LANDSCAPE AS COMMON GROUND

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Landscape as common ground

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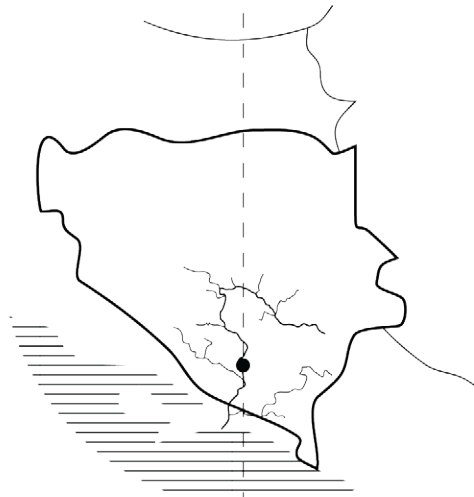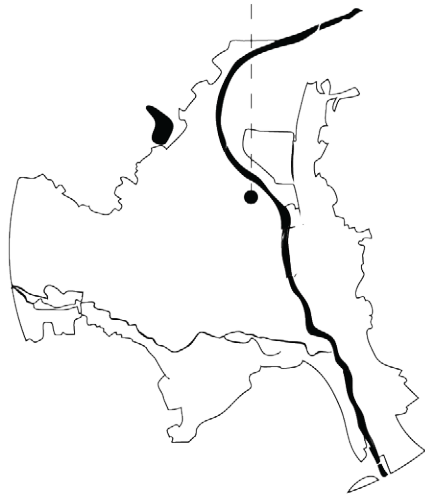
Bosnia-Herzegovina

Mostar in BiH

Site in Mostar

This graduation project started for me while doing an internship in Zurich. What surprised me when I moved to the largest city of Switzerland is even when you're in the middle of the city you have a close relation to nature. Mountains, rivers and the lake are basically located within the cities built fabric. The fact that from the city centre you can reach the top of a glacier within 2 hours travelling, makes the relation to nature not only visually strong but also in terms of connectivity. For a Dutch person growing up in a country that is basically man made this is a unique experience. An experience that coloured my view on Mostar from an early stage.

When starting on the analysis of Mostar I discovered similar qualities that can be found in Zurich. The city is embedded between hills and crossed by a river, landscape elements that in light of my new experience offer a diverse landscape, leisure opportunities and therefore great quality to life in a city. While visiting Mostar, the Neretva river turned out to be even more beautiful than shown on any image I've seen beforehand. When walking around the city, I constantly enjoyed the breeze and fresh air brought into the city and the closer to the river you get the more the noises of the city disappear.

What fascinated me while visiting the city of Mostar, was while they are present in the city there is always a distance to the elements of nature that could give the city so much quality. The Neretva river and mountains are visible from almost every angle, but at first glance there are almost no connections to these landscape elements in the city. As if the city turned its back to the landscape within the city. Is there indeed a disconnection between the city and the landscape within the city? What created this disconnection between local users and the landscape? Has it always been like this? Questions that made me curious after my first site visit and formed the start for my research design project in which an investigation into the landscape and different layers of the past form a framework for further research and design.

MOSTAR

43° 20′ NB, 17° 48′ OL in Bosnia and Herzegovina. 113.169 inhabitants (BHAS 2013). Mostar is situated on the Neretva River and is the fifth-largest city in the country and the administrative center of Herzegovina-Neretva Canton. Mostar was named after the bridge keepers (mostari) who in medieval times guarded the Stari Most (Old Bridge) over river Neretva.

THE SOCIAL CITY

The Balkans have been the site of geographical and religious conflict for at least 700 years due to its geographical location between Western and Eastern Europe (Malcolm, 1994). These confrontations resulted in a mix of different cultures and religions, and a wide veriety of cultural remnants and heritage from these different periods. The city has a rich Ottoman, Austro-Hungarian and Yugoslavian history.

Under Titos rule, leader of the former Socialist Federal Republic of Yugoslavia, a socialist regime was established that emphasized similarities instead of ethnic differences. In 1969 Mostar presented a huge contrast to American society at that moment, according to Plunz: "There I found an orderly, well-functioning, and integrated urban entity: three religions with all their traditions and symbols coexisting side-by-side. It was kind of social oasis within the turmoil of global human relations at least relative to where I was coming from. Even physically the city was a green oasis, nestled in its container of mountains with the prominent symbolism of the sixteenth-century Stari Most - its iconic bridge across the Neretva - still touching to the souls of the late millennium" (Plunz, 2017, p.51).

Mackic describes Mostar as a city with a strong connection to nature with traditions deeply rooted in local culture which all take place in public spaces near the founding place of the city: Neretva river. "Mostar has traditionally always been a very social city in which public activities, such as 'promenading' along the Korzo, the public street cabaret (Liskaluk), and diving off the Old Bridge were all very important premises for the city to function" (Mackic, 2016, p. 61).

THE PICTURESQUE CITY

The city had served for centuries as a hub for commerce and administration in the region due to its location along a major historic transportation route connecting the Adriatic Coast with major cities inland. This convenient location has enabled a mix of different cultures and beliefs to live peacefully with eachother for a long time in a city that was famously beautiful and pleasant. When William Stillman visited Mostar in 1877, he was amazed by the city: "The city of Mostar is one of the most picturesque I have ever seen" (Stillman, p. 532).

Image of man jumping of the Old Bridge (Stari Most), from cidom.org

THE SIEGE

The death of Tito in 1980 and the conclusion of the Cold War in 1989 resulted in a divided Yugoslavia. All the major republics announced their secession from the former Socialist Federal Republic of Yugoslavia. A majority of Bosnian Muslims and Croats voted in favor of independence while the Bosnian Serbs strongly opposed to this. The civil war that followed in Bosnia-Herzegovina lasted from 1992 to 1995, in which brutal ethnic cleansing campaigns were undertaken by Croatian and Serbian paramilitaries (Calame & Charlesworth, 2012). The war ended with the signing of the Dayton Agreement in December 1995 after negotiations lead by the international community.

POST-WAR MOSTAR

The Siege resulted in extraordinary destruction of the city and a continuing post-war ethnic partition into Bosniak and Croat sides of the city. Ruins and abandoned spaces still dominate the city's streetscape, but what struck me most during my first site visit was the neglect of the landscape and amounts of trash dumped in nature and public spaces. According to Mackic this thoughtlessness in treating the environment is an after effect of the war. She explains that the environment is not worth the trouble of maintaining as people are not longer sure if the environment will continue to exist (Mackic, 2016).

The city is also experiencing the pressing 'ordinary' problems of an ageing post-Sovjet and post-industrial city (Plunz, p. 52). Among the effects of these 'ordinary' problems are weakened employment and a weakened morale among working-class urban residents which prevent political decisions from being taken to move the city forward.
"Mostar emerged from civil war as a crippled industrial centre and a pariah on the tourist map, having been stripped of its greatest prewar assets" (Calame & Charlesworth, 2012, p. 119). From this research, three different landscape layers can be identified that at times overlap and together form the problem field: post-traumatic landscape, neglected landscape and ageing post-soviet & post-industrial landscape.

PROBLEM FIELD

Post-traumatic landscape   Neglected landscape   Ageing post-soviet & post-industrial landscape

PROBLEM STATEMENT

LOSS OF IDENTITY AND PLACE

After The Siege reconstruction of Mostar started quickly. This was done with a similar approach compared to other cities that remained ethnically divided after conflict. With rebuilding the historic Ottoman core of the city and the Old Bridge as a symbol for these transformations, an important start has been made towards social and economic recovery. With the reconstructed historic Old Town, Mostar got back on the tourist map. However, only a select group of people can identify themselves with this reconstructed core of the city since its located on the Bosnian Muslim side of the segregated city and only refers to an Ottoman past of the city. This part of Mostar's history does not capture a complete image of the heritage of the city with its different building traditions and changing relation to the landscape throughout time.

In this erasure of the past and erasure of building traditions there is a threat that history is rewritten and group identity depends predominantly on tourism (Grodach, 2002). Demirovic underlines that planners and international organizations involved in reconstructing Mostar associate the city with the Old Bridge, but they seem to forget it's only a symbol for the city, it's not where the people actually live (S. Demirovic, personal communication, October 7, 2019).

PROBLEM STATEMENT

The problem field described in the preceding section describes the complexity of a research design project in a post-conflict location like Mostar. Within this problem field I think that one of the causes is the broken relationship with the underlying landscape which has to do with the loss of identity and place in the aftermath of The Siege.

I think now, in times of social segregation, a neglected landscape and a search for a new identity, there is an opportunity for an integrated and sustainable solution to (re-)define the relation between the landscape and its local users in order to form a common ground in an environment of ethnic differences in post-traumatic landscapes.

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OBJECTIVE

With this research design project I want to look further than the recent history of Mostar and The Siege. I personally believe that the after-effects of The Siege can be understood better by learning more from the history of Mostar before The Siege, its historic development and different cultures in relation to the landscape. Therefore, this research design project aims to reconnect the landscape with its local users. The landscape has many components, but I will focus on the relation between human practices and the landscape since this relation has been broken in (recent) history of the city.

How can local users be reconnected with the landscape in a site specific landscape design intervention that deals with the heritage of different cultures and their changing relation with the landscape in a post-traumatic landscape?

Landscape
By doing research into the historic development of the city and the landscape, how they are connected to eachother and if this relation changed over time I aim to explore the creation of the construct that serves the perception of landscape in Mostar today. In what ways is the historic development of the city related to the landscape, how are they related and did this relation change in history?

Common ground
There are many ruins and abandoned spaces spread across the city since The Siege. These scars of the war are now slowly being taken over by nature and in the collective memory connected to The Siege, but they are part of a history that goes far beyond the war. Through research into human practices and their changing relation with the landscape, old traditions and possible new urban activities I aim to find way to reactivate those ruins and abandoned spaces in order to reconnect the landscape and its local users. In what way can ruins and abandoned spaces be re-used?

Landscape as common ground
As hypothesis I am proposing a network in which the ruins and abandoned spaces across the city form anchor points in order to reconnect with the landscape, the history of the place and the heritage of the war. The design research will focus on one line from a network of ruins to connect the landscape with its local users through reactivating the ruins that are slowly being taken over by nature. The output of the design will elaborate with a landscape architectural design intervention and strategy for one location on this route on how to reconnect with the landscape. How to create a site specific landscape design intervention that strengthens the relation between the landscape and its local users?

Reflection
This report will be concluded in a reflection where the plausibility of the solutions offered is questioned. Can a broken relationship with the underlying landscape caused by traumatic events and conflict be fixed and recover a sense of identity and place?

RELEVANCE

"Mostar as a centre of production has disappeared: partly by the destruction of the war and partly through 'ordinary' problems of an ageing post-Sovjet and post-industrial city" (Plunz, p. 52). I think now, in times of social segregation, a neglected landscape and a search for a new identity, there is an opportunity for an integrated and sustainable solution to (re-)define the relation between the landscape and its local users in order to form a common ground in an environment of ethnic differences in post-traumatic landscapes.

NEW MEANING THROUGH HUMAN PRACTICES

By focussing on human practices I aim to get a better understanding of how local people use the landscape now and throughout history. Finding out the history of how people use the landscape provides leads for restoring a lost relationship or creating a new one. The Siege resulted in extraordinary destruction of the city and surrounding landscape (Plunz, 2017). With this, the way local people use and perceive the landscape drastically changed. After The Siege, rebuilding of the city became a slow process due to the fact that the city was divided into two parts, each belonging exclusively to one specific ethnic group with each ethnic group rebuilding their monuments, but the meaning of these places has changed after the war (Mackic, 2016). By focussing on the use of the landscape and public spaces I am aiming to reconnect the landscape with its local users by finding new meaning in the landscape and create places for new memories.

ETHICAL CONSIDERATIONS

To get a better understanding of the human practices related to the landscape and the way people use public spaces for social activities I conducted interviews during my site visits. I am aware that I talked with people who represent only a small part of society, mostly university educated people and people working in tourist industry due to the language barrier with the majority of local people. However, for me as a foreigner this served as a way of understanding the current situation in a post-conflict area and getting a better understanding the relation between local people and the landscape. For a full overview of ethical considerations see chapter Reflection.

METHODOLOGY

Landscape as palimpsest is used as a method to reconstruct the layered entity that shaped the city of Mostar today, complemented with maps the historic development of the city is researched. A photo series taken on site of spatial characteristics and design principles behind the relation between local people and the landscape throughout history supports the maps and literature.

This forms the basis for further research into the relation between human practices and the landscape in these different layers defined in landscape as palimpsest. Through literature, interviews, studying maps and old photographs, the relation between human practices and the landscape throughout history has been defined. Through a close reading of maps, old pictures and experiences on site questions on the natural landscape were defined and answered with literature research.

The characteristics of the natural landscape and the layered entity defined in landscape as palimpsest together shape the local perception of the landscape today. This gives hand and feet to the defined problem statement defined by the problem field and gives context to why this is a problem for local society, supported by a theoretical framework on these different landscapes that are defined within the problem field.

Research into the layered entity that forms the local perception of the landscape today gives points of reference from the past to restore a relationship between local people with the landscape.

Direct observation of current human practices connected to the landscape show how local people use the landscape today. Spatial consequences and principlesderived from this analysis will serve as basis for the landscape design intervention. How people use the landscape today gives spatial conclusions for how the new landscape design intervention can be designed in a way that fits the needs of local people today and what the spatial consequences are connected to this. Interviews test these findings and gives an insight in desired new urban activities that can be included in the site and the spatial requirements for these activities.

Through site analysis into morphology and history of the site we can find out what the relation between the specific site location and the research is. Case studies are used to show how to deal with giving space to nature in design and how to activate spaces. This will lead to a site specific design intervention that aims to connect the local people with the landscape.

VOGT-WALL

As part of this methodology, I'm using a tool for spatial analysis developed by Vogt Landscape Architects. After a close reading of (aerial) photographs and historic photographs different landscape types were defined to make research into the landscape more specific. The aim is to gather written information about lthe andscape and categorize it with help of photographs, maps and interviews to give a complete overview of the landscape.

Sometimes when taking atmospherical qualities into consideration that define a design, such as light, shadow, colour, texture, acoustic phenomenons, dryness and moistness, mineral and vegetative materials one has to look further than the traditional map. Here the perspective of landscape as spatial-visual structure comes into play, where the visual form of the landscape is based on the sensorial experience that emerges only by movement and is affected by the position and intensity of light sources. To document this, I am using a tool developed by the chair of Gunther Vogt at ETH to be able to take these atmospherical qualities into account from the beginning: "The research, put up on a wall at the beginning of a project becomes more and more dense during the development of the project. Eventually the map records the research and acts as inspiration. The map is then also part of the final submission" (Vogt, 2012).

The categories during this project started with water, basin/valley, mountain, forest and plateau and The categories gradually evolved into river and karst landscape, connected to the natural conditions that shape the city of today throughout history: topography and soil.

Stage of the 'VOGT-wall' at P2

Stage of the 'VOGT-wall' at P4

READING ITINERARY

The chapter landscape will elaborate on the creation of the construct that serves the perception of landscape in society of Mostar today. The aim is to show through scales what current connection with the landscape is, how connection with landscape used to be and if we can learn from the past to create a connection with the landscape again. Through current human practices connected to the landscape common ground will explore in what way ruins and abandoned spaces can be re-used in order to connect local people to the landscape.

Landscape as common ground will elaborate on how to create a site specific landscape design intervention that strengthens the relation between the landscape and its local users. In order to do this the chapter contains a site analysis that will be followed by the site specific landscape design intervention.

The reflection of the report will elaborate on reflect on the process and conclude if a a broken relationship with the underlying landscape caused by traumatic events and conflict can be fixed and recover a sense of identity and place.

The end of the report contains a bibliography and glossary of the used vocabulary.

PRACTICAL INFORMATION

All maps and supporting images are made by the author of this report, unless stated otherwise. Interviews that I conducted myself and support the story are written italic.

„Nicht in der Natur der Dinge, sondern in unserem Kopf ist die ‚Landschaft' zu suchen; sie ist ein Konstrukt, das einer Gesellschaft zur Wahrnehmung dient, die nicht mehr direkt vom Boden lebt." - Lucius Burckhardt, Warum ist Landschaft schön?

"The perception of the given terrain. Landscape has no physical reality, but can be defined as a commonly shared image of a part of the land that nature presents to an observer" (Smets & Treib, 2015, p. 12).

The next chapter will elaborate on the creation of the construct that serves the perception of landscape in society of Mostar today.

LANDSCAPE AS PALIMPSEST

The chair of landscape architecture at TU Delft developed four perspectives of our profession. Just like geologists we as landscape architects are trying to understand the landscape. Where making use of the same phenomena, but with different perspectives. The perspectives on landscape architecture developed by TU Delft are: landscape as spatial-visual structure, landscape as palimpsest, landscape as scale-continuum and landscape as ecologic, economic and social process (Nijhuis, 2013).

The aim for the research design project was finding a methodology and approach for an environment that is still dealing with a loss of identity because of The Siege and its aftermaths. It is my personal belief that doing research into a place that is still recovering from relatively recent traumatic events, the social-spatial antecedents and consequences of the place can be understood by placing them into a long-term historical framework.

After a close reading of aerial and historic photographs, different landscape types and phenomena could be identified for which the perspective of landscape as palimpsest was an entrance to apply as a framework for my research design project.

Palimpsest : "A very old text or document in which writing has been removed and covered or replaced by new writing" ("Palimpsest", 2019).

This perspective takes the perceived landscape as a layered entity with traces of the past. Bernard Lassus took on this perspective in many of his projects, as he states that an intervention should take on the character of the place, but it should add something to show the existing qualities of the place (Lassus, 1998).

The section cultural landscape will elaborate on the four most influential eras for the city of Mostar and Mostar since The Siege. Spatial characteristics for each period are identified and the connection between landscape and its local users is identified with the help of literature, historic maps, photogaphs and paintings and complemented with interviews and talks during site visits. The timeline on the next page gives context to the urban development of the city and highlights the most important events that shape the city of Mostar today.
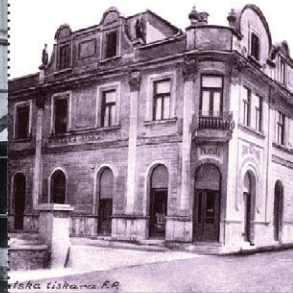
1452
City foundation

1468
Ottoman empire

1878
Austro-Hungarian empire

1918
Kingdom of Yugoslavia

Ottoman empire

Austro-Hungarian empire

Kingdom of Yugosla

1566
Stari Most built in
stone & fortification
of city finished

1552
First Mosque in Mostar:
Cejvan Cehaj Mosque

1863
Orthodox Cathedral
Holy Trinity built

1834
First Serbian
Orthodox Church

1474
The name of Mostar was first mentioned in
a document dating from 1474, taking its
name from the bridge-keepers (mostari);
this refers to the existence of a wooden
bridge from the market on the left bank of
the river which was used by traders,
soldiers, and other travelers.

1913
Lučki most
bridge finished

1902
Construction of residential districts
around the Rondo and Gymnasium

1885
First railway tracks
to Mostar in use

1882
Most Musala bridge construction finished
(Most Emperor and King Francis Joseph / Tito bridge)

1881
Town became the seat of the Roman
Catholic Diocese of Mostar-Duvno

1914
–
1918
WW I

1919
Paris Peace
Conference : BiH
becomes part of
Kindom of Serbs,
Croats and Slovenes

1944
Socialist Federal Republic of Yugoslavia

1992
The Siege

1995
Bosnia & Herzegovina

| vía | Socialist Federal Republic of Yugoslavia | The Siege | Bosnia & Herzegovina |

940
-
945
W II

1945
Mostar Operation on February 14th :
Liberation by partisans led by Tito,
BiH becomes republic within the federation

1965
Partisan Memorial
Cemetery built in Mostar

1980
Tito dies

1993
Stari Most destroyed,
so are a lot of other cultural
heritage sites in Mostar

1993
Croat-Bosniak War escalates

1992
Bosnian independance, Mostar
is besieged by Yugoslav People's
Army (JNA), Croats and Bosniaks
join forces to get back in control

2005
UNESCO inscribed the Old Bridge
and its closest vicinity onto the
World Heritage List

1995 - now
Since the end of the wider war in 1995,
great progress has been made in the
reconstruction of the city of Mostar

1995
Dayton Agreement

uring World War II
ostar was also an
mportant city in the
scist Independent
tate of Croatia

erman occupation from 1941

939
ostar became
part of the
novina of
atia

23

LLAANNDDSSCCAAPPEE AASS CCOOMMMMOONN GGRROOUUNNDD

HISTORIC DEVELOPMENT

After close reading of maps it becomes visible that the historic background of the city is still visible in its urban pattern. Throughout different eras the city expanded in different directions. These different layers of spatial planning are still visible in the urban pattern of today, leaving traces from a rich heritage of different cultures and styles. What makes the urban pattern of Mostar especially interesting, is that although the city has different cultural backgrounds and the city grew a lot in different eras, the existing urban pattern remained roughly the same throughout these different eras and the city expanded in different directions because of clearly identifiable reasons and by the customs of that particular time. This page gives a brief introduction on the historic development of the urban fabric, the following pages will elaborate on the spatial consequences and what that meant for the relation with the landscape.

OTTOMAN EMPIRE : 1452 - 1878

The Ottoman past of the city is perfectly represented by the Old Town and Stari Most (Old Bridge), which are now UNESCO World Heritage sites (Pašić, 2004).The centre of the city was located on the East side of Neretva river because of the major historic transportation route connecting the Adriatic Coast with major cities inland. Oriental design principles organised the social and spatial configuration of the city around mahalas (residential quarters around a mosque). Besides these residential quarters the city consisted of narrow streets with small shops and public buildings facing the river (Bottlik, 2017).

As the city grew, Neretva river was crossed for urban expansion following Radobolja river, a small local river which flows into Neretva river just south of the Old Bridge. In the city's expansion on the West side of Neretva river a small market square, hamams (Turkish baths) and hans (inns for travelling merchants) could be found (Grodach, 2002).

AUSTRO-HUNGARIAN EMPIRE : 1878 - 1918

After the occupation of Mostar in 1878 by the Austro-Hungarian empire, military zones were constructed North and South of the city next to the historic transportation route. Industrialisation was brought to Mostar with a railway line and industrial zones on the West side of the river. City expansion followed on the West side of Neretva, with tree lanes following an orthogonal grid and villas for families. The railway was located at the street now known as Bulevar. and divided the Old Town and New Town (Plunz, 2017).

Although catholic religion was introduced and churches were built across the city of Mostar, there was a tendency of Austro-Hungarian administrators to harmonise rather than suppress cultural difference within the empire. This was done through architectural language which is illustrated well by the Gymnasium, built in Islamic style in 1902 (Pašić, 2004).
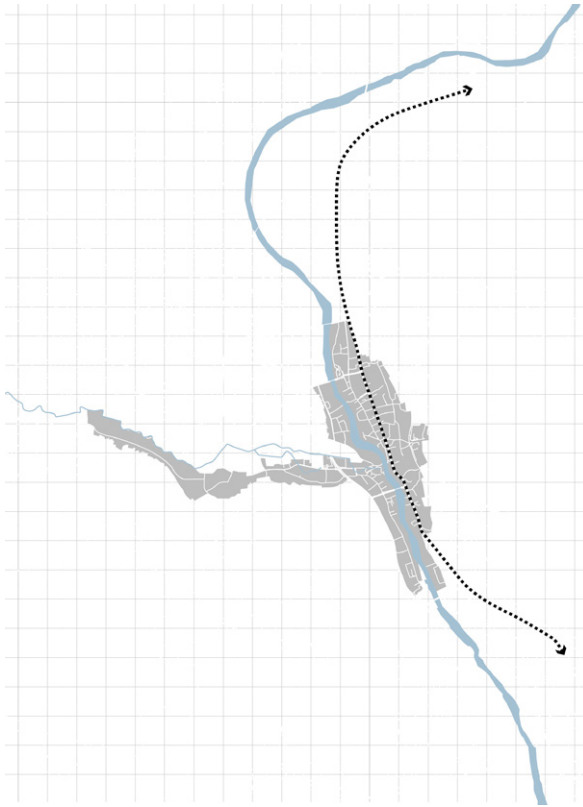
Ottoman : 1452 - 1878

Austro-Hungarian : 1878 - 1918

Yugoslavian : 1945 - 1992

Bosnia - Herzegovina : 1992 - now

WORLD WAR I TO SOCIALISM

Under Austro-Hungarian rule the importance of the city of Mostar was continuously emphasized by the Austro-Hungarian administration as a calculated move to avoid a Serbian takeover. After World War I was triggered in Sarajevo with the assassination of the Archduke Franz Ferdinand, a fear of being taken over by the Serbians lead to most Bosnians being loyal to the Austro-Hungarian Empire during World War I (Pašić, 2004).

After World War I ended a constitutional monarchy was founded, the Kingdom of Serbs, Croats and Slovenes (later called Kingdom of Yugoslavia) included Bosnia and Herzegovina. Internal conflicts were soon overshadowed by an alliance of the Croats with the Germans in World War II. Under Josip Broz Tito, a partisan resistance grew popularity among large numbers of Bosnians. After World War II was over, a new socialist Yugoslavia was born under Tito's rule (Pašić, 2004).

YUGOSLAVIA : 1945 - 1992

After WWII Bosnia-Herzegovina became one of the discrete republics that together formed The Socialist Federal Republic of Yugoslavia under Tito's rule. The newborn federation marked a new era of great economic prosperity for the city. During this period in Mostar, the industrial base was expanded with construction of a metal-working factory, cotton textile mills, and an aluminium plant. This brought skilled workers to the city, which changed the demographic profile of the city dramatically as the city's population in this period grew from 18.000 to 100.000 people (Pašić, 2004).

The Old Town on the Eastern side of Neretva river was characterised by inefficient and outdated infrastructure, so the city expanded further on the Western side of the river with the construction of large residential blocks (Pašić, 2004).

Tourists in front of Partisan Memorial in 1977, from cidom.org

THE SIEGE : 1992 - 1995

The death of Tito in 1980 and the conclusion of the Cold War in 1989 resulted in a divided Yugoslavia. All the major republics announced their secession from the former Socialist Federal Republic of Yugoslavia. A majority of Bosnian Muslims and Croats voted in favor of independence, while the Bosnian Serbs strongly opposed to this. The various parties involved began to conquer as much territory as possible and members of other ethnic groups were militarily removed from the areas they had claimed for themselves. This marked the beginning of a civil war in Bosnia-Herzegovina that lasted from 1992 to 1995, in which brutal ethnic cleansing campaigns were undertaken by Croatian and Serbian paramilitaries (Calame & Charlesworth, 2012).

The Siege of Mostar started with Serbian forces capturing the newly declared independent state of Bosnia and Herzegovina in order to create a Greater Serbia. With Croatian support, Bosnian Muslims drove these Serbian forces out of Mostar by May 1992. During the first Siege of Mostar an incredible amount of cultural heritage sites were deliberately destroyed in just 3 months (Mackic, 2016). Barely after the majority of Serbs were forced out of Mostar, fighting renewed as the Croatians started an attempt to expel Muslims out of Bosnia in order to establish a Croat mini-state with Mostar as its capital. The historic Bulevar formed the front line during the following conflict and formed a physical division of Mostar (Grodach, 2002). The Old Bridge (Stari Most), the symbol of the city and once an emblem of unity and tolerance, formed the only connection between East and West until Croatian forces destroyed it in November 1993 in only a few hours. The war ended with the signing of the Dayton Agreement in December 1995 after negotiations lead by the international community.

The Siege resulted in extraordinary destruction of the city and surrounding landscape, resulting in many ruins and abandoned spaces across the city. Neretva river and the Bulevar formed the front line during the war and mark the segregation line ever since.

BOSNIA-HERZEGOVINA : 1995 - NOW

During and after the war around 40.000 inhabitants of the city had moved away, but the flow of refugees from the countryside in search of work and shelter kept the amount of inhabitants in the city the same as before the war. From many ruins and abandoned spaces across the city there is no clarity of ownership, which resulted in urban sprawl after the war (Plunz, 2017). This is clearly visible in the map on page 25, where the urban sprawl of the city is illustrated since the war. The chapter *cultural landscape* will elaborate further on the landscape of today.

STARTING AT THE RIVER

Mostar was named after the bridge keepers (mostari) who in medieval times guarded the Stari Most (Old Bridge) over river Neretva. The Old Bridge, built in stone in 1566, but the name of Mostar was first mentioned in a document dating from 1474, which refers to the existence of a wooden bridge from the market on the left bank of the river which was used by traders, soldiers and other travelers.

Due to its location along a historic transportation route connecting the Adriatic Coast with major cities inland, the city of Mostar was founded and grew along the river as shown on the icons on this page. But why did the city grow like it did?

RIVER LANDSCAPE

The hydrological network is composed out of different karst wellsprings and clear rivers that flow into river Neretva, making the Neretva valley the most significant source of drinking water in the region. Neretva river has its source in Lebršnik and runs 225 km through Bosnia-Herzegovina and Croatia before it discharges in the Adriatic Sea. The Neretva watershed is 11,798 square kilometres in total. Neretva river currently has four dams with hydro-electric powerplants, two of them are close to Mostar, as shown in the map on the right page.

TOPOGRAPHY

The map on the right page shows river Neretva and the topography on a metropolitan scale. By comparing the stages of urban expansion to the topographic map it becomes clear that the city grew along the rivers. In the last 30 years the city's expansion seems not connected to the landscape anymore since the city expanded in all directions. However, after closer inspection the foot of the mountains around the city forms the boundary for the expanding city throughout time.
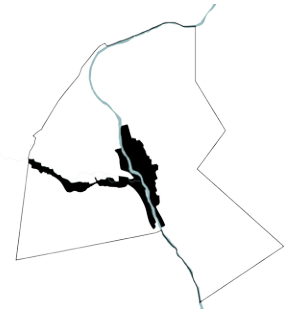
1452 - 1878
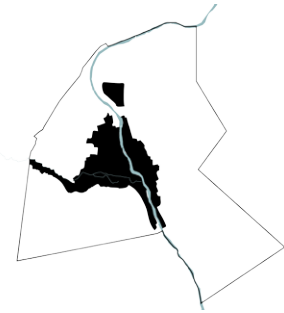
1878 - 1918

1945 - 1992

1995 - now

1:50.000 RIVER LANDSCAPE

—— River	Dam	500 - 1000 m
Lake	Mostar city boundary	200 - 500 m
Swamp	*Elevation*	60 - 200 m
- - - Underground aquaduct	> 1000 m	
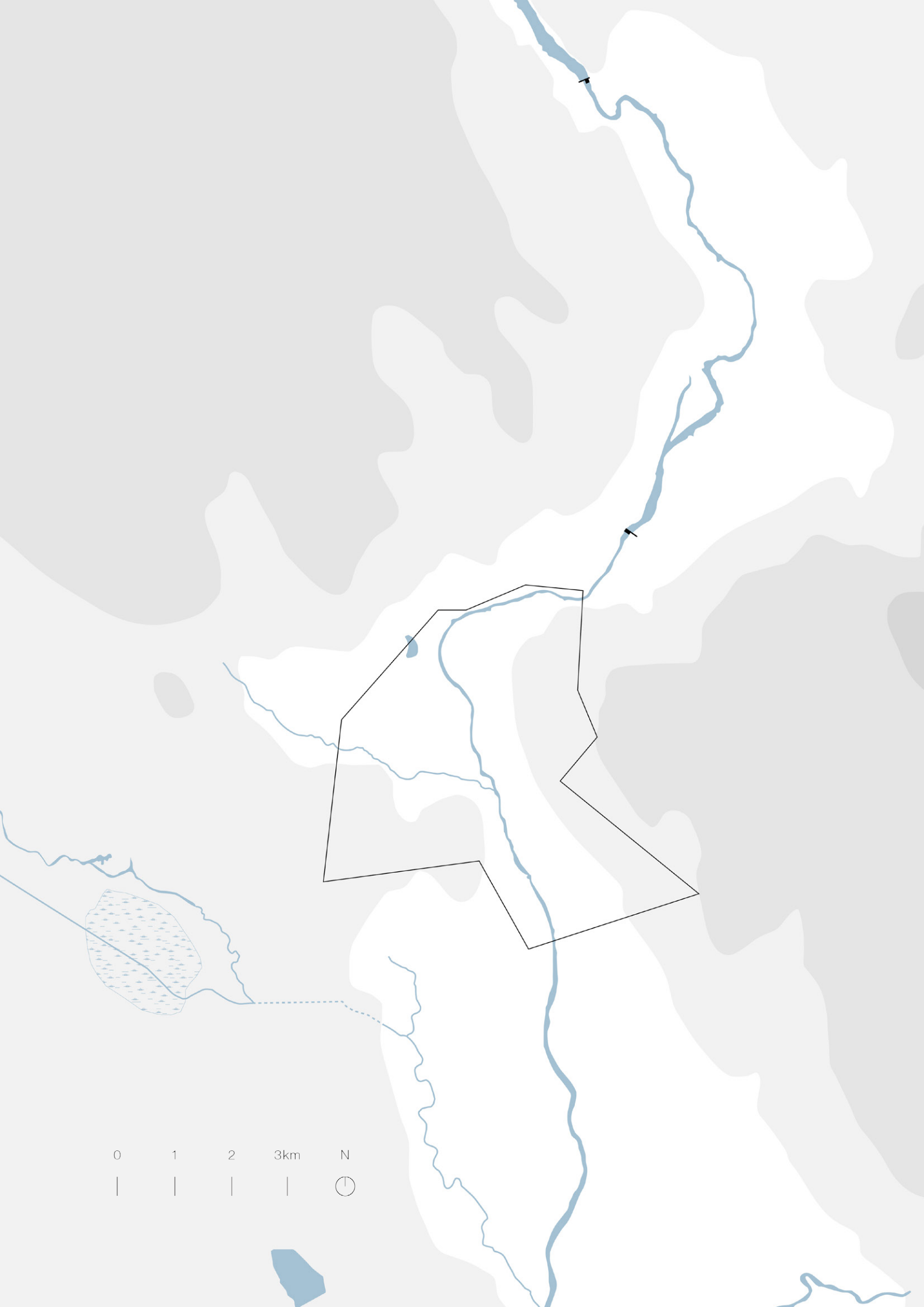
0   1   2   3km   N

KARST

Inextricably bound to the topography is the soil structure. Mostar is located in a karst landscape. The term 'karst' is a geological expression derived from the slavic krš, meaning bare stony ground, suggesting that karst terrain does not support much soil, vegetation or life in general. A lack of surface water is the reason for this characteristic. What makes the karst landscape unique is the tendency of water to run underground, as shown in the image below the water penetrates cracks in the limestone. Through erosion passages and caves are formed. Disappearing streams move through the passages and caves to appear above ground again through karst wellsprings.

The city of Mostar is located in an alluvial valley within this karst landscape. Due to the alluvial and pleistocene clay the soil is very fertile. Since the valley is a relatively flat area with fertile soil this is an ideal location for agriculture.
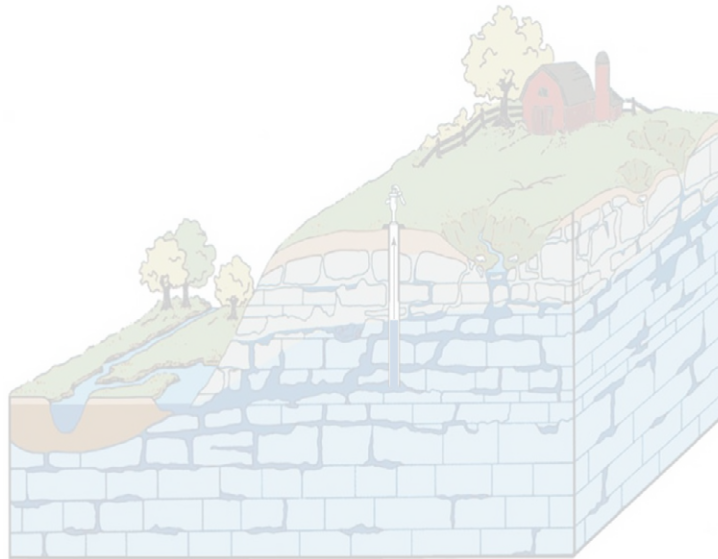
Karst diagram, from Environmental Protection. (n.d.).

1:50.000 SOIL MAP

—— River	• Well	*Soil types*
– – Disappearing stream	- - - Underground aquaduct	▦ Pure karst
Lake	Dam	Alluvial
Swamp	Mostar city boundary	◎ Chromic cambisols

0   1   2   3km   N
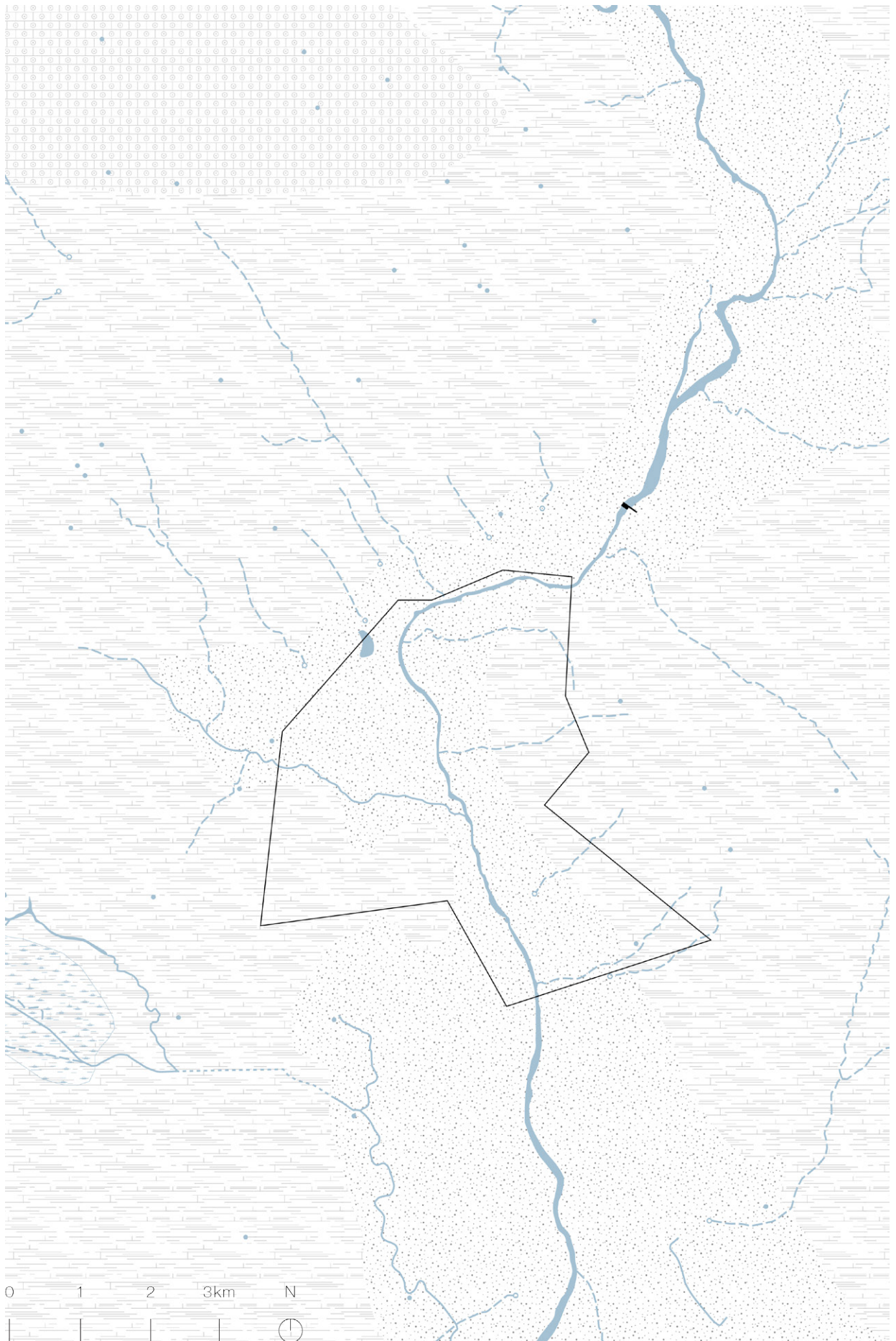
WATER - STRUCTURE

Due to its location along a major historic transportation route connecting the Adriatic Coast with major cities inland, the city of Mostar was founded and grew along the river. Therefore, train tracks and main roads also follow the course of the river.

NERETVA VALLEY

The steep mountains around the city limited the city's growth within the limits of the river basin. This flat part inbetween the mountains is also most convenient for agriculture due to a fertile soil and limited elevation. This results in a patchwork of different functions concentrated in the river valley. Forests grow everywhere, so they can mainly be found at locations where agriculture is not possible. In the river valley there are almost no forests on a bigger scale, due to the amount of different types of land use that are already present.

