

HOLEŠOVICE CULTURAL AND ART CENTER

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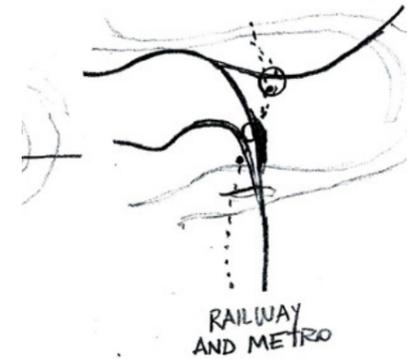
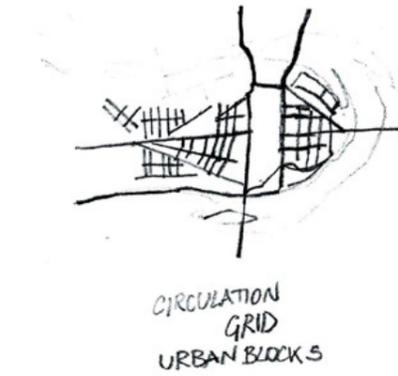
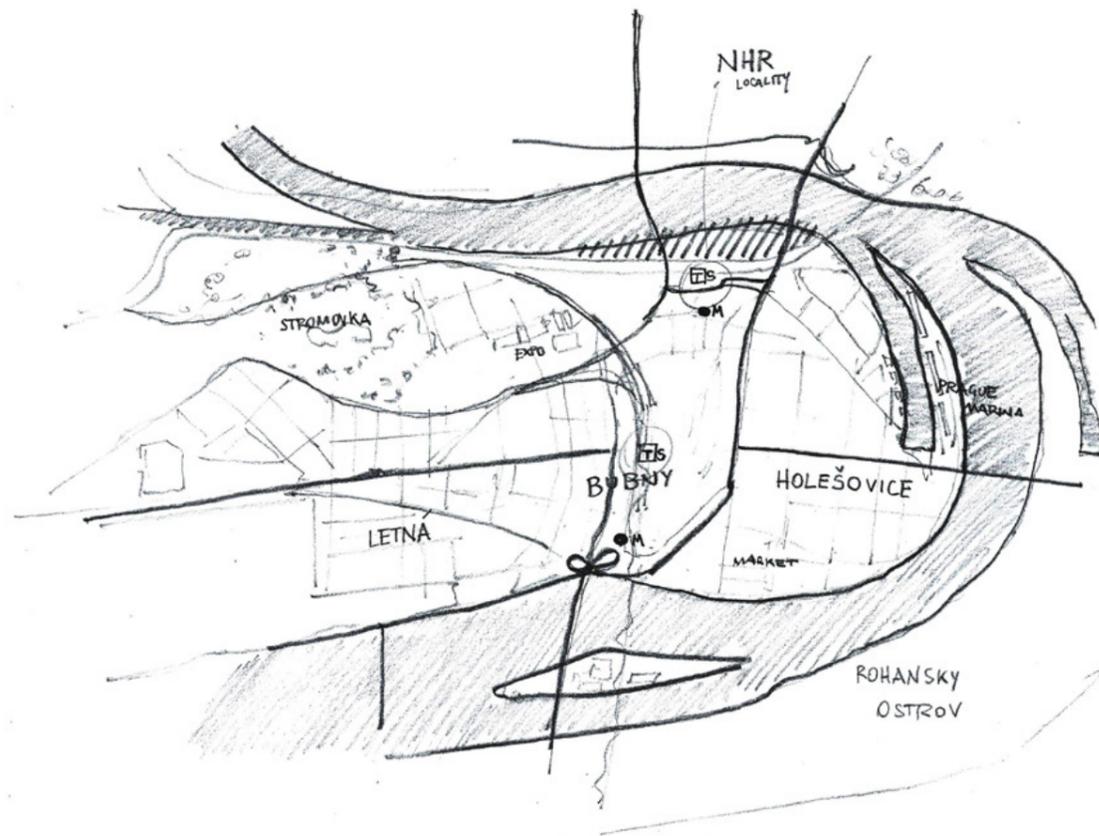
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1 Introduction

The final result arises from a long project process that started from the research of a potential and problematic area for developing an urban and architectural design that should solve the issues and enhance the positive trend of the area. The time management for the project was essential and critical for the final elaboration since the topics developed are many, from a wide urban context to architectural details. The masterplan of the whole area has been designed based on the idea to develop a critical node inside the plan which is the most representative and significant for the future of the city of Prague. In fact from the initial researches emerged that Holešovice district is turning rapidly into

the present and future cultural heart of the city of Prague. This brought me to design a specific building dedicated to the exhibition of every form of art. This defined function and the location on the riverfront gave me a feeling of freedom in the design process, since the final output had to be joyful and attractive for each type of user. The inspirations were many, from the past times to the present time, from the city of Prague to projects abroad. Each of the references brought positive input for the improvement of my ideas. Although some initial ideas have not been fully developed, I feel confident with my design and I believe it could bring benefits for the future of the city, both cultural and economic growth.



Holešovice district has a particular shape for its location on a meander of the Vltava river. Almost the whole territory belongs to Prague 7 but a small part in the South-East belongs to Prague 1. The area is really close to the city center, which is reachable easily on foot and by public transportation.

Nowadays the meander is divided in three areas: LETNÁ, BUBNY and HOLEŠOVICE. Though they are so close, they are disconnected from each other. Each area has its distinct features, related to the development history of the city.

Since Letná belongs to a royal history, it is more connected to the city and to the castle, and it has access to the main parks of the city, Letná park and Stromovka park.

In the case of Holešovice its growth is due to the industrial development of the city during the nineteenth century. In fact the area is physically disconnected from the city because there was no need to relate the industrial activities with the city life. Bubny that today is a brownfield in the middle of Holešovice, was a large railway yard constructed after the demolition of the former village of Bubny. Probably besides the river the railway was constructed to serve the intense production activity of the area. The rail was connected with the rest of the city thanks to the construction of the Negrelliho Viaduct. Though nowadays the train connection is still used, this meadow it is the first cause of the disconnection between Letná and Holešovice.

The river that forms the meander of Holešovice is the peculiar characteristic of the whole area, in fact it has important roles over the centuries for agricultural development, fishing and industrial development; In particular for the transportation of goods.

However the river has been always disconnected from the city and the people, instead of being open to the city life the past developments pushed the river far from the public realm.

From the drawing it is possible to see the division of Holešovice in three areas.

2 Analysis

PRAHA Holešovice district



103.5 HA - NEW DEVELOPMENT AREA



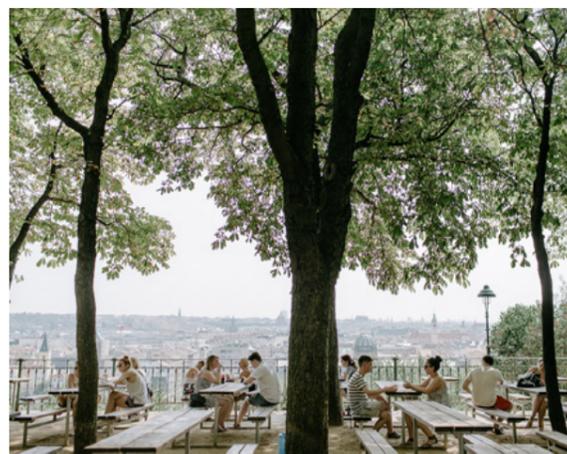
LETNÁ

BUBNY

HOLEŠOVICE

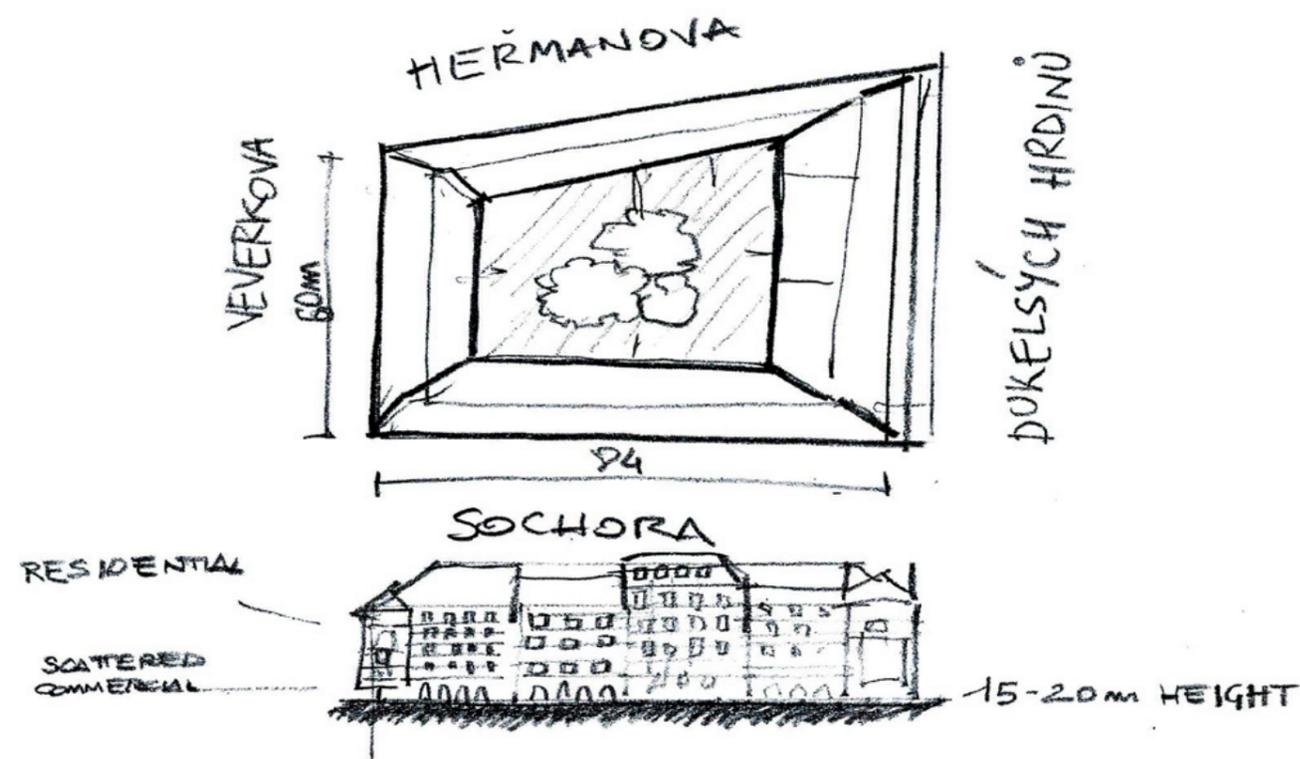
KARLÍN

LETNÁ

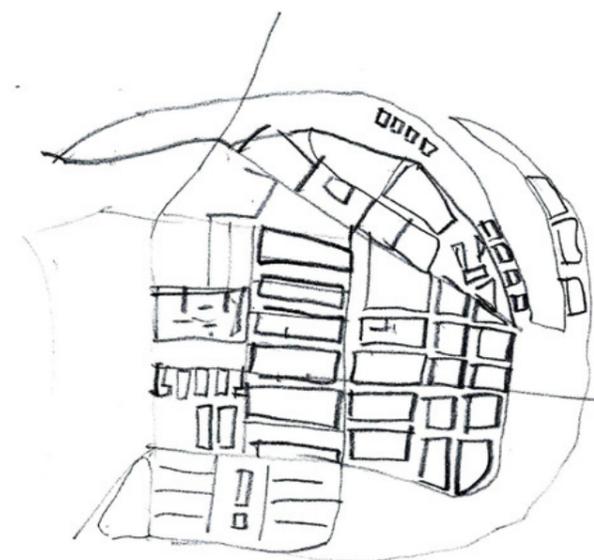
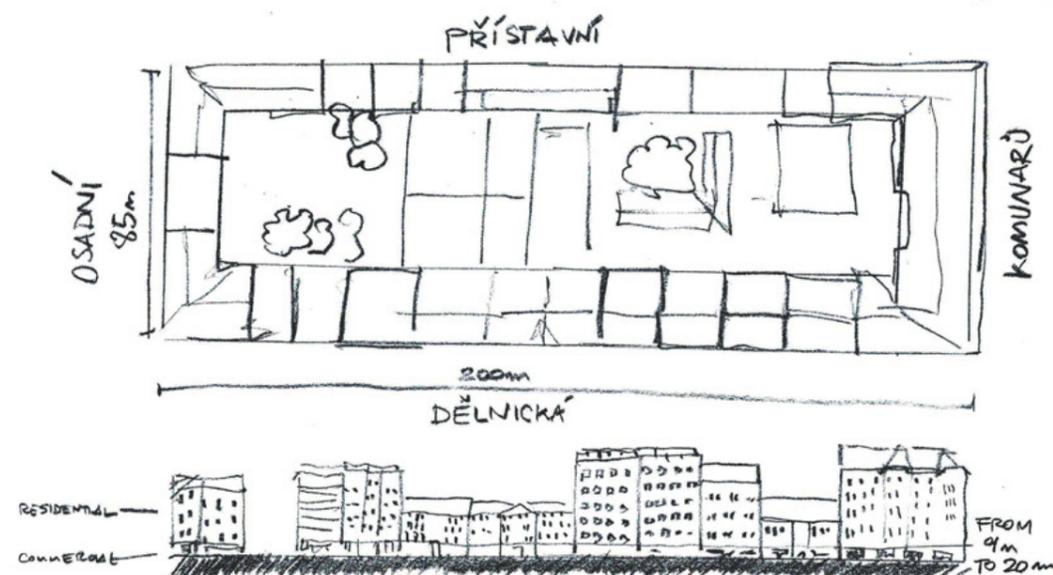
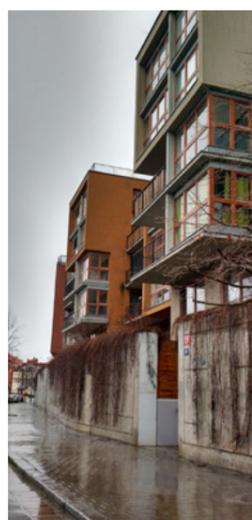
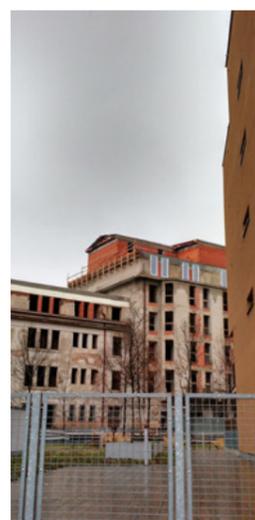


Letná is composed of relatively small urban blocks (70m x 70m) mostly residential with commercial ground floor. The urban pattern consist of a loose grid that follows the direction to the castle and Dejvická. The buildings has 5/6 storeys with a style that goes from eclectic to modern. The main circulation arteries for car movements are Dukelských, Veletržní, M. Horákové and Letenský tunel that connect directly Letná with the city center. All the other secondary streets serves only residential car movement. In fact the main problems are related with car parking; all the streets are fulfilled with cars parked by the residents of the area, taking off space for pedestrian movements. The area is good connected with tram lines that goes from the city center to Dejvická passing through Letná. Metro stop Vltavská links Letná with the metro system, and a new planned train station located at the end of Dukelských street will connect the area with high speed train that will run from Masarykovo station

to Václav Havel Airport. Letná is the address of many cultural, civic, recreational buildings as the VELETRŽNÍ PALÁC (today the national art gallery), Výstaviště Praha (an exhibitions area founded in 1891), the church of St. Antony (in Strossmayerovo square), the Stadion Letná, and the Národní technické muzeum. Schools, art galleries, theaters, clubs, cafès are spread all around Letná, where nowadays gentrification is occurring, attracting increasingly foreigners. Moreover the location between Letná park and Stromovka park make the area highly attractive for living. These two parks are the green lung of the city and the biggest recreational areas of Prague. They attract many citizens and tourists during the year for the lush vegetation and the recreational activities. The position of Letná between the parks is suitable for green pedestrian corridors that will connect from North to South the two parks giving a sense of continuity in the city.



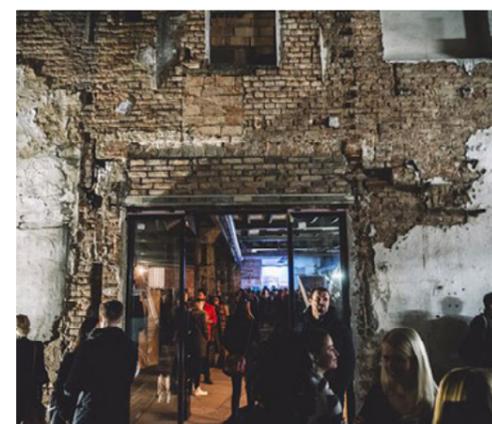
HOLEŠOVICE



Another predominant area visible from the analysis is Holešovice. It is located in the extreme East side of the meander and it is enclosed between the river and the railway of Bubny. For this reason Holešovice is quite isolated from the rest of the city. The urban pattern consists of a rigid grid composed by large urban blocks (200m x 90m). This grid creates an internal circulation for the communication between the blocks. These internal streets connect with peripherals arteries as Argentinská and U Uranie which lead to a wider communication network. The main public transportation system are bus and tram lines that run through all Holešovice. Metro lines are reachable from Vltavská and Nádraží Holešovice, two very important transportation nodes for the area. Nádraží Holešovice is the main train station of Holešovice and one of the biggest in Prague, that serves regional and national train lines.

Holešovice is connected with the surrounding through four bridges for cars and pedestrian, these bridges are: Hlávkuv most, Libenský most, Barikádník most, Trojský most. The first two connect Holešovice with Florenc and Palmovka the others link to Troja. With the urban regeneration projects of Rohanský ostrov a new pedestrian bridge should be constructed to connect Karlín and Holešovice; this project could implement the strategic plan to reclaim the rivers banks and to create a pedestrian connection from the city center to Stromovka.

The industrial use of the area shaped the buildings over the centuries. The key characteristics are low rise buildings with large courtyards and internal open spaces, suitable for the industrial production, with a purely functional aesthetic. From the highly industrial use of the past, nowadays, the neighborhood is becoming more residential and public friendly. In fact most of the existing industrial building changed function into cultural and commercial activities. The abandoned buildings has been renovated turning in meeting point as art galleries, market places, cafes and clubs. Holešovice, as Letná, is having a rapid gentrification period. The increasing visitors and inhabitants bring the need of reshaping the public spaces and the relationship with the river that has never been thought for the public realm. This changes can be seen in Prague Marina where an industrial port has been turned into residential areas which are highly attractive for the position on the river bank and the multiple opportunities of the district. Though these residential complex are fenced and privatized, excluding any possibility of usability and connection. The challenge is to maintain the characteristic of the areas trying to fulfill the real necessities of transformation that the city and the inhabitants need. Instead of transforming them into fruitless and sterile private housing estate or administrative centers. The river bank could become a ring of connection for Holešovice and a new attraction for the public life.

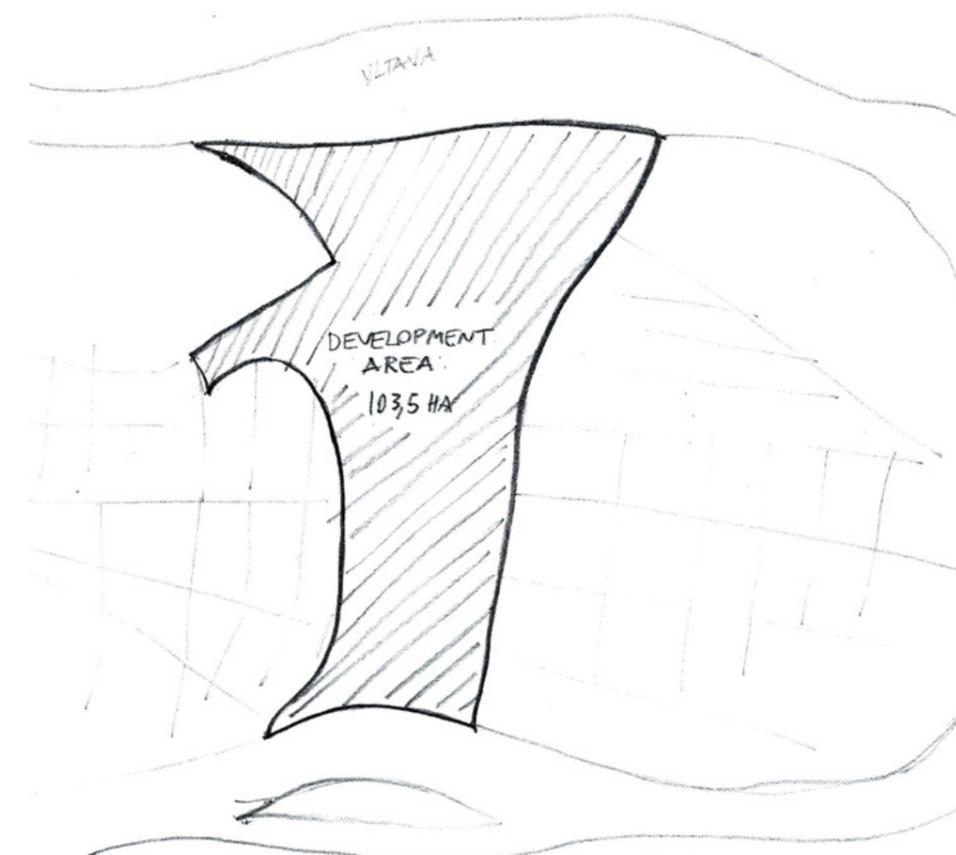


BUBNY



The biggest barrier, that cuts in two the meander, is the railway in Bubny. In the nineteenth century the former village of Bubny was destroyed to build the train connection from Masarykovo nádraží to the North through the Negrelliho viadukt. However the past development of Holešovice and Letná was clever enough to maintain the same axes' direction of the grids for a Further development of Bubny. The area is a very busy transportation node, in particular for trains and metro, still this nodes are not coordinated with the surrounding neighborhoods and functions. Indeed they are far from the existing centers of interest and activity without a clear pedestrian connection. Vltavská station is the first from south and it is a crucial interchange for tram lines and metro, it serves both Holešovice and Letná since the station is in between the two. The train station of Bubny is located, in the middle of the area, although today it is only served by local trains and with limited passenger facilities, it is one of the largest stations in Prague by area, with 20 tracks and 6 platforms. The station is not served directly by any trams or buses, but is 5 minutes walking distance from the tram system and 10 minutes from Vltavská metro station. It is also located a short distance south from the more mainline Praha-Holešovice station. This last station is a railway station located

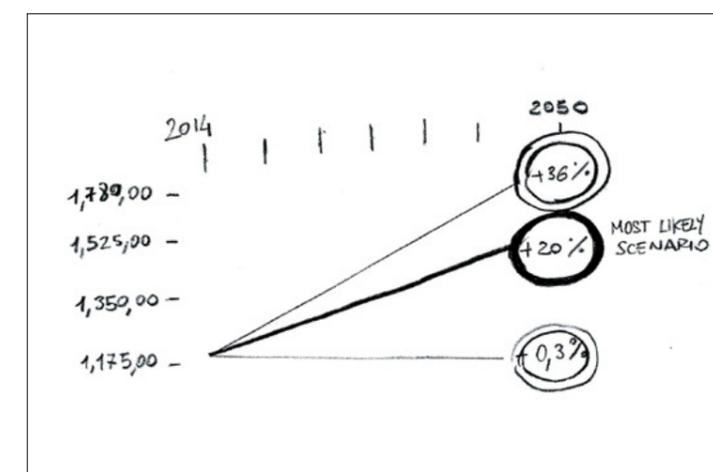
in in the north side of Holešovice. Opened in 1985, it was originally used as a terminus for international fast trains coming from the east. Since the completion of Nové Spojení in 2008, these trains terminate at the more central hub, Praha Hlavní Nádraží, however, international and inter-regional trains going north from Hlavní Nádraží towards Berlin still stop here. The station is connected to the Prague Metro's C line by the metro station of the same name, and also to the Prague tram system by numerous lines. Bubny is also crucial for the cars circulation in the city, at national and international level, since is the entrance of the city from North, where receives most of the traffic from Germany. The main arteries that surround Bubny are Argentinská and Bubenská, which have no relation with the inner area of Bubny. Nowadays Bubny is a meadow in between two renaissance neighborhoods that must be filled in to fulfill the connections that this part of the city needs. In 2006, extensive land in the district of the station was sold for 1.1 billion crowns to a real estate group, which plans to build a residential, entertainment and administrative complex within a ten-year period. The new district project originally counted with the construction of luxury and classic flats, office spaces, new schools, medical facilities and a university campus.



Development potential

All the meander of Holešovice needs redevelopment plans at different scales; from small changes, but essential, in the existing urban fabrics to more wide and visionar plans like the birth of a new neighborhood in Bubny. The vast empty land of Bubny should enhance the connectivity in Holešovice and sustain the population growth in Prague.

In fact according to demographic projections, there is a very high probability that the population of Prague will grow over the coming years. There are three scenarios for this development. The highest scenario gives a figure of up to 1.7 million people living in Prague in 2050, which represents a 36% increase compared to the current situation. According to the most likely, mid-level scenario, around 1.5 million people will be living in Prague in 2050, with corresponds to an increase of 20%. The lowest estimate only an increase of 3.000 people. Could this growth bring the need to the city of Prague for the construction of a new neighborhood?



HISTORY

BUBNY

The first mention of Bubny dates back to 1088, the strategic position of Bubny near an important ford across the river on the direct route to Prague Castle meant that the devastation of the area during military conflicts was frequent.

The worst destruction came during the Thirty Years War in the 17th century. A new phase in the development of Bubny started only after 1750. In 1788 there were 24 houses in 1825 a cardboard box factory was built. After 1850, when Bubny was merged with Holešovice, an unprecedented building boom occurred.

HOLEŠOVICE

Holešovice was mainly an agricultural settlement. The name of Holešovice is first mentioned in historical records in 1228 as royal property. Up to the 16th century this farming hamlet did not develop in any way and the number of farms there remained the same. Only in the 18th century did the farms start to decline and from the mid-19th century Holešovice was gradually transformed into a city suburb.

HOLEŠOVICE-BUBNY

In 1850 Holešovice was merged with Bubny into a single Prague urban district, although the two parts continued to develop in relative independence of each other. From the end of the 19th century Bubny was directly connected with Prague by a chain bridge and served mainly as a district of residential apartment blocks, while Holešovice concentrated more on the building factories and became a peripheral industrial district.

In 1884 Holešovice-Bubny was incorporated into the City of Prague as its seventh district.

The district underwent rapid growth. While in 1857 there were a mere 110 houses with 1,200 inhabitants, at the beginning of the 20th century there were already 780 house numbers, and a population of 30,000.

In 1881 there were already 32 factories in Holešovice but the greatest turning-point in the history of Holešovice was the construction of the unique Karlín

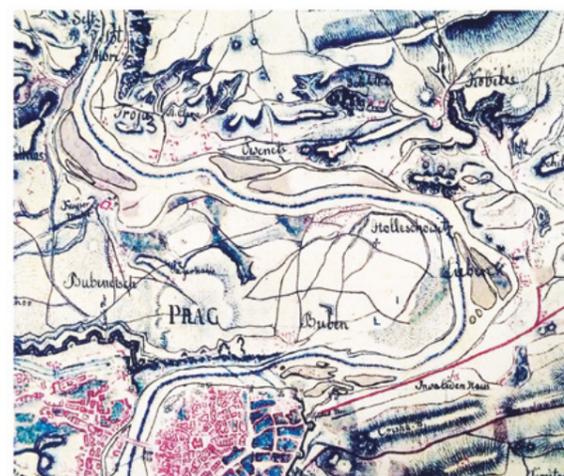
Rail Viaduct, which brought the railway from the State Station (today Masaryk Station) onto the Prague-Dresden Line. The Holešovice and Bubny stations were built at the same time, and the railway was later connected up to steamboat transport to Hamburg

LETNÁ

Although Letná is administratively part of Holešovice-Bubny, it is a highly distinctive area with its own history. Letná belonged to the Czech princes, and in 1088, together with Bubny, it was donated by the king to the Vyšehrad Chapter. In 1261 Přemysl II was crowned here. In the past the south slope of Letná was used as a vineyard, particularly in the reign of Charles IV. Later, however, the viticultural tradition gradually disappeared and the vineyards were abandoned, especially during the Thirty Years War. The tradition was to be revived only at the end of the 18th century by the Freiherr Jakob Wimmer. In 1715-16 a summer palace Belvedere was constructed here, but not quite thirty years later it was destroyed by the French army. Since then the summer palace at the Prague Castle has taken over the name Belvedere. The strategic position of Letná was militarily very suitable for artillery bombardments. The direct threat this posed to Prague resulted in the construction of fortifications in 1757, which were torn down after the land was bought by the Prague municipality in 1859 and replaced by the Letná Gardens. Their park design with the then fashionable chestnut avenues was the work of the chief gardener of the royal city of Prague, František Thomayer.

STROMOVKA

The history of Stromovka dates back to 1268, when Premysl Otakar II used Stromovka as the royal hunting grounds. The park was open to the public in 1804, after Czech nobles saved the grounds from complete demolition from the reign of Maria Theresa who ordered everything cut and burned. The park is no longer full of deer to hunt; the park now features paths for skating, romantic ponds, large meadows, a few cafes, and even horse stables.



