

# *LIVING BY RAILS*

*DEVELOPING CULTURAL IDENTITY IN THE POST-COMMUNIST CITY*

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MASTER THESIS IN SUSTAINABLE URBAN DESIGN  
LUND UNIVERSITY





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|--------------------|-----------------------------------|
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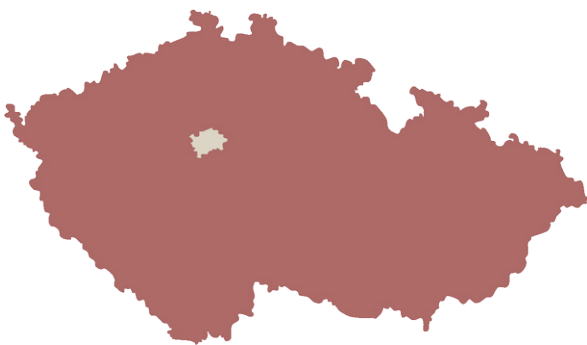
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The fall of communism in East-Central European countries brought various changes in the political, economic and social sphere influencing urban structures of cities. The transition from industrial to commercially oriented cities has left a trace in the form of abandoned brownfield sites.

The thesis project is mostly research-based. The research was carried on five existing transportation brownfield sites located in the city center of Prague.

The master thesis proposal is supposed to become an example of sustainable redevelopment of a brownfield site in Prague, which is based on developing the unique character of the site and its cultural heritage.



## THE CZECH REPUBLIC

Area: 78,866 km<sup>2</sup>  
 Population: 10,610,947  
 Density: 134/km<sup>2</sup>  
 Independency: 1993

## PRAGUE

Area: 796 km<sup>2</sup> (capital city)  
 298 km<sup>2</sup> (urban area)  
 Population: 1,308,632 (capital city)  
 Density: 2600/km<sup>2</sup>  
 Founded: 7th century

50°05'N 14°25'E

SOURCE: Wikipedia

#### 4000 BC

Certain regions of Prague were inhabited by Celtic and German tribes

#### 9th CENTURY - 13th CENTURY

Prague was part of the short-lived Great Moravian Empire until the Czechs finally broke away from it. Around the 870's Prince Borivoj built the Prague castle. Soon after this, the area around the Castle fledged into an important trading centre, where the merchants from all over Europe came together.

#### 15th CENTURY - HUSSITE REVOLUTION

The 15th century is marked by religious conflicts between the Hussite and the Roman Catholic Church in Bohemia. Many historical monuments were destroyed and Prague Castle was also damaged in this era.

#### 17th CENTURY - DARK AGE

The Dark Age began in the 17th century with uprising protests from the year 1618. This led to the Thirty Years' War, harming much of Europe and particularly Bohemia where many people died.

In 1620, the Battle of the White Mountain took place and the Protestants were defeated leading to the loss of Prague's independence. Saxons occupied Prague and Swedes moved into Hradčany and Malá Strana in 1648. Other areas were damaged and the population in the city declined by more than 50%.

#### 19th CENTURY - INDUSTRIAL REVOLUTION

The Industrial Revolution boomed in Prague. Many industries were established during this period. In 1845, a railway was started which connected Vienna to Prague. In 1850, Josefov was recognised as one of the historical centres of Prague. The National Theatre was opened in the year 1868, and in 1890 the National Museum was established. The city also experienced a rise in population.

#### 6th CENTURY

Slav tribes inhabited both sides of the Vltava

#### 14th CENTURY - GOLDEN AGE

In 1310 the Holy Roman emperor John of Luxembourg became King of Bohemia.

The city bloomed in the 14th century under the Luxembourg dynasty during the reign of Charles IV, as Prague became one of Europe's largest and wealthiest cities. In 1348, the Charles University was established.

#### 16th CENTURY - HABSBURG RULE

In 1526, the Habsburg dynasty ruled over Prague and Prague Castle was reconstructed. During this period, Prague evolved as the centre of science and alchemy and was nicknamed "Magic Prague". Many famous scientists were attracted to Prague during this time. Also following the fire in 1541, Hradčany and Malá Strana were rebuilt and much of the beautiful architecture erected still remains to this present day.

#### 18th CENTURY

Prague was divided into four independent urban areas (Staré město/Old Town, Lesser Town/Malá Strana, Hradčany and Nové město/New Town) in 1784, under the rule of Joseph II. During this time, the National Revival, a Czech nationalist movement began that brought the Czech language, culture and identity back into existence.

#### 20th CENTURY

Prague became the capital of independent Czechoslovakia after the fall of the Austro-Hungarian empire in 1918. Prague Castle became the place for the first president of Czechoslovakia, Tomáš Garrigue Masaryk. During World War II (1939 - 1945), Prague was occupied by Nazi - Germany.

In 1946 the communists (KSC) became the dominant party and formed a coalition government with other socialist parties. In 1948 the communists seized power and many democrats fled the country. In the 1950s the country suffered harsh repression and decline, Stalin style practices adopted by the KSC (Communist Party of Czechoslovakia) proved to be more damaging than anything. Eventually, those in charge of the KSC were executed.

On 17th November 1989, the Velvet Revolution started in Prague that ended communism thus making Czechoslovakia a democratic country.

In January 1990, the first democratic elections were conducted, making Václav Havel the president.

On 1st January 1993, Czechoslovakia was split into two independent countries, Slovakia and the Czech Republic. Prague became the capital of the Czech Republic.

(Prague.com, n.d.)

# PRAGUE AFTER 1989



## PRAGUE AFTER THE *FALL OF COMMUNISM*

The crisis in the Soviet Union (USSR) and subsequent disintegration of the so-called people's democracies led to the dissolution of the Warsaw Pact and the Council for Mutual Economic Assistance.

The consequences were the creation of sovereign nation-states, unification of Germany and collapse of the Soviet Union. At the turn of the 1980s and 1990s, a new group of states which departed from socialism emerged on the world's political map, now referred to as the post-communist states. As a result, fourteen new states appeared on the world's political map. In November 1989, the Velvet Revolution was set in motion in Czechoslovakia.

(Karmowska & Marciniak, 2015)

Prague if from scholars' point of view one of the former communist cities, that adapted very soon to the capitalist model.

Post-communist urban development was influenced by government/directed reforms of the political and economic

systems, internationalization and globalization, public policies favoring unregulated market development, economic restructuring in terms of deindustrialization and growth of producer services.

These policies led to similar urban changes of the cityscape associated with the commercialization of the historical core, revitalization of some inner-city neighborhoods and residential and commercial suburbanization in the outer city.

(Garcia-Ayllon, 2018)

The main features of the communist capital city were compactness, large scale public projects, an oversupply of industrial uses, undersupply of commercial uses, weakened social ties and disrupted patterns of social behavior.

(Hlaváček, et al., 2016)

Post-communist cities are cities under transformation. Urban landscapes formed under socialism are being adapted and remodeled to new conditions shaped by the political, economic and cultural transition to capitalism.





1989- Massive demonstrations

SOURCE: <https://www.aktuality.sk/clanok/642456/nezna-revolucia-ako-sa-rodila-sloboda/>



1989- Massive demonstrations

SOURCE: <https://www.aktuality.sk/clanok/642456/nezna-revolucia-ako-sa-rodila-sloboda/>

1989- "Welcome freedom"

SOURCE: <https://www.aktuality.sk/clanok/642456/nezna-revolucia-ako-sa-rodila-sloboda/>

Post-communist transition involves a set of social and urban processes, including a transformation in the urban spatial organization of the built environment, land use and residential segregation.

The key aspect of understanding post-communist urban change is the distinction between:

- The short-term period, when the basic principles of political and economic organization are changed
- The medium-term period, when people's behaviors, habits, and cultural norms are adapted to a new environment and transformations in a number of spheres and begin to effect broader societal change
- The long-term period, when more stable patterns of urban morphology, land use, and residential segregation are shaped.

(Sýkora & Bouzarovski, 2012)

The former communist Prague was based on the contrast of the beautiful historic city used by the elites of the communist party with housing estates, built by prefabricated concrete panels. The economic and sociocultural influence of the communist regime influenced the shape of the city. (Hlaváček, et al., 2016) The accelerated rise of real estate market during the post-communist period led to important housing problems, growing social inequalities, roadway congestions, parking shortages, a decrease in usage of public transportation, increased traffic accidents, air pollution, noise. The old communist party in the city center has been replaced by the real estate market and commercial shops while one in three Prague's inhabitants still live in one of the housing estates.

(Garcia-Ayllon, 2018)

Since 1989 residential differentiation, commercialization, gentrification, suburbanization and international migration played the main roles in shaping the urban structure of Prague.

While in the socialist city, many housing estates were socially mixed areas with a large proportion of families with children, in the western part of Europe, these high-rise schemes were usually intended for immigrants and low-income group. The post-socialist transformation brought spatial polarisation reflected in growing socioeconomic differentiation.

Gentrification and social revitalization of inner-city neighborhoods and the dynamic development of suburban areas have turned previously neglected parts into attractive places for more affluent residents. Temelová et al. identify three general risk processes influencing the city structure:

- The outflow of well-educated people and better-off families from housing estates to regenerated inner-city areas causing social degradation and ghettoization
- Demographic aging of the population and unbalanced age structure
- The poor technical and architectural condition, urbanistic quality, lack of public spaces and recreational activities

Degradation of the whole housing estate sector is according to Temelová unlikely, as there is still lack of available housing to satisfy the growing demand.

Demand for housing in cheaper apartments on housing estates is due to the growing international migration and inflow of foreign workers and ethnic minorities from more developed countries.

While the social status of residents living on housing estates during the socialist era was heterogeneous, the demographic structure was mainly homogeneous, as the main share of the residents was made up by young families with children.

The subsequent introduction to mortgages has opened up a wider supply of housing to middle-class households. Middle-class families, leaving housing estates for suburban areas, are replaced by young people moving to the capital.

In Prague, there are over 50 housing estates housing 42 percent of Prague's population. According to Maier, residents are mostly satisfied with their housing situation. Housing estates benefit from the general attractiveness of the capital city, the growing labor market and estate. High prices of apartments prevent housing estates from degradation. Even though diversified social structure, thanks to the inflow of young educated people, persists, the construction of new apartments on empty building lots can help to decrease the risk of social degradation.

(Temelová, et al., 2011)

## SOCIO-ECONOMIC CHANGES IN POST-COMMUNIST PRAGUE

1978- A crowd of people waiting for a tram

SOURCE: <http://www.orava-liptov.sk/SOCIALISTICKE-CESKOSLOVENSKO-70/Socializmus-CSSR-1978.jpg>



1978- A crowd of people waiting for a tram

SOURCE: <http://www.orava-liptov.sk/SOCIALISTICKE-CESKOSLOVENSKO-70/Socializmus-CSSR-1978.jpg>



**HOUSING ESTATE**

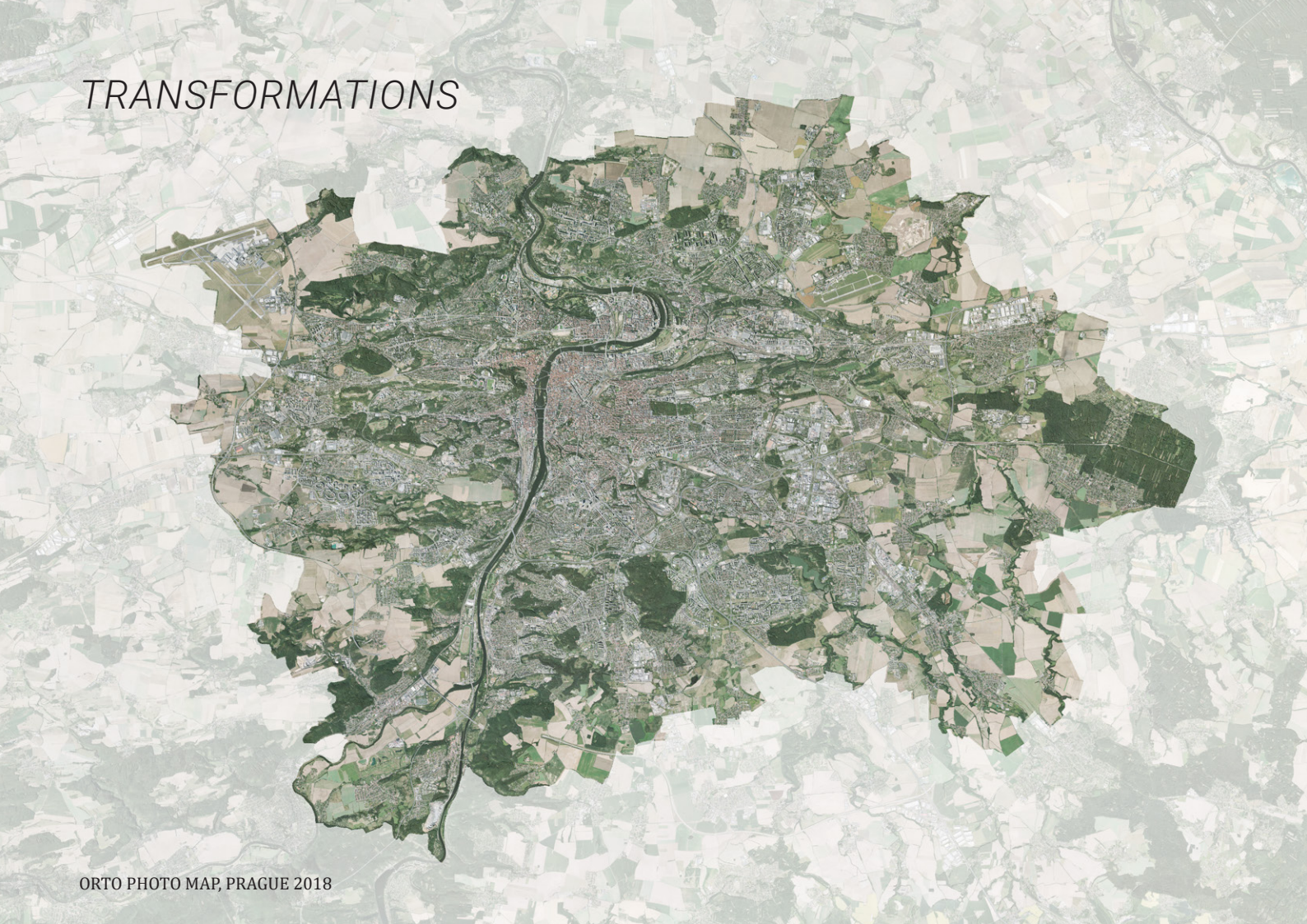
SOURCE: <https://www.zilina.sk/prispevky/kategorie/historia>



**"OLD GOOD DAYS"**

SOURCE: <https://rmagazin.sk/ako-prebiehal-komunisticky-prevrat-v-ruzomberku/>

# TRANSFORMATIONS



ORTO PHOTO MAP, PRAGUE 2018

## PHASE 01 INSTITUTIONAL TRANSFORMATIONS:

## PHASE 02 SOCIAL TRANSFORMATIONS:



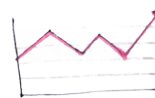
DEMOCRATIC GOVERNMENT ELECTIONS



INTERNATIONALIZATION



PRIVATIZATION



ECONOMIC RESTRUCTURING



PRICE LIBERALIZATION



SOCIAL POLARIZATION



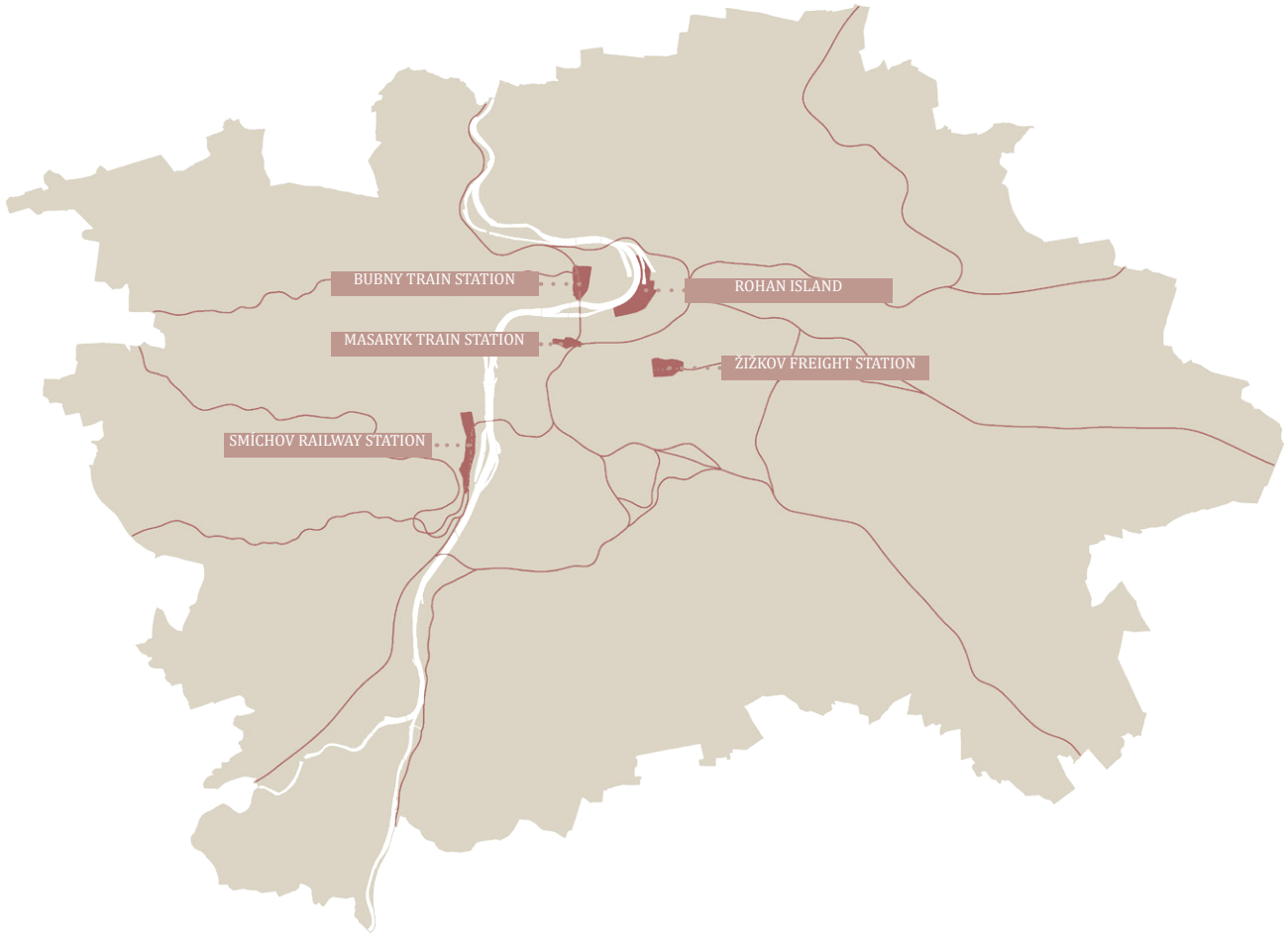
FOREIGN TRADE LIBERALIZATION



POST-MODERN CULTURE

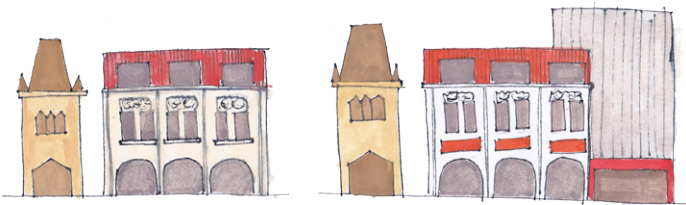


NEO-LIBERAL POLITICS



BROWNFIELD SITES IN PRAGUE

PHASE 03  
URBAN TRANSFORMATIONS:



CITY CENTRE COMMERCIALIZATION



INNER CITY REGENERATION



SUBURBANIZATION



BROWNFIELD SITES

# COMMERCIALIZATION

As a result of the transformational changes in the Czech Republic after 1989, conditions in internal trade have changed and retailing, as a part of the trade sector, has undergone considerable changes, becoming one of the most dynamic industries of the national economy.

Retailing in the nineties can be characterized by many features:

- The disintegration of the state companies
- The newly emerged business organizations
- The inflow of foreign direct investment
- A great increase in the retail sales area
- The increasing number of employees in trade
- New services and retailing
- The modernization of the retail network
- The improvement of the operating staff level and technological functioning
- Large-scale retail outlets

(Spilková & Šefrna, 2010)





Long queue in front of a butcher shop  
 SOURCE: [https://boleslavsky.denik.cz/galerie/foto.html?mm=fronta\\_na\\_maso&back=3597698814-174-4&photo=1](https://boleslavsky.denik.cz/galerie/foto.html?mm=fronta_na_maso&back=3597698814-174-4&photo=1)

The most frequent problems in connection with suburban shopping centers are the decline of city centers and the outflow of commercial functions to the outskirts of cities, traffic problems, and liquidation of small retailers by strong international retail chains. Among the most serious problems, one of the most alarming is the loss of important agricultural land in the hinterland of big cities. Scholars agree that the recent massive development of large-scale commercial capacities needs to be controlled. In the majority of western European countries, such regulation is carried out at the local, regional or national level and some regulations might be set by the central government. (In the USA the development is permitted only on land zoned for commercial development while in some western European countries planners determine the amount and location of land available for commercial development.)

Koželouh's research used in Spilková and Šefrna's paper proved that the largest projects are located outside the built-up area of the cities, with more than half of the new applications places in free or mostly green areas. He also pointed at the impact of the existence of these newly built retail buildings. Increased transportation, decreased air quality, increased noise are some of the negative aspects connected to these new developments. Kouželouh found out, that a common practice is to place a new retail outlet on undeveloped agricultural land.

The research pointed out that all of the mentioned developments were driven by foreign companies and foreign developers.

The research carried by Spilková and Šefrna reveals that new large-scale retail formats have been built in the peripheral areas of Prague regardless the fact that there are still enough potential locations in the inner city, such as the plots with ruderal vegetation or industrial brownfields, which are cataloged as non-agricultural land. Due to growing retail development, we have been witnessing the loss of agricultural land and quality soils and the concerns about sustainable growth and food security has been one of the most discussed



Insufficient stock  
 SOURCE: <https://bratislava.sme.sk/c/5541566/o-com-sa-pisalo-pred-57-rokmi.html>

topics worldwide. Construction of large-scale retail buildings attacks soils of higher quality and the extent of arable land has decreased significantly.

(Spilková & Šefrna, 2010)

Green revolution (increased efficiency of agriculture) led to the declining importance of agriculture land for food production in all European countries. Since 1989, when the land was returned to its previous owners, traditional relation to the land and its importance has been vanishing, mainly in urbanized areas. The demand for construction plots, attractive locations and lack of legislation rights for soil protection strengthen the decision of landowners to make a maximal profit out of the property by selling it for construction purposes. Fertile soils could be easily exempted from the agricultural land stock after fulfilling all the legislative conditions or after being given a special exception. Strong capital behind the developments is able to afford to pay high charges for the exemption of parcels as well as high market prices.

Expand of retail development and housing into a previously highly productive area is a problem of commercial suburbanization of the capital city of the Czech Republic. The soils of the highest quality ranks have always been an important agricultural hinterland in the history of Prague's rise as an administrative center of the republic, producing cereals and sugar beet.

(Spilková & Šefrna, 2010)

The land with better proximity to the market is used for crops production of higher income and expensive transfer. It can be assumed that the suburbanization of Prague is removing agricultural economy and replace it with the commercial one.

(Žitek, 2013)

There are two main aspects playing important role in the location of commercial developments:

- Flat terrain (more economical construction process)
- The proximity of an important transport communication guaranteeing good access for customers e.g. highway, motorway

(Spilková & Šefrna, 2010)

# TOURISTIFICATION

The Czech Republic moved from a centrally planned economy to market economy through the re-internationalization of markets. The process was based on privatization (distribution of property rights) and liberalization (setting the market mechanism). This market transition created the private sector, and so new accommodation and hospitality facilities were established and private travel agencies started to work.

The process of privatization is considered to be a crucial point in the economic transition connected to tourist development. Privatization led towards the distribution of property rights between foreign investors (developers) and Czech inhabitants. The private sector was created together with insufficient legislation created conditions for the Czech as well as foreigners to buy properties in the historical center of Prague and use them for commercial purposes.



Dancing house designed by Frank Gehry  
SOURCE: <https://www.traveller.ee/blog/transfers/how-to-get-from-prague-to-vienna/>

The economic transition influenced the development of tourism which led to changes in the spatial structure in Prague. The transformation of space is connected with two processes:

- Internationalization- allowed foreign developers to buy properties and run their businesses
- Concentration (destination becomes a tourist ghetto)- led to the allocation of new accommodation facilities in the historical core of the city

The freedom of movement is considered to be the first step that influenced the development of tourism in Prague. After 1992 there was a mass increase in arrivals of foreign tourists in the Czech Republic. This rapid growth was called „curiosity effect and expectations“ as most of the tourists were coming from Western Europe.

A turning point for tourism is the year 2002. There were two reasons which influenced touristic flow, visitors regarding Prague to be a cheap destination, into the city:

- Prague was hit by floods
- Terrorist attack in New York- impact on aviation which was transformed and low-cost flights appeared in the market (Holešinská & Šauer, 2018)

According to Holešinská and Šauer, the historic center of Prague is becoming a so-called touristic ghetto. Excessive commercialization of Prague in favor of visitors is causing a loss of authenticity, which is reflected in the offer of non Czech goods.

The most tourist part in the city copies the Royal Route, which is considered to be the most beautiful sightseeing path in Prague. The name was given to a route, which for many centuries had been taken by the Czech kings in a procession to their coronation in the St. Vitus Cathedral at the Prague Castle, the spiritual center of the kingdom.

## SOME FACTS ABOUT THE TOURISM IN PRAGUE:

The number of tourists arriving in Prague has been increasing steadily. Back in 1989, there were 1.6m tourists arriving in the Czech capital. In 2000 the figure was 2.6m and in 2017 as many as 7.6m, according to figures from Prague City Tourism.

A Euromonitor study (2017), noted Prague had become the fifth most visited destination in Europe, after London, Paris, Rome, and Istanbul, and experts are predicting further growth.

The accommodation offering via Airbnb has increased in particular, with over a million tourists booking their accommodation in the Czech Republic via Airbnb, many more than in the neighboring countries of Hungary, Poland or Slovakia.

The state has been loath to interfere with the market and increasing tourism revenues have led to uncontrolled development of tourism in Prague's historic center, which has evolved into a tourist ghetto.

The tourism boom would certainly have been unimaginable without the development of air travel and the entry of low-cost airlines into the Czech market.

Prague Airport is struggling with its own limits. While in 2017 a record number of 15.4m passengers checked in, a further increment of 1.5m passengers is predicted for 2018 – already the estimated capacity of the airport.

Prague City Tourism has also been pro-active in finding solutions to over-tourism. Firstly, in promoting less well-known pedestrian trails to redirect visitors from what is known as the Royal Way and focus on other interesting places in the city.

Attractive tourism is one of the six key areas of the approved Strategic Plan of the Prague City Smart Concept 2030 (Deloitte Ceska Republika, 2014). Prague City Tourism aims to use 3D technology and augmented reality as a tool to decrease over tourism and promote the locations less frequented by tourists. Through the 'I Have an Idea' campaign, local inhabitants also have an opportunity to design new things that will help improve the quality of life in their city.

(Colston, 2019)

65% of all foreign visitors in the Czech Republic come to Prague every year. 90% of all overnights are performed by foreign visitors.

(Holešinská & Šauer, 2018)





Old Town Square during summer

SOURCE: <https://www.tasteofprague.com/pragueblog/12-things-you-should-know-before-visiting-prague>

*“The tourist authorities do not appear too concerned about the growing numbers. Their plan is to try to divert tourists out of the center toward the outlying neighborhoods (called in the industry ‘changing the geographic distribution’). I’m not sure how successful that will be as people come here for the Old Town Square and Charles Bridge (not the neighborhoods of Smichov and Karlin). The authorities are limited by economic realities: about 1 in 10 Prague residents now works directly for the tourism industry, so it’s a vital part of the economy.”*

Baker, author of the Lonely Planet Guide to Prague  
(Turp, 2017)



# ELDERLY IN THE CITY CENTRE



SOURCE: [https://www.planetizen.com/files/styles/news\\_header\\_sm/public/images/shutterstock\\_228358156.jpg?itok=9agAdECp](https://www.planetizen.com/files/styles/news_header_sm/public/images/shutterstock_228358156.jpg?itok=9agAdECp)

Rapid regeneration is transforming some of the inner city neighborhoods from working-class peripheries to modern city sub-centers with new offices, shopping malls, entertainment, and high-end housing. In the historical core, touristification and commercialization have led to the displacement of cheaper stores and to the spread of specific services aimed at tourists and wealthy residents. The changing residential environment, landscape, and functions affect the quality of life and the residential satisfaction of the local population in their home neighborhoods. Particularly the elderly population, which daily movements take place mostly in the neighborhood, is sensitive to these changes. Transformations related to urban changes are perceived as stress factors for people living in their long-term apartments. The main changes influence their everyday life as there is a loss of familiar environment and feel of a community due to the loss of affordable housing, the displacement of cheaper shops selling everyday goods make them travel long distances and most of the public spaces aimed for congregation have been privatized.

Age-friendly urban planning could be seen as a solution to limit the loss of independence of elderly people and lessen the stress caused by the need for quick adaptation.

Residential satisfaction is one of the ways how to evaluate the quality of the urban environment. The urban environment is the context of everyday life, inevitable and leisure activities, mobility and social participation. Independency lifestyle is one of the most important attributes of high-quality life in old age. The majority of the daily activities of elderly people are undertaken by foot in the surrounding of the house and neighborhood. The distance plays a crucial role in designing an accessible place for shopping, services and social contacts.

An age-friendly city is defined as a place that gives pleasure, feels safe, is neighborly and offers access to facilities and services. Such a city offers safe public transportation, public spaces where older people are able to relax, meet and interact with respect to their limited mobility, as social cohesion, participation, and trust increase the residential satisfaction. Comparative research by Fobker and Grotz proves that central districts provide physically better infrastructure and better preconditions for an independent and active lifestyle than areas in the urban fringe. Advantages of living in central districts are mixed services, a short distance between home and facilities, good pedestrian access encourage walking and protect them from dependency on assistance.





SOURCE: <https://pixabay.com/es/photos/st%C3%A1%C5%99%C3%AD-%C5%BEny-babi%C4%8Dka-d%C5%AFchodce-4050627/>

On the other hand, regeneration of these neighborhoods brought negative aspects like high living costs, crime, traffic, changing population and weak social bonds. Urban revitalization means bringing new life into cities and upgrading them for a higher social and economic standard. While the neighborhood is transformed into an image of newcomers, the original residents have exposed the pressure linked to the changes in population, rising rents and property prices and loss of possibilities for local shopping and satisfying the basic needs in the neighborhood. The most influenced subjects are elderly people, low-income families, and single-parent families as well as neighborhood shops tailored to the everyday needs of local residents, which are not able to compete with luxurious boutiques and restaurants.

The research explored the lack of satisfaction of elderly people living in the historical core of Prague complaining about the absence of food and drugstore close to their homes. Walking is the most important means of transport for elderly people to do daily shopping and public transportation is used usually for visiting relatives and going to the doctor. Prices of food are on average 17% higher than in the other parts of the city as shops are looking for clients with higher purchase power. The accessibility of parks and greenery is one of the major problems perceived not only by the elderly but also for other residents. Elderly people are usually very sensitive about the presence of a crowd, tourists, and sportsmen and opt for smaller pocket parks as a place for contemplation. Night-time users, as well as foreigners, are also considered to be challenging for pensioners. Elderly people find it insecure to walk outside during the night, therefore, they have a tendency to plan their time in advance to avoid risky situations.

Elderly people miss social bonds and interactions and to build community ties is quite challenging as most of the apartments in the city center are sold to better-off households, rented out to young professionals or used as Airbnb accommodation. Despite the struggle to pay rents caused by high living costs, there is high residential stability of older people as the majority of the elderly tend to stay in the city center. There is not a noted desire to move out of the central neighborhoods due to the number of years spent in the city center.

(Temelová & Dvořáková, 2012)

Many inner cities in East Central Europe after World War II gradually dilapidated, as state housing policy focused on the building of new housing estates at the urban fringe. Younger and higher educated generations moved into new housing estates, avoiding polluted city centers due to archaic heating systems and industries. The social structure of many inner cities became dominated by older and less educated people. After the fall of communism, city centers were witnessing a physical decline, outmigration, and social downgrading. Nowadays, the trend of regeneration brings new inhabitants, therefore the opposite processes of in-migration and rejuvenation have been changing the urban structure of city centers.

(Haase, et al., 2012)

In western countries, scholars define these processes as gentrification and studentification.

Gentrification is a process connected to a displacement of former residents and big socio-demographic changes, therefore the term regeneration is more in favor in the context of the Czech Republic.

“Transitory urbanities” is a term used to describe a generation of young professionals, students or cohabiting couples, who all chose to live temporarily in the city center because it brings benefits to their current stage of life.

Residential mobility, which is influenced by shifts in the economy, housing policies or housing markets, is according to Rossi quoted in Haase’s paper a major driver of both residential and urban changes. Residential change is defined as a process of the formation, alternation, and rearrangement of residential patterns, e.g. physical and social decline, neighborhood regeneration and gentrification.

Key factors for household location decisions in the urban space are economic, social and cultural resources. While financial capital influences accessing certain housing market, social capital, informal ties, and formal relations, might function as a pull or push factor to move to a certain area or leave it for another. Cultural capital, qualifications, and educations are strongly related to social status.

According to Haase, people can be socially mobile without physically moving and thus collectively change the social fabric of a place, its amenities, and equipment. Residents represent a socially networked space, where the presence of others provides opportunities to build up, reactivate and ignore local social interactions.

In the context of the Czech Republic, the post-socialist transition is seen as the most important social influence shaping urban and neighborhood development.

## TRANSITORY URBANITIES





Letná, favourite summer spot

SOURCE: <https://www.tasteofprague.com/pragueblog/prague-off-the-beaten-path-letna-district>

## FRAMEWORK CONDITIONS OF RESIDENTIAL CHANGE IN CZECH INNER CITIES

The process of privatization represents a large-scale transfer of housing property from public to private actors (partly via restitution to former owners or their heirs). Haase identified four ways for residents to find an apartment in the city center: inheritance, buying an apartment, dwelling exchange, renting an apartment.

The research carried out by Haase revealed that renting is the major way of entering the inner city. It is quite a common scenario, that the original owner leaves the inner city for suburbia and wants to keep the flat for additional income or for future kids. The transitory phase of life, especially of students, young professionals or young couples, is connected to an uncertain housing situation, which also represents considerable housing mobility.

Due to housing shortage during socialism, most young people had to remain in their parents' flats until marriage and sometimes even after that. In contrast, now a new group of highly mobile inner-city dwellers is identified. Common relocation of this group is related to changes in personal life, education, work or housing situation. The most common housing carrier is from parents' home they move to students' halls of residence and from there to a couple's flat- or maybe room/shares.

Since the young generation of people has a possibility to alter residential patterns of aging, population decline and decay in

the neighborhoods, they are sometimes seen as pioneers in the regeneration of the neighborhood, as they have an impact on the social mix within the area.

Suburbanization is one of the most visible and discussed processes of urban development in post-communist countries. Most of the transitory urbanities, who are temporary inner-city residents, have expectations of leaving the inner city in the future, usually for suburban areas, and regard living in the inner city only as a decision for certain time. Some of them intend to look for more stable and children-adapted neighborhoods in proximity to the city center.

Most of the young people moving to bigger cities usually rent their first apartment at the urban fringe, due to the lack of available housing. Later they move closer to the city center since the previous residents move to a suburban area or to bigger apartments. Inner-city housing location suits young people needs and desires, especially the comfort represented by the proximity to the city center, work, school, cultural activities. The decision to leave the inner-city apartment is most of the times connected to family formation since inner-city neighborhoods are not perceived as safe the environment for raising children. Transitory rental housing is not only a result of lack of ability to make a decision upon future settlement of young residents but also a consequence of the high cost for purchase or restricted access of the public housing segment.

(Haase, et al., 2012)



SOURCE: <http://www.dk1.cz/>

## SUBURBANIZATION

The definition of suburbanization used by Ouředníček is “the process, which led to decrease of residents living in the inner parts of the city and their migration to newly built quarters consisting of family detached houses at the urban fringe”.

Suburbanization means growth of population, spatial growth as well as qualitative changes in the suburbs. The most discussed negative aspect of suburbanization is a negative impact on the environment (heavy traffic, use of agricultural land for construction purposes, degradation of the surrounding landscape, pressure on parking places in the city center) and we can also observe socio-economical changes among suburban residents. Undirect urbanization is the term describing the influence of new residents and their habits and behavior on previous residents. Suburbanization in Prague is influenced by the migration of residents from inner city on the outskirts and decentralization of various city functions.

(Ouředníček, 2003)

### HISTORY OF SUBURBANIZATION IN PRAGUE

One of the first signs of the suburbanization of Prague could be considered building aristocratic summer residence outside of the overcrowded and unhealthy city center. As a response to the arrival of workpeople during the industrial revolution were new independent cities around Prague center, which later became municipal districts of Prague (e.g. Smíchov, Karlín, Vinohrady, Žižkov). During the 20th century, there was ongoing metropolization of Prague with the growth of agglomerations remoted from the city center.

(Ouředníček, 2003)

### SUBURBANIZATION OF PRAGUE DURING THE ERA OF SOCIALISM

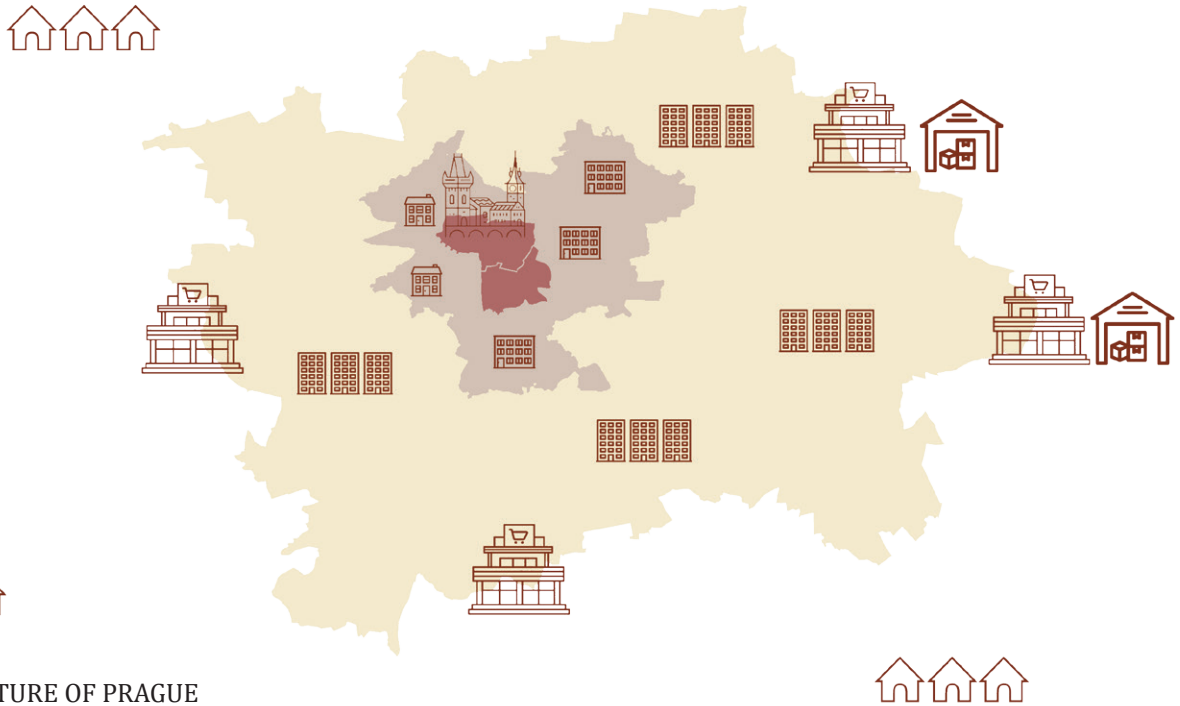
The process of suburbanization was in socialist Prague completely replaced by “complex housing/apartment construction” (in Czech “komplexní bytová výstavba”). The growth of suburbanized areas was restricted by limited access to land, economic capital, and building material. There was no market allowing people to take loans or to buy land, as the agricultural land fond was strictly protected. On the other hand, the difference in living expenses in the city and in the villages concentrated around Prague was not that significant. Contrametropolization was an unnatural process when the potential growth of Prague was unused and the attractiveness of the city was expressed only by the increased number of commuters and workers to Prague, living in the villages around the capital, which were on the contrary during the era of communism very urbanized due to their good economic resources.

(Ouředníček, 2003)

### NEW SUBURBANIZATION OF PRAGUE

In the 90s all the barriers of the suburbanization process were removed. Land restitution increase of differences in living conditions and quality, financial support of future house owners supported the continuity of suburbanization. The second half of 90s Prague was losing residents due to the selective migration to the attractive parts of Prague’s outskirts. On the other hand, remoted parts of the Central Bohemian Region are losing population as they are found less attractive for residents. The potential of the future growth of villages is influenced by good public transportation and accessibility, the attractiveness of natural and social environment, availability of building plots.

The process of suburbanization is supported by the availability of economic sources for middle-income families,



## URBAN STRUCTURE OF PRAGUE

previously living in the housing estates, who are able to finance medium standard housing and affordable building plots. Housing estates, therefore, struggle with the decrease of social structure, as many educated people leave them for suburbs.

Characteristic features of the process of suburbanization in the Czech Republic is spatial fragmentation of housing, not compact city development and a large number of individual projects. Prague is able to attract residents due to economic reasons. The main loss of residents is due to health problems, lack of suitable housing options or growing family. The suburbs of the city are attractive places for young families with children as well as middle-aged people. On the other hand, teenagers, young adults mostly live in the inner city, due to economic or educational reasons. The elderly, who used to live in the city center, do not tend to move to the suburbs.

Young families, usually educated adults, moving to the suburbs may influence the social structure of the surrounding and support the level of education and decrease the age average. However, a lot of young families moving to the suburbs do not interfere with local people, as they do not have a tendency to create bonds with their neighbors. They live isolated and do not participate in village development.

(Ouředníček, 2003)

The research carried by Kázmér and Boumová regarding housing satisfaction proved that the most satisfied people in the Czech Republic are the family house owners, while the less satisfied ones are living in rental housing in housing estates. In 2001, housing estate residents were less satisfied than in 2013. The attractiveness had risen because of the modernisation and renovation.

(Kázmér & Boumová, 2016)





FORMER INDUSTRIAL BROWNFIELD IN OSTRAVA, CR  
SOURCE: <https://static.independent.co.uk/s3fs-public/thumbnails/image/2018/01/25/17/a-dolni-vitkovice-1.jpg>

# BROWNFIELD REGENERATION

## CHAPTER 2

### DEFINITION OF BROWNFIELD

Since 1989 the progress of social processes of demilitarization, deagriculturalization and deindustrialization has been much more intensive. On consequence of these processes there has been a huge increase in the amount of unused space, so-called brownfields.

Brownfields could be defined as unused, abandoned, derelict and often contaminated lands and premises. They are products of mutual relations within the concrete locality, its history, social, legislative and ecological processes representing particular information about the state of the surrounding society.

The meaning of the word „brownfield“ has a different meaning across various countries and contexts. Brownfields originate as a consequence of structural changes in a wide number of different economic activities. (Kunc, et al., 2018) CABERNET’s definition of Brownfield (Concerted Action on Brownfield and Economic Regeneration Network): “Brownfields are sites that have been affected by the former uses of the site and surrounding land; are derelict and underused; may have real or perceived contamination problems; are mainly in developed urban areas, and require intervention to bring them back to beneficial use.” (Thornton, et al., 2007)

A definition of brownfield that is widely accepted in the Czech Republic is provided by the Business and Investment Development Agency CzechInvest, the agency of the Ministry of Industry and Trade. Brownfield is defined as:

*“Property (land, building, area), that is underused, derelict and may be contaminated. It occurs as reminder of industrial, agricultural, residential, military and other activity. It is not possible to use such site suitably and effectively without regeneration process“.*

The legacy of brownfield sites is, therefore, a result of a combination of economic, industrial and agricultural restructuring, speculative property development and demographic change. (Ganser & Williams, 2007) In many countries, brownfield sites have become part of a wider strategic planning policy aims to create sustainable cities. Urban land reuse is seen as a contribution to the reduction of pressure on greenfields and minimizing urban sprawl. It is also perceived as a positive contribution to urban regeneration by upgrading neglected areas and providing new housing, services, and amenities. (Ganser & Williams, 2007)



# BROWNFIELD REGENERATION

RESCUE's definition of sustainable brownfield regeneration is:

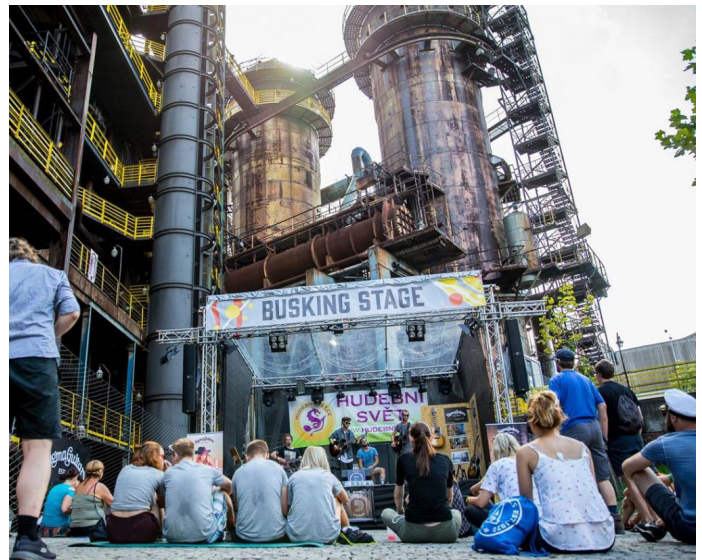
“The management, rehabilitation and return to beneficial use of brownfields in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations in environmentally sensitive, economically viable, institutionally robust and socially acceptable ways within the particular regional context”.

Brundtland defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (Thornton, et al., 2007)

Attitudes towards brownfield regeneration in capitalist and post-communist countries differ in a certain time delay. The major increase in the number of brownfields occurred during the 1970s in capitalist countries and became a relevant social topic in 1990s, in post-socialist countries they started to appear after the collapse of the Eastern Bloc and became publicly discussed only after 2010. The main reasons for brownfield appearance were the collapse of socialism and the return to a market economy, with the restructuring of traditional industries, and following globalization trends during the last decade of the 20th century. (Osman, et al., 2015)

During the late 19th and 20th centuries, industrial sites were established surrounding the city center. The dynamic growth of cities during the 20th century saw them become integrated into densely urbanized inner city. Outside the inner-city brownfields covering extensive areas emerged from various former uses, including brick pits, quarries, transit depots, waste/sludge fields of agriculture. (Navratil, et al., 2018) Brownfields with central location create important spatial barriers limiting the sustainable development of a compact urban organism. The huge occurrence of brownfields and efforts to make the regeneration of these sites easier frequently lead to underestimation of the importance of their heritage. An occurrence of heritage is quite frequently perceived as a barrier to seed up the brownfield redevelopment process. Heritage preservation depends predominantly on recognizing its value by the developers. (Navratil, et al., 2017)

The problem of regeneration and re-use of brownfields might partially contribute to the solutions for sustainable development. One of the major problems of Central Eastern European cities is to reduce the undesirable increase of extent of build-up areas beyond city limits on the account of the open landscape. (Tureckova, et al., 2017) In many countries, brownfield sites have become part of a wider strategic planning policy aims to create sustainable cities. Urban land reuse is seen as a contribution to the reduction of pressure on greenfields and minimizing urban sprawl. It is also perceived as a positive contribution to urban regeneration by upgrading neglected areas and providing new housing, services, and amenities. (Ganser & Williams, 2007)



Festival Colors of Ostrava, example of successful brownfield regeneration, Dolní Oblast Vitkovice, CR  
<https://en.festival.travel/festivalen/uploads/2017/10/colours-of-ostlava-2018-album-4-1024x853.jpg>

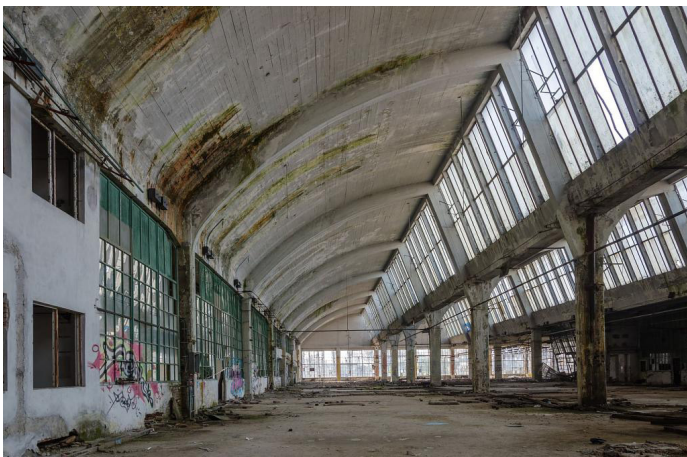


Festival Colors of Ostrava, regenerated brownfield Dolní Oblast Vitkovice, CR  
SOURCE: [https://www.hlimg.com/images/events/738X538/5\\_1541242428e.jpg](https://www.hlimg.com/images/events/738X538/5_1541242428e.jpg)

Brownfield regeneration can contribute to the compactness of cities, reduce environmental health risks for local population or tourists and contribute to an increase of attractiveness of cities and municipalities. Support of brownfields regeneration can enhance preservation of the existing industrial history as well as the awareness of living in a more sustainable and environmentally friendly city. (Tureckova, et al., 2017) The reuse of temporarily abandoned areas can therefore also strengthen more environmentally friendly way of thinking. (Tureckova & Nevima, 2018) On the other hand, brownfields affect microclimate in the city as these abandoned areas have a cooling effect and their redevelopment may lead to loss of cooling effect due to densification. (Navratil, et al., 2018)

Navratil argues that while brownfields could be seen as potential sites for demolition, the most socially convenient option seems to be keeping historically valued brownfields as part of the heritage of a bygone industrial area. Other options are landscaping to create green spaces or demolition followed by a new development, which is seen as a common and economically driven option. (Navratil, et al., 2018)

# PERCEPTION OF BROWNFIELDS



PRAGOVKA ART DISTRICT, former factory, Prague  
SOURCE: <https://www.digimanie.cz/galerie/showimage.php?i=38081&c=6>

The social, environmental and symbolic values of brownfield sites are also of great importance so that the quality of life of the local population could be improved, and more sustainable and balanced urban development could be reached. Since brownfields and industrial buildings were an integral part of industrial cities for decades and served as areas of production where the local people were commuting to work, a local settlement was formed around them and local people. Even though an industrial operation was ended, and the sites were abandoned, a mental relation to brownfields has remained. The mentioned relation might be systematically used for the development and strengthening of the local identity. (Martinat, et al., 2018)

The occurrence of brownfields is usually perceived as a weakness or a thread for future development of cities, towns, and municipalities. Brownfields are perceived quite negatively, as the local population believes that their existence reduces prices of residential properties. The property prices are constructed by characteristics of the local real estate market where geographical location belong to factors of crucial importance. Willingness to purchase the real estate in the proximity of brownfield is affected by the mix of factors like geographical location, accessibility, availability of infrastructure and perception. On the other hand, once the process of regeneration is finished the property values usually increase. (Tureckova, et al., 2017)

## *Problematic issues connected to urban regeneration:*

- Poor public-private partnership
- Unclear ownership structures of brownfield sites from the privatization process during the 1990s (sites are sometimes still blocked by banks or the absence of unambiguous ownership)
- Multiple ownership of sites

(Navratil, et al., 2017)

With growing environmental awareness brownfields have become an issue of strong interest among the general public (Martinat, et al., 2018) While empty brownfields have a negative impact on the surrounding environment, the process of their regeneration increases the social capital, not only from a restoration of public spaces but also from environmental responsibility and link to our ancestors. (Tureckova & Nevima, 2018)

The decreased social capital of brownfields is caused by lower property linked to the negative impact and perception on these sites. Pollution, contamination, danger from a technical point of view make brownfields decaying, therefore they are usually places of concentration of socially pathological phenomena (drug addicts, homeless) is perceived as a weakness or a thread for the future development of cities.

The survey carried by Tureckova and Nevima proved, that residents do not want to buy a property in the close proximity to a brownfield site. This is one of the reasons, why are brownfields perceived quite negatively as the local population believes that they are causing property price reduction as the price is strongly influenced by location, what plays a key factor is the decision of purchasing a property. (Tureckova & Nevima, 2018)

Brownfield regeneration is perceived as a significant element in the development of contemporary cities. The regeneration is accompanied by the decontamination of sites, the increase in the economic activity and it also enables us to preserve the cultural heritage for the future. Brownfields with temporary uses are usually perceived by the public more positively than abandoned sites. The temporary use of brownfields creates great preconditions for accelerating long-term regeneration processes, or event the planning of such, and creates good conditions for public acceptance of new uses. The opening brownfields for tourists and visitors seem to be another important way how to attract public attention to brownfield issue.

The increased interest might also push forward the regeneration processes. The temporary use of brownfields might be linked to an organization of cultural or sports events, the use of brownfields for renewable energy production such as the location of solar plant or growing of biomass, the project of urban agriculture or the use of brownfields for the leisure time of the local population or tourism. Protection of cultural heritage is predominantly about using the spaces within cities related to some of their significant era which provides the given environment of the city ist unique and one-of-a-kind character. As one of the main barriers of brownfield regeneration might be the combination of economic transformation and economic weakness of towns and communities. (Martinat, et al., 2018)

# PARTICIPATORY PROCESS

According to Klusáček, good governance is a strategic way of promoting development opportunities in urban space. He identifies three governance principles relevant for brownfield regeneration: responsiveness, transparency and the importance of participation for brownfield redevelopment. (Klusáček, et al., 2018)

McCarthy quoted in Osman's paper claims, that the active participation of local communities is considered one of the key pillars of a successful regeneration policy, especially in the case of less economically viable brownfields as the more economically viable a site, the less its redevelopment will be on this factor. (Osman, et al., 2015)

According to Rizzo, the proposed brownfield regeneration process consists of five phases:

- Planning and preparatory work
  - Stakeholder identification and selection
  - Workshops and focus groups
  - Web-based questionnaire
  - Feedbacks to stakeholders (Rizzo, et al., 2015)
- (Rizzo, et al., 2015)

Scholars emphasize public participation in the urban planning process for the redevelopment of brownfields. Particularly for the reason, that the residents, who are the foundation of urban democracy, are affected by the redevelopment the most- especially economically, socially and environmentally. Determining the resident's preferences for regeneration alternatives is of great importance for this process.

According to Navrátil's research, general attributes of regeneration project, based on residents' opinion, should be: mobility and accessibility, use of renewable energies, environmental education, economic redevelopment and safety, and security. Spatial proximity was found to be the key factor affecting the perception of a revitalization project, similarly to the local context. (Navratil, et al., 2018)

In the Czech Republic, there is not that much attention paid to the opinions of the citizens, in the residence of which the brownfields are located. Lusicky and Musil quoted in Martinát pointed out, that the vital factor of success of any development is the support of local population. (Martinát, et al., 2017)





Three former farm buildings, Leszno, Poland / NA NO WO architekci  
 SOURCE: <https://www.archdaily.com/783283/20-creative-adaptive-reuse-projects>

## ADAPTIVE REUSE

Fetisov in his work suggests that to preserve post-industrial brownfields in the Czech Republic demand a new experimental level of conservation of industrial heritage by the „adaptive reuse approach“. Adaptation of industrial heritage for new effective functions with the conservation of historical and architectural value of all industrial heritage objects is seen as a solution to the problem of preservation of post-industrial city structures. Adaptive reuse approach consists of understanding and analyzing problems of a specific site and conservation of industrial heritage by finding a new effective use, integration of social, municipal, cultural and other components resulting in improvement of microclimate in the area. (Fetisov, 2015)

The process of industrialization began in England in the late 18th century with the introduction of the first manufacturing plant spreading to France, Germany and in the late 19th century to the rest of Europe. In addition to the major social changes, the industrial revolution meant a change from manufactory and craftsmanship to factory production. Industrialization was important for the global development of architecture. The development of industry influenced the creation of a new type of buildings known as industrial architecture (production halls, multi-story buildings). The industrial area introduced global changes which meant new goals and new means how to achieve them. Industrialization was requiring new concepts and technologies what reflected in the typology of industrial architecture. Versatility and variability of buildings, unification and standardization of buildings and building components, indoor environmental quality and requirements for fire safety, open layout of the floor plans, continuous windows on the facades could be listed as some of the features of industrial architecture built to be used not only by workpeople but mainly for mechanical devices. (Fetisov, 2015)

Old industrial infrastructure gradually loses its function as industrial buildings become unsuitable for future use, implementation of new technologies is not possible and the previous technologies are not effective anymore. Modern industrial architecture has different requirements, not compatible with the industrial heritage as more technological and automated electronic devices were introduced into manufacturing. (Fetisov, 2015)

Fetisov in his analytical research work defined three tasks and goals of adaptive reuse of industrial heritage:

- historical (preservation of the historical value of industrial buildings)
- architectural and artistic (preservation or architectural and artistic value of the concept of industrial building, preservation of internal organization and distribution of the original spaces including interiors)
- technical (preservation manufacturing equipment and technologies, movable monuments like machinery, transport, and other equipment)



Two new residential complexes inside a disused factory  
 SOURCE: [https://images.adsttc.com/media/images/56dc/657a/e58e/cec3/ec00/0065/slideshow/portada\\_004.jpg?1457284467](https://images.adsttc.com/media/images/56dc/657a/e58e/cec3/ec00/0065/slideshow/portada_004.jpg?1457284467)

Large urbanized cities have a deficit of „suitable social environment“ and therefore it is necessary to create a new social, cultural and municipal objects based on industrial buildings and brownfields that will be used taking into account all environmental problems. An optimal new function is supposed to be a function with social or municipal importance for the population. (Fetisov, 2015)

Fetisov suggests six most important and relevant functions for adaptive reuse: (Fetisov, 2015)

- development of residential infrastructure (e. g. hostels, student hostels, social accommodation, house for aged, hotels, pensions etc.);
- public health care (hospitals, health centers, and service, social institutions etc.);
- development of cultural and intellectual municipal fund (museums, libraries, concert halls, exhibition centers, galleries, workshops, theaters etc.);
- development of education and science resources (e. g. kindergartens, schools, colleges, universities, schools of art, study and reading rooms, dance halls, laboratories, research centers etc.);
- municipal sports and recreation (sports clubs, swimming pools, fitness centers, parks, botanical gardens etc.);
- special and other methods.



Former Burckhardt machine factory in Basel, Switzerland

SOURCE: [https://images.adsttc.com/media/images/56dc/65ec/e58e/cec3/ec00/0067/slideshow/Stereo\\_img2880\\_01.jpg?1457284580](https://images.adsttc.com/media/images/56dc/65ec/e58e/cec3/ec00/0067/slideshow/Stereo_img2880_01.jpg?1457284580)

## HISTORICAL VALUE

Brownfield sites that retain suitable structures and other attributes related to former industrial uses could provide interest and opportunities for heritage tourism development. Increasingly, options for the reuse of such sites include tourism, recreation, and leisure land uses, particularly on brownfield locations inappropriate for alternative land uses such as housing. (Alker & Stone, 2005)

Cultural heritage is an important part of societal and community well-being. National governments and pan-European institutions increasingly recognize the values of cultural heritage. Built heritage is an important part of the cultural heritage of towns and cities. Current definitions of built heritage are narrow and rely on architectural and historical value. In many countries these values are protected by legislation, therefore the protection of building is not perceived as a problem. The most pressing problem is how to address areas within towns and cities that are not considered worthy as conservation areas and yet form an essential part of the urban character. These „urban fragments“ often epitomize a unique population density, historic nature, street pattern, and other cultural features. Tweed and Sutherland state that there is a need to broaden the current definition of built heritage to embrace less obvious examples. Rautenberg quoted in the work of Tweed and Sutherland suggests cultural heritage could be treated either as heritage by designation (heritage is applied as an honorific label to site by experts) or heritage by appropriation (emerges from public behavior, citizens play a much larger part in determining what is considered cultural).

