

Žatec :

Reclaiming the riverplain

DIPLOMA PROJECT / DESIGN PORTFOLIO

ESRA AKGÜN KULIN

FA CVUT, LS 2022/2023



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INTRODUCTION

The project explores the potential of the city of Žatec as an attractive and autonomous town with layers of high quality public life.

Once the most important centre of hops production in the world, Žatec is highly equipped in technical, administrative and health infrastructure, although it is not an administrative capital of its region.

Today, the city of Žatec risks losing its centuries old agricultural identity due to wars and political regimes. The town has applied to a protection from the Unesco World Heritage to preserve the Hops related buildings as well as the surrounding landscapes where Hops is still grown. While the protection might ensure the preservation of this identity, it holds a risk of not contributing to the local life in any significant way.

The proposal aims at redefining the urban structure to serve local inhabitants while creating clear connections to the Historic Core. This approach searches a sustainable future of the town should where its green identity is preserved and continued onto the future.



Czech Technical University in Prague, Faculty of Architecture

ASSIGNMENT of the Diploma project

Master degree

Date of Birth:

17/11/1995

Academic Year / Semester: Summer semester 2022-2023

Department Number / Name: 15121 – Department of Spatial Planning

Diploma Project Tutor: Ing. Arch. Veronika Šindlerová, Ph.D.

Diploma Project Theme:

Žatec : Reclaiming the River Plain in relation with the Historic Core

Assignment of the Diploma Project:

1/description of the project assignment and the expected solution objective

The project assignment looks to reclaim the river plain of the Ohře river in Žatec in contact with the historical core of the town, which is protected as a monument. While the protected old town as well as the Prague district is very important for the preservation of the town's unique history, character and importance, the rest of the town, including the river plain of the Ohře river, must evolve somehow too in order to avoid the shrinkage of the population of the town, and ensure steady growth for its future to be sustainable.

Until the second half of the 20th century, the river plain was utilized by farmers to grow hops, together with settlement for farmers. A stream flowed through it, used to irrigate the hops fields. Nowadays the stream is fully covered up by roads and the river plain is changed to the residential areas, mainly in the typology of block of flats housing estates to the West, and unbuilt land with agricultural activities and water treatment facilities to the East. The separation of this "lower town" in the river plain from the historical town core on a promontory above the river is defined by drastic topographical difference, covered by a strip of greenery and parks, interrupted at places.

The objective of the project is to propose the vision and concept of urban transformation of the river plain into a well structured and equipped area for the locals of Žatec, while creating clear connections to the historical core. This will help overlap layers of history but also of social classes and types of visitors of the city of Žatec, and ensure its sustainable future.

description of the final result, outputs and elaboration scales

A- Theoretical research, mapping of current status and analysis

- Theoretical research of needs and trends of urban development of former agricultural towns and cities and UNESCO heritage towns
- Case studies of
 - o Heritage towns in function to their development and their strategies for the future
 - o Towns with streams running through them and their incorporation into the urban structure
- Complex mapping of the current status of Žatec and its surroundings to terms of its history, infrastructure, urban structure, functions, landscape context etc.
- Detailed mapping of current status of the area of the river plain linked to the historical town core, especially the functions and usage, urban structure, system of public spaces, transportation infrastructure, public amenities and other services, town greenery etc.
- Analysis of positives and negatives of the current status of Žatec and of the area of interest (river plain), informing about the opportunities and risks of the territory for its future development (SWOT analysis, map of positives and negatives)

B- Design

- Vision and goals for the regeneration of the river plain of Žatec in contact with the historical core of the town
- Concept and general urban design of the regeneration of the river plain of Žatec in contact with the historical core of the town, included the solution of the mutual integration of Historic core and overlooked river plain and reintegration of the former stream into the urban structure of the river plain.
- Urban Situation / Master plan (approx. 1:5000)
- Selected Urban Details (approx. 1:1000)
- Schemes of new proposed solutions of the designed system of public spaces, transportation infrastructure system, system of town greenery, functions, etc.
- Selected sections through important public spaces (approx. 1:500/1:1000)
- Overview perspectives of the urban situation
- Perspectives from human horizon of important public spaces

3/list of further agreed-upon parts of the project (model)

To this list further attachments can be added according if necessary.

- Physical Model of one selected Urban detail
- A4 Portfolio of the Analytical part and theoretical Research (according to FA CTU guidelines)
- A4 Portfolio of the Design part (according to FA CTU guidelines)
- 2x A0 Posters or 4x A1

Date and Signature of the Student: 02 | 03 | 2023 

Date and Signature of the Diploma Project Tutor: 02/03/2023 

Date and Signature of the Dean of FA CTU: 



CZECH TECHNICAL UNIVERSITY IN PRAGUE FACULTY OF ARCHITECTURE	
AUTOR, DIPLOMANT: AUTHOR OF THE DIPLOMA WORK / DIPLOMA PROJECT Academic Year 2022/2023 , Summer Semester	
TITLE OF THE DIPLOMA WORK / DIPLOMA PROJECT (IN CZECH LANGUAGE) - Žatec: Rekultivace Toku v Návaznosti na Historické Jádro	
TITLE OF THE DIPLOMA WORK / DIPLOMA PROJECT (IN ENGLISH LANGUAGE) - Žatec: Reclaiming the Riverplain in relation with the Historic Core	
LANGUAGE OF THE DIPLOMA WORK / DIPLOMA PROJECT: English	
Diploma Work / Diploma Project Supervisor	Ing. arch. Veronika Šindlerová, Ph.D. ÚSTAV PROSTOROVÉHO PLÁNOVÁNÍ : Department of Spatial Planning
Diploma Work / Diploma Project Opponent	Mikael Ekegren
Key Words (Czech)	Žatec, Ohře, Revitalizace, Veřejný prostor, Potok, Zelený Urbanismus
Annotation (Czech)	
Annotation (English)	

The Author's Declaration

I declare that I have elaborated the submitted diploma work / diploma project independently and that I have stated all the used information sources in coherence with the "Methodological Instruction for Ethical Preparation of University Final Works".

(The complete text of the methodological instruction is available for download on <http://www.fa.cvut.cz/En>)

In Prague on26/05/2023..........Signature of the Diploma Project Author

This document is an essential and obligatory part of the diploma project / portfolio / CD.

VISION

“ RECLAIMING
THE RIVERPLAIN
IN FUNCTION TO
THE HISTORICAL CORE ”

A **LIVELY** UNESCO TOWN



WITH MULTI-LAYERED **PUBLIC LIFE**



AND STRONG **GREEN** CHARACTER



CONCEPT

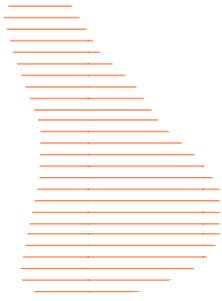
The approach is to strengthen local life enough to ensure that the shrinkage of the population can be avoided. Beyond that, high quality urban spaces of different characters need to be recreated so as to spread the activity zones as much as possible and keep the city "alive".

The existing strong green character needs to be amplified and supported through making more public green spaces.

3 NEW PRODUCTIVE CORES

Three existing cores in the “Lesser Town” are identified to create hubs of different characters. The aim is to offer different profiles of visitors different environments and bring the neighbourhood more alive than they are today.





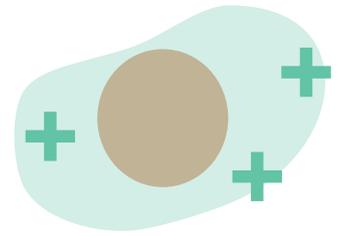
WITH RELATION TO THE HISTORIC CENTRE

All neighbourhoods have some relation with the Historic Core whether it be visual or for access. Keeping the connection to the Old Town is key in creating a permeable town all throughout and across, despite the high difference in altitudes.

GREEN CORE



INTERACTIVE EDGES

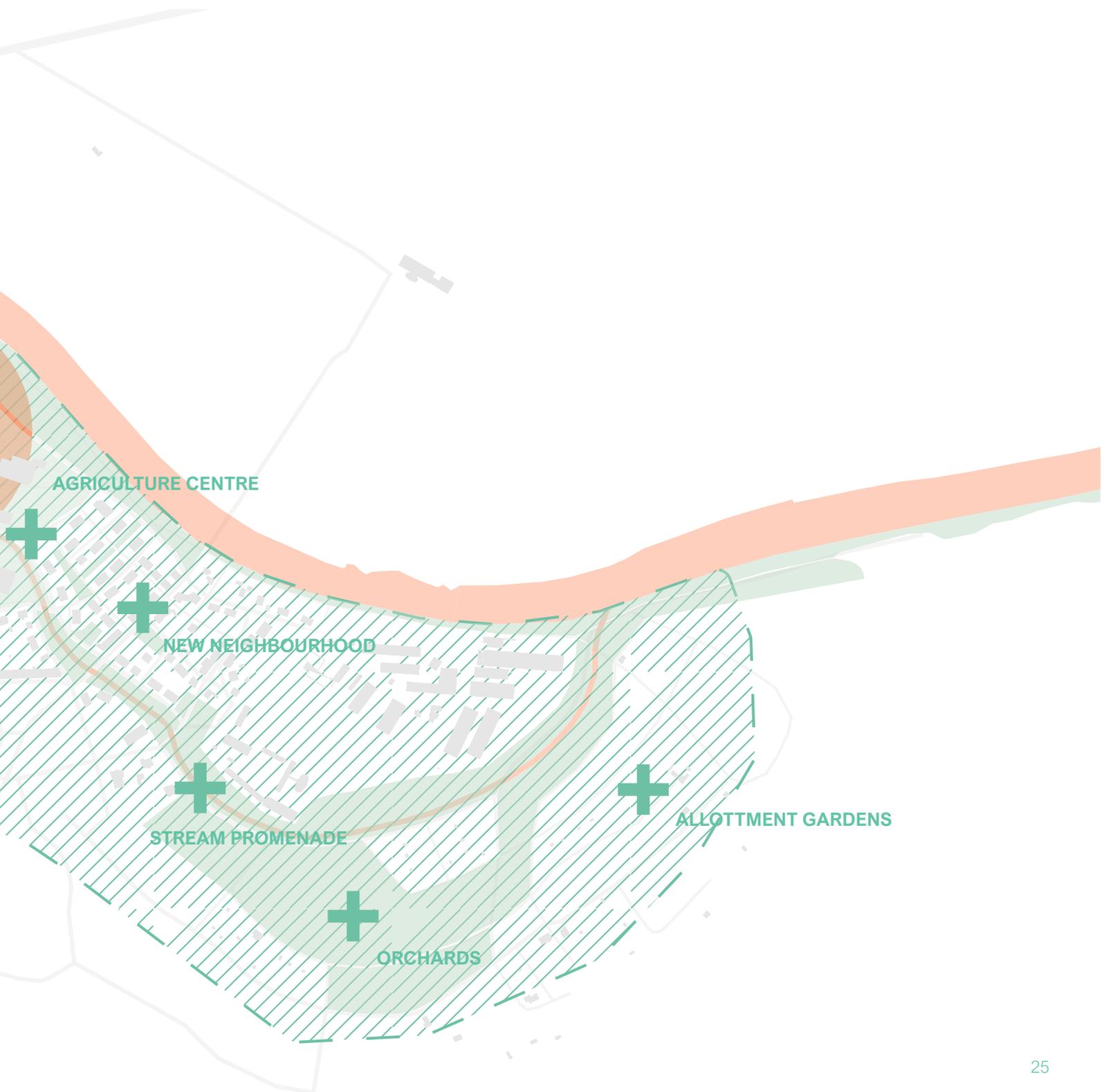


Each Core is defined by an "Edge", where key places act as interactive points.

These points are where different people with different profiles may meet and interact.