CONCLUSION

Two types of landscape can be defined after doing research into the natural conditions of the landscape: valley and karst. The valley is relatively flat and has alluvial soil, which is very fertile. The mountains are very different, vegetation is sparse in this bare karst landscape. The streams and small rivers from the mountains connect the karst mountains with the alluvial valley. Disappearing streams of the karst landscape connect the mountain and the valley visually, through a densification in shrubs and small trees visible above ground. Water forms a connecting element in the landscape.

CONCLUSION FOR LAND USE

Due to its location along a major historic transportation route Mostar was founded and grew along the river Neretva. Soil type and elevation are conditions that determine land use in Mostar and its surroundings. The Neretva valley is because of these conditions besides the location of the city an ideal location for agriculture and orchards.

0   1   2   3km   N

1:50.000 LAND USE

River	Mostar city boundary	Agriculture
Disappearing stream	Roads	Orchards
Lake	Train tracks	Forests
Swamp	> 1000 m elevation	Meadow
Well	500 - 1000 m	Industrial
Underground aquaduct	200 - 500 m	Retail
Dam	60 - 200 m	Mineral extraction
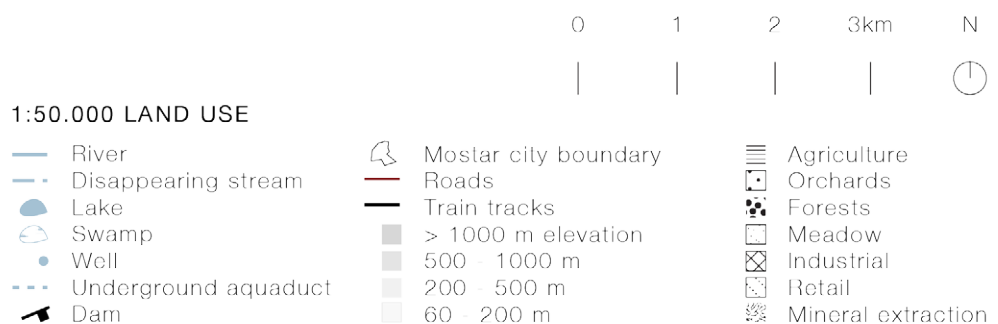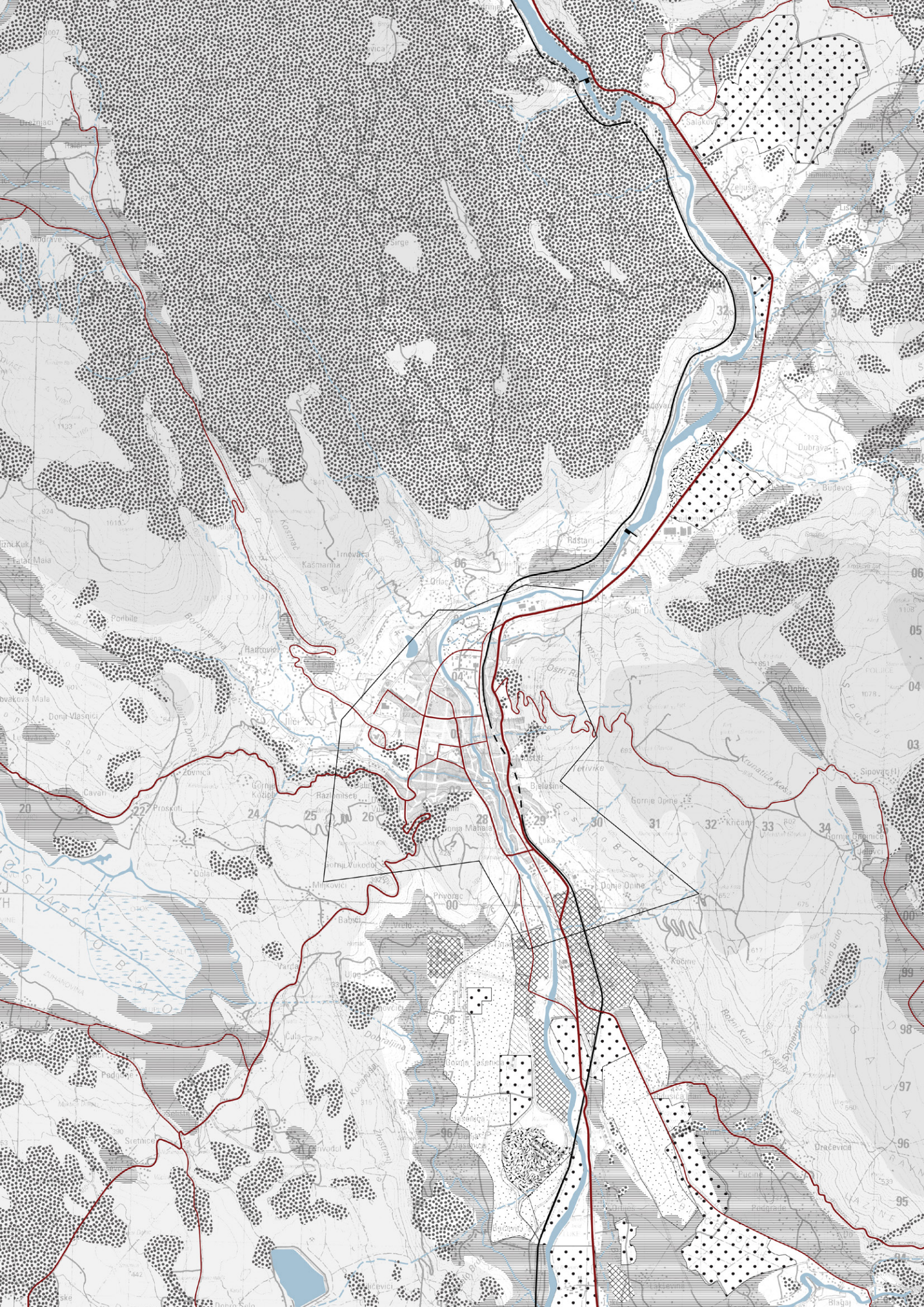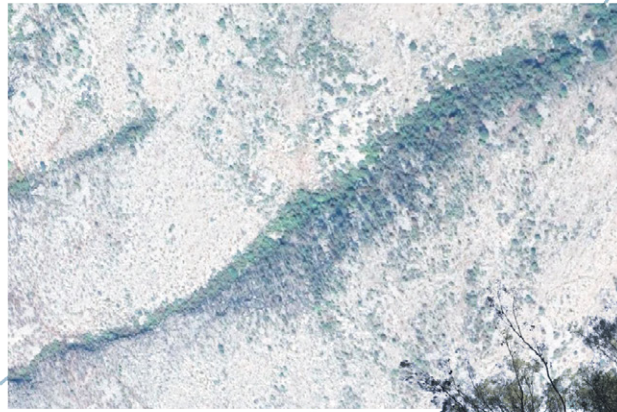
SPATIAL CHARACTERISTICS MOUNTAIN

The mountains around Mostar show the spatial characteristics typical for a karst landscape, meaning bare stony ground with little vegatation in the form of shrubs scattered over the steep slopes around Mostar. These areas are alternated with dense coniferous forests as shown on the map on the right. The disappearing streams that are an important feature of the karst landscape and are clearly recognisable from a distance due to a densification of shrubs.
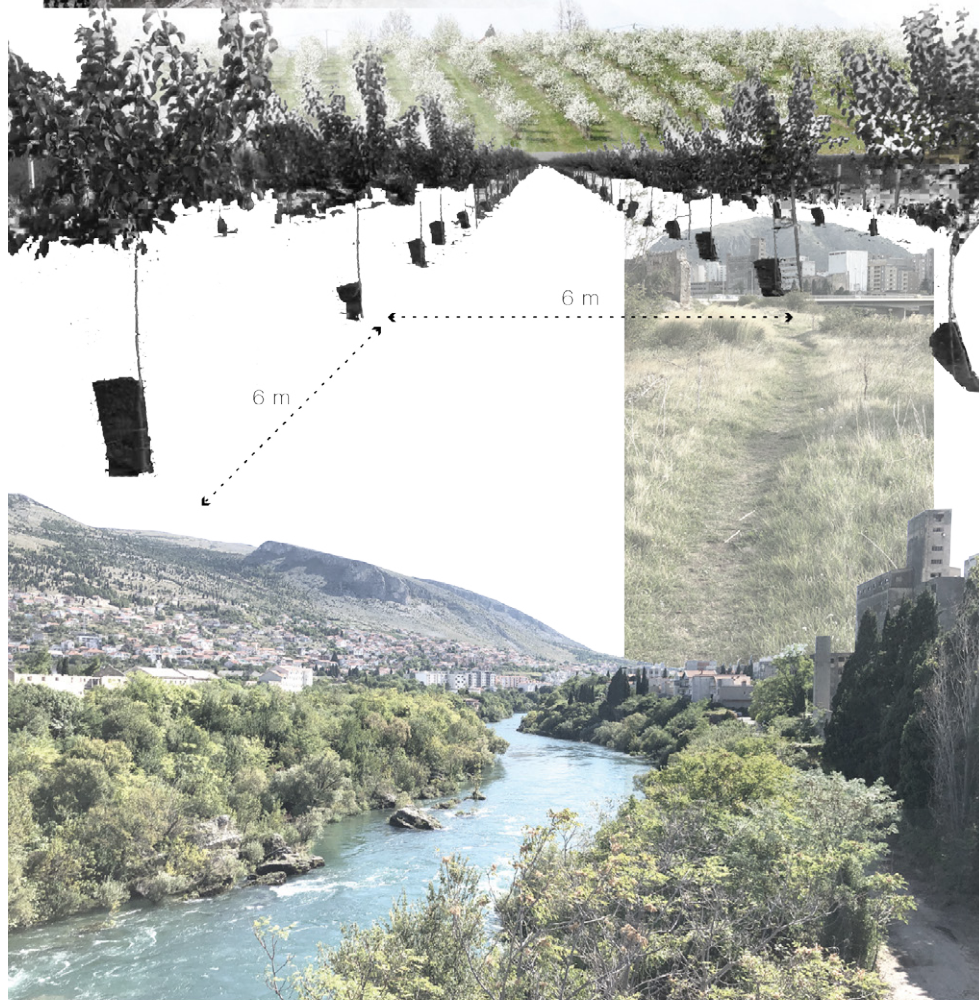
SPATIAL CHARACTERISTICS VALLEY

The river forms a continuous green corridor through the landscape. Small rivers that flow into Neretva river connect the river with the surrounding mountains. The valley has higher temperatures in summer and in winter, but along the river a continuous cold breaze moves through the valley. Due to the fertile alluvial soil and relatively flat topography it has high potential for agriculture and orchards.

Mostar city map in 1617, from cidom.org

CULTIVATING THE LANDSCAPE

Studying historic maps of Mostar shows that the landscape has been cultivated in different ways and on changing locations throughout history. Taking a closer look at the historic development and the human practices connected to the landscape in the different cultural backgrounds of Mostar gives a better understanding of the role of the landscape throughout history and the changing relation between local people and the landscape.

OTTOMAN EMPIRE (1468 - 1878)

Bosnia-Herzegovina was rich in mineral resources and silver, gold and lead mines were exploited from the early 13th century. "Mining established work settlements, transportation infrastructure and foreign relations. By 1422, Europe received more than a fifth of its silver from Bosnian and Serbian mines" (Grodach, 2012, p. 66). Mostar flourished under Ottoman rule, mainly due to its location along a major historic transportation route connecting the Adriatic Coast with major cities inland. Under Ottoman rule an imporant regional city was erected that today constitutes the Old Town. The city had a population of 10.000 people and remained the same until the occupation of the Austro-Hungarian empire in 1878 (UNESCO, 2005).

The city expanded parallel to the river Neretva with narrow streets with small shops on both sides following the historic trades route. As the city grew more, Neretva river was crossed for urban expansion following Radobolja river, a small local river which flows into the Neretva just south of the Old Bridge. In the city's expansion on the West side of Neretva a small market square, hamams (Turkish baths) and hans (inns for travelling merchants) could be found (Grodach, 2002). During the Ottoman Period, the Stari Most (Old Bridge) was built to replace a small wooden bridge and the city of Mostar became a symbol of the power of the Ottoman Empire (Pašić, 2004).

Ottoman Mostar used to have clear defined areas for agriculture and the urban centre, with broad agricultural plains on the west bank of the city with an ingenious irrigation system. The east bank of the city consisted of steep terraces surrounded by mountains (Pašić, 2004). However, from the cadastral map drafted by the Austro-Hungarians in 1878 after their arrival in the city, a great presence of green spaces can be identified (see page 41). The map above, dating from 1617, already displays a harmonious connection between the city and the landscape as built structures and trees alternate within the city walls, showing that both are part of the city.
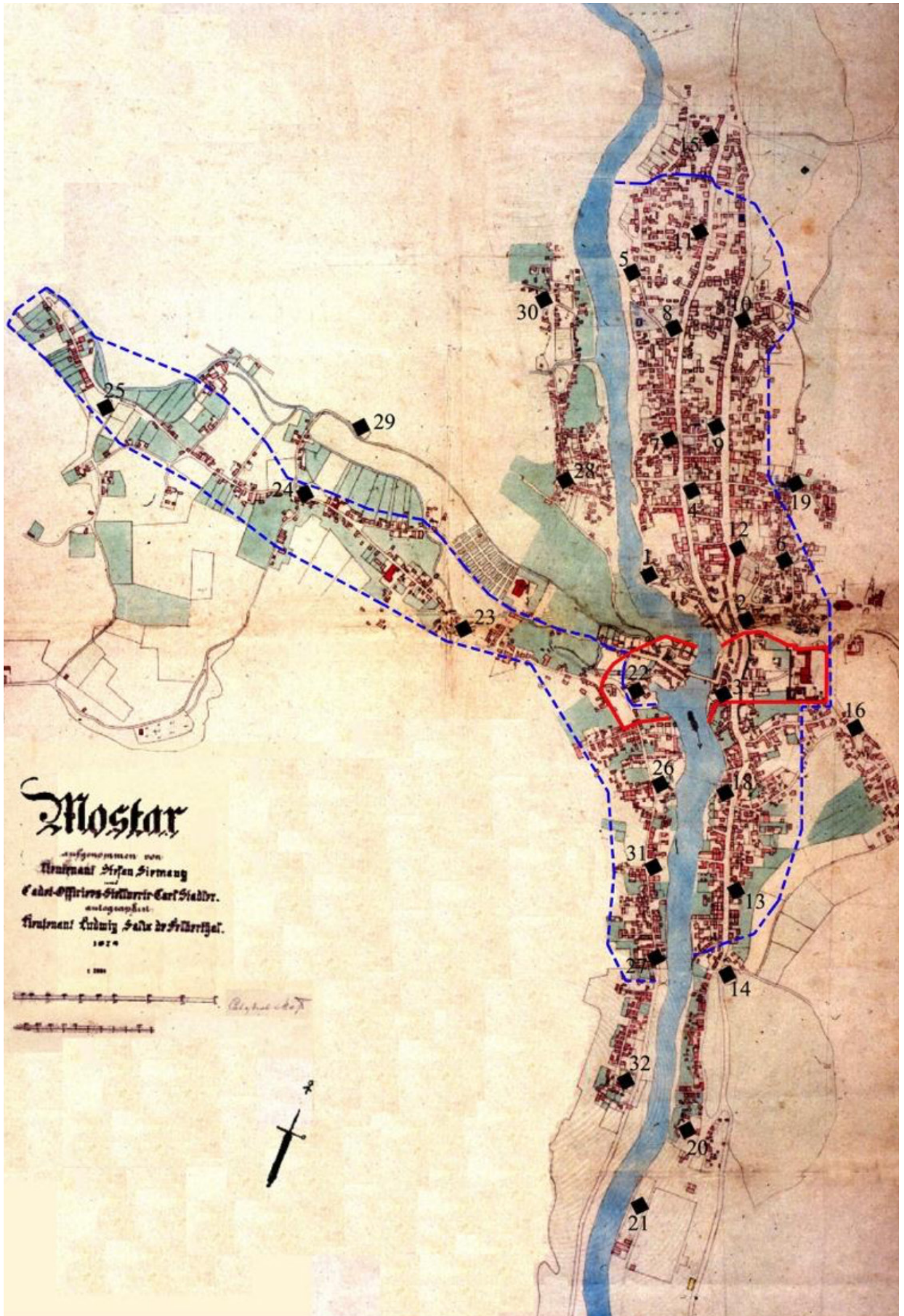
MOSTAR 1878

Mostar 1633   City Walls/ Gradski Zid   Mahala Center

Cadastral map of Mostar in 1878, from cidom.org

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Oriental design principles organised the social and spatial configuration of the city around mahalas, the name for residential quarters around a mosque, which is still used to indicate a neighbourhood (Bottlik, 2017). Mahalas developed quickly on both banks of the Neretva, surrounded with one- and two- storey houses. Each house was placed carefully to catch a view of a cypress or minaret from second-storey windows and in a way to not block the views of a neighbour (Pašić, 2004).

The entry of each house from the street would access a courtyard as a transition from public to private space: They used to build houses with courtyards. The courtyard is enclosed with stone walls for privacy and the strong wind. Muslim women could take off their facial coverings inside the courtyard, therefore there is a saying that says: "the higher the walls the more beautiful the women". Fruit trees and a fountain are placed in the courtyard. The stones and pebbles on the floor come from the river and every single one is placed by hand.
- Guide at Biscevic House

The towers of mosques were accompanied by tall trees and helped define the skyline of the city and its surrounding landscape. Buildings and bridges are constructed out of timber from the surrounding woodlands and stones from the riverbeds and mountains, this results in a distinctive colour scheme which visually connects the built fabric with its surrounding landscape. Ottoman Mostar was a famously beautiful and pleasant city. When William Stillman visited Mostar in 1877, he was amazed by the city: "The city of Mostar is one of the most picturesque I have ever seen" (Stillman, p. 532).

The Ottoman core of the city still represents the way life within the city and in connection to the landscape used to be. Nominating the Old Town as a UNESCO World Heritage site confirms the importance of the presence of this cultural history: "The essence of centuries-long cultural continuity is represented by the universal synthesis of life phenomena: the bridge and its fortresses – with the rich archeological layers from the pre-Ottoman period, religious edifices, residential zones (mahalas), arable lands, houses, bazaar, its public life in the streets and water" (UNESCO, 2005).

In Ottoman Mostar a strong visual, symbolic and utlitarian connection with the landscape defined the configuration of the city and every day life in the city. City expansion was shaped by its geographical location and natural conditions, the landscape reached private spaces in courtyards and in the small agriculture within the city combined with a large productive agricultural hinterland. The way buildings were placed within the city and neighbourhoods, protecting the views of neighbours towards the landscape emphasises a deep-rooted respect and identification of the local people with the landscape during the Ottoman empire.

Ottoman Mostar with minarets marking the collection of mahalas that together form the city, from cidom.org

AUSTRO-HUNGARIAN EMPIRE (1878 - 1918)

After the occupation of Mostar in 1878 by the Austro-Hungarian empire, the city remained an important place within the region as the capital of the Herzegovina canton. This was emphasised by the construction of a new railway line and the arrival of important players within the Austro-Hungarian administration (Pašić, 2004).

The railway was located at the street now known as Bulevar and divided the Old Town and New Town (Plunz, 2017). Industrialisation was brought to the city and found a place in the new city expansion on the west side of the Bulevar. City expansion soon followed and Western European design principles were introduced to the Ottoman city. As there was enough space for the city to expand outside the Old Town, the Ottoman core of the city has been preserved despite the introduction of entirely different architectural language. Significant investments were made in infrastructure, communications and housing (Pašić, 2004).

City expansion was done in fashion of that time and public parks and lanes lined with trees were introduced to the densified Ottoman city. The tree lanes followed an orthogonal grid with villas for families and important public buildings. The two parts on both sides of the Neretva river were connected by the construction of several bridges (Plunz, 2017).

New monuments and architectural styles reflected the aspirations for the city at that time. Although catholic religion was introduced and churches were built across the city of Mostar, there was a tendency of Austro-Hungarian administrators to harmonise rather than suppress cultural difference within the empire. This was done through architectural language which is illustrated well by the Gymnasium, built in Islamic style in 1902 (Pašić, 2004).

Due to the expanding city, the ingenious ingenious irrigation system disappeared from the available historic maps of the city, but the irrigation system can still be found in canals which are used during high tide in Radobolja river to prevent flooding. Since the city expanded outside the Old Town and new settlements were built on former agricultural grounds, agriculture was moved further from the city, emphasized by the railway line that formed a barrier between the city and its agricultural hinterland. Besides that, with all development and public facilities located in the New Town, the flourishing Old Town began to die a natural death in the nineteenth century (Suri, 2012).

Train station of Mostar in 1910, from cidom.org
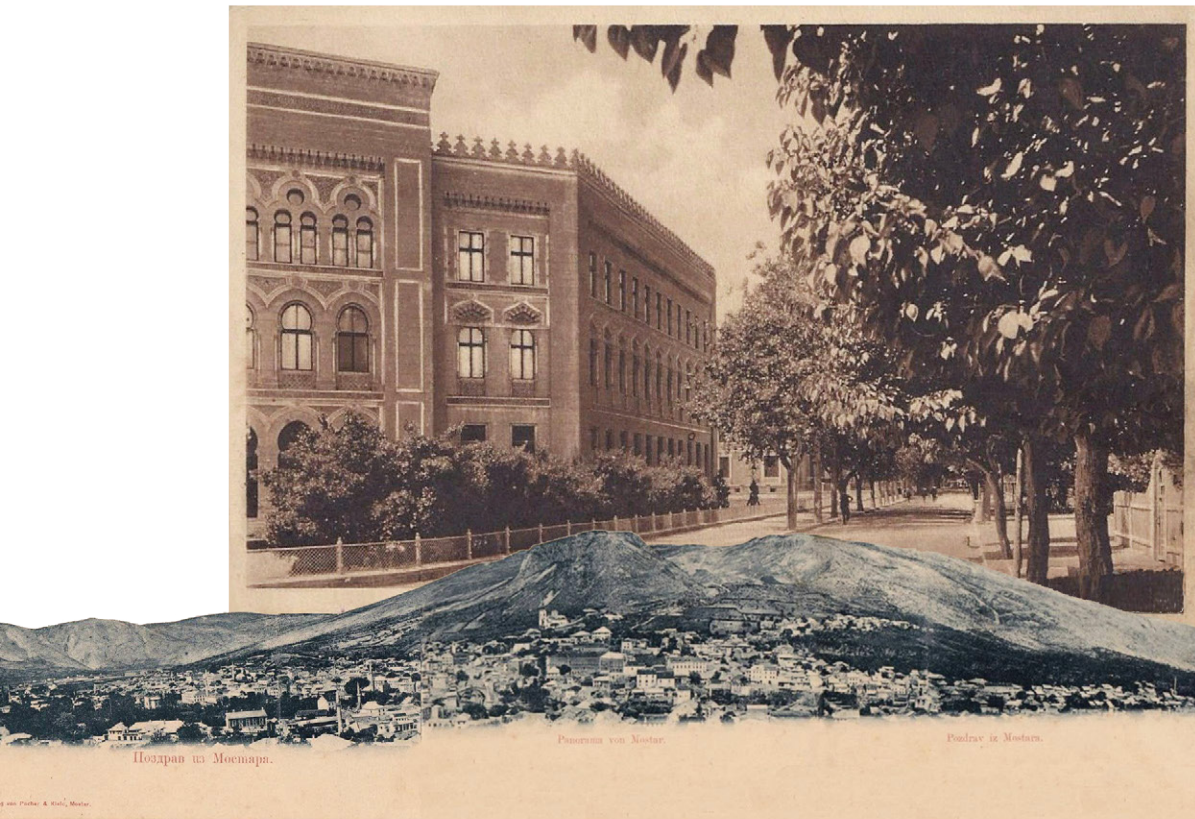
Under Austro-Hungarian administration the relation with the landscape became more formal which was emphasized by the monumental lanes with trees and public parks that were introduced in this era. This formalization of the relation with the landscape made space for a new appropriation of nature, besides the productive and symbolic connection of the Ottoman city with the landscape. Outside the narrow streets in the Ottoman core of the city, a leisure landscape was introduced with public parks and lanes with trees that became places to socialize and enjoy the landscape.

Children sitting at Radobolja in 1900, from cidom.org

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Partisan memorial and city expansion in 1960, from cidom.org

SOCIALIST FEDERAL REPUBLIC OF YUGOSLAVIA (1945-1992)

With an increase in mineral extraction, expanding stone quarries, a growing agricultural sector outside the city containing agricultural fields with permanent crops, vineyards and orchards, the landscape's potential to be productive was used more than ever before. An area of 5000 hectares along the Neretva was planned for state owned vineyards and orchards (Suri, 2012). Large numbers of wild growing species, mushrooms and sage were exported (source). During this period a number of hydro-electric power plants were established, two in Neretva river and one in Jablanica river (a small river flowing into Neretva), all in close proximity to Mostar (Suri, 2012).

Besides this, forestry and the lumber industry in Yugoslavia played an important role in transforming the landscape into a productive landscape. Yugoslavia was rich in forests, including subtropical laurel, cork oak, and olive trees as well as varieties common to the coldest zones. Bosnia-Herzegovina was the republic with the highest amount of state owned forests within the federation. There was a distribution of coniferous trees (fir, juniper, pine and other conifers) and deciduous trees (oak, beech, other deciduous trees), but large areas of Bosnia-Herzegovina were old forest unsuitable for cutting and large areas of brushwood, which serve mostly as pastures and food for livestock (Anonymous, 1950).
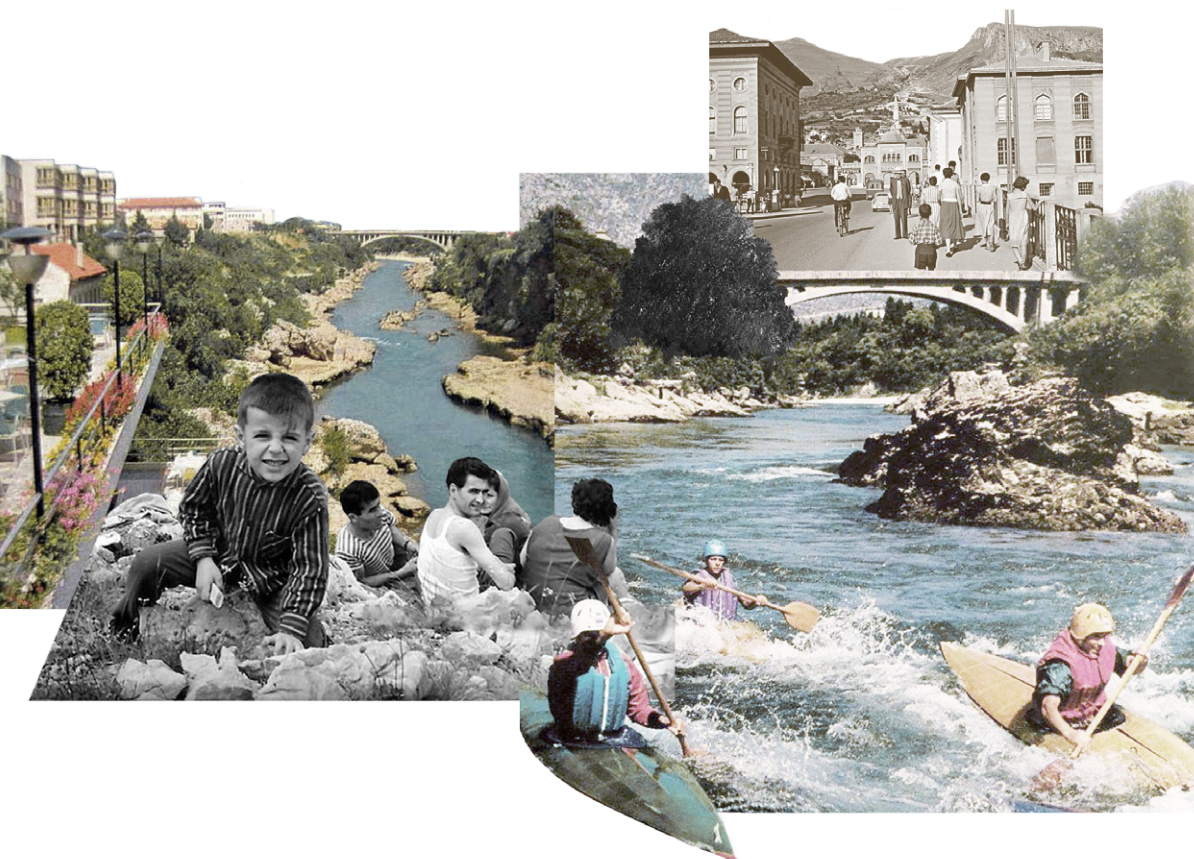
Yugoslavia's ambition to become a large player in the field the lumber industry became clear when the Federal Ministry of Forestry turned planting new trees into a social project:

As a kid I used to go into the mountains with my grandfather and plant a tree every year, it was a tradition in Yugoslavian times. - Damir

The Old Town on the Eastern side of Neretva river was characterised by inefficient and outdated infrastructure, so the city expanded further on the Western side of the river with the construction of large residential blocks in a modernist aesthetic. In this modernist style, commercial buildings appeared on the historic side of the city as well so for the first time since Ottoman Mostar the timber constructions that had survived for centuries were replaced on a larger scale in the 1970s and 1980s (Pašić, 2004).

However, at the same time a plan to preserve the Old Town was implemented, which brought huge economic prosperity to the city of Mostar as from this moment the city became a tourist attraction (Bottlik, 2017). Even though in Yugoslavia a socialist regime was established that emphasized similarities instead of ethnic differences,

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a tourist industry was established within the federation to experience and enjoy the collective past (Grandits & Taylor, 2010). When the tourist industry was established in Mostar, a new appropriation was formed for the city's historic connection to Neretva river. Stairs that connect the city with the riverfront were built, new public spaces arose at the riverfront and hotels and public buildings created terraces and balconies capturing the Neretva view (Grandits & Taylor, 2010).

According to Plunz, in 1969 he found in Mostar "an orderly, well-functioning, and integrated urban entity: three religions with all their traditions and symbols coexisting side-by-side. It was kind of social oasis within the turmoil of global human relations at least relative to where I was coming from. Even physically the city was a green oasis, nestled in its container of mountains with the prominent symbolism of the sixteenth-century Stari Most - its iconic bridge across the Neretva - still touching to the souls of the late millennium" (Plunz, 2017, p.51).

Yugoslavian Mostar marked a new era of big transformations of the landscape. The productive landscape was pushed to another level compared to previous times, mainly due to the fact that the city's population in this period grew from 18.000 to 100.000 people. Huge agricultural fields, vineyards and orchards were planned and a Federal Ministry of Forestry planted forests across the country, which were connected to social projects which turned into traditions. At the same time, a new appropriation for the landscape was formed due to tourism industry.
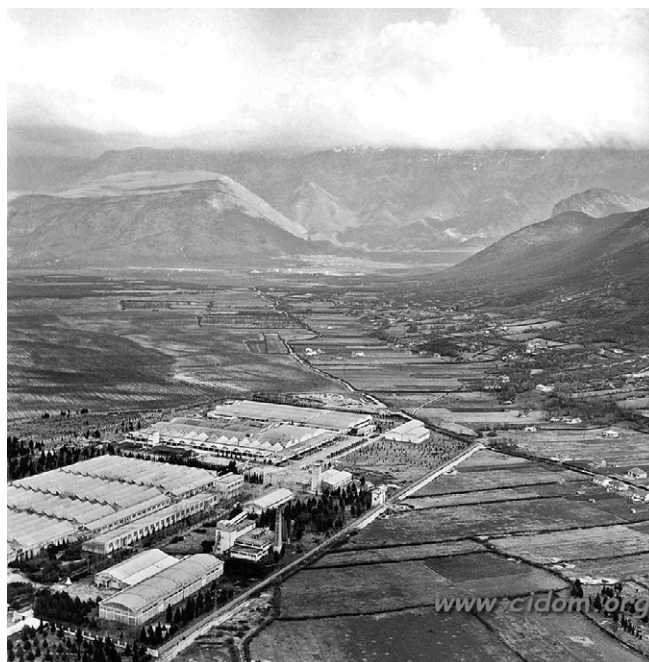
Agriculture and industries North of Mostar in 1960, from cidom.org
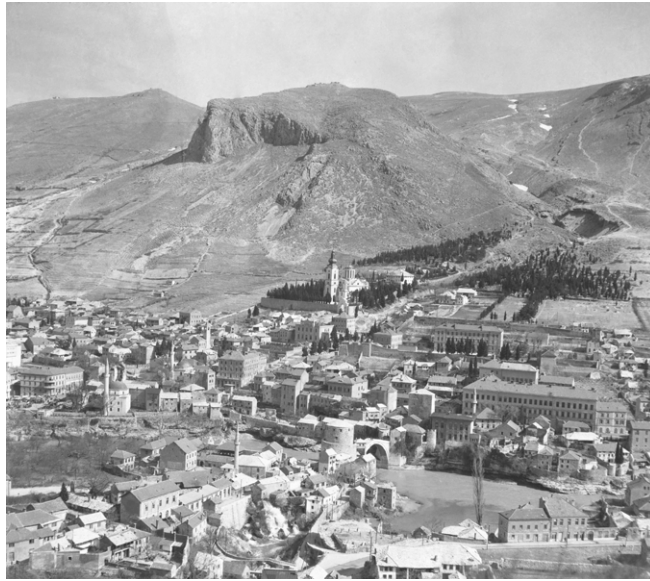
Mountain East side of Mostar with Orthodox church in 1954, from cidom.org

Mountain East side of Mostar with Orthodox church in 1970, from cidom.org

The same mountain and Orthodox church are shown in the pictures above. In 1954 the foot of the mountain is bare, with some trees around the Orthodox church. The picture taken in 1970 shows a big difference of the same view, showing that in 16 years a lot of new trees were planted, drastically changing the landscape around Mostar.

THE SIEGE (1992-1995)

During The Siege landscape elements formed the frontline during the battle. Snipers were located in the mountains and the river Neretva formed the line of segregation. The map on the right displays the front lines during the war. During the Siege a lot of these cultural landscape features were destroyed like the rest of the city and parks were transformed into cemeteries for all the people that lost their lives during the events of the Siege.

Burned down cars, pieces of cloth and ruins were used to move behind or through. Bosniak militias also dug trenches and tunnels in the soil in order to move safely through the city. The river was used for washing and courtyards and the trees in and around the city were cut to warm up during the cold winters and used to block roads as source of protection. Enclosed spaces were used as kitchen gardens for private food production, spaces for social activities combined with spaces for graves. The connection between human practices and the landscape was out of necessity brought back to its most elementary form by the war (source).

The landscape also served as a natural border during the battle, as the Bulevar and Neretva formed the frontline. The Eastern part of the city was closed off from water supply and didn't have a lot of shops due to heavy bombings so women were allowed to cross the river a few times in order to get water and basic necessities by crossing the bridges or substitute wooden bridges that remained (Mackic, 2016).
Pictures Siege, from cidom.org

SIEGE MAP

⦀	Bosniak frontline
⦀	Croat frontline
▦	Overgrown
▦	Main frontline
—	Hill frontline
●	Snipers hill
●	Snipers city

0   200   400   600m   N
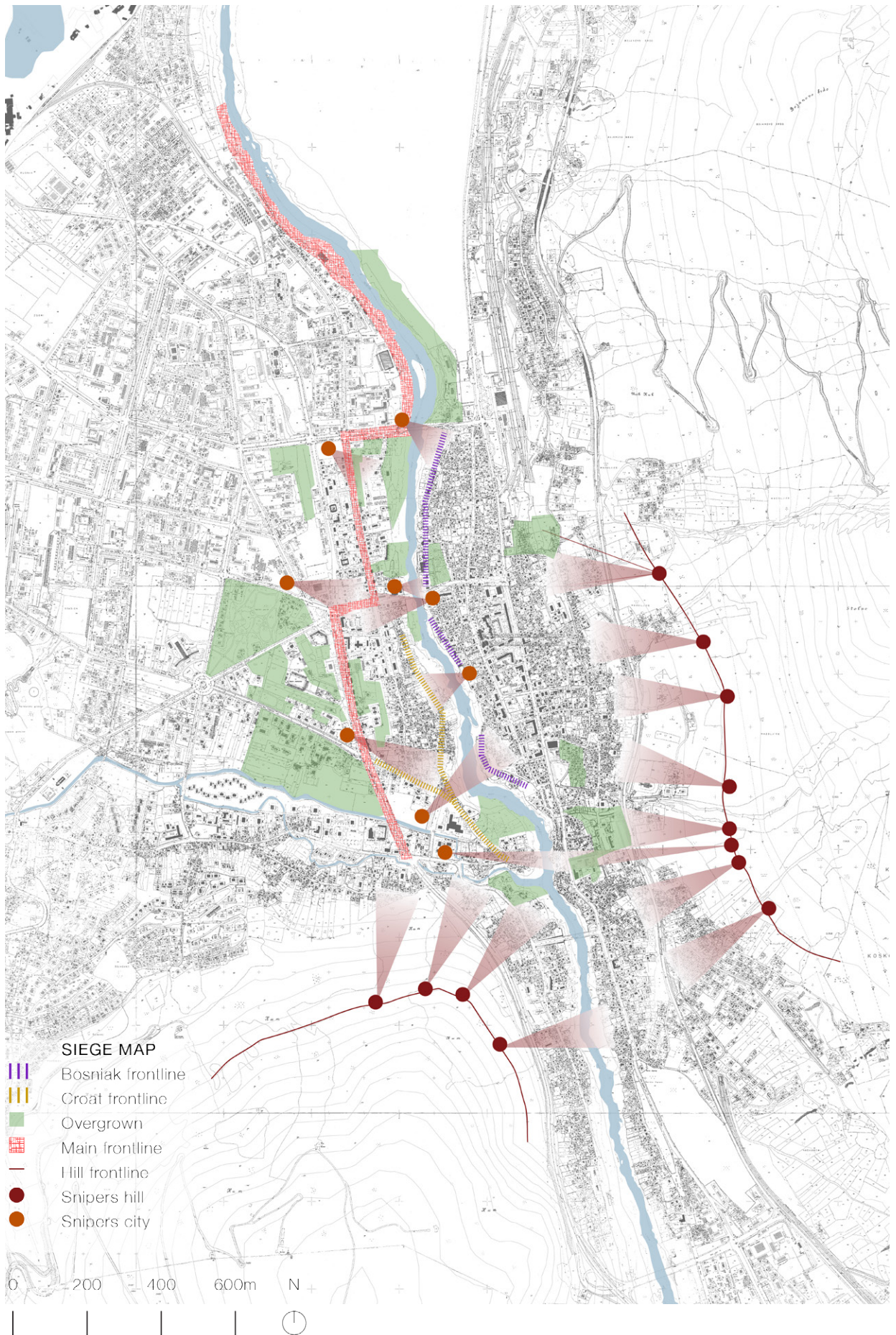
Aerial picture of the Old Town (Stari Grad) and Old Bridge (Stari Most) in 1993, from cidom.org

POST-TRAUMATIC LANDSCAPE

The Siege resulted in extraordinary destruction of the city and a continuing post-war ethnic partition. Due to its geographical location the Balkans have been the site of geographical and religious conflict for at least 700 years (Malcolm, 1994). However, "since the bloody war of 1992-1995 - for which the neighbouring countries are more to blame than the indigenous ethnic groups - this image finally was set in the heads of everyone. Who talks of Bosnia-Herzegovina, talks about ethnic differences, ethnopolitics, separatism and religious fanaticism" (Ernst, 2019).

After the war ended, many international organizations came to Bosnia, and Mostar, providing the city with thousands of hours of labour power, material resources and financial assistance. The Old Town (Stari Grad) and Old Bridge (Stari Most) were restored and became a UNESCO world heritage site. However, more than just the historic core of the city of Mostar was heavily damaged during the Siege.

Besides the ruins and abandoned spaces across the city, the front line during the war running along the Bulevar remains as a political and psychological division line into Bosniak and Croat sides of the city. Where the former division line during the war runs from the river to the Bulevar, a neutral zone was created between the two sides. Initially was the thought behind this to create a neutral zone for all public amenities the city needs. In reality, the two parts function as separate cities. This is emphasized by the many abandoned spaces and ruins along the Bulevar, initially meant for common facilities for both sides. Since the war, not only has the administration of the city been divided, but each part also has its own facilities, ranging from hospitals, bus stations, schools and universities, to energy and telecom companies (Grodach, 2002). People who live on one side don't necessarily have to go to the other side if they don't have to.

"These structures reflect Mostar's multi-cultural past and should be reclaimed to meaningful use in order to spur economic growth, revitalise neighbourhoods and enhance community pride and identity" (Pašić, 2004).

