renovation of the PTT building, the National Theatre, the railway station, and the airport. Additionally, beautification efforts were undertaken throughout the entire city, extending beyond the Olympic sites (Husukic & Zejnilovic, 2023).



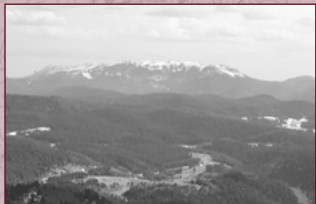
■ Figure 27: Construction of Mojmilo Olympic village, which hosted the athletes during the Olympics (IOC, 1984).

Natural environment

Trebevic



Jahorina



Igman



Bjelasnica



Sportfacilities

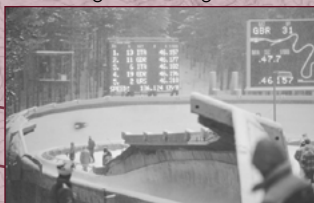
Zetra olympic complex



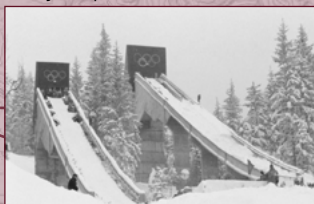
Skenderija



Bobsleigh and luge track



Ski jumps



Ski course at Jahorina



Ski course at Bjelasnica



Urban infrastructure

Hotel Holiday Inn



RTV building



Mojmilo olympic village



Dobrinja press village



Hotel Igman



3.4 Cultural landscape

Symbolism and Rituals

Initiatives to enhance Sarajevo’s aesthetic appeal during the 1984 Olympics extended beyond the event venues, influencing the entire urban area. The unmistakable presence of the Olympics was evident throughout the city, marked by the integration of prominent symbols and motifs (fig. 29) (Husukic & Zejnilovic, 2023).

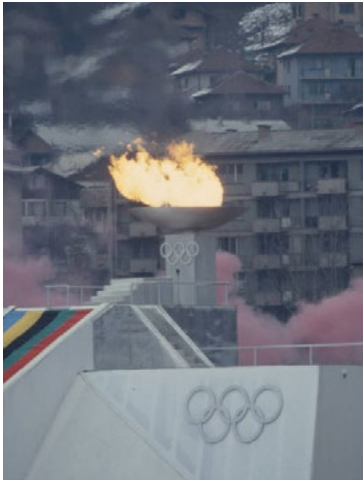
These Olympic signs and symbols played a crucial role in shaping the city’s identity. The impact of the 1984 Games reached far beyond mere aesthetics, significantly affecting the landscape’s multimodal character. Over a five-year transformation, spaces within the city were infused with the essence of Olympic ideology. Associating Sarajevo’s name with such a prestigious global event—typically hosted by the world’s largest cities—deeply influenced the city’s character (Husukic & Zejnilovic, 2023). The symbols and rituals of the Olympics became integral to the visual identity of the host city, effectively creating an Olympic narrative that merged various metaphors and cosmic meanings within the transformed urban landscape.



■ Figure 29: A poster of Vucko, presenting the olympic symbolism in the streets of Sarajevo (IOC, 1984).



■ Figure 30: The torch brought into the Kosevo stadium after travelling through various Yugoslav cities, symbolizing its unity (IOC, 1984).



■ Figure 31: The Olympic flame, lit above Kosevo stadium symbolizing the spirit of the Olympic Games (Kluetmeier, 1984).

One of the rituals of the Olympic Games is the opening ceremony. The opening ceremony of the XIV Winter Olympics in Sarajevo was a remarkable event that extended beyond sports, showcasing cultural richness and international unity (Jalbert Production, 2019). The ceremony drew thousands of people to Kosevo Stadium, while millions watched from around the world as Sarajevo welcomed athletes from diverse nations (Kurtic, 2024).

The festivities began with an enchanting mix of music, dance, and symbolic rituals that celebrated the diverse heritage of Yugoslavia (Jalbert Production, 2019). The Olympic flame, traditionally lit in Olympia—the birthplace of the modern Olympics—began its journey through various Yugoslav cities, symbolizing the unity of the nation. After traveling an impressive 5,289 kilometers with the help of around 1,600 torchbearers, it was Olympic figure skater Sanda Dubravčić who had the honor of igniting the Olympic flame (fig. 30) (IOC, 2020).

The lighting of the flame marked a moment filled with symbolism, embodying the spirit of the Games and bringing a message of unity, endurance, and shared aspirations to every corner of the city (fig. 31). The flame made its way from the historic Skenderija complex to Kosevo Stadium, officially commencing the Winter Olympics (Husukic & Zejnilovic, 2023).

As the flame illuminated the night sky, Sarajevo transformed from a host city into a vibrant showcase of tradition meeting modernity. The opening ceremony acted as a bridge between the city’s rich cultural heritage and the sports venues that awaited athletes in the surrounding mountains.

The emblem of the XIV Olympic Winter Games in Sarajevo (fig. 32) features two main elements: a central motif and the iconic Olympic rings (IOC, 2020). Designed by Miroslav Roko Antonic, the central motif represents a fusion of a stylized snow crystal and a traditional embroidery design from the region, symbolizing the local culture (Husukic & Zejnilovic, 2023).

Crowning this motif are the five Olympic rings, a symbol that is recognized globally. Originally conceived by Pierre de Coubertin, the Olympic rings serve as a visual ambassador for Olympism, reaching billions of people around the world (IOC, 2024).

The emblematic rings consist of five interlocking circles of equal size, embodying the spirit of the Olympic Movement. They symbolize the unity of the five continents and the gathering of athletes from across the globe at the Olympic Games, reinforcing the ideals of international cooperation and friendship in sport (IOC, 2024).



■ Figure 32: The emblem of the Olympic Winter Games in Sarajevo 1984 (IOC, 2020).

Sarajevo introduced a charming mascot in the form of a wolf, named Vučko (fig. 33), which is commonly found in the forests of the Dinaric Alps. Vučko's design featured a range of friendly expressions—smiling, frightened, and serious—effectively transforming the traditional ferocious image often associated with wolves (IOC, 2020).

In Yugoslav fairy tales, the wolf represents qualities such as courage, strength, and perseverance, particularly during the harsh winter months. Given the wolf's natural habitat in the Dinaric Mountains, Vučko became an apt symbol for the Games, embodying the spirit of the region and the Olympic ideals (IOC, 2020).



■ Figure 33: Vucko, the mascot of the Olympic Winter Games in Sarajevo 1984 (IOC, 2020).

History and Heritage

The 1984 Winter Olympics in Sarajevo highlighted the city’s rich cultural heritage and its unique status as a crossroads of civilizations. Over the centuries, Sarajevo evolved into a vibrant melting pot of cultures, religions, and architectural styles (fig. 34). From the intricate bazaars and mosques of the Ottoman era to the elegant buildings reflecting Austro-Hungarian influence, the city embodies the coexistence of diverse traditions. This dynamic history gives visitors a sense of time travel, where one can easily transition from the Ottoman period to modern influences (Troncota, 2015).

Established by the Ottoman Empire in the late 1450s, Sarajevo quickly became a significant administrative hub, renowned for its expansive marketplaces and mosques. The demographic shifts during this time, with many Slavs embracing Islam, set Bosnia apart from its neighbors and shaped the city’s unique urban identity (Troncota, 2015).

The late 19th century marked a turning point as Austro-Hungarian rule replaced the Ottomans, infusing Sarajevo with a European flavor in its architecture. This blend of Ottoman and contemporary styles illustrates how different cultures have left their mark on the city. The assassination of Archduke Franz Ferdinand in 1914 further divided Sarajevo along ethno-national lines, igniting tensions that contributed to World War I (Troncota, 2015).

Post-war, the establishment of the Kingdom of Serbs, Croats, and Slovenes aimed to unify diverse ethnic identities under a shared Yugoslav identity. This ideology promoted “brotherhood and unity” among the different nationalities, striving for collective strength amidst historical animosities. Following World War II, Sarajevo became part of the Socialist Federal Republic of Yugoslavia, known for its ethnic diversity (Troncota, 2015).

Often referred to as the “European Jerusalem,” Sarajevo’s blend of natural beauty, historical significance, and cultural diversity makes it a city unlike any other (Troncota, 2015). The 1984 Winter Olympics showcased Sarajevo’s unique identity, highlighting its historical and cultural richness that continues to resonate today.



■ Figure 34: ‘Sarajevo meeting of cultures’ sign in the streets of Sarajevo, emphasizing the ethnic and religious diversity within the city (2023).

Arts and Culture programmes

Throughout the Olympics, Sarajevo showcased the rich art and culture of the host city and country (fig. 35 & 36). Alongside the athletic competitions, a variety of art and culture programs were organized to highlight the diversity, history, and unique identity of Sarajevo and Yugoslavia. These programs played an important role in enhancing the Olympic experience by offering visitors a deeper understanding of the region’s cultural heritage (Jalbert Production, 2019).

Cultural events included exhibitions, festivals, and performances that took place throughout the city, transforming Sarajevo into a vibrant hub of artistic expression. The exhibitions featured works by local and international artists, blending traditional and modern art forms. These visual art displays reflected the history of the city, from its Ottoman roots to its Austro-Hungarian influence, offering visitors a chance to explore the complex cultural layers of Sarajevo (Jalbert Production, 2019).

In addition to visual arts, music and dance festivals were held, showcasing the diverse ethnic traditions of the region. Folk performances, classical concerts, and contemporary music events brought together artists from different backgrounds, emphasizing the multicultural nature of Sarajevo. These festivals celebrated both the unity and the diversity of the Yugoslav people, promoting cultural exchange and understanding among visitors from all over the world (Jalbert Production, 2019).

The cultural programs of the 1984 Sarajevo Winter Olympics were a vital component of the event, reflecting the rich history and diversity of the host country. Through exhibitions, festivals, and performances, these programs enriched the Olympic experience, fostering greater cultural appreciation and understanding among the global audience.



■ Figure 35: Dance performance during the opening ceremony of the Olympics, sharing the culture of Sarajevo and Yugoslavia with the rest of the world (Kluetmeier, 1984).



■ Figure 36: Dance performances during the opening ceremony of the Olympics (Fenn, 1984).

Symbolism and rituals

Opening ceremony



Olympic flame



Olympic rings



Sarajevo snowflake



Medal ceremony



Mascot Vucko



Arts and cultural programs

Cultural expression during opening ceremony



History and heritage

Ottoman empire



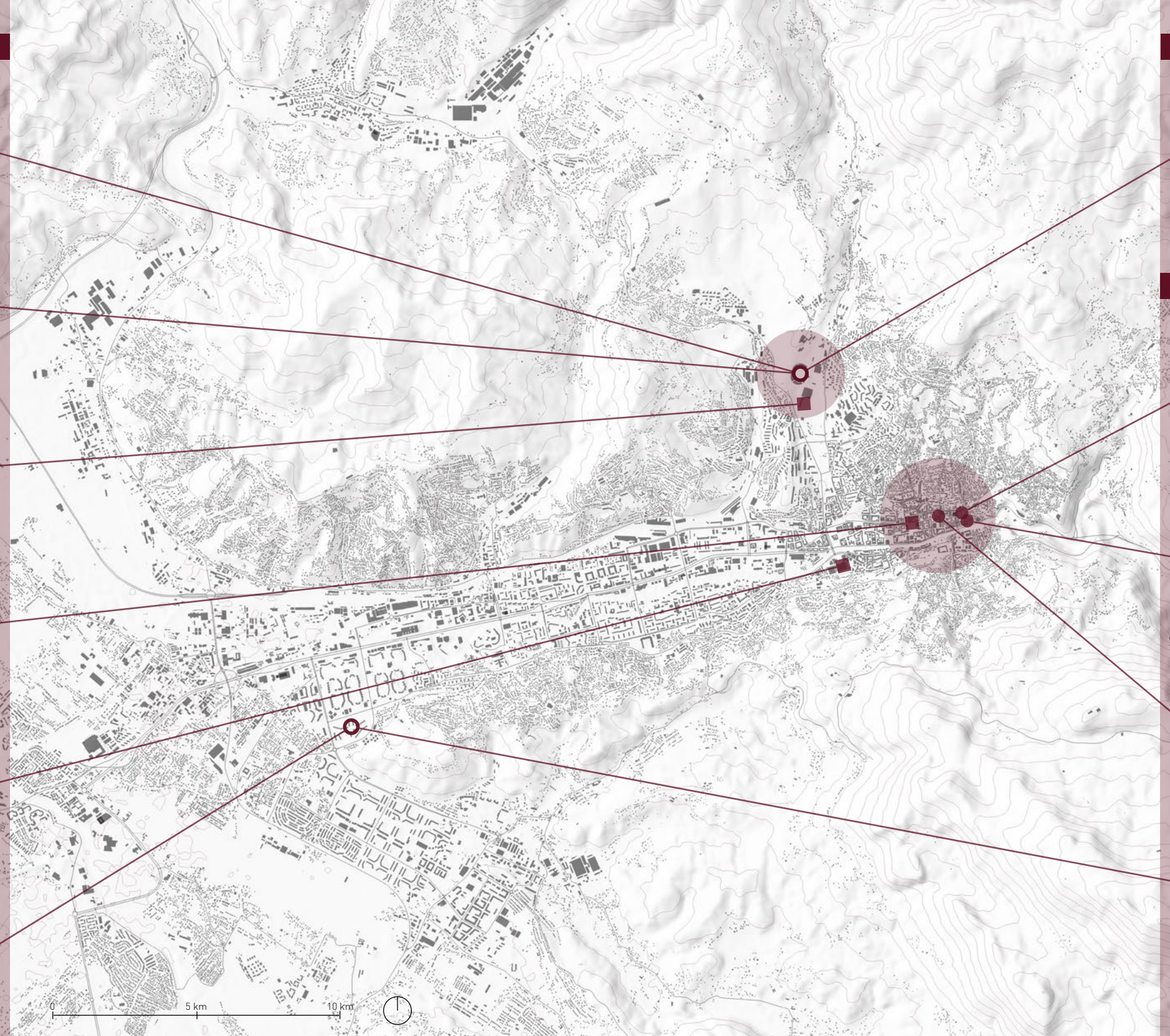
Austro Hungarian period



Sarajevo meeting of cultures



Socialist Yugoslavia



3.5 Social landscape

Communities and Citizens

In the spirit of the Games, people from diverse ethnic backgrounds and religious beliefs came together with a shared purpose: to prepare Sarajevo for the global stage. The city became a symbol of unity, as Muslims, Serbs, Croats, and others worked side by side to ensure the success of the Olympics. The event showcased a brief moment of harmony in a nation otherwise strained by internal conflicts, with the collective effort demonstrating that, despite political and cultural differences, a common goal could unite the people of Yugoslavia (Moll, 2015).

For the duration of the Games, Sarajevo presented a united front to the world, emphasizing collaboration, peace, and the power of sports to transcend deep-rooted divisions (Moll, 2015).

This spirit of unity and dedication in the lead-up to the 1984 Winter Olympics was evident from the very beginning. Over 1.2 million people and 4,500 organizations from across Yugoslavia contributed to the Games. Young people played a significant role, with more than 10,000 volunteers actively participating in the preparations (fig. 38 & 39) (Olympic Museum Sarajevo, 2023). This collective effort, regardless of ethnic or religious backgrounds, demonstrated the country's shared commitment to showcasing Sarajevo on the global stage.

Perhaps the best example of this unity occurred just before the Games began. On the day before the opening ceremony, grass was still visible on the competition sites, and the mild weather showed no signs of changing. However, on that following night of February 7, 1984, a heavy snowstorm hit posing a new challenge for the organizers. The sudden snowfall threatened to delay the Games, as roads, competition tracks, and seating areas at the Kosevo Olympic Stadium—where the opening ceremony was to be held—were covered in snow (Kurtic, 2024).

The following morning, Sarajevo's residents took matters into their own hands. People from all over the city came out to clear snow from the streets, sidewalks, and competition areas (fig. 40). By the time the sun rose on February 8, the roads were clear, the venues were prepared, and the Olympic Stadium was filled with visitors, ready for the grand opening ceremony (Kurtic, 2024).

This extraordinary moment of collective effort reflected the deep desire of the people of Sarajevo to present their city in the best possible light to the world. Regardless of their backgrounds, everyone united with a shared goal—to make the Sarajevo Winter Olympics a success (Arbutina, 2024). This spirit of cooperation and pride demonstrated how a common purpose could overcome divisions, highlighting the power of unity even in a country facing internal challenges.

Munevera Begic - 39 years old Sarajevan citizen during the Olympic Games.

"I remember that we were all on the edge as there was the possibility of cancelling the Games, as there was no snow. But when the first snowflakes showed up, hopes rose, and as soon as it turned into a blizzard, it felt like a countrywide festival"

Zdravko Lipovac - sports journalist from Sarajevo, who reported on the Games in 1984.

"In the days before, we were all very worried because there was no snow. Normally there is always snow in Sarajevo and the surrounding mountains at this time of the year. But that year: nothing. And then, on the night before the Games began, a meter of snow fell. It was perfect,"

(Arbutina, 2024)



■ Figure 38: Volunteers assist in the construction of the bobs track at Trebevic (Photograph taken by author at Olympic Museum Sarajevo, 2024).



■ Figure 39: Volunteers who help prepare Sarajevo for the Olympic Games (Photograph taken by author at Olympic Museum Sarajevo, 2024).



■ Figure 40: Citizens of Sarajevo united together to remove snow from the seats at the Olympic stadium which would host the opening ceremony (Puksic, 1984).

The sporting competitions during the Olympic Games also served to unite people, exemplified by Jure Franko's historic achievement in the giant slalom. Never before in Olympic history had a host country failed to win a medal, and when the 1984 Winter Games were awarded to Sarajevo, it was widely assumed that this unfortunate record would be broken. Yugoslavia had never won a single medal in any winter sport and had no serious contenders heading into the 1984 Games (IOC, 2024).

However, Jure Franko, a 21-year-old Slovenian skier, defied expectations finishing in second place. This remarkable performance earned him Yugoslavia's first Olympic Winter medal—a significant honor for the country (IOC, 2024).

The news of Franko's victory sparked euphoria throughout Yugoslavia. This achievement not only brought pride to the country but also united its people in celebration (Sofic, 2024). Once again, the Olympics served as a powerful reminder of how sports can bridge divides and foster a sense of community, as people from different backgrounds came together to celebrate a shared accomplishment.



■ Figure 41: Jure Franko (Yugoslavia) during the giant slalom event held at Bjelasnica (IOC, 1984).



■ Figure 42: Jure Franko celebrating his silver medal, the first medal ever for Yugoslavia in the Winter Olympic Games (IOC, 194).

Munevera Begic - 39 years old Sarajevan citizen during the Olympic Games.

"For days, everyone talked about it. Sarajevans even had a saying which goes, 'We love Jurek more than burek (traditional Balkan pie)'."