In increasingly multi-cultural societies subjected to the extreme homogenizing pressures of globalization, the problem of what to protect has come to the forefront of the debate about built heritage. Built heritage contributes to the satisfaction of individual and societal needs, such as the higher level needs of cultural identity and a sense of belonging. (Tweed & Sutherland, 2007)



Museum of Science & Industry, Manchester

SOURCE: <https://www.northernsoul.me.uk/museum-of-science-industry-manchester/>

*„Every citizen has had long associations with some part of his city, and his image is soaked in memories and meanings.“*

Lynch

*„The preservation of heritage not only contributes to the state of health of the built environment but also crucially to a community and cultural identity and helps to define the character of a place.“*

Renewal.net

# CULTURAL BROWNFIELDS

Brownfields typically reduce the attractiveness and economic value of given neighborhoods. Sites hold historic, architectural and urbanistic values. If these sites can be more appealing to tourists, it would then help enhance their value for heritage preservation (Navratil, et al., 2017)

A lot of brownfield regenerations in western Europe were aimed especially at tourists with leisure and conference facilities or hotels (Liverpool, Cologne, Thessaloniki). Industrial forests in Germany are specific leisure spaces, which combine historical heritage preservation and the increase in the quality of the environment. The typical product of the travel industry are museums that provide the evidence of the original use of area and buildings, most often these are former quarries as well as industrial factories. The attraction of tourists to such destinations might also contribute to de/concentration of tourists from overloaded traditional urban destinations. Location of brownfields within the city center creates a great potential for the re-amalgamation of such sites into the living city organism attractive for visitors. Use of urban brownfields for tourism could be seen as a way how to contribute to the sustainable development of cities. (Navratil, et al., 2017)

The conclusion of the research done by Navratil proved that sites can be developed for tourism and leisure time activities which/ if accompanied by suitably sensitive preservation of landscape, historical, architectural or aesthetic values- can serve as a benefit and public interest of the whole society. It is apparent that forming and adapting urban structures under such influence is beneficial for further urban development. Although individual brownfields differ from one other Navratil suggests that historic preservation can help speed the regeneration of contaminated sites and again make them useful and safe for public use in the Czech Republic and elsewhere. (Navratil, et al., 2017)

In recent years culture has often had a driving role in various regeneration projects with its economic benefits of cultural facilities (e.g. museums concert halls) and cultural industries commonly stressed as key features of urban policy. (Andres & Grésillon, 2013)

Pararell to the rising importance of culture in urban policy, there is evidence of organic bottom-up projects developing on brownfield sites. In advance of any formal process of re-development, artists have sought to move into these empty buildings because of benefits such as cheap rents, few constraints in term of maintenance and flexibility of usage. Until the 1990s these organic projects have not been integrated into mainstream urban and cultural policies, either at a local or national level. They have been distinct from traditional cultural facilities (e.g. museums) and did not hold much interest for public policy actors. The rise of a more holistic approach to culture-led regeneration within the narrative of the creative city has led to a paradigm shift whereby organic and bottom-up cultural uses have been progressively included in formalized cultural and urban planning policy and strategy both at a local and national level. (Andres & Grésillon, 2013)

The most recent focus is on the impact of artistic bottom-up initiatives at the neighborhood and city level stressing the role of artists as pioneer agents of gentrification and cultural brownfields have progressively become a mainstream object for cultural and urban policies. (Andres & Grésillon, 2013)

There are plenty of expressions to describe cultural initiatives that have settled in urban brownfields which relate to their artistic and cultural functions or to their alternative and unusual nature (e.g. free zones, places of alternative culture, kunstfabrik, alternatives Kulturzentrum, friches culturelles).



The Tacheles, Art House in Berlin

SOURCE: <https://www.heartberlin.de/2017/01/26/the-story-of-the-tacheles-art-house-in-berlin/>

Andres and Grésillon relate to the term friches culturelles (cultural brownfields) which refers to organic, bottom-up alternative cultural projects settled on derelict sites which differ from any squatting activities. (Andres & Grésillon, 2013)

Culture's contemporary definition is merged of both the anthropological definition of culture as a way of life and its aesthetic meaning of the arts as a public good for suitably educated people. Culture can be defined as a culture of class diverse in background but with a disposable income, which uses cultural space. Holistic meaning of culture also refers to the rise of the creative city and integration of strategies of economic and cultural development. (Andres & Grésillon, 2013)

Andres and Grésillon on the examples from the USA and Europe defend that cultural facilities can be used as an economic and symbolic driving force in the transformation of industrial and post cities, enabling urban authorities to break their physical decline. (Andres & Grésillon, 2013)

The idea that culture can be employed as a driver for urban economic growth led to the design of new cultural and creative quarters aiming to revitalize neglected or deprived neighborhoods by developing the local creative economy. Initially organically led processes of redevelopment have become one of the main focuses in the agenda of policy-making. (Andres & Grésillon, 2013)

### THREE PROFILES OF CULTURAL BROWNFIELDS

#### ALTERNATIVE CULTURAL BROWNFIELDS

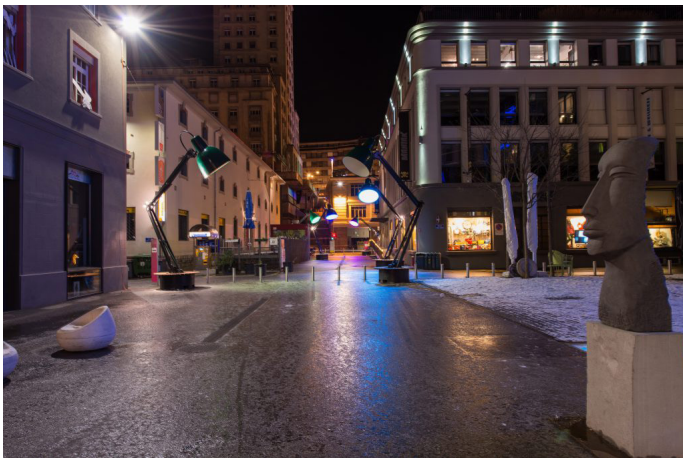
(historic and traditional cultural brownfields, organic cultural alternative spaces) result from alternative cultural spaces developed in the 1970-1980s. These spaces are inherited from the squatter movement and are characterized by the importance of conflicts between cultural actors and local authorities. Such alternative spaces sit within an ideology of opposition to a dominant capitalist model and tend to have a very strong influence as a territorial and symbolic marker on the surrounding areas and city. They reflect the decade of new social movements and the beginning of the use of culture as an integral part of urban policy and politics, therefore these spaces have a strong social and community focus. The transformation of such cultural brownfield has tended to take one of two directions:

- an adaptive process moving toward a more conventional and less conflictual space which is progressively included in more holistic urban policy and politics
  - their disappearance as a physical entity as a result of the incapacity to respond and cope with the external economic cultural and political pressures (example: Tacheles in Berlin)
- Alternative cultural brownfields are not very common type as they are inherited from youth demands against a restrictive

#### BRANDING CULTURAL BROWNFIELDS

(merchandised use of artists and culture) are often inherited from the gentrification path of industrial districts (for example Soho) valuing the role of artists for local decision-makers, and from the generalized ambition of promoting cultural districts. The previous conception of culture as a factor of community enhancement was shifted towards a tool for urban, economic and social regeneration, where culture becomes part of the strategy of branding and city marketing. This period is significant in the development of new cultural districts with the aim of fostering the attractiveness of places and cities for tourists which explains the attention paid to city branding. This type of cultural brownfields relies on the acknowledgment of the economic benefits of culture and the perception of artists and art centers as a real contributor to the economy and regeneration. These cultural brownfields have two potential transformation paths:

- an artificial use of the trendy image of the site once the standstill period is over (for example Flon in Lausanne). A trendy character is sustained by paying attention to the aesthetic of the building and the overall design of the area.
- Construction of a trendy alternative image from the beginning of the project due to the belief that the artificial creation of a cultural brownfield in an adequate flexible building can attract cultural actors (for example Custard Factory in Birmingham). The economic dimensions of culture and the prospect of the economic outcomes of cultural development are here the core drivers.



Le Flon, cultural district  
Source: <https://www.my-lausanne.com/en/the-flon-district/>



Le Flon, cultural district  
Source: <https://www.my-lausanne.com/en/the-flon-district/>



These types of brownfields are examples of the importance of culture for urban development and regeneration. The core focus is not on cultural uses and policy but on the impact of such projects, strategy at neighborhood, city and regional level. (Andres & Grésillon, 2013)

#### CREATIVE CULTURAL BROWNFIELDS

reflect the last trend towards cultural brownfields, where the promotion of the creative city and of alternative forms of culture is a key objective for local authorities. The trend focuses on the benefits of cultural industries for economic development and the importance of artists and other bohemians helping to revitalize the neighborhood and districts. The key specificity of this last type is that creative cultural brownfields are labeled as cultural brownfields and will look and may function as such. The initial steps are not organically driven but implemented within a partnership between public authorities and cultural actors. To build reputation the aesthetic of an alternative cultural space is used. Strategy development as a cultural project is well planned with specific urban, cultural and socio-economical outcomes. The recognition of the economic benefits has contributed to the reduction of opportunities for artists to invest in spaces in a spontaneous manner. (for example La Friche in Marseille)  
(Andres & Grésillon, 2013)



La Friche, The Rooftop  
SOURCE: <http://www.lafriche.org/en/venues/the-rooftop>



The Hungarian Museum of Transport, brownfield site, Budapest  
SOURCE: <https://www.archdaily.com/899992/call-for-entries-new-hungarian-museum-of-transport>



# SUMMARY: SUSTAINABLE REDEVELOPMENT

The rise of intense socio-spatial disparities and spatial segregation together with the suburbanization process are one of the processes that have been influencing urban development in post-communist cities.

The sustainability of the redevelopment depends on its long-term complex integration into the organism of the city and region. The problems cannot be solved by isolated rehabilitation activities in an appropriate way. Only strategic goal-oriented approach as an integrated part of local land-use management framed by systematic development planning can guarantee efficient redevelopment investment.

Smart component of brownfield regeneration processes is in perceiving the brownfield sites as resources and as opportunities. Also, it encompasses acknowledging them being part of the city without the necessity to always put them down and completely rebuild them, but rather try to recycle them. Recycling signifies using as much as possible

from the physical structure and using the materials and location benefits without the need to change the site from scratch.

To achieve smart growth of cities it is necessary to include all actors and their interests. Jamecny and Husar suggested the inclusion of a multitude of actors not only into the plan making process of brownfield regeneration but also in the process of creating an overall framework of governance. State subsidizes the establishment of industrial or technology parks on the greenfield, while at the same time the majority of municipalities has to face the problem of under-used or derelict old industrial areas in the state, well connected by the transport system, technical infrastructure, incorporated into the urban system. Jamecny and Husar call for a strong need for a specific strategic approach for brownfield regeneration as a part of complex spatial development strategies.

(Jamecny & Husar, 2016)



## BROWNFIELD

- existence of brownfields reduces prices of residential properties
- lower willingness to purchase property in the proximity of brownfield
- pollution
- contamination
- concentration of socially pathological phenomena
- need of decontamination (expensive)
- problems with ownership

## SUSTAINABLE REGENERATION

- temporal use of brownfield sites creates great preconditions for accelerating long-term regeneration
- opening for visitors and tourists increases interest, which puts forward the regeneration process
- need of participation
- adaptive reuse
- complex integration into the organism of the city
- perception of resources and opportunities
- framework of governance
- 

## NEW NEIGHBOURHOOD

- compactness of cities
- reduce environmental health risks
- increase of attractiveness of cities
- preservation of existing industrial history
- strengthen more environmentally friendly way of thinking
- reduction of pressure on greenfields
- preserved mental relation to the previous function
- strengthening of the local identity
- increased prices of properties in the proximity of a site
- satisfied the need of cultural identity and a sense of belonging



MASARYK RAILWAY STATION



SMÍCHOV RAILWAY STATION



ROHAN ISLAND



BUBNY RAILWAY STATION



ŽIŽKOV FREIGHT STATION

The chapter is dedicated to studying the biggest existing brownfields in the center of Prague and proposals for these sites. The study is based on background and historical research, personal visit of all the discussed sites and study of proposals for the future development of these former transportation brownfields. All the proposals for the sites were evaluated according to sustainable principles, which are delivered from the theory, and are found to be the way how to regenerate brownfields in a post-communist city in order to decrease all the socio-economic impacts influencing the urban structure of the city. For all the brownfields was prepared a new strategy, which is found to be more site-specific, accepting and using the unique existing heritage which is strongly present on each of the sites. Each of the brownfields should be regenerated according to its heritage and existing boundaries. The brownfield sites used to be important transportation nodes in the city, therefore all the revitalized parts shall become one existing body working together. The last part of the chapter depicts the way how these brownfields and their new use could be intertwined in the city structure in the future.

# PRAGUE BROWNFIELDS

## CHAPTER 3

# BROWNFIELD REGENERATION IN THE CZECH REPUBLIC

According to the World Bank, The Czech Republic is regarded one of the most developed, industrialized and prosperous economies of the countries in Central and Eastern Europe. The Czech Republic has one of the most successful transition economies in terms of attracting foreign direct investment, which is one of significant drivers of the brownfield redevelopment.

In the context of the Czech Republic various types of brownfields could be identified:

-AGRICULTURAL, resulting from the decline of socialist agricultural cooperatives

-MILITARY, relics of the military sector restructuring

-INDUSTRIAL

-TRANSPORT

Regenerated brownfields are more likely located in the municipalities with a higher development potential, which is defined by spatial peripherality, the rate of local business activities and the quality of local infrastructure.

In 2005, the CzechInvest agency identified 2355 brownfields with a total area of 10326 ha in the Czech Republic.

In 2013, the first database of regenerated brownfields was created, listing 101 brownfields (former use: 45% industrial, 21% military and 16% agricultural brownfields).

The most common use of brownfields after regeneration was:

- public facilities
- mixed-used developments (retail, services, housing, administration)
- industrial zones
- sport and recreational activities
- areas for the manufacturing industry.

## TRANSPORT BROWNFIELDS

Transport brownfields are unused areal and linear transport constructions, which could be divided according to the basic types of transport constructions:

- Unused transport constructions previously utilized for the movement of transport vehicles (e.g. roads, railways, airports)
- Unused necessary support constructions for transport (e.g. railway stations, airport terminals, river, and seaports, etc.)

An apparent shift from production to consumer activities is observed when comparing the previous and temporary use of sites, supported by the processes of industrial restructuring, demilitarization, and deagriculturization. Industry plays a significant role in both the original and the present use of sites, however, the spatial patterns have changed completely. Industrial activities are not reestablished in their original localities, within the inner-city parts, but are organized within industrial areas and parks on the outskirts of the city. As a response to the needs of the current society, new activities have emerged: recreation, tourism, leisure time, retail, services, sharing and spreading knowledge or alternative means of energy.

The most frequent factors of regeneration in the Czech Republic are:

- Proximity of railway
- Support of local self-government
- Decontamination
- Commercial use potential
- Subsidy grounds support

The least frequent factors are:

- The same or similar type of use after regeneration
- The historical value of area or sites

(Osman, et al., 2015)

Reuse of linear transport brownfields will become a more discussed topic in the future since there is a high density of railways in the Czech Republic, a decrease in demand for railway transport in the country and pressure for the reorganization of local railway connections.

Some of the possible future scenarios of linear transport brownfields could be remodeling them into bicycle or footpaths (for use by both tourists and the local population) or purposely grown greenery (brownfield sites are not left completely abandoned and unused until another suitable use is found).

(Krejčí, et al., 2016)

# SUSTAINABLE PRINCIPLES

## SOCIAL

*the main focus*



### ELIMINATION OF SOCIAL SEGREGATION

- diversity in typology, diversity in public spaces, diversity in function (day/night)



### LOW-INCOME FAMILIES

- rental apartments, possibility to spend time in the development without being the resident



### SUBURBANISATION

- urban houses, typology allowing residents to have both-city life and their own space for rest



### KIDS AND TEENAGERS

- safe playgrounds, proximity to amenities- school, kindergarden



### TRANSITORY URBANITIES

- rental places for young people  
- public spaces of high quality



### THE ELERLY

- small residential places for the elderly to gather  
- proximity to transportation  
- typology for creation social bonds



### PUBLIC SPACES AND CONNECTIONS

- to reach social mix among the residents and people living in the surrounding it is necessary to propose public spaces of high qualities, which could be used by all the age/social groups



### CULTURAL HERITAGE

- use of unique site specific attributes that each of the site offers  
- the importance of keeping the spirit of the city present

## SOCIO-ECONOMIC

*the main focus*



JOB OPPORTUNITIES

- opportunities to rent small office place
- bigger companies- bring capital to site



TOURISTS

- creation of places of interest for tourists (bring capital to site, decrease the number of tourists in the city centre)

## ECOLOGICAL



TRANSPORTATION

- proximity to tram/ subway/ city centre
- bicycle paths
- proximity to leisure time activities



MICROCLIMATE

- pleasant places for future users- places exposed to sun, places sheltered, use of water



BUILDING LEVEL

- use of modern technologies
- use of traditional and local materials (for example brick)



LEISURE TIME AND GREEN SPACES

- use of trees in the urban environment
- use of existing greenery



## MASARYK RAILWAY STATION



Old city centre of Prague  
SOURCE: Penta Real Estate

Masarykovo nádraží is the oldest railway station in Prague. Constructed to receive the first trains from Vienna via Olomouc, the neo-renaissance main building is by Antonín Jungling, with the possible involvement of Viennese court architects Peter de Nobile and Paul Sprenger. The glass-roofed arrivals hall (pictured) with its cast-iron columns and wooden roof, was added in 1862 at the western end of the main station, and reconstructed in 2011.

Originally called simply 'Prague Station', the building was the culmination of the Olomouc to Prague line initiated by the 30-year-old engineer Jan Perner, who was carried in triumph aboard the first steam train to arrive here on 20 August 1845. A month later Perner was killed after striking his head on a pole as he leant out of a train window near the town of Choceň.

The station was renamed in honour of the Czechoslovak Republic's first president, Thomas Garrigue Masaryk, in 1919.

(Vitruvius, 2011-2018)

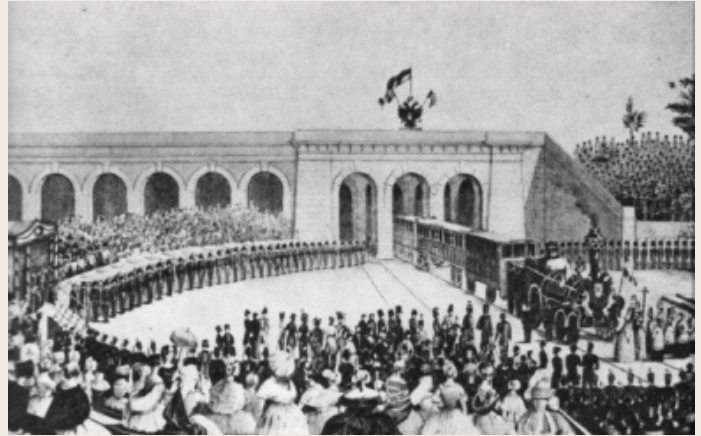
Part of the Masaryk train station area will be used as a train museum, while the train station will become city terminus to the Václav Havel International Airport.

Even in 2008, the station, located between the municipalities of Prague 1 and Prague 8 just a few minutes' walk from the city centre, served 15,000 passengers a day who travelled to and from central and northern Bohemia.

(Richter, 2008)

### 1845- The first railway station in Prague

On 1st September 1845, regular traffic was launched. The location of the railway station and the railway lines were designed by engineer Jan Perner while the buildings by architect Antonín Jüngling. The limited space inside the city walls caused the unique division of the railway station into inner and outer parts (service buildings) by city gate.



### 1919- A new name for the railway station

The station represented a gate to Olomouc, Vienna and Dresden. In 1874, demolition of the city walls started. The traffic node brought into the neighborhood various services and institutions, e.g. a post office, hotels and ale-houses. In 1919, in the honor of the president Masaryk the railway station was named Masaryk railway station.

### 1974-1978- Spatial division by the new transport network

Traffic oriented planning of the 60's changed the city pattern of Prague. In 1978, the construction of the bypass of Masaryk railway station was finished, creating a strong division and border of the city districts between New Town and Žižkov.



### 1990-2000: Decline of the area

Delocalization of freight transport to Prague Main Railway Station, isolation from the main station, increased road transportation caused the decay of the railway station. These factors opened a discussion about the importance of Masaryk railway station and its future abolition.

### 2009-2018: Searching for a new vision

There were several architectural competitions between 2009 and 2014. In 2014, based on international competition, the winning proposal by Zaha Hadid Architects was chosen. In 2015, it was decided upon the preservation of the railway station, which will be the terminal station of the connection to the airport and Kladno.

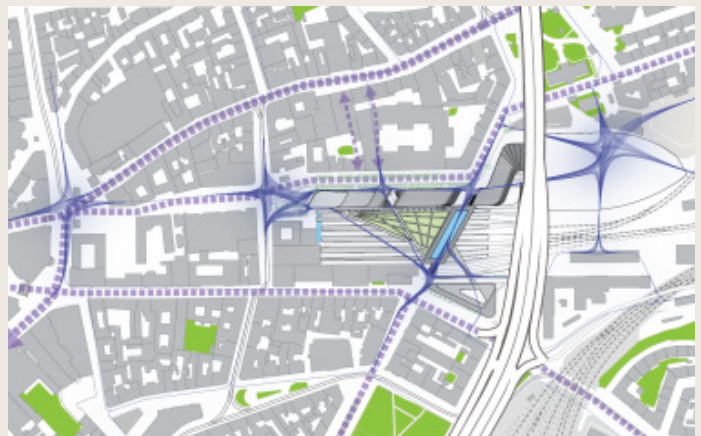


PHOTO SOURCE: <https://www.masaryckaspojuje.cz/historie/>  
<https://cs.wikipedia.org/>  
(Penta Real Estate, 2018)

## CENTRAL BUSINESS DISTRICT



SOURCE: <http://www.zaha-hadid.com/architecture/masaryk-train-station/>



A dominant administrative building and the historical railway station  
SOURCE: <https://www.tvarchitect.com/en/video/penta-masaryk-railstation/>



Office buildings  
SOURCE: <http://www.zaha-hadid.com/architecture/masaryk-train-station/>

*"We have developed an urbanism for the site which draws inspiration from our analysis of the city and the site's dynamic circulation networks."*

*"The design is sensitive to context, unifying in aspiration and contributes to the urban fabric of Prague"*

Craig Kiner, ZHA project architect

*"The project will regenerate this site that has been abandoned for decades into a vibrant new central business district with exceptional public spaces"*

Marek Dospiva, Investment group Penta partner

The design establishes a new central business district that integrates the city's transport networks including the suburban and domestic rail services at Masaryk Station and the coach/bus terminus.

Masaryk station will also become the future city terminus for the new airport rail link to Prague's Vaclav Havel International Airport.

The mixed-use development (administrative and retail) stitches together Prague's Districts 1, 3 and 8, minimising the impact of the elevated Wilsonova Highway which separates them.

(Zaha Hadid Architects, n.d.)

A new public square will span the railway lines, creating a connection to Na Florenci street and improving access to the station. Four additional plazas will be dotted across the new district, including at the bus terminus and along the boulevard.

(Fearnson, 2016)

note: the construction has started



*„It is an utterly foreign development. Prague is an extraordinary city. It does not mean that it should be conserved. A change is an attribute of every city, a part of its life. We do not want to create an open-air museum, but if we do not want to lose all the values, we have to take into consideration the order and the system of the city.“*

Marie Švábová, architect



SOURCE: <http://www.zaha-hadid.com/architecture/masaryk-train-station/>

*„The proposed design does not remind me of Zaha Hadid, Hadid did great solitaire buildings, not urbanism. The design shows standardized office buildings, very much like Czech designs. I would not wonder if some of the Czech studios took over the project. This is only a brand image. A perfect example of great PR.“*

Arch Vader, Facebook portal

*„I would call it urbanistic boredom. It is proposed by one design studio. A lot of precious experience proves, that such huge pieces of land, should not be designed by one person enforcing mono-functionality.“*

Richard Biegel, theorist of architecture

*„The proposed spaces on visualizations are neither park nor a public square.“*

Petr Klápště, Faculty of Architecture CTU

*„The visualizations show a composition of solitaires, sometimes a hint of a street, but in reality, it is not supposed to be a city- it is just an illusion of a city. It is supposed to be a business and administrative center.“*

Richard Biegel, Theorist of Architecture

*„In ten years we might not need that many office buildings- once this function is not necessary, the city will start to decay and the life will disappear.“*

Petr Zeman, activist  
(Zabloudivová, 2016) (Koubová & Svoboda, 2018)

The development of Zaha Hadid's proposal was planned to start with the dominant of the design, administrative building. The building with a railway lines façade will be built in the proximity to the historical building of Masaryk railway station in a heritage reservation area.

The evaluations of the public and various professionals differ significantly. The main critic was against the mono-functionality of the designed buildings and the character of the massive project in one of the most luxurious parts of the city itself. The proposed public spaces, which could be visible on visualizations, were mainly criticized for their poor quality and lack of contribution to city life.

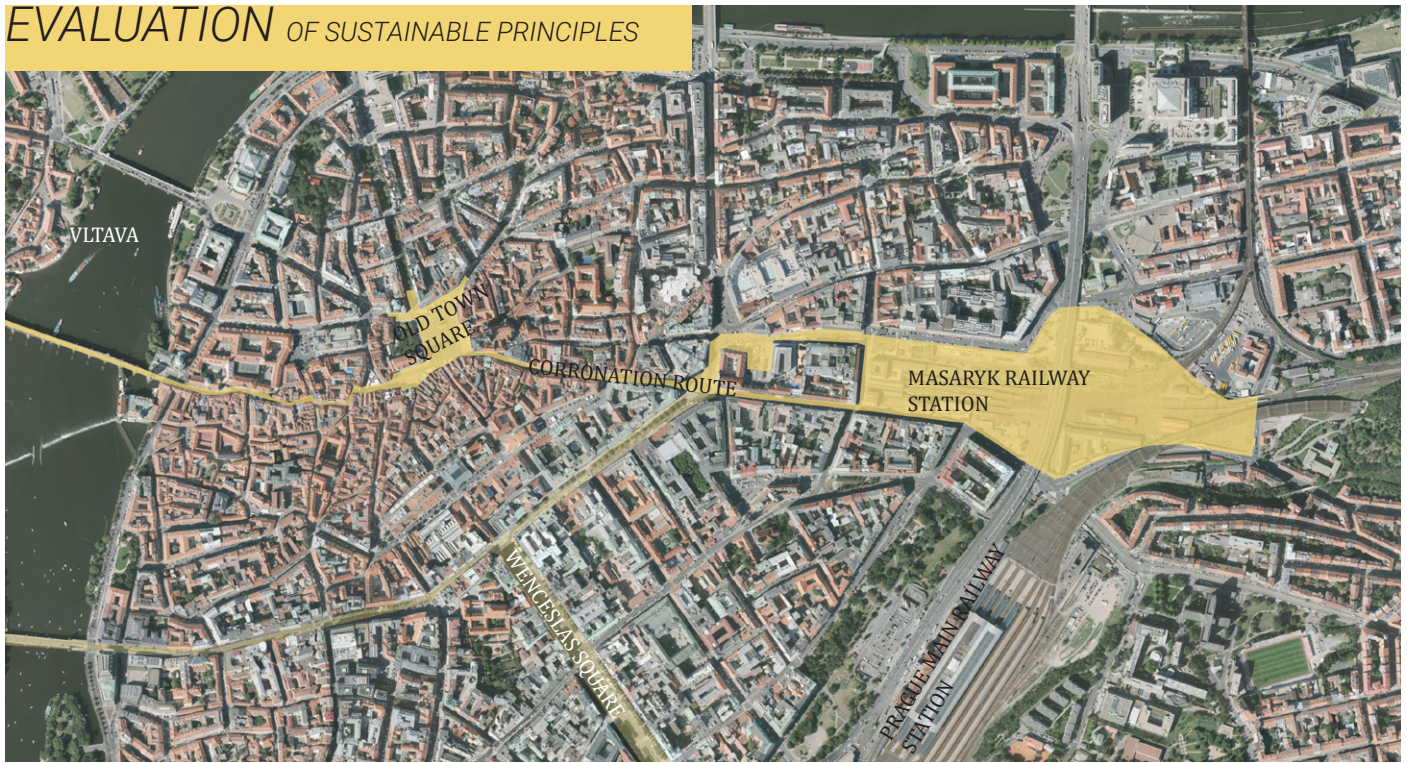
Petr Klápště, Faculty of Architecture CTU, claimed that the biggest mistake happened ten years ago when the private developer purchased the inner-city land from the Czech railway company. Klápště used examples from Germany and Austria explaining that the development should be initiated by the public administration. First, the requirements of the municipality must be met, then the private developers' visions of the commercial business could be implemented.

Scholars' suspicion that the design of a proposal was made by the Czech studio, Jakub Cigler Architekti, was confirmed in the building notice. According to this document, the use of rainwater is planned to be used for bathroom purposes and watering the plants.

The lack of public greenery is one of the most discussed topics. Design green spaces are according to scholars insufficient in terms of size and freedom to use. The patches of greenery could not be used by the residents of Prague.

(Zabloudivová, 2016)

# EVALUATION OF SUSTAINABLE PRINCIPLES



## SOCIAL PRINCIPLES

The proposed solution is aimed for administration and business development and it fails in providing social interactions among different income groups as the developer does not take various income groups into consideration. Even though aging city center is one of the main problems in the center of the capital, no attention is paid to the creation of various public spaces for young families with kids as well as the group of the elderly was ignored in the proposal. The proposal is based on the establishment of connections, which are mainly for pedestrians, but the use of public transportation is not very promoted in the project. The development counts with a big number of underground parking spots, therefore it might attract even more cars to enter the city center. The design has been mainly criticized due to the missing link to the existing cultural heritage. It does not fit to Prague scale and context and looks like any modern development in the world.

## SOCIO-ECONOMIC PRINCIPLES

The development is located close to the Coronation Route- the most touristic route in Prague. Due to the name of the design studio, Zaha Hadid, volumes have the potential to become a landmark or a place of interest. Newly created job opportunities for people working in the administrative sector or services will strengthen the character of the important nod in the city center.

## ECOLOGIC PRINCIPLES

People commuting on daily bases could be encouraged to take public transportation, e.g. trams and trains. Even though the proposed buildings are supposed to meet the ecological standard, no pleasant microclimate environment taking climate into consideration was identified. The use of the buildings in several years, after the administrative function is not needed, is uncertain. Since the district is not offering any outdoor spaces, it can be assumed that the site will be empty after working hours.

NOTE: pink- not fulfilled principle, beige- neutral, green- fulfilled principle

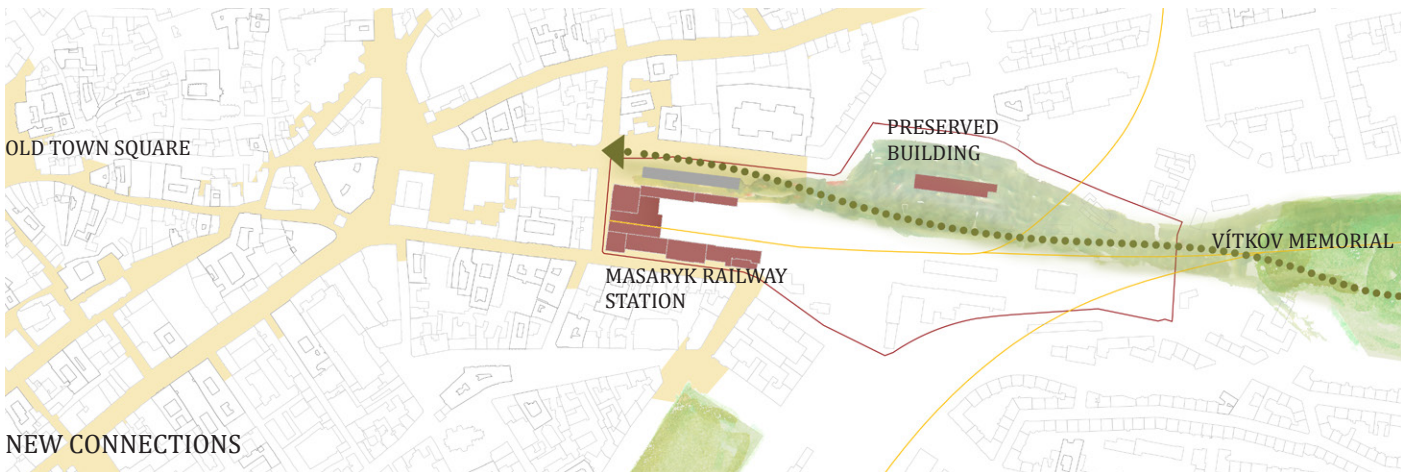
## OFFICE BROWNFIELD WITH PUBLIC GREENERY OF HIGH QUALITY



VISION

The site with its city center location and the presence of the train station, which will be connected to the airport in the future, has a huge potential to become an entrance, welcoming gate to the city for all the visitors. The train station is in the west surrounded by the hill with a famous monument on top, called Vítkov. The proposed solution is the creation of a bio-corridor, which connects the city center and the Vítkov monument. The bio-corridor should have a form of a sequence of public spaces for visitors, locals and administrative workers, in order to provide a social mix all day. On site, there are several industrial buildings built due to the former use of the train station. These buildings could become a part of the future public spaces, facilitating them with some public uses, like café, small exhibition area or a branch of the city library.

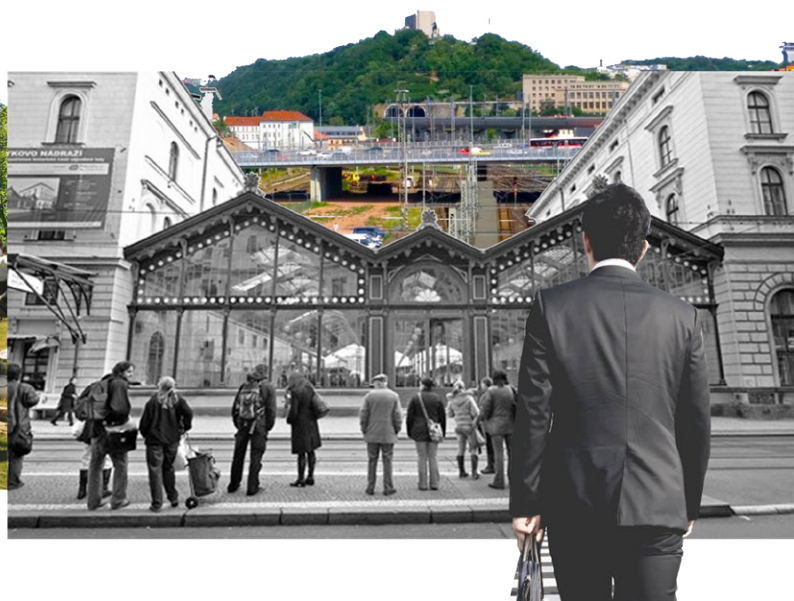
Proposed volumes seem very massive and very different from the current built-up area in Prague of the city center buildings from the 19th century now provide space for commercial or administrative. We could witness a shift from housing to commercial use. The shift from factories to office buildings demands a space. Due to the process of commercialization, a lot of use. The single-use proposal might be used only while the particular use is needed in the city. Therefore, the vision of a development located in the very city center of Prague should have a mix-used character to avoid possible emergence of empty volumes which were once a very expensive development.



NEW CONNECTIONS



VISION - PHOTOMONTAGE





## SMÍCHOV RAILWAY STATION

The area of Smíchov was formed by the creeks that flow in the western-eastern direction into the Vltava River and that sculpted the deep valleys. The focal point of the settlement of Smíchov must be sought in the narrow plain by the river, whose banks changed frequently. Smíchov had since 1838 been a suburb (which was in 1849 designated the site of the district hetman) and since 1903 an independent town. In 1920 (effective in 1922) Smíchov became a part of Greater Prague. At the beginning of the 21st century, Smíchov is one of Prague's administrative districts; specifically, it is a part of Prague 5.

In the early modern period, the northern part of the present day cadaster of Smíchov, separated since the end of the 17th century from Prague's Malá Strana with a massive baroque fortification, was transformed into a recreation zone of the leading noble families, who built follies and villas with decorative gardens here. Many of them became cultural and social centers. The 19th century brought a massive transformation: Smíchov became an industrial district, whose population, as a result, grew significantly. Smíchov's leaders, since the end of the first third of the century, in which Smíchov gained the status of a suburb, began systematically to build public buildings. The flat areas of Smíchov were filled with continuous, several story high blocks of buildings; Smíchov was gaining an urban character.

As many large European cities, in which the industrial revolution significantly interfered with their social, economic and urban development, Smíchov also underwent a dramatic transformation.

According to Scott and Webber, in the 70ies and 80ies of 20th century the long-term development concept of Prague defined four key points for Smíchov:

- construction of the metro station Anđel (in 1985 launched a metro line B to Anđel station and Smíchovské nádraží)
- CKD Tatra plant relocation (former Ringhoffer's factory)
- building of Strahov tunnel
- regeneration of housing stock.

(Scott&Weber s.r.o, 2014)

The railroad played an important role in the development of Smíchov. The train station of the Česká Zápavní Line was opened in 1862 as the foundation of a quickly growing complex of the train station. The train station of the Bustěhradská Line was added in 1872, the Pražská Spojovací Line, which joined Smíchov with the present day Main Train Station using the railway bridge. (Chodějovská, 2015) In the 19th century, Prague grew rapidly thanks to industries connected to a spreading railroad network. The rail link with west Bohemia passed through the district, and heavy industries were established such as the Staropramen brewery and the Ringhoffer factory, which produced railway carriages, and later trams such as the vast ČKD Tatra concern.

(Creighton, 2011)

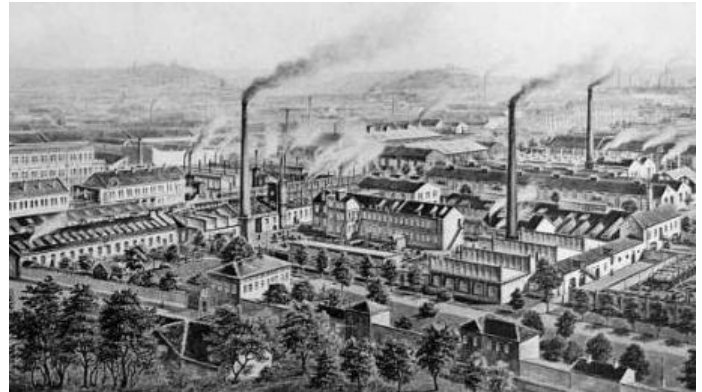
Due to the finalisation of high speed tracks the importance of the Smíchov railway station declined. In 2014 the municipality of Prague approved on the new urbanistic conception of volumes proposed by A69 studio. Due to approval, Smíchov Station Development (merged Sekyra Group and Czech railway company) and Prague Institute of Planning and Development launched a competition for an architectural form of the development. The winning studio, Kuba & Pilař architekti, will collaborate with another studios, e.g. D3A, Projektíl and Lábus-AA.

(Prokop, 2017)

As in other cities, one can find here a number of brownfields. One of the largest is located in the vicinity of the Smíchov railway station.

The central part of Smíchov underwent a fundamental change when the industrial complexes were replaced by distinctive multi-story buildings serving office-commercial functions. In relation to the metro station and along with the adjacent public space, at the beginning of the 21st century, it fulfills the function of the actual center of Smíchov. In the context of all of Prague, Smíchov is important for its traffic function and is characterized as a residential and administrative-commercial district.

(Chodějovská, 2015)



Industrial history of Smíchov

SOURCE: <https://sonicity.cz/cs/karasek-ze-lvovic-about-prague>



1919- Smíchov

SOURCE: <http://www.fotohistorie.cz/Praha/Praha-mesto/Smichov/Default.aspx>



Railway bridge- connection to the right bank of the city

SOURCE: <https://www.zelpage.cz/clanky/historie-vyhybny-praha-vysehrad?lang=en&oddíl=2>

# SMÍCHOV CITY

*“Modern housing in the centre of Prague with excellent transport access, while surrounded by greenery.”*

Sekyra Group



SOURCE: [https://smichovcity.praha5.cz/?page\\_id=6](https://smichovcity.praha5.cz/?page_id=6)

*“The district is designed as short distance neighbourhood according to western concepts. Due to the combination of residential function, job opportunities, high-quality public spaces and greenery a self-sufficient neighbourhood will be developed. On the ground floors of the residential buildings there will be shops, restaurants, coffee shops and other public amenities. The aim of the project is not to stand out, but to be a connection between separated city parts, link to surrounding build-up area and naturally connect what the history divided by a fence and rails.”*

Sekyra Group

The new Smíchov City office, commercial and residential project will transform the locality of Smíchov Station into a multi-functional district full of greenery. Urbanists and architects were inspired in their designs by traditional 19th century cities, but they improved them for the 21st century. The new district will consequently offer quiet housing, modern offices and all the necessary community facilities.

The project will offer housing here for approximately 3,300 residents, in addition to nearly 190,000 m<sup>2</sup> for services, shopping and offices, which will provide a modern environment for 9,000 jobs. The plan also includes a park of an area of approx. 14,000 m<sup>2</sup>, i.e. an area comparable to the Waldstein Gardens, and a longitudinal park with a 28 m functioning as a pedestrian zone, like la Rambla in Barcelona for instance, and 600 m long.

The design by the Kuba & Pilař architekti won the architectural competition for design of the buildings for the 1st phase of the Smíchov City district, and Haascookzemmrich STUDIO 2050, Chalupa architekti + A.L.T, Architekti, Lábus – AA – Architektonický ateliér, D3A and Projektil architekti, were recommended as additional collaborating architects. All the aforementioned subjects a cooperating on preparation of the 1st phase of the project, in order to assure the requisite architectural diversity.

(Sekyra Group, n.d.)

Smíchov City is based on a new traffic solution. Long-distance and suburban bus lines will be moved from Na Knížecí Square to the area by the crossroads of Radlická and Dobříšská streets. This will create a complex transport terminal with a large-capacity P+R car park.

- The main thoroughfare of the whole area will be the pedestrian boulevard, edged by trees, with views towards Prague Castle and Saint Wenceslas Church between the new South Terminal and Na Knížecí Square.

- Thanks to the 1.4 hectares of park and the new avenues edging the newly designed streets, Smíchov City will become a green district. It will be not only a more pleasant place to live, but will also contribute significantly to reducing air pollution.

- The new district intends to cover the areas vacated by the railway. The new houses will maintain the height level of the existing development and also the prescribed distances. Views of Hradčany, Vyšehrad and other landmarks will be accented in the Prague panorama.

The main motto when creating the Smíchov City project was to restore housing to the centre of Prague, where it traditionally belongs. Approximately twice as many residents lived in Smíchov in 1961 compared to the numbers today.

Living in the centre affords a wide range of cultural opportunities, all the requisite community facilities nearby and also romantic walks along the Vltava River.

(Sekyra Group, n.d.)

Some of the main points of the development:

- 60% public spaces, 40% built-up area

- The new bus terminal and P+R area adjoining the station will create a fully integrated transport node in this area (P+R parking, bus, underground, trains and trams).

- Residents in Smíchov City will no longer have to spend so much time commuting or travelling to shops on the edges of Prague; future residents will be able to take care of everything either by foot, on their bike or by taking the tram a few stops.

- A fully-fledged elementary school (9 classrooms) and a nursery school (6 classrooms) are planned in the dominant location on the intersection of the park and the boulevard.

- Residential blocks will be divided into individual houses, the size of which will correspond to blocks of flats in a traditionally built city. Each of these houses will be designed by a different architect, in order to guarantee sufficient variety.

- The residential houses will meet the highest standards for urban housing - from comfort to economy. Buildings will meet low-energy standards at least, but there will also be passive buildings. Offices will be certified according to the international BREEAM or LEED systems without exception.

(Sekyra Group, n.d.)



Proposed boulevard with an active ground floor  
SOURCE: <http://www.sekyragroup.cz/>



Proposed boulevard with an active ground floor  
SOURCE: <http://blog.aktualne.cz/blogy/petra-kolinska>

# PUBLIC BUILDINGS

## RAILWAY STATION AND BUS TERMINAL

The transportation hub as a part of Central Smíchov development is planned to be finished in 2023. The rain station will be merged with the parking house and a bus terminal located above the railway tracks. The proposal will strengthen the character of Smíchov railway station as an important transition station. The space occupied by the bus station nowadays will later become a public square meant to be a connection between the older part of Smíchov and the newly proposed residential area.

The proposal was a result of a discussion between the architects from the studio A69, engineers, the municipality and the private investor. Even though the proposed solution to a traffic problem is seen as an expensive one, it will merge all the means of public transportation into one spot.

(Ludvík, 2018)



Model of the design

SOURCE: [https://www.idnes.cz/praha/zpravy/ipr-smichov-city-nadrazi-vizualizace-terminal.181108\\_438285\\_praha-zpravy\\_rsr](https://www.idnes.cz/praha/zpravy/ipr-smichov-city-nadrazi-vizualizace-terminal.181108_438285_praha-zpravy_rsr)

## SCHOOL

The winner of the competition for the elementary school in Prague 5, was a project designed by a Canadian studio Ou in collaboration with INOSTUDIO from Poland. According to the founders of studio OUu, the school is based on social and environmental principles. The school is perceived as one of the elements recovering the community in Smíchov.

Interconnection of the inner and outer public spaces provides students and teachers an opportunity to communicate with the city environment. The design was influenced by the study, that trust and success of students are strongly related to the ability to influence the environment they are situated.

(Janišová, 2018)



Elementary school

SOURCE: <https://www.asb-portal.cz/architektura/obcanske-stavby/skoly/smichovska-skola>

## BANKS

The complex of buildings will be a new office and administration center of one of the biggest banks, Česká spořitelna (Erste). One of the main requirements for the design was to connect bank services with public spaces, to contribute to the idea of the boulevard. Part of the complex will house facilities improving the financial abilities of pupils and students.

(Marečková, 2018)



Winning proposal - Baumschlager Eberle Architekten, Pavel Hnilička architekti

SOURCE: <https://zpravy.aktualne.cz/ekonomika/obrazem-banky-si-v-praze-buduji-nova-okazala-sidla/r~a9d86f92c7ec11e890ecac1f6b220ee8/>





In the Smíchov City project, residents had the opportunity to take part in designing public areas and amenities. This approach is rather unique in the context of Prague. Into the process of participation, several institutions were involved.

- CAMP (Centre for Architecture and Metropolitan Planning) hosted a presentation connected to the exhibition of Smíchov city development.
- IPR (Prague Institute of Planning and Development) gave people an opportunity to walk through the area via 3D planning.
- Sekyra Group, the first private investor participating with the residents in the context of the Czech Republic, accepted and implemented some beneficial comments into the proposal.

The main problem seen by the residents were the volumes of the buildings and lack of greenery, which was one of the main requirements of the residents. In order to meet their requirements, the investor decided to modify the volumes by taking away 10 000m<sup>2</sup> (15%).

(Kučera, 2018)

Some of the ideas for the city district were coffee shops with terraces or the possibility to relax in the public space. The municipality of Prague 5 proposed a better infrastructure system and a school or a kindergarten, which would be necessary to meet the number of kids living in the neighborhood.

(Blesk.cz, 2017)

*“The approach that we have in Prague, that we do not communicate, is not right.”*

*„As the result of the participation process, a lot of interesting information was discovered about the location and inspiration for project improvement to make the city for future residents.”*

Leoš Anderle, Sekyra Group

*„The residents perceive the railway station as a barrier to walk through the city. According to them, the new city arts should be connected to the existing street network and enable better connection with Radlice (city district) and Na Knížecí area.”*

Marek Vácha, IPR

*„On behalf of our municipal district, I am very pleased that we managed to meet the requirements of the investor; the residents of Smíchov and the municipality of the capital city.”*

Pavel Richter, mayor of Prague 5

*“What I really appreciate is the fact that the presentation is here. I think that this is the first publically presented project.”*

(VOŠP: Natáčíme, 2018)



2017- Exhibition in CAMP (Centre of Architecture and Metropolitan Planning)  
SOURCE: <http://www.sekyragroup.cz/>



2017- Exhibition in the city gallery  
SOURCE: <http://www.sekyragroup.cz/>



SOCIAL PRINCIPLES

The process of participation allowed future residents as well the general public to express their opinion upon the future form of the public spaces, however, they could not influence the future typologies and sizes of apartments. The cost of the future apartments has not been published yet as well as the information regarding the ownership. The environment seems to attract people of all the ages and the district will be facilitated to provide a comfortable life of a family. A lot of attention was paid to kids and teenagers. A school and a kindergarten are parts of the proposal. The transportation node will provide accessibility to the district. Greenery will be one of the main features of the development as well as connection to the rural areas. - There is a wide range of public and semi-public spaces, however, the courtyards seem to be fully closed to the public. There is no function inside the courtyard. The development is supposed to be fully walkable with no need to take public transportation to reach the facilities. There will be pockets of greenery to shelter. All the existing buildings are meant to be torn down. The scale of the development is linked to the existing built-up areas.

SOCIO-ECONOMIC PRINCIPLES

The development is located in the vicinity of Nový Smíchov, which became one of the central spots in Prague and an attractive commercial center for tourists. There will be approximately 9000 new job opportunities, therefore it can be assumed that the residents can work within the neighborhood in order to reduce the need for transportation.



NOTE: pink- not fulfilled principle, beige- neutral, green- fulfilled principle

ECOLOGIC PRINCIPLES

Transportation was the main task for designers to deal with. The achieved solution will merge bus and train transportation in order to make switching between the means more comfortable. One of the most evaluated features of the design was the play with the volumes to achieve pleasant microclimate. The sightlines will be preserved, and the designed mixed-use development will provide residents and office workers with a wide range of public spaces for all the social groups. The buildings are supposed to meet the environmental requirement.

WORKING IN GREENERY



VISION

Smíchov railway station is surrounded on the eastern site by one of the Prague islands, Císařská louka. And on the western side by the park greenery. The proposed solution for this brownfield could be based on the use of the existing greenery and the old industrial buildings as well as new office development, which represent a modern way of economy. The connections of green bodies on the west with the island on the east could have a form of two or three bio-corridors, leading residents, visitors, and office workers from a busy commercial spine of the site towards two different green free time activity places. The island should facilitate different free time activities, for example, public beach, kayaking and be open to the public. The main commercial spine represents a way of movement of the pedestrians, therefore it should follow old railway tracks to preserve the way of movement which was present on site in the past. By establishing the connections of green bodies, the train station will not become the gate to the commercial district but also to newly connected green areas in the city center of Prague.



NEW CONNECTIONS



VISION, PHOTOMONTAGE



## ROHAN ISLAND

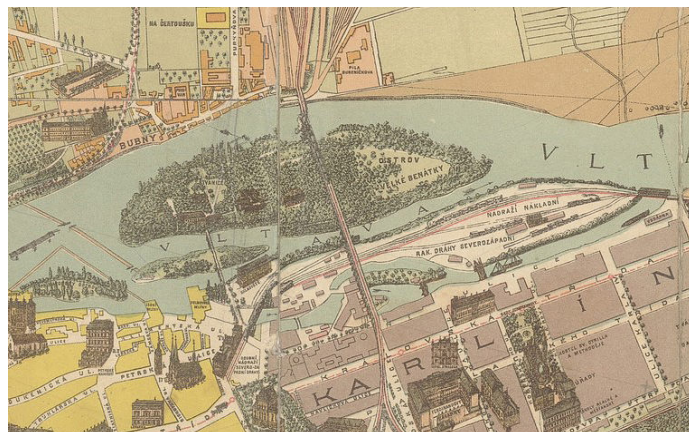
SOURCE: Jan Gojný

Today, the name Rohan Island is used for part of the territory of Karlín. The original island was built in 1550 with the use of river deposition. At the turn of the 19th and 20th centuries, it was connected with the Jerusalem Island on the west side. In 20s of the 20th century it was connected with the Libeň Island and the Karlín riverbank and thus lost the characteristics of an island and became a waterfront.

In 1822, Karlín harbor was established as the first commercial port in Prague, connecting the city with Germany, Hamburg. Before the railway lines, the harbor had an important impact on the growth of Karlín, which is considered to be the first Prague suburb. The harbor lost its importance after the relocation of the Vltava's meander.

With the start of the metro construction, the island was adjusted for the purposes of construction yard of a company Metrostav company, building warehouses, a concrete mixing-plant, a saw-mill, dormitories and a canteen on a former island. Since 2006, when the company left the site, the former island has been decaying and became a territory of homeless people and drug addicts.

(Technické památky, n.d.)



Historical map of Karlín

SOURCE: <http://www.adviseurmakelaar.nl/rohansky-ostrov-mapa/>



Industry in Karlín

SOURCE: <http://www.lauderky.cz/2016/10/01/tajemstvi-rohan-ostrov/>

*“The project to build Karlín was designed according to strict requirements beforehand, making a system of right-angle streets – three main longitudinal streets with six perpendicular side-streets – a very rational system that was well thought through from the engineering point of view. Karlín was being used to meet needs that Prague – closed off by its medieval planning system – could not fulfil. And so for example a major industry of textile printing was built here, there was a paper-mill and eventually five minor machine works including one of the world’s major tram producers, ČKD and it was in Karlín that the first gasworks were built to light the lamps of Prague streets.*

*When Karlín got out from under the rule of the Knights of the Cross in the second half of the 19th century very quickly became one of the most affluent parts of the Czech lands thanks to the great amount of industry and the cargo dock, now a forgotten arm of the Vltava that has been paved over, a vastly important port that was controlled by the major Prague distributors and bankers. And so even though it was an industrial quarter, Karlín never had the kind of proletariat character of other villages on the outskirts of Prague, like Žižkov, but more of a bourgeois, artisan environment – a middle class.”*

Dr. Zdeněk Míka

*“Karlín was established in a different way than the other Prague suburbs, which grew out of smaller settlements. The Austrian officials at the time simply decided there was going to be a new suburb in 1817, and to call it Karolinenthal, and soon there was a need to name it in Czech as well- Karlín.”*

Dr. Zdeněk Míka

*“It was such an area, and this area was very, very interesting from a social point of view. For instance, it’s funny, but between the wars and even before the First World War, the prostitutes from Karlin were very expensive because they knew manners. The bourgeoisie lived here together with workers, and there were no social problems. The whole spectrum of society lived together in Karlin. Of course, after the 1950s new people came here, and at that point social life in Karlin was decaying. But anyway, there were still nice cabarets, there were small theatres, and some good pubs.”*

Martin Krise, architect

*“After the last flood of 2002 Karlín recovered very quickly. You can even say that the neighbourhood made money off of it, even though it was a tragic event and the damage was catastrophic in the weeks, months and year following. But life returned very quickly to the streets of Karlín and no one today would recognise that there ever was a flood, and most importantly, the area was modernised tremendously.”*

Dr. Zdeněk Míka

(Interviews-Radio Prague, Willoughby, 2002, Falvey, 2011)



Tešnov railway station, (non-existing) important node in Karlín  
SOURCE: <http://podzemi.solvayovylomy.cz/techpam/rohan/rohan.htm>



1908- Karlín  
SOURCE: <http://www.fotohistorie.cz/Praha/Praha-mesto/Karlin/Default.aspx>

# ROHAN CITY



3D model of Rohan city development  
SOURCE: <http://www.iprpraha.cz/>



Rohan city  
SOURCE: <http://www.sekyragroup.cz/>

*“A unique view of the Prague Castle, a tight connection to the Vltava River, greenery and comfort housing in the city center. This is what’s now created in the project of the residential, office and commercial center Rohan City at the borders of Karlín, Invalidovna and Libeň. Eco-friendly and comfortable. That’s how the new housing on Rohanský Island will look like. It features low-energy apartments with perfect inner microclimate, low operational costs and useful practical inner division.*

*The location is what makes the project Rohan City so unique. It’s located at the borders of Karlín, Invalidovna and Libeň, in the neighborhood with strong atmosphere, in a tight connection to the Vltava River; offering magnificent views of Prague.*

*Still, it’s very easy to forget you’re in the city center. That’s because Rohan City consists of the continuous greenery with water spots and lots of leisure time areas.*

*The Rohan City project proved itself well during the recent major floods – the ground floor is 1 to 1.5 m above the safe limit of the flood control levee.”*

(Sekyra Group, n.d.)

*„The recreational zone close to the new development offers direct contact with the river; activities on the river bank will be supported by the promenade, which will replace the former bicycle lane, and commercial groundfloor with services in the central part of the development.“*

Leoš Anderle, Sekyra Group  
(Bajtler, 2018)

The author of the proposal is Pavel Hnilička Architects.

The municipality of Prague 8 and the developer were interested in the opinion of the public. In May 2018, they held the first official public meeting and presentation of urban study connected to a site visit. Representatives of the municipality, the investor, Prague Institute of Planning and Development and the architect of the urban study were present during the event. Hnilička, the head of the designer studio, offered a guided tour through the development site explaining the proposed design and regulation, showing all the important features of the future development on prepared materials. Approximately seventy people joined the event and left inspirational comments for all the stakeholders.

(Konrádová, 2018)



SOURCE: <http://www.sekyragroup.cz/>

The representatives of the municipality of Prague 8 appreciated the most a continual stripe of greenery with water bodies and a range of places for relaxation. As one of the positive aspects is seen the prevention of floods. The project is from the municipality point of view well connected, including a metro station and a tram station in a walking distance. The representative of Prague 8, Peter Vilgus, also appreciated the street pattern aimed to serve electric buses.

(Konrádová, 2018)

*„I am happy, that we finally finished all the necessary steps to make the area of Rohan island a full-valued part of Prague 8 and the whole city. As the most significant success, I can see the agreement with the developer, who fulfilled all our requirements and incorporated them into the proposal.“*

Roman Petrus, Mayor of Prague 8

Marek Vácha, an IPR representative, evaluated the participation process and the willingness of the investor to incorporate changes and make the design follow the principles of the older Karlín part.

(Bajtler, 2018)

Due to the collaboration between the municipality and the investor, the investor is tied to donate 60 000 000 CZK (2 326 483,13 €). The money will be used for the construction of an elementary school and a kindergarten to promote residential housing in the broader center of the city.