LEGEND

- Water
- Ruins
- + Abandoned spaces
- = Bridges

rocks at riverfront	promenade	bridge	stairs to water	beach
cemetery	mosque with tree	small square&fountain	pergola	tree lane
public square	enclosed garden	vegetable garden	orchard	terraces
yugoslav forest	recent forest	high rise building	sports field	park
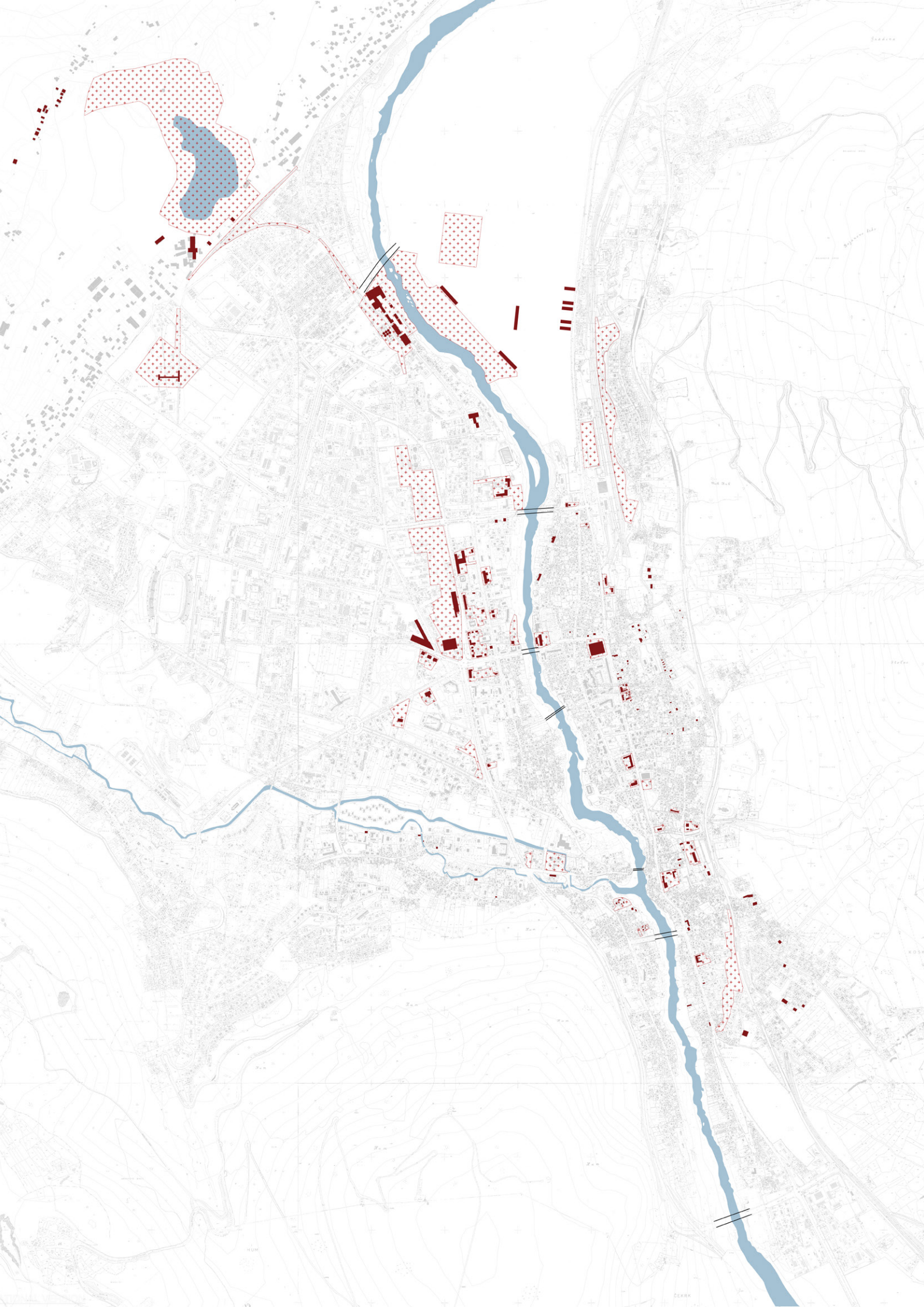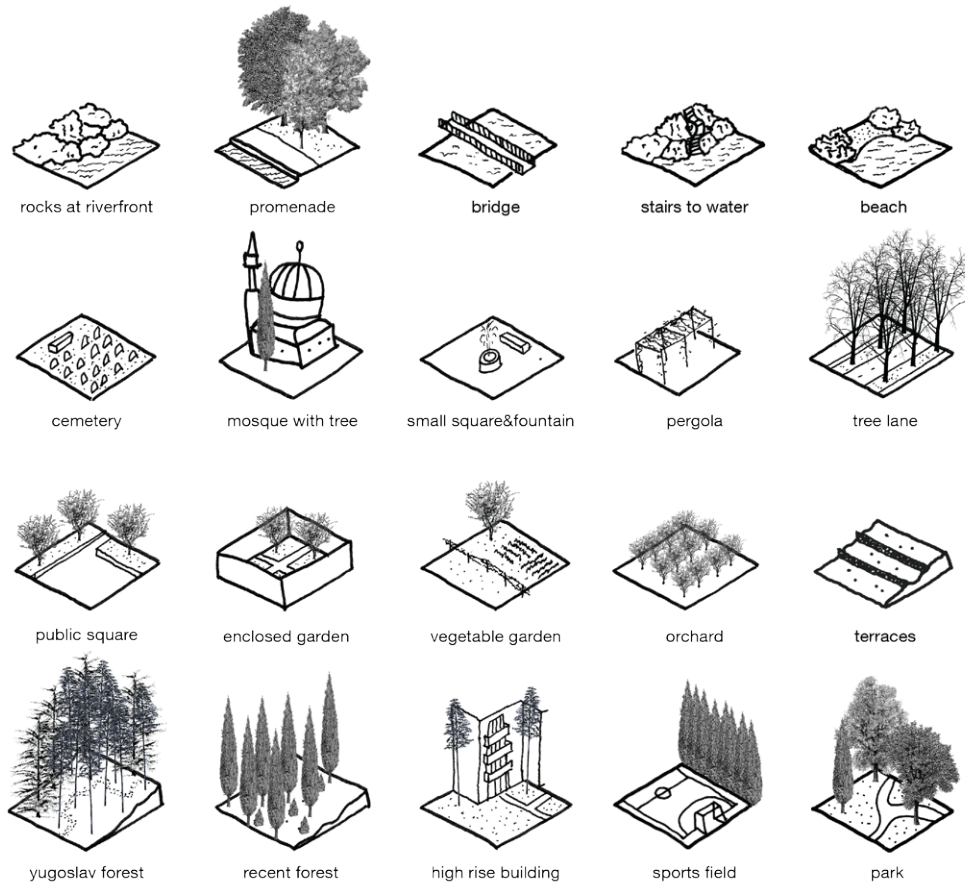
THE DISAPPEARANCE OF MEANING

Before The Siege, the many layers of the past used to offer different historical points of reference to people from different backgrounds and with different views. They were filled with collective memories, used to have meaning for people and showed in what ways the different cultural backgrounds connected to the landscape. These social public spaces were all based on design principles from different times in the rich heritage of Mostar (Mackic, 2016).

Design principles that were used in the past in order to make a connection with the landscape are spread across the city. The spaces once filled with colletive memories were lost during The Siege. After careful reconstruction of many of these spaces, the physical spaces are back, but the meaning of the spaces is often lost (Mackic, 2016). The map on the right shows the location of these spaces.

During and after the war around 40.000 people moved away from the city, but due to a lot of refugees from the countryside the number of inhabitants of Mostar stays the same at 100.000. This means that there are a lot of new people that don't share the collective memories connected to these spaces.

RESTORED PUBLIC SPACES

- Bridge
- Park
- Neighbourhood park
- Square
- Cemeteries
- Lane

0 200 400 600m N
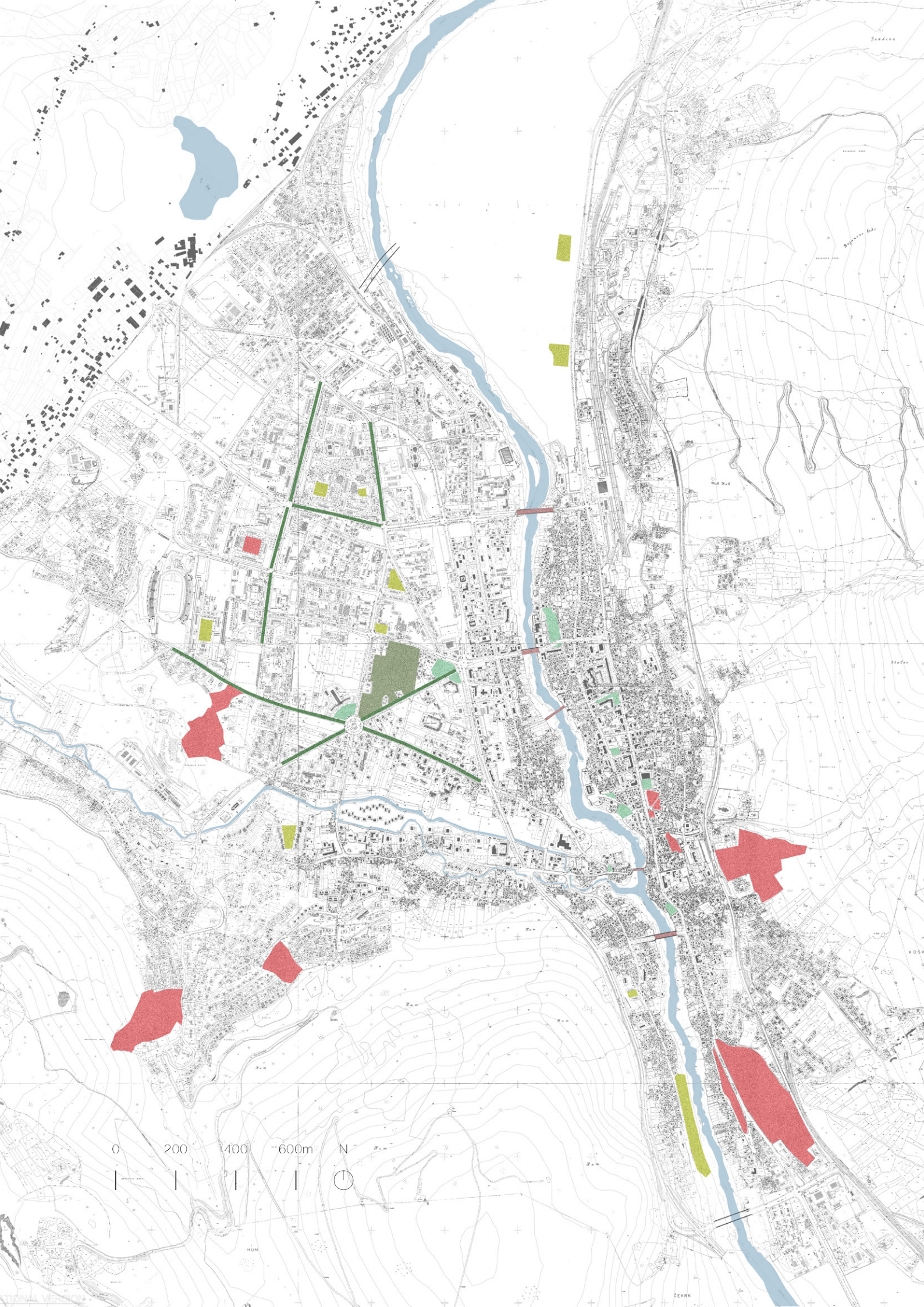
Former Yugoslavian bakery in Mostar, from cidom.org

POST-INDUSTRIAL LANDSCAPE

On the other hand, Mostar is a city with 'ordinary problems' just like any other city: "From the perspective of urban design, it is difficult to know where to start with Mostar given the extraordinary destruction of the war and the continuing postwar ethnic partition. The city is also experiencing the pressing 'ordinary' problems of an ageing post-Sovjet and post-industrial city. We were quickly brought to consider the city as region, the scale at which strategic planning issues in Mostar originate and must be resolved - in much the same manner as any post-Soviet city, regardless of the particulars of the Bosnian context. Mostar as a centre of production has disappeared: partly by the destruction of the war and partly through 'natural causes'" (Plunz, p. 52).

Among the effects of these 'ordinary' problems are weakened employment and a weakened morale among working-class urban residents which prevent political decisions from being taken to move the city forward. "Mostar emerged from civil war as a crippled industrial centre and a pariah on the tourist map, having been stripped of its greatest prewar assets" (Calame & Charlesworth, 2012, p. 119).

The image on this page illustrates this case with a former bakery in times of the Socialist Federal Republic of Yugoslavia which lost its function during The Siege due to a changing system and the ongoing war at that time. The building lost its function, and fell into decay during and after the war.

NEGLECTED LANDSCAPE

During my first site visit my attention was drawn to the neglectance of the landscape and amounts of trash dumped in nature and public spaces. Undefined spaces lead to cars being parked everywhere there is space for it and small green spaces don't seem to matter in the current public realm. The after-effect of the Siege plays a big role in this, as Arna Mackic describes: "What struck me most was an after-effect that nobody considered when the war was still raging. Foreign powers forged the Dayton Agreement. Bogdanovic mourned the irrevocable death of his beloved cities. Political parties and the media kept reproducing the ethnic fault lines long after the war. But of all the evils we could have expected, this was not one of them: the banality. The cheapness, the makeshift repairs, the superficial facades barely covering up poverty and disillusionment, the third-rate copies of Italian fashion or American entertainment. Empty bottles and plastic bags littering the riverside. The thoughtlessness in treating the environment, no longer sure it will continue to exist, no longer worth the trouble of maintaining" (Mackic, 2016, pp. 22-23).

CONCLUSION

Natural conditions and the different layers of the past have shaped the way local people use the landscape until today. The river and historic trades route connecting the Adriatic Coast with bigger cities inland and the country's mineral resources are the reason behind the location of the city. Topography and soil conditions define how the landscape was used. Water forms a connecting element within the landscape in and around the city, as the Neretva forms a green corridor through the city and underground streams that are characteristic for the karst landscape are visible above ground due to a densification in plants and trees within the bare karst landscape.

Throughout history a direct connection with the landscape was gradually lost, as local people don't live directly from the ground anymore and upscaling of agriculture and an expanding city pushed the natural landscape and productive landscapes that are directly connected to the natural landscape out of the city. The productive landscape remained, but the distance between city and productive landscape became bigger throughout history. This process is shown in the land use maps on the right.

However, during The Siege the productive landscape was brought into the city again out of necessity. Due to the war, the connection between human practices and the landscape was out of necessity brought back to its most elementary form. Another important aspect of it was that these spaces of connection with the landscape reminded people of the war and as a result were neglected afterwards. These public spaces were part of daily life before the war and filled with collective memories, they used to have meaning for people and showed in what ways the different cultural backgrounds connected to the landscape. Many of them were rebuilt but have lost their meaning since the war (Mackic, 2016). The Siege left many abandoned spaces and ruins across the city that are slowly being overgrown. These spaces are not part of daily life anymore and will gradually disappear from the collective memory.

LEARNING FROM THE PAST

By looking at the historic development of human practices connected to the landscape we can conclude that there are different ways to connect with the landscape. The way Ottoman Mostar was spatially organised shows a deep-rooted respect and identification with the landscape, this could be explained in that the people depended on the landscape and its productive capacities.

In Yugoslavian Mostar the importance of the productive capacities of the landscape manifested itself in a renewed exploitation of the landscape for export purposes, which resulted in agriculture, vineyards, orchards, mining, dams and forests were planned on a federal scale by the government. Yugoslavia's ambition to become a large player in the field of the lumber industry turned planting new trees into a social project and planting a new tree every year became a tradition among Yugoslavian families.

Although the relation with the landscape changed throughout history, symbolic relations with the landscape and engagement with the landscape that turn into local traditions connected to the landscape find their origin in the productive landscape. By learning from the past, a new connection between local people and the landscape can be made through human practices by connecting and engaging with the productive landscape.
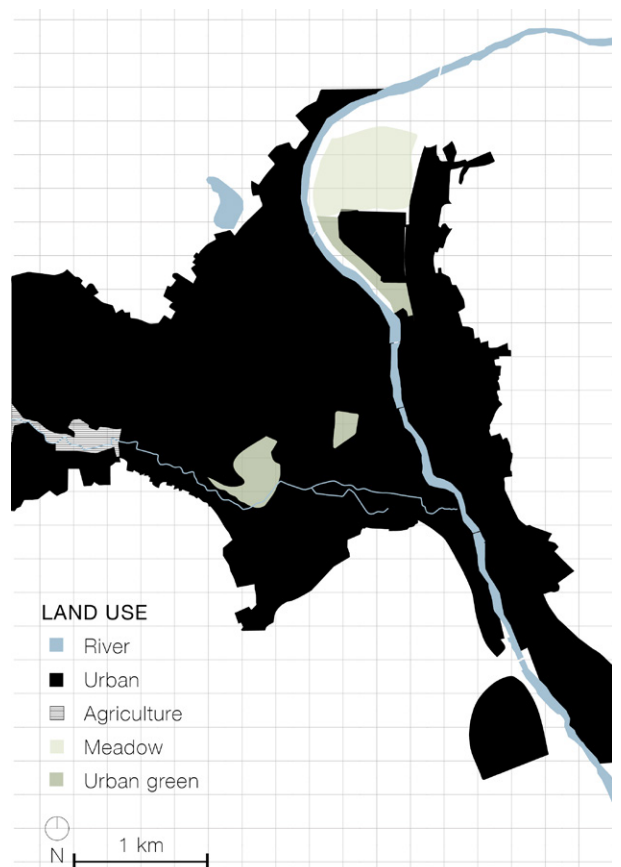
LAND USE
- River
- Urban
- Agriculture
- Meadow
- Urban green

N   1 km
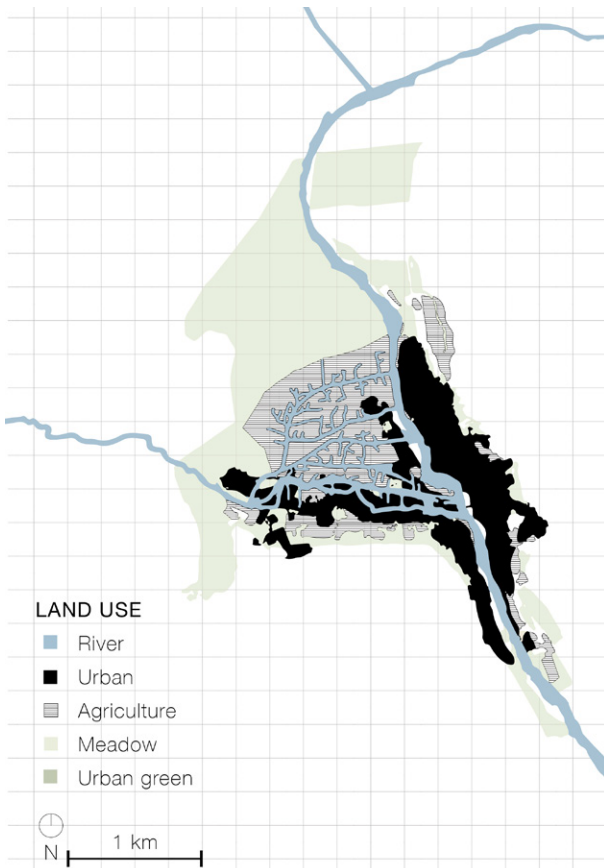
Ottoman Mostar : 1468 - 1878

LAND USE
- River
- Urban
- Agriculture
- Meadow
- Urban green

N   1 km
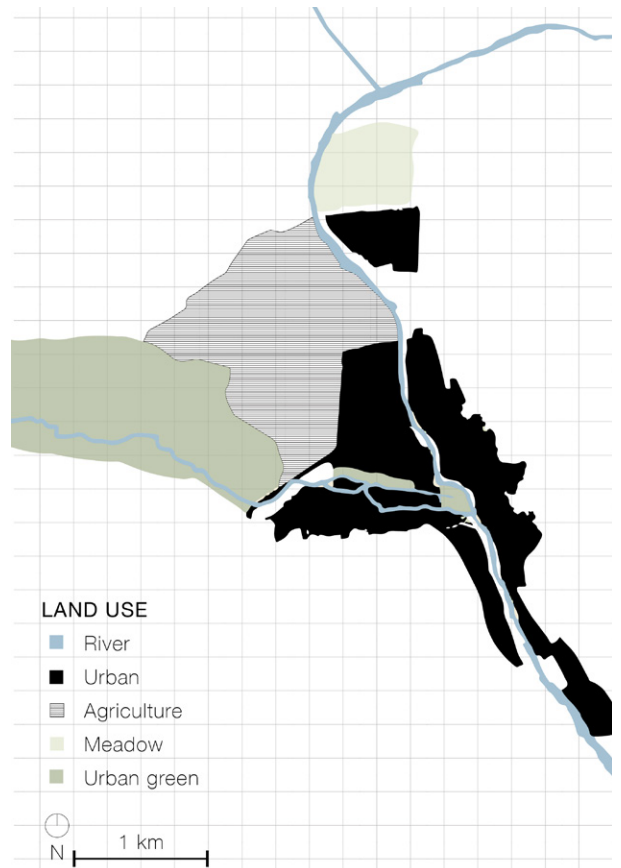
Austro-Hungarian Mostar : 1878 - 1918

LAND USE
- River
- Urban
- Agriculture
- Meadow
- Urban green

N   1 km

Yugoslavian Mostar : 1945 - 1992

LAND USE
- River
- Urban
- Agriculture
- Meadow
- Urban green

N   1 km

Mostar in Bosnia - Herzegovina : 1995 - now

LANDSCAPE PROPOSAL

In the previous sections is explained how the connection between local people and the landscape is lost throughout history. Urbanisation of the natural landscape and historic events make it hard to find traces of the relation with the natural landscape. Research into the historic development also showed how a connection between local people and the landscape used to be established through human practices. How to connect local people with the landscape again?

CONNECTING THROUGH CONTINUITY

As described in the previous sections the landscape and connection between local people and the landscape has changed throughout history. However, by doing research into the natural landscape continuity can be found during the changes, which also helped define the changes of the landscape throughout history. In natural conditions is described how the topography and soil conditions define the land use and that the water connects the different landscape types: mountain and valley. Throughout history the relation between human practices and the mountain and valley changed. All these changes were connected to the presence of water, in the form of a river and disappearing streams, which defined where human practices connected to the landscape took place and where settlements developed.

This continuity of water will be taken as a base to make a new connection with the landscape. The river forms a continuous green corridor through the city and the disappearing streams, visible in the landscape through dense vegetation within the bare surroundings, are coming from the mountains and touch the edge of the urban fabric. These continuous landscape features will be connected through a path, in order to connect the city with the wider landscape again and make it accessible for locals.

In this report I will further elaborate on the route connecting the two water bodies, marked in blue on the map on the right. The ruins and surrounding abandoned space at the waterfront on this route will be my area of focus.

CONNECTING THROUGH THE PRODUCTIVE LANDSCAPE

The Siege left many abandoned spaces and ruins across the city that are slowly being overgrown. These spaces are not part of daily life anymore and will gradually disappear from the collective memory. By learning from the past, a new connection between local people and the landscape can be made through human practices by connecting and engaging with the productive landscape. The ruins and abandoned spaces form an opportunity to do this by bringing back the productive landscape into the city in these ruins and abandoned spaces.

As described in the end of cultural landscape the post-conflict city remains divided, and public functions are segregated. The universities are also a showcase for this segregation in the city, with two agricultural faculties within the city. Both are doing research into agro ecological conditions of Bosnia and Herzegovina and specialise in specific orchards and vineyards, flower production and environmental awareness and management of the environment in agriculture. Students from these faculties are going on a regular basis on fieldtrips to orchards and plantations outside the city. Offering both universities a research location to experiment and do research within their field and learning about productive landscapes will give students from
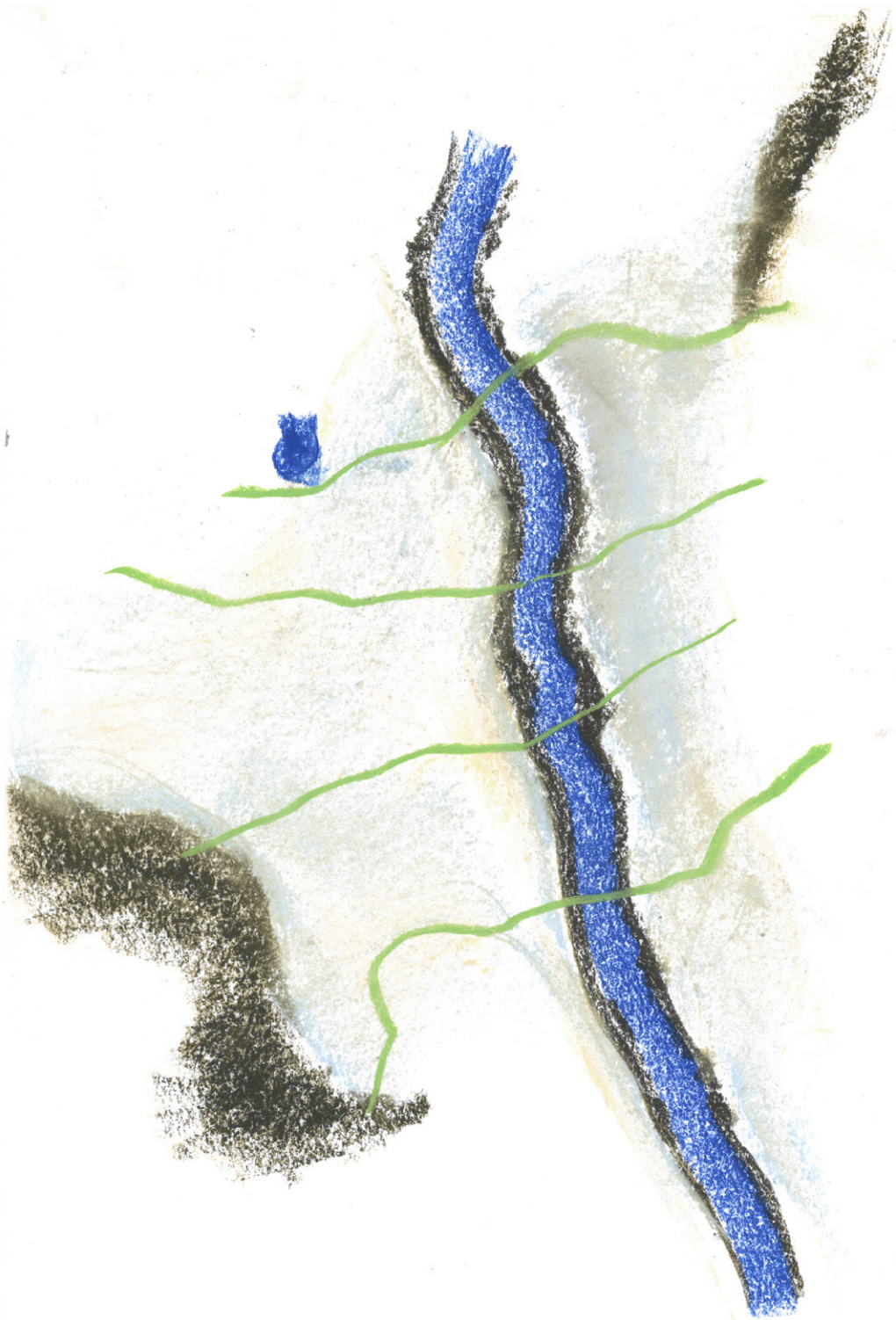
Conceptual diagram of design proposal

different universities common ground within their field of studies. In this way, these students will play a key element in the execution of the project. During my fieldtrips I found out that among young and educated people there is willingness to bridge the cultural differences in the near future. This is in line with the Jericho foundation, which provides scholarships for Bosnian students since the war: "Hope starts here. We believe the only way to create lasting change is to empower the next generation of change agents" (Jericho, n.d.). The map on the right shows the location that I will elaborate on in this report, with the two faculties of agriculture in the city.

CONNECTING THROUGH ENGAGEMENT

In the section learning from the past we saw that engaging with the landscape is an important factor to connect with the landscape and could even turn into local traditions connected to the landscape. In bringing back the productive landscape into the city, students will actively engage to make it happen and learn from the process. Every year, a new group of students will take on a different location within the city. They will need help of other people within this process, by educating people from the neighbourhood and teaching them how to take care of the landscape, the people from the neighbourhood can get involved and by being able to engage in the project the project will mean something for the neighbourhood. By organising a yearly harvest day, based on the principle of the Yugoslavian tree plant day tradition, will keep the people from the neighbourhoods engaged in the project and can show them directly what the productive landscape can offer them.

REACTIVATING RUINS AND ABANDONED SPACES

With the proposal described above we can create a new connection between local people and the landscape and it might even turn into new traditions, like a harvest day or tree planting day, but it won't make these spaces part of daily life yet. In order change the narrative towards the landscape of today, where the connection is lost between people and spaces that have a (symbolic) relation with the landscape, spaces that become productive landscapes need to be reactivated and part of daily life again. The next chapter, common ground, will elaborate on this.

connecting.through.continuity

reactivating.ruins.and.abandoned.spaces

connecting.through.the.productive.landscape

connecting.through.engagement
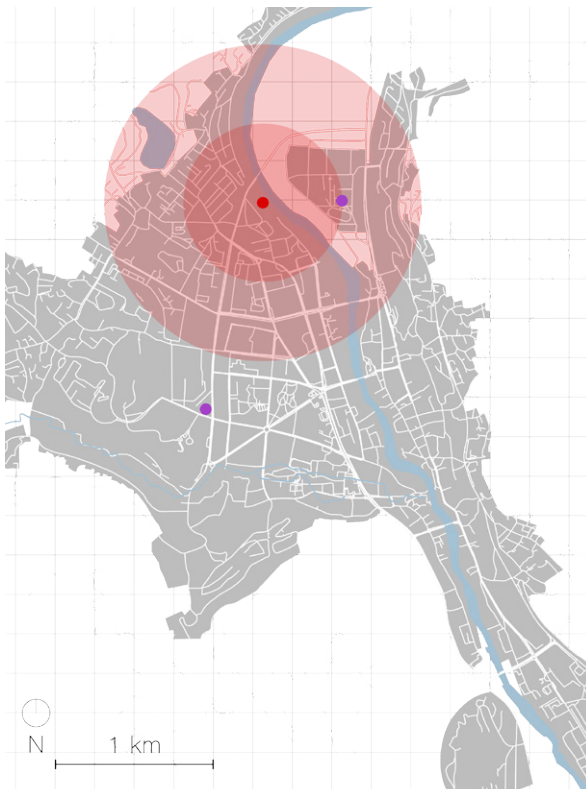
Location of existing agriculture faculties in Mostar and site location with a radius of 500m, which is the amount people are willing to walk. I experienced that Mostar is quite walkable, so added a 1km circle as well.

N   1 km

LANDSCAPE AS COMMON GROUND

Through current human practices connected to the landscape this chapter will explore in what way ruins and abandoned spaces can be re-used in order to connect local people to the landscape.

REWRITING THE CITY

The Siege drastically changed the city and its public life. Although many public spaces were carefully reconstructed after The Siege, the meaning of these spaces has changed for the local people. Mackic underlines that not the physical spaces, but old urban traditions can make people reconnect with the city and the landscape: "By recalling their own traditions, which never completely disappeared but may have been put on hold for one generation, the citizens of Mostar should listen to their own memories. These memories could be based on old urban traditions that were and still are the premises for the city to function, as promenading along the Korzo and public street caberet (Liskaluk) once were, and jumping off the Old Bridge still is. This is the only way to write the city again" (Mackic, 2016, p. 133).

Mackic touches upon an interesting notion here: the old urban traditions that have a connection with the landscape are still in place despite the segregated communities, all be it in separate communities but it is a demonstration that traditions remain. The different ethnic groups promenade on their own side of the river, the pulic street cabaret (Liskaluk) moved indoors and jumping off the Old Bridge happens in the Old Town, which is part of the Bosnian Muslim side of the city. The fact that these old urban traditions are still present in the city today, means that there are other human practices connected to the landscape still in place. Through observation and conversations during my field trips the human practices below are human practices connected to the landscape that are present today within the city.

Analysing the spatial conditions connected to these human practices will deliver spatial conclusions for the landscape design interventions on site.

Walking   Sitting at riverside   Gathering in public space   Hiking

WALKING

As a case study a walking path along Radobolja river is analysed. On a nice sunny afternoon a lot of people were walking here. After observation I noticed that they are all walking from the beginning to the end of the path. It's a path that stretches over 1.2 km parallel to the Radobolja river. Sometimes along the river, sometimes leaving the river within eye sight with a field or gardens inbetween. The times the path touches the river it's designed as a promenade, a little bit elevated compared to the river.

From the path one can reach the forest and agricultural fields, but the path remains the dominant element which is emphasized in pavement. Once on the path you are able to walk unabrupted for 1.2 km. All people that were observed turned around and walked back when the paving stopped.

Conclusions for the route: path is uninterrupted if possible, paving doesn't stop and from the path you can reach surrounding functions and a variety in land uses.

0   100   200   300m   N
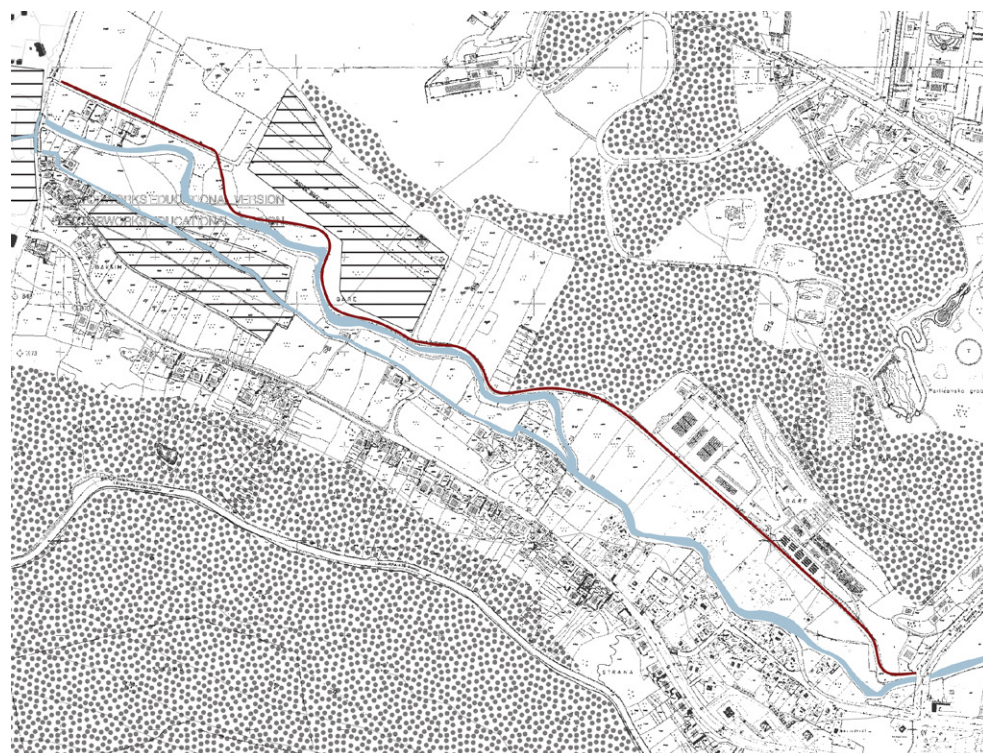
LEGEND
— Path   Forest
  Water   Agriculture
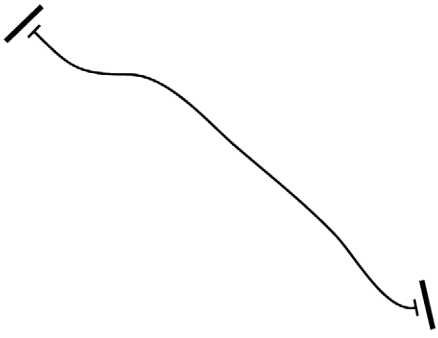
Uninterrupted path
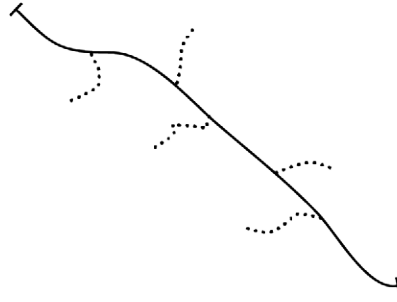
Connecting surroundings
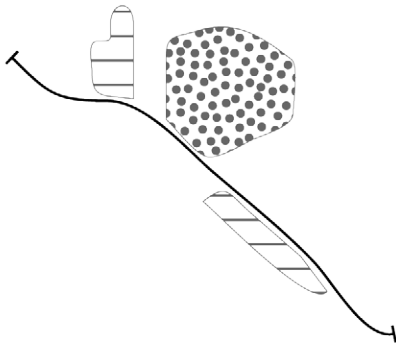
Variety of land uses
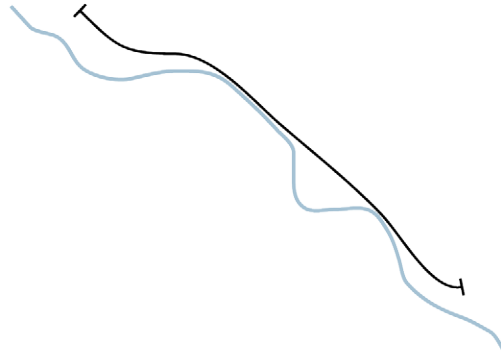
Connection with river

SITTING ALONG THE RIVERSIDE

During lunch time a lot of students could be found at the riverside in the city centre while having lunch. Most of them were sitting concrete platforms and stairs created in Yugoslavian times in order to reach the water from the elevated city. If there were no platforms and stairs present, they were sitting and walking on the rocks.

People gather along the riverside where there is visual connection to other public spaces: bridges or a spot for gathering on the other side of the river. Although people gather at visible places, the places where people gather are protected for the strong wind by dense vegetation. There is no difference for the enclosure of space if the path is paved (or a stair) or if people have to move over the rocks to reach the riverside. However, the places that are easy to reach from the urban fabric are used more often.This can be through stairs or paving, but at spots where the riverside is part of the surrounding urban fabric bigger groups of people gathered. Conclusion for the waterfront visual connections and enclosure define if people use the spaces and the riverside is more often used if it's part of the urban fabric.

bridge

stairs to water

rocks at riverfront

0   50   100   150m   N
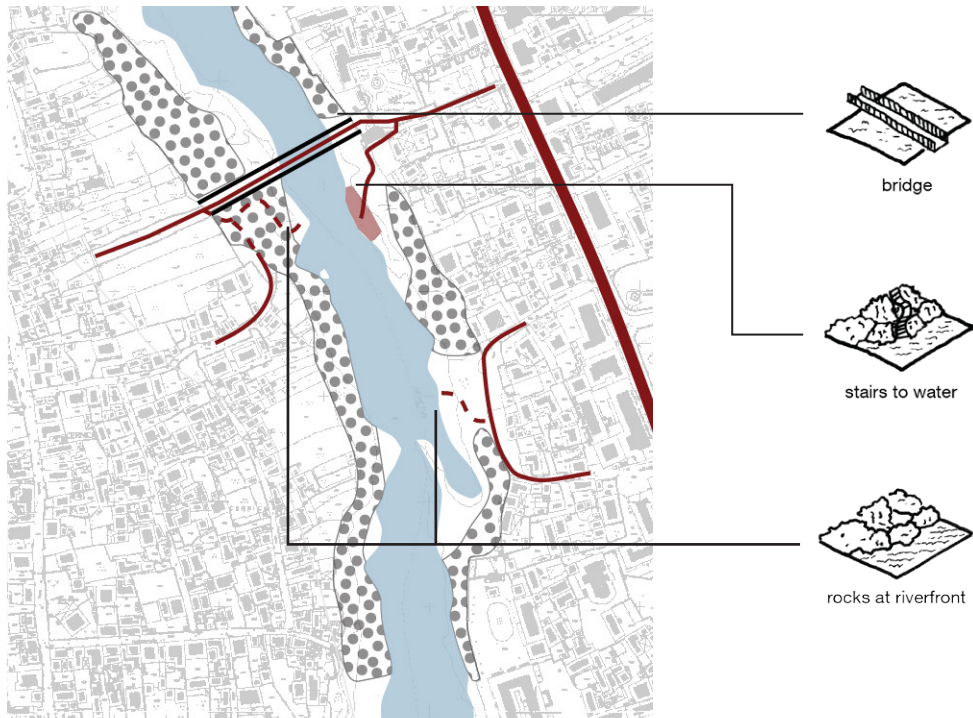
LEGEND
— Paved path   ▨ Concrete deck
▧ Water   ▨ Dense vegetation
                      - - 'Path' on rocks
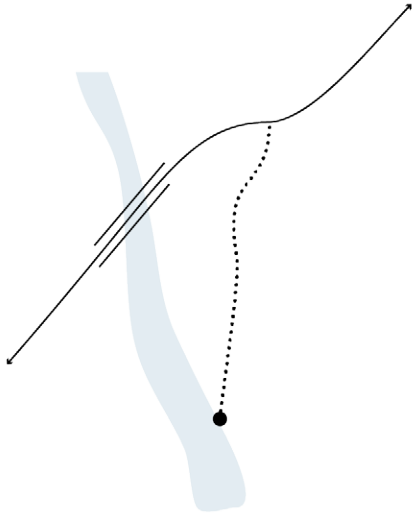
Part of urban fabric
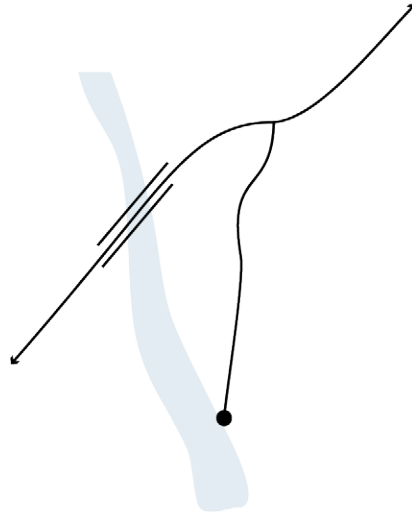
Physical connection
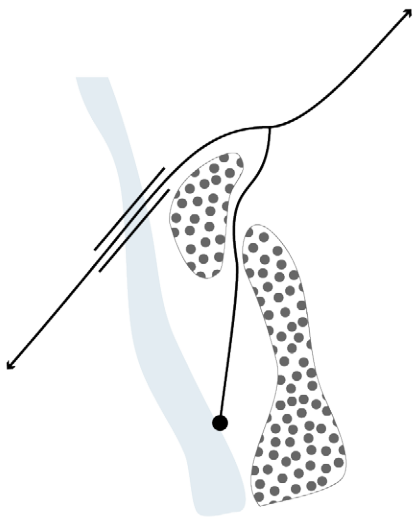
Open & Enclosed
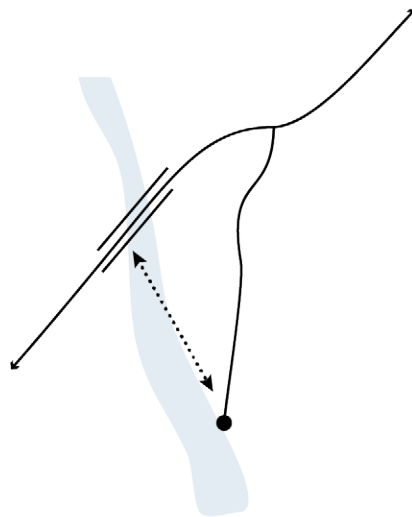
Visual connection

GATHERING IN URBAN PUBLIC SPACE

Mostar has many public squares where either no one can be found or the spaces are filled with tourists. The public squares where Mostarians can be found is in public squares along busy roads filled with cafe terraces. Sometimes a small public square interrupts these terraces, and it doesn't seem to matter how busy the road is.