(Sofic, 2024)

"There was no kid who did not know who Jure Franko was in the years after the games"

(Kurtic, 2024)

Interactions and Networks

The 1984 Winter Olympics in Sarajevo were not just a showcase of athletic prowess; they also highlighted the intricate social dynamics among athletes, coaches, volunteers, spectators, and various stakeholders. These Games became a unique melting pot of cultures, fostering connections that transcended national boundaries and showcased the universal language of sports (Jalbert Production, 2019).

1272 athletes from around the world, 49 countries, came together in Sarajevo, bringing their diverse backgrounds and experiences to the Olympic stage (IOC, 2024). This convergence created an environment ripe for interaction. The friendships formed among competitors often extended beyond the competition itself, as many forged friendships that lasted long after the Games concluded (Jalbert Production, 2019).

Volunteers were essential to the success of the Olympics, providing invaluable support and services. Their enthusiasm and dedication helped create a welcoming atmosphere for both athletes and spectators. Many volunteers had the opportunity to interact with visitors from different countries, sharing their culture and learning about others in return. This added another layer to the social fabric of the event (Jalbert Production, 2019).

Spectators, too, contributed to the vibrant atmosphere of the Games. Fans from various nations gathered to support their teams, cheering in unison and creating a sense of global community. The shared excitement of watching athletes compete at the highest level fostered a feeling of togetherness, turning the Olympic venues into arenas of cross-cultural celebration (Jalbert Production, 2019).

Through the interactions of athletes, coaches, volunteers, and spectators, the Games created a unique space for cultural exchange and mutual understanding, demonstrating the unifying power of sport in a divided world (fig. 43).

Social inclusion and Participation

The 1984 Winter Olympics in Sarajevo committed to inclusivity, particularly through programs aimed at engaging diverse populations, including minorities and underserved communities. Recognizing the importance of representation, the organizers made significant efforts to ensure that all segments of society could participate in the Games, fostering a sense of belonging and community (Jalbert Production, 2019).

One of the key initiatives was outreach to local schools and youth organizations. Programs were established to educate young people about the Olympic values of excellence, friendship, and respect. These initiatives encouraged participation not just as spectators but also as volunteers and future athletes. By involving youth from various backgrounds, the Games aimed to inspire the next generation and promote inclusivity in sports (Jalbert Production, 2019).

In addition to youth engagement, special programs were created for minority groups and disadvantaged communities. These initiatives included workshops and training sessions designed to provide access to sports facilities and coaching. By breaking down barriers and offering support, the organizers aimed to empower these communities and create a sense of ownership of the Olympic experience (Jalbert Production, 2019).

Sarajevo exemplified the importance of inclusivity and community engagement. Through targeted programs that involved diverse populations, the Games not only enriched the Olympic experience but also paved the way for better representation in sports.



■ Figure 43: The athletes of USA during the opening ceremony, in front the dancers and thousands of spectators in the stadium (Madison, 1984).

Communities and citizens

Citizens clearing the snow before opening ceremony



Volunteers constructing the bobsleigh track



Franko's medal brought Yugoslavia together



Interactions and networks

Opening ceremony brought people together



Many spectators at the sport competitions



Athletes interactions in the Olympic village



Inclusion and participation

Educate young people to sports and Olympic values



3.6 Conclusion Olympic landscape Sarajevo 1984

After 10 days of competition, the Olympic Games have come to an end. Soon the crowds will disperse and the athletes will return to their homes. But in the perpetual life that is our memory, the glow of these days will persist and we will remember with pride the accomplishments here.

Documentary: ‘Sarajevo ‘84 the best Olympic Winter Games ever’ (Jalbert Production, 2019)

The XIV Winter Olympics in 1984 marked a pivotal moment for Sarajevo, leaving a lasting impression on the city and its people. For the citizens of Sarajevo, the Games were far more than just a sporting event; they symbolized hope, unity, and international recognition. As the eyes of the world turned to this Balkan city, its residents took great pride in showcasing their rich cultural heritage and their ability to successfully host a global celebration.

The Olympics brought not only world-class athletes to Sarajevo but also a renewed sense of optimism and belonging to the global community. The city buzzed with excitement, and its historical landmarks became stages for cultural exchange. The Games provided Sarajevo with a unique opportunity to share its identity with the world, challenging preconceptions and fostering an atmosphere of fellowship.

One of the lasting impacts of the Games was the modern infrastructure built for the event. The construction of cutting-edge facilities on Mount Jahorina, Igman, Bjelasnica, and Trebevic not only accommodated elite athletes during the Olympics but also served the local community in the years that followed. These venues became popular recreational spaces, contributing to a vibrant sporting culture in the region.

However, the most defining characteristic of the 1984 Sarajevo Winter Olympics was the social atmosphere it created. Yugoslavia, positioned between the spheres of Western and Eastern powers, managed to bring these opposing forces together during the world’s biggest sporting event. The Games saw a flourishing sense of Yugoslav unity at a time when the country faced increasing pressure to fragment. People from different ethnic and religious backgrounds worked together to ensure that Sarajevo and Yugoslavia presented their best to the world.

Ultimately, the success of the Sarajevo Olympics was not defined by its facilities or athletic achievements but by the city and the nation’s ability to come together, regardless of background or beliefs. The Olympic spirit of unity and cooperation shone brightly, making the social landscape the most enduring legacy of the 1984 Winter Games.

”

Sarajevo is the big winner in Winter Olympics. No longer will people laugh at this one-time caravan stop in the Bosnia and Herzegovina backwoods. For years to come, it will be Sarajevo – the Olympic City.

Newspaper Baltimore, Maryland, USA

Physical landscape

Zetra olympic complex



Skenderija



Bobsleigh and luge track



Ski jumps



Ski course at Bjelasnica



Ski course at Jahorina



0 5 km 10 km



Social landscape

Opening ceremony brought people together



Citizens clearing the snow before opening ceremony



Athletes interactions in the Olympic village



Franko's medal brought Yugoslavia together



Cultural landscape

Cultural expression during opening ceremony



Olympic flame



Sarajevo meeting of cultures



Sarajevo snowflake



Mascot Vucko



04

The eclipse of the Olympic dream

This chapter further explains the thesis problem: the destruction of Sarajevo's Olympic landscape. It introduces the causes of this destruction and analyzes its impact and the current state of the landscape.

Sub-research question 3 is addressed: "What is the current state of the Olympic landscape of Sarajevo after a period of destruction and recovery?"

4.1 Siege of Sarajevo

*Break-up Yugoslavia
Siege of Sarajevo*

4.2 Destruction Olympic landscape Sarajevo

*Physical landscape
Social landscape
Cultural landscape*

4.3 Current Olympic landscape Sarajevo

4.1 Siege of Sarajevo

Break-up Yugoslavia

However, this spirit of unity and celebration proved to be short-lived. As the excitement of the 1984 Olympics faded, old tensions in Yugoslavia began to rise again. The strong feelings of togetherness from the Games couldn't hold up against the growing demands for nationalism and ethnic identity in the late 1980s. Despite the pride the Olympics brought, the divisions among different ethnic groups became clearer, leading to a troubled political situation (Troncota, 2015).

After World War II, Yugoslavia was established as a federation consisting of six republics: Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia. Under the leadership of Josip Broz Tito, the country experienced both economic growth and political stability. However, his death in 1980 weakened the federal structure (Office of the Historian, 2019).

By 1990, the rise of ethnic nationalist parties in the first multi-party elections signaled growing divisions, and between 1991 and 1992, four of the republics declared independence (fig. 45) (Office of the Historian, 2019).

These declarations triggered the Yugoslav Wars, which began in Croatia and soon spread to Bosnia and Herzegovina (Office of the Historian, 2019). The multi-ethnic population of Bosnia, in particular, faced immense suffering during the conflict. In 1992, Bosnia held an independence referendum, which was supported by Bosniaks and Croats but boycotted by Serbs. This led to the country's declaration of independence, followed shortly by war. Sarajevo became a key battleground, symbolizing the violent unraveling of Yugoslavia (Troncota, 2015).

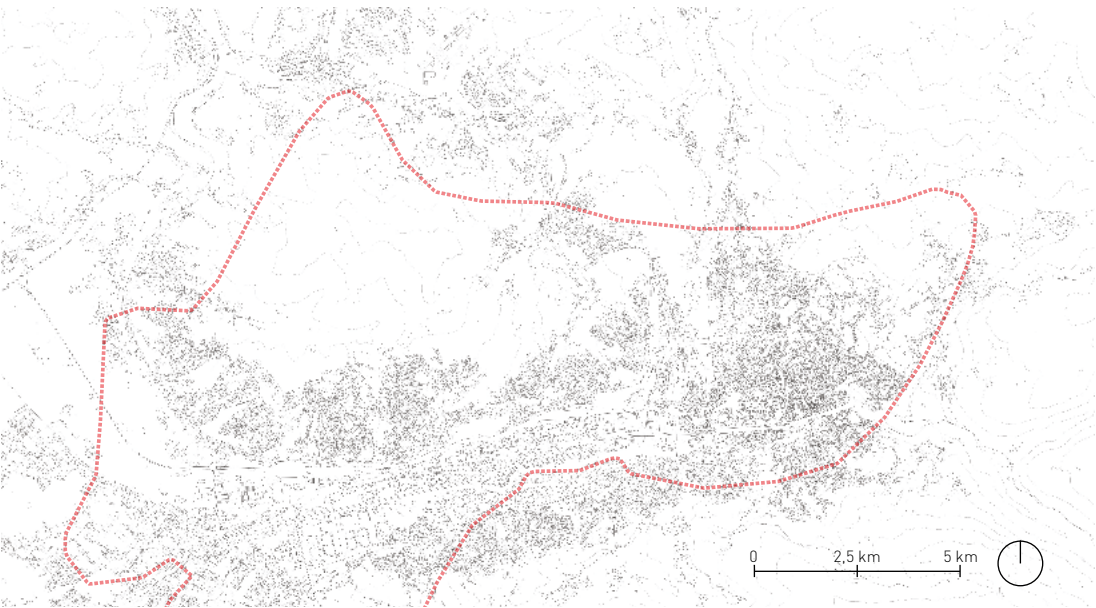


■ Figure 45: Timeline showing the break up of Yugoslavia, from one federation into seven 'independent' countries (2024).

Siege of Sarajevo

From April 5, 1992, to February 29, 1996, Serb forces and the Yugoslav People's Army laid siege to Sarajevo, marking the longest siege of a capital city in modern history. This period saw some of the worst atrocities in Europe since World War II, leaving a profound and lasting impact on both the city and its people. Nearly every part of Sarajevo suffered significant destruction as Serbian artillery relentlessly bombarded the city, forcing its residents to endure extreme hardships. For almost four years, the population lived without basic necessities like electricity, heating, water, and medical supplies (Troncota, 2015).

On average, Sarajevo was struck by 329 shells per day, with a record 3,777 shells hitting the city on July 22, 1993, the height of the siege. All major routes in and out of the city were blocked, and the airport was closed, leaving around 400,000 residents trapped and cut off from vital resources (fig. 46). Over the course of the siege, 11,541 people were killed, including more than 1,500 children. An additional 56,000 people were wounded, with nearly 15,000 of them being children. The siege left scars on the city and its people that would last for generations (Troncota, 2015).



■ Figure 46: Map showing the frontline during the Siege of Sarajevo, completely surrounding the city of Sarajevo (2024).



■ Figure 47: The streets of Sarajevo transformed into a brutal warzone [n.d., 1992].



■ Figure 49: The urban fabric of Grbavica, a neighbourhood in Sarajevo, was completely destroyed during the war [n.d., 1996].



■ Figure 48: People running across the street, walking could be your dead - 'Welcome to hell' [n.d., 1992].



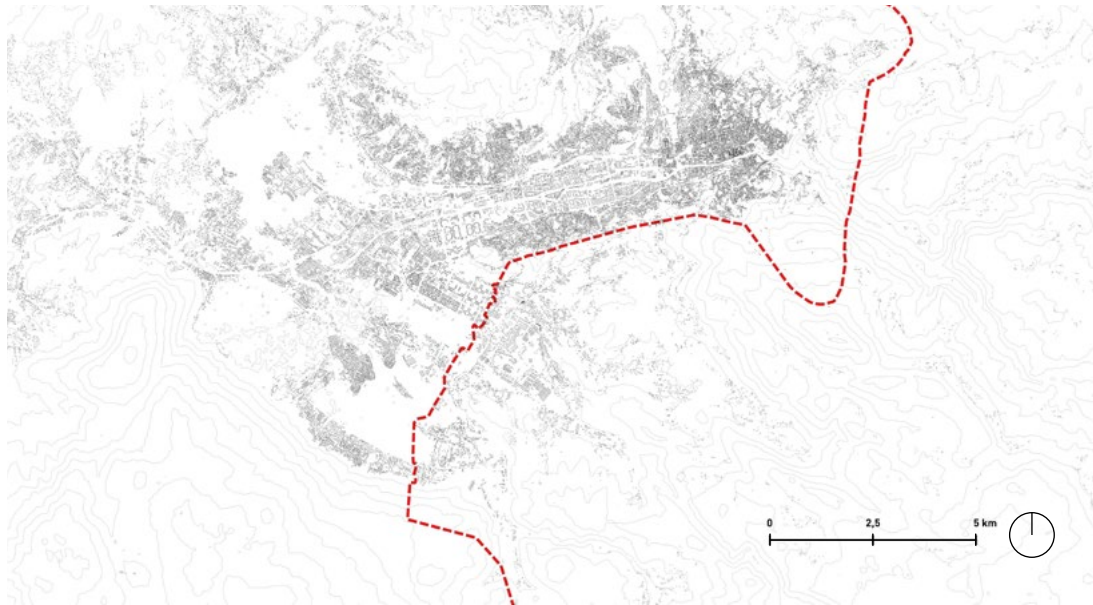
■ Figure 50: The building of the Parliament in Sarajevo was destroyed by fire after Serbian mortar shellings (Andia, 1994).

The General Framework Agreement for Peace in Bosnia and Herzegovina, commonly known as the Dayton Agreement, was reached on November 21, 1995. This landmark accord brought an end to the Bosnian War, which had lasted three and a half years as part of the broader Yugoslav Wars. The agreement established peace among the warring factions and laid the foundation for a united and sovereign Bosnia and Herzegovina. As part of the agreement, Bosnia and Herzegovina was divided into two entities, marked by the 'Inter-Entity Boundary Line' (IEBL), an administrative boundary that separates Republika Srpska (RS) from the Federation of Bosnia and Herzegovina (FBiH) (fig. 51 & 52) (Troncota, 2015). This line, which stretches 1,080 kilometers, became a key feature of the post-war geopolitical landscape.



■ Figure 51: Division of Bosnia and Herzegovina into two entities, as a result of the Dayton Agreement (2024).

The IEBL divided both the physical and social fabric, which had significant impact on the city of Sarajevo (Bollens, 2007). Though the war had ended, its effects were far-reaching, and they continue to shape the urban landscape of Sarajevo today.



■ Figure 52: The Inter-Entity Boundary Line that separates Federation of Bosnia and Herzegovina, and Republika Srpska (2024).

4.2 Destruction Olympic landscape Sarajevo

Physical landscape

The outbreak of war in Bosnia posed a severe threat to the Olympic spirit, as most of Sarajevo's Olympic facilities were either destroyed or severely damaged (Buric, 2015).

The Zetra Olympic Hall, once a symbol of the city's pride, was reduced to rubble after being bombed on May 21, 1992 (fig. 53 & 54). What was once a hub of sports and celebration turned into one of the largest burial grounds for civilians killed during the war. By the end of the conflict, the site, once home to an Olympic skating rink, stood in stark contrast to the adjacent mass graveyard—an unsettling reminder of how a symbol of national achievement had become one of grief and loss (Husukic & Zejnilovic, 2023).

Skenderija, another Olympic venue located a few kilometers away, suffered similar devastation. It was heavily shelled throughout the war, and while the main building managed to survive due to its position beneath a hill, the Youth Center was completely destroyed (Husukic & Zejnilovic, 2023).

Additionally, the neighborhoods built for the Olympics—Mojmilo, which housed athletes and coaches, and Dobrinja, built for the press—became frontlines during the war. Mojmilo, once built in a spirit of optimism, was heavily damaged as trenches were dug through it for cover from snipers (Husukic & Zejnilovic, 2023). Dobrinja, due to its strategic position between Sarajevo Airport and Mojmilo Hill, became a critical battleground and was cut off from the rest of the city for much of the war (Heco, 2008). The area's green spaces, intended for the Olympic residential settlement, were converted into graveyards. Dobrinja, no longer associated with its Olympic past, was left shattered, haunted by the deaths of hundreds and the suffering of thousands (Husukic & Zejnilovic, 2023).

The iconic Holiday Inn, built for the Olympics, also witnessed the war's brutality. On April 6, 1992, it became the site of Sarajevo's first casualties when snipers fired from its windows during peaceful demonstrations (Rotheroe, 1993). Throughout the war, the hotel was repeatedly shelled. Despite this, it remained functional, becoming a base for international media, broadcasting the violence to the world. Its prominent location near the infamous Sniper Alley made it a focal point of both the city's defense and international attention, though it survived the war battered but still standing (fig. 55) (Husukic & Zejnilovic, 2023).



■ Figure 53: The destroyed roof of the Zetra Hall [photograph taken by author at the Zetra Hall, Sarajevo, 2024].



■ Figure 54: Photo inside the destroyed Zetra Hall [photograph taken by author at the Zetra Hall, Sarajevo, 2024].



■ Figure 55: The Holiday Inn Hotel remained functional as base for international media, although it was heavily shelled (n.d., 1995).

*It was the ultimate war zone hotel
Its south side blown away by shot and shell
Apparently, the lodging place from hell
And yet, away from where the mortars fell
It did not just survive but cast its spell
It was our refuge and it served us well*

*To those who ran away, it seemed accursed
More like ground zero than a place of rest
By normal standards it was quite the worst
But to us, the war zone folk it seemed the best*

*We the believers, they the infidels
In this most dangerous of all hotels
And those who stayed there were uniquely blessed*

(Bell, 2013)

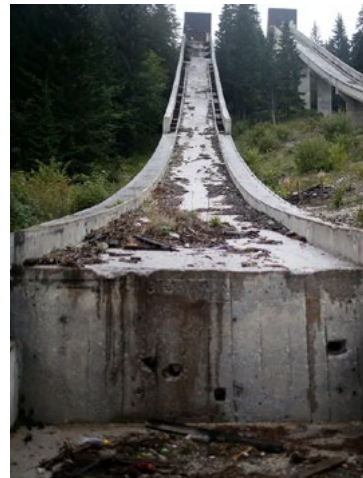
Sarajevo's Olympic mountains, Trebević and Igman, underwent dramatic transformations during the war, shifting from sites of athletic triumph to symbols of military aggression and destruction. Trebević, once cherished for its winter sports facilities and scenic views, became a strategic military stronghold for Serb forces. The bobsleigh and luge track, which had hosted international athletes during the 1984 Winter Olympics, was repurposed as an artillery base. Serb forces used the elevated position of the mountain to shell Sarajevo continuously, turning what had been a symbol of international sporting cooperation into a hub for destruction. Holes were even punched into the concrete of the track to create firing positions for heavy weaponry, forever altering the structure's original purpose (Niebyl, 2020).



