

HUSAPARK RE-VIVO

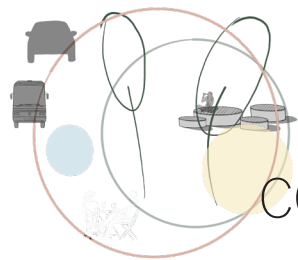
ANNA KOUPALOVÁ

ATELIER REHWALD // LS 2024

ČVUT
fakulta
architektury







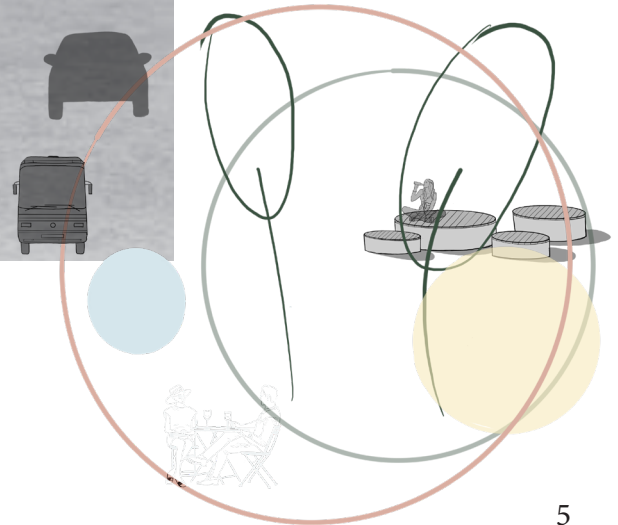
CONTENT OF THE PORTFOLIO

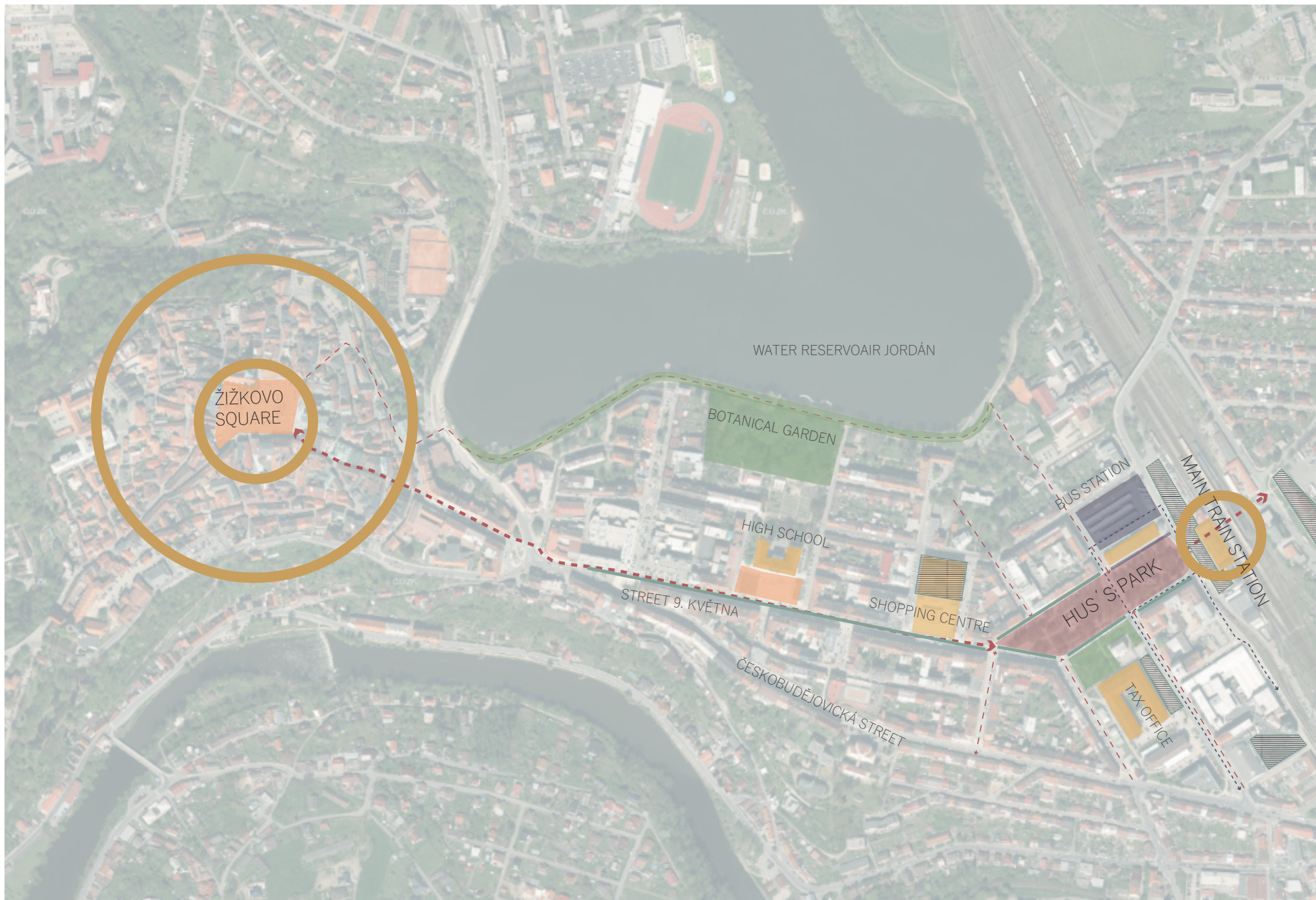
1. Analytic Part
 - History
 - Greenery
 - Technical Infrastructure
 - Mobility
 - Social Side
 - Map Of Problems
2. Concept
3. Design

ANALYTIC PART

CONTENT

Wider Context
History
Greenery
Technical Infrastructure
Mobility
Social Side
Map Of Problems





WIDER CONTEXT

Hus Park is located in the town of Tábor, situated in the foreground of the main train station. The park lies at the end of the connection between the old and new parts of the city. It represents the only larger public green space in this part of the city. A portion of the park extends in front of the main train station, with the bus station building connected to the park on the right side, making this area of the park very bustling. In the park's second section, smaller businesses such as cafés and restaurants play an important role in bringing life to the area. Another significant building near the park is the tax office. 9 May Street, which intersects the park, serves as an important link to the old center, being less than a 15-minute walk from Hus Park. This street has a boulevard-like character and is home to numerous businesses, shops, and a larger shopping center with underground garages. Additionally, the Agricultural School building with its botanical garden and the small TGM square are important landmarks along this street. The center can also be accessed from the park by walking around the Jordan Reservoir. Another essential element of the infrastructure is Českobudějovická Street, which serves as the main traffic route.



map source.: <https://mapy.mutabor.cz>

HISTORY

The creation of the park is closely related to the introduction of the railway to the town of Tábor, which took place in the first half of the 19th century. With the arrival of the railway, a new town part began to develop. The new city part has a block building character, and only one larger open area was created in front of the station, which was originally used as a road and only later turned into a park. Between 1888 and 1892, historical cadastral maps show that this area was transformed into the design of Hus Park and Square. The original idea for this area was to create an arboretum. The original green areas of the arboretum occupied a smaller area than today; the area around the Hus monument was paved and formed, creating a square with planted bosquets. The paths in the original design had colonnade-like characteristics so that people could walk around the different types of trees and admire them. In the 1970s, the park was still one large area; the road running through the center only appeared with the creation of the bus station in 1965. These years saw the introduction and subsequent densification of traffic around the park. The park was also landscaped for the last time in the second half of the 20th century. The paths, originally made of clay, were replaced with cobblestones, and the areas forming the plaza with bosquets were grassed over and added into the park area. The park became more enclosed and created separate spaces (park and street area). Towards the end of the last century, it became evident that the park was poorly maintained, and the newly added greenery was laid out without a plan. Due to these actions of the last decades, the park became unclear, unsafe, and enclosed.