This creates a continuity in movement through the town as well as diversity.





AGRICULTURE CENTRE

NEW NEIGHBOURHOOD

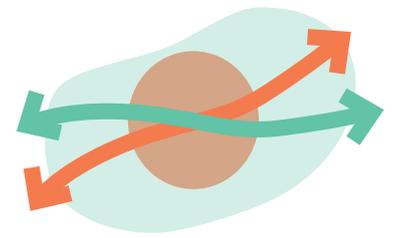
STREAM PROMENADE

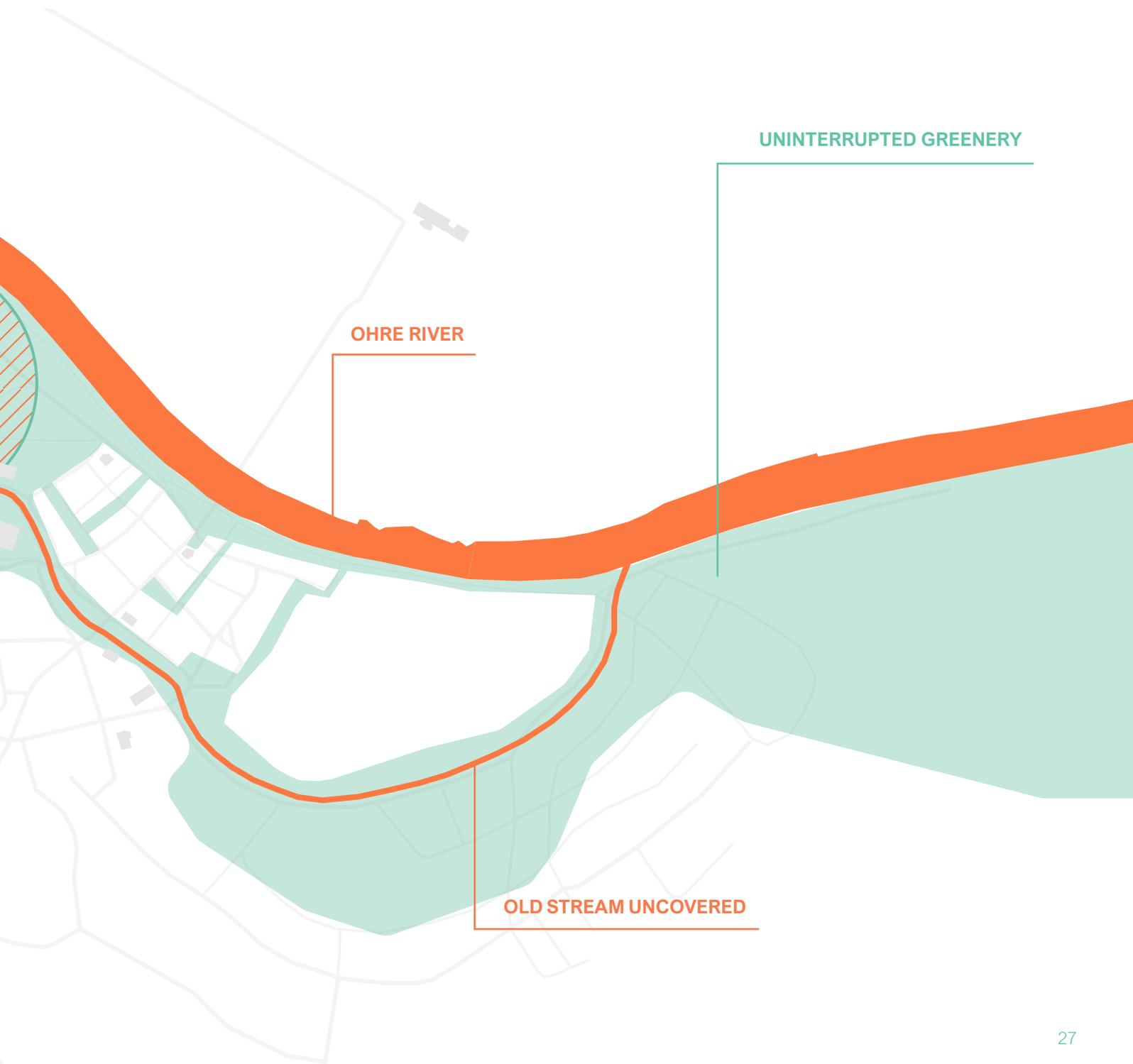
ORCHARDS

ALLOTTMENT GARDENS

CONNECTED BY CORRIDORS

The Ohre River, the improved continuous greenery and the uncovered old stream act as three dimensional binding elements that connect the 3 cores to each other and to the interactive points throughout the Riverplain.





OHRE RIVER

UNINTERRUPTED GREENERY

OLD STREAM UNCOVERED

DESIGN

The main design motivations are movement, green identity and diversity in the riverplain of the Ohre River. A successful design results in the immediate improvement of the quality of life in Zatec and revive the once bustling energy of this once Medieval town.

MOTIVATION OF USERS



CYCLING



SIGHT SEEING



EXPLORING



PLAYING



FAMILY TIME



RELAXING



MEDITATION



FARMING



HOBBY FARMING



COLLECTIVE FARMING



HOPS EXPERTISE



SOCIALIZING



SHOPPING



WORKING

TPOLOGIES



MIXED URBAN



NEW URBAN



PANELAK



GARDEN



TWIN HOMES



ROW HOUSES



SHOPS



PARK



PLAYGROUND



CAFE



BEER GARDEN / PICNIC



SPORTS AREAL



FORREST



WATERFRONT



GREEN PATH



FIELD

CHARACTERS



QUIET



LOUD



COLLECTIVE



INDIVIDUAL



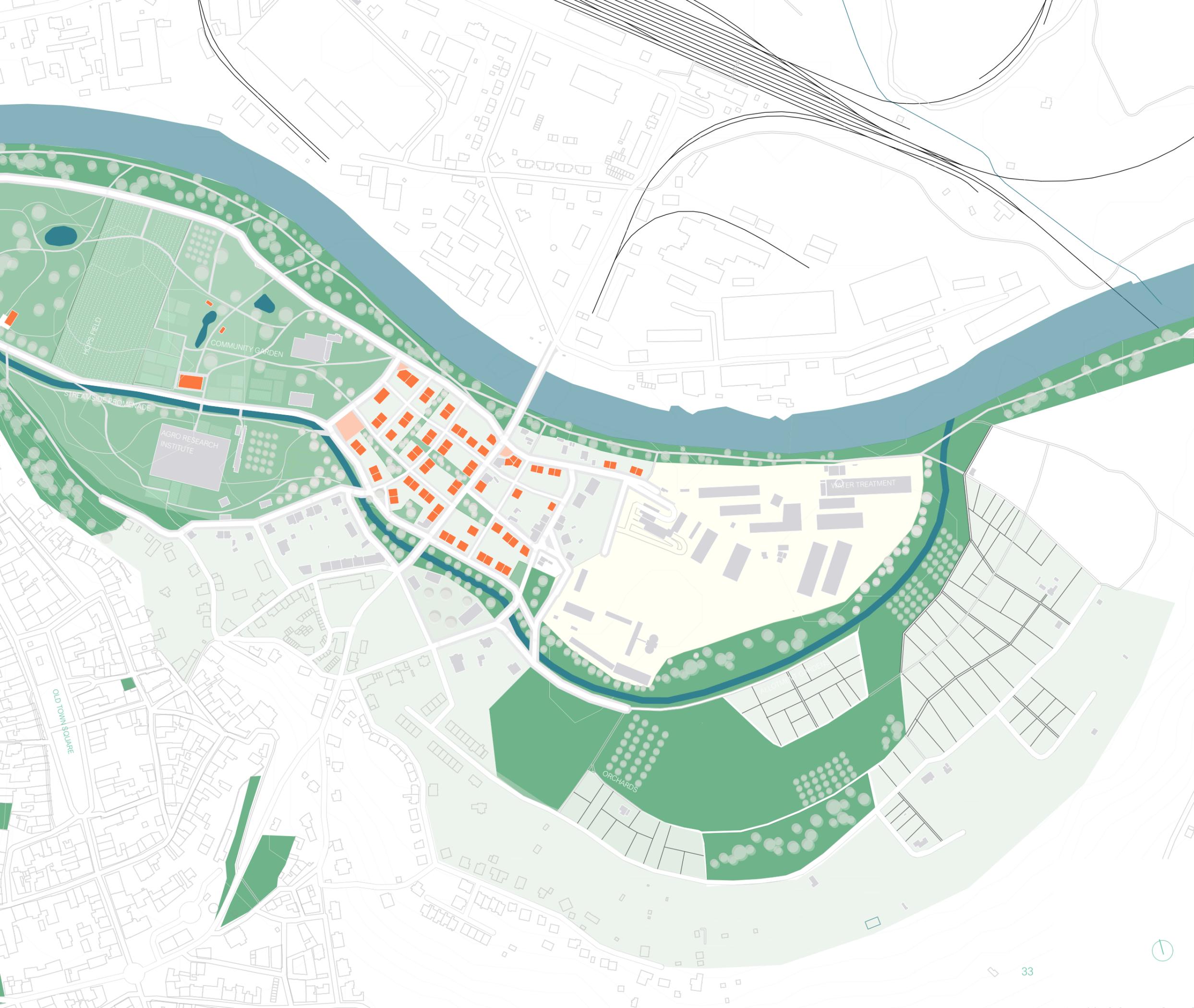
TRANSITIONAL



DESTINATION

MASTERPLAN





- new structures
- existing structures
- important public spaces
- public pavement
- paved roads
- parking
- public park
- public greenery
- field
- forrest
- private greenery
- water treatment centre
- water



