



COLOPHON

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Amsterdam, March 05, 2021

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1. INTRODUCTION

1.0 preconditions

- located in the city of Brno
- large former industrial site
- brownfield to be transformed into urban mixed use area
- some remaining characteristic buildings and chimneys



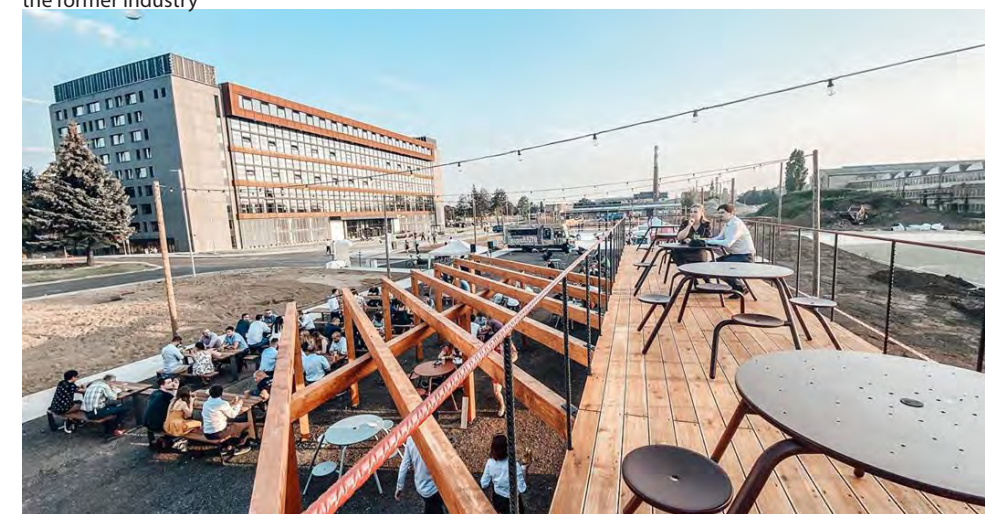
the former industry



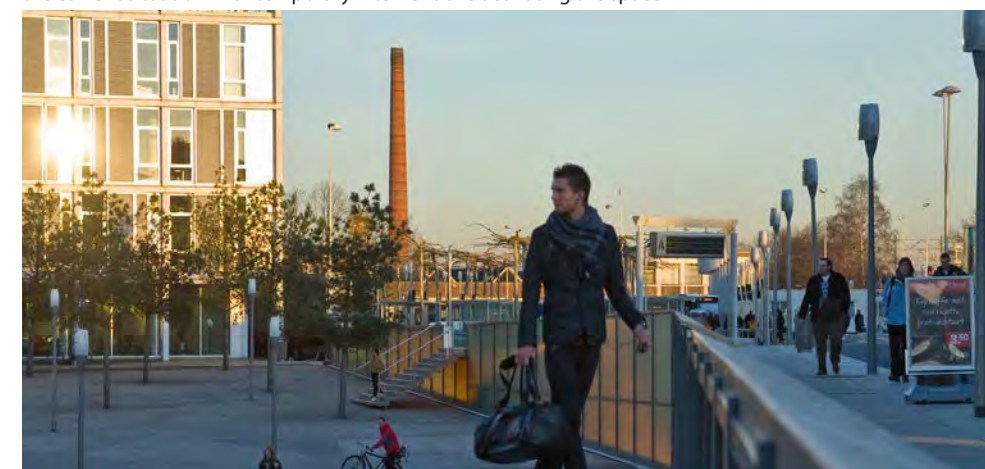
the former industry in the city of Brno



the former industry



the current situation with temporary interventions activating the space



a reference project: Apeldoorn Station Square with a chimney out of past times



1. INTRODUCTION

1.1 location

- a site for a large urban development,
- a site half the size of Brno city centre
- located between the river and the railway
- location with river frontage
- near a station, easy access to various public transport
- one main road connecting it with the city and the outer suburbs
- several parks, sport parks and natural areas in the vicinity

1. INTRODUCTION

1.2 context and existing connections

- there are many facilities surrounding the district like parks, shopping centres, libraries, theatres.
- there are multiple bus- and tramlines near the site that can be connected to the site.



1. INTRODUCTION

1.3 industrial heritage

- some existing buildings and structures (chimneys) have been kept
- these buildings and structures are landmarks and will be incorporated in the development
- the buildings will have public functions and play a role as activators within the development