Trees are an important element, not only for their atmospheric qualities but more importantly because they provide shade during the hot summer months. The public square or street is often enclosed on at least one side and located next to a busy road. The spaces where people gather busy crossings and places where people pass by, so these spaces are often located near public facilities or on central locations.

Conclusions : people gather at busy crossings and streets near public facilities as shops, supermarkets, etc. Trees are an important element in these spaces because they provide shade during the hot summer months.
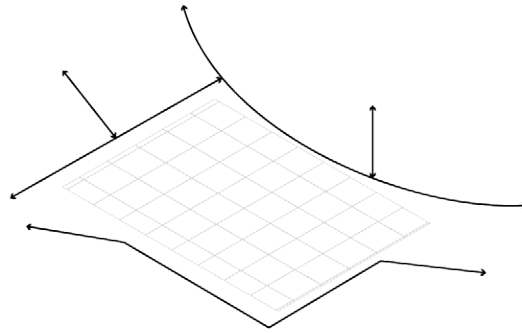
Accessible within urban fabric
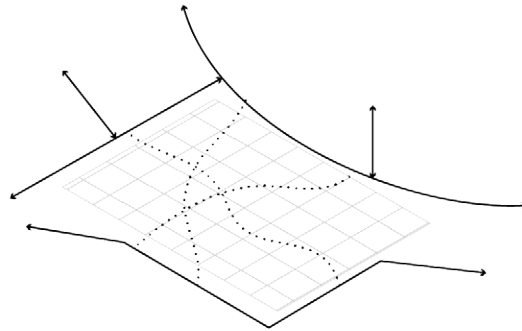
Pedestrian friendly zone
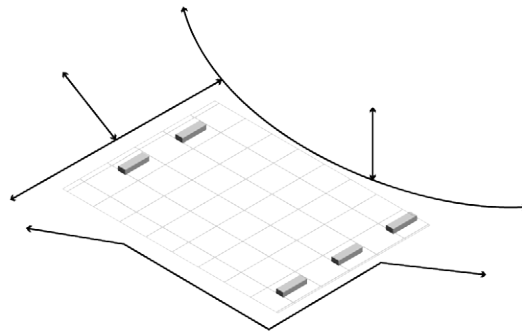
Seating opportunities
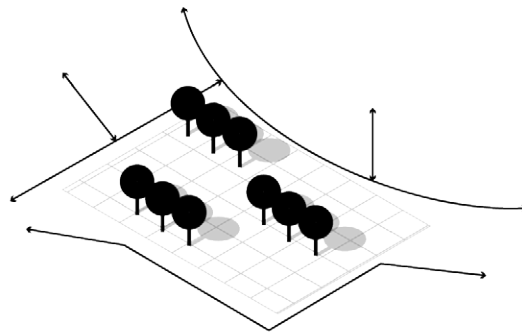
Trees provide shade

HIKING

Around Mostar there are a few official hiking routes connecting the city with mountain villages. It's not easy to find the routes and starting points. Since the mountains are steep and the paths are interrupted, it's a long hike towards the destination. The paths are characterized by rocks and stones in the mountains, interrupted by mountain roads that are asphalted and make moving through the landscape quicker. Height lines are followed and at steep hills the trail is combined with a road for cars.

There are also unofficial hiking routes, but trails through the meadows reveal that people walk there. These trails are parallel to the river, outside the city where access to the riverfront is limited due to the elevation and the absence of stairs or rocks to go down to the river.

Conclusions : hiking trails in the landscape are formed by people that walk there, often not paved but a trail reveals movement through the landscape. At steep parts in the mountains, the trail is combined with an asphalted road.

```
0        200       400m        N
|         |          |         ( )
```
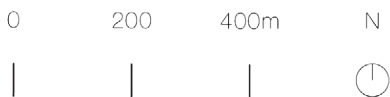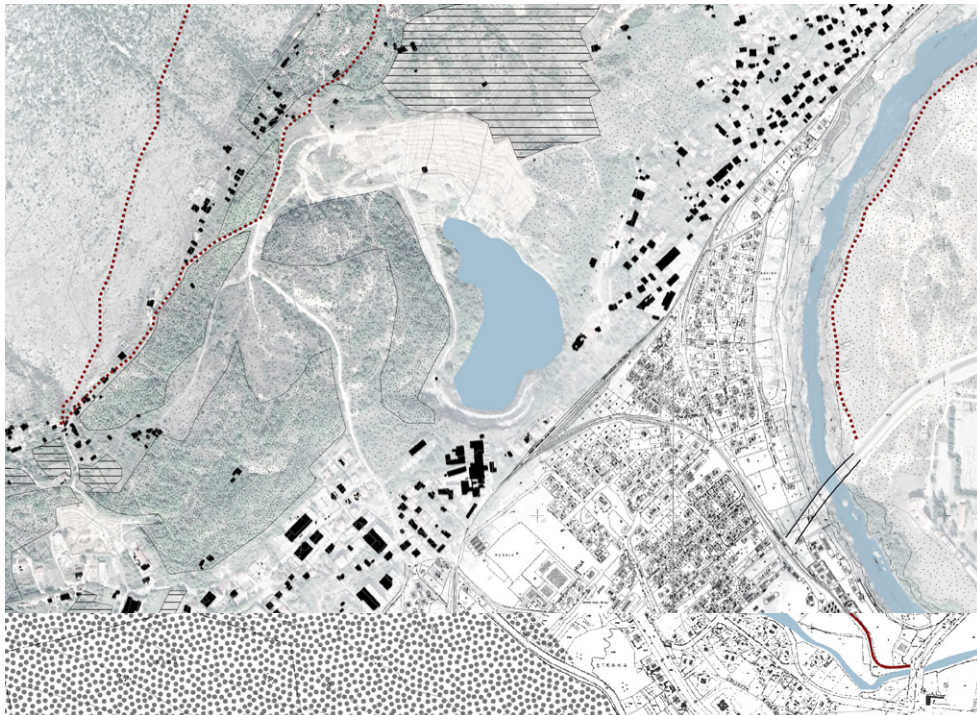
LEGEND

••• Hiking trail   ▦ Forest   ⬚ Meadow
▪ Water   ▤ Agriculture   ⬚ Overgrown
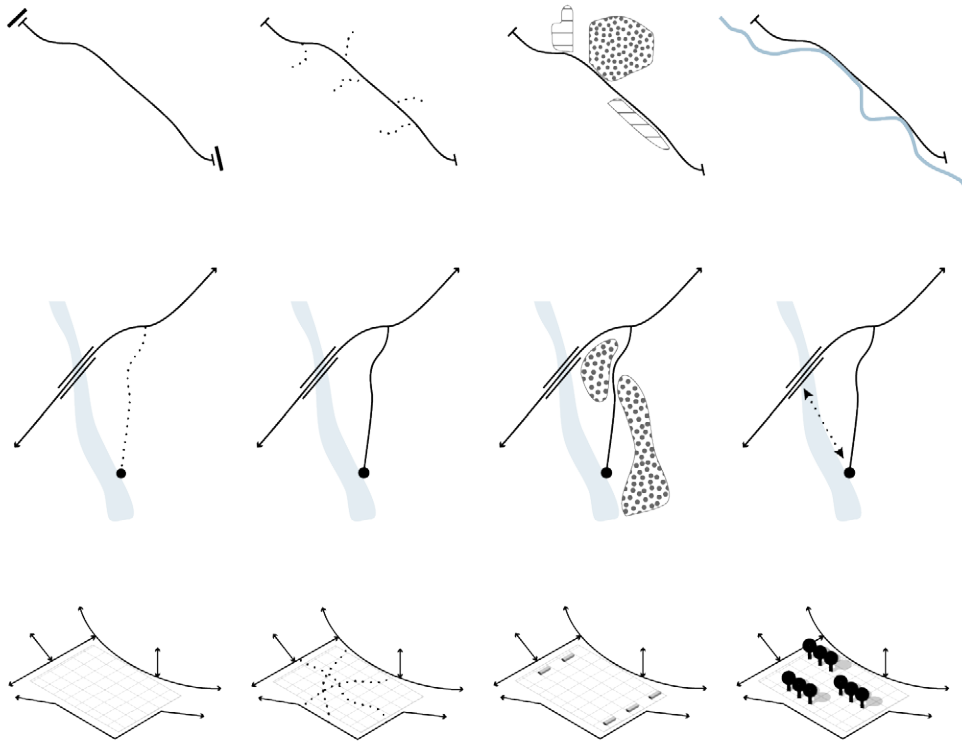
CONCLUSION

Analysing the spatial conditions connected to these human practices delivers spatial conclusions for the landscape design interventions on site in the form of design principles as shown above. These can be categorized in requirements for the route that connects the ruins with the landscape surrounding the city and requirements for the abandoned spaces and ruins across the city that will be transformed into productive landscapes. Analysing the spaces that are currently used for human practices connected to the landscape is necessary to understand the conditions that ensure that make sure a proposed space is used.

Some of these requirements can be found in design principles applied throughout the cultural history of Mostar, by applying them on site a distinctive design can be created as these principles have been used before to connect human practices with the landscape.

Conclusions for the route: path is unabrupted if possible, paving doesn't stop and from the path you can reach surrounding functions and a variety in land uses.

For the waterfront other conclusions can be made: visual connections and enclosure define if people use the spaces and the riverside is more often used if it's part of the urban fabric.

Conclusions for the square: people gather at busy crossings and streets near public facilities as shops, supermarkets, etc. Trees are an important element in these spaces because they provide shade during the hot summer months.

Conclusions for hiking: hiking trails in the landscape are formed by people that walk there, often not paved but a trail reveals movement through the landscape. At steep parts in the mountains, the trail is combined with an asphalted road.

The next section will elaborate on the spatial consequences of new urban activities.

NEW URBAN ACTIVITIES

Besides getting a better understanding of the relation between landscape and its local users, the interviews and conversations held with local people gave an idea of what new functions people can imagine for the city of Mostar. For me this was one of the ways to test the findings from my research and analysis, to see how people react to a landscape design intervention and their sentiment towards reactivating ruins and abandoned spaces. The following pages will elaborate on the new urban activities I talked about with local people.

These new urban activities sometimes come from memories of places that are lost, sometimes from activities not present in Mostar at the moment. The new urban activities might not all have a direct connection to the landscape, but they can help to activate the abandoned spaces and make them part of daily life again.

The new urban activities give an idea of what could happen to reactivate the spaces and the gives an idea of the size of spaces that is required for these new urban activities.

MARKET PLACE

This used to be a nice market place for local people under a roof of trees, now they built this covered space and they sell tourist products. - Damir

The market place refered to by Damir is located in the Old Town, next to Neretva river. It is a square enclosed by buildings on two sides and located along a street running through the city centre parallel to the river. The square is separated from the street by a few steps. The back side of the market place offers a view over Neretva river, inbetween a small wall there are stairs down to restaurants at the riverfront.
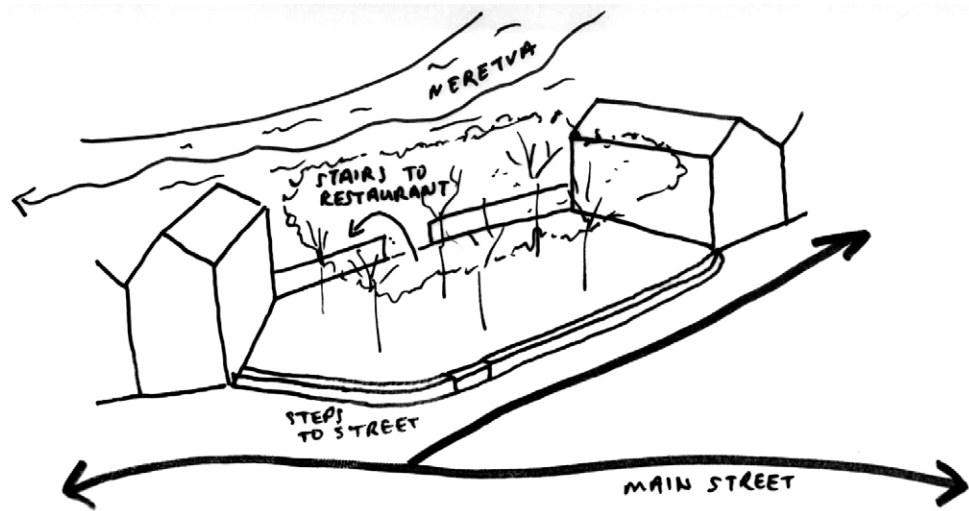
Market place analysis
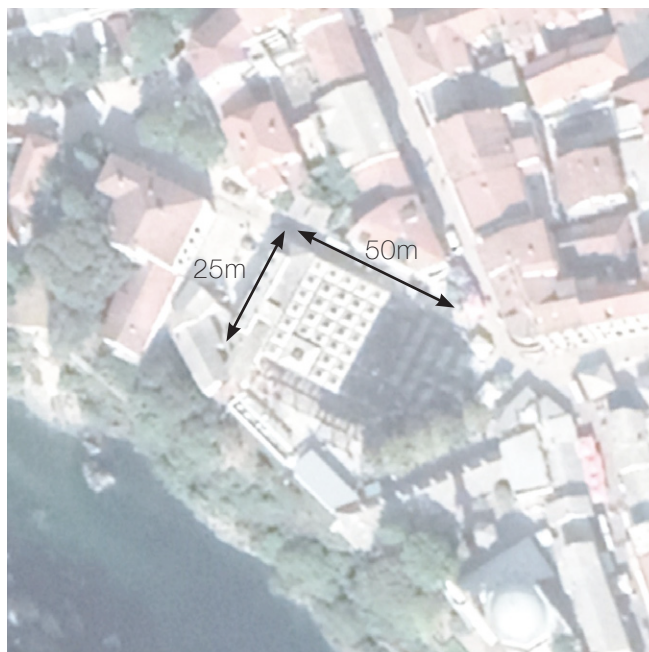
Market place location

Imagined market place on site

LEGEND
● Location site
● Outdoor markets
● Supermarkets <1km
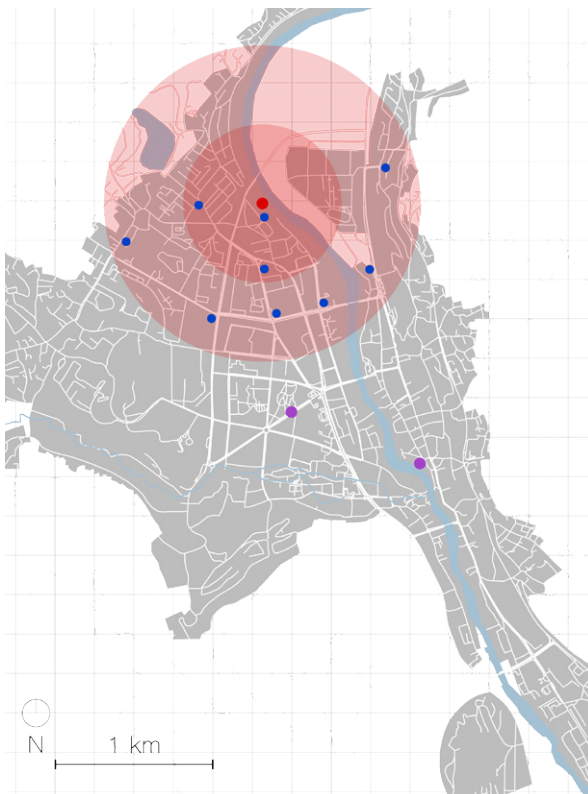
Location of existing market places in Mostar and supermarkets <1km

PLACE FOR CULTURE

A museum for memory and venue for cultural performances were mentioned during an interview. There are already a lot of museums that deal with memory in the city, as well as theatres, as shown on the map. A cultural venue outside or a stage for performances would add something to the existing offer.

Imagined place for culture on site
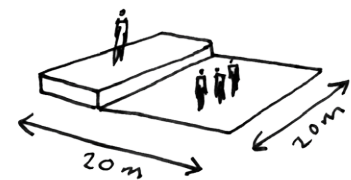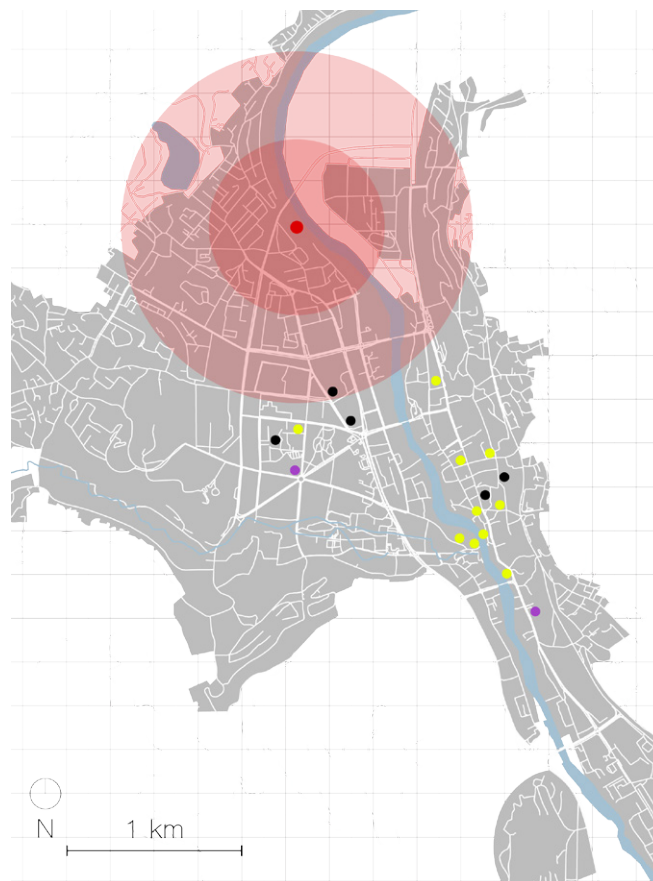
LEGEND

● Location site
● Cultural centre
● Museum
● Theatre

Location of existing cultural centres in Mostar

WATER SPORTS

During my conversation with Bruno, a kajak instructor and organises day tours for tourists, he mentioned that he's doing kajak trips for tourists on Neretva river. They are getting into the boats at the Old Bridge, but he would love to explore other sites if the infrastructure would be sufficient for it.

Imagined water sports on site

beach

promenade

stairs to water

LEGEND
- 🔴 Location site
- ⚫ Kajak start point
- ...... Route
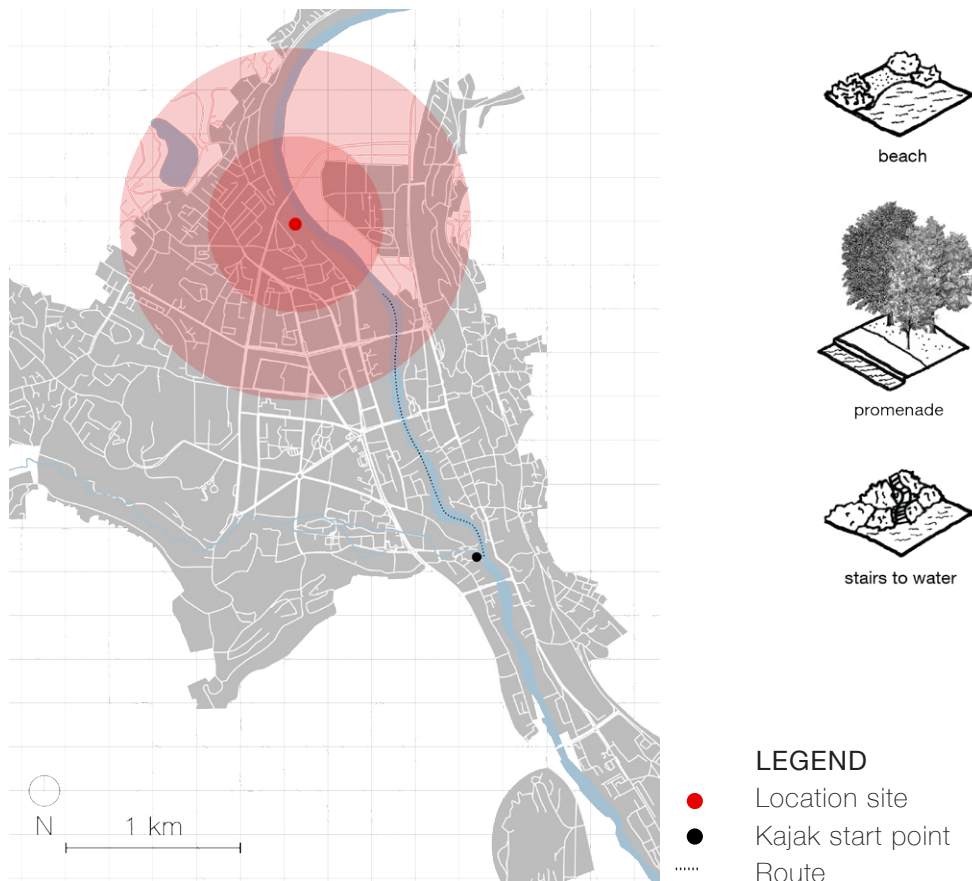
Location of existing water sports in Mostar

OUTDOOR CINEMA

During an interview an outdoor cinema came up as a new urban activity which is not present in the city of Mostar. The required size is taken from a reference: La Belle Friche de Mai in Marseille.

Imagined outdoor cinema on site

40 m
40 m

N   1 km

LEGEND
● Location site
● Cinema
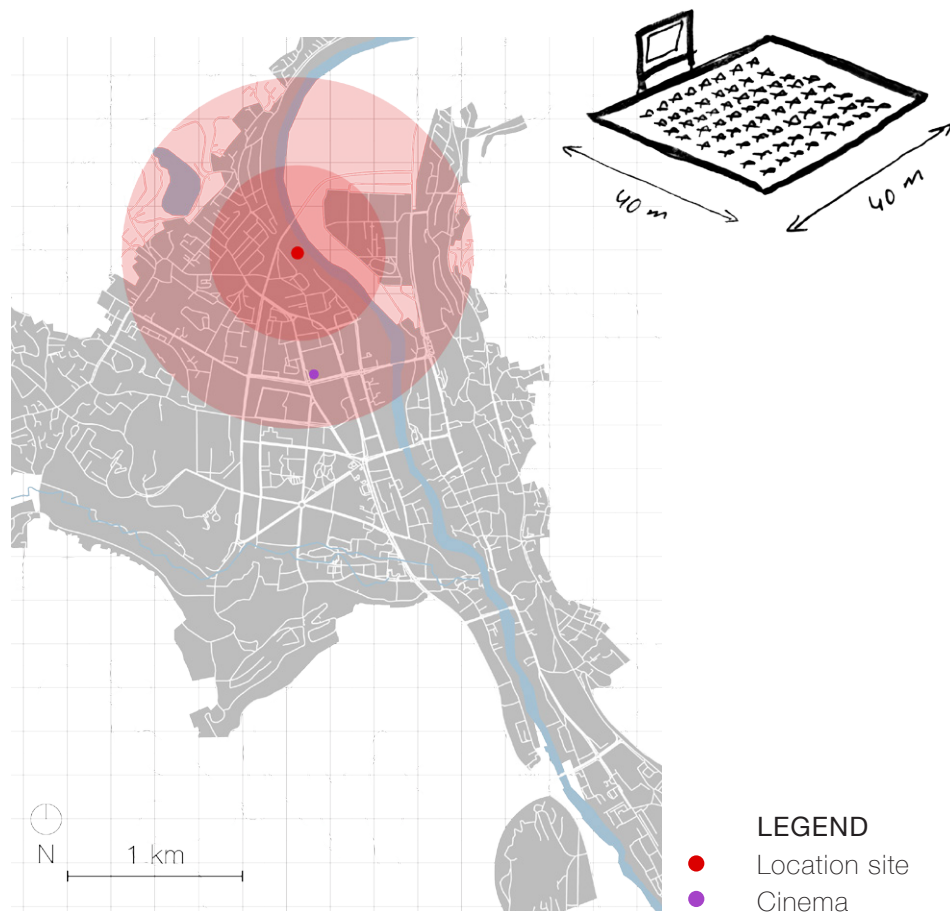
Location of existing cinemas in Mostar

PLAYGROUND

Imagined playground on site. As shown below there are a lot of smaller playgrounds in the neighbourhood. These come from Yugoslavian times, where each block has a shared outdoor space where often a playground was located. A more natural playground within the orchard would add something new to the existing playgrounds.

Imagined playground on site
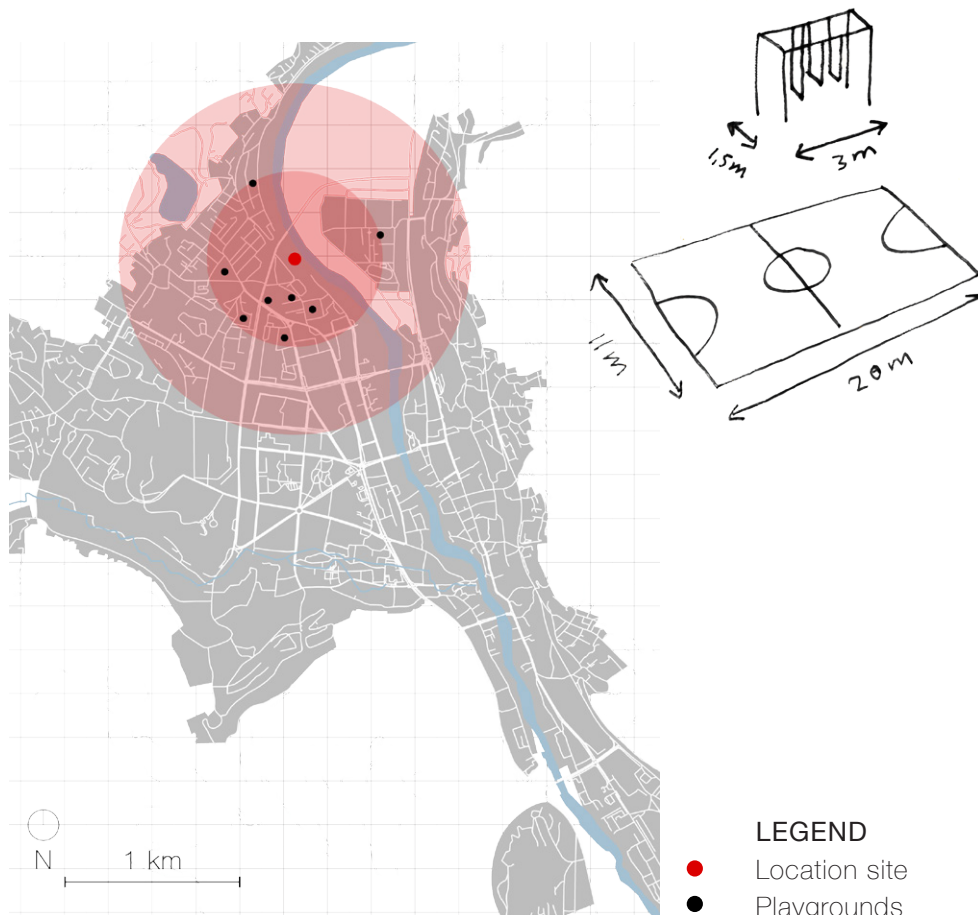
Location of existing playgrounds in 500m radius

LEGEND
- Location site
- Playgrounds

LANDSCHAFTSPARK DUISBURG NORD - LATZ + PARTNER

„The existing patterns and fragments formed by industrial use were taken, developed and re – interpreted with a new syntax, existing fragments were interlaced into a new landscape. The Piazza Metallica is the symbol of this park, a metamorphosis of the existing hard and rugged industrial structure into a public park. Iron plates that were once used to cover casting moulds in the pig-iron casting works, form today the heart of the park. From the first moments of their existence, these cast iron plates have been eroded by natural physical processes. In this new place, they will continue to rust and erode. It was a controversy to create places and public spaces in midst of a blast furnace plant. Today, the fear of pollution and contamination has given way to a calm acknowledgement of the old structures. During festivities up to 50.000 people gather in these places where the flowering trees interweave with the bizarre framework of the blast furnaces and the windheaters to a fantastic image. So, by degrees, a fresh history and a fresh understanding of the contaminated site and of the landscape art have been developing" (Landschaftspark Duisburg Nord, 2011, 25 August).

The context of Landschaftspark Duisburg Nord is completely different, however this project shows how the industrial relics of the site can be preserved and included in the design for transformation of a former brownfield area. This project gave me the idea to include the industrial relics that are still present on the site in the proposed intervention and let them become part of the natural processes and the changing landscape. In fact, this project shows how an abandoned industrial complex can be re-activated through a landscape design intervention.

Re-activating abandoned spaces, photo by Michael Latz, from landezine.com

Landschaftspark Duisburg Nord by Latz + Partner, photo by Christa Panick, from landezine.com

Landschaftspark Duisburg Nord by Latz + Partner, from : Latz+Partner (n.d.).

Cap de Creus process by EMF landscape architecture, from landezine.com

CAP DE CREUS - EMF LANDSCAPE ARCHITECTURE

„In 1961, on the eastern tip of Iberia Peninsula, Cap de Creus cape, one the windiest and most northern exposed corner of our geography, Club Med constructed a privative holiday village with 430 buildings to receive around 900 visitors 3 months a year. The urbanization project it is considered as one of the most notorious examples of modern movement settlement on the Mediterranean coast. With the advent of democracy and the rise of ecological consciousness, Cap de Creus was declared Natural Park in 1998. The cape, including Club Med surroundings, was classed with the highest figure of land protection because its outstanding geological and botanical values. In summer 2003 Club Med ceased activity. In the period, 2008-10, Club Med has been 'deconstructed', its ecological dynamics revived and a network of paths and viewpoints as been 'remade' for its rediscovery, becoming Mediterranean coast biggest restoration project ever. The work distills and enhances the consubstantial values of the site, the diversity of geological formations, the harshness and nakedness of the rock outcrops, the specialization of native vegetation, the wind and the sea magnificence" (EMF Landscape Architecture (2011, 23 March).

This project shows how a derelict site can be transformed by a landscape architectural design intervention that reconnects the site with the natural surroundings. In that sense, the project inspired me to look for site specific elements to include in the design proposal to create visual and physical connetions with the landscape again. EMF Landscape Architecture even used the deconstructed buildings on site as materialization for the design.

Cap de Creus viewing point, photo by Esteve Bosch, from : landezine.com

Cap de Creus by EMF landscape architecture, photo by Pau Ardèvol, from landezine.com

This chapter will elaborate on how to create a site specific landscape design intervention that strengthens the relation between the landscape and its local users. In order to do this the following chapter contains a site analysis that will be followed by the site specific landscape design intervention.

RECONNECTING THE LANDSCAPE WITH ITS LOCAL USERS

The design proposal operates on four levels of intervention: connecting through continuity, connecting through the productive landscape, connecting through engagement and by reactivating ruins and abandoned spaces. The continuity of water throughout history will be taken as a base to make a new connection with the landscape. The river forms a continuous green corridor through the city and the disappearing streams, visible in the landscape through dense vegetation within the bare surroundings, are coming from the mountains and touch the edge of the urban fabric. These continuous landscape features will be connected through a path, in order to connect the city with the wider landscape again and make it accessible for locals.

To determine the location of the path, the principles from the study into current human practices connected to the landscape were used as the proposed pathways are as uninterrupted as possible. In this way, a selection of ruins and abandoned spaces across the city remain that will be transformed into productive landscapes. As shown in the map on the right page, the proposed routes and sites connect to existing patterns of human practices connected to the landscape. In this way, each proposed path becomes part of a bigger existing network across the city.

As site one specific route is chosen to elaborate on with a design research. This route runs through the North of the city and is located on the edge of the city's existing urban fabric. The site is part of the planned grid in modernist city expansion, part of Austro-Hungarian past with former military barracks and part of current urban sprawl. The former military barracks are now partially used as university campus.

The site is connected to the problem field by the presence of ruins and abandoned spaces and several references to the industrial past of the city in the form of an abandoned quarry, abandoned railway line and abandoned Yugoslavian grain and bakery complex of Zitopromet factory. All mentioned spaces are in a state of decay because they are currently unused and/or ruins from the war. The former military barracks that are not in use by the university are also ruins and abandoned spaces. At the location, the river marks the post-war division line of the segregated city.

0   25   50   75 100m   N
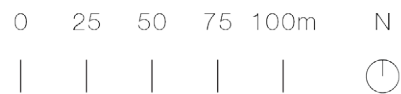
LEGEND

| | | | |
|---|---|---|
| — New path network | ⋯ Existing river paths | |
| ●→ End path proposed network | ▲ Existing river access | ■ Ruins |
| ▨ New productive landscapes | ▽ Existing river viewpoint | ▨ River |
| ▪ Agriculture faculties | -- Existing hiking trails | -- Disappearing streams |
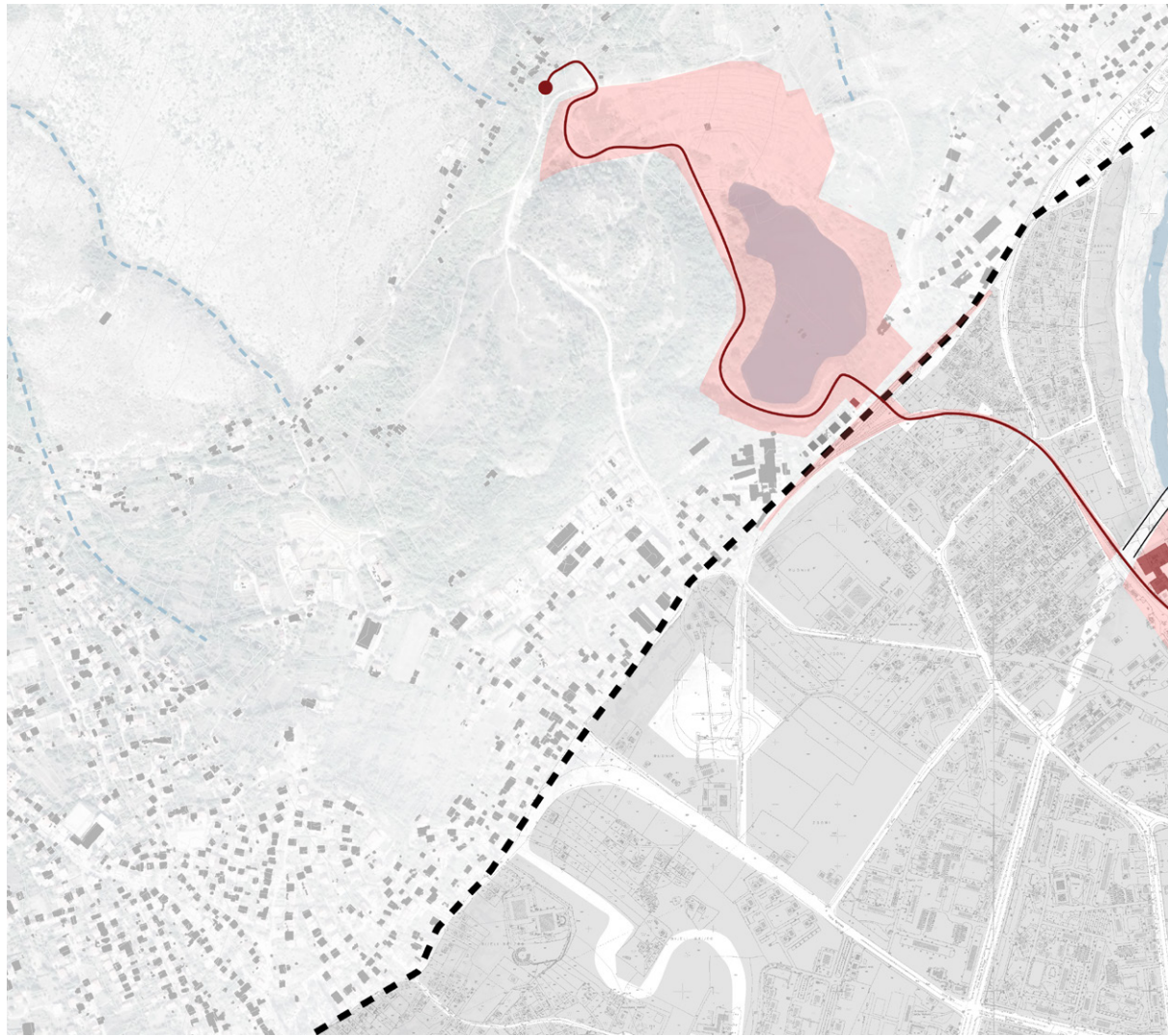
CREATING CONTINUITY

Looking at the morphology of the city there is a division between urban and suburban structures. Urban paths run parallel to the river or in the grid system introduced by Austro-Hungarian administration, which has been preserved and extended in Yugoslavian times. The Suburban paths follow the territory and are guided by the topography of the landscape. The abandoned spaces are forming gaps in the urban landscape. This leads to a discontinuous pattern.