(Konrádová, 2018)



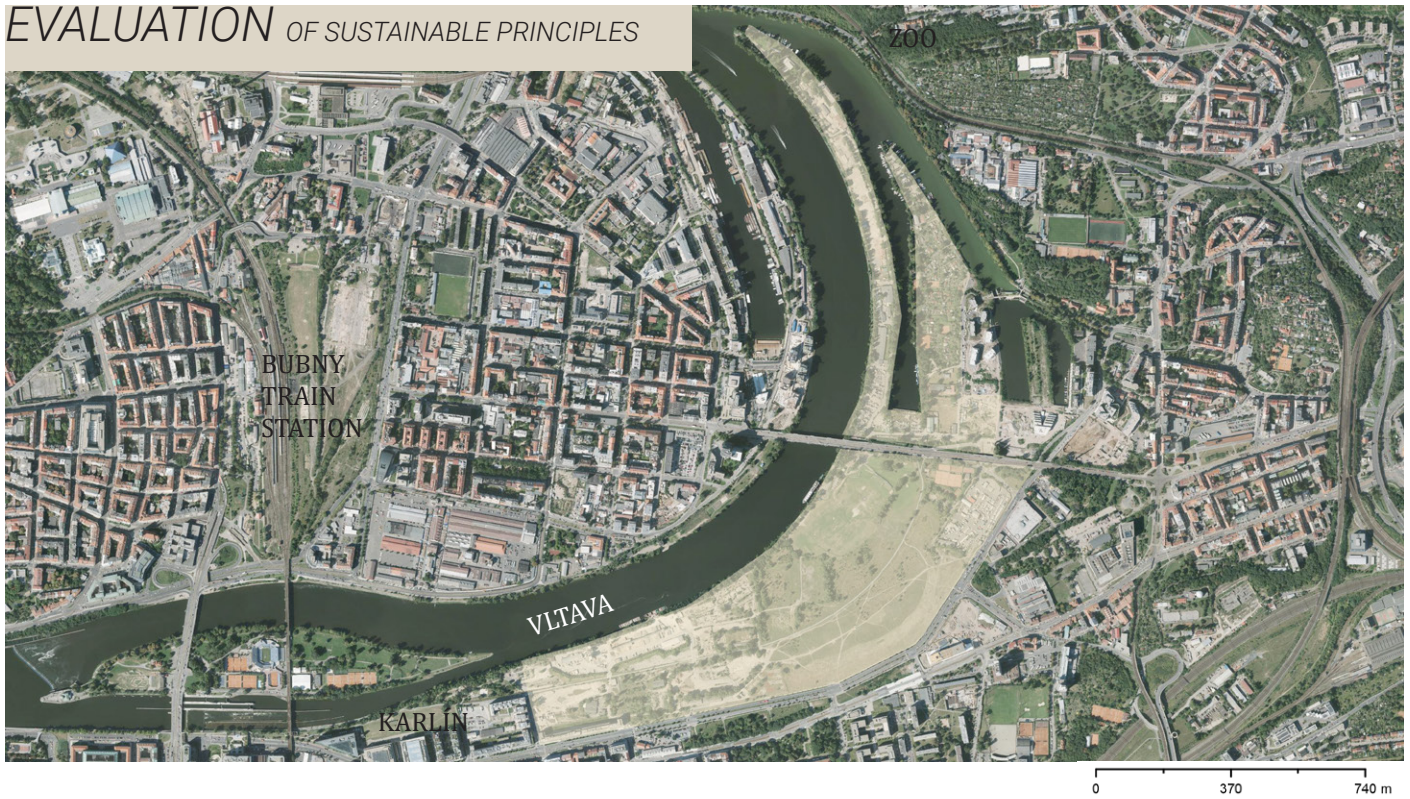
Site visit with the architect of the design

SOURCE: <https://www.praha8.cz/Rada-Prahy-8-dala-zelenou-navrhu-studie-Rohan-City.html#&gid=1&pid=3>



Public meeting

SOURCE: <http://blog.aktualne.cz/blog/petra-kolinska.php?itemid=31979>



NOTE: pink- not fulfilled principle, beige- neutral, green- fulfilled principle

SOCIAL PRINCIPLES

The designed boulevard could serve as a meeting spine for all the income groups. The size and cost of the apartments have not been published yet. There is no information regarding social or rental housing as well as there is no evidence of the future use of courtyards since it is very hard to assume their functions from visualizations. The environment seems to attract people of all the ages and the district will be facilitated to provide a comfortable life of a family. Thinking about kids and teenagers, a school will be part of the development and a green island could serve as a safe environment for children to play. Visualizations do not really show how the elderly were incorporated into the proposal. The designed boulevard could connect the site with the rest of the river bank as well as provide public facilities and free time activities. There is no evidence of smaller pocket parks or a calmer environment. There are not many buildings that could be preserved. The scale of the built-up area still does not correspond to the built-up area of the older part of Karlín and reminds of housing estates.

SOCIO-ECONOMIC PRINCIPLES

Sekyra Group aims to make 50% of the development as office spaces (rest 50% housing). It can be assumed, that the site can provide both, housing and job opportunities for residents. The design does not take tourists into consideration.

ECOLOGIC PRINCIPLES

A currently used bicycle lane, which is placed on site, will be turned into a boulevard. An electrical bus will operate in the neighborhood. Speed of cars will be decreased to 30 km/hour. No parking house is proposed, only underground and street parking. Some of the buildings might be too tall to create a cozy environment. Distances between them are too wide in order to provide good light conditions. Green spaces around buildings are not defined. Buildings are supposed to be very ecological, however, it might be disputable, whether the blue opening on top of the tall buildings is a swimming pool or just a window shaft. The green island, that will be detached by the river canal will provide green spaces for leisure and family time.



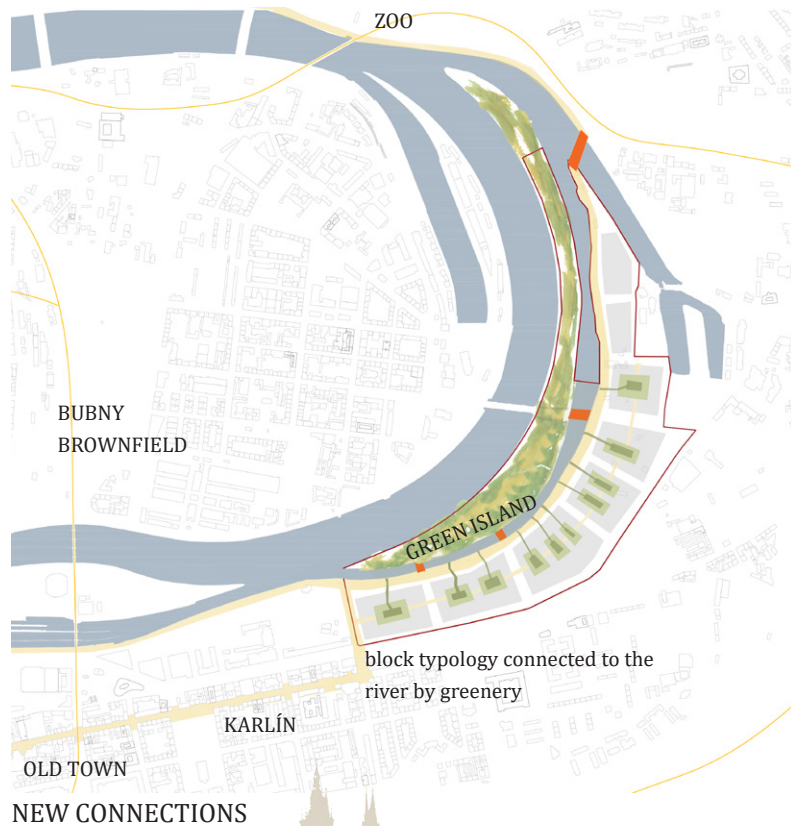
LIVING BY THE WATER



VISION

Rohan brownfield has as the only one from the studied brownfields the direct proximity to water, which was not fully exploited. The courtyards should be the biggest attraction for future residents, providing a calmer environment connected to public green spine located along the river bank. The proposed spine will become part of the connection created from the historic city center to Trója castle and Prague Zoo.

The newly formed island will provide public sports facilities, attracting residents from the wider neighborhood, tourists and office workers during lunchtime and after working hours. The block typology should be more dense, linking to existing Karlín block typology, where the social bond among residents could be created. The variety of housing typologies will provide a social mix and the buildings will be more ecological when it comes to connection to greenery and water management, not only the technology.



VISION, PHOTOMONTAGE



## BUBNY RAILWAY STATION

SOURCE: <https://www.e15.cz/domaci/bubny-se-mohou-vystavbe-otevrit-za-dva-roky-babis-tam-chce-vladni-ctvrt-1344987>

*“It is clear that time has come to look for a new language. The generation of holocaust survivors is leaving us, along with their legacy. While the survivors are still around, their stories don’t need any artistic accompaniment. But once they are gone, just showing films about them doesn’t have the same effect. So we need to find a new way to talk about this very significant topic, which is also similar to events we are living through today.”*

(Volynsky, 2013)

The first trains passed through this northern suburb of Prague in 1850, but it was not until 1873 that a station was constructed to service the coal industry that had grown up in the loop of the Vltava. Originally part of a much larger complex comprising workshops and a locomotive maintenance depot, Bubny station has now been relegated to a minor local stop en route to the west and north of the city.

(The Prague Vitruvius, n.d.)

The run-down Praha-Bubny train station is now a fairly insignificant stop on commuter train routes going to and from destinations west of Prague. But in the early 1940’s, this was the setting for one of the darkest and cruelest chapters in Czech history.

Some 50,000 Czech Jews walked through the small departure lounge at the Bubny station to be put on transport trains taking them to the Łódź ghetto and later to the concentration camp in Terezín. Most were subsequently transported to forced labor and death camps like Auschwitz.

(Volynsky, 2013)

Bubny station has suffered from neglect for. Developer Orco intends to turn this into a mixed-use “city within a city”, becoming one of the biggest redevelopment projects in Central Europe.

(Creighton, 2011)



Praha Bubny Station, holocaust memorial

SOURCE: <https://www.radio.cz/en/section/curraffrs/annual-drumming-session-recalls-first-jewish-transport-from-prague>

As numerous archaeological finds have shown, there was human settlement on the territory that is now Prague 7 as far back as the Stone Age. The area offered favourable conditions for hunting and fishing, and for agriculture. With the gradual arrival of the Slavs, however, the centre of settlement shifted in the 8th – 9th centuries to what today is the Old Town. The historic settlements of Holešovice and Bubny form the basis of Prague 7.

#### 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 people of Bubny lived mainly by fishing, but their competitors in the Old Town induced the emperor to issue a letter of majesty forbidding the sale of fish in the Lesser Town and affecting primarily Bubny. A new phase in the development of Bubny started only after 1750. In 1788 there were 24 houses here, in 1825 there were thirty and even a cardboard box factory. After 1850, when Bubny was merged with Holešovice, an unprecedented building boom occurred.

#### HOLEŠOVICE

The life of the more remote Holešovice developed quite differently from Bubny with its fisheries. It was mainly an agricultural settlement. The name of Holešovice is first mentioned in historical records in 1228 as royal property. 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. 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.

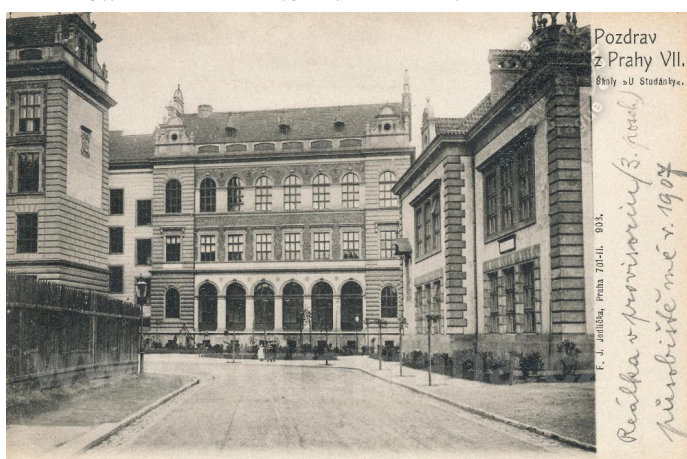
(Prague 7, n.d.)



1928-Holešovice  
SOURCE: <https://www.milujuprahu.cz/neuveritelne-snimky-venkovske-prahy-holesovice-dejvice-branik/>



Holešovice  
SOURCE: <http://www.stareholesovice.cz/galerie/stare-holesovice/>



Old postcard  
SOURCE: <https://www.starapraha.cz/pohlednice-praha-holesovice.php>

# BUBNY-ZÁTORY (DESIGN 2008)



SOURCE: <http://www.ciglermarani.cz/uzemni-plan-bubny-zatory>

In a brownfield area, a new multifunctional quarter will be established, providing office spaces, residential apartments, university, hospital and railway station.

(Cigler Marani Architects, 2008)

Proposal for new development was found controversial, some criticized the lack of connection to the rest of the city, some people shared an opinion, that the municipality was trying to meet the developer' desires, e.g. some buildings that were previously listed as cultural heritage were removed from the list.

(StavbaWeb, n.d.)



Public greenery

SOURCE: <http://www.ciglermarani.cz/uzemni-plan-bubny-zatory>



New metro terminal and development

SOURCE: <http://www.ciglermarani.cz/uzemni-plan-bubny-zatory>



SOURCE: <http://www.pelcak.cz/projekty/koncepce-urbanniho-rozvoje-holesovice-bubny-zatory-praha/>



3D model

SOURCE: <http://www.pelcak.cz/projekty/koncepce-urbanniho-rozvoje-holesovice-bubny-zatory-praha/>

## BUBNY-ZÁTORY (NEW PROPOSAL 2018)

*„Bubny represents an area of 110 hectares, what is approximately the size of the Old Town. The aim of the supplementary analyses is to ensure, that the regional study will correspond the local needs as well as the municipal ones. You can imagine the process as the creation of the missing puzzle piece, that has been missing for long. It is supposed to comfortably connect Holešovice and Letná and the area on the other side of Vltava river.“*

Petra Kolínská, Prague municipality

(Jaroševský, 2018)

*„From the city point of view, Bubny is one of the main transformation area, which has the potential to boost the whole city economically and culturally. Therefore, it is important for the site to become an exhibition area with a pleasant city environment and efficient public facilities.“*

Adriana Krnáčová, mayor of Prague

The municipality of Prague in collaboration with IPR commissioned an architectural office for a new development plan that is supposed to find a solution to the creation of full-valued city district from an abandoned brownfield site. The plan should take into consideration a new Philharmonic building, administrative center close to the train station. The proposal should be a synergy of housing, job opportunities, commerce, culture, and services.

(IPR PRAHA, n.d.)

The proposal consists of two city-shaping figures, government part, and cultural square, connected by the green spine along the railway lines, which connects two city parts and their identities, Bubny and Holešovice. The study is a base for the development of the area.

(Pelčák a partner architekti, n.d.)

# EVALUATION OF SUSTAINABLE PRINCIPLES



## SOCIAL PRINCIPLES

The proposed public spaces and green corridors could create a base for a social mix within the city. Unfortunately, very little is known about the design of streets as well as the building typology. According to the plan, the wide car connection seems to be narrowed, making the road more pedestrian friendly and the site will gain new importance, as it will become an important part of Airport- Masaryk station (city center) connection. Green corridors can open a possibility to visit Stromovka park, which is a very popular free time space for locals. There is no information about the quality of public spaces yet. The site is aiming to become a new cultural center, while the buildings will be torn down, except for the old train station hall. In the times of growing anti-Semitism, the Jewish story could be used more efficiently and the proposal might be stronger influenced by this historical moment.

## SOCIO-ECONOMIC PRINCIPLES

The mix-used development can provide job opportunities for local residents as well as for residents of Kladno (a shrinking city which will be connected by the high-speed train connection). Bubny should become a new touristic site to decrease the number of tourists in the older part of the city and a newly built Philharmonic is supposed to become an interesting point for them.

## ECOLOGIC PRINCIPLES

The new system of tram lines will serve the area as well as train station will still operate in the future, as it will become part of an important connection Kladno-Airport-Masaryk train station. The study shows only volumes, there is no information about the streets and courtyards, how permeable they will be. There is no information about the buildings. There will be two main public squares connected via a green corridor. There is no information about some smaller pocket parks or sport facilities.



NOTE: pink- not fulfilled principle, beige- neutral, green- fulfilled principle

# CULTURAL BROWNFIELD

CONNECTED TO EXHIBITION AREA VIA GREENERY



VISION, ACTIVATION OF THE TRAIN STATION



NEW CONNECTIONS

Holešovice has become a very popular part of Prague due to its location as well as cultural facilities (National gallery, Dox-gallery of contemporary art). The proposed vision is therefore built upon the strong cultural presence and the vision of the municipality to establish a new Philharmonic building. The cultural character can strengthen the current identity of Holešovice as well as create an appealing touristic site. While taking a train, travelers will be able to meet the cultural part of Prague while commuting to the city center, since Holešovice is planned to become part of a connection from the Airport to Masaryk station. In order to provide proximity to cultural features and raise awareness of the Jewish history, the main pedestrian connection will connect the Philharmonic building, the Jewish memorial located by the historic train station, exhibition area Výstaviště Holešovice and Stromovka park. Vertical connections running through the site will have a character of typical Prague street (sidewalk, greenery, car street, greenery, sidewalk) while the horizontal ones, connecting river banks will have a character of pedestrian spine as well as the green connection, which will have a form of a sequence of various public pockets and squares.



VISION, PHOTOMONTAGE



SOURCE: FB Nákladové nádraží Žižkov 2013-2015

*„They have to start somehow and I think that starting with cultural things and with public money for a thing like this – which is listed, so it’s protected – is the way to start. I think you know this easy idea: that if the public money comes first then the private money will also join. It’s definitely a much better version than just knocking it down or replacing it by something else. We have many structures from the past which are really great and in the majority cases are of better quality than new ones. I think that we should rethink this strategy of building something new and instead use what we have.”*

Adam Gebrian, architecture critic  
(Willoughby, 2014)

Praha-Žižkov freight railway station (Czech: nákladové nádraží Žižkov) is a railway station formerly used for rail freight transport, located in the Žižkov district of Prague, the capital of the Czech Republic. It was originally opened in 1936 and ceased operations in 2002.

The buildings were designed by Karel Caivas and Vladimír Weiss, whereas Miroslav Chlumecký designed the track infrastructure. The purpose of the station was to relieve Prague city centre of freight train services. It was also used for warehousing, although the creation of a food warehouse in the district of Strašnice in 1966 reduced the demand at the station.

The station building was confirmed as a cultural monument in March 2013. Between 2014 and 2017, the station was served as a new cultural hub, hosting various design exhibitions and events.

(Wikipedia, 2018)



Historical photo of the station

SOURCE: <http://nakladovenadrazizizkov.com/cs/historie-budovy-nnz>



„Žižkov was the most important residential area in Prague, where thousands of workers of big factories in the districts of Libeň and Vysočany had their homes.“

Milan Polák, publisher

“There were many small companies and small factories, and some bigger ones of course, narrow streets, and this typical, we can say, ‘pauper’ kind of architecture: poor houses that are richly decorated from the outside but the real side is very poor, with systems of parallel balconies on the backs of the buildings – called ‘pavlače’ in Czech – which are very typical of the Žižkov area. There were very small apartments, very poor, just one or two rooms without kitchens, without toilets.”

Zdeněk Lukeš, architectural historian

“Patriotic feeling has always been typical of inhabitants of Žižkov. For the Czechs of the end of the 19th century, the symbol of freedom was the Hussite movement, and this is why Žižkov is called Žižkov, after the leader of the movement Jan Žižka of Trocnov.”

Milan Polák, publisher

“Žižkov has its own spirit – we say ‘genius loci’. You cannot find another district like Žižkov in all of Prague. A lot of poor people lived there over the long centuries, but on the other hand Žižkov lies near the centre of Prague, so today it has a good address for people who are working in the city. And the other thing that is typical of Žižkov is that there are many, many pubs, inns and restaurants.”

Milan Polák, publisher  
(Falvey, 2011)



Typical architecture for Žižkov

SOURCE: <https://www.prahamestoliteratury.cz/cz/aktuality/225-noc-literatury-2014-na-zizkove/>



1917- Žižkov

SOURCE: <https://www.milujuprahu.cz/neuveritelne-snimky-venkovske-prahy-holesovice-dejvice-branik/>

The contemporary Žižkov territory used to be a rarely settled landscape in the past, located behind the boundaries of Prague. In 1358 the Emperor Charles IV issued a decision to grow vineyards on the hillsides around Prague.

In 1849 the territory was called Vinohrady, later divided into two parts- Královské Vinohrady and the current Žižkov. The name Žižkov was officially permitted in 1877. In 1881, Emperor Franz Josef I promoted Žižkov to a township. On January 1st, 1922, the town became part of Prague.

(Prague City Line, n.d.)

Žižkov has received the name “the Montmartre of Prague” not just for the hills but also for the notorious decadence and the proletariat milieu that drew artists, writers, musicians and ‘bohemians’ in general.

On of the most lasting impression that the communist era left on Žižkov, that is, the colossal television tower that is often called one of the ugliest or the most fantastic structures in the world.

(Falvey, 2011)



ŽIŽKOV TV TOWER, ROOFSCAPE

SOURCE: <https://www.viator.com/Prague-attractions/Zizkov-District/d462-a23972>

# PARK QUARTER



SOURCE: <https://www.central-group.cz/parkovactvrt>

## DESIGN PROPOSAL

The urban concept for Park Quarter has been created by the renowned architect Jakub Cigler, who is also the principal architect for the site. He and the investor held a unique workshop for the purpose of choosing 9 leading studios, which together they came up with a total of 21 architectural concepts for this location. The new quarter will therefore have its own sense of unity while still offering a wide variety of architectural elements.

Park Quarter is now emerging in five compact residential tenements with around 1,500 new apartments, plenty of small commercial space in the parterres of the buildings, and a new, large kindergarten. Two additional residential tenements are being planned for the future.

In addition to the new apartments, Central Group will also offer room for restaurants, shops and services in the parterres of several buildings in the main zones.

A large public park covering 14,000 m<sup>2</sup> will be developed and a central pedestrian zone with water features for relaxation. The project will also include a big kindergarten (six classrooms with a kitchen and large outdoor lawn) that Central Group will build at its own cost and then transfer the ownership of it to the city district free of charge.

(Central Group)

*“Our urban design is based on the traditions of this part of Prague and its semi-enclosed city blocks. This way we respect the character so typical for Vinohrady and Žižkov. We are also devoting a large part of our work to premium public spaces with lots of greenery. The architects and investor are completely at one about this.”*  
Jakub Cigler



Proposed architecture

SOURCE: <https://www.central-group.cz/parkovactvrt>

# PARK QUARTER DESIGN EVALUATION

## PUBLIC OPINION

*„The freight railway station suits the most railway service. It might be naive, but it would be nice if the presence of trains would be preserved. Unfortunately, the railway connection will be cut off by the development in the eastern neighborhood.“*

Kateřina Bečková, architect

The design was officially presented to the public in May 2018. The presentation was held by the developer representatives, the head of the municipality and the main architect of the proposal Jakub Cigler. Approximately sixty attendants had a discussion about the new development.

(Central Group, n.d.)

*„Transparent approach to the presentation of the plans, and explanation of wider connections is the best way how the project should be discussed in the city.“*

Vladislava Hujová, Mayor of Prague 8

The developer in collaboration with the municipality conducted a survey, asking residents about their preferences regarding the services in the neighborhood.

(Central Group, n.d.)

The survey did not touch the desired form of urban structure or the typology, therefore, it can be assumed, that the participants could influence only the use of the ground floor, not the design itself.

*„Central Group itself is fully aware of the fact, that the height of the buildings and the architecture could be different. Only one-third of the site is being designed and it is not an answer to a question where for instance an elementary school would be located, whether the courtyards will be accessible for the public, how the connections towards the freight railway station will be solved.“*

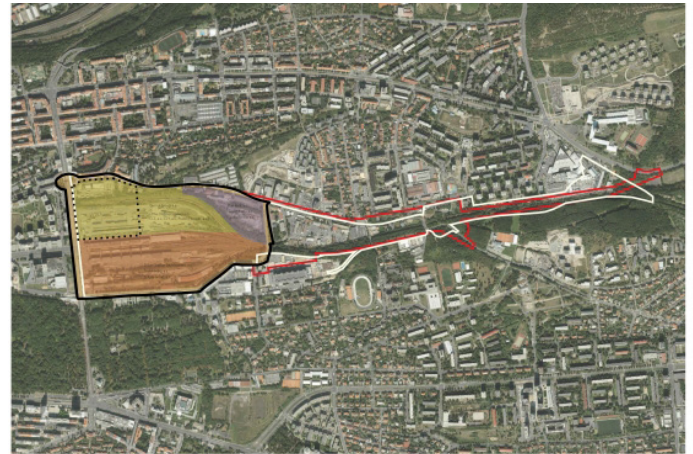
Ondřej Rut

Among all the discussed issues, the most controversial was the street parking, the absence of bicycle lanes, sports facilities a school. The designed greenery which connects to the northern park but not to the cemetery in the southern neighborhood, even though in the metropolitan plan this connection is supposed to be a bio-corridor.

(Maršálová, 2018)

Ondřej Rut criticized the absence of the spatial plan which could anchor stronger regulations regarding heights and accessibility of public spaces. According to Rut, the biggest mistake is, that the municipality of Prague 3 did not require a spatial plan for the whole area, therefore, all the investors could approach their part of site differently, creating no links and connection to the other parts of the previous brownfield site.

(Bajtler, 2018)



NÁKLADOVÉ NÁHRAŽI ŽIŽKOV - vymezení území

Owners of the railway station area

SOURCE: <http://www.ippraha.cz/nnz>



Site visit with the designer

SOURCE: <http://www.central-group.cz/parkovacvrt>



New metro terminal and development

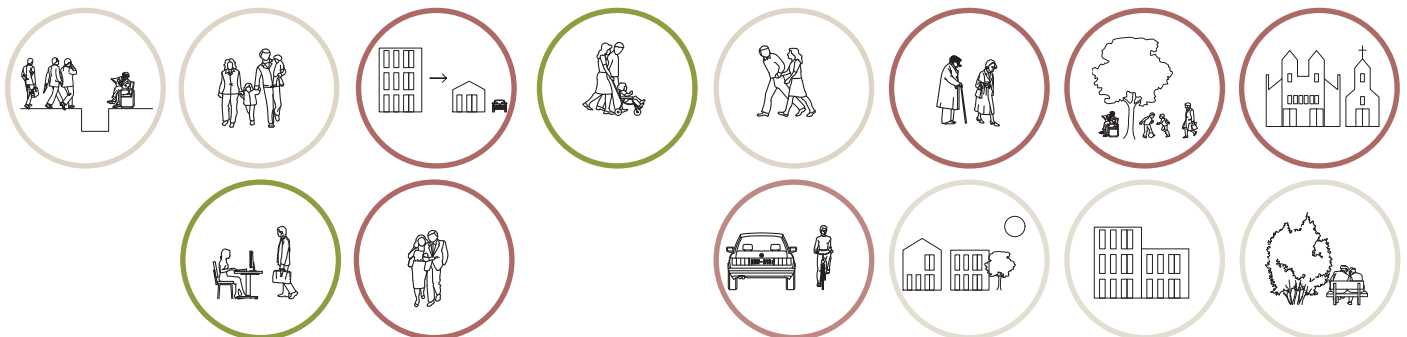
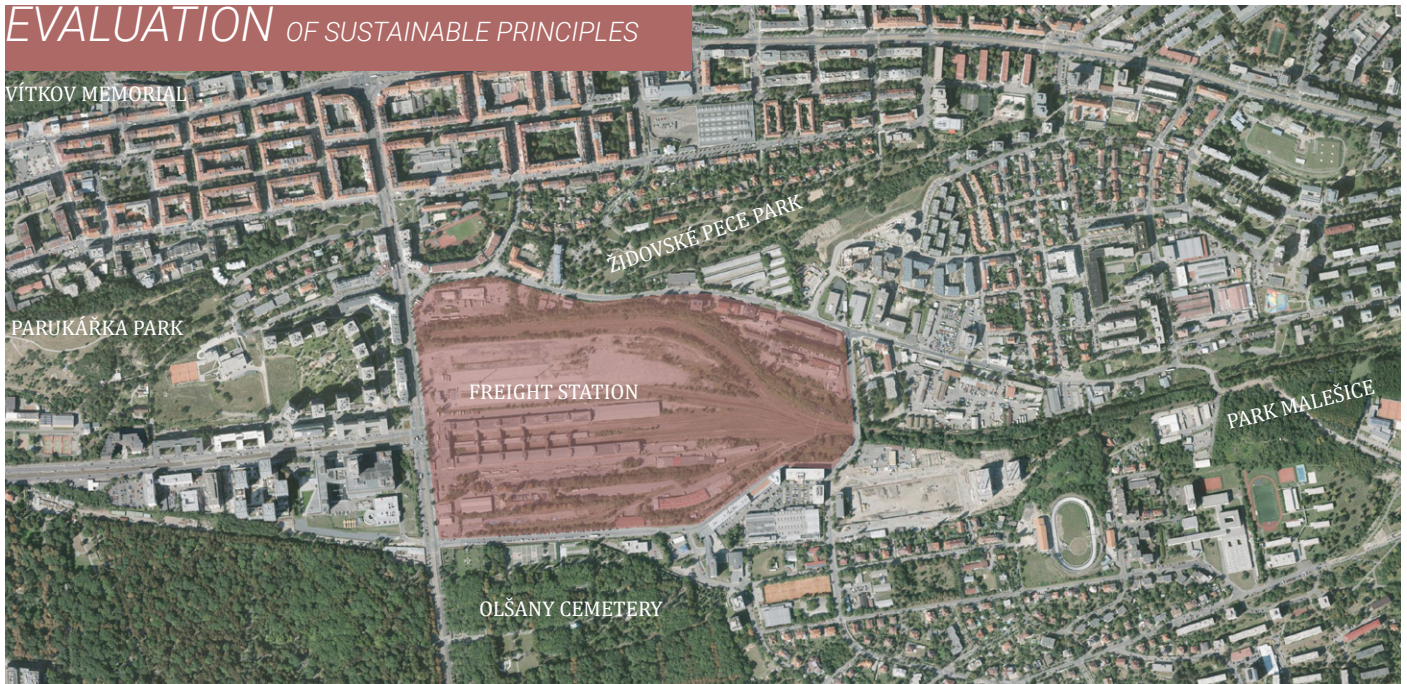
SOURCE: <https://stavbaweb.dumabyt.cz/parkova-tvr-18527/clanek.html>



Public greenery

SOURCE: <https://stavbaweb.dumabyt.cz/parkova-tvr-18527/clanek.html>

# EVALUATION OF SUSTAINABLE PRINCIPLES



NOTE: pink- not fulfilled principle, beige- neutral, green- fulfilled principle

## SOCIAL PRINCIPLES

The process of participation allowed residents to influence the decision of the future facilities and type of greenery located in the neighborhood. Unfortunately, they could not decide upon the housing typology even though the development is aimed to be a residential one. It can be assumed, that the proposal is not an answer to a question how to eliminate suburbanization since there is no evidence of the use of various housing typologies nor the information regarding social or rental housing. The neighborhood might attract people of all the ages due to its location, unfortunately not due to the quality of the urban structure. Proposed facilities will have mainly commercial character and due to the process of participation, a kindergarten will be part of the development. Designed public spaces are quite modern and open, visualizations do not show inner courtyards, therefore it is quite difficult to assume whether a suitable public space for the elderly will be available. The location of the central green spine might be seen a little bit irrational since it is blocked by existing buildings, while the connection to the city, which could be established between the development and the existing train station is not designed at all. The volume of the train station, which could be a driver of the whole development and attract various income and age group in order to create lively neighborhood and decrease the number of tourists in the city center was fully ignored in the proposal. The genius loci of Žižkov, its amazing cultural and pub life was not elaborated into the design as well.

## SOCIO-ECONOMIC PRINCIPLES

There will be some job opportunities for people working in the service sector, however, it is disputable whether they could afford an apartment in the neighborhood. Despite the unique location and the presence of the train station, to reduce the stress of the massive tourism in Prague was not the aim of the designers.

## ECOLOGIC PRINCIPLES

All the residential block will have three underground floors for parking. The idea of a decrease in the use of public transportation and future tram line (according to metropolitan plan) was not really elaborated. The development could be seen as very car-dependent since the idea of the future tram line (the aim of the municipality) was probably not taken into consideration. The development, therefore, will be another car-dependent neighborhood creating car stress on the city center. The proposed green connection which is connecting the proposed blocks seems to have a function of a big rain garden. The stormwater management could be therefore more elaborated and become part of the courtyards. The proposed spine and a park are the only leisure time spaces and the neighborhood lacks different activities. The proposed block structure does not remind of typical Žižkov blocks. The designed blocks are missing variety in typologies, variety in terms of use of courtyards as well as lack of communication among residents, which could be achieved by various building typologies. Very little is known about the sustainability on the building level.

## OPEN-MINDED BROWNFIELD

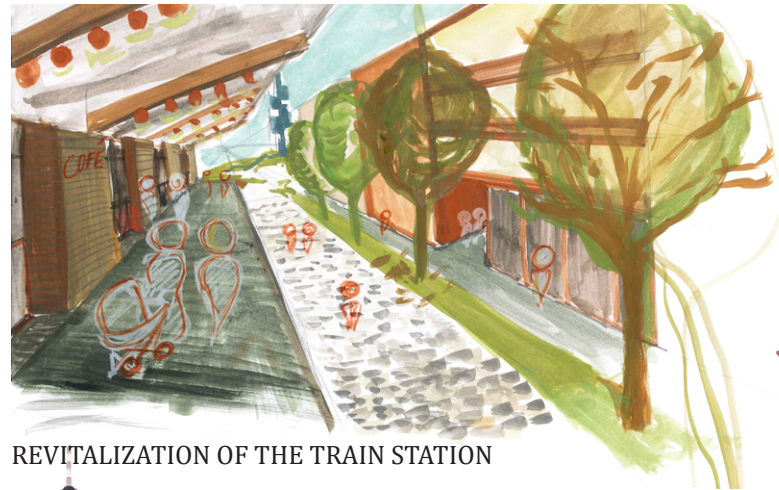
The vision is supposed to bring back the culture of old Žižkov, which was in the past the culture of the working class living in courtyards and pubs, therefore various scholars define it as bohemian lifestyle, which is still present in the older part of Žižkov.

The train station, which used to inhabit various artist and cultural groups, will be established as a new cultural hub becoming the main driver of the neighborhood. The newly established cultural hub could be an appealing spot in the city for the young as well as tourists in order to decrease the pressure on the city center.

The site is surrounded by a number of green bodies, which could be connected by the site, therefore part of the site could become a natural bio-corridor for both, people and animals.



NEW CONNECTIONS



REVITALIZATION OF THE TRAIN STATION



**BROWNFIELDS IN THE ORGANISM OF THE CITY:  
BUBNY AND MASARYK RAILWAY STATION**

*STORY OF TOURISTS TRAVELLING FROM THE AIRPORT TO THE OLD TOWN DISCOVERING PRAGUE*

*"Hurry up, we need to catch the train!"*

- Airport Václava Havla connected by the new train line to Masaryk station (1)

*"Oh, look at that old heating plant. What about going there tomorrow? I have read that it is a new sport area nowadays."*

- Former industrial sites identified according to Czech Invest- new cultural hub (2)

*"Do not look into your phone! Look, there is the castle! Oh, it is so stunning!"*

- Prague castle (3)

*"Well, this is so nice, the train is running through such a lush green space!"*

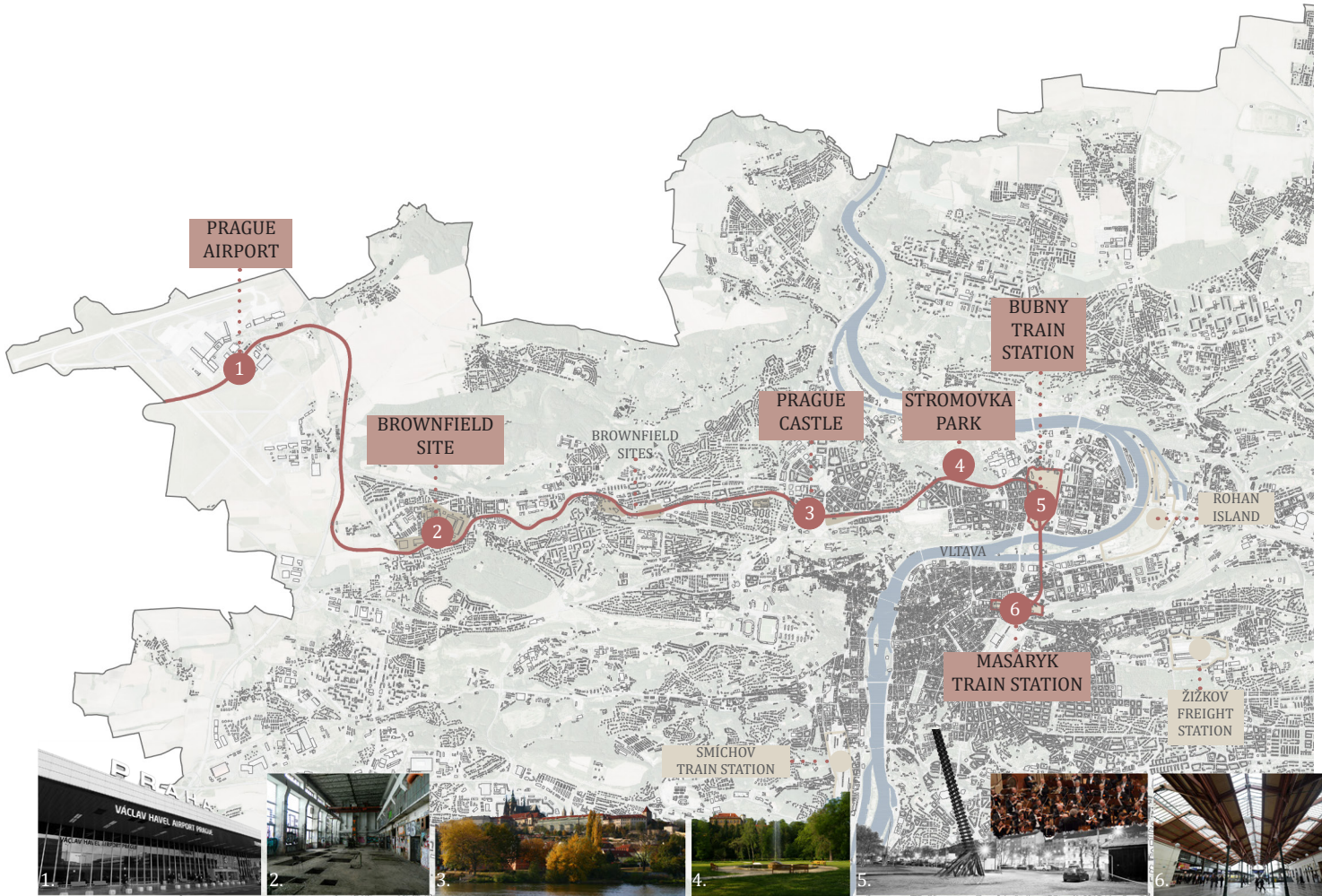
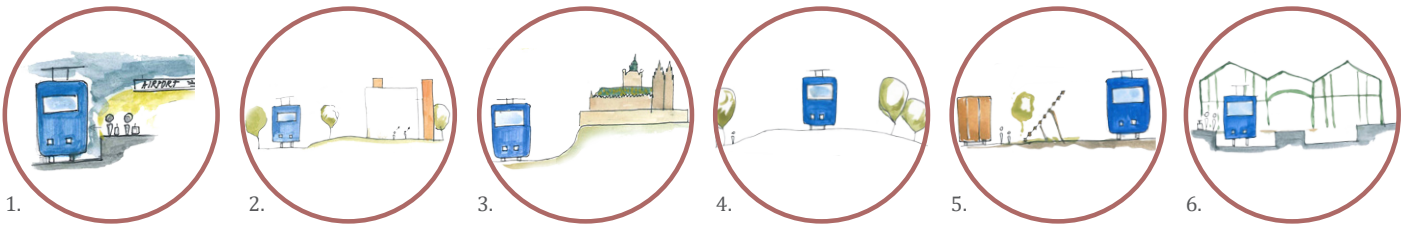
- Stromovka, one of the biggest and most beautiful city parks (4)

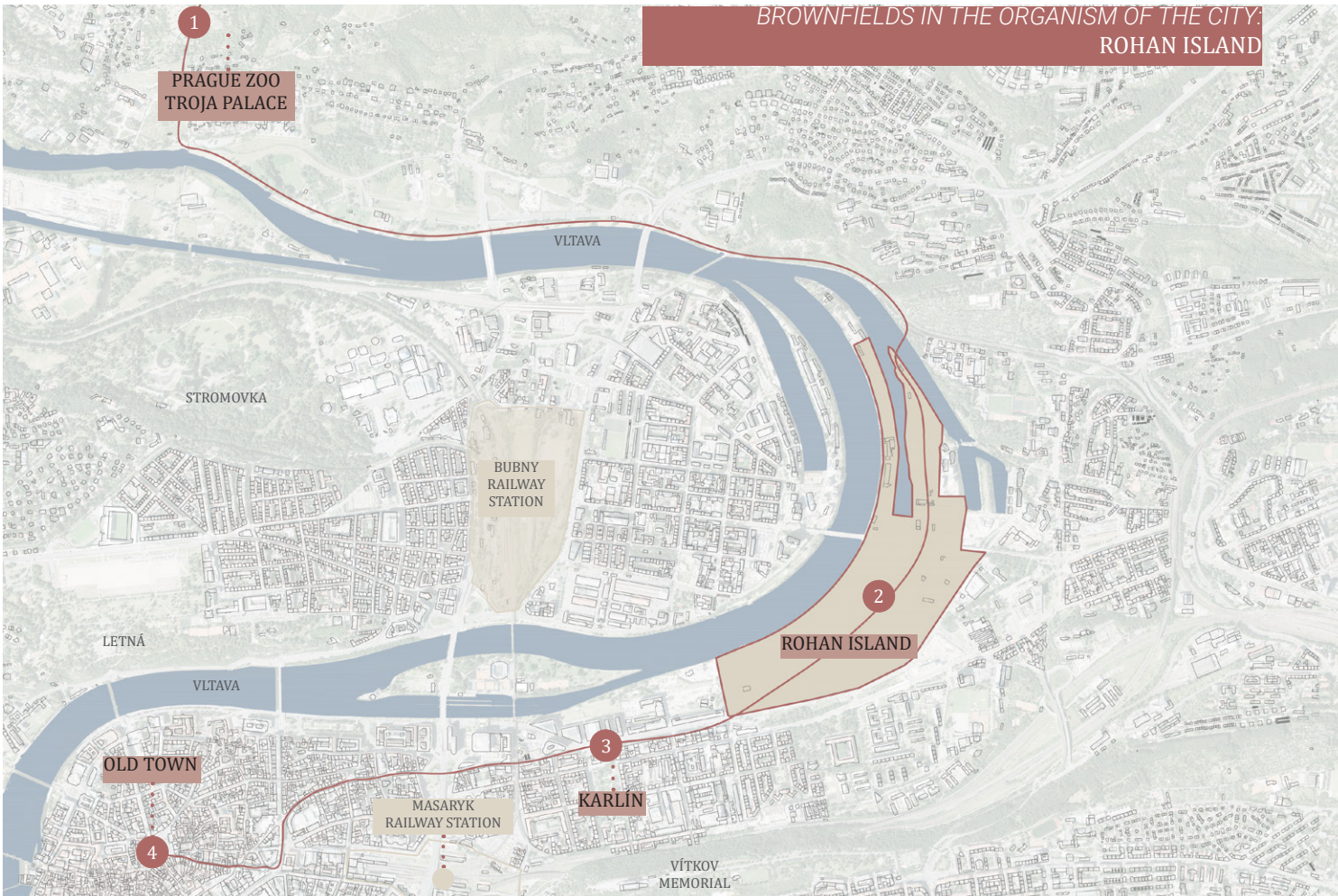
*"I guess, now we are in Holešovice. I read in that they have turned it into a new cultural centre with Jewish museum."*

- Holešovice, Bubny (5)

*"Let's go and explore Prague. But first, can we have a coffe in that small park by the station?"*

- Masaryk railway station, new green gate to Prague (6)





1. *STORY OF A FAMILY VISITING PRAGUE ZOO AND THE OLD TOWN*

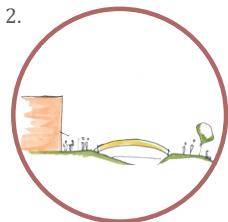


*"Mom! Look at that panda!"*

- Prague Zoo (1)

*"This castle is so so boring! Can we go for ice cream to the city?"*

- Troja Palace (1)



*"What a nice and long walk along the river. I hope that kids will sleep well tonight!"*

- Promenade along Vltava river (2)

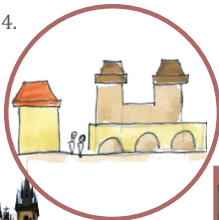
*"May I go and play football with those boys?" "No, first finish your ice-cream!"*

- Rohan Island, new outdoor sport centre connected to water (2)



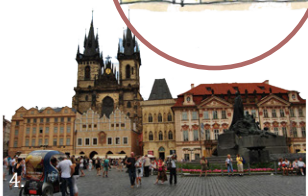
*"Mom, I am a bit hungry!" "Can you wait for a while? There are plenty of restaurants in Karlín."*

- Karlín, city part of Prague (3)

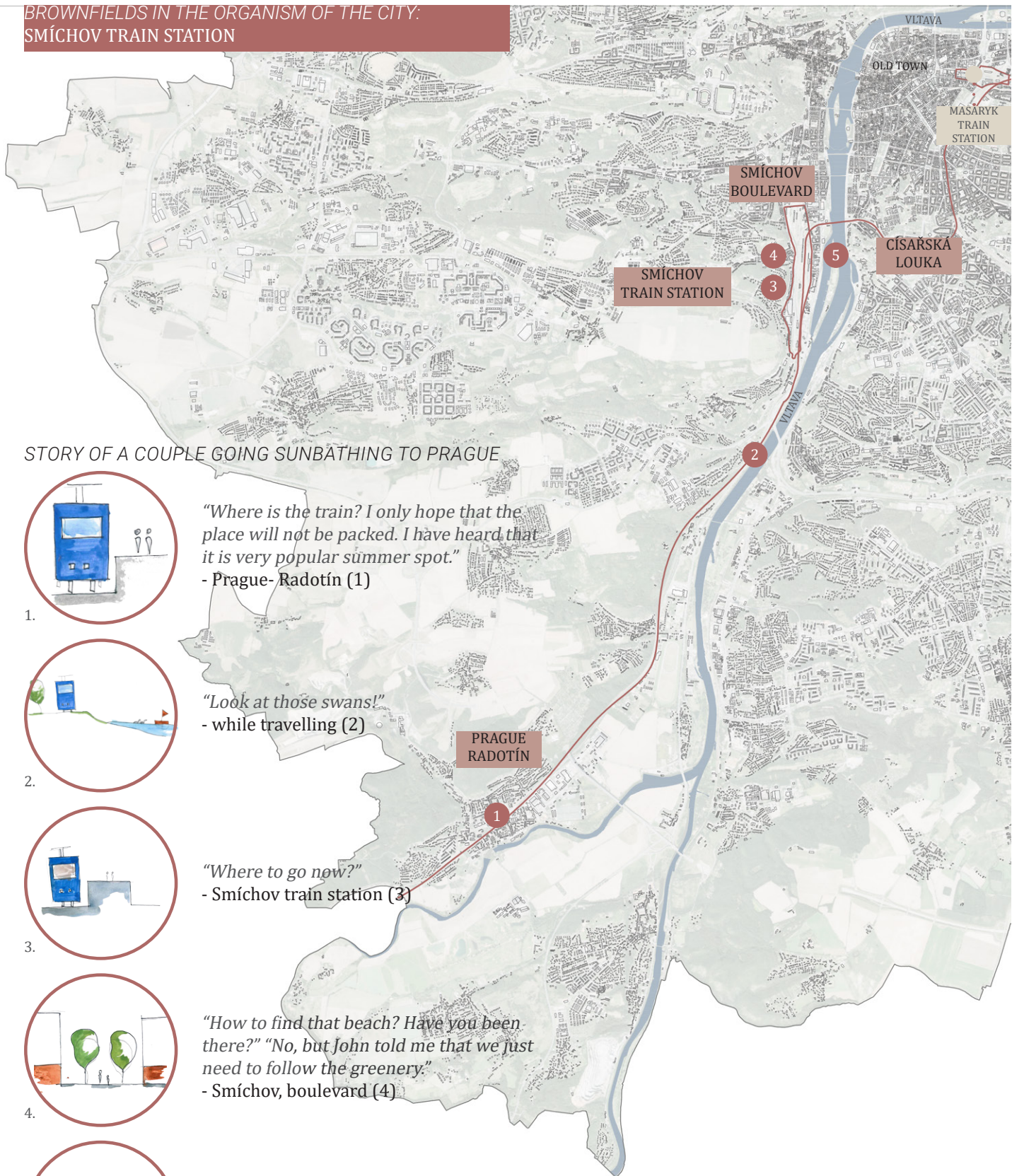


*"Wow, look how many tourists are there! Can we avoid the centre and rather go somewhere else?"*

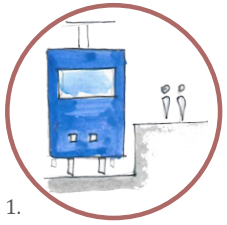
- Old Town Square (4)



**BROWNFIELDS IN THE ORGANISM OF THE CITY:  
SMÍCHOV TRAIN STATION**

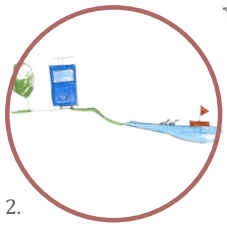


**STORY OF A COUPLE GOING SUNBATHING TO PRAGUE**



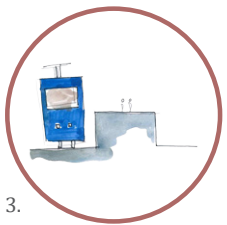
1.

*"Where is the train? I only hope that the place will not be packed. I have heard that it is very popular summer spot."*  
- Prague- Radotín (1)



2.

*"Look at those swans!"*  
- while travelling (2)



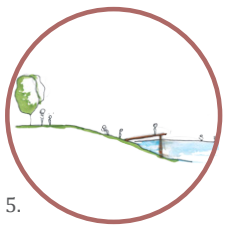
3.

*"Where to go now?"*  
- Smíchov train station (3)



4.

*"How to find that beach? Have you been there?" "No, but John told me that we just need to follow the greenery."*  
- Smíchov, boulevard (4)



5.

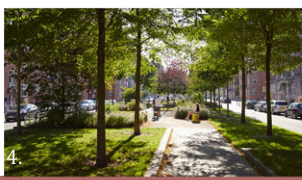
*"Shall we rent a boat?"*  
- Císařská louka, one of Prague's islands, final destination (5)



1.



3.

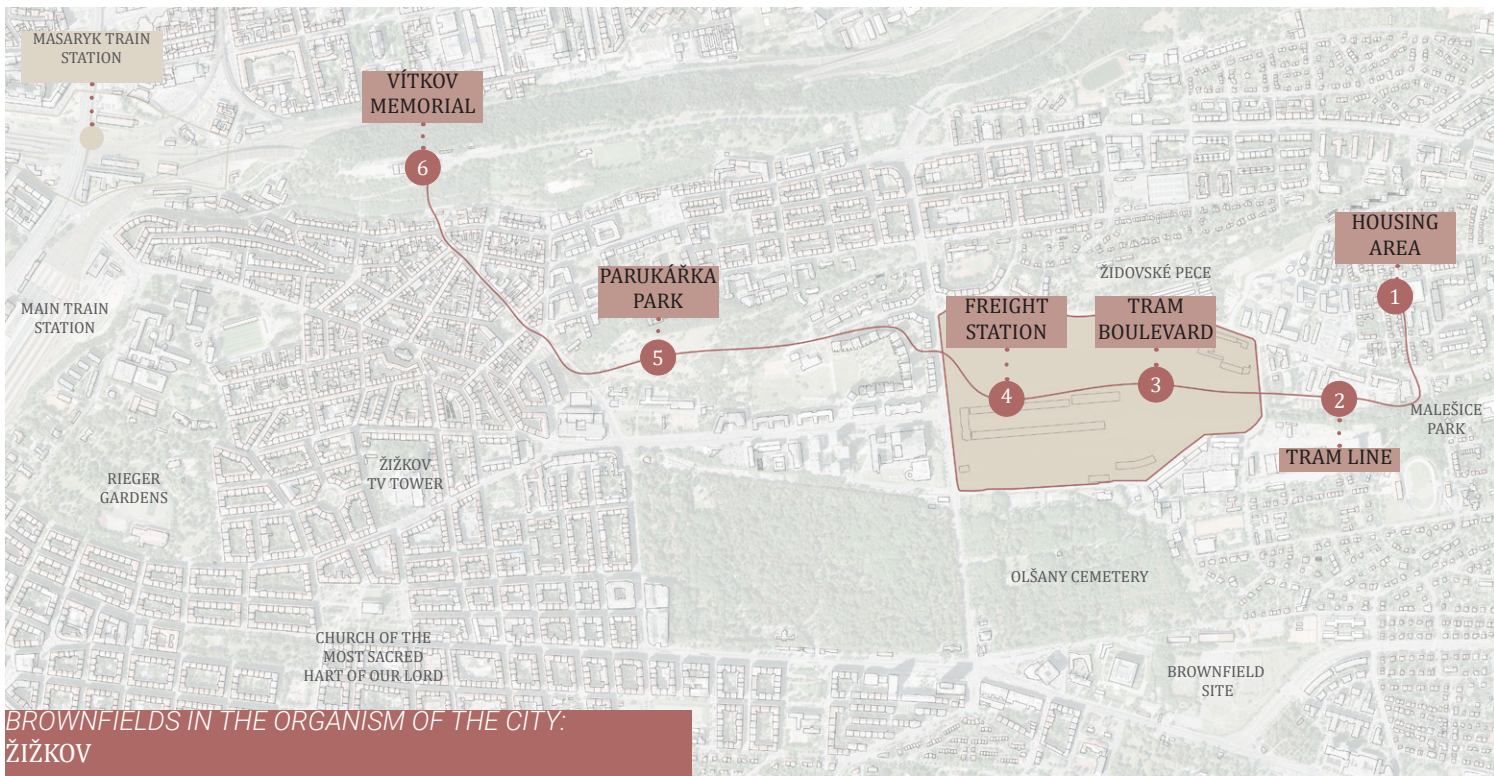


4.

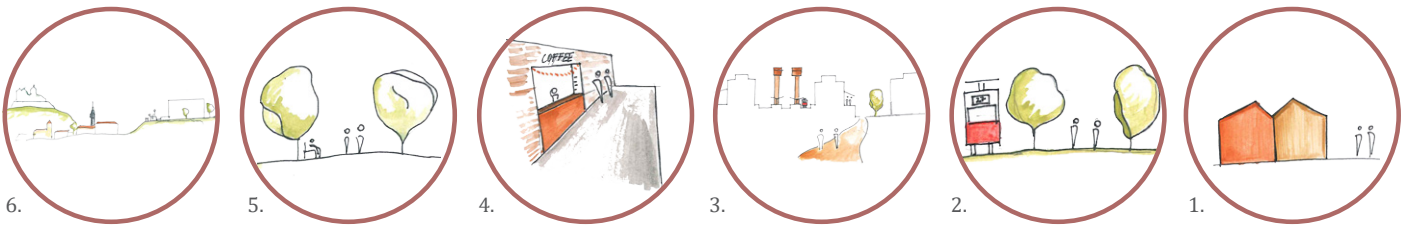


5.





**BROWNFIELDS IN THE ORGANISM OF THE CITY:  
ŽIŽKOV**



*STORY OF TWO FRIENDS GOING RUNNING TOWARDS THE CITY CENTRE*

*"Do you have an idea where to go today?" "What about Vítkov, we can go there through Žižkov Brownfield."*  
- Prague, Žižkov (1)

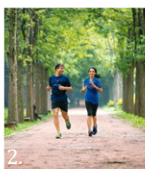
*"I am very happy that they revitalized this area. Old tracks were preserved and now we can run along them. They also create a boundary and protect us from the tram line."*  
- while running (2)

*"Look there is a market, can we stop and have a look?"*  
- approaching the old station (3)

*"Shall we continue towards Parukářka park?"*  
- Žižkov railway station (4)

*"I am very thankful for this new green connection!"*  
- Parukářka park (5)

*"Wow, I have been here many times, but I will always find this view charming!"*  
- Vítkov memorial (6)



# CONCLUSION AND FINDINGS

The study of the biggest and the most discussed inner-city brownfields in Prague led me to several conclusions.

Prague brownfields are seen as potential sites, therefore, they are owned by private companies. The approaches of private developers differ significantly. While in the case of Masaryk railway station, where the private investor commissioned a famous studio Zaha Hadid, did not put any effort into creating a design with future users, in the case of e.g. Smíchov, the developer decided to collaborate with the municipality and the Institute of Planning and Development in order to find the best solution suitable for the site.

Nowadays, there is an attempt to collaborate also with future residents and municipalities with investors are trying to include public opinion through the participatory process. These processes have usually forms of meetings, site visits, and discussions. Discussions eliminate future misunderstand and it can be seen as a way of promotion of private investors selling apartments. In the case of Czech Brownfields, residents could influence future services on the ground floor or the purpose of greenery. They were not particularly asked questions regarding housing, building form, and typology. It can be assumed, that the developer has a vision

of the target group, the development is suited for this group and the residents of the city can influence only future public spaces. This approach can be criticized for trying to create suitable housing conditions for various social groups, but on the other hand, the public space is open to everybody and people, who cannot afford to live in luxurious apartments, can interfere with other residents via public spaces, schools, and kindergartens.

Future developments constructed on current brownfield sites in Prague will have mainly commercial and residential character. Very little attention has been paid to the question of tourists. Brownfields are the missing pieces of the puzzle of the city landscape of Prague, therefore, their uses should support the city answers to the most discussed problems of the capital. Tourism is one of the main problems the city center has been facing in the last years. The potential of brownfields in terms of tourism has not been exploited. These sites can be attractive modern points, especially for young generations, distributing the number of visitors.

Sustainability in the Czech Republic is usually elaborated only partially. While the word „sustainability“ is usually understood in the context of green buildings, rainwater management, and new technologies, the social and economic pillar have not been

- LATE COLLABORATION WITH THE PUBLIC

- VERY LITTLE ATTENTION PAID TO TOURISM

- BROWNFIELDS ARE NOT PERCEIVED AS ONE BODY AND MISSING PIECES OF PUZZLE

- SUSTAINABILITY IN TERMS OF MODERN STRUCTURES

- MISSING CULTURAL IDENTITY OF BROWNFIELD SITES

- LITTLE ATTENTION PAID TO COURTYARDS- ELIMINATE SUBURBANIZATION

- EDUCATION- MISSING ABILITY TO ADAPT TO WESTERN CITY MODEL AND ITS QUALITIES

- COPYING OF WESTERN VOLUMES NOT QUALITIES, NO SENSITIVE APPROACH



well-incorporated yet. One of the reasons might be, that private developers have different aims than the municipality. Private investors, as the capital holders, can fulfill their visions of modern and well-equipped neighborhoods of shiny glass facades and expensive coffee shops for office workers. The municipality can influence future development in a form of stronger regulations, which could lead to a decrease in social gaps among residents.

Cultural identity, sometimes called the fourth pillar of sustainability, was not identified in any of the proposals. The only link identified was the the height of the designed volumes based on the height of surrounding built-up areas. In days of multicultural society, any link to cultural identity, historical identity or recycling of old industrial buildings of high quality has not been found.

Most of the visualizations, that have been studied, focus on public spaces or architecture. Some open spaces had the only form of not defined greenery. Pictures are in form of bird-eye view or human perspective. Three types of visualizations were found: bird-eye view, human perspective of a building, human perspective of public space. There was no perspective focusing on courtyards identified. It seems like that all of the visualizations are made to promote the qualities architects spend time designing, attracting the general public.

On the other hand, one can argue, that **VERY LITTLE ATTENTION IS PAID TO INNER COURTYARDS**, which are meant to be semi-public spaces attracting future residents. Plenty of different scenarios could be happening inside courtyards, they can have different functions and accessibility. Well designed courtyards have the power to eliminate growing suburbanization if they can offer similar qualities of a private garden to residents.