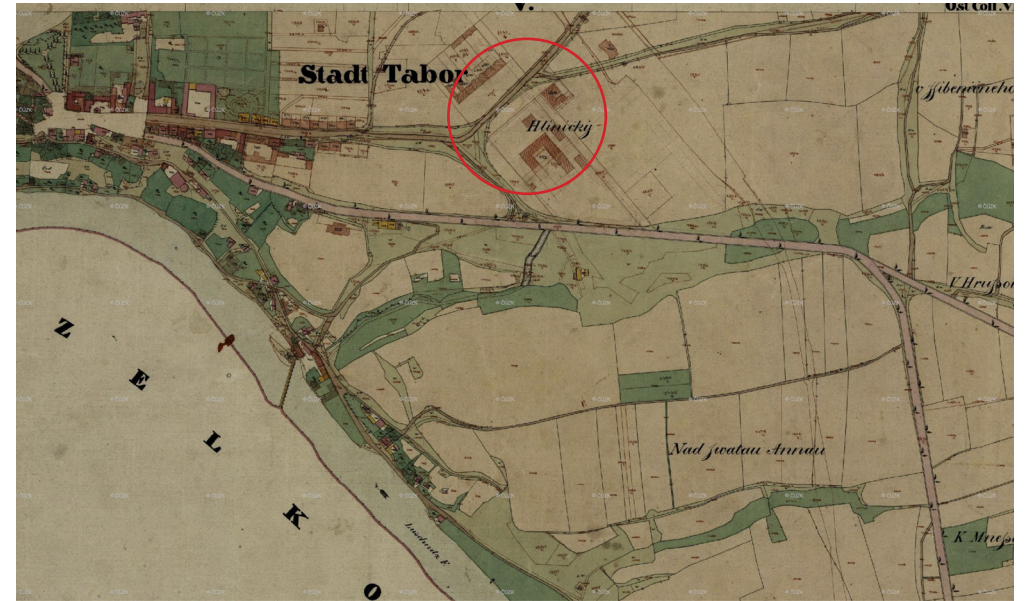


photography source.: <https://sechtl-vosecek.>



1746-67

III. soldier mapping



1830

1842



maps source.: <https://mapy.mutabor.cz>



1888-92



1946

1888-92





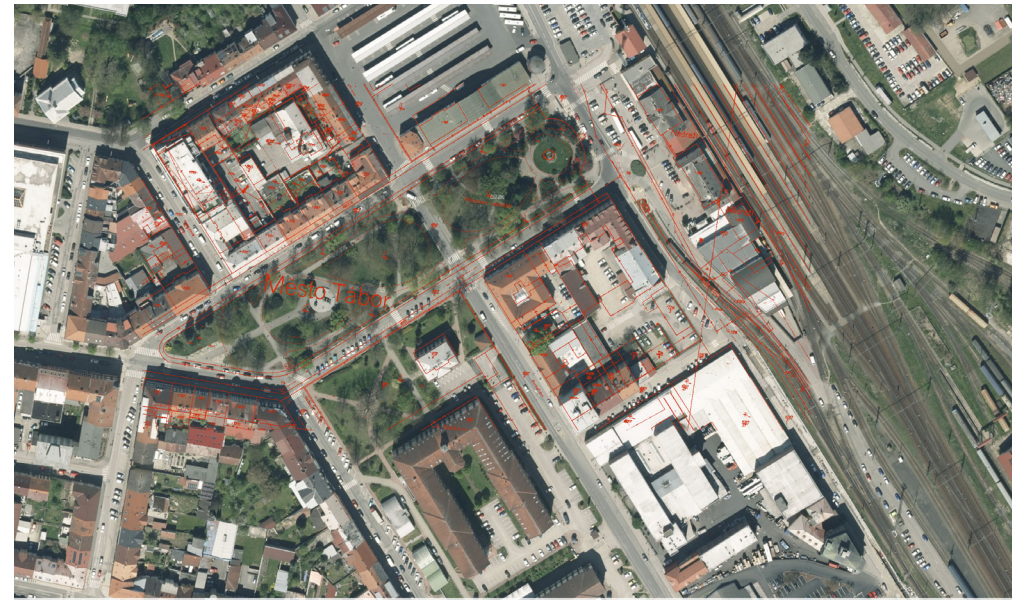
1965

1965

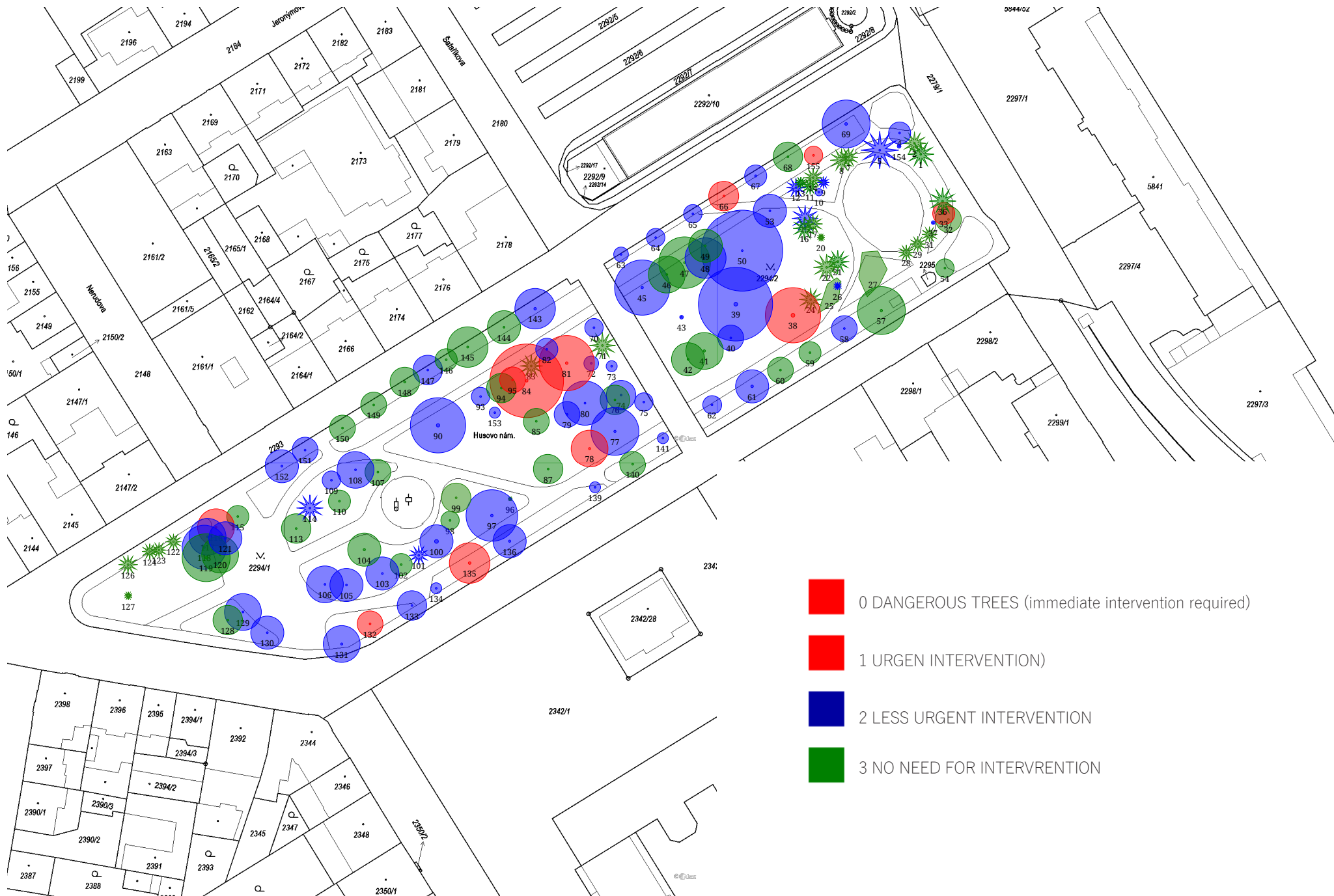


2002

current



pam sorce.: <https://mapy.mutabor.cz>



GREENERY

The park was established as an arboretum, resulting in a great diversity of tree species. Other greenery was added later, including both grouped and solitary shrubs. Additionally, the park features perennial beds, which were only added in recent years without a precise plan.