facilities near the site



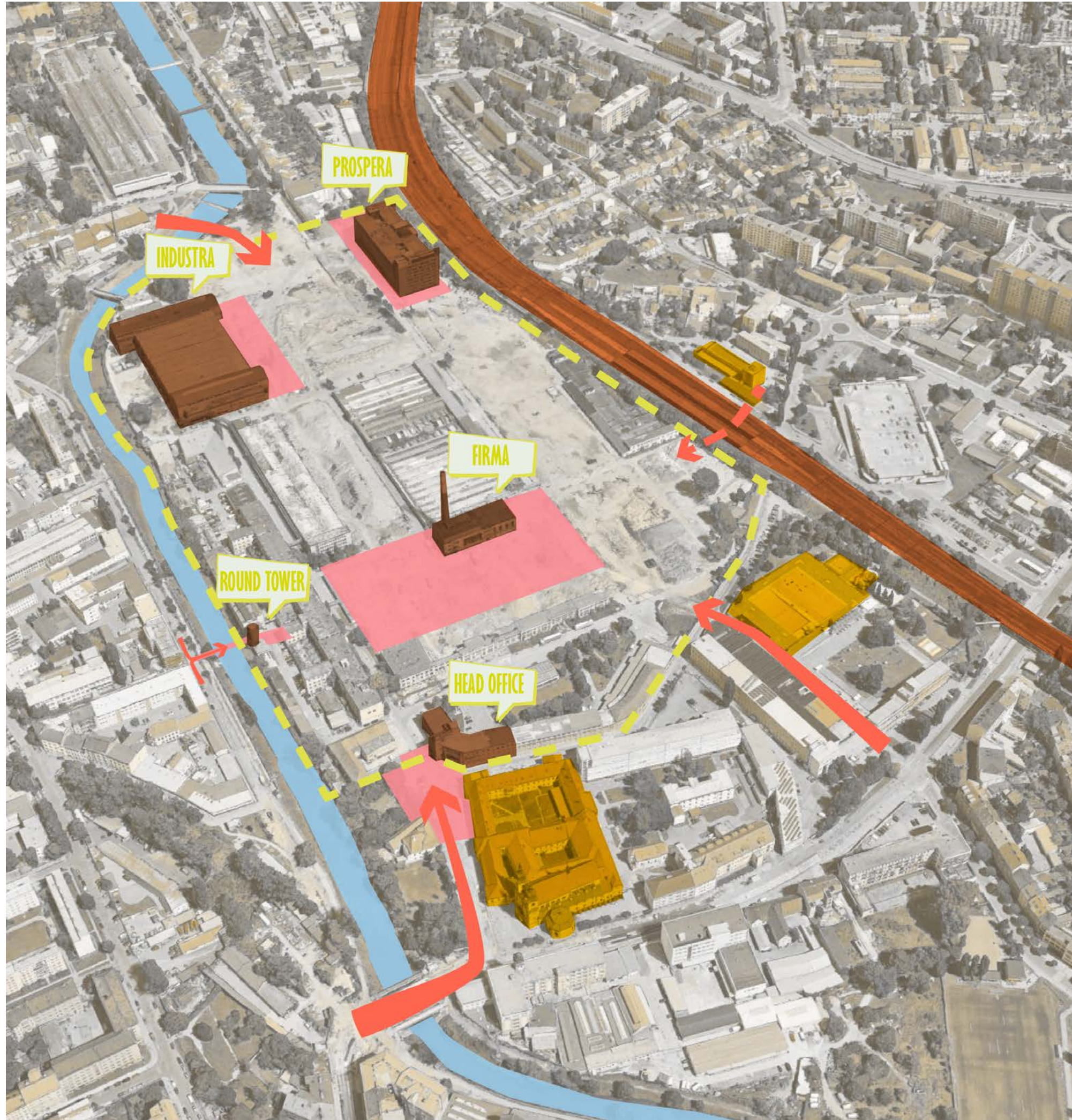
public transport near the site

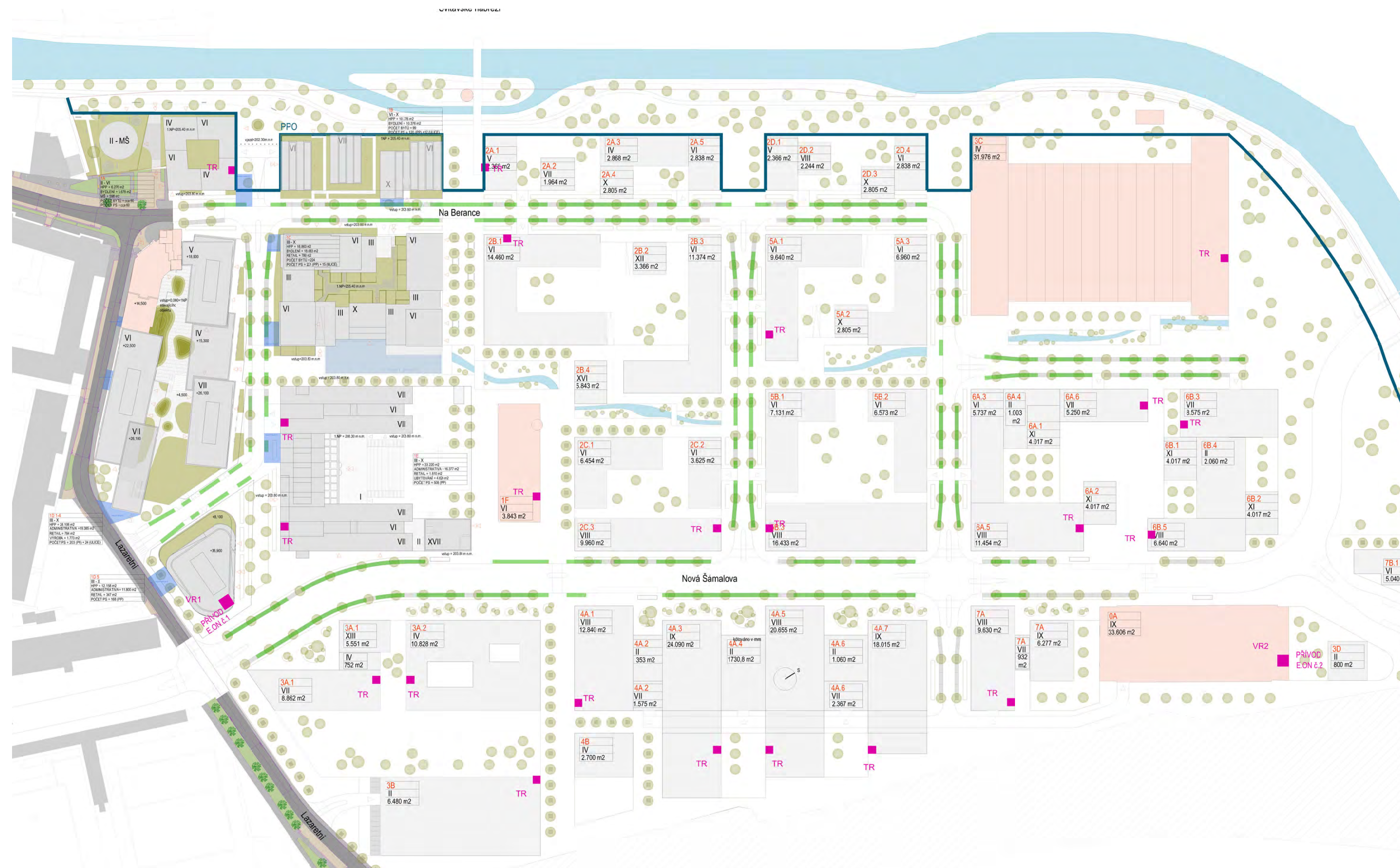


1. INTRODUCTION

1.4 conclusions of site analyses

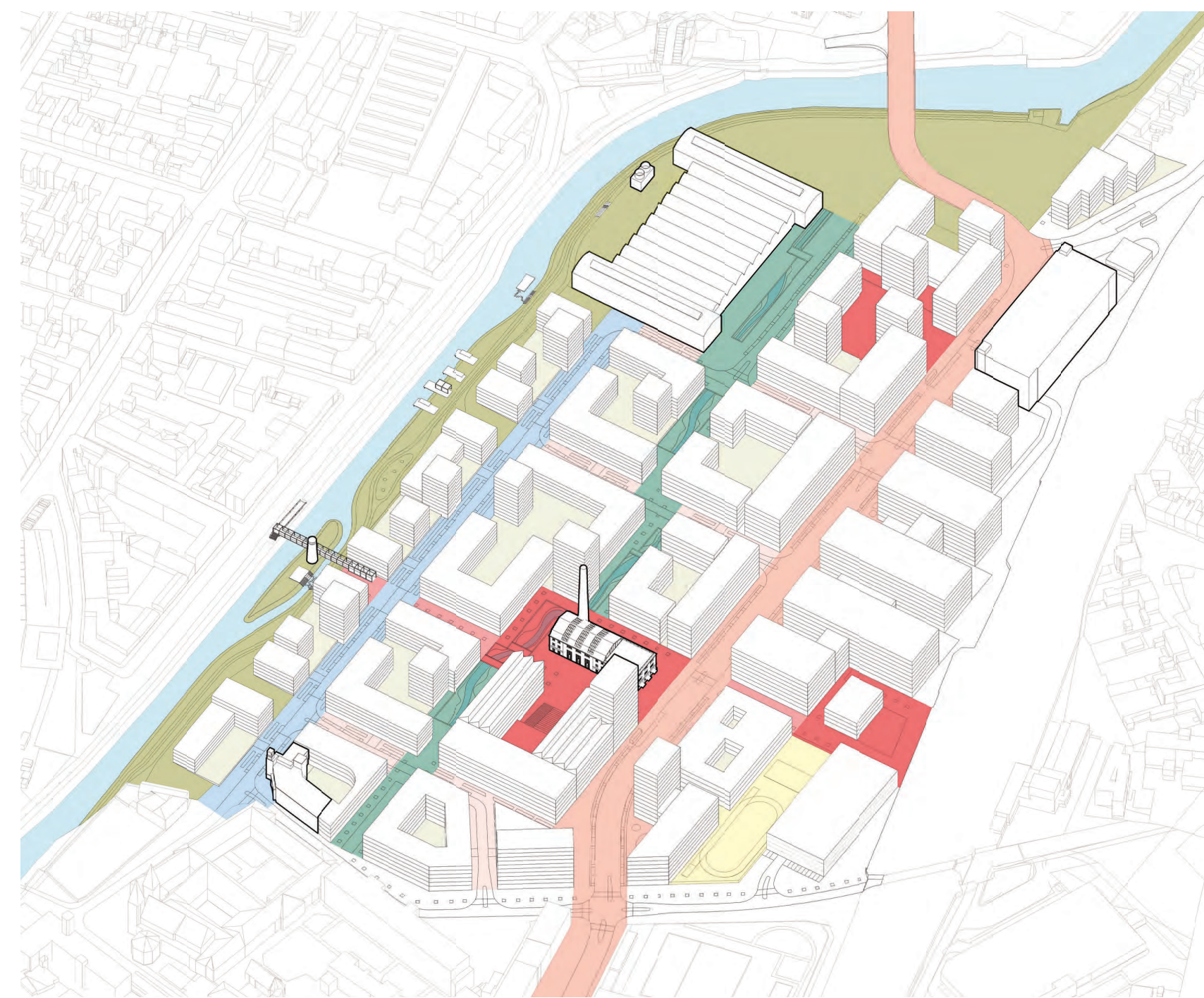
- the site is largely defined and confined by the river and the railway line
- the site has direct river frontage and has the potential to orientate itself towards the river both for buildings and for public space
- it is a quality that there is a limited number of entrances to the site, they are the starting point for a clear hierarchy in roads
- the train station is nearby, there is the potential to create a direct entrance from the station to the district
- characteristic historic industrial buildings are kept. They will have a public function and can be supplemented with adjacent public space that has a direct relationship to those buildings. This space also enhances the visibility of those buildings and adds to the identity of the development





- this plan shows the planned buildings around the existing buildings and structures that are kept,
- the river landscape is embraced,
- there are 3 main public zones from left to right: the river zone, the neighbourhood street, the creek zone and the main road providing access to the site
- the red zones are the main public meeting places.

This urban masterplan is the starting point for the public space and landscape masterplan. The building layout we treat as a given, the nature of the public space as an inspiration to be further developed.



LEGENDA

MĚSTSKÁ TRIDA	PLOCHA NÁMĚSTÍ	REKREAČNÍ NÁBŘEŽÍ
ZELENÁ ULICE S VODNÍM PRVKEM	HLAVNÍ PĚŠÍ PROPOJENÍ	PLOCHY PRO SPORT A ŠKOLSTVÍ
OBYTNÁ ULICE	KLIDNĚJŠÍ PŘÍČNÉ ULIČNÍ PROSTORY	SOUKROMÁ ZELEN'

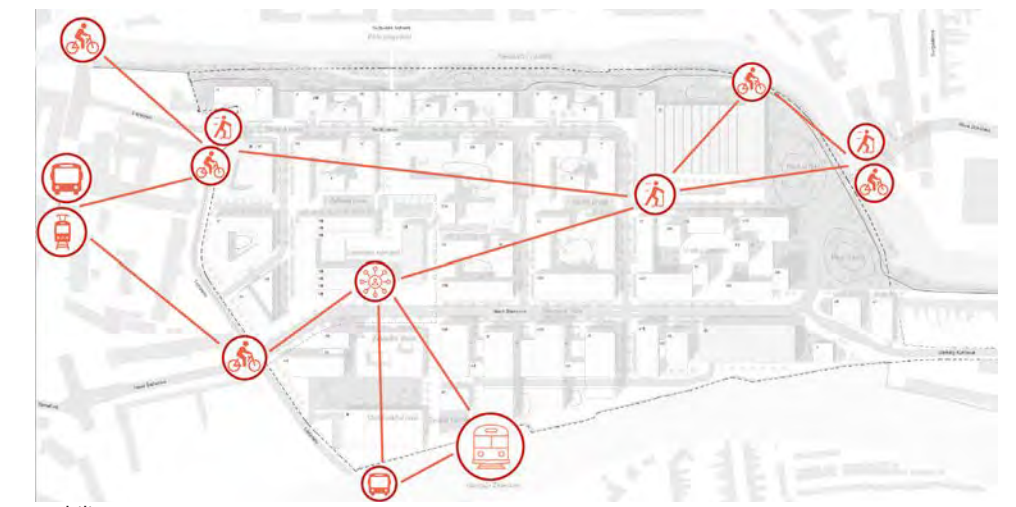
VISION

3.0 vision

- the multi use nature of the development asks for a public space that supports the life style and work style of its future residents and user groups
- the public space addresses programm, identity and sustainability



PLAY LEISURE SPORT
 OUTDOOR ACTIVITY GREEN ENVIRONMENT CULTURE
EDUCATION RESEARCH
 BIODIVERSITY KNOWLEDGE CREATION SAFETY
 ECOLOGY NETWORK RE-USE WORK SPORT
 WELLNESS RETAIL
 SMART CONNECTIONS TRANSPORTS
 BUSINESS NETWORK
 COMFORT LEISURE SUSTAINABILITY
 WORK LEISURE
FOOD SHOPPING **LIVING**
 COOPERATIVITY OUTDOOR ACTIVITY
 WORK COMMUNITY ECOLOGY
 SPORT CULTURE BIODIVERSITY KNOWLEDGE
 GREEN ENVIRONMENT WELLNESS LEISURE
 PRESERVATION COMFORT LEISURE



