

REIMAGINING ŽELEZNÁ STUDNIČKA:

Renaissance of the Wellness oasis

Ján Cholvadt

BIG VERTICAL STUDIO

Name of the Brief: Carpathians – Getaway – Bratislava
Project stage: Urban Design Proposal
Student name: Bc. Ján Cholvadt
Year: 5.
Academic Year: 2023/2024
Studio: Ateliér BIG (Vertical Design Studio at FAD)
Supervisor: MArch. Matthew Oravec,
Ing. Ján Baška RIBA (AA),
Ing. arch. Michal Rachela,
Ing. arch. Andrej Boros

University: Slovak University of Technology Bratislava
Faculty: Faculty of Architecture and Design
Field of Study: Architecture
Subject: Studio of Urban Design
Subject Guarantee: Prof. Ing. arch. Ľubica Vitková, PhD.

Brief

Carpathian - Gateway - Bratislava

Three Following challenges for architecture and urbanism have been omnipresent in 2023:

Responsibility: The need to inhabit the planet in ways responsible to the natural ecosystem, global climate and humanity.

Sustainability: Creating a mind-shift from comfortably-traditional to innovatively-sustainable

Adaptability: The emergence of global crises that rapidly require revamping of the environments we are creating for work, education, commercial and social life.

Background: A large IT company is establishing its Headquarter Campus on a former military hospital ground at the gateway between the city and the natural reserve around Kamzik mountain. The campus will house more than 1000 employees together with a mix of residential, commercial, event and sport programs. The ambition to create one of most innovative and sustainable campuses is envisioned to bring benefits not just its occupants but also wider public.

The large investment is seen as a highly beneficial development which will bring life to a quiet part of the city, but as a result will present new challenges to the surrounding area ranging from extra footfall to traffic overload in an already overstressed district. The popular recreation area Zelezná Studienka, which is in effect the Small Carpathian gateway, already struggles with recreational crowds. Visitors traditionally come by car (which is the most convenient yet most polluting form of transport). Eventhough the City tries to shift this preference towards public transport, by creating TIOP Zelezná Studienka, at this moment it has barely been seen as a viable replacement. The popularization of this area has to be carefully planned in order not to overload its facilities and disrupt its environment.

We propose to explore a brief from two directions:
Half the program is a real physical project, dealing with the challenges of connection between the site and adjacent recreational area with the city and wider context. In this respect it will be necessary to re-visit they current amenities and functions within the area and suggest solutions for enabling creation of world class recreational gateway.
The other half would contemplate an ideal connection scenario within the realm of alternative reality. Students are to imagine that cars have never been invented and people have never experienced a need for this mode of transport. The task would be to explore possibilities and impacts on local urbanism and how those learnings could be implemented into the real world.

The studio will be run together with a representative of Bjarke Ingels Group BIG:
Matthew Oravec
Ioanis Gio
And supported by INFLOW
Jan Baska
Michal Rachela
Andrej Boros

My Statement

Železná studnička area is a...

A spring once diminished

Where nature clashes with the bustling city

Urban forest

Gateway to the Carpathian Mountains

Place of solitude, a sanctuary

Location

Železná studnička is a suburban recreational area in the Bratislava Forest Park. It is located at the end of the Mlynská dolina valley, in the territory of the Nové Mesto district of Bratislava III. The locality got its name after the iron water that originated in the local area.

Železná studnička is an imaginary gateway to the Little Carpathians, in the very south-west of the vast Carpathian Mountains stretching across central and eastern Europe. Since time immemorial, the Iron Fountain has been a place for trips into the countryside. On the site of the spring, a spa and a social house were built in the 19th century, an important place for the bourgeoisie until the time of World War II. Both the spa and the spring area faced challenges in the 20th century, and the turn of the 20th century saw the revitalization of the area, as well as various preventative measures to prevent logging and vehicular circulation that would permanently disrupt the character of the area. However, the spa failed the test and was demolished. Because of its undisturbed setting, the Iron Well still enjoys popularity with visitors, but there is still room for improvement.

My focus

My aim is to build on the basic characteristic of the fountain as a forest park environment, but I want to bring back to this space an element that has been carried by it since the 19th century and make it a recreational-rehabilitation area. The names of objects such as a spring, baths, sanatorium, bath-house resonated in the iron well. All these things refer to the healing character. All of these four things disappeared at some point in time. Of these, only the spring has been restored. The other buildings went to hell with developers or, in the form of cupolas, the focus to rebuild them did not come. It is this building that I have taken as the main driving force, to which I have conditioned the urbanistic interventions I want to make in this locality.

Železná studnička Spa

My intention is to rebuild the Iron Well Spa. There are already other buildings on the site of the original baths. This means finding a new suitable site and defending the choice of this location. I want to bring additional features to the baths. I have to design all new interventions sensitively, because Zelezná studnička is part of the Bratislava Forest Park and strict ecological rules and regulations apply here.

Recreation and rehabilitation zone

I want to redevelop certain areas suitable for recreation and thus increase the number of visitors and the circulation of people, but not to become a threat to nature. I am trying to make small interventions in the place, especially the improvement of the existing infrastructure, as well as some suggestions to improve the quality of stay in the iron well. I am also working with existing proposals for the transformation of buildings such as the former sanatorium and the shopping mall, as well as the future promenade on the water reservoirs behind the Zelezná studnička.

Minor interventions

To my above-mentioned aim belongs the creation of an urban zone within the area of the Bratislava Forest Park. In this area I add proposals and objects designed to increase the quality of the place from the point of view of visitors. These small interventions include various small living zones in the form of camping or picnic areas, children's playgrounds.

At the same time, I want to database the objects under construction and those to be built in the future, to make information about them available to the public. This is to be corresponded by a unified information system, a graphic language made especially for the area of the Zelezná studnička.

History

Early History:

The area around Bratislava-Železna studnička has a long history of human habitation dating back to ancient times. Archaeological findings suggest that the region was inhabited by various cultures, including Celts and Romans.

Medieval Period:

During the Middle Ages, the Small Carpathians, where Železna studnička is situated, were known for their dense forests and natural resources.

The forests provided timber, game, and other valuable resources for the nearby settlements.

17th Century:

In the 17th century, the area became known for its iron ore deposits, which led to the establishment of ironworks and small mining operations.

The name “Železna studnička” itself can be translated as “Iron Spring,” which reflects the historical significance of iron production in the area.

19th Century:

The 19th century brought industrialization and the expansion of the railway network in Slovakia. This included the construction of the railway line connecting Bratislava to Vienna.

The Bratislava-Železna studnička train station, which serves the area, was likely established during this period to facilitate transportation of goods, including iron and timber.

Historic trolleybus Pressburg 1909 again at Železná Studnička!

- On 25/8/2023 the city of Bratislava issued a permit for the historical trolleybus Pressburg 1909 to run on Železná Studnička.

-5/6/1909 The Hungarian Royal Ministry issued a permit allowing the construction of an electric local railway across the Emperor Franz Joseph Bridge (the Old Bridge) with a connection in Kopčany to the Zadunajská railway.

- At the same time on 19/7/1909 the first trolleybus line in Pressburg saw the light of day. It was called Electric car line to Vydrica valley (to Železná studnička).

- The length of the line was 5,800 metres, the cost of construction was 310,000 crowns. 7 Daimler - Stoll trolleybuses were delivered, four of which were open (summer) and two closed.

- The stops on the line were Palugyay's Palace, the Road to Kamzik Hill, the Road to the Iron House, the Mountain Park, Roth's Patronage Factory (Patrónka), Kühmayer's Factory (Military Hospital), the Eighth Mill (Klepáč), the Ninth Mill and the Iron Well.

- On 19 July 1909, in the presence of Ferdinand Porsche and the inventor of the trolley-car, Ing.Stoll, the Bratislava electric trolleybus line to the Vydrica valley started running with open vehicles of the Elektro - Daimler - Stoll system manufactured by the Österreichische

20th Century:

In the mid-20th century, Bratislava-Železna studnička began to transform into a recreational and leisure destination as Slovakia experienced urbanization and increased interest in outdoor activities.

The surrounding forested area was designated as a nature reserve and protected landscape area, preserving its natural beauty.