■ Figure 56: The ski jumps at igman were completely destroyed during the Bosnian war (Ruvic, 2018).

Mount Igman, which had been the site of Nordic skiing events during the Olympics, played a different yet equally crucial role during the conflict. Positioned southwest of Sarajevo and beyond Serbian lines, Igman became a lifeline for the besieged city, as it was one of the few areas not under Serb control. However, Igman was also the site of fierce battles, as control of the mountain shifted between Serb forces and Bosnian defenders. The fighting left Igman's Olympic facilities, including the ski jumps and hotels, in ruins, with many of them completely destroyed (fig.56 & 57) (Husukic & Zejnilovic, 2023).

The war's impact on Sarajevo's Olympic sites was devastating. Structures that once symbolized international unity and athletic achievement became graveyards, battlegrounds, and ruins. The physical landscape of the Olympics in Sarajevo, once a beacon of hope, was transformed into a testament of destruction, marking the deep scars left by the conflict.



■ Figure 57: The ski jumps at Igman completely destroyed during the Bosnian war (Ruvic, 2018).



■ Figure 58: The bobsleigh track completely overgrown by trees due to human inactivity (Kami, 2018).



■ Figure 59: The bobsleigh track completely overgrown by trees due to human inactivity (Kami, 2018).

Social landscape

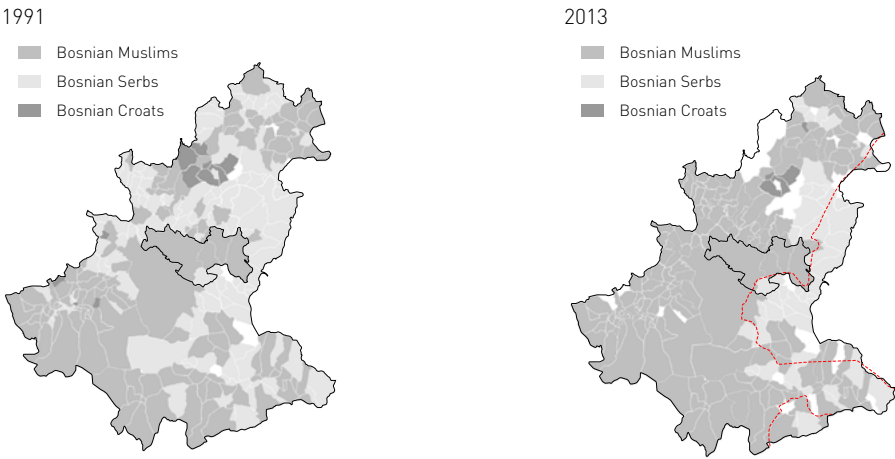
The Sarajevo 1984 Winter Olympic Games united the citizens of Yugoslavia and Sarajevo like never before, transcending ethnic and religious differences (Moll, 2015). The ideology of “Yugoslavism,” which sought to overcome historical animosities between various nationalities and promote strength through collective effort (Troncota, 2015), was at its peak during the Games. The event symbolized unity, bringing people together in a shared celebration of athletic achievement, regardless of their background (Moll, 2015).

However, the very diversity that made Sarajevo a symbol of unity and one of the reasons it was chosen to host the 1984 Olympics also contributed to the outbreak of war just eight years later (Troncota, 2015). This war shattered the ideals of international harmony and peace that the Olympics, and Tito’s vision of a non-aligned Yugoslavia, had visioned. Sarajevo, once a vibrant crossroads of civilizations, religions, and architectural heritage, was transformed into a brutal war zone for over three years (Buric, 2015). The city, which had embodied unity, became a divided place, physically and symbolically marked by the Inter-Entity Boundary Line (IEBL) [(Aquilué & Roca, 2016).

The Dayton Agreement, which ended the war in Bosnia and Herzegovina, had a mixed impact on Sarajevo. While it brought much-needed peace, it also administratively divided both the country and the city. Part of Sarajevo was renamed “East Sarajevo,” emphasizing not just territorial boundaries but also deepening the cultural and ethnic divides within the population (Bollens, 2007). The agreement categorized the people of Bosnia and Herzegovina, including those in Sarajevo, into three distinct ethnic groups: Bosniaks, Croats, and Serbs. This reinforced the complexities of post-war society and left many of the underlying ethnic tensions unresolved. What was once a city known as the “Jerusalem of Yugoslavia” or “Small Yugoslavia” for its rich mix of ethnicities, drastically changed after the 3.5-year war (Troncota, 2015).

In the post-Dayton era, Serbs who remained as minorities in the Bosniak-Croat Federation faced marginalization, leading many to relocate to Republika Srpska or Serbia. The demographic makeup of Sarajevo shifted dramatically. In 1991, Bosniaks made up half of the city’s population, but by 2013, their share had risen to nearly 85%. The Serb population, on the other hand, plummeted from 157,143 in 1991 to just 13,300 by 2013 (fig. 60) [McEvoy & O’Leary, 2013].

Where the 1984 Winter Olympics had brought Yugoslavia and its people closer together than ever before, the Siege of Sarajevo, only eight years later, did the exact opposite. The city that once celebrated unity and diversity saw its population turn against each other, with ethnic groups pitted on opposing sides. The social fabric that the Olympics once symbolized was torn apart, leaving Sarajevo forever changed by the war. The legacy of division and loss has reshaped not only the city’s physical landscape but also the very essence of its social identity.



■ Figure 60: Map which shows the demographic shift between 1991 and 2013, due to the war and the Dayton agreement that followed the war the majority of Bosnian Serbs moved to Republika Srpska [made by author, 2024, information from McEvoy & O’ Leary, 2013]

Cultural landscape

During the Games, Sarajevo showcased the city’s rich cultural heritage, symbolizing unity and diversity through Olympic symbolism, historical landmarks, and artistic programs. Sarajevo’s unique position as a cultural crossroads was celebrated through festivals and exhibitions that highlighted its traditions and history (Jalbert Production, 2019).

Just eight years after, Sarajevo’s vibrant cultural landscape was devastated by the outbreak of war, shattering the city’s symbolic role as a beacon of peace and unity. The Siege of Sarajevo targeted not only the city’s people and infrastructure but also its cultural and historical landmarks that had played such a vital part in the Olympic story (Husukic & Zejnilovic, 2023).

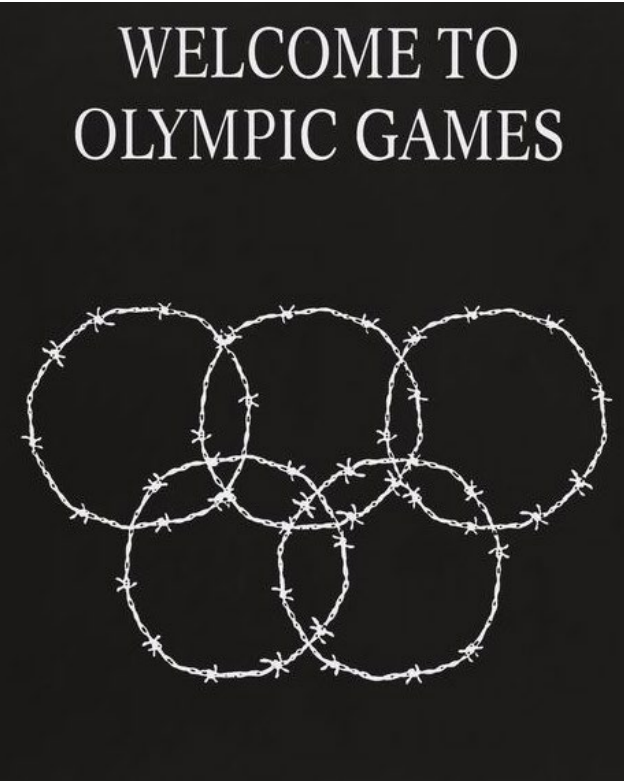
The Olympic Museum, once a symbol of shared heritage and international unity, was reduced to rubble by relentless shelling. The Olympic flame, which once stood for peace, was extinguished as Sarajevo descended into violence, becoming a stark contrast to the harmony it had once celebrated (Husukic & Zejnilovic, 2023).

The war deliberately targeted Sarajevo’s cultural heart. Iconic landmarks like Gazi Husrev-beg’s Mosque, the Cathedral of Jesus’ Heart, the Jewish Cemetery, and the Old City Hall were damaged or destroyed in an effort to erase the city’s multicultural identity. The damage went far beyond physical destruction; it was an attack on the cultural soul of Sarajevo (Troncota, 2015). The Olympic legacy, which had once united Yugoslavia’s diverse communities, became a painful reminder of what had been lost. The ideals of peace, unity, and international friendship that had defined the Sarajevo Olympics were replaced by division and violence. Sarajevo’s once-celebrated cultural landscape, rich in history and diversity, became a symbol of the city’s fractured identity, struggling to preserve its heritage in the aftermath of war (Husukic & Zejnilovic, 2023).

■ Figure 61: A manipulated Olympic logo showing the Olympic rings as barbed wire, related to the Siege of Sarajevo. This leads to a different, negative, experience to Olympic symbolism (Trio Sarajevo, 1994).



■ Figure 62: The Olympic podium at Igman was used for executions during the war (Klawuttke, 2015).



4.3 Current Olympic landscape Sarajevo

Today, the city stands as proof to both resilience and the ongoing challenges of recovery. Many of the facilities built for the Olympics have seen considerable restoration efforts. The Olympic Hall Zetra, which hosted ice hockey and figure skating events, has been revitalized and now serves as a venue for concerts and sports events, reflecting a renewed vibrancy (fig. 63) (Husukic & Zejnilovic, 2023).

Skenderija has been partially renovated, but what used to be an important space in Sarajevo is now a symbol of the political changes that reflect the city’s uncertain future (Husukic & Zejnilovic, 2023).

In 2019, Sarajevo and East Sarajevo hosted the European Youth Olympic Winter Festival (EYOF), an important step in reviving the city’s Olympic spirit. This event featured young athletes from 50 countries and highlighted Sarajevo’s commitment to celebrating its Olympic legacy. The restored venues successfully hosted competitions, much like they did during the original Games (Olimpijski komitet Bosne i Hercegovine, 2019).

However, the story is not entirely one of revival. Several Olympic sites remain in disrepair, serving as stark reminders of the city’s turbulent past during the Bosnian War in the 1990s. Notable examples include the ski jumps on Igman and the bobtrack on Trebevic. These abandoned facilities, with their crumbling infrastructure, reflect the ongoing struggles of a society still healing from conflict (Husukic & Zejnilovic, 2023).

Bosnia’s administrative and political systems have hindered effective management of this Olympic legacy. The lack of systematic planning has led to the underutilization of these sites, contrasting sharply with the restored venues and highlighting the uneven progress within the city (Husukic & Zejnilovic, 2023).

Meanwhile, the social landscape of Sarajevo is marked by significant ethnic tensions that impact daily life. The legacy of war has created deep divides among various ethnic groups, resulting in mistrust and hostility that affect community interactions. A recent survey reveals that the Bosniaks, Croats, and Serbs, despite living together for centuries, have a limited understanding and interest in one another. Their perceptions are still influenced by stereotypes from the past and the recent war. The survey highlights that relations among these groups are strained, particularly between the Bosniaks and Serbs, who have the most negative views of each other (Skoko, 2024).

Although there are ongoing efforts to promote reconciliation and unity, many challenges remain. The scars of history are not easily healed, and many residents continue to confront the consequences of past conflicts (Troncota, 2015).

Most of the Olympic facilities in Sarajevo have been restored, serving as reminders of the joyful spirit of the 1984 Games. However, the city still struggles with social tensions and cultural divisions. What was once a symbol of unity and cooperation now reflects the ongoing struggles with its identity. The challenge today is to bridge these divides, foster a sense of community, and revive the Olympic spirit in a way that transcends ethnic differences.



■ Figure 63: View at the restored Zetra Hall, which hosts concerts and sports events [2023].

05

Site Analysis

This chapter motivates the choice of the abandoned bobsled track as the design site, followed by an analysis of the track and its context through spatial and historical analysis.

- 5.1 Defining the design location
 - Olympic bobtrack Sarajevo 1984*
 - Youth Olympic Winter Games*
- 5.2 Olympic bobtrack Sarajevo 1984
 - Spatial analysis*
 - Historical analysis*
- 5.3 Mountain Trebevic
 - Spatial analysis*
 - Historical analysis*

5.1 Defining the design location

Olympic bobtrack Sarajevo 1984

The chosen design location is the abandoned bobsleigh track on Mount Trebević, used during the 1984 Winter Olympics. This track played an important role in two of the most significant events in Sarajevo’s history: the Olympic Winter Games and the war that followed. As a result, the bobsleigh track has become a powerful symbol of the city, a physical reminder of both glory and destruction (Husukic & Zejnilovic, 2023).

The track is located on Mountain Trebević (fig. 64). Despite its proximity and historical significance, the track has remained in a state of disrepair since the war, still lying in ruins (Husukic & Zejnilovic, 2023). This decay symbolizes the destruction of the Olympic landscape.



■ Figure 64: Top view photograph of the bobtrack at Trebevic (Gaubert-Amy, 2022).

Youth Olympic Winter Games

Against this historical background, there are plans to renovate the track with a view to organizing the Youth Olympic Winter Games (YOG) in Sarajevo in 2028 or 2032 (Livingstone, 2023).

The Youth Olympic Winter Games are a prestigious sporting event for young athletes aged 15 to 18 from around the world (IOC, 2024). The overarching vision of the YOG is to inspire young people worldwide to engage in sports while embracing and living by the Olympic values (IOC, 2009).

The scale of the Youth Olympic Games is smaller than that of the Olympics. The International Olympic Committee (IOC) mandates that all events be held within the host city, and no new sports venues should be constructed specifically for the event (IOC, 2009).

Since bobsleigh, luge and skeleton are all part of the sports program of the YOG, Sarajevo would require a functional bobtrack in the future to meet these requirements.

This need provides a compelling reason to select the abandoned Sarajevo bobtrack as the focal point for design exploration. By addressing the potential renovation and reactivation of this iconic structure, the project contributes to reimagining how Sarajevo’s Olympic heritage can be thoughtfully restored and integrated into the city’s future development.



■ Figure 65: Athletes and officials were honoured as OKBIH announced its intention to bid for the Youth Olympic Games on its 30th anniversary (OKBIH, 2023)

5.2 Olympic bobtrack Sarajevo 1984

Spatial analysis

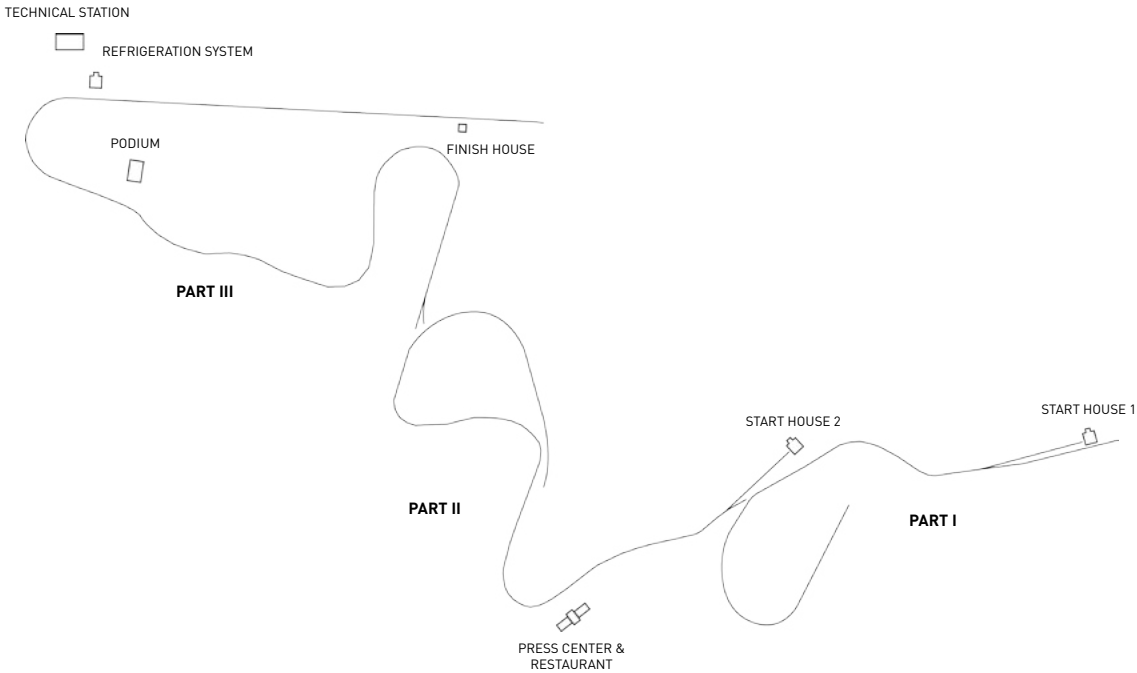
The bobsled track in Sarajevo, used during the 1984 Winter Olympics, was divided into three distinct sections (fig. 66), each designed to be utilized independently thanks to an innovative switch system (Westnyacktwins, 2011).

The first section was the easiest, featuring the least elevation change. It began at the starting house and diverged from the main track after the third turn (Westnyacktwins, 2011).

The second section presented a greater challenge, with higher speeds and more complex curves, including the Double S. This segment started at the second starting house and branched off after the seventh turn (Westnyacktwins, 2011).

The third section was the most demanding, reaching the highest speeds. It included critical turns such as the Omega, Hairpin, and Labyrinth (Westnyacktwins, 2011).

The track was supported by various buildings, but due to the war, little remains of these structures today, leaving only ruins that outline their former presence(fig. 79-90). The track itself also suffered extensive damage. In the following pages, the current state of the bobtrack is visualised in photographs taken during the site visit in december, 2023 (fig. 67-78).



■ Figure 66: The layout of the bobtrack used during the 1984 Winter Olympics, consisting of three parts



■ Figure 67: The track during my site visit (2023).



■ Figure 69: The end of training track I, splitting from the main track (2023).



■ Figure 68: The track during my site visit (2023).



■ Figure 70: View underneath the track, showing the transfer system at the end of training track I (2023).



■ Figure 71: Open atmosphere in corner 5, elevated above the ground crossing the road (2023).



■ Figure 73: The inside of a corner, showing colorful graffiti (2023).



■ Figure 72: Open atmosphere in corner 5, elevated above the ground crossing the road (2023).



■ Figure 74: The outside of a corner, showing its neutral color and the concrete skeleton (2023).



■ Figure 75: The end of training track II, splitting from the main track (2023).



■ Figure 77: The open atmosphere in the final corner (2023).



■ Figure 76: The end of training track II, splitting from the main track (2023).



■ Figure 78: The open atmosphere in the final corner (2023).



■ Figure 79: The former start house 1 during my site visit (2023).