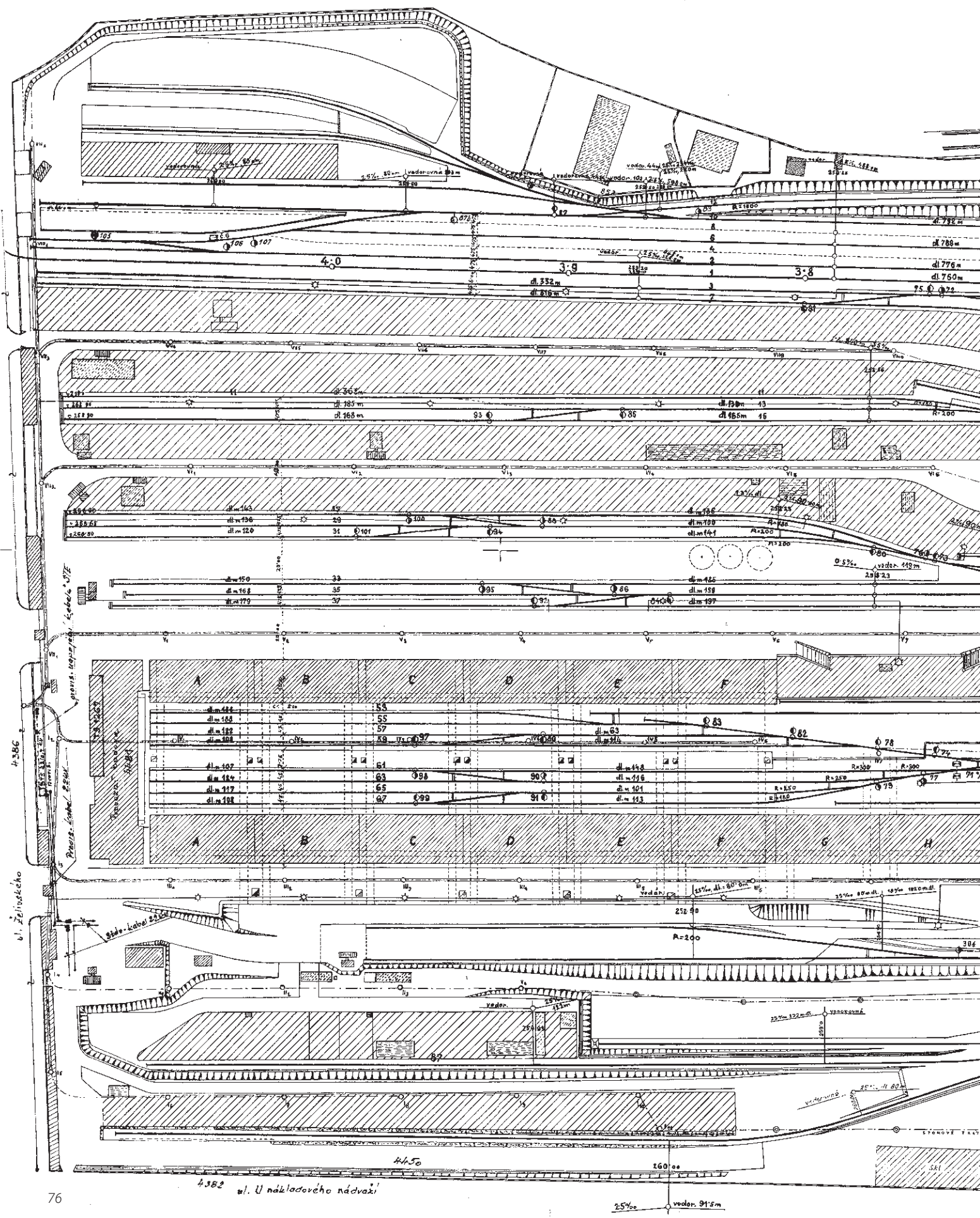
Old Prague courtyards were full of life, while usually there is no trace of human being in modern ones. The reason, why architects pay a lot of attention to the look of buildings and facilities provided in neighborhoods might be the impact of the communist regime. The decision makers, generation of people born in the 1960s and 1970s were kids raised in a regime, when everybody lived in the same apartment type, furnished by the same furniture, wearing the same clothes and queueing for a loaf of bread in a bakery.

They might not know how to handle the situation of growing market opening possibilities and modern technologies and how to implement them in a sensitive way into proposals.

People were restricted to travel to the Western part of Europe, therefore there was neither education about western architecture nor the personal experience of western cities. The only perception of a city was a Soviet model of a city. Architects might struggle with designing modern cities. The understanding of modern is linked to new buildings of various materials, which are finally accessible, modern building technologies and expensive apartments. One can assume, that the generation of architects raised in communism, had to adapt very quickly. Western cities pay a lot of attention to public spaces, while in the context of communist cities, public spaces were meant to be representative, with no interest in people. Designers might not be only struggling with the self-teaching themselves and finding a way of how to adapt to a new way of designing, but also with the perception of a modern sustainable city. During the communism, all of the developments represented by housing estates were rather socially sustainable, therefore professionals might not be able to address nowadays needs.

Younger architects, educated by the people raised in communism, have tendencies to find inspirations of western cities. Modern technologies allow them to study various projects online, on the other hand, perception, the most important aspect, will never be understood and will never become a part of their toolboxes. One can again assume, that this generation is raised with the understanding of "what is western, that is right" with no understanding of the qualities. The generation of young architects is raised to help developers fulfill their dreams of modern, luxurious cities for well-off residents.

**MODERN ARCHITECTURE OF THE CZECH REPUBLIC COULD BE SEEN AS AN APPLICATION OF NOT UNDERSTOOD WESTERN MODELS INTO THE CZECH CONTEXT, WITH IGNORANCE OF THE CULTURE AND HERITAGE.**



1:1000  
Č. j. 12 800 / 53 - A 171

# žst. PRAHA-ŽIŽKOV nákl.n.

1:1000

Československé státní dráhy  
Správa Soveránní dráhy  
Služba elektrotechniky a energetiky  
111 54 Praha I, Dlážděná 6  
12. 10. 1953

OV ONV 3

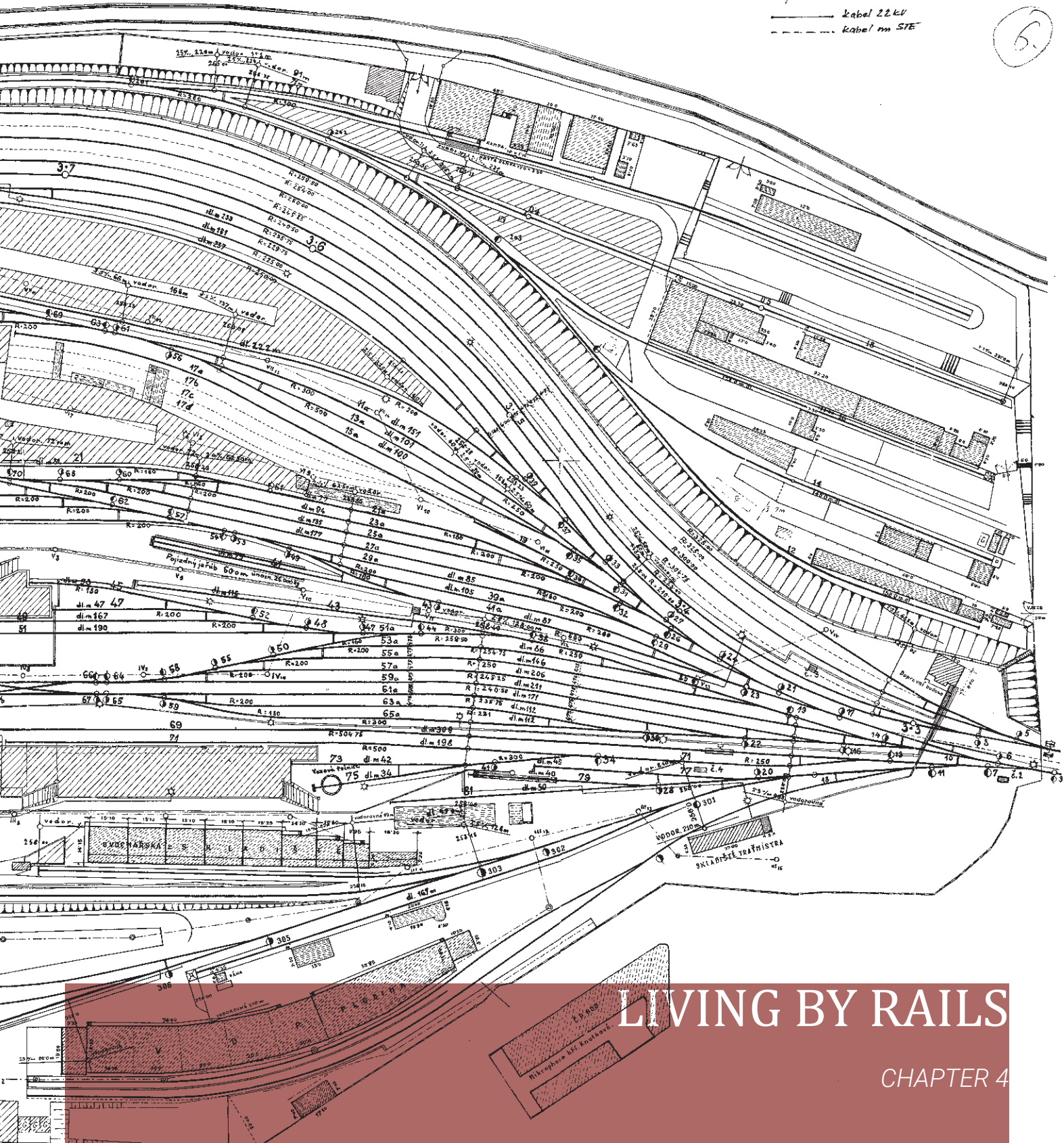
Útvar hlavního architekta  
Hlavního města Prahy

Tento výkres je nedílnou součástí  
dokladu stavebního číselního rozhod-  
nutí vydaného  
dne 20. 10. 1953  
pod č. j. 12 800 / 53 - A 171  
Podpis: [Signature]

Legenda:

— Kabel 22kV  
- - - Kabel m STE

6.



# LIVING BY RAILS

## CHAPTER 4



SOURCE: [https://cdn.vsh.prague.eu/file/edee/2018/09/jpgtif\\_dsc8098-20180912-160243.jpg](https://cdn.vsh.prague.eu/file/edee/2018/09/jpgtif_dsc8098-20180912-160243.jpg)

# ŽIŽKOV

... SOME MORE INFORMATION

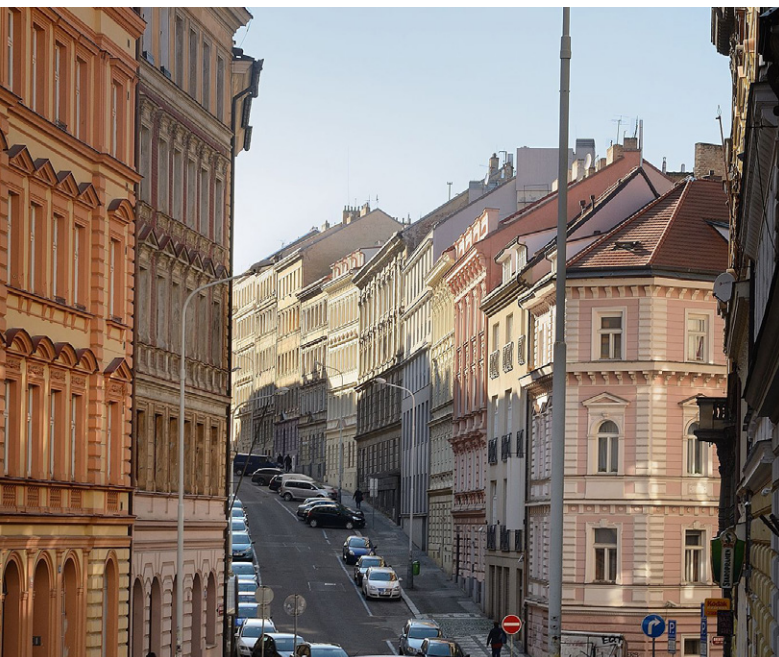
## WHY ŽIŽKOV?

One of the main impacts of the fall of communism, which is Prague facing now, is the inability of designers to adapt to the western way of city planning. The biggest problem could be recognized as a loss of cultural identity. In case of Žižkov Freight Station, where the site is very unique as well as the past of the train station, the cultural identity was not elaborated at all and it could be even stated that it was ignored.

The train station has the potential to become the driver of the neighborhood, which is recognized as a problematic neighborhood for the poor. The site could become an interesting spot, attracting all the age groups as well as tourist, therefore the stress created in the city center could be reduced. The new development can change the whole perception of the city part, from the poor drinking in shabby pubs into the young enjoying themselves in hidden courtyard coffee places.

Through the typology one could achieve an interesting social mix, accommodating the young, the elderly as well as families, which are nowadays not seeing Žižkov as the family place.

One of the main intentions of the proposal is to provide the spatial plan for the whole neighborhood, not only the first part, as well as the implementation of a missing bicycle lane and creation of a bio-corridor connecting the surrounding green bodies.



SOURCE: <https://en.svoboda-williams.com/images/supply/1920x1200/434383-resize~residential-project-rehorova-zizkov-prague-3.jpg>

Žižkov, whose main area today lies in the Municipal District of Prague 3, used to be an independent town until the 1920s. The area got its name from the Hussite leader Jan Žižka from Trocnov in 1877, a Czech general and hero of the civil war in Bohemia. The neighbourhood stands at the foot of Vítkov hill, a place in which Žižka, loyal to the ideals of Jan Hus, achieved a major military victory over the army of Emperor Sigismund in 1420. On the hilltop there is an imposing equestrian statue of the great leader.

Historically, Žižkov has always been a popular neighbourhood, especially during the communist period, when it became a symbolic place of the working classes, to such an extent as to become defined as “The red heart of Prague”, due to the high number of residents, who were particularly loyal to the Party. For a certain period of time, it was connected to the district of Vinohrady, but then became an independent area. In the past the area had a reputation of a restless and rebellious part of Prague. Žižkov, with its nearly 58,000 inhabitants and an urban area of 5.44 km<sup>2</sup>, is now a lively and dynamic neighbourhood and in the last few years, has changed quite a lot architecturally as well as in reputation.

Increasing number of alternative clubs and small coffee bars have allowed the district to maintain the reputation of “Bohemien”. Žižkov has remained a meeting place for artists and writers (for example in the past Jaroslav Hašek). The site is known as the birthplace of the Czech poet Jaroslav Seifert, Nobel Prize winner for Literature in 1984.

The district is now also a destination for many foreigners, who choose it as a favourite place in which to reside, fascinated by its charming aura of decadence and, certainly,

also attracted by the famous pubs and clubs, where the Czech underground culture was born and developed, including other interesting cultural movements during the course of history.

Easy access to services and entertainments is perhaps the main reason why Žižkov district has been drawing many foreigners who chose Prague as their permanent residence. There’s also a lot of artists and students, which enhances the district’s multicultural character even more. Another reason for staying here might be affordable prices, not only in restaurants but also concerning housing and rents.

From an architectural point of view, Žižkov displays unique features which makes it impossible to confuse it with any other district in the Czech capital. Next to popular houses there are tall concrete buildings which overlook other wonderful Art Nouveau buildings, containing hidden courtyards, in a sort of architectural cacophony, but not without a charm of its own, which – engraved in stone, manifest the anarchic soul of the place, which is continually being transformed. The famous TV tower built between 1985 and 1992, based on a design by architect Václav Aulický and illuminated during the night by lights, (with the colours of the Czech flag), is 216 meters high and is the tallest tower in Prague overlooking the neighbourhood with its fascinating yet disquieting profile. Though it had been viewed with contempt by the local population during its construction, today its reputation has definitely improved and it has become the symbol of Prague 3 and, from its internal restaurant, one can enjoy a spectacular view of the city.

(Ruggiero, 2013)



SOURCE: <https://www.tasteofprague.com/pragueblog/prague-christmas-dining-guide-eating-out-on-christmas-and-nye>







ŽIŽKOV- PRAGUE 3

ŽIŽKOV FREIGHT STATION

“Television was still a distant future, radio was a hot trend available only for select ones. Not many spent time sitting over books here and as soon as the temperature raised the streets were full of life. Only few people stayed in the narrow and sometimes quite dark apartments with a cheap bulb. There were many pubs around. Although they were busy all the time, many of the drinking fellows were putting their pints on the window sills in the groundfloor or on the house stairs and they enjoyed smoking and gossiping here. It was simply common for Žižkov to live in the streets. Cigárka (cigarettes) were rolled with help of rolling papers and cheap tobacco. Pepíci (Joes) held them skilfully in their mouth corners or stuck them to the lower lip, where they were reliably moving even during vivid conversation. Dandies who nonchalantly pulled out their snuffboxes with bought cigarettes liked to clap them noisily while closing. But they had to be homeboys otherwise they were suspicious and they would be likely to get beaten.”

(Prague City Line, n.d.)



PUBLIC COURTYARD

<https://www.kudyznudy.cz/aktivita-a-akce/aktivita/platyz.aspx>

## PRAGUE BUILDING HERITAGE



Use of courtyards- coffee place

SOURCE: <https://city-dog.cz/post/19-znamych-i-neznamych-vnitrobloku-a-pavlici-v-praze/>

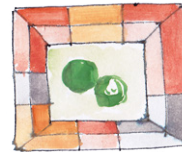


Use of courtyards- cinema

SOURCE: <https://city-dog.cz/post/19-znamych-i-neznamych-vnitrobloku-a-pavlici-v-praze/>

### EXISTING URBAN TYPOLOGY IN PRAGUE

#### CITY PART: VINOHRADY



80 m

- semi-public courtyard
- greenery, gardens

#### CITY PART: HOLEŠOVICE



155 m

- shortcuts through blocks
- different types of use

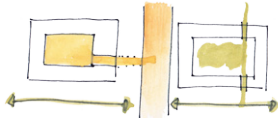
#### CITY PART: ŽIŽKOV



130 m

- different typologies inside the courtyard
- division: inside, outside; front, back

## USE OF COURTYARDS

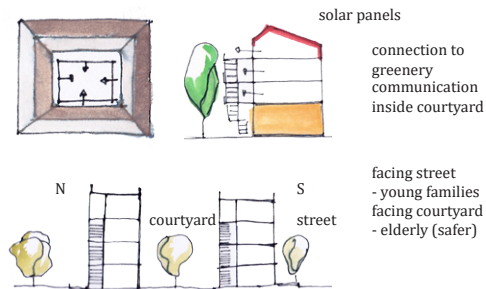


- public courtyard connected to a main public street
- use of public courtyard:  
coffee place, library, small shopping area
- semi-public courtyard connected to a residential street
- use of semi-public courtyards:  
gardening, playground



Existing courtyards, Café Pavlač  
SOURCE: <http://studentsprague.com/legendary-zizkov/>

## EXISTING BUILDING TYPOLOGY



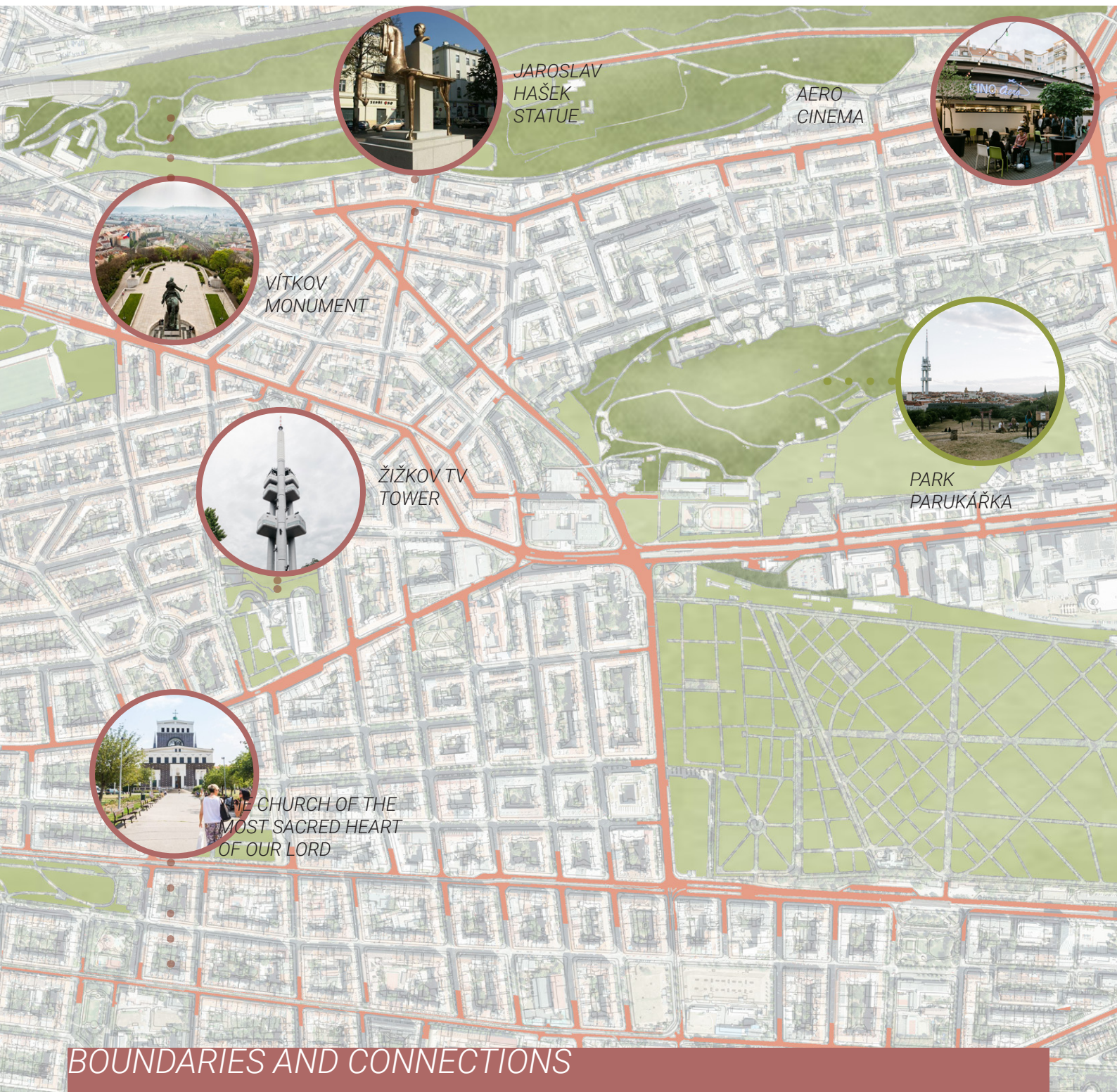
- existing typology in Žižkov- gallery access houses
- communication between residents
- usually main rooms in apartments- one facade
- N-S direction- use of S facades for main rooms
- courtyard entrance- communication with a courtyard (social bond, neighbourhood feeling)
- street entrance- communication with a street



Pavlač- gallery accessible units  
SOURCE: [https://commons.wikimedia.org/wiki/File:Praha\\_pavla%C4%8De\\_%C5%A0kolsk%C3%A1.jpg](https://commons.wikimedia.org/wiki/File:Praha_pavla%C4%8De_%C5%A0kolsk%C3%A1.jpg)



Use of courtyards as working space  
SOURCE: <http://www.vzdechmarketplace.cz/files/uploads/Event/4397/Opero%20Atrium.jpg>



The Židovské pece park creates a northern boundary. The park slowly spreads to the city as the character of the urbanity of built-up structure slowly changes from family-oriented vila neighbourhood to typical urban blocks with all the city facilities and good transportation connections.

Žižkov cemetery on the south creates a boundary of the freight station site as well as it represents a mental barrier for people since in the past the cemetery had an outer-city location and this perception is still present among Prague's residents. The typology surrounding the site on the south-east is the cemetery with its solid wall, family villas and some office buildings framing the site.

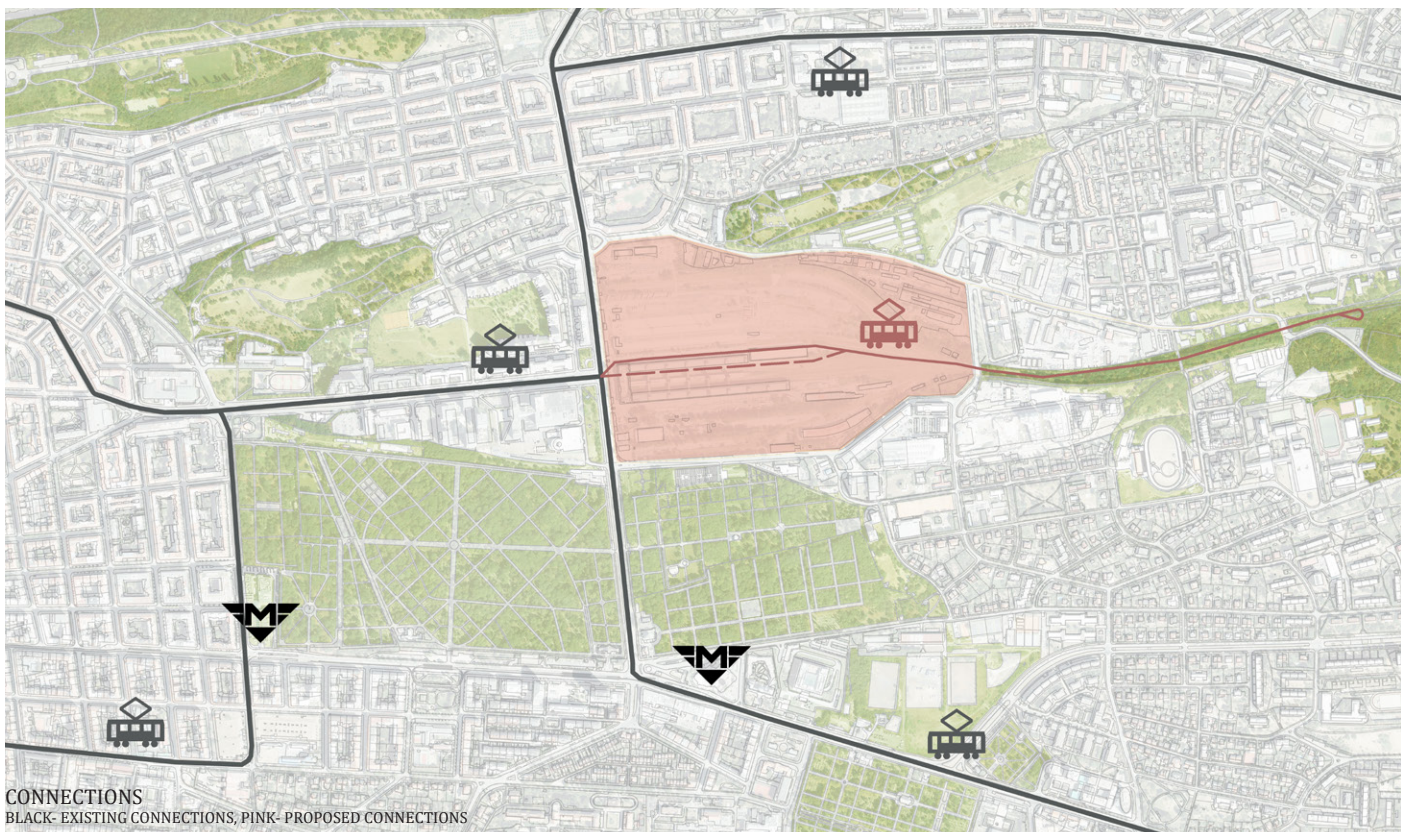


The eastern boundary is represented by four-lane street, Jana Želivského, creating a north-south connection within the city. The street divides the site from the city center and park Parukářka, which is a very favorite leisure time activity space of widespread popularity. The built-up structure of the northern part is represented by mainly solitary buildings, four to six stories high, built during the previous regime.

The frame of the site on the eastern part is represented by a bridge, which was built due to the construction of the freight station, and recycling garbage center. The bridge represents entrance gate to a green stripe linking the site with Malešice park. The typology on the west is a variation of single-family

houses, some industrial spaces and prefabricated blocks of flats.

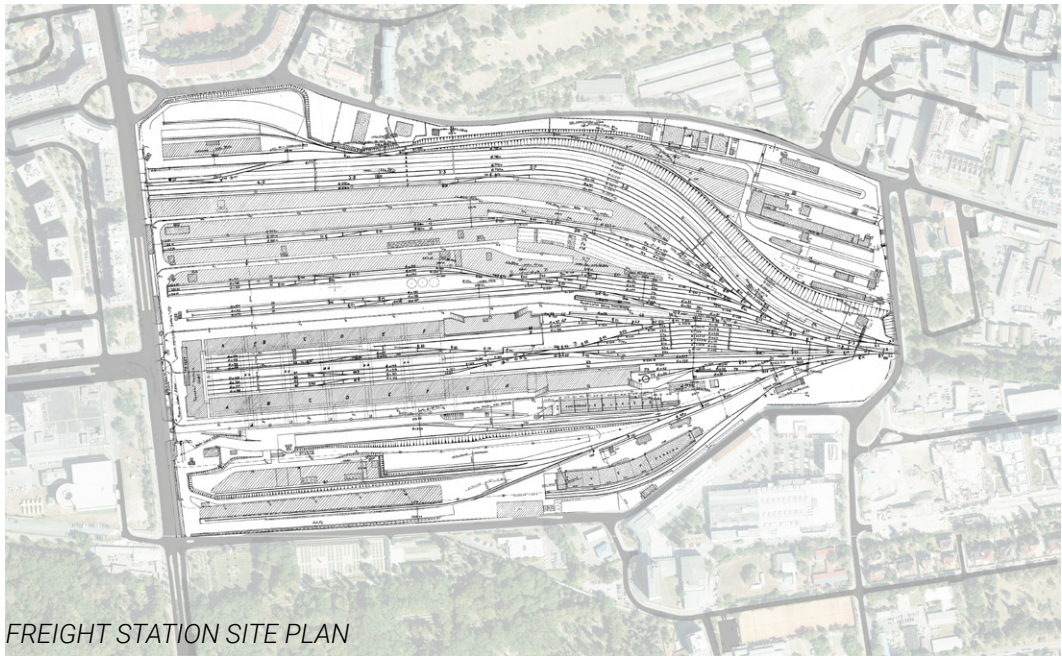
The most important places of interest could be divided into two groups- the green and the city places. The green places are the parks and the cemetery surrounding the site, while the city ones are located mainly in the northern and western neighborhood. (The repurposed train station is regarded as one of the most important city places since it is supposed to be the driver of the whole new development.)







FORMER CONNECTION, 1842

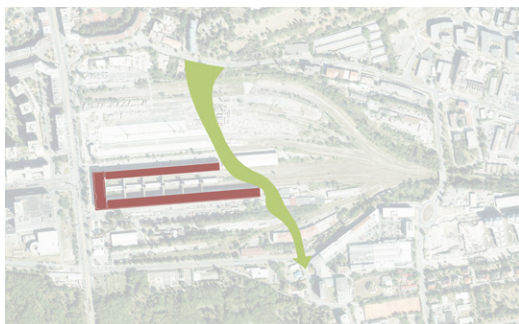
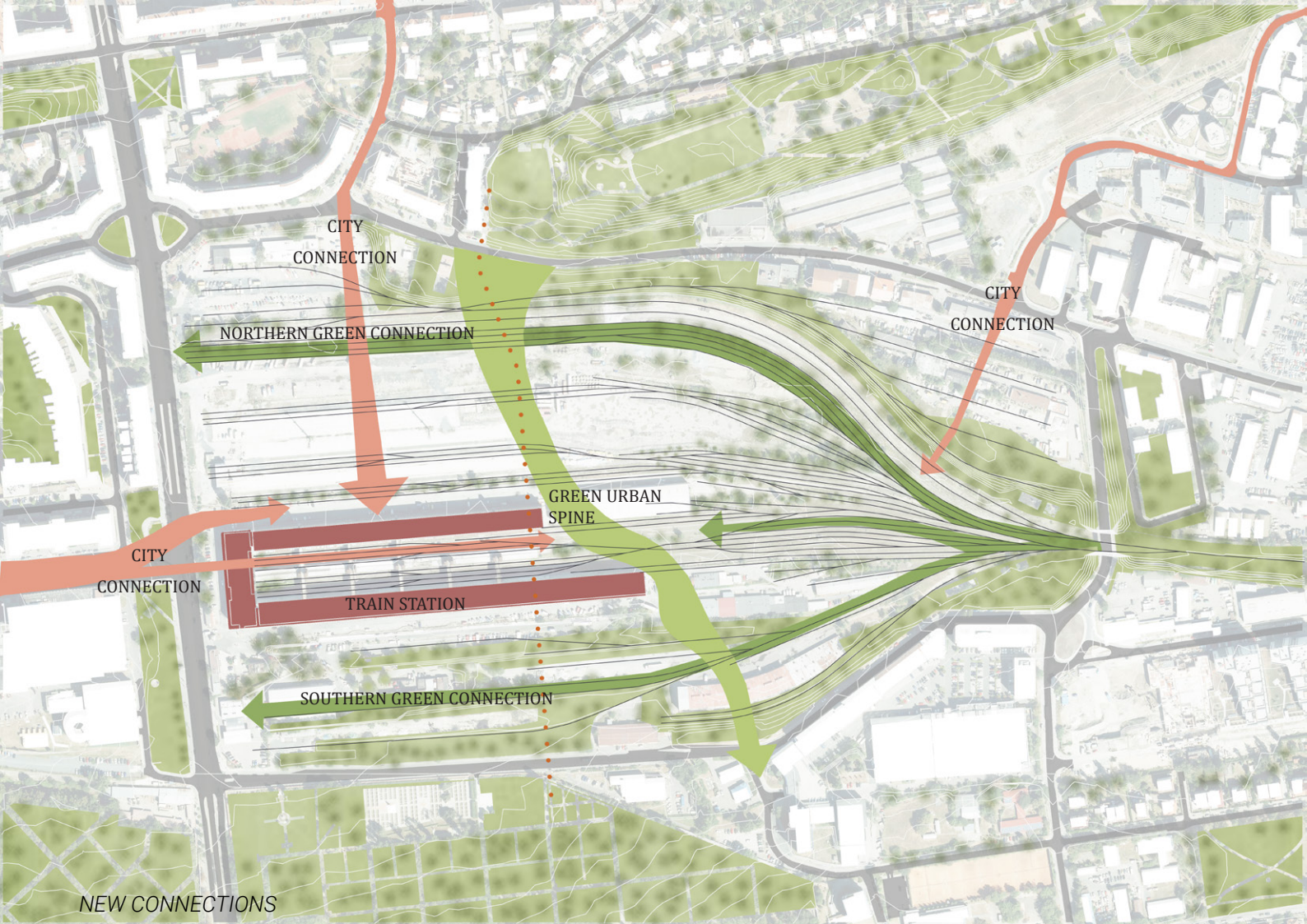


FREIGHT STATION SITE PLAN

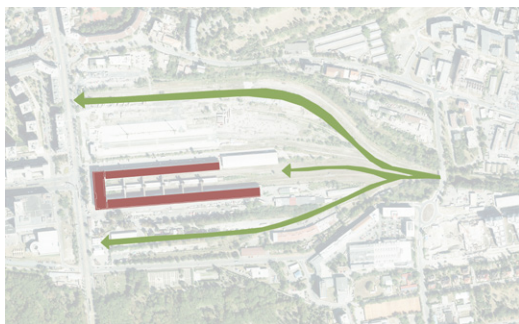


EXISTING GREENERY

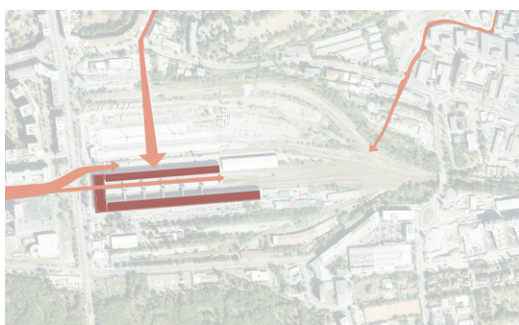




**GREEN URBAN SPINE** represents the former connection, renewed heritage of movement which was there in the past. The green spine will be a corridor for both, pedestrians and animals. The connection allows future link to the existing brownfield located in the south of the cemetery.



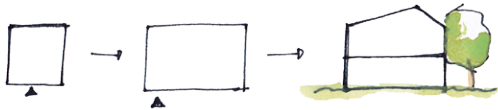
**GREEN CONNECTIONS** copy the flow of the former railway lines and trace the existing greenery. Northern connection connects Malešice park, Židovské pece and Parukářka. Southern connection connects the site with the city pocket parks or larger parks.



**CITY CONNECTIONS** connect site with the city in the North.

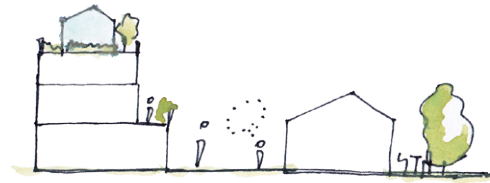
# IMPLEMENTATION OF THE GENERAL SUSTAINABLE PRINCIPLES

## SOCIAL SUSTAINABLE PRINCIPLES



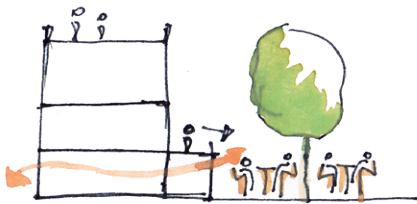
LOW-INCOME FAMILIES

- rental housing units
- variation in sizes
- possibility to purchase a bigger unit in the future



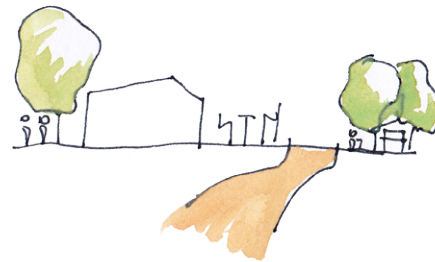
SUBURBANIZATION

- offer qualities of individual housing and city facilities



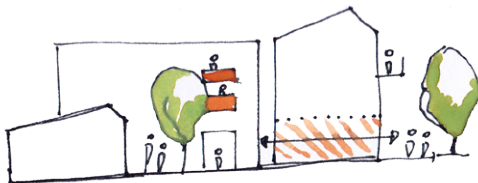
TRANSITORY URBANITIES

- attractive places for young people
- possibility to stay within the neighbourhood (block)



THE ELDERLY

- peaceful environment
- city connection
- pockets of greenery
- possibility to live close to their relatives



ELIMINATION OF SOCIAL SEGREGATION

- variation in typology of housing and public spaces



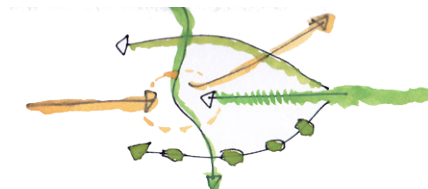
KIDS

- safe inner block environment
- public places to play



CULTURAL HERITAGE

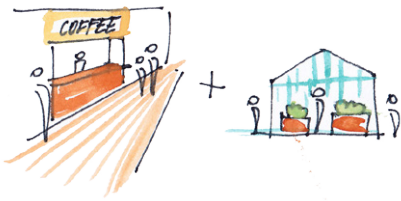
- preservation of existing railway building
- preservation of existing railway lines as leading feature through the site
- public groundfloor- various activities
- biocorridor for existing species (flora and fauna)



PUBLIC SPACES AND CONNECTIONS

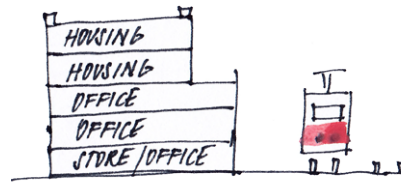
- different types of connections: city, green, pockets of greenery crossing at important nodes

## SOCIO-ECONOMICAL SUSTAINABLE PRINCIPLES



TOURISTS

- green- open-minded character
- hipster place
- cultural buildings of bohemian character
- contemporary art exhibitions



JOB OPPORTUNITIES

- proximity to tram line
- good connection to the city centre
- job opportunities within the site

## ECOLOGICAL SUSTAINABLE PRINCIPLES



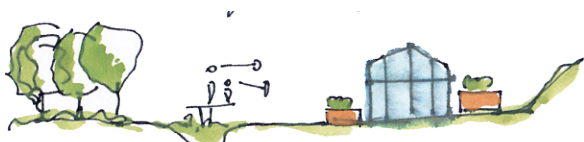
BUILDING LEVEL

- use of sun
- water recycling
- recycling of old railway station building



TRANSPORTATION

- walkable district
- tram transportation
- bike transportation



LEISURE TIME AND GREEN SPACES

- provide different types of open public spaces, variability



MICROCLIMATE

- distances between buildings and height of volumes should provide good light conditions
- facades facing S, E-W direction



## MICRO STRATEGY AND SITE PRINCIPLES

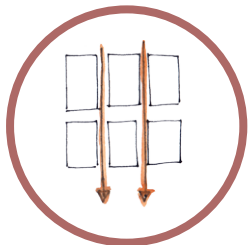
Due to the specific location, the concept of a site is called City meets the green. The site is surrounded by various green features while from the other point of view a very strong and unique city character defines the neighborhood area. The concept is based on finding a balance between natural elements as well as urban ones.



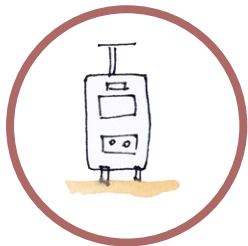
## SITE PRINCIPLES

Based on this site strategy, site principles were delivered:

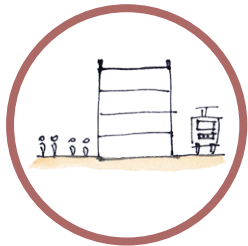
### CITY



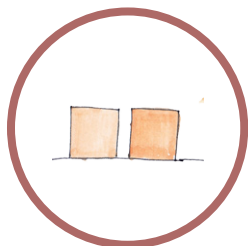
- grid,
- connections towards the railway station- easy to orientate
- city connections derived from existing street sections in Prague



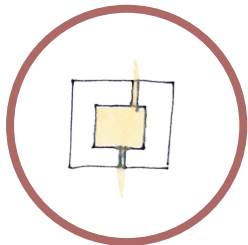
- tram



- city facilities



- flat terrain



- passage entrances



- coffee places

### GREEN



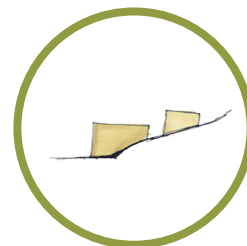
- natural movement of people
- connections of different scenarios



- bike



- peaceful greenery



- hillside housing



- openings



- courtyards greenhouses

# DEVELOPING CULTURAL IDENTITY

... FOR BETTER AND MORE SUSTAINABLE FUTURE

Based on the site strategy, the preserved heritage could be divided into two parts. The city heritage and green heritage.

The city heritage is represented by the existing urban block typology and courtyard structure. Courtyard life is full of small businesses and coffee places and gallery-access type of apartment houses, very typical for the city part of Žižkov, leads residents towards communication among each other.

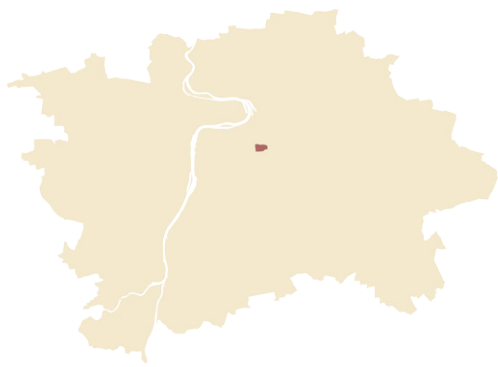
The green heritage is represented by the existence of three parks surrounding the site as well as the cemetery, which creates the southern boundary. The main vision for this site is to create open-minded regenerated brownfield as a link to the existing city part Žižkov.

The train station and the present railway lines represent a strong identity of movement which was kept and replaced by the streets. The streets copying old rails pattern have a more natural character and the streetscape changes according to the various urban character of the site. Most of the S-N connections, creating links to the city, have a streetscape traditional for Prague (pavement, greenery, cars, greenery, pavement).

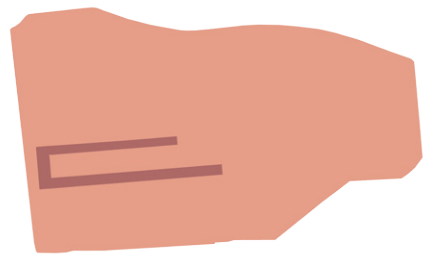
The site is divided by the train station volume and the artificial slope, constructed due to the railway service, into three parts. Each of the parts has different boundaries, which gives different attributes of heritage, which were implemented in the design. Unique site-specific heritage gives each site a different character, which influence the urban form. Each of the characters is part of the whole picture of open-minded brownfield.

The first phase of development is supposed to bring back the culture and cultural life, the second phase is working with the culture in a form of a modern lifestyle and raising ecological awareness of Prague residents bringing a new way of ecological community life to the site. The third phase is working with the culture represented by nature. In all the phases, general sustainable principles which were delivered from the theoretical part are implemented as well as the site strategy of City meets green.

- *How can BOUNDARIES of a part frame the HERITAGE to work with?*
- *How can the HERITAGE form a CHARACTER of a part?*
- *How can an URBAN FORM (typical for Prague) be influenced by the CHARACTER?*
- *How can a COMMUNITY BOND look like in each of the phases?*
- *How can BUILDING TYPOLOGY be influenced by the desired character?*
- *How can GREENERY be influenced by the desired character?*
- *How can the character SHAPE THE MAIN CONNECTIONS of the site?*
- *How are SUSTAINABLE STRATEGIES IMPLEMENTED according to the character?*



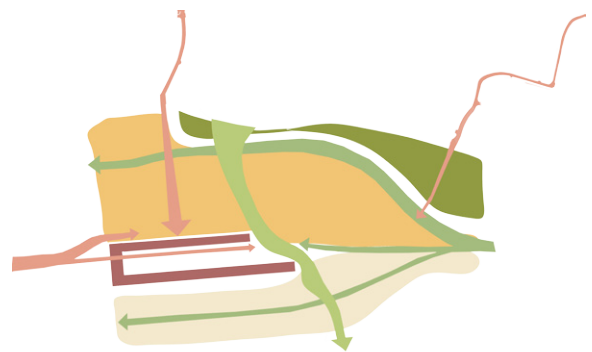
GENERAL SUSTAINABLE PRINCIPLES



SITE AND "CITY MEETS GREEN"