Wider relations

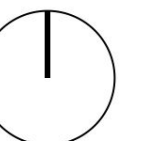
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Winter Semester 2023/2024

Brno 126 km away

Prague 325 km
away

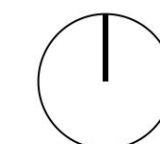
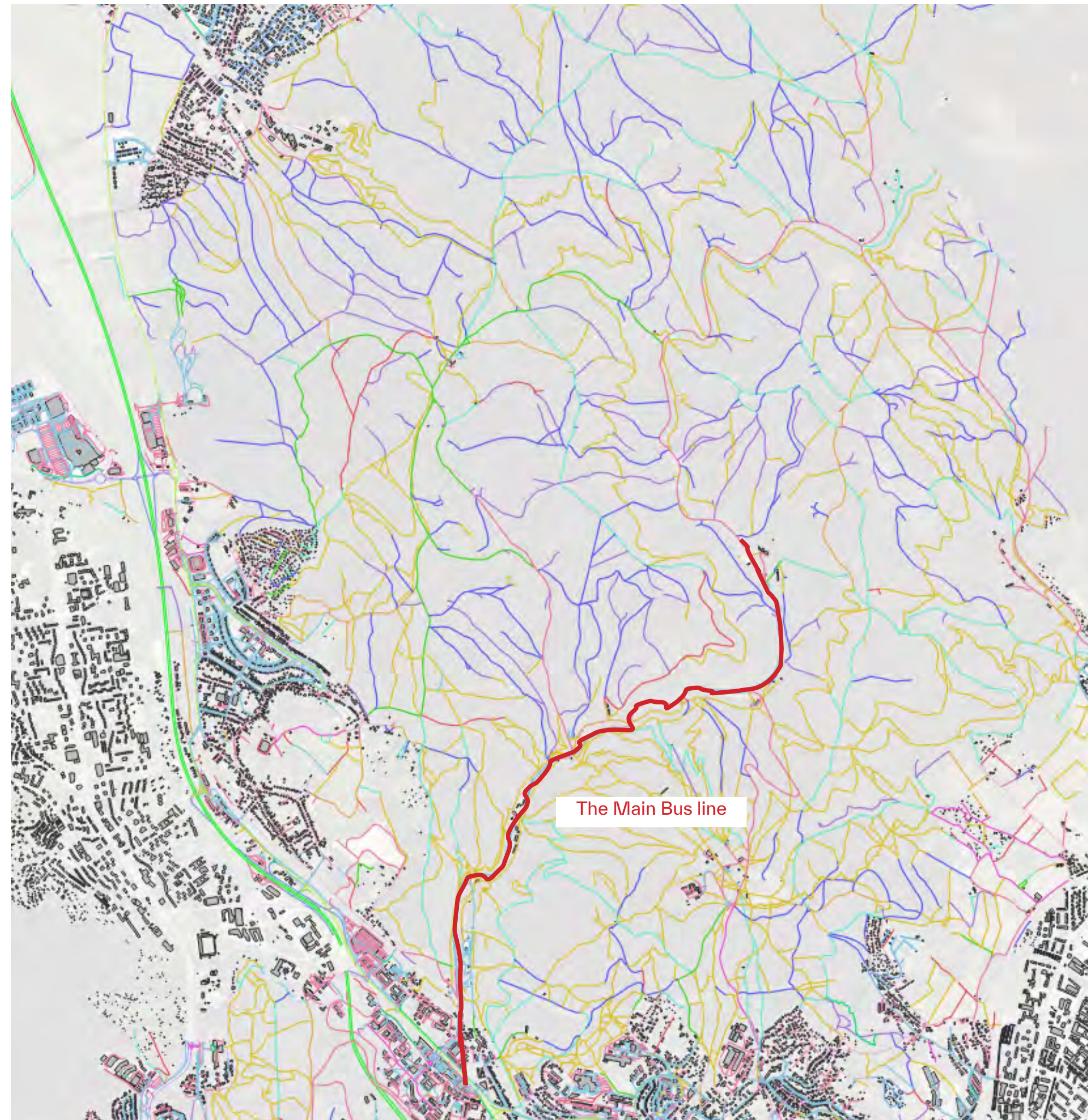
Vienna 69 km
away

Munich 488 km away

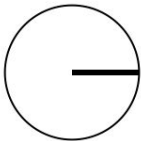
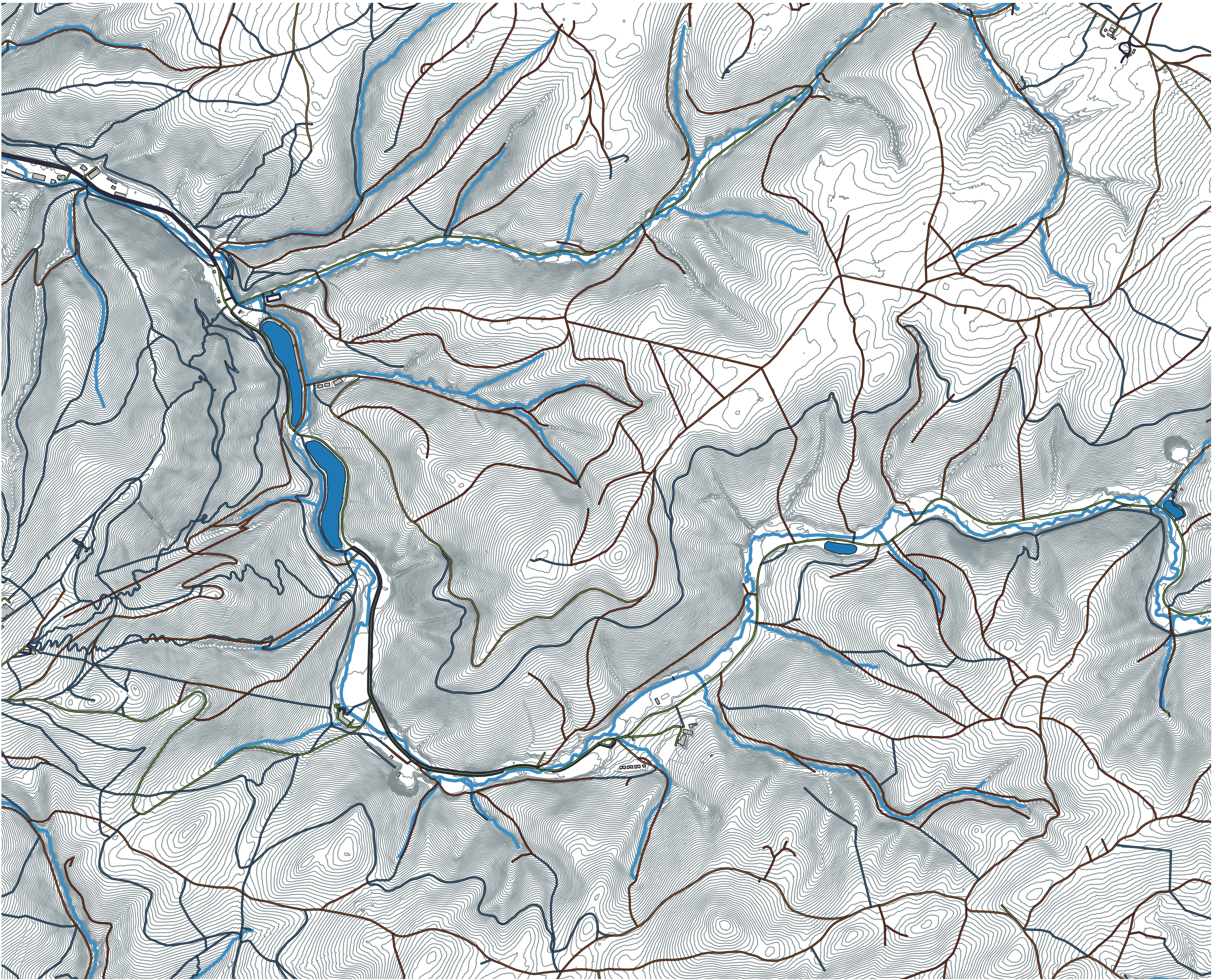


The Road Network

	cydeway	cydeway
	footway	footway
	living_street	living_street
	motorway	motorway
	motorway_link	motorway_link
	path	path
	pedestrian	pedestrian
	primary	primary
	primary_link	primary_link
	residential	residential
	secondary	secondary
	secondary_link	secondary_link
	service	service
	steps	steps
	tertiary	tertiary
	tertiary_link	tertiary_link
	track	track
	track_grade1	track_grade1
	track_grade2	track_grade2
	track_grade3	track_grade3
	track_grade4	track_grade4
	track_grade5	track_grade5
	trunk	trunk
	unclassified	unclassified



Analysis

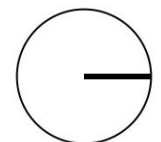
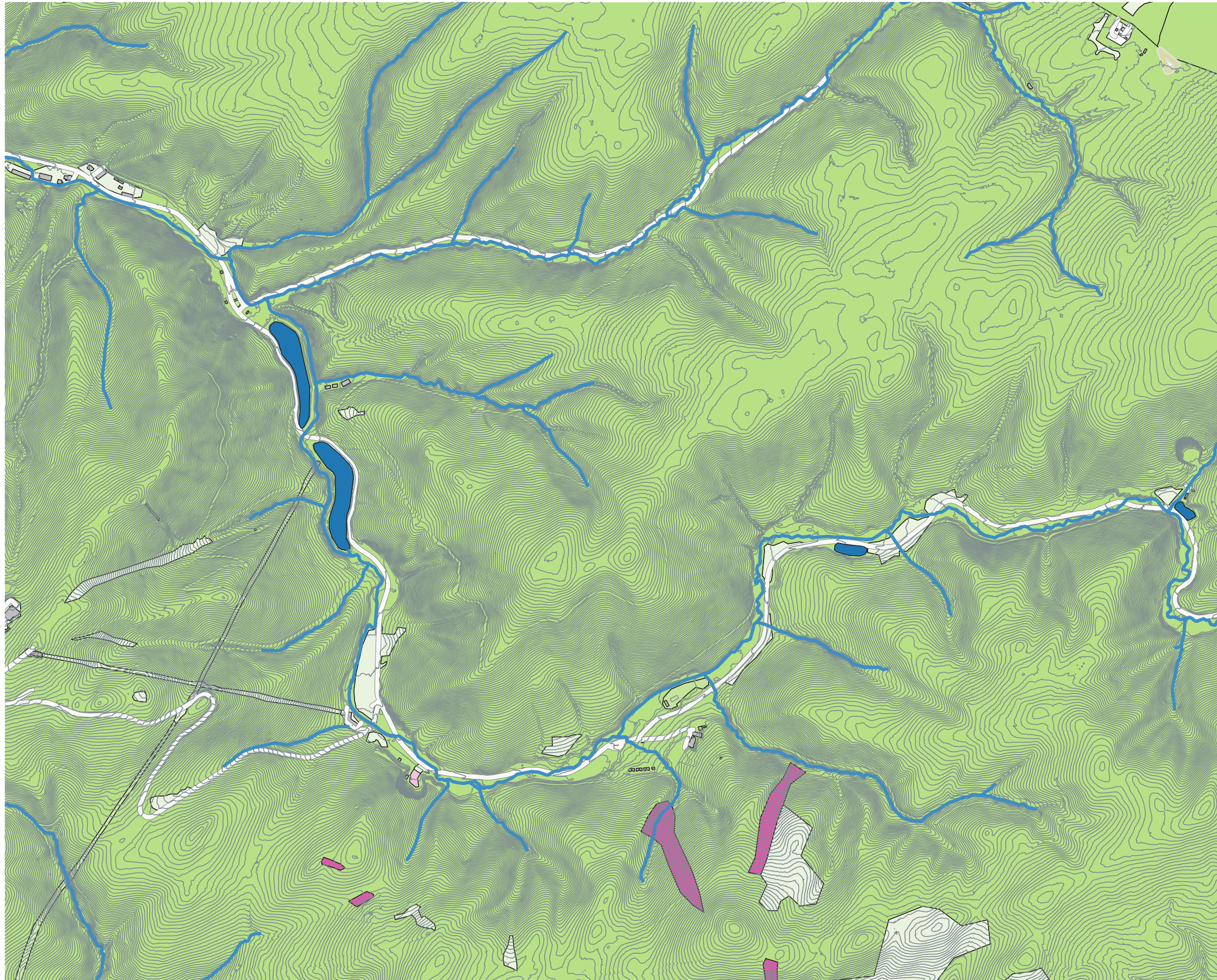