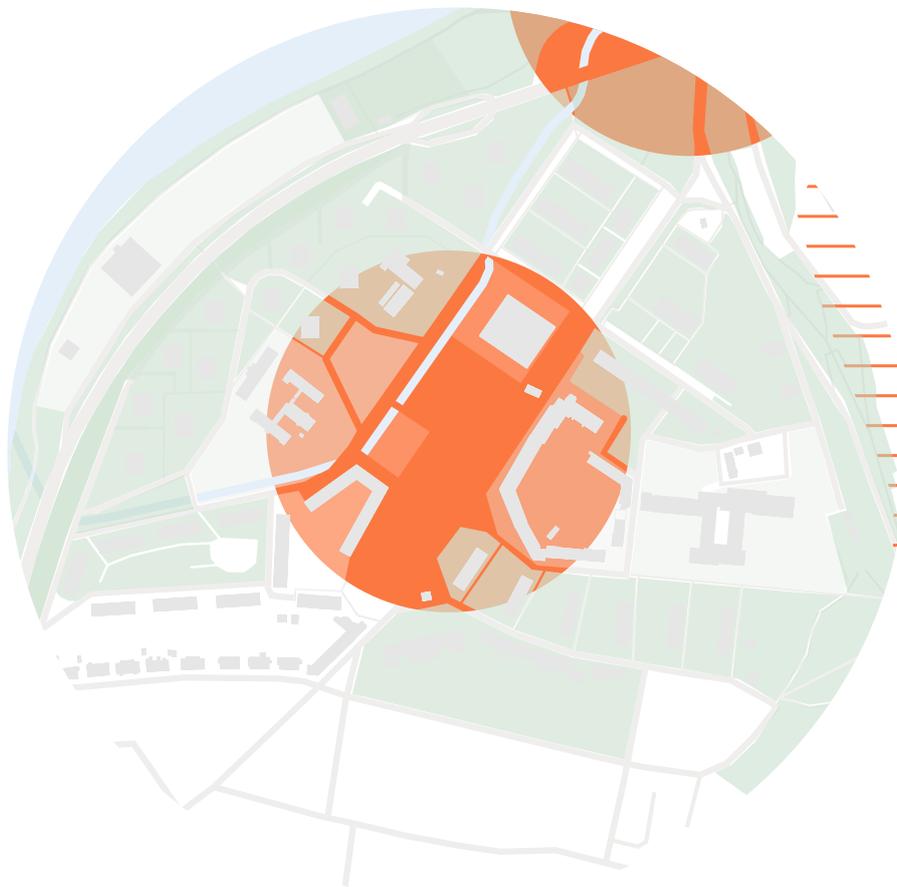


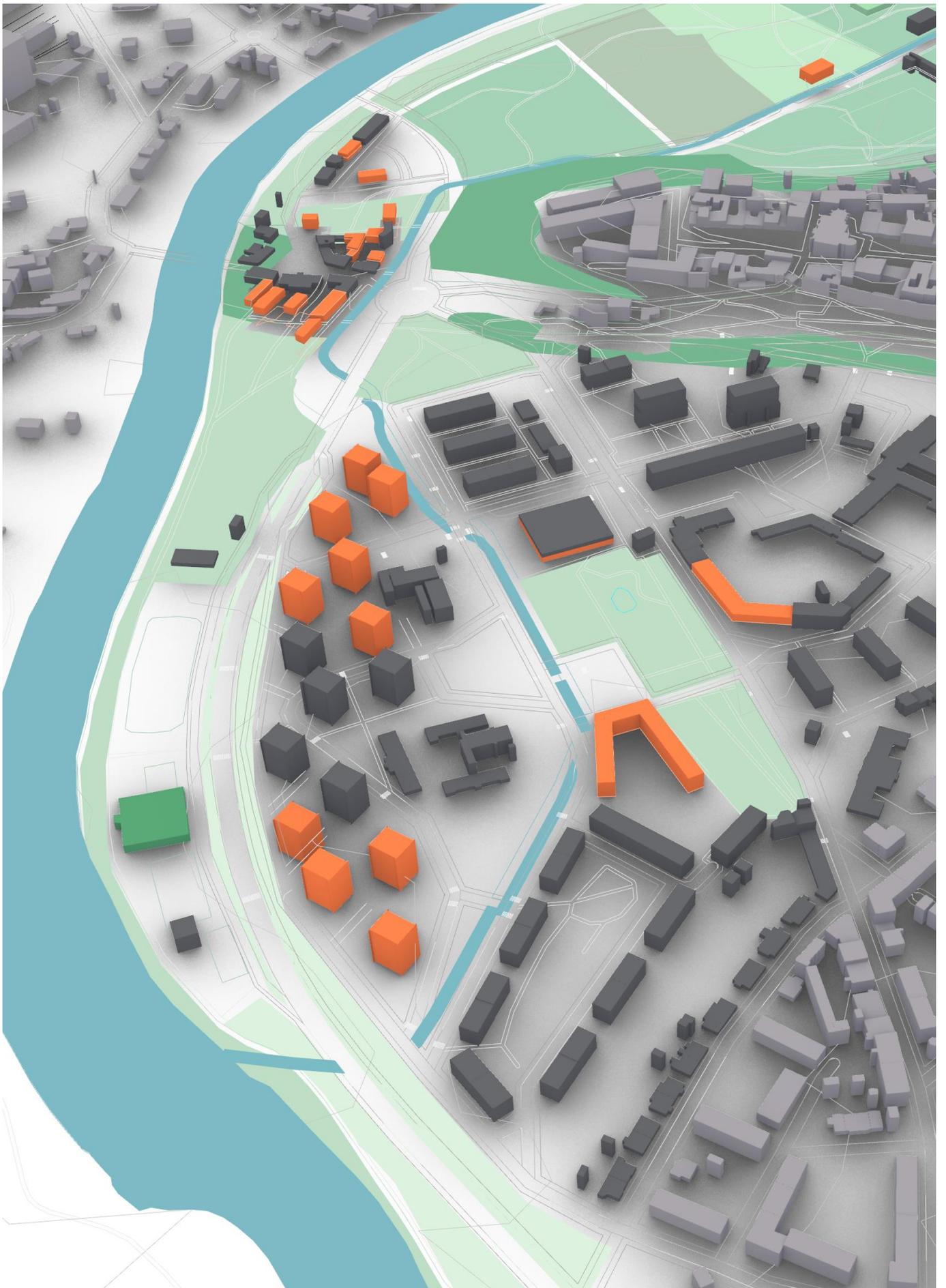


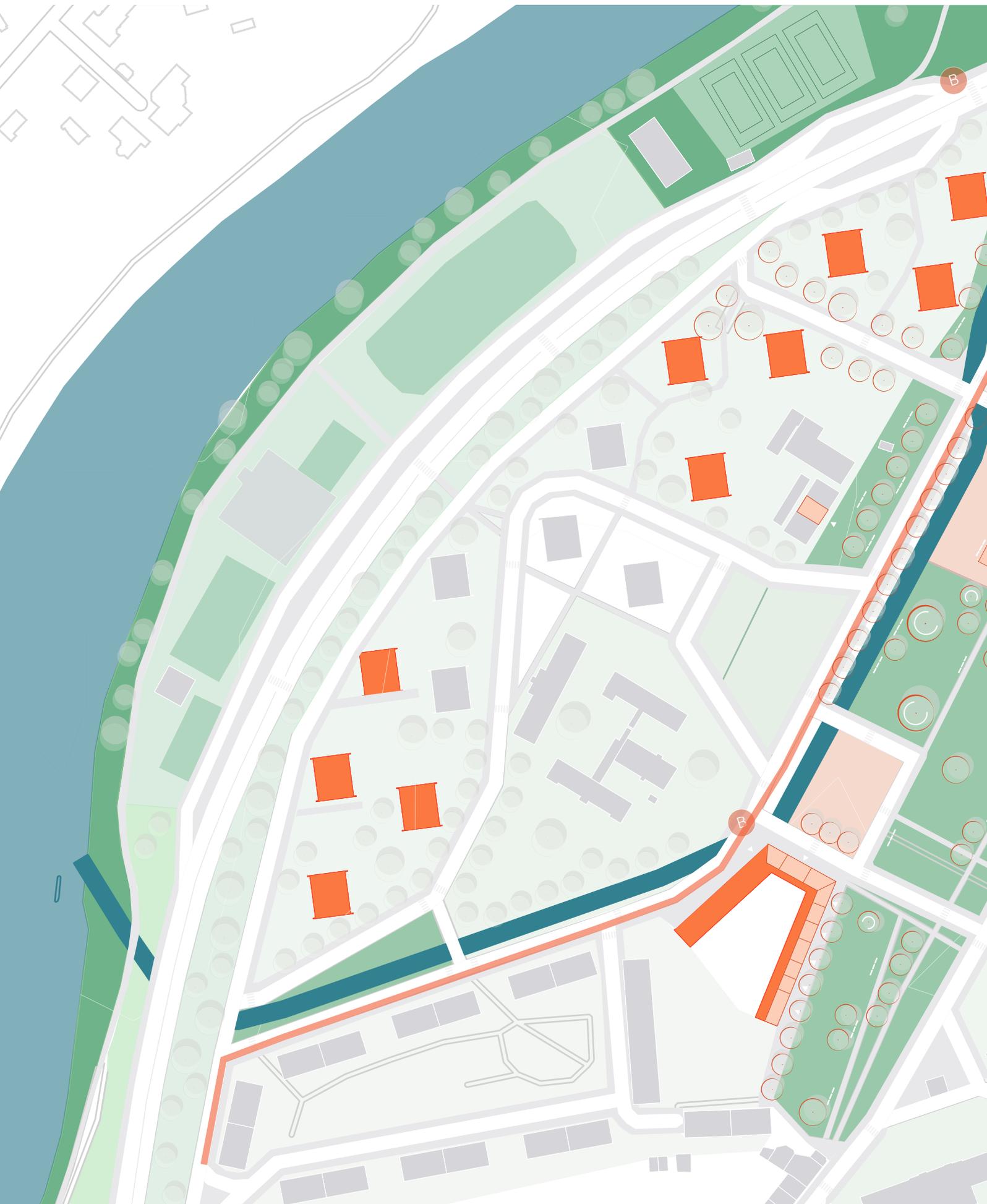
URBAN CORE

Located on the lower-west side of the Historic Centre, this urban core was characterised by the development of Housing Estates during the Soviet Regime. The uncovering of the old stream acting as a catalyst to redefine the random structure of the urban fabric.

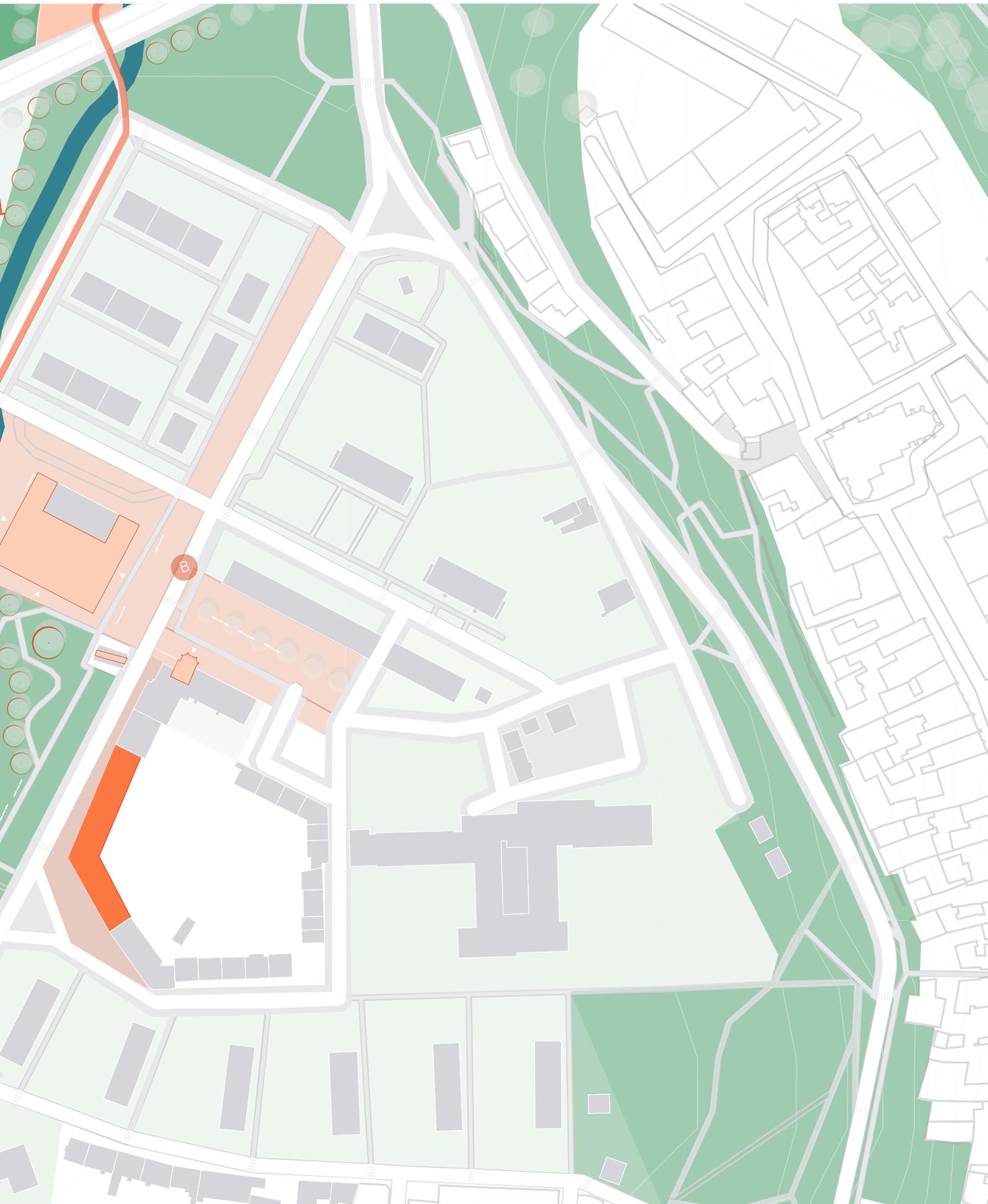
Some “Panelak” are cleared to make room for the stream as well as creating a central public space around it, where the newly improved neighbourhood can be drawn in.