Some trees in the area lack long-term perspective, while others can serve as the skeletal framework for future park designs. However, the green spaces in the area are not adequately maintained, leading to reduced visibility and social control. Certain mature trees currently obscure important views within the park. Furthermore, the species composition and distribution of the greenery do not adhere to any main concept.

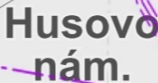
The shrubs bordering the park create a barrier to the surrounding space. Both grouped and individual shrubs within the park contribute to an ambiguous and potentially hazardous environment, often serving as makeshift toilets or litter bins. Overall, the existing shrubs within the park are viewed negatively.

The perennial beds within the park lack a precise layout concept, and the stone infill frequently protrudes from the beds. Additionally, the lawn is poorly maintained and extensively trampled in many areas.

SPECIES COMPOSITION OF TREES

Rosa hugonis
Ginkgo biloba
Abies concolor
Juniperus sabina
Juniperus horizontalis
Tilia euchlora
Tilia cordata
Tilia platyphyllos
Spirea vanhouttei
Acer ginnala
Acer saccharinum

Platanus acerifolia
Liriodendron tulipifera
Rhododendron
Taxus baccata
Gleditsia triacanthos
Carpinus betulus
Philadelphus coronarius
Lonicera tatarica
Ribes alpinum
Spirea vanhouttei
Fagus sylvatica
Quercus rubra
Acer saccharinum pyramidalis
Pinus nigra
Amelanchier arborea
Robinia pseudoacacia
Stephanandra incisa
Lonicera ruprechtiana
Quercus robur
Betula pendula
Prunus hispanica
Pinus silvestris
Ginkgo biloba
Pseudotsuga menziesii
Juniperus horizontalis
Corylus avellana
Pinus rotundata
Abies grandis
Acer pseudoplatanus
Syringa
Padus avium
Tilia vulgaris
Ribes alpinum
Stephanandra incisa
Mahonia aquifolium
Malus sp.
Pinus omorica



TECHNICAL INFRASTRUCTURE

Utilities run under existing paved areas or along the edge of green areas. The protection zones of technical infrastructure networks will be respected when planting new trees and surface works.

PRŮBĚHY SÍTÍ

	Telekomunikační vedení (plocha) - stav
	Telekomunikační vedení (plocha) - návrh / záměr
	Telekomunikační vedení (plocha) - ke zrušení
	Telekomunikační vedení (plocha) - zrušeno
	Vedení tepla - stav
	Vedení tepla - návrh / záměr
	Vedení tepla - ke zrušení
	Vedení tepla - zrušeno
	Technologický objekt na teplovodu - stav
	Technologický objekt na teplovodu - návrh / záměr
	Technologický objekt na teplovodu - ke zrušení
	Technologický objekt na teplovodu - zrušeno
	Plynovod VTL s tlakem nad 40 barů - stav
	Plynovod VTL s tlakem nad 40 barů - návrh / záměr
	Plynovod VTL s tlakem nad 40 barů - ke zrušení
	Plynovod VTL s tlakem nad 40 barů - zrušeno
	Plynovod VTL do tlaku 40 barů včetně - stav
	Technologický objekt na plynovodu - stav
	Technologický objekt na plynovodu - návrh / záměr
	Technologický objekt na plynovodu - ke zrušení
	Technologický objekt na plynovodu - zrušeno
	Vedení elektrické sítě ZVN - stav
	Vedení elektrické sítě ZVN - návrh / záměr
	Vedení elektrické sítě ZVN - ke zrušení
	Vedení elektrické sítě ZVN - zrušeno
	Vedení elektrické sítě VVN - stav
	Vedení elektrické sítě VVN - návrh / záměr
	Vedení elektrické sítě VVN - ke zrušení
	Vedení elektrické sítě VVN - zrušeno
	Vedení elektrické sítě VN - stav
	Vedení elektrické sítě VN - návrh / záměr
	Vedení elektrické sítě VN - ke zrušení
	Vedení elektrické sítě VN - zrušeno
	Vedení elektrické sítě NN - stav
	Vedení elektrické sítě NN - návrh / záměr
	Vedení elektrické sítě NN - ke zrušení
	Vedení elektrické sítě NN - zrušeno
	Vedení elektrické sítě - svod (nadzemní vedení) - stav
	Kanalizační stoka dešťová - stav
	Kanalizační stoka dešťová - návrh / záměr
	Kanalizační stoka dešťová - ke zrušení
	Kanalizační stoka dešťová - zrušeno
	Kanalizační stoka jednotná - stav
	Kanalizační stoka jednotná - návrh / záměr
	Kanalizační stoka jednotná - ke zrušení

	Kanalizační stoka splašková - ke zrušení
	Kanalizační stoka splašková - zrušeno
	Kanalizační stoka - odvod důlních vod - stav
	Kanalizační stoka - odvod důlních vod - návrh / záměr
	Kanalizační stoka - odvod důlních vod - ke zrušení
	Kanalizační stoka - odvod důlních vod - zrušeno
	Kanalizace - odvod průmyslové odpadní vody - stav
	Kanalizace - odvod průmyslové odpadní vody - návrh / záměr
	Kanalizace - odvod průmyslové odpadní vody - ke zrušení
	Kanalizace - odvod průmyslové odpadní vody - zrušeno
	Kanalizační stoka bez rozlišení (ostatní) - stav
	Kanalizační stoka bez rozlišení (ostatní) - návrh / záměr
	Kanalizační stoka bez rozlišení (ostatní) - ke zrušení
	Kanalizační stoka bez rozlišení (ostatní) - zrušeno
	Vodovodní síť - stav
	Vodovodní síť - ke zrušení
	Vodovodní síť - zrušeno
	Katodová ochrana vodovodu - stav
	Katodová ochrana vodovodu - návrh / záměr
	Katodová ochrana vodovodu - ke zrušení
	Katodová ochrana vodovodu - zrušeno