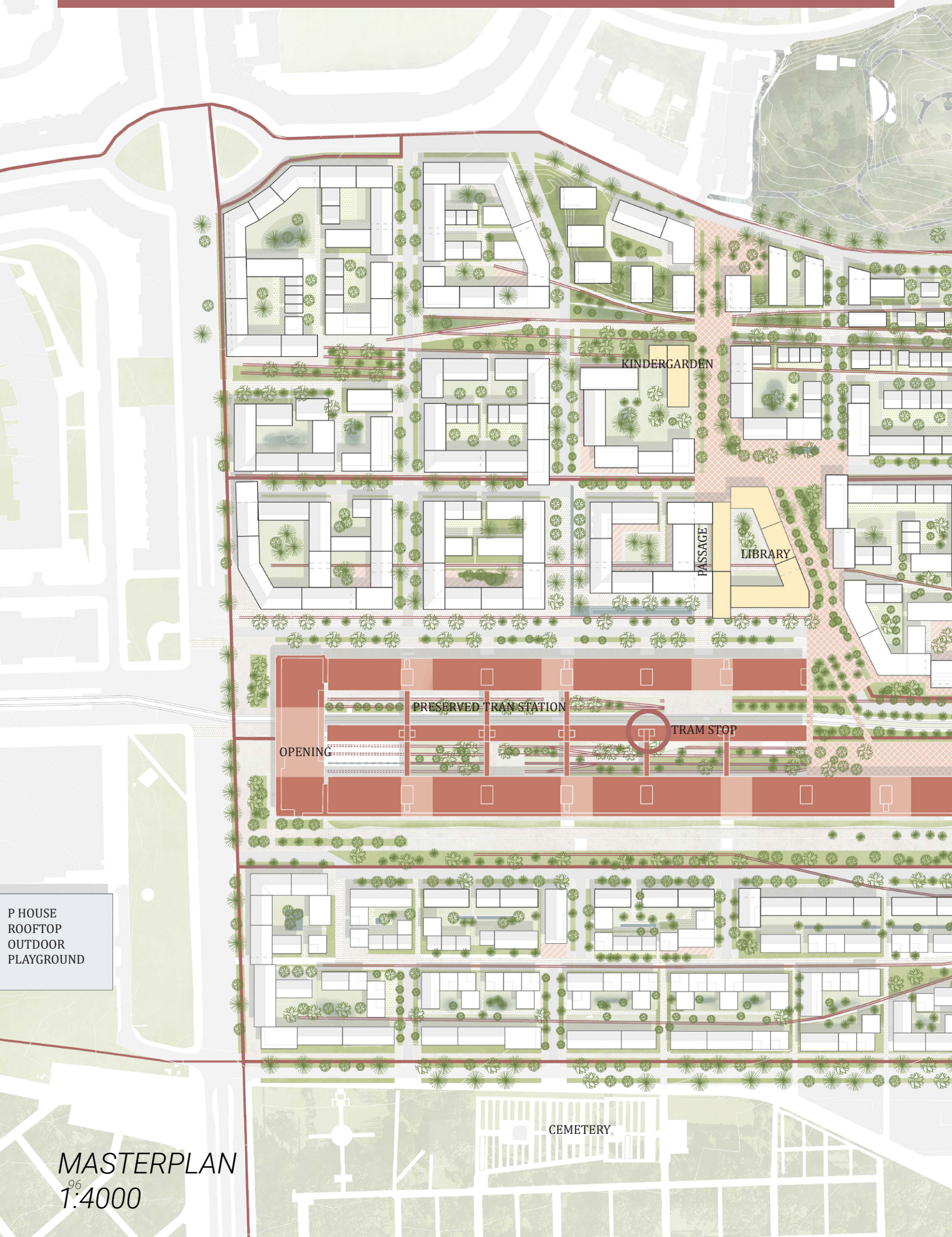


THREE CHARACTERS



CHARACTERS AND CONNECTIONS

# ZIZKOV FREIGHT STATION DESIGN



P HOUSE  
ROOFTOP  
OUTDOOR  
PLAYGROUND

MASTERPLAN  
1:4000



ŽIDOVSKÉ PECE

P HOUSE  
ROOFTOP GARDEN

PASSAGE

SCHOOL

TRAM STOP

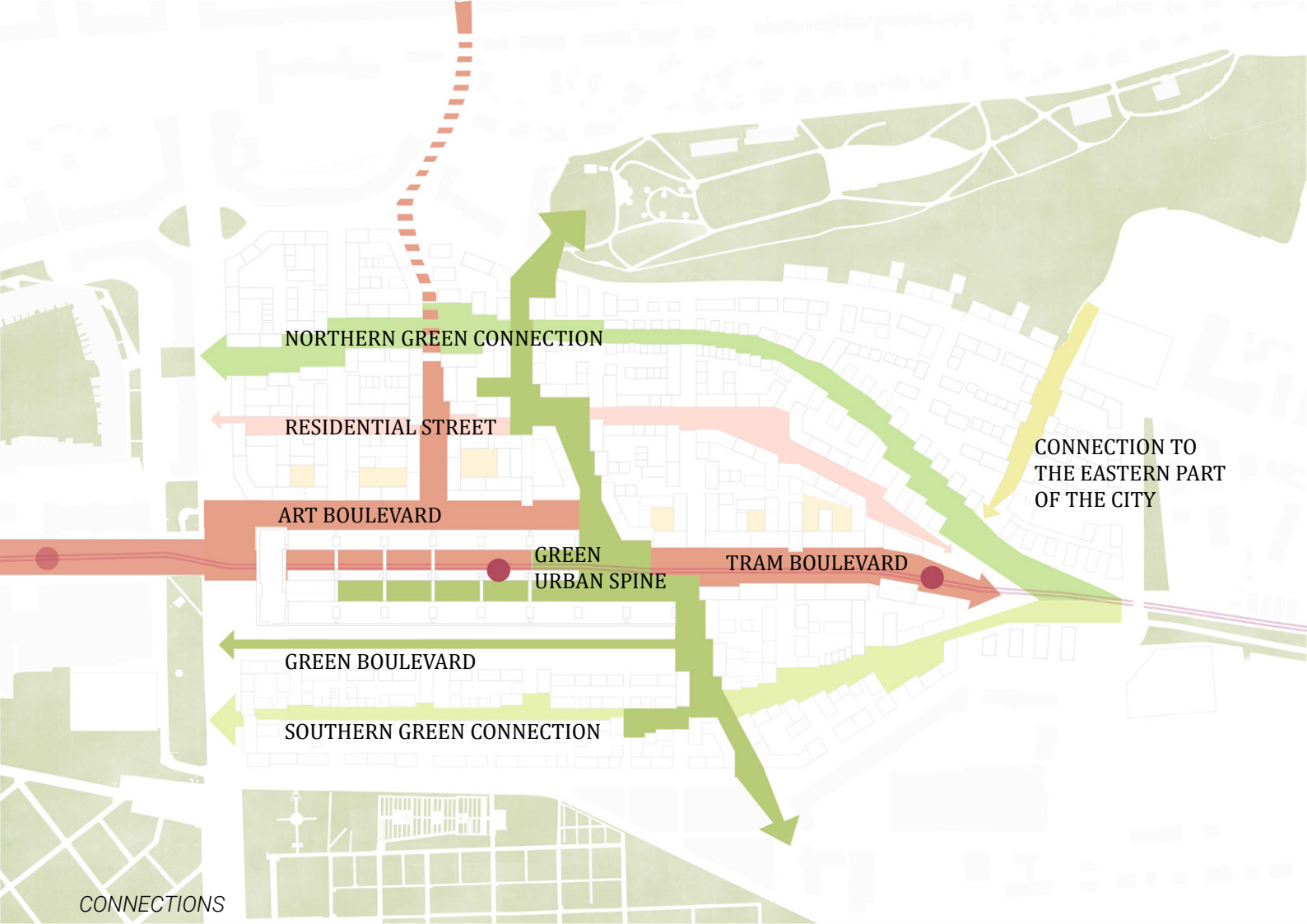
P HOUSE  
ROOFTOP  
OUTDOOR GYM

EXISTING OFFICE BUILDING

10m

100m





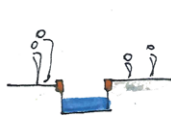
PATH



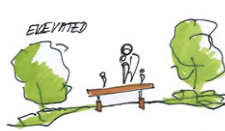
SEATING FURNITURE



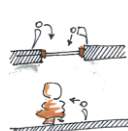
RAINGARDEN



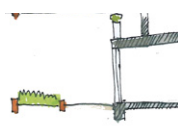
CANAL



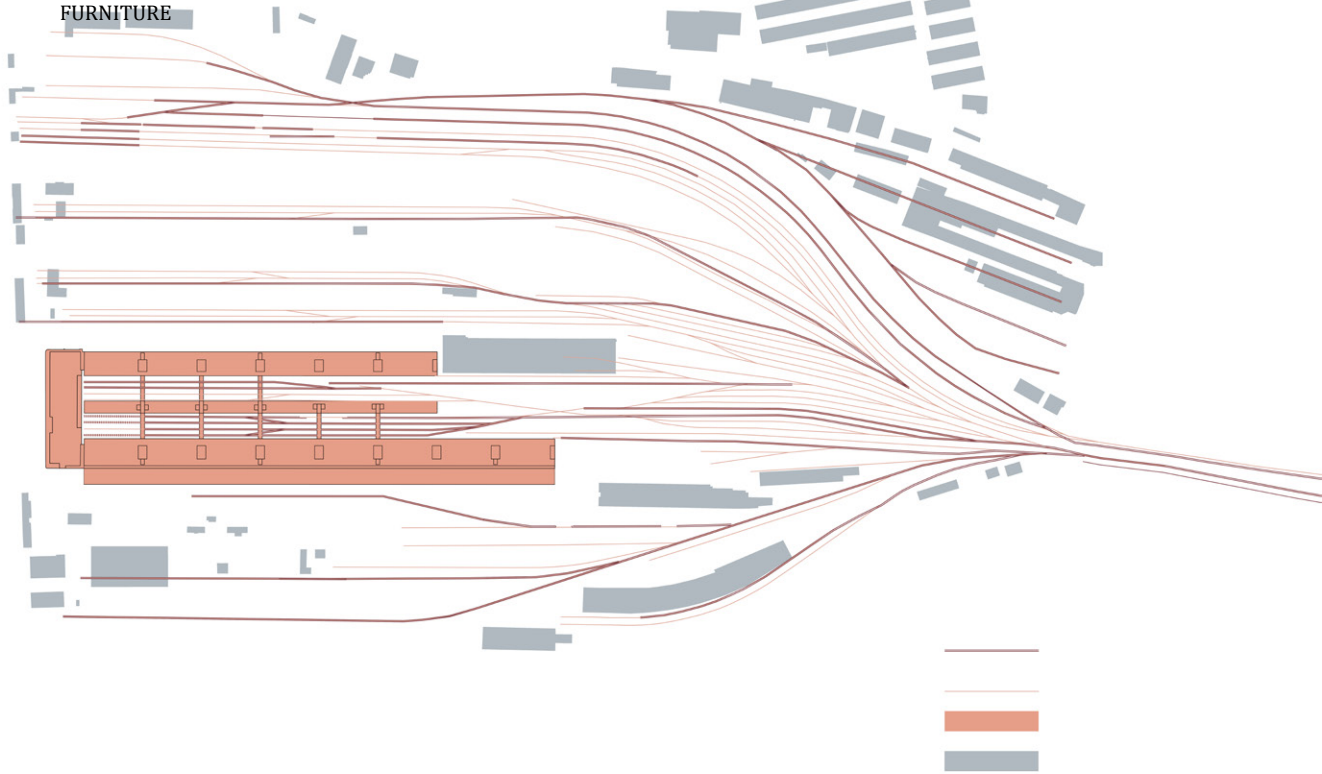
ELEVATED PATH

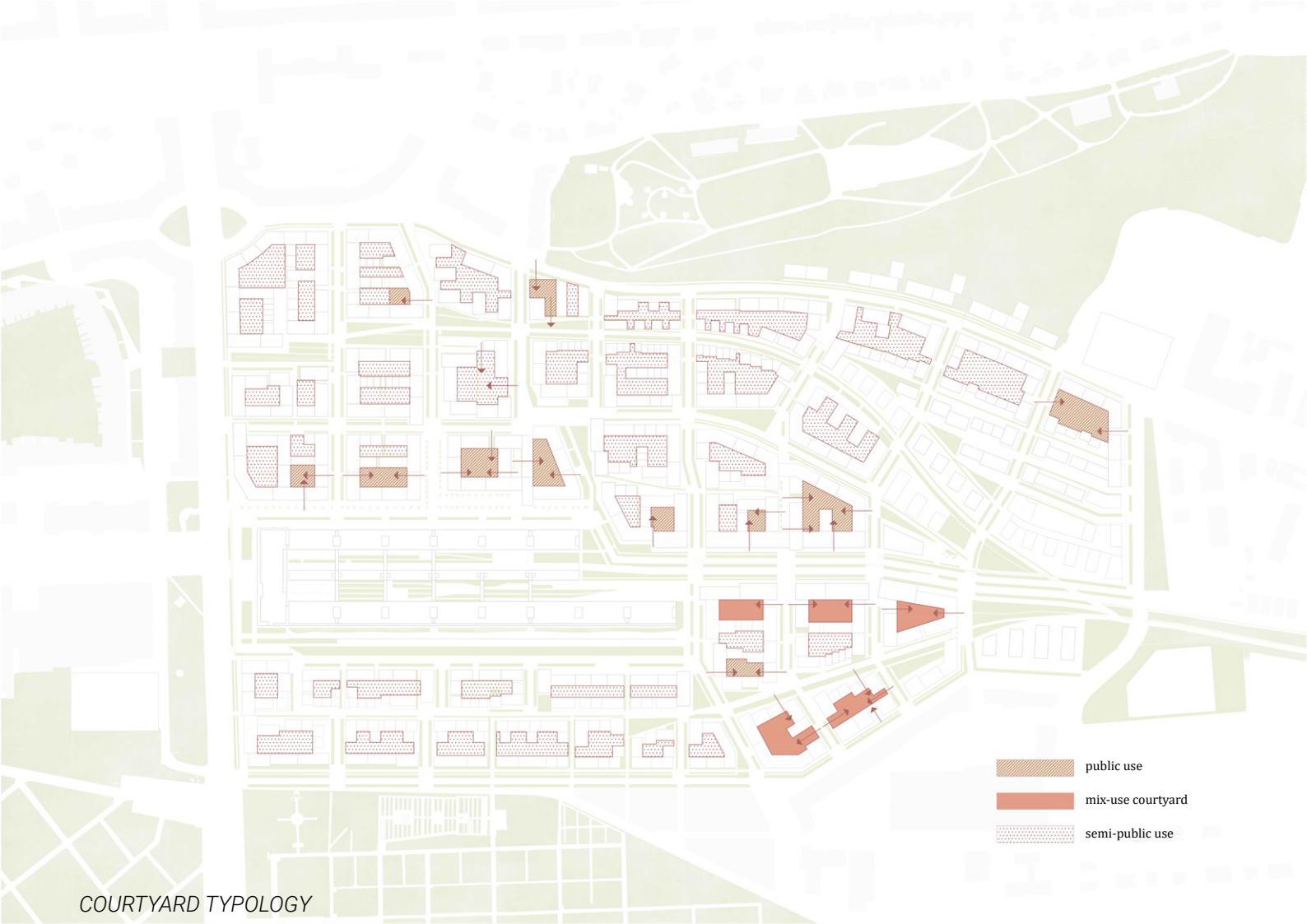


WINDOW

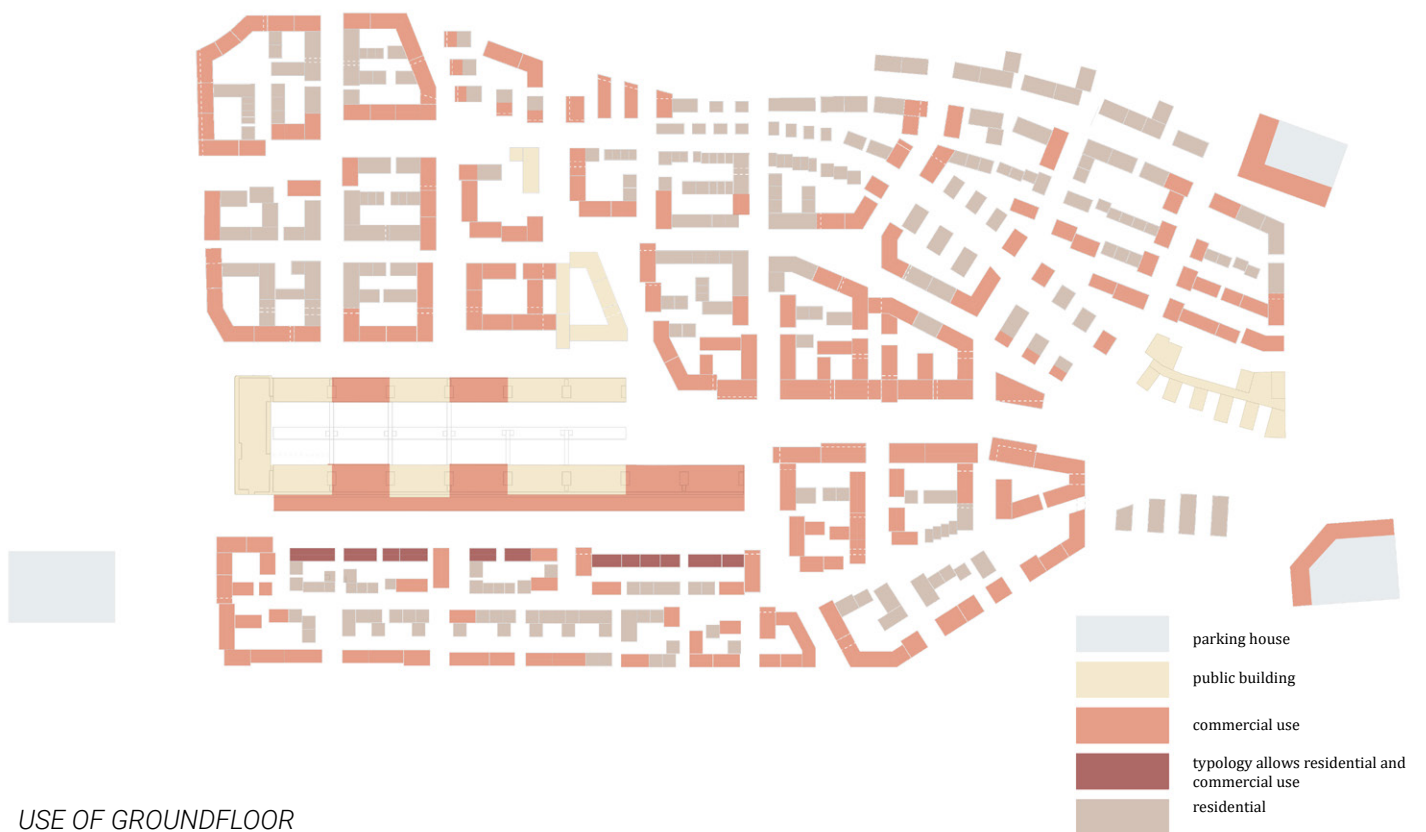


FORM OF A FENCE

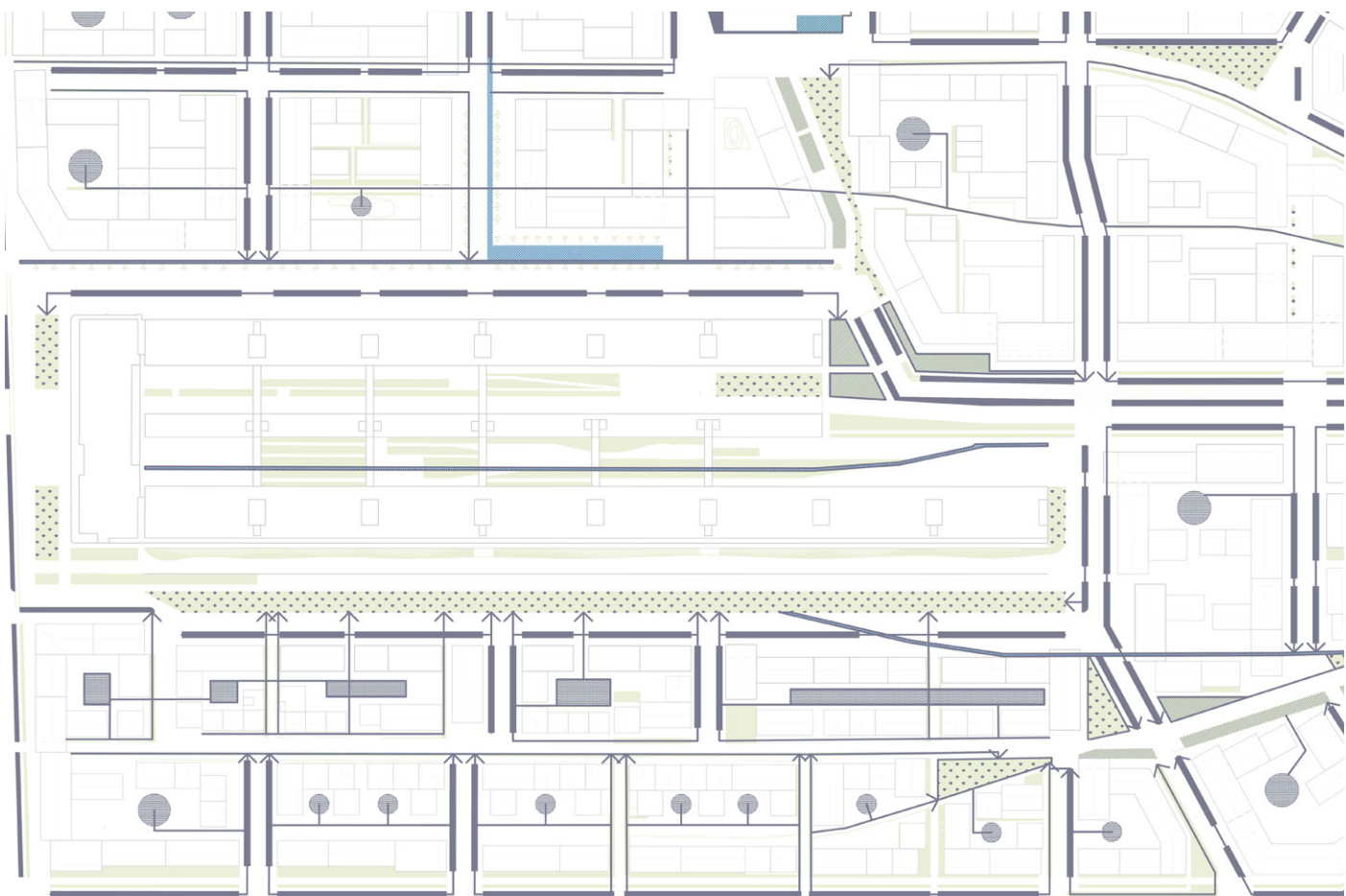
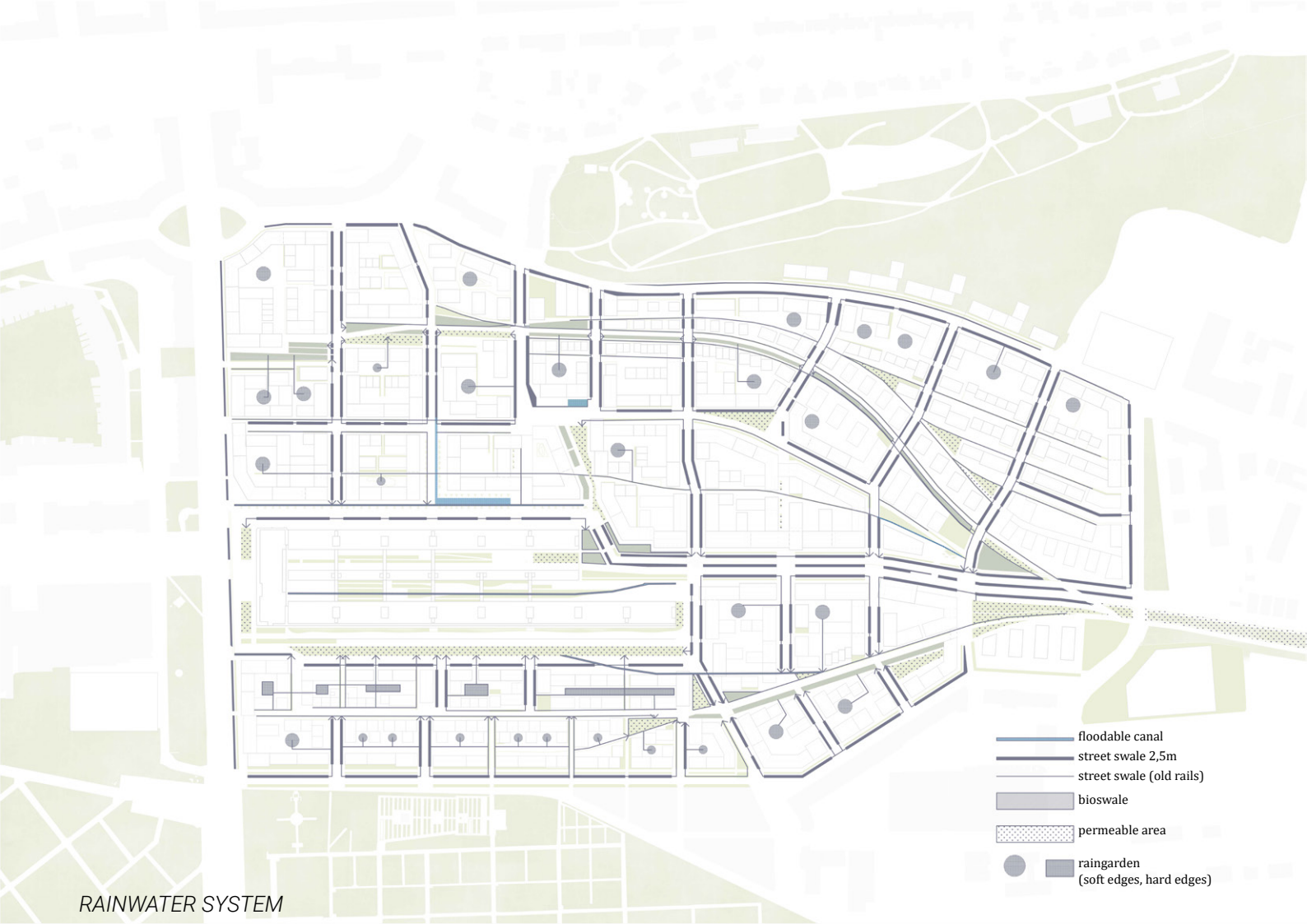


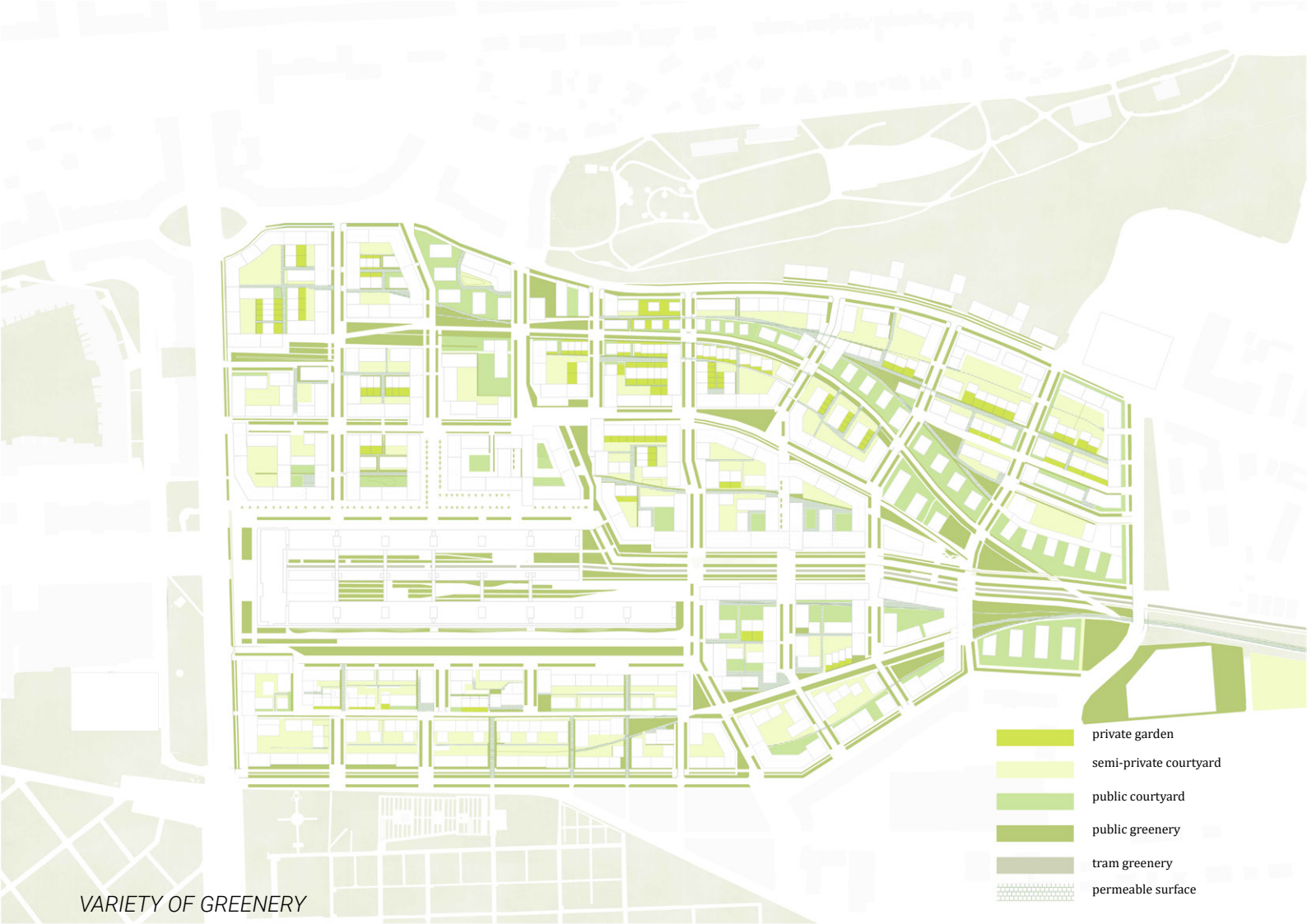


COURTYARD TYPOLOGY



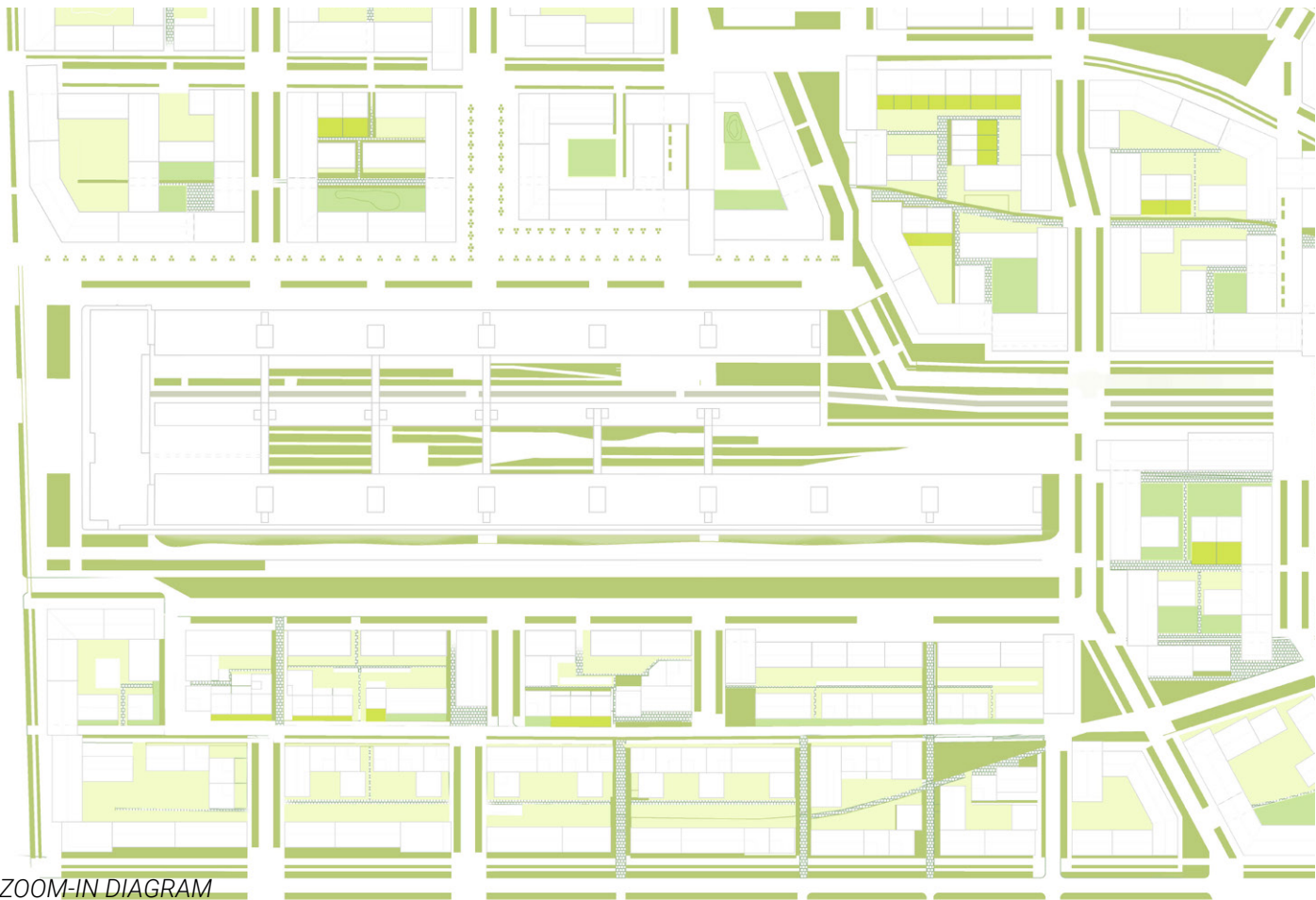
USE OF GROUND FLOOR



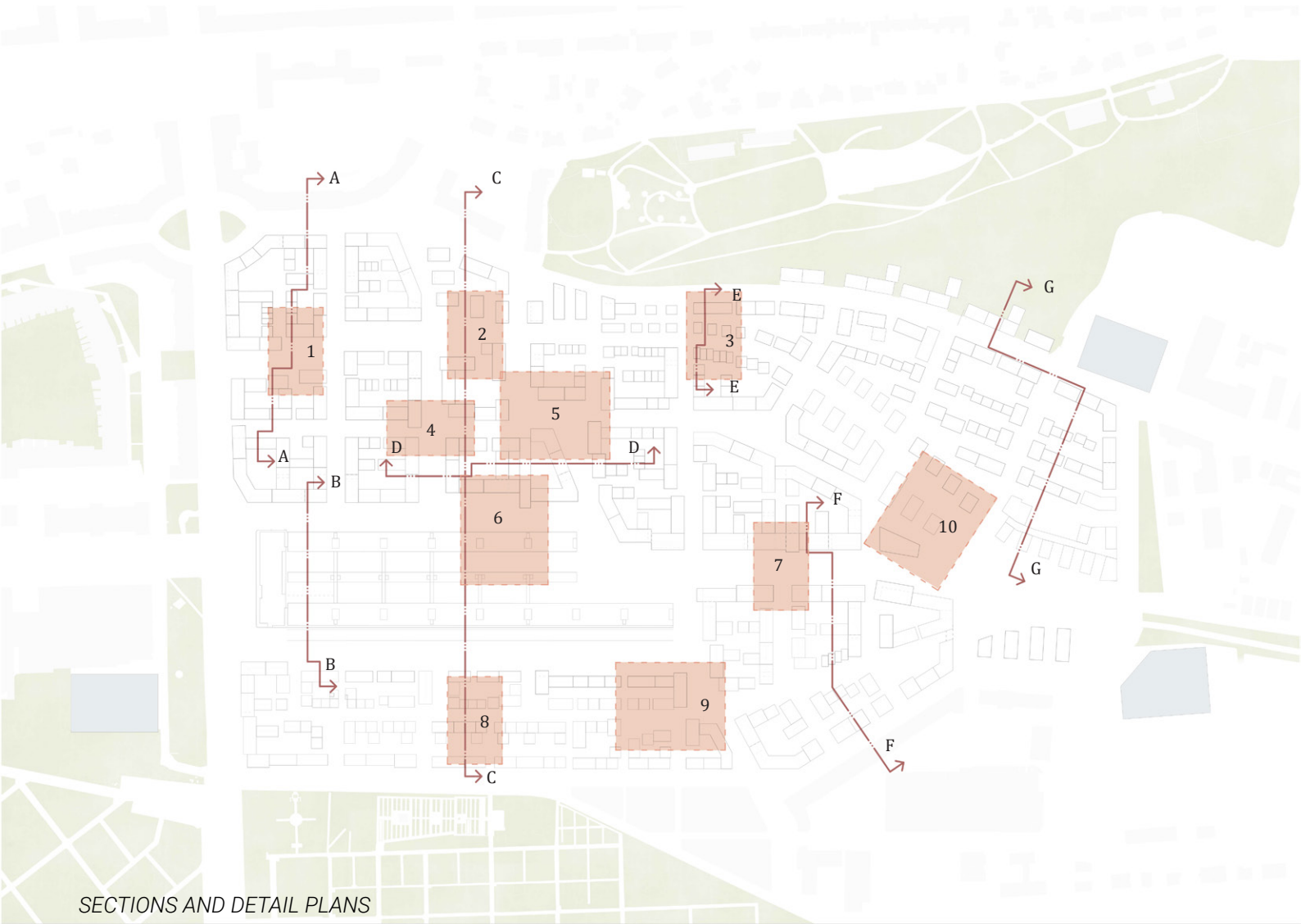


VARIETY OF GREENERY

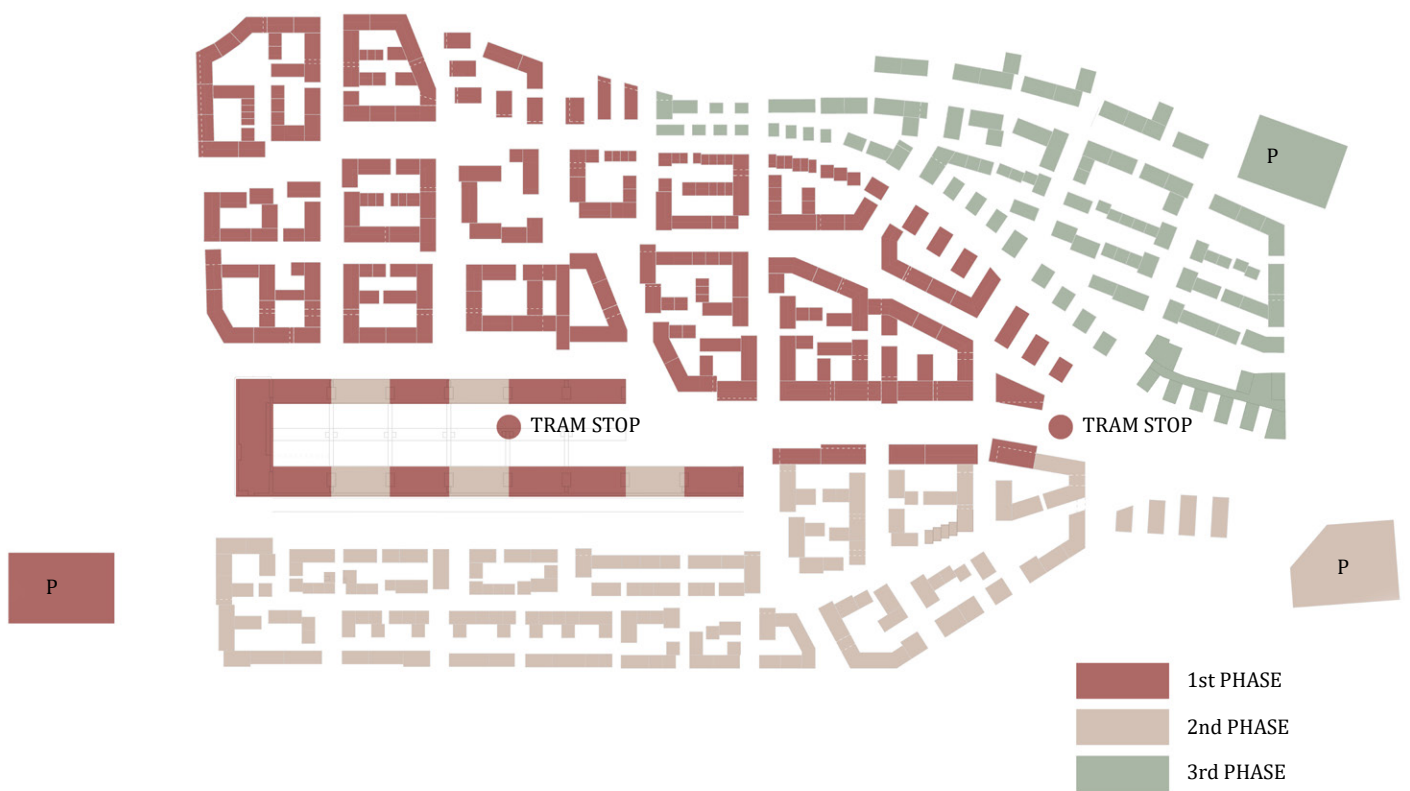
- private garden
- semi-private courtyard
- public courtyard
- public greenery
- tram greenery
- permeable surface



ZOOM-IN DIAGRAM



SECTIONS AND DETAIL PLANS





NUMBER OF FLOORS



BUILDING TYPOLOGY



MODEL







#### TRAIN STATION

Source: <https://prizsky.denik.cz/galerie/nakladove-nadrazi-zizkov.html?photo=1&mm=7299157&back=1308459654-8087-63>

## NEW CULTURAL HUB IN PRAGUE

The object of the existing train station has a big potential to become a driver of the process of revitalization of the whole site.

The train station in the past attracted various art groups which were trying to revitalize the train station, but due to the low economic sources, the whole transformation was not successful.

The municipality of the city has according to the newly released Metropolitan plans intention to bring tram line into the neighborhood. There has been a discussion about opening the front facade of the train station or to preserve its architectural value and develop the tram line along the functionalist volume.

According to Sára Hermannová, former cultural group representative, the train station is an oasis in the city, creating a boundary from a noisy and dusty surrounding of the site. She proposed the construction of the tram line approximately fifty meters from the existing train station in order to keep the peaceful values which it has nowadays.

In the urban context of Žižkov, the form of the train station stands as a very strong boundary towards the city center. The proposed solution is to open the front façade, create an opening allowing people and tram line to enter the genius space created in between freight volumes. The reasons for this solution are several. The service and the purpose of the train station in the past used to be traffic and by allowing the tram line to enter, we can preserve the mental heritage of movement. Since the construction of the tram line, as well as the process of revitalization, will be both very expensive, it is important to make these two future developments benefit from each other. The tram line will represent a connection towards the city (city center in 10 minutes) and the repurposed train station will become a new driver for the economy and residents to move to the newly proposed development. The third reason is, that people traveling from the eastern part of Prague towards the city center will have a chance to become a part of the station's life while traveling and therefore they can discover the underestimated heritage of the functionalist era.



Bridge connecting southern and northern wing  
Source: DS



Furnished train station  
Source: <https://rut.blog.respekt.cz/>



Front facade of the station  
Source: DS



Art events in the past  
Source: <https://rut.blog.respekt.cz/>

The new vision for the station is to turn it into a cultural hub. According to Sára Hermannová, the train station could become the Prague version of Centre Pompidou, attracting artists, tourists and local people to visit a new pulsing place in Prague.

In numbers, the freight station covers 15000 m<sup>2</sup>. Each of the volumes has three floors and one underground floor. In total, approximately 60000m<sup>2</sup> need to find a new purpose.

According to old plans, the train station was divided into blocks, one module on each site. To establish the connection, future uses will be located according to this old plan. Based on the theory, some of the parts, where the connection is necessary to be established, will have a future use from the beginning, while some can find potential users later when the train station has a potential to attract various functions. The programming of a place is also influenced by the strategy of the city meets the green (from more urban towards more active purposes).



LEFT WING  
Source: DS



### OPENING OF THE FRONT FACADE

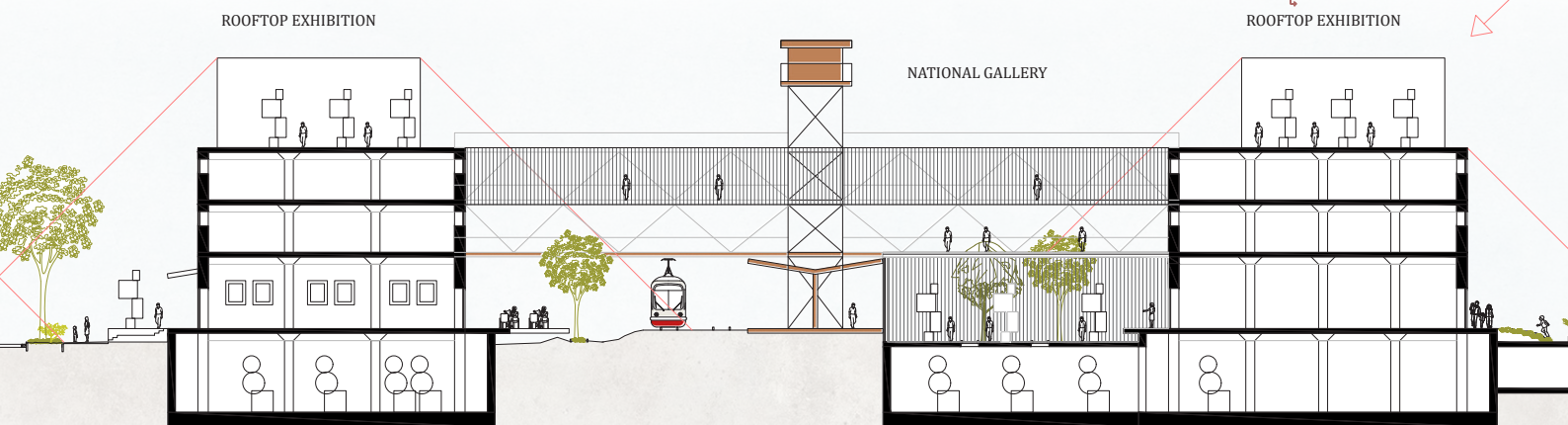
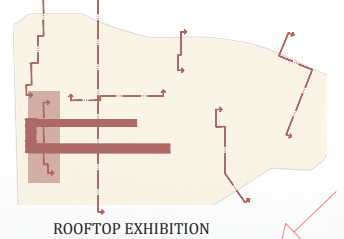
Based on the interview with Sára Hermannová, the National Gallery is interested in establishing a sculpture depository. The new vision of the train station works with the idea of culture as a driver of the whole revitalization. The national gallery will create an entrance, communicating with the street as well as with the inner station space.

The idea is to create a glass façade box with a sculpture exhibition. This structure can communicate with the surrounding and still preserve the closed character of the train station. The preserved rails can become roof windows

and visitors of the gallery can experience an exhibition of modern art from above.

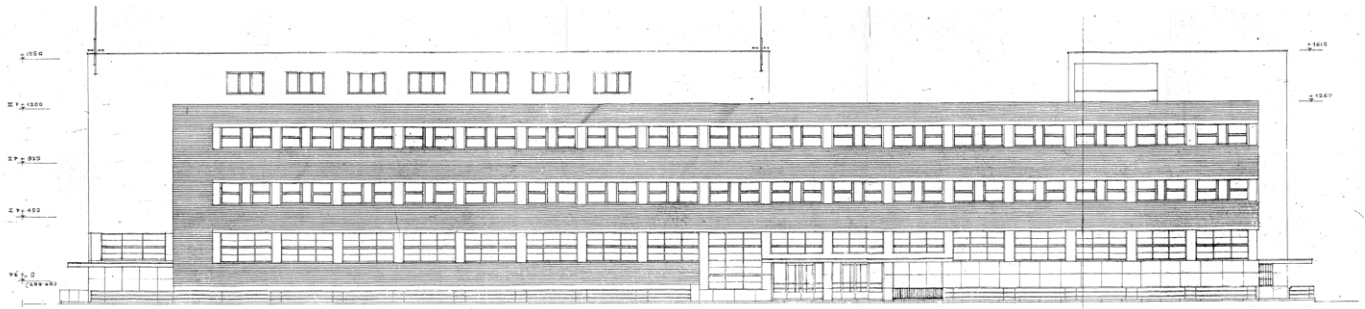
The second module of the train station is left without purpose. This part is aimed to become mix-use development with the active ground floor. The idea is to attract various

artists, architects, small galleries, design exhibitions and small eco-services like recycling station. The public space will be established as an urban park, preserving the rails.

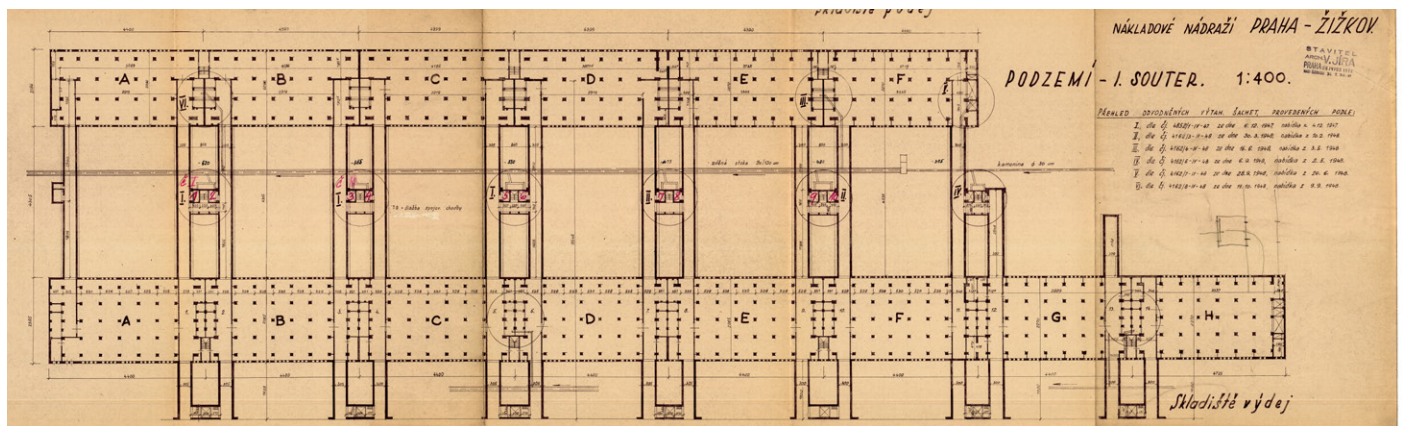


SECTION B-B  
NATIONAL GALLERY  
1:400

UNDERGROUND EXHIBITION



FRONT FACADE  
Source: CITY ARCHIVE



MODULES, UNDERGROUND FLOOR  
Source: CITY ARCHIVE

The third module of the development is aimed to become the National film archive, which is also interested in moving into this building. The national film archive can bring the culture of film for the public and continue in the previous function as summer cinema or for example some dancing events. (Note: The National Archive collaborated in the past with artists in a form of summer cinema evenings).

The fourth module is left without purpose, the same strategy as for the second one.

The fifth and sixth modules are designed as an Art school, to bring the identity of artistic Žižkov back to the site and establishing a tram stop. (Note: Art School in Prague has been recently looking for a new space). The connection towards the tram stop is established by creating openings in both façades. Future commuters can enjoy the exhibition created by the art students and they might have a possibility to raise awareness of contemporary art.

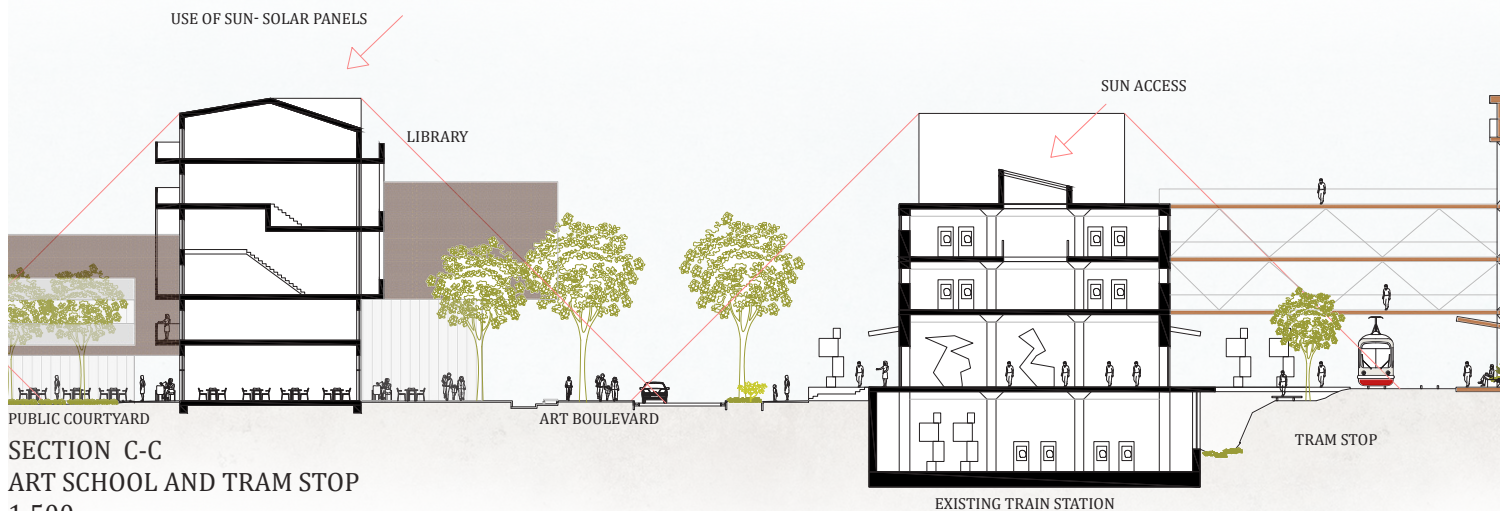
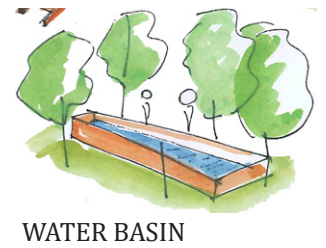
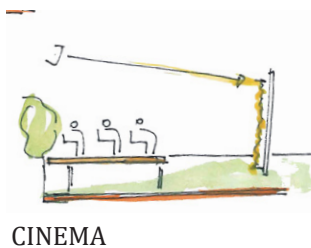
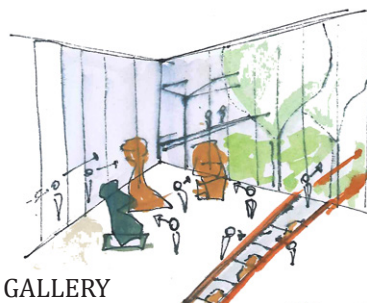
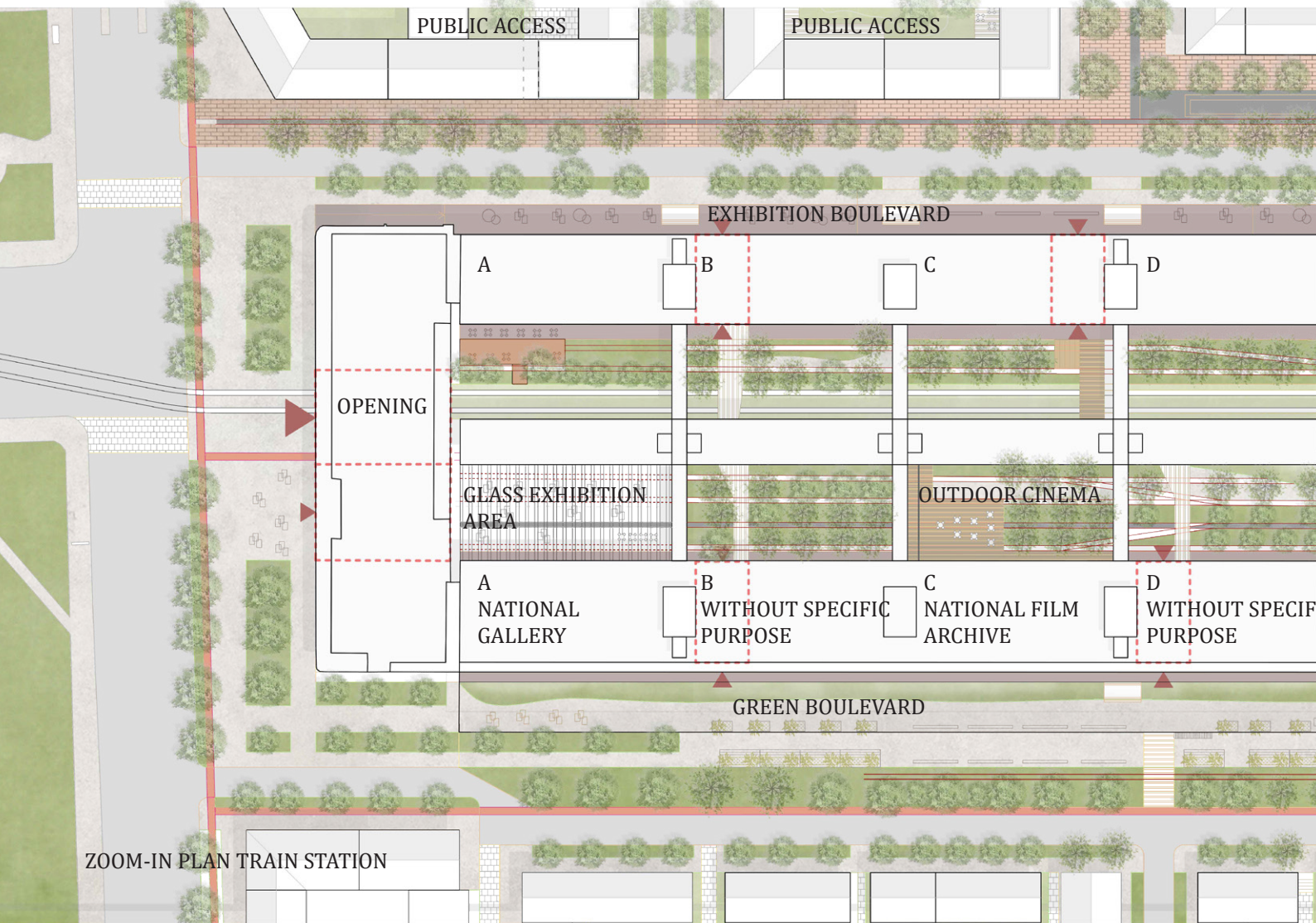
The northern part is meant to become school space while the southern part is aimed to become a school restaurant with various free time and sports activities. Upper floors serve as housing as well as the structure built on top.

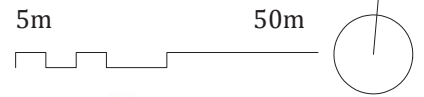
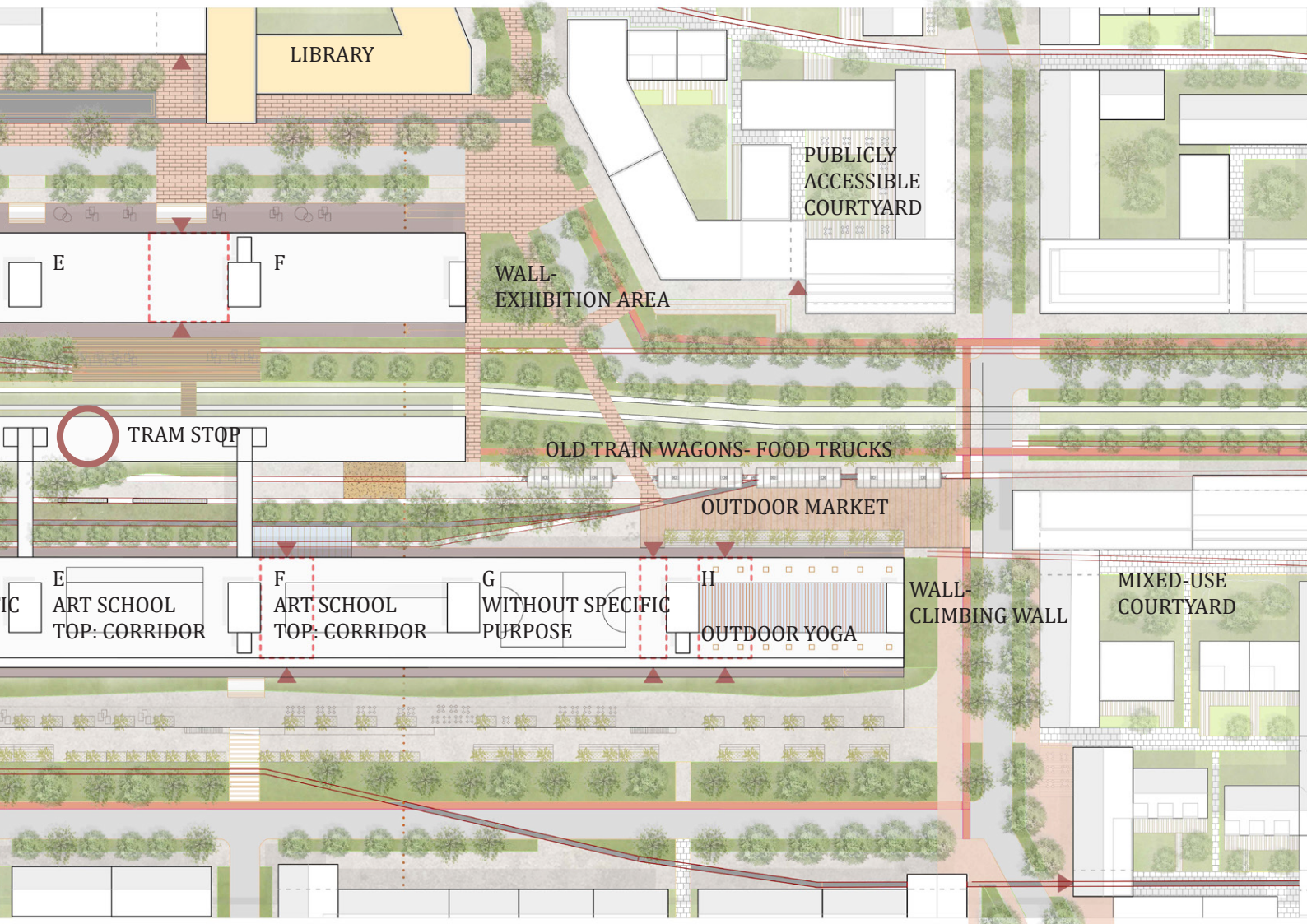
The seventh module and the eight modules are not fully programmed. The ground floor is supposed to become part

of the green urban spine, the N-S connection, in the form of an open market place while the top of this module can become an outdoor gym. more green and active part. The northern boundary of the station created by the city will be strengthened by the gallery boulevard created out of the northern platform, while the southern will become a green boulevard with public services allowing people to enjoy the active lifestyle on the sun.

The southern platform has two elevations, the lower part will be used as small services, like a coffee place or a small eco food shop.

The preserved heritage is not only in the form of the train station but also might be seen as a sentimental value especially for the elderly, who have strong connections to the previous regime. The revitalized station could be seen by tourists as a museum of functionalism, which functions, works and lives. Culture of people will be preserved not only in the way of a physical piece of art but also in the mental connection when people meet the culture of the others while doing basic daily activities. The public space is aimed to provide various cultural and sports facilities to decrease social segregation and give also lower income residents an active way of spending free time.





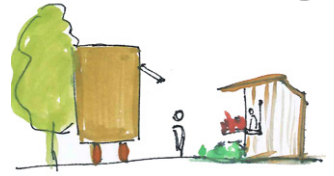
OUTDOOR SEATING



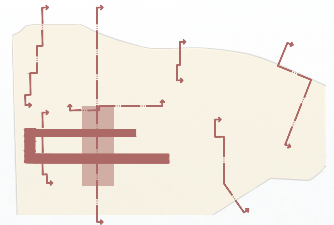
DINING HALL



SPORT ACTIVITIES

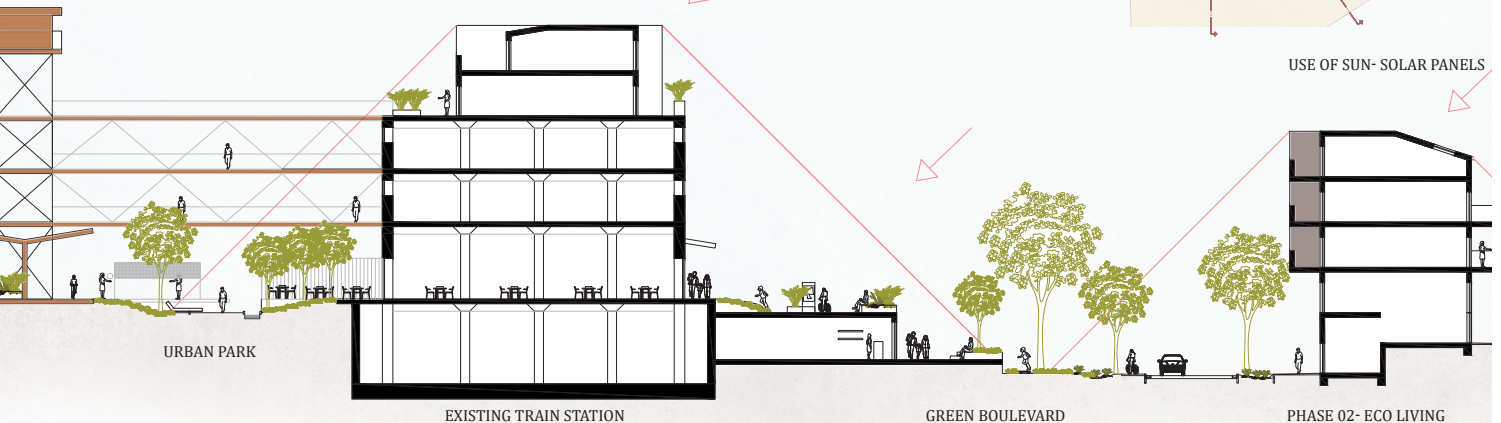


MARKET PLACE



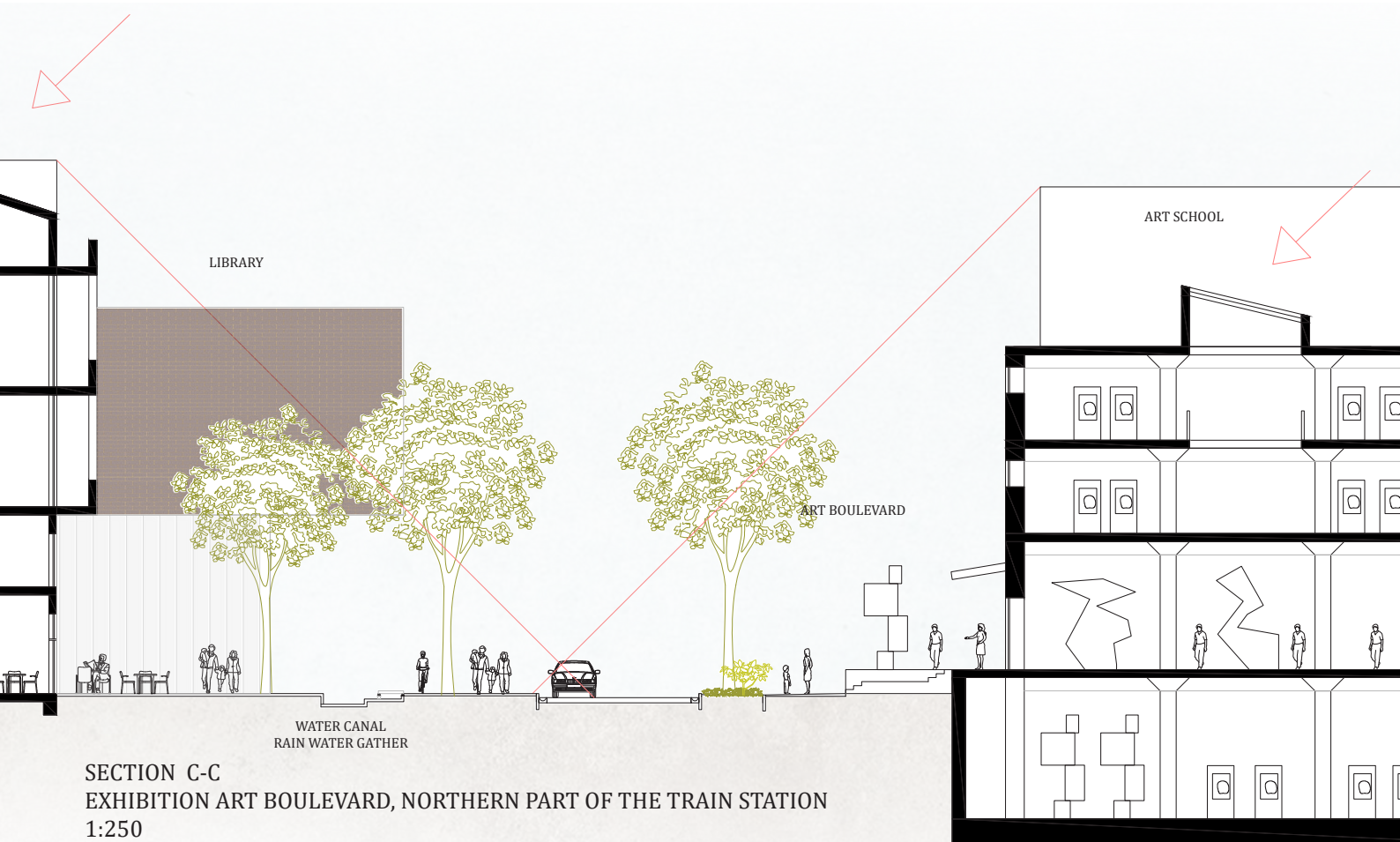
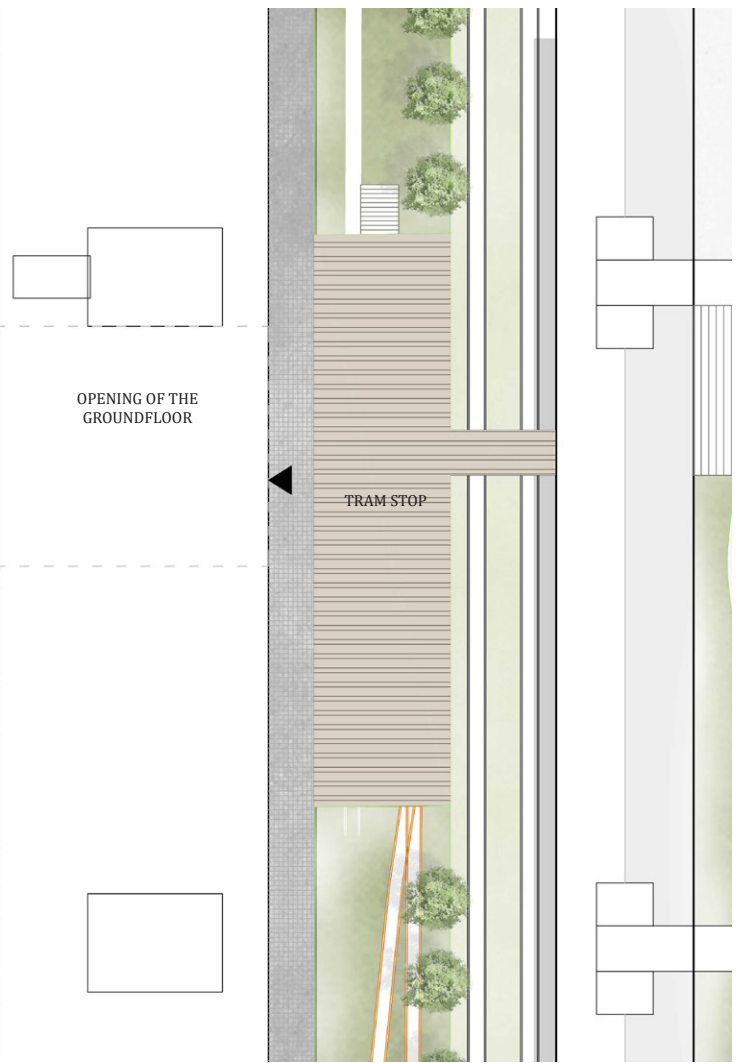
SUN ACCESS

