

# Žatec :

## Reclaiming the riverplain

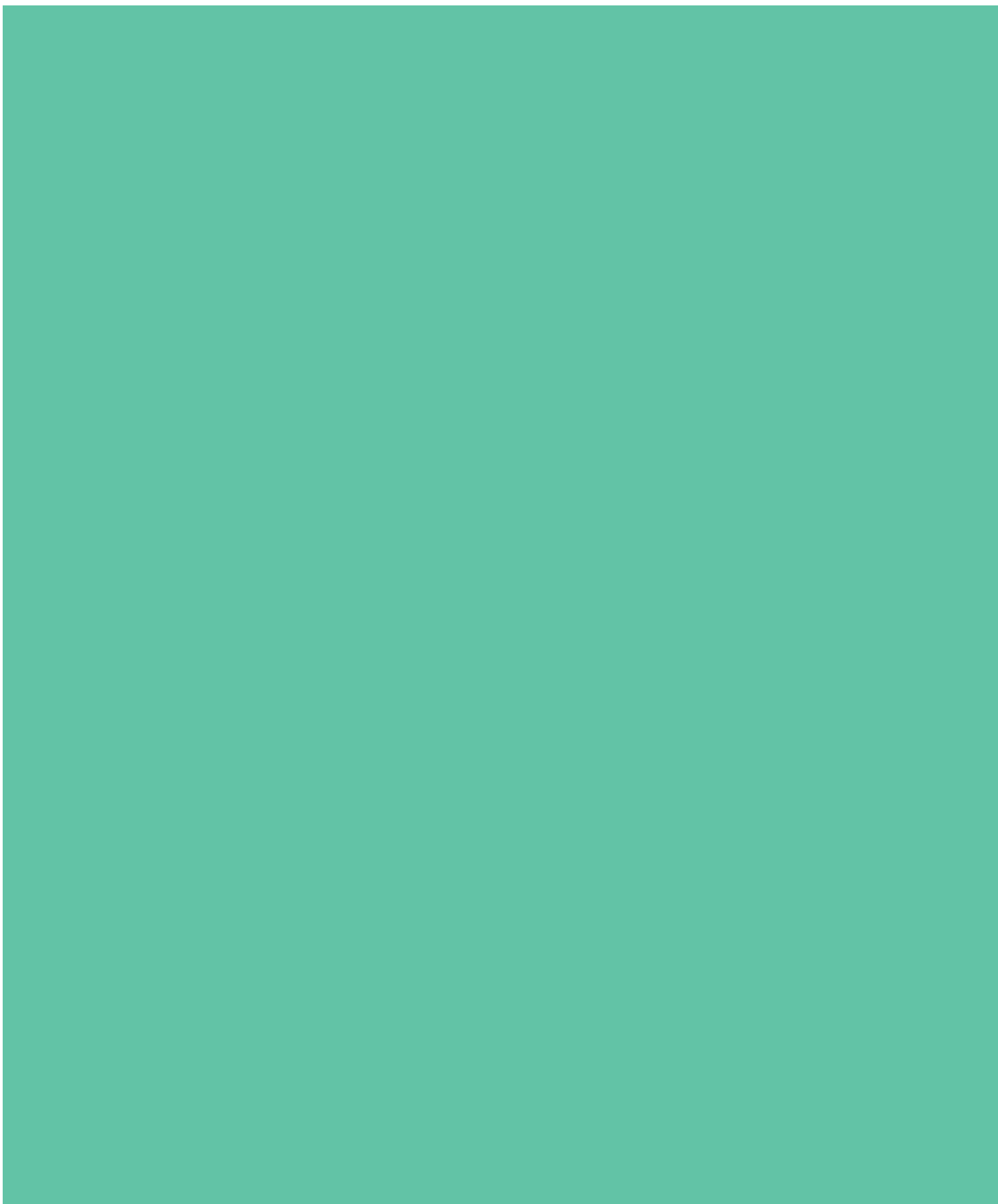
DIPLOMA PROJECT / ANALYSIS PORTFOLIO

ESRA AKGÜN KULIN

FA CVUT, LS 2022/2023







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# INTRODUCTION



# CONTEXT

The city of Zatec is believed to be founded in the Middle Ages according to archeological excavations.

Known as Saatz in the Austro-Hungarian Empire, Zatec and has been the most important producer and exporter of hops in the world for centuries, until the 20th century.

Located on a hill top, the town itself contains the warehouses and treatment facilities to prepare the hops for transportation and exporting. The surrounding land, sourced by the Ohre river flowing through it has historically been used to grow the hops.

The town of Zatec is a candidate for UNESCO protection of its hops facilities as well the craft of production of hops itself.

## KEY INFORMATION

Region : USTI NAD LABEM

Administrative District : LOUNY

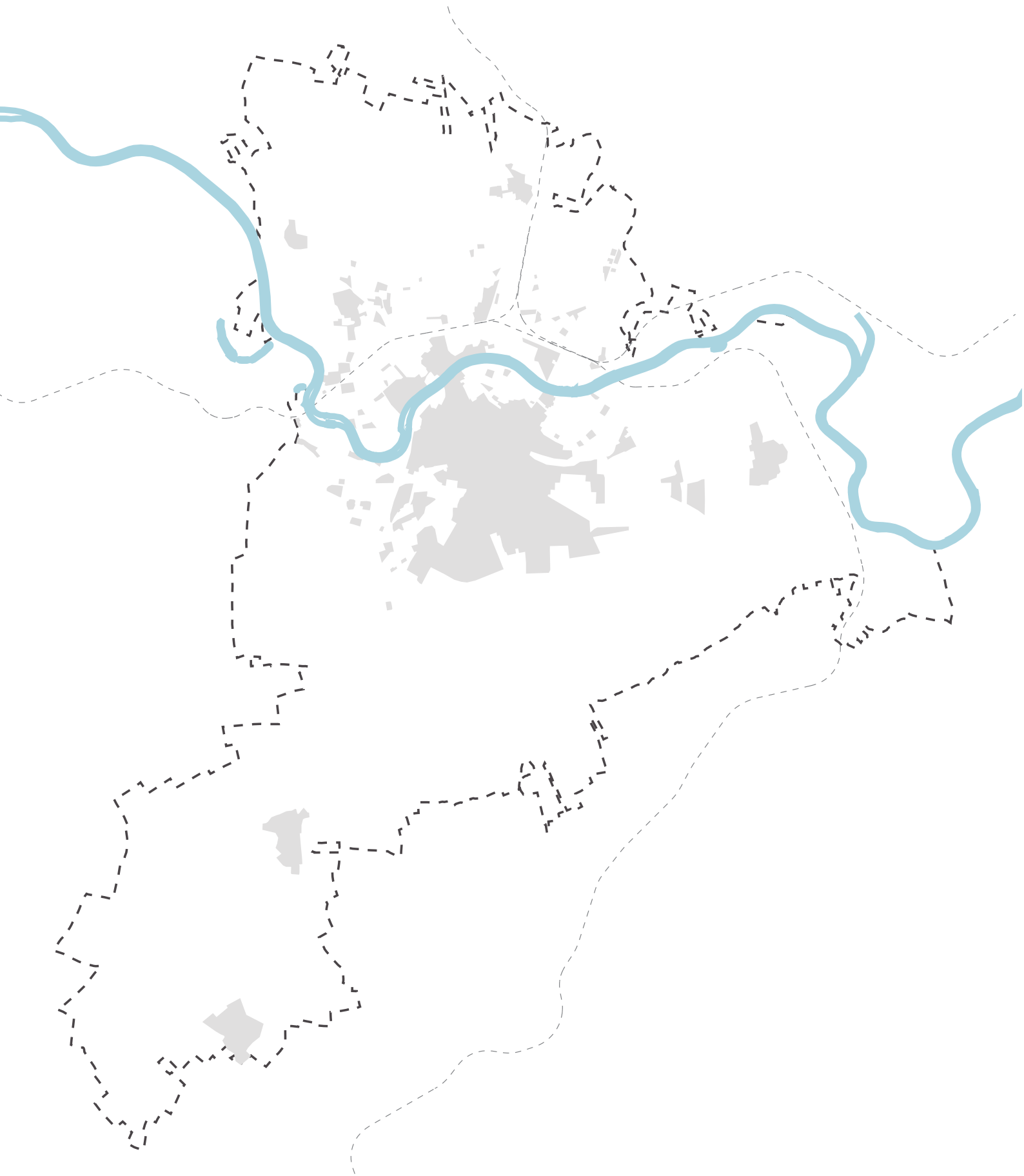
Population : 18 570 (2022)

Density : 440/km<sup>2</sup>

Area : 42.68 km<sup>2</sup>

Altitude : 233 m







# HISTORY



# EVOLUTION



1004

First mention of Saatz in literature + archeological findings of medieval settlement