■ Figure 81: The former press center and restaurant during my site visit (2023).



■ Figure 80: The former start house 1 during my site visit (2023).



■ Figure 82: The former press center and restaurant during my site visit (2023).



■ Figure 83: The former technical station during my site visit (2023).



■ Figure 85: The former refrigeration system during my site visit (2023).



■ Figure 84: The former technical station during my site visit (2023).



■ Figure 86: The former refrigeration system during my site visit (2023).



■ Figure 87: The former finish house during my site visit (2023).



■ Figure 89: The former podium during my site visit (2023).



■ Figure 88: The former finish house during my site visit (2023).



■ Figure 90: The former podium during my site visit (2023).

Historical analysis



■ Figure 91: Timeline of the Sarajevo bobsleigh track, highlighting its physical transformations and its evolving role in relation to people (2024).

For the 1984 Winter Olympic Games, the landscape of Trebević Mountain was transformed into a venue for bobsleigh and luge competitions. Trebević became a symbol of the emerging Olympic spirit in Sarajevo and its surrounding areas. It was not only considered one of the top sports venues globally but also regarded as the most natural setting for such events. The track was innovative and unique, being the first in Olympic history to combine bobsleigh and luge runs, a feature celebrated as Sarajevo’s original contribution to the Games (Husukic & Zejnilovic, 2023).

However, during the Siege of Sarajevo, the area where the track was located became part of the frontline. The Bosnian Serb army used the bobsleigh track as a strategic position for artillery, even going as far as cutting holes into the concrete to fire weapons. After the war, the track was left abandoned and overgrown, neglected due to the lack of maintenance and human activity (Niebyl, 2020).

Throughout the 2000s, the track drew the interest of both locals and tourists eager to explore its dilapidated state and leave their mark with graffiti. Over the years, it transformed into a popular attraction for those curious about Sarajevo’s history and the Olympic Games (Niebyl, 2020).

In conclusion, the Trebević track, once a cutting-edge Olympic venue, experienced transformation and neglect due to the war but has since been revived as a significant cultural and tourist destination, reflecting the resilience of Sarajevo and its people.

5.3 Mountain Trebević

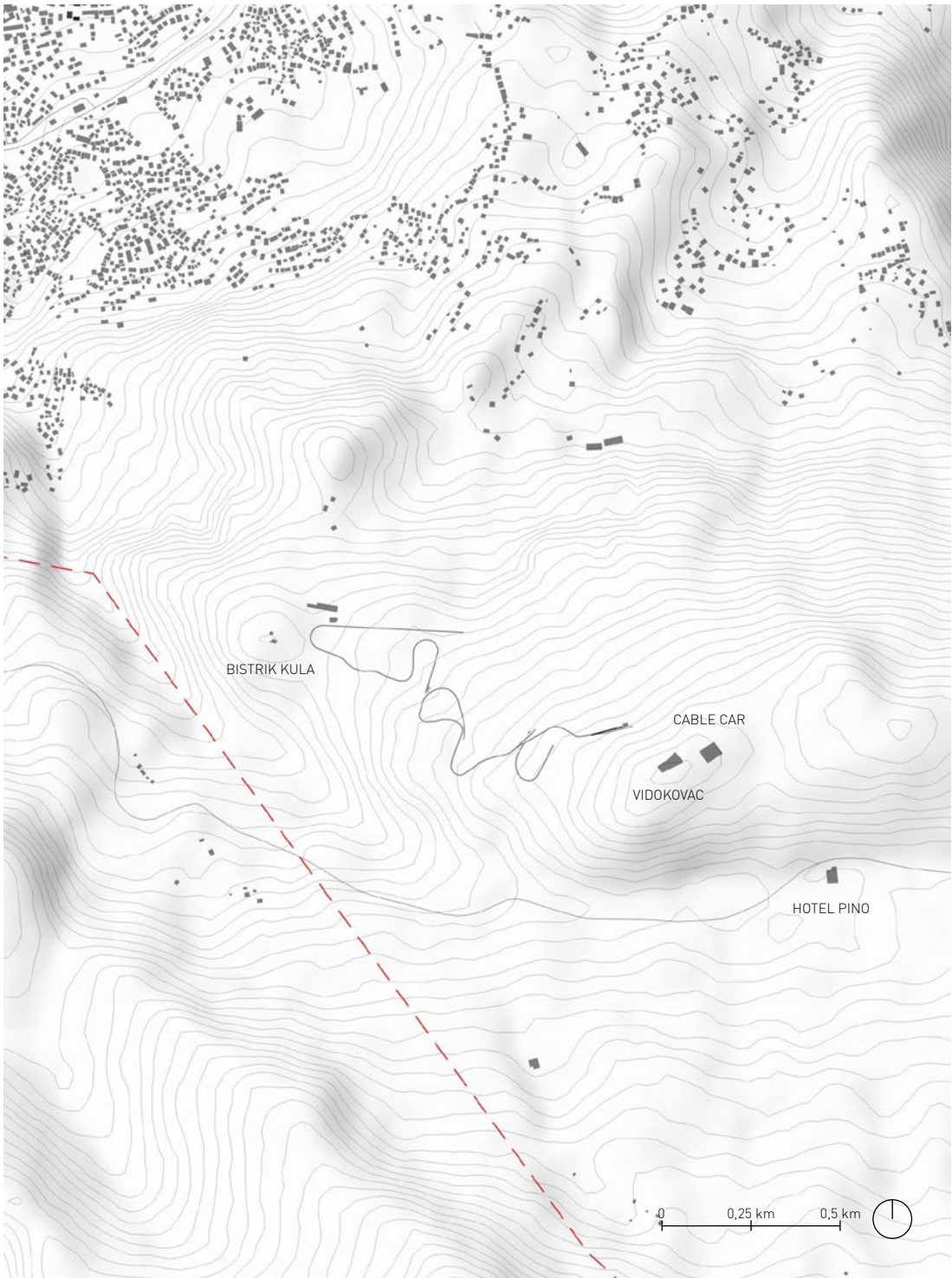
Spatial analysis

The significance of Mount Trebević extends beyond the bobsled track. Its proximity to Sarajevo has greatly influenced the placement and role of various structures on the mountain. During the Austro-Hungarian era, defensive fortifications were built on Trebević because its height provided a clear vantage point of the city, making it ideal for military purposes (Hukic & Klaric, 2018). Although these fortifications were destroyed in subsequent wars and never rebuilt, their remnants remain as historical landmarks and popular viewpoints, offering a glimpse into the mountain's ongoing connection to the city's past (fig. 95).

In addition to its historical importance, Trebević's accessibility made it a favored destination for recreational activities. This led to the construction of a cable car that connects the city to the mountain, with the upper station stopping at the Vidikovac viewpoint. This spot became a beloved destination for locals and tourists alike, offering stunning panoramic views of Sarajevo (Hukic & Klaric, 2018).

After the war, efforts were made to revive the mountain's recreational appeal. The cable car was rebuilt (fig. 93), and a restaurant with a terrace overlooking the city was constructed next to the viewpoint (fig. 94), further enhancing its tourist-friendly amenities. Additionally, just south of the viewpoint, Hotel Pino was established to attract visitors (fig. 96), solidifying the mountain's role as a hub for tourism and leisure.

Ultimately, the combination of historical fortifications and modern recreational facilities on Trebević reflects the mountain's evolving role over time. From a site of Olympic glory to a place of strategic military significance, and now a vibrant destination for recreation and tourism, Trebević encapsulates the resilience and spirit of Sarajevo.



■ Figure 92: Map that shows the bobsled track in a larger context, in relation to the city of Sarajevo and the elevation of Trebević (2024).



■ Figure 93: The cable car station at Trebevic which has been restored after the war, once again connecting the city and the mountain (n.d)



■ Figure 95: Bistrik Kula, a former fortification and observatory left in a ruinous state after the war. (Hinchcliffe, 2016).



■ Figure 94: Vidokovac, a restaurant including a rooftop terrace with a view over the city over Sarajevo, recently built (n.d.)



■ Figure 96: Hotel Pino, located just south of the bobtrack (Dautbegovic, 2015).

The geographic location of Mount Trebević plays a significant role in shaping the area's rich diversity of plant and animal life. The mountain is home to typical Dinaric vegetation, characterized by various forests that provide shelter and nourishment for both flora and fauna with forests of beech, downy oak, hornbeam, fir, and spruce (fig. 97) (Parks Dinarides, 2023).

In terms of wildlife, Trebević supports a range of mammals. The mountain's environment, with its mix of dense forests and rocky landscapes, also attracts a variety of bird species, making it an ideal habitat for birds. Additionally, reptiles like lizards and vipers thrive in the rocky areas, reflecting the mountain's ecological richness (Parks Dinarides, 2023).

The geographical characteristics of Mount Trebević not only shape its landscape but also contribute to its diverse ecosystem, supporting an array of species adapted to the mountain's unique environment.



Characteristic flora Trebevic

-  Common beech - *Fagus sylvatica*
-  Downy oak - *Quercus pubescens*
-  Common hornbeam - *Carpinus betulus*
-  Douglas fir - *Pseudotsuga menziesii*
-  Serbian spruce - *Picea omorika*

■ Figure 97: An average forest at Trebevic, mostly consisting of spruce trees (Parks Dinarides, n.d.).

Historical analysis



■ Figure 98: Timeline of Trebević Mountain, highlighting its physical transformations and its evolving role in relation to the city of Sarajevo (2024).

During the Ottoman period, the northern slopes of Mount Trebević experienced urbanization, increasing its significance for the city of Sarajevo. The mountain’s importance grew due to its role in wood production, recreation, and defense. Its elevated position provided a panoramic view of the entire city, which led to the construction of fortifications on its slopes (Hukic & Klaric, 2018).

Following World War II, existing facilities on Trebević were renovated, and additional tourist amenities were introduced. To improve access, a cable car was built, linking the city center to the “Vidikovac” viewpoint. Visiting this site became a popular recreational activity for the people of Sarajevo (Hukic & Klaric, 2018).

Trebević gained international attention when it hosted the bobsleigh and sledging events during the 1984 XIV Winter Olympic Games. A bobsleigh track and accompanying facilities were constructed on its northern slopes, further cementing its reputation as a recreational hub (Hukic & Klaric, 2018).

However, during the Bosnian War and the siege of Sarajevo, Mount Trebević took on a far more sinister role. Its strategic elevation made it a prime location for besieging artillery, turning the mountain into a battleground (Hukic & Klaric, 2018).

After the war, Trebević remained heavily mined and hazardous, making it inaccessible for years. The once cherished mountain, which had played a vital role in the wellbeing and recreation of Sarajevo’s residents, became a symbol of fear and painful memories. As a result, many locals chose to distance themselves emotionally from the area, attempting to forget its once joyful significance ([Hukic & Klaric, 2018).

Significant efforts were made to restore the mountain’s recreational appeal. The cable car was restore, as a symbol of hope. Various amenities were developed to enhance the visitor experience, including restaurants, viewpoints, and accommodations. This comprehensive approach sought to create a welcoming environment for those looking to explore the mountain’s natural beauty and escape the busy city. This trend, which had been popular in the past, was now being revived, especially as Sarajevo ranked among the most polluted cities in the world in December 2023 (RFE / RL’s Balkan Service, 2023).

06

Design

This chapter presents the design, structured into four parts leading to the master plan. The design is divided into three sections, with detailed discussions of the design choices supported by close-ups and visualizations. To reach this design, the design objectives and strategies are first formulated, based on the analysis of the Olympic landscape.

This chapter addresses sub-research questions 4 and 5: "What design objectives and strategies can be derived from the analysis of the Olympic landscape of Sarajevo?" and "How can the design strategies be applied to the design site?"

6.1 Design Objectives

6.2 Design Strategies

6.3 Design concept

*Abandoned Olympic track
New functional track
Restored track*

6.4 Design

*Bobtracks
Pathway network
Road network
Facilities*

6.5 Masterplan

6.6 Zoom-in design

*Open air museum
Amphitheatre
Diorama garden
Sports fields
BMX / Skatepark
Playing ground*

6.7 Design conclusion

*Design objectives
Large scale: Sarajevo Olympic landscape*

6.1 Design objectives

To ultimately contribute to the revitalization of the Olympic landscape, various design objectives have been established. These objectives are divided into nine sub-categories, within three main categories: the physical landscape, the social landscape, and the cultural landscape. The goals are based on the framework developed when defining an Olympic landscape (chapter 3.2).

The purpose of these design objectives is to provide direction and focus for the design process. They help ensure that each design decision contributes to the overall aim of restoring the Olympic landscape.

Physical landscape

This refers to the material and geographical aspects of the landscape. In the context of an Olympic landscape, this includes:

- Sports facilities:
- The design provides sufficient sports facilities.
 - The design offers supporting infrastructure for sports facilities.
- Natural environment:
- The design preserves and protects the natural features of the landscape.
 - The design is climate- and weather-resistant.
- Urban infrastructure:
- The design ensures effective and user-friendly accessibility.
 - The design provides adequate accommodations and amenities.

Cultural landscape

This concerns the aspects related to traditions, values, and heritage present in the Olympic landscape:

- Symbolism and rituals:
- The design reflects the identity and spirit of the Olympic Games.
- Heritage and history:
- The design protects and highlights the local heritage and history.
- Arts and cultural programs:
- The design supports arts and cultural programs that promote local culture.

Social landscape

The social environment refers to the human and community aspects within the Olympic landscape:

- Communities and residents:
- The design encourages local communities and residents.
- Interactions and networks:
- The design promotes social interactions (among diverse population groups).
- Social inclusion and participation:
- The design is socially inclusive.

6.2 Design strategies

In this thesis, multiple design strategies have been developed for each of the design objectives. The purpose of these design strategies is to define a plan or approach for how the established design objectives can be achieved. Design strategies help structure the design process by providing clear guidelines for decision-making. They ensure that the different components of the design contribute cohesively to the final objective.

Physical landscape

Design objective:
The design provides sufficient sports opportunities.

Design strategies:

- The design restores the existing Olympic sports facilities.

The design restores the existing Olympic sports facilities. The aim is to revitalize the abandoned structures from the 1984 Winter Olympics, bringing them up to modern standards while preserving their historical significance.

- The design provides multifunctional sports facilities.

Design sports facilities that are suitable for multiple sports and activities. This maximizes the use of the infrastructure and accommodates diverse sporting opportunities.

- The design offers public sports amenities:

Design public spaces such as parks and squares with integrated sports facilities that are accessible to the local community and visitors.

- The design provides sports facilities that can be used year-round:

The design includes sports facilities that are functional in all seasons, allowing for continuous use throughout the year. These facilities are adaptable to different weather conditions and activities.

Design objective:
The design provides supporting infrastructure for sports facilities.

Design strategies:

- The design restores supporting infrastructure for the existing Olympic sports facilities:

The design restores and upgrades essential infrastructure which are necessary for the proper functioning of the sports venues. This ensures the facilities are accessible and fully operational.

- The design provides facilities for visitors, athletes and staff:

Provide supporting amenities such as changing rooms, training spaces, recovery, and medical facilities close to the sports venues, so that visitors, athletes and staff can perform at their best.

- The design offers infrastructure for visitors during competitions:

Ensure sufficient supporting infrastructure for spectators, such as seating, sanitary facilities, catering, and access for people with disabilities.

- The design provides logistical spaces for storage:

Design storage and distribution areas for sports equipment and other essentials necessary for the execution of sports.

Design objective:
The design preserves and protects the natural features of the landscape.

Design strategies:

- The design has minimal impact on the landscape:

Limit the impact of the design on the natural landscape by minimizing construction activities and preserving existing natural structures.

- The design uses natural materials:

Choose materials that are locally sourced and integrate well into the natural landscape to minimize visual and ecological impact.

- The design incorporates natural vegetation:

Integrate existing natural vegetation into the design to preserve and restore the existing biodiversity.

- Increase of biodiversity, flora, fauna:

Preserve and protect the natural features of the landscape while enhancing biodiversity, including flora and fauna.

Design objective:
The design is climate- and weather-resistant.

Design strategies:

- The design uses sustainable materials:

Choose materials with a low environmental impact, such as recycled, renewable, or cradle-to-cradle certified materials, to minimize the ecological footprint of the construction project.

- The design uses weather-resistant materials:

Select materials that can withstand local weather conditions and extreme climate events to extend the lifespan of the structure and reduce maintenance costs.

Design objective:
The design provides effective and user-friendly accessibility.

Design strategies:

- The design optimizes the road network:

Design roads and access routes that maximize traffic flow and minimize congestion.

- The design provides good access routes for pedestrians and cyclists:

Ensure safe, well-lit, and direct pathways for pedestrians and cyclists to enhance the accessibility of the design.

- The design offers efficient parking management:

Design sufficient parking facilities in strategic locations, with effective management to improve efficiency.

- The design is easily accessible by public transport:

Integrate public transport options that efficiently serve the design, with frequent and reliable services that are easily reachable.

Design objective:
The design provides sufficient accommodations and amenities.

Design strategies:

- The design integrates existing/new hospitality facilities:

Design the space in such a way that existing and new hospitality facilities are seamlessly integrated into the overall design, focusing on accessibility, functionality, and ambiance to provide an attractive and cohesive experience.

- The design integrates existing/new recreational facilities:

Design the space so that existing and new recreational facilities are seamlessly integrated, ensuring a logical layout, good accessibility, and an inviting environment that appeals to diverse users.

- The design integrates existing/new tourist facilities:

Design the space to seamlessly integrate existing and new tourist facilities, paying attention to accessibility, user experience, and the preservation of local culture and environment to create an attractive and cohesive tourist destination.

Cultural landscape

Design objective:
The design protects and emphasizes local heritage and history.

Design strategies:

- The design integrates historical elements and features:

Incorporate existing historical elements and features into the design to preserve and highlight the historical context.

- The design repurposes historical buildings:

Assign a new function to historical buildings that aligns with their heritage value while meeting modern needs.

- The design utilizes local materials and techniques:

Use local building materials and traditional techniques to maintain the cultural and historical connection to the area.

Design objective:
The design reflects the identity and spirit of the Olympic Games.

Design strategies:

- The design integrates Olympic symbolism:

Incorporate iconic Olympic symbols and themes into the design to reflect the identity and spirit of the Olympic Games, fostering a sense of unity and pride among athletes, visitors, and the local community.

Design objective:
The design supports art and cultural programs that promote local culture.

Design strategies:

- The design provides cultural centers and spaces for exhibitions and performances:

Design dedicated cultural centers or spaces for exhibitions and performances that focus on local culture, history, and traditions.

Social landscape

Design objective:
The design stimulates local communities and residents.

Design strategies:

- The design creates employment for local communities and residents:

Design spaces and facilities that directly contribute to creating jobs for the local population.

- The design facilitates local tourism:

Design attractions and amenities that are appealing to tourists and highlight local culture, nature, and heritage.

Design objective:
The design promotes social interactions (between diverse population groups).

Design strategies:

- The design creates communal spaces:

Design central, accessible communal areas where people can gather and interact.