Learning from the Radobolja case study, the path is used for a stroll if the path is as long as possible uninterrupted, paving doesn't stop and from the path you can reach surrounding functions and a variety in land uses. With this in mind and reacting on site specific elements as the train tracks, the river and highway, the route shown
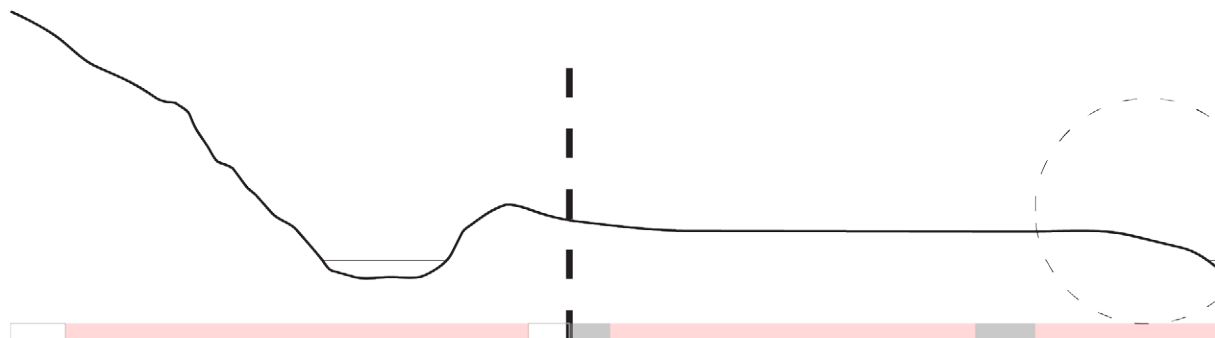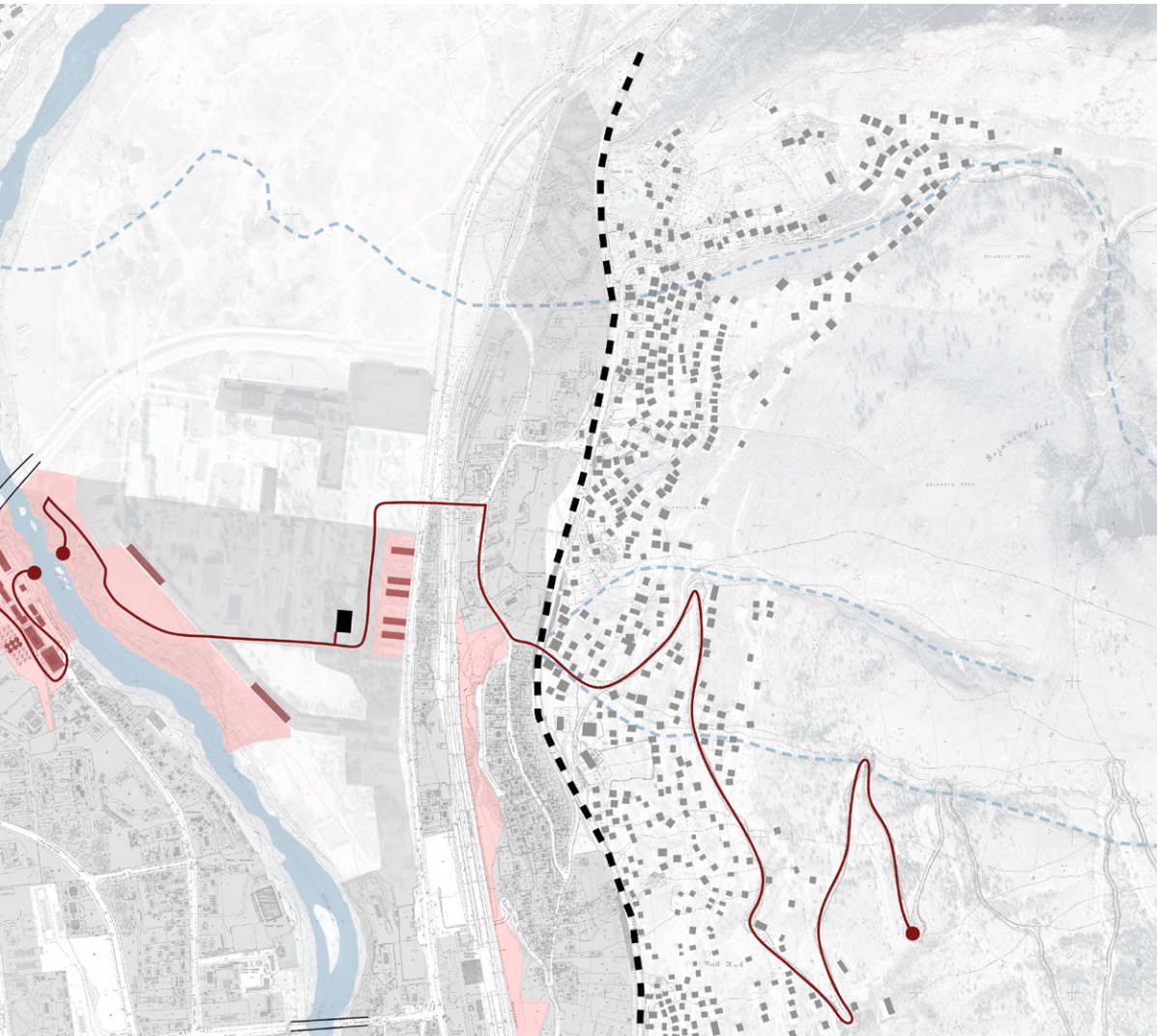
above is defined. To make the ruins part of everyday life again existing streets are used as a base if possible. The route will run up the mountains and end in a viewing point where one can overlook the urban and suburban structures and get an experience of the vastness of the landscape, a specific quality of the landscape that can only be experienced from the mountains.

The current urban paths are often side walks, pedestrian zones and only sometimes part of the asphalted street. The current suburban paths are either non existing and part of the asphalted street or walking trails through the landscape. The new path aims to connect the abandoned spaces to the wider landscape in a continuous way. In situ concrete forms the base material for the continuous path.

300

200

100

0m
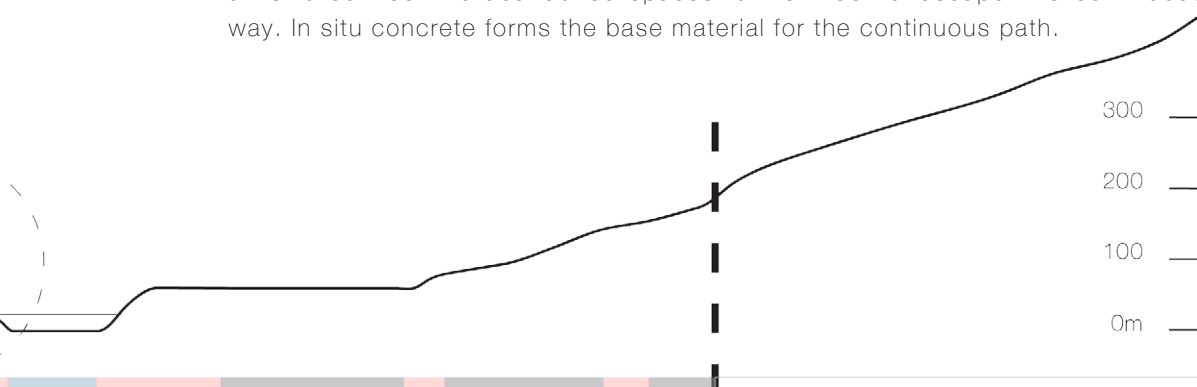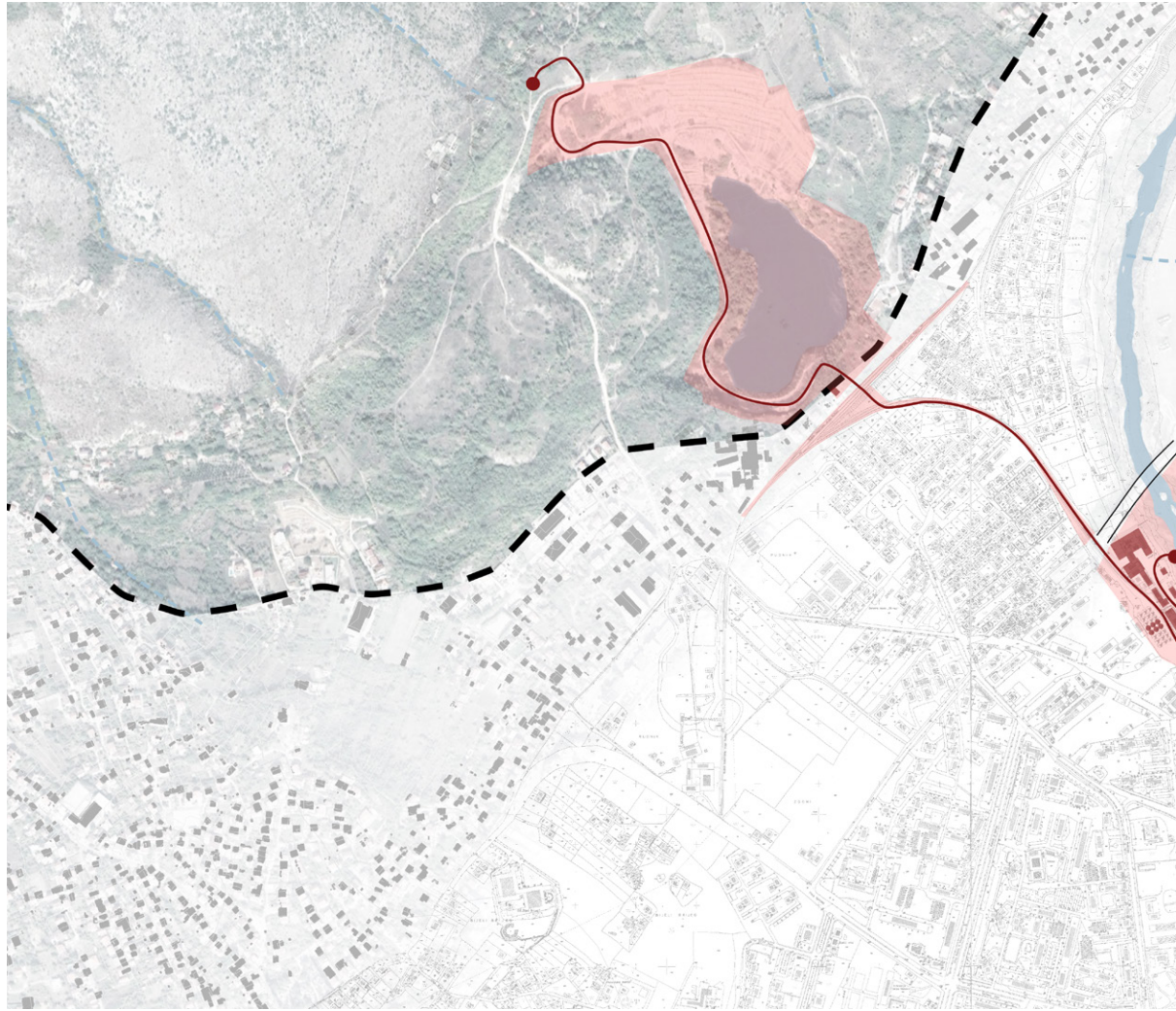
CONNECTING TO TOPOGRAPHY & SOIL

The proposed path connects suburban and urban structures, river landscape with karst landscape in a continuous way. In order to connect to site specificity the materialisation of the path reacts to the natural landscape features of topography and soil. In the karst mountain a limestone aggregate is applied in the in situ concrete path, where pebbles and small stones from the river landscape embedded in the in situ concrete path. In this way, the continuous path that connects different landscape types in a continuous way reacts to site specific elements.
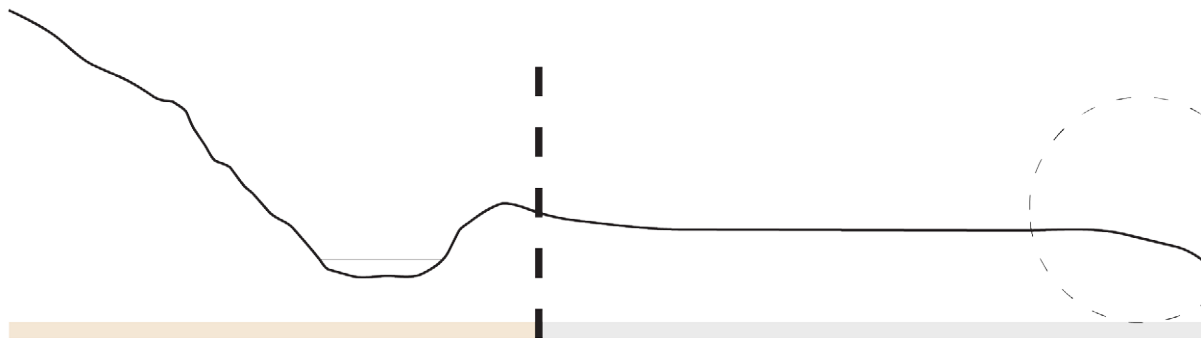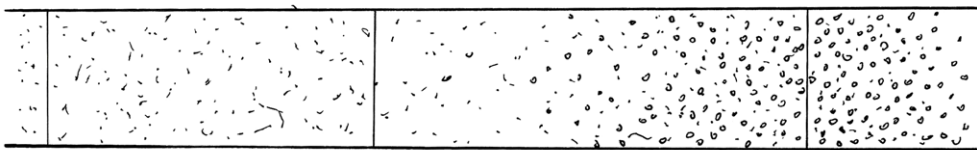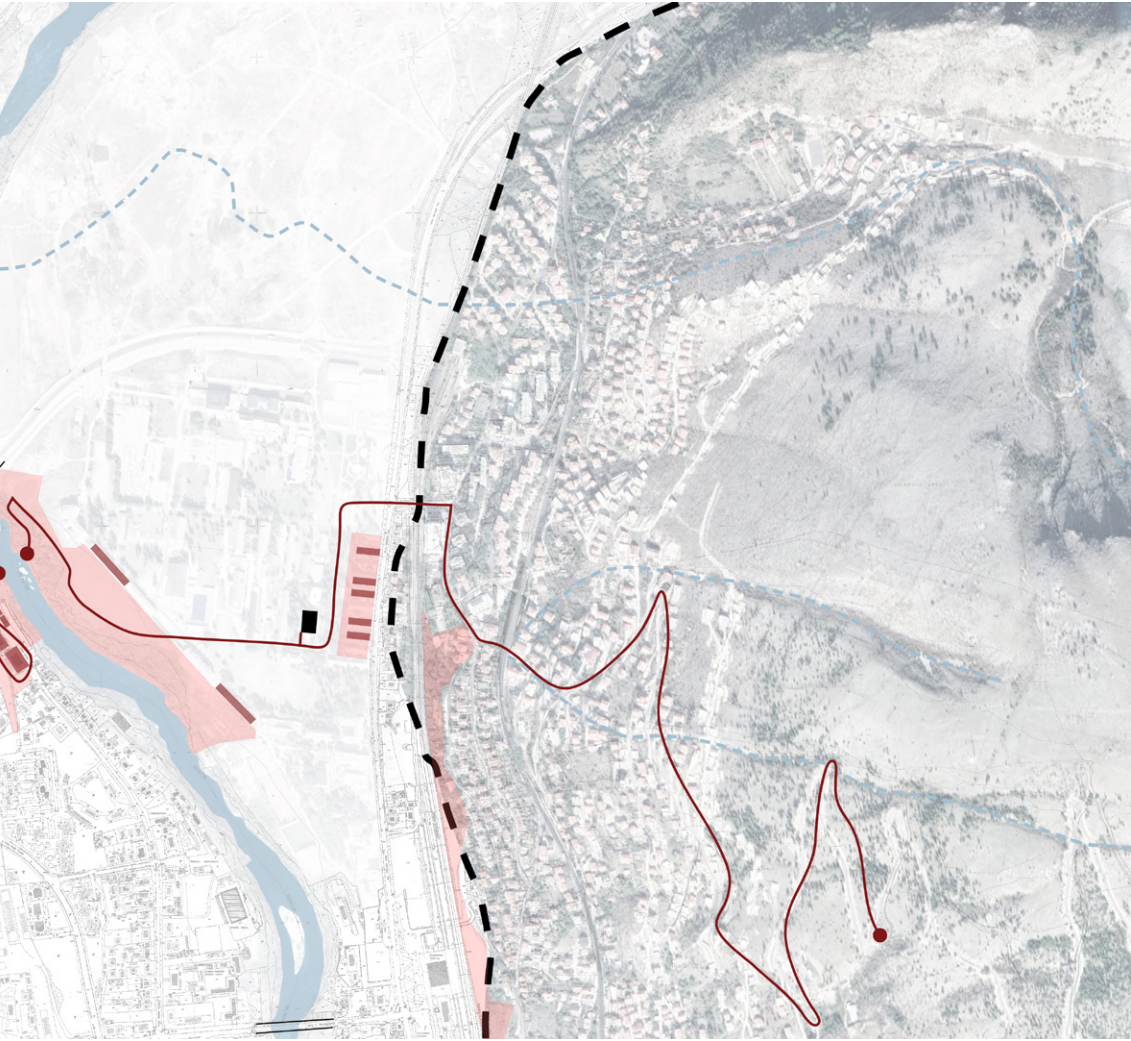
Limestone aggregate in concrete in mountains   -   Pebbles and stones in concrete in valley

300 __

200 __

100 __

0m __

93
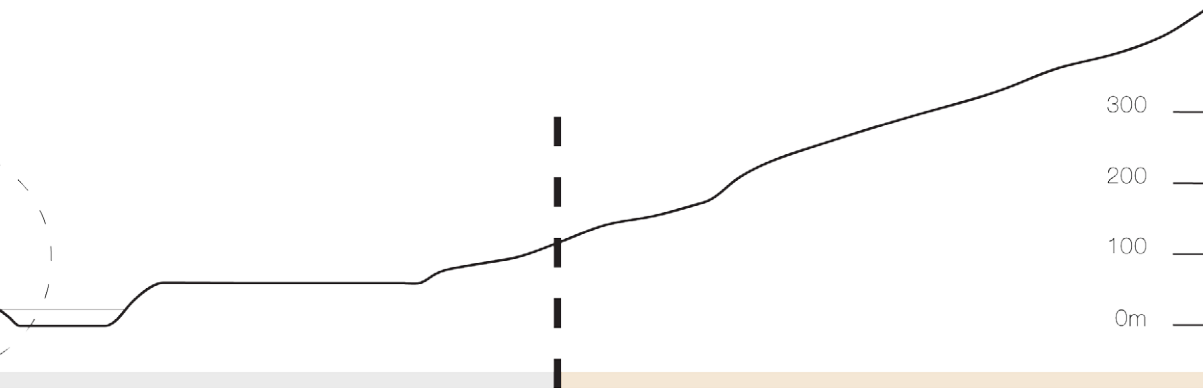
A CONTINUOUS PATH

As mentioned before, the proposed path is a continuous in situ concrete element that is added and responds to the existing urban fabric. The diagram on the right page shows the shape of the path. The marked spots on the map are the locations for the principle sections and images that are shown below. These locations together represent the course of the proposed path. In the sections and images is shown how the continuous path is shaped on specific sites. The continuous language in the path can be found in different aspects: the path is always slightly elevated, the path responds in width to the site but remains at least 1,5 meters wide along the entire course of the path and in materialisation.

As mentioned before, the materialisation of the path is in situ concrete, mixed with limestone aggregate in the mountains and with stones and pebbles in the valley. The diagram below shows how the transition between these materials is designed in such a way that continuity is guaranteed. This is also shown in the image that accompanies the fourth section on the right page.

150 cm

10

40
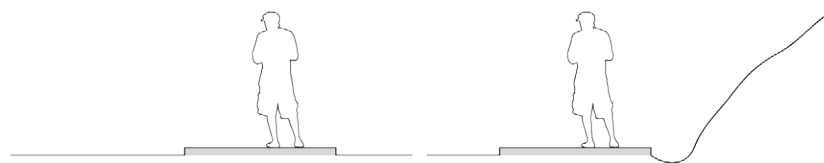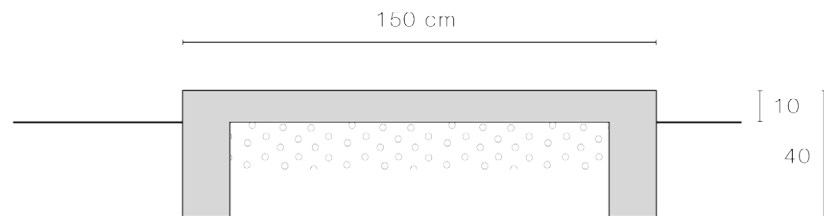
1. Slightly elevated path

2. New path leaves space for existing rainwater stream
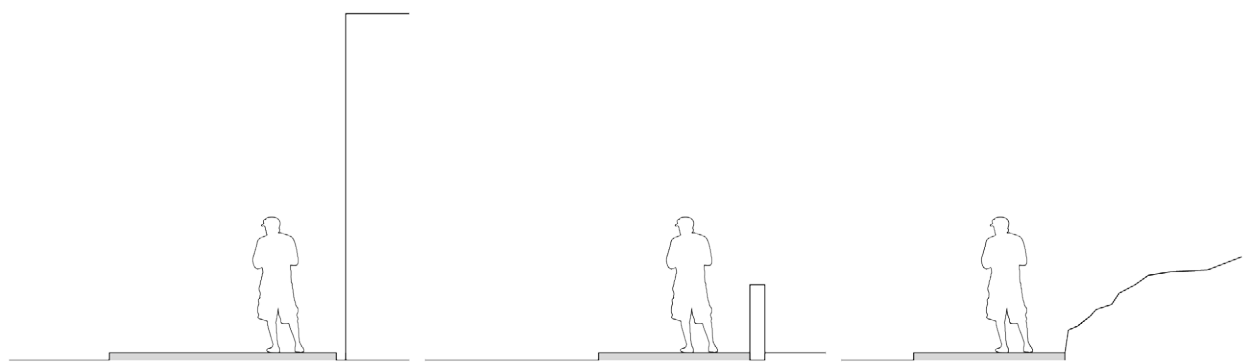
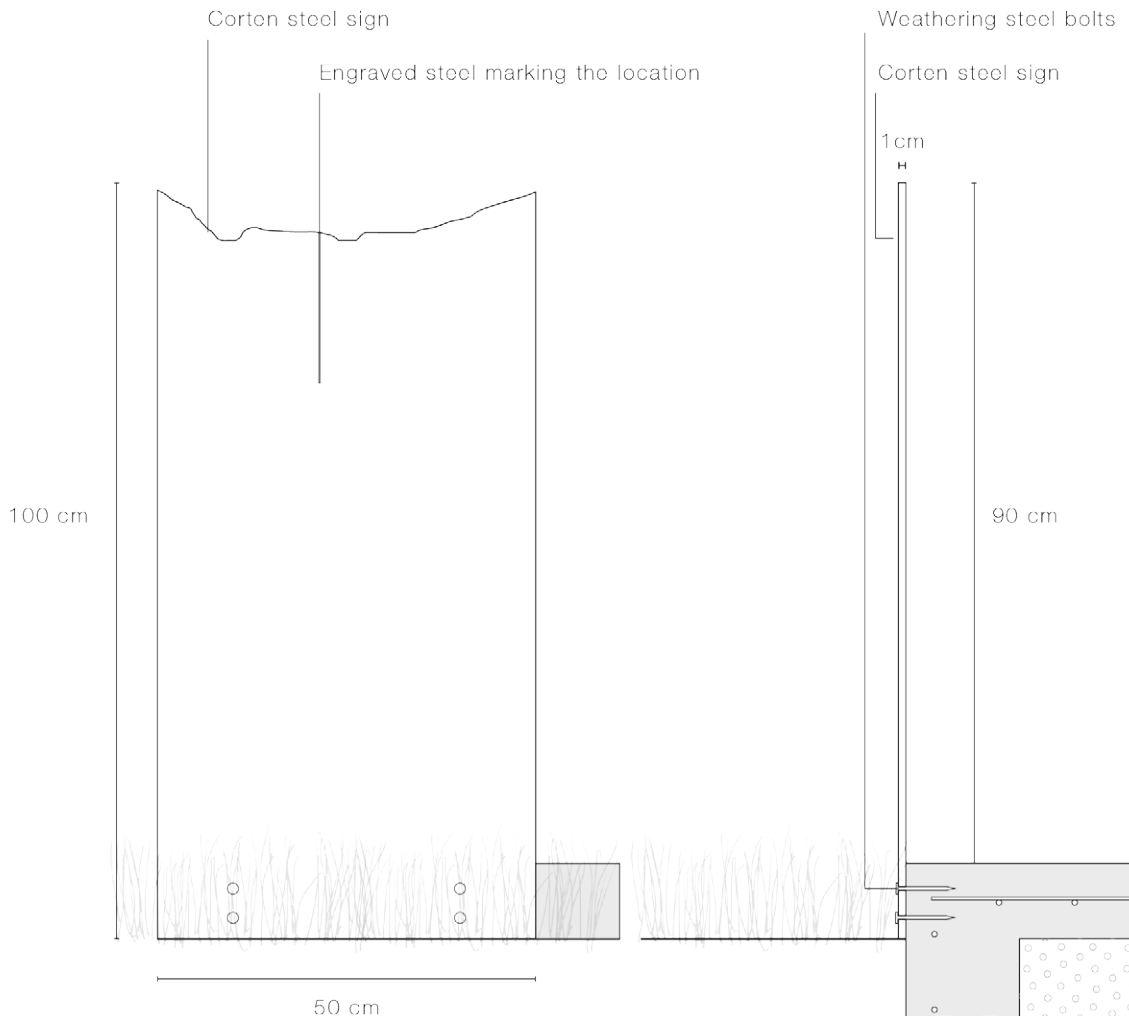3. Path forms new sidewalk   4. Path replaces sidewalk   5. Path touches rocks (in situ)
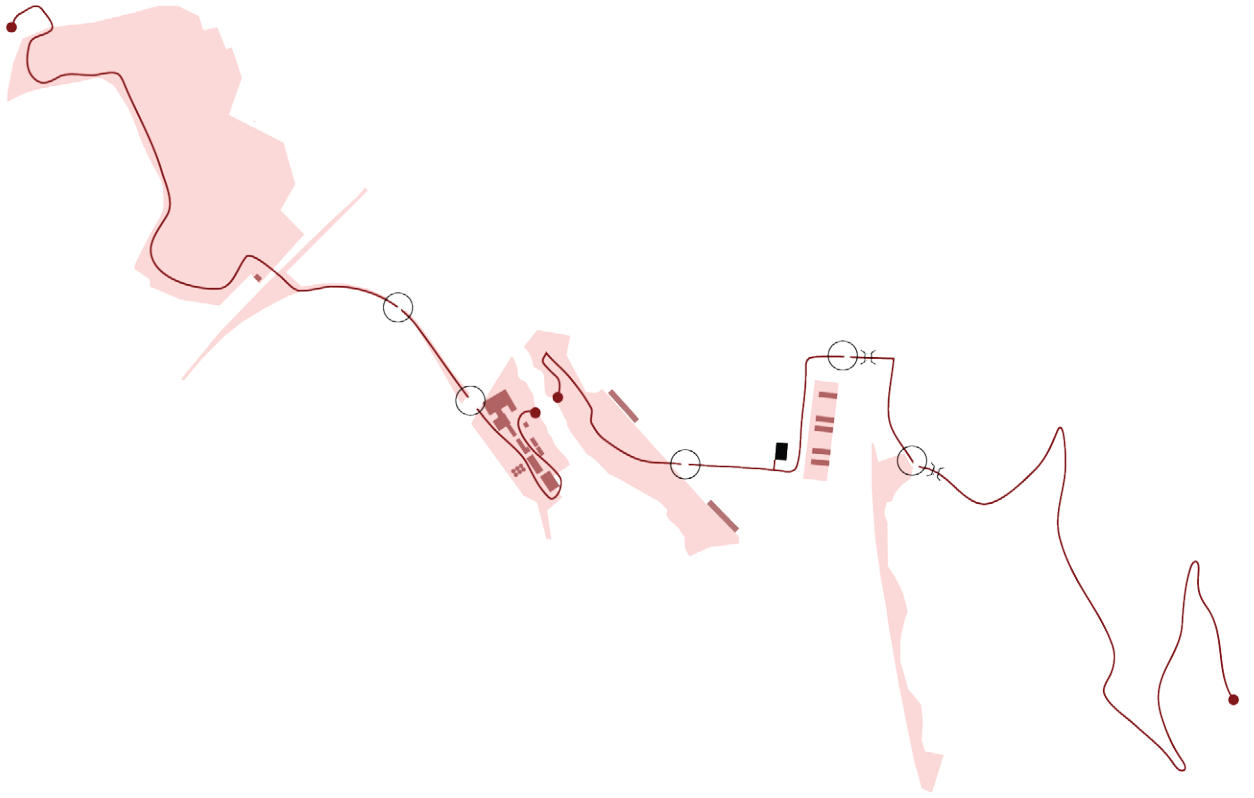
INTERRUPTIONS OF THE PATH

The path follows the existing urban pattern if possible in order to connect to existing movement patterns and to current human practices that are connected to the landscape. Even though the aim is to create a continuous path, the path will be intterupted. The diagram on the right shows where these interruptions are located. The path is interrupted by tunnels and intersections. As shown in the image of the tunnel there is enough space in the tunnels to continue the path. At the intersections this is a different story. At these spots, marked with circles in the diagram, the path has to be intterupted due to heavy traffic.

At the locations where the path is interrupted a sign will mark where the path continues on the other side of the intersection. The top of the sign is shaped in the cross-section of the underlying landscape of the path on which the user is currently located . In this way, each path is provided with a unique sign that serves as an anchor point for the user of the path where interruptions take place. The sign thus underlines the specific location of the path in the underlying landscape.

The sign for the path I am elaborating on is shown in the images below.

Corten steel sign

Engraved steel marking the location

Weathering steel bolts

Corten steel sign

1 cm

100 cm

90 cm

50 cm

CONNECTING TO THE RIVER

Currently there already are different types of connections from the city to the river: bridges, viewing points and waterfront accesses. There is an average height difference between the city riverfront of Neretva river of 10 meters and the riverfront can be accessed by climbing the rocks and some man made riverfront accesses.

In the history of Mostar concrete paths and stairs are used to connect the river with the elevated city by the Yugoslavian administration. In order to create a continuous language throughout the city and in order to build on the past, concrete serves as a material for the entire path to make a connection with the wider landscape.

In the north of the city there are almost no connections to the riverfront. The existing connections and viewpoints are often overgrown by dense vegetation. The next page will elaborate on how the connection with the river is strengthened in the proposal for a network across the city.

0   200   400   600m   N
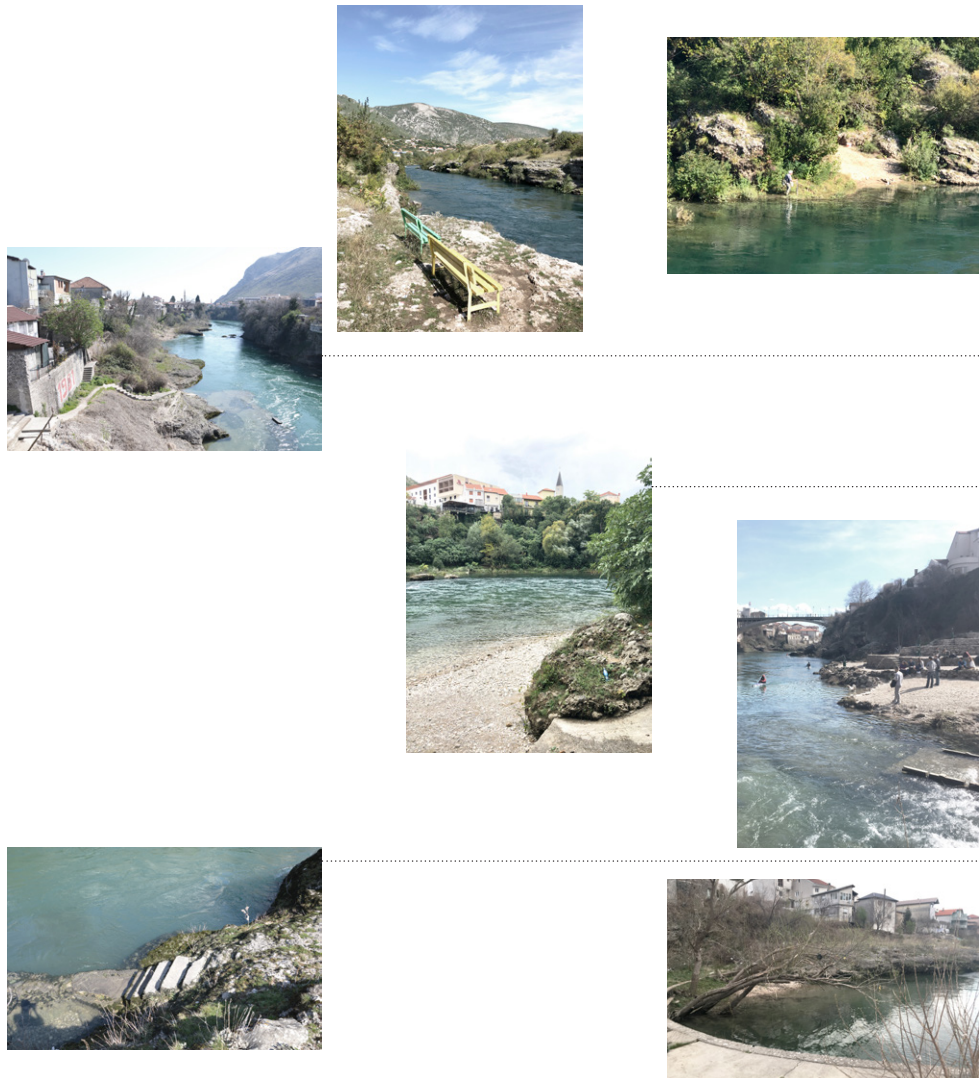
LEGEND RIVERFRONT ACCESS

Dense vegetation   ▷ Rocks
= Bridge   ▶ Stairs
                           ▶ Viewpoint

LANDSCAPE AS COMMON GROUND
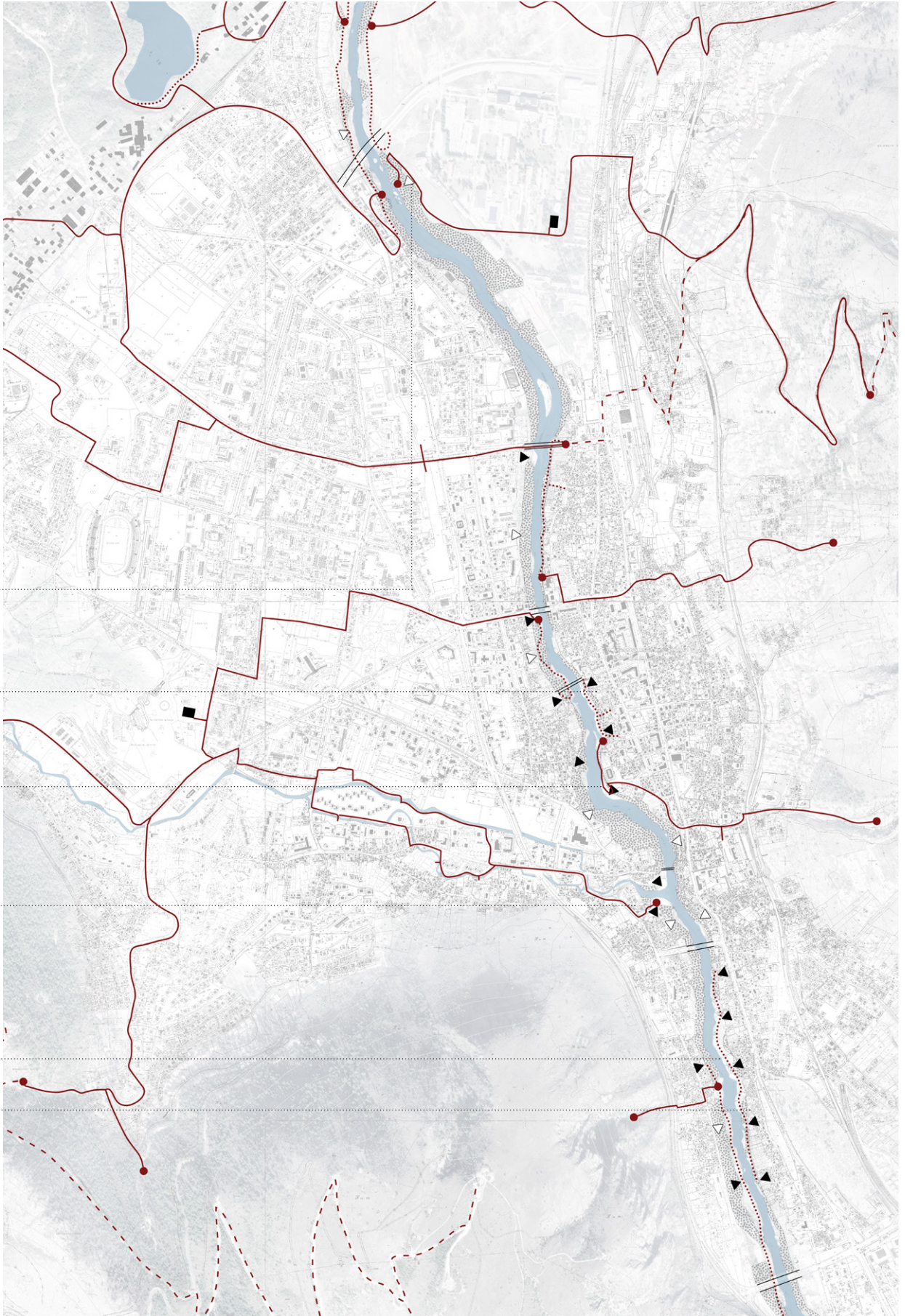
CONNECTING TO THE RIVER

The proposal builds on the existing connections with the river by extending what is there and adding new elements. The stairs from the city towards the river are taken as starting point. If possible, the paths end in stairs towards the river. Sometimes the elevation is too steep, which doesn't make it possible to go to the level of the river, in these locations a viewing platform is introduced. The locations that make it possible to a water path will be introduced, connecting to tidal effects of the river. The sections are shown below. The map on the right shows where these sections are implied.


1

2

3

LANDSCAPE AS COMMON GROUND
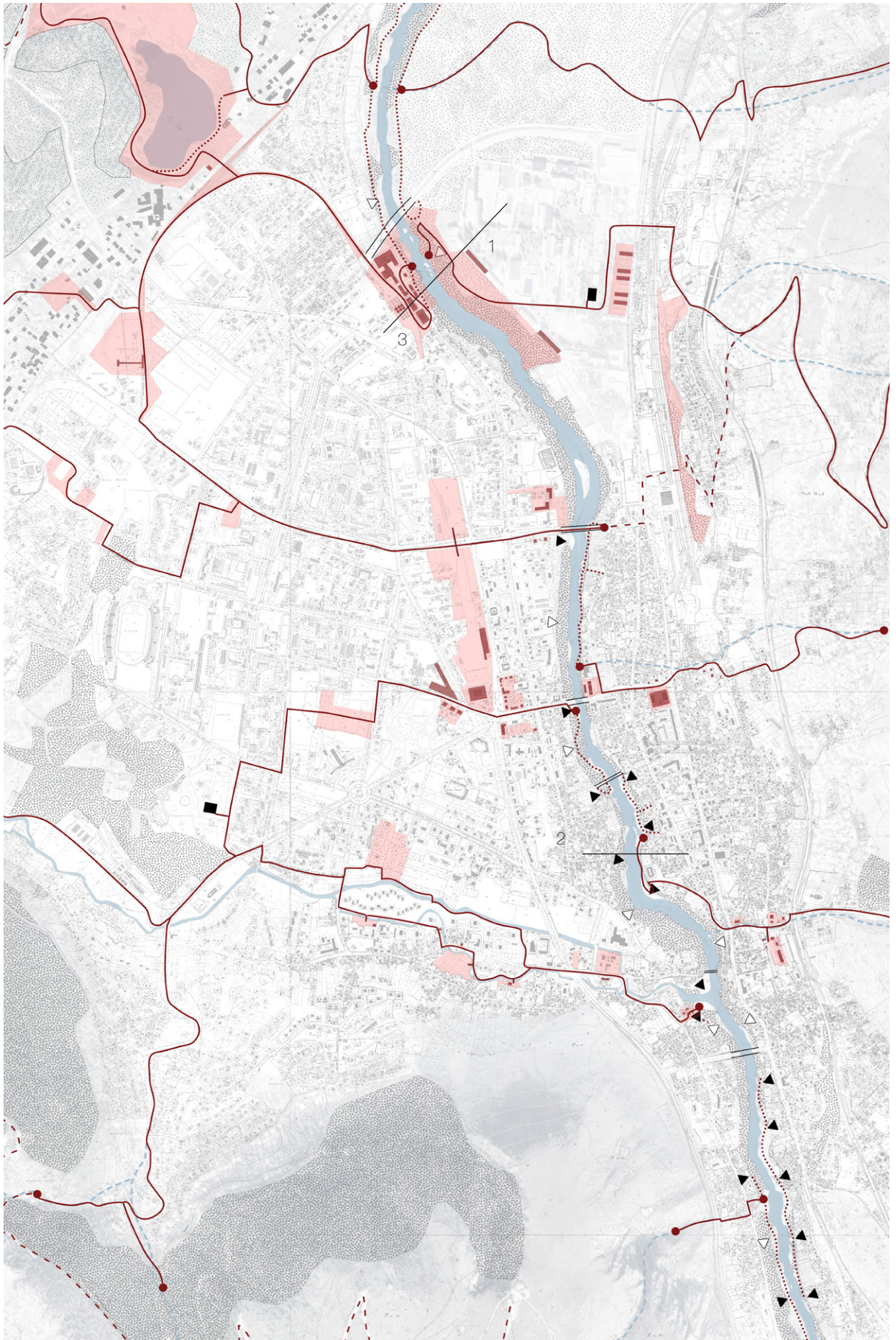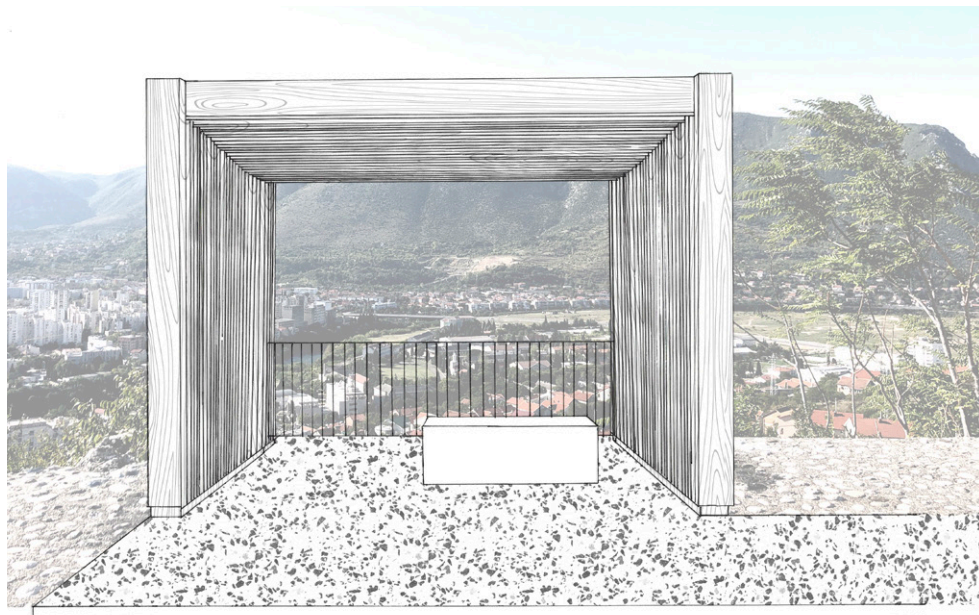
CONNECTING TO THE MOUNTAINS

The end of the route in the mountains connects to existing hiking trails. The hiking trails often start in the city, but for the end of the routes a location just above the building limit is chosen in order to capture the spatial qualities of the mountains. From this point, one can overlook the valley and at this altitude it is the only place where you can experience vastness of the landscape. Therefore, a viewing platform will be constructed to enhance this vastness of the landscape. A pergola structure is built on the viewing platform that captures the view and provides shade during hot summers while not closing off the space for wind, as between the bare vegetation in the mountains, one is exposed to intense sun, but there is a fresh breeze in the mountains.