Landuse

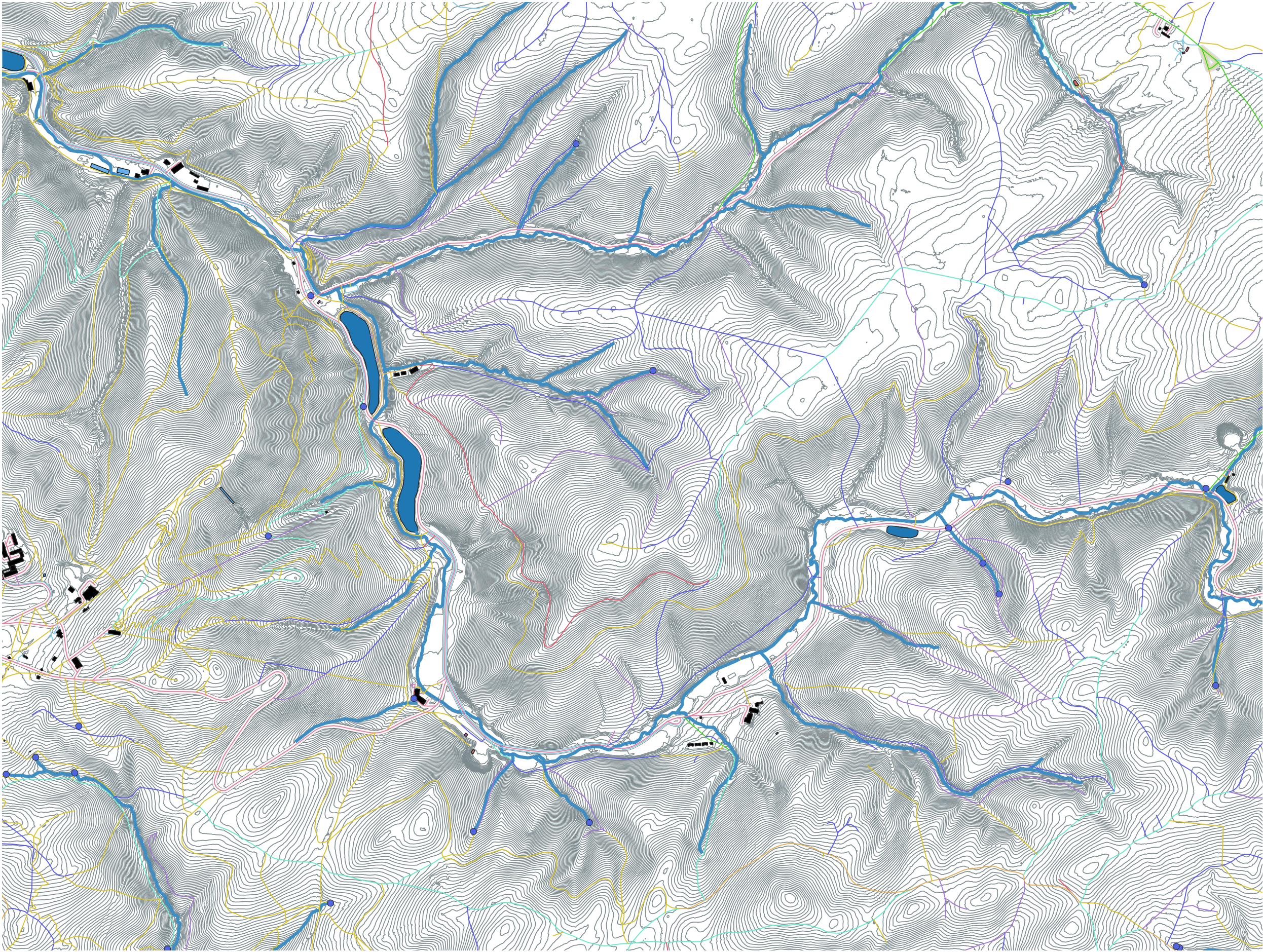
Pink: Recreation grounds

Green: Forestry

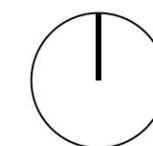
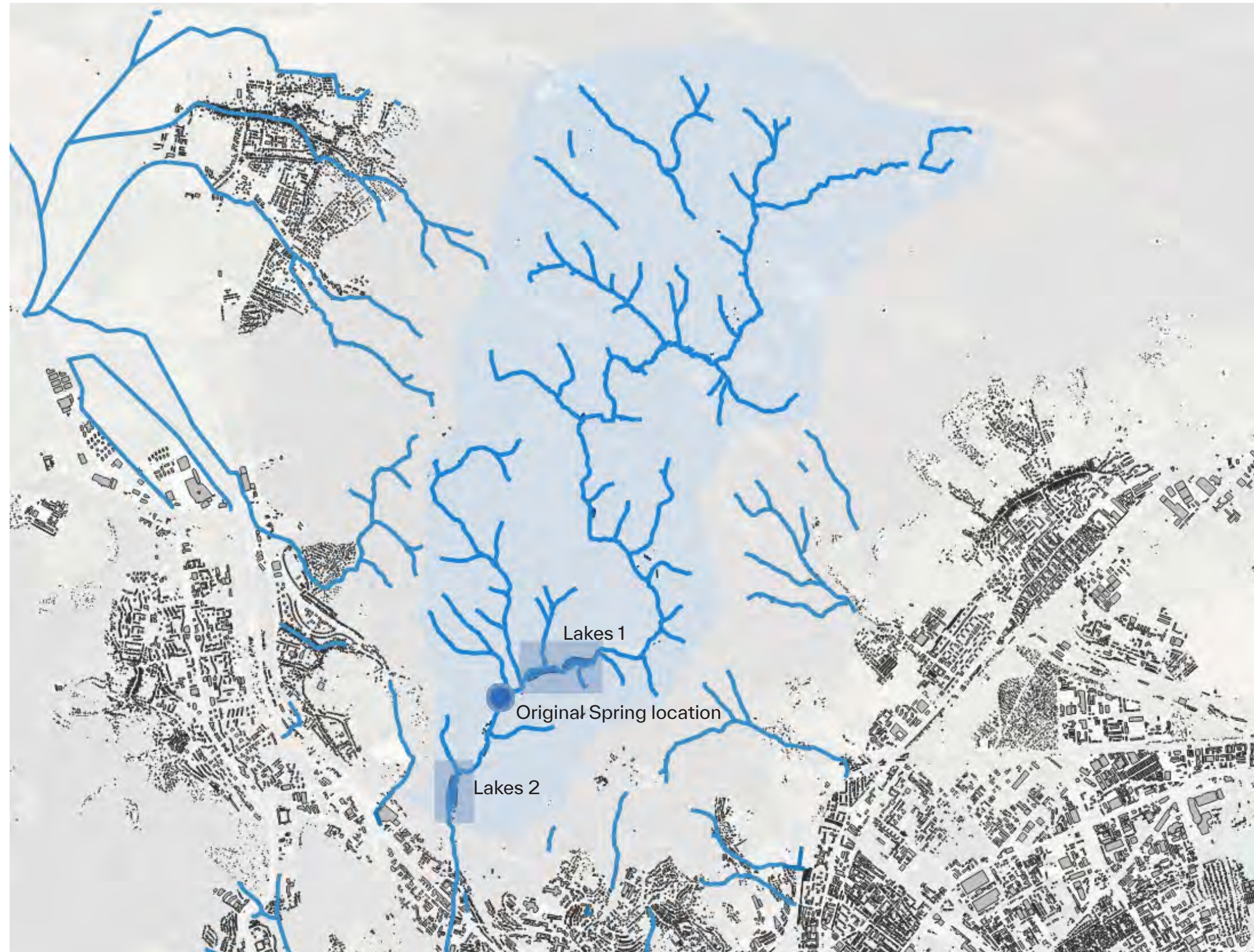
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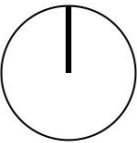
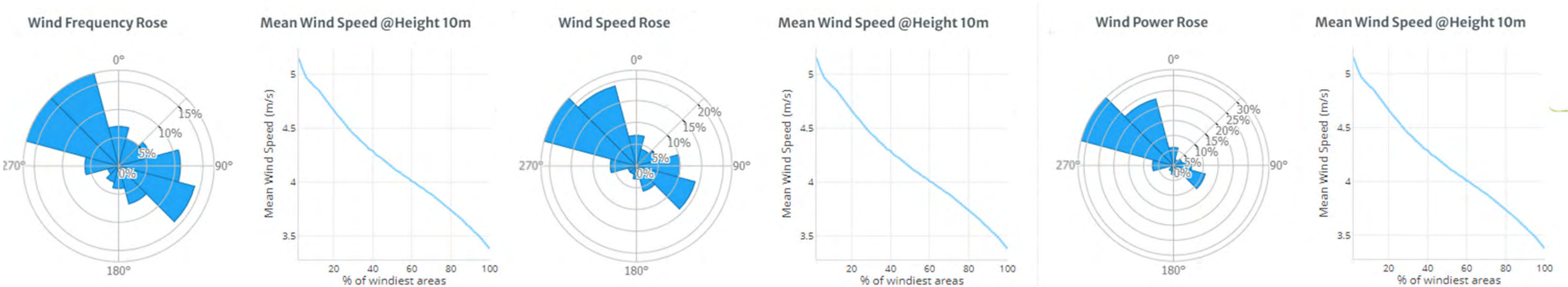
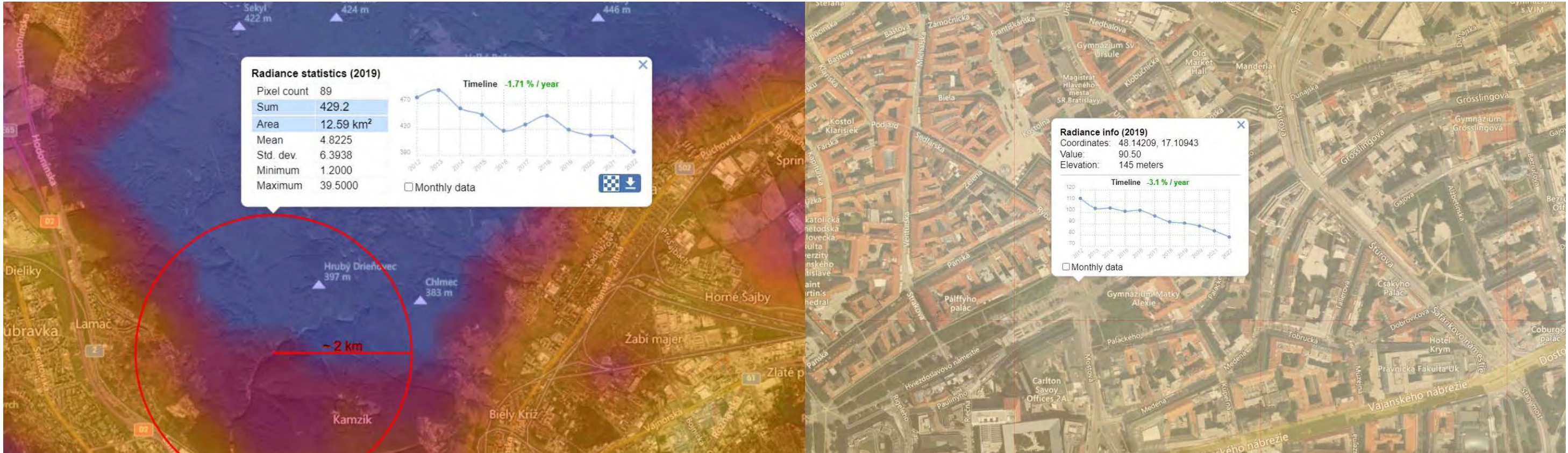
Springs