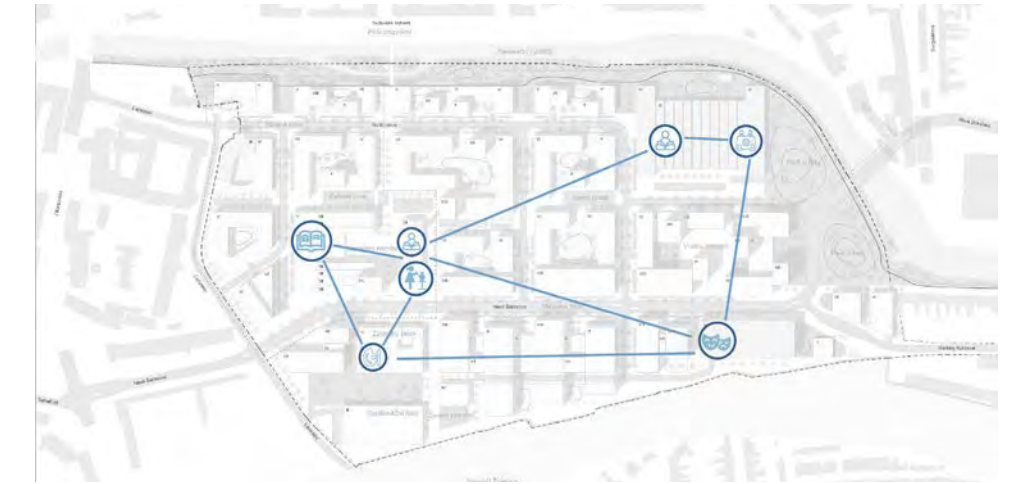
mobility



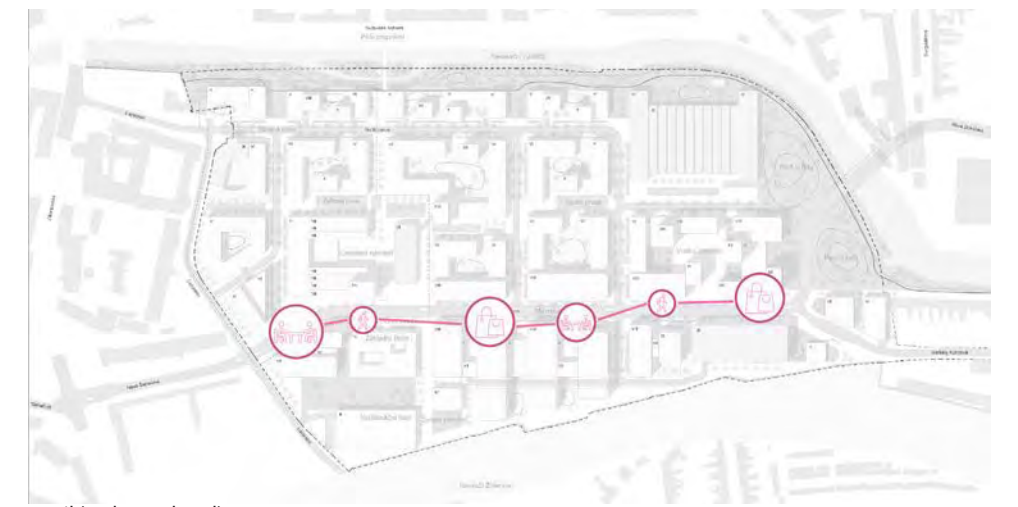
sports and outdoor activities



culture



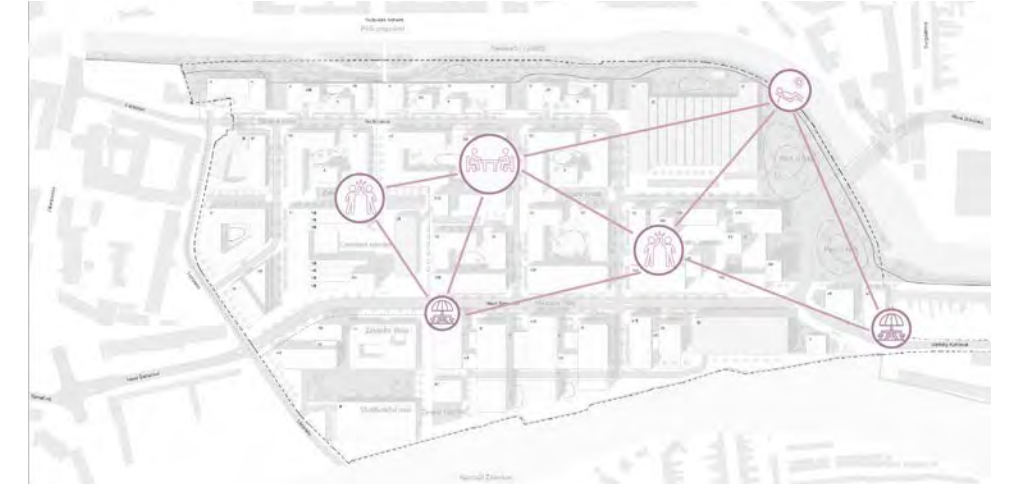
work



retail (to be updated)



sustainability and healthy life style



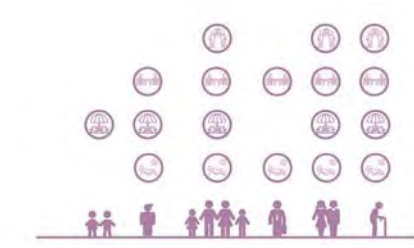
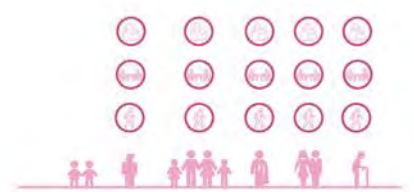
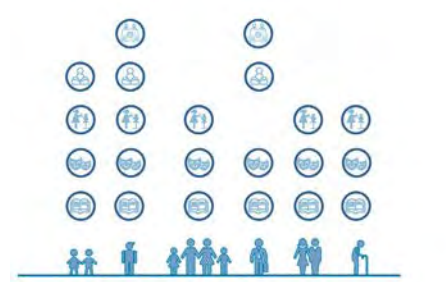
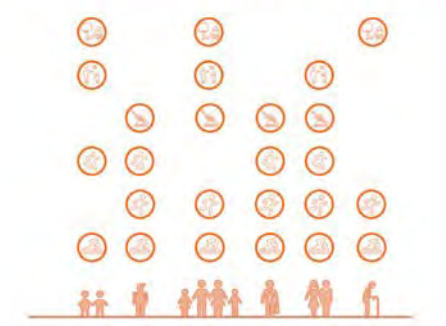
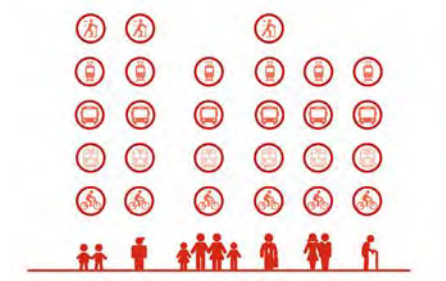
social interaction

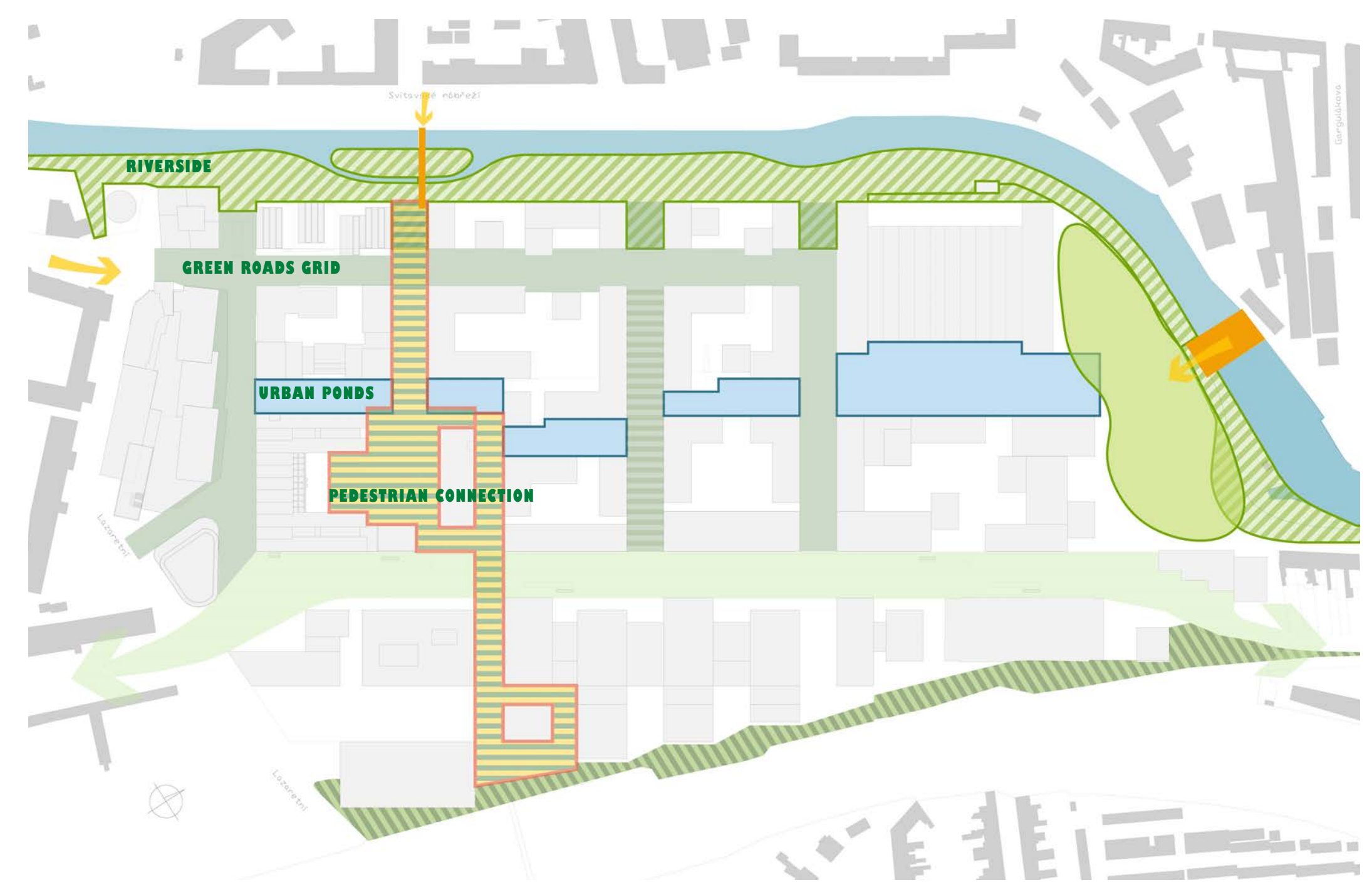


education

3.1 overlapping networks

- the development will be a mixed use area with overlaying networks providing interest and facilities meeting the needs of all residents, workers and visitors