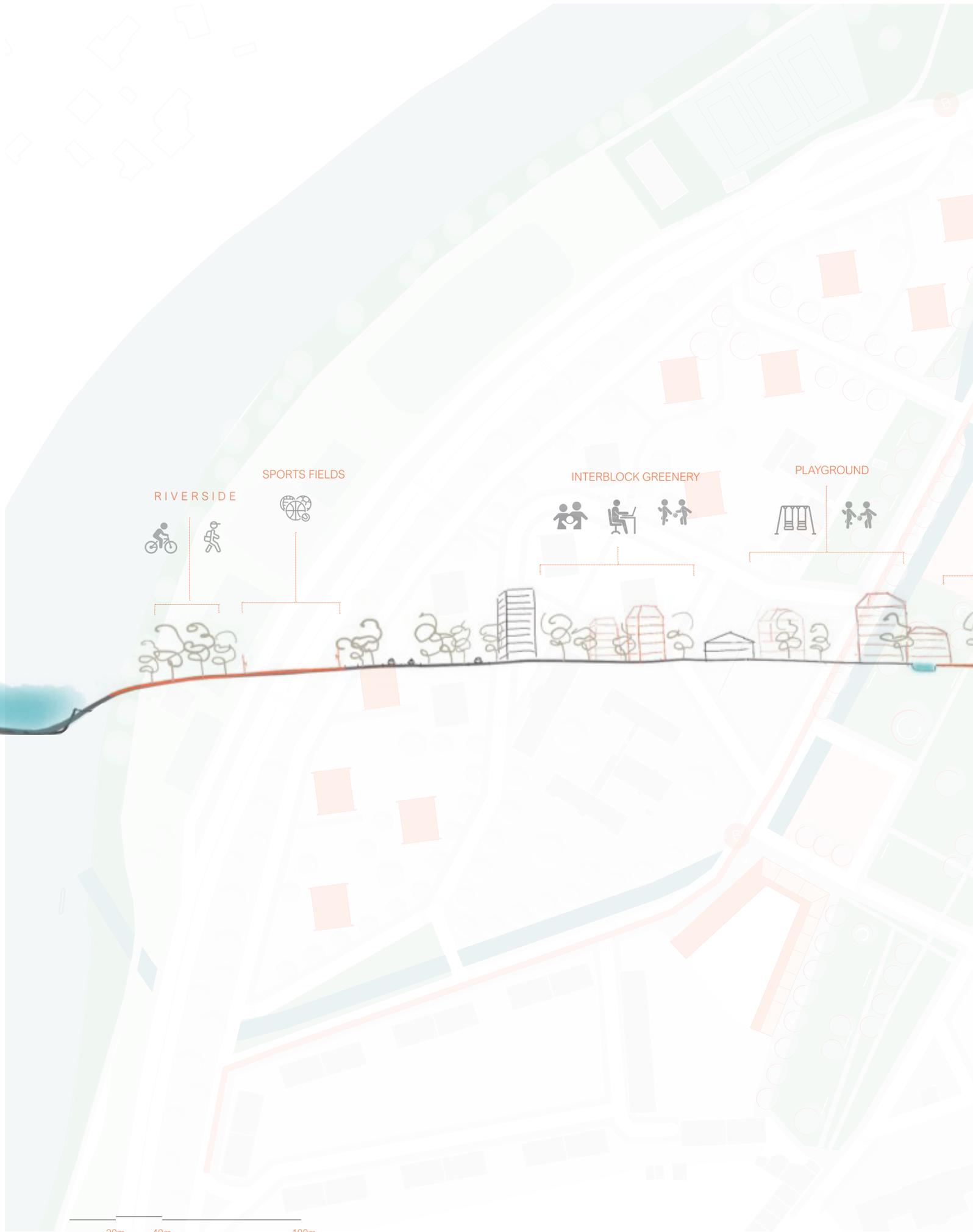






20m 40m 100m





RIVERSIDE



SPORTS FIELDS



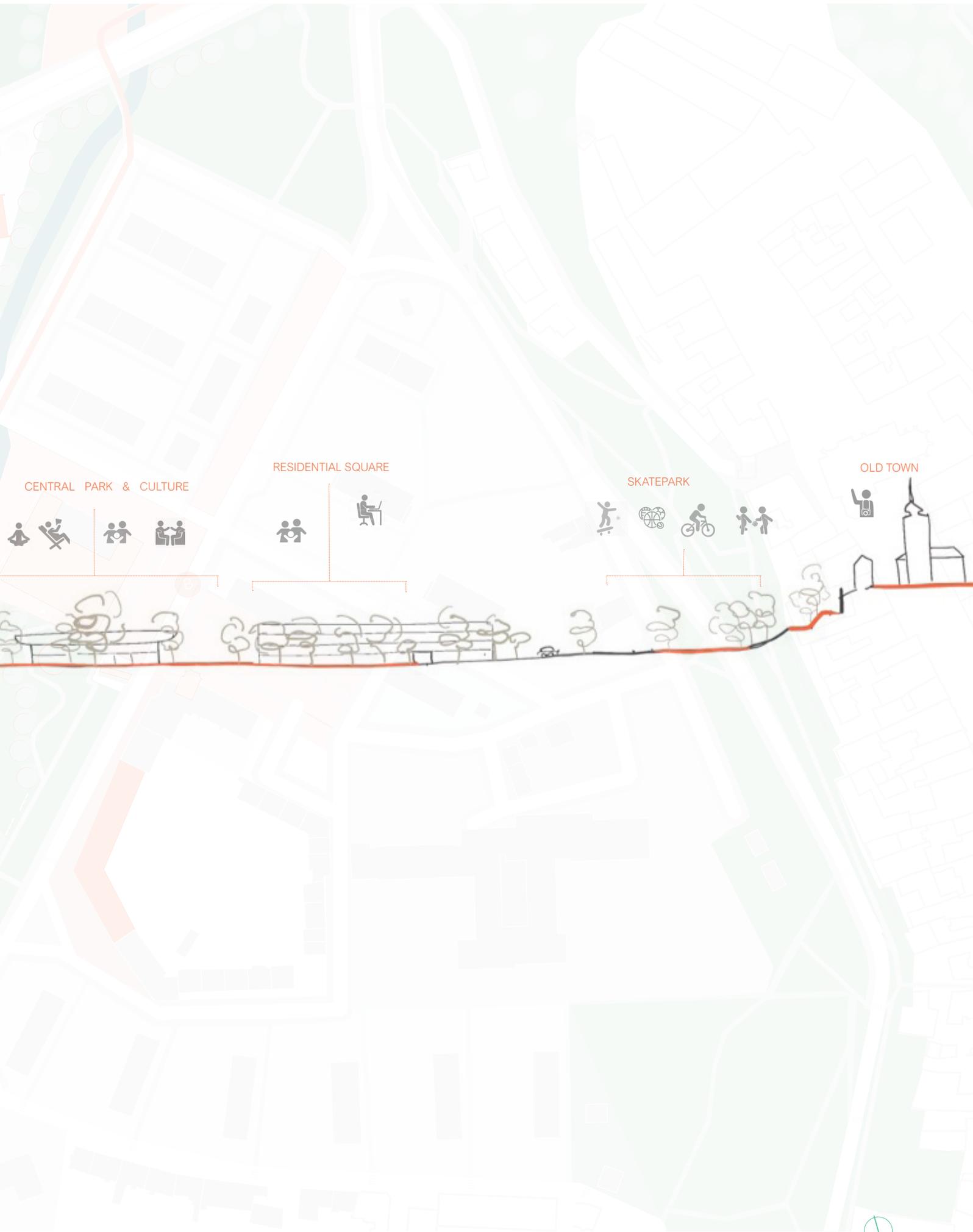
INTERBLOCK GREENERY



PLAYGROUND



20m 40m 100m



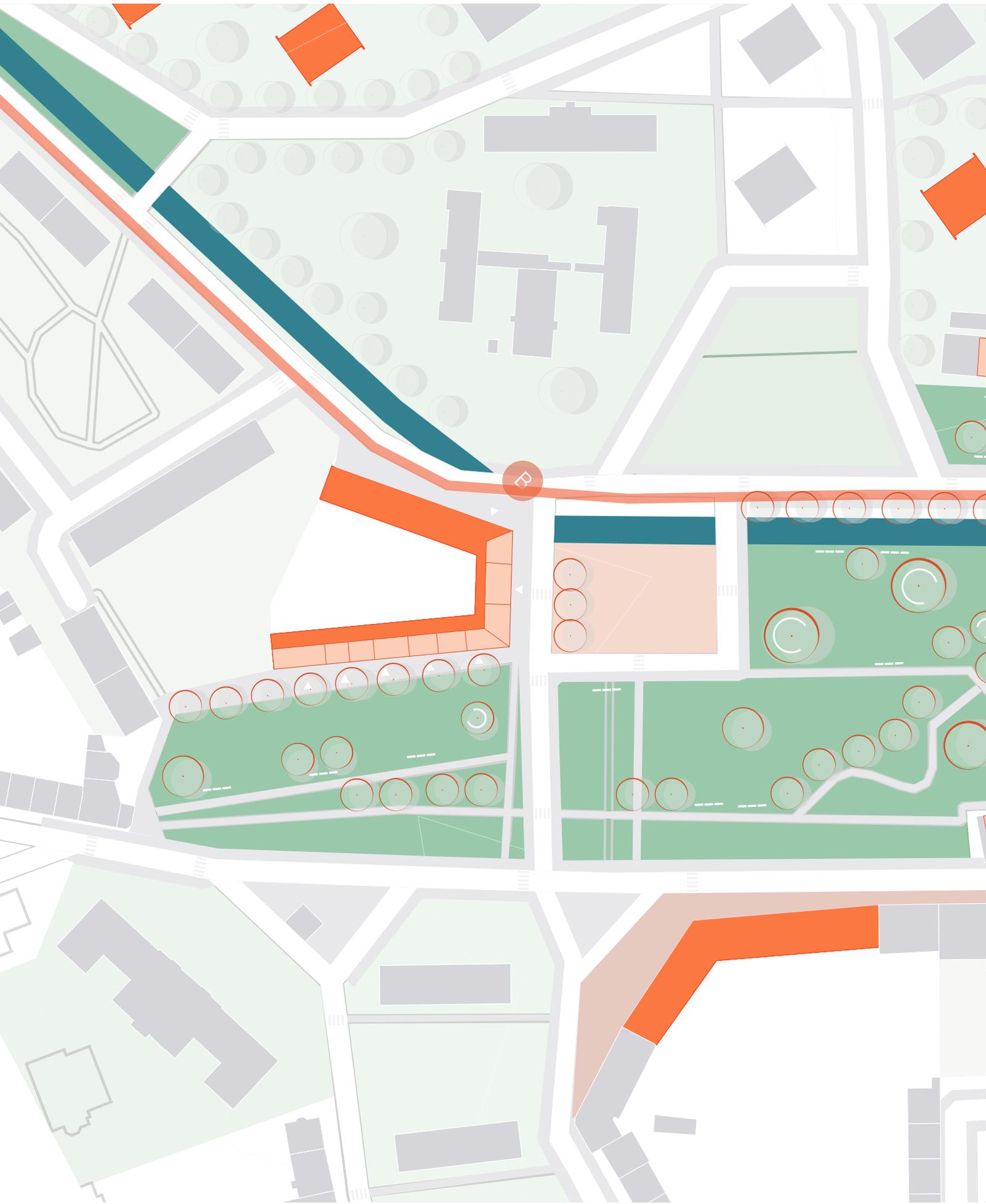
CENTRAL PARK & CULTURE

RESIDENTIAL SQUARE

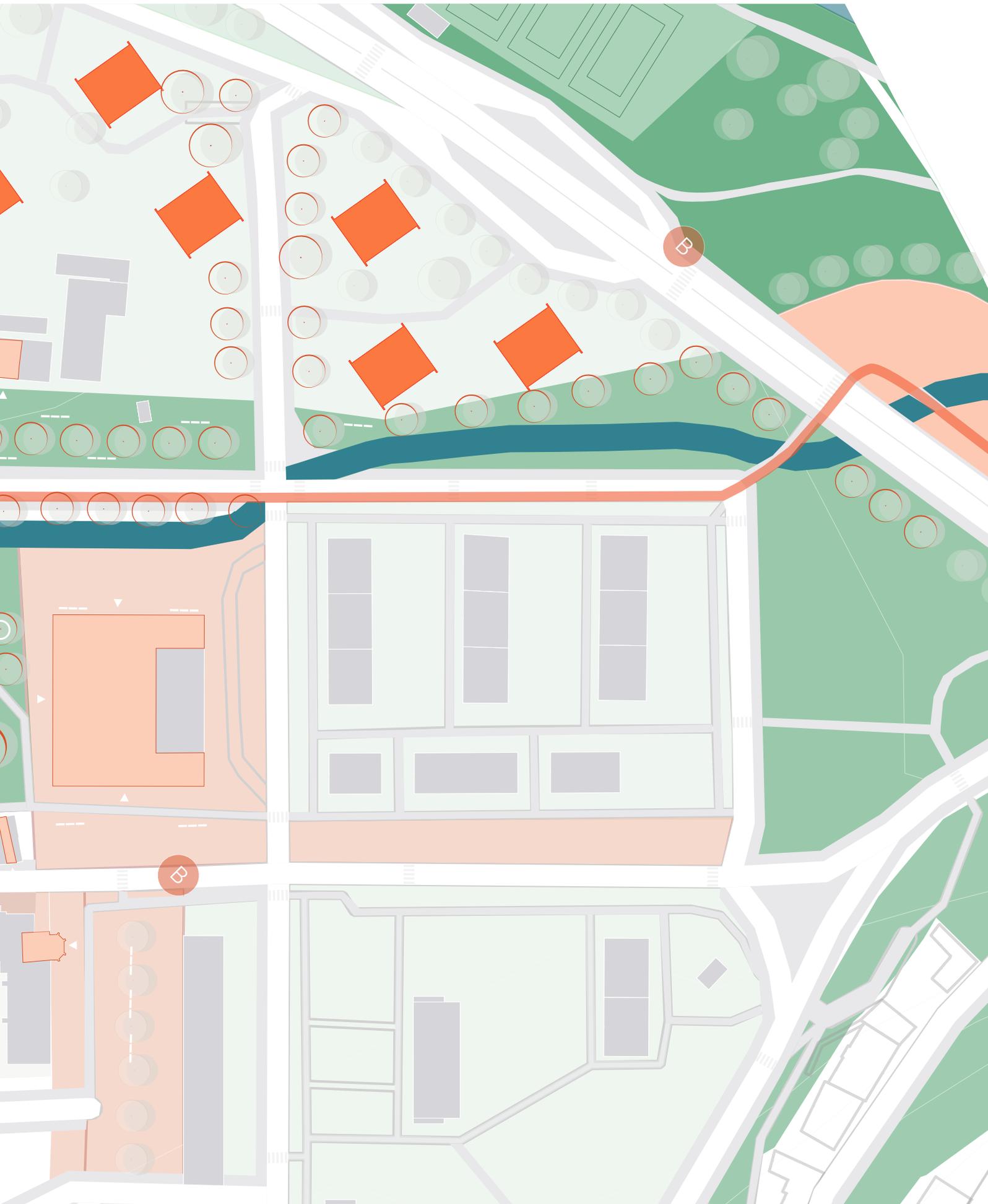
SKATEPARK

OLD TOWN





10m 20m 50m



CENTRAL PARK

MOTIVATION OF USERS



SIGHT SEEING



EXPLORING



PLAYING



FAMILY TIME



SHOPPING



SOCIALIZING

TPOLOGIES



MIXED URBAN



CAFE



PICNIC



PARK



PANELAK



NEW URBAN

CHARACTERISTICS



LOUD