The Water Bodies: Rediscovering the Once Lost Springs



Light Pollution and Wind Study



The Bottom Line: SWOT

Strengths:

- Harmony of technical buildings (mills, dams, ponds, forestry and fishery facilities)
- Beautiful countryside in close proximity to the city core
- Cleanliness
- Silence, peace
- Good transport accessibility
- Preserved elements of living nature
- Little pollution
- Relatively small development

Weaknesses:

- Nuclear functions have been neglected for a long time
- The connection on the railway line has been neglected for a long time
- Area development boundaries are difficult to define
- Some sites are on difficult terrain
- The whole area is fragmented
- Windy

Opportunities:

- High urban tourist potential
- Rehabilitation potential
- Recreational potential
- Sports potential
- Natural and educational potential
- High cultural-historical qualities

Threats:

- Low visitor interest after conversion
- High amount for conversion
- Lack of interest from the city's civic structures
- Vandalism
- Poor management of the park's parking and administrative capacity

The Users



Working proffesionals



Elderly people



Gloomy teenagers

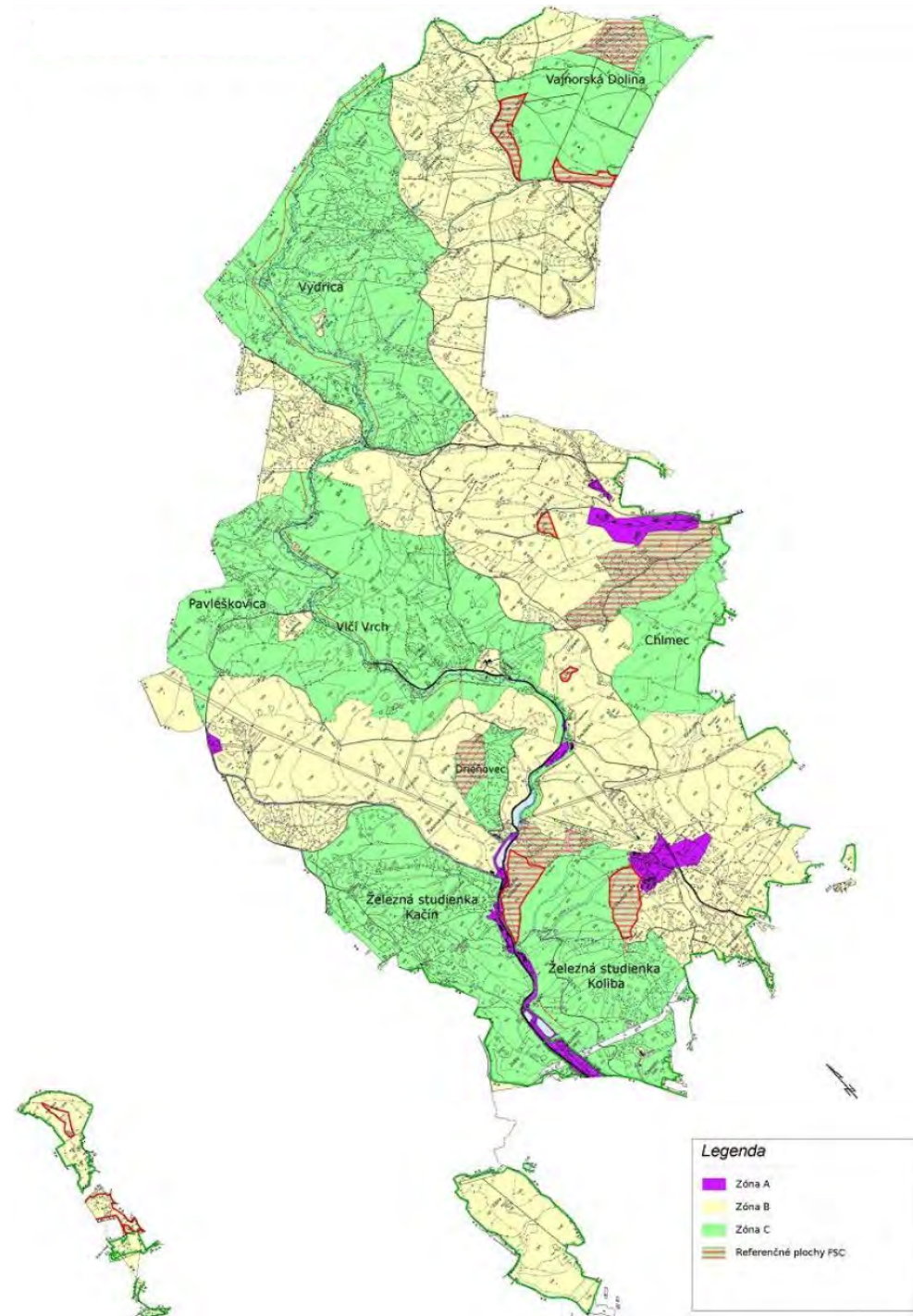


For everyone who likes nature

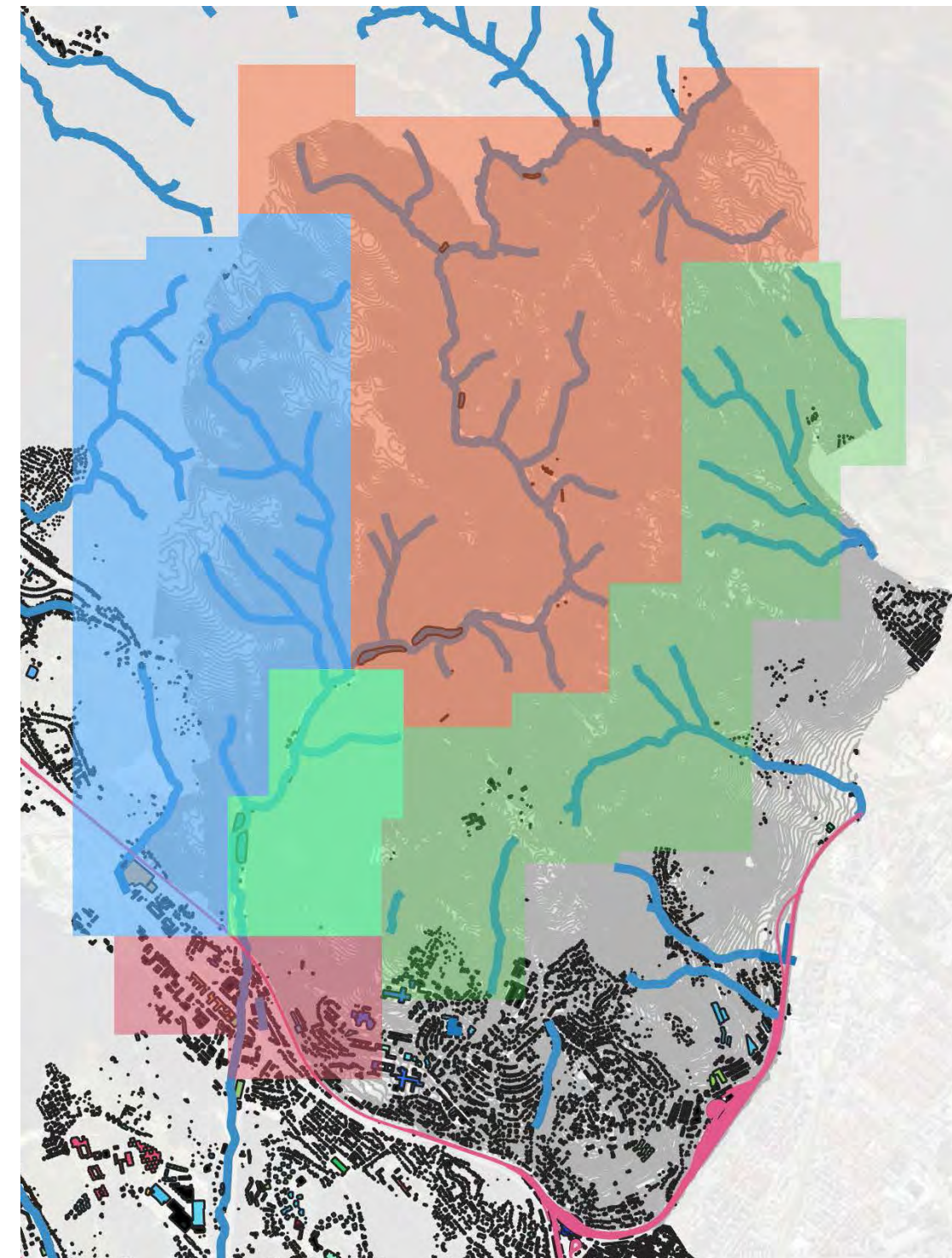
Studnička is "For Every Body, Every Age."

Proposal: Rehabilitation and Wellness Complex

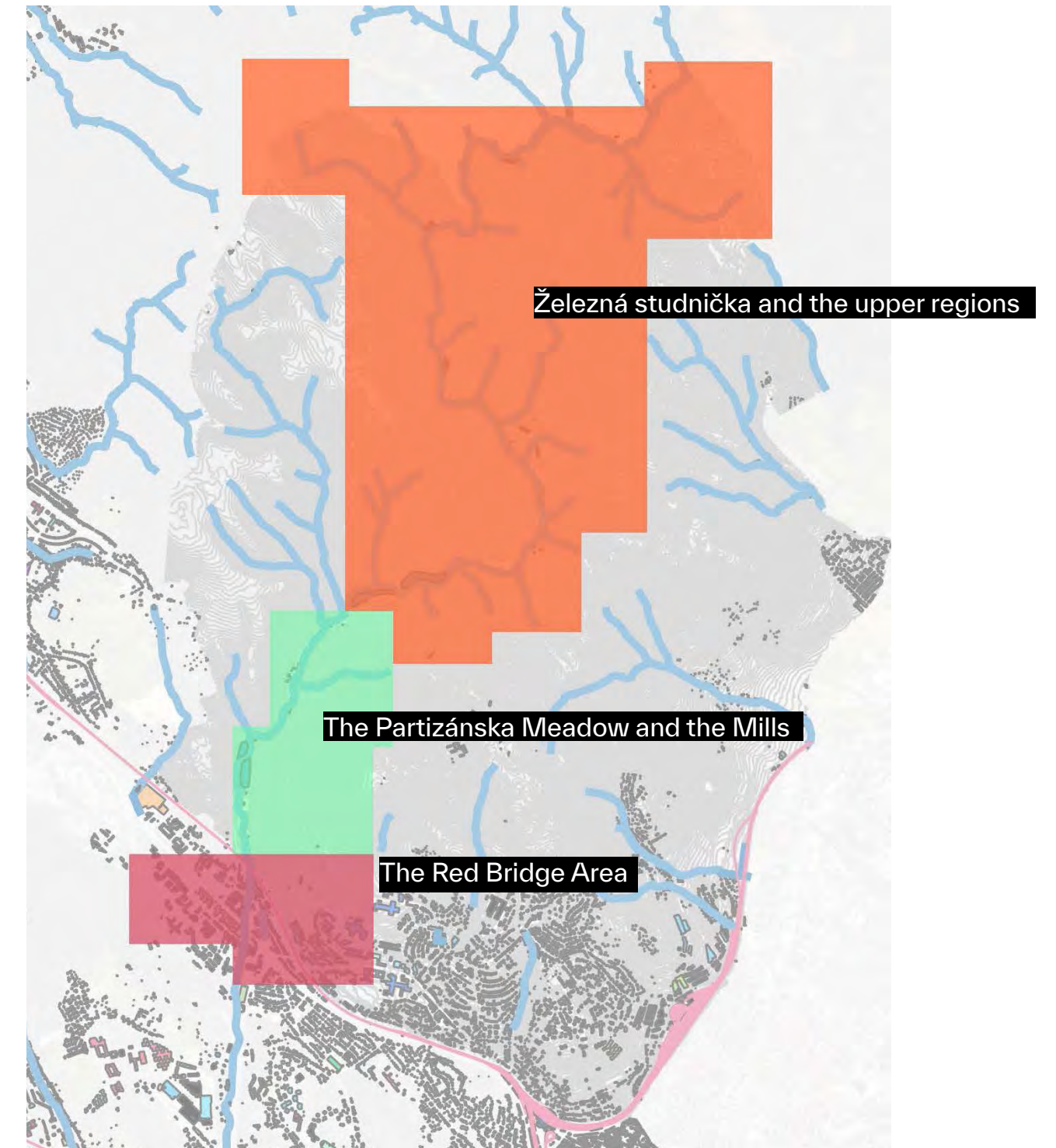
Zoning of the Areas: creating perfect dreamy complex