1248

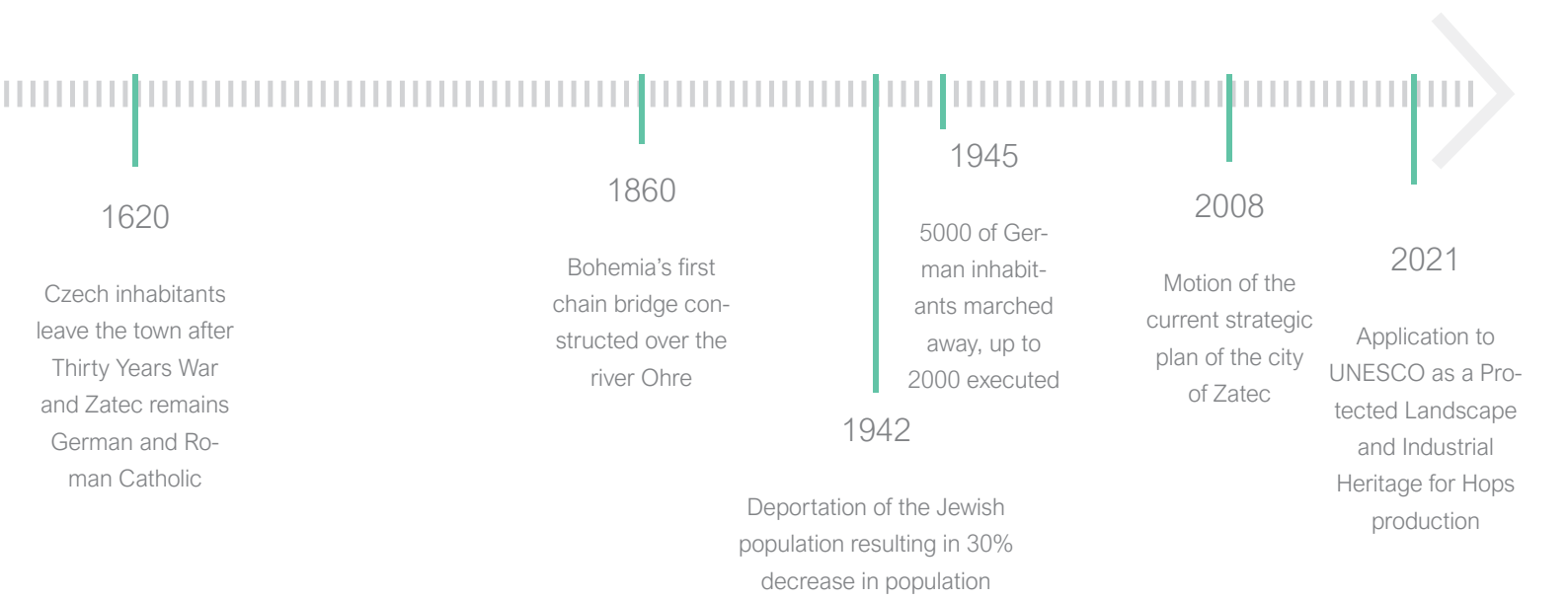
Zatec titled as a town

1265

Zatec becomes royal town under Ottakar II

1419

The town becomes mostly Hussite after the Hussite War



# TOWN OF HOPS

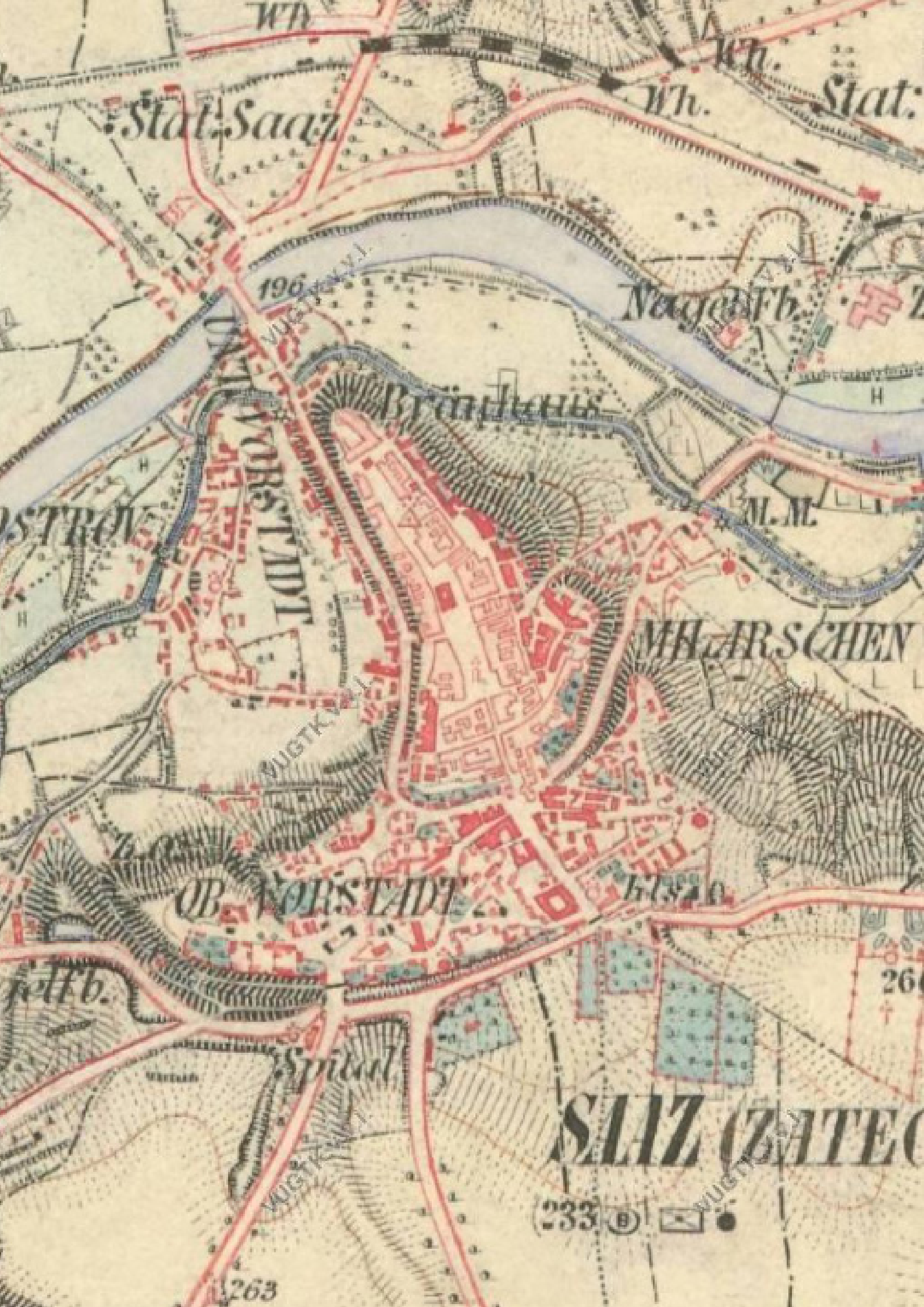
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Stat. Saaz

Wh.

Stat.

196

Nöyger Fb.

STROV

MÄHRISCHE  
STADT

M.M.

MÄHRISCHE  
MÄRSCHEN

OB. VORSTADT

Fb.

260

SLIZ (ZATEC)

233



263

## A STRONG IDENTITY TO THE LAND

„Žatec and the Landscape of Saaz Hops bears an exceptional testimony of a strong, centuries long and never interrupted

cultural tradition of hop growing and processing in Europe. This tradition is based on the exceptional quality of most sought-after Saaz hops which is a globally recognised agricultural commodity, protected by administrative acts since the time of the Enlightenment reforms carried out in the former Austrian Monarchy. As a result of the innovations in hop

production and booming trade with the commodity in huge demand in the world, in which the Czech, German and Jewish communities were involved and interacted as well as influenced each other, the town of Žatec became a globally

recognised centre of hops, particularly in the 19th century“

*Žatec A Krajina Žateckeho Chmele, Nominacni Dokumentace, Leden 2021*





„The technical knowhow and skills were further developed and improved on the site of the property from where they spread under the name of the hop growing centre – Saaz (Žatec). This had also a crucial impact on the appearance of the Saaz landscape which is well demonstrated by the hop fields with the fixed structure of the trellis, usually made of wooden poles and wires and every year complemented by hop strings, which are guiding wires providing support to the twining hop bines. On the basis of the local empirical knowledge, this structure developed into a specific design of Saaz hop wire trellis called „žatecká drátěnka“ which is now used in many other hop growing regions around the world. Typical hop drying kilns and other hop growing facilities were built in the rural area and the processing of hops impacted the overall appearance of Žatec where the architecture of residential buildings as well as industrial facilities, educational institutions and amenity centres designed for different groups of local residents associated with the hop growing business is unmistakable“



*Žatec A Krajina Žateckeho Chmele, Nominacni Dokumentace, Leden 2021*



# AN AGRICULTURAL TOWN

„Numerous specific skills, knowledge and experience on work organisation in hop production were passed from generation to generation. The empirical approach gradually improved and developed into a socio-economic and technical system, which survives today. Targeted breeding of particular hop varieties subsequently led to a new independent and locally conducted discipline which uses hop fields in the nominated property for basic research. The outcome of such endeavours are internationally recognised clones of Saaz hops.

## 20A. BASIC INFORMATIONS

Every year many experts from all over the world gather at the site to participate in specialised events, conferences and workshops the organisation of which has a long tradition. The celebration of the living intangible heritage of hops in the nominated landscape is reflected in the public and social events associated with the annual cycle of hop growing, seasonal festivities, local customs, rituals and festivals closely linked with hops and strengthening the identity of Žatec, its residents, and the surrounding hop growing landscape.“

*Žatec A Krajina Žateckeho Chmele, Nominacni Dokumentace, Leden 2021*







# URBAN EVOLUTION



## OLD TOWN

The first settlement signs in Zatec were found on today's Svobody Namesti which indicate settlements back to the Middle Ages.

The urban blocks are made of three story row houses. Most of them functioned as Hop businesses, with the parterres used as the commercial fronts while the families lived on the upper floors and Hops being dried in the attics. The roofs equipped with bulls eye windows helped ventilate while drying the Hops.

These characteristic buildings can be found the in the Old Town area and were used until the Hops production received a boost during the industrial revolution with new technological advances.





# PRAGUE DISTRICT

With the worldwide fame and success of the Saatz Noble Hops and the new possibilities that the Industrial revolution brought, bigger facilities with larger production capacity were necessary. The warehouses and production facilities were moved from the humble Old Town attics to bigger, better equipped and technologically advanced facilities built in what the town came to call the Prague district.

The shift started when owners of the growing hops businesses built their vilas in the Southern part of town, with the warehouses and drying facilities in their backyards or courtyardds.

In the 20th century, the Hops producers starting associating and collaborating, creating a hub of know-how and unique techniques used for the drying and processing of hops to be shipped world-wide.

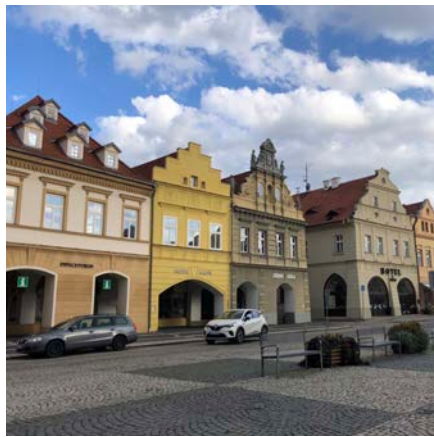
These buildings are equipped with unique chimney systems created to optimallz dry the hops and treat it, as well as space for packaging and storing big quantities.







# HERITAGE PROTECTION ZONE



UNESCO heritage zone



cultural assets



industrial heritage assets



# CLOSED BLOCK STRUCTURE

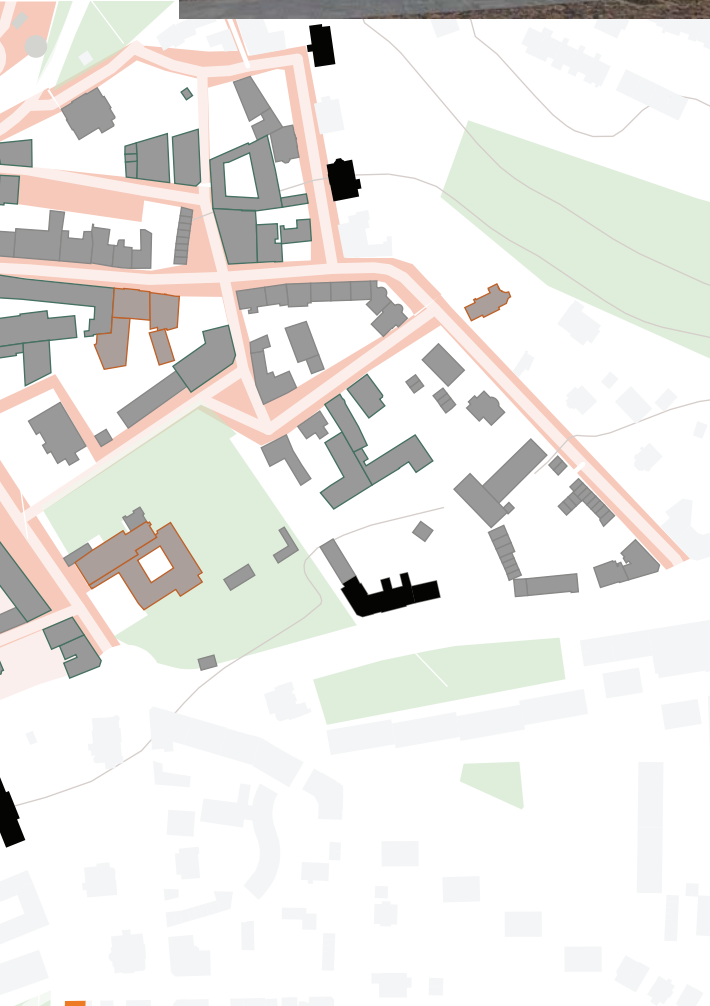
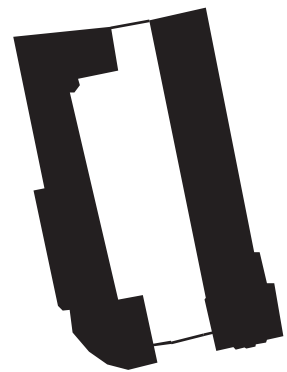
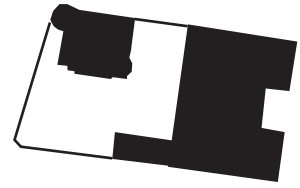
In the 1990's after the collectivization of production and associations, the treatment and production of hops falls under the monopoly of the Socialist State.

The Prague district's industrial buildings are left without production, while the life in the district slowly faded away as the individual business owners were mostly chased or sent away in the last thirty years and the working population was no longer required to commute to the district.

If we cue to the present situation, we notice that this is still the case today. The buildings once essential to Zatec's welfare, fame and identity are now mostly vacant, under heritage protection and functioning as exhibition and demonstration relics of a not so distant past.

The entire Hops production happening in the town of Zatec is located on the other side of the river Ohre, 10 km to the North of the Prague district.