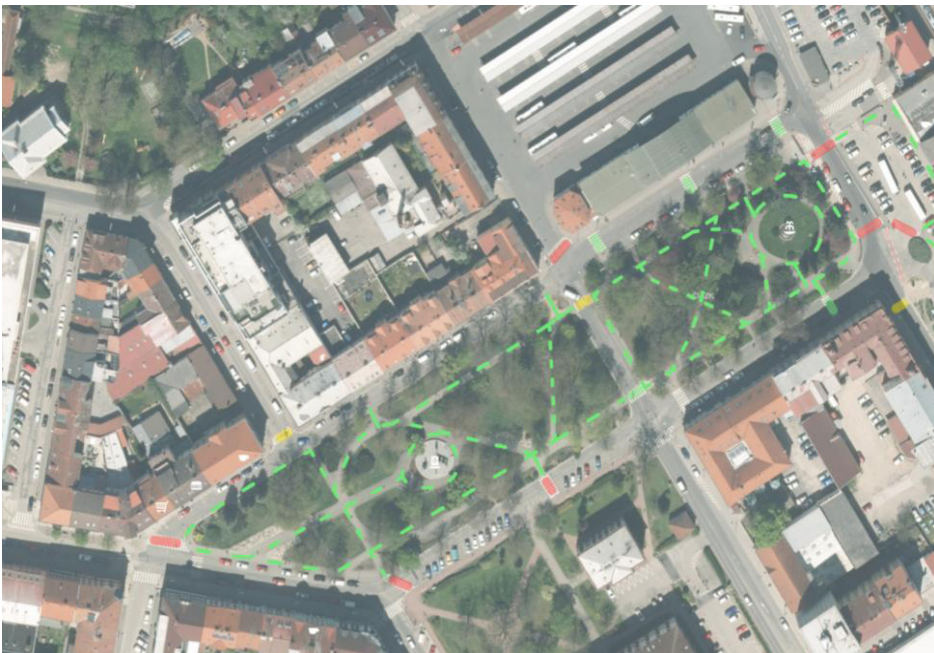
OCHRANNÁ A BEZPEČNOSTNÍ PÁSMA

	OP vodohospodářského díla - stav
	OP vodohospodářského díla - návrh / záměr
	OP vodohospodářského díla - ke zrušení
	OP vodohospodářského díla - zrušeno
	OP ložisek peloidů - stav
	OP ložisek peloidů - návrh / záměr
	OP přír. léčivého zdroje a zdroje min. vod II. st. - stav
	OP přír. léčivého zdroje a zdroje min. vod II. st. - návrh / záměr
	OP přír. léčivého zdroje a zdroje min. vod I. st. - stav
	OP přír. léčivého zdroje a zdroje min. vod I. st. - návrh / záměr
	OP radioreléové trasy - stav
	OP radioreléové trasy - návrh / záměr
	OP radioreléové trasy - ke zrušení
	OP radioreléové trasy - zrušeno
	OP telekomunikačního vedení - stav
	OP telekomunikačního vedení - návrh / záměr
	OP telekomunikačního vedení - ke zrušení
	OP telekomunikačního vedení - zrušeno
	OP telekomunikačního zařízení - stav
	OP telekomunikačního zařízení - návrh / záměr
	OP telekomunikačního zařízení - ke zrušení
	OP telekomunikačního zařízení - zrušeno

MOBILITY

Mobility around the park is very unbalanced and creates many barriers for pedestrian users. With the construction of the bus station in 1965, the park was cut through by the road due to the turning of buses. This road is later used by automobiles as well as the entire area surrounding the park. Traffic is mostly one-way, but it is still quite busy.

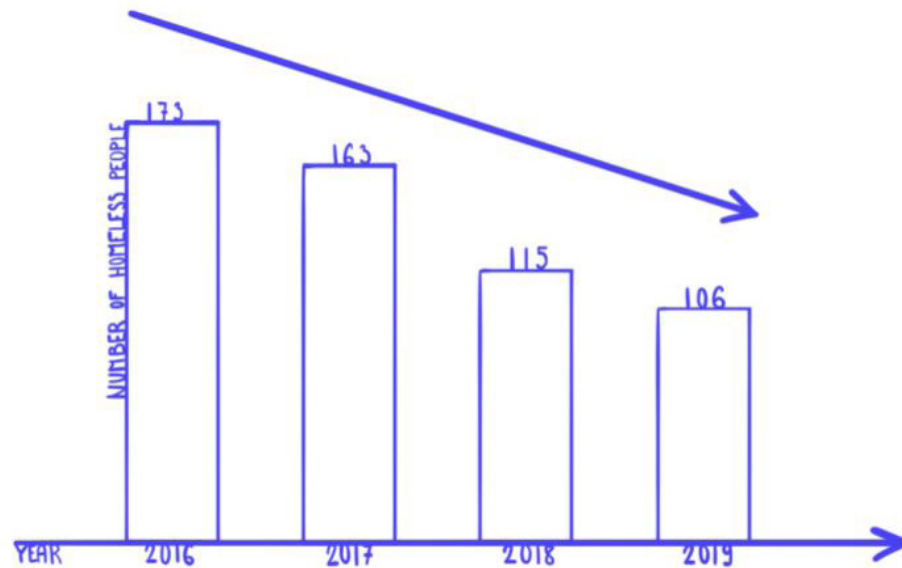
Another element of mobility is the parked cars along the entire length of the park. The busiest places are the intersections in front of the stations where pedestrians, cars (passing and parked), and buses arriving at the station meet. The park is thus encumbered by this busy traffic. Pedestrians are left to use sidewalks and crosswalks that often do not connect to the park's pathways.



map source.: <https://mapy.mutabor.cz>

SOCIAL SIDE OF PARK

The park has suffered from social problems since the end of last summer. Near the park, there is a hostel for homeless people, but they can only use it overnight, so they retreat to the park during the day. Over time, with the gradual closure of the park, it has become an ideal place for them to meet. The unmaintained greenery creates dark corners in the park and encloses the entire park, creating an exclusive and poorly socially controlled space, perfect for this unadaptive group.





PROBLEMS MAP AND CURRENT ASTATE

Today, the park faces many problems, such as poorly maintained greenery that creates visual and physical barriers, mainly caused by solitary and grouped shrubs. Another issue is unbalanced mobility, especially due to the high car traffic, which forms a barrier around the entire park, with the greatest impact around the station, which is the busiest. The lack of connectivity between the park and the street space increases the frequency of traffic, with pedestrians resorting to the pavements around the road rather than the park.

The park also suffers from inadequate facilities, such as a lack of lighting, litter bins, and activities for different social groups. Currently, the park is not very popular and is not perceived as a safe space. The shrubbery enclosing the park and preventing visibility makes it disorganized and an ideal spot for homeless people who spend their time there.

The character of the park has hardly changed since the last modifications, which consisted mainly of surface changes and bringing it closer to the road infrastructure. As a result, the park does not meet current standards for public space.

The materials in the park date back to the end of the last century when the paths were reconstructed and the surfaces changed from mortar to paving. The surrounding roads are made of asphalt.

One positive aspect is the newly made connection with the main city axis (9th May Street).