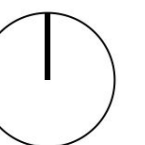
Bratislava Urban Forests Map

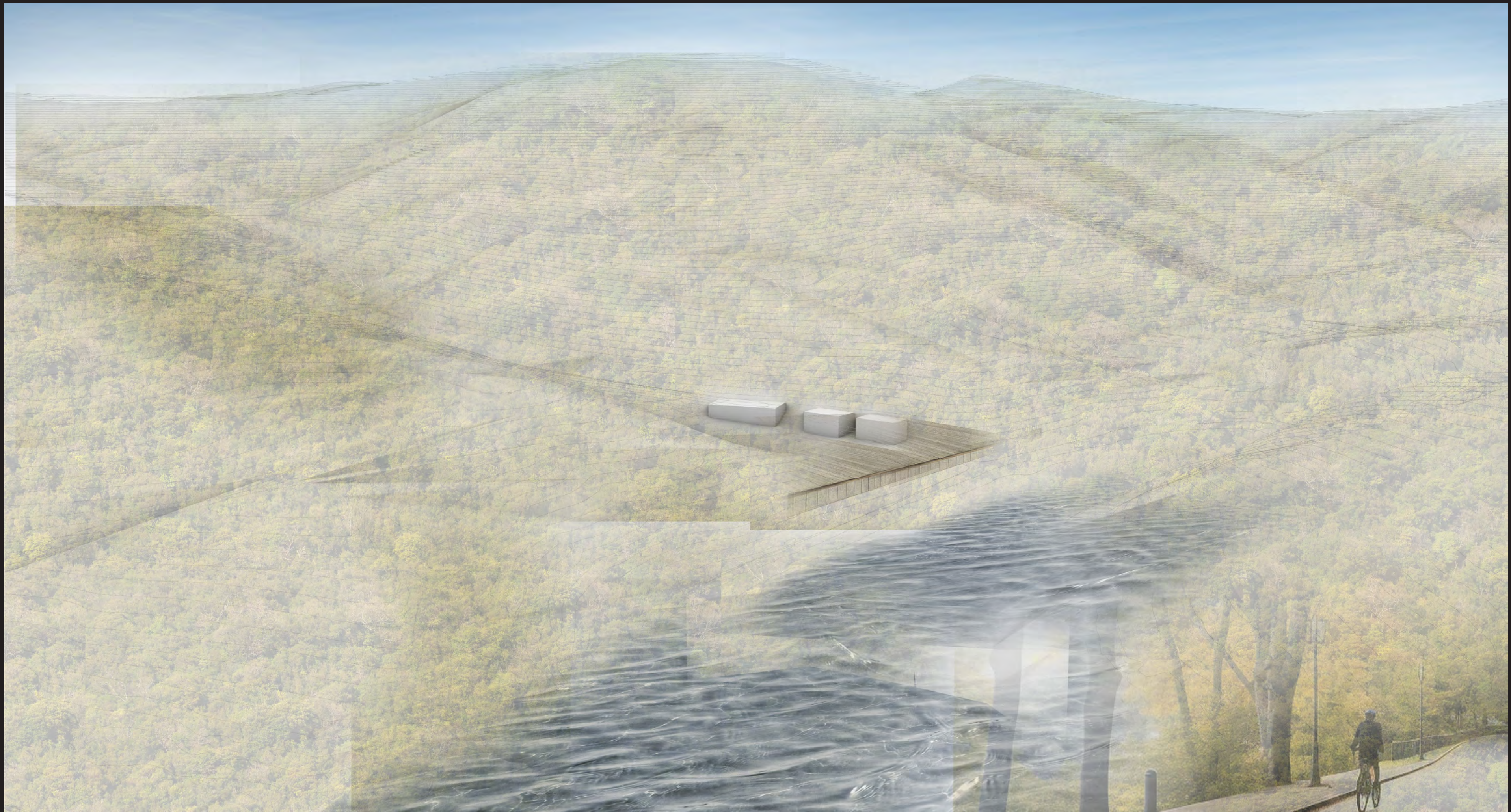


My Zones of Železná studnička



Central Zones of Železná studnička





Blue: active pools