# END OF 20TH CENTURY

In the second half of the 20th century, the lower West plain under the town of Zatec sees a swift increase of residential development. The Hops fields and the large green areas and gardens turn into the new residential quarter. Housing estates and row houses are built without a clear order or system.

The stream is covered to accommodate the new development and the result is a new neighbourhood with a confusing plan with no clear system of public spaces or functions.





# PERIPHERY DEVELOPMENT

## BEZDEKOV

Although the strategic plan makes space for new residential developments, the lack of supporting policies to ensure the development in a holistic and sustainable way result in suburban developments around the surrounding „villages“ like Bezdekov. The observed development is big construction of family houses on quite big plots, disconnected from each other and any visible urban/social tissue.

The risk is to end up with an even emptier town centre for Zatec, and a disconnection of people who live in the suburbs to the historical importance and relevance of the town.







strategic plan Zatec, 2008



orthophoto, 2021, ČUZK

















# GENERAL SITUATION













# FUNCTIONS OF TERRITORY

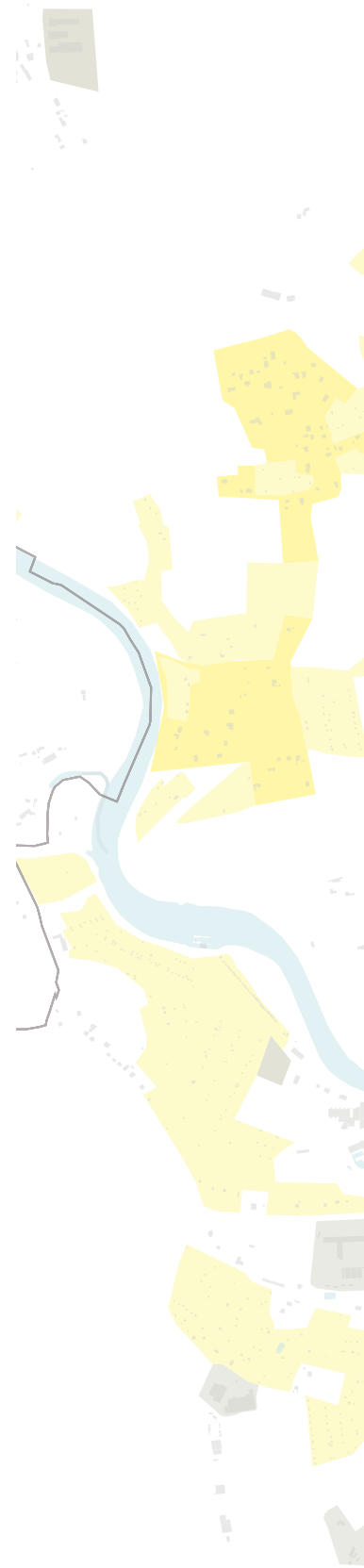
historical center	
mixed use - residential & commercial area	
educational & health facilities	
industry	
urban green space & parks	
forrest	
cemetery	
military zone	
agricultural land	
Ohre river	
buildings	
railway	

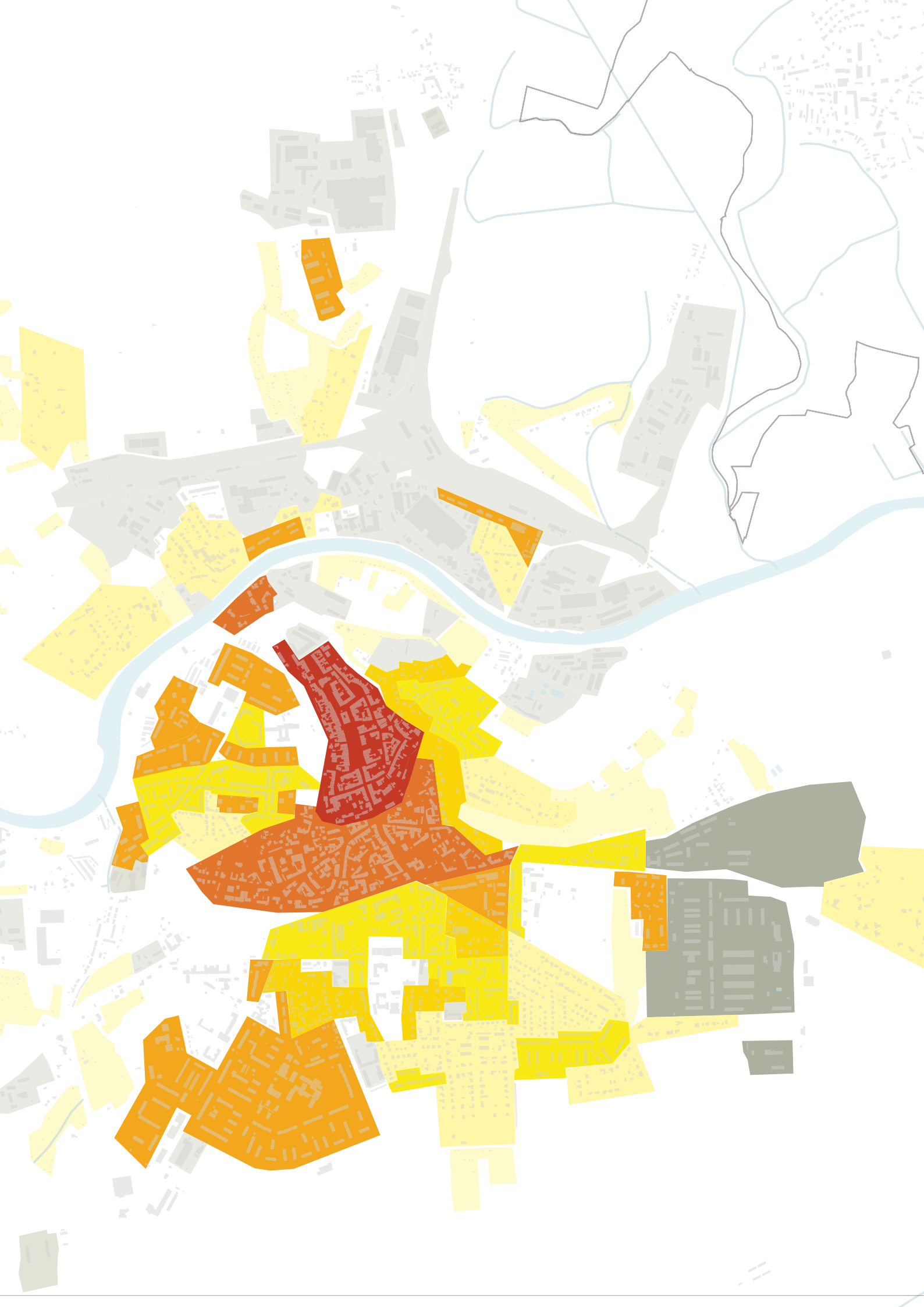




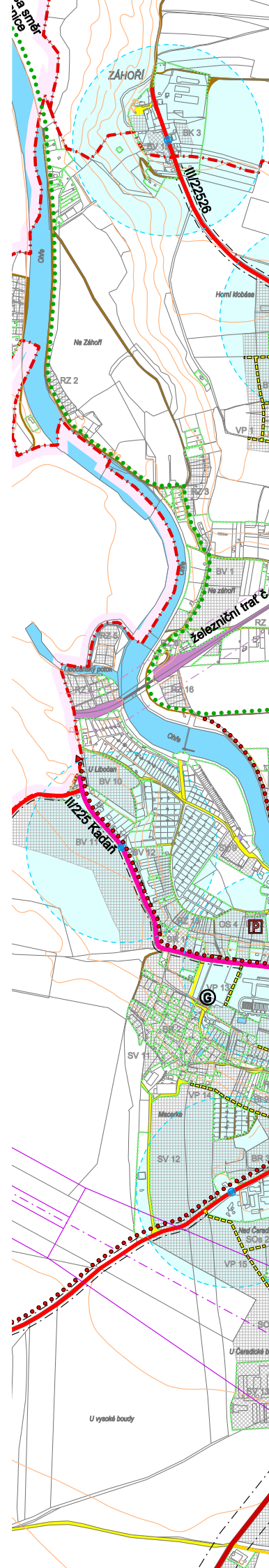
# STRUCTURE OF TERRITORY

historical center	
Pražská district, industrial heritage	
social housing estates	
villas	
row houses	
detached houses	
garden colonies	
industrial / warehouse facilities	
military facilities	
buildings	