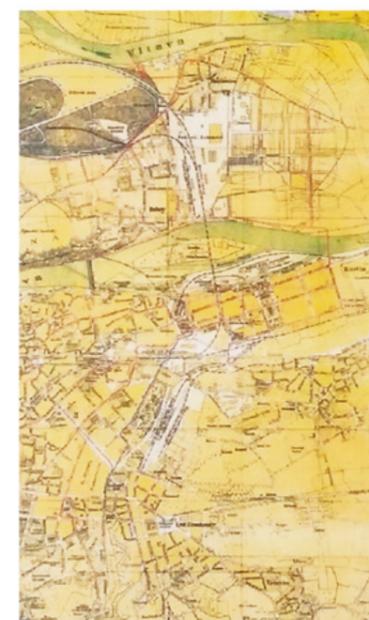
1780-1783



1836-1851



1848



1889



1889

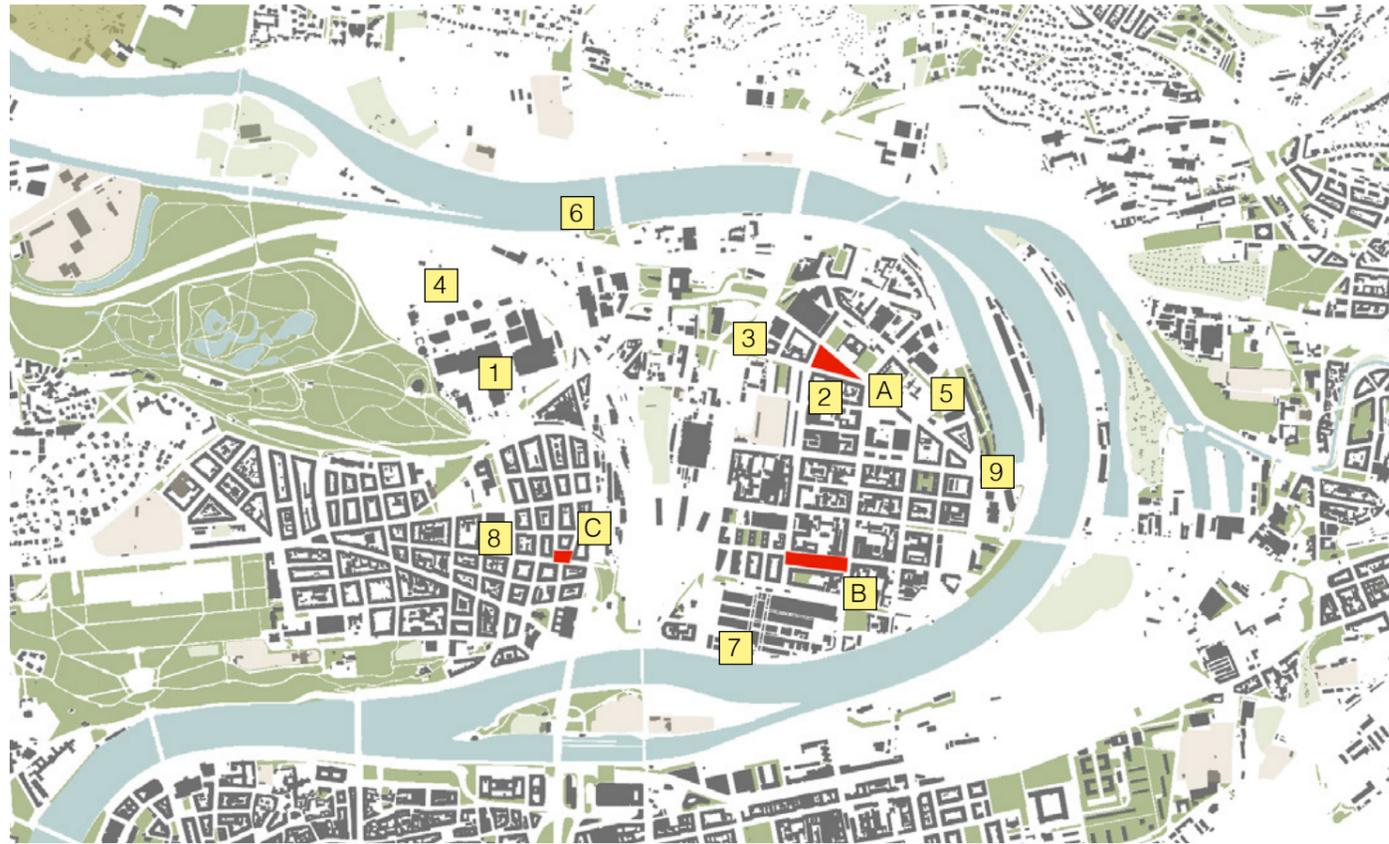
ŠTVANICE

The island earlier known as Velké Benátky (Great Venice) came to be called Štvanice (the Chase) around the end of the 16th century. This was because it was the frequent venue for the rather cruel pursuit of chasing and baiting beasts in an arena for the entertainment of the nobility, burghers and common folk. Much later the sport was definitively banned by the Emperor

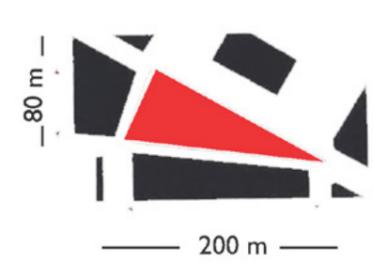
Francis II, but the island continued to live by offering various attractions.

In 1900 the island was connected by a wooden bridge to the State Station (today Masaryk Station) and to Bubny. Later Štvanice was chosen as the site for the well-known Winter Stadium, the first artificial skating rink in Prague, where international contests have been held since 1932.

NOTABLE PLACES



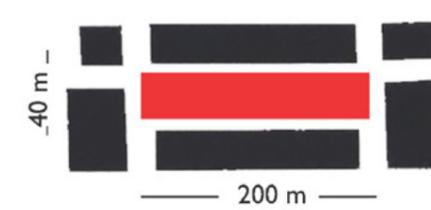
A ORTENOVNO NÁMĚSTÍ



HOLEŠOVICE



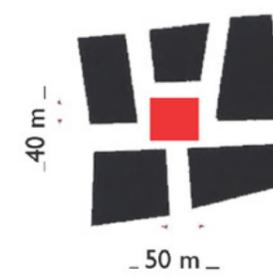
B PARK TUSAROVA



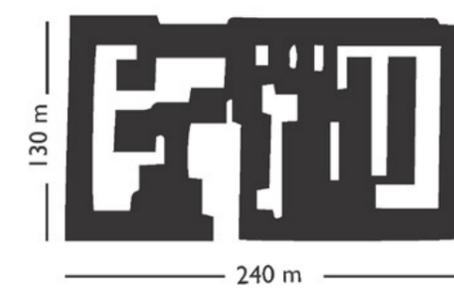
LETNÁ



C ŘEZÁČOVO NÁMĚSTÍ



KARLIN



CMCARCHITECTS STUDY 2012



EXPOSITION CENTER



NIGHT CLUBS



AMUSEMENT PARK



ACTIVE RIVER FRONT



ART GALLERIES



SHOWROOMS



MARKET

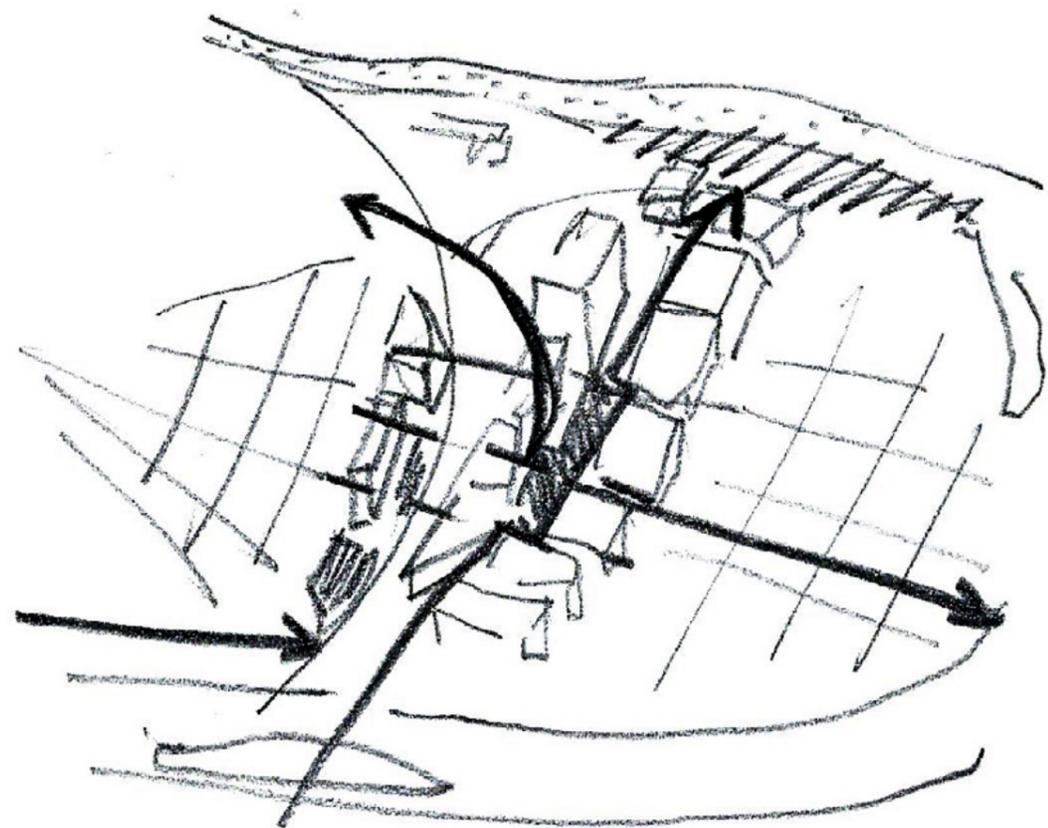


VELETRŽNÍ PALÁC



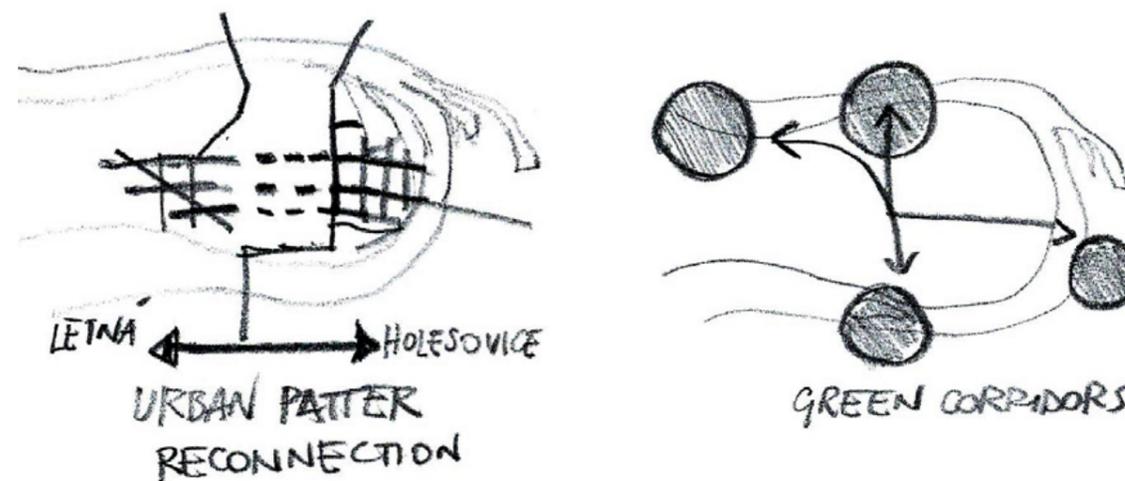
PRAGUE MARINA

EXISTING CONCEPT & MASTERPLAN



The existing concepts for Bubny are dated in the last twenty years. All of them attempt to fill the gap between Holešovice and Letná, trying to connect them with a new urban fabric that will generate the new neighborhood of Bubny. Much importance has been given to the East - West connection that shapes the urban blocks. Less precise is the way how they want to connect the North part with the South part and what they want to connect. Since the area is a very busy transportation nodes, It is not clear the priority order for the movement in this axis North - South. Most of the conceptual plans shows the need to find new open and public spaces, inside of the

new urban fabric. The recurring idea is to place a large green open space in the middle of Bubny, a sort of new center of gravity for the district where the main buildings will appear. These opening should represent the green connection to Stromovka park, though they seem to compete with it for their large size.



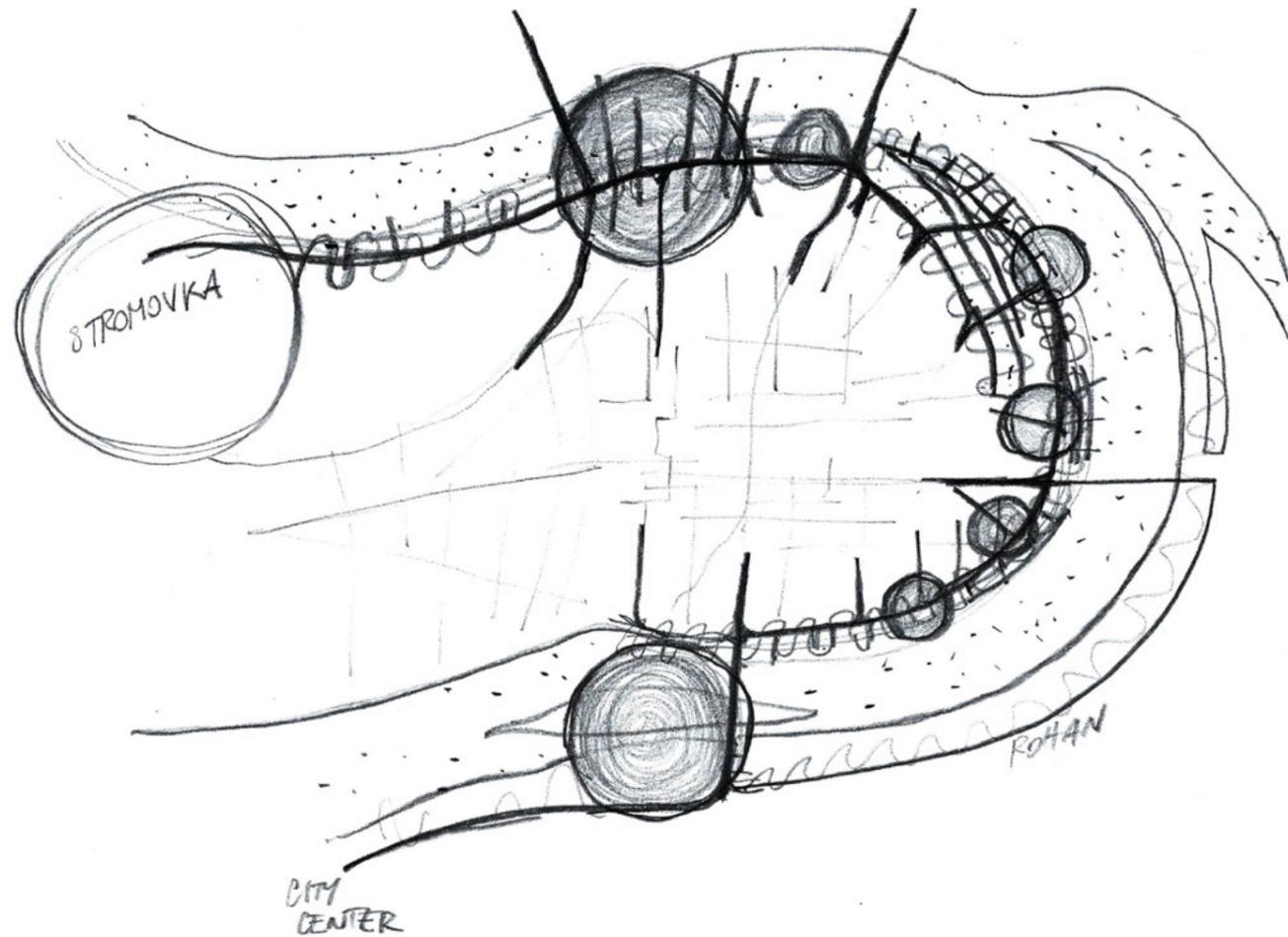
2012 CMC ARCHITECTS

The last concept is designed by CMC ATELIER in 2012. The concept has a wider vision for the connection in the city, where is clearly visible the reconnection of the entire district and the attempt to link the green spaces all around. Instead of a big central park, the project has four/five green internal courtyards scattered in the urban fabric enclosed by the massive urban blocks. These small green areas are connected each other creating a green path from North to South. In fact the masterplan gives importance to the green river front in the North side as main green and recreational area. Indeed this area has many potential as part of a possible development of the entire river bank, which could become the main attraction in Holešovice .

The program is vague, there are mostly residential and administrative blocks mixed together, and few building for commercial and the rest for the transportation system. The size of the blocks is dubious, it is not clear how they could appeal. Will they have courtyards as the previous projects?

This project lacks the details, however the conceptual idea is the precursor of another possible vision for Holešovice focused on the riverfront reclamation.

DEVELOPMENT POTENTIAL



Nowadays Holešovice is having sporadic changes from the social and architectural point of view, in fact the district is becoming more attractive for foreigners, young people, and families and it is focusing on leisure time, entertainment, and culture. These changings raise the people's desire to live in a lively neighborhood close to the city center. Thus there is an increasing demand for housing thanks to the many opportunities that the district gives. It is stated that there are enough requirements for a successful urban development of the area. But how is this development coordinated? At first sight the large area of Bubny could be starting point of the revitalization plan, could this space become the new center of gravity of Holešovice without losing the characteristics of the district? Are there other

possible visions for the future of the whole area? One of the privileged place of Holešovice is the river bank, that could become the belt of reconnection of the urban tissue and it could generate many new centers of gravity of the city life. Could the redevelopment plan starts to unify and focus more on this part of the meander and subsequently to develop the internal area which has less opportunity and more problems to solve. Today the river bank started to be constructed from private agencies that think only about profits and do not consider about a wide vision for the city reconnection and social equity. The riverbank has the opportunity to become the new face of the city, a development strategy that has already been used by many European and non-European cities.

SWOT analysis

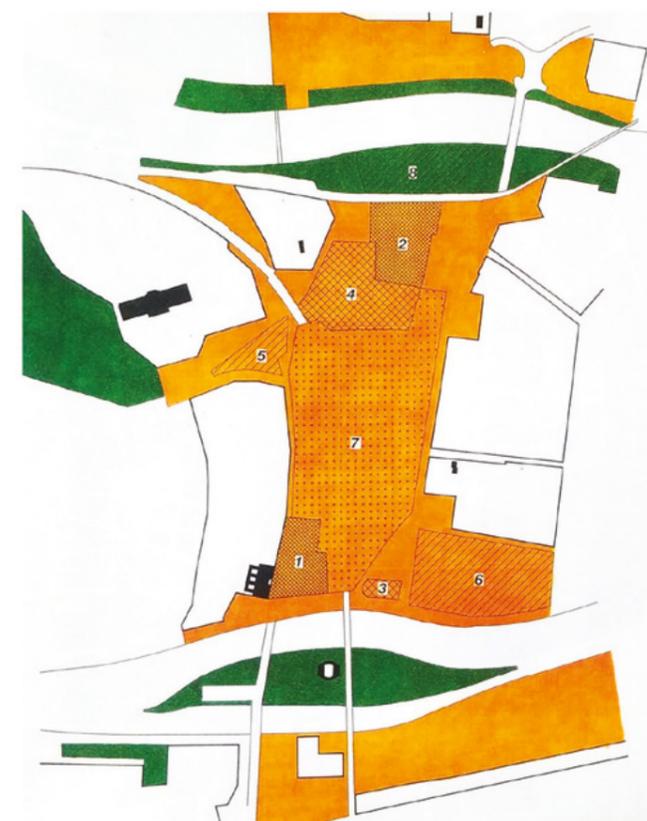
- Important connection node
- Entrance to prague from north
- North - South connection
- Visual connection to the center and to the castle
- Area close to city center
- Big green areas
- Cultural activities
- Many transportation facilities
- To keep the urban pattern for the connection west - east

- Difficult to orient in the area
- Area not suitable for pedestrian
- Transportation nodes are not point of interest and attractiveness
- Vltava river disconnects the area with the other districts
- Height differences along the river
- The transportation modes are not integrated between each other
- Lack of connectivity between green areas

SWOT

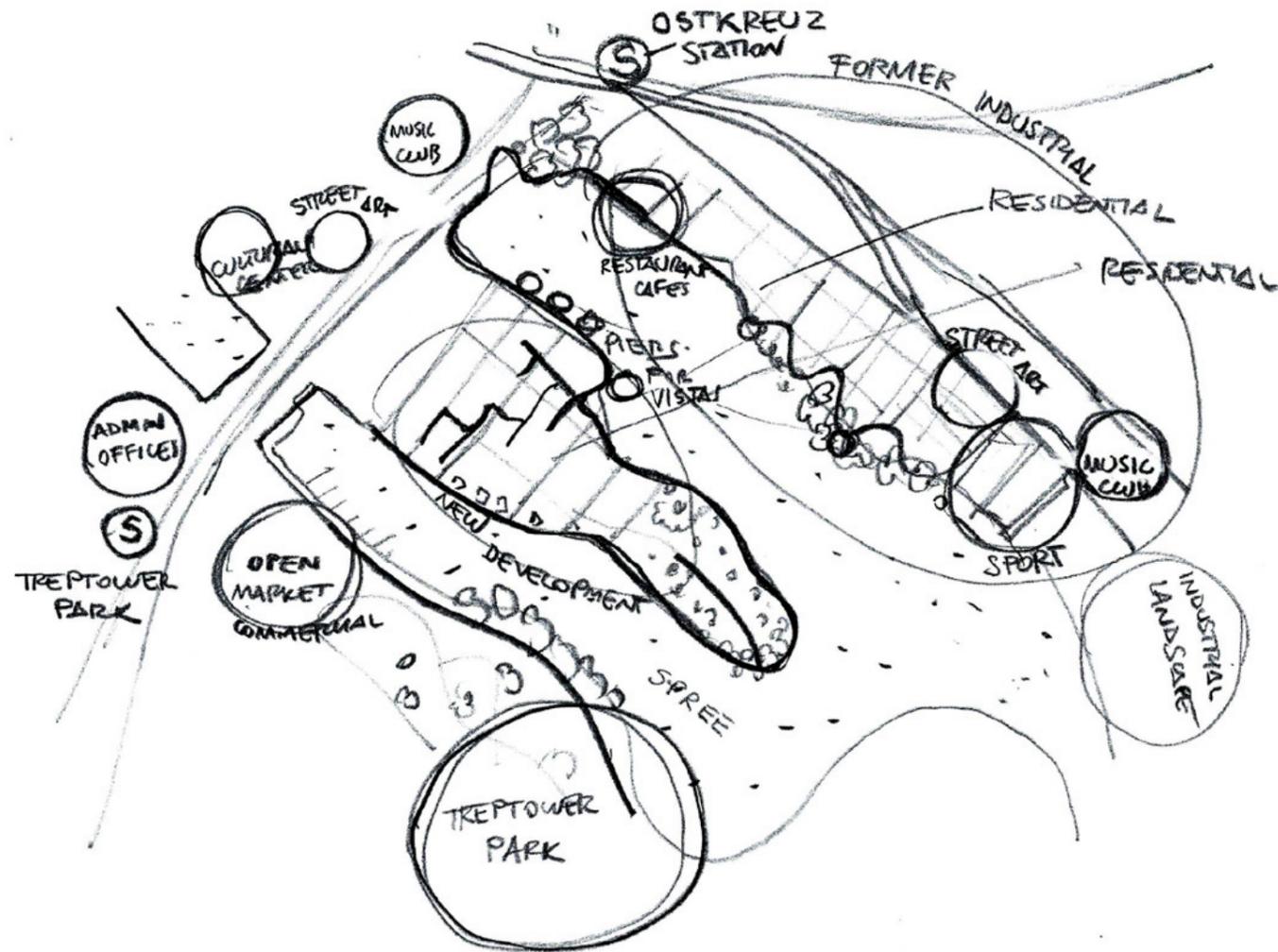
- Recreational river front
- New transportation connection Prague - airport
- New high speed trains
- Existing tunnel plan: less traffic in Argentiska street
- Gentrification of the area
- Existing cultural activities network
- Connection with the city center
- Many attraction for multiple users

- Existing development in prague
- Marina for close to public
- To lose the industrial identity (genius loci) of the area
- Lack of green connections
- To lose the local scale
- Floods



BRA ARCHITECTS 1994

Berlin riverfront reference

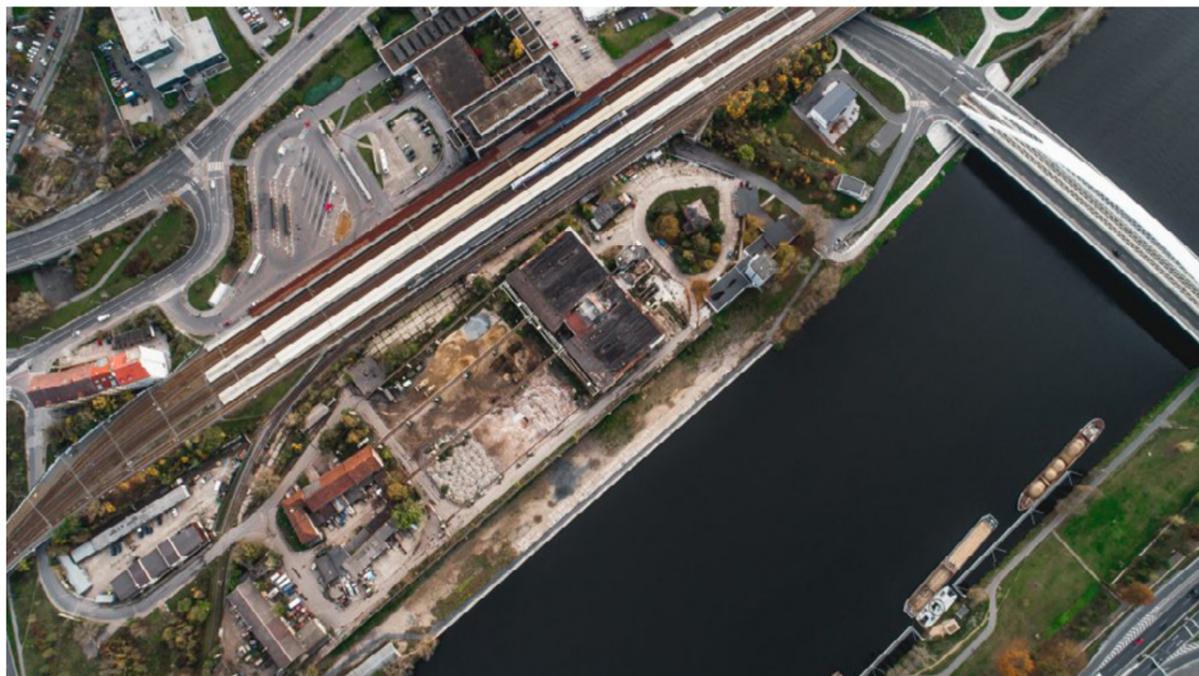


The riverfront in Rummelsburg district in Berlin reconnects through a meander the newly redeveloped area with Treptower Park. This former industrial area has been turned into a very pleasant neighborhood for dwelling, recreations, and working. The redevelopments has the perfect balance between the past industrial character and newly built urban fabric. The journey offers multiple atmospheres and beautiful views with the right combination between nature and built up

environment. The activities offered are many and spread all the way, the public spaces are always in harmony with the private areas as private gardens and housing entrances. All the riverfront is well coordinated with the transportation system, that means that in any places it is easy to orient and find the nearest transportation mode. Prague has similar or stronger opportunities to develop a similar green belt along the former industrial riverfront of Holešovice.



PROJECT AREA DECISION



The decision for developing a project in this area has been taken based on the previous analyses on Holešovice, which highlighted the multiple opportunities for a successful urban development. The NHR locality, for its position, has the possibility to become a new center of gravity for Holešovice and the city. It could become the leading and initiator project for the entire riverbank reclamation, since it is the most desirable and wider area of the waterfront. The project should characterize and find a clear identity for this part of the riverfront which is both the beginning and the end of the pedestrian connection that will skirt the riverbanks. The locality's unique location nearby the Holešovice station makes the area highly attractive for the many and fast connection possibilities within the city, at national and international level.