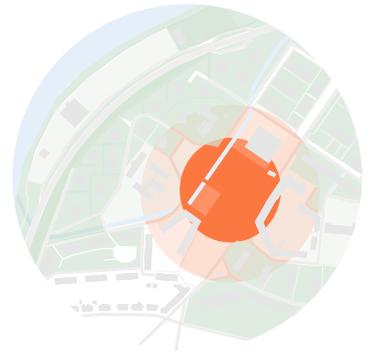
COLLECTIVE



DESTINATION



TRANSITIONAL



NEW URBAN VILLAS

MOTIVATION OF USERS



PLAYING



FAMILY TIME



WORKING

TYOLOGIES



MIXED URBAN



NEW URBAN



PLAYGROUND

CHARACTERS



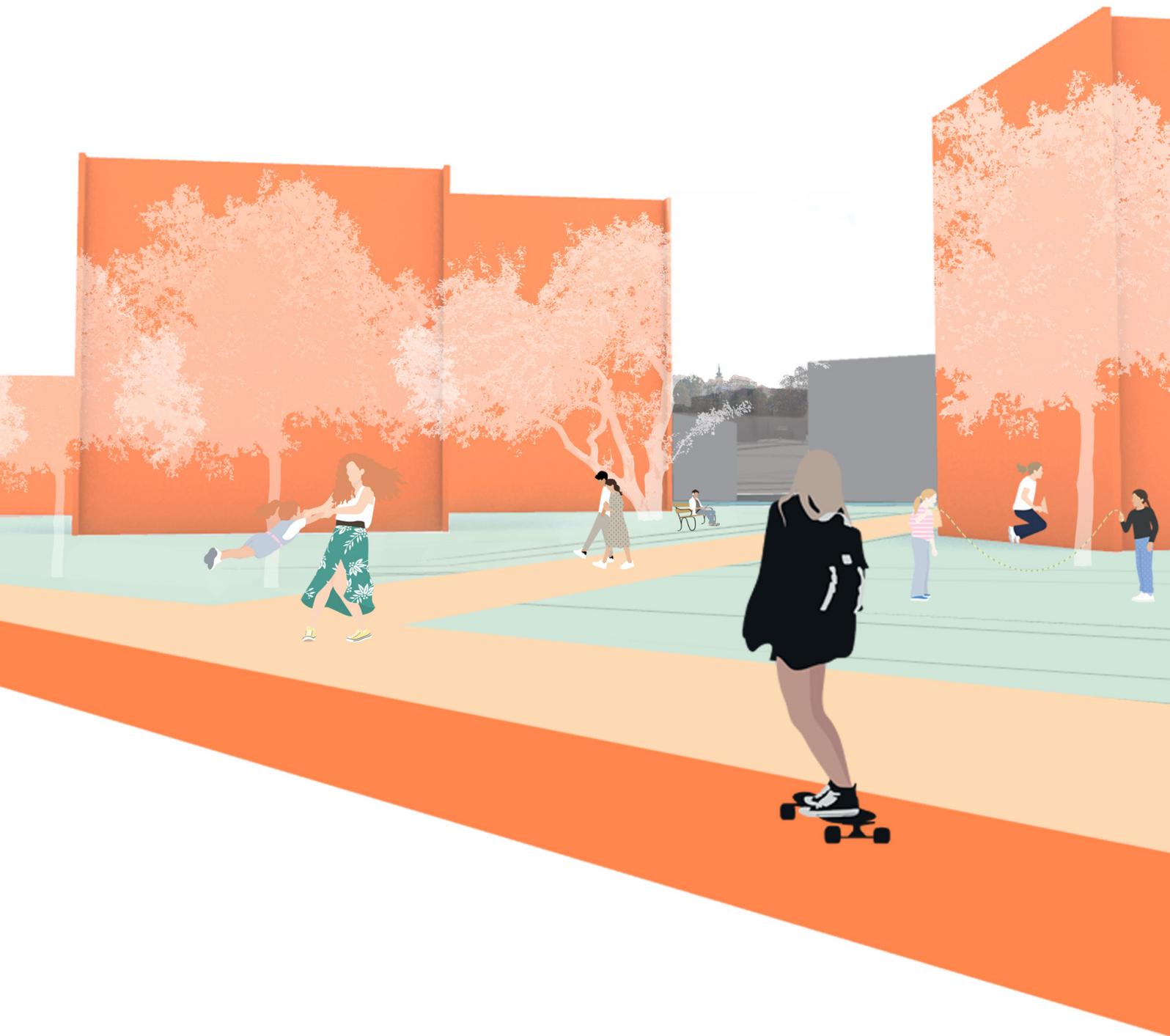
QUIET



INDIVIDUAL



TRANSITIONAL



THE SPORTS STRIP

MOTIVATION OF USERS



PLAYING



CYCLING



EXPLORING



SPORTS

TYOLOGIES



SPORTS
AREAL



WATERFRONT



GREEN PATH

CHARACTERS



LOUD



COLLECTIVE



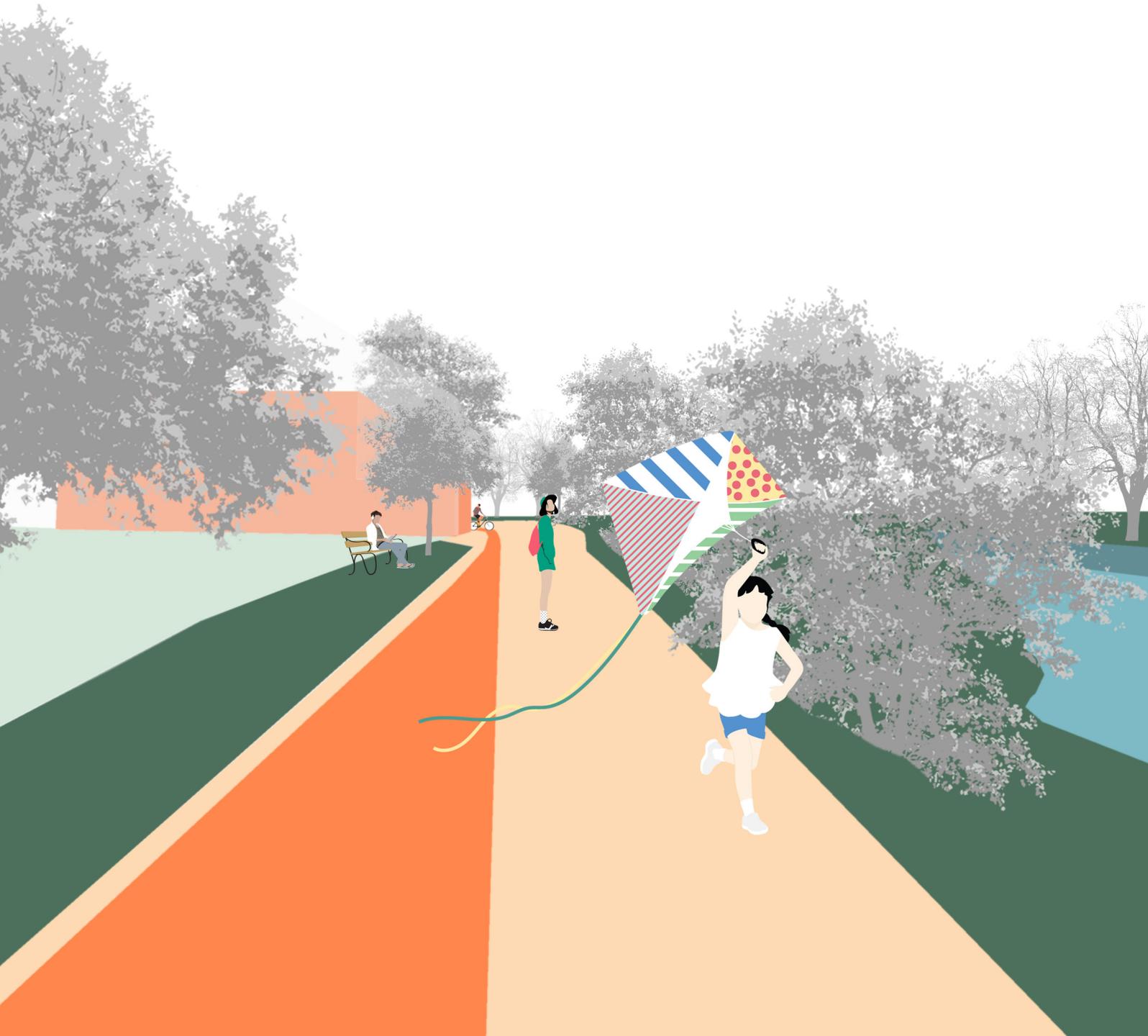
INDIVIDUAL



TRANSITIONAL



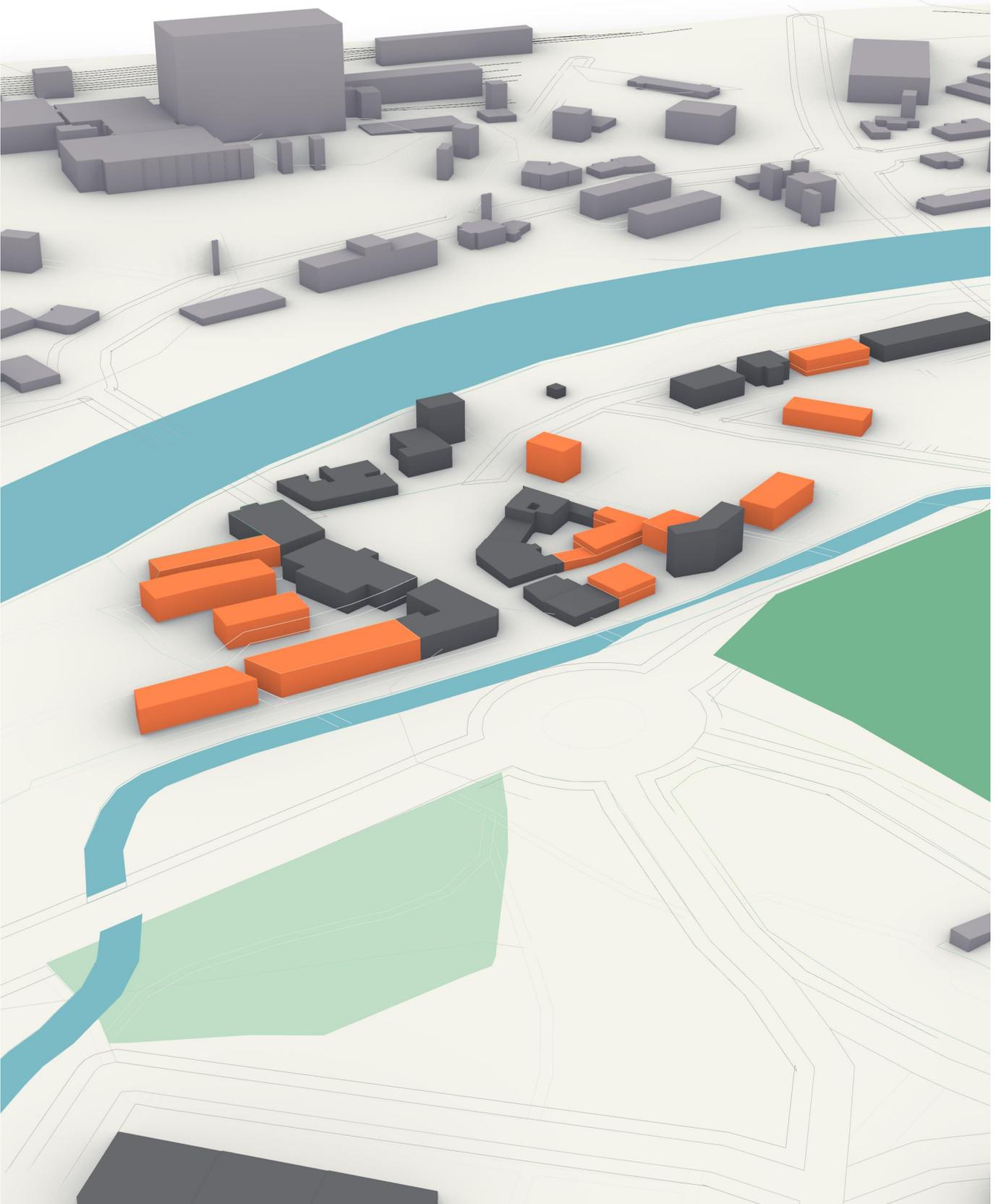
DESTINATION