Pink: Sanatorium Complex

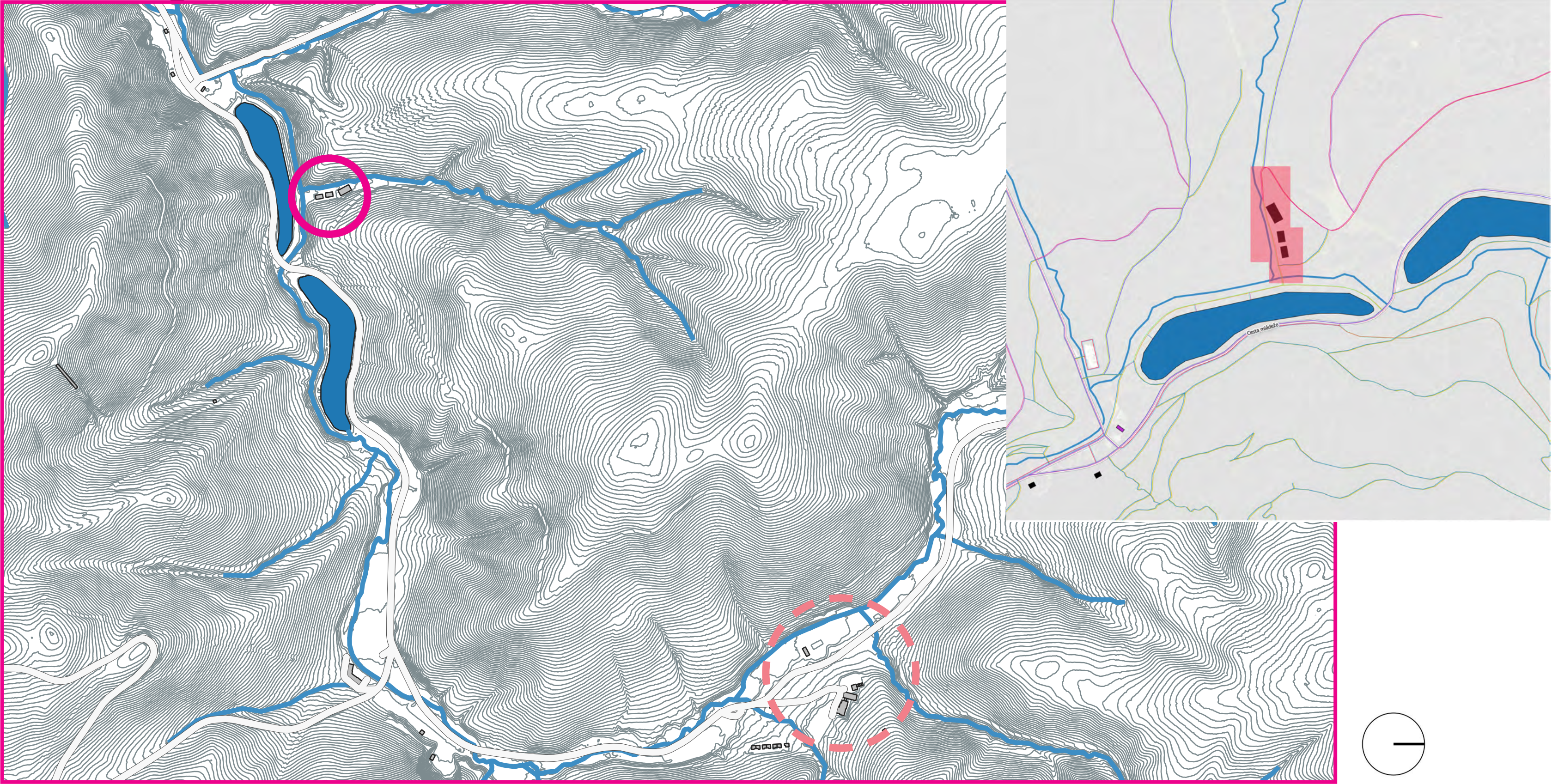
Purple: New Bathhouse



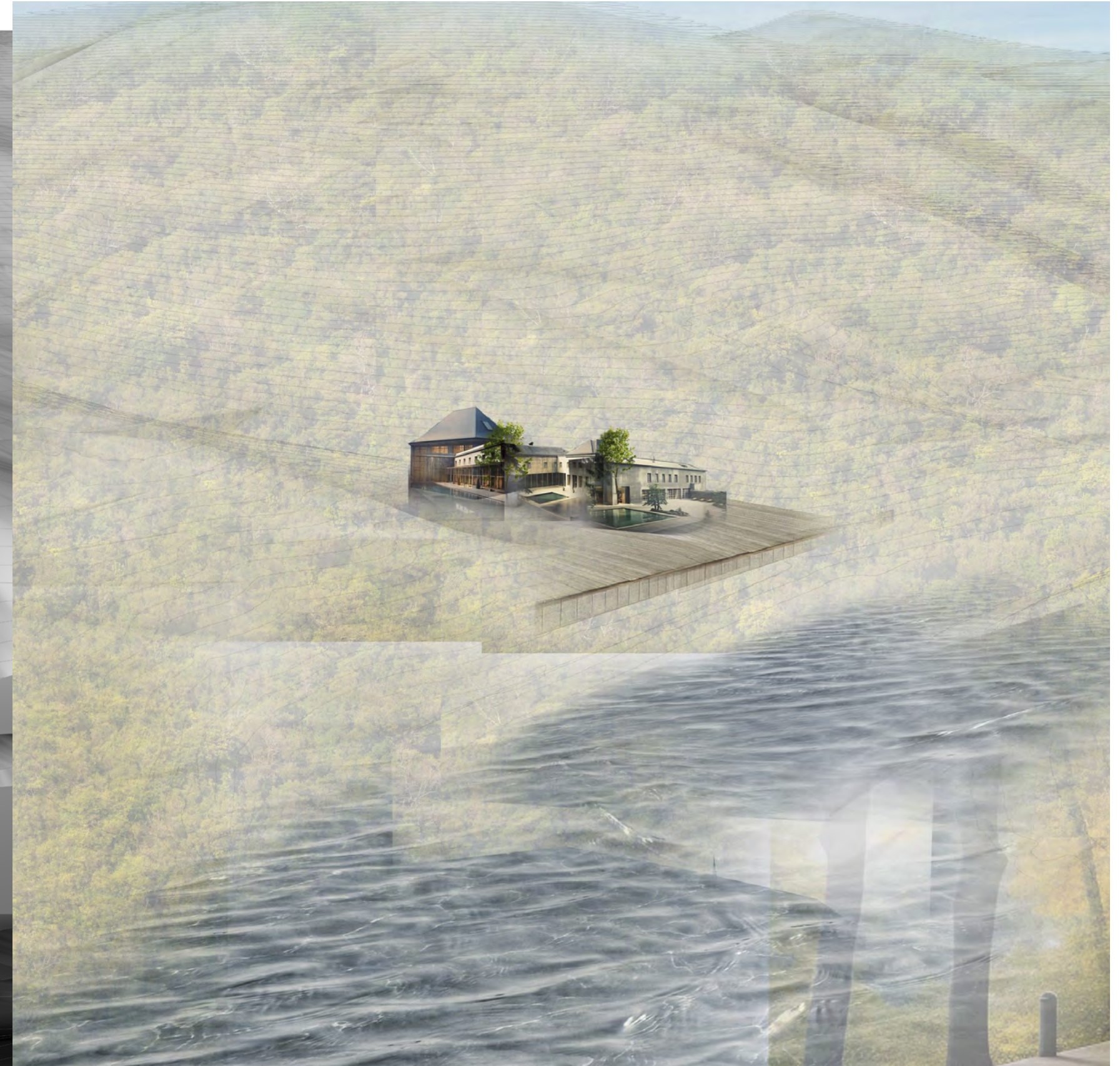
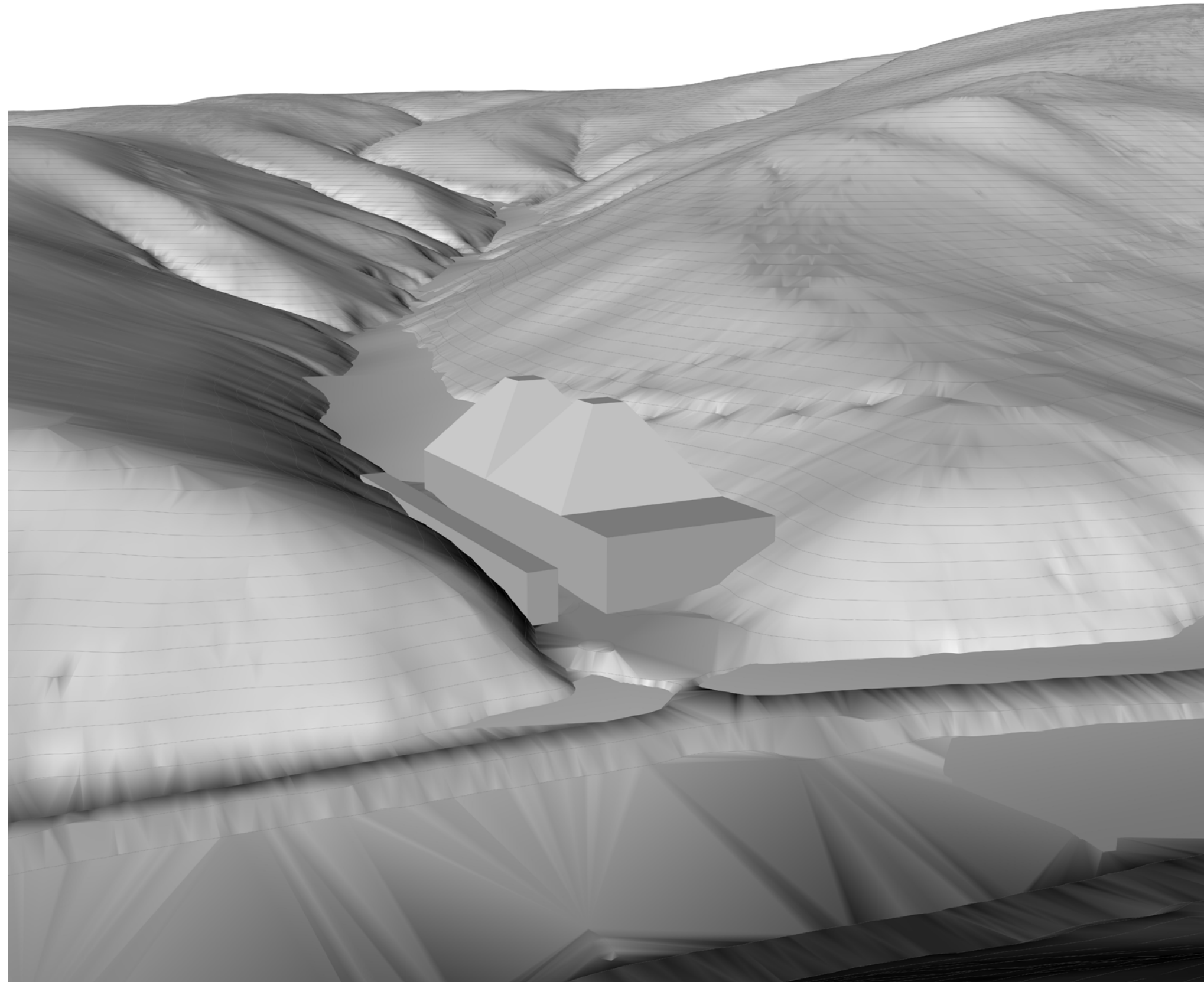
THE BATHHOUSE - Visual Reference