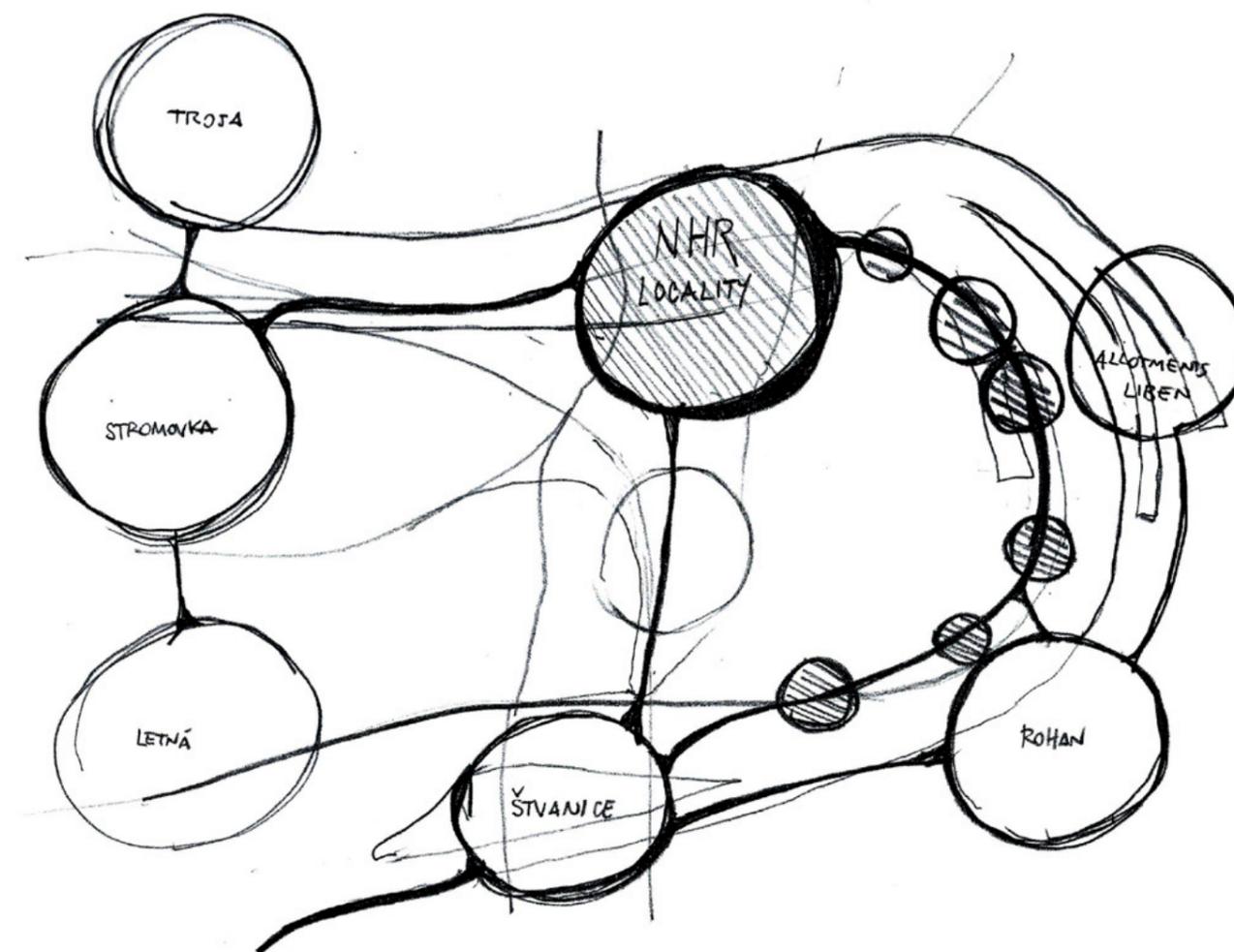
The main goal is to transform the current inaccessible area into a new viable bank where citizens and

visitors can enjoy the riverfront day and night, and in all seasons.

High quality of living must be provided, with powerful public spaces that function as common spaces for the residents, workers and visitors. The design for the area should provide a distinctive atmosphere where interactions between people are encouraged to achieve social equity.

The transformation aimed at safeguarding social relationships, the provision of recreational areas, and the promotion of more environmentally friendly lifestyles.

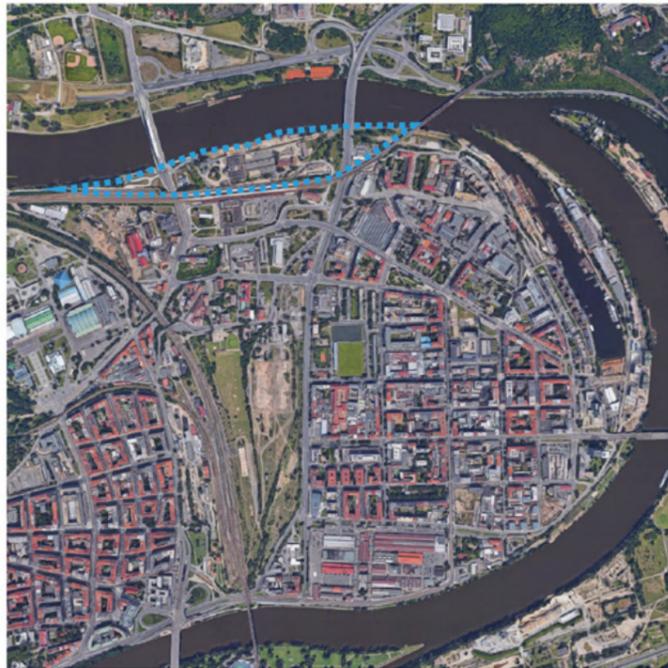
The focus on all aspects of the inhabitants' daily life is significant, offering alternatives for mobility, leisure, working, living and consumption. Moreover the project has the potential to become a component of an existing network of the cultural activities within Holešovice.



2 Analysis

Holešovice riverfront (project area)

LOCATION IN HOLEŠOVICE



The currently inaccessible NHR LOCALITY in the northern part of the city district of Holešovice, with an area of around 7.5 hectares, is on one side cut off by the river and by the transport infrastructure. It is adjacent to one of the largest development zones in Prague – Bubny/Zátory. In the context of the existing zoning plan it is categorized as a green area, which ruled out development or modification of the existing grounds of the former prefabricated panel plant. It was in this place that panels were produced for the apartment block developments in the north and east of Prague. Today production has ceased and the grounds have fallen into disrepair. The genius loci and development potential of the area carry a great challenge, though. Fragments of its history may become constituent elements of the place without it becoming a lifeless theme park, but on the contrary a viable part of the city.



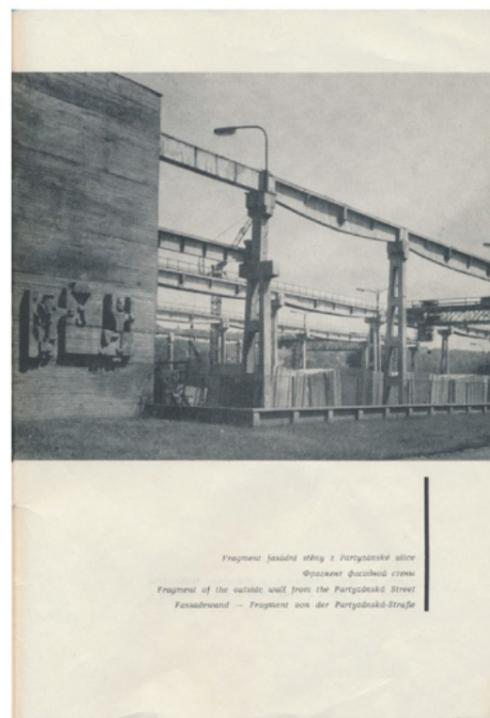
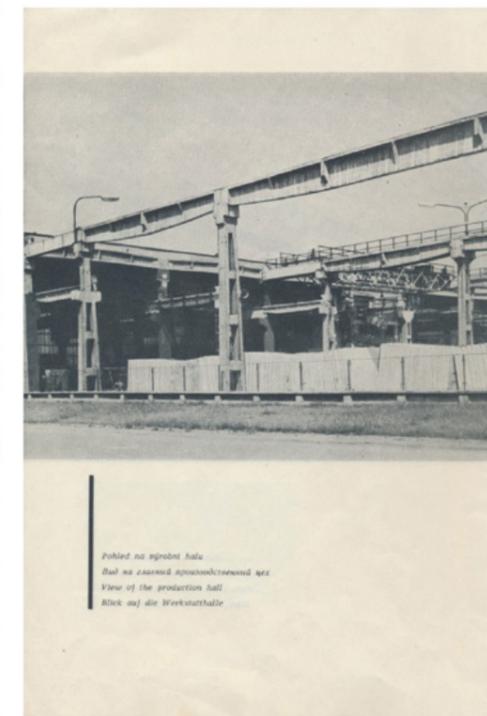
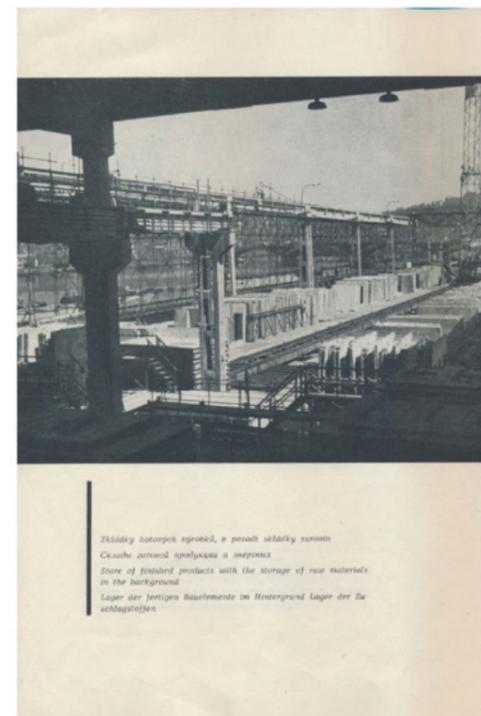
HISTORY

In the years 1959-61, on the site of the former village, Prefa Holešovice panel factory was established. The panel factory communicated to the rest of the surrounding area. The trail of the original street and several objects that were part of the panel factory were preserved. Nevertheless, Prefa brought a completely new benchmark to the site.

Until then, the Prague construction was dependent on the panel house in Toušeni. For the planned construction of housing estates in the north and east of Prague, this solution was not very effective. By construction of a new panel house, 5,000 crowns have been saved on one housing unit. The general designer of the panel was the Keramoprojekt, which provided the projection activity of the production plants for building materials for the whole of Czechoslovakia.

In 1965, a reconstruction project was prepared to increase the production capacity and, above all, to build new premises for administration and social facilities, the so-called SAC building.

After almost thirty years of operation, the panel office was included in the privatization process as a result of another political exchange. The owner of the premises became the German company Wolf Prefa sro in 1994. In 1999, a new land-use plan came into force, which included the area of greenery. By this classification the fate of the panel was more or less sealed. After the year 2008, when the economic crisis took place, Wolf Prefa sro started to lose its competition. Any modernization or reconstruction was not in line with the land-use plan, so the 2013 firm was forced to end production after a long 52 years.

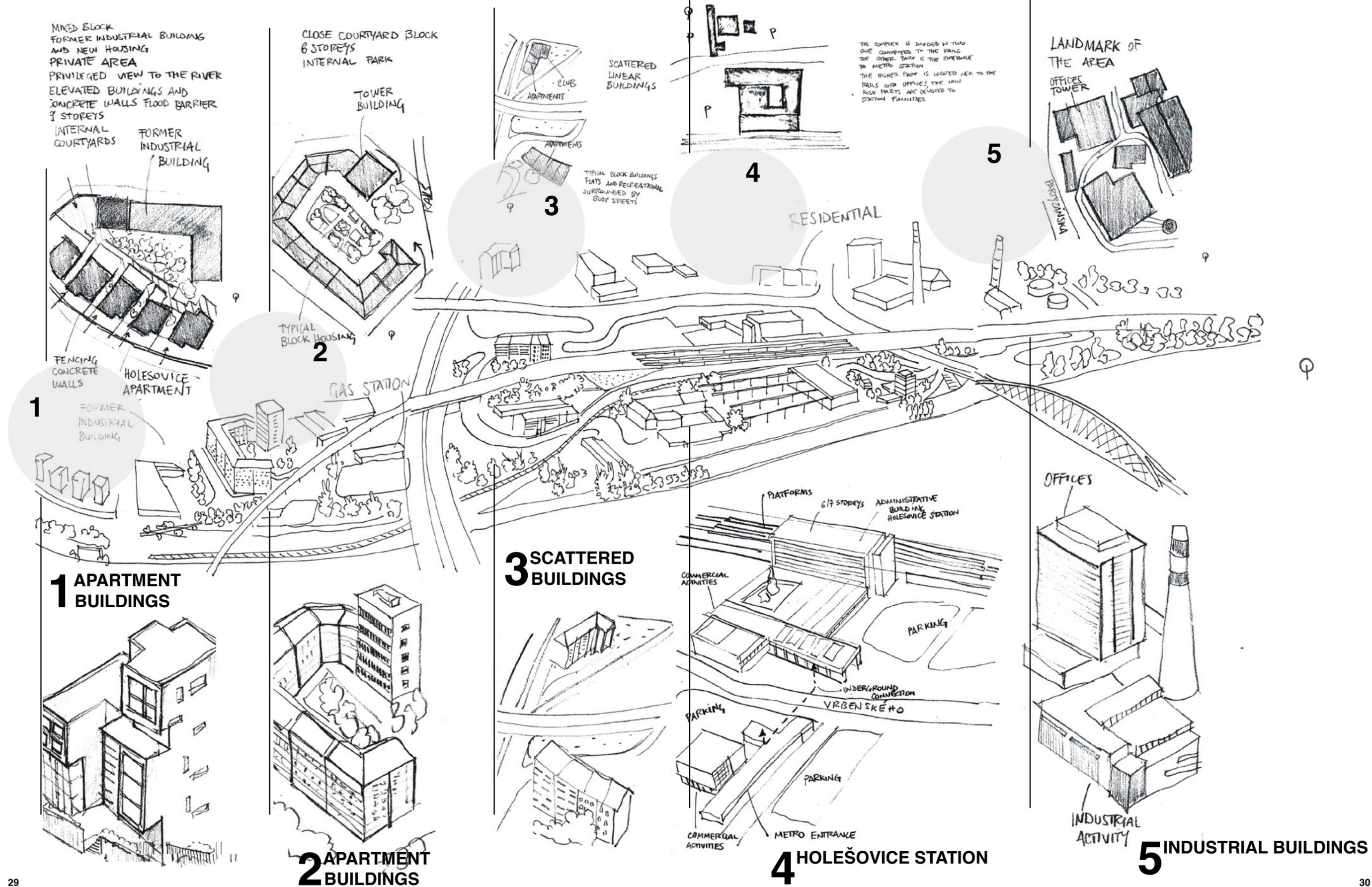


ORTHOPIHOTOMAP OF 1975 DEPICTING PANEL FACTORY BEFORE THE CONSTRUCTION OF RAILWAY



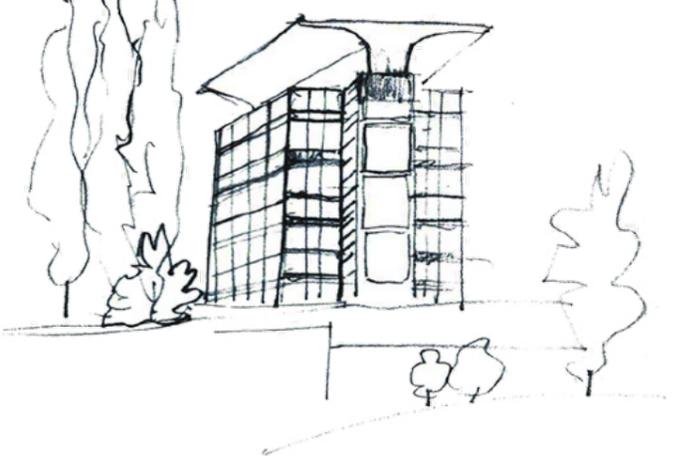
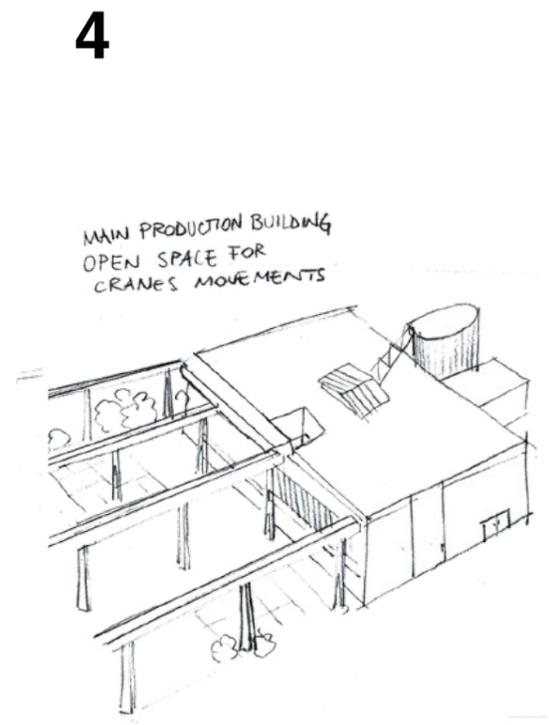
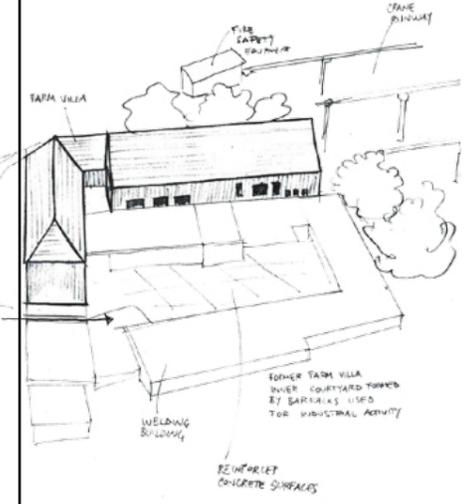
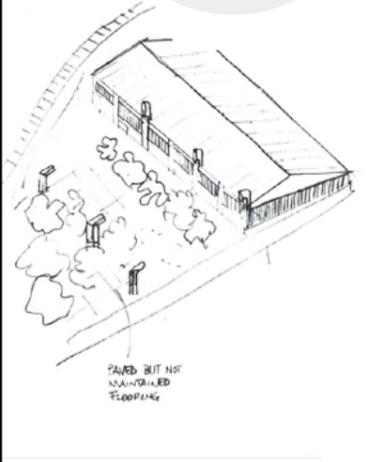
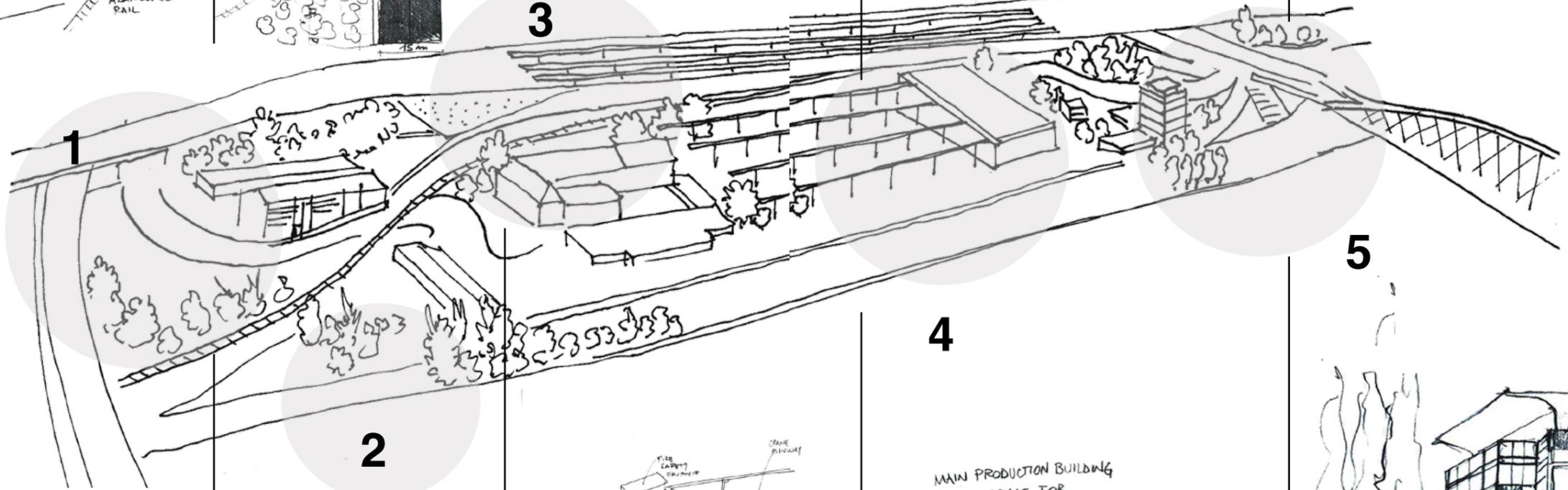
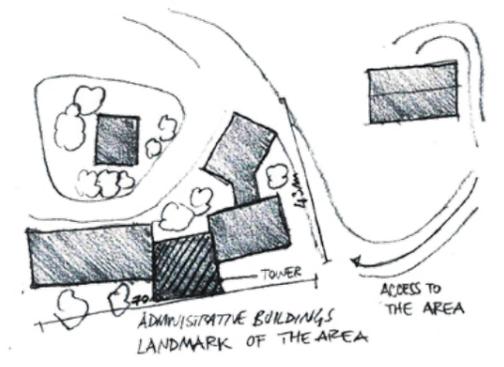
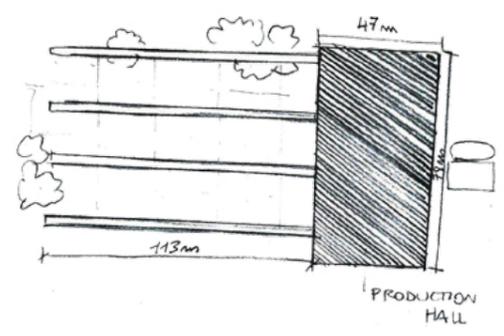
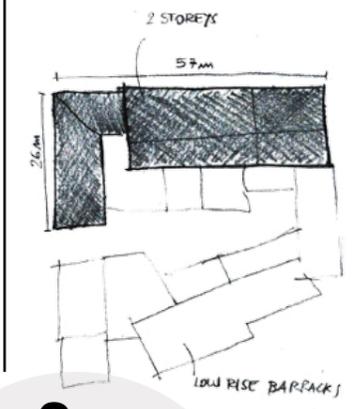
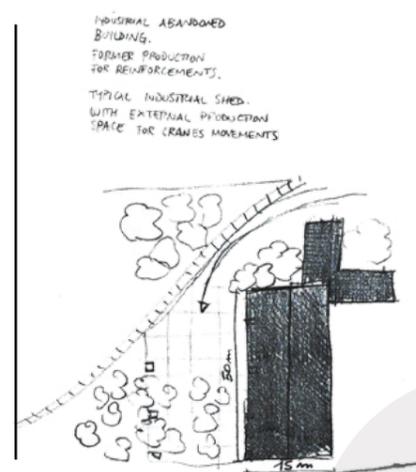
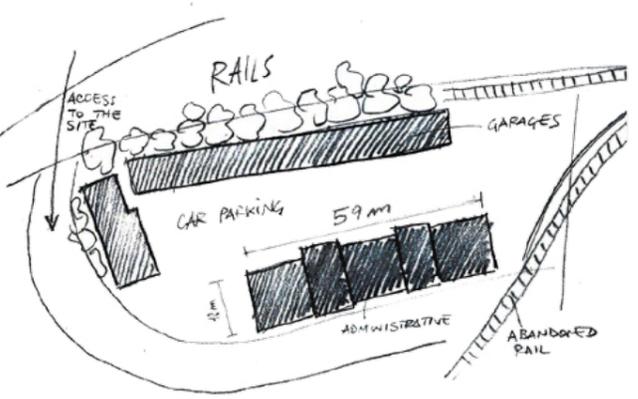
ORTHOPIHOTOMAP OF 1945 DEPICTING THE VILLAGE OF HOLEŠOVICE BEFORE DEMOLITION

BUILT ENVIRONMENT surrounding



BUILT ENVIRONMENT

Riverbank



1 ADMINISTRATIVE BUILDINGS

2 INDUSTRIAL BUILDING

3 FARM VILLA

4 INDUSTRIAL BUILDING

5 ADMINISTRATIVE BUILDINGS

NATURAL ENVIRONMENT & ACTIVITIES

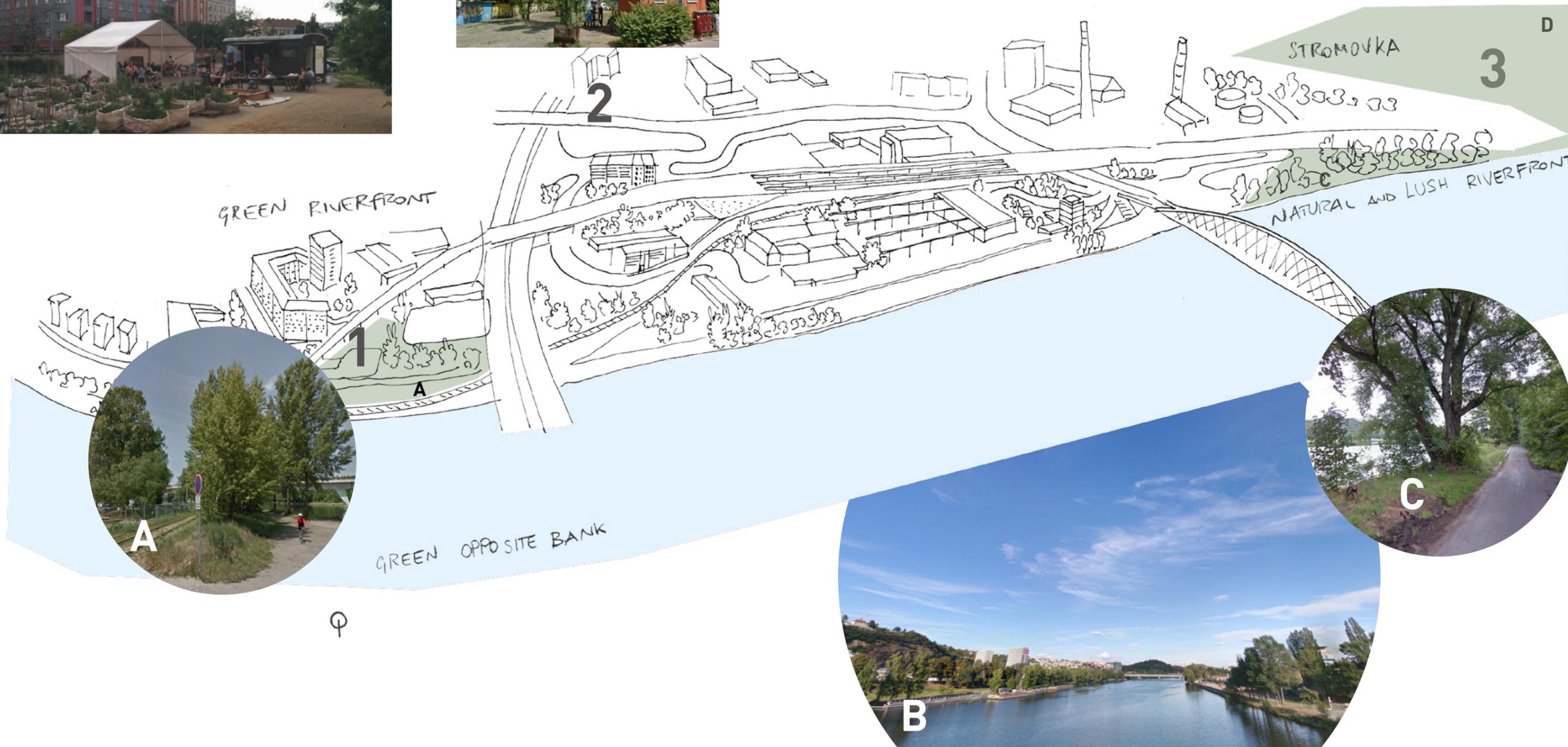
1 COMMUNITY GARDEN ALONG THE RIVERFRONT



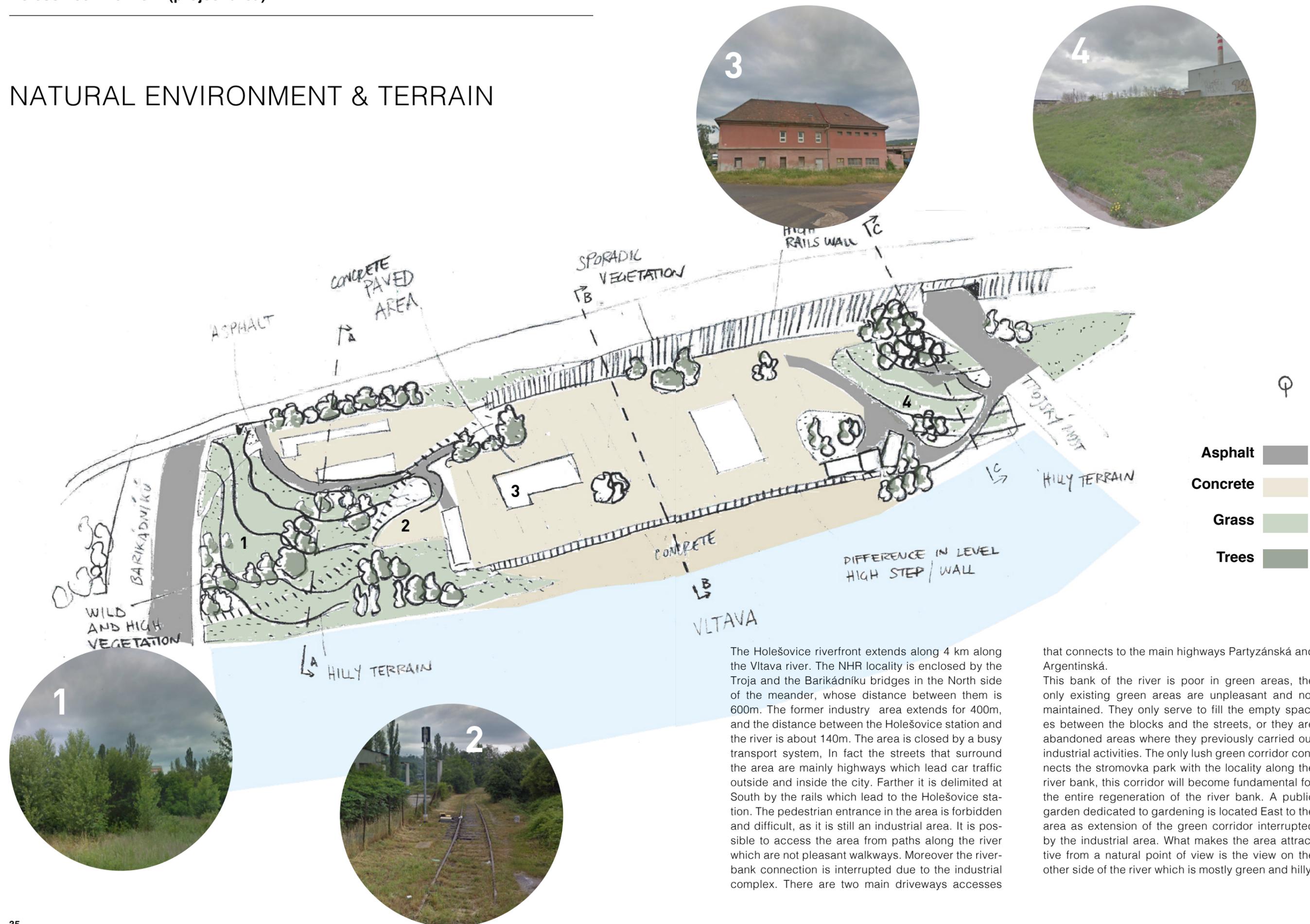
2 CULTURAL ACTIVITIES IN GARDEN COURTYARDS