- The design creates cultural hubs:

Design multifunctional cultural centers that provide space for various international events, exhibitions, and workshops.

- The design provides connective routes:

Create walking and cycling paths that connect different parts of the community and promote social interaction along the way.

- The design encourages informal meeting places:

Integrate informal meeting spots into the design, such as benches, picnic tables, and covered shelters.

- The design provides shared activity zones:

Develop zones specifically designed for communal activities, such as sports, play, and recreation.

Design objective:
The design is socially inclusive.

Design strategies:

- The design is accessible for people with disabilities:

Ensure universal design that allows physical access for everyone, regardless of mobility or sensory impairments.

- The design creates a safe and inclusive environment:

Design a safe environment where all population groups feel welcome and protected.

- The design offers inclusive public spaces and activities:

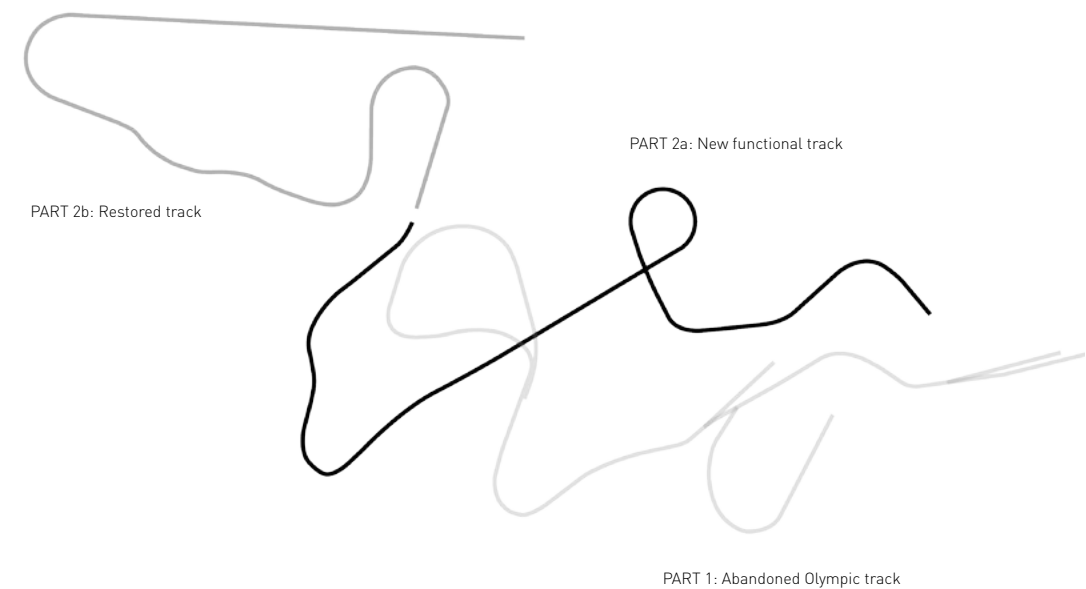
Design public spaces that are inviting to everyone, regardless of background, age, gender, or socioeconomic status.

6.3 Design concept

The design consists of two bobsleigh tracks: the old, abandoned track from the 1984 Olympic Games and a new, functional track for future competitions. This decision aligns with Sarajevo’s ambition to host the Youth Olympic Games, which requires a modern bobsleigh track. At the same time, the original track symbolizes the resilience of the city, having survived the war and since gained historical and aesthetic value. By combining both tracks, the design honors the practical and symbolic aspects of the bobsleigh track.

Each track will serve a distinct function, with the overarching goal of bringing people together. The old track will be used for cultural activities, allowing visitors to experience the history and culture of Sarajevo, while the new track will function as a sports hub where people gather to compete and engage in sporting activities. The new track is made up of two parts: a completely new section and a restored part of the old track. This restoration emphasizes the design’s goal of reviving Sarajevo’s Olympic landscape.

As a result, the final design comprises three elements: the abandoned old track, the restored section, and the entirely new track. Each part has its own atmosphere and purpose. The old track remains a space for culture and history, while the restored and new tracks focus on sport and competition. This creates a design where sport and culture blend harmoniously, with the main goal of uniting people and reviving the Olympic spirit in Sarajevo.



Abandoned Olympic track

A part of the old track, used during the Olympics in 1984, will remain in its current state. This part of the design focuses on the unique atmosphere created by the old, abandoned track, which will serve a significant cultural function within the overall plan. The ambiance of this area is characterized by a wild, overgrown environment featuring dark forests of spruce trees, remnants of graffiti, decaying concrete, and ruins of buildings that will be revitalized and repurposed. The combination of these elements contributes to a sense of history and nostalgia, allowing visitors to experience a blend of nature and urban decay.

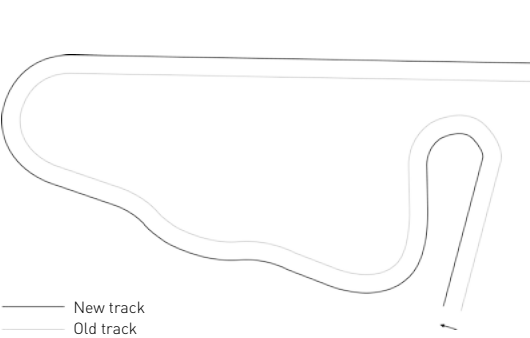
New functional track

The design also emphasizes the vibrant atmosphere of the area surrounding the newly constructed functional bobtrack. It features asphalt pathways and modern buildings made from light materials that complement the track. The landscape includes deciduous trees and colorful plants, creating open spaces for sports and social activities. This blend of contemporary design and natural elements fosters a lively environment that encourages community engagement and outdoor recreation.

Restored track

The third and final part of the design centers around the restored section of the old track. However, this label is somewhat misleading, as the track requires complete renewal. Therefore, the decision was made to construct a brand-new track while retaining the same outline as the original. This approach allows for a seamless connection to the past while embracing modern functionality.

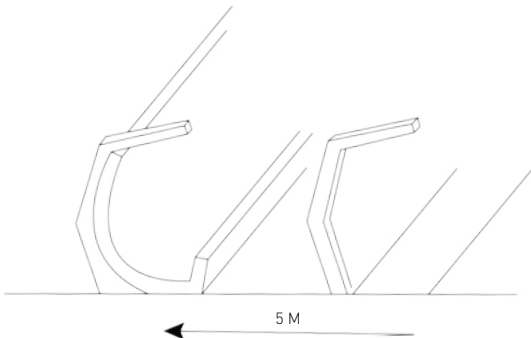
The overall atmosphere of this area embodies a sense of restoration and reflection, as functional facilities pay homage to their historical roots. By blending old elements with modern infrastructure, the design creates a space that celebrates the legacy of the original track while providing contemporary amenities for users.



■ Figure 99: Concept of the restored track (2024).

The old track will be removed, leaving only the safety barriers, a kind of concrete skeleton intact. To evoke a sense of nostalgia, the new design shifts the layout five meters inward or outward, depending on whether the curve turns left or right (fig. 99 & 100). As athletes or visitors glide over the new track, they will see the concrete pillars standing alongside, serving as reminders of the original structure and its history.

The outline of the former track will be utilized as a pathway, with the concrete pillars guiding the way. This integration ensures that the memory of the old track is woven into the fabric of the new design. The pillars will not only serve as historical markers but also function as light posts to illuminate the path, enhancing safety and visibility. Additionally, elements from the old track will be incorporated into the sports facilities, providing further connections to the past.



■ Figure 100: Section concept of the restored track (2024).

6.4 Design

Bobtracks

The bobsleigh track used during the 1984 Olympic Games consisted of three sections (fig. 66 - chapter 5.2). To preserve as much historical and aesthetic value as possible, a decision has been made to keep two of these sections in their original state, while only one section will be restored and made functional.

To ensure that walking along or over the old track is not disrupted by the functional section, it is important that the original sections remain contiguous. Since the first two sections end in a switching system (fig. 70 - chapter 5.2), only the third section of the track will be restored. This allows for uninterrupted access to the entire old track.

The layout of the new bobsleigh track is shaped by three key factors. First, it will wind around the old track, providing an engaging spectacle for both on-site visitors and at-home viewers during competitions.

Additionally, the track is positioned on a north-facing slope to minimize sun exposure, which leads to cooler temperatures and less reliance on artificial cooling, making it cost-effective and environmentally friendly.

Finally, the new track must seamlessly connect with the restored section of the old track to create a cohesive operational course.

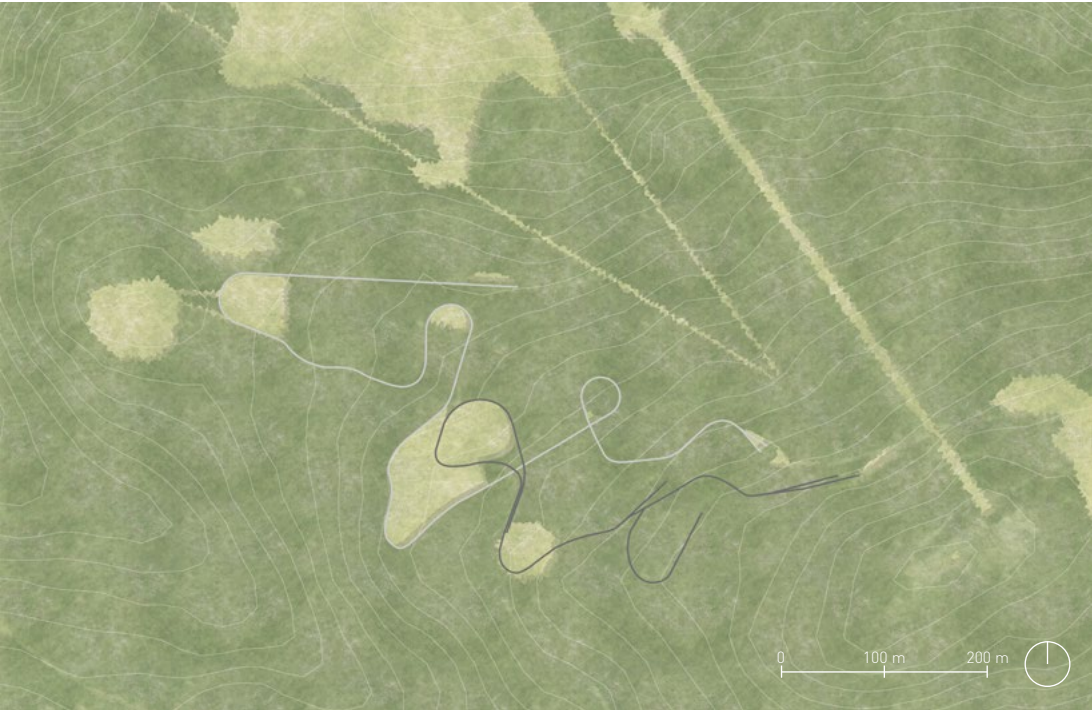
The tracks form the foundation for further design decisions.

Pathway network

The pathway network is based on the layout of the two bobsleigh tracks. To ensure that the new track is always accessible for maintenance and in case of accidents during competitions, a path has been created that follows the entire route of the new track, providing access to all its sections.

Originally, a path ran alongside the old track too to ensure access during competitions. Since no more competitions are held on the old track, it is now possible to modify this path. A path running directly next to the track offers little in terms of experience, so the new design alternates between areas close to and further away from the old track. This variation creates an engaging walk.

In addition to the two main paths, several smaller paths have been created. These secondary paths often run perpendicular to the main routes, clearly indicating which are the primary pathways through the area. The secondary paths connect interesting spots and link to the existing network of walking trails, ensuring the pathway system is fully integrated into the surrounding landscape.



■ Figure 101: Map which highlights both tracks in the design (2024).



■ Figure 102: Map which shows the pathway network in the design (2024).

Road network

The designed area must be easily accessible to various groups, including local communities, tourists, athletes, and visitors. Therefore, the area has been made accessible via multiple routes, with the most convenient options being by road or by lift from the city.

The most commonly used and environmentally friendly way to reach the area is the cable car, which takes visitors directly from the city to the area surrounding the bobsled tracks. This option reduces the need for parking and contributes to a more sustainable transportation system.

Additionally, the area is accessible by car, though only minimal adjustments have been made to the road network. The number of parking spaces remains the same as during the 1984 Winter Olympics, as the expected number of spectators is similar. The access routes to these parking areas are also unchanged, with entry points from the north and via the regional road from the south.

The only modification is the rerouting of the road that originally passed through the area. This change ensures that vehicle traffic is separated from other users of the site, improving both safety and accessibility.

Facilities

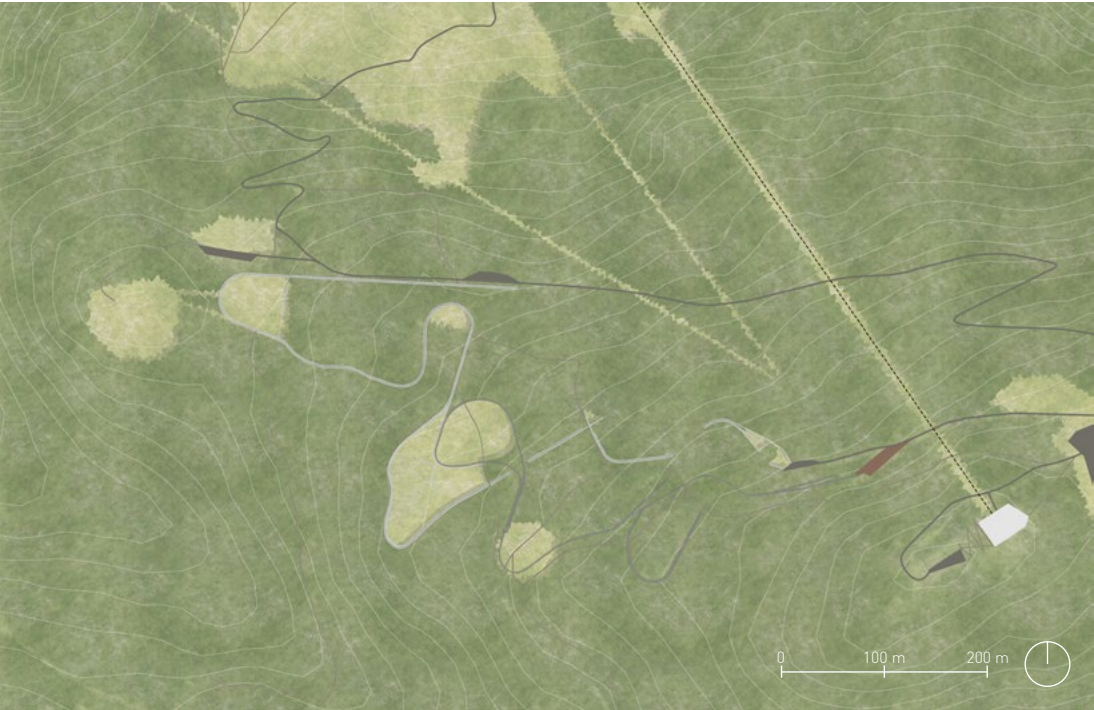
The facilities in the design are divided into two categories: cultural and sports facilities. Cultural activities are centered around the old track, while sports facilities are located near the new track.

Along the old track, there is a public museum and an amphitheater. These were chosen to showcase local culture—informally through the museum and more formally through performances in the amphitheater.

The location of these facilities was influenced by the shape of the track. The amphitheater, with its circular form, fits well within the final curve of the old track, while the museum and its garden are positioned in an open area near turn 5, where the track is fully visible.

Along the new bobsled track, various sports facilities are available, including a downhill mountain biking (MTB) trail, a sports hall, multifunctional sports fields, a BMX/skate park, and a playing area.

The downhill MTB trail runs alongside the bobsled track, keeping fast-moving bikers separated from other users of the area. The trail connects to an existing downhill path and starts near the highest point of the bobsled track, maximizing the elevation for an exciting biking trip. The start area also features rental services and the end station of the lift that transports athletes upward.



■ Figure 103: Map that shows accessibility of the design [2024].



■ Figure 104: Map that shows the facilities in the design [2024].

A bit further along the new bobsled track is the sports hall, primarily used for formal, organized sports activities. This hall is available year-round for a variety of sports, making it an important addition to the area’s sports facilities.

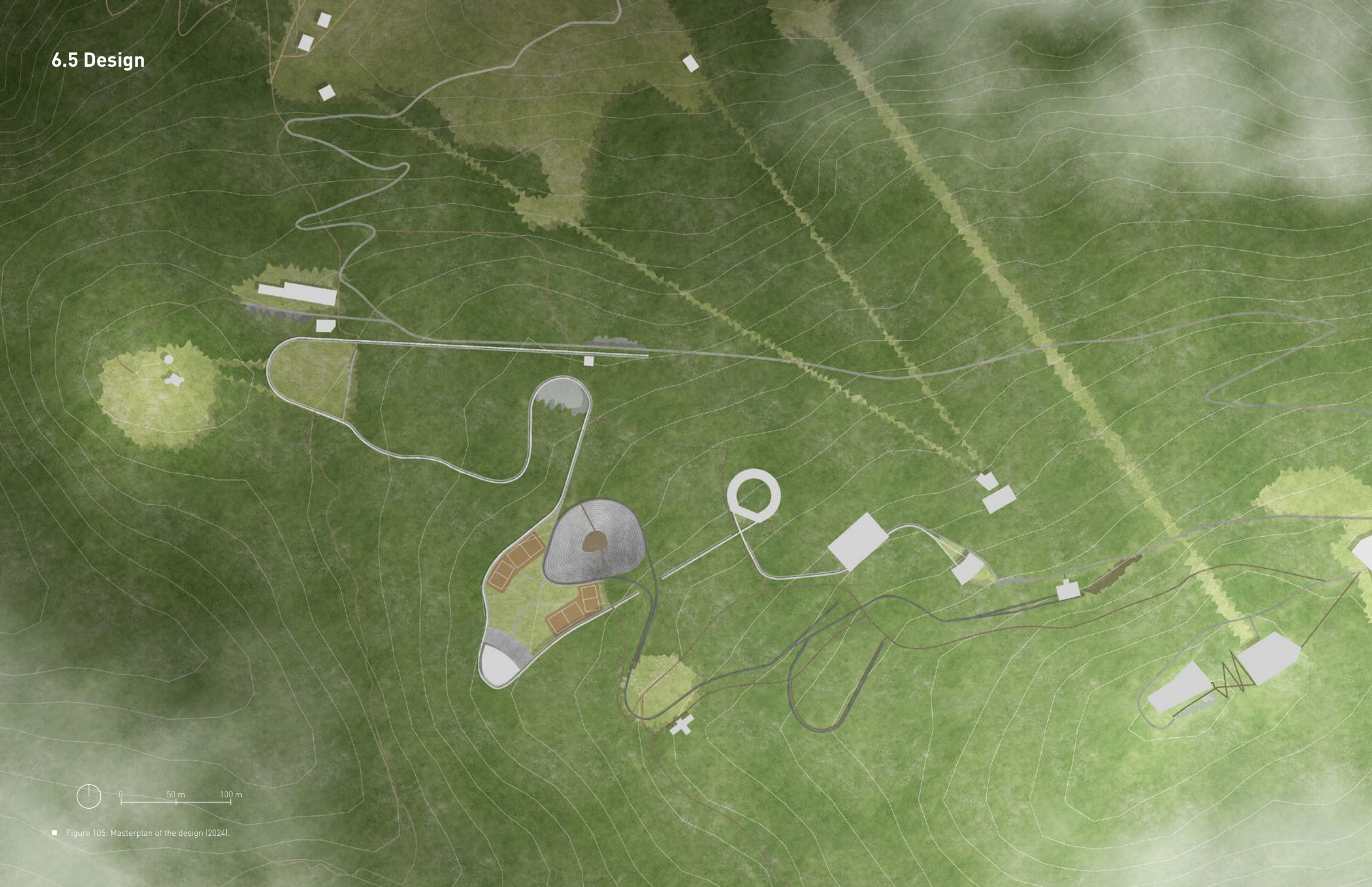
The sports fields are located on a relatively flat area along the track, requiring minimal modifications to the terrain. Since the old and new tracks converge at this spot, establishing a visual connection is important to link Sarajevo’s historical legacy with the restored and functional bobsled track. Therefore, an open facility that does not obstruct this visual relationship is desirable, making the sports fields a suitable choice for this location.