USE OF SUN- SOLAR PANELS



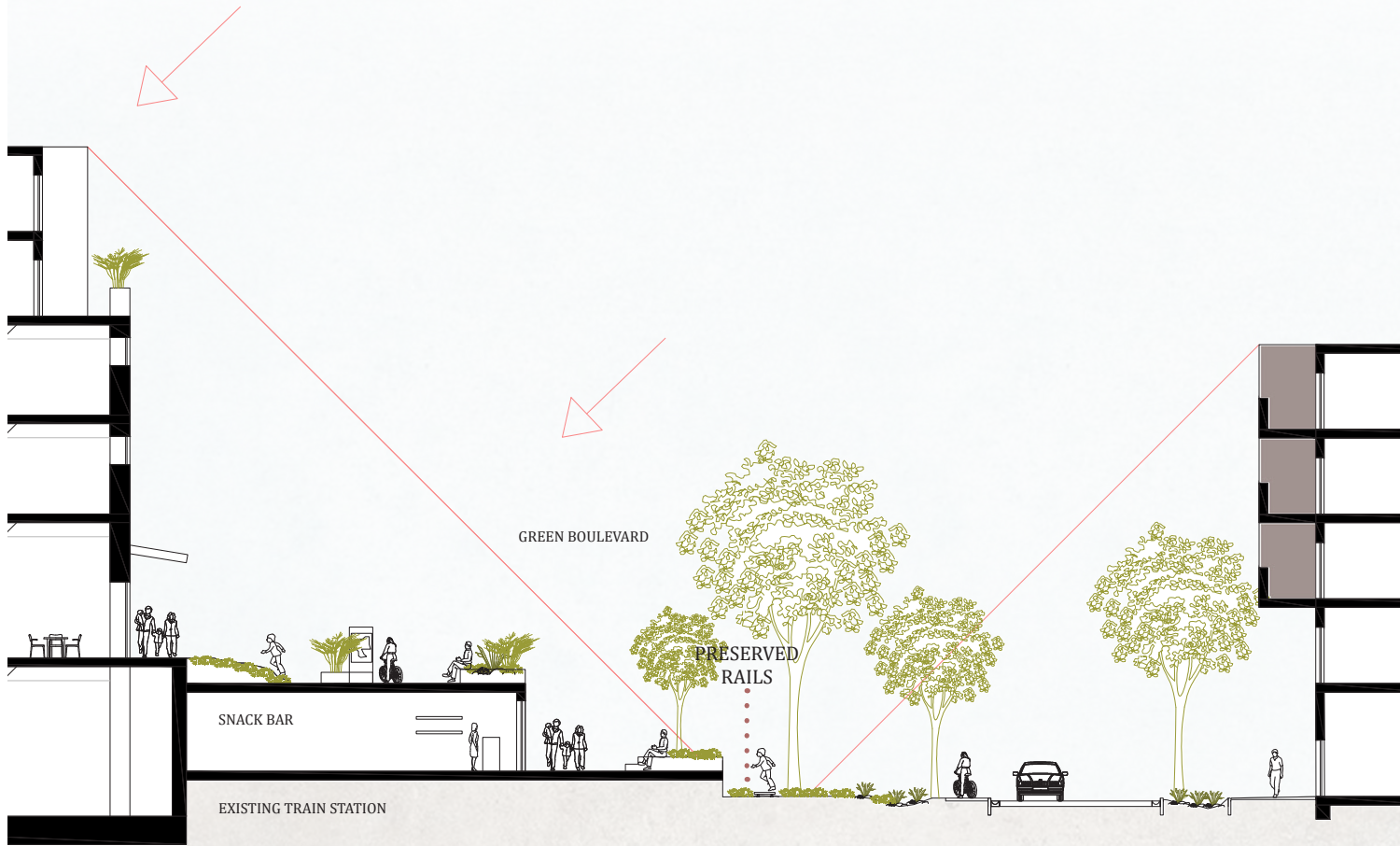


DETAIL PLAN 6  
EXHIBITION ART BOULEVARD, LIBRARY  
1:500

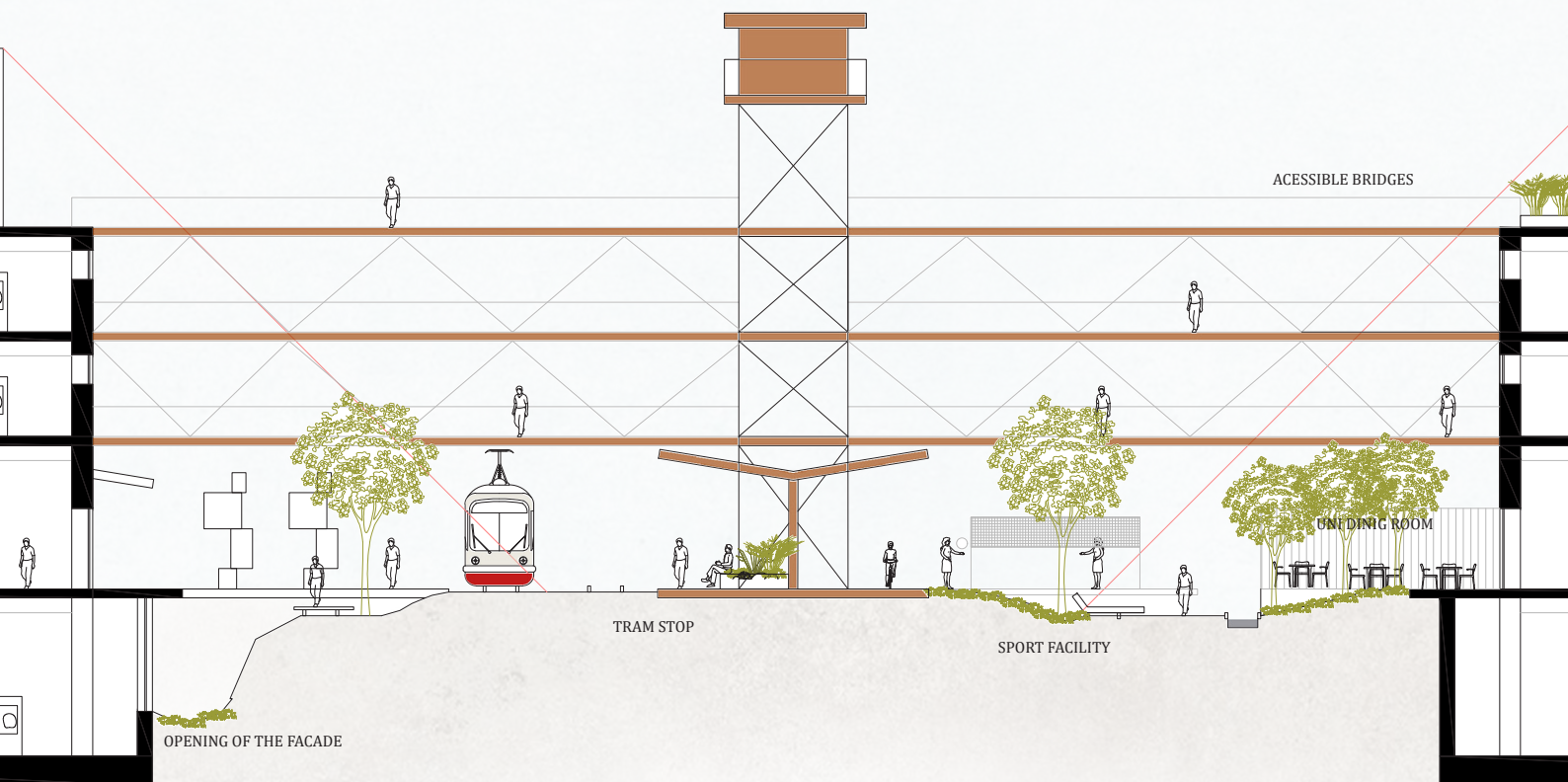


SECTION C-C  
EXHIBITION ART BOULEVARD, NORTHERN PART OF THE TRAIN STATION  
1:250





SECTION C-C  
 GREEN BOULEVARD, SOUTHERN PART OF THE TRAIN STATION  
 1:200





REGENERATED ŽIŽKOV STATION



# PHASE 01- BOHEMIAN CITY

ŽIDOVSKÉ PECE

PHASE 01

TRAIN STATION

BOUNDARIES

CULTURAL PART OF THE TRAIN STATION  
CITY RELEASING TO NATURE

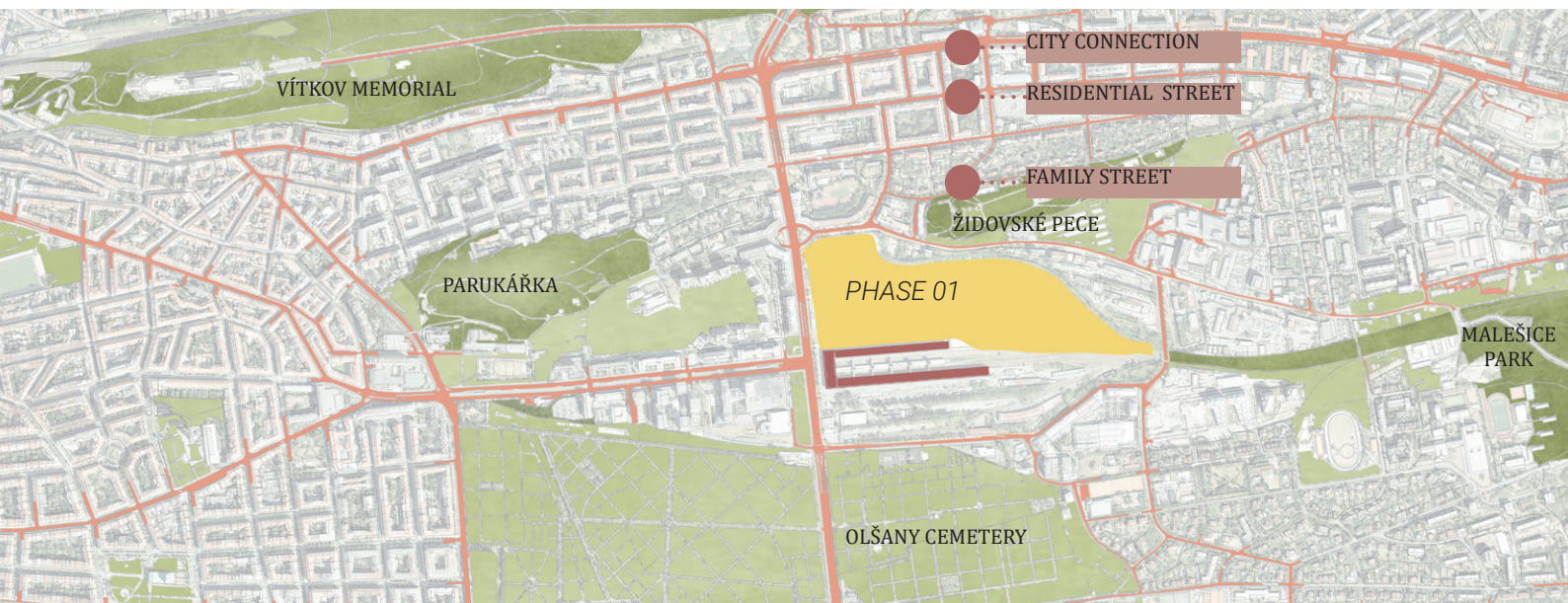
HERITAGE

CULTURAL HERITAGE OF ŽIŽKOV,  
CULTURE AND ARTISTIC LIFE

VISION

BOHEMIAN CITY





The identity of the first phase of the development was influenced by the heritage, which is present on site. The presence of hill on the northern side represents a connection to the city. The southern boundary, in the form of the old train station, is aimed to represent a cultural driver in the future. The boundaries, which frame the first phase, represent a strong link to the cultural identity of the place and formed the name of the first phase, Bohemian city. Since the city was in the past known as the bohemian district full of pub life, lively courtyards and a strong presence of culture, the first phase carry all these attributes which are very typical for the city part Žižkov. The first phase creates a strong link to the existing character of a place in order to bring back the life and help to develop stronger community ties among future residents.

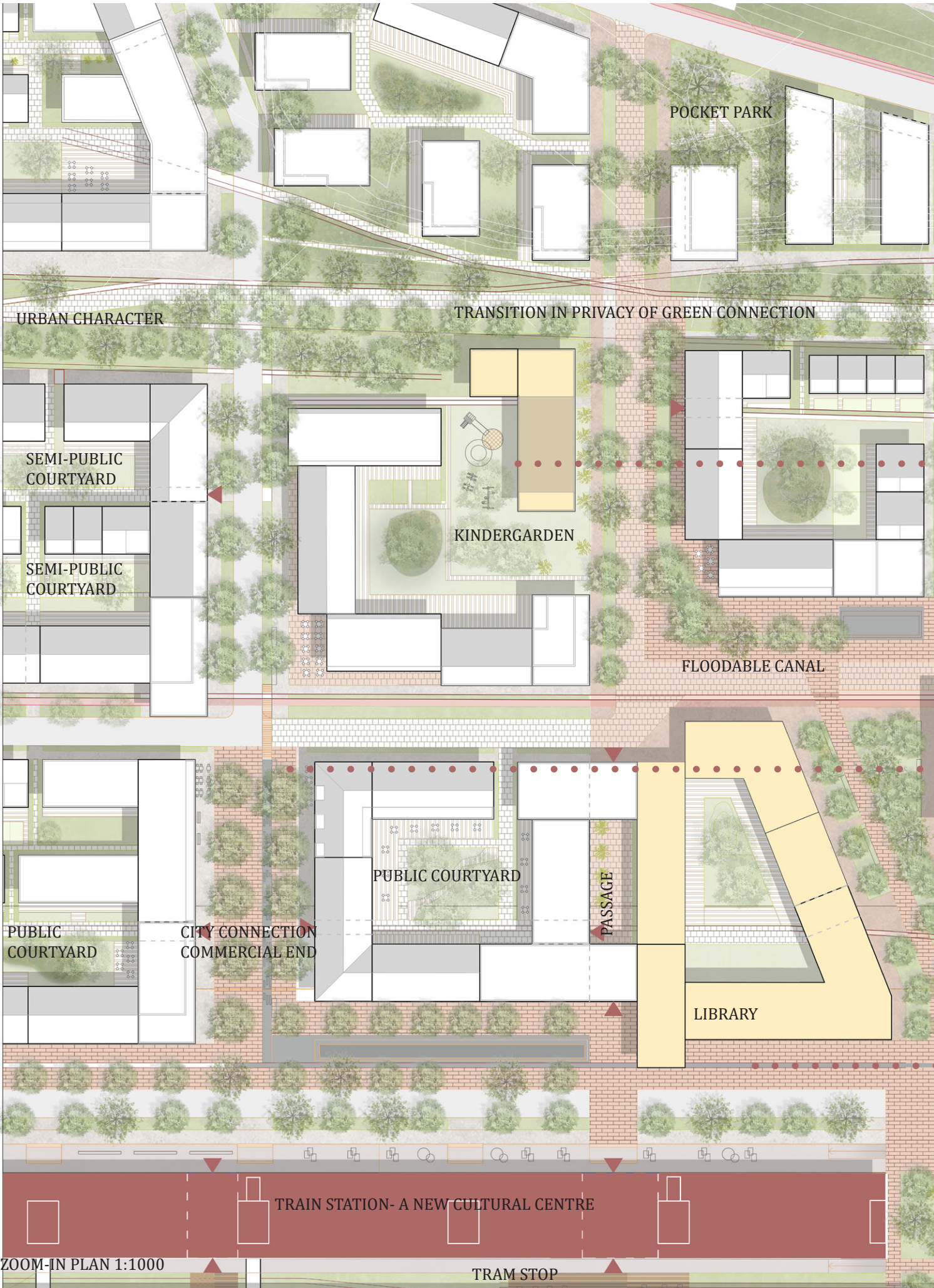


The development is aimed to attract young families looking for an affordable way of housing with an opportunity to stay within the neighborhood in the future, a rising population of art-oriented young people enjoying city vibe and old people with a strong connection to the city and its existing culture.



The proposed street network is copying the existing old train lines, preserving the sense of the movement which was present on the site in the past. The hierarchy of the streetscape was influenced by the hierarchy, which could be found on the northern side of the hill Židovské pece. The proposed street hierarchy represents a transformation from greenery toward the beating pulse of a city. Residents walking from the park towards the city in the North experience different scenarios- a very family oriented street, a normal residential street and a commercial street connecting the neighborhood to the city. The proposed street network, therefore, respects this hierarchy and principle of “city releasing to nature”.





ZOOM-IN PLAN 1:1000

ŽIDOVSKÉ PECE PARK

MORE PRIVATE CHARACTER OF STREET

PUBLIC  
COURTYARD

COMMERCIAL TRAM BOULEVARD



# URBAN FORM INFLUENCED BY THE VISION



KINDERGARDEN



WATER CANAL



WATER CANAL-  
OLD RAILS



5m

50m



YOUNG ARCHITECTS AND THEIR VIEW FROM THE STUDIO ON THE PUBLIC COURTYARD AND THE LIBRARY



ENTRANCE TO THE PUBLICLY ACCESSIBLE COURTYARDS ART BOULEVARD



Pedestrians walking from the northern part of the city can, therefore, experience the reversed scenario. The park greenery transforms into a more residential street, which is, in this case, a green corridor leading from east to west, connecting the site with two very popular parks Parukářka and Malešice park. The northern green connection linking all the three parks got according to the hierarchy more residential character. The character was influenced by the overall strategy city meets green, when the link starts as a bioswale in the East, continues as a more residential lush green street towards the kindergarten, which represents the transition area into the more urban park creating the western green entrance to the neighborhood. The street hierarchy of W-E connections continues towards the train station and the intensity of the urban character grows into a residential street. The crossings of the residential street with the main S-N connections represent small pocket places or bigger open green squares. The intensity of the urban character of W-E connections culminates into a boulevard in front of the train station which connects the site with the Old Town of Prague.

The proposed roofscape and the materiality of the first phase of development shall remind residents of the old Prague neighborhoods. Most of the roofs are therefore tilted, referring to the existing roofscape of the city. The shape of roofs was influenced by their use- to gain solar energy, to become an important orientation point or to become a gathering rooftop space. The materiality of the facades of the buildings is mostly plaster, ceramic tiles, stone, and brick. Facades of the inner-courtyards buildings do not have to follow regulations regarding the material but shall follow the color scheme of the neighborhood. In order to achieve community bond and create a link to existing typology, some of the buildings are formed in the traditional shape of a gallery- accessed apartment buildings,

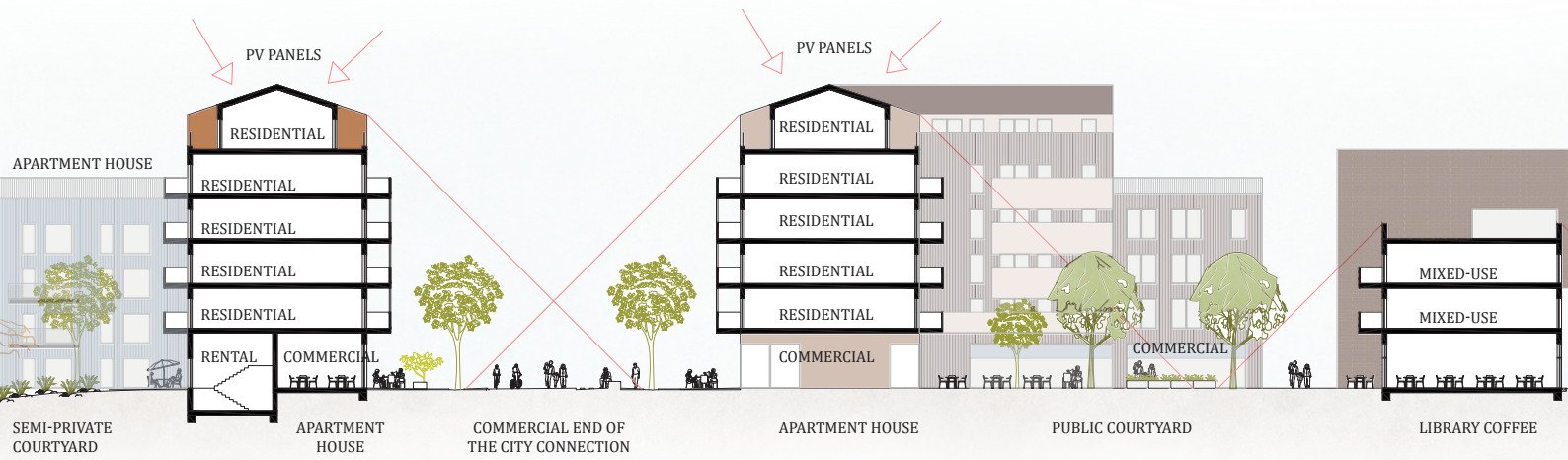
mainly the ones which the main facades are facing the South in order to gain solar access.

The form of the main connections running through the site was influenced by the character in the first phase. In the past, most of the social life was happening on the streets and inside courtyards. The main city connection leading from the North towards the train station accepts the hierarchy of for E-W connections (city releasing to nature). It starts as a normal street ending as a commercial boulevard by the train station. The green spine has a very similar scenario- starting as a small pocket park to attract pedestrians, continues as a wider green street with an artificial floodable canal leading pedestrian towards the library. The intensity of greenery grows and the green connection ends by the train station in the form of a green boulevard. The proposed courtyards located by the tram line or the train station have a public character with beating city life. The most public one is located by the library, creating a transformation from peaceful library surrounded by trees towards the city beat represented by the commercial ending of city connection. In this phase of development two passages are designed to create a transition from very urban character towards more residential one. The passages connect public courtyards with public facilities.

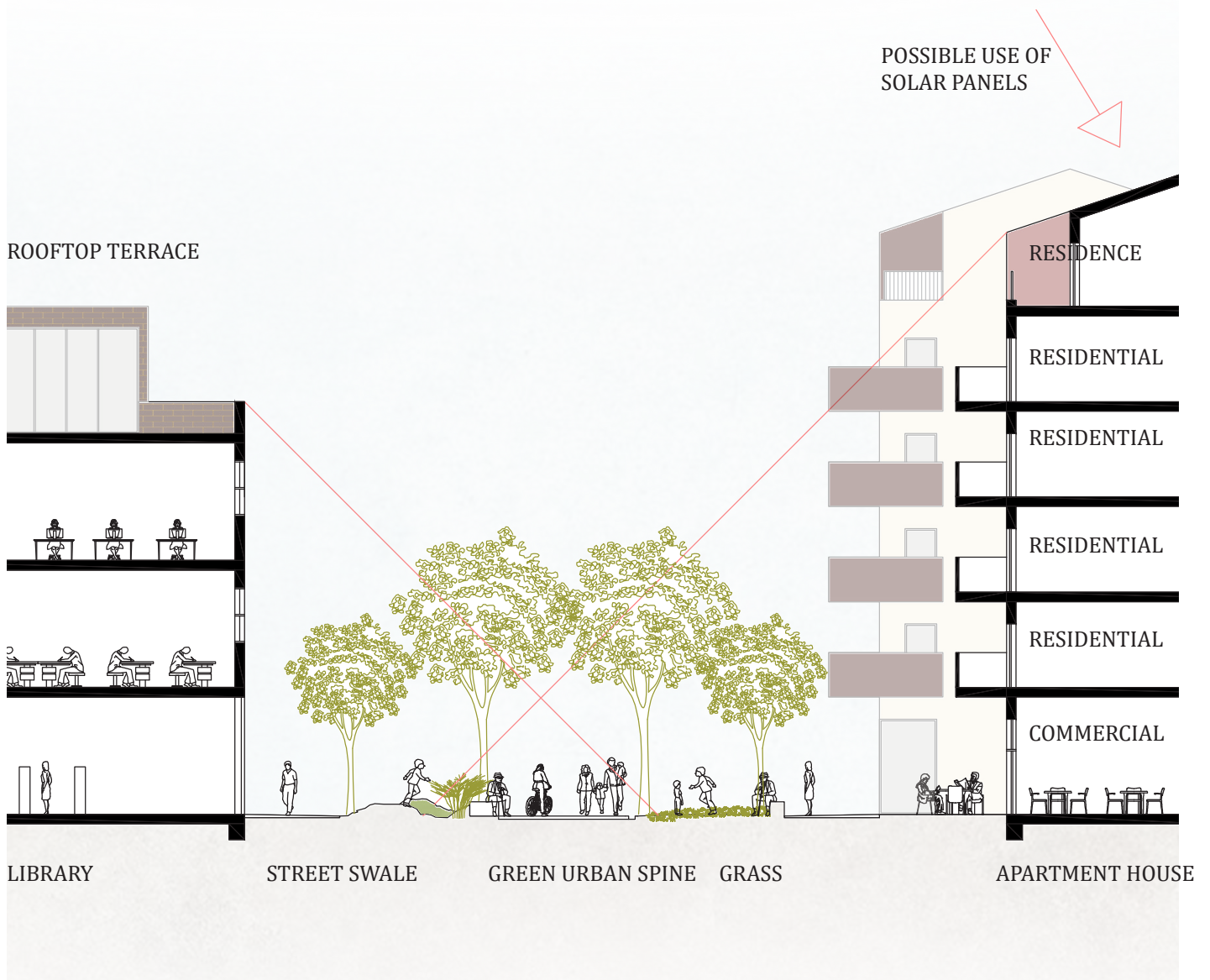
The design aims to limit social segregation by proposing different public spaces and courtyard typologies to increase the chance of a community bond among the residents. In order to accommodate low-income families and transitory urbanities, the rental market will be introduced. Rental apartments are located in the buildings with commercial ground floor, more luxurious apartments on the upper floor or inside the courtyards with commercial use. The rent of commercial space and the cost of more luxurious apartments located in the same building will compensate for the lower rental price for lower-standard rental apartments. In order to achieve community bond and create a link to existing typology, some of the buildings are formed in the traditional shape of a gallery- accessed apartment buildings. Kindergarten located close to the library create a cultural point mainly for kids, students and elderly people enjoying reading the news in the library courtyard. The train station with public courtyards is attracting tourists and local residents enjoying cultural events and the city vibe.



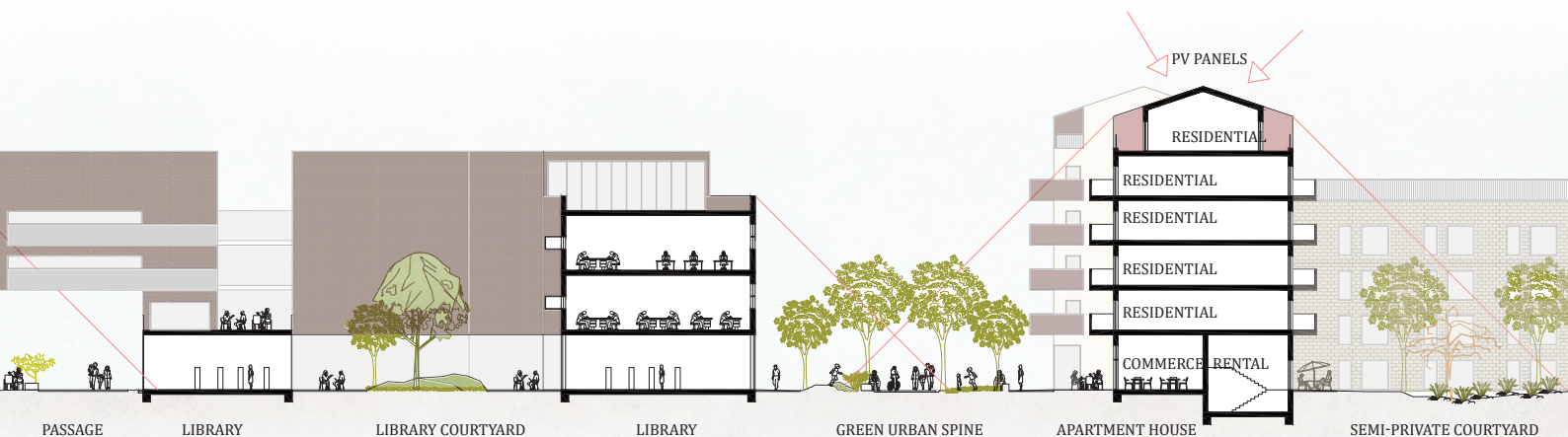
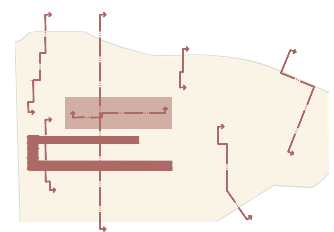
DETAIL PLAN 5  
 GREEN SPINE TRANSFORMS INTO MORE GREEN BOULEVARD  
 1:400



SECTION D-D  
 CONNECTIONS TO THE NORTHERN PART OF THE CITY AND THEIR URBAN CHARACTER  
 1:500



SECTION D-D  
 GREEN URBAN SPINE, LIBRARY  
 1:200





MODEL  
GREEN SPINE, LIBRARY



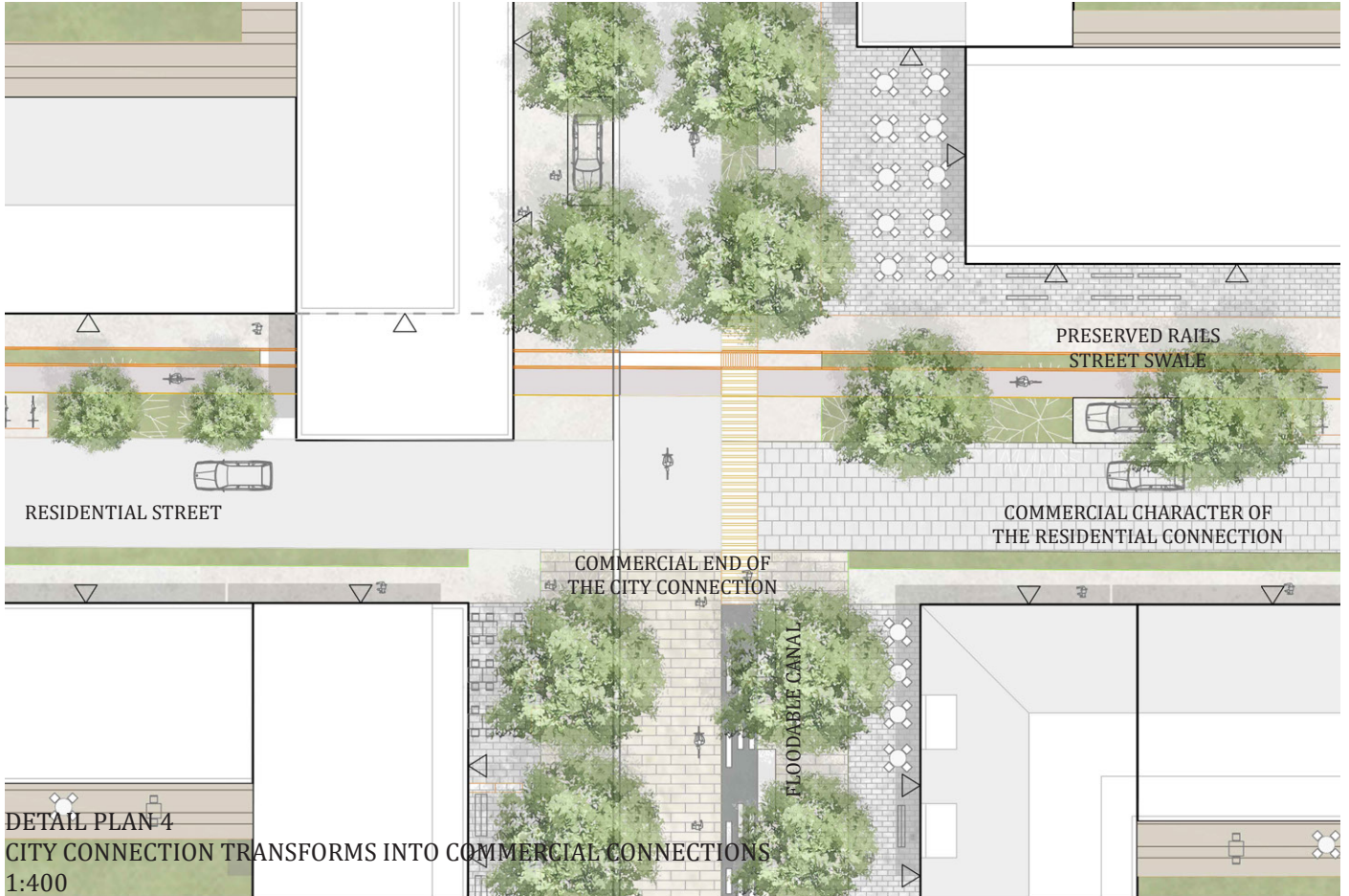
MODEL  
CITY CONNECTION TRANSFORMS INTO COMMERCIAL CONNECTION

POSSIBLE USE OF SOLAR PANELS

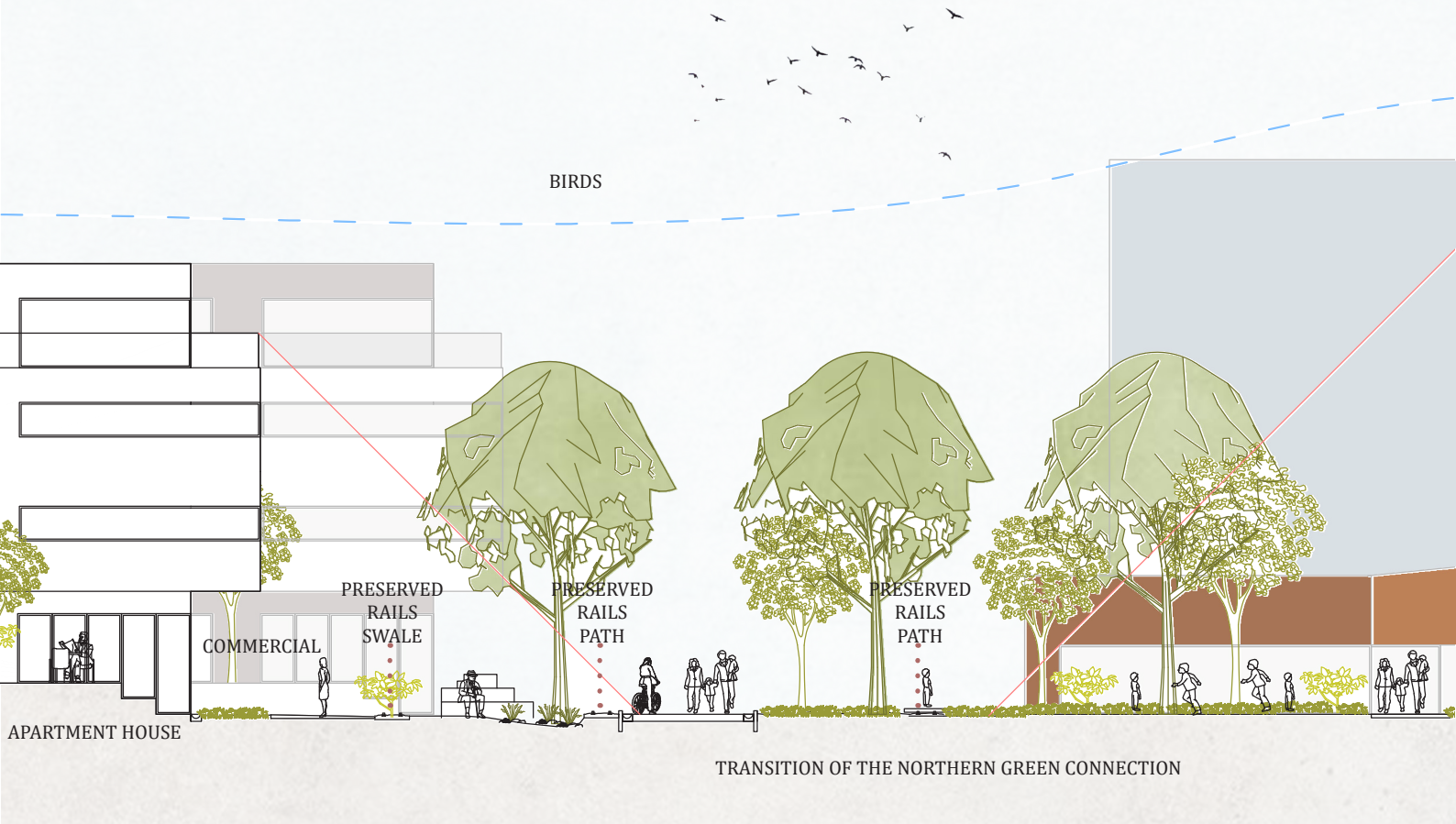
POSSIBLE USE OF SOLAR PANELS



SECTION D-D  
COMMERCIAL PART OF THE CITY CONNECTION  
1:200



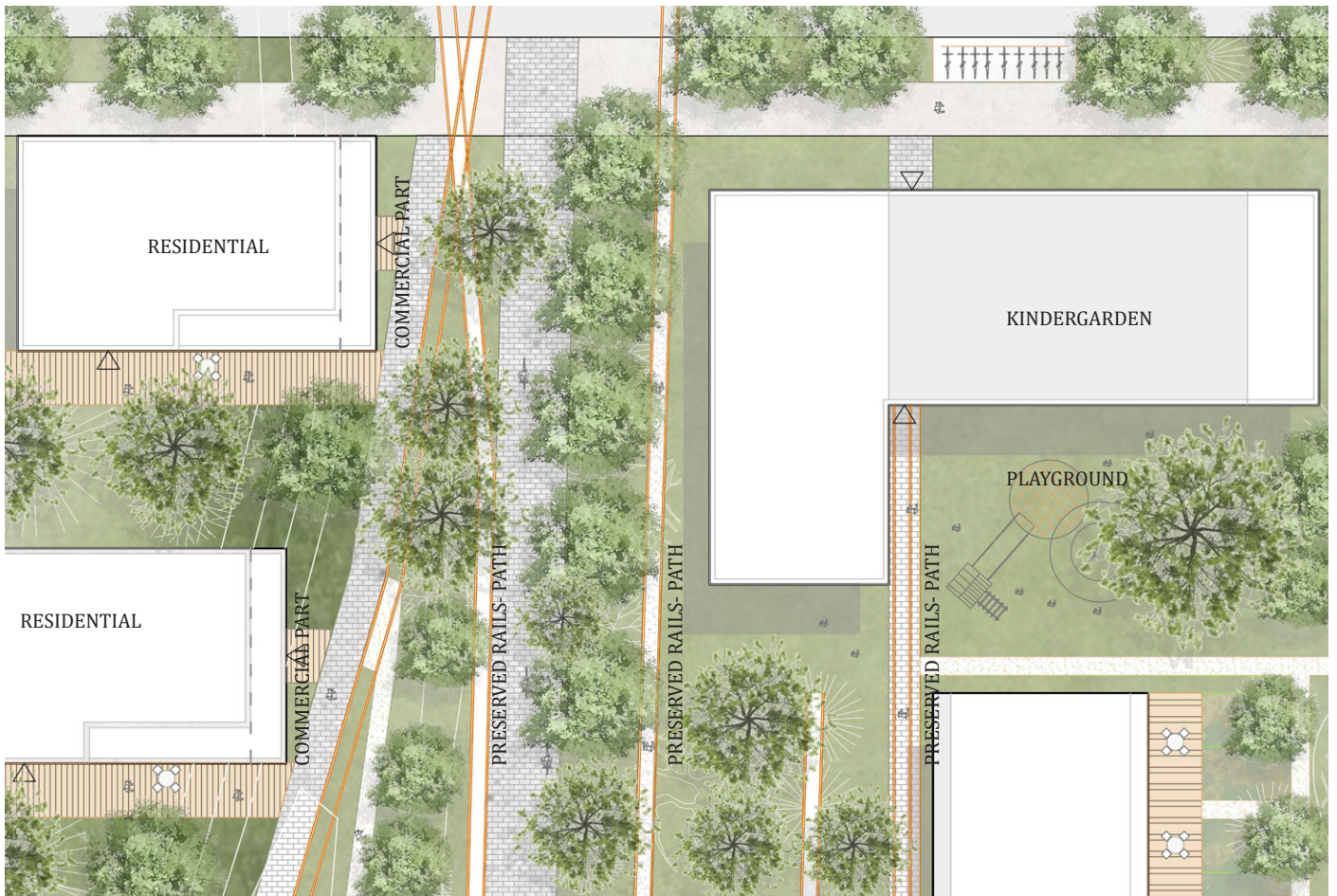
DETAIL PLAN 4  
CITY CONNECTION TRANSFORMS INTO COMMERCIAL CONNECTIONS  
1:400



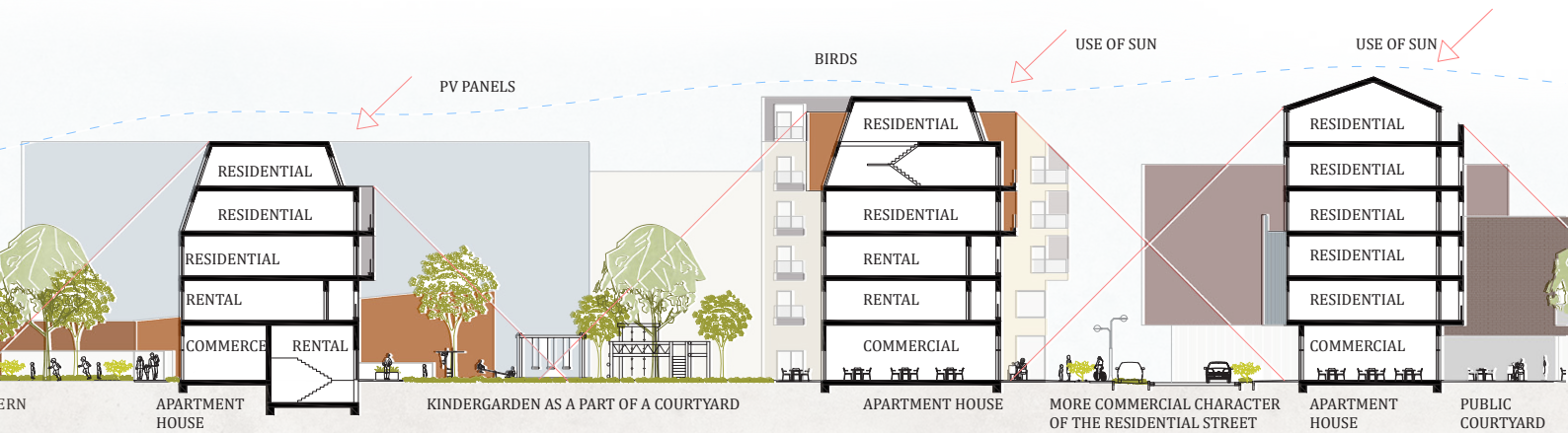
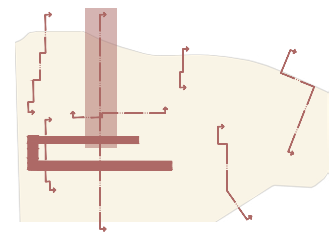
SECTION C-C  
 SHAPE OF THE GREEN CONNECTION (FROM MALEŠICE PARK TOWARDS PARUKÁŘKA PARK)  
 1:200

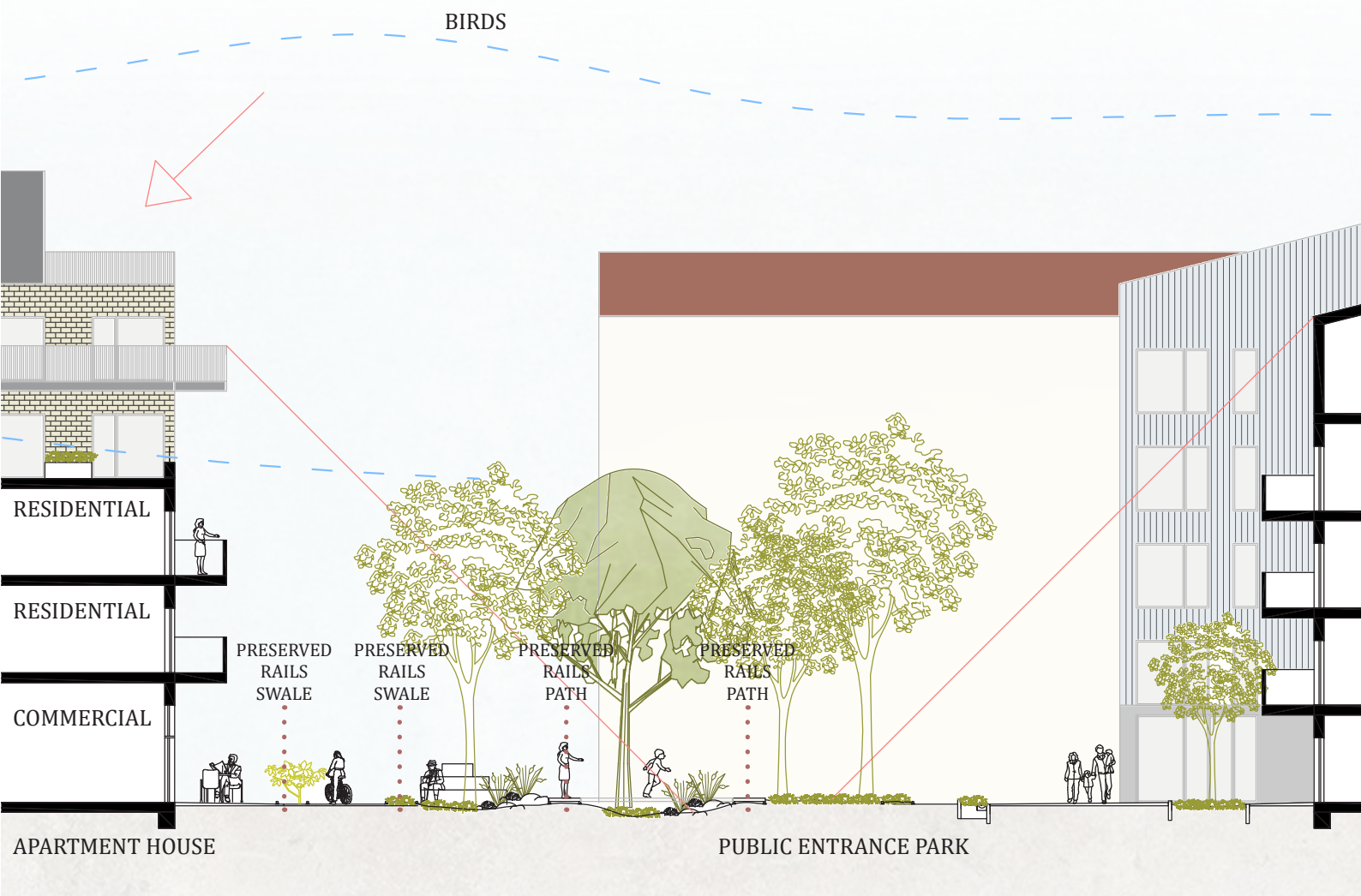


SECTION C-C  
 BOHEMIAN CITY, STREET HIERARCHY, GROWTH OF VOLUMES  
 1:500

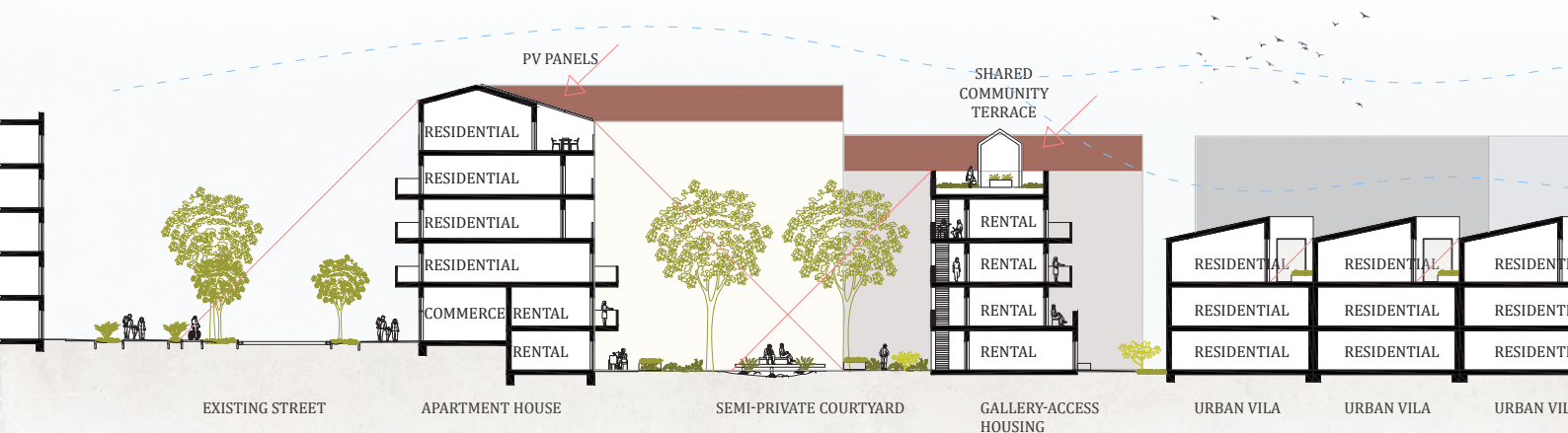


DETAIL PLAN 2  
 TRANSITION FROM URBAN CHARACTER OF THE GREEN CONNECTION TOWARDS MORE RESIDENTIAL,  
 KINDERGARDEN



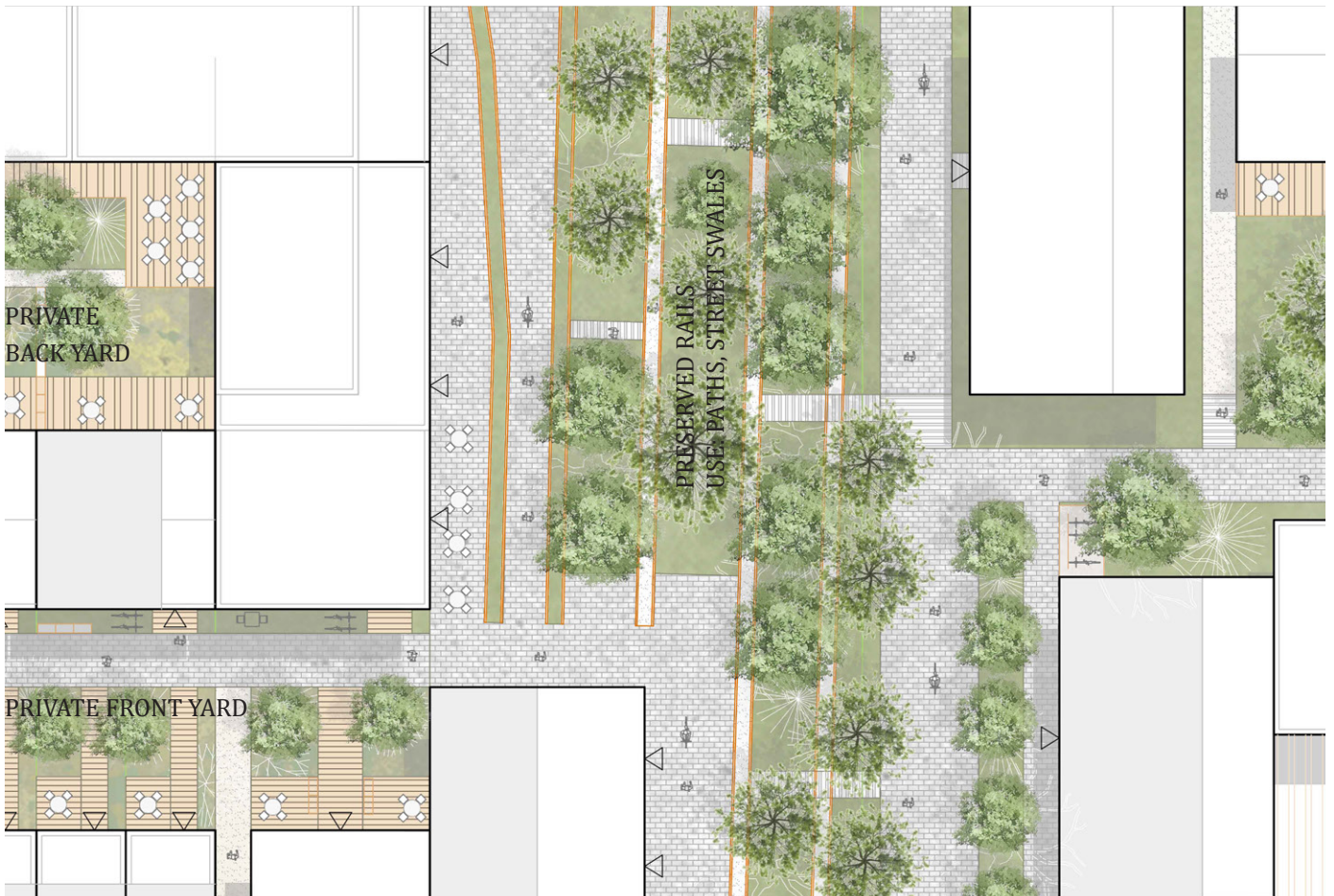


SECTION A-A  
 URBAN CHARACTER OF THE GREEN CONNECTION, WESTERN ENTRANCE  
 1:200

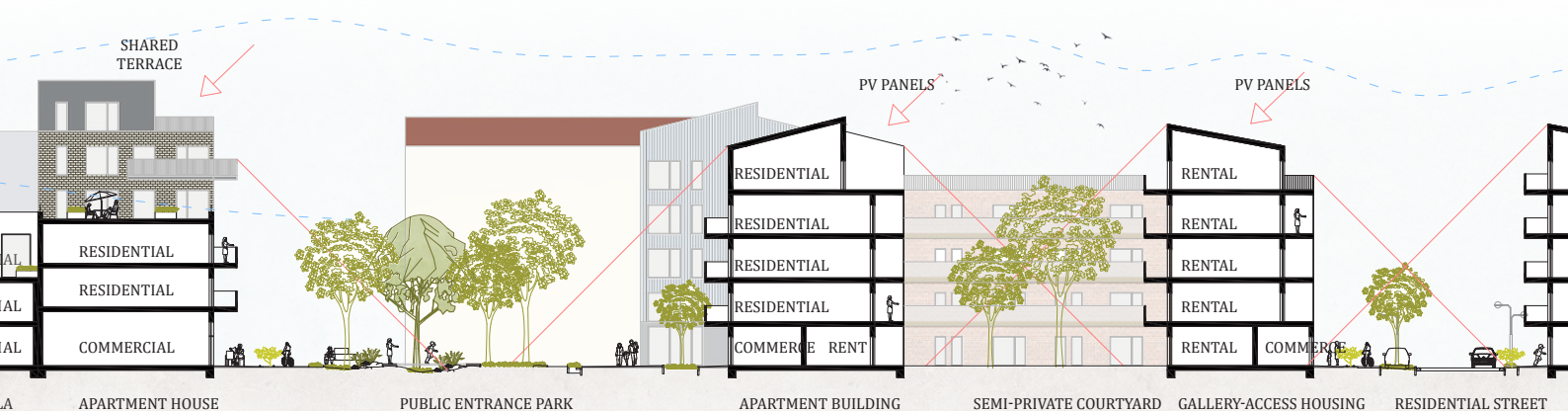
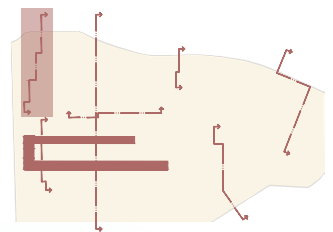


SECTION A-A  
 INNER COURTYARD TYPOLOGIES, ENTRANCE PARK, A NEW FORM OF GALLERY-ACCESSIBLE HOUSING  
 1:500





DETAIL PLAN 1  
 URBAN CHARACTER OF THE GREEN CONNECTION, WESTERN ENTRANCE  
 1:400





# CHECK LIST OF SUSTAINABLE PRINCIPLES- BOHEMIAN CITY

## SOCIAL



### ELIMINATION OF SOCIAL SEGREGATION

- community bond based on cultural lifestyle
- different types of courtyard typologies, different type of housing typologies



### TRANSITORY URBANITIES

- rental spaces, cultural public courtyards, new way of "Pavlač" housing, proximity to free time activities in parks



### LOW-INCOME FAMILIES

- introduced rental system



### THE ELERLY

- residential pockets proximity to park, library and connection to the train station-cultural events



### SUBURBANISATION

- urban house, urban vila typology



### PUBLIC SPACES AND CONNECTIONS

- green spine- connection to the station
- city connection- gains urban character
- E-W green connection- different forms
- exhibition boulevard in front of the station



### KIDS AND TEENAGERS

- kindergarden connected to the library



### CULTURAL HERITAGE

- preservation of the existing rails, cultural spirit of Žižkov, roofscape, facade materiality, scale, culture and life inside the courtyards (public, semi-public ones)

## SOCIO-ECONOMIC



### JOB OPPORTUNITIES

- mix use development along the tram line
- public courtyards with city amenities
- commercial spaces along the main city connections



### TOURISTS

- connection to the old lifestyle of people in Prague
- library as an attraction
- temptation to see the development from hilly park

## ECOLOGICAL



### TRANSPORTATION

- proximity to the train station (tram)
- use of existing parking house (addition-rooftop sport activities)
- bicycle lanes- follow preserved rails



### MICROCLIMATE

- dimensions in between buildings influenced by the height of the volumes
- system of rain gardens
- height- do not block trajectory of birds



### BUILDING LEVEL

- mostly local materials
- use of solar panels
- balconies- allow people to have small farming pots

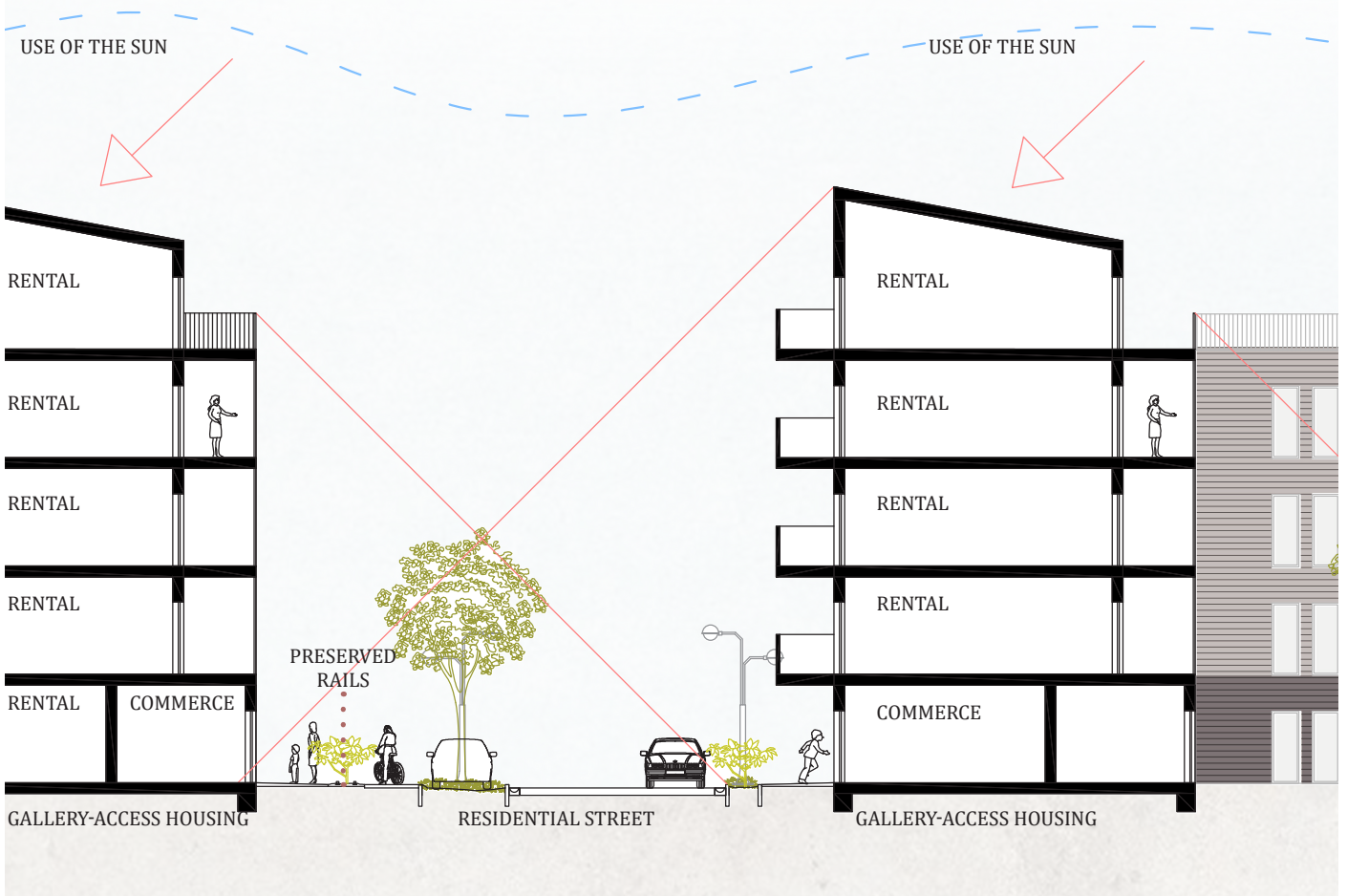


### LEISURE TIME AND GREEN SPACES

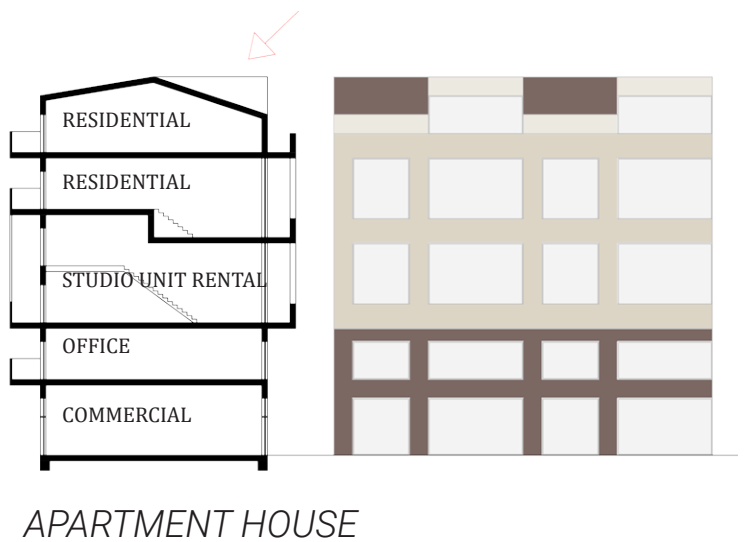
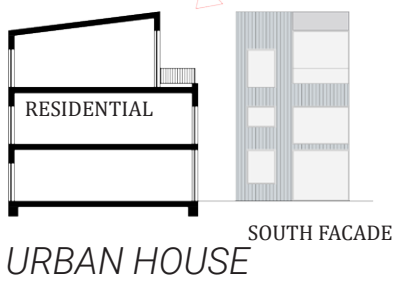
- green connection: urban park, transition area, lush residential street
- connection to Židovské pece park
- connection to the train station