3 CULTURAL ACTIVITIES IN STROMOVKA PARK



NATURAL ENVIRONMENT & TERRAIN

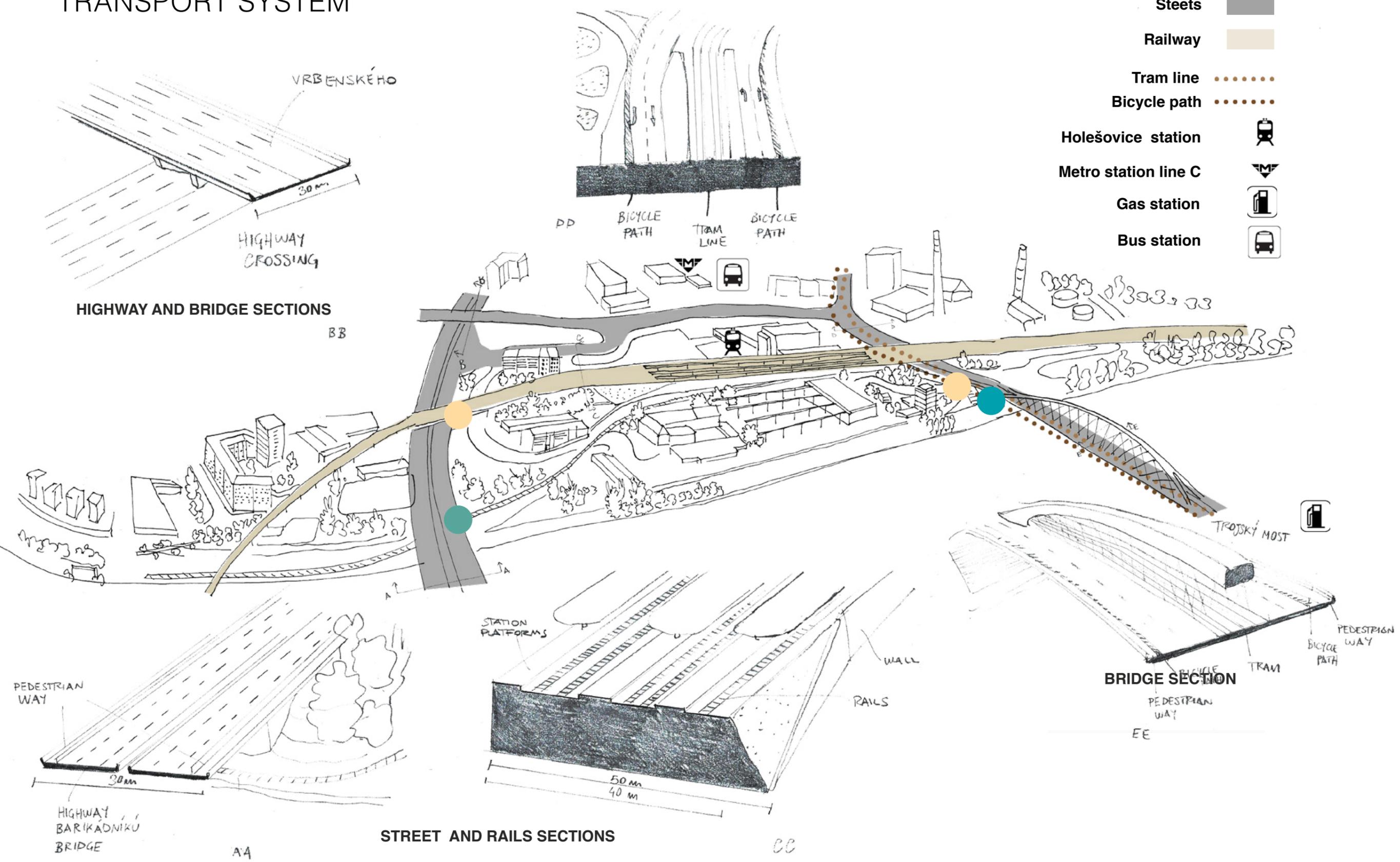


The Holešovice riverfront extends along 4 km along the Vltava river. The NHR locality is enclosed by the Troja and the Barikádníku bridges in the North side of the meander, whose distance between them is 600m. The former industry area extends for 400m, and the distance between the Holešovice station and the river is about 140m. The area is closed by a busy transport system, In fact the streets that surround the area are mainly highways which lead car traffic outside and inside the city. Farther it is delimited at South by the rails which lead to the Holešovice station. The pedestrian entrance in the area is forbidden and difficult, as it is still an industrial area. It is possible to access the area from paths along the river which are not pleasant walkways. Moreover the river-bank connection is interrupted due to the industrial complex. There are two main driveways accesses

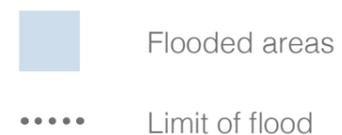
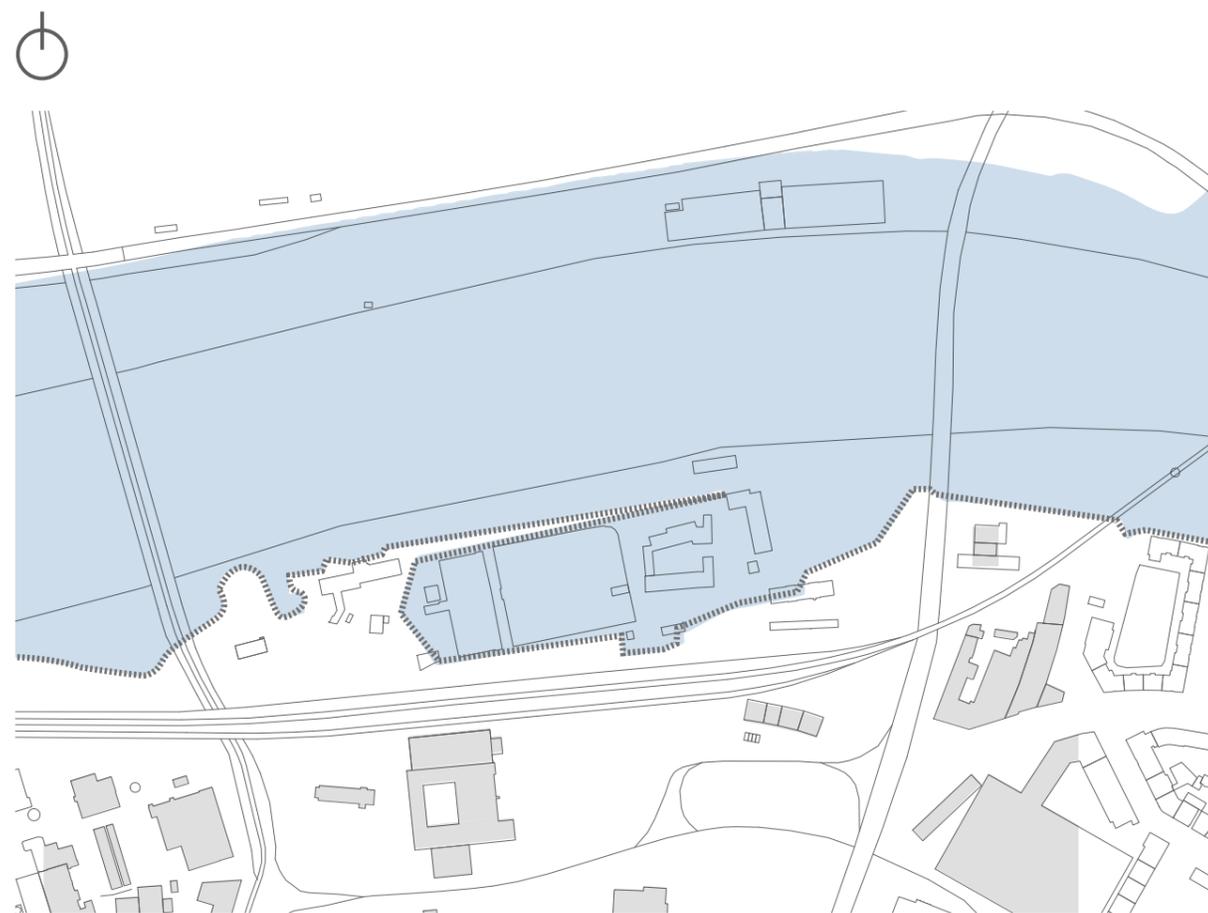
that connects to the main highways Partyzánská and Argentinská. This bank of the river is poor in green areas, the only existing green areas are unpleasant and not maintained. They only serve to fill the empty spaces between the blocks and the streets, or they are abandoned areas where they previously carried out industrial activities. The only lush green corridor connects the stromovka park with the locality along the river bank, this corridor will become fundamental for the entire regeneration of the river bank. A public garden dedicated to gardening is located East to the area as extension of the green corridor interrupted by the industrial area. What makes the area attractive from a natural point of view is the view on the other side of the river which is mostly green and hilly.

TRANSPORT SYSTEM

- Car access
- Pedestrian
- Streets
- Railway
- Tram line
- Bicycle path
- Holešovice station
- Metro station line C
- Gas station
- Bus station



FLOODING



In 2002, Prague experienced severe flooding with total damage of 24 billion CZK (1 billion euro). This event was recognized as one of the most expensive weather-related disaster in the history of the city with heavy damages on infrastructure, housing and environment. Future climate scenarios predict a change in the number and intensity of extreme events, inter alia, increasing the risk of river flooding.

Since the 2002 event, the implementation of flood control measures by Prague municipality substantially speeded up. The flood control system constructed in Prague consists mostly of grey infrastructure, such as fixed and mobile barriers and safety valves in the canalisation network along the Vltava River. The implemented adaptation measures were assessed using a cost benefit analysis which showed that the benefits are greater than the costs even if only one event with a return period of 50 years (Q50) is considered.

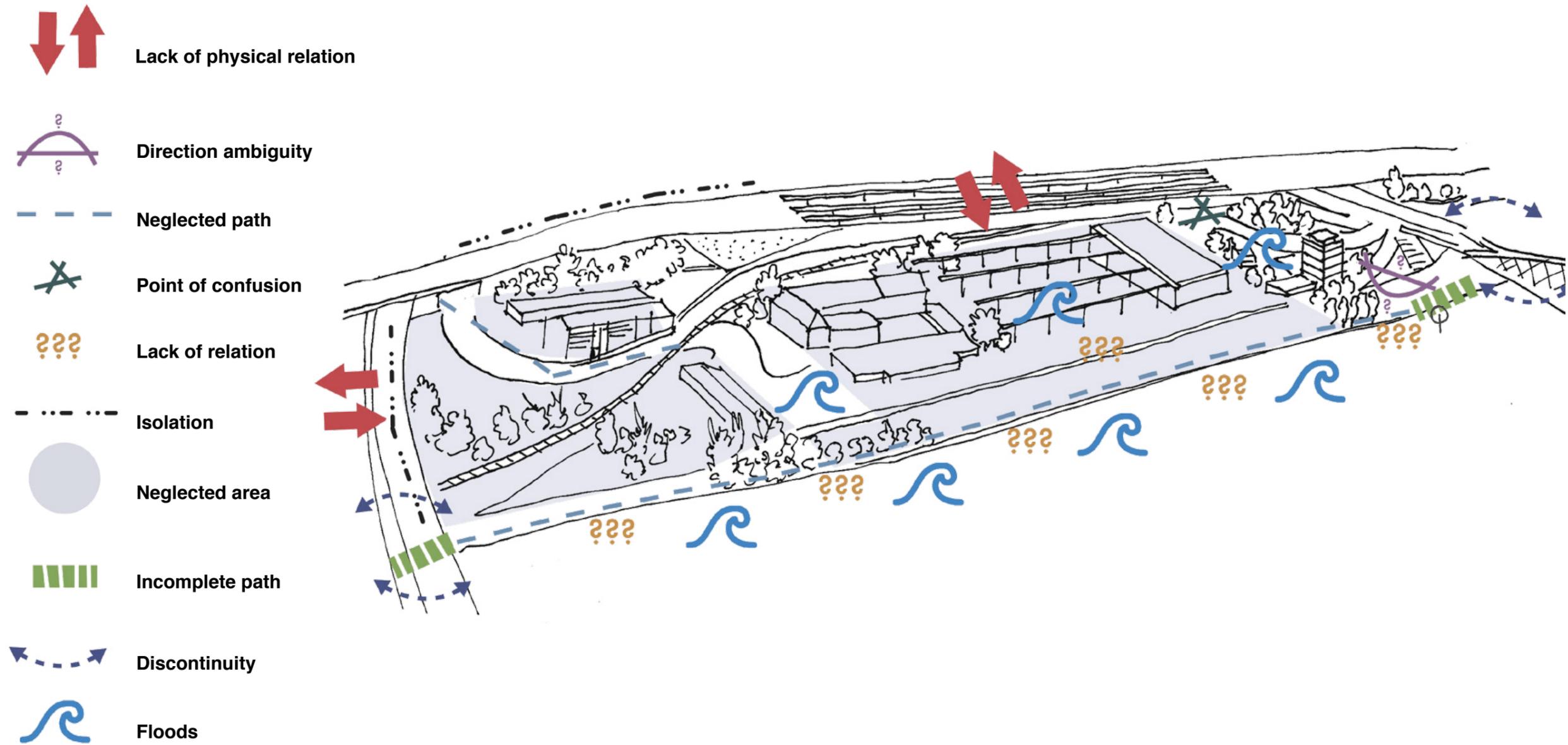
The 2002-flood substantially speeded up the development of a more resilient flood risk management system to protect the city of Prague. Although, at that time, the flood protection measures were not presented and named as climate change adaptation measures because climate change adaptation was not a topic issue on the political agenda, the identified measures aimed to increase resilience to flood risk, also in a climate change perspective. In particular, realised measures can cope with flooding events with a return period of 500-years, thus considerably increasing Prague resilience towards extremes events.

The flood protection system of Prague has been now finished and protects most parts of Prague from flood with 1 to 500 years return period.

Green infrastructure would serve as an additional support to the flood barriers and can be very useful for example to tackle flash floods caused by extreme precipitation.

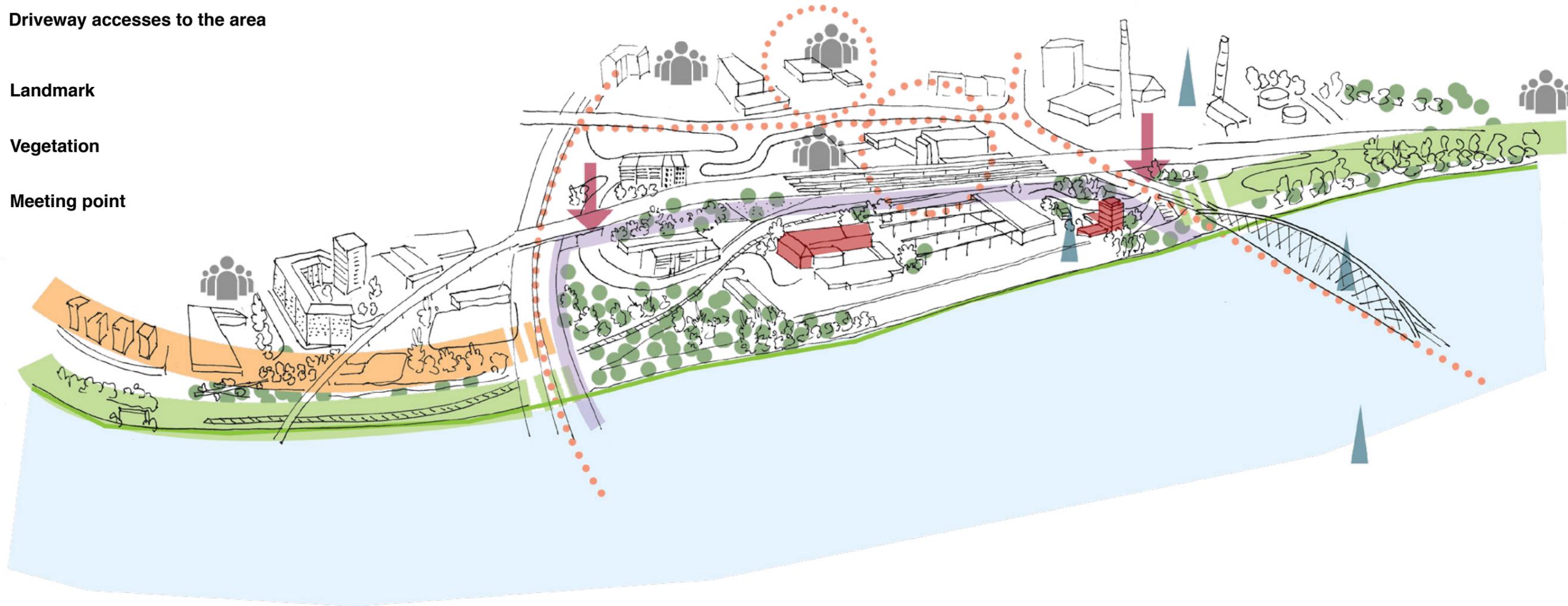
Source: climate-adapt.eea.europa.eu

PROBLEM MAP



MENTAL MAP

- Riverfront reconnection
- Housing development
- Barriers
- Historical buildings
- Transport mode, station position
- Driveway accesses to the area
- Landmark
- Vegetation
- Meeting point



SWOT analysis

- Important connection node
- Entrance to prague from north
- East- west riverbank connection
- Big green areas stromovka park
- Many transportation facilities (Nádraží Holešovice)
- Industrial construction (re-use)
- Cultural activities within Holešovice

- Difficult to enter and cross the area
- Fragmentation of the riverbank
- Transportation arteries isolate the area
- Lack of connectivity between green areas
- Transportation node (Nádraží Holešovice) is not point of interest and attractiveness
- Vltava river disconnected from Holešovice

SWOT

- Recreational river front
- To enhance the network of cultural activities
- Gentrification of Holešovice
- (Nádraží Holešovice) position
- New transportation connection Prague - airport
- New high speed trains
- Many attraction for multiple users nearby
- Connection with the city center

- Existing development in prague marina for
- Private areas on the riverfront
- To lose the industrial identity (genius loci) of the area
- Lack of green connections
- Floods

3 Vision & Goal

KEY WORDS

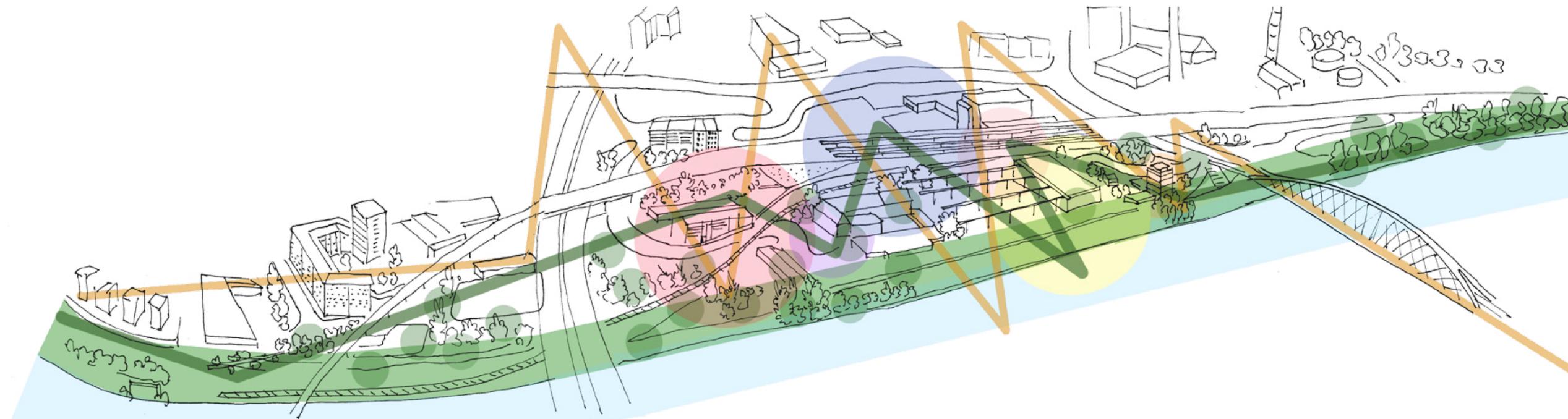
- Sustainability
- Natural environment
- Flooding protection
- Connections

Vision

- A new lively cultural center on the riverfront for Holešovice and the city
- A new viable riverbank where citizens and visitors can enjoy the riverfront day and night in all seasons

Goal

- To re-establish the connectivity between the city and the river
- To promote environmental justice
- To enhance the existing network of cultural and recreational activities of Holešovice
- To integrate the riverfront creating destination for multiple purposes



Working



Sports



Relax



Music and dancing



Education



Water activity



Shopping



Cafes, restaurant



Tourism



Art



Living



Gardening

4 Scenarios

The proposal should follow a certain program and fundamental conditions, further it must integrate with the urban organism as a whole. The clarity of the overall objectives allows a good degree of flexibility in the project, ensuring recognition and identity for the area. Two exploitation approaches can be used:

MAXIMUM EXPLOITATION PROGRAM

One approach is to benefit from the area to the maximum to combine multiple functions as possible, creating a compact but powerful environment, that varies from the architectural and functional point of view. The uses proposed are administrative, commercial, residential, sport activities, cultural and recreational. Where the buildings will be built alternated with driveways, open spaces, squares, public gardens, bicycle and pedestrian paths. The disposition of these functions should be based on objective decisions to maximize the area's strengths. The decision to place housing in the area will follow the existing development of residential buildings alongside the river bank, however the residential complex will be combined and mixed with public functions to enhance interactions between the community and the visitors.

The residential buildings should have a privileged position overlooking the river, however the spaces on the river bank must give priority to public functions as recreational or sports activities. The administrative complex could benefit from the Holešovice station position to encourage the commuting movement through the public transport. Therefore the office building should be designed as much as possible near the station for a direct connection between them. The commercial functions will be scattered all over the area on the first and second floor of each building, with more concentration in the administrative building. With commercial functions are intended grocery store, pharmacies, cafes, restaurants, and retail shops...

Each cultural, sport and recreational activities will have a given building, which will be open to the public and con-

nected with the surrounding buildings. These buildings will be located between the residential ones, to create a homogeneous ensemble of functions and to provide different activities for each kind.

One museum, art galleries, ateliers/workshops and internal and external exposition spaces, will form the cultural building, which will have a certain importance in the area. The sport activities will have a given building where internal and external sport fields, a gym, and a spa will take place, the river will have a fundamental role for sport activities. Recreational activities will vary according to ages;

Bar and clubs will have open spaces with views on the river, some of existing industrial buildings could be maintained and given to young people for street art and music clubs. However all the public spaces will have a main role as recreational areas, in fact the public spaces will link all the activities described and will be the meeting point for the people. A main square should be the center of internal connections, which will be located on the main driveway of the area between the administrative building and the buildings closer to the river. A park could stand between the buildings and the river to give maximum opening on the river view.

Pedestrian and bicycle paths will be the main recreational attraction because they will connect the area with all the river bank. There will be a main path located directly on the river shore and others for the internal communication between the buildings. Users will be able to choose whether to walk along the river or to go into the built environment and participate in the activities that the area offers.

This approach gives more attention to built environment, as an extension of the urban fabric of Holešovice and as a crowning for the new development project of Bubny. It may be seem a plan too articulated for an area that is not too extensive, moreover the development plans already provide many of these functions for Bubny area and reclaim the NHR locality as a free green area focused mainly on recreation.

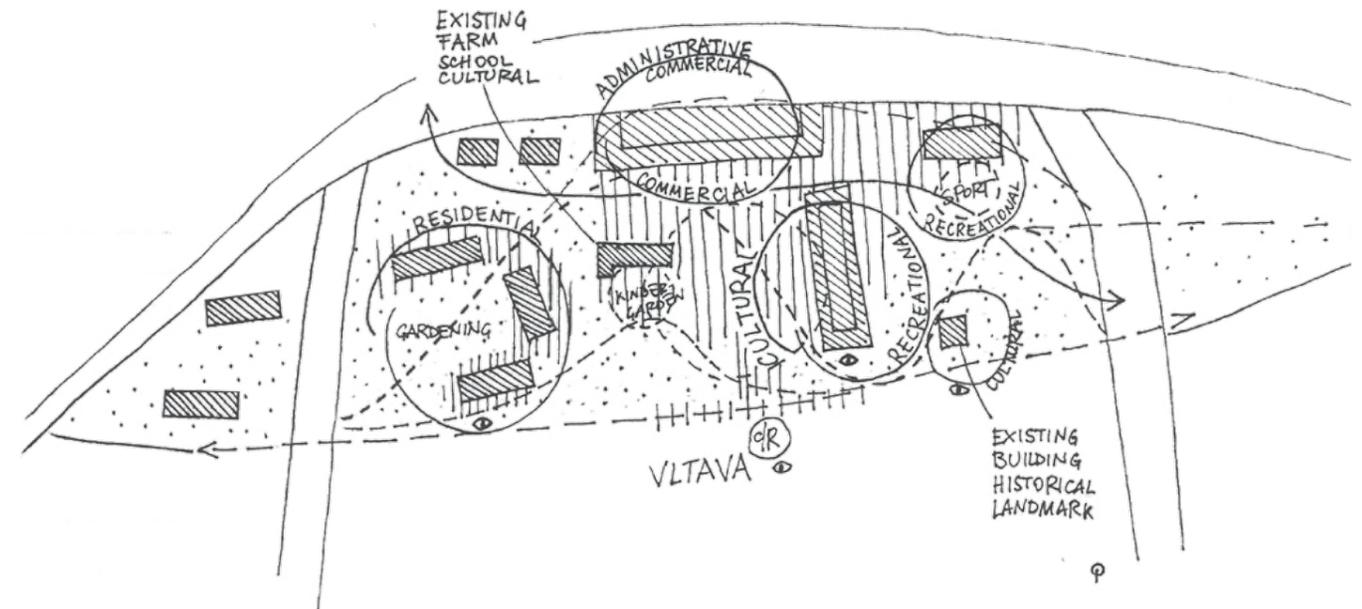
- RESIDENTIAL:**
- FAMILY HOUSE/FLATS
 - STUDENT FLATS
 - BED AND BREAKFAST

- ADMINISTRATIVE:**
- OFFICES
 - CONFERENCE HALL
 - CANTINE

- COMMERCIAL:**
- GROCERY STORE
 - PHARMACY
 - RETAIL STORE
 - RESTAURANT
 - CAFE

- CULTURAL:**
- ART GALLERY
 - MUSEUM
 - THEATRE
 - ATELIER

- RECREATIONAL:**
- PUBS
 - MUSIC CLUBS
 - POLIFUNCTIONAL SPACES
 - GARDENING
 - PARK ACTIVITIES
 - SPORT INDOOR
 - SPORT OUTDOOR



- PARK
- BUILDINGS
- PAVED AREAS
- PEDESTRIAN PATH
- SQUARE
- ⓐ CRUCIAL OBSERVATION POINT
- ⓐ CJR PAVILION
- ⓐ NEW LANDMARK LIGHT BUILDING SURROUNDED BY GREEN
- ⓐ SEMI-OPEN BUILDING ELEMENT IN THE LANDSCAPE