The decision to include a BMX/skate park was driven by the unique energy these sports convey, which complements the graffiti and concrete aesthetic of the existing track. The location for the BMX/skate park was strategically chosen near the 180-degree turn, as this area enhances the vibrant atmosphere.

In the final curve of the track lies the play area, providing an informal space for a variety of sports and recreational activities. The decision to place the play area here was influenced by the existing open atmosphere of this section, which naturally invites active engagement.

Together, all the sports facilities create diverse opportunities for various types of sports, ranging from formal organized activities to casual play. This inclusive design caters to individuals of all ages and is accessible throughout the entire year, fostering a vibrant community hub for physical activity and social interaction.

6.5 Design



■ Figure 105: Masterplan of the design [2024].

6.6 Zoom-in design

Open air Museum

The open-air museum at Mount Trebevic is designed to tell the history of the mountain and the bobsled track. This story is conveyed through information boards placed along the path leading to the museum building and garden (fig. 107), creating a cohesive narrative that culminates in a dedicated exhibition space.

The museum garden, an open space designed to emphasize the old bobsled track, creating a striking visual impact as the path emerges from a densely forested area. The garden will showcase larger artifacts, such as the Olympic rings and a bobsled that visitors can interact with. To reach these artifacts, a gravel path has been created which contrast with the taller surrounding vegetation, such as narrow small reed (*Calamagrostis acutiflora*). The neutral green tones of the garden are intentionally chosen to draw attention to the vibrant graffiti that covers the old bobsled track. The open space is further defined by surrounding Serbian spruce trees (*Picea omorika*), echoing the natural forest and the curved shapes of the bobsled track.

Visitors will also have access to the museum building, which will display photographs, stories, and smaller artifacts related to the bobsled track and its Olympic history.

Together, the museum building, garden, and surrounding paths create a dynamic space where visitors can experience both the natural beauty and the rich history of Mount Trebevic, highlighting the enduring legacy of the bobsled track in an engaging and interactive way.



■ Figure 106: Zoom in design of the open air museum [2024].



Narrow small reed
Calamagrostis acutiflora



Gravel



Serbian spruce
Picea Omorika



Copper



Figure 107: Visualisation the Open air museum [2024].

Amphitheatre

The amphitheater is designed to host theater, dance, and music performances that showcase the local culture of Sarajevo, as well as the broader traditions of Bosnia and Herzegovina. A unique feature of this amphitheater is that the inner curve of the old bobsled track will serve as the first tier of seating, making use of the track's natural shape to create a circular viewing area around a central stage.

The seating arrangement will consist of approximately 40 rows, each spaced one meter apart with a height difference of 25 centimeters between consecutive rows. This creates a total elevation difference of 10 meters between the highest seating point and the stage. Due to the varying height of the bobsled track, the elevation change between rows will differ around the stage, but the track will consistently serve as the first row of seating throughout the venue.

This design not only utilizes the historical structure of the bobsled track but also enhances the amphitheater's unique circular layout, providing an immersive viewing experience for performances. The amphitheater will serve as a cultural hub, bringing together local arts and traditions in a space that connects Sarajevo's past with its present, creating a lasting venue for community and cultural events.

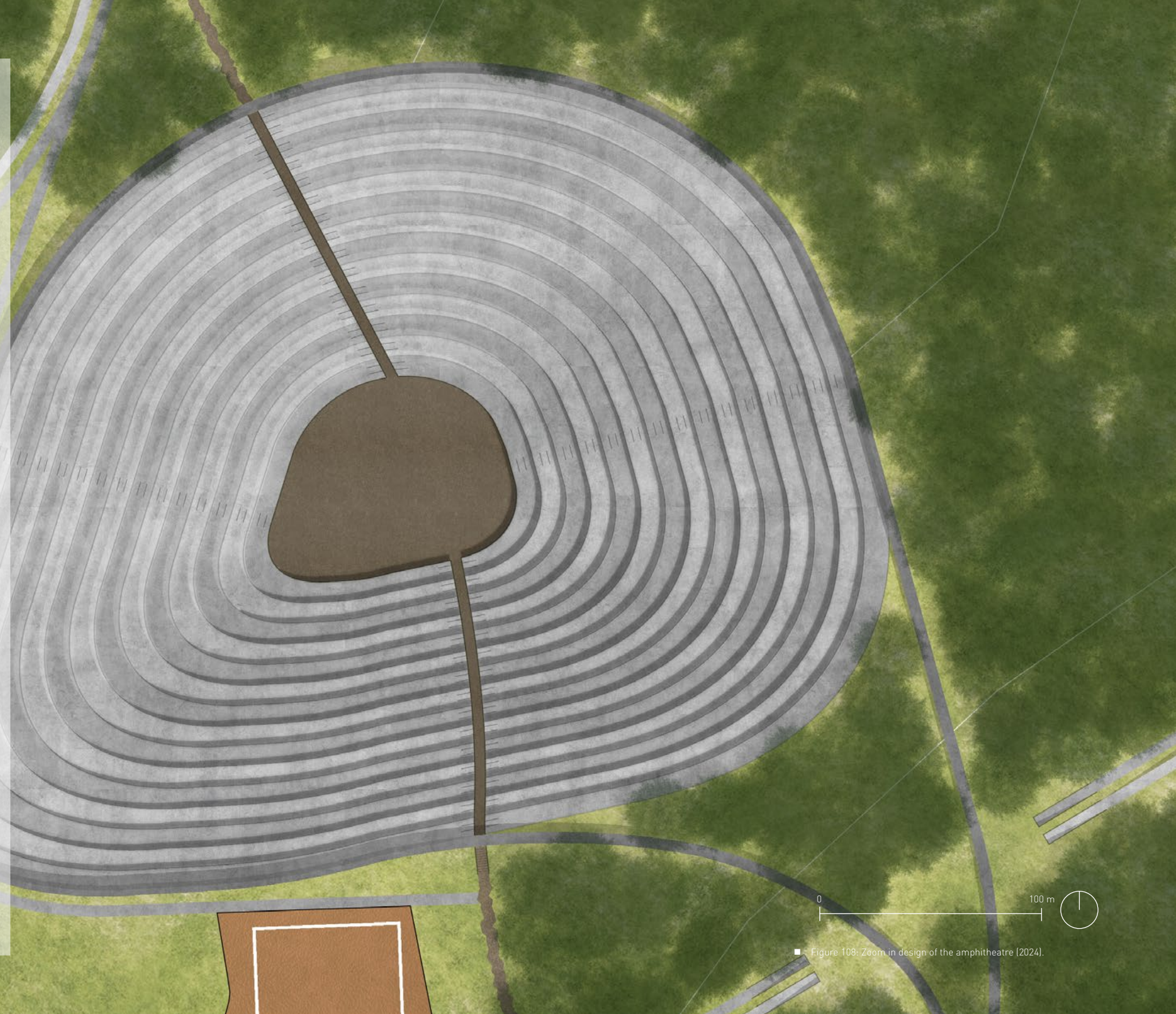


Figure 108: Zoom in design of the amphitheatre [2024].



Recycled concrete



■ Figure 109: Visualisation of the amphitheatre [2024]

Diorama garden

Unlike the amphitheater, this circular space is primarily outward-facing. The new bobsled track forms the outer structure of the building, which during competitions serves as a viewing area for invited guests. Here, they can enjoy the event while having refreshments from the on-site café, as they watch the bobsleds race at high speed, winding 270 degrees around the building.

When no competitions are taking place, the focus shifts to the building's inner courtyard. A fully glass interior wall offers a view into this enclosed garden, creating a "diorama" effect (fig. 110). The planting in this garden contrasts sharply with the monotony of the surrounding landscape dominated by spruce trees. Instead of uniform greenery, the garden will showcase a wide variety of colorful trees and plants that bloom throughout the year, attracting birds and insects and creating a vibrant, ever-changing atmosphere.

This dual-purpose space not only enhances the guest experience during competitions but also serves as a peaceful, nature-filled retreat during quieter times, blending function and aesthetic appeal in harmony with its surroundings.



■ Figure 109: Zoom in design of the diorama garden [2024].



■ Figure 110: Visualisation during autumn of the diorama garden (2024).

The planting of the Diorama Garden is guided by a series of carefully considered criteria. The selection process begins with an assessment of the soil type, the level of shade, and the frost tolerance of trees and shrubs. These factors generate a broad list of species that can thrive under these specific conditions. From this initial list, the focus narrows to native species that are commonly found in Sarajevo or across Bosnia and Herzegovina. Native plants are more likely to flourish in the local climate compared to exotic species.

Further refinement of the selection involves aesthetic and functional considerations such as the tree’s height, crown shape, flowering patterns, autumn foliage colors, and contribution to biodiversity. For instance, taller trees with open crowns, such as the wild service tree (*Sorbus torminalis*), help maintain a sense of lightness in the garden. In contrast, shorter trees with denser crowns, like the medlar (*Mespilus germanica*), add variety without overshadowing the space.

The planting plan is designed to ensure year-round visual interest. Different trees and shrubs bloom at various times, transitioning through a spectrum of colors (fig. 111). In spring, the yellow hues of Cornelian cherry (*Cornus mas*) dominate. By summer, white blossoms, such as those of the rowan tree (*Sorbus aucuparia*), take center stage. Autumn introduces vibrant shades of orange, red, and purple from species like the hawthorn (*Crataegus monogyna*). This dynamic palette not only creates a visually engaging landscape but also supports a diverse range of butterflies, birds, and bees throughout the year.

Ground cover is left to develop naturally, adapting to the garden’s varying light conditions. In shaded areas, ferns (*Dryopteris dilatata* and *Athyrix filix femina*) are expected to thrive, while woodland anemones (*Anemone nemorosa*) are likely to populate the sunnier spots. This approach embraces the organic interplay between the environment and plant growth.

Beyond the plant selection (fig. 112), the garden’s spatial design plays a crucial role in its appeal. To ensure an optimal viewing experience, the layout allows for different perspectives. High-canopy trees are placed along the edges, creating sightlines beneath their crowns to the shrubs beyond. Taller trees are positioned in the center, adding depth and a dynamic vertical element to the composition. This thoughtful arrangement results in a garden that is not only ecologically balanced but also spatially engaging.



■ Figure 111: Graphic that shows the dominant flowering color in the garden.

Nederlandse naam	Latijnse naam	Hoogte	Kroontype	Bloemen	Bloeimaand	Herfstkleur	Ecologische waarde
Bomen / Heesters							
Elsbes	<i>Sorbus torminalis</i>	10-20m	rond, open kroon	Wit	Mei	Rood, purper	Drachtboom voor bijen, vogels en vlinders
Gele kornoelje	<i>Cornus mas</i>	5-6m	breed eirond tot rond, dichte kroon, grillig groeiend	Geel	Februari	Geel, oranje	Voedselboom voor vogels
Gewone vogelkers	<i>Prunus padus</i>	8-15m	breed eirond, halloopen kroon	Wit	April		Drachtboom voor bijen, vogels en vlinders
Lijsterbes	<i>Sorbus aucuparia</i>	10-15m	breed eirond, halloopen kroon	Wit	Mei	Geel, oranje, rood	Drachtboom voor bijen, vogels en vlinders
Meidoorn	<i>Crataegus monogyna</i>	5-8m	rond/bobvormig, halloopen kroon, grillig groeiend	Wit	Mei	Geel, oranje, rood, purper	Drachtboom voor bijen, vogels en vlinders
Mispel	<i>Mespilus germanica</i>	4-8m	aigekplat bolvormig, dichte kroon, grillig groeiend	Wit	Mei	Geel	Drachtboom voor bijen en vogels
Wilde appel	<i>Malus sylvestris</i>	7-9m	rond, onregelmatig, halloopen kroon, grillig groeiend	Lichtroze tot wit	Mei		Drachtboom voor bijen, vogels en vlinders
Wilde liguster	<i>Ligustrum vulgare</i>	3-5m	vaasvormig, dichte kroon	Wit	Juni - Juli		Drachtboom voor bijen en vogels
Zachte lerk	<i>Betula pubescens</i>	15-20m	onregelmatig ovaal, halloopen kroon	Geelgroen	April	Geel	Waardboom voor vlinders
Onderbegroeiing							
Bosanemoon	<i>Anemone nemorosa</i>	10-25cm	Hallschaduw tot schaduw	Wit, lichtroze	Maart - Mei		Belangrijk voor bijen
Brede stekelvaren	<i>Dryopteris dilatata</i>	40-120cm	Schaduwrijke plekken			Bruin	Habitat voor kleine dieren en insecten
Wijfjesvaren	<i>Athyrium filix-femina</i>	50-120cm	Hallschaduw tot schaduw			Geel tot bruin	Schuilplaats en voedselbron voor insecten

■ Figure 112: Planting table Diorama garden

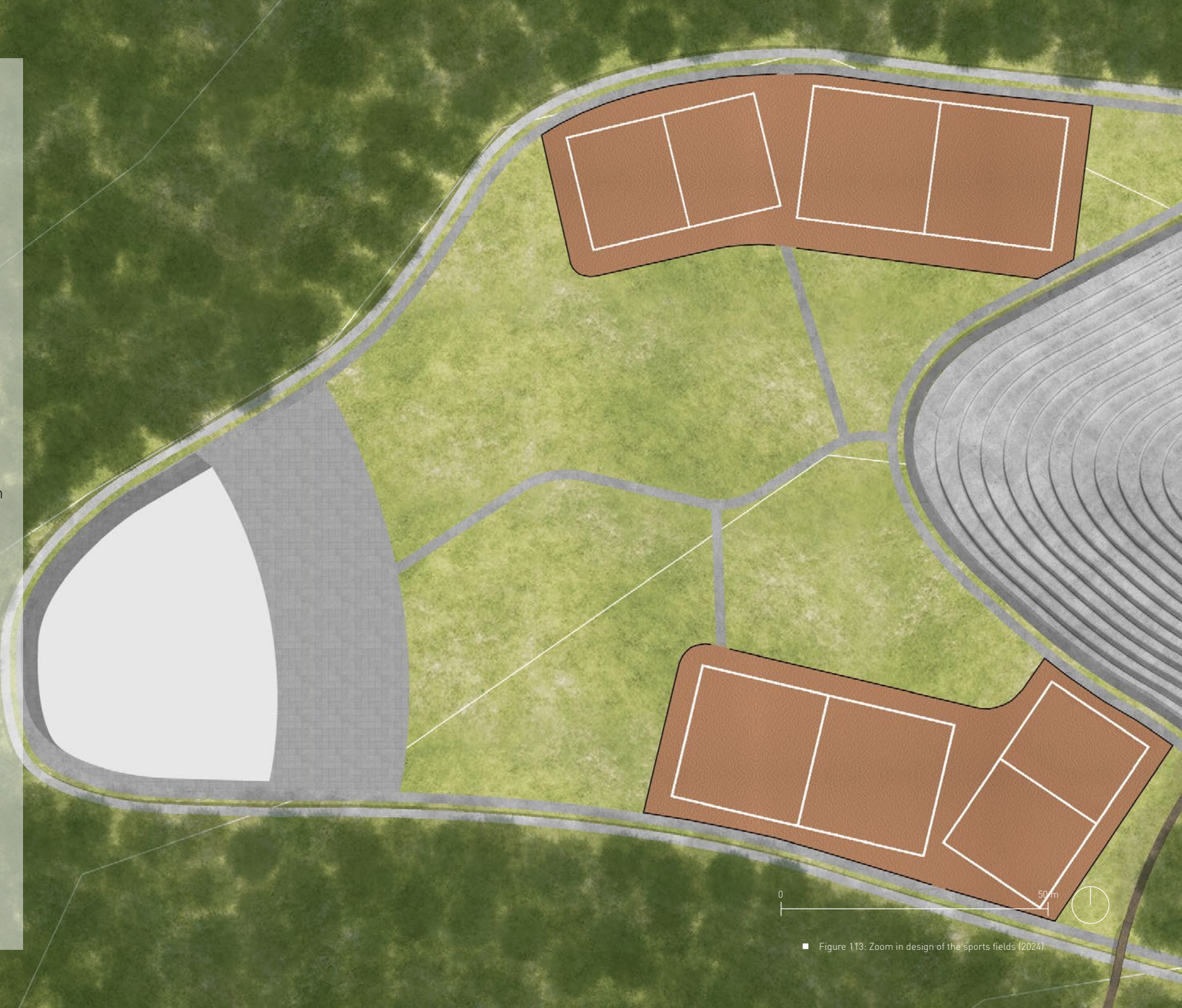
Sports fields

The sports fields are situated in this area because it is relatively flat, it only has a gentle slope towards the amphitheatre, which helps create a visual connection between the old track—representing history, culture—and the new track—symbolizing the future. To preserve this visual relationship, the space has been kept open.

The design features multifunctional sports fields, primarily focused on team sports like basketball and football, which are the most popular sports in Bosnia and Herzegovina. These fields have a resin-coated surface, a material commonly used for sports fields because of its durability, weather resistance, and ability to provide a consistent playing surface (Superfici Moderne, 2023). To avoid visual pollution, these fields are positioned on the side of the area, easily accessible from the main path.

The sports fields are supported by a nearby building. This facility includes changing rooms, a restaurant, a terrace and a flexible space that can be converted into a meeting or press room for events or informational sessions.

Together, the combination of multifunctional sports fields and the supporting facility allows for both informal activities, such as playing sports with friends, and organized events or tournaments, where the building can serve as a central hub for coordination. This fosters both casual recreation and formal competitions, making it a versatile addition to the area.



■ Figure 113: Zoom in design of the sports fields (2024).