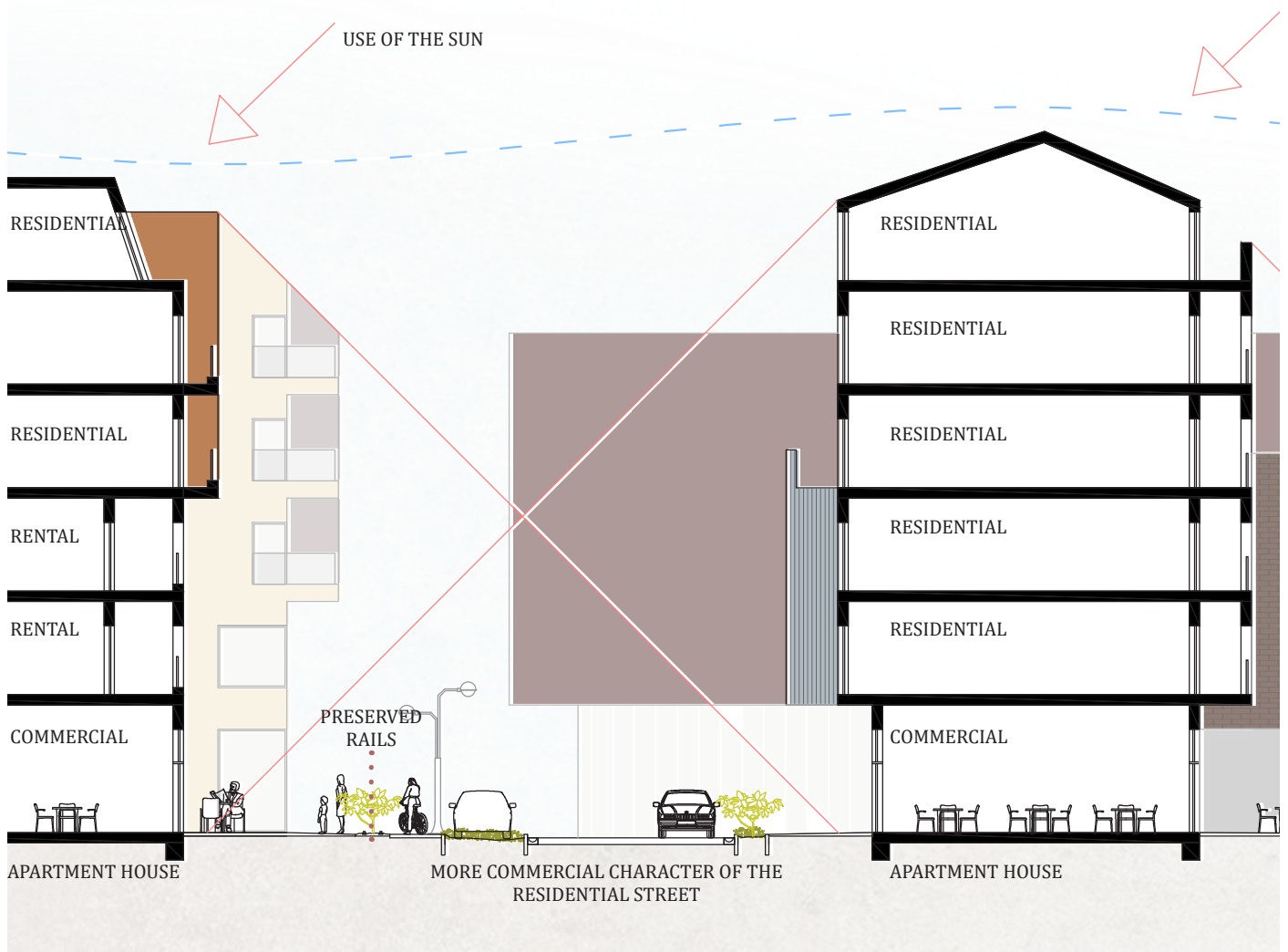


MODEL  
ENTRANCE PARK, NORTHERN GREEN CONNECTION

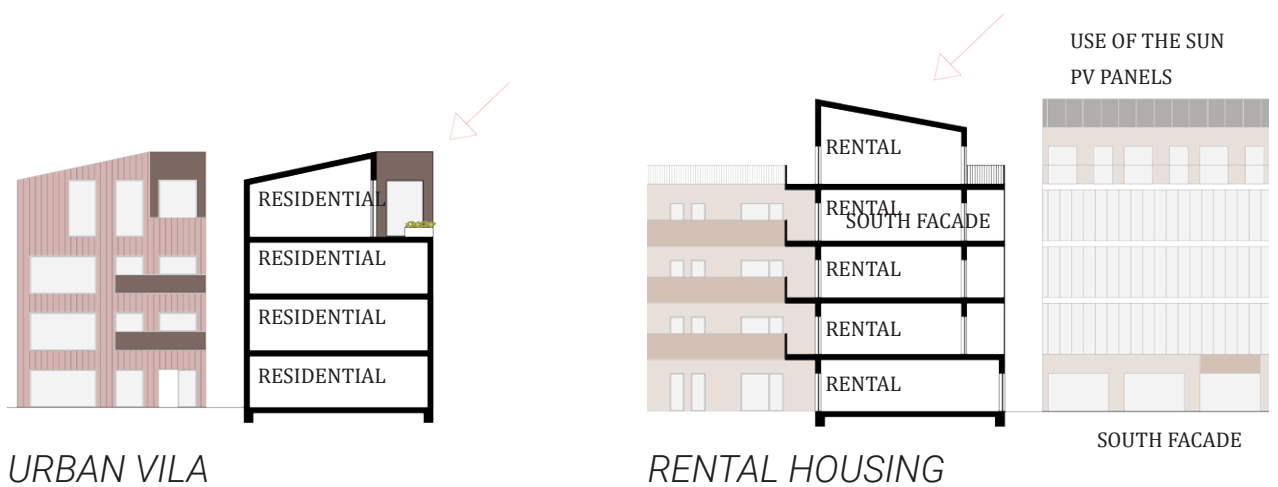


SECTION A-A  
RESIDENTIAL STREET  
1:200





SECTION C-C  
 RESIDENTIAL STREET WITH MORE COMMERCIAL CHARACTER, CONNECTION OF COMMERCIAL CITY CONNECTION AND THE GREEN SPINE  
 1:200



NOTE: TYPOLOGY DERIVED FROM THE EXISTING ONE TYPICAL FOR ŽIŽKOV- GALLERY ACCESS UNITS

# PHASE 02- ECO CITY

BOUNDARIES

CEMETERY, TRAIN STATION  
EXISTING AND PROPOSED OFFICES

HERITAGE

RAISING SUSTAINABLE AWARENESS AND  
CULTURE OF PRAGUE RESIDENTS

VISION

ECO CITY





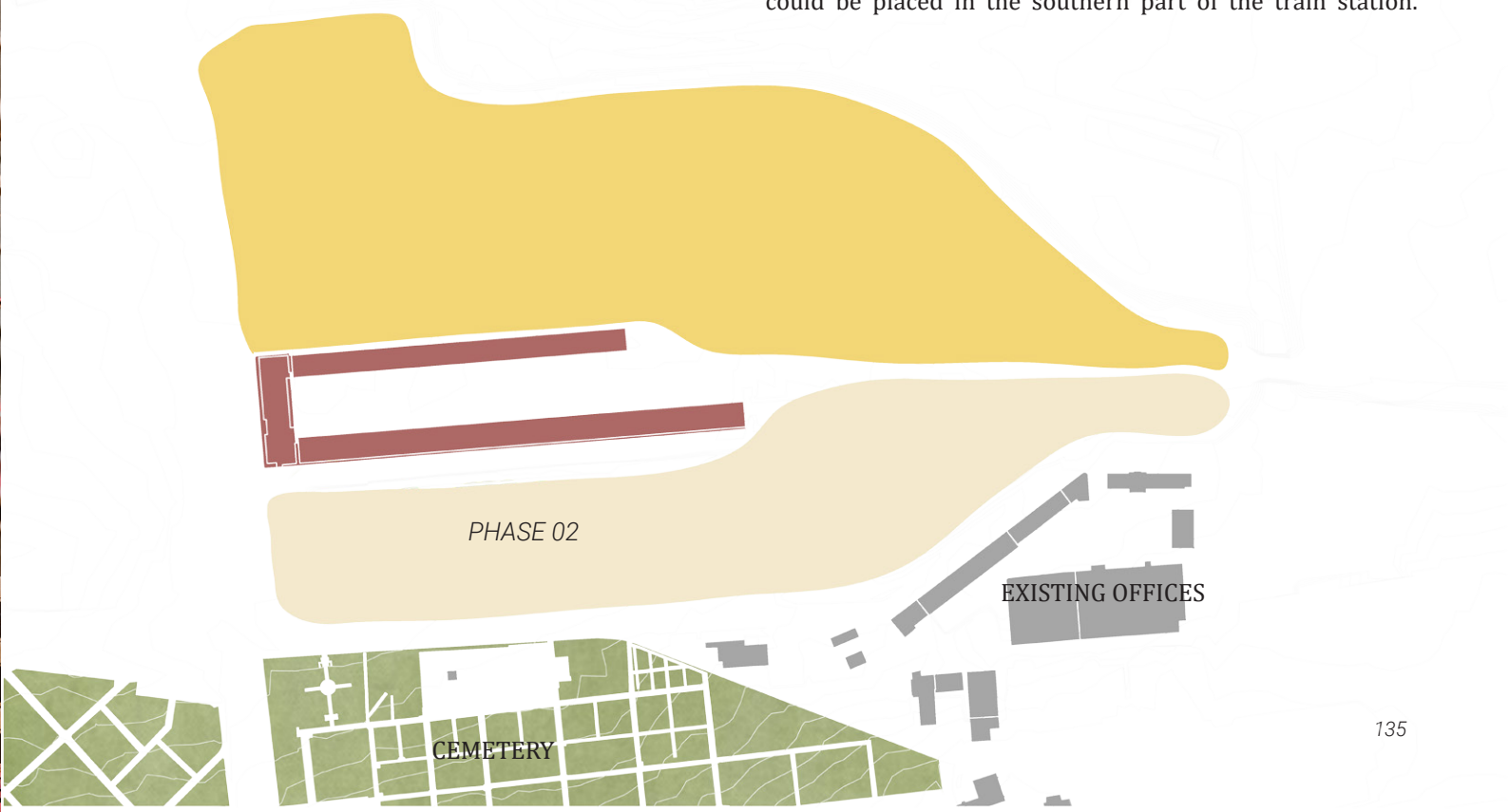
The identity of the second phase of the development was influenced by the existing boundaries and structure built in the first phase. The second phase is visually divided into two parts by the proposed green spine and these two parts have also different boundaries framing them.

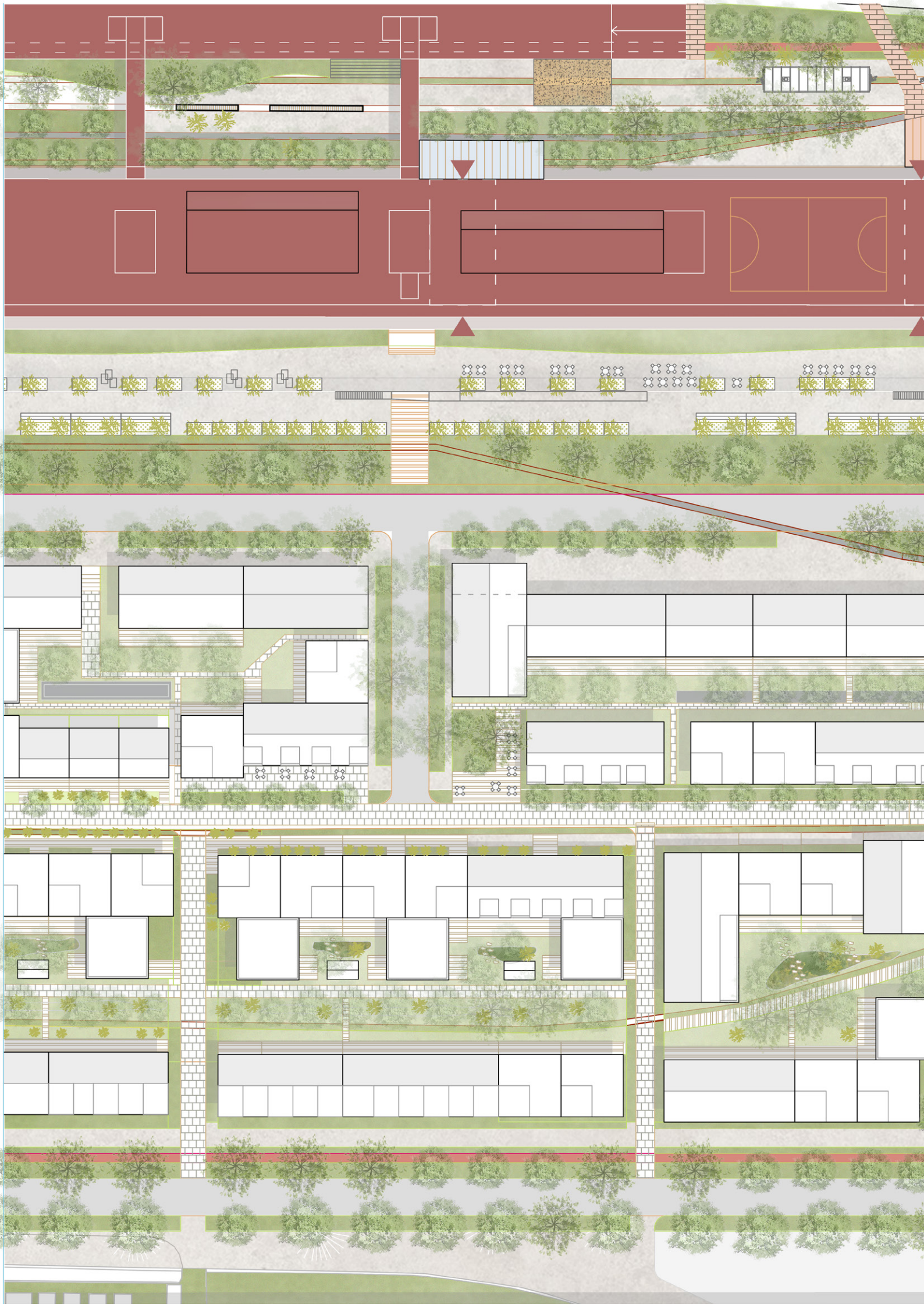
The first part, the western one, is surrounded by the train station and the cemetery. The second part is surrounded by the existing office buildings and a proposed tram line connection with mix-use development. To find a common identity for these two significantly different parts it was necessary to zoom-out and look at the site from a wider perspective. The connection which is established in this phase is a connection from Malešice park towards very popular city parks with landmarks, for example, Žižkov TV tower or the Church of the Most Sacred Heart of Our Lord, which are listed as popular city attractions.

Following the overall vision of the site to be an open-minded brownfield, the idea of this connection is supposed to be an active path from the city center to Malešice park. Therefore the idea of bringing a new way of active and ecological lifestyle became the main vision for this part of development. The second phase of the whole design will, therefore, use the culture of people, the culture of a new lifestyle as a driver.

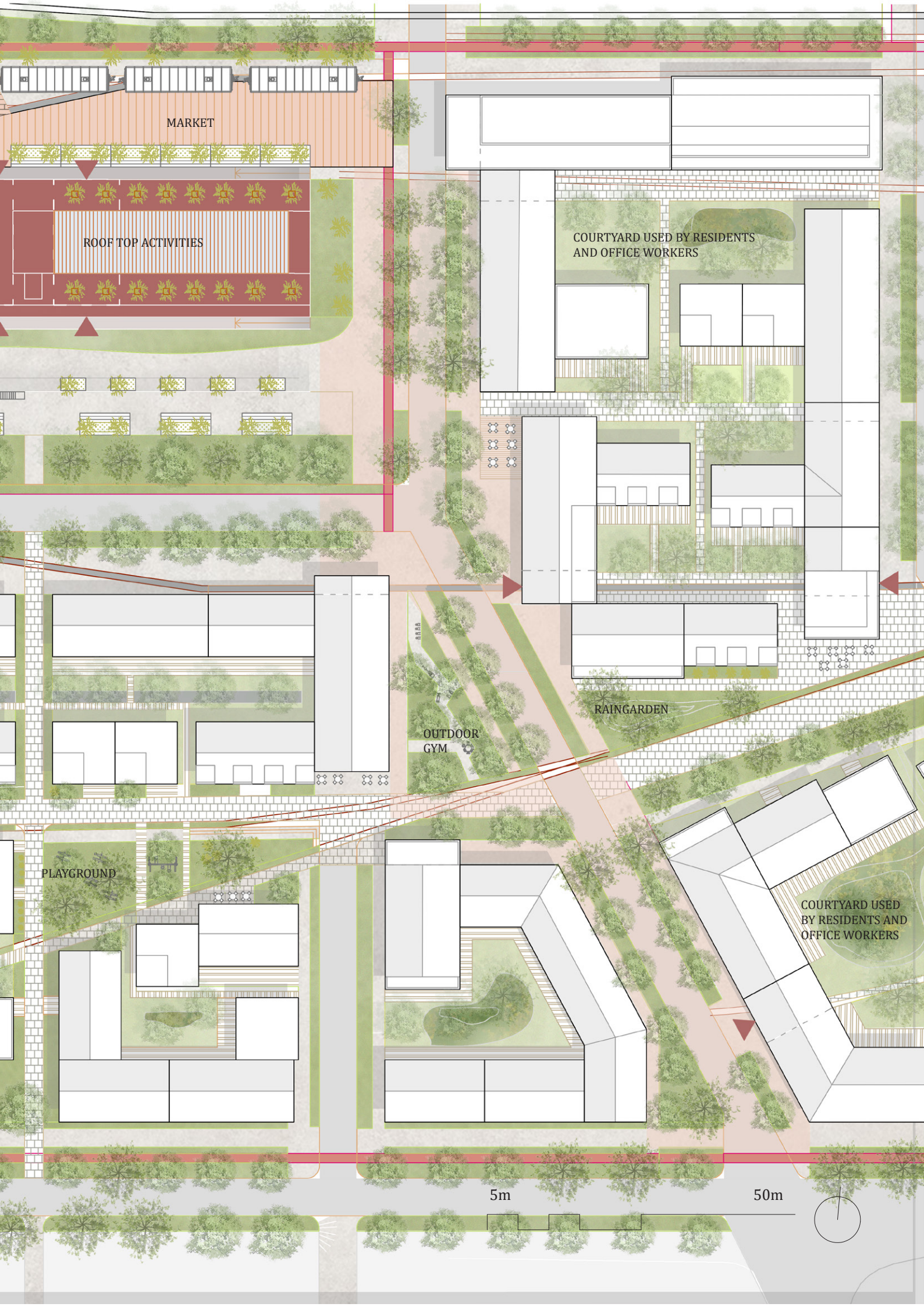
The second phase of the development is supposed to attract active residents, residents living in a more ecological way spreading more sustainable way of thinking. Farmer markets are very popular free time activity of Prague residents and the ecological and sustainable way of thinking has been spreading recently. There are plenty of new small projects in Prague, which are trying to bring a more ecological way of living into the city, offering greener products and services. (For more: [greenglasses.cz](http://greenglasses.cz) or Prague Green City Guide- the first sustainable travel guide to Prague.)

The development is aimed to attract also companies to create a mix of typologies and provide public spaces full of life during the whole day. The second phase is also considering attracting tourists interested in more green services, which could be placed in the southern part of the train station.









MARKET

ROOF TOP ACTIVITIES

COURTYARD USED BY RESIDENTS AND OFFICE WORKERS

OUTDOOR GYM

RAIN GARDEN

PLAYGROUND

COURTYARD USED BY RESIDENTS AND OFFICE WORKERS

5m

50m

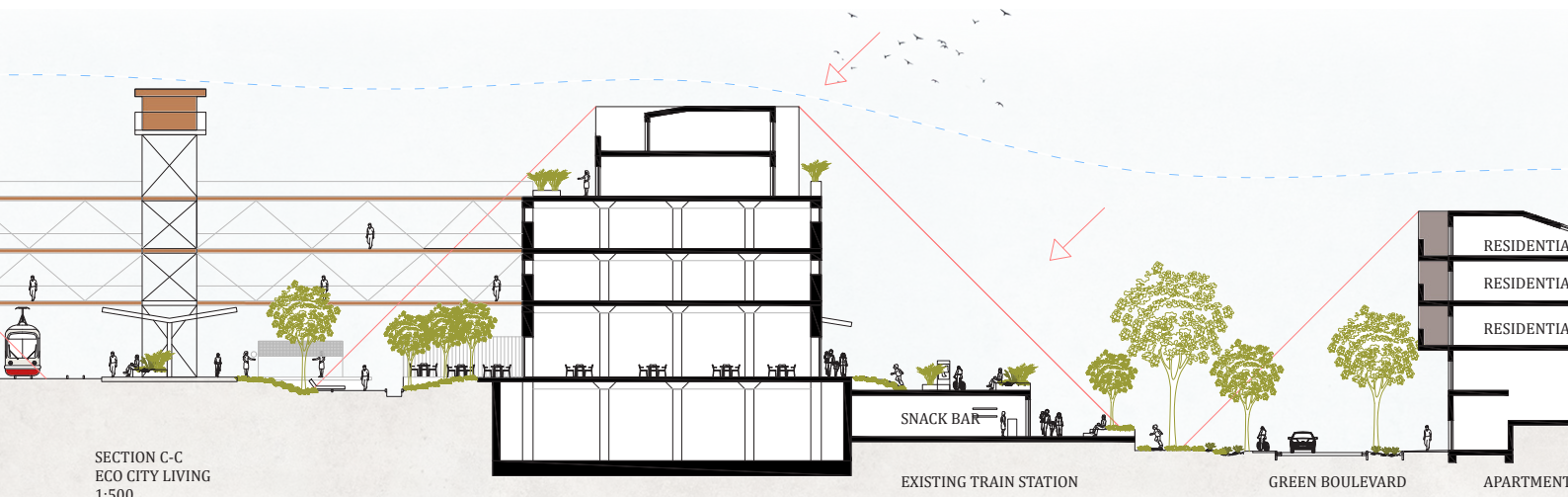




COURTYARD WITH RAINGARDEN (SOFTER, NATURAL EDGE)

The western part of the second phase is surrounded by the train station and Olšany cemetery. The southern part of the train station is aimed to become a lively hub full of young open-minded people, diverse activities and a hub of a more sustainable way of thinking. The cemetery represents a boundary, which has two different forms according to the season- during summer time it is a lush green space while during the winter time it can evoke different feelings due to the loss of tree leaves.

The train station represents a landmark of the functionalist era. During this era, in Prague (Dejvice) the Baba housing estate was built by the Czech Werkbund movement. That time it was an exhibition area of modern housing and modern way of living. This neighborhood might be also seen as an exhibition area of a modern and more sustainable way of living. The scale of the development does not compete with the train station since the train station is supposed to be the landmark, as it is the strongest heritage preserved on site. The scale is also limited by the fact, that the greenery in cemetery loses leaves during winter times offering a not very appealing look at the old graves. The proposal is however quite dense in order to achieve urban density as well as

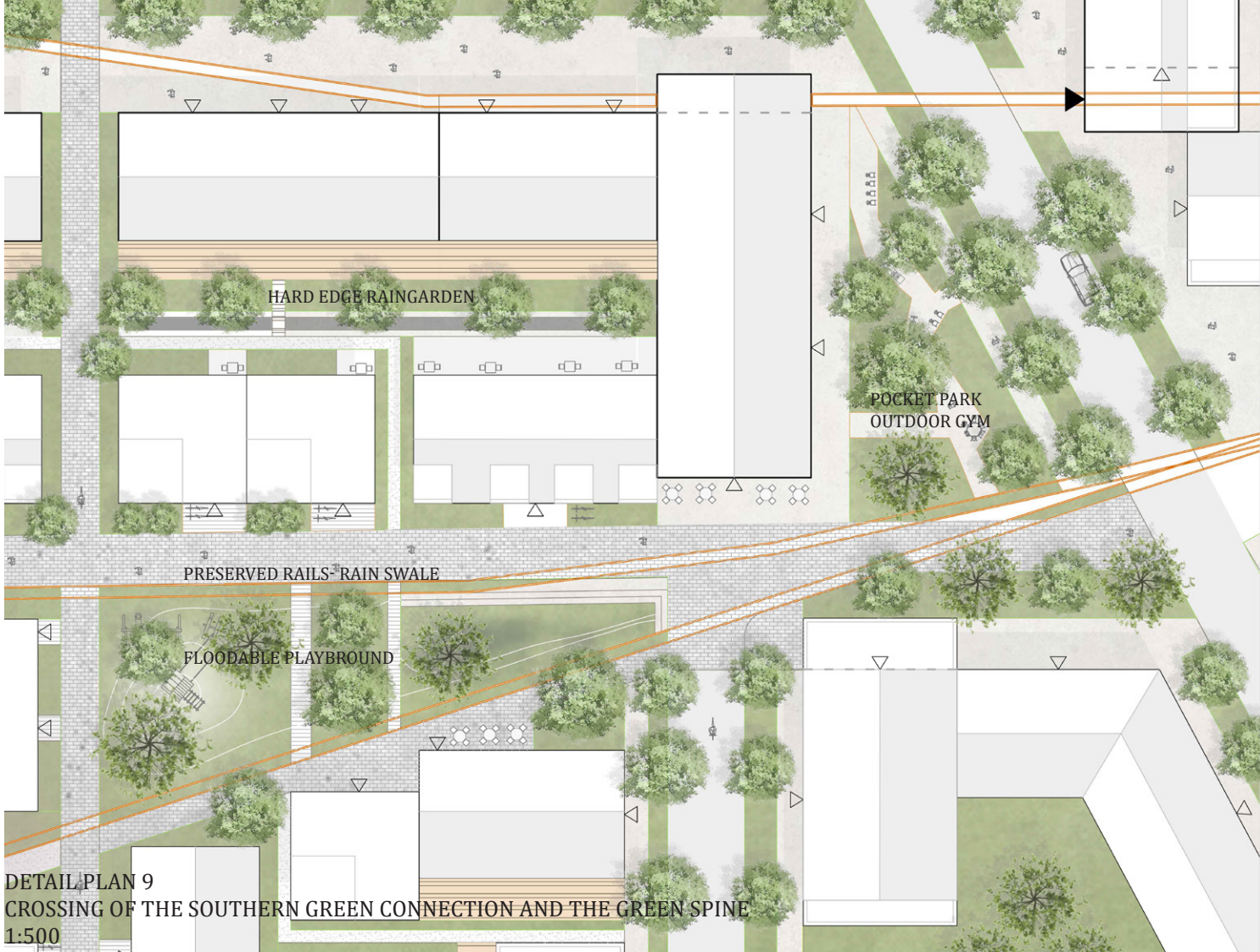


SECTION C-C  
ECO CITY LIVING  
1:500

EXISTING TRAIN STATION

GREEN BOULEVARD

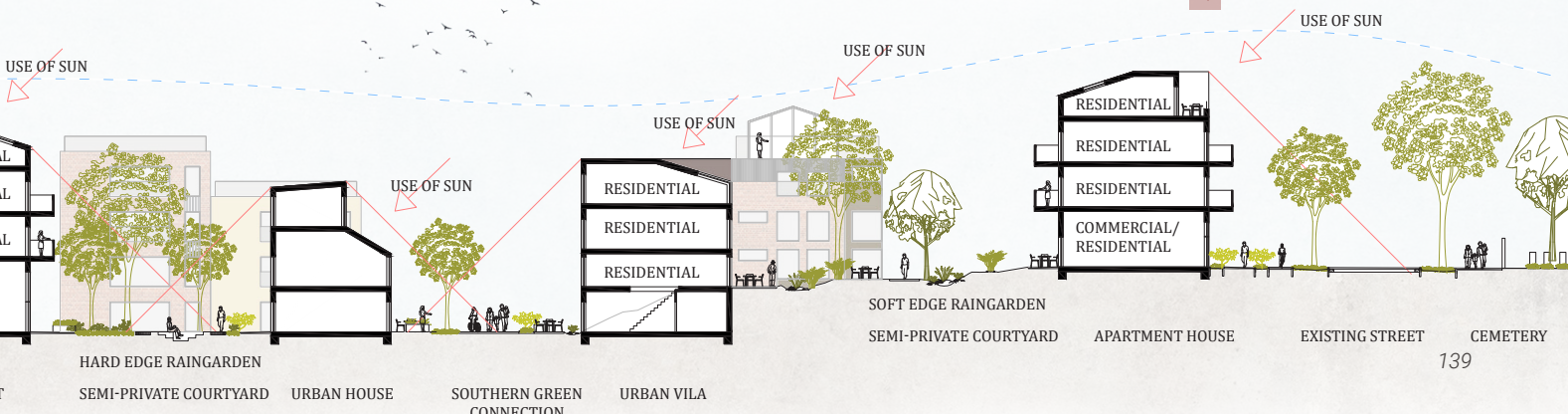
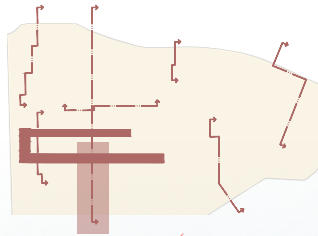
APARTMENT

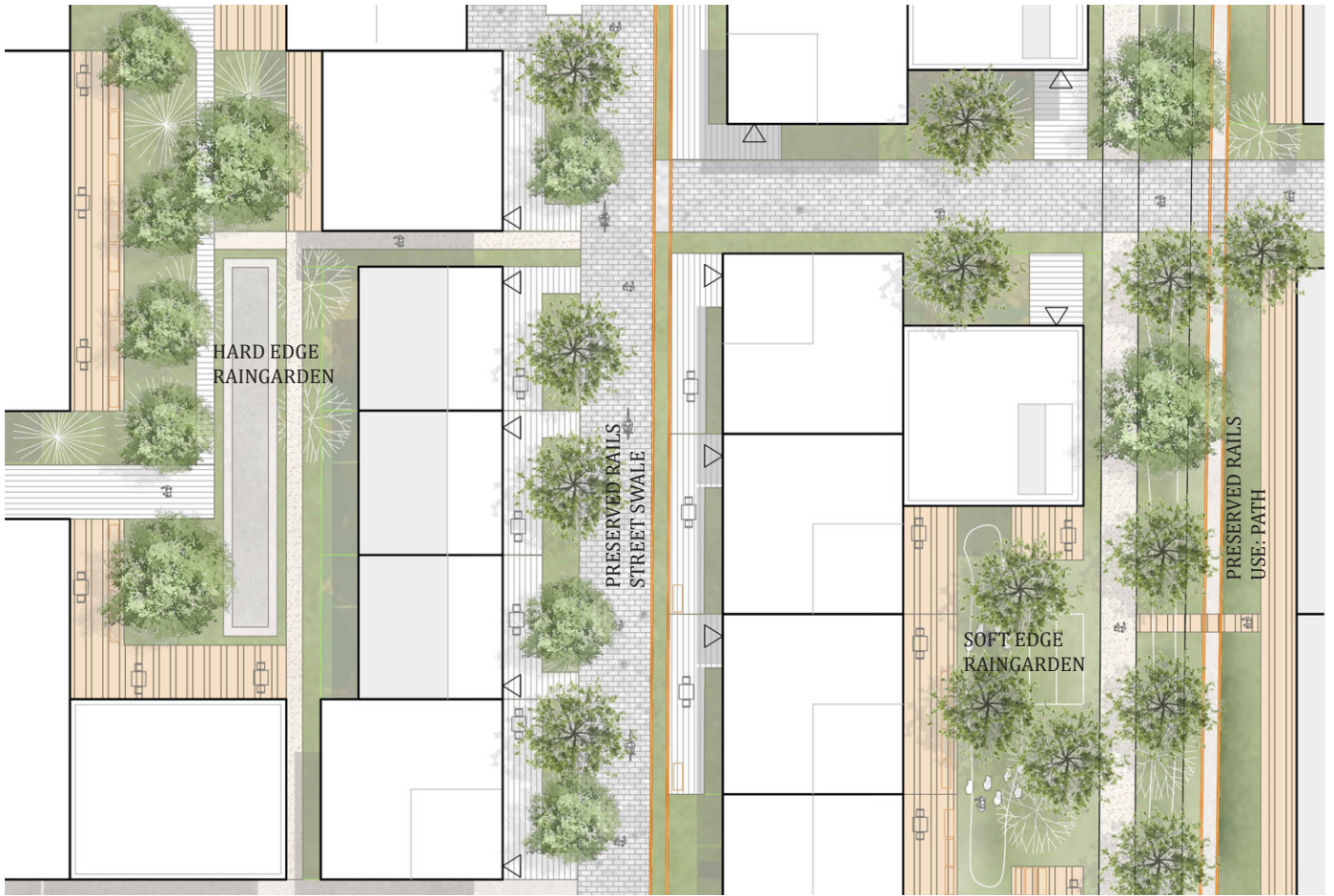


DETAIL PLAN 9  
CROSSING OF THE SOUTHERN GREEN CONNECTION AND THE GREEN SPINE  
1:500

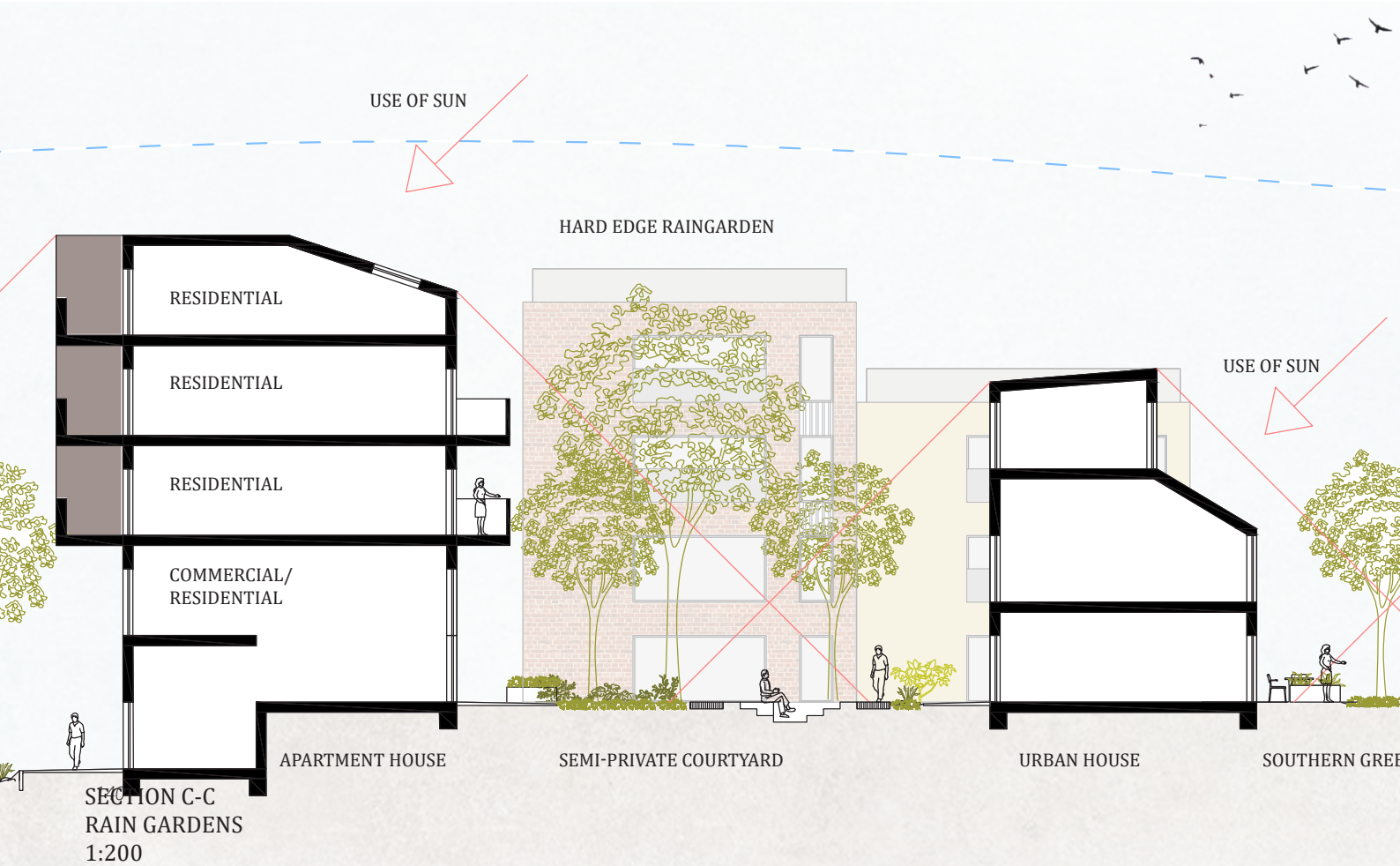
build community bond. Since the site is slightly tilted towards the train station, the system of rain gardens was implemented into the courtyards, forming community bonds, which could be also seen as a link to the era of the train station development. Following the idea of city meets green, edges of the inner-courtyards rain gardens located closer to the train station have more solid character while the ones located in the southern part have softer edges. The typology is supposed to create a link towards the train station in terms of materiality as well as roofscape. Since the development is aimed to become a modern ecological district, the volumes of buildings shall, therefore, carry both attributes.

Architects are challenged to find a modern way of mixture between minimalism, specific for functionalism era, as well as the use of modern pocket coffee places for residents. The E-W green link in this part of development does not have a visual green form, it is established by the green way of thinking. technologies to gain solar energy and recycle water. The N-S connection between the train station and the cemetery are broken in order to form small pocket coffee places for residents. The E-W green link in this part of development does not have a visual green form, it is established by the green way of thinking. The crossing of a green spine with a green E-W connection has a form of an outdoor gym and a playground, which could be floodable.





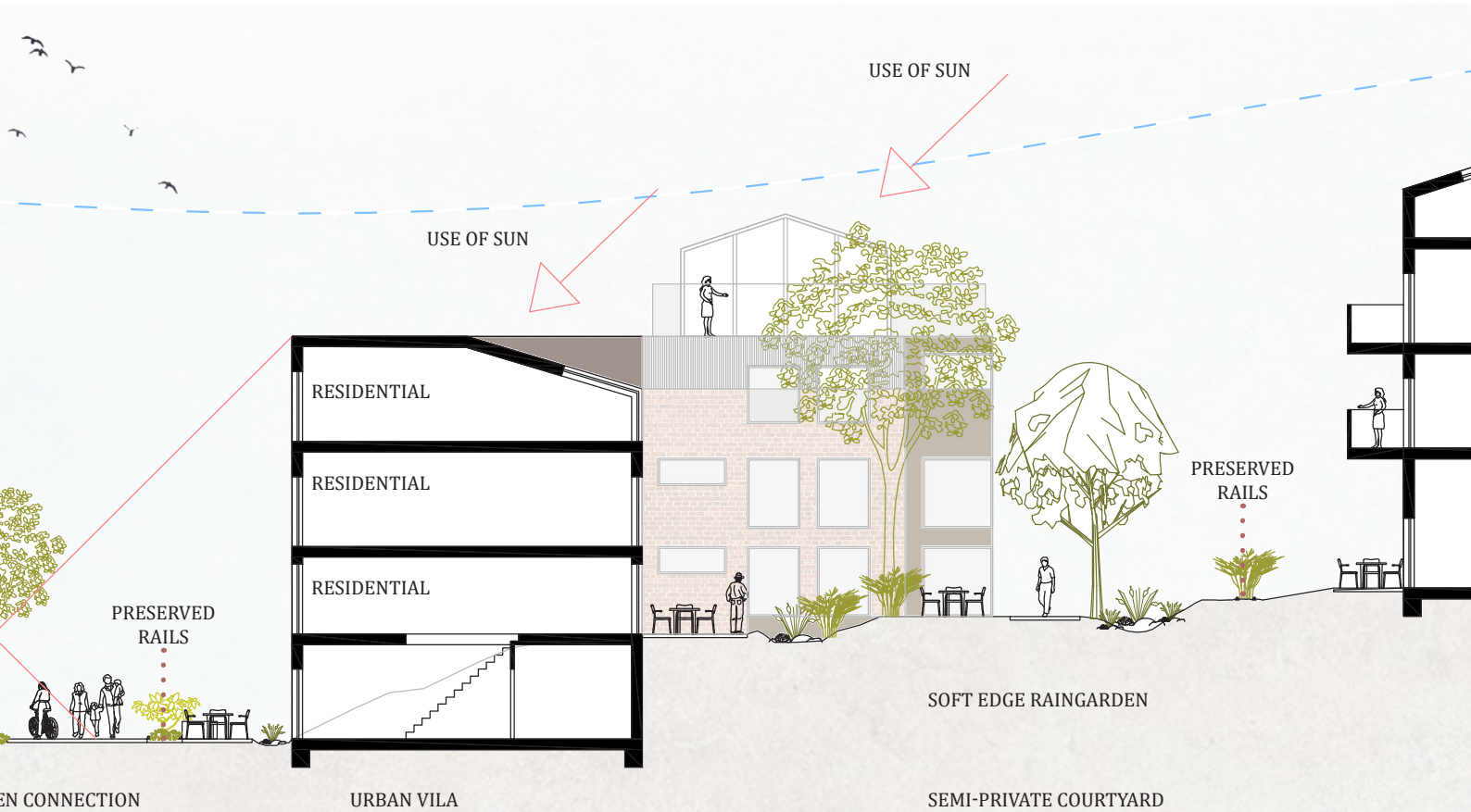
DETAIL PLAN 8  
RAIN GARDENS  
1:400



SECTION C-C  
RAIN GARDENS  
1:200



MODEL  
RAIN GARDENS, ECO CITY



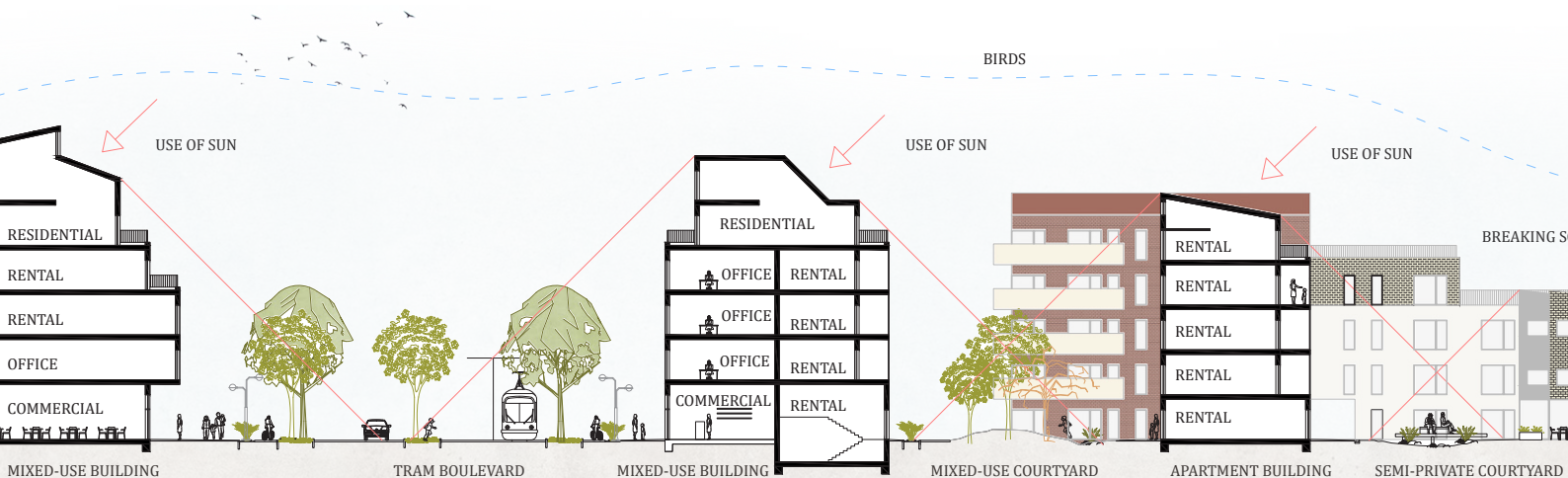
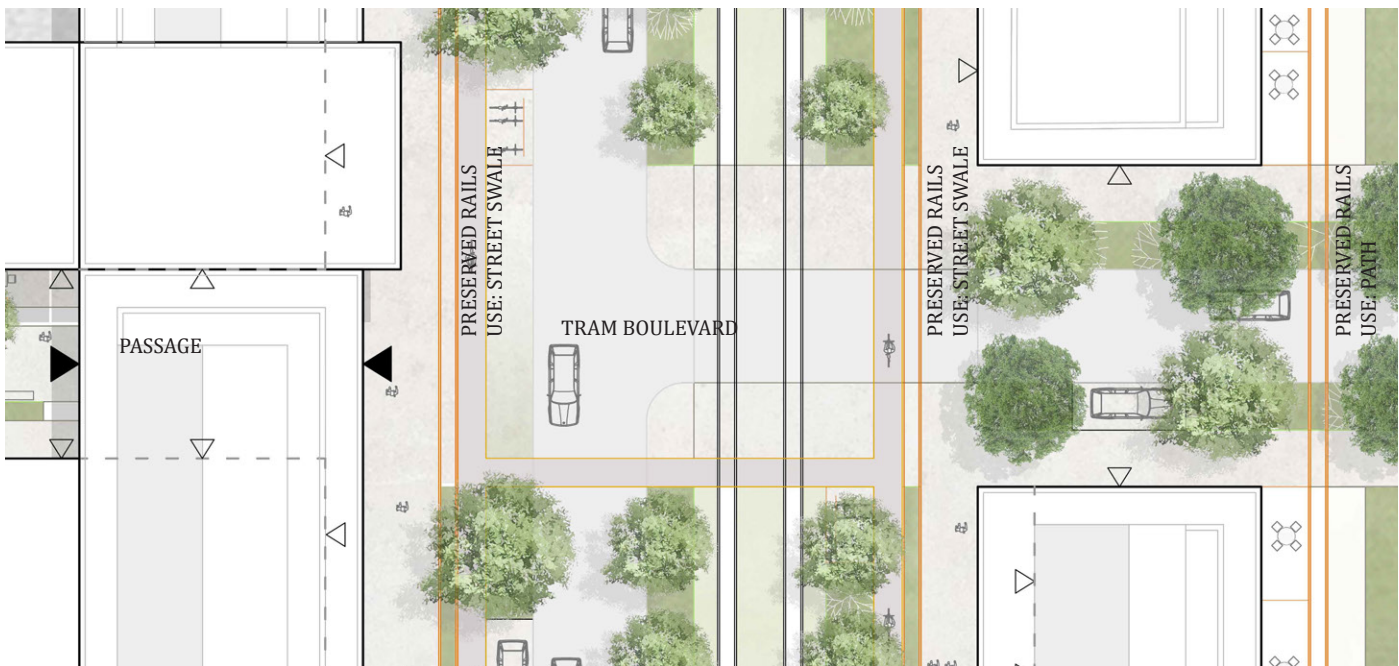
GREEN CONNECTION

URBAN VILA

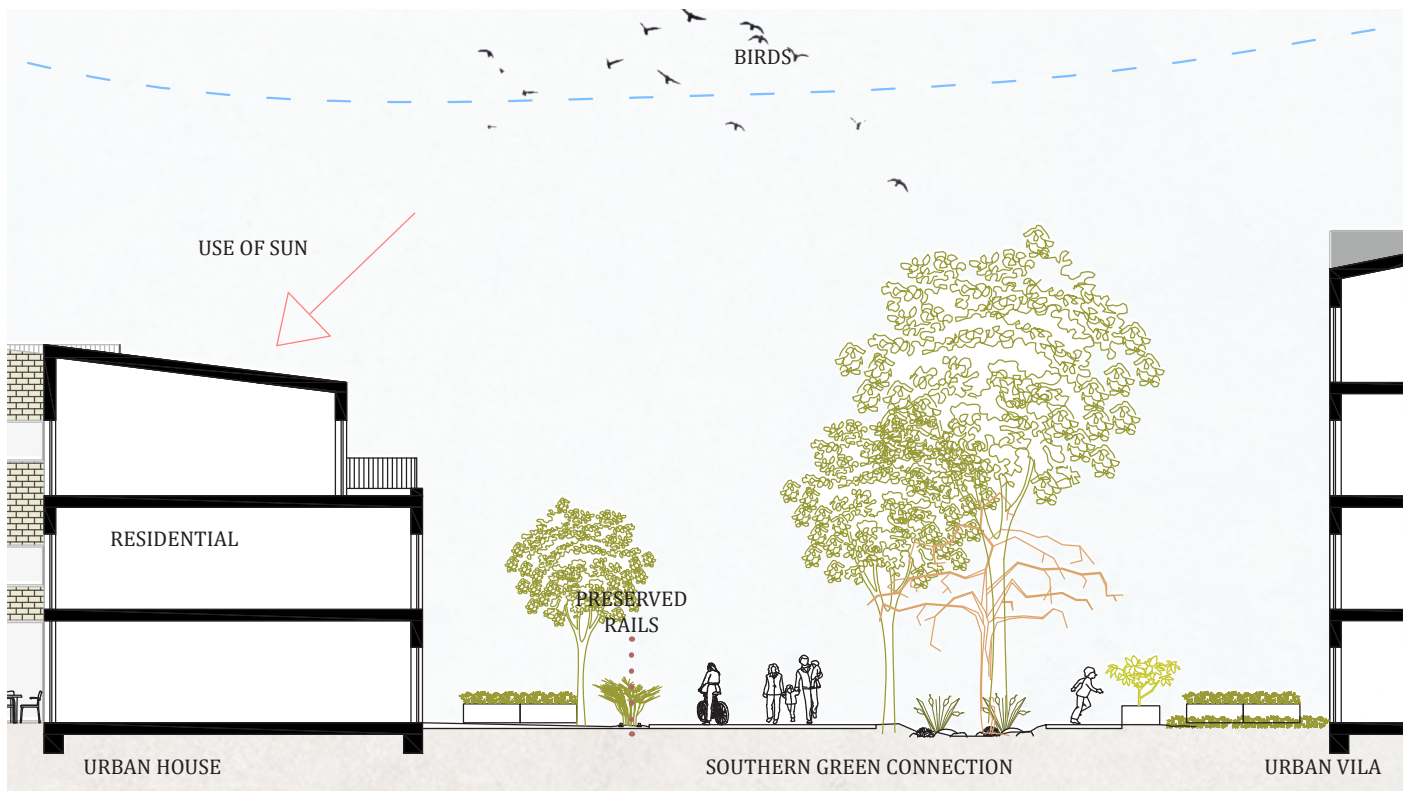
SEMI-PRIVATE COURTYARD



STREET SECTION F-F  
TRAM BOULEVARD  
1:200



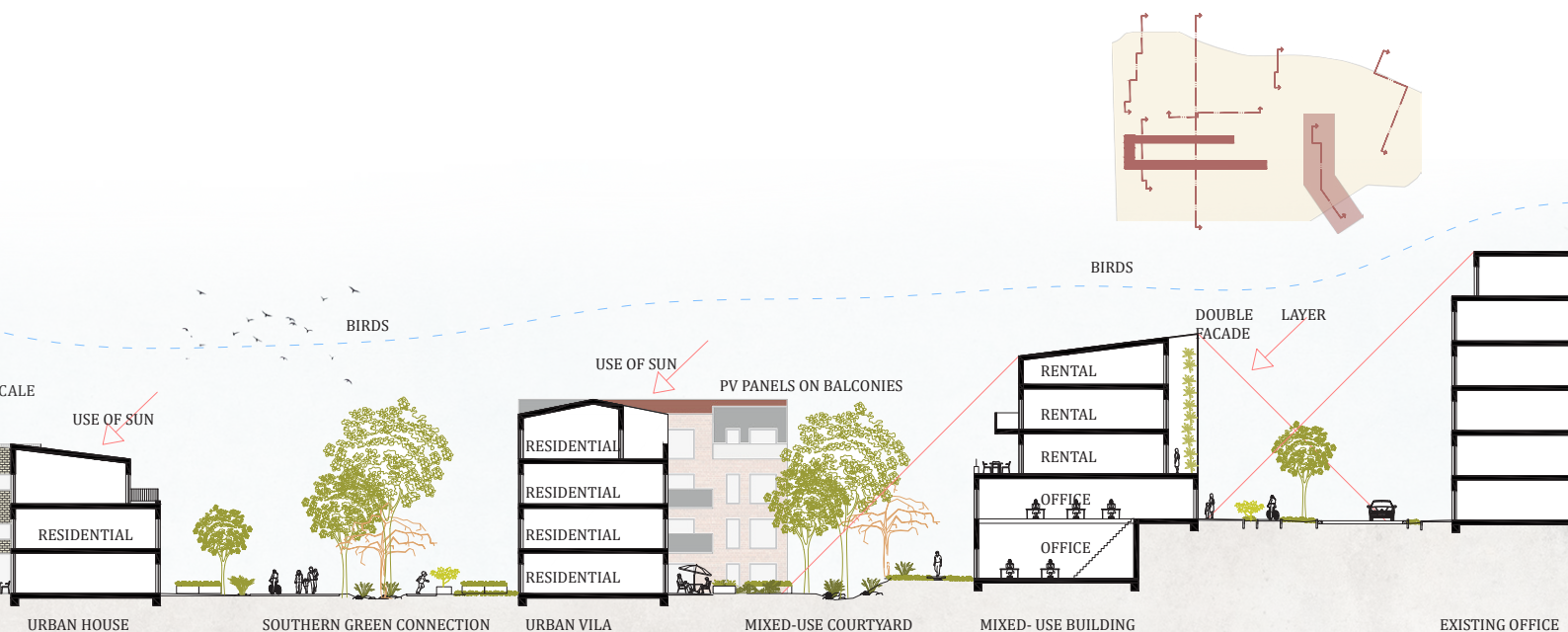
SECTION  
TRAM CONNECTION, COURTYARD TYPOLOGIES, GREEN CONNECTION TO CITY PARKS  
1:500



SECTION F-F  
GREEN CONNECTION TO CITY PARKS  
1:200

The second part is surrounded by office developments on both sides. This part is supposed to become a mix-used development establishing a new modern way of working and housing in Prague. Courtyards represent transition zone between office spaces and residential housing, shared by both, the residents and the office workers. These zones are designed to be used during the whole day, in the morning by office workers and in the afternoon by residents. The scale of the development is broken due to the establishment of a green connection linking the site with the greenery on the East and the city center. The E-W green link in this part of a neighborhood has a form of a bioswale with

small pocket rain gardens supposed to create a pleasant environment for people to rest during lunch time, to bring the street life also to this part of the neighborhood but in a different way, more ecological and green. This green link is represented by the preserved railway lines in both parts, leading residents which could meet greenery and the city on the edges. In this phase, the urban form creating a community bond is influenced by the vision of ecological living and working. The courtyards differ in terms of use and structure from the previous phase. While in the previous phase, culture was the binding attribute, in this phase, the ecological way of living is bringing residents together.





# CHECK LIST OF SUSTAINABLE PRINCIPLES- ECO CITY

## SOCIAL



### ELIMINATION OF SOCIAL SEGREGATION

- community bond based on ecological way of thinking
- different typologies, mix of uses



### TRANSITORY URBANITIES

- rental system, proximity to the train station (cultural hub) and office spaces



### LOW-INCOME FAMILIES

- introduced rental system



### THE ELERLY

- small pocket coffee places, possibility to create community bond with other residents



### SUBURBANISATION

- urban house, urban vila typology, ecological way of living in the city



### PUBLIC SPACES AND CONNECTIONS

- connection to the city parks
- connection to the train station



### KIDS AND TEENAGERS

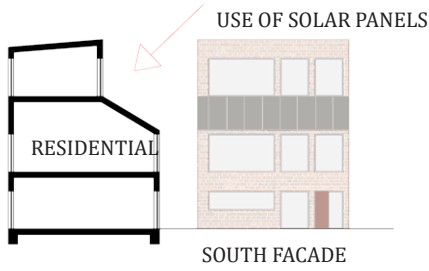
- playground



### CULTURAL HERITAGE

- link to functionalizm, use of old rail lines
- use of new way of thinking- culture of people in Prague

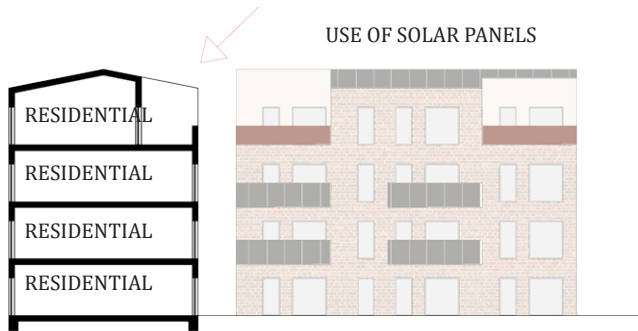




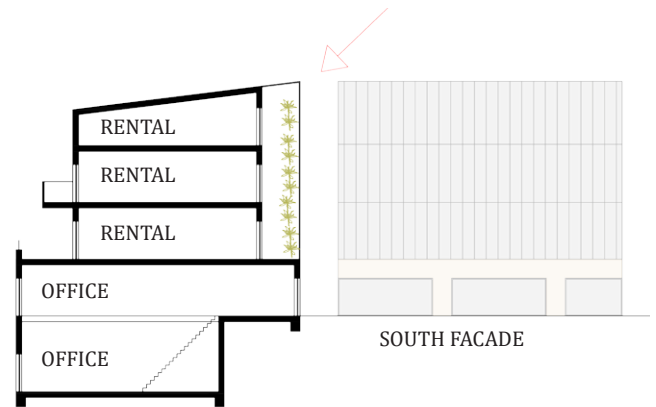
URBAN HOUSE



URBAN VILA



APARTMENT HOUSE



RENTAL HOUSING

## SOCIO-ECONOMIC



### JOB OPPORTUNITIES

- ecological way of working
- social bonds with residents



### TOURISTS

- new ECO exhibition area close to the cultural hub (train station)

## ECOLOGICAL



### TRANSPORTATION

- proximity to the tram stop
- lower speed- shared space for pedestrians, bicyclists and cars
- parking house (E)- rooftop activities



### MICROCLIMATE

- dimensions in between buildings influenced by the height of the volumes
- height- do not block trajectory of birds
- system of rain gardens



### BUILDING LEVEL

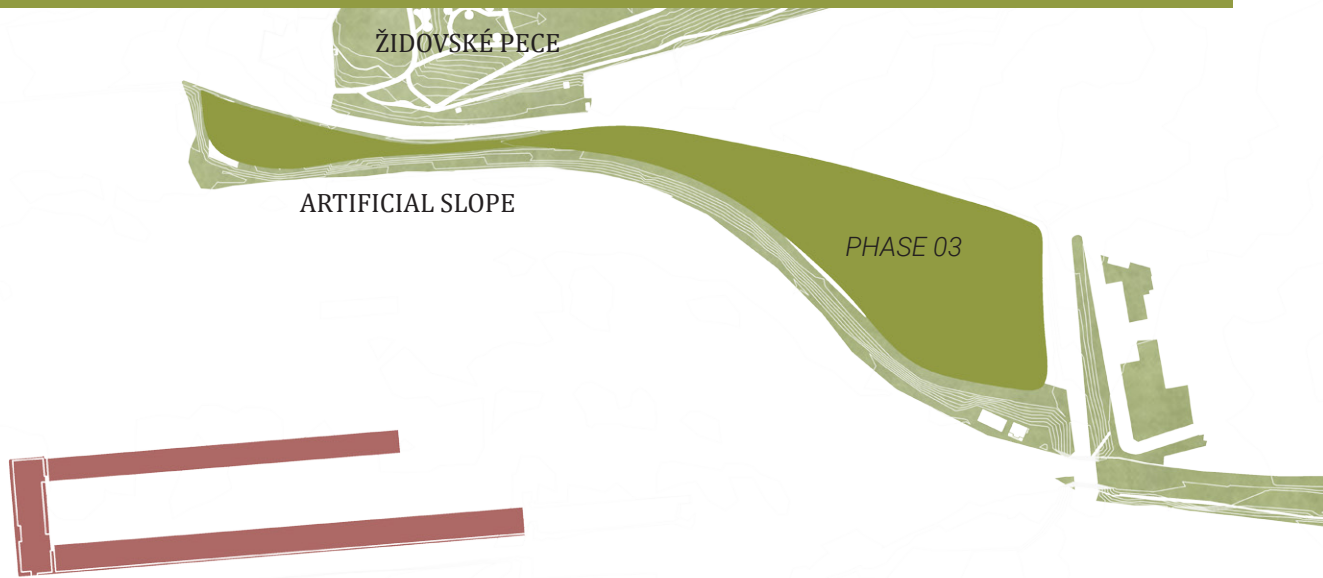
- use of sun, PV panels, tilted roofs (water can run down to rain gardens)
- mainly local materials (plaster, brick cladding,..)