- FUNCTIONS

- RESIDENTIAL • • •
- ADMINISTRATIVE • • •
- COMMERCIAL • • •
- CULTURAL • • •
- RECREATIONAL • • •

- PUBLIC SPACES

- SQUARES • • • •
- PARK • • • •
- RIVER BANK • • • •

- NATURAL ENVIRONMENT

- EXISTING GREEN • • •
- NEW GREEN • •

- ECONOMY

- TOTAL INITIAL PROJECT COST • • • •
- OPERATING EXPENCE • • •
- RETURN ON INVESTMENT • • • • •

- BUILT ENVIRONMENT

- EXISTING BUILDINGS • •
- NEW BUILDINGS • • • •

A NEW CULTURAL NEIGHBORHOOD



RESIDENTIAL AREA

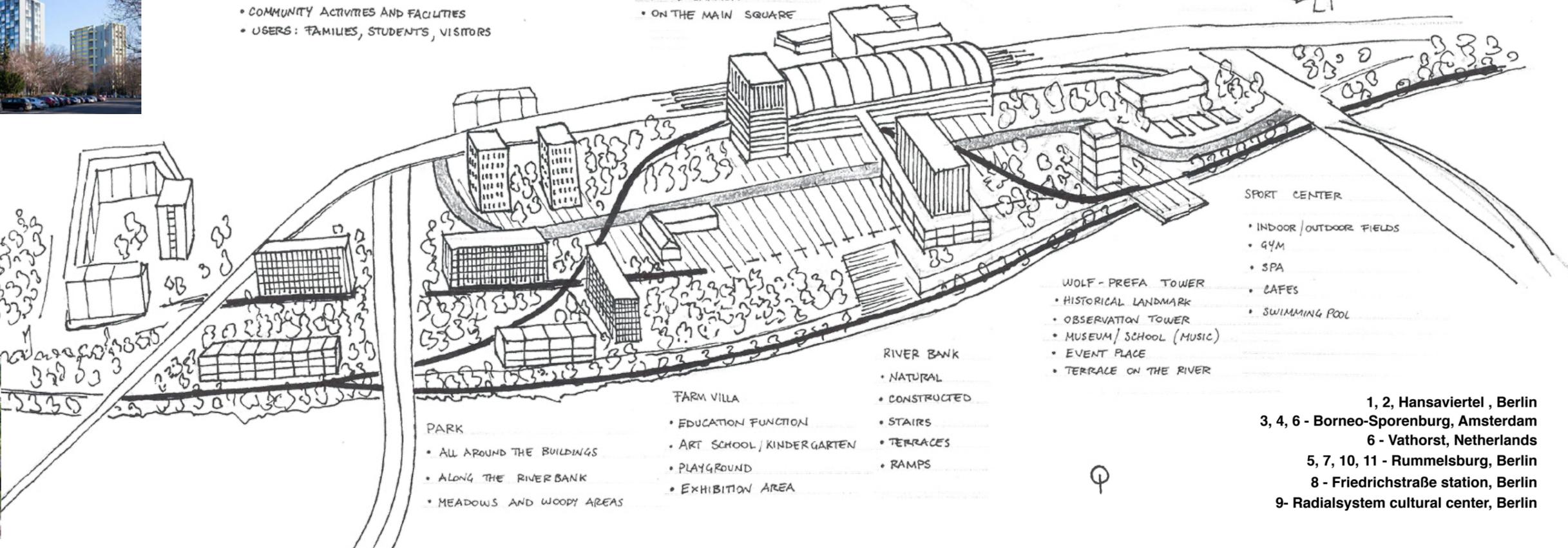
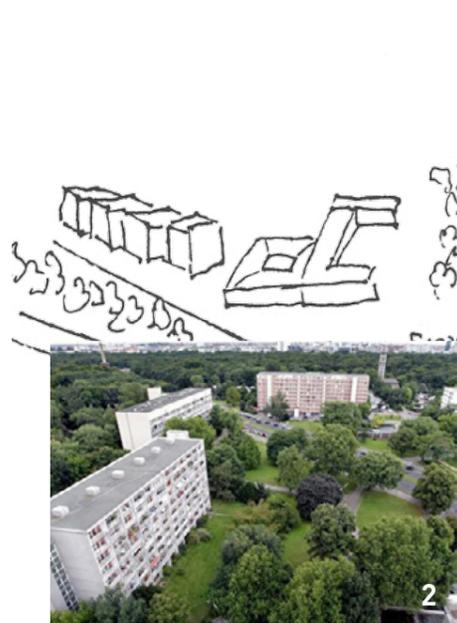
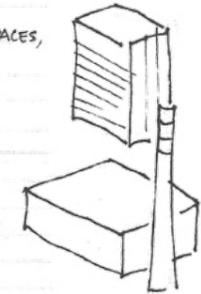
- EXTENSION OF RESIDENTIAL FABRIC
- OPEN COMPOSITION (LINEAR, TOWER)
- SURROUNDED BY GREEN
- PRIVILEGED POSITION ON THE RIVER BANK
- GROUND FLOOR COMMERCIAL
- COMMUNITY ACTIVITIES AND FACILITIES
- USERS: FAMILIES, STUDENTS, VISITORS

COMMERCIAL AND ADMINISTRATIVE BUILDING

- EXTENSION OF THE STATION
- OFFICE TOWER
- COMMERCIAL ACTIVITIES UNDER THE RAIL LEVEL
- UNDERPASS / OVERPASS
- RAILS COVERING
- CONNECTION BUILDING
- NEW REPRESENTATIVE BUILDING OF TRANSPORT SYSTEM
- ENHANCE COMMUTING
- NOISE BARRIER
- ON THE MAIN SQUARE

CULTURAL AND RECREATIONAL CENTER

- PRIVILEGED POSITION ON THE RIVER BANK
- ART GALLERIES, ATELIERS, POLIFUNCTIONAL SPACES, CAFES, RESTAURANT, CLUBS, PUBS, SHOPS
- POSITION ON THE MAIN SQUARE
- TERRACES
- CONNECTION WITH COMMERCIAL BUILDING



- 1, 2 - Hansaviertel, Berlin
- 3, 4, 6 - Borneo-Sporenburg, Amsterdam
- 6 - Vathorst, Netherlands
- 5, 7, 10, 11 - Rummelsburg, Berlin
- 8 - Friedrichstraße station, Berlin
- 9 - Radialsystem cultural center, Berlin



MINIMUM EXPLOITATION PROGRAM

The second approach gives more importance to the natural environment that surrounds the locality and to a possible reclamation of the area with a minimum soil exploitation. The concept sees the area as an extension of Stromovka park, giving a sense of continuity of the natural environment. The area will focus on cultural, recreational and sports activities. Administrative and commercial functions will take place next to the station, to protect the area from train traffic and to enhance commuting. The rest of the area will be articulated with bicycle and pedestrian paths that will connect scattered pavillions or small buildings which will have a given recreational function. The vision is to revitalize the area as the first recreational center on the river bank, since Stromovka park is articulated as a vast forest not related with the river.

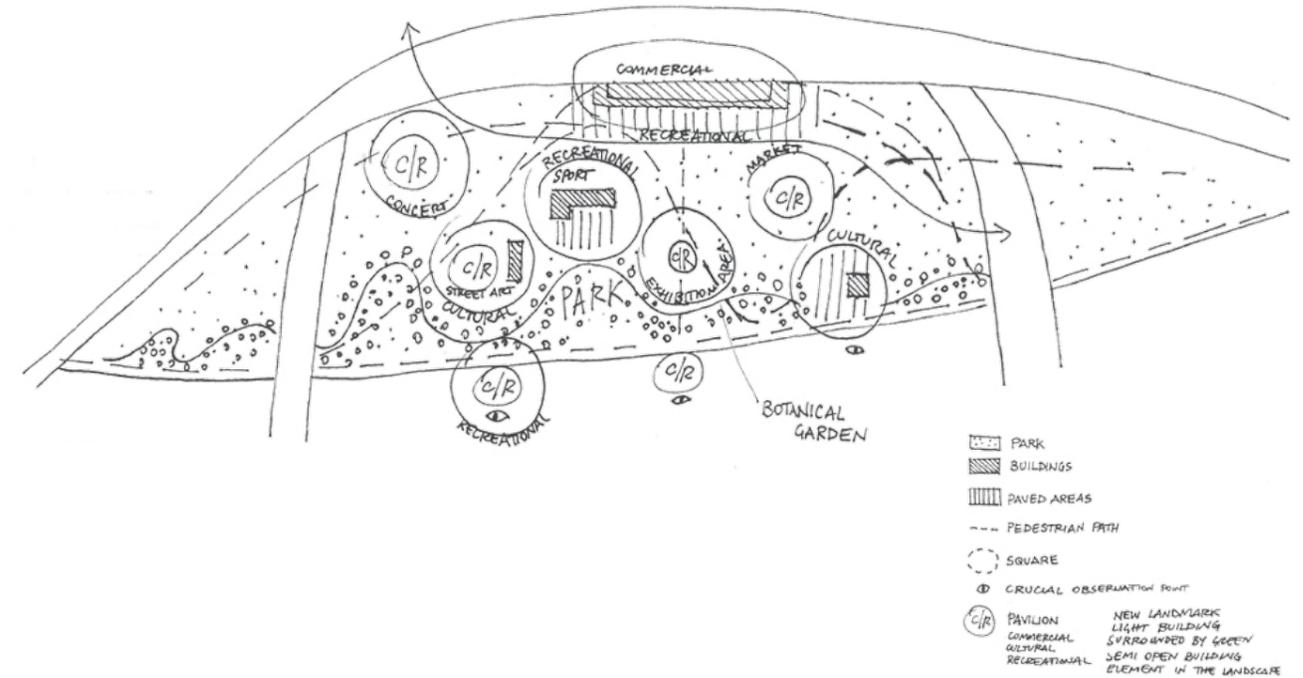
The primary goal is to provide a pleasant water front where people will enjoy to hang out and relax. The users will be primarily the inhabitants of the residential complexes in the East part of the river bank and the residents of all Holešovice including the future Bubny inhabitants. Even the area will be a new attraction of the entire city which will be visited by many foreigners, since it will become the beginning of the pedestrian promenade on the river bank. As recreational area it should attract people all day providing activities also during the night, due to the absence of residential complexes it could be the optimal position for pubs, bars, music clubs, and opens spaces for concerts; a new center for the night life. The spaces dedicated to these kind of activities could be located in between the river and the administrative complex trying to avoid that the area becomes desolate during the night. During the day the activities are related more to sport and culture. As stated before these activities will be located in pavillions scattered all over the green park. All these pavillions will be public accessible and connected through pedestrian paths. The external areas next to the

pavillions will have a certain importance for the activities, there will be placed external exposition areas or sport fields. Each pavillion will have services such as cafes and restaurants, to allow visitors to relax while enjoying the river view. The relation with the river is crucial, the design must include piers and green slopes for a direct contact with the water. Very important is to consider the threat of flooding, therefore the concept should always consider this threat for certain decision as position, shapes and relation with the ground for the designed environment and elements.

There are vantages and disadvantages in both choices. The first approach has the possibility to become very attractive from the architectural point of view, since the basic concept is to design a small village on the river bank, that will be a new part of the built environment. This approach could be a revival of the former village of the nineteenth century with a dense urban pattern along the river bank. However the area will loose the possibility to become a predominantly green area of the river bank. From the economical point of view, if the revitalization is successful there will be a long-term return on investment for the more possibility of sales and rentals in the area.

The second approach can become the most attractive recreational area of the meander, where nature and architecture harmoniously coexist. The area will become the cultural center of the river bank, full of live day and night for the multiple activities that the area will offer. The project should promote the development of a green belt along the river bank from Stromovka towards the city center. Obviously from the economical point of view the project is less lucrative, but it will give a more sustainable and free space to the citizens.

- COMMERCIAL:**
 - GROCERY STORE
 - PHARMACY
 - RETAIL STORE
 - RESTAURANT
 - CAFE
- CULTURAL:**
 - ART GALLERY
 - MUSEUM
 - THEATRE
 - ATELIER
 - CONCERT SPACE
- RECREATIONAL:**
 - PUBS
 - MUSIC CLUBS
 - POLIFUNCTIONAL SPACES
 - GARDENING
 - PARK ACTIVITIES
 - SPORT INDOOR
 - SPORT OUTDOOR
 - WATER ACTIVITIES
 - BOTANICAL GARDEN



- FUNCTIONS**
- RESIDENTIAL
 - ADMINISTRATIVE
 - COMMERCIAL
 - CULTURAL
 - RECREATIONAL

- PUBLIC SPACES**
- SQUARES
 - PARK
 - RIVER BANK

- NATURAL ENVIRONMENT**
- EXISTING GREEN
 - NEW GREEN

- ECONOMY**
- TOTAL INITIAL PROJECT COST
 - OPERATING EXPENCE
 - RETURN ON INVESTMENT

- BUILT ENVIRONMENT**
- EXISTING BUILDINGS
 - NEW BUILDINGS

A RECREATIONAL & CULTURAL PARK

BOTANICAL GARDEN

- ALONG THE RIVERBANK
- EDUCATIONAL PATH
- ENVIRONMENTAL JUSTICE
- IMPROVE THE CONNECTION WITH THE RIVER

ATTRACTION CENTERS/PAVILIONS

- OPEN MEADOW FOR BIG EVENTS
- OPEN PAVILIONS CULTURAL AND RECREATIONAL ACTIVITIES
- LANDMARKS TO IMPROVE ORIENTATION
- TO KEEP ELEMENTS FROM THE EXISTING LANDSCAPE
- EXHIBITION PLACES
- MARKET PLACES
- ART ACTIVITIES
- TERRACES AND WATER CONNECTION

FARM VILLA

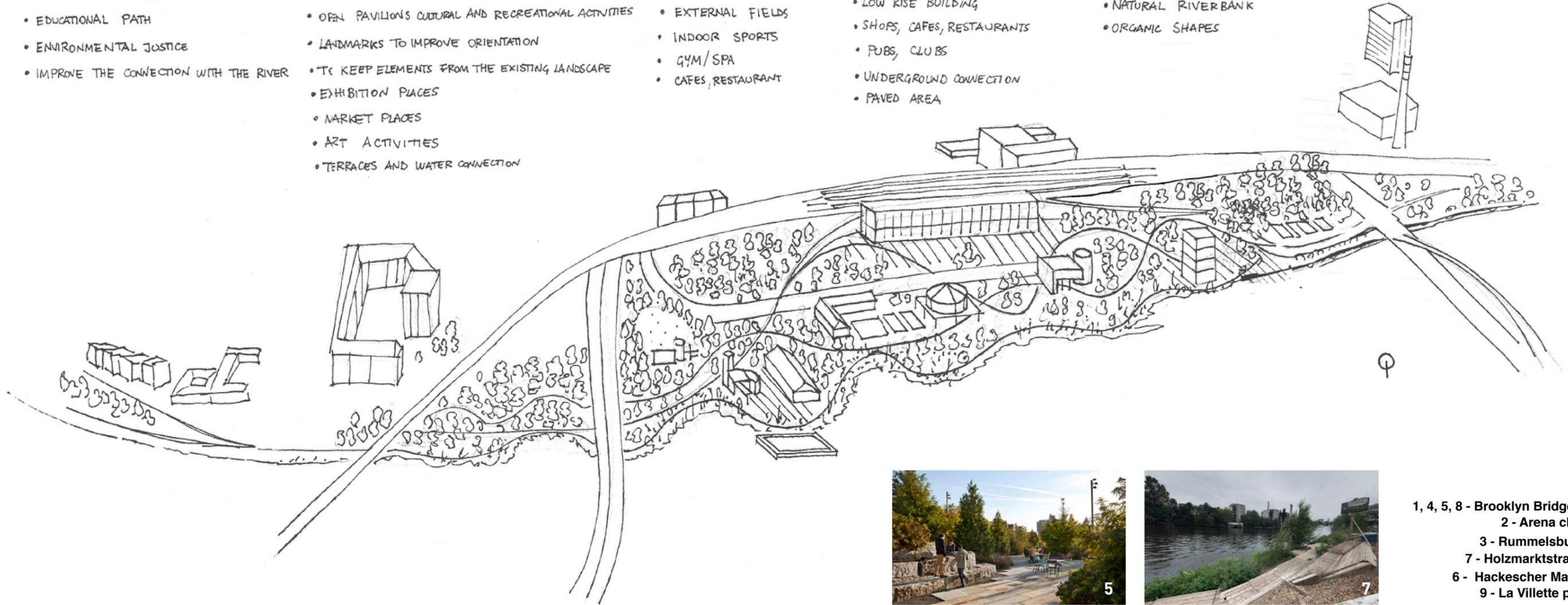
- SPORT ACTIVITIES
- EXTERNAL FIELDS
- INDOOR SPORTS
- GYM/SPA
- CAFES, RESTAURANT

COMMERCIAL AND RECREATION STATION

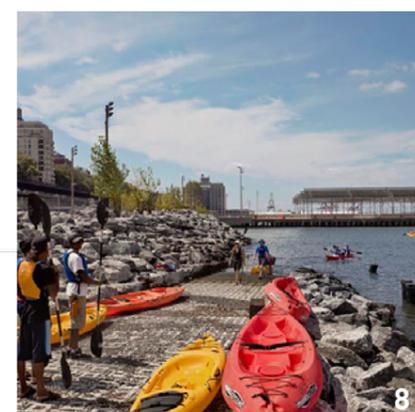
- LOW RISE BUILDING
- SHOPS, CAFES, RESTAURANTS
- PUBS, CLUBS
- UNDERGROUND CONNECTION
- PAVED AREA

PARK AND RIVERFRONT

- PREDOMINANT NATURAL ENVIRONMENT
- NATURAL RIVERBANK
- ORGANIC SHAPES



1, 4, 5, 8 - Brooklyn Bridge Park, NY
 2 - Arena club, Berlin
 3 - Rummelsburg, Berlin
 7 - Holzmarktstraße, Berlin
 6 - Hackescher Markt, Berlin
 9 - La Villette park, Paris



PROJECT REFERENCES

Hansaviertel, Berlin



Brooklyn Bridge Park, NY



La Villette Park, Paris



Rummelsburg, Berlin

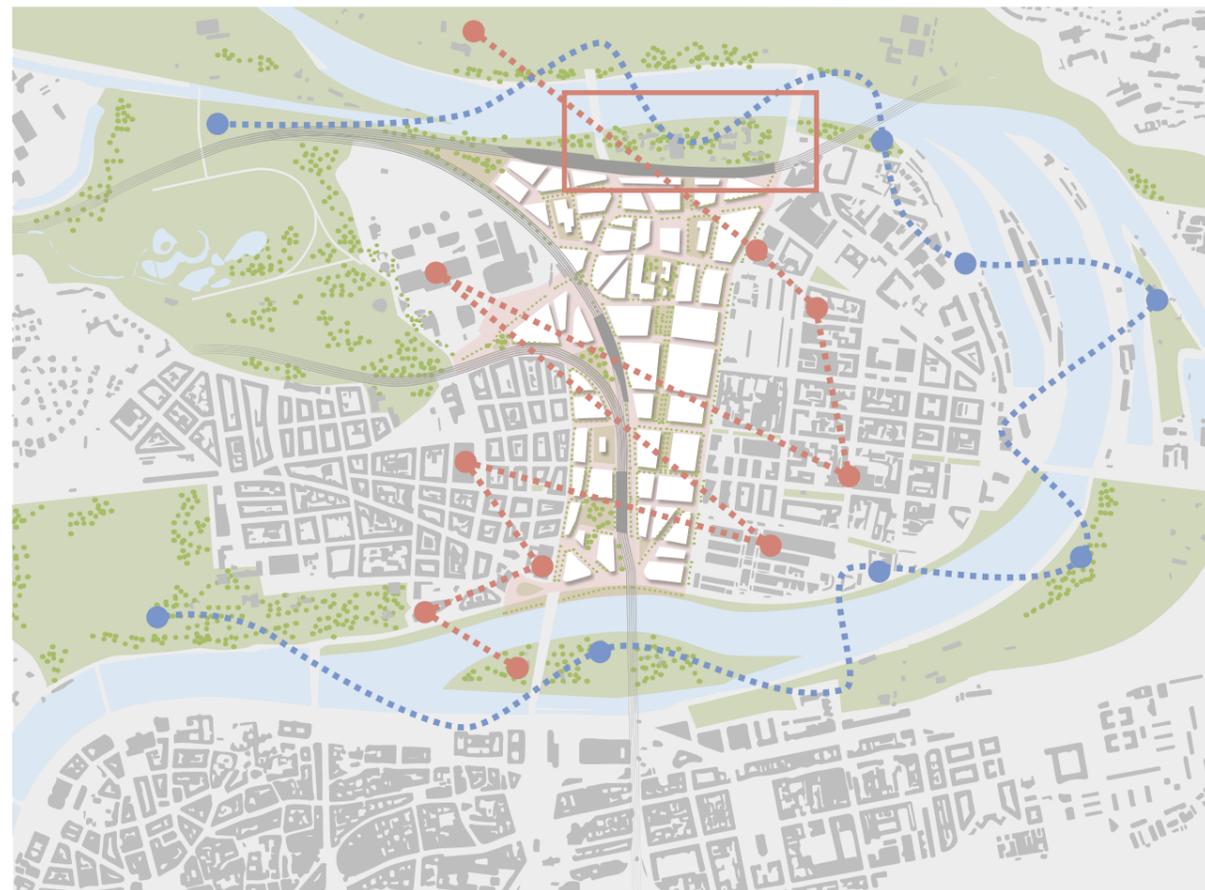


Borneo-Sporenburg, Amsterdam



5 Design concept

Context map

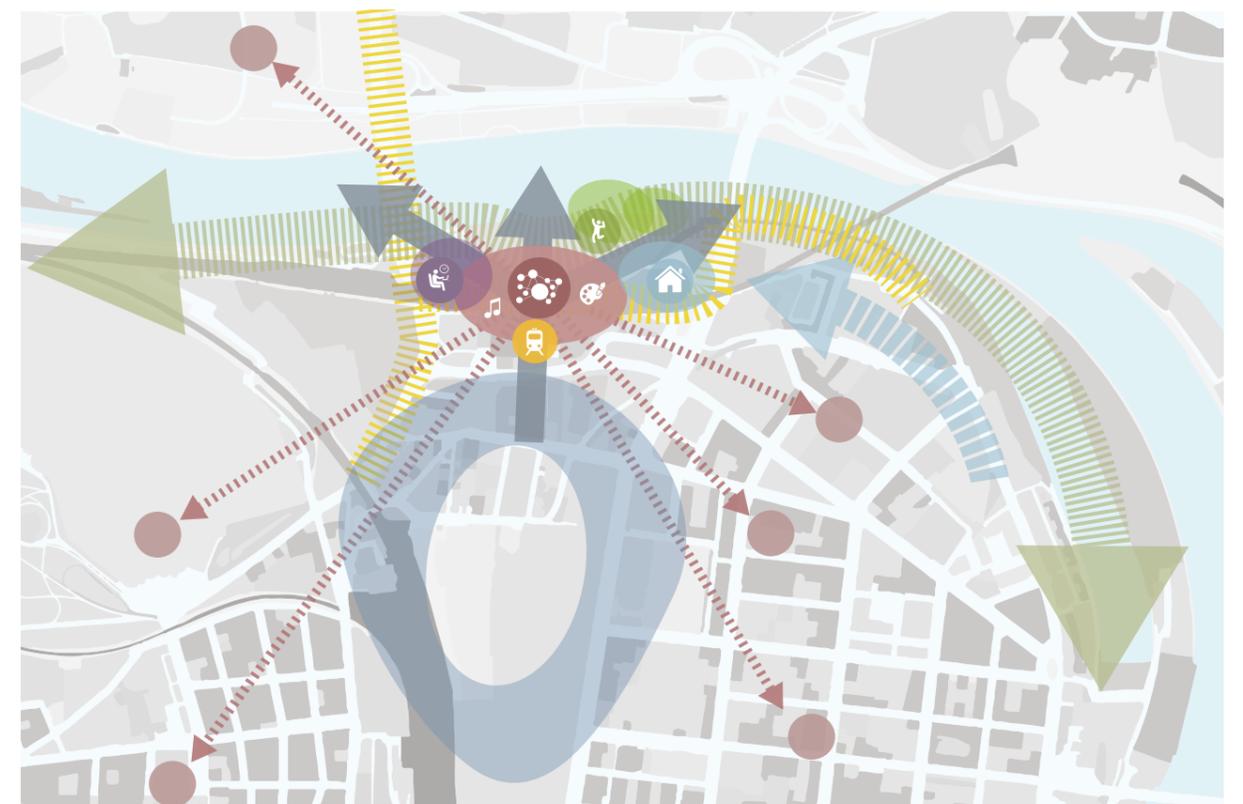


- Green areas and parks
- Cultural Network within Holešovice
- Network of potential riverbank areas
- Future Bubny development
CMC architects masterplan 2012
- Existing urban pattern

Design concept

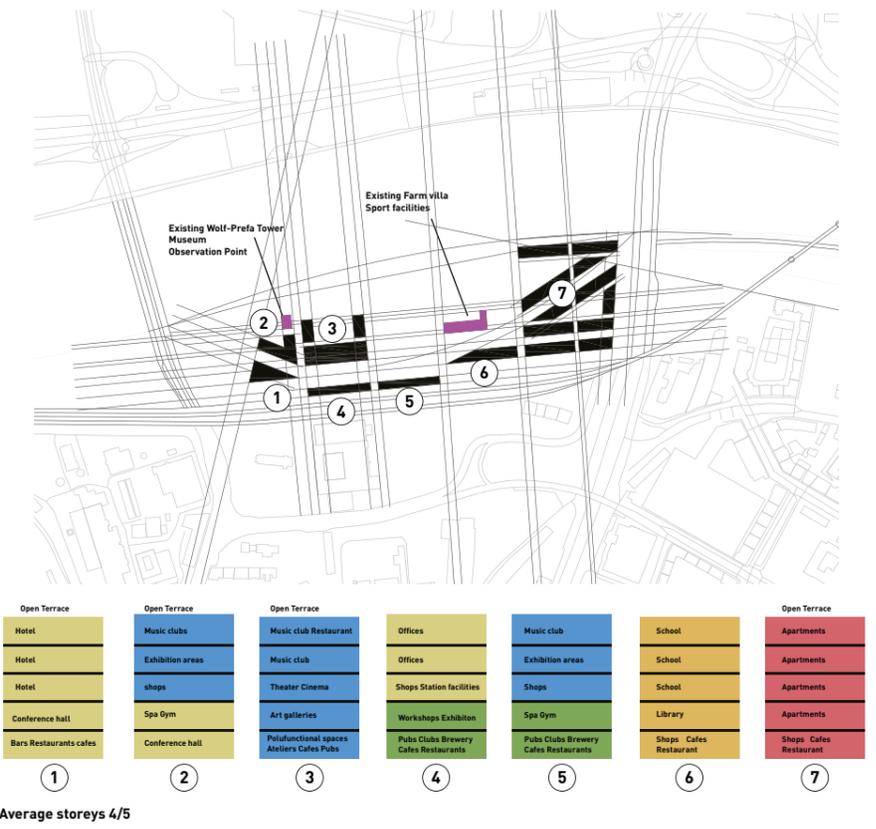
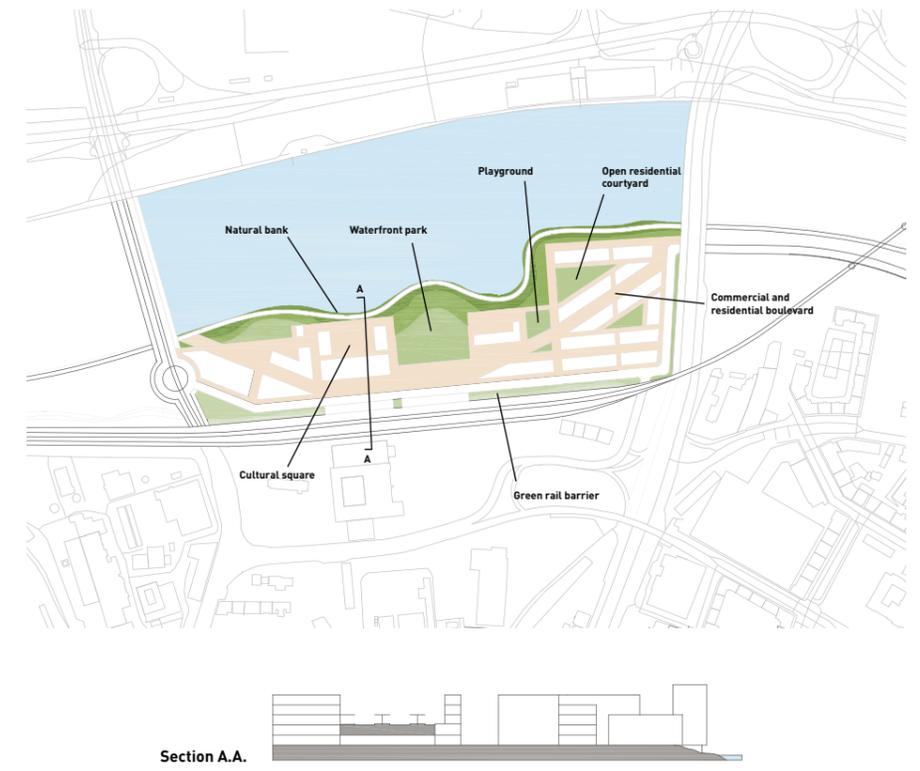
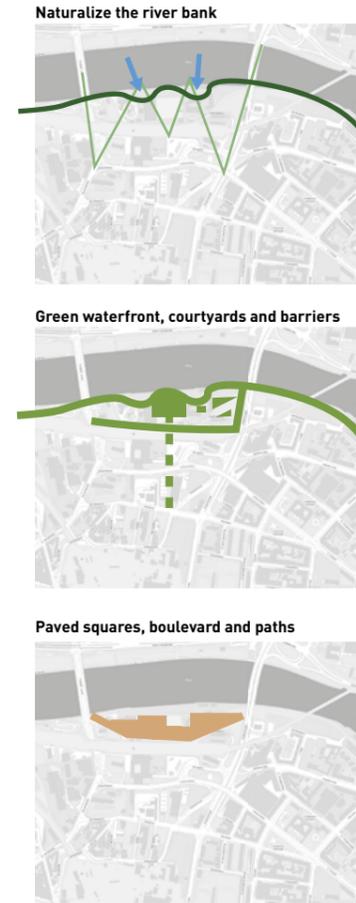
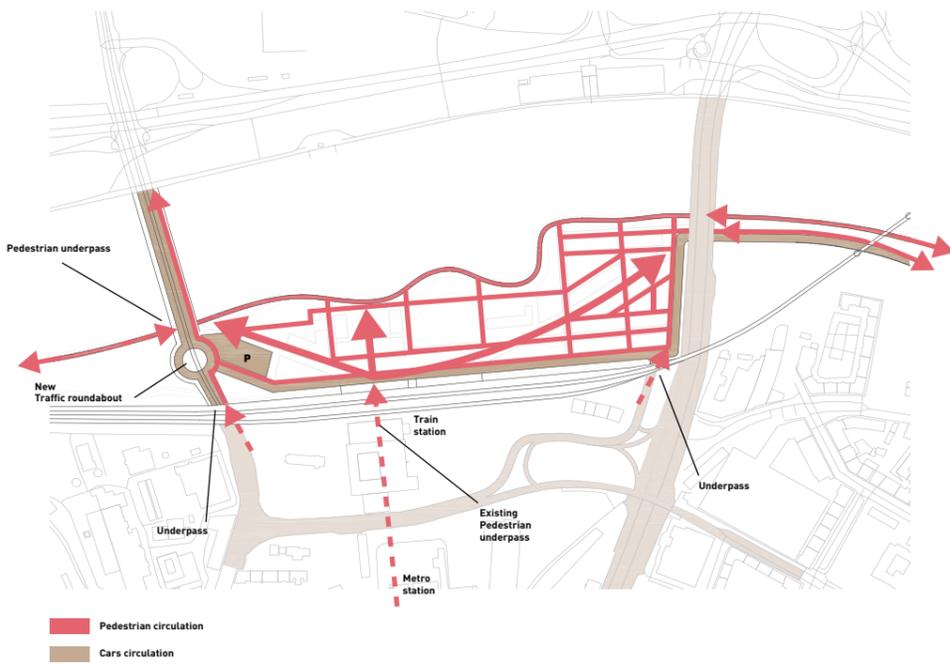
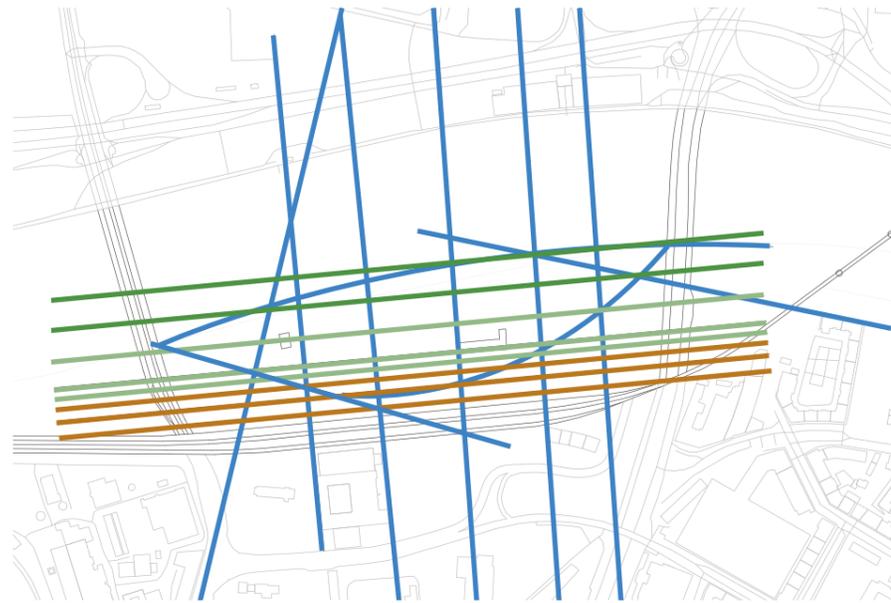
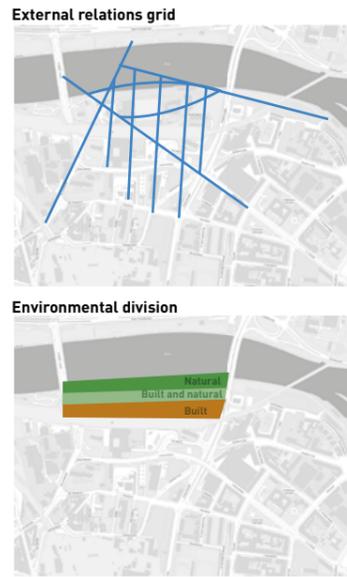
- A new urban composition interconnected with the existing city fabric and the future development
- High quality connectivity within the proposal through clear planned routes
- A natural riverfront inspired by the natural flow of the river
- A series of locally identified nodes, public spaces and open vistas across proposal