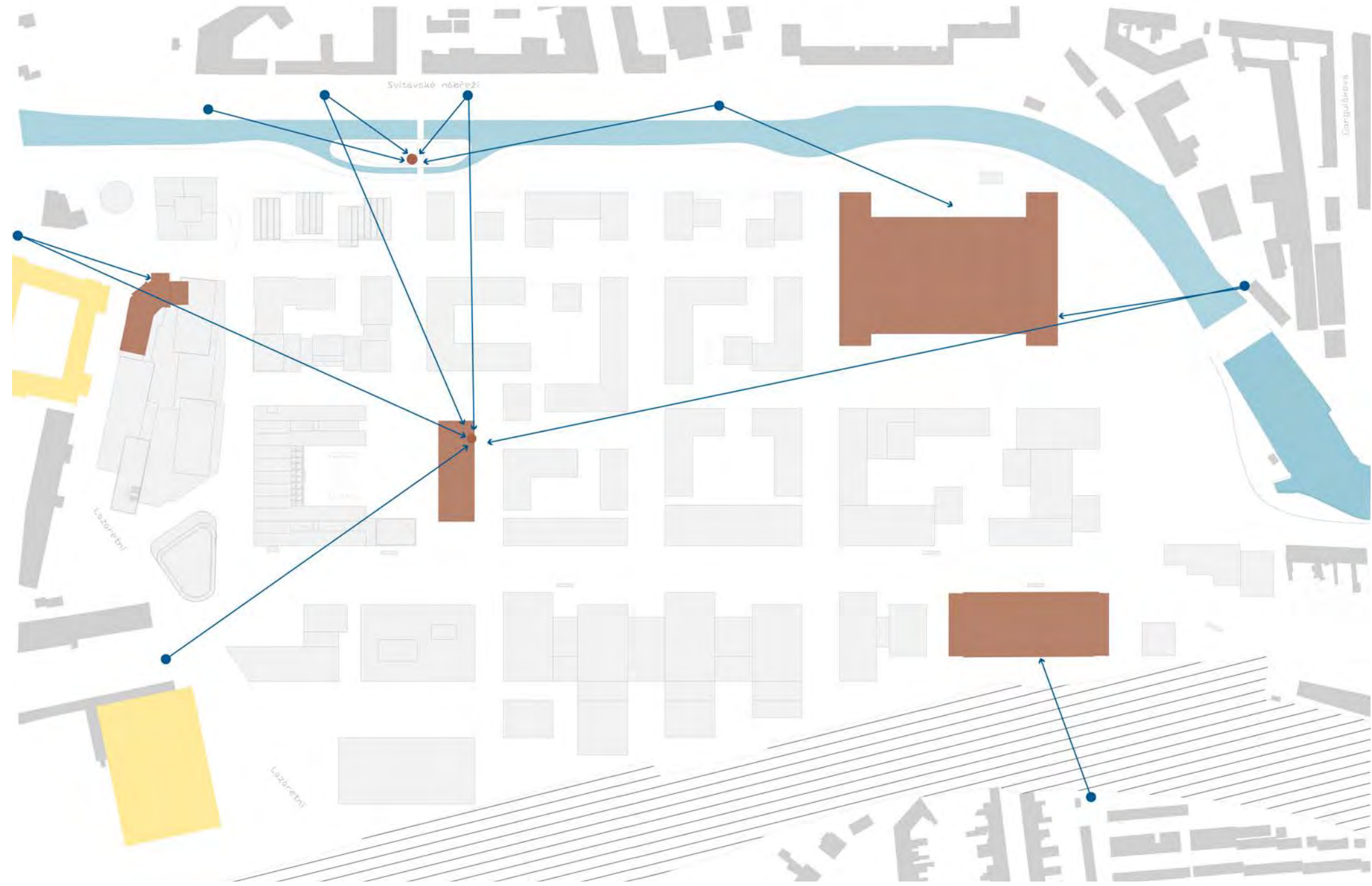


- A clear network of public spaces
- clear entrances
 - one main car route
 - walkable and bikeable city
 - main meeting places connected to historic buildings
 - lush and green streets
 - ecological zone along the railway
 - private courtyards, connected to and visible from the street

- A clear public space network
- 3 pedestrian axes complemented by a pedestrian friendly network of streets:
 - The three pedestrian axes are:
 - a. east west: riverside
 - b. east west: urban ponds
 - c. north south: station to river lookout
 - The pedestrian friendly network of streets with meeting places within the street network.

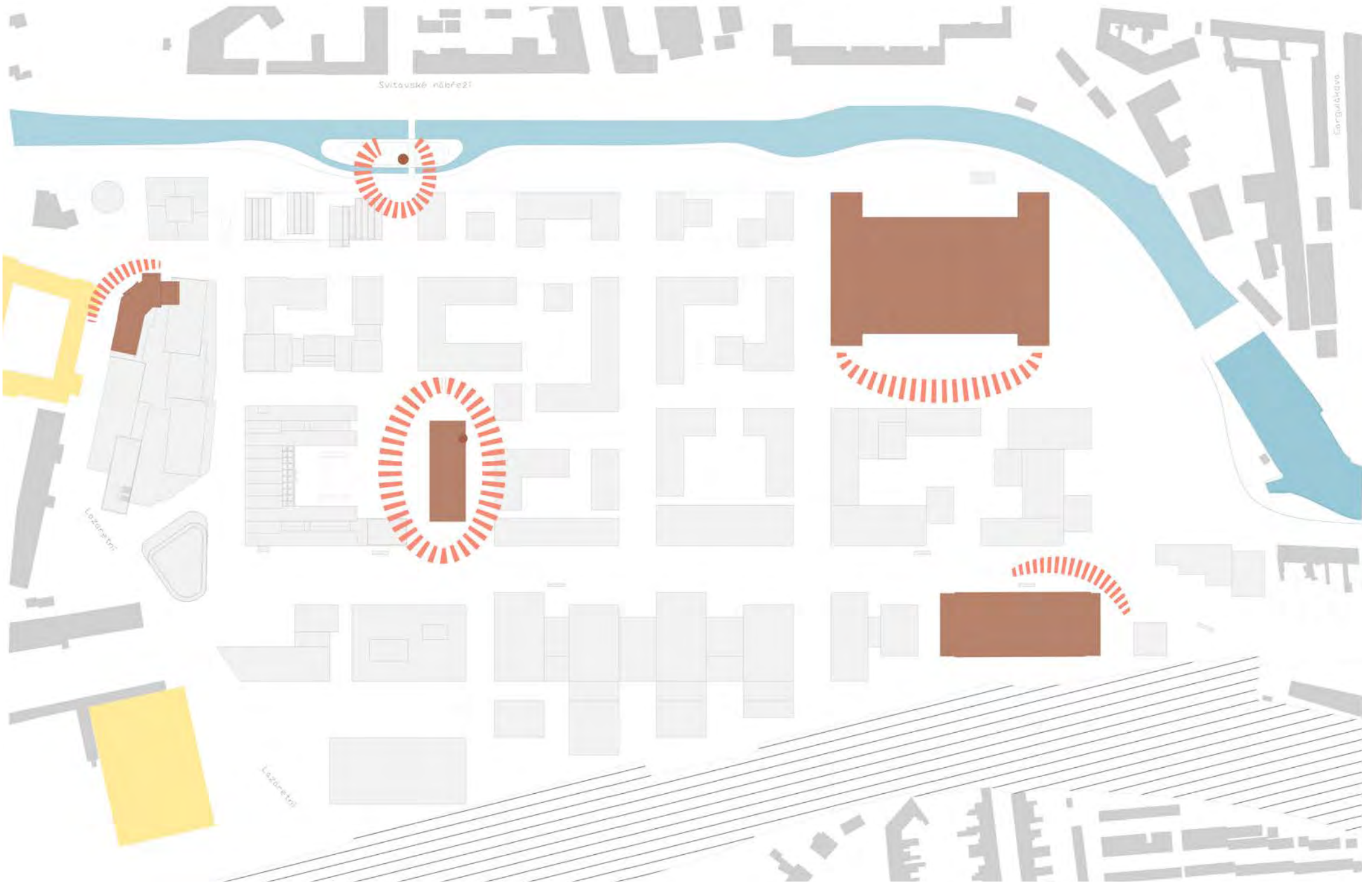
3.4 landmarks visible from outside the site

- landmarks from the industrial heritage are embedded in the urban plan
- the landmarks (buildings and chimneys) are visible at entrances an crucial position outside and inside the the site.



3.5 points of interest

- the historic buildings and structures (chimneys) are points of interest and will be accompanied by public spaces that will be the main places within the site
- the public spaces are next to or around the building and have a specific orientation



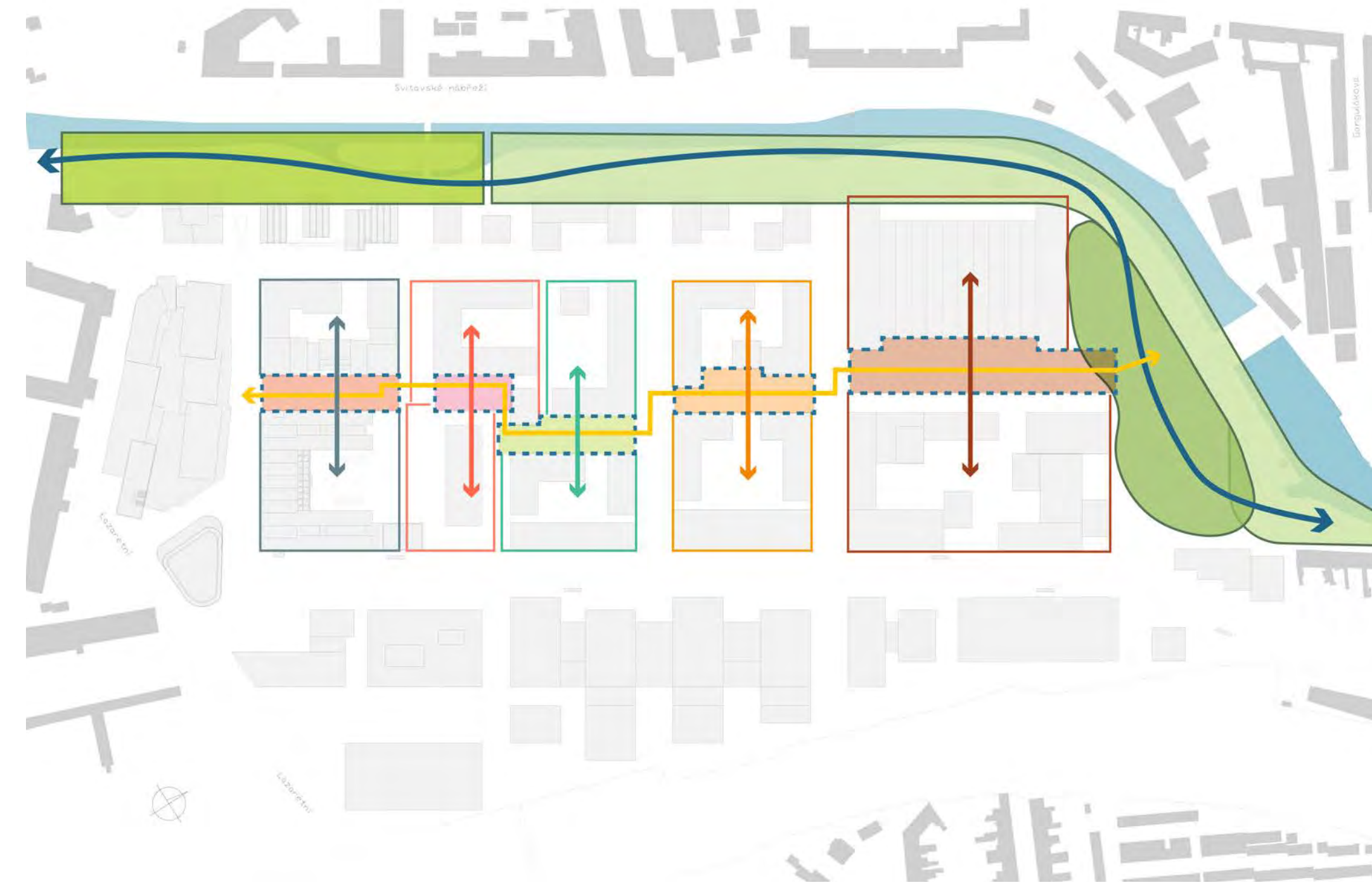
3.6 concept - north south pedestrian axes

- the pedestrian route between the river and the station is a connector between meeting places