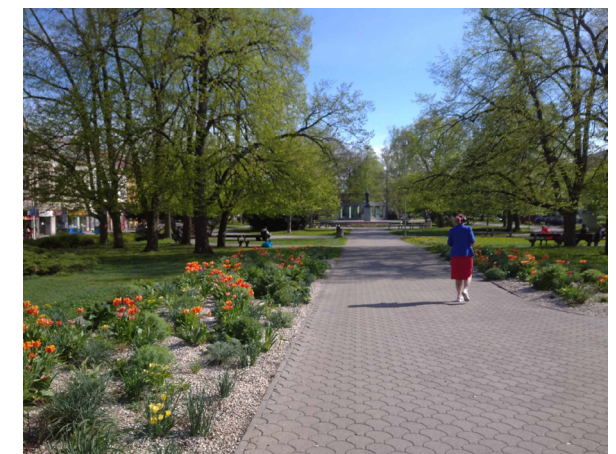
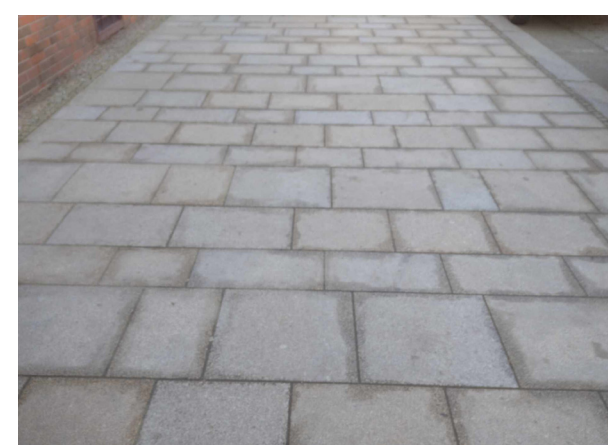
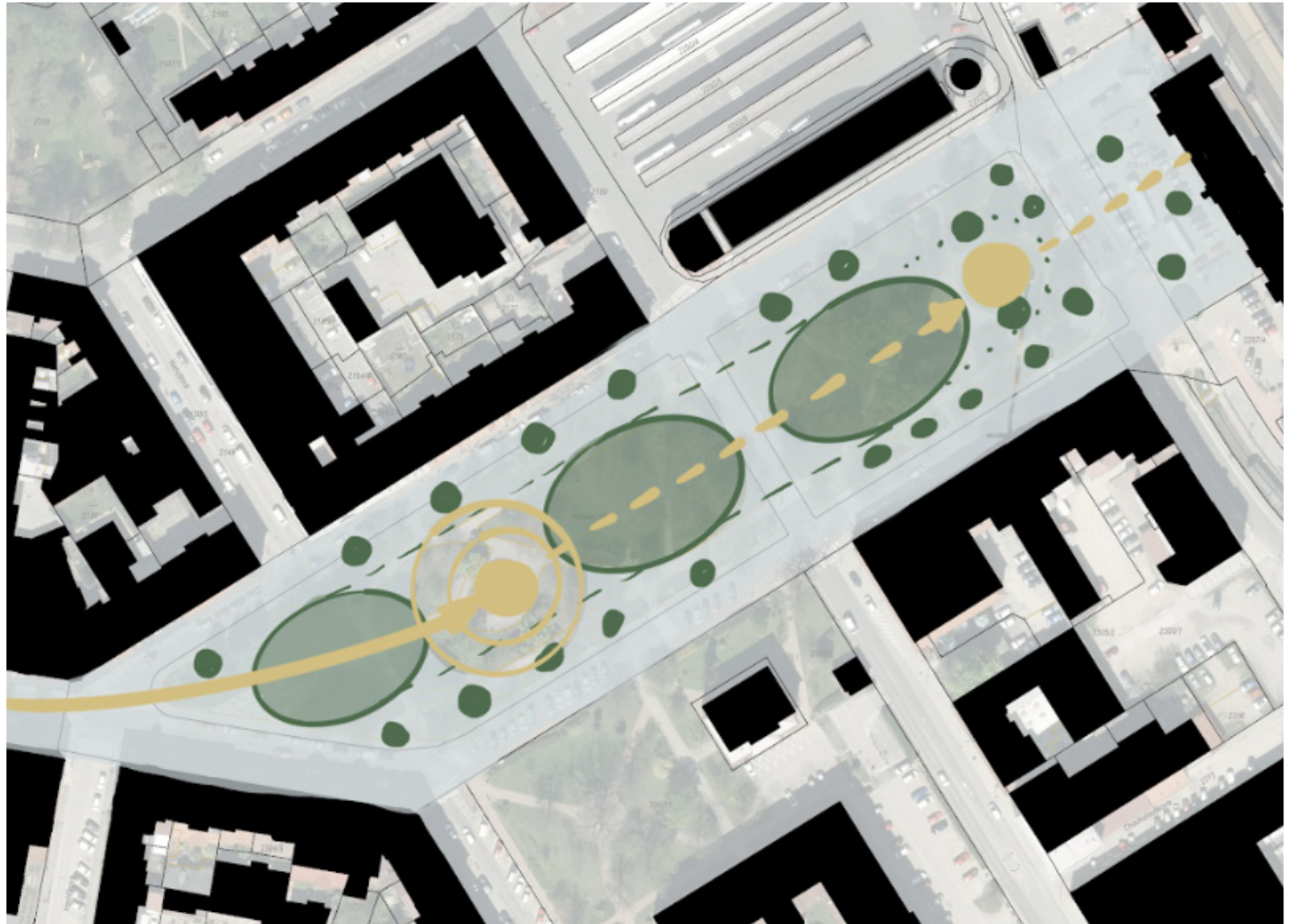
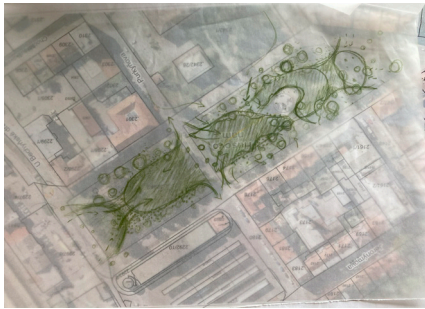
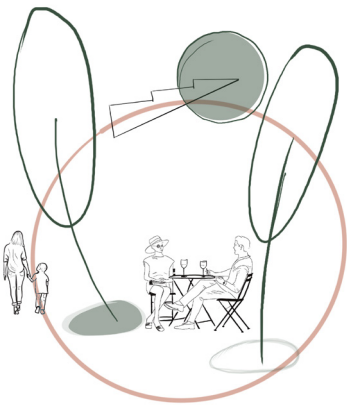


photo source: vlastní fotografie

CONCEPT

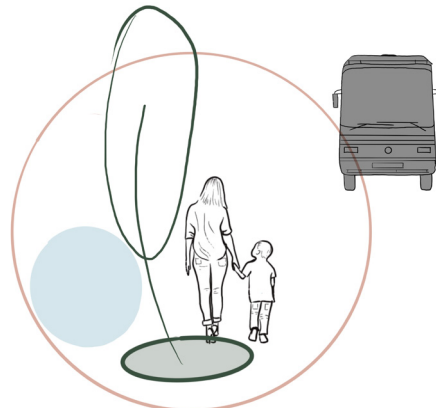


map sources: <https://mapy.mutabor.cz>



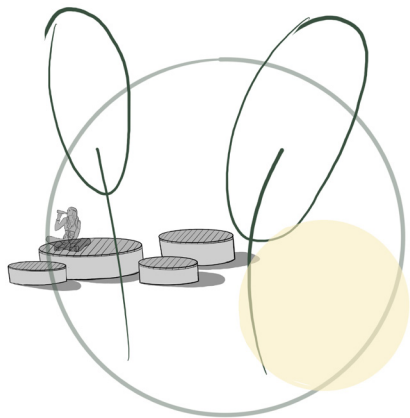
MOBILITY BALANCE

SHARED STREET AREA
VIBRANT STREET PATERRE - PARK OPENING
SMOOTH CONNECTION BETWEEN STREET AND
PARK AREA



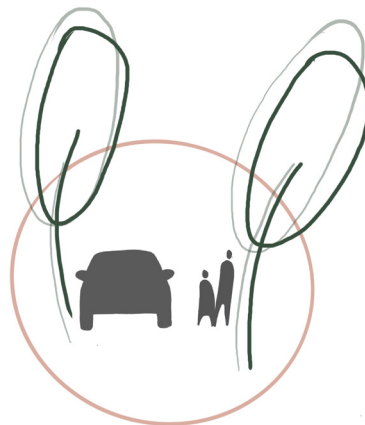
MOST FREQUENTLY USED SHARED AREA

REDUCING VEHICLE SPEED
EXPANDED BUS STOP FACILITY
GENTLE WATER INSTALLATION
TREES INCORPORATED INTO THE SIDEWALK



GREEN PARK AREAS

UNIFIED SHAPE
VALUABLE TREES IN THE CENTER
RESIDENTIAL ZONES WITHOUT PATHS
OPEN CLEAN SPACE



STREETS AREAS

GENTLE DIFFERENCES BETWEEN CAR LANES
AND PEDESTRIAN PATHS
CONNECTION AND COMMUNICATION WITH PARK
AREAS

CONCEPT

Three key issues arising from the site analysis are the fundamental pillars underpinning the concept: barriers, unbalanced mobility, and social problems. These problems are connected and interact with each other. The conceptual solution focuses on finding effective solutions to these problems.

The conceptual solution is directly influenced by the existing urban structure, with its main street that connects the old and new towns. This street starts at Hus's park and ends in the old city center. Businesses, cafes, and restaurants also play an important role in the area and can contribute to the prosperity of the park while creating a lively atmosphere.