Concept scheme



- | | | |
|--|---|---|
| ● Cultural activities within Holešovice | ● Housing | ● New cultural center |
| → Cultural connections | ● Working | → Connectivity and development directions |
| New road system | ● Recreation | ● Future Bubny development |
| Green riverbank reclamation | ● Train and metro station | |

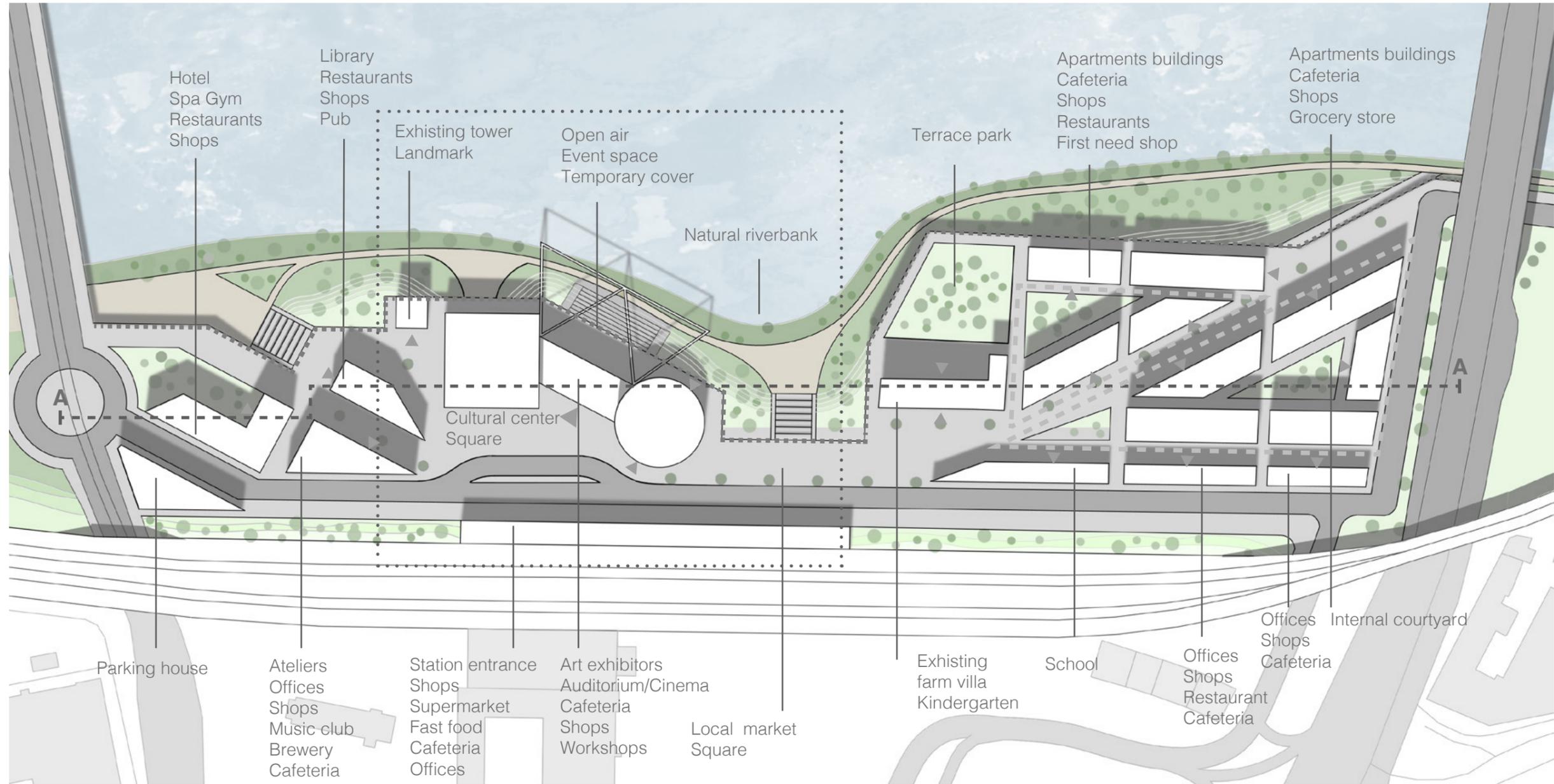
6 Masterplan design



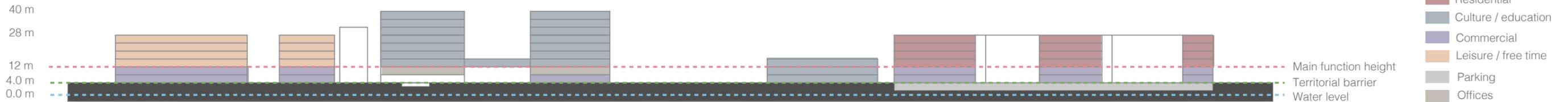
7 The cultural center

MASTERPLAN COMPLETION

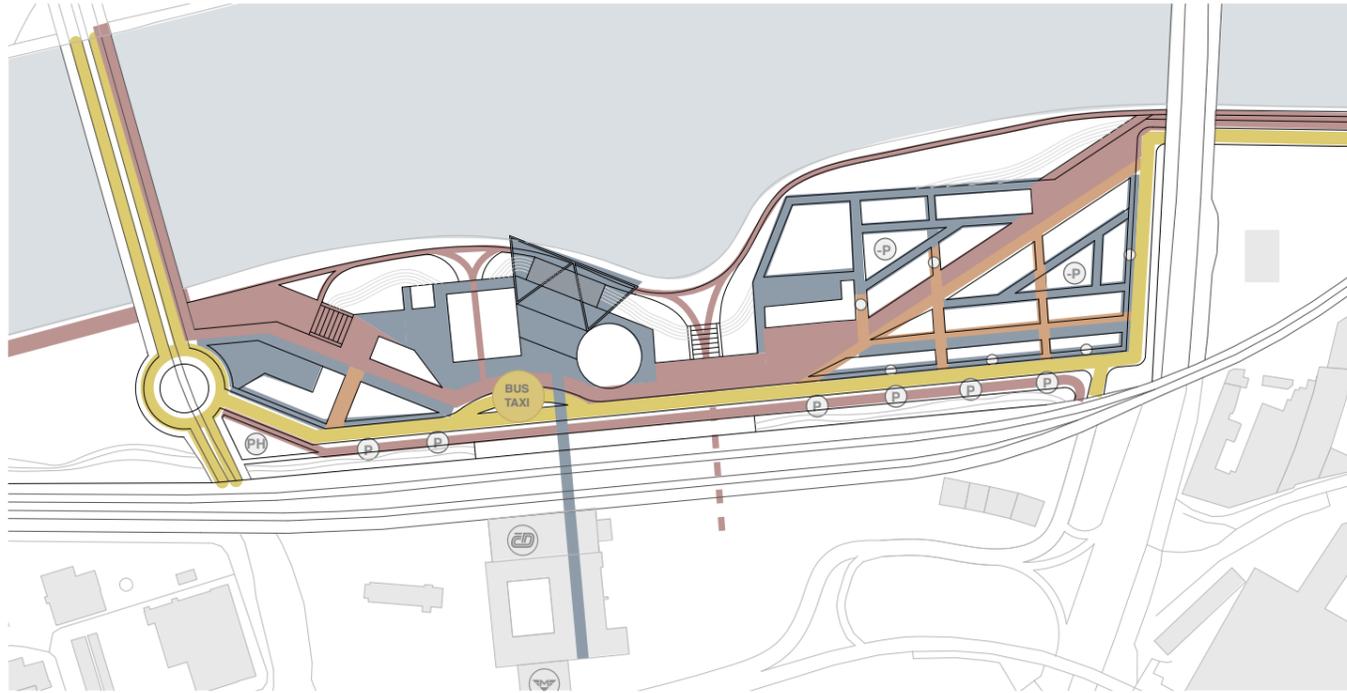
Masterplan scale 1.2000



Territorial section A.A

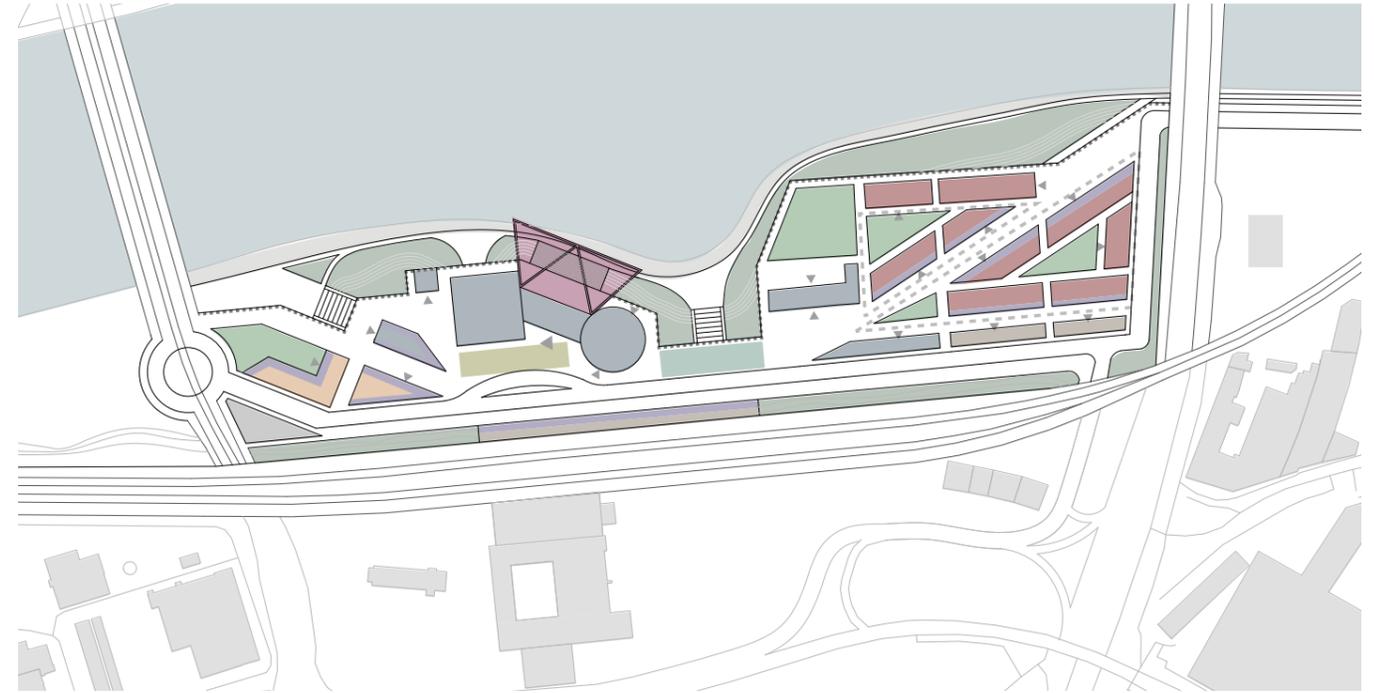


Circulation map 



- | | | | |
|---|--------------------------------------|---|------------------------------|
|  | Bicycle and pedestrian path |  | Underground parking |
|  | Main car circulation 50 km/h |  | Underground parking accesses |
|  | Internal car circulation 30 km/h |  | Parking house |
|  | Pedestrian zone |  | Street parking |
|  | New bicycle and pedestrian underpass | | |
|  | Existing pedestrian underpass | | |

Function destination 



- | | | | |
|---|----------------------|---|--------------------------------|
|  | Residential |  | Cultural center square |
|  | Leisure / free time |  | Market square |
|  | Culture / education |  | Green slopes / green riverbank |
|  | Commercial |  | Gardens / parks / courtyards |
|  | Offices |  | Main building entrance |
|  | Open air event space |  | Flood barrier |
| | |  | Underground parking |

Car parking estimation

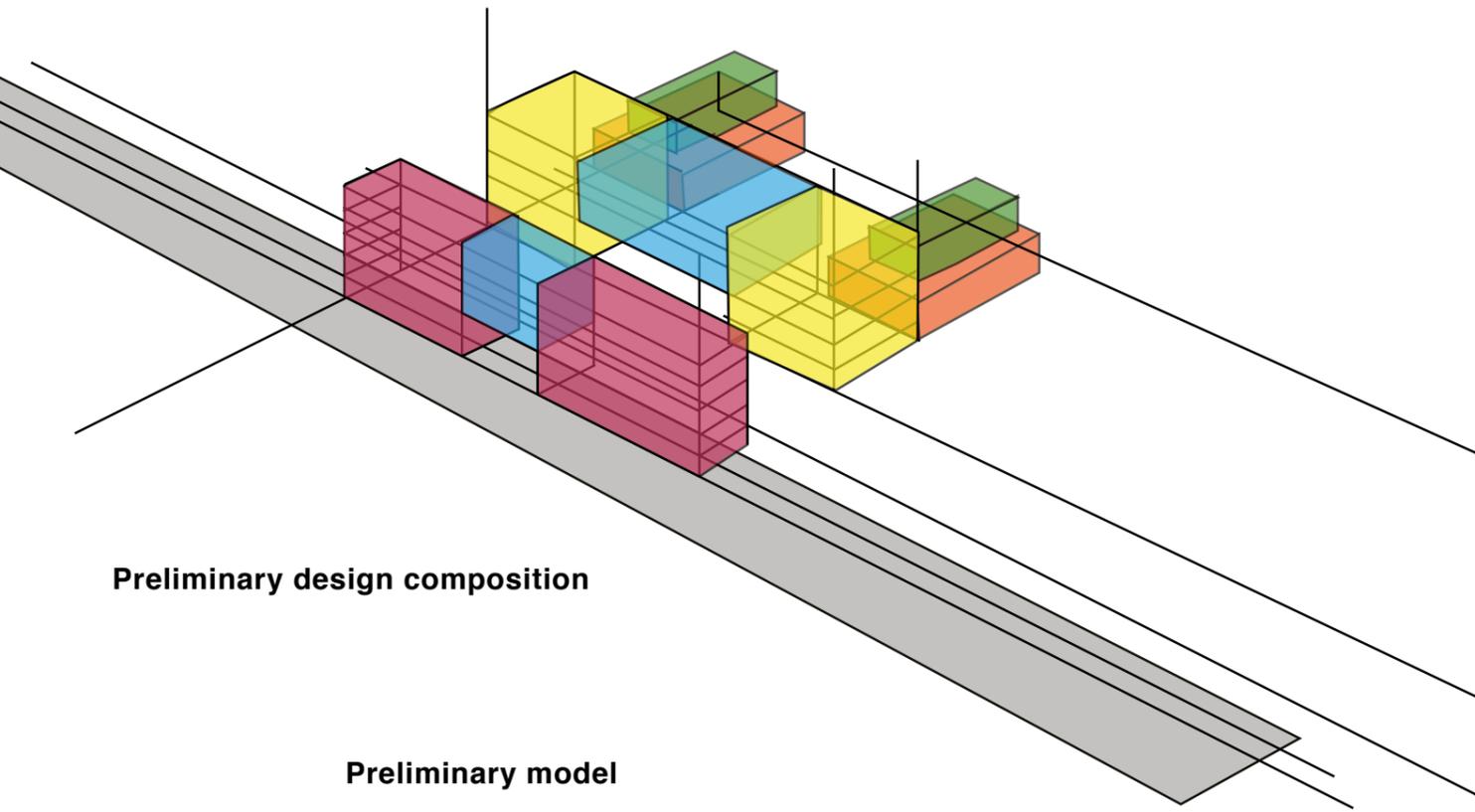
Residential	25 896 m2
Commercial	16 257 m2
Cultural / Education	19 995 m2
Offices	12 528 m2
Hotel / Leisure / Entertainment	4830 m2
Parking house	4260 m2
Underground parking	12350 m2
Street parking	4500 m2
<p>Average m2 for apartment 150m2 One family unit 4 people 1,5 car per family</p> <p>172 apartments 688 residents 260 cars for all residential area</p> <p style="text-align: right;">Min. m2 for residential parking 2600 m2</p>	
<p>Average m2 for commercial space 100m2 Average workers per unit 2 2 cars per commercial unit Only daily use</p> <p>162 commercial units 324 workers 324 cars for all commercial function</p> <p style="text-align: right;">Min. m2 for residential parking 3240 m2</p>	

<p>Average cultural center workers 20 Average library worker 20 Average kidergarten workers 15 Mostly daily use Average School workers 30</p> <p>85 cars for cultural activities workers</p> <p style="text-align: right;">Min. m2 for cultural activities parking 850 m2</p>
<p style="text-align: right;">Only daily use</p> <p>Average m2 for office 400m2 One office unit 30 people 30 cars per unit</p> <p>31 Offices 930 office workers</p> <p style="text-align: right;">Min. m2 for residential parking 9300 m2</p>
<p>Average Hotel workers 40 Average Entertainment workers 30</p> <p style="text-align: right;">Min. m2 for hotel and entertainment parking 700 m2</p>

Total parking area within the proposal Total m2 parking needed
 21110 m2 for residents and workers 16690 m2

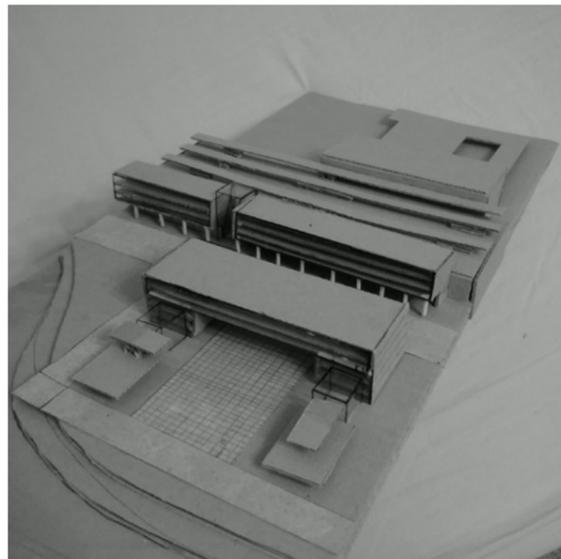
4420 m2 parking space for visitors in the area
 + parking spaces outside the area
 (Nádraží Holešovice)

ARCHITECTURAL DESIGN

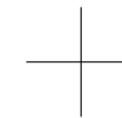
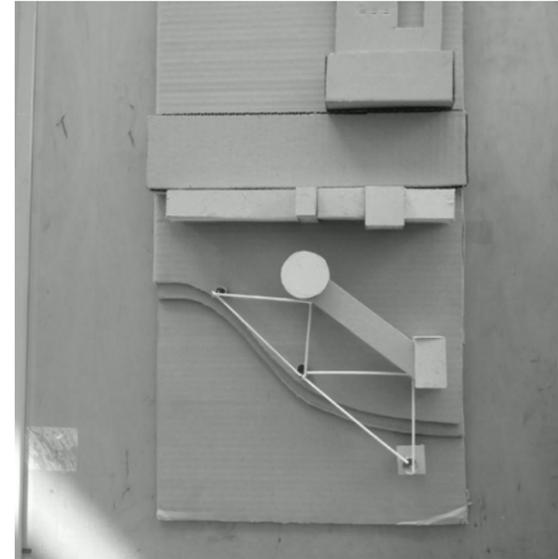