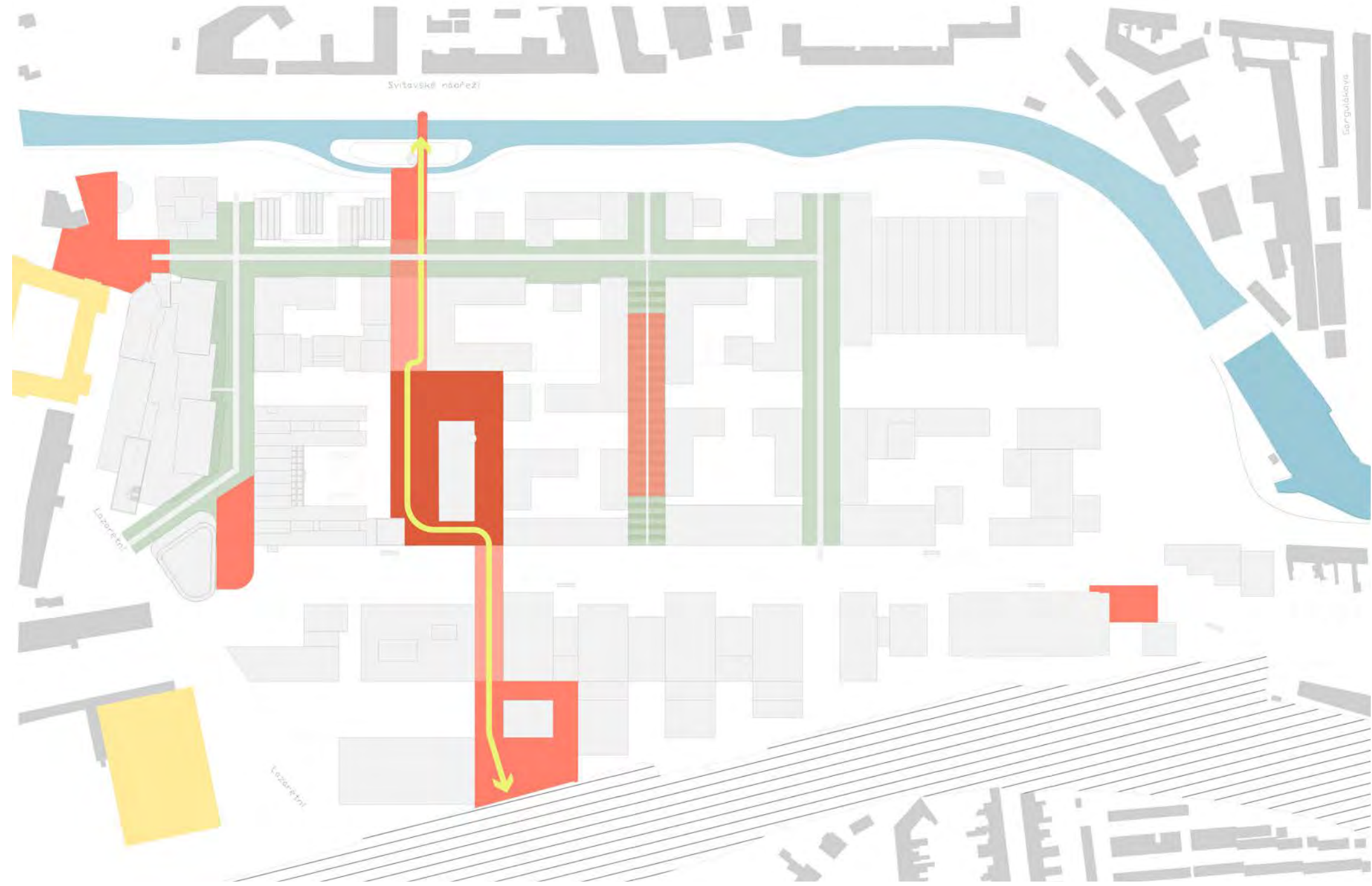
3.7 concept - 2 east west pedestrian axes with water

- there are two main water lines in the site:
 - * the riverpark lies on the edge of the site
 - * the series of urban ponds lies within the site
- the site faces the river (river frontage) and connects to the river
- the riverpark is dynamic, flood proof and has a natural atmosphere
- the urban ponds are a series of water related urban meeting places within the urban context, connected by a pedestrian route



3.8 concept - network of pedestrian friendly streets- and meeting places

- the streets in this network:
 - * lush and green, heat stress proof
 - * low in car traffic, pedestrian friendly
 - * include specific user oriented meeting places like a community play ground and urban arena



3.9 concept - walkable city

- the extensive underground car parking allows this development to be a walkable city; a healthy city inviting people to walk and to cycle
- green streets with trees that provide shade make it pleasant to walk here



3.10 concept - semiprivate courtyards

- the housing ensembles are positioned in a way that the court yards open up at some points and are visible from the public space
- the use of the court yards is still to be defined.
- the court yards will be used by the residents and could possibly be open to the public during the day
- the court yards are positioned above the half sunken car parks
- one courtyard will be divided in a public and a semi public part to allow for a pedestrian connection between two historic buildings
- the court yards are gardens for the residents, the roofs of the car parks need to be able to carry enough soil for trees.



3.11 concept - public space program

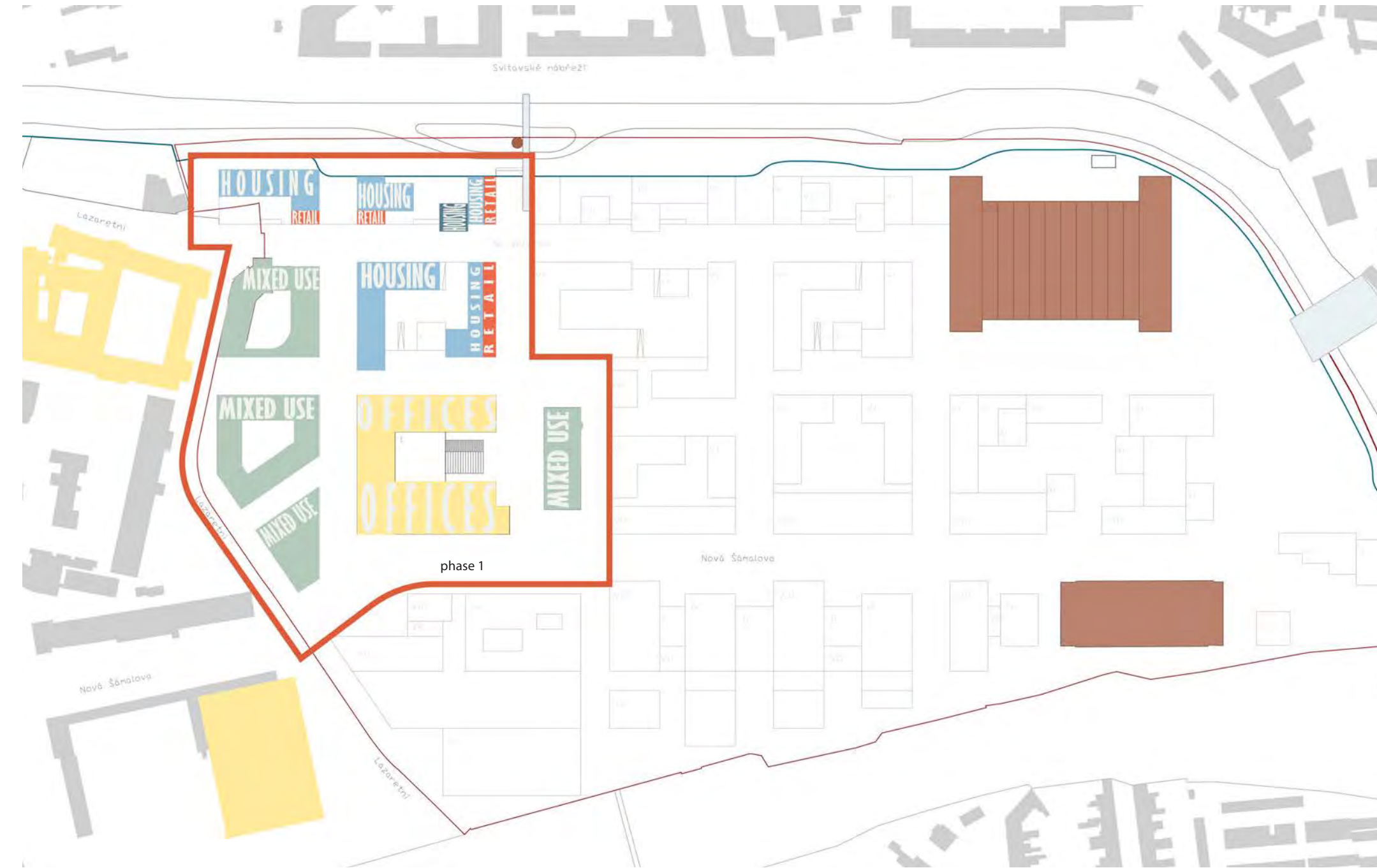


- semi private courtyards
- public space
- front gardens along main street
- park
- ecozone

THE LANDSCAPE PLAN



- the masterplan is explained by theme and by typology in the next chapters



- | | | | | | | | |
|--|--------------------|--|-----------------------------------|--|---------------------------------------|--|--------------------|
| | main road | | urban arena | | semi private courtyards | | residential market |
| | bike lane | | entrance gates - daycare pavilion | | Industra square | | |
| | neighbourhood road | | riverside | | reception pavilion | | |
| | pedestrian axes | | riverside park | | office garden | | |
| | urban ponds | | ecozone | | guest parking in the stree | | |
| | play road | | front gardens along main street | | entrance for under ground car parking | | |

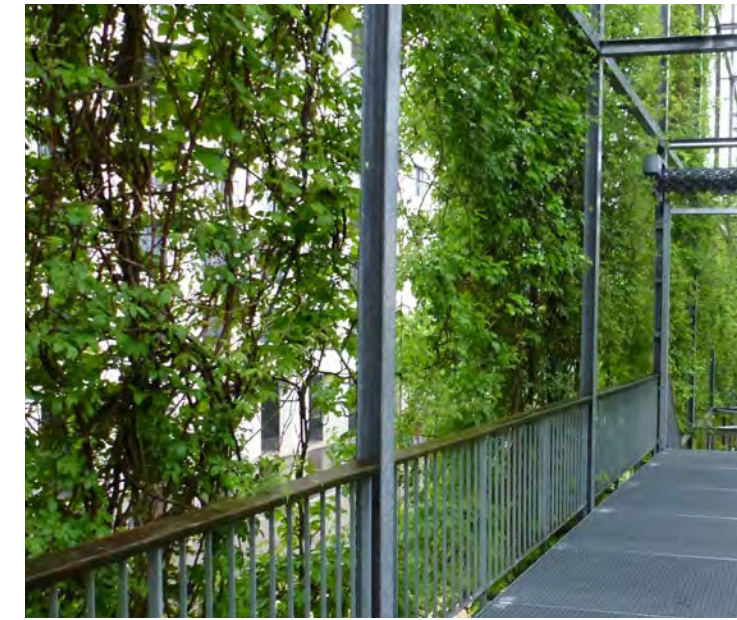
SUSTAINABILITY

5. SUSTAINABILITY

5.0 sustainable outdoor space development

The landscape masterplan addresses sustainability themes relevant to the public or outdoor space:

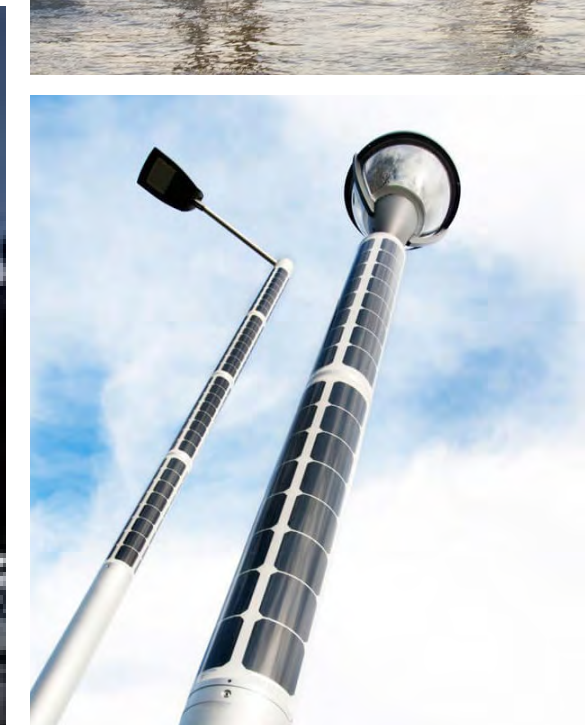
- rain proof design
- minimizing heat stress
- enhancing biodiversity
- healthy living
- edible city
- low energy consumption
- community oriented design
- circularity



5. SUSTAINABILITY

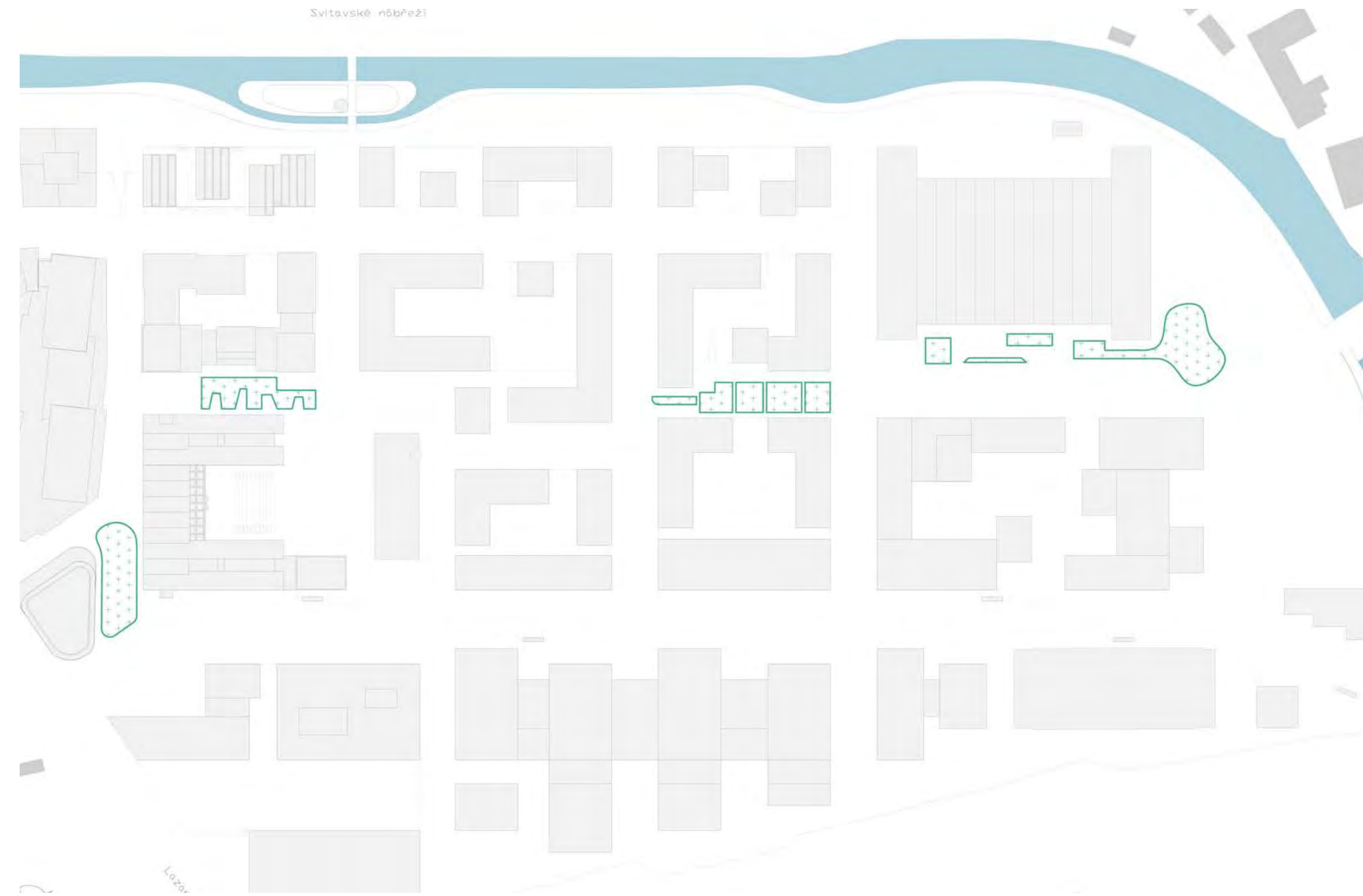
5.1 visible sustainability

- it is important that users can see and experience the sustainability so it will inspire



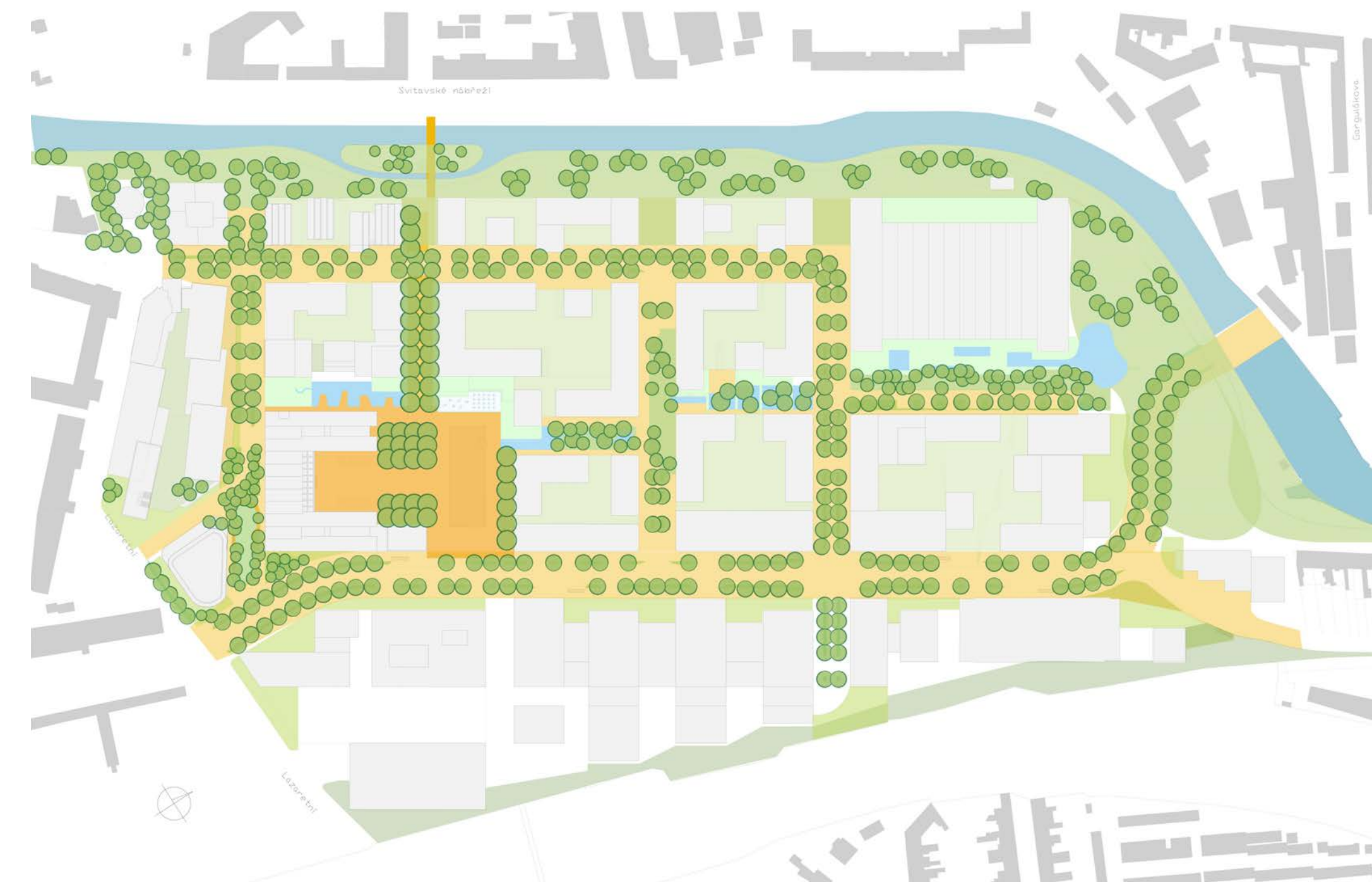
5.2 waterretention

- the indicated Urban Ponds are rain water retention zones.
- the rain water is stored and can infiltrate
- the Urban Arena is an additional rain water retention zone. It functions as a water square. The water has drained away in a maximum of 24 hours
- the river park is a floodzone at the same time