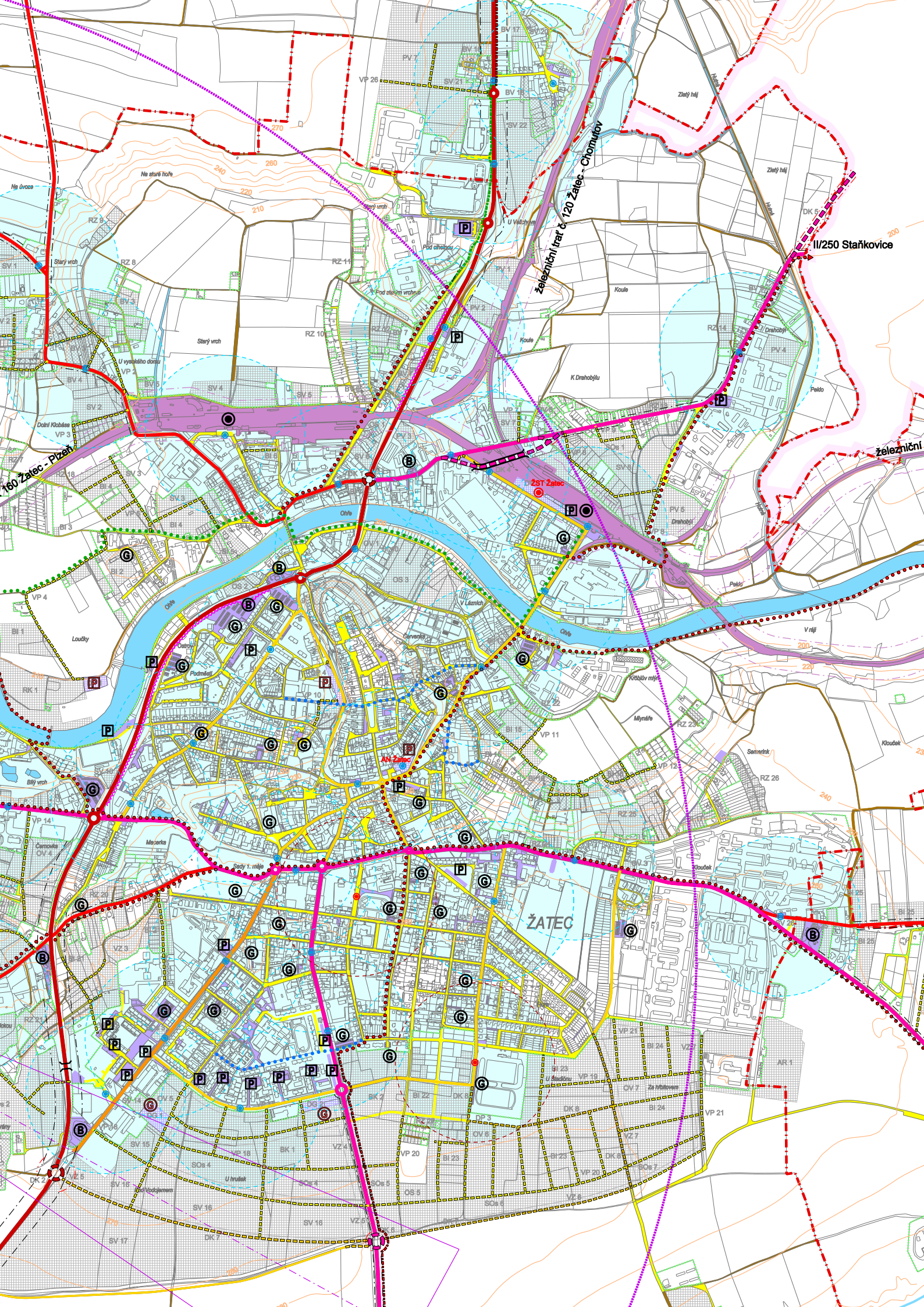




# TRANSPORTT INFRASTRUCTURE







160 Zatec - Píseň

Železniční trať 120 Zatec - Chotumov

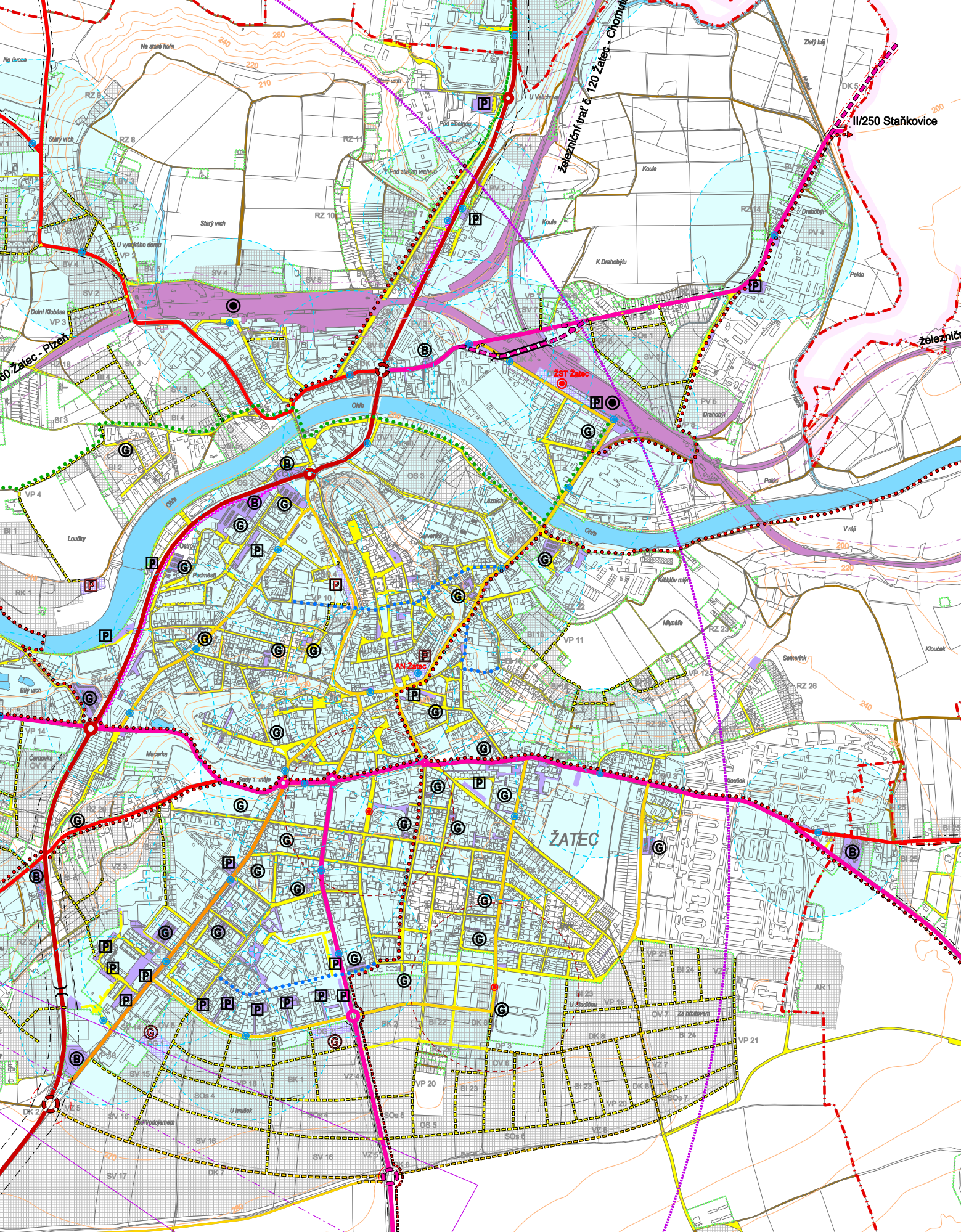
II/250 Staňkovice

železniční

ŽATEC

ZST Zatec

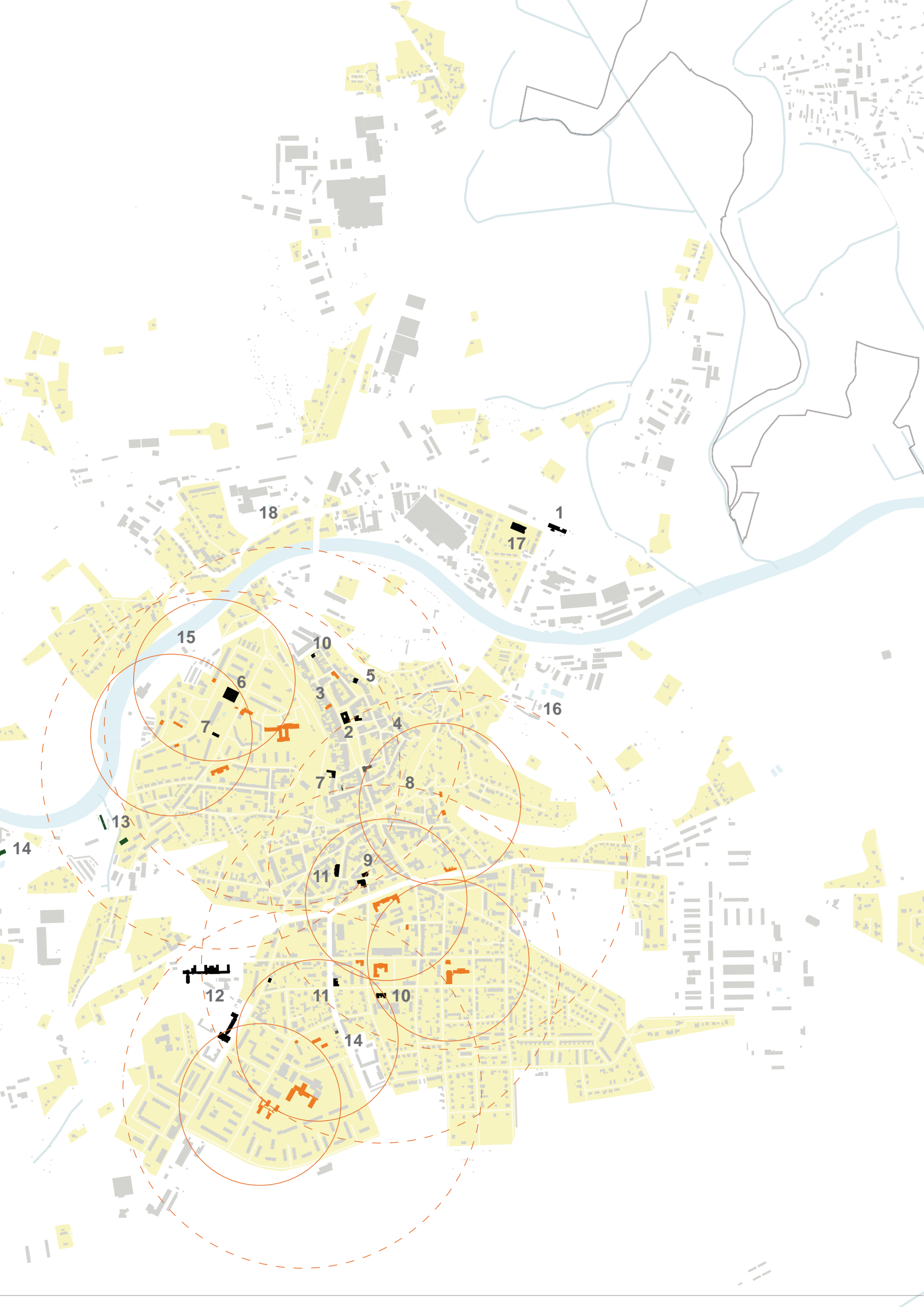
AN Zatec



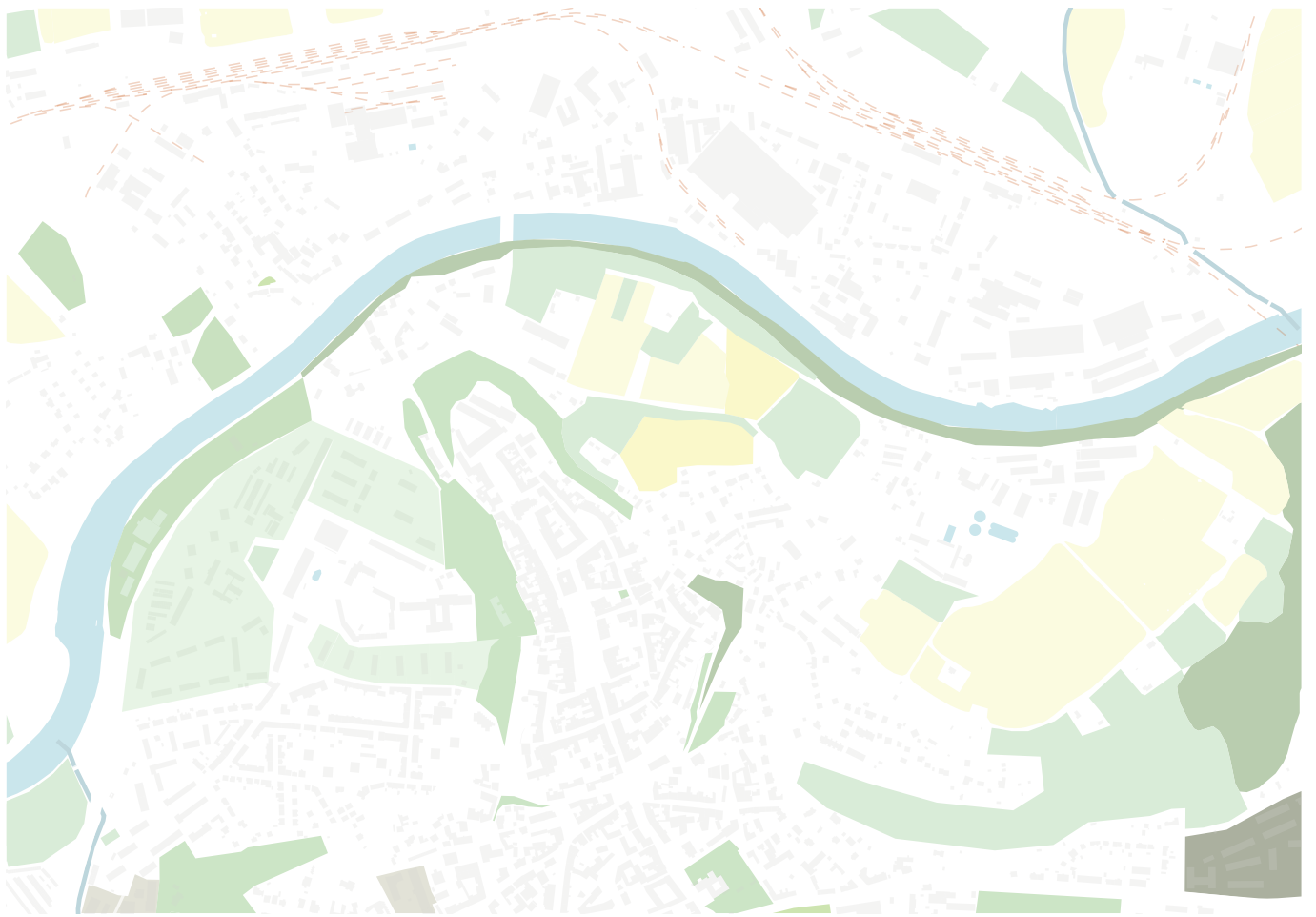
# IMPORTANT FACILITIES

- residential area
- educational facilities
- 400m perimeter from a kindergarten
- 700m perimeter from an elementary school
- significant facilities
  - train station 1
  - town hall 2
  - church 3
  - synagogue 4
  - community centre / mederuv dum 5
  - beer museum 6
  - Homolupulu museum 7
  - bus terminal 8
  - Temple of Hop and Beer 9
  - Hops Museum 10
  - post office 11
  - hospital of Zatec 12
  - sports facility 13
  - public swimming pool 14
  - driving school 15
  - water treatment centre 16
  - post office 17
  - chmelarstvi hops association 18