NOSTALGIC CORE

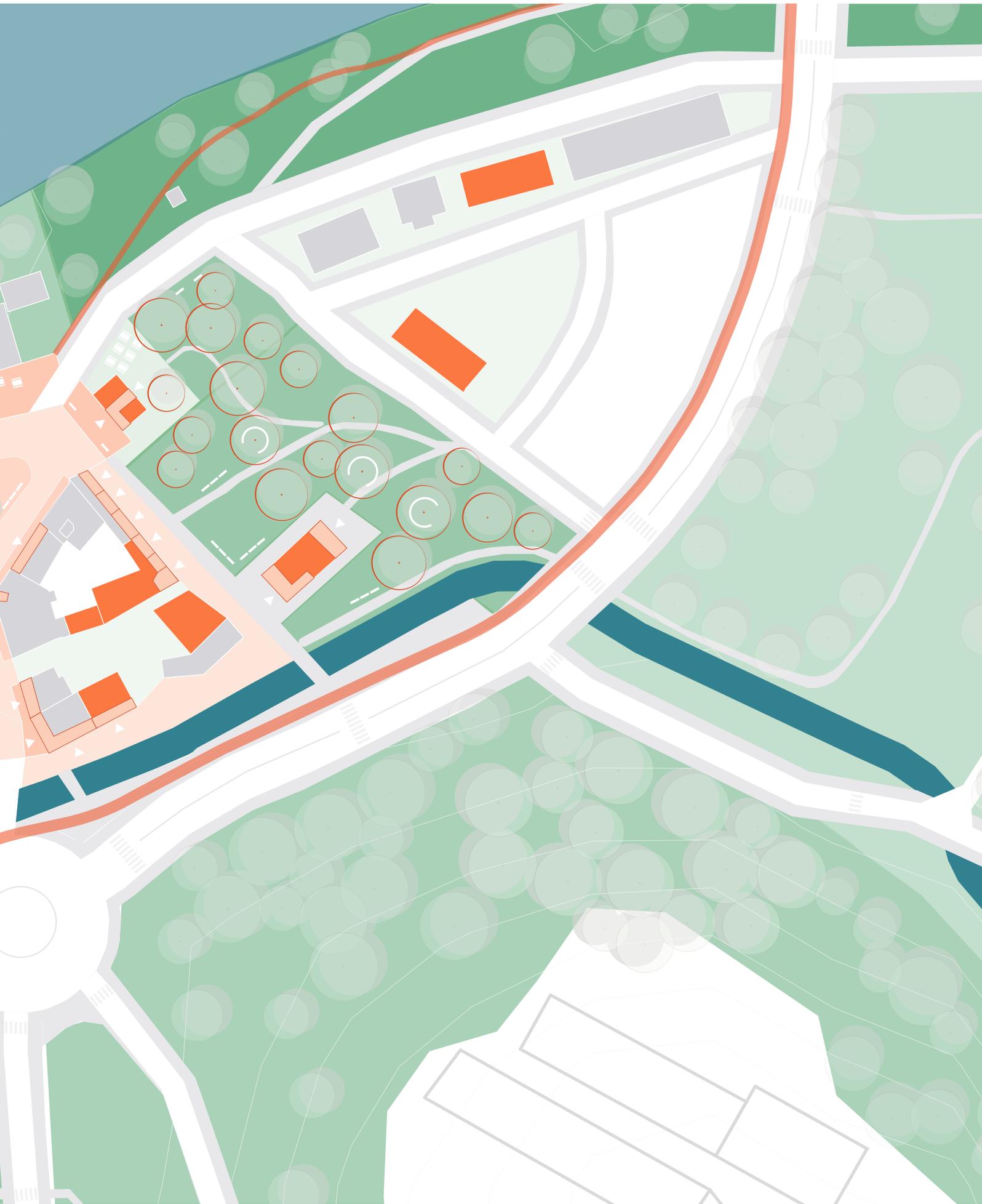
The Nostalgic Core takes its name from the today's Husitske Namesti, the former Market Square. The newly revitalized square sits where the bridge and the riverside paths cross. The abandoned structured around it are repurposed into small shops and commerces. The idea is to strentghten this core for people who cross Zatec through the river, for the visitors interested in sightseeing and learning more abouth the town beyond Hops, but definitely also for the locals, a place to socialize shop and start or end a nice green promenade