Determining the Location for the Proposed Bathhouse



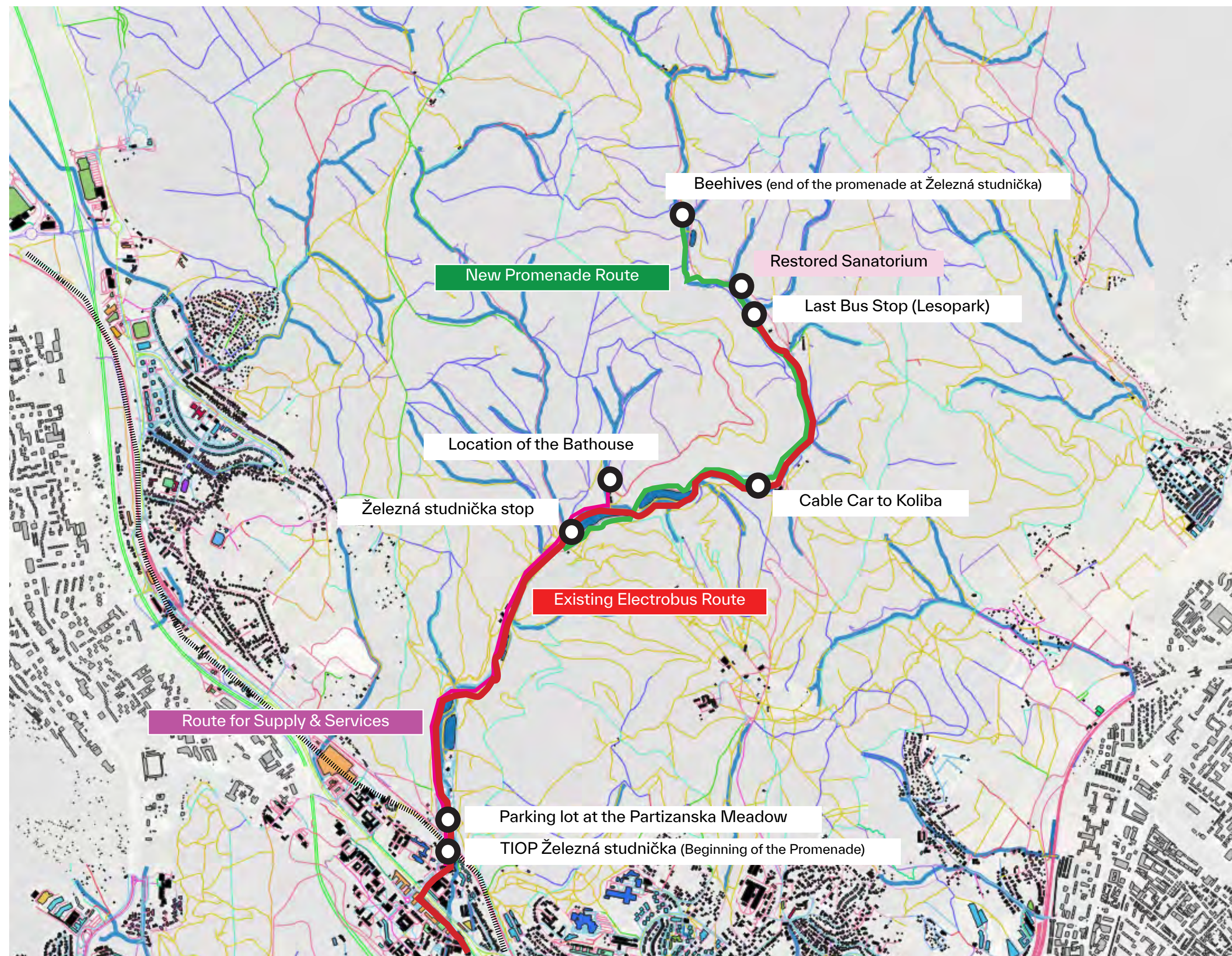
Bathhouse, Concept



Masterplan

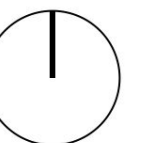
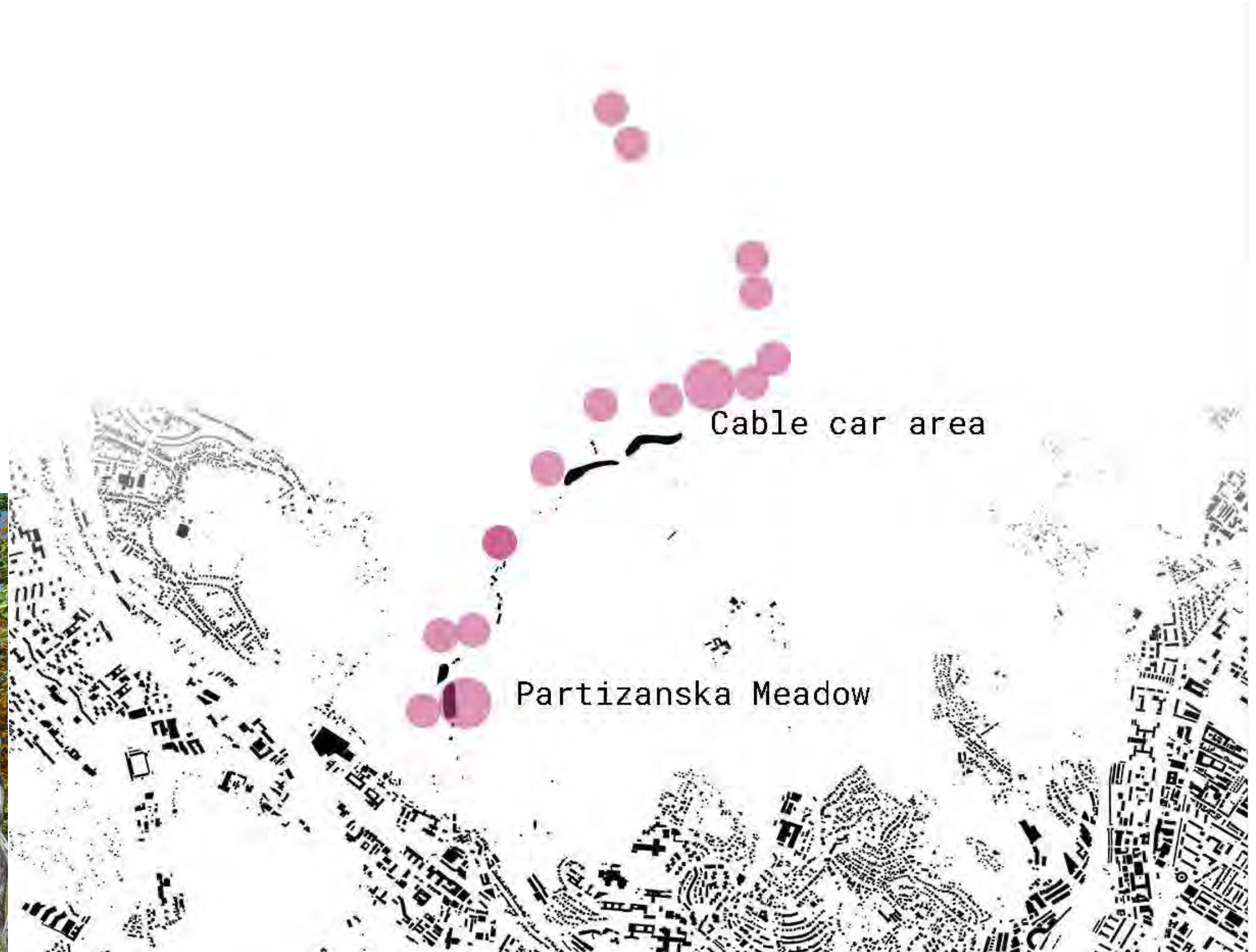
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Minor Interventions