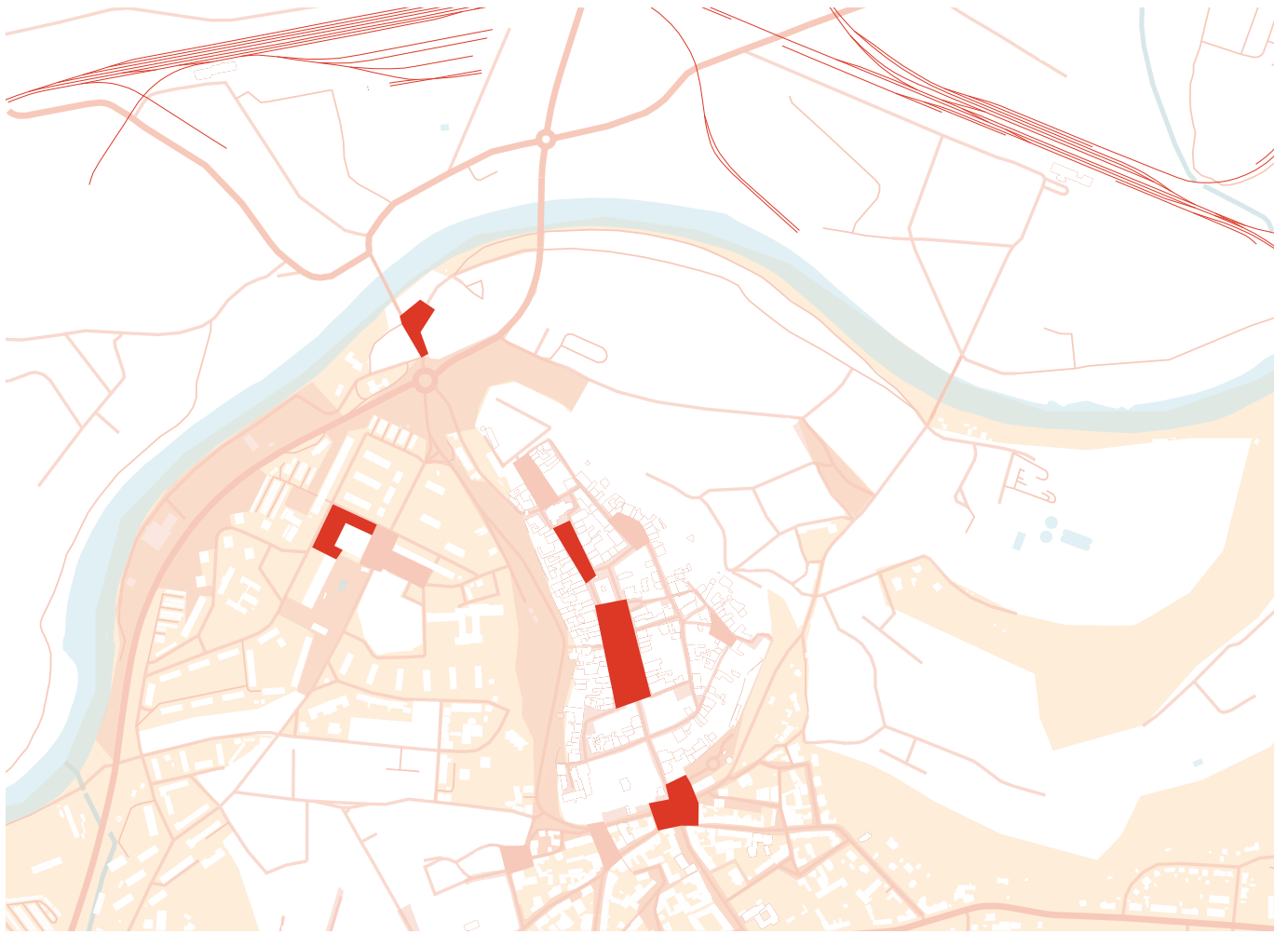


# SYSTEM OF GREENERY



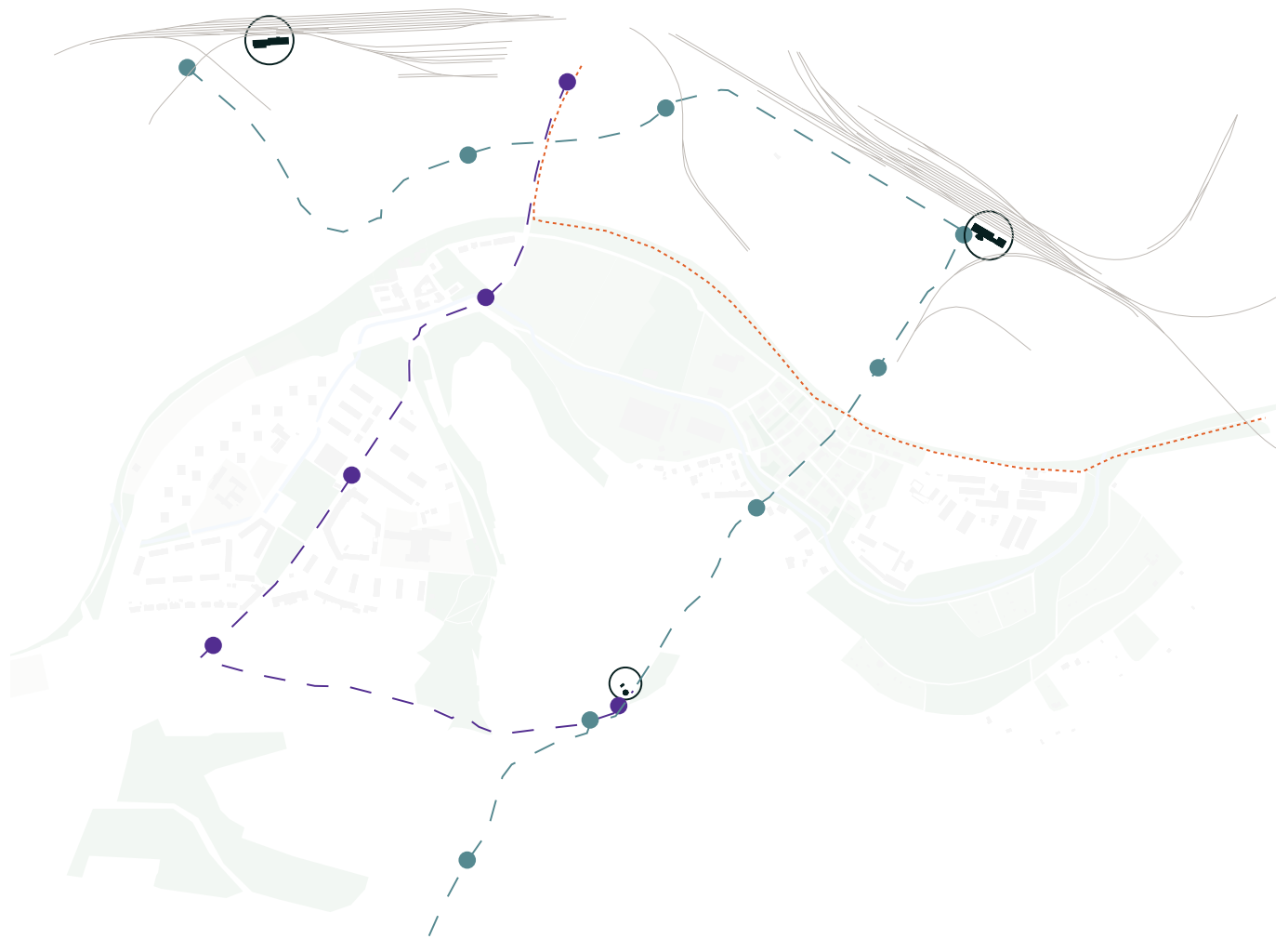
- public park
- botanical garden
- public courtyard greenery
- schoolyards
- sports greenery
- private backyards
- private agricultural greenery
- fields
- agricultural area
- orchards
- densely planted forrest

# SYSTEM OF PUBLIC SPACES



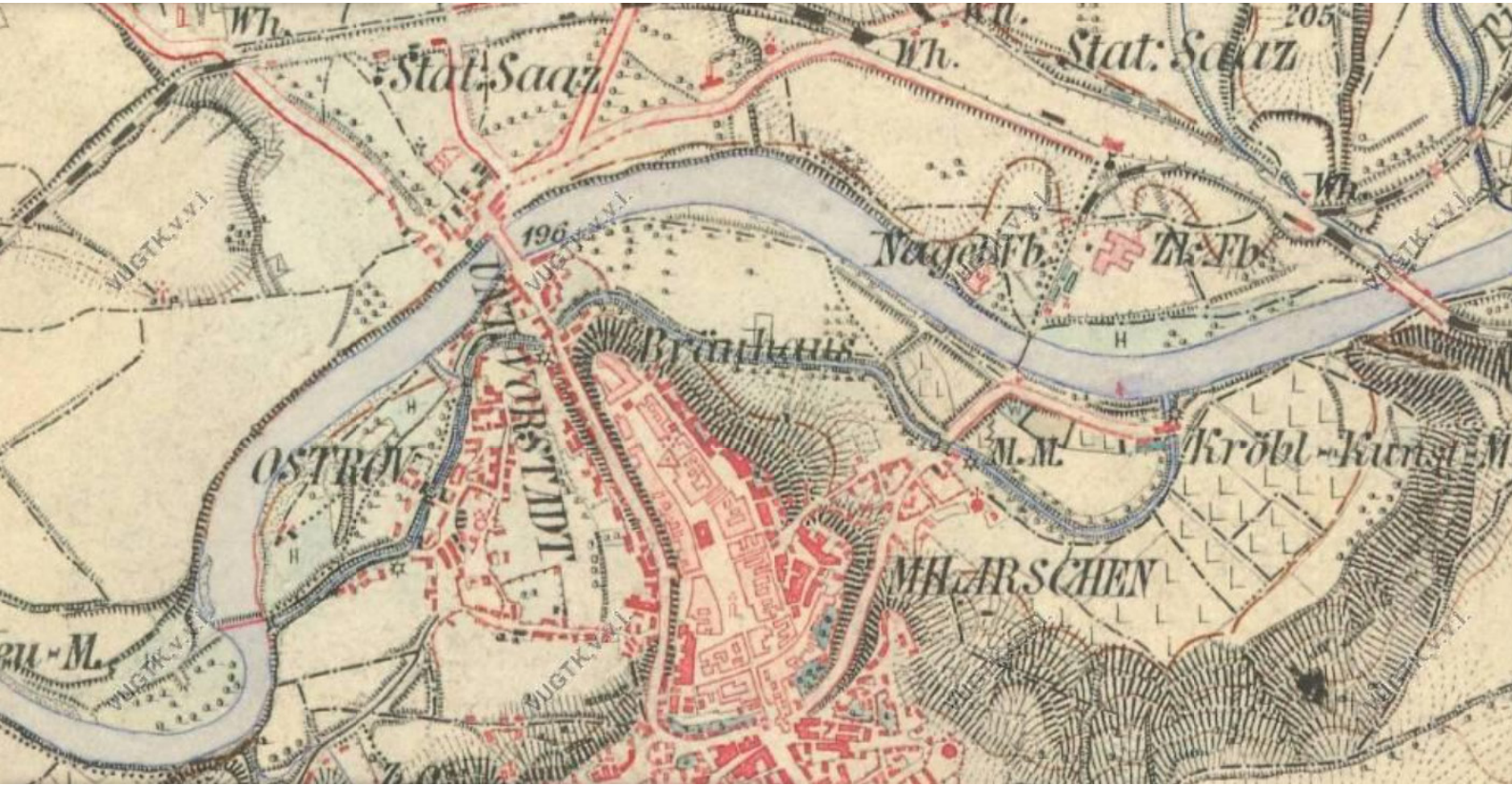
- roads
- main public square
- secondary transitional public space
- public greenery
- semi-public greenery
- public inner courtyard
- public sports facilities
- educational facilities