10m 20m 50m





RIVERSIDE GREEN

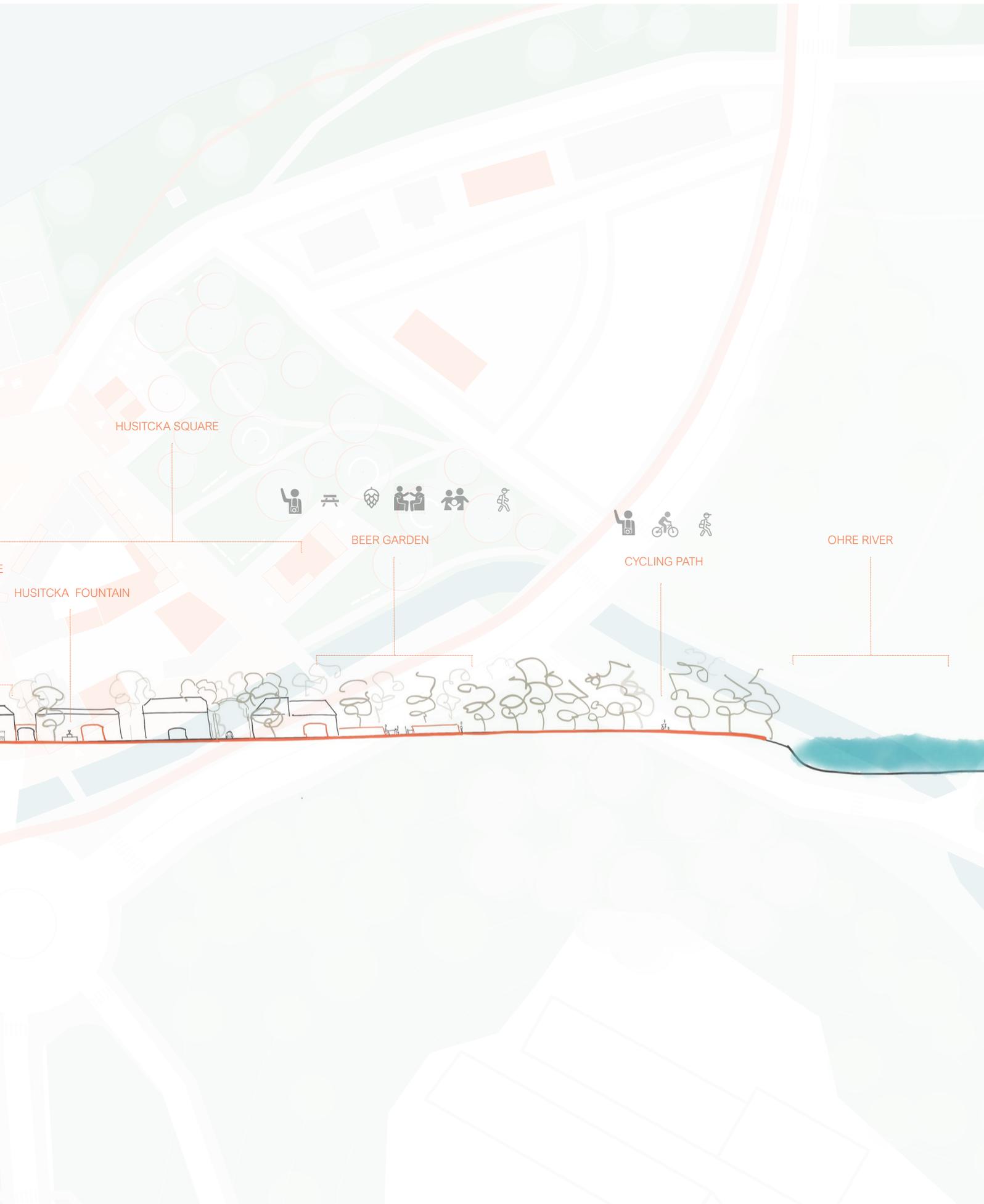
TENNIS COURTS

NEW GALLERY & GARDEN

STREAMSIDE PROMENADE

MARKETPLACE

10m 20m 50m



NOSTALGIC MARKET SQUARE

MOTIVATION OF USERS



SHOPPING



SOCIALIZING



SIGHT SEEING



EXPLORING



CYCLING

TYOLOGIES



SHOPS



PARK



CAFE

CHARACTERS



LOUD



COLLECTIVE



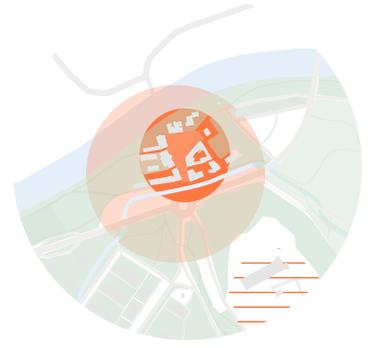
INDIVIDUAL



TRANSITIONAL



DESTINATION



BEER GARDEN

MOTIVATION OF USERS



FAMILY TIME



SIGHT SEEING



EXPLORING



SOCIALIZING



PLAYING

TYOLOGIES



PARK



PLAYGROUND



BEER GARDEN
/ PICNIC



WATERFRONT



GREEN PATH

CHARACTERS



LOUD



COLLECTIVE



TRANSITIONAL



DESTINATION



THE STREAM PROMENADE

MOTIVATION OF USERS



EXPLORING



CYCLING



SOCIALIZING



SHOPPING



SIGHT SEEING

TYPES



PARK



CAFE



SHOPS

CHARACTERS



LOUD



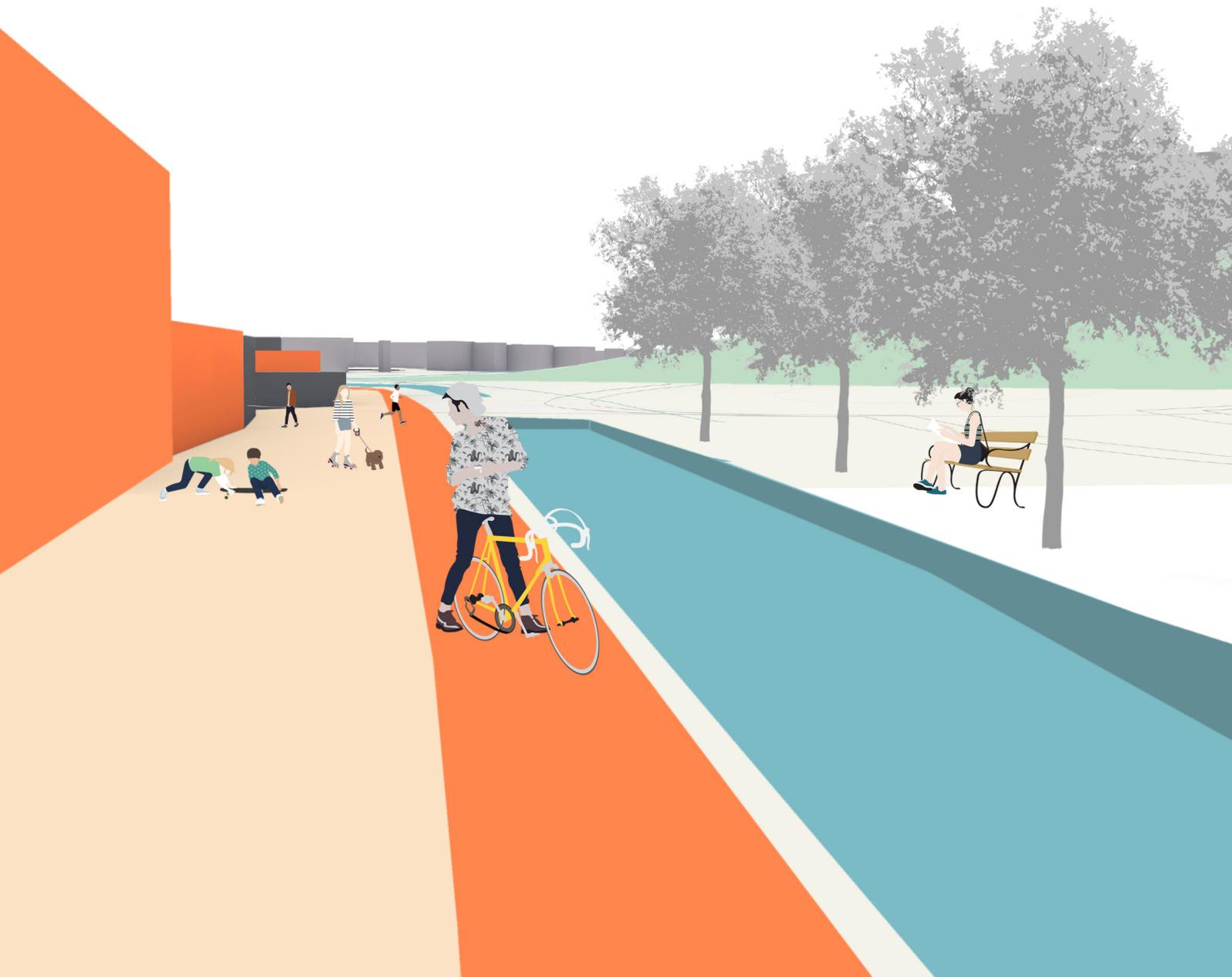
COLLECTIVE



TRANSITIONAL



DESTINATION



GREEN CORE

The green core is perhaps the one going through the most major change. The epicentre of this core is a new Community Garden located next to the only remaining Hops field of Zatec. Surrounded by a new Botanical Garden, it strengthens the agricultural character of this part of town with the existing Agricultural Research Institute.

The Riverfront is cleared from garden colonies, which are moved into the free field more inland. Meanwhile, the broken structure of this historic part of town located on the important axis to the train station is patched through the creation of a new neighbourhood of shared houses with private gardens.

The Garden Colonies are surrounded by orchards so as to keep the private/public rhythm in this more quiet and green part of town.







20m 40m 100m





OLD TOWN



NEW FORREST PATH

BOTANICAL GARDEN



AGRICULTURE RESEARCH CENTRE



STREAMSIDE PROMENADE

20m 40m 100m



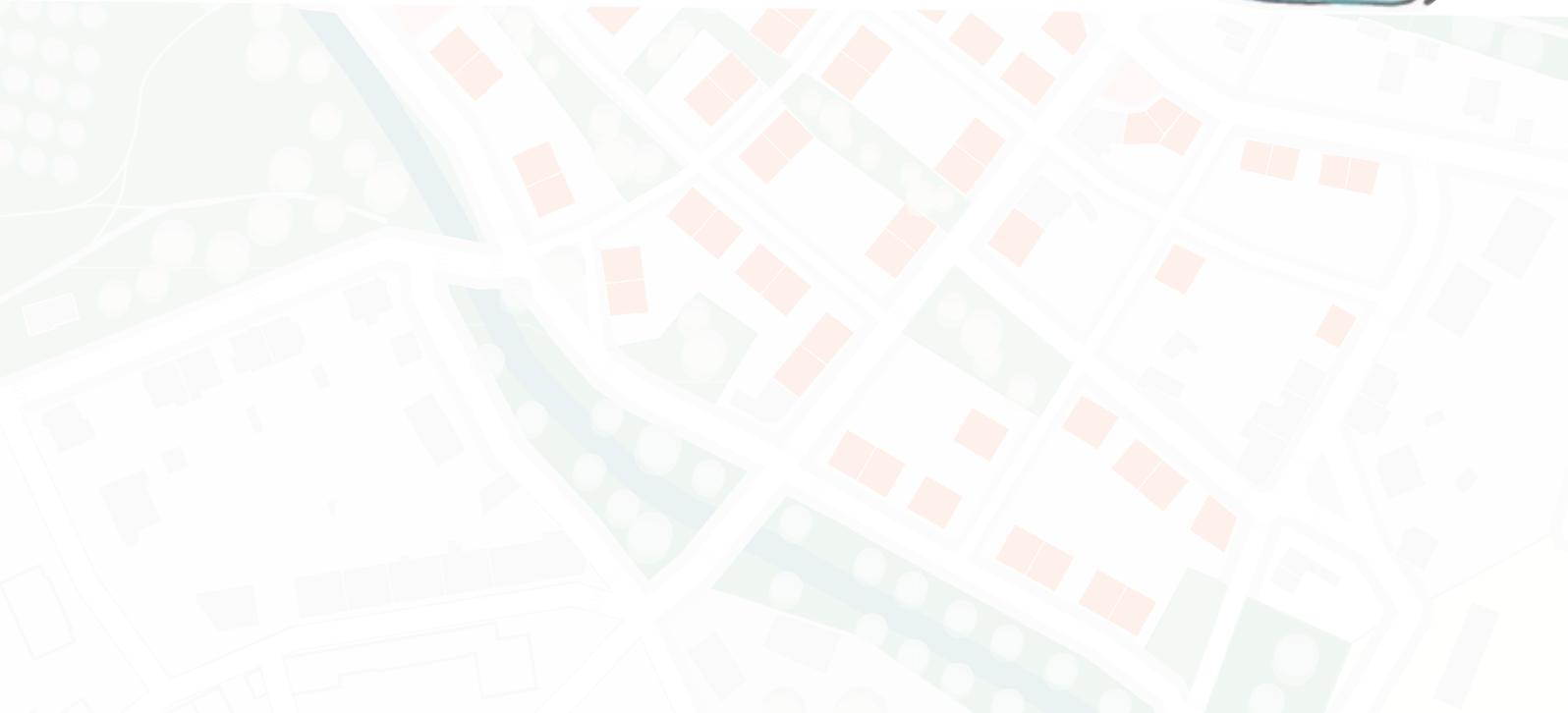
PEDESTRIAN & CYCLIST PATHS THROUGH GREEN