Asphalt path

Resin coated
sports field

BMX - Skatepark

The BMX/skate park is designed to integrate with the natural shape of the bobsled track, utilizing its curves to form the skate pit. To emphasize the site's history and restoration, parts of the old bobsled track are incorporated into the design. The high curve from the outside of the old track is repurposed within the skate park (fig. 116). This creates a striking contrast between the old, graffiti-covered concrete and the new, smooth surfaces, perfectly matching the urban vibe of a BMX/skate park.

The small vertical wall from the old track is also repurposed as seating along the edge of the park, blending functionality with the historical aesthetic. The skate park connects to one of the existing paths that crosses the new bobsled track, ensuring easy access for users.

By combining the past and present, the BMX/skate park offers a unique recreational space that honors the area's legacy while providing a fresh, modern venue for sports.



■ Figure 115: Zoom in design of the bmx/skatepark (2024).



Concrete skatepark

Concrete new track

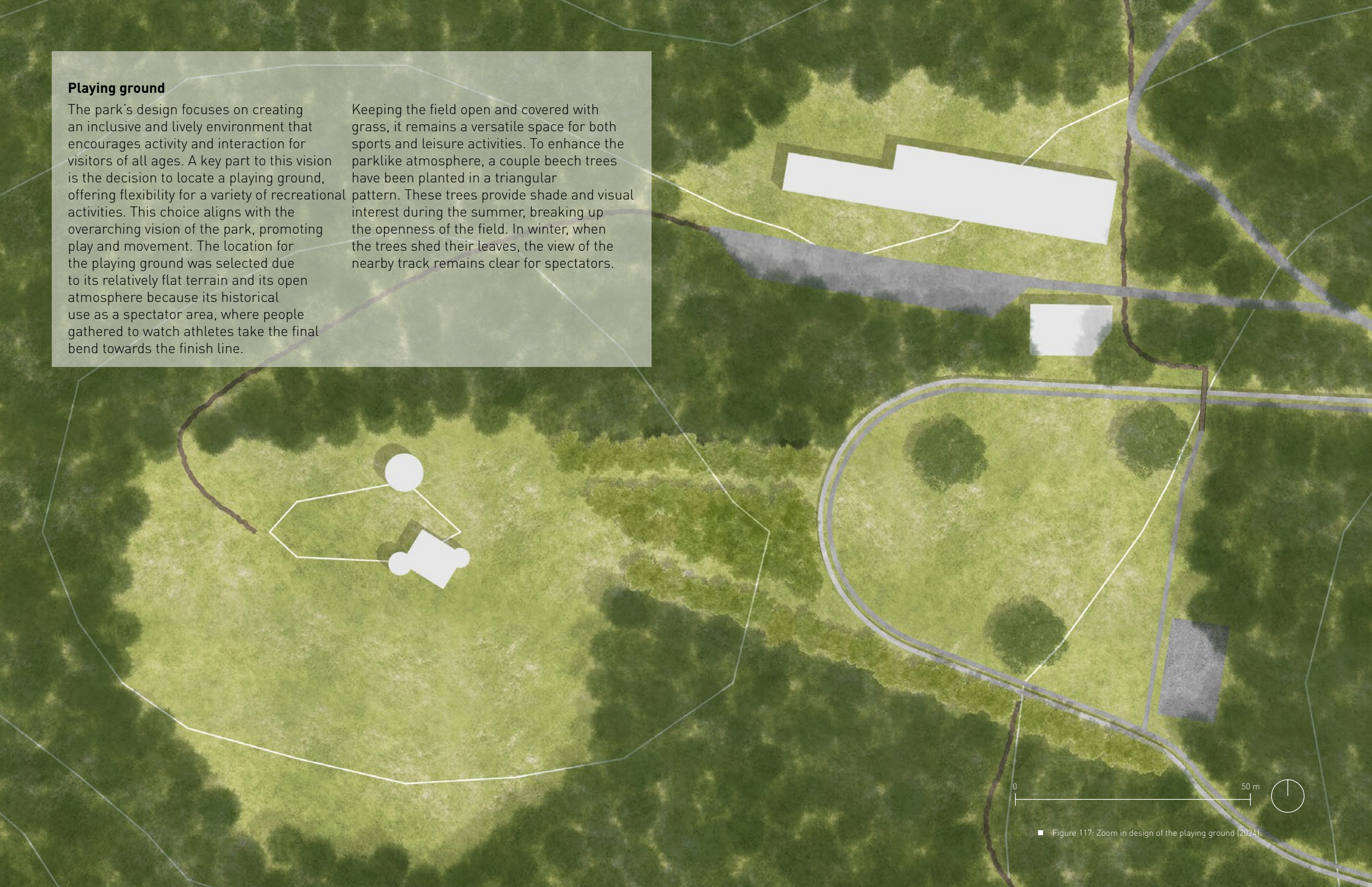
Concrete old track

■ Figure 116: Visualisation of the bmx/skatepark (2024)

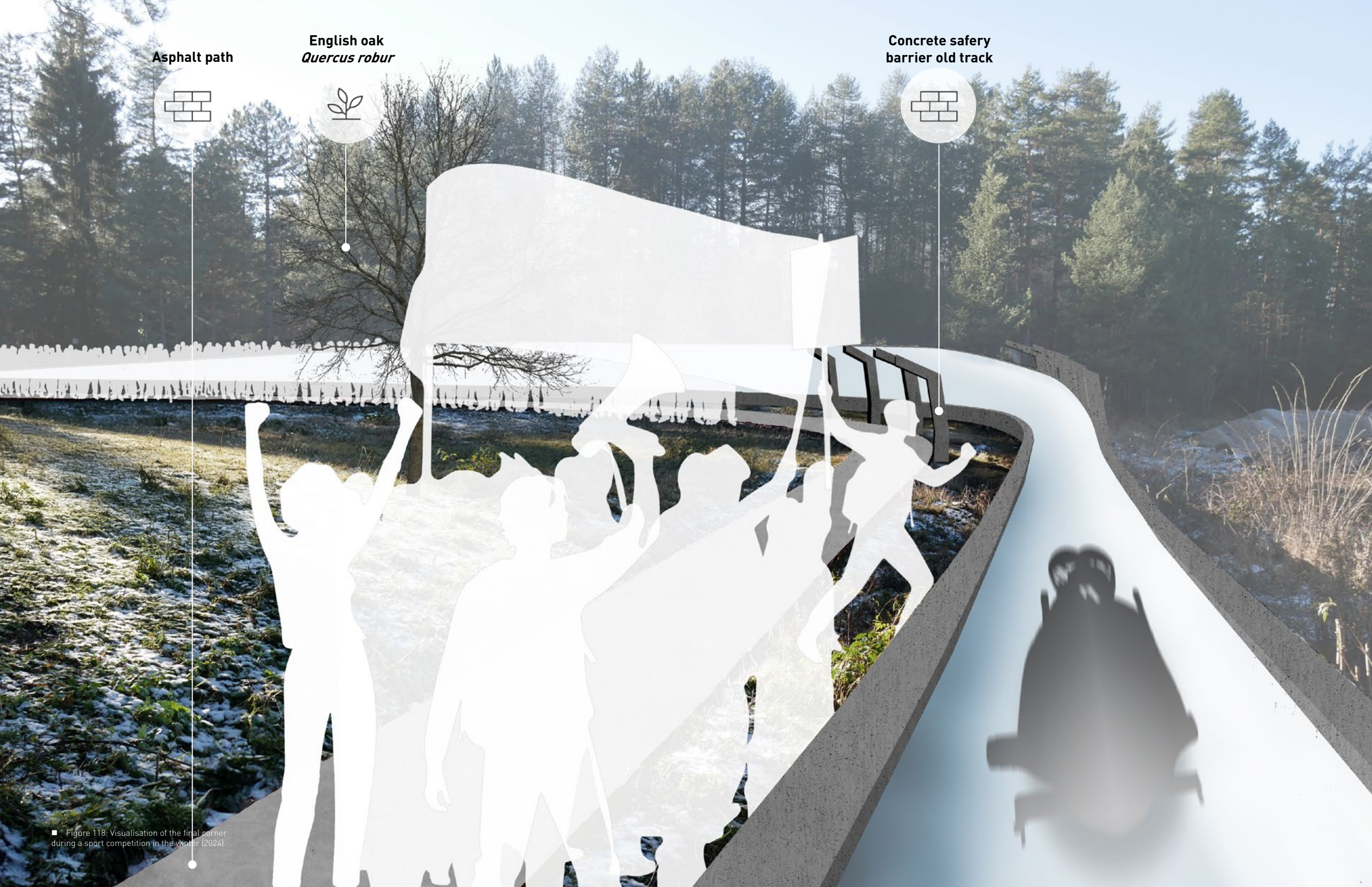
Playing ground

The park’s design focuses on creating an inclusive and lively environment that encourages activity and interaction for visitors of all ages. A key part to this vision is the decision to locate a playing ground, offering flexibility for a variety of recreational activities. This choice aligns with the overarching vision of the park, promoting play and movement. The location for the playing ground was selected due to its relatively flat terrain and its open atmosphere because its historical use as a spectator area, where people gathered to watch athletes take the final bend towards the finish line.

Keeping the field open and covered with grass, it remains a versatile space for both sports and leisure activities. To enhance the parklike atmosphere, a couple beech trees have been planted in a triangular pattern. These trees provide shade and visual interest during the summer, breaking up the openness of the field. In winter, when the trees shed their leaves, the view of the nearby track remains clear for spectators.



■ Figure 117: Zoom in design of the playing ground [2024].



Asphalt path



English oak
Quercus robur



Concrete safety
barrier old track



■ Figure 118: Visualisation of the final corner during a sport competition in the winter (2024).

The site features an old podium used for award ceremonies during past sports competitions. This podium will be restored for future events during the winter. A clean and formal backdrop behind the podium is created with a row of spruce trees, harmonizing with the existing forest landscape. The choice of beech and spruce trees, native species, also contributes to the preservation and enhancement of local biodiversity

Supporting the park's functionality is a small building that houses the cooling system for the bobsled track, a nod to its role during the 1984 Winter Olympics. This facility will be restored to its original function. In addition, a larger building will be repurposed, with the lower level serving as a technical house and storage for the bobsled track equipment, as it did during the Olympics. The upper floor will be transformed into a restaurant or café, offering a place for visitors to relax with food or drinks. Due to its position at the beginning or end of a visitor's journey through the park, depending on their direction of arrival, this café will serve as a welcoming and practical amenity

Next to the sports field, there is a viewpoint. From this point, visitors can also enjoy stunning views of Sarajevo, particularly from Bistrik Kula, an abandoned defense tower dating back to the Austro-Hungarian period. Although damaged during the Bosnian War, the tower remains accessible and offers a panoramic view of the city.

To draw attention to this viewpoint, two sightlines have been established from the path alongside the bobsled track, guiding visitors toward the tower. These sightlines are accentuated by the planting of columnar European beech trees (*Fagus sylvatica* 'Dawyck gold') (fig. 122), which stand out with their towering height of around 25-30 meters, just surpassing the surrounding vegetation, mostly composed of spruce trees.



■ Figure 119: Section which shows the viewline towards Bistrik Kula (2024).

6.7 Design conclusion



Design objectives

This map summarizes the specific design objectives for each area, ensuring that together they contribute to achieving the overall goals for restoring an Olympic landscape. The objectives which are not mentioned are captured across the whole the design, but not specific in one of the zoom-in areas.

Physical landscape:

1. The design provides sufficient sports facilities.
2. The design offers supporting infrastructure for sports facilities.
3. The design preserves and protects the natural features of the landscape.
4. The design is climate- and weather-resistant.
5. The design ensures effective and user-friendly accessibility.
6. The design provides adequate accommodations and amenities.

Cultural landscape

7. The design reflects the identity and spirit of the Olympic Games.
8. The design protects and highlights the local heritage and history.
9. The design supports arts and cultural programs that promote local culture.

Social landscape

10. The design encourages local communities and residents.
11. The design promotes social interactions (among diverse population groups).
12. The design is socially inclusive.

■ Figure 120: Map which shows the design objectives captured across the design (2024).

Large scale: Sarajevo Olympic landscape

The redesign of Sarajevo’s abandoned bobsleigh track carries significance far beyond its immediate surroundings. It has the potential to become a catalyst for hosting a major sporting event, such as the Youth Olympic Games (YOG) in 2028 or 2032, an ambition Sarajevo has expressed interest in. Conversely, the prospect of hosting such an event provides motivation to restore and modernize the bobsleigh track, creating a mutually reinforcing relationship between the project and the city’s broader aspirations.

The design influences various aspects of Sarajevo on a larger scale, aligning well with the objectives of revitalizing the city and preparing it for future opportunities.

Restoration and Modernization of Infrastructure:

Many facilities built for the 1984 Winter Olympics, including the bobsleigh track and the ski jumps on Mount Trebević, have suffered destruction or neglect due to the war and subsequent economic struggles. A renewed Olympic initiative could secure funding to renovate these historic sites. Such efforts would not only support the YOG 2032 but also enhance local tourism and revitalize the region’s sports culture.

Economic Boost and Employment

Hosting an international event like the YOG would stimulate Sarajevo’s economy by attracting visitors, investments, and international support. Preparation for the games would generate jobs in construction, tourism, hospitality, and other sectors, providing tangible benefits to the city’s residents and strengthening its economic foundation.

International Reputation and Tourism Growth

Sarajevo once held a reputation as a vibrant, multicultural city, demonstrated by its successful hosting of the 1984 Winter Olympics. However, the war and its aftermath have impacted this image. Organizing the YOG would offer Sarajevo a chance to reclaim its place on the global stage, showcasing a city that has moved past its turbulent history toward renewal and peace. This effort would attract tourists, sports enthusiasts, and media attention, enhancing Bosnia and Herzegovina’s reputation as a safe and welcoming destination.

Olympic Heritage and Values

Reviving the Olympic spirit would reconnect Sarajevo’s youth and community with the values of the Olympic movement—friendship, respect, and excellence. The YOG, with its focus on younger generations, could inspire a new wave of Bosnian athletes while reinforcing the local sports culture. Furthermore, workshops and educational initiatives could promote youth engagement in sports and overall well-being, leaving a lasting legacy.

Symbolism and Reconciliation

For a city deeply scarred by war, hosting the Olympics again carries profound symbolic meaning. It would represent resilience, recovery, and a forward-looking vision. The YOG’s emphasis on friendship and collaboration could foster reconciliation among Sarajevo’s diverse communities, offering a shared goal that unites rather than divides.

The organization of the Youth Olympic Winter Games in Sarajevo in 2032 would represent a pivotal moment for the city, revitalizing its Olympic heritage while projecting its resilience and ambition to the world. Beyond the sports arena, this project promises economic, cultural, and social benefits, bridging the gap between a painful past and a hopeful future.

The bobsleigh track’s redesign plays a crucial role in this vision. It supports both the physical restoration of Sarajevo’s Olympic legacy and the creation of modern sports facilities. These enhancements could invigorate sports tourism and local athletic culture while introducing Sarajevo’s youth to winter sports like bobsleigh, luge, and skeleton—sports currently inaccessible due to a lack of infrastructure. Through this design, the city takes a significant step toward reclaiming its place on the global stage while building a brighter future for its residents.

The map on the next page shows the effects of the design, and the possible organisation of the YOG, on the larger scale divided into the three layers of an Olympic landscape: the physical landscape, social landscape and cultural landscape.

Physical landscape

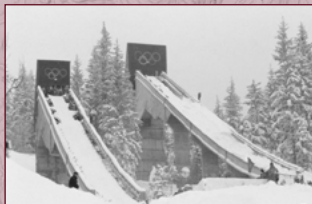
Renovation bobtrack



Construction new Olympic village



Renovation ski jumps



New sport facilities - Sports hall Peki



New sport facilities - Dvorista ski centre



Social landscape

Reconciliation between population groups



Introduce youth to sports



Employment for the citizens



Investments in sport competitions and facilities



Cultural landscape

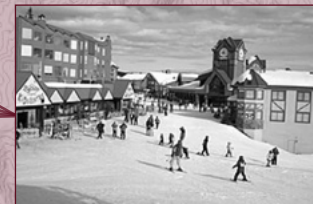
Symbol for resilience



Share culture of Sarajevo



Increase in (winter - sport) tourism



07

Conclusion

This chapter presents the conclusion of the thesis, answering the main research question: "How can landscape architecture contribute to the revitalization of the Olympic landscape of Sarajevo?"

I then reflect on the research and process, addressing the sixth sub-research question: "How does the design contribute to the revitalization of the Olympic landscape of Sarajevo?"

- 7.1 Conclusion
- 7.2 Reflection

7.1 Conclusion

In 1984, Sarajevo experienced a moment of international glory when it hosted the Winter Olympics. The Games symbolized unity, optimism, and the city’s ability to connect with the global community. However, just eight years later, Sarajevo faced a tragic downfall. The outbreak of the Bosnian War in 1992 shattered the harmony the city had displayed during the Olympics. Sarajevo, which had been celebrated for its multicultural unity, endured a siege that lasted more than three and a half years. During this time, much of the city, including its Olympic infrastructure, was destroyed. This dramatic shift from a symbol of international cooperation to a site of destruction and division forms the foundation of the problem explored in this thesis.

The aim of this thesis is to contribute to the revitalization of Sarajevo’s Olympic landscape, with a focus on the bobsleigh track, which has become a symbol of Sarajevo due to its significance during the Games and the subsequent war. This restoration seeks to go beyond merely rebuilding physical structures, aiming instead to restore the social, cultural, and historical significance of the area. The central research question guiding this thesis is: How can landscape architecture contribute to the revitalization of the Olympic landscape of Sarajevo? To address this, six sub-research questions have been formulated to explore different aspects of the Olympic landscape and its revitalization.

1. What is an Olympic landscape?

An Olympic landscape encompasses the physical, social, and cultural environments shaped by the Olympic Games. The physical aspects include the natural setting, sports venues, and urban infrastructure. The social landscape involves communities, interactions, and social inclusion, while the cultural landscape reflects the traditions, heritage, and symbolic values associated with the Games.

2. What did the Olympic landscape of Sarajevo in 1984 entail?

In 1984, the Olympic landscape of Sarajevo was not only defined by its sports facilities in the city and the surrounding mountains but also by its vibrant cultural atmosphere. The Winter Games brought global attention to Sarajevo, showcasing its rich history and diverse culture. More than just a sporting event, the Olympics fostered a sense of unity and international recognition for the city. The Games united different ethnic groups within Yugoslavia, symbolizing hope and cooperation amidst growing political tensions.

3. What is the current state of the Olympic landscape of Sarajevo after a period of destruction and recovery?

The current state of the Olympic landscape in Sarajevo reflects a story of transformation after a period of destruction. During the siege, not only were the physical structures of the Olympic facilities, which previously symbolized pride and sportsmanship, destroyed, but the associated cultural and social values were also lost. Although most of these facilities have now been restored and evoke memories of the joy of the 1984 Olympic Games, the city continues to struggle with social tensions and cultural divisions. What was once a symbol of unity and cooperation now reflects the ongoing struggle for identity. The challenge lies in bridging this divide, fostering a sense of community, and reviving the Olympic spirit in a way that transcends ethnic differences.