# TRANSPORT INFRASTRUCTURE



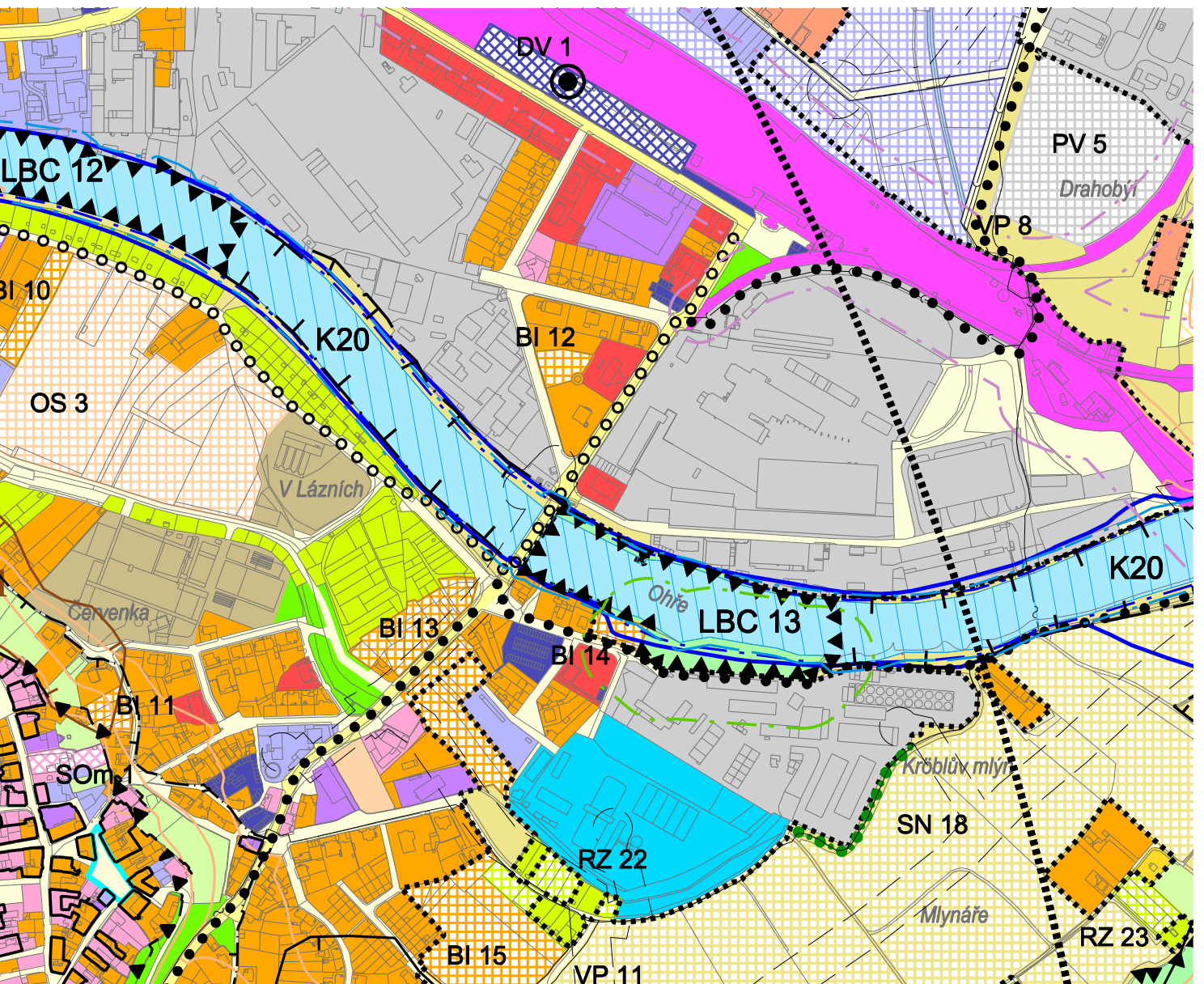
- train stations
- bus terminal
- existing bus line 1
- existing bus line 2
- new bus line 3
- - - bicycle path

# THE COVERED STREAM









**Territorial system of ecological stability**

**Územní systém ekologické stability**

	Existing	Proposed	
Functional suparegional biocentre (NRBC)			nadregionální biocentrum funkční (NRBC)
Functional suparegional ecological corridor (NRBK)			nadregionální biokoridor funkční (NRBK)
Non-functional suparegional ecological corridor (NRBK)			nadregionální biokoridor nefunkční (NRBK)
Functional regional biocentre (RBC)			regionální biocentrum funkční (RBC)
Functional regional ecological corridor (RBK)			regionální biokoridor funkční (RBK)
Functional local biocentre (LBC)			lokální biocentrum funkční (LBC)
Functional local biocentre (LBC)			lokální biocentrum nefunkční (LBC)
Functional local ecological corridor (LBK)			lokální biokoridor funkční (LBK)
Non-functional local ecological corridor (LBK)			lokální biokoridor nefunkční (LBK)
Interaction element (IP)			interakční prvek (IP)

Management zone of watercourses		
Water management area of Čeradický stream – open/culverted sections		
<b>Protection of mineral resources, impacts on the landscape</b>	<b>Existing</b>	<b>Proposed</b>
Areas affected by underground mining		
Active landslides		
Other landslides		
<b>Protection of areas of special interest</b>	<b>Existing</b>	<b>Proposed</b>
Areas in the interest of the Czech Army – microwave transmission corridor		
Areas in the interest of the Czech Army – other areas and structures		
<b>The entire administrative area of Žatec is affected by the area of interest in relation to the military facility „Lažany“</b>		
Celý správní území město vojenského objektu Lažany		



# SITE ANALYSIS

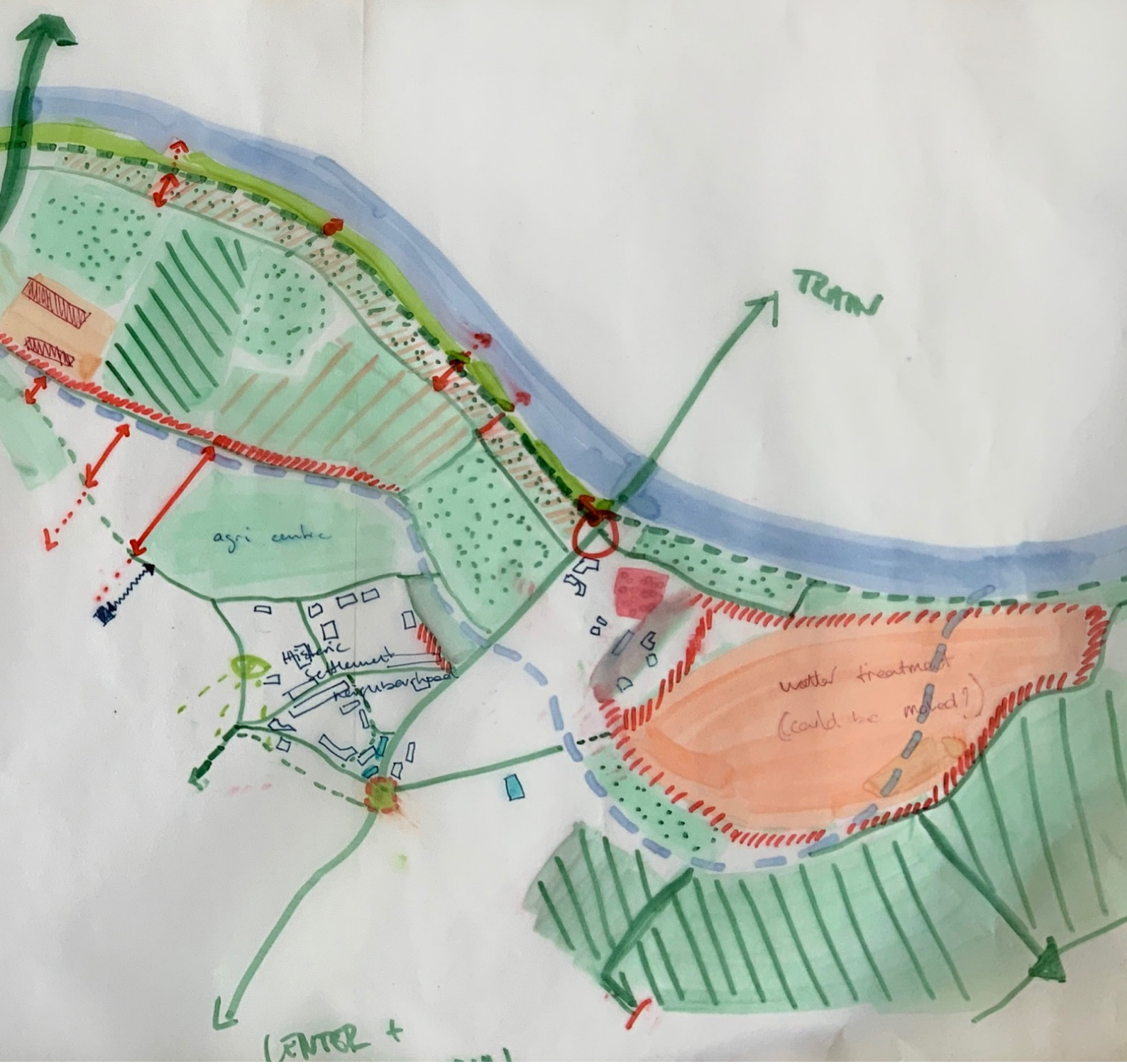


- barrier / wall
- buildings to take down / renal
- to review
- lack of communication / connect
- problematic zone / hub / centre / intersection
- problematic use / function
- no access
- parking lots
- parking along street w/o barriers
- pedestrian entry point

- quality green in between blocks / buildings
- characteristic view
- strong axis
- pedestrian path
- parking pockets
- buildings w/ historical character (value?)
- + function

+ function but needs review of form / place





# MAP OF POSITIVES AND NEGATIVES

## STRENGTHS

- + very strong history
- + historically very well connected to nearby towns
  - + multicultural/multi-ethnic inhabitant history
- + deep historical tradition & know-how for the production of the Saatz Noble Hops
  - + old town protected under „Urban Monument Resrvation“
  - + Unesco nomination to protect tradition of Hops treatment
  - + Unesco nomination to protect architectural industrial heritage
- + autonomous town in terms of facilities & amenities
  - + quality green spaces
  - + Ohre river passing through the town
  - + picturesque Old town
- + availability of resources in foreign languages
  - + strong Hops identity
- + strong destination for international film industry
  - + bridges connecting northern part of town
  - + two train stations (industrial + public)
- + agricultural culture alive with a lot of allotment gardens
  - + strong archival records
- + renovation of public spaces in and around old town
  - + beautiful trees and greenery in town

## OPPORTUNITIES

- + connecting the town to the river
- + introducing better public functions along river
  - + opening up the stream
- + new development in the Eastern lower town
  - + creation of new public spaces
- + utilization of the agricultural culture to enhance urban farming lifestyle
  - + attracting young families with children to Zatec
- + providing high quality of life for elder population's future
  - + creation of housing
  - + creation of new centres for services
- + reintroducing agriculture in the urban setting/ not just for demonstration
  - + attracting steady flow of national and international tourists
- + intrucing new functions to Industrial buildings & reviving Prazska district
- + creating more fluidity in public spaces in Prazska district by opening up the courtyards
  - + attracting investment to restore protected buildings
  - + University of Zatec
  - + Agricultural/industrial specific teaching centres