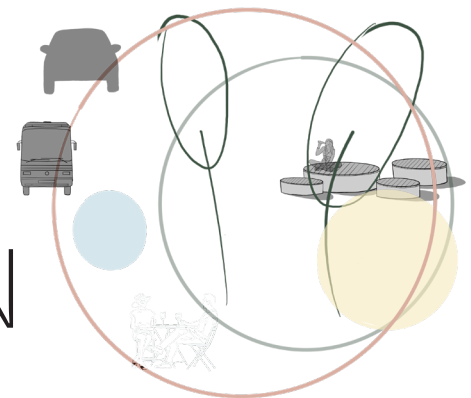
BARRIERS

The answer to this problem is the removal of existing borders and the creation of new, more intuitive boundaries. Greenery plays a key role in this aspect; in its current poorly maintained form, it creates barriers and closes the park off from itself. Another key issue is mobility, which the concept addresses. Currently, mobility in the area is unbalanced, with car traffic taking up more space than necessary. Therefore, the concept works with the idea of a shared street space in which some parts are designated for pedestrians, cyclists, and cars, and in certain areas, car traffic is restricted.

The park area consists of a center with preserved valuable trees and the surroundings of the Hus Monument. This part is designed as a recreational and residential area.

Overall, the conceptual design seeks to respect the fixed historic structures while simultaneously opening up the park to the surrounding area and eliminating barriers in the form of greenery and vehicular traffic. The aim is to create a shared, open, and uncluttered space that reflects the needs and requirements of a busy pre-highway area.

DESIGN







BUS STATION

TRAIN STATION

SHARED SPACE

SHARED SPACE

WATER ELEMENT

SHARED SPACE

SHARED SPACE

LAWN AREA

HUS MONUMENT

LAWN AREA

LAWN AREA

SHARED SPACE

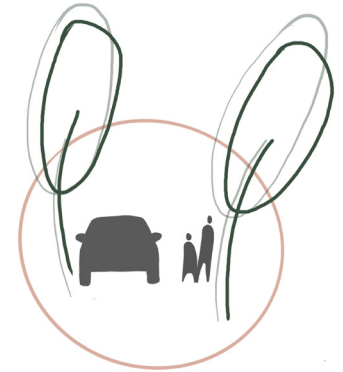
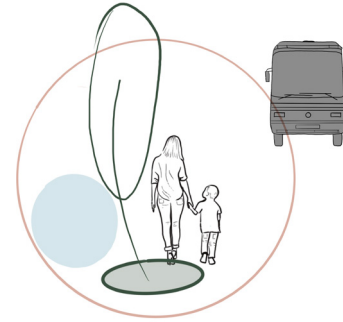
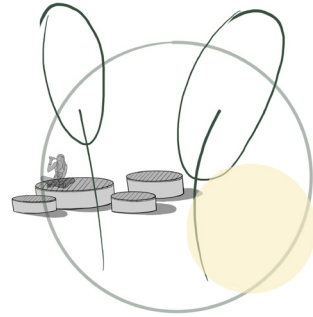
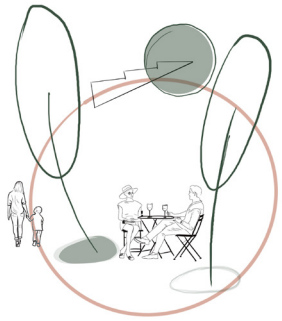
SHARED SPACE

SHARED SPACE

TAX OFFICE



M: 1250



LEGEND



CURRENT TREES



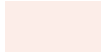
NEVLY PLANTED TREES



GREEN LAWN AREAS



PERENIAL BEDS



PAVED PEDESTRIANS AREAS



PAVED AREAS FOR CARS



HOGGIN



BENCHES



WATER ELEMENT



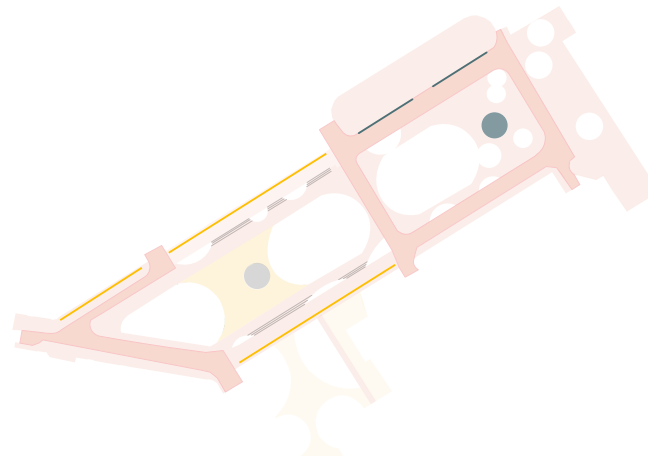
DRINKING WATER



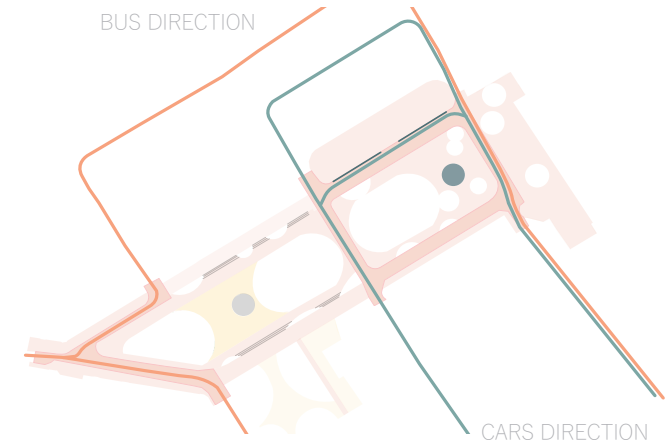
STAIRS



PARKING LOT



VIBRAN STREET DIAGRAM



NEWLY ARANDGED MOBILITY DIAGRAM

DESIGN VISION

The project is based on the revival of old structures and seeks to open up the park, connecting it to the surrounding streets to create an active street parterre and demonstrate that park and street spaces can intermingle. The project aims to soften the boundaries between the park and the street. The new demarcation is very non-intrusive and provides space for people to move freely, showing that it takes little to set up a functional shared space. The park space should become clear and pleasantly livable. The streets involved in the shared space should facilitate a smooth transition between the park and the neighborhood, giving the surrounding businesses a chance to enjoy the benefits of the park.



- CURRENT TREES
- NEWLY PLANTED TREES
- LAWN AREAS
- PERENIALS BEDS

M.: 1250

GREENERY

The green areas in the park design follow the layout of the original arboretum, creating an imaginary boundary between the park and the street space. The interior of the park is dominated by lawn areas. The lawn area closest to May 9th Street is designed as a stressed lawn, capable of withstanding the increased frequency of people who might cut through this area. In this section, a clear visual axis connecting May 9th Street with the statue of Mister Jan Hus is maintained. The remaining two grassy areas are designated as recreational lawns that will not be as heavily used.

The other green elements are the green edges of the park, following the original edges. The new edges are formed by perennial beds.

Characteristics of perennial beds:

Species-rich perennial mix with a number of flowering species even in the second half of the season. Blooms throughout the season.

Suitable location for perennial beds:

Partial shade, light to medium tree shade; the plants in question tolerate drier sites very well.

These beds are also used to create green circular spaces in the pavement under newly planted trees.

The trees in the park are mainly represented by valuable and healthy existing trees. The space will be supplemented with approximately 10 new trees (of the species *Gleditsia triacanthos*), which will be predominantly planted in the pavement to encourage the blending of the park's greenery with the street spaces and to provide much-needed shade. The trees newly planted in the paved parts of the park will be given sufficient root space. Root spaces can be connected to make irrigation and tree care more efficient.