A seating element provides a space for hikers to rest before or after their hike, or just as a place to sit and take in the view.

THE PRODUCTIVE LANDSCAPE

For the type of productive landscape that an abandoned site is transformed into, the productive landscapes to be, follow the spatial characteristics of existing productive landscapes in the surroundings. Thus, conditions of the abandoned site determine what type of productive landscape is suitable on that specific location. Soil, surface material, topography and the distance to water bodies play a role in this. Plantations are most flexible, as trees can grow almost everywhere, however the size of the site plays a role for the site to be able to become a plantation. Agriculture currently happens through the scales, from kitchen gardens to large agricultural fields, on relatively flat and fertile soil, however agricultural fields also can be found in the mountains around the city. For the orchard the requirements are more specific: as orchards are only located on flat fertile soil close to the river. The prefered surface material for agriculture is bare soil, as for the orchard small stones and grasses are no objections. Since the latter is the case on the site for the elaboration, the site will be turned into an orchard.
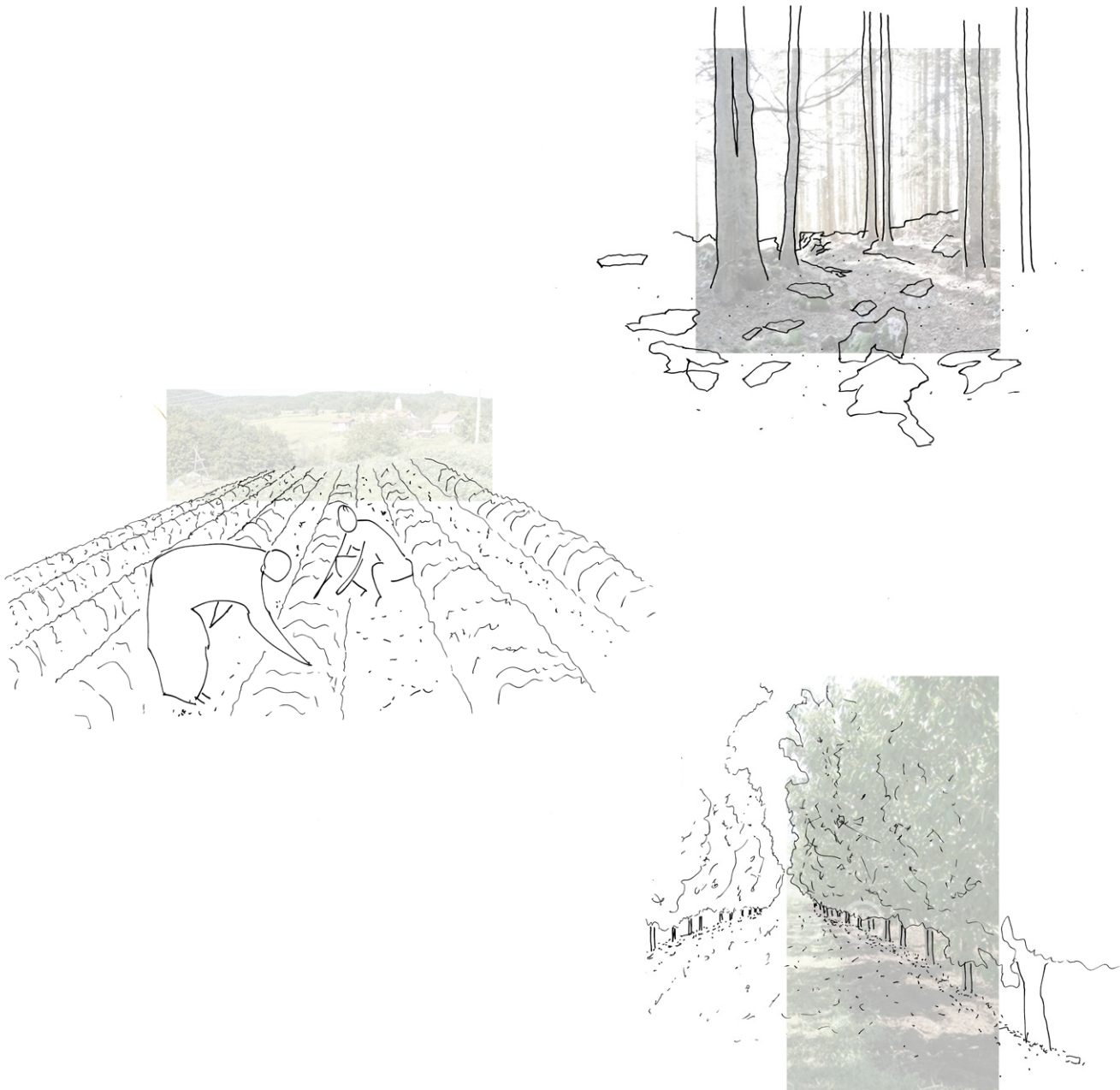
STRATEGY

The design strategy is an important component of the final design and enhances the different levels of intervention. As mentioned in the proposal, a connection with the landscape is made through continuity, through the productive landscape, through engagement and through reactivating the ruins and abandoned spaces that are turned into productive landscapes. As shown in the diagram on the right page, different actors are included in the process.

In connecting through continuity, NGO's and the municipality are involved through funding and paving of the path, which happens on the scale of the city, meaning that a path is constructed as soon as the initiative for one site starts. This is done in order to stimulate the transformation of other sites along the path.
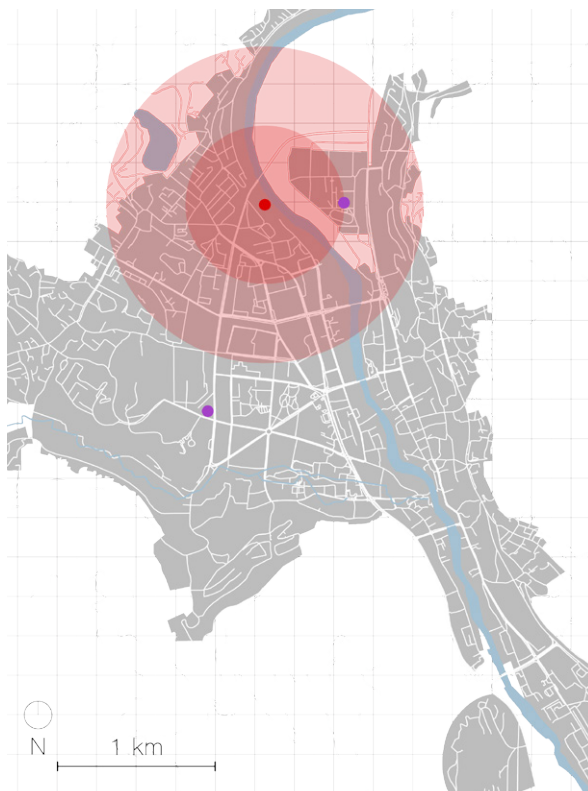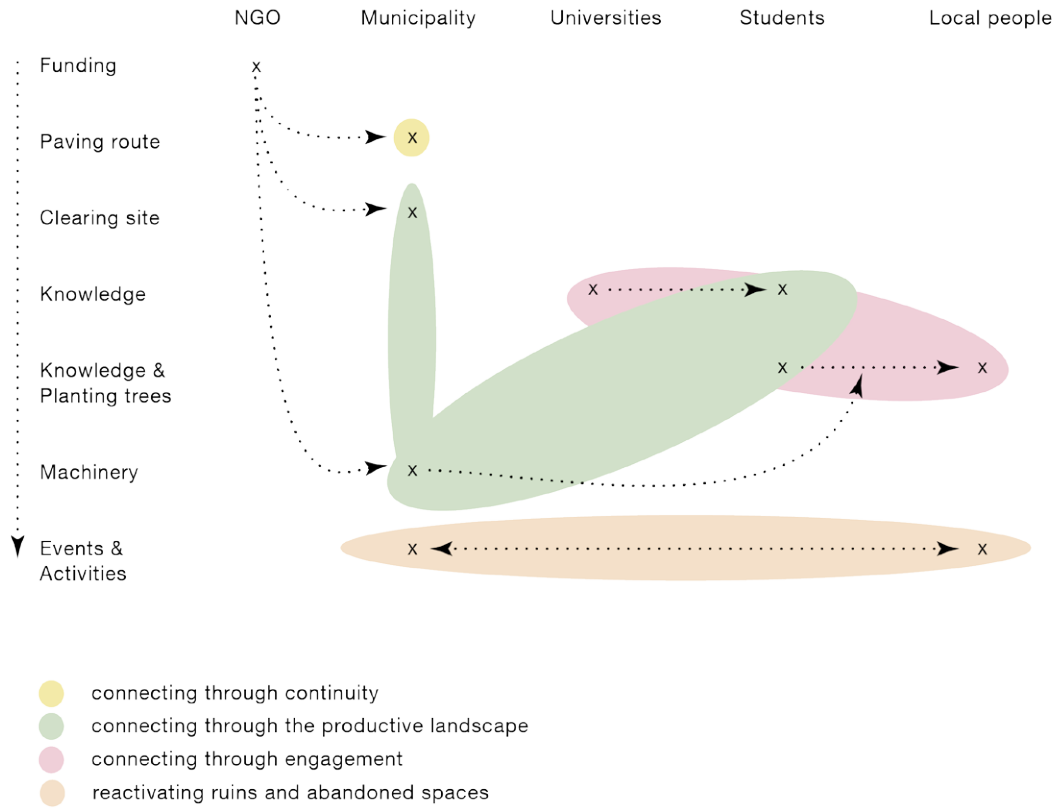
Connecting through the productive landscape happens in different phases. The first phase contains clearing the site of potentially dangerous structures and extending the path that connects the site with other productive landscapes on city scale. The municipality is also in charge for preparing the site for implementing the productive landscape on site, in case of the orchard with the placing of tree poles and a water system. Phase 1 is now completed. NGO's are involved through providing the funds for the municipality in order to do the labour. After this phase is finished, public spaces are finished and events and activities organised by the municipality and local people can take place in order to attract people to the site and make the site part of everyday life.

As shown in the map on the right, only one faculty of agriculture is located close to site. Therefore a temporary workshop will be constructed on site for educational purposes and as a place where students and residents from the neighbourhood can gather throughout the process.

As mentioned in the proposal, the productive landscape and engagement are interconnected. Therefore, connecting through engagement is part of two phases. In phase two, universities, students and local people together construct the productive landscape. Through workshops and lectures on site, students and local people are educated on how to construct and maintain a productive landscape and how natural and cultural landscape features play a role in the way the specific site is transformed. Further engagement with the site and the productive landscape at hand is generated through involving local people in the process of planting the trees.

During and after construction of the productive landscape within a neighbourhood engagement is connected to the productive landscape. First in construction, afterwards in an annual local fruit harvest day where the locals can reap the benefits of their hard work by collecting the fruit produced by the orchard for own consumption. The surplus fruit will be sold on a local market organised in one of the constructed public spaces on site. This annual event can turn into a local tradition for families and neighbourhoods, creating new memories and traditions connected to the landscape.

The following pages will elaborate on the elements that together form the landscape design intervention and how the phases of the strategy are implemented on this specific design location.

	NGO	Municipality	Universities	Students	Local people
Funding	x				
Paving route		x			
Clearing site		x			
Knowledge			x	x	
Knowledge & Planting trees				x	x
Machinery		x			
Events & Activities		x			x

- connecting through continuity
- connecting through the productive landscape
- connecting through engagement
- reactivating ruins and abandoned spaces

N   1 km

Picture of the former Zitopromet factory, from cidom.org

SITE SELECTION

The following pages contain a site specific design intervention for the abandoned former Yugoslavian grain and bakery complex of Zitopromet factory. On this specific site the design intervention will be tested.

The site is located next to the river and therefore connected to the wider natural landscape through the green corridor around the river. The former Yugoslavian bakery is now a big complex of ruins and abandoned spaces next to the river, formerly known as one of the biggest industrial bakeries in Herzegovina. The site used to be connected to other industrial sites in the city and to other towns and cities by a railway line, the remains of the railway line can still be found next to the site. The railway lines and silos on site were removed with the construction of a new regional road and bridge next to the site, which is now physically disconnecting the current site from the unused railway line that is still running through the adjacent neighbourhoods.

The aerial pictures on the right show the difference over the last 25 years. The historic aerial picture shows that the railway lines that once run between the silos and the factory are already gone. In the current situation the silos are gone and several buildings have fallen into decay, however the fundaments of six silos remain. There is a new bridge just North of the site connecting the West side of the city with the new highway on the East side of the river.

The site is located in a residential area that consists of high rise buildings from the Yugoslavian era and single family houses along the river. Within the direct surroundings of the site, a supermarket and primary school can be found. The other side of the river houses the campus of Dzemal Bijedic University of Mostar.
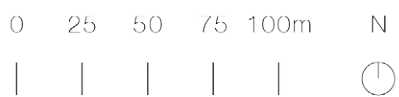
From the interventions on a bigger scale, a connection with the riverfront will be created at the site of the former bakery, as the river is one of the connecting elements within the wider natural landscape.
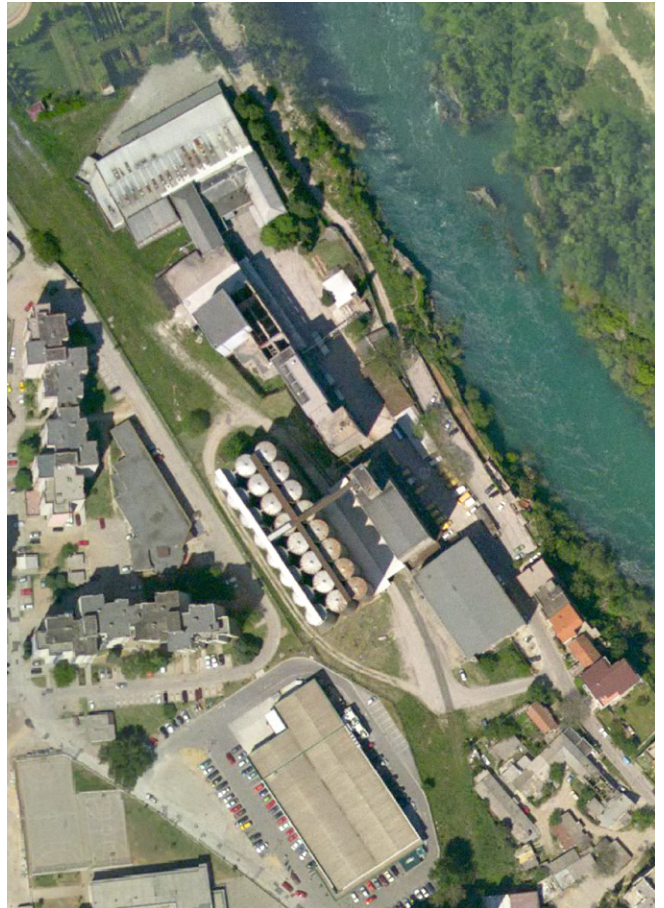
Aerial picture after the war, from mostargis.ba

Aerial picture now, from mostargis.ba

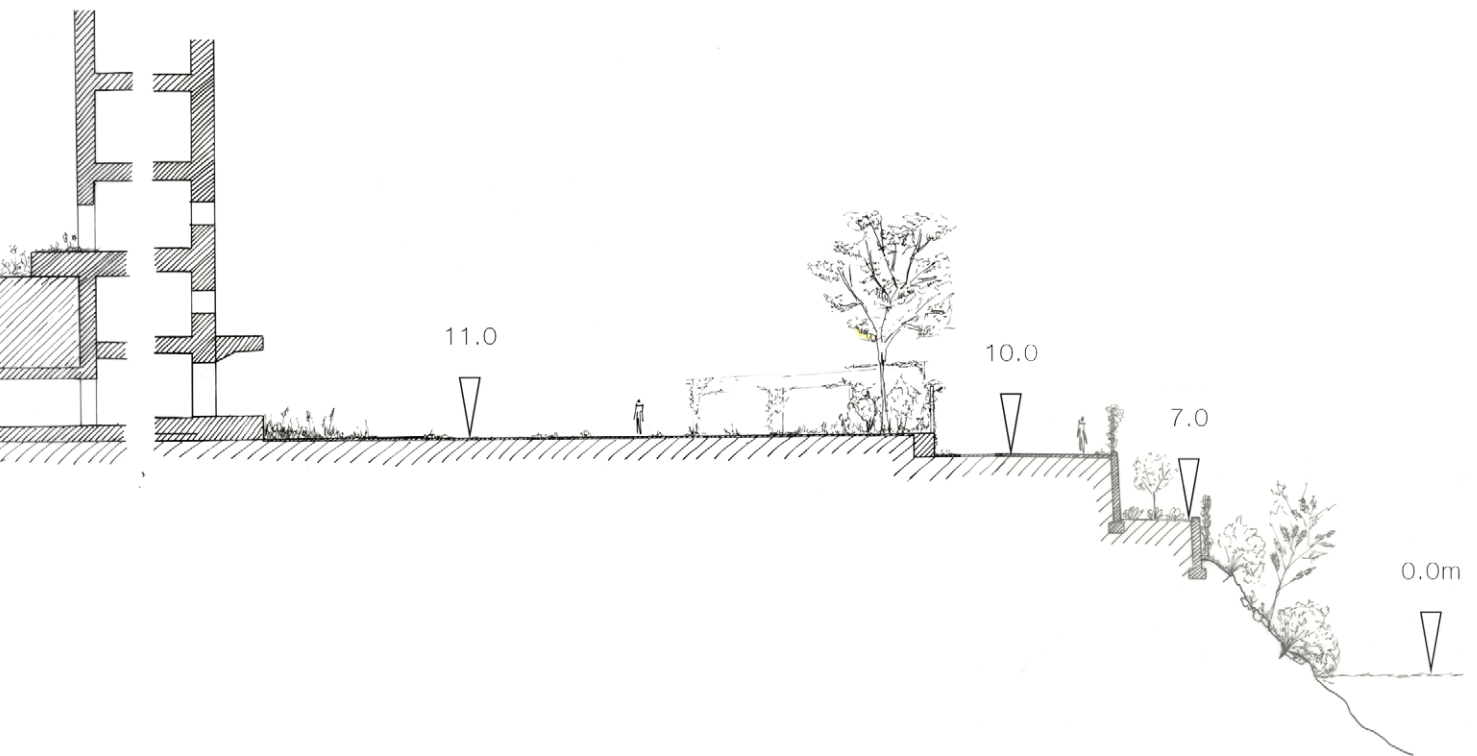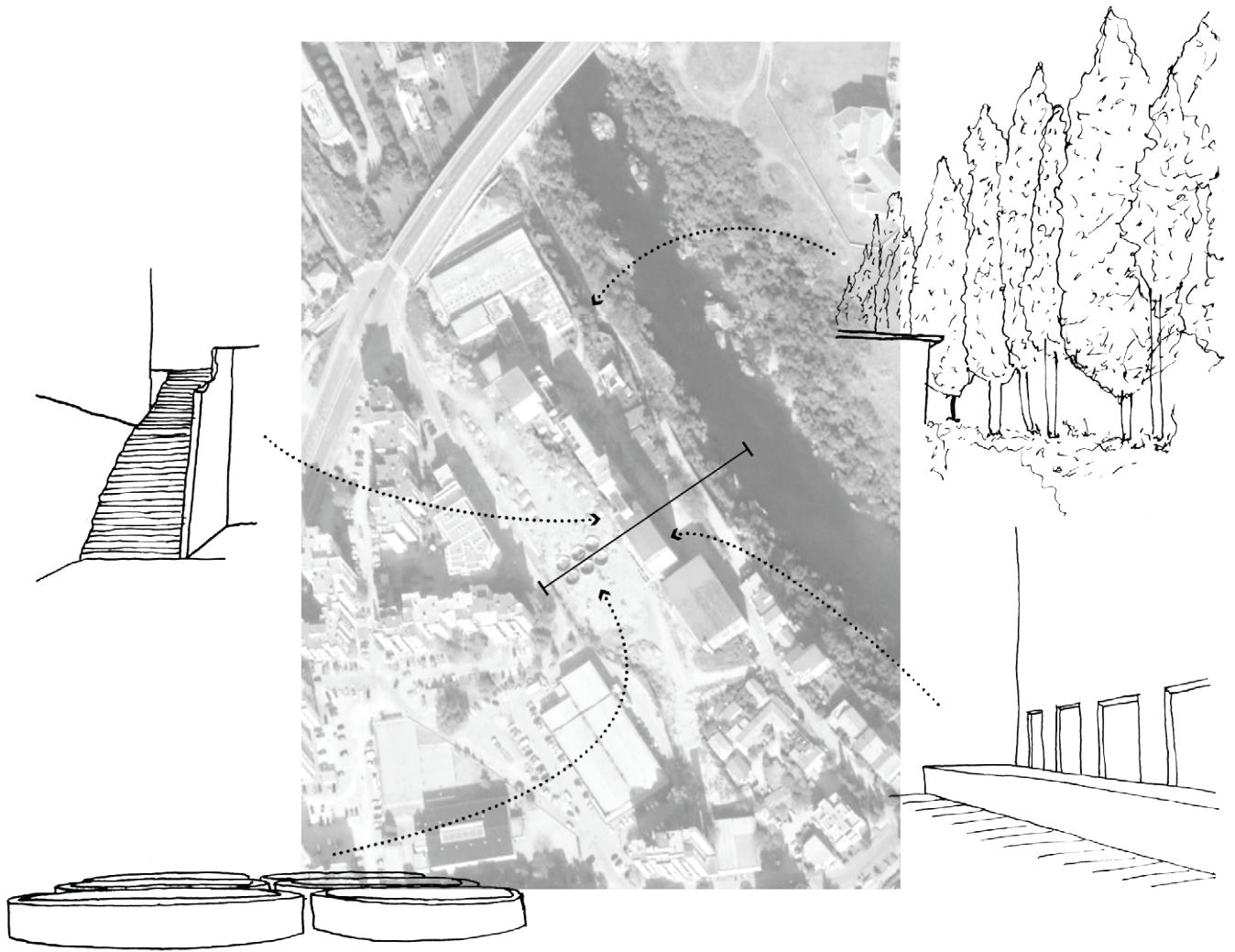0   25   50   75 100m   N

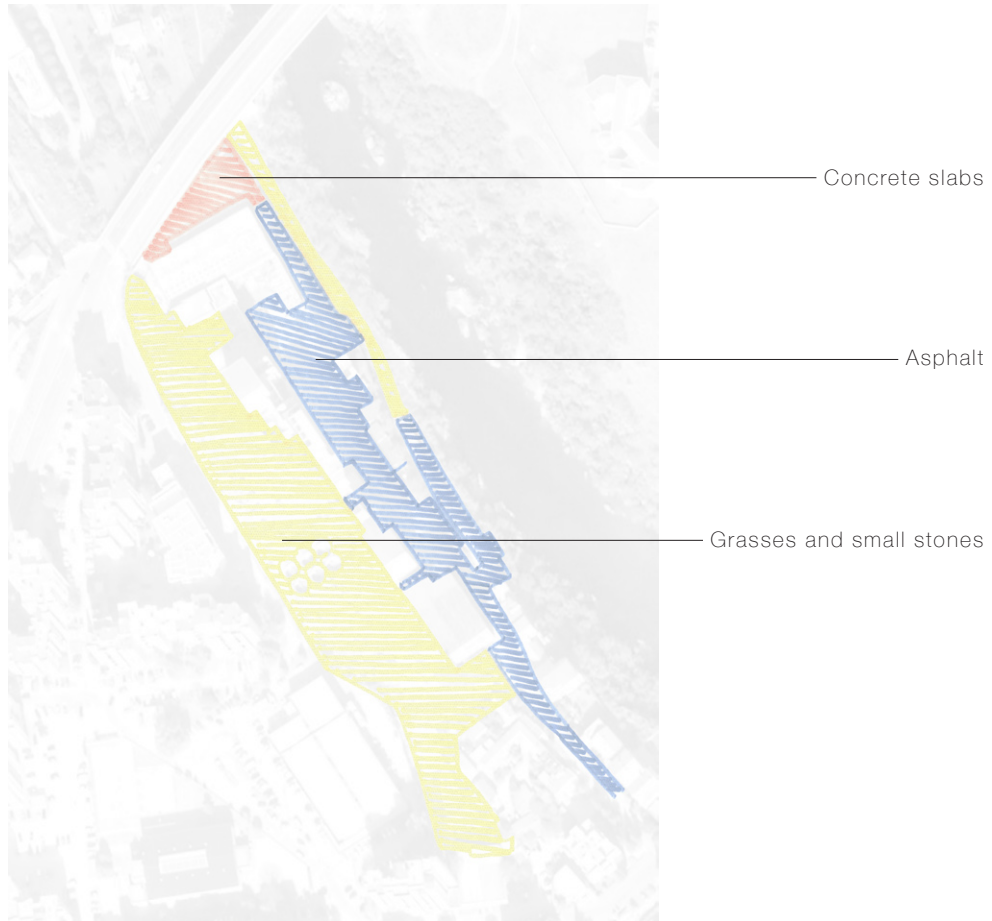LANDSCAPE AS COMMON GROUND

SPATIAL CHARACTERISTICS

Besides the former factory itself, the site is defined by different remains of the past that form spatial characteristics of the site today. As shown in the section below the former factory building was built on terraces towards the Neretva river. The lower terrace is 11.0 m above water level and the higher terrace is situated at 18.5 m above water level. The remaining foundation of the former silos connects the two terraces, since the bottom of the foundation is at the level of the lower terrace and is also connected to this terrace by a tunnel.

The difference in height on the site is bridged by the existing buildings and walls and connected by two stairs inbetween the buildings. On the south side of the buildings is a slope that connects the site with the lower road, which connects the two terraces on either sides of the building. Two buildings on the site are separated from the terrain by raised platforms. In addition to these built elements, a conifer row of monumental size can be found on the north side of the location. The diagram on the right displays these most remarkable spatial characteristics and their location on the site. These spatial characteristics influence the proposed grid for the orchard, as these spatial characteristics remain since these spatial characteristics are connected to the identity and history of the place and give certain spatial qualities.

19.5m

18.5

19.5

18.5

12.0
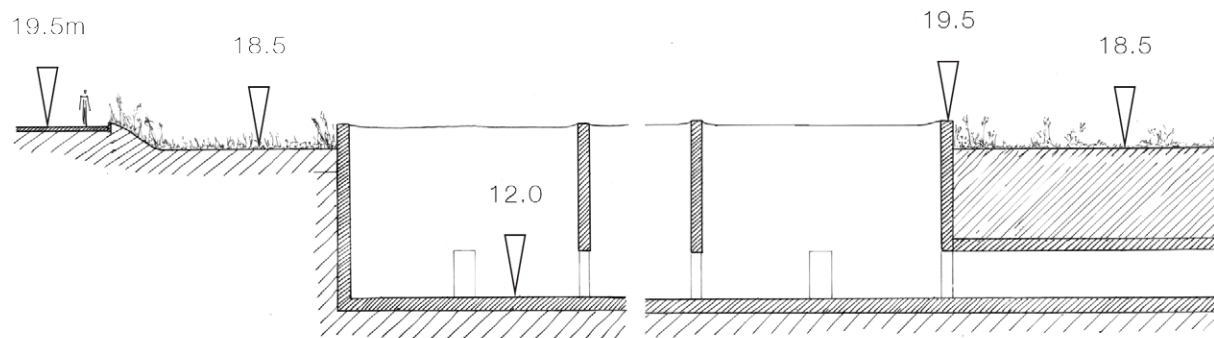
0   5   10m

Current section of the site

11.0

10.0

7.0

0.0m

LANDSCAPE AS COMMON GROUND

Concrete slabs

Asphalt

Grasses and small stones

SURFACE OF THE SITE

As mentioned in the previous section, this location has the features that best suit an orchard from the various options for productive landscapes. However, after further analysis there is a nuance in the surface material. Most of the site consists of grasses and small stones, but the lower terrace consists mainly of asphalt and concrete slabs. As mentioned earlier, the proposed route and intervention will respond to site specific characteristics and existing surface materials will stay part of the site surrounding the connecting path.

Among these site specific characteristics for this particular site is the difference in surface material as shown on the diagram above. The page on the right shows a study of how nature reacts to these different surface materials and how these surface materials, even in a state of decay, influence the course of natural growth on site. Nature grows everywhere it can grow, especially on the fertile soil around to the river, but the built structures define where something can grow and what grows where. Edges of materials as concrete slabs form habitats for small grasses, while bigger shrubs and small trees tend to grow against built structures. The upper terrace is characterised by a semi-paved ground covered with grasses, shrubs and small trees, the stones and soil become visible again where people tend to walk, leaving traces of an informal path system.

Since the materials on site remain after the intervention, this site specific characteristic will help determine the spatial qualities of the site while preserving traces of the past. Besides this, the study predicts how after the intervention nature can react to the different surface materials and built structures that are introduced.
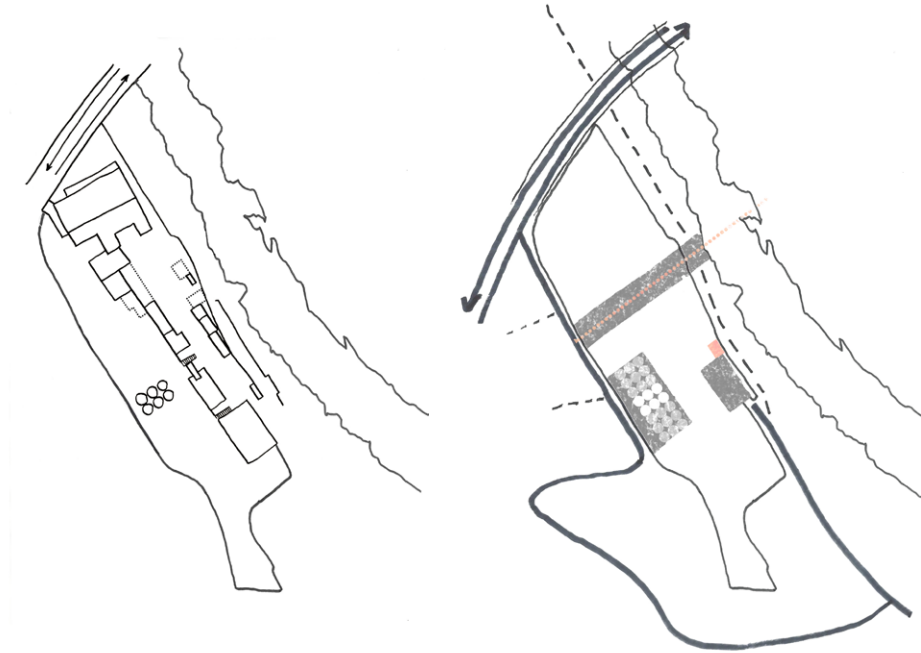
Buildings that remain and demolished   New public spaces in existing network

CONNECTING TO THE SURROUNDINGS

In order to be able to use the site in the future it is cleared of (remains of) buildings that could potentially be dangerous for people to enter. The materials released from the demolition of the buildings in question will be reused in the creation of the proposed path and public spaces. By demolishing the buildings shown in the diagram on the left, a new visual connection to the other side of the river is created. In the proposal this visual connection will be preserved and part of a public space for new urban activities on the site.

Another public space is created around the fundaments of the former silos, one of which will function as a stage for performances in public space. On the lower terrace a public space will be created at the former entrance of the factory, which is situated at the end of a road leading all the way to the centre of the city. This new public square will in the future again function as an entrance to the site. In an existing building adjacent to this square the workshop will be created for educational purposes and serve as a laboratory throughout the process of transformation for students from both universities.
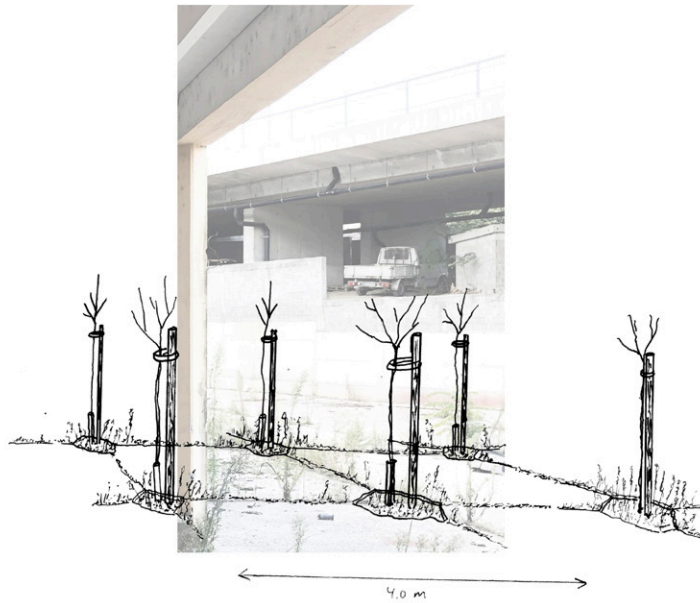
As shown in the upper right diagram, all public spaces are connected to the existing network of movement around the site in order to connect to existing movement patterns of people that live or move around the site.

0   10   20   30   40   50m   N

LEGEND
▼ Entrance to new public space   Workshop in existing building
⋯⋯ Buildings to be demolished   ⇢ Connection to continuous landscape

INTRODUCING THE GRID

Before creating the orchard, a grid is introduced on site in which the trees are placed based on the spatial characteristics that can be found on site. The grid reacts to the density of the surrounding vegetation, as towards the river the density becomes higher and towards the mountain it becomes lower. By taking the silos on the upper terrace as base for the grid and the concrete slabs on the lower terrace the intervention combines site specific elements with spatial characteristics of the natural landscape, since these elements offer a grid where the distinction in distance to the river can be made visible in an increasing density of vegetation towards the river.

As a basis for the dimensions of the grid, existing elements on site are used as guidance. The grid on the higher terrace is defined by the foundations of the former silos: 8 x 8m. The grid on the lower terrace is defined by the dimensions of the concrete slabs : 4 x 4m. The grid is fitted into the built structures on site and is interrupted by existing trees and the public spaces that are created on site in order to reactivate the abandoned site.
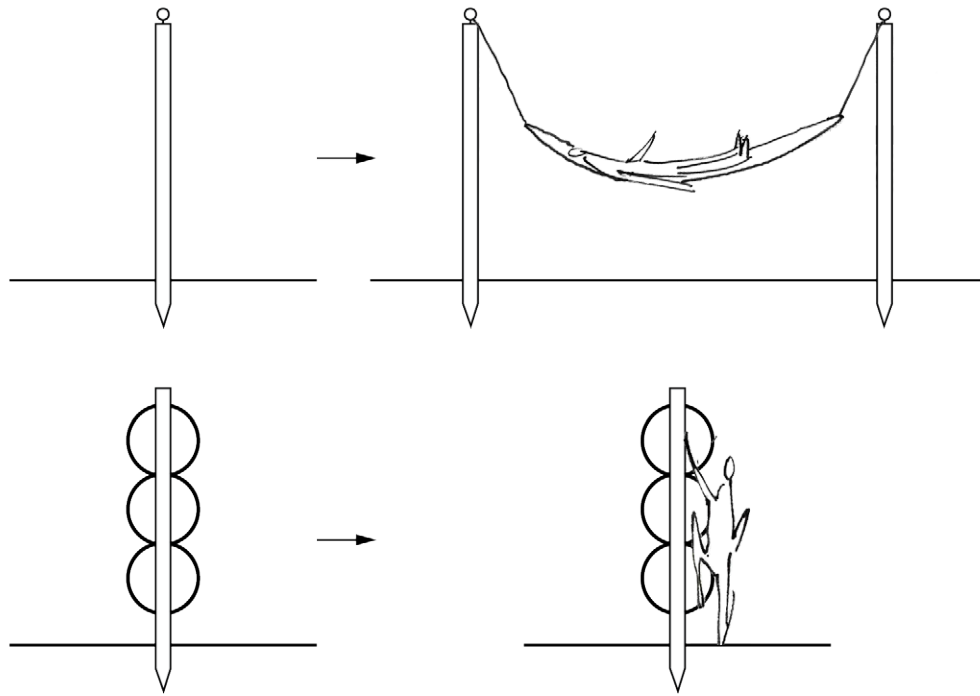
CREATING INFORMAL SPACES

What makes the proposed productive landscapes unique compared to existing productive landscapes in the surroundings, is that they are located within the neighbourhood designed for the local community. Due to professionalized agriculture and the distance from the city, today's productive landscapes are far removed from everyday life and not freely accessible. With the proposed productive landscapes located within the neighbourhoods, people can enter the productive landscapes and thus can become part of everyday life again.

This given is taken into consideration in the design of the tree poles. As usual, the tree poles are placed 30 centimetres away from the new to be planted tree. The new trees to be planted will not be placed everywhere on the grid, in order to represent the increasing density towards the river within the natural landscape. However, the entire grid will be filled with tree poles, also the spots within the grid that are left out with new to be planted trees in order to represent the natural landscape. The tree poles that are placed in these spots where no tree will be planted are designed in a specific way.

In the diagrams above, different options for the design of the tree poles are shown. The tree poles are complemented either with eye bolts or steel handles in order to make it possible to use the tree pole as play or sports equipment or, for example, to attach a hammock.

This is to achieve that people use the spaces inside the future orchard. In this way the orchard itself becomes a place that is used for human practices connected to the landscape and the qualities of these spaces that are normally inaccessible can be experienced.