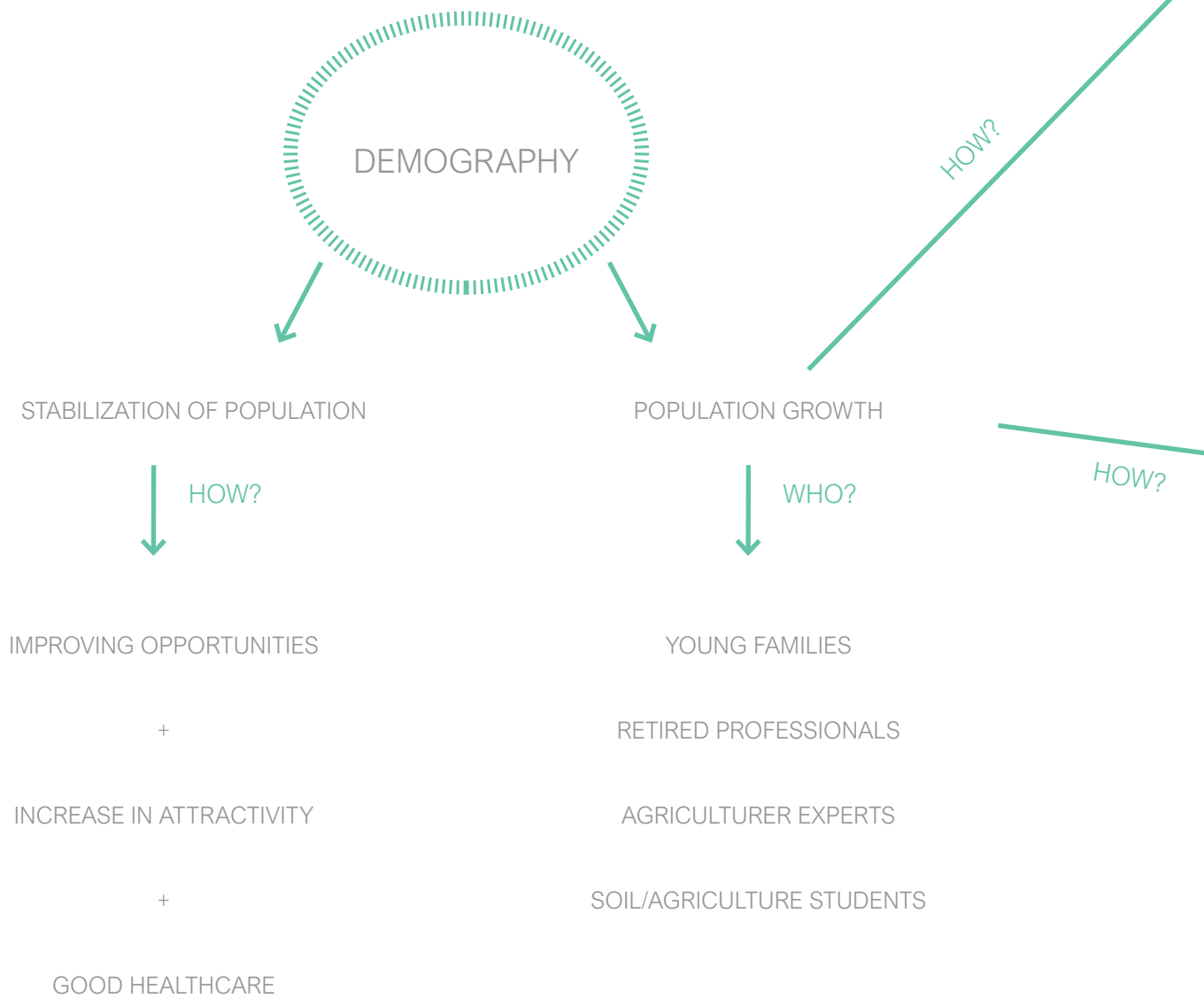
## WEAKNESSES

- tumultuous history of deportations and loss of population
- historical loss of knowledge & know-how
- collectivisation of land & hops growing industry
- disconnection of the town from the Ohře river
- random development of lower town
- massive industrial development in northern part of town
- covering of former stream by new roads
- loss of fields in the town
- modern structures in old town that endanger UNESCO protection because of visual & stylistic dissonance with context
- loss of industry head status as main exporter of Hops in the world
- mass agriculture surrounding town not serving the town itself
- declining population
- „abandoned“ Prazska district with vacant industrial buildings
- vacant warehouses and villas from 19th century after deportations
- lifeless Prazska district
- further settlements too far from public amenities & educational facilities
- restricted system of public spaces
- extreme topographical difference between old town & lower town

## THREATS

- becoming only a movie set town
- becoming a tourist town
- lack of financing for restoration of buildings & urban decline
- no UNESCO protection
- loss of tangible connection to Hops production to Steknik
- strong decline in population due to decline in job opportunities
- dysfunction of urban structure leading to reduced quality of life
- reduced attractiveness of Zatec to
- young population leaving Zatec
- loss of agricultura tradition and culture in the new generation
- lack of connection between Old Town and new Town
- social inequality
- random periphery development
- unsustainable suburban growth (Bezdekov)
- spoilage of heritage character of the town
- disconnection of inhabitants to the town itself and its history
- lack of sense of belonging
- lack of participation in the sustainable future of the town

# WHAT IS THE FUTURE OF ZATEC ?







DEVELOPMENT OF SERVICE SECTOR

JOB CREATION FOR  
YOUNGER GENERATION

AGRICULTURAL KNOW-HOW

investment in agricultural industry

opportunity to become a centre of agricultural education nation-wide

development of agri-research facilities

INDUSTRIAL GROWTH ?

available land, resources and infrastructure



WHAT TO PRESERVE, WHAT TO RENEW,  
WHAT TO CREATE ?

HIGH QUALITY PUBLIC SPACES

preserving green city feeling

new green passageways in the city

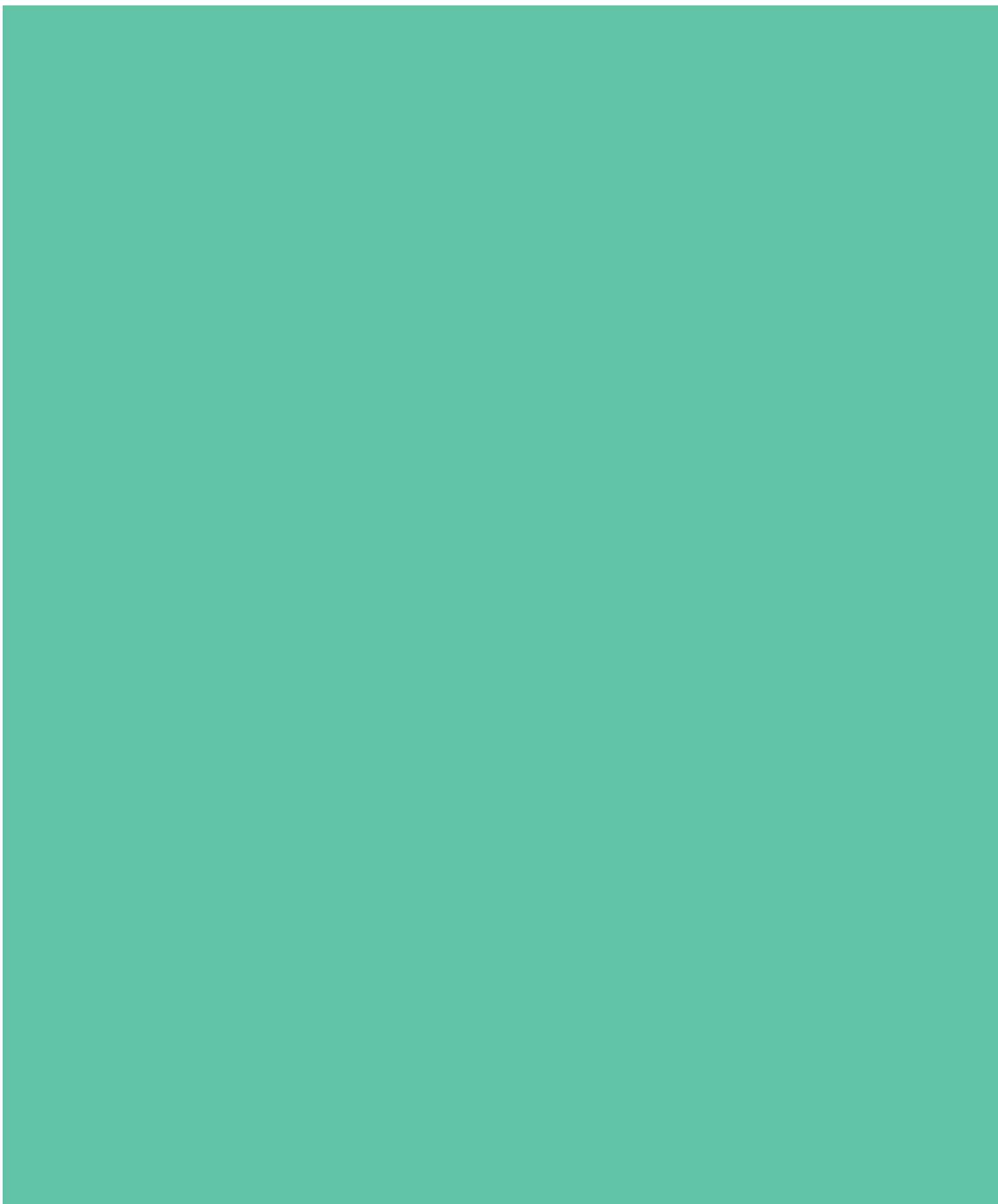
connection between neighbourhoods &  
residential typologies