PERENIAL BEDS MIXTURE

SOLITARY PLANTS

Anemone × *hybrida* 'Serenade'
Aster ageratoides 'Asran'/'Ashvi'
Diervilla splendens
Persicaria amplexicaule 'Speciosa'



GROUP PLANTS

Aster divaricatus 'Tradescant'
Helleborus orientalis
Phlox russeliana



COVER PLANTS

Epimedium pubigerum 'Orangekönigin'
Geranium 'Sirak'
Geranium 'Tiny Monster'
Luzula nivea



STUFFED PLANTS

Aquilegia vulgaris kultivary
Digitalis lutea
Viola odorata 'Königin Charlotte'



BULB AND TUBOUS PLANTS

Allium aflatunense
Anemone blanda 'White Splendour'
Chionodoxa luciliae
Crocus tommasinianus
Narcissus cyclamineus 'Jetfire'
Puschkinia scilloides var. *libanotica*

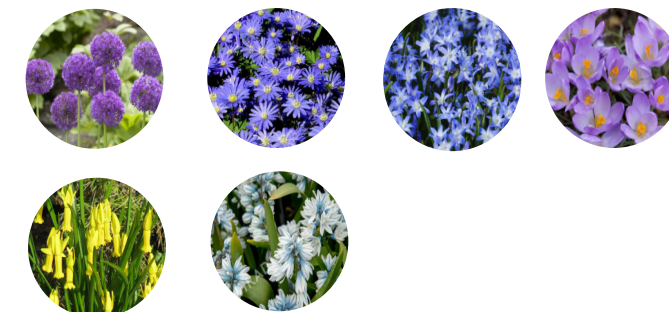


DIAGRAM OF THE NEW BUS AND CAR
TRANSPORT LAYOUT

- PEDESTRIANS
PAVED AREA
- PAVED AREA FOR
CARS
- HOGEN SURFCES
- STAIRS

PAVED AREAS AND MOBILITY SOLUTIONS

The street spaces around the park are designed based on the concept of shared space, which seeks to compensate for the unbalanced mobility in the area. This approach includes a materially unified area that serves to address the existing height differences between roads and pavements.

For better orientation in the space, the vehicle movement areas and pedestrian areas are differentiated by different-sized paving stones. Further visual differentiation is provided by a guide line and a channel that collects rainwater. The carriageway areas are significantly reduced in the new design, providing more space for pedestrians. Car traffic is redirected to side streets, minimizing its impact on the park area.

The overcoming of the height difference between the park and the street area is most noticeable in the second part of the park, further away from the station. Here, the height differences are addressed by the use of steps and intermittent perennial zones around the perimeter of the park.

A further change in the height difference is between the park sections. Currently, the road is below the level of the park section; in the proposal, the road is raised to the level of the park to create a more cohesive plan and provide pedestrians with space for unrestricted movement while also slowing down passing buses.

Another focal area is around the Hus monument, which is covered with a mud surface.

Materials used for the paved areas:

Granite paving stones: 10x10x8, 16x16x8
clay surface



BUS STOP AREA



ONLY PEDESTRIANS AREA



GUIDING LINE



HOGEN SURFACE



PAVING MATERIAL PEDESTRIANS



STAIRS ALONG THE PARK

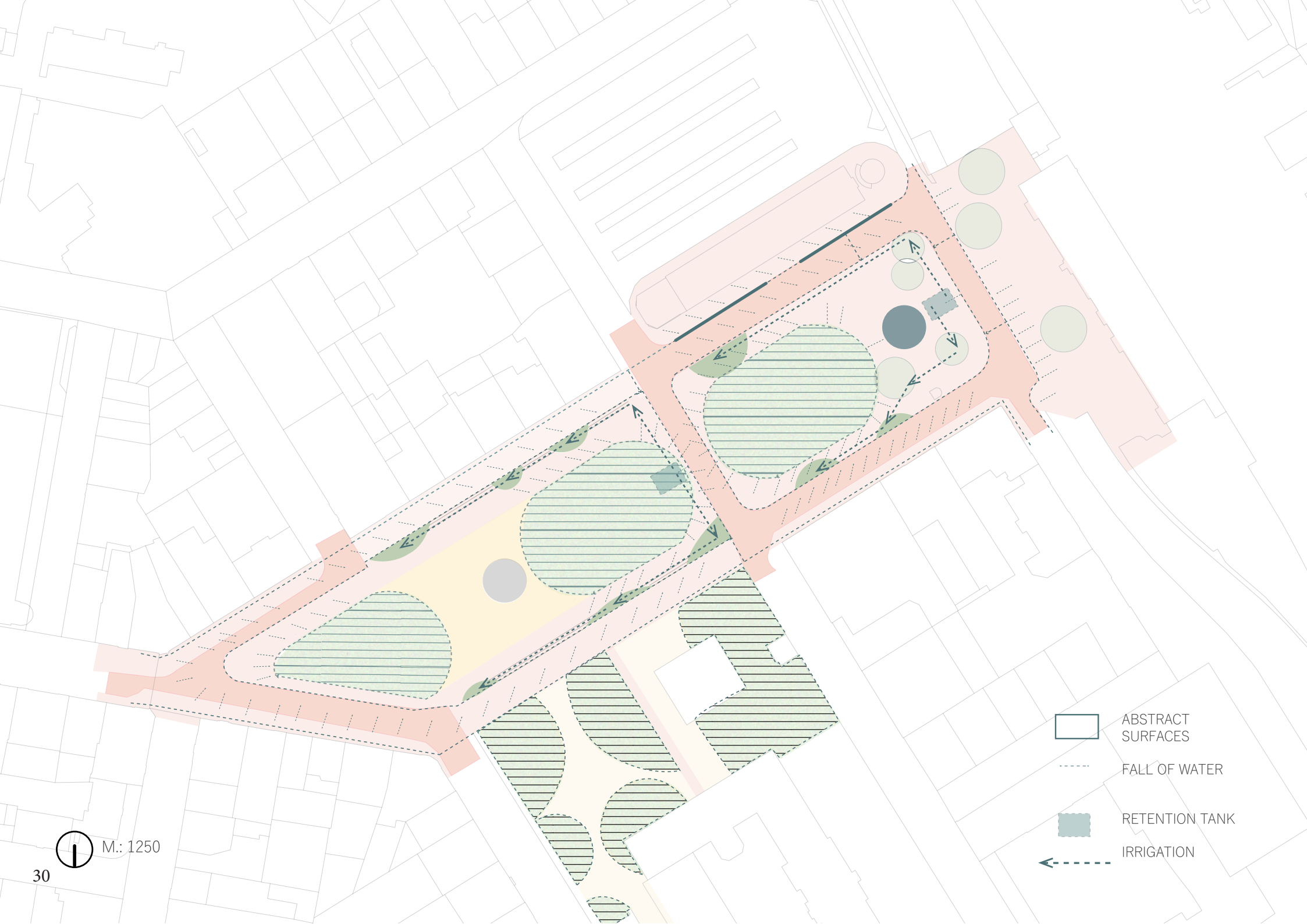


BUS STOP



PAVING MATERIAL -CARS

photo source.: vlastní fotografie



- ABSTRACT SURFACES
- FALL OF WATER
- RETENTION TANK
- IRRIGATION

M.: 1250

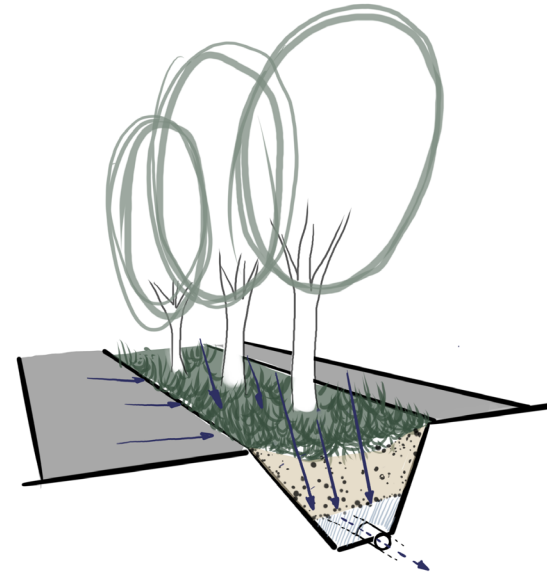
RAINWATER MANAGEMENT SCHEME

Rainwater will be actively collected and stored in retention cisterns located below the park surface. Each section of the park will have its own retention cistern, ensuring sufficient capacity to capture rainwater during rainfall events.