### LEISURE TIME AND GREEN SPACES

- semi-public courtyards
- green connection in the Eastern part
- outdoor playground- crossing with the green spine

# PHASE 03- *LIVING WITH GREENERY*



BOUNDARIES

HERITAGE

VISION

ŽIDOVSKÉ PEČE PARK  
OVERGROWN SLOPE

GREENERY AND THE UNIQUE POWER OF  
THE NATURE TO SPREAD OUT

## LIVING WITH GREENERY



VISION FOR THE THIRD PHASE

The last phase of the development was influenced by the boundaries represented by the landscape. The northern boundary is represented by the park Židovské pece and the southern one is represented by the slope formed during the construction of the train station, which has become a lush green edge connecting the Malešice park with the first phase of development and Parukářka park.

The third phase is aimed to preserve the culture of nature present on site, turning the previously industrial site into a lush green spot, therefore, it was named Living with greenery.

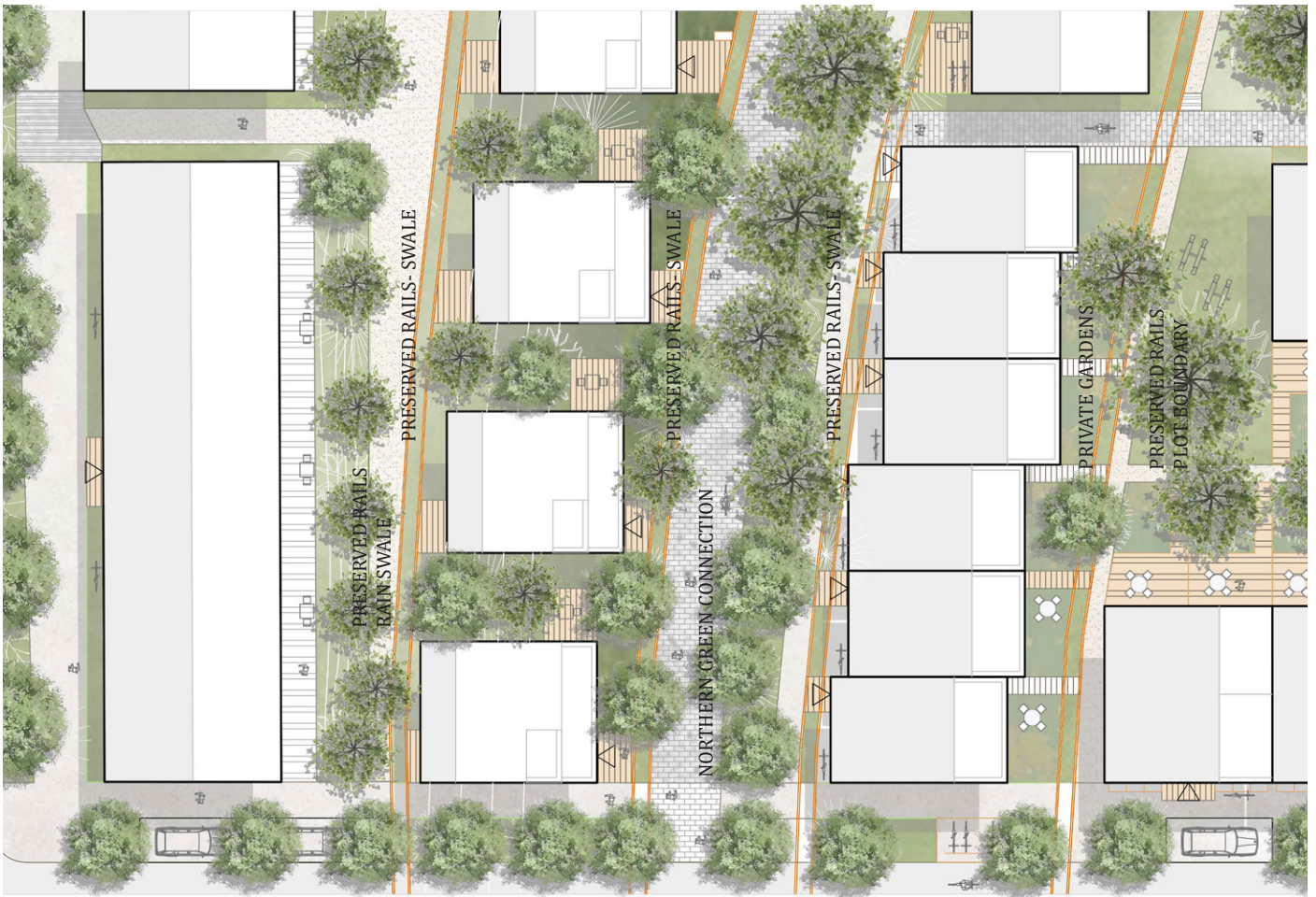
The ability of nature spreading life was one of the main components, which the proposal is aimed to give to residents—the feeling of living with the natural elements in the city. The proposal is based on inviting greenery to residents lives. Courtyard structures in this phase of development were shaped by the existing railway lines as well as existing greenery. The proposed typology is aimed to create a social bond between the residents through common spaces in a form of greenhouses, which are part of the typology, or small common rooftop gardens representing a link to the hill and breaking the scale in order to invite greenery in.

This phase of development is attracting nature-oriented people and residents desiring to have some qualities of suburban life, but do not want to give up on city amenities.

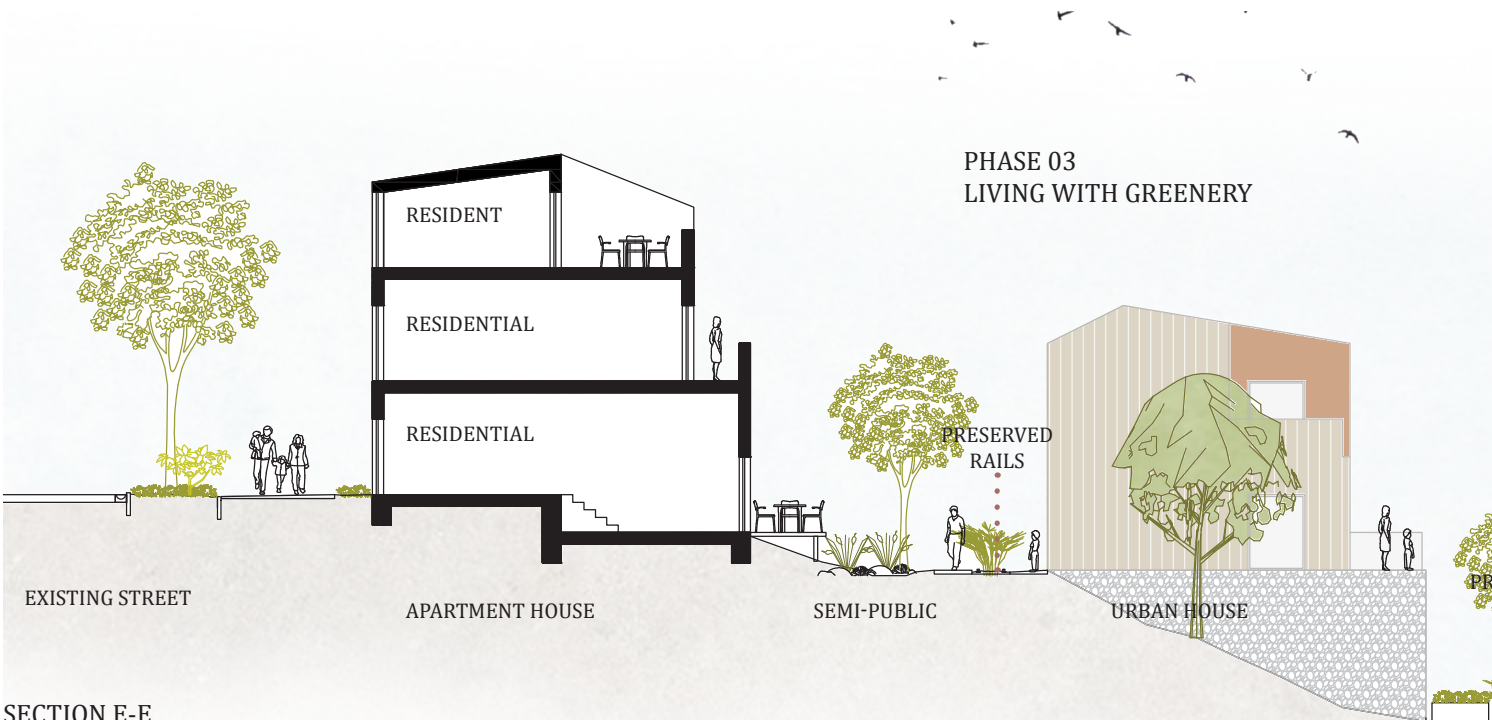
The boundary represented by the six-meter elevation overgrown by trees gave a unique chance to place single volumes creating the dynamic dialogue between the existing cultural Bohemian city and the power of nature. To achieve the accelerating dynamic dialogue also on a public space, the proposed school is aimed to be cantilevered and have a communication with the greenery surrounding it. The location of a school is close to the tram stop and gives school kids living in small apartments in the surrounding neighbourhoods possibility to be surrounded by the greenery with its calming effect. What brings people together in the second phase is the greenery and its different forms.

The presence of elevated development influenced the function of the green spine connecting the Bohemian city and the Living in greenery. The green link has a function of bioswale leading from the urban entrance park in the west through a more residential character to the more natural one in a form of big bioswale creating an entrance to the site. The rainwater is also retained in the former asphalt basins, found in the northern part of the development, which are designed to become rain gardens, representing common spaces aimed to link people. Public pockets parks in this part have a form of triangles and are located at the crossing of rails, which are part of the streetscapes.

The proposed typology on the north is a link between the greenery and the city structure and creates a dialogue with the residents and park visitors. The typology of terrace houses was, in this case, reversed to create a gradual growth of volumes.



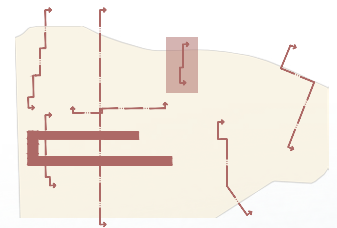
DETAIL PLAN (3)  
 HILLSIDE LIVING, CONNECTION TO THE BOHEMIAN CITY  
 1:500



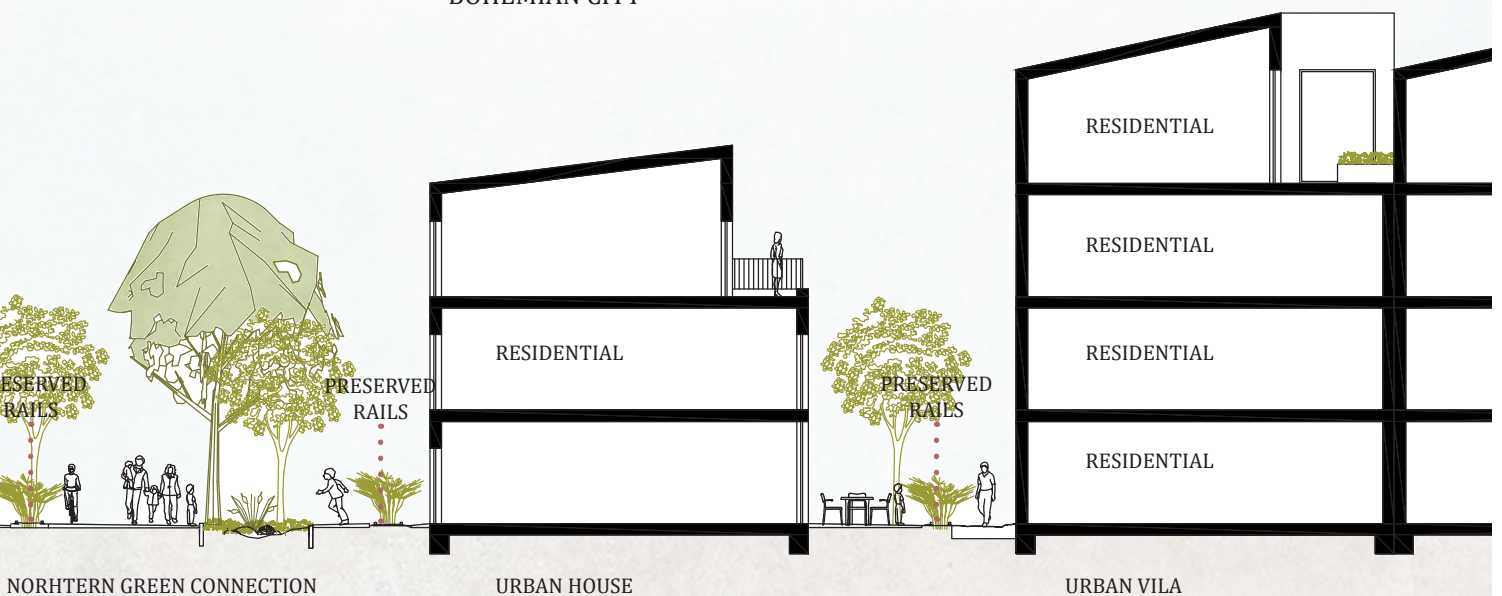
SECTION E-E  
 HILLSIDE LIVING, CONNECTION TO THE BOHEMIAN CITY  
 1:500  
 148



MODEL  
HILLSIDE LIVING, CONNECTION TO THE BOHEMIAN CITY



PHASE 01  
BOHEMIAN CITY



NORHTERN GREEN CONNECTION

URBAN HOUSE

URBAN VILA



RAINGARDEN

RESIDENTIAL STREET

PASSAGE

PUBLIC COURTYARD

PUBLIC COURTYARD

TRAM BOULEVARD

ZOOM-IN PLAN LIVING WITH GREENERY

1:1000



RAINGARDEN  
FORMER CONCRETE BASIN

RAINGARDEN  
FORMER CONCRETE BASIN

PRESERVED RAILS  
PATH

RAINGARDEN

RAINGARDEN

NORTHERN GREEN CONNECTION

PLAYGROUND

SCHOOL

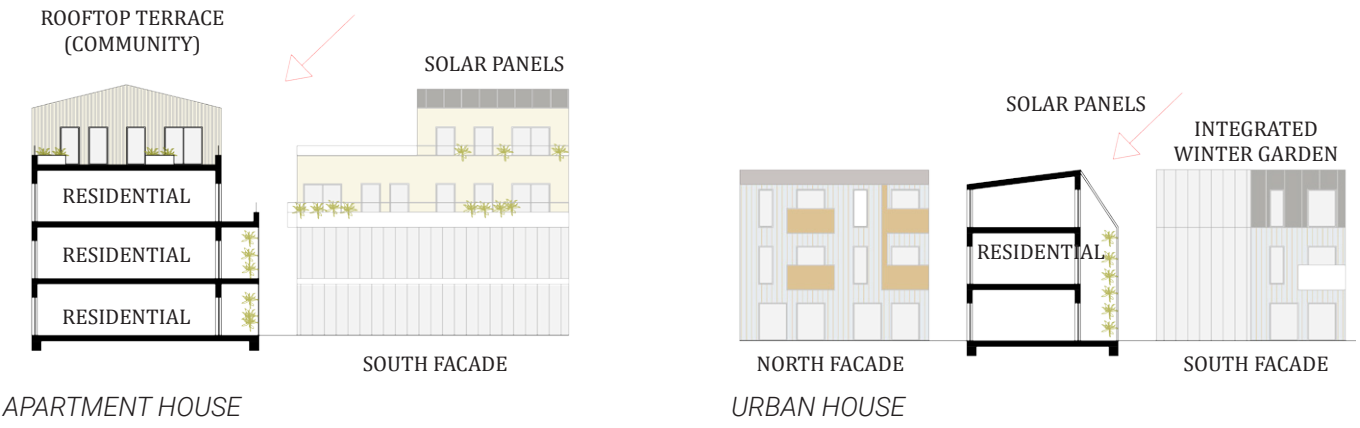
5m

50m

TRAM STOP

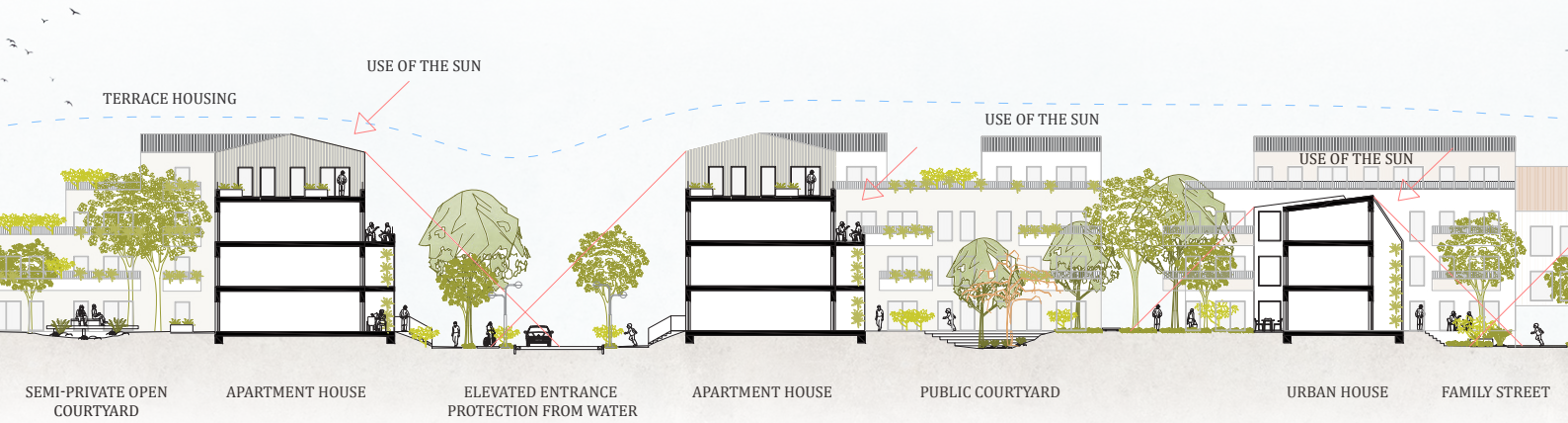


MODEL



APARTMENT HOUSE

URBAN HOUSE

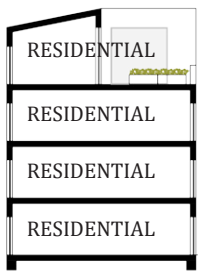


SECTION G-G  
 LIVING WITH GREENERY, URBAN CHARACTER OF THE STREETScape AND THE TYPOLOGY DROWS TOWARDS THE CITY  
 1:500  
 152



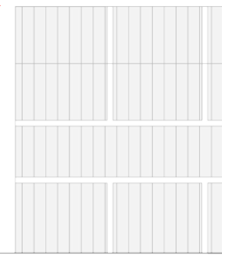
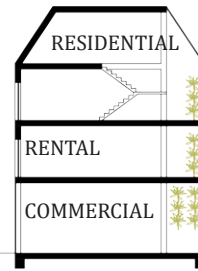


PUBLICLY ACCESSED COURTYARD



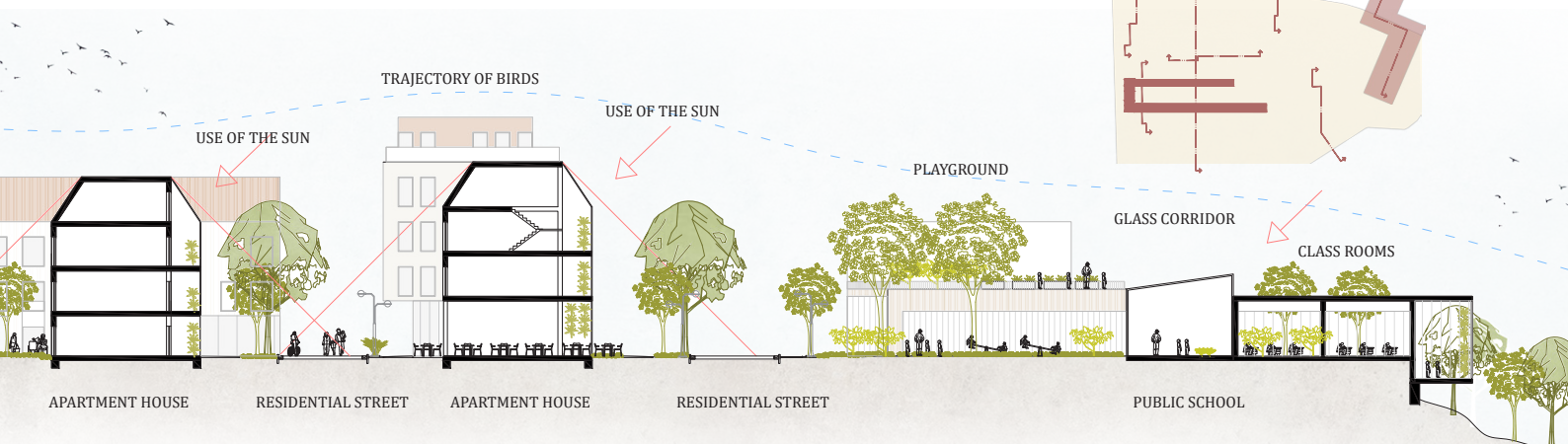
SOUTH FACADE

URBAN VILA



SOUTH FACADE

NORTH FACADE  
RENTAL HOUSING



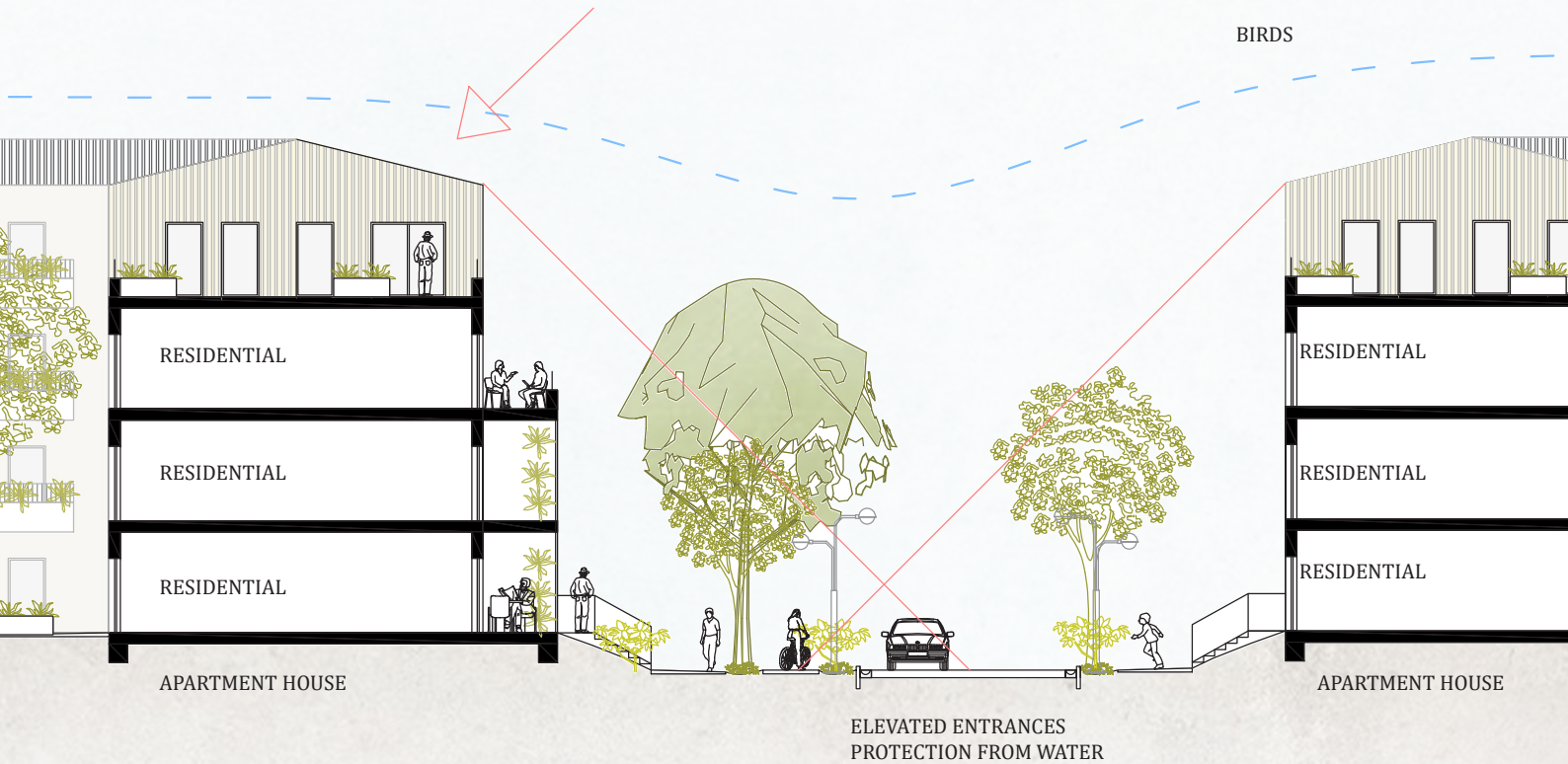
APARTMENT HOUSE

RESIDENTIAL STREET

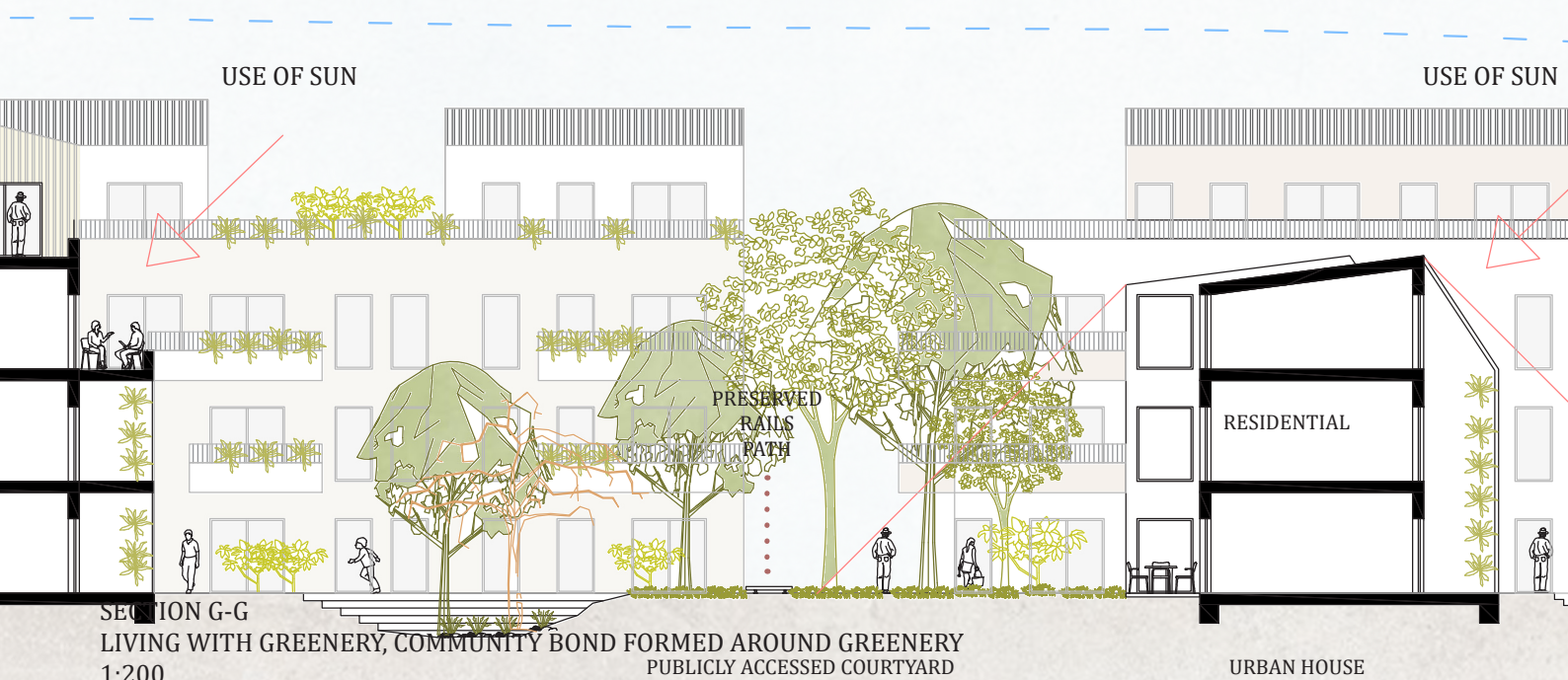
APARTMENT HOUSE

RESIDENTIAL STREET

PUBLIC SCHOOL



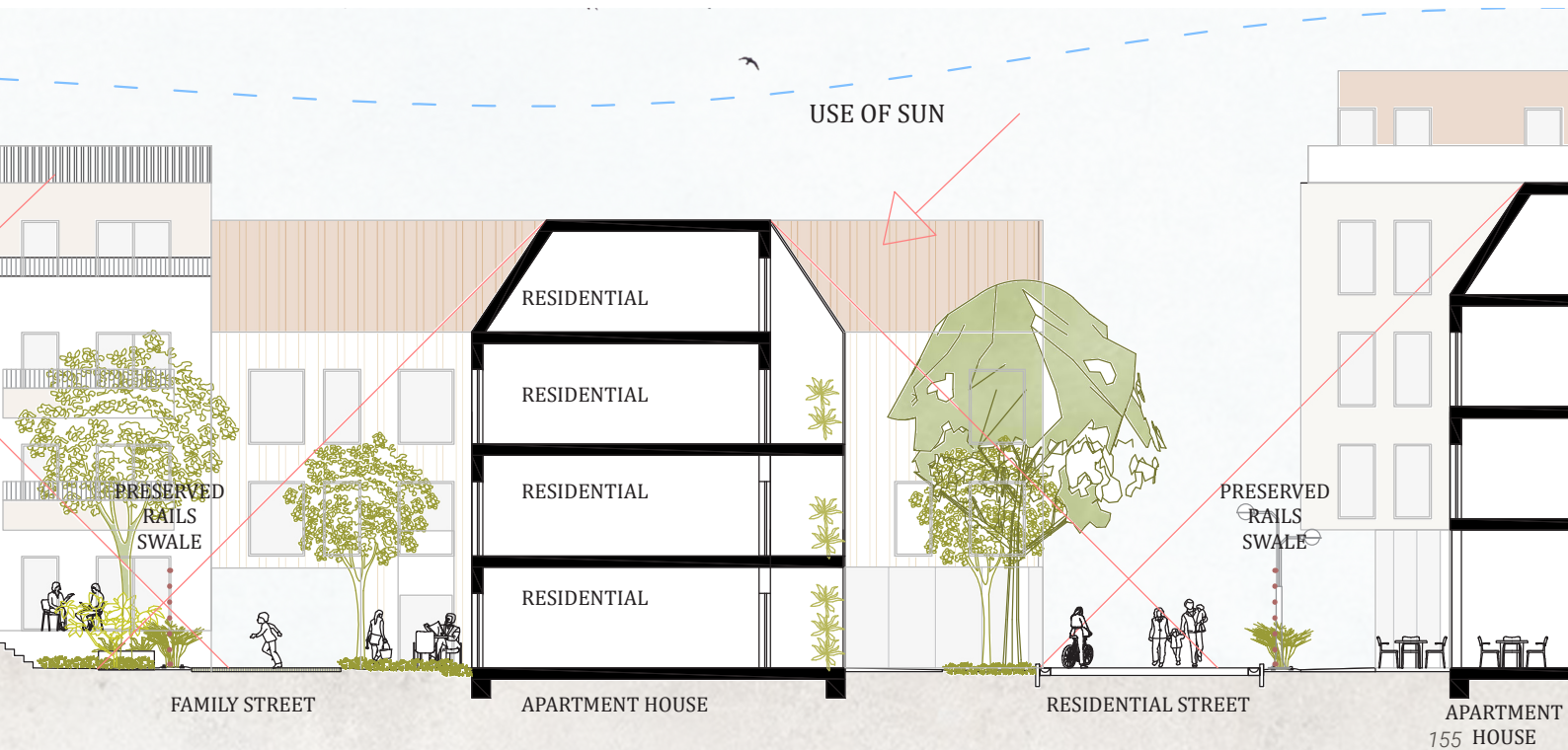
SECTION G-G  
LIVING WITH GREENERY, ELEVATED ENTRANCES- RESIDENTIAL USE, PROTECTION FROM THE RAIN WATER  
1:200



SECTION G-G  
LIVING WITH GREENERY, COMMUNITY BOND FORMED AROUND GREENERY  
1:200



DETAIL PLAN (10)  
TRAM STOP  
1:500



# CHECK LIST OF SUSTAINABLE PRINCIPLES- *LIVING WITH GREENERY*

## SOCIAL



### ELIMINATION OF SOCIAL SEGREGATION

- community bond created around greenery
- different typologies, public school



### TRANSITORY URBANITIES

- rental system, beginning- apartment, possibility to stay within the site- people do not have to break social bonds



### LOW-INCOME FAMILIES

- introduced rental system



### THE ELERLY

- surrounded by the greenery, possibility to have small gardens (for people moving from the suburbs to live with their relatives in the city)



### SUBURBANISATION

- urban house, urban vila typology, rooftop terraces, greenhouses as a part of the typology



### PUBLIC SPACES AND CONNECTIONS

- connection to the tram line
- connection to the park Židovské pece



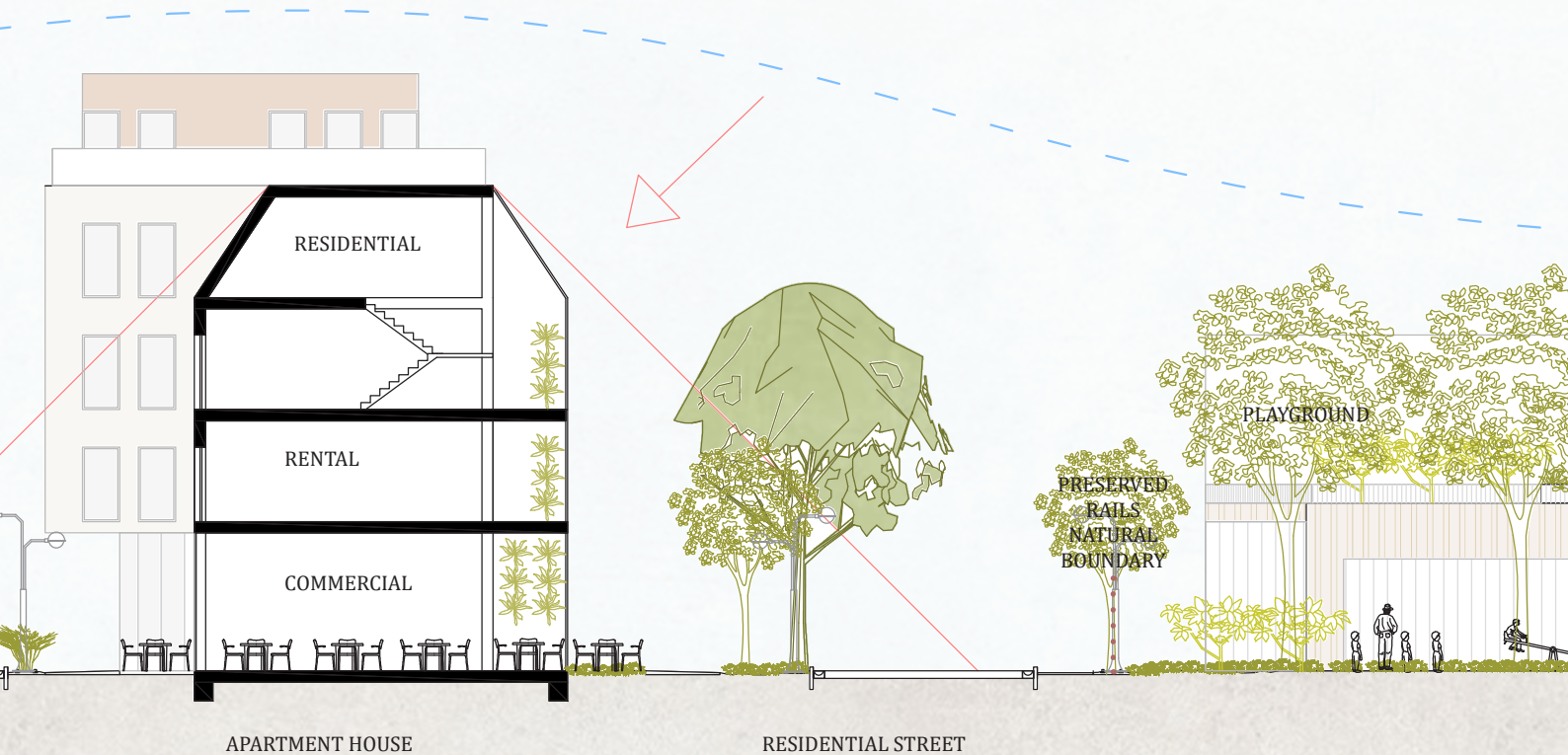
### KIDS AND TEENAGERS

- school and playground



### CULTURAL HERITAGE

- preservation of the dynamic power of the nature surrounding us and spreading into people's lives, use of old rails



APARTMENT HOUSE

RESIDENTIAL STREET

SECTION G-G  
PUBLIC SCHOOL

1:200

## SOCIO-ECONOMIC



### JOB OPPORTUNITIES

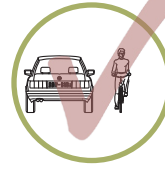
- proximity to the tram line
- commercial spaces along the main connections



### TOURISTS

- more active type of tourism, mainly as a connection from the tram stop to the park

## ECOLOGICAL



### TRANSPORTATION

- proximity to the tram stop
- lower speed- shared space for pedestrians, bicyclists and cars
- parking house- rooftop garden



### MICROCLIMATE

- dimensions in between buildings influenced by the height of the volumes
- height- do not block trajectory of birds
- use of greenery



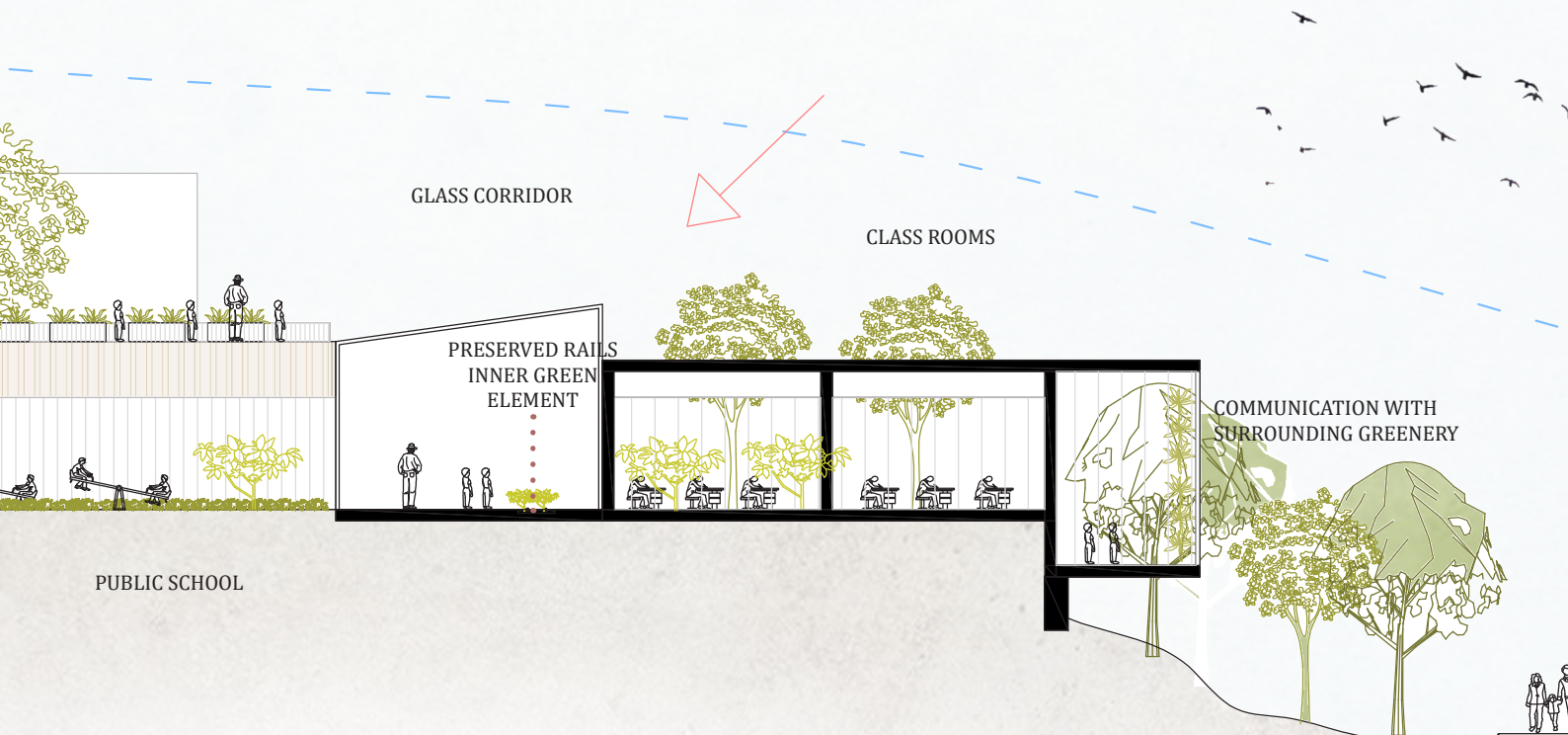
### BUILDING LEVEL

- use of natural materials
- use of solar panels and integrated green-houses



### LEISURE TIME AND GREEN SPACES

- pocket parks
- playground part of the school
- surrounded by greenery and its forms



# SUMMARY OF THE DESIGN PROPOSAL

The thesis project was carried out to raise awareness of sustainable brownfield regeneration. The thesis reflects on the current approach of regeneration of brownfield sites in the city center of Prague.

The topic of the master thesis is framed by the understanding of the socio-economic changes after the fall of the communism and its influence on the urban pattern of the city. The thesis project is based on research and understanding the current situation of urban planning in Prague.

*„By seeking and blundering we learn.“*

Johann Wolfgang von Goethe

Creating cities is a process which requires designers to incorporate various inputs into an urban form. Collecting information and learning is, therefore, an inevitable part of all the successful urban development and regenerations. All the previous projects and developments represent a particular learning outcome for future generations, which can learn from previous mistakes and avoid them in the future.

Five of the existing brownfield sites located in the city center were evaluated according to sustainable principles, which were derived from the theoretical part and could be seen as tools to eliminate the impact of the former regime.

The overall proposal for all the brownfield sites is in a form of connected brownfield sites with different characters which are very sensitive to historical and site context. Former transportation sites are aimed to eliminate the impacts of the communism in a form of inclusive sustainable neighborhoods. Current developments in Prague do not link to the existing identity of sites and most of the developments are found utterly foreign to the structure of Prague. The cultural identity of the city creates a unique atmosphere of the city, which can strengthen a sense of national belonging and creates a strong memory of a space.

The research gave an important input, therefore defining and developing the cultural identity of Prague became the main topic of the master thesis project. The proposal is aimed to raise awareness of the importance of the creation of modern developments which are tight to the city. The design is based on finding the cultural values of the city and developing them for a more sustainable future.

3D AXONOMETRY



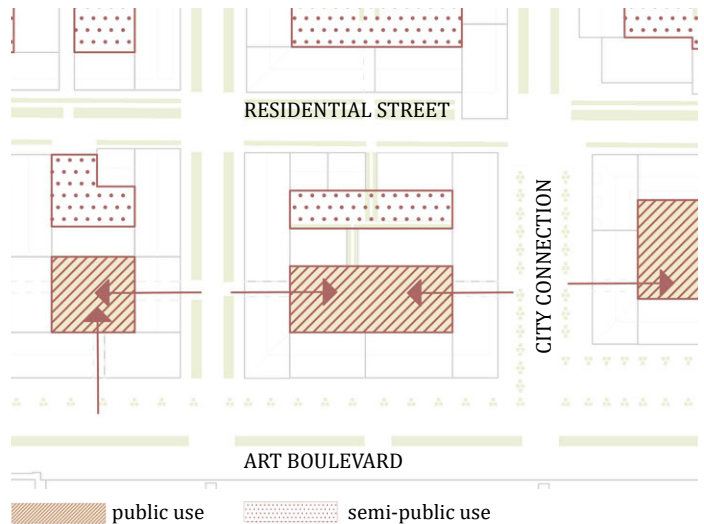
The former freight station located in Žižkov has preserved identity in the physical form of the train station. The train station with its unique location, surrounded by various green bodies and the northern neighborhood with its bohemian city vibe, created the overall vision of the site to become an open-minded brownfield.

The train station is aimed to become a cultural hub and facilitate various artist groups. From the urban point of view, the repurposed train station represents the driver of the whole development and will become a landmark preserving sense of the movement as well as its historic and sentimental value.

The overall masterplan respects and develops the identity of the site. The main connections of the development follow the preserved railway lines in order to preserve the sense of movement and pay tribute to the historical function of the site.

The detailed design was strongly influenced by the existence of the site development of the former freight station, which divides the site into parts framed by different boundaries. The boundaries, which represent on-site heritage, were sensitively elaborated and helped to develop a character of a phase they frame. The term culture in the urban environment could have a different meaning. The design works with the implementation of three different types of culture, based on the character of the phase while following the overall vision of the open-minded brownfield. Implemented general sustainable principles, derived from the research, have various forms according to the character of each of the phases.

The first phase of the development is named Bohemian city. The part is aimed to create a connection between the existing urban structure of Žižkov in the north and the repurposed train station. The first phase is bringing the existing culture of Žižkov on site in the urban form of cultural buildings and rich diversity of courtyards. In order to strengthen the bohemian experience some of the designed courtyards have a very blurred line between public and semi-public use. These courtyards are designed to become small bonding residential public pockets with public access, where residents could enjoy their beloved beer or reading a book while sipping a cup of coffee. The proposed solution supports the curiosity and joy of exploring the depth of the city. The publicly accessible courtyards are connected to the main public connections, while family-oriented courtyards are accessible from residential streets and could be connected to publicly accessible courtyards.



ZOOM-IN DIAGRAM OF COURTYARD TYPOLOGY

The second phase of the development is framed by the cemetery, the train station, and the existing office buildings. The phase is aimed to strengthen the raising awareness of a sustainable lifestyle. The urban form of a residential part of the second phase is built around the system of rain gardens, so the community bond among residents is created around the physical form of the ecological lifestyle in a form of stormwater management. The eastern part of the phase is supposed to accommodate offices as well as residents. The mixed-use development is built around mixed-use courtyards, which are used by the residents as well as offices to create a lively environment with a natural social mix. The second phase could, therefore, be seen as an exhibition area of the sustainable way of residing and working.

The cultural attributes of the third phase of the development are embodied in the form of the greenery and natural elements. The urban form of the development was designed to blend residential housing into the preserved natural elements. The proposed typology has integrated winter gardens and rooftop terraces allowing the dialogue between residents and natural elements.

Forms of the proposed connections were influenced by the integration of stormwater management as well as the desired character of connections.

The *NORTHERN GREEN CONNECTION* following the existing railway lines is a green link of various experiences. It starts as an urban park on the west, transforms into a lush residential street.

The *SOUTHERN GREEN CONNECTION* represents the mental green connection. The urban form is a street sale carrying pockets of rain gardens.

The character of the *CITY CONNECTION*, linking the train station and the existing urban form in the north, grows on commercial importance in the southern part.

The main *TWO BOULEVARDS, THE GREEN ONE AND THE ART ONE*, are merged into the proposed tram boulevard. Together with the train station create the main public artery connecting the city center with the whole development.

The *URBAN GREEN SPINE* is aimed to cross all the important horizontal connections, which are following the preserved railway lines. The crossings of the urban green spine have a different form of public spaces. The urban green spine is linking the northern part of the city with the current development. The vision for this connection in the later phases (for example Phase 04) is to link the development with the existing brownfield site located in the southern neighborhood. The urban green spine is supposed to become a connection to the southern part of the city.

The site specificness and its boundaries helped to shape three different characters of an open-minded brownfield. The master thesis project is an example of a site-sensitive approach, defining formerly ignored potentials while developing cultural identity.

The learning outcome of this master thesis could be summarized as:

*LEARN FROM THE PAST,  
LINK TO THE CITY AND  
DESIGN FOR THE FUTURE*







ŽIDOVSKÉ PEČE

N GREEN CONNECTION

RESIDENTIAL STREET

CITY CONNECTION

ART BOULEVARD

GREEN URBAN SPINE

TRAM BOULEVARD

MALEŠICE PARK

GREEN BOULEVARD

S GREEN CONNECTION

CEMETERY

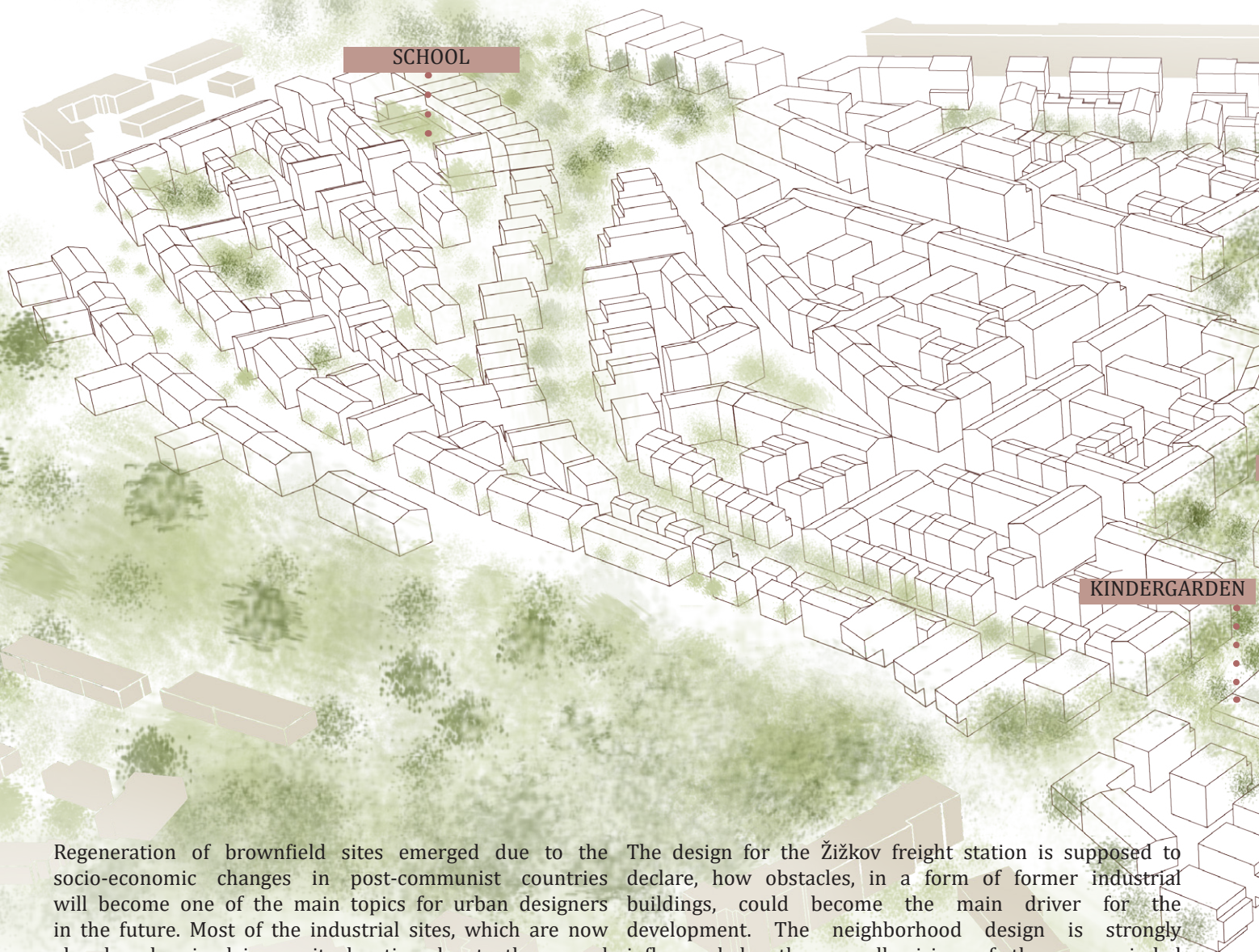
FUTURE CONNECTION

SITE FOR FUTURE REGENERATION



# CONCLUSION

## CHAPTER 5



Regeneration of brownfield sites emerged due to the socio-economic changes in post-communist countries will become one of the main topics for urban designers in the future. Most of the industrial sites, which are now abandoned, gained inner city location due to the spread of cities. Sustainable brownfield regeneration can have a positive effect on the site as well as the surrounding.

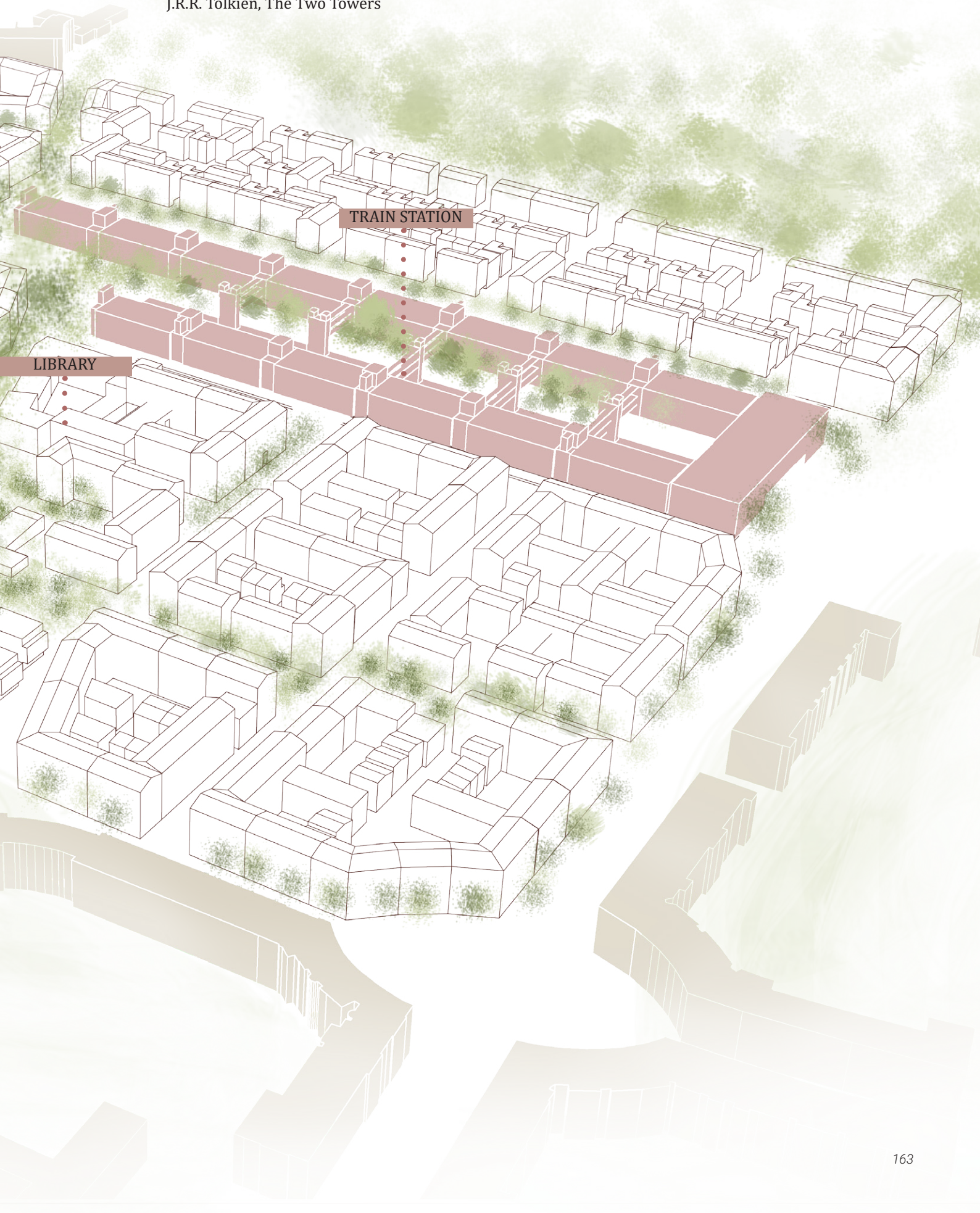
Regeneration of the brownfield sites in the city center of Prague, which used to be transportation nodes in the past, is lacking an overall vision for these sites, which could become important nodes working together in the organism of the city. The master thesis project is aimed to become an example of a more holistic approach to the topic of brownfield regeneration in Prague.

Proposed visions for these sites are research-based, taking into consideration their previous use, the character of the site, natural environment, and historical facts. Each of the sites has a different function, therefore all of them are completing each other and become missing pieces of the puzzle in the urban structure of Prague.

The design for the Žižkov freight station is supposed to declare, how obstacles, in a form of former industrial buildings, could become the main driver for the development. The neighborhood design is strongly influenced by the overall vision of the open-minded neighborhood. Since the site is visually divided into three parts, each of the parts have different boundaries, which generate the on-site heritage, which was incorporated into the design. The first phase of the development establishes the cultural connection to the northern part of the city, while the second phase supports the growing interest in ecological way of living. The third phase is an example of the dialogue between nature and urban development.

Charles Spurgeon said, that every generation needs regeneration. This quote could be found relevant also in term of the brownfield regeneration. Every generation has a different lifestyle and needs. Former industrial sites, which are no longer under the service, need new visions of future use, which is feasible also for future generations. Urban Designers shall, therefore, foresee the future and design with the qualities of our ancestors for the future.

*"A fair vision had welcomed him in this land of disease."*  
J.R.R. Tolkien, *The Two Towers*



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