Open fire Pit

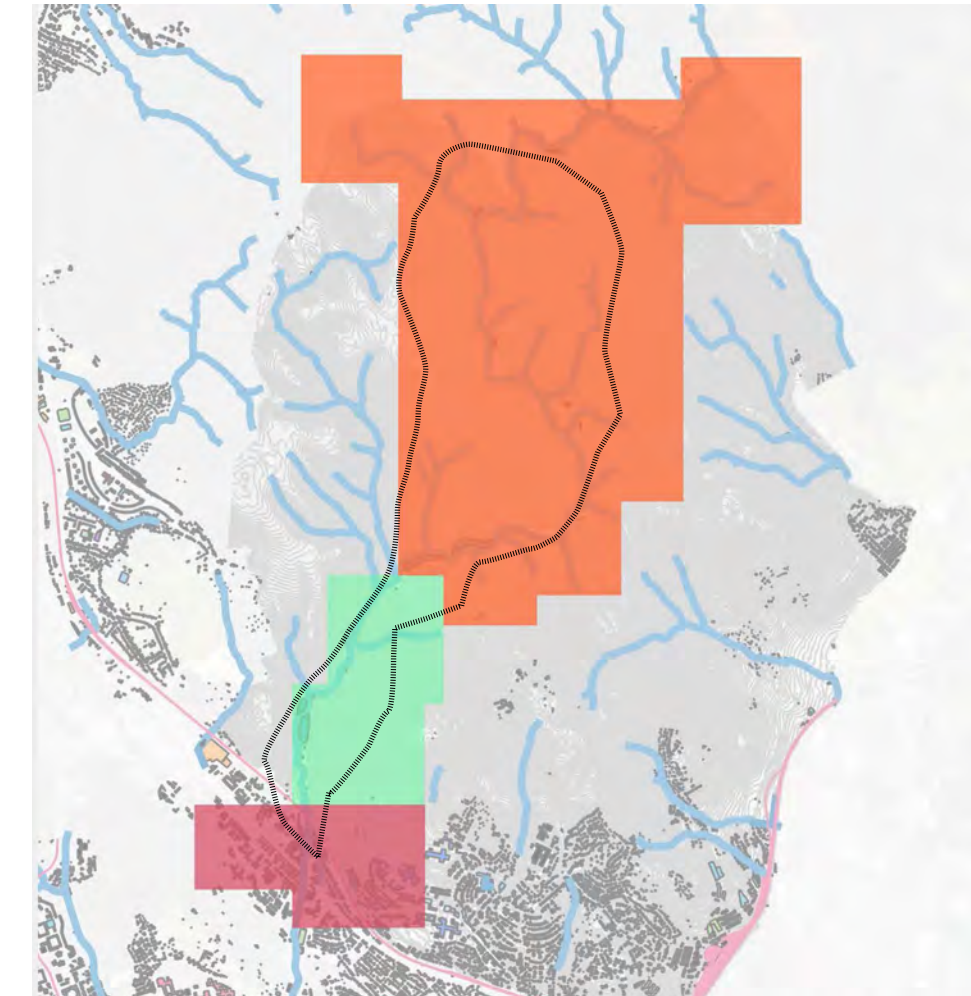


The Visual Graphic Language

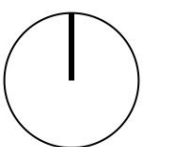


Bilingual information boards (Slovak, English)
Replacement of the existing information infrastructure.

The Visual Language



Walkpath with information boards.



Viewpoints



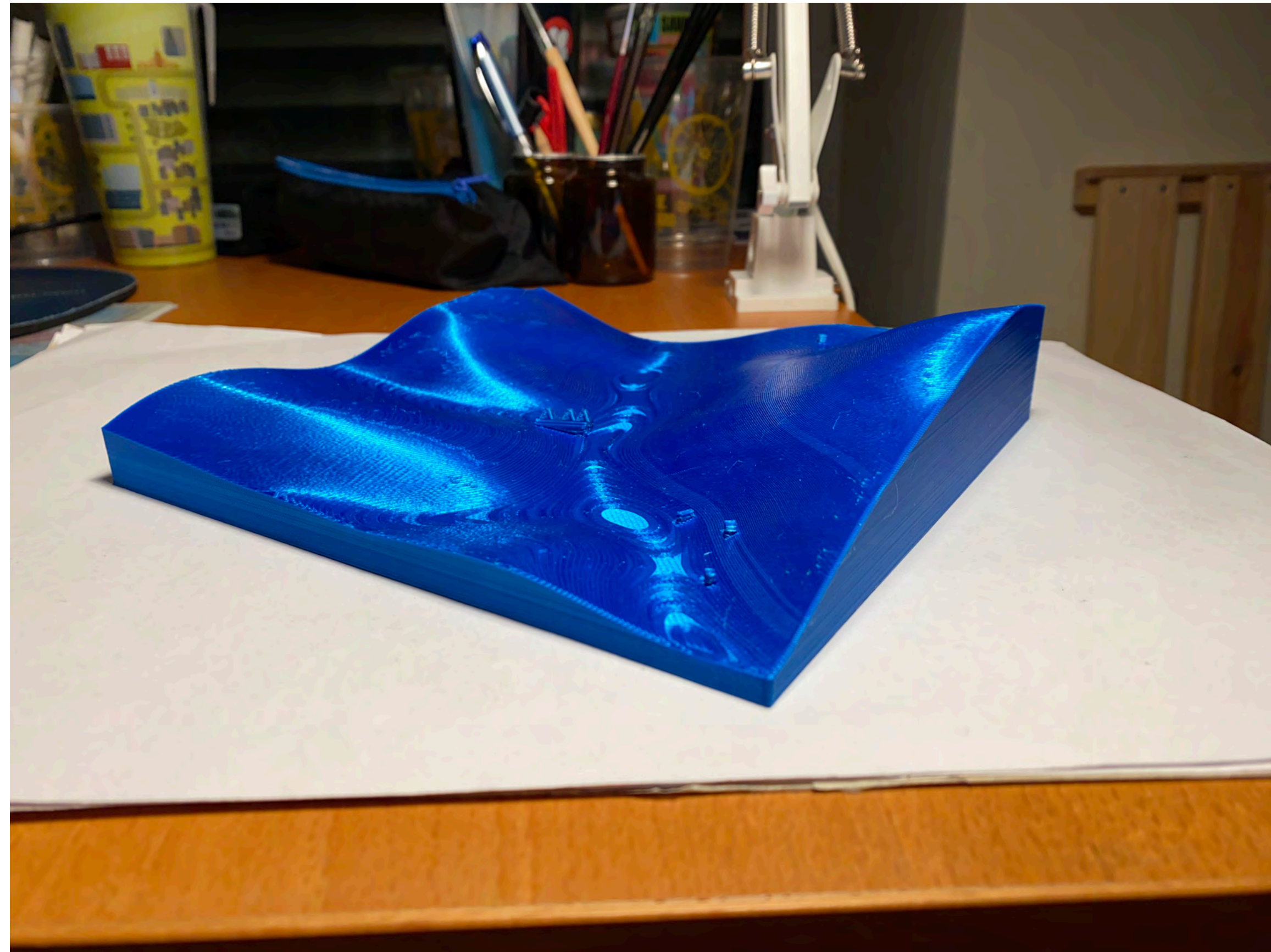
Resting Stations



Physical Model

Area:
Around the Proposed Bathhouse

Scale:
1: 5000



Balances

Work during the semester

Timeline of Visits

Visit 1: 21/9/2023

Visit 2: 11/10/2023

Visit 3: 19/10/2023

Visit 4: 14/12/2023

1107 photos taken at Železná studnička

23,8 GB of harddisk space taken