4. What design objectives and strategies can be derived from the analysis of the Olympic landscape of Sarajevo?

Based on the analysis of Sarajevo’s Olympic landscape, several design objectives emerged, organized into three categories: physical, social, and cultural. The physical objectives include the implementation of sports facilities and protecting the natural environment. The social goals focus on fostering community interaction and social inclusion, while the cultural objectives aim to preserve the city’s heritage and reflect the Olympic spirit of unity.

5. How can the design strategies be applied to the design site?

The chosen site for revitalization is the abandoned bobsleigh track on Mount Trebević, a location that holds historical significance from both the 1984 Olympics and the subsequent war. The design strategies are applied here to blend sports facilities and cultural activities, within the overarching social theme of bringing people together. The plan envisions a site where sport and culture coexist, offering spaces for athletic events as well as cultural gatherings, symbolizing Sarajevo’s ability to bridge its past and future.

6. How does the design contribute to the revitalization of the Olympic landscape of Sarajevo?

The design reimagines the Olympic landscape by restoring its physical infrastructure, such as the bobsleigh track, while also enhancing its cultural and social dimensions. By creating spaces for community interaction and preserving historical elements, the design fosters a renewed sense of unity in Sarajevo. The project aims to transcend the city’s ethnic divisions, reviving the Olympic spirit that once brought together diverse communities.

To conclude, the revitalization of Sarajevo's Olympic landscape, explored through the lens of landscape architecture, shows that the restoration of such a space requires more than just rebuilding physical structures. It involves reconnecting the city with its cultural and social heritage. By integrating sports facilities with cultural programs and fostering social inclusion, the design contributes to a holistic revival of the Olympic landscape of Sarajevo. The restoration of the bobsleigh track, in particular, stands as a symbol of the city's resilience and its potential for unity, blending history with modern functionality. Ultimately, landscape architecture can serve as a useful method in not only restoring Sarajevo's physical landscape but also in providing a space that could heal the social and cultural scars left by war, helping the city reclaim its identity as a symbol of peace and cooperation.



7.2 Reflection

I started my project with a clear problem in mind: Olympic facilities that fall into disrepair after the games are over. This issue was evident at the bobsled track in Sarajevo, which has been left abandoned since the 1984 Winter Olympics. However, simply restoring the bobsled track didn't seem like enough. The problem is much larger; it involves the entire Olympic landscape and the social and cultural elements connected to it.

Analyzing the broader context of Sarajevo's Olympic landscape, helped me understand the significance of the site. The goal became clear: I needed to develop a redesign that not only addressed the bobsled track but also revitalized the surrounding area.

This project can serve as an example in a wider context. The redesign of the bobsled track is part of a complex issue that still requires a lot of work, both physically and socially. During my thesis, I faced challenges in clearly defining the problem. It was tough to turn the idea of restoring the Olympic spirit into a tangible goal, it was too vague for effective design objectives.

To make the process easier, I created a structured framework for the Olympic landscape. This helped clarify the connections between the analysis, the design goals and the final design. The lessons learned here can be applied beyond Sarajevo to other places where Olympic landscapes have been damaged for various reasons.

The design aims to benefit society as well. While it physically restores an element of the Olympic landscape, it also works to regain a sense of community, as described in the Olympic values. However, the role of a landscape architect has its limits. A landscape architect can repair the physical aspects of the Olympic landscape, but for social and cultural recovery, the design can only create opportunities for gathering and emphasize unity.

This research focuses on that very role of the landscape architect. With this design, I aim not only to restore the bobsled track but also to contribute to the revival of the entire Olympic landscape, including its social and cultural values. By addressing the bigger picture, I hope to create a space that fosters community spirit and celebrates the rich heritage of Sarajevo.

References

Literature

Arbutina, Z. [2024, February 10]. 1984 Winter Olympics: When the world came to Sarajevo. Dw.com; Deutsche Welle. <https://www.dw.com/en/1984-winter-olympics-when-the-world-came-to-sarajevo/a-68203443>

Bell, M. [2013]. For Whom the Bell Talls: Light and Dark Verse. Icon books Ltd.

Bollens, S. A. [2007]. Cities, Nationalism, and Democratization. Routledge.

Buric, A. [2015]. SARAJEVO 1984 WINTER OLYMPICS. The ice of the past, the warmth of optimism and what came after.

Heco, F. [2008]. BLOKADA I OPSADA GRADA SARAJEVA. Sarajevo: Institut za istrazivanje zlocina protiv covjecnosti.

Hukic, E., & Klaric, S. [2018, February]. Bridging the gap with a common landscape: Sarajevo’s Trebević Mountain.

Husaric, Z. [1984]. U znaku Sarajeva. Kako su xiv zimske olimpijske igre opisane u jugoslovenskoj stampi i JRT (p. 39). Sarajevo: Organizacioni komitet XIV zimskih olimpijskih igara.

Husukic, E., & Zejnilovic, E. [2023]. SPACES OF WAR, MEMORY AND IMAGINATION, Sarajevo 1984 Olympic Games.

Ibrahim Sofić. [2024, February 6]. Jure Franko o Igrama '84: Sarajevo je ujedinilo svijet. Al Jazeera Balkans. <https://balkans.aljazeera.net/teme/2024/2/6/jure-franko-o-igrama-84-sarajevo-je-ujedinilo-svijet>

International Olympic Committee. [2021, October 16]. Youth Olympic Games. International Olympic Committee. <https://olympics.com/ioc/youth-olympic-games>

IOC. [2009]. Factsheet Youth Olympic Games. IOC.

IOC. [2018, April 24]. Sarajevo 1984 Winter Olympics - Athletes, Medals & Results. Olympics.com. <https://olympics.com/en/olympic-games/sarajevo-1984>

IOC. [2020a, December 17]. Sarajevo 1984 Olympic logo, poster design & look of the games. Olympics.com. <https://olympics.com/en/olympic-games/sarajevo-1984/logo-design>

IOC. [2020b, December 17]. Sarajevo 1984 Olympic Mascot - Photos and History. Olympics.com. <https://olympics.com/en/olympic-games/sarajevo-1984/mascot>

IOC. [2020c, December 17]. Sarajevo1984 Olympic Torch Relay - Highlights. Olympics.com. <https://olympics.com/en/olympic-games/sarajevo-1984/torch-relay>

IOC. [2024a]. Jure FRANKO. Olympics.com. <https://olympics.com/en/athletes/jure-franko>

IOC. [2024b]. Olympic Charter. <https://stillmed.olympics.com/media/Document%20Library/OlympicOrg/General/EN-Olympic-Charter.pdf#page=22>

Jalbert Production. [2019]. SARAJEVO '84 the best Olympic Winter Games ever - Documentary. www.youtube.com/watch?v=VGocsDtpu7w

Jovanovic, Z. [2021]. A Cultural History of the 1984 Winter Olympics: The Making of Olympic Sarajevo. Cham: Palgrave Macmillan.

Kurtic, A. [2024, February 8]. Winter Glory: Sarajevans’ Bittersweet Memories of the 1984 Olympics. Balkan Insight. <https://balkaninsight.com/2024/02/08/winter-glory-sarajevans-bittersweet-memories-of-the-1984-olympics/>

Lampe, J. R., Malcolm, N. R., & Pickering, P. [2018]. Bosnia and Herzegovina | Facts, Geography, History, & Maps. In Encyclopædia Britannica. <https://www.britannica.com/place/Bosnia-and-Herzegovina>

Livingstone, R. [2023, September 27]. Bosnia and Herzegovina preparing bid to host Youth Olympic Games - GamesBids.com. GamesBids. <https://gamesbids.com/eng/youth-olympic-bids/bosnia-and-herzegovina-preparing-bid-to-host-youth-olympic-games/>

Luiten, E., & Cattoor, B. [2023, October 27]. Strategy, Methods & Techniques. Brightspace. <https://brightspace.tudelft.nl/d2l/le/content/594324/viewContent/3551471/View>

McEvoy, J., & O’Leary, B. [2013]. Power Sharing in Deeply Divided Places. University of Pennsylvania Press.

Metych, M. [2024, September 1]. Sarajevo | History, Population, & Facts. Encyclopedia Britannica. <https://www.britannica.com/place/Sarajevo>

Moll, N. [2015]. An Integrative Symbol for a Divided Country? Commemorating the 1984 Sarajevo winter Olympics in Bosnia and Herzegovina from the 1992–1995 War until Today. Croatian Political Science Review, 51[5].

Niebyl, D. [2020, August 29]. The Architectural Legacy of Sarajevo’s ‘84 Winter Olympics. Spomenikdatabase. <https://www.spomenikdatabase.org/post/the-architectural-legacy-of-sarajevo-s-84-winter-olympics>

Office of the Historian. [2019]. The Breakup of Yugoslavia, 1990–1992. State.gov. <https://history.state.gov/milestones/1989-1992/breakup-yugoslavia>

Olimpijski komitet Bosne i Hercegovine. [2019]. EYOF 2019 Sarajevo and East Sarajevo - Olympic Committee of Bosnia and Herzegovina. Okbih.ba. <https://okbih.ba/en/text/eyof-2019-sarajevo-and-east-sarajevo/77>

Organizing Committee of the XIV Wlnter Olympic Games 1984 in Sarajevo. [1984]. Final Report: Sarajevo ‘84. Oslobođenje.

Parks Dinarides. [2023, July 26]. Protected landscape Trebević - Parkovi Dinarida. Parkovi Dinarida. <https://parksdinarides.org/en/protected-landscape-trebevic/>

RFE / RL’s Balkan Service. [2023, December 21]. Sarajevo Tops List As World’s Most Polluted City Amid Choking Smog. RadioFreeEurope/RadioLiberty. <https://www.rferl.org/a/sarajevo-tops-list-most-polluted-city-amid-choking-smog-/32741485.html>

Rhenicer, R., & Hrisafovic, M. [1989]. Planning Preperations for the Perimetry Landscaping of the XIV WOG Sarajevo 84. Arhitektura I Urbanizam, 94-95, 7–11.

Ruimte met Toekomst - Lagenbenadering. [2014, August 11]. Ruimtexamlieu.nl. <http://www.ruimtexamlieu.nl/wiki/ontwikkelconcepten/lagenbenadering>

Skoko, B. [2024]. What Croats, Bosniaks and Serbs think of each other and what do they think about BH. https://www.bozskoko.com/english/detalji-vijesti_14/what-croats-bosniaks-and-serbs-think-of-each-other-and-what-do-they-think-about-bh_253/

Superfici Moderne. [2023]. Resin flooring for sports. Superficimoderne. <https://superficimoderne.it/en/projects/resin-floor-surfaces-for-sports/>

Swift, J. [2022, July 5]. Siege of Sarajevo | Description & Facts | Britannica. www.britannica.com/event/Siege-of-Sarajevo

E. Taverne, S. Dembski, L. de Klerk, B. Ramakers. [2012]. Greep op de stad. Nederland stedenland, Continuïteit en vernieuwing. Rotterdam. 9-20.

The Press Village of Dobrinja. [1989]. Arhitektura I Urbanizam, 94-95, 56–57.

These abandoned Olympic venues look so sad. [2022, January 24]. www.cbsnews.com/pictures/abandoned-olympic-venues-sites/

Troncotă, M. [2015]. Sarajevo - a border city caught between its multicultural past, the Bosnian war and a European future. Eurolimes, 19, 119–138. <https://www.ssoar.info/ssoar/handle/document/46465>

Trumic, A., & Wenzler, F. (n.d.).

Van den Berk Boomkwekerijen. [2024]. Bomen. Van Den Berk Boomkwekerijen. <https://www.vdberk.nl/bomen/>

westnyacktwins. [2011, December 26]. 1984 Winter Olympics - Four-man Bobsled Run 1 Part 2. YouTube. <https://www.youtube.com/watch?v=93Pza8npwYg>

Winter Olympics History. [2021, November 4]. History. <https://www.history.com/topics/sports/winter-olympics-history>

Zejnilovic, E., & Husukic, E. (n.d.). Sarajevo Memories - the City of Sublime Disorder. Arhitektura & Urbanizmus, 54(3-4).

Images

Andia. (1994). In Getty Images. <https://www.gettyimages.nl/detail/nieuwsfoto%27s/war-in-the-former-yugoslavia-february-1994-the-capital-nieuwsfotos/526255534?searchscope=image%2Cfilm&adppopup=true>

Bicanski, M. (n.d.). In Getty Images.

Brauer, J. (2015). In Mountainphotographer.com. <https://www.mountainphotographer.com/snapshots-from-sarajevo/>

Dautbegovic, D. (2015). In panacomp.net. <https://www.panacomp.net/pino-nature-hotel-sarajevo/>

Decograsses. (n.d.). In Decograsses.be. <https://decograsses.be/product/sesleria-autumnalis/>

Fenn, S. (1984). In Getty Images. <https://www.gettyimages.no/detail/news-photo/sarajevo-bosnia-herzegovina-opening-ceremonies-at-the-1984-news-photo/994954568?adppopup=true>

Focanskidani. (n.d.). In spomenikdatabase.org. <https://www.spomenikdatabase.org/post/the-architectural-legacy-of-sarajevo-s-84-winter-olympics>

Gaubert-Amy, X. (2022). In Google.com/maps.

Hinchcliffe, I. (2016). In Atlasobscura.com. <https://www.atlasobscura.com/places/colina-kapa-astronomical-observatory>

Husukic, E., & Zejnilovic, E. (2023). In SPACES OF WAR, MEMORY, AND IMAGINATION Sarajevo 1984 Olympic Games.

IOC. (1984a). In Balkaninsight.com. <https://balkaninsight.com/2024/02/08/winter-glory-sarajevans-bittersweet-memories-of-the-1984-olympics/>

IOC. (1984b). In Balkaninsight.com. <https://balkaninsight.com/2024/02/08/winter-glory-sarajevans-bittersweet-memories-of-the-1984-olympics/>

IOC. (1984c). In Olympics.com. <https://olympics.com/en/athletes/jure-franko>

IOC. (1984d). In Balkaninsight.com. <https://balkaninsight.com/2024/02/08/winter-glory-sarajevans-bittersweet-memories-of-the-1984-olympics/>

IOC. (1984e). In Balkaninsight.com. <https://balkaninsight.com/2024/02/08/winter-glory-sarajevans-bittersweet-memories-of-the-1984-olympics/>

IOC. (1984f). In Olympics.com. <https://olympics.com/en/galleries/sarajevo-1984>

IOC. (2020). In Olympics.com. <https://olympics.com/en/olympic-games/sarajevo-1984>

Kami. (2018). In Mywanderlust.nl. <https://www.mywanderlust.pl/sarajevo-bobsled-track/>

Klawuttke, H. (2015). In Atlasobscura.com. <https://www.atlasobscura.com/places/igman-olympic-jumps>

Kluetmeier, H. (1984a). In Getty Images. <https://www.gettyimages.in/detail/news-photo/sarajevo-bosnia-herzegovina-olympic-flame-alight-opening-news-photo/994942982?searchscope=image%2Cfilm&adppopup=true>

Kluetmeier, H. (1984b). In Getty Images. <https://www.gettyimages.no/detail/news-photo/sarajevo-bosnia-herzegovina-opening-ceremonies-at-the-1984-news-photo/994943120?adppopup=true>

Madison, D. (1984a). In Getty Images. <https://www.gettyimages.nl/detail/nieuwsfoto%27s/janet-goldman-skates-in-the-womens-speed-skating-nieuwsfotos/455118215>

Madison, D. (1984b). In Getty Images. <https://www.gettyimages.be/detail/nieuwsfoto%27s/bill-johnson-of-the-usa-skis-the-mens-downhill-event-of-nieuwsfotos/107612483?adppopup=true>

Madison, D. (1984c). In Getty Images. <https://www.gettyimages.nl/detail/nieuwsfoto%27s/matti-nykanen-of-finland-competes-in-the-90-meter-ski-nieuwsfotos/673593376?searchscope=image%2Cfilm&adppopup=true>

Madison, D. (1984d). In Getty Images. <https://www.gettyimages.nl/detail/nieuwsfoto%27s/anthony-howard-of-great-britain-competes-in-the-mens-nieuwsfotos/656870818?searchscope=image%2Cfilm&adppopup=true>

Madison, D. (1984e). In Getty Images. <https://www.gettyimages.ca/detail/news-photo/the-team-of-olympic-athletes-from-the-united-states-marches-news-photo/629150652?searchscope=image%2Cfilm&adppopup=true>

McNamee, W. (1984). In Getty Images. <https://www.gettyimages.ie/detail/news-photo/east-german-bobsled-team-at-the-1984-olympics-news-photo/576821284>

n.d. (1983). In X.com. <https://x.com/NerminTulic/status/1365978877835804673>

n.d. (1992). In BBC.co.uk. <https://www.bbc.co.uk/programmes/p03kjszr>

n.d. (1995). In klix.ba. <https://www.klix.ba/vijesti/bih/bbc-sarajevski-holiday-inn-simbol-lijepe-i-tuzne-bh-proslosti/131102041>

n.d. (1996). In Wikipedia.nl. [https://nl.wikipedia.org/wiki/Grbavica_\(wijk\)](https://nl.wikipedia.org/wiki/Grbavica_(wijk))

Nomadingnerds. (2022). In Nomading Nerds. <https://nomadingnerds.com/2022/11/26/sarajevo-to-mostar/>

OKBIH. (2023). Bid Youth Olympic Games. <https://www.insidethegames.biz/articles/1141149/bosnia-herzegovina-noc-yog-anniversary>

Parks Dinarides. (n.d.). In Parksdinarides.org. <https://parksdinarides.org/en/protected-landscape-trebevic/>

Puksic, J. (1984a). In mnszs.

Puksic, J. (1984b). In mnszs. <https://siol.net/sportal/zimski-sporti/teden-dni-pred-igrami-skrbi-zaradi-pomanjkanja-snega-prve-tekme-pa-v-sneznem-metezu-625367>

Redzepagic, A. (2023). In SPACES OF WAR, MEMORY, AND IMAGINATION Sarajevo 1984 Olympic Games.

Ruimte met Toekomst. (2014). In Ruimtexmilieu.nl. <http://www.ruimtexmilieu.nl/wiki/ontwikkelconcepten/lagenbenadering>

Ruvic, D. (2018). In businessinsider.nl. <https://www.businessinsider.nl/winter-olympics-abandoned-venues-sarajevo-bosnia-2018-2/>

Trio Sarajevo. (1994). In iwm.org.uk. <https://www.iwm.org.uk/collections/item/object/26551>

Tzortzinis, A. (n.d.). In FoxSports.com. <https://www.foxsports.com.au/olympics/graffiti-garbage-and-mould-the-forgotten-olympic-venues-left-to-rot/news-story/64e071801bb6d98d81ddb8fec0116a4c>

Zavičajac. (1984). In Wikimedia.org. https://commons.m.wikimedia.org/wiki/File:Bjela%C5%A1nica_1984_4.jpg

Znidarsic, J. (1984). In mnszs.