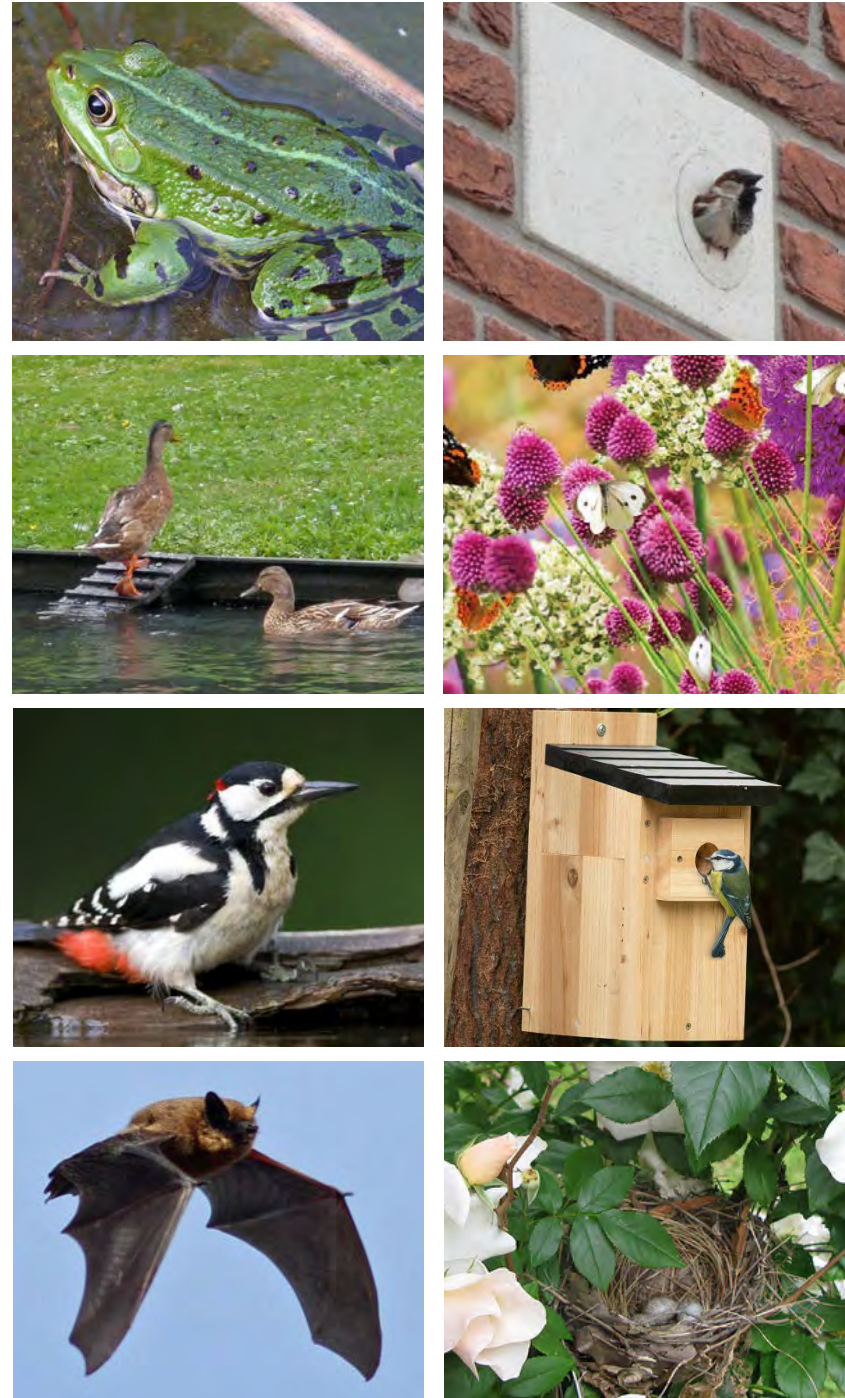
5.3 avoiding heat stress

- an abundance of trees can be found in the public space, avoiding heat stress and enhancing the walkable city



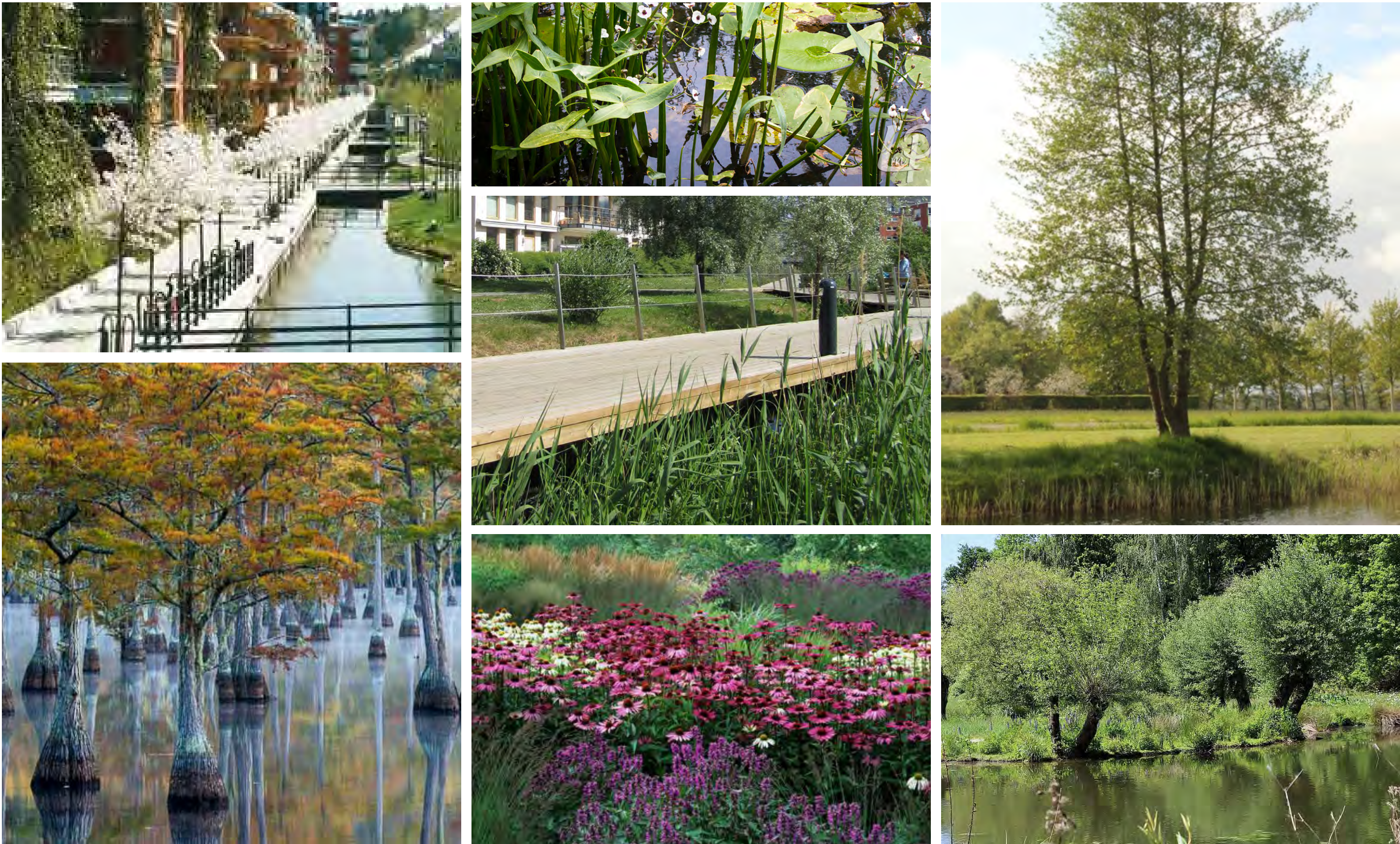
5.4 vegetation and biodiversity

- the vegetation and plantings provide ecosystem services.
- the riverside and the ecocorridor along the railwayline are ecological corridors serving wet and dry conditions
- the plantings in the streets, parks and gardens aim at enhancing the biodiversity in the city providing habitat and food (nectar, seeds, nuts, fruits and berries), to small mammals, birds and insects like native bees and butterflies