Rainwater conveyance channels will run along the perimeter of the park streets, where rainwater will be collected and conveyed to the retention cisterns. The interior portion of the park will be designed so that rainwater will be directed to grassy areas where it will then soak into the soil. Other areas of direct infiltration will include perennial beds along the edges of the park and round beds under trees in the pavement. Excess water seeping down from the trees will filter through the soil naturally and can be drained into retention containers.

Water draining into the street drains will need to be purified due to road salting and the presence of other toxic substances from the street and rooftops. The water will be cleaned directly in the channels using a special substrate, which will need to be mechanically cleaned at regular intervals.

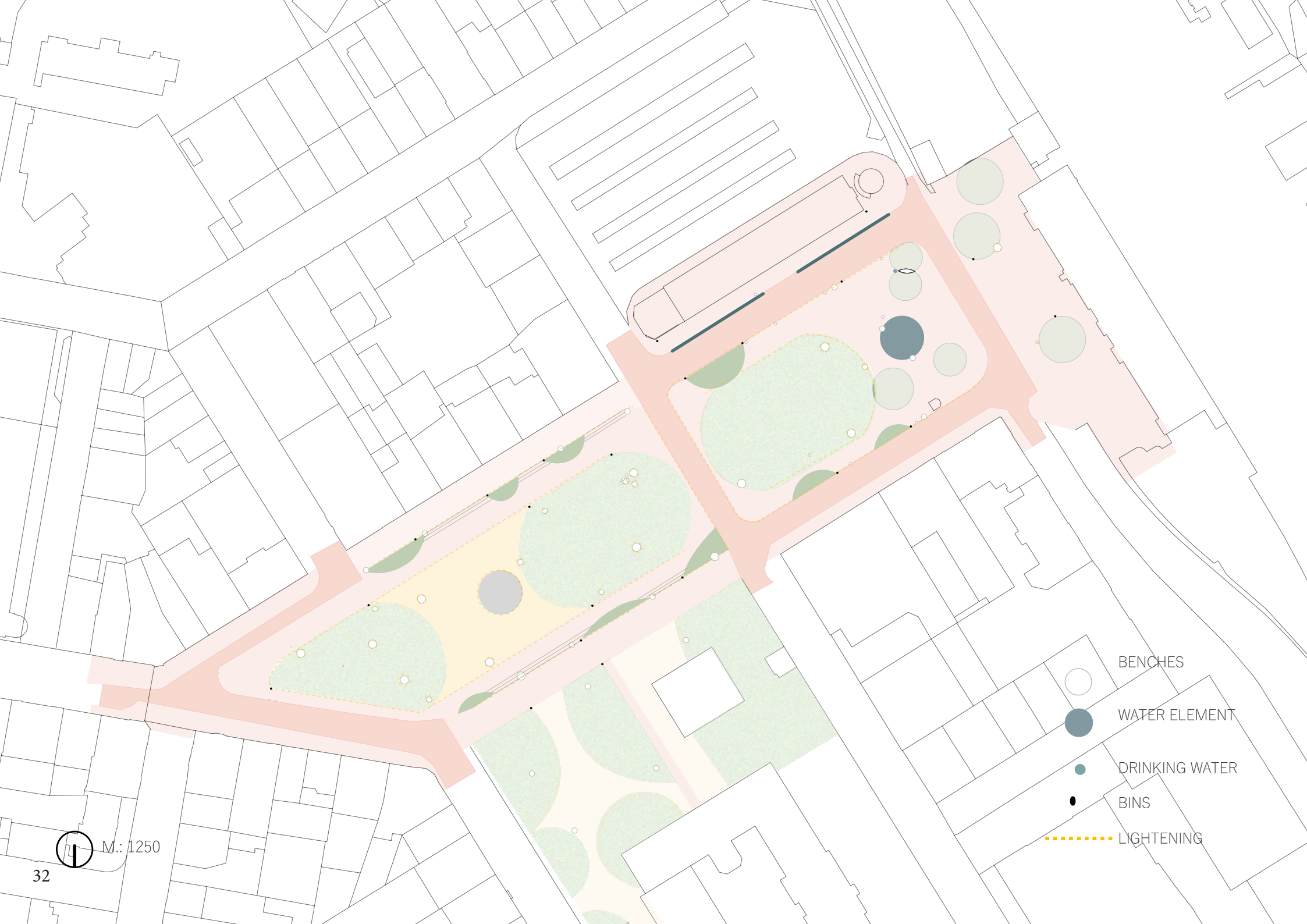
The collected rainwater will then be used for the irrigation of trees and other green elements in the park. This will minimize the consumption of potable water for irrigation.



SOAKING OF RAINWATER SYSTEM SCHEME



CHANNEL COLLECTING RAINWATER



BENCHES

WATER ELEMENT

DRINKING WATER

BINS

LIGHTENING

M.: 1250

MOBILIAR

The park furniture includes benches, a drinking fountain, trash cans, and lighting.

BENCHES

Benches are located throughout the park, in grassed and paved areas. The benches are circular in shape and come in three sizes that can be combined to form a single seating area or a group of elements that together form a playground, for example.

Dimensions:

Diameter: 1m, 2m, 3m

Height: 30 cm, 45 cm, 60 cm

DRINKING FOUNTAIN

The drinking fountain is located at the front of the park in the busy area between the stations.

WASTE BINS

The waste bins are placed along the park area, numbering twelve, with additional bins located in front of the station.

LIGHTING

Lighting is distributed throughout the park, regularly in the paved areas and in the grassed areas near the benches to ensure the park is safe at night.



BENCHES SKETCH

DRINKING FOUNTAIN

LIGHTENING

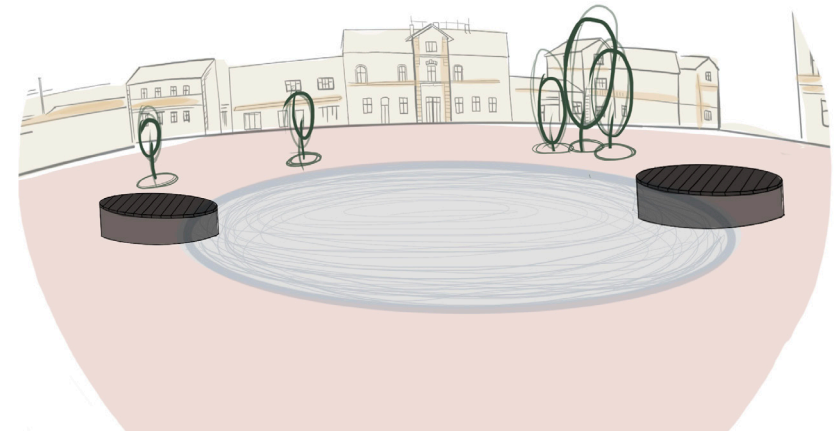
WATER ELEMENT

The water feature is located on the site of the existing fountain. Its shape corresponds to the shape of the pedestal for the statue of Jan Hus, thus imaginatively closing the park axis.

The water feature is very inconspicuous and shallow. It is formed by a small depression in the pavement. The water level reaches a maximum depth of approximately 5 cm.

Its main function will be in summer when it will be used for occasional cooling on hot days. In winter, the water will be emptied, but due to the shallow depth and the gentle slope of the bottom, it will not form a barrier in the space once emptied, and the area will be freely passable.

The jets that will bring the water to the surface will be in the centre, and at the edges, there will be a ring of guide lines that will also serve as an overflow for the water, allowing it to circulate and clean itself.



WATER ELEMENT



M: 1250

SECTIONS