Water inlet according to elevation

Water storage in former silos

Pump installation
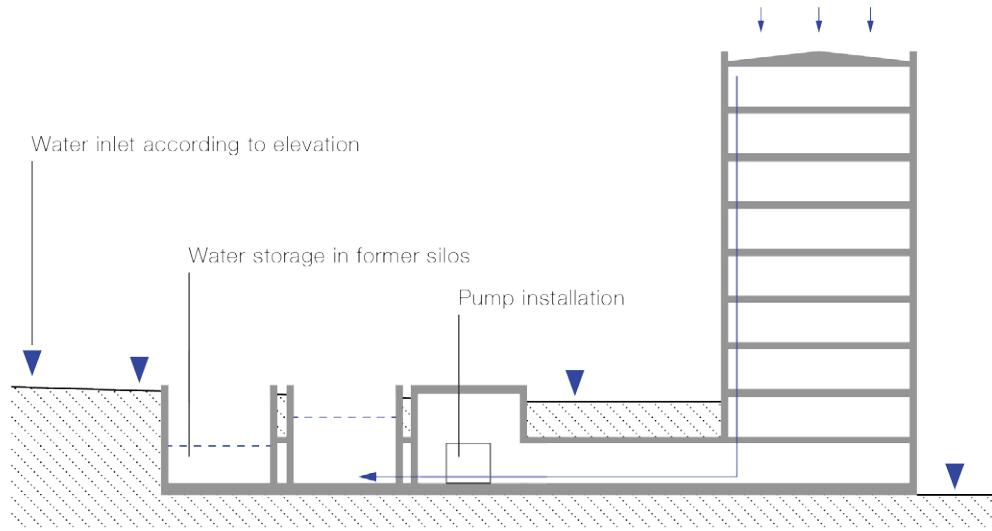
INTRODUCING A WATER SYSTEM

Within the the proposal is a network of water channels which carry the water supply of the orchard. Rainwater is collected from the roofs of the buildings and stored in the foundations of the former silos. Within five silos 1500 m³ water can be stored, the sixth silo offers space for a pump that distributes the water into the network, supplying the trees in the orchard with water during the warm and dry summer months. The water inlets are placed according to the elevation on site. The map on the right page shows the entire water network with the waterinlets marked in dark blue.

In addition to a functional role, the water system contributes to the atmospheric qualities of the place by creating movement and sounds across the site. In the places where the water canals meet the public spaces, they disappear before the eye, referring to the disappearing streams in the mountains. This emphasizes the sensory experience of hearing the flow of water. The section with details will elaborate further on the disappearing streams in the squares.
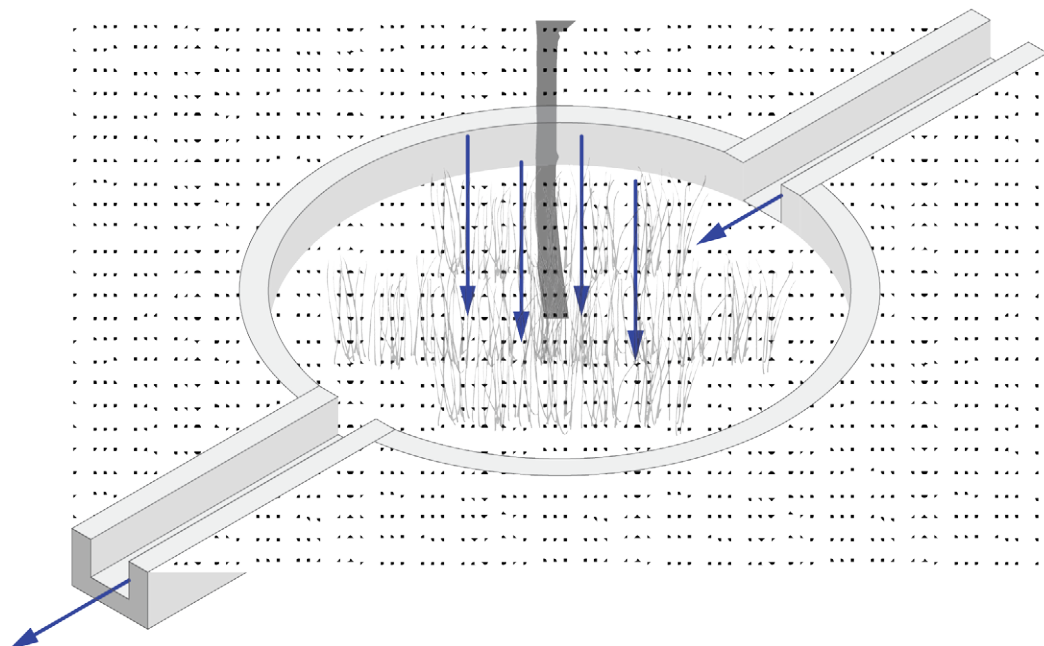
THE ORCHARD

The tree species to be placed in the orchard will be the same as those in the Mostar area. By taking the silos on the upper terrace as base for the grid and the concrete slabs on the lower terrace the intervention combines site specific elements with spatial characteristics of the natural landscape, since these elements offer a grid where the difference in distance to the river can be made visible in an increasing density of vegetation towards the river.

By reacting on the existing concrete slabs on site, the upper terrace has a grid of 4 x 4 m. These dimensions give restrictions to the tree species to be placed in the orchard. Therefore, the lower terrace will contain pomegrenate, plum and apricot trees, as they fit within the proposed grid, for the dimensions see the diagram below. The higher terrace has a grid of 8 x 8 m, derived from the fundaments of the former silos that are still present on site. The species that do not fit into the grid of the lower terrace will be placed here.

By organising the trees in a specific way, the orchard will resemble the increasing density in vegetation towards the river. Bigger species are placed closely together towards the river, transitioning into smaller trees within the same grid, after which this composition shall be repeated with the same distance, leaving one tree inbetween out. This composition is implemented on the lower and higher terrace.

LOWER TERRACE

HIGHER TERRACE

Pomegrenate 4 m 3 m

Plum 4,5 m 4,5 m

Apricot 6 m 6 m

Apple + Pear 8 m 8 m

Cherry + Fig 9 m 9 m
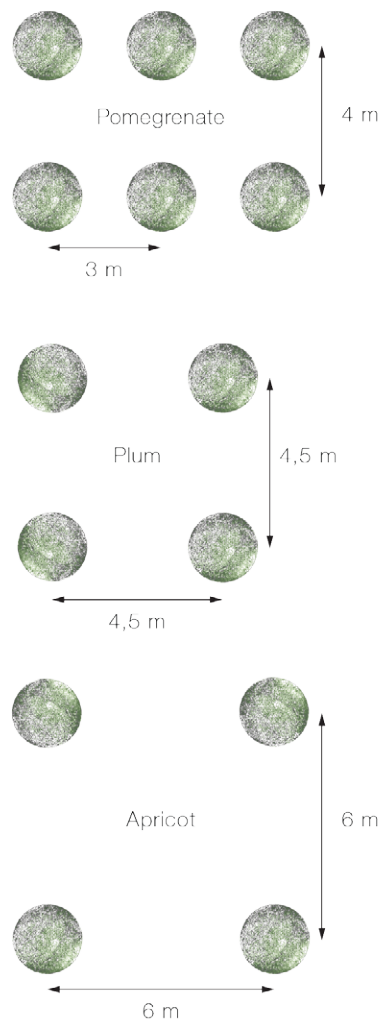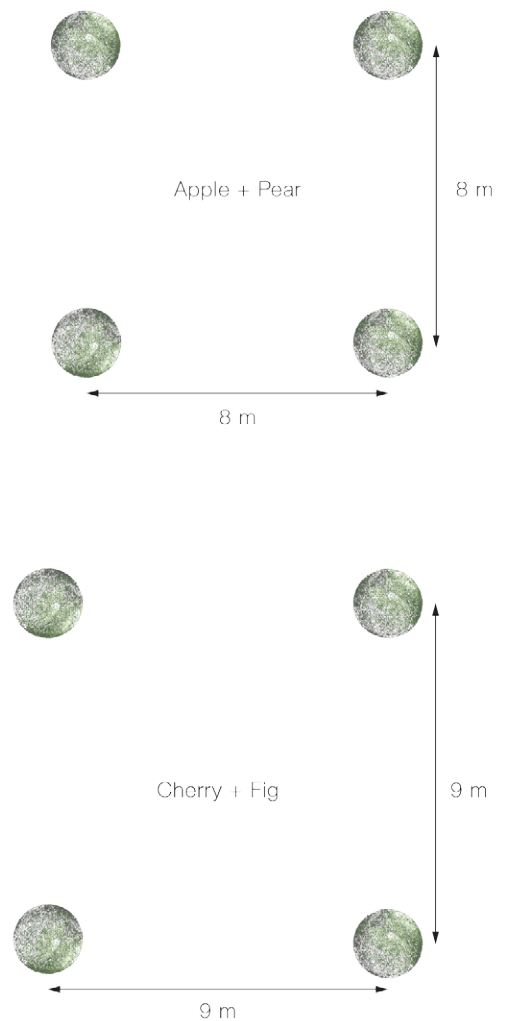
PHASES OF THE DESIGN

As described in the strategy, the design is divided into several phases. These phases are visible on the following pages.

The first phase contains clearing the site of potentially dangerous structures and extending the path that connects the site with other productive landscapes on city scale. In this phase, the continuous path is created, as well as the workshop on site and the water system and tree poles are placed.

The second phase, after 1 year when the site is slowly becoming part of everyday life, contains planting of the trees by students from the agricultural faculties and locals from the neighbourhood.
The third phase is after 10 years, when the trees are grown and traces of people using the spaces are becoming visible. The map that displays this phase shows the section and parts of the site that will be elaborated on in order to explain the landscape design intervention.
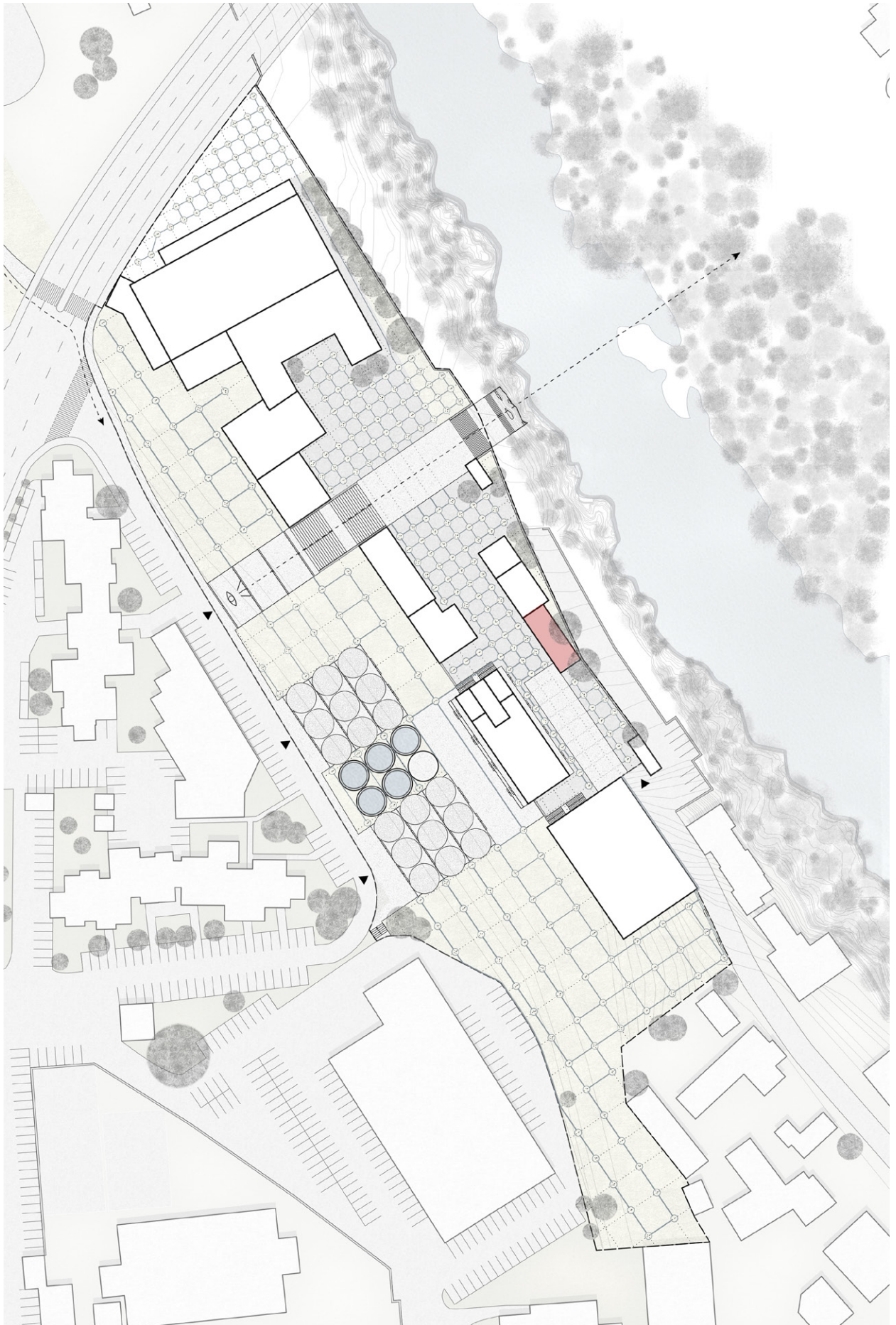
0   10   20   30   40   50m   N

LEGEND

▼   Entrance to new public space   ▨ Workshop in existing building
⋮⋮⋮ Buildings to be demolished   ⇢ Connection to continuous landscape

Phase 1 : Clearing the site, groundworks for the orchard and connecting to path towards continuous landscape

LANDSCAPE AS COMMON GROUND
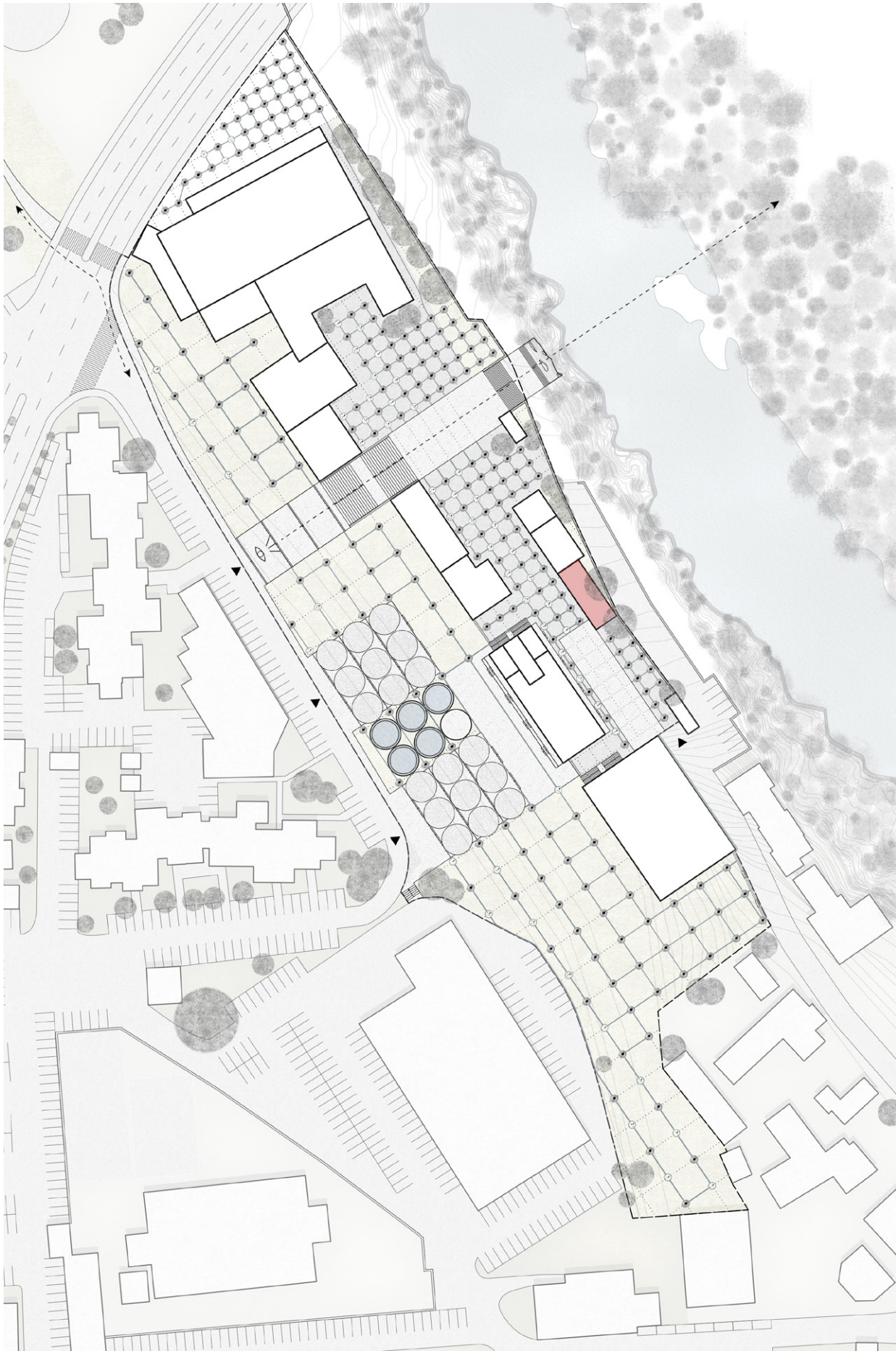
Phase 2 : After construction of the productive landscape, 1 year into the project

Phase 3 : Full grown trees and people adding another layer to the landscape, 10 years into the project

LANDSCAPE AS COMMON GROUND

CONNECTING THROUGH CONTINUITY

As mentioned before, by demolishing the potentially dangerous structures on site, a vista towards the other side of the river is created that can be experienced from the highest terrace untill the riverfront. This is the location where the path connecting to the continuous landscape ends at the riverfront of the Neretva.

There is a steep cliff towards the Neretva, therefore a water terrace is introduced on this location in order to connect with the continuous landscape. A place to fish or to sit during the hot summer months and enjoy the fresh breeze that is brought into the city with the Neretva river. Gentle stairs lead from the lower terrace on site to the higher terrace, offering a place to sit and take in the view. The higher terrace located adjacent to the road between the site and the surrounding neighbourhood is used as a public space for a local market. The square that is created steps down with the elevation of the site, every 8 meters following the grid of the orchard and water system.

The detail below shows how the terrace overlooking the Neretva is constructed around the existing rocks present at the riverfront.
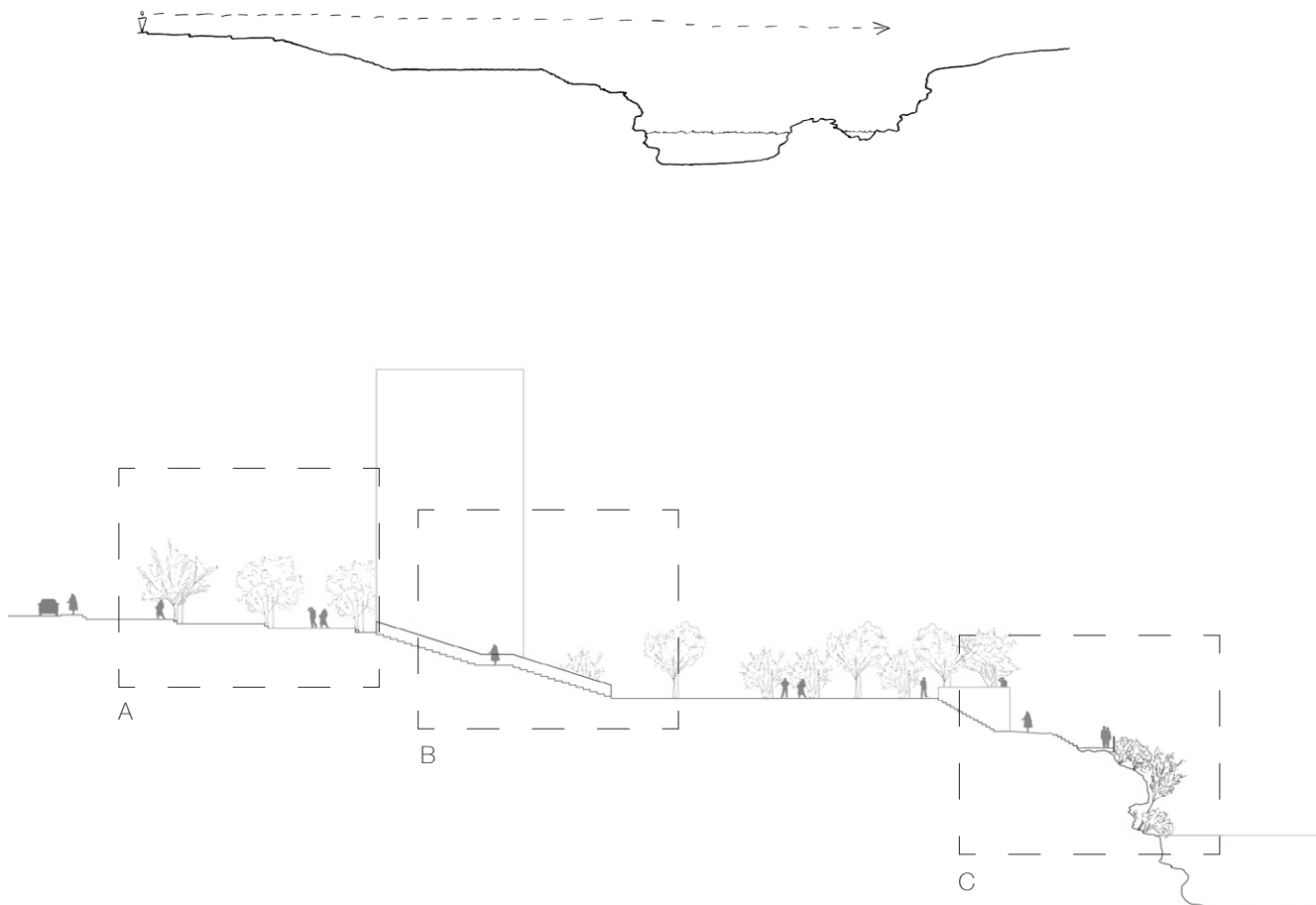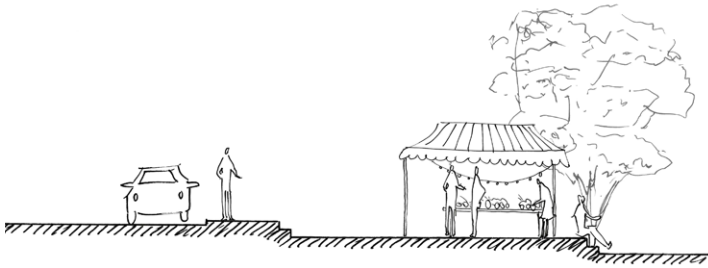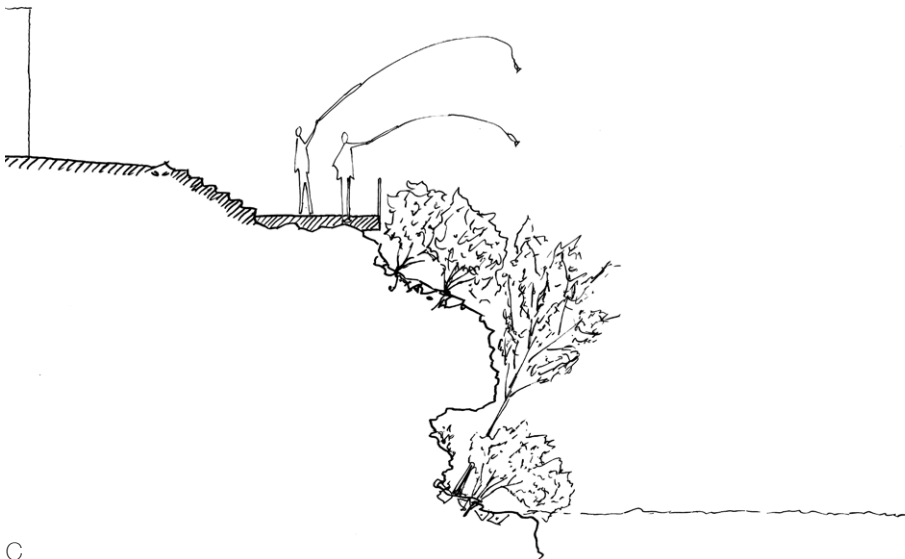
A
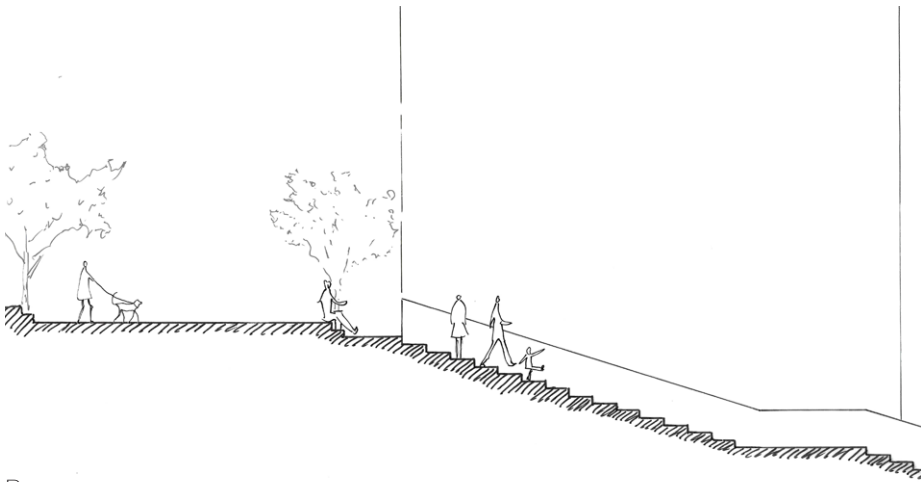
B

C

REACTIVATING RUINS AND ABANDONED SPACES

The intervention starts with creating public spaces on site in order to reactivate the ruins and abandoned spaces by making the spaces part of everyday life again. A part of a public space on the upper terrace is shown in plan and section on this page. One of the silos is transformed into a stage for performances and the square that is created steps down with the elevation of the site, every 8 meters following the grid of the orchard and water system. Underneath the public square, the water streams disappear before the eye, referring to the disappearing streams in the mountains. This emphasizes the sensory experience of hearing the flow of water. This principle is shown in the section on the right page.

Structural rebar   In situ concrete 15 cm   Prefab concrete
water channel

40 cm

15 cm
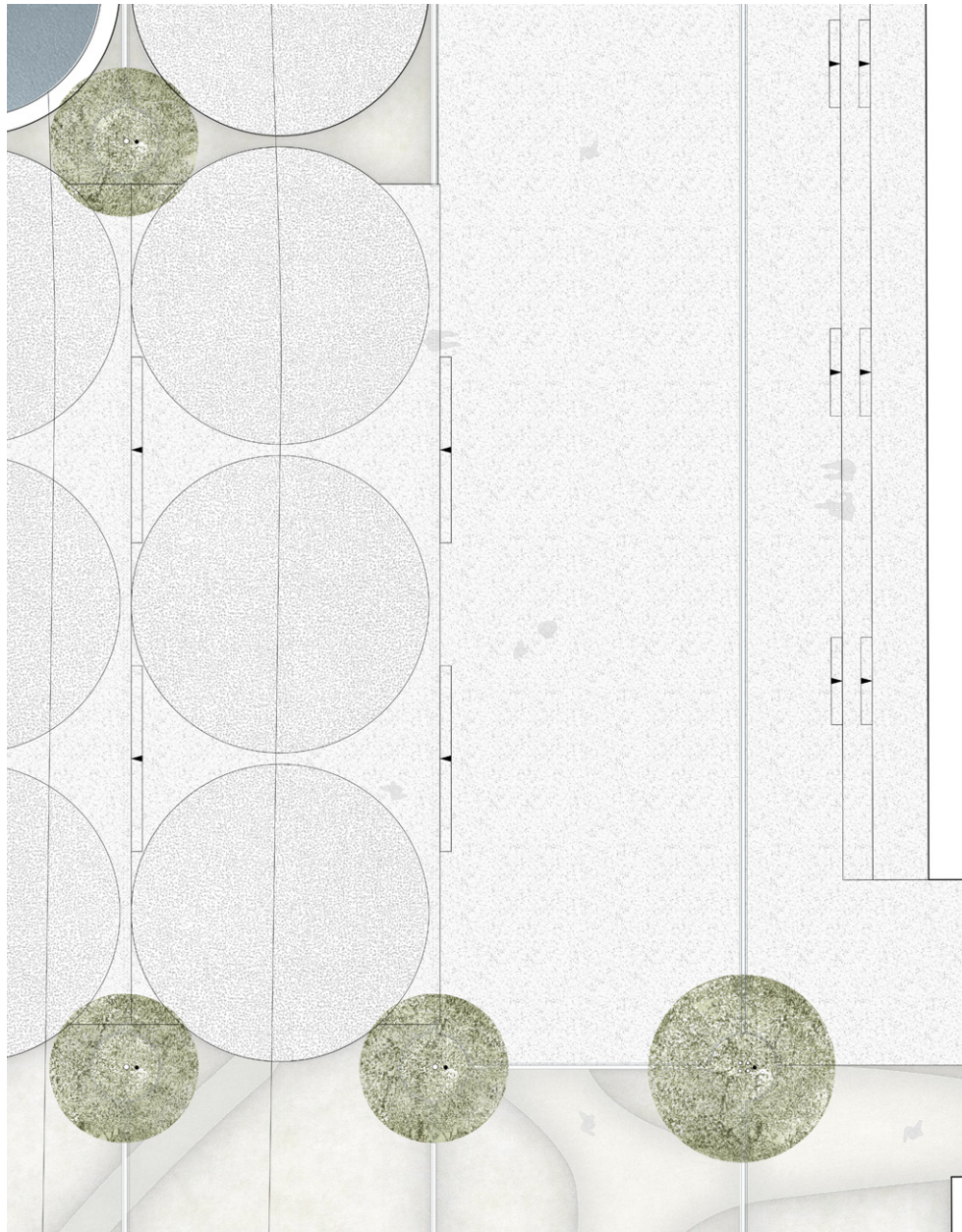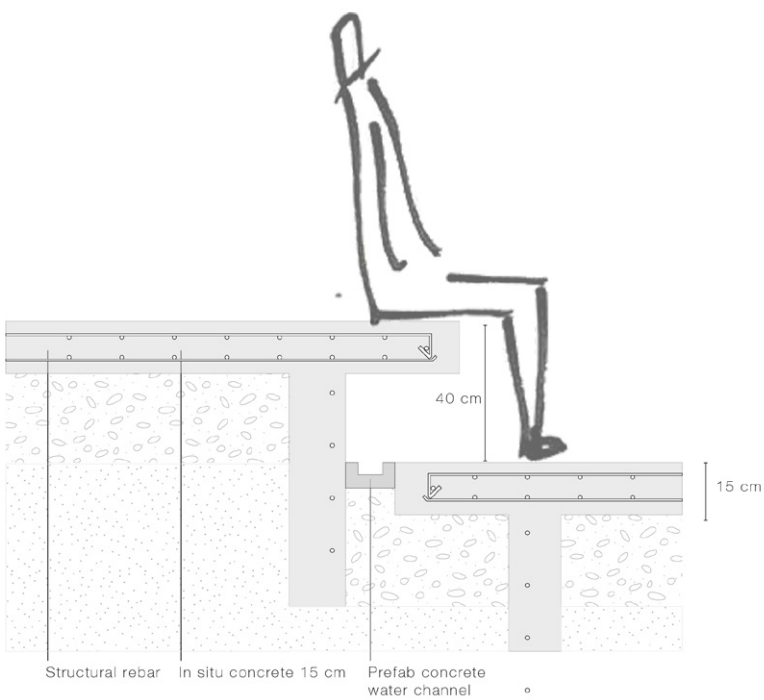
THE PRODUCTIVE LANDSCAPE

Within the productive landscape, informal spaces are created by moving through the field and where people gather. The ground vegetation will remain low in these spots, hence actively letting people add another layer to the landscape defined by how they use it for human activities connected to the landscape. I can only give an indication of what these spaces might look like, but the exact location remains unknown untill the site is in use and ages over time. However, the tree poles that are designed with eye bolts and steel handles form anchor points for the locations of these informal spaces, since they offer opportunity and stimulate a different use of the space that is turned into a productive landscape.
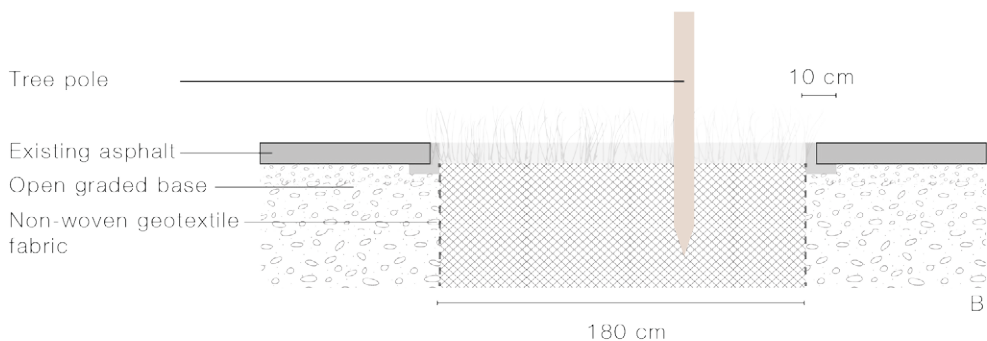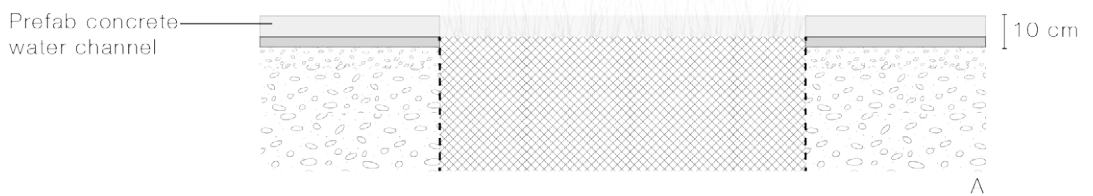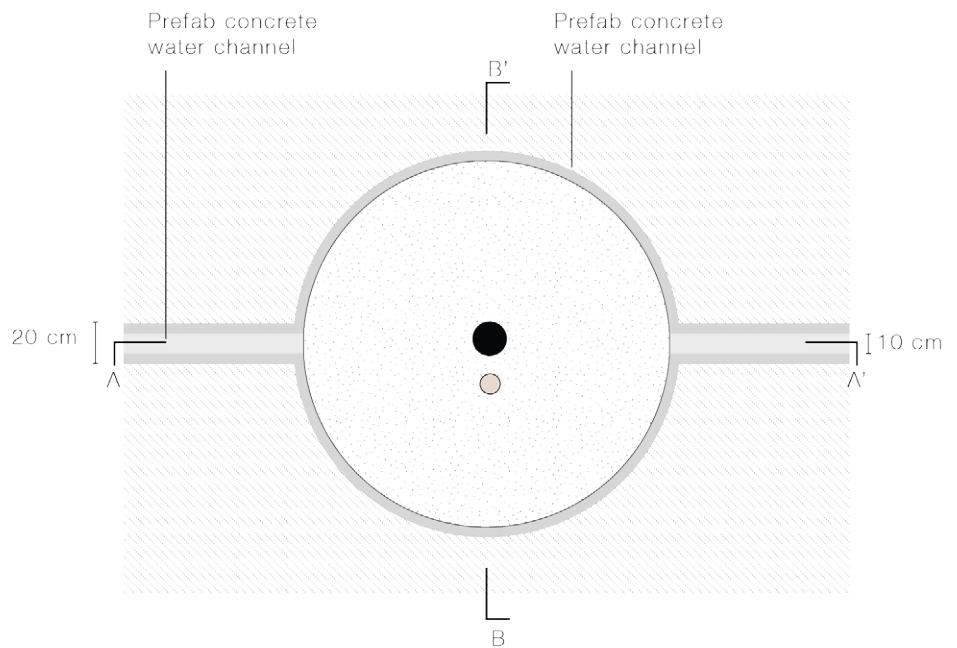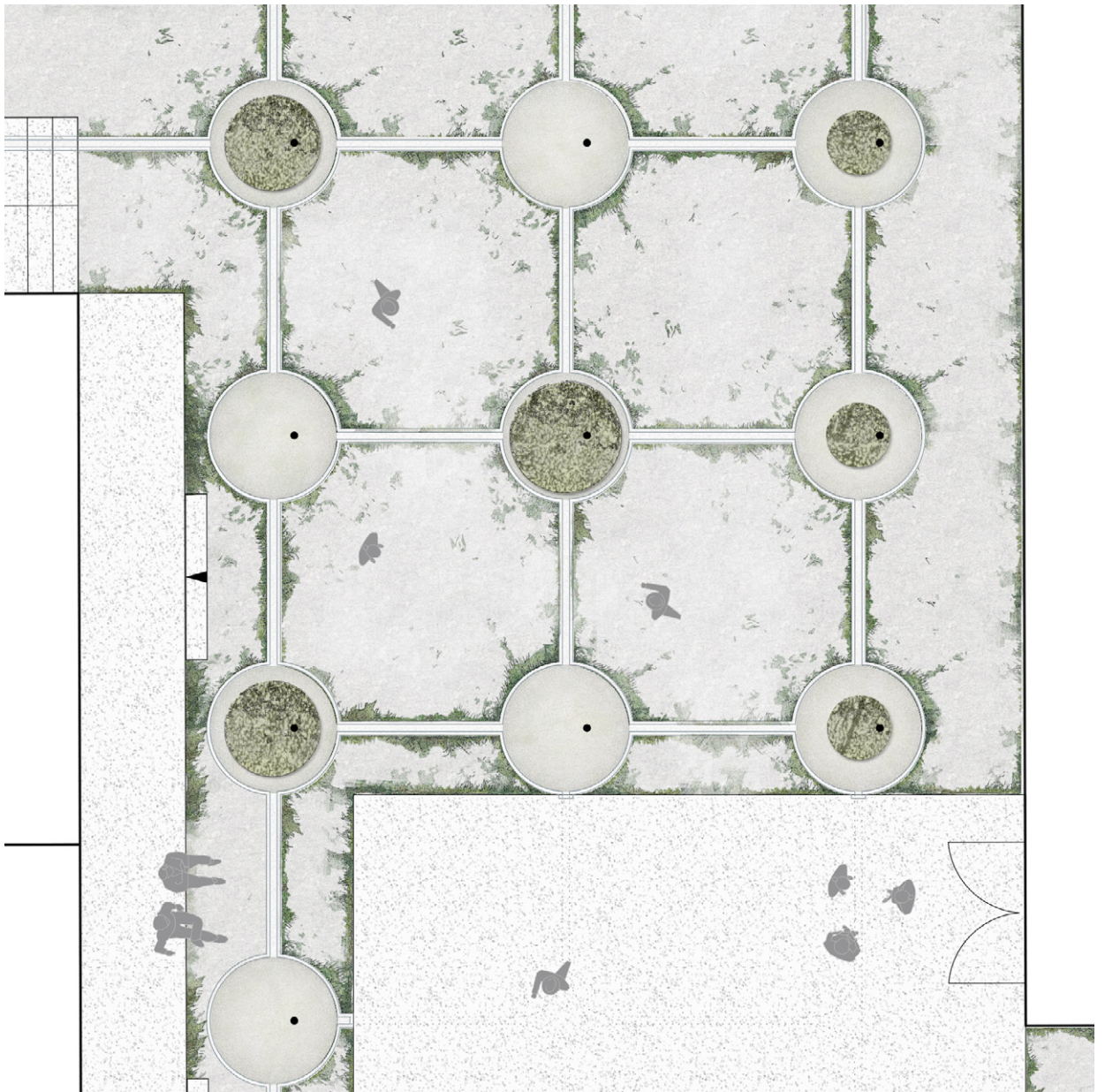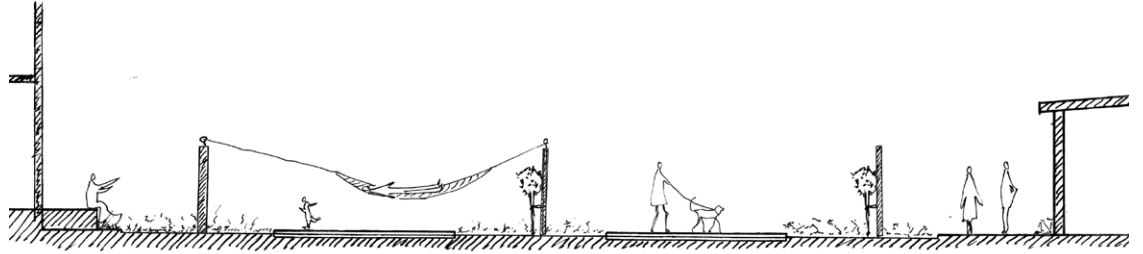
LANDSCAPE AS COMMON GROUND
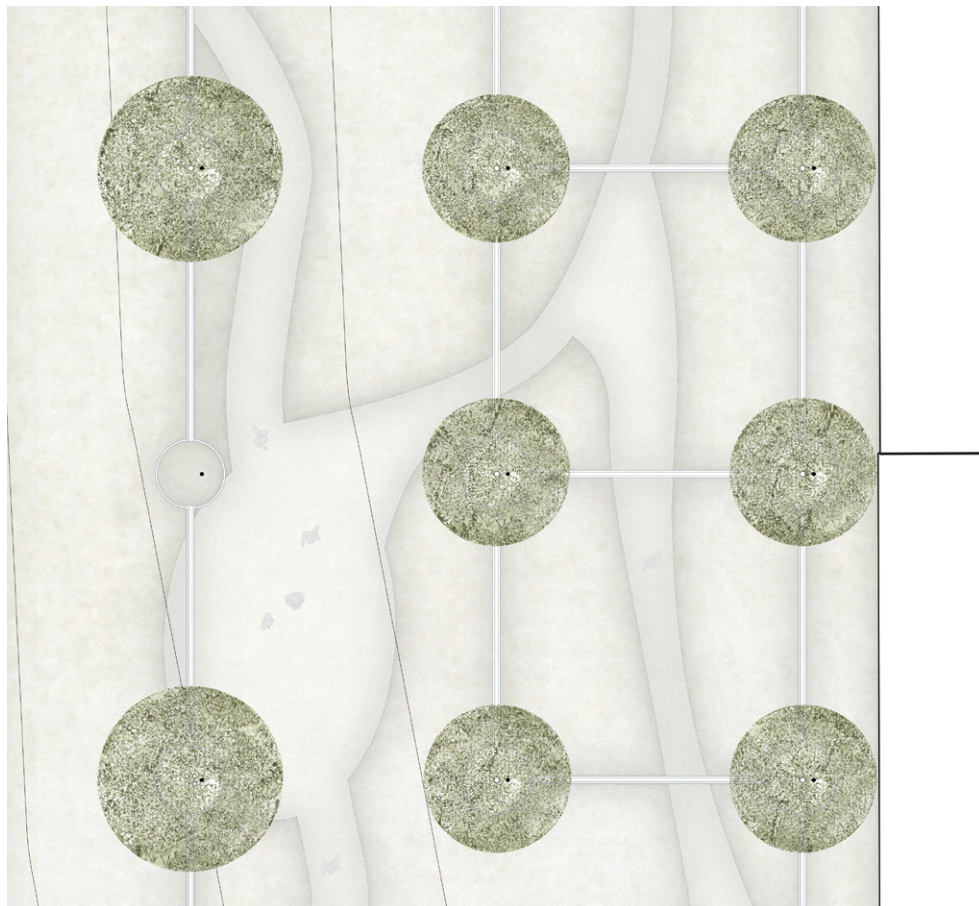
LANDSCAPE PROCESSES IN TIME

The following sections and plans show how landscape processes in time will change the place. As mentioned before, human practices that will take place on site influence these landscape processes which becomes visible, as the spaces where people gather and walk become readable in the landscape throughout time.