Preliminary design composition

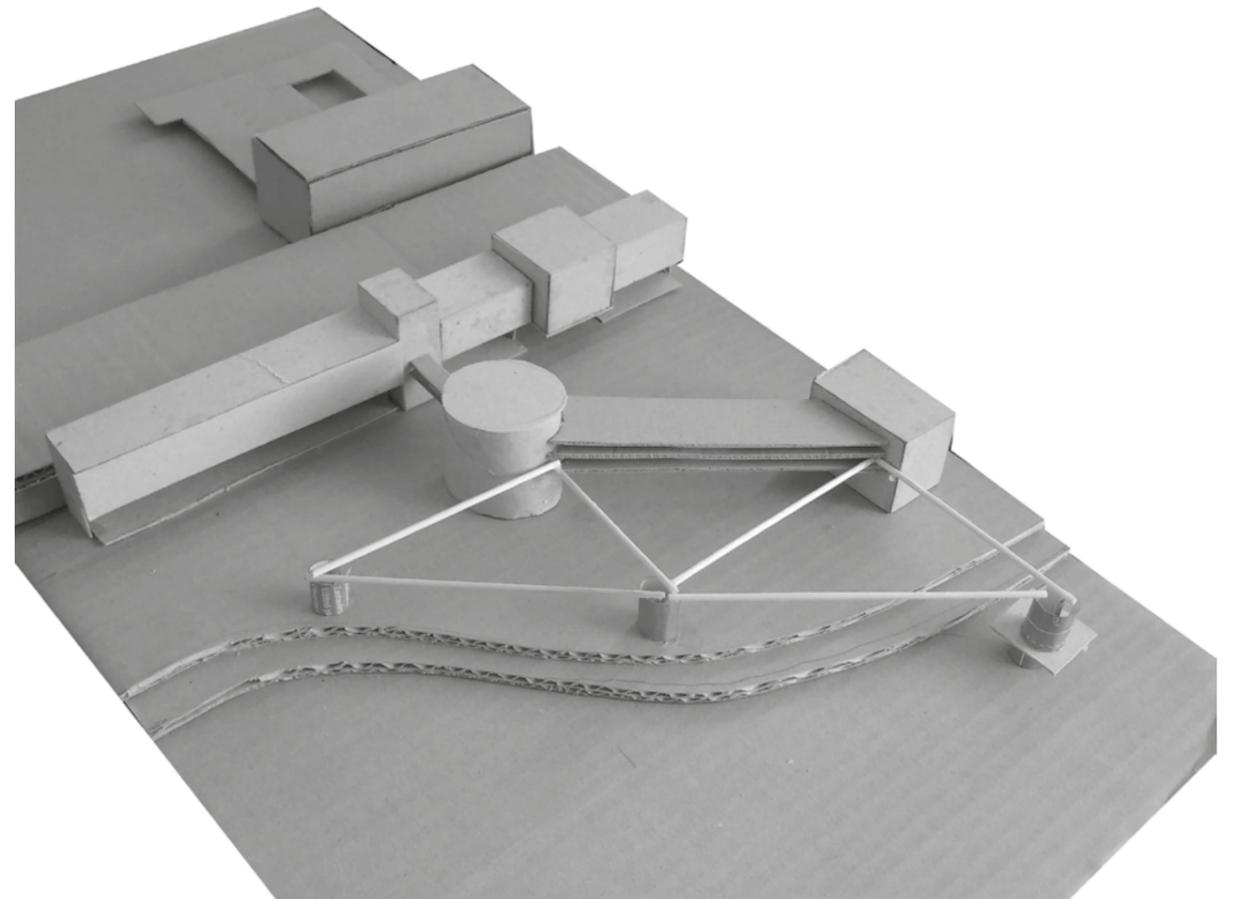
Preliminary model



Preliminary model further step

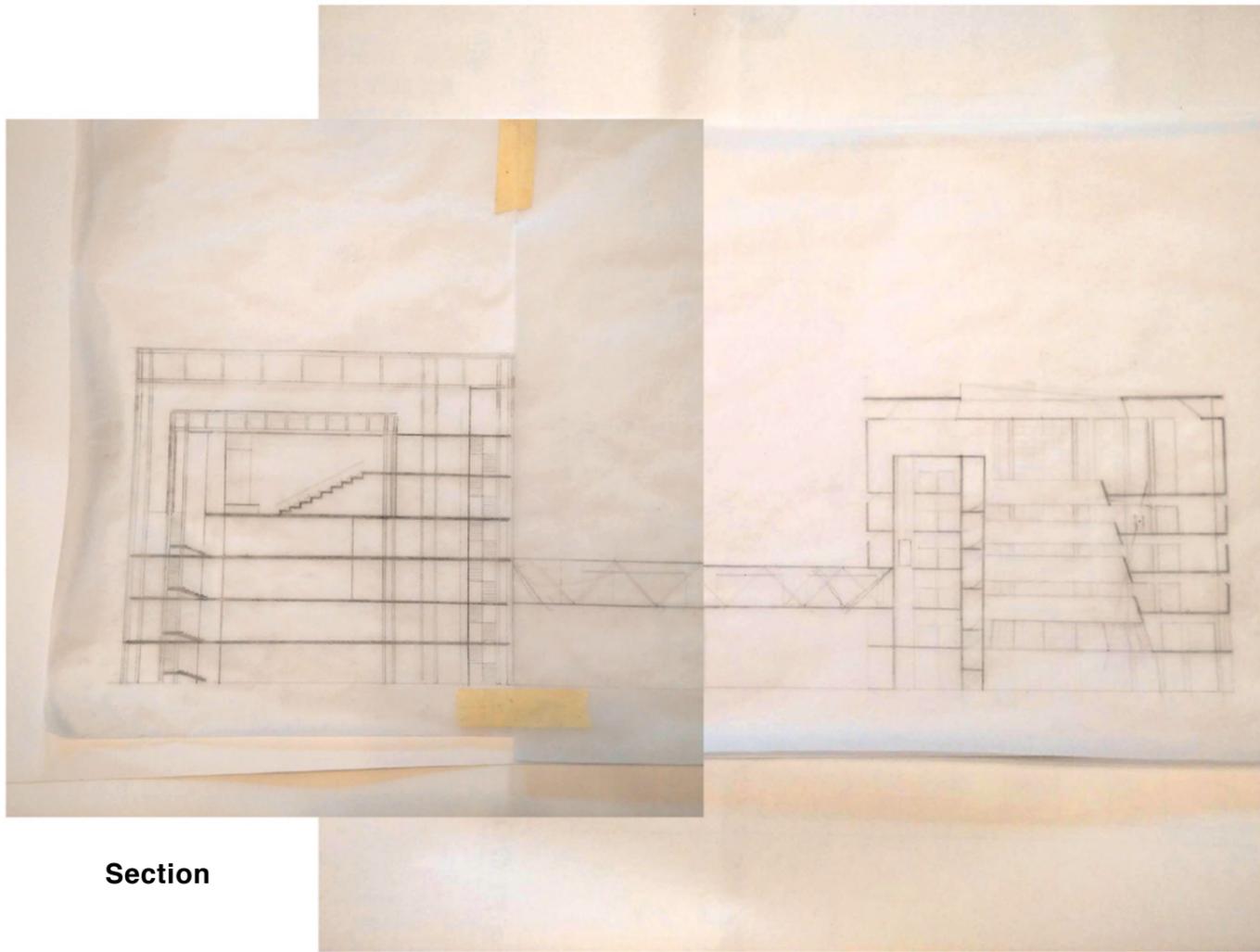


LIGHT
FREEDOM
SPACE
FUN

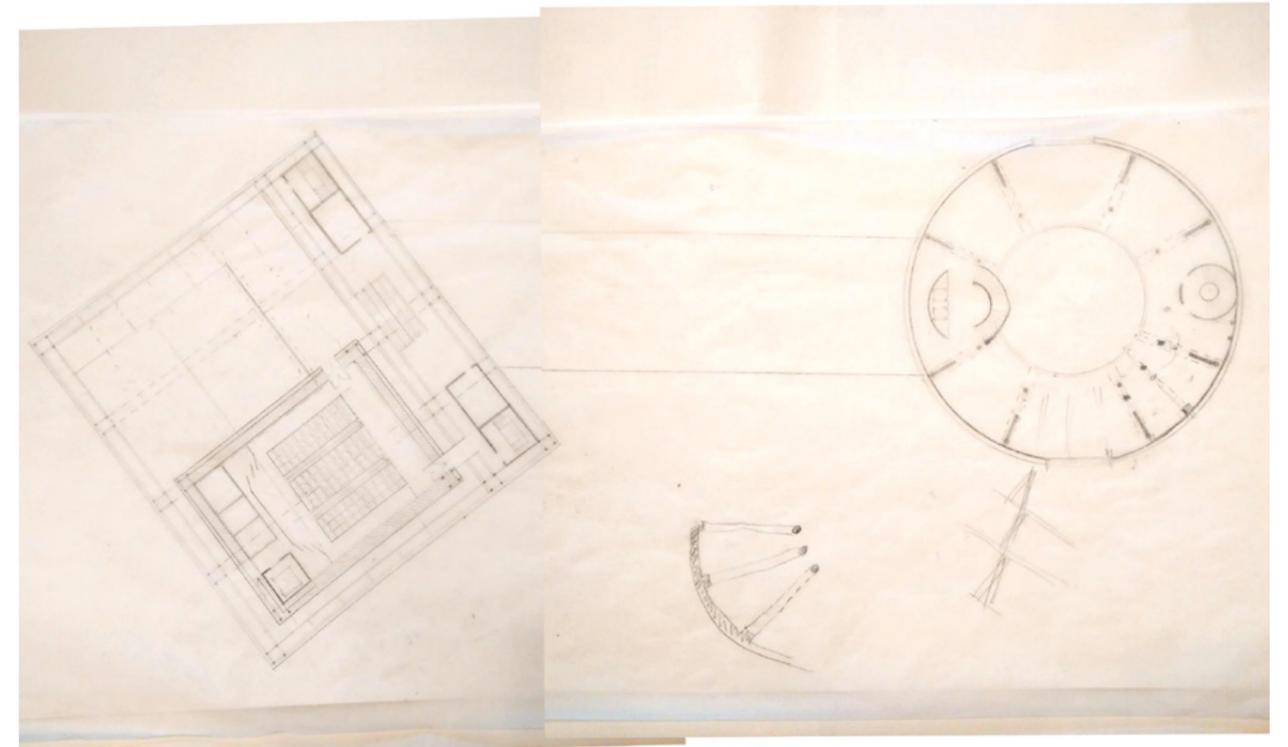


The cultural center

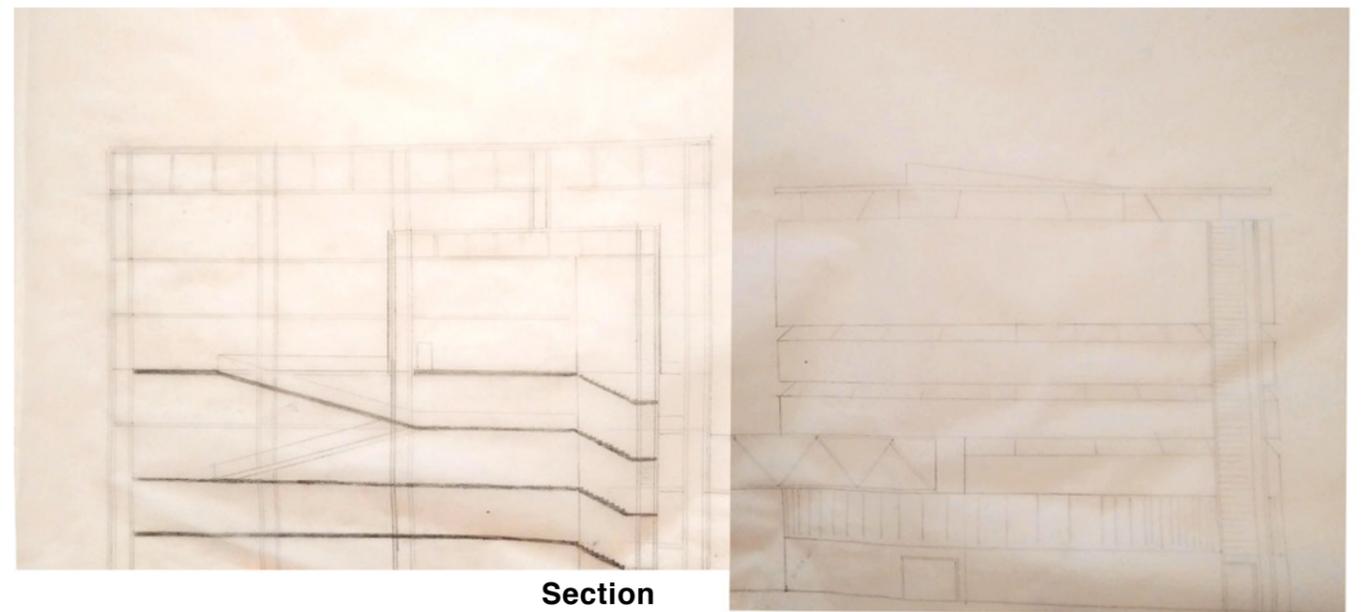
Preliminary drawings



Section



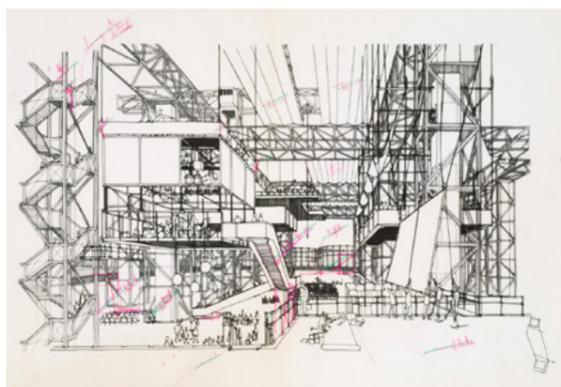
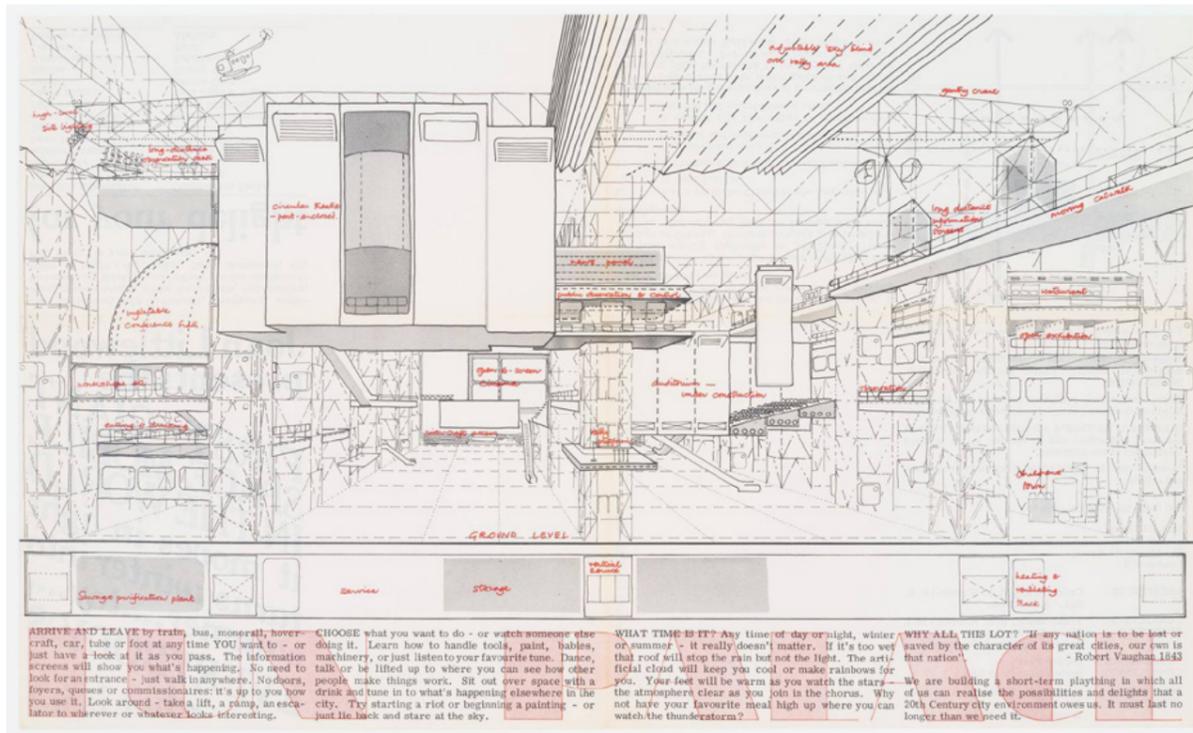
Floor plan



Section

PROJECT REFERENCES

Fun Palaces



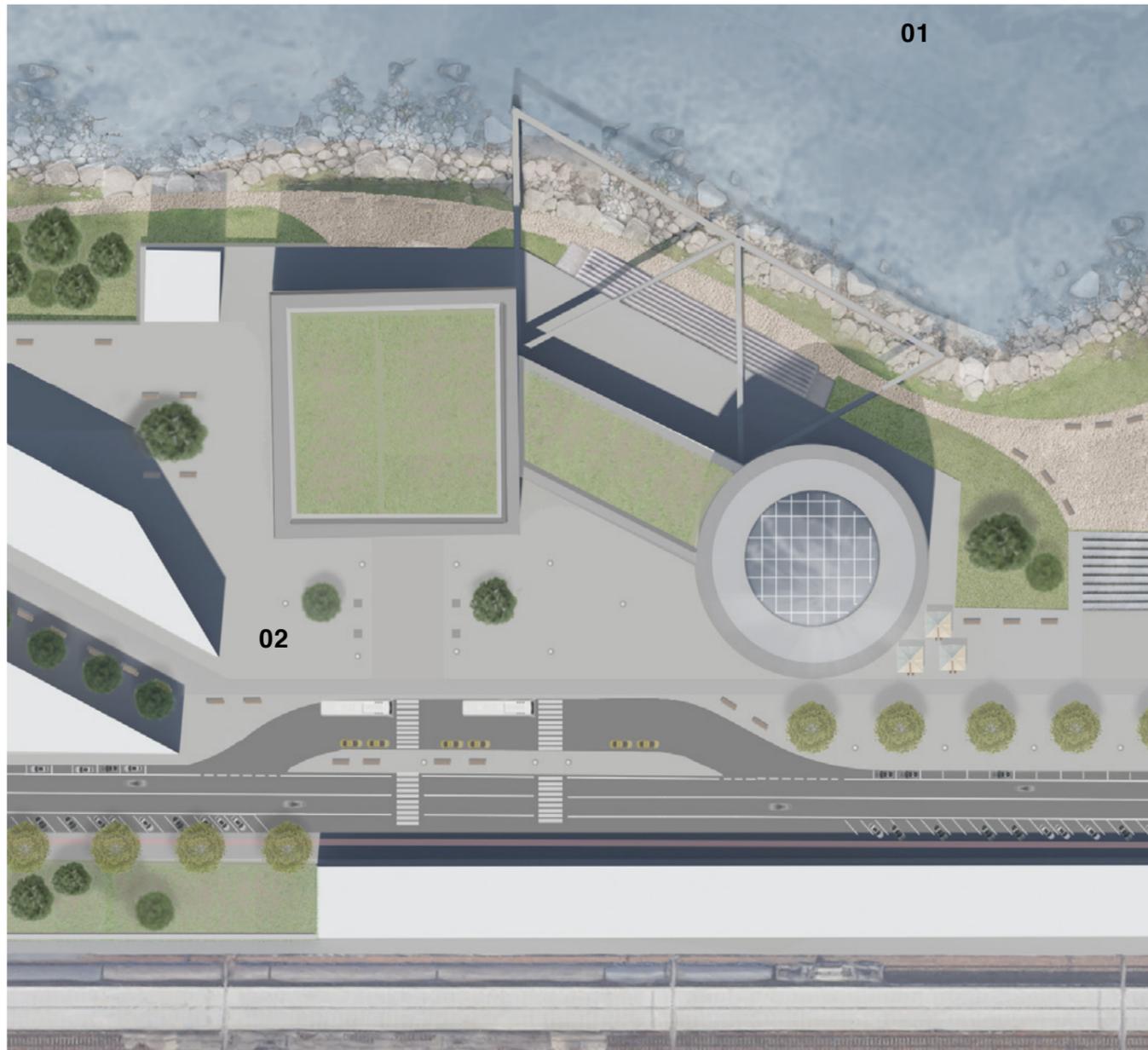
Cedric Price 1961

Fondazione PRADA

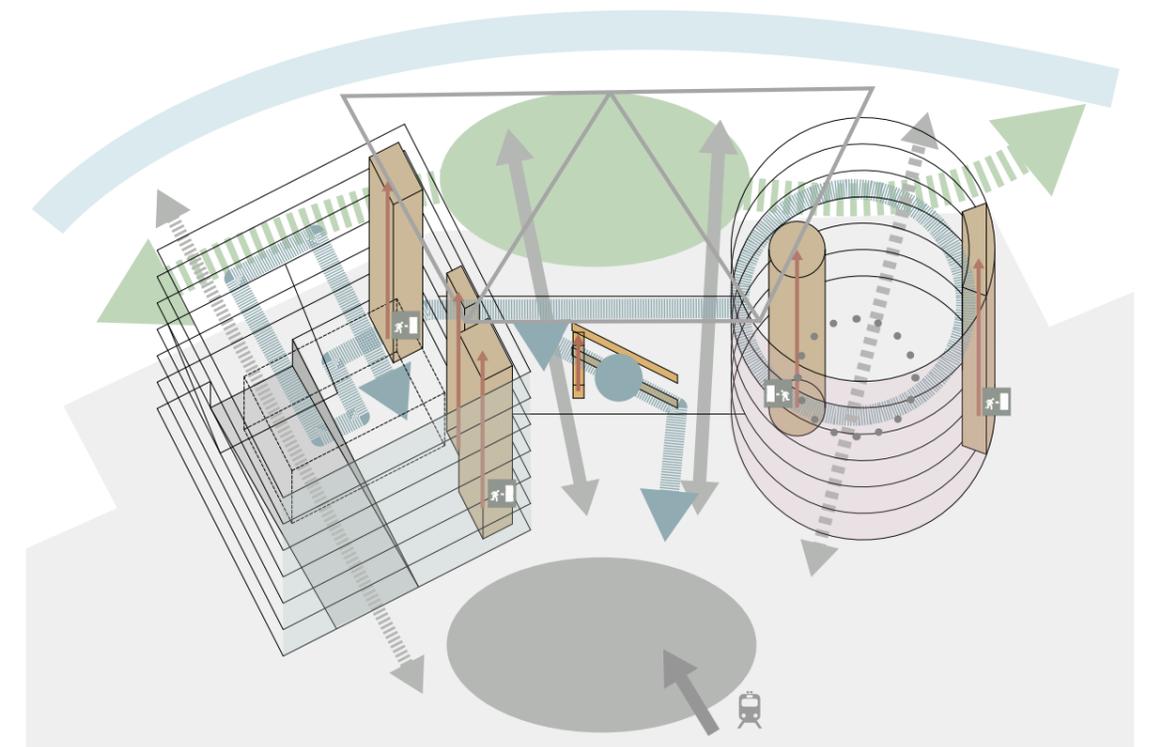


The Office for Metropolitan Architecture (OMA)
2008-2018 Milano Italy

SITUATION



Building circulation



- Open air event space
- Cultural center square
- Main entrance exhibition areas
- Riverbank movements
- Exhibitions areas circulation
- External connection square - riverbank
- External covered connection square - riverbank
- Internal connection square - riverbank
- Public hall Public exhibition
- Stairs
- Vertical movements
- Escape exit
- Train station / metro



The Cultural center overview

The Holešovice Cultural Center is envisioned as a series of separate buildings, each with a distinct design consistent with its function and providing its own identity, connected by a unifying element, a Bridge. In this way, the design provides benefits of both separateness and consolidation. An external structure serves a shading function, providing a shaded outdoor space on the riverfront, aiming to transform what could typically be an impractical and exposed condition into one that provides a comfortable outdoor microclimate throughout the day. With characteristic buildings and a unifying bridge, the design delivers on a commitment to bring programs together, bring people together and provide a solution that is representative of the changes Holešovice is undergoing, while at the same time introducing generous amounts of natural landscape, a microclimate and usable public spaces directly on the riverbank.

The Cylinder

The Cylinder is a solid building made of concrete that functions as exhibitor for traditional artworks, as painting and sculpture. For its strict design the exhibition is set up on circular floors around a main full height hall that is illuminated from the top by a glazed roof. Narrow strip windows illuminate each floor from above with a diffused light, optimal for artworks. As a conclusion of this first exhibition space, the last floor has a double height to exhibit massive artworks. The ground floor of the building, not connected with the upper exhibition, serves as public space with a cafeteria, shops and workshops and it can host independent exhibitions.

The Bridge

The Bridge besides to unify the two buildings is important because it functions as a main entrance to the cultural center. It is the foyer for all the exhibition spaces. This space distributes visitors to the chosen exhibition, while they can enjoy the view on the Vltava river. Since the Bridge is elevated it allows a visual connection with the river from the main square and it is possible to underpass it and directly get to the river under the shading structure where open air event can occur.

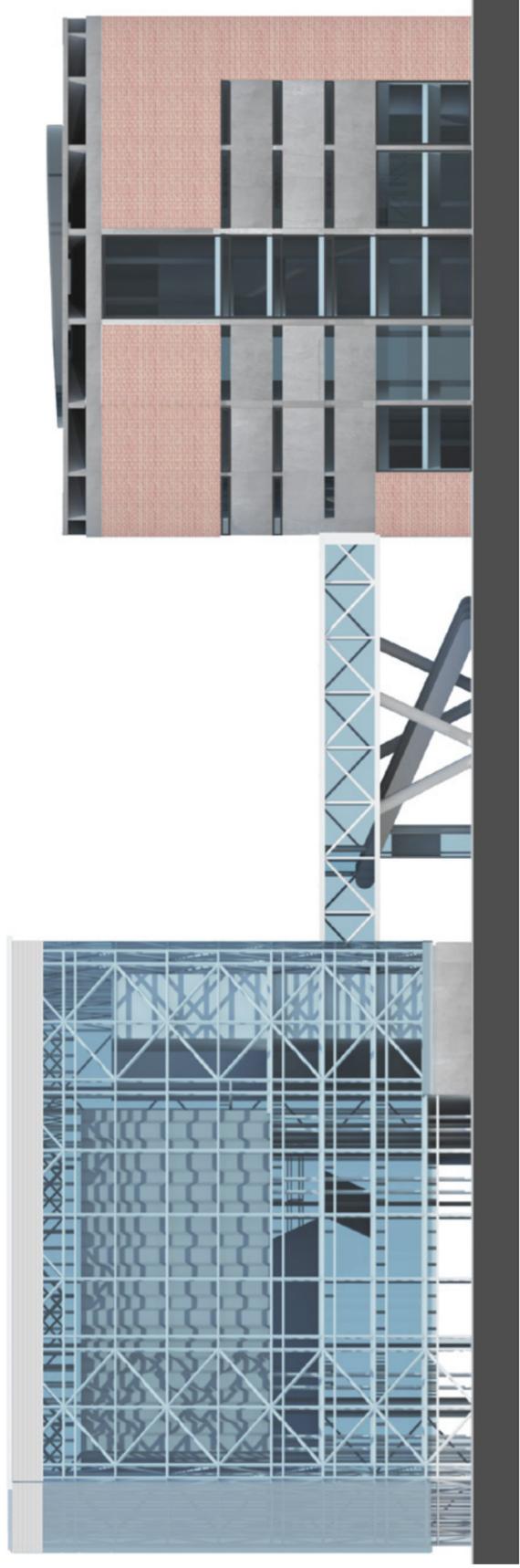
The Cube

The Cube is a light building made of steel and glass that has flexible spaces to exhibit interactive and media art. The floors are connected with ramps and they work as a continuum space constantly changing in disposition and height. Some spaces have double height and others half height, in the main hall is located a suspended auditorium shaped as an industrial container. One cafe is located on the top floor of the building where it is possible to observe the high space and the outside view. Visitors have the opportunity to observe the outside panorama from every position in the building thanks to the absence of perimeter walls, that gives a sense of continuity between indoor and outdoor spaces. The ground level of the building connects directly the riverfront with the square through a gentle slope, it will be the main route between the station and the river.