NEW HOUSING

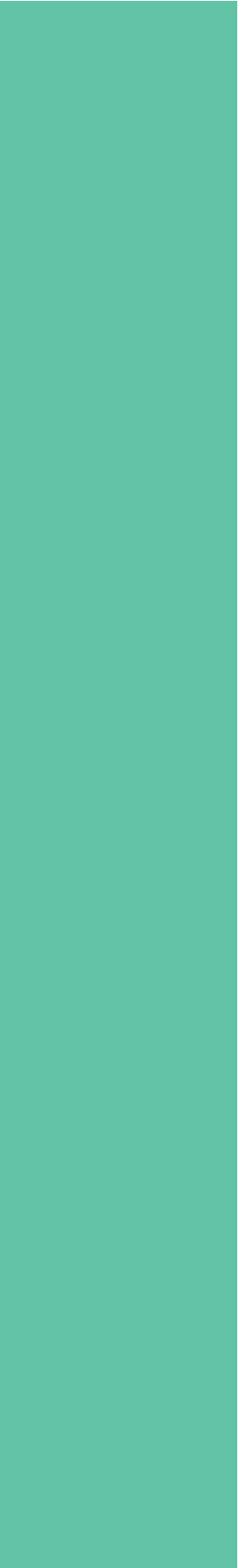
affordable

connected by public space

accessible to greenery



# REFERENCES



# BUILDING AROUND A STREAM

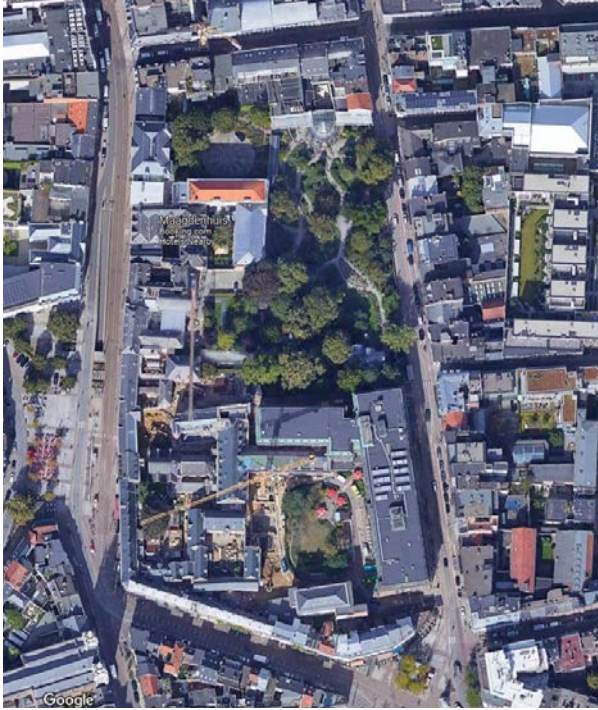
LITOMYSL, CZECH REPUBLIC





# URBAN BOTANICAL GARDEN

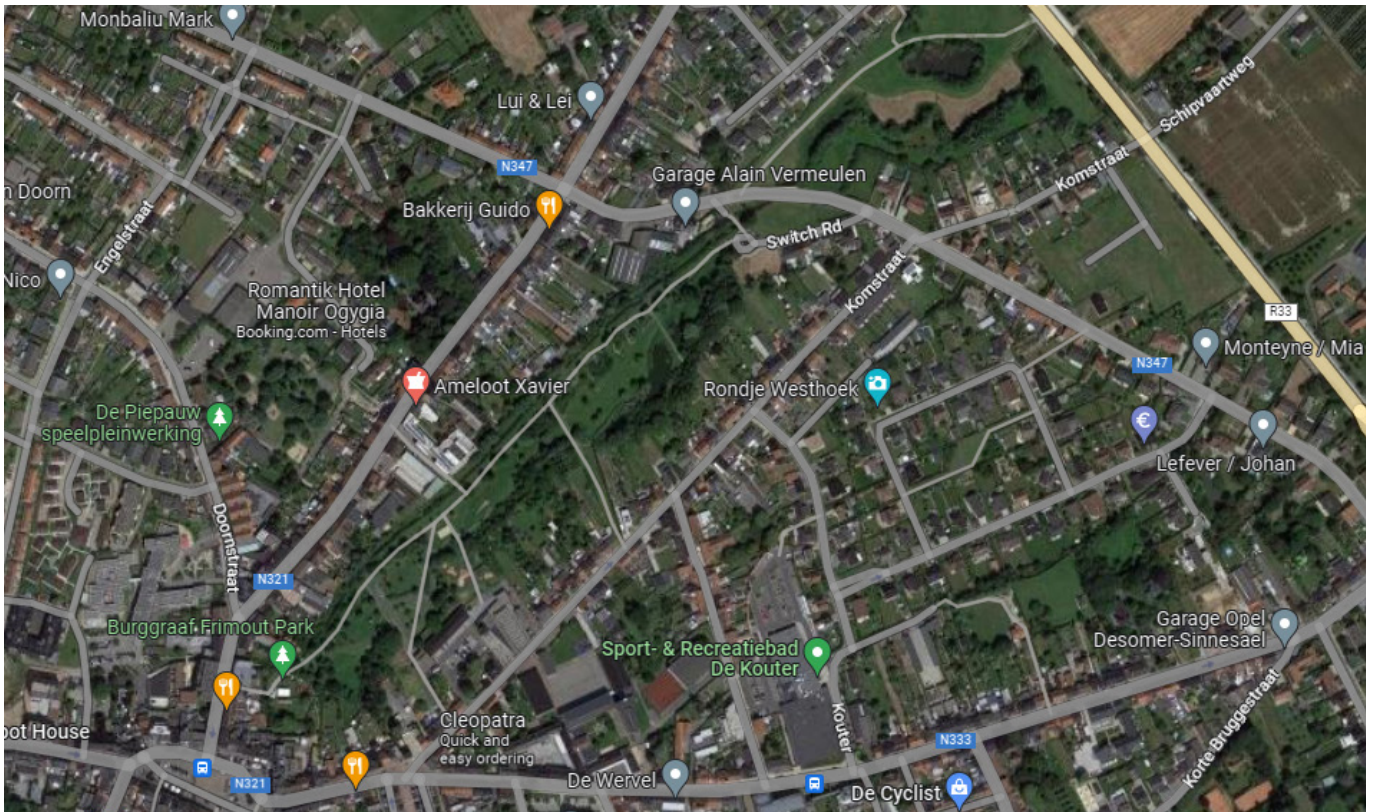
ANTWERP, BELGIUM





# HOUSING TYPOLOGIES AROUND A STREAM

## POPERINGE, BELGIUM

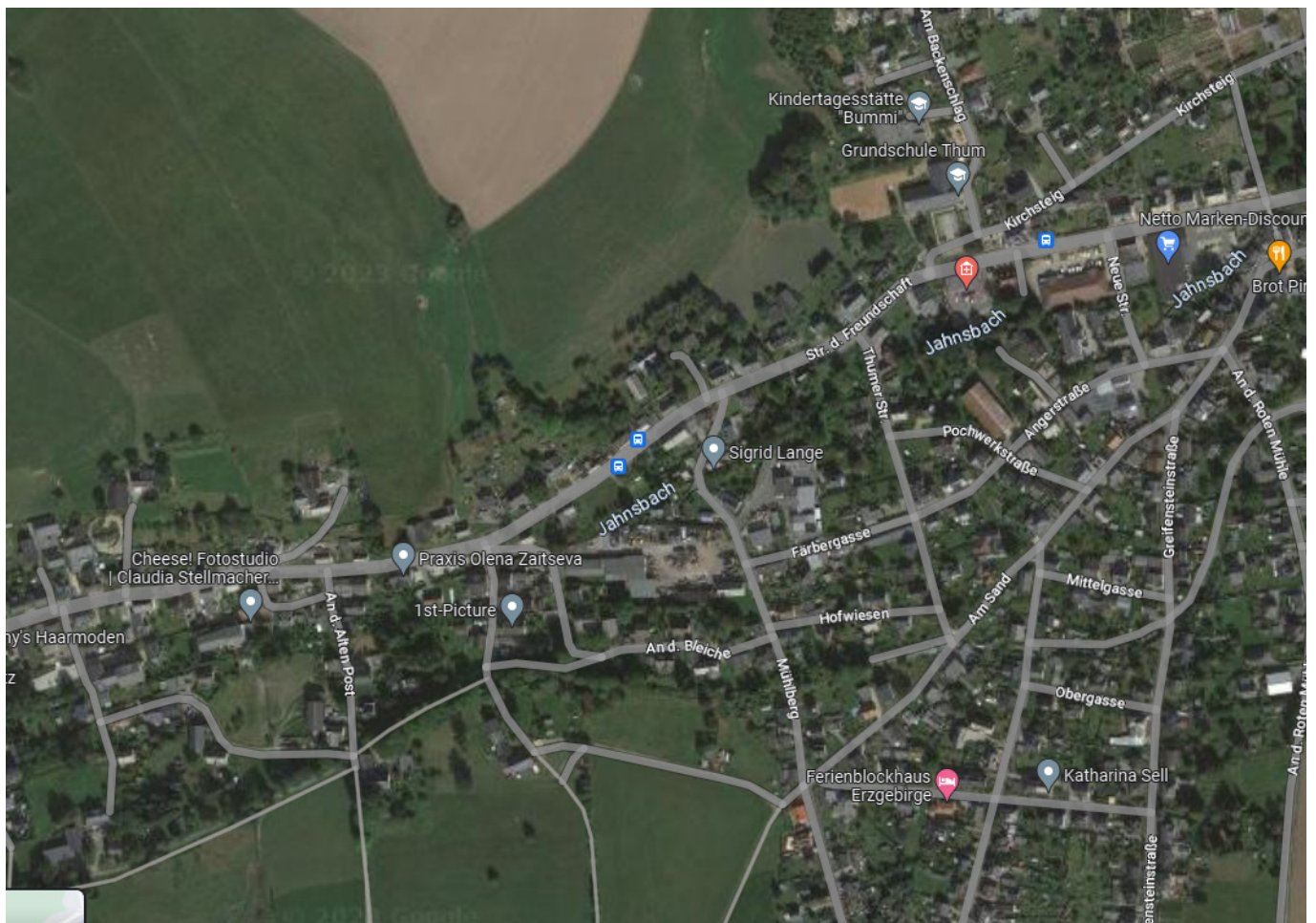






# INCORPORATING A STREAM INTO A TOWN

THUM, GERMANY





# PARK FROM FORMER INDUSTRIAL ZONE

ANTWERP, BELGIUM





# CREATING PUBLIC SPACES WITH WATER

KRASNYSTAW, POLAND













# RESOURCES



## TEXTS

Žatec A Krajina Žateckeho Chmele, Nominacni Dokumentace, Leden 2021

[https://www.zatec-and-the-landscape-of-saaz-hops.com/resources/cs/UNESCO\\_Zatec\\_2021\\_A4.pdf](https://www.zatec-and-the-landscape-of-saaz-hops.com/resources/cs/UNESCO_Zatec_2021_A4.pdf)

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Transformation of Industry Ecosystems in Cities and Regions: A Generic Pathway for Smart and Green Transition, Nicos Komninos, August 2022,

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Urban Transformation, Change, Opportunities. The case of Nuremberg West, Germany, Nadia Alaily-Mattar, Alain Thierstein, Agnes Förster, January 2012

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## MAPS

<https://ags.cuzk.cz/geoprohlizec/>

<https://mapy.cz>

<https://google.maps>

<https://www.mesto-zatec.cz/>

<https://www.zatec-and-the-landscape-of-saaz-hops.com/>

## REFERENCES

### Litomysl

<https://lam.litomysl.cz/architekt/251-josef-pleskot>

### Thum

<https://www.google.com/maps/place/Thum,+Germany/@50.670899,12.9544194,3a,75y,336.45h,90t/data=!3m8!1e2!3m6!1sAF-1QipM26Tz2gTvZ1ab03jGVMfbWP7ZAghMTxadlu5M!2e10!3e12!6shttps:%2F%2Fh5.googleusercontent.com%2Fp%2FAF1QipM26Tz2gTvZ1ab03jGVMfbWP7ZAghMTxadlu5M%3Dw203-h135-k-no!7i6000!8i4000!4m7!3m6!1s0x47a74dac02005ddd:0xa7a4b77cc1e44ac8!8m2!3d50.6712877!4d12.9492562!10e5!16zL20vMGZrMTkz?entry=ttu>

### Poperinge

[https://www.google.com/maps/place/Poperinge,+Belgium/@50.920513,2.6225473,3a,75y,137.74h,90t/data=!3m8!1e2!3m6!1sAF-1QipPgURSFC-285DF1JB9wgKymBb2rOx0XTRHzqn8\\_!2e10!3e12!6shttps:%2F%2Fh5.googleusercontent.com%2Fp%2FAF-1QipPgURSFC-285DF1JB9wgKymBb2rOx0XTRHzqn8\\_%3Dw203-h152-k-no!7i4032!8i3024!4m7!3m6!1s0x47dcc37924402bef:0x5493453e290c4443!8m2!3d50.855593!4d2.726943!10e5!16zL20vMDE0NXp2?entry=ttu](https://www.google.com/maps/place/Poperinge,+Belgium/@50.920513,2.6225473,3a,75y,137.74h,90t/data=!3m8!1e2!3m6!1sAF-1QipPgURSFC-285DF1JB9wgKymBb2rOx0XTRHzqn8_!2e10!3e12!6shttps:%2F%2Fh5.googleusercontent.com%2Fp%2FAF-1QipPgURSFC-285DF1JB9wgKymBb2rOx0XTRHzqn8_%3Dw203-h152-k-no!7i4032!8i3024!4m7!3m6!1s0x47dcc37924402bef:0x5493453e290c4443!8m2!3d50.855593!4d2.726943!10e5!16zL20vMDE0NXp2?entry=ttu)

### Krastnystaw

<https://krasnystaw.pl/>

<https://zamkomania.pl/krasnystaw.php>

## [Antwerp](#)

PLANTENTUIN:

<https://www.google.com/maps/place/Plantentuin/@51.2145724,4.3874073,15z/data=!4m9!1m2!2m1!1sPLANENT%C4%B0UM+ANTWERP!3m5!1s0x47c3f6fbad077a63:0xf042a0d4d1ebad4a!8m2!3d51.214592!4d4.4064369!16s%2F-g%2F121ln332?entry=ttu>

DOKPARK:

<https://www.antwerpenmorgen.be/nl/projecten/gedempte-zuiderdokken/over>







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DIPLOMA PROJECT / ANALYSIS PORTFOLIO

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