NEW GREEN NEIGHBOURHOOD



NEW LOCAL SQUARE



COMMUNITY GARDEN

MOTIVATION OF USERS



COLLECTIVE
FARMING



HOPS
EXPERTISE



FARMING



GREEN
EDUCATION



FAMILY TIME



WELL-BEING

TYOLOGIES



FIELD



FORREST

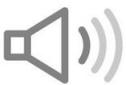


WATERFRONT



GREEN PATH

CHARACTERS



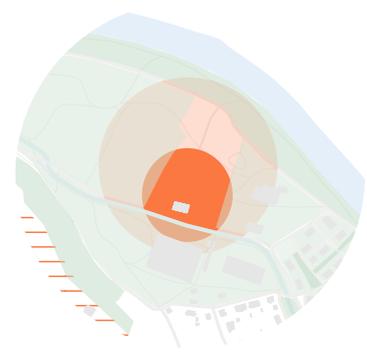
QUIET



COLLECTIVE



DESTINATION



BOTANICAL GARDENS

MOTIVATION OF USERS



SIGHT SEEING



EXPLORING



GREEN
EDUCATION



FAMILY TIME



RELAXING



WELL-BEING

TYOLOGIES



PICNIC



PARK



FORREST



GREEN PATH



WATERFRONT



FIELD

CHARACTERS



QUIET



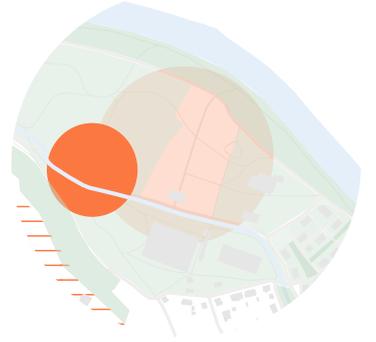
INDIVIDUAL



TRANSITIONAL



DESTINATION



GREEN NEIGHBOURHOOD

MOTIVATION OF USERS



FAMILY TIME



RELAXING



PLAYING



GREEN
EDUCATION



COLLECTIVE
FARMING

TYPOLOGIES



GARDEN



TWIN HOMES



GREEN PATH



PARK



WATERFRONT

CHARACTERS



QUIET



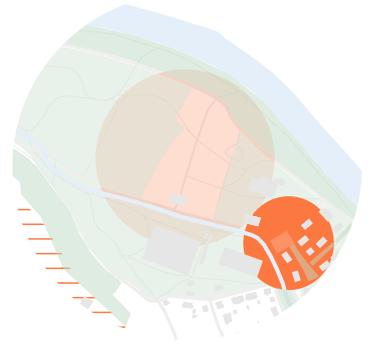
COLLECTIVE



INDIVIDUAL



DESTINATION



ORCHARDS & GARDEN COLONIES

MOTIVATION OF USERS



FAMILY TIME



RELAXING



WELL-BEING



FARMING



GREEN
EDUCATION

TYPES



GARDEN



FORREST



WATERFRONT



GREEN PATH



FIELD

CHARACTERS



QUIET



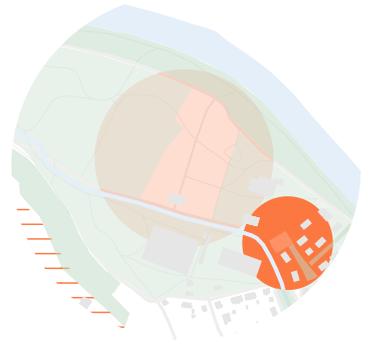
INDIVIDUAL



TRANSITIONAL



DESTINATION



FUNCTIONING



NEW STRUCTURE



- nostalgic market square
- urban square
- housing estates (post 70's)
- urban villas
- row houses
- individual houses
- garden colonies
- sports area
- educational
- agricultural warehouses
- water treatment area
- public park / botanical garden
- historic core
- former industrial Prague district

STRUCTURE OF FUNCTIONS



- mixed use public and commercial hubs
- historic town centre
- former industrial Prague district
- residential
- educational facilities
- sports areas
- agricultural facilities
- water treatment facilities
- public greenery
- private agricultural (garden colonies)

IMPORTANT FACILITIES



■ ■ educational buildings

○ 400m perimeter from a kindergarten

○ 700m perimeter from a primary school

■ ■ significant facilities

- | | | | |
|----|--------------------------|----|------------------------|
| 1 | main train station | 12 | new shopping centre |
| 2 | secondary train station | 13 | |
| 3 | church | 14 | multisports hall |
| 4 | town hall | 15 | tennis courts |
| 5 | synagogue | 16 | beergarden |
| 6 | homo lupulus hops museum | 17 | community garden |
| 7 | main bus terminal | 18 | agricultural institute |
| 8 | Kapusinska monastery | 19 | |
| 9 | Zatec brewery | 20 | |
| 10 | Medveduv Dum | 21 | new library |
| 11 | Kulturni Dum | 22 | guest house |

SYSTEM OF GREENERY



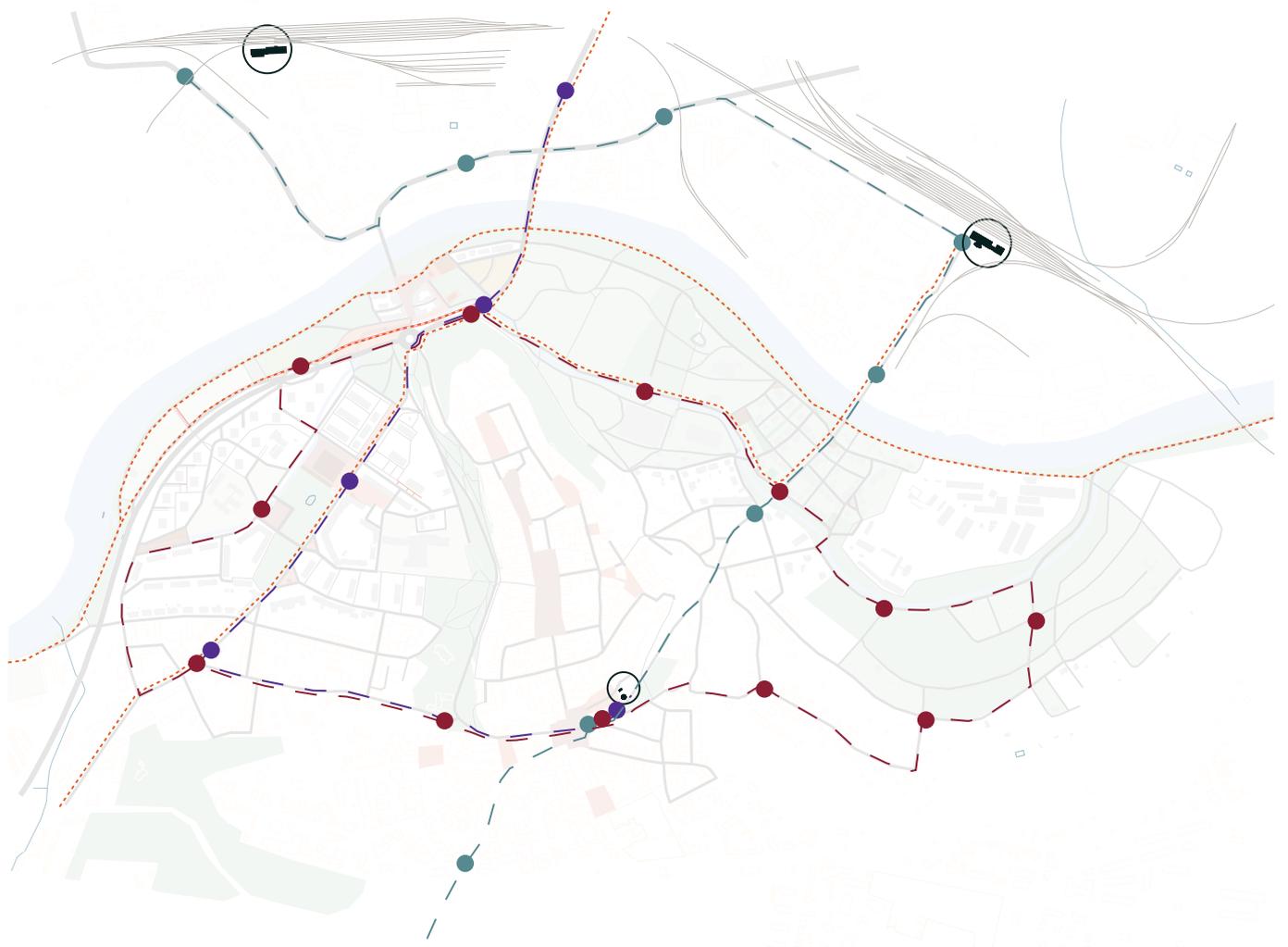
- public park
- botanical garden
- public courtyard greenery
- schoolyards
- sports greenery
- private backyards
- private agricultural greenery
- fields
- agricultural area
- orchards
- densely planted forrest

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

PROCESS



METHODOLOGY

WHY ZATEC ?

I first encountered Žatec in Atelier Efler, the Vernacular Architecture Studio at FA CVUT. The main focus was on the buildings used to process the hops grown in Žatec that are no longer in use today. I spent a semester studying the urban structure of this “Prague District” of the town and explored the possibilities of opening, reusing old industrial blocks to make the city more permeable. The same principle could be used in the rest of this beautiful town to avoid it becoming a dormant UNESCO gem.

The fascination with Žatec resulted in a deeper curiosity of much larger scale for me, hence the site and scope of this diploma work.

DEFINING THE SCOPE

While the Prague District is intricately full of possibilities, a wider scope would help make a more significant, or bolder change in the town and have a larger impact for a much wider array of visitors of the town and users of its spaces.

“A living UNESCO town” was a main vision that drove the search for the extent to which the project should find solutions.

DEFINING THE SITE

The intense topographical change and between the lower town where the hops was once grown and the Historic Core was an immediate challenge to take on.

While the randomly structured Housing Estates were daunting to touch, a somewhat radical approach was necessary in order to see significant effects of this intervention onto local life, beyond remaining as a concept.

CASE STUDIES

The case studies were both challenging and rewarding to find due to the many characters I was after for Žatec. The city of Litomyšl was a great starting point conceptually to link different characters of a town through a continuous promenade that changes character.

The case for Žatec, however, was that no sole aspect of the corridors linking the edges of town were aimed to become the main concept of the project.

FOOD URBANISM

While the agricultural history of the town is obvious through the strong history with Hops, Žatec also has a surprising amount of Garden colonies in immediate vicinity of the centre. Together with the Agricultural Research Centre, this creates a very strong base for agricultural activity in Žatec, at the level of the public.

Opening this agro industry to the public and enhancing the opportunity for public agriculture invites residents from other parts of town to participate and claim the green identity even if they don't have a garden or a private plot.

REFLECTIONS

Working on this scale with many variants has been a challenge, although a rewarding one. I enjoyed the creation of this alternate possibility which seems quite achievable in real life even if taken on different scales or orders. With a site extending across the territory lengthwise, it has been a challenge to express the motivations and the vision clearly, and create a coherent sequence of spaces that feed each other and their surroundings.



CONCLUSION

Žatec is a beautiful town with green streets, great views, a strong multicultural history, great traditions and preservation efforts of its identity.

I wanted to explore the more human and local scale of an intervention to improve its local life, I do believe this to be the best way not only to preserve Žatec's unique character but to help it evolve into a living things rather than a distant memory we are reminded of, upon seeing the chimneys of the old factories.