This applies also for the existing surface materials on the lower terrace. The following pages will show the transformation in time after plantation of the trees of the orchard. The installed prefab concrete water channel for the orchard opens up the existing asphalt surface of the lower terrace. This leaves behind cracks and holes that form places for small plants to start growing. Once again, human activities on site determine if the weeds and small plants can grow, as shown in the following pages.

Prefab concrete
water channel

Prefab concrete
water channel

B'

20 cm

10 cm

A

A'

B

Prefab concrete
water channel

10 cm

A

Tree pole

10 cm

Existing asphalt

Open graded base

Non-woven geotextile
fabric

B

180 cm

Growing process : 1 year

LANDSCAPE AS COMMON GROUND
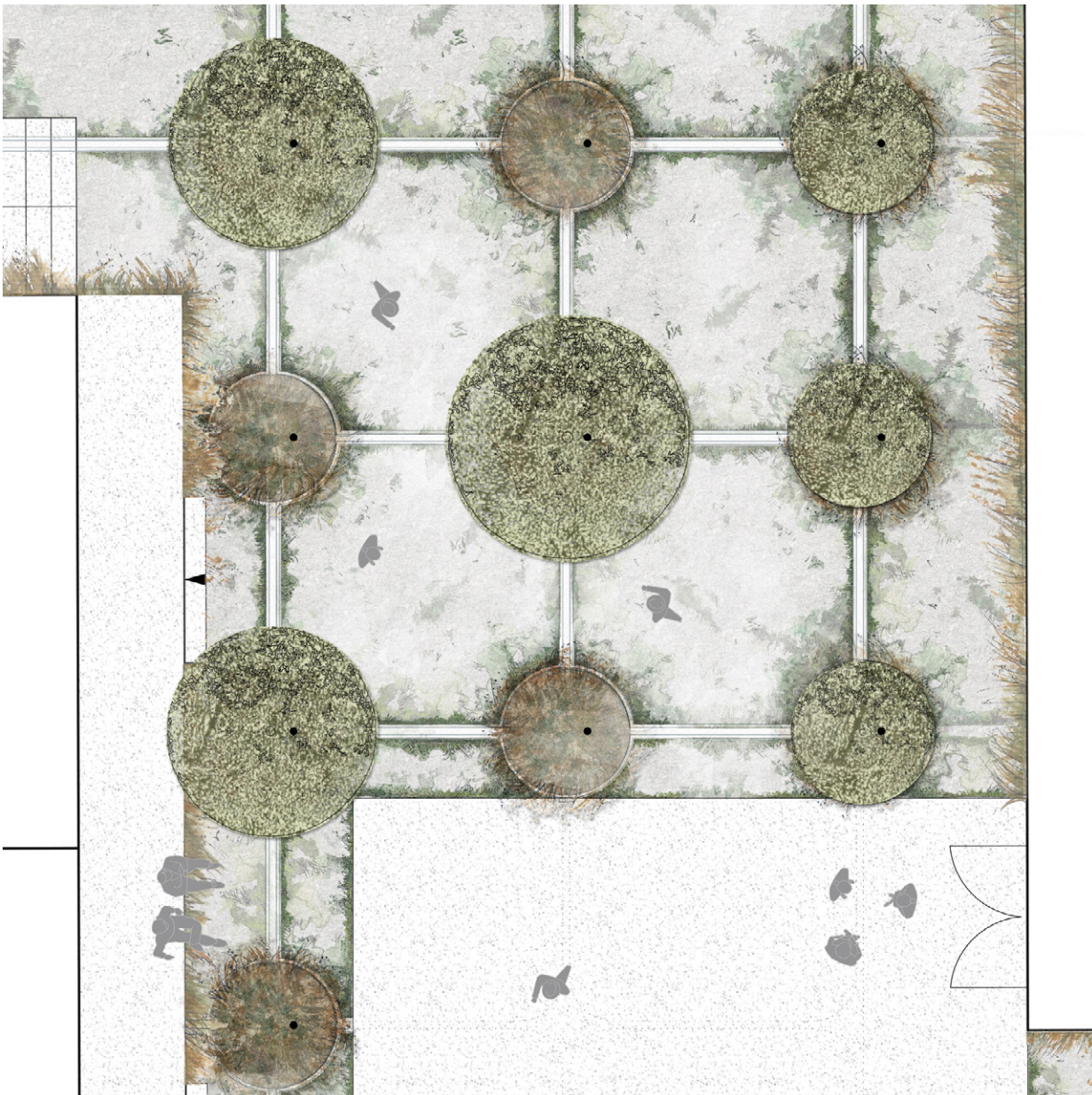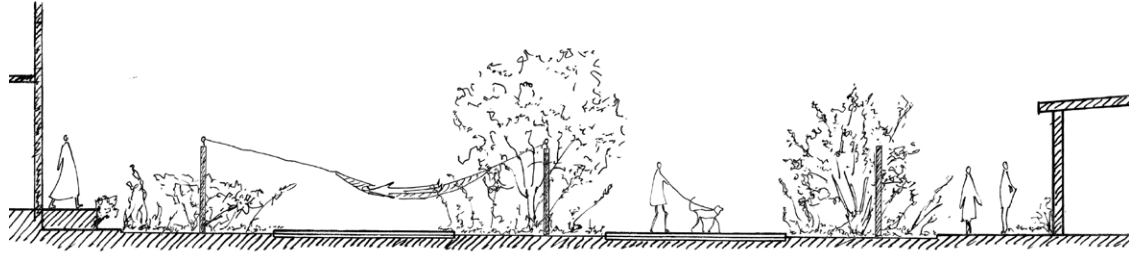
Growing process : 5 years
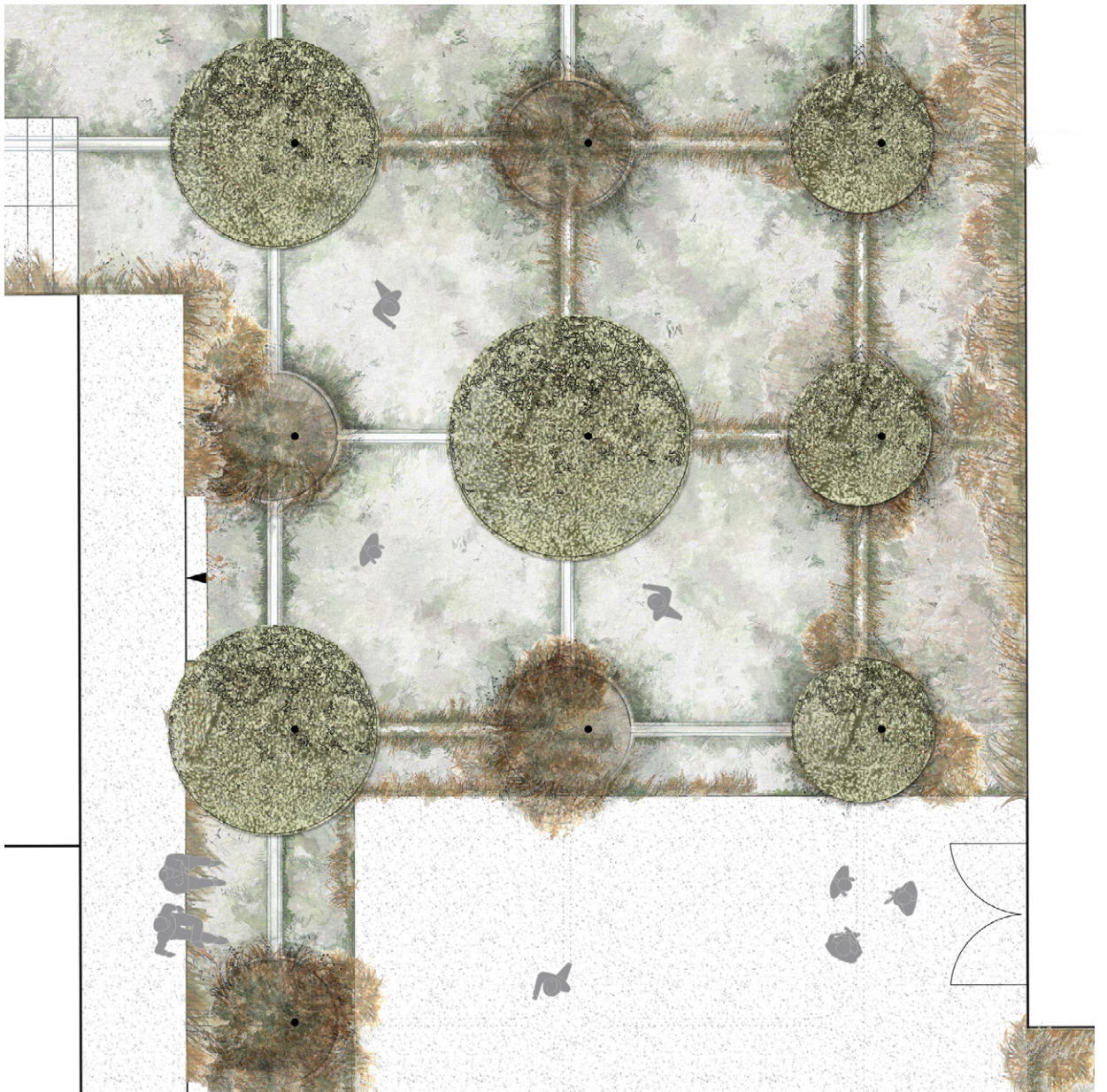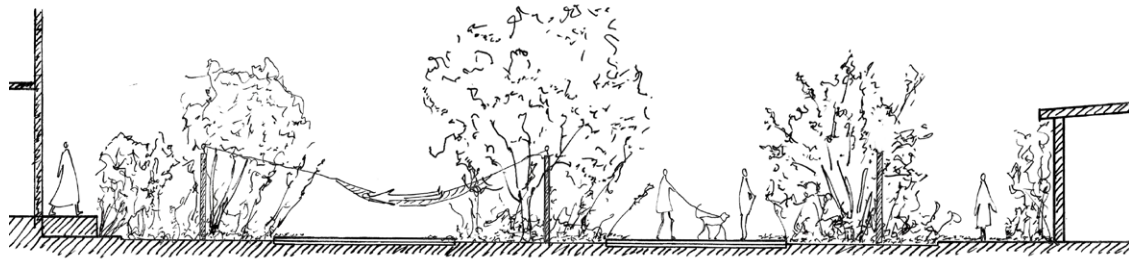
Growing process : 10 years

LANDSCAPE AS COMMON GROUND

PHASES OF THE DESIGN

The images display the different phases of the design and how it enables local people to use to new public spaces. The first phase consists of creating public spaces for new urban activities, the groundworks for the orchard and the creation of the workshop where students and local people can gather and exchange knowledge on site .

Phase two happens after one year, when the new public spaces are becoming part of everyday life and local people have found their way to the former factory site. In this phase, students from both agricultural faculties and local people are placing the trees for the orchard.

After 10 years we have arrived at the third phase of the design, when the trees are grown and the public spaces are part of everyday life. The part of the strategy called 'social engagement through the productive landscape' is becoming clearly visible in this phase, since new traditions and memories are formed by local people in the form of an annual harvest day, where the fruit from the orchard is collectively picked by local residents. In this phase, buildings on site are slowly transformed into functions connected to the public spaces and the productive landscape within the neighbourhood.
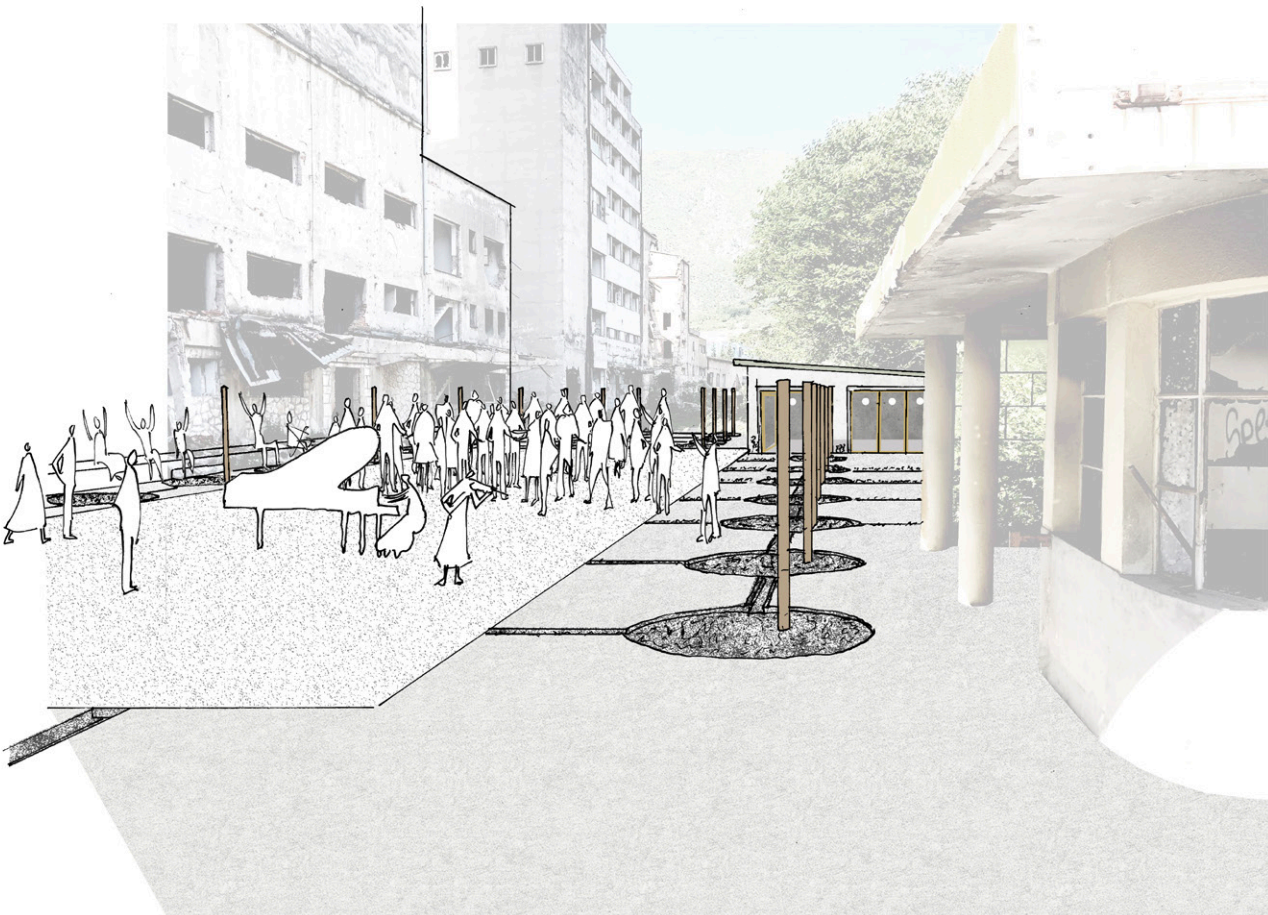
Phase 1 : public spaces for new urban activities, workshop and groundworks for orchard
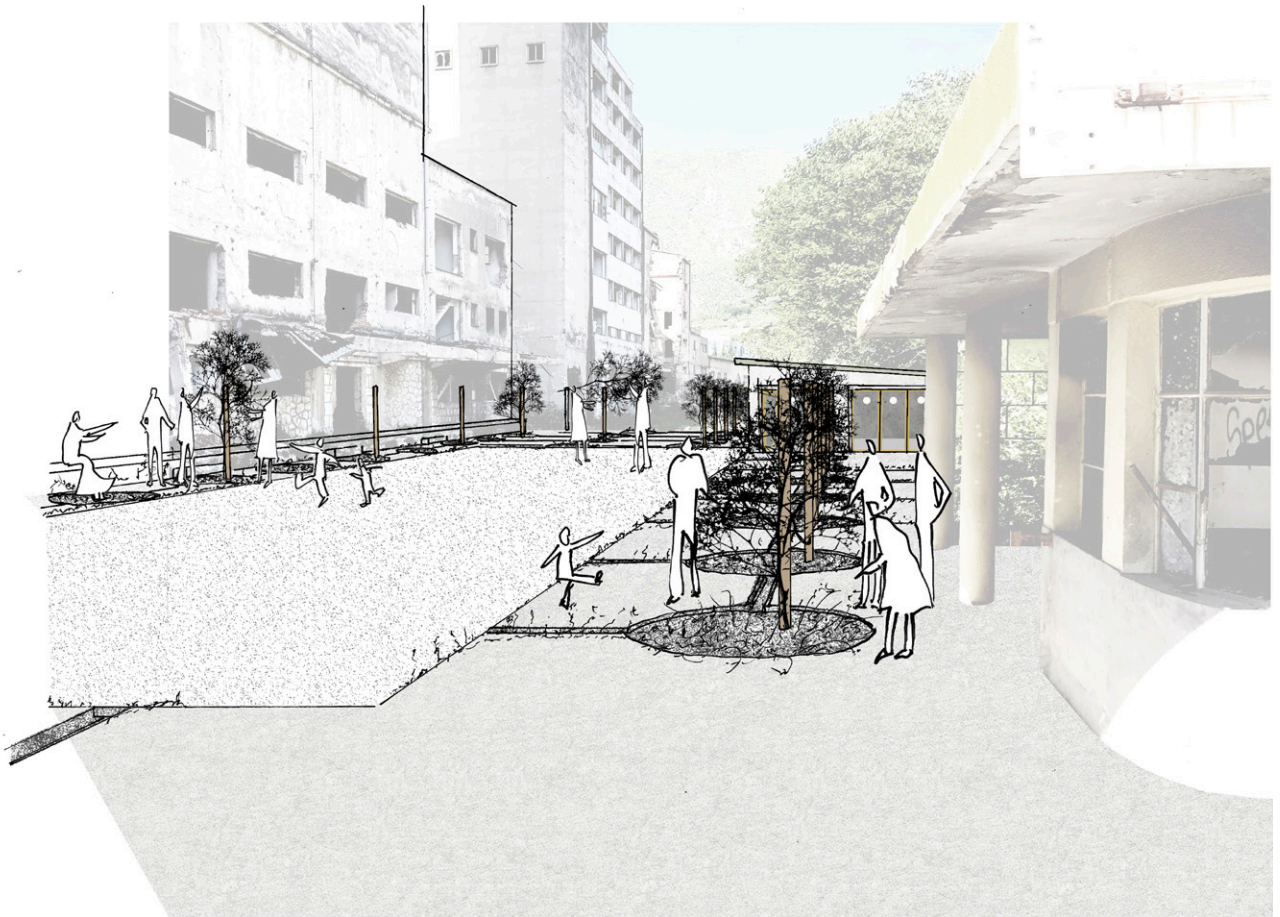
Phase 2 : Students and local people are planting the trees for the orchard
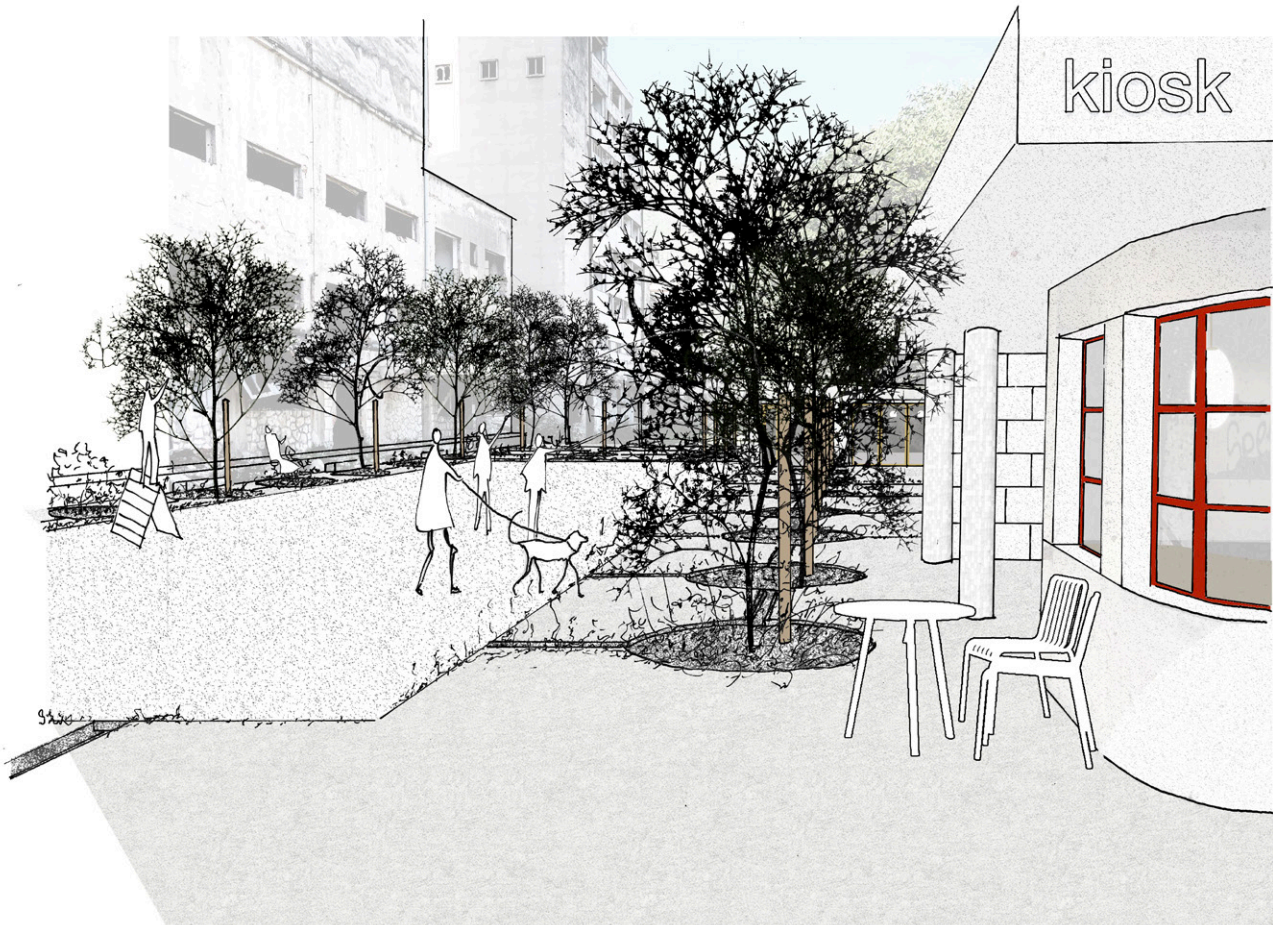
Phase 3 : Full grown trees, local people are picking fruits, start of re-using derelict buildings on site

LANDSCAPE AS COMMON GROUND

CONCLUSION

The main objective of this research design project is to reconnect the landscape with its local users. During the war from 1992-1995 many spaces across the city that symbolised this connection with nature were either destroyed or reminded people of the war and as a result were neglected afterwards. Within the complexity of the context, finding a way to create new memory was not an easy task. However, it is my personal belief that this disconnect with the landscape is a temporary situation, but it is not yet on the agenda in the complex post-traumatic context of Mostar. During conversations on site it turned out that locals are still not used to thinking about a future vision for the city for themselves because of the old socialist system. However, there is a desire for change among a young generation, which made me decide, based on a landscape analysis, to look for a connection with the local universities and to reach this younger generation. Not only to include them within the process for a landscape design intervention, but also because this is where the discussion about the future of Mostar can start.

An in-depth study of the current landscape in and around the city and its creation, has led to four levels of intervention in order to reconnect with the landscape: through continuity in the natural landscape, through the productive landscape, through engagement and by reactivating ruins and abandoned spaces across the city. These four components together show that people are involved in the image of landscape that we have today. The natural landscape and history of the place gave spatial conditions for an intervention and after analysing them a certain logic arose of how to design an intervention. This analysis into the local connection with the landscape throughout history has shown that the productive landscape is a way to get people more actively involved than just the role of consumers. The ruins and abandoned spaces across the city that are the proposed location for these productive landscapes are now being overlooked and are slowly disappearing from the collective memory. Through reactivating the ruins and abandoned spaces the aim is to make these spaces part of everyday life again, in order to attract people to the spaces of intervention.

Involving students from the local universities in the creation of the productive landscapes in the city, a theme they are researching at the universities, is an important component in the strategy for the landscape design intervention. This means that every year a new group of students can be involved in a project at a different location, which means that the network can grow. Another important component are the residents in the neighbourhood who are actively involved in the process. They are ultimately the users of the transformed ruins and abandoned spaces on a daily basis. By involving them in planting the trees and organising events around for instance fruit harvest days within the neighbourhood, the narrative towards the landscape is changed as they are actively involved in transforming it themselves. In addition, new collective memories and traditions linked to the landscape can be formed, as was customary in the history of Mostar. How local people are using the space, through movement and gathering on specific spots, will ultimately determine what the site will look like in the future. Because local people have a visible influence on how this specific place transforms in the place to which they in the future will connect memories and new traditions, a renewed appreciation for the landscape in general can arise. For me personally this research design project turned out to be more than just a pretty picture, as the process and strategy are equally important in the formation of this research design proposal.

With this project I have dived into the past of the city and its relationship with the landscape, which has resulted in this specific approach and spatial solution. It will be hard to find a similar context due to the complexity and difference of every post-conflict area, so in terms of scalability this project is custom made for the site and the context of Mostar. This already starts at the specific approach of an in depth landscape analysis into the local perception of landscape, combined with personal considerations, resulting in a highly specific project.

RELATION RESEARCH AND DESIGN

This research design project started with the hypothesis that the relationship between landscape and human practices is broken. Analysis and research of landscape and human practices showed that historic development created a physical distance between human practices and the landscape, this process started long before The Siege. The landscape remained productive throughout history. However, The Siege added another layer to the local perception of the landscape: as a result of The Siege and its extraordinary destruction of the city and the landscape, symbolic relations with the landscape were lost. The spaces filled with collective memories and engagement with the landscape have lost their meaning, eventhough the spaces were carefully reconstructed after the war.

Research and analysis into the natural conditions of the landscape and historic development of human practices connected to landscape helped define the local perception of the landscape today. This process proved that within the turbulant history of Mostar continuity can be found in the landscape.

By learning from the past through research and analysis a proposal has been made to reconnect local people with the landscape through connectivity, engagement and creating spaces for new collective memories connected to the landscape. Ruins and abandoned spaces from the past that are now slowly being taken over by nature serve as anchor points within the city for the design intervention. The route into the wider landscape serves as a backbone to connect these spaces for events that create new collective memories, combined with exposing the landscape characteristics and opportunities through a productive landscape that gives new meaning to the spaces.

CHOICE OF RESEARCH METHOD, SCIENTIFIC RELEVANCE AND THE POSSIBILITY TO ABSTRACT IT

During my research for this research design project I experienced that due to to the war there is limited information available on the human practices connected to the landscape in Mostar. The information can be found in writings, historic maps and photographs and in the collective memory of local people. During this research design project the VOGT-wall served as my personal archive to understand the relation of local people with the landscape. By collecting information on the landscape characteristics, the connection with the landscape and memories connected to the landscape I was able to get an understanding of the local perception of landscape. I divided the VOGT-wall in different topics, the ones I used during my internship to do research into a project and landscape types that, it was my belief at that time, would capture the dynamics and spatial characteristics of the landscape.

By using specific topics, there is a chance that other topics can easily be forgotten. During the process of collecting information I soon found out that in a complex situation like Mostar the landscape could not be defined in spatial landscape types and the term landscape needed to be redefined first (see glossary for definition). This has led to literature research on the perception of the landscape, supported by interviews and historical maps and photographs. The VOGT-wall remained as my personal archive during this process.

During this research design project I found out that there is limited research available for post-war areas within my specific angle. Most of the time, the focus is on

reconstructing the city and spaces that were lost during the war, which underlines the importance of combining the available research with experiences on site.

RELATION BETWEEN GRADUATION TOPIC, THE STUDIO TOPIC AND THE MASTER TRACK

This research design project is part of the studio Neretva recollection: materiality of war, flowing memories and living archive, with the aim of exploring urban and landscape transformations of the Neretva River, the river banks and the city of Mostar started in the wartime between 1992-1996, and to translate these explorations in a design intervention.

By placing The Siege and aftermath in a bigger context of many historical and cultural layers that shape the landscape of today, my aim was to get a better understanding of the context. It lead to ways of reintroducing the landscape into the city and connect local people with the landscape through engagement, with processes, events and principles from the past. The in depth analysis through the scales of the wider landscape and its spatial conditions and how human practices react on this throughout history has resulted in a different outcome than by focussing only on the war and its aftermath. The same approach was applied for the Neretva river, by approaching it in a bigger system turned out to be resourceful for reconnecting local people with the landscape again.

SOCIETAL AND ENVIRONMENTAL RELEVANCE

The current disconnect between local users and the landscape is emphasized in the amounts of trash in public spaces and the neglect of the landscape. Projects such as the cleaning up of trash on the banks of the river are a positive development, but in my opinion they do not address the real problem.

Abandoned spaces and ruins in the city are currently either neglected or reconstructed. The spaces that are reconstructed have lost their meaning for local people during, after and sometimes even before the war due to a changing society. By looking at the natural conditions of the landscape and the different layers of the cultural landscape my aim was to find a new meaning for local users in the landscape. Creating new meaning in the landscape for local users could act as a catalyst for a change in behaviour and the way the landscape is handled, and hopefully could put an end to the endless stream of waste, the dumping of furniture and the discharge of sewage into the river in the near future. Including education about the landscape in this proposal could form anchor points for a changing narrative towards the landscape.

ETHICAL ISSUES AND DILEMMAS

Dealing with the memory of war, people losing their loved ones and seeing the city they grew up in being totally destructed and an utterly divided society is something I have never dealt with before. Through research and personal conversations I tried to understand the situation better, but this required a cautious approach. The way in which I could maintain this cautious approach, but still get the answer to my questions, formed a continuous moral issue during my research design project.

The difficult political situation at a time when an entire society seems to stand still

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and things suddenly happen without people knowing anything about it, which seems to weaken trust in local politics, was a new situation for me.

The language barrier made it hard to obtain information on site, since a limited number of people spoke English and the people who did were all university educated and/or working in tourist industry. I am aware that the image I have received during the conversations does not represent the entire local community. Nevertheless, my image of the city and the local relation with the landscape would be incomplete without the conversations and interviews.

PERSONAL DEVELOPMENT

In an incredibly complex situation like Mostar, it was quite a challenge for me to formulate a problem statement and design assignment. In a place so devastated by war, resulting in a total segregation of the city, the challenges seem endless. During my field research, learning to better understand the local cultures without judging them at once was therefore an ongoing personal task, which ultimately led me to appreciate the city, the culture and the local people. Let's just say I have become a lot more patient during my second field trip to Mostar. This has opened doors that I had not dared to hope for after my first field trip.

During the past year I have wandered several times, mainly because of the complex situation in Mostar, which sometimes gave me the feeling that nothing is possible in a place like Mostar. Discussions with locals, and Senada in particular, have made me realize that a design study can also be a means to give perspective in such a situation. During the last year this gave me room to see possibilities again.

Research into the landscape in relation to human practices gave me a whole new perspective on the meaning of places and has changed my personal view of landscape from an aesthetic image to a layered entity with deep-rooted meaning in a local culture, this is something I will take with me for the rest of my life.

COMMON GROUND
Opinions or interests shared by each of two or more parties.
"Common ground was most important in Yugoslav times" (S. Demirovic, personal communication, October 7, 2019).

HUMAN AGENCY
The capacity for human beings to make choices and to impose those choices on the world, the capacity of an actor to act in a given environment.

HUMAN PRACTICES
How social beings, with their diverse motives and their diverse intentions, make and transform the world which they live in. It is a dialectic between social structure and human agency working back and forth in a dynamic relationship.

LANDSCAPE
"The perception of the given terrain. Landscape has no physical reality, but can be defined as a commonly shared image of a part of the land that nature presents to an observer" (Smets & Treib, 2015, p. 12).

This reaearch design project started with the definition of landscape by Smets and Treib. However, during the project the definition evolved, as especially in an urban context as Mostar human practices produce and change the landscape. This takes place through the scales, from large scale urban planning that gives space to nature, to small scale

MOSTAR
43° 20′ NB, 17° 48′ OL, a city in Bosnia and Herzegovina. 113.169 inhabitants (BHAS 2013). Mostar is situated on the Neretva River and is the fifth-largest city in the country and the administrative center of Herzegovina-Neretva Canton. Mostar was named after the bridge keepers (mostari) who in medieval times guarded the Stari Most (Old Bridge) over river Neretva. *"Mostar has traditionally always been a very social city in which public activities, such as 'promenading' along the Korzo, the public street cabaret (Liskaluk), and diving off the Old Bridge were all very important premises for the city to function"* (Mackic, 2016, p. 61).

NEGLECTED LANDSCAPE
The landscape in a state of being uncared for. Further interpreted as 'Terrain vague'.
"Empty bottles and plastic bags littering the riverside. The thoughtlessness in treating the environment, no longer sure it will continue to exist, no longer worth the trouble of maintaining" (Mackic, 2016, pp. 22-23).

POST-TRAUMATIC LANDSCAPE
When the perception of the given terrain (landscape) is overwritten by the traumatic experience from the war. *"The main function of the bridge, for example to cross the river, or its importance as the cultural heritage monument is overwritten by the traumatic experience from the war, 'spatial hate', nationalist and political narratives within the Mostar landscape"* (Architecture and Urbanism departments from TU Delft, p. 16).

POST-INDUSTRIAL LANDSCAPE
The city is also experiencing the pressing 'ordinary' problems of an ageing post-

Sovjet and post-industrial city (Plunz, p. 52).

PROMENADING

Take a leisurely public walk, ride, or drive so as to meet or be seen by others.
"Promenading was an urban activity that belonged to all inhabitants of Mostar, and many other cities in former Yugoslavia. The street that would be promenaded on was called the Korzo. Between six and ten in the evenings was a time of seeing and of being seen, catching up with people, and laughing and flirting" (Mackic, 2016, p. 61).

TERRAIN VAGUE

"The concept of terrain vague, roughly means 'wasteland' or 'ambiguous space'. Describing leftover spaces that are difficult to categorise - from vacant lots and disused rail lines to urban wilds and a motley of interstitial public spaces - terrain vague possesses complex, fragmented, and at times, contradictory meanings. Because terrain vagues make up a significant part of our everyday surroundings and contain within them complex resources - yet are often either misunderstood or overlooked - it is all the more important that they be given their fair due. It is to our own peril, and the peril of public space that we overlook the overlooked, neglect the neglected" (Barron & Mariani, 2014, p. 11).

THE SIEGE

A military operation in which enemy forces surround a town or building, cutting off essential supplies, with the aim of compelling those inside to surrender.

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INTERVIEWS

Senada Demirovic : Senada is PhD candidate at Džemal Bijedić University of Mostar with the thesis 'Urban reconstruction in continuity', she's also founder and curator of ADA, centre for architecture, dialogue and Arts in Mostar.

Damir Ugljen : Damir is a local archeologist and provided my with a lot of information in several conversations during my stay in Mostar.

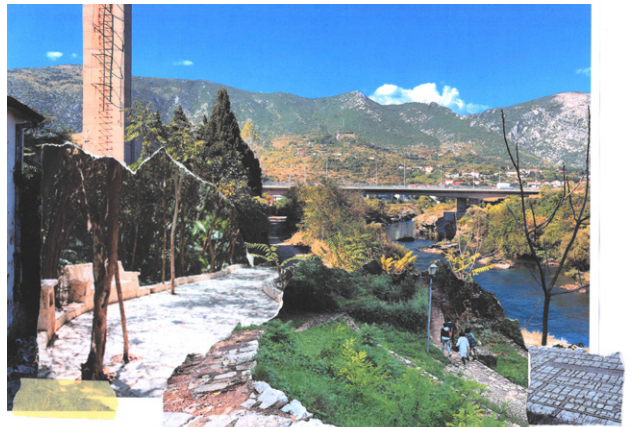*Josh* : Josh is an exchange student from UK sitting at Spanish Square
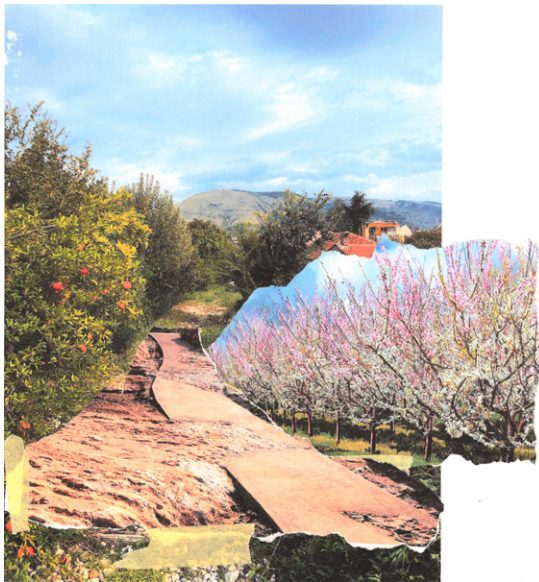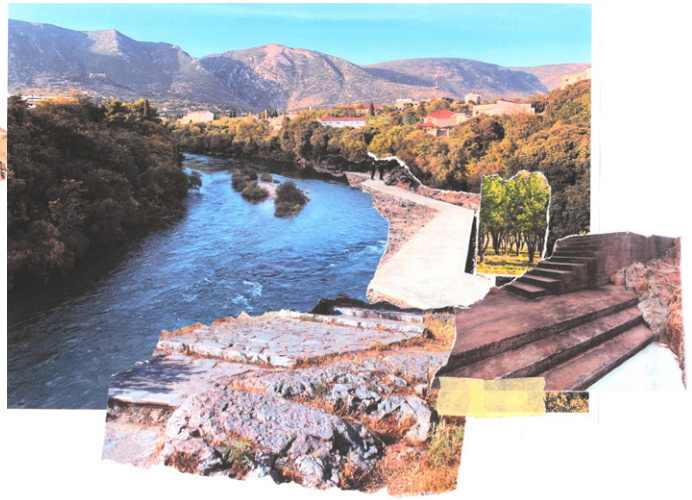
Professor Biology : He is a Professor in Biology at Džemal Bijedić University in Mostar

Bruno : Bruno is a kajak instructor and organises day tours for tourists

Ana : Ana works as a travel agent at iHouse travel, is a dance teacher to 29 girls at the culture centre and a psychology student at Džemal Bijedić University of Mostar thanks to a scholarship provided by Jericho Foundation.

Nadia : Nadia is a guide at Biscevic House

Among conversations in the streets and in cafes and formative talks to learn more about local culture and their relation to the landscape. The collages on the right page show what was discussed during interviews and the collages were partly created through participation.