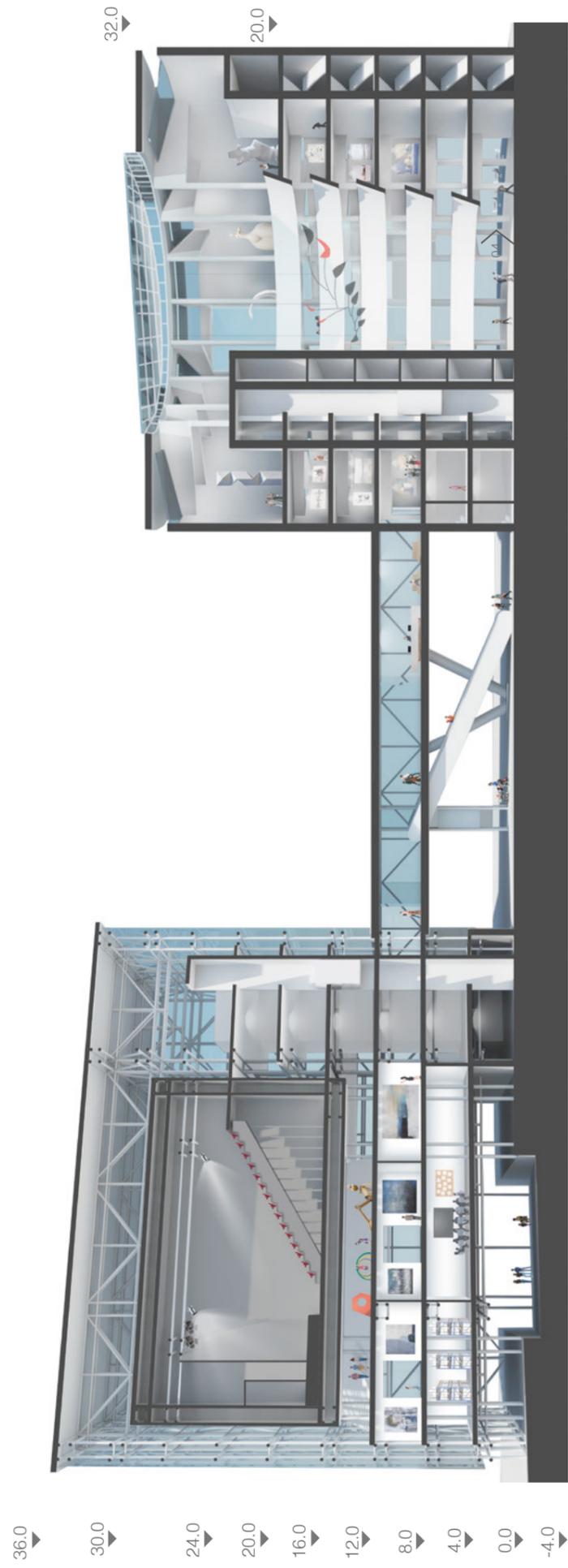
Visualization 02



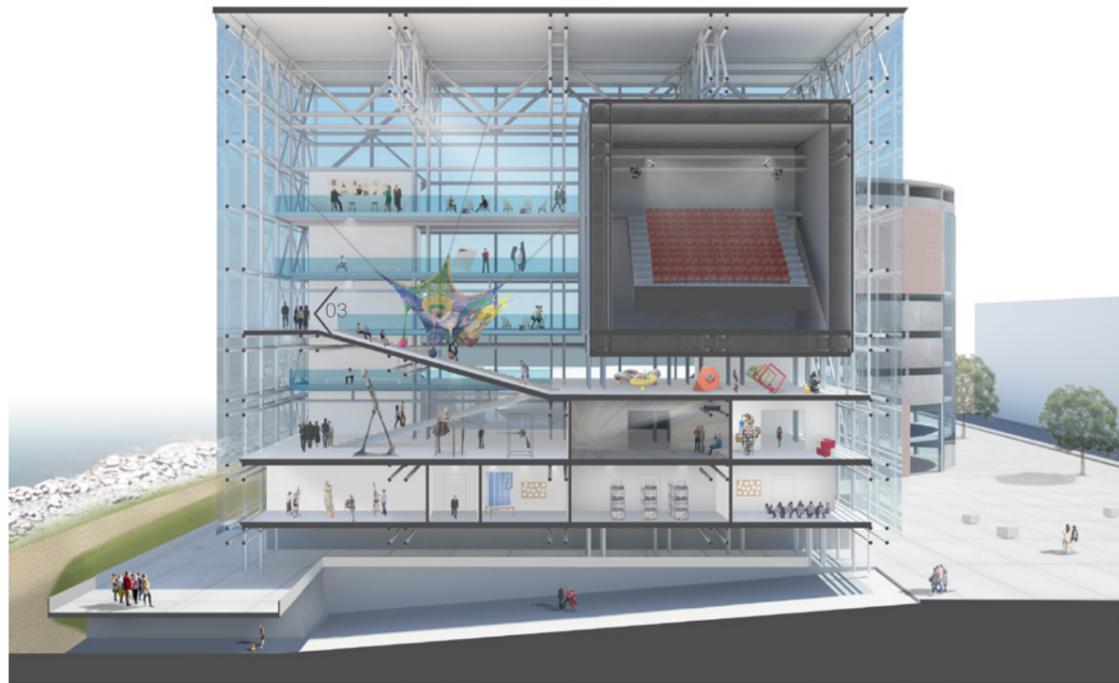
South facade scale 1.500



Section A.A. scale 1.500

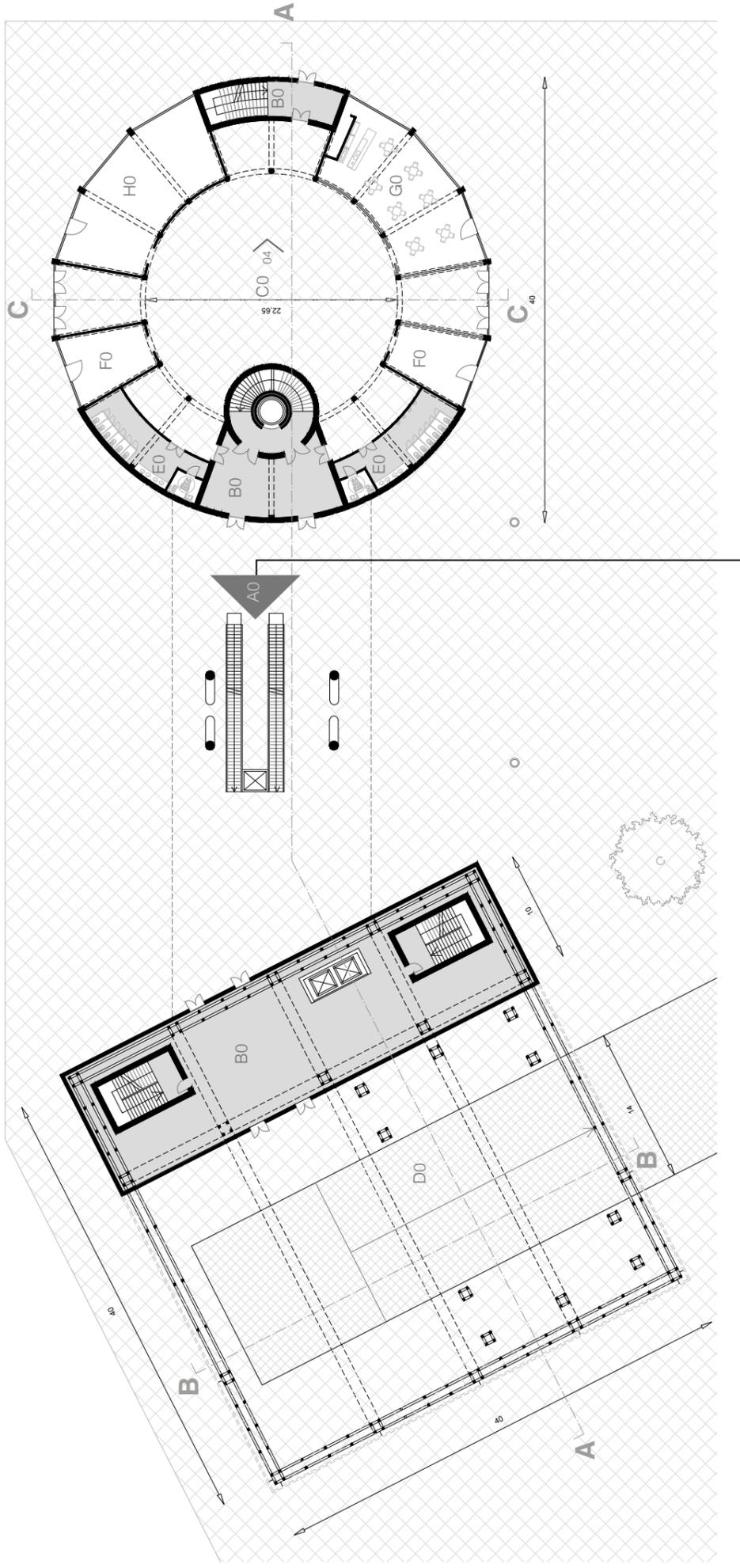


Section B.B. scale 1.500



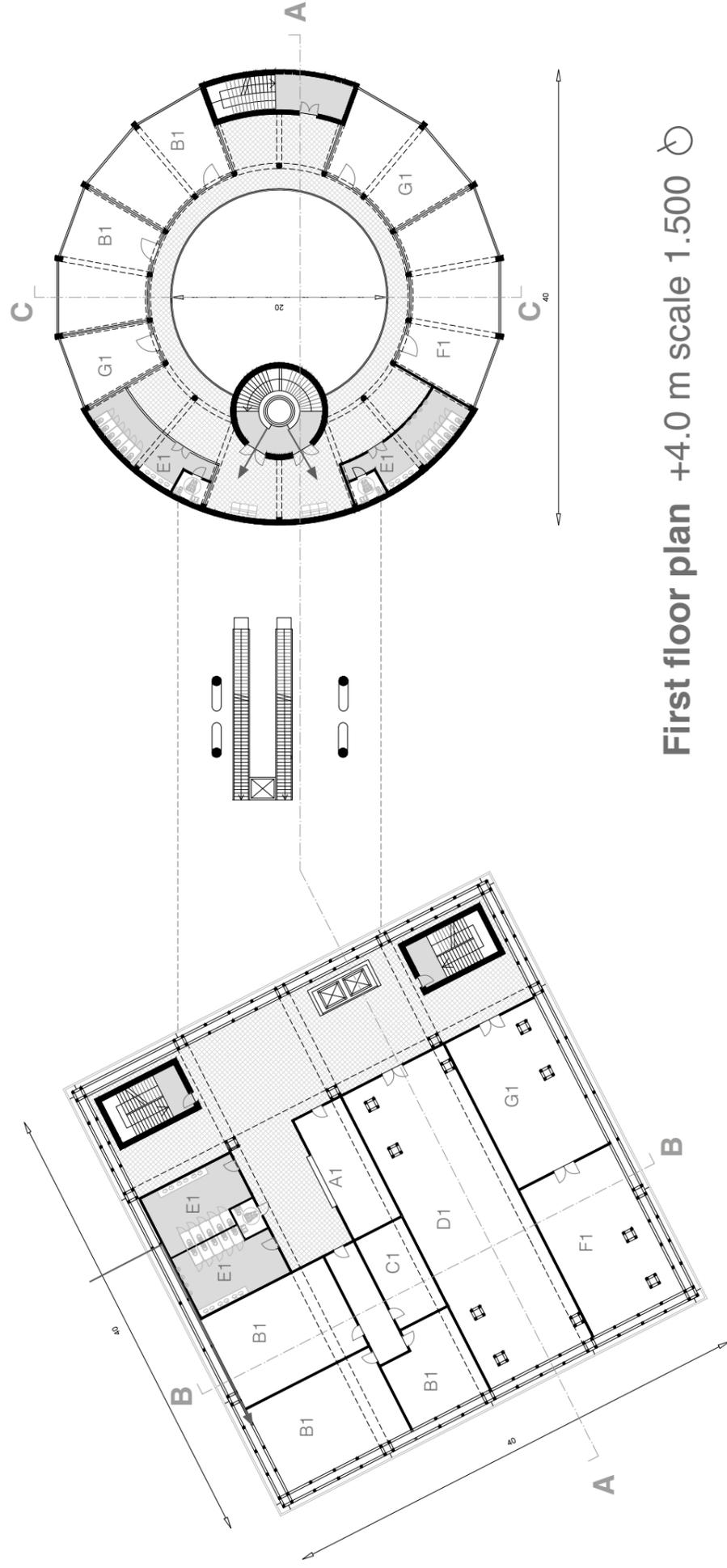
Section C.C. scale 1.500





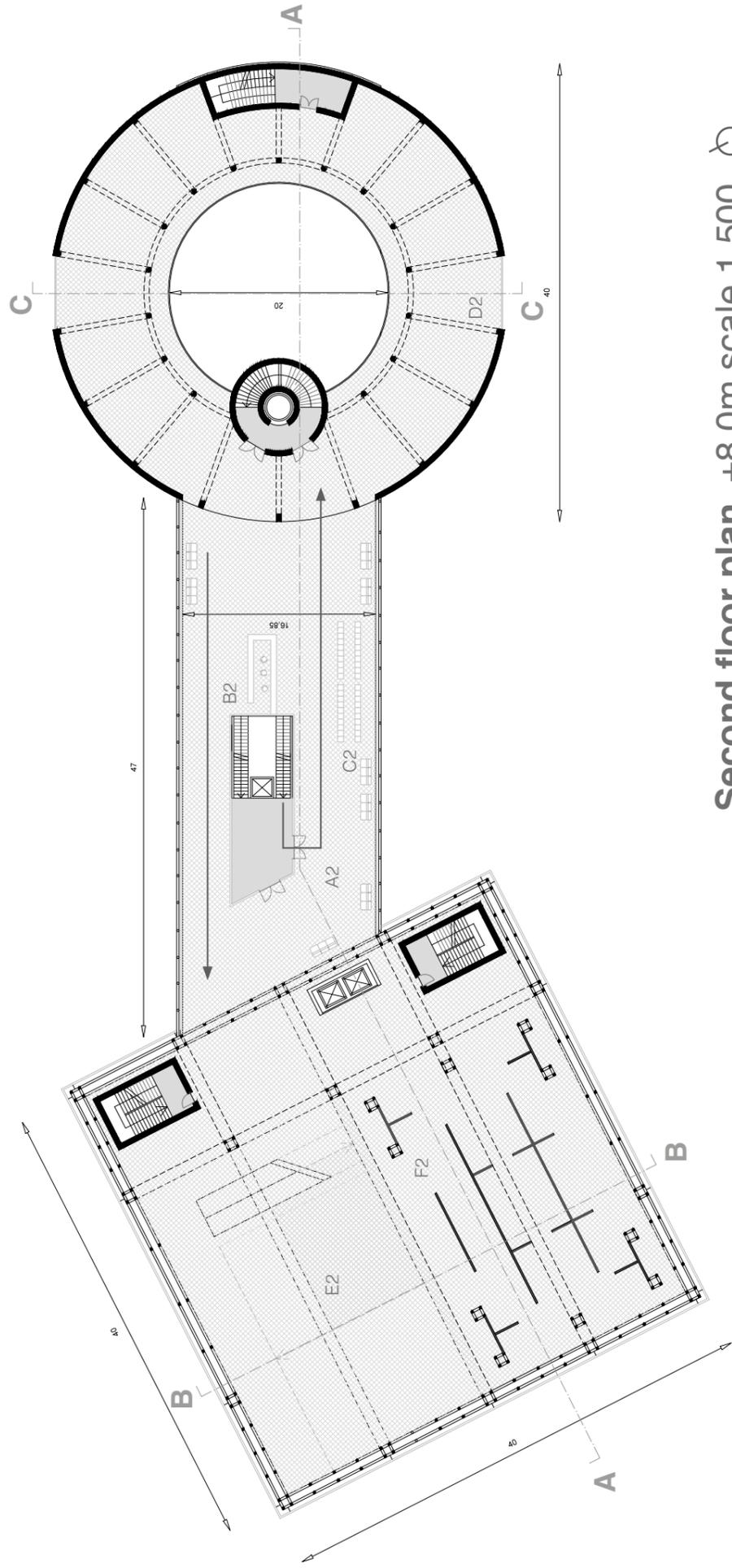
Ground floor plan 0.0 m scale 1.500 

- A0 Main exhibition entrance
- B0 Secondary entrance / escape ways / staff entrance
- C0 Public hall
- D0 Slope / connection to river
- E0 Toilets
- F0 Shop
- G0 Cafeteria



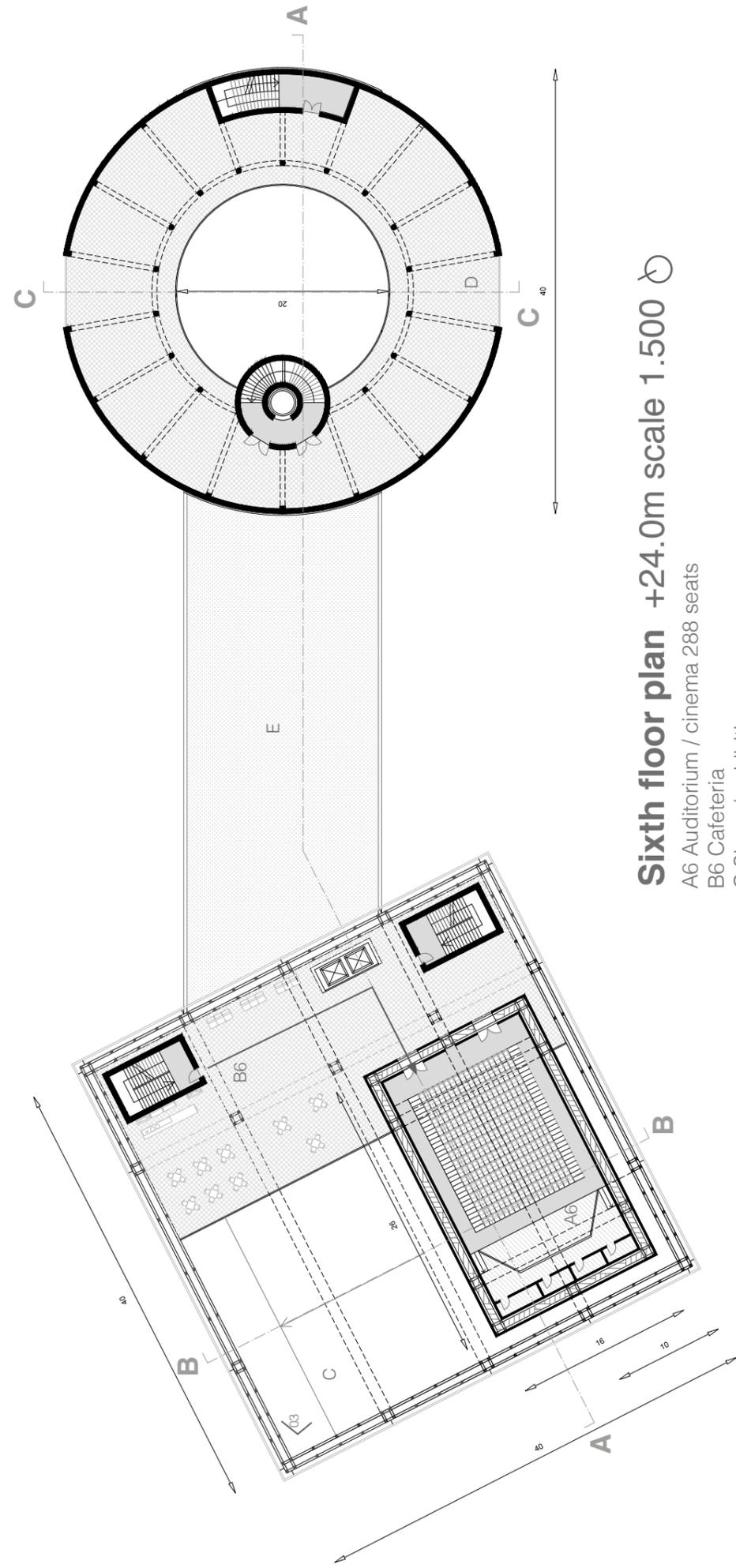
First floor plan +4.0 m scale 1.500 

- A1 Cloakroom
- B1 Workshop
- C1 Changing room
- D1 Stockroom
- E1 Toilets
- F1 Conference room
- G1 Office



Second floor plan +8.0m scale 1.500 ⌚

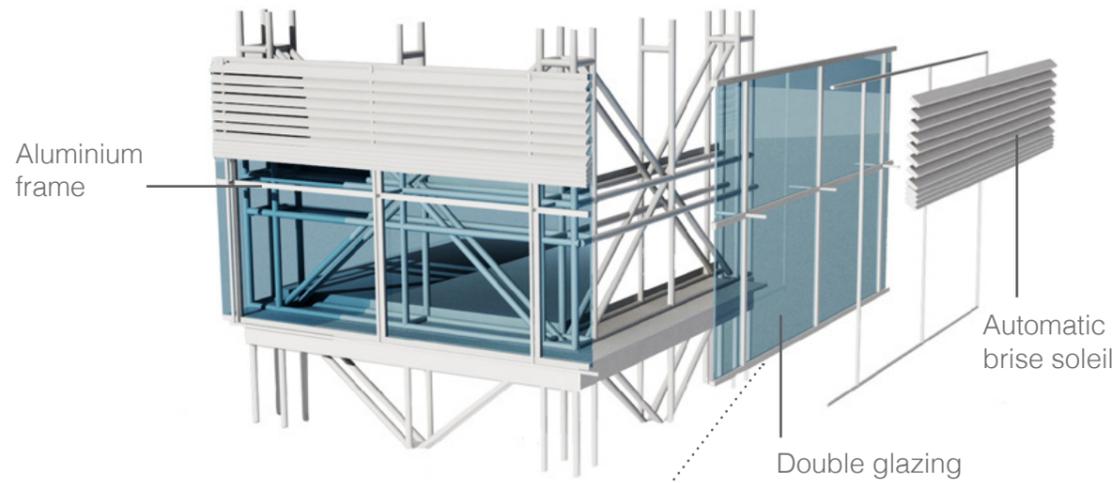
- A2 Foyer
- B2 Ticket / reception
- C2 Cabinets
- D2 Exhibition space
- E2 Exhibition space
- F2 Exhibition space



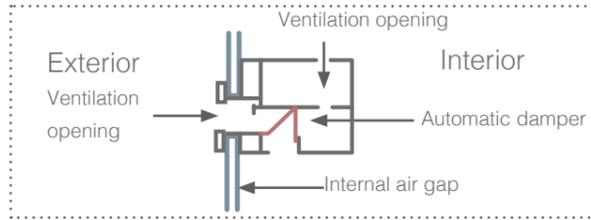
Sixth floor plan +24.0m scale 1.500 ⌚

- A6 Auditorium / cinema 288 seats
- B6 Cafeteria
- C Slope / exhibition space
- D Exhibition space
- E Green roof

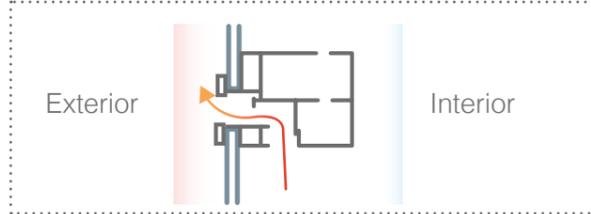
Climate-adaptive building shell



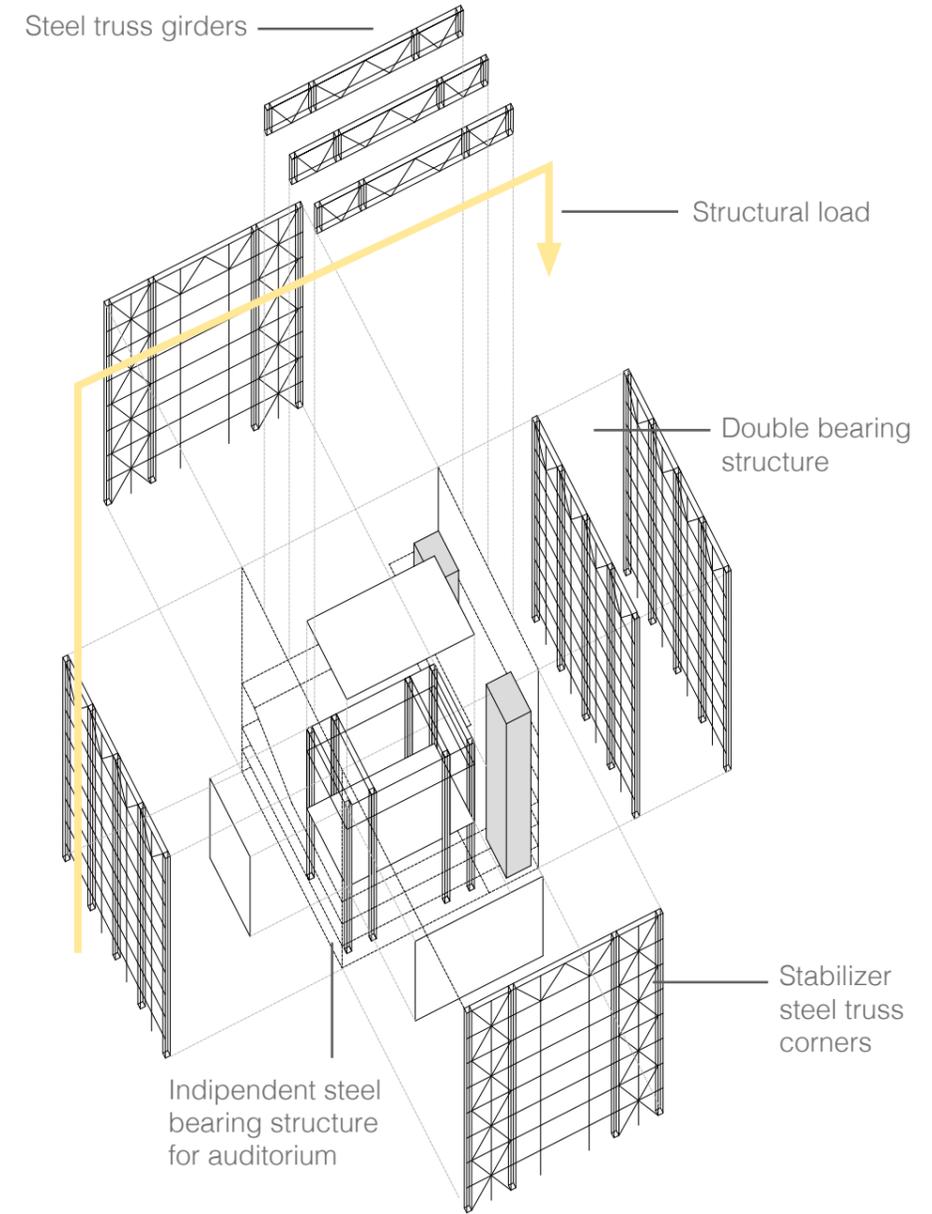
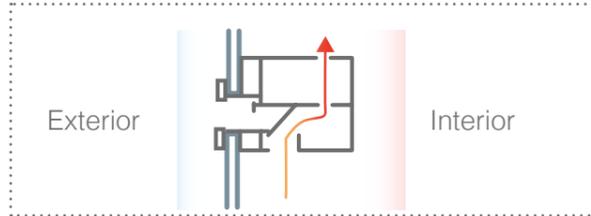
Detail - ventilated mullion



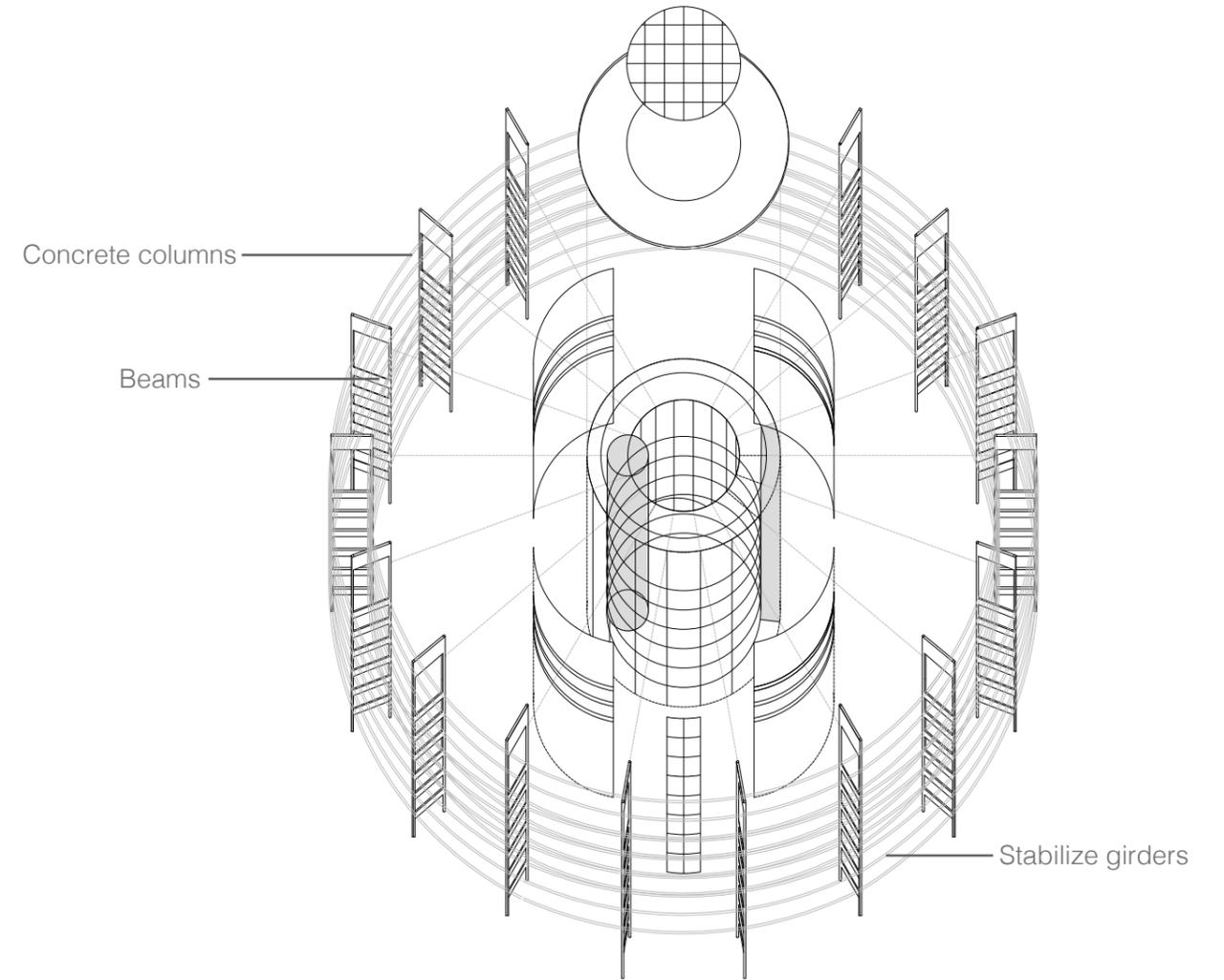
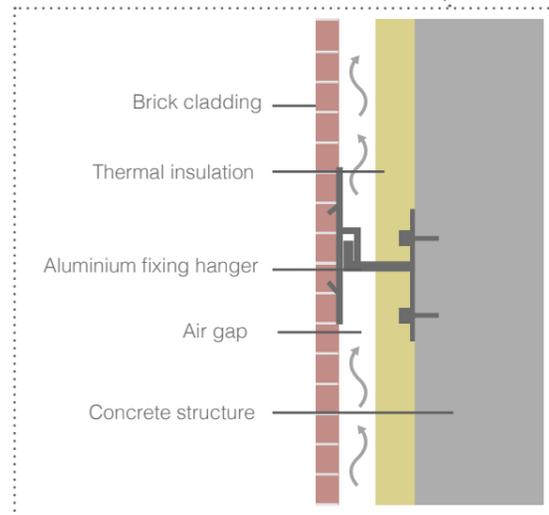
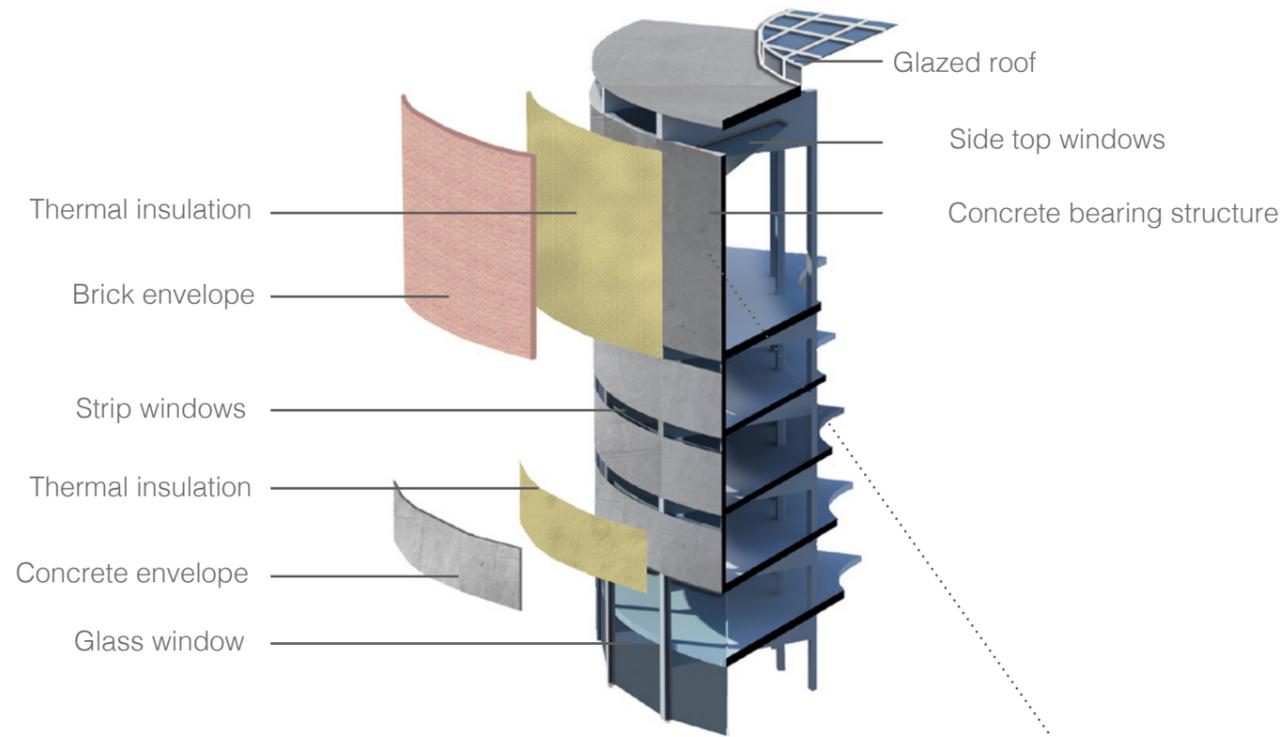
Summer cooling season (natural ventilation)



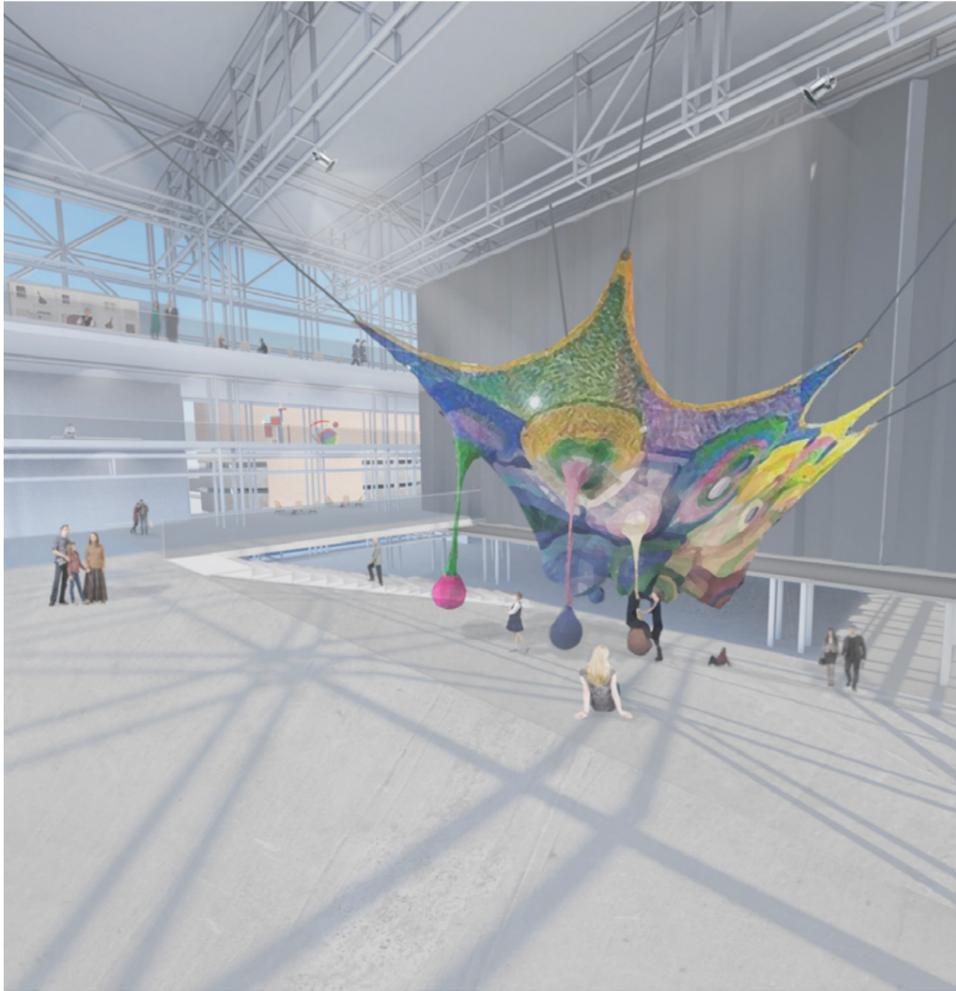
Winter heating season



Ventilated facade



Visualization 03



Visualization 04