5.4 vegetation and biodiversity

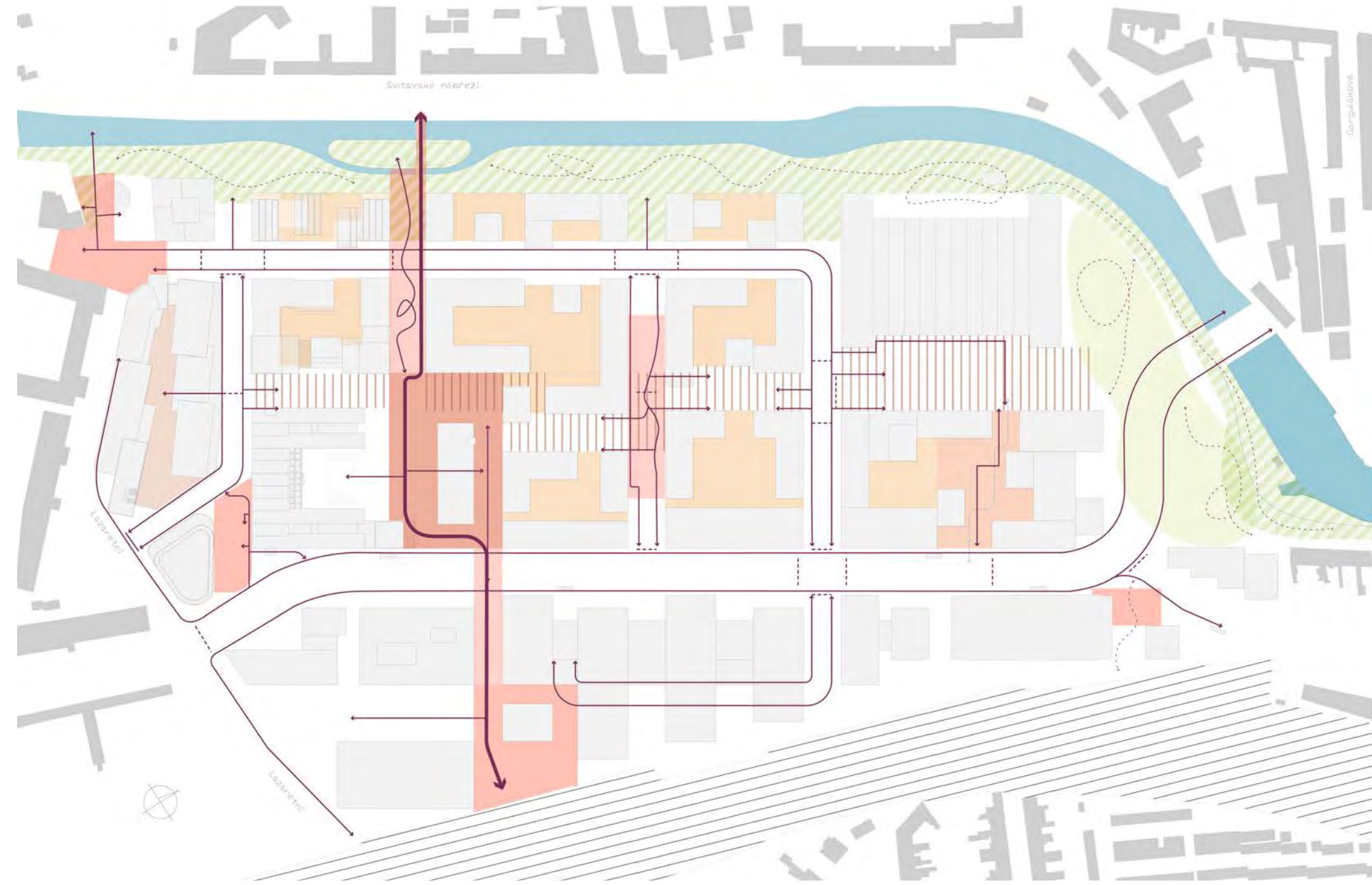
references



STREETS

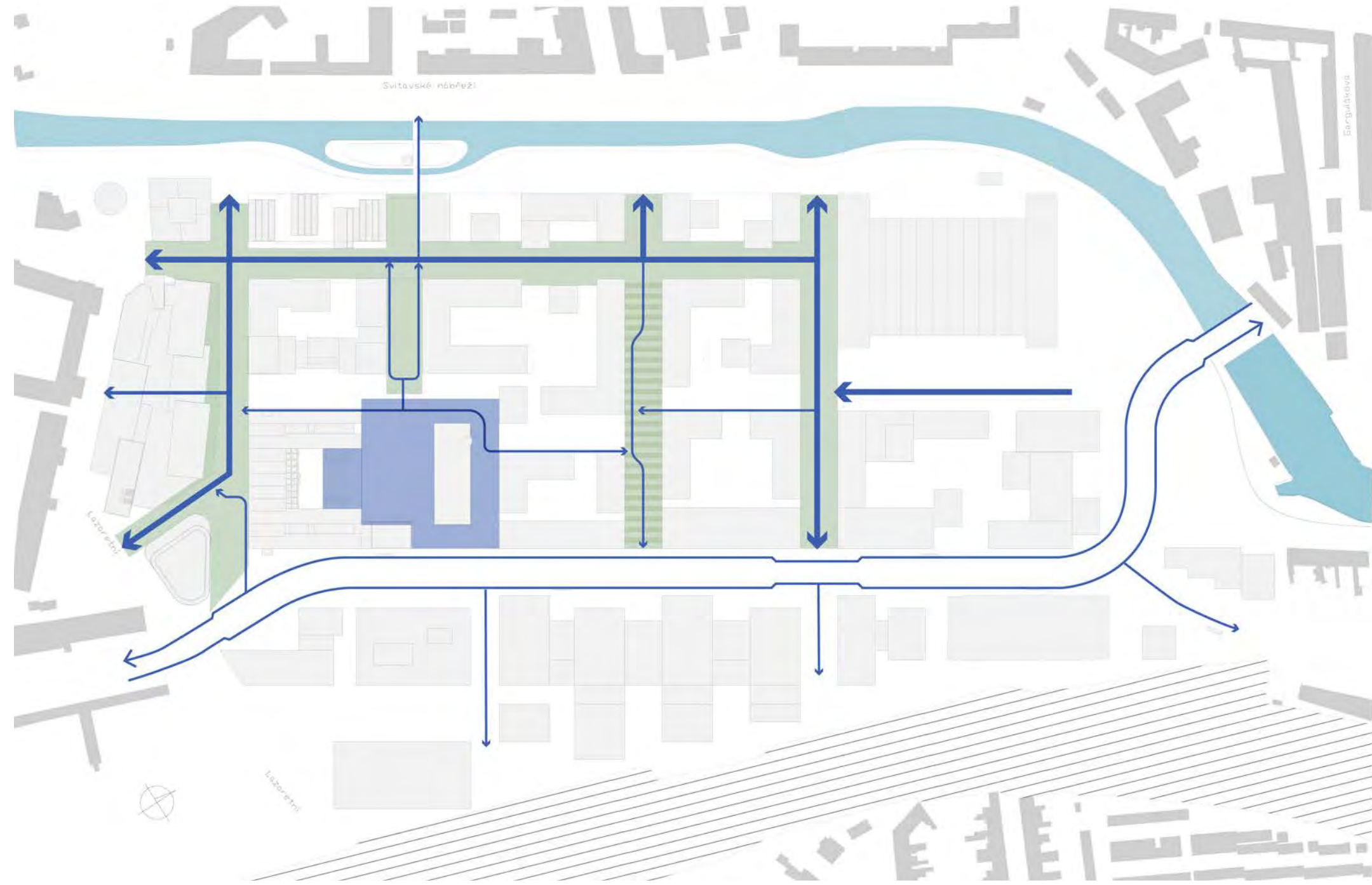
6.0 pedestrian circulation

- the two car free pedestrian axes are connected to a network of footpaths in the streets and the riverside park
- this network has the potential to connect to a riverside walk



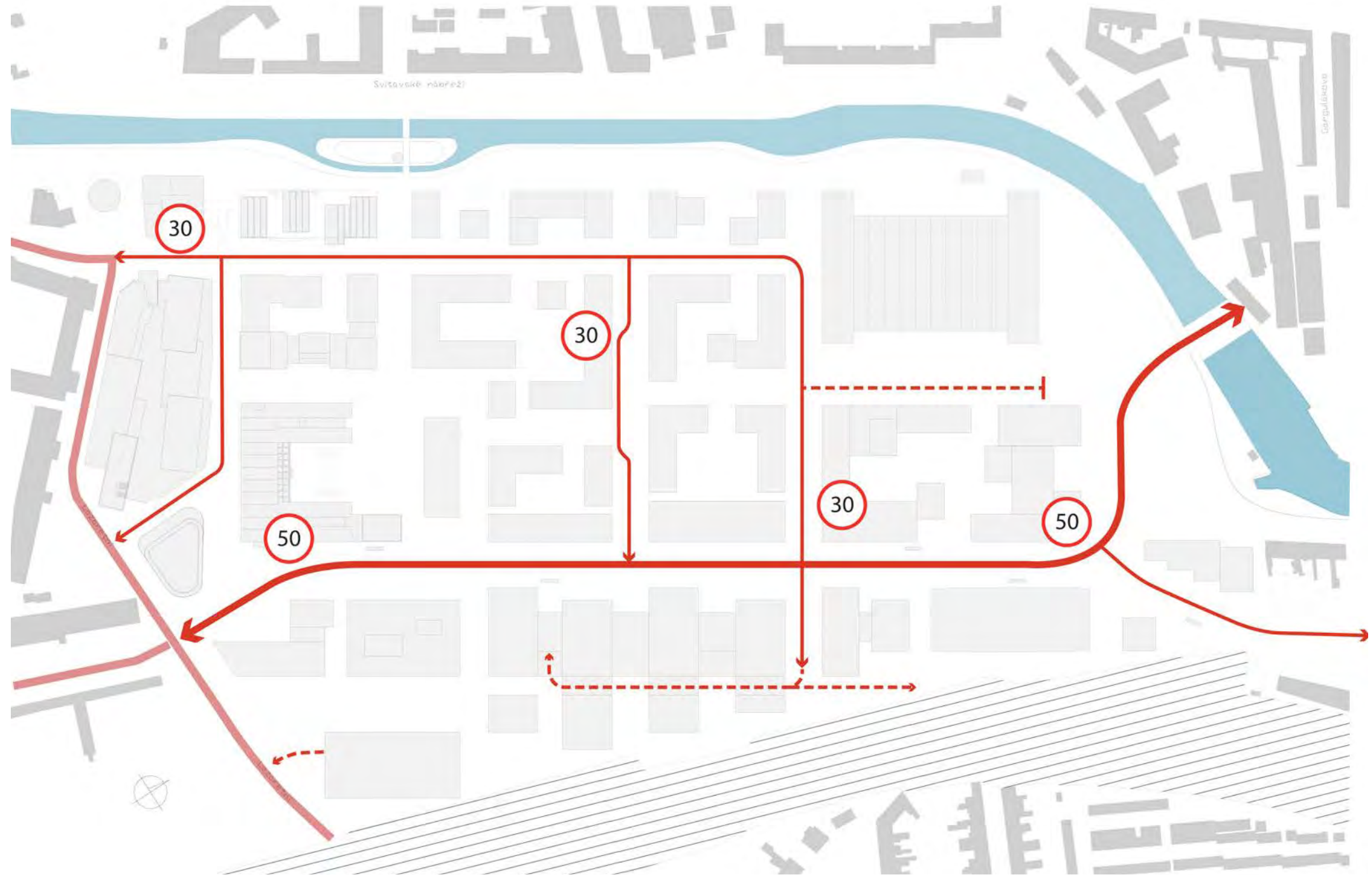
6.1 bicycle circulation

- the main street that runs through the site has the most car traffic and therefore has separate bike lanes.
- on all other streets there is little traffic and the cyclists use the street



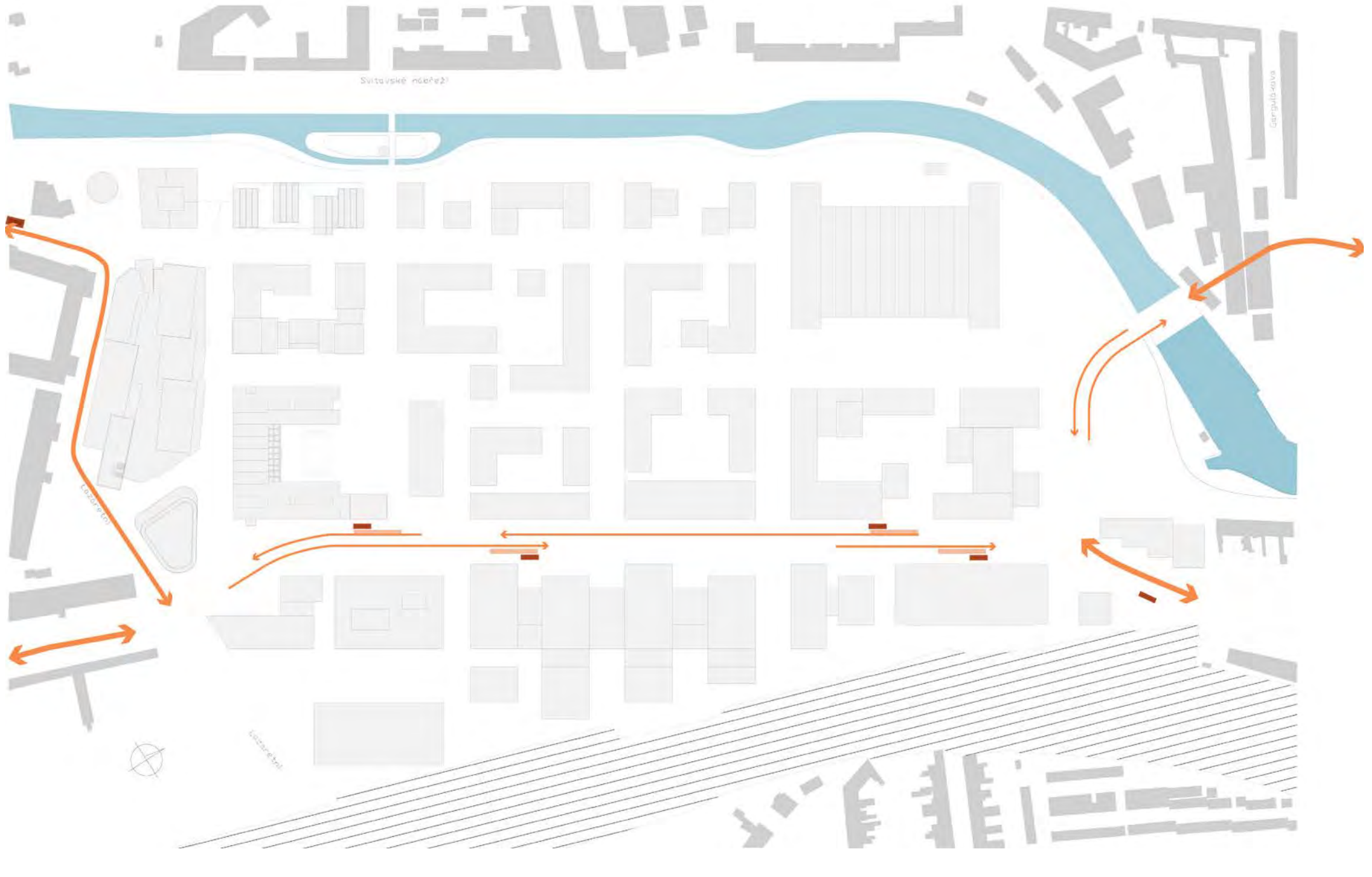
6.2 car circulation

- the main street that runs through the site is designed for a maximum speed of 50 km/ hr
- all other streets that cars can enter are residential streets with a maximum speed of 30 km/hr. These streets are small and the cars are the guest in these streets that are the domain of the pedestrian and the cyclist and even playing children
- there is a substantial amount of public space that is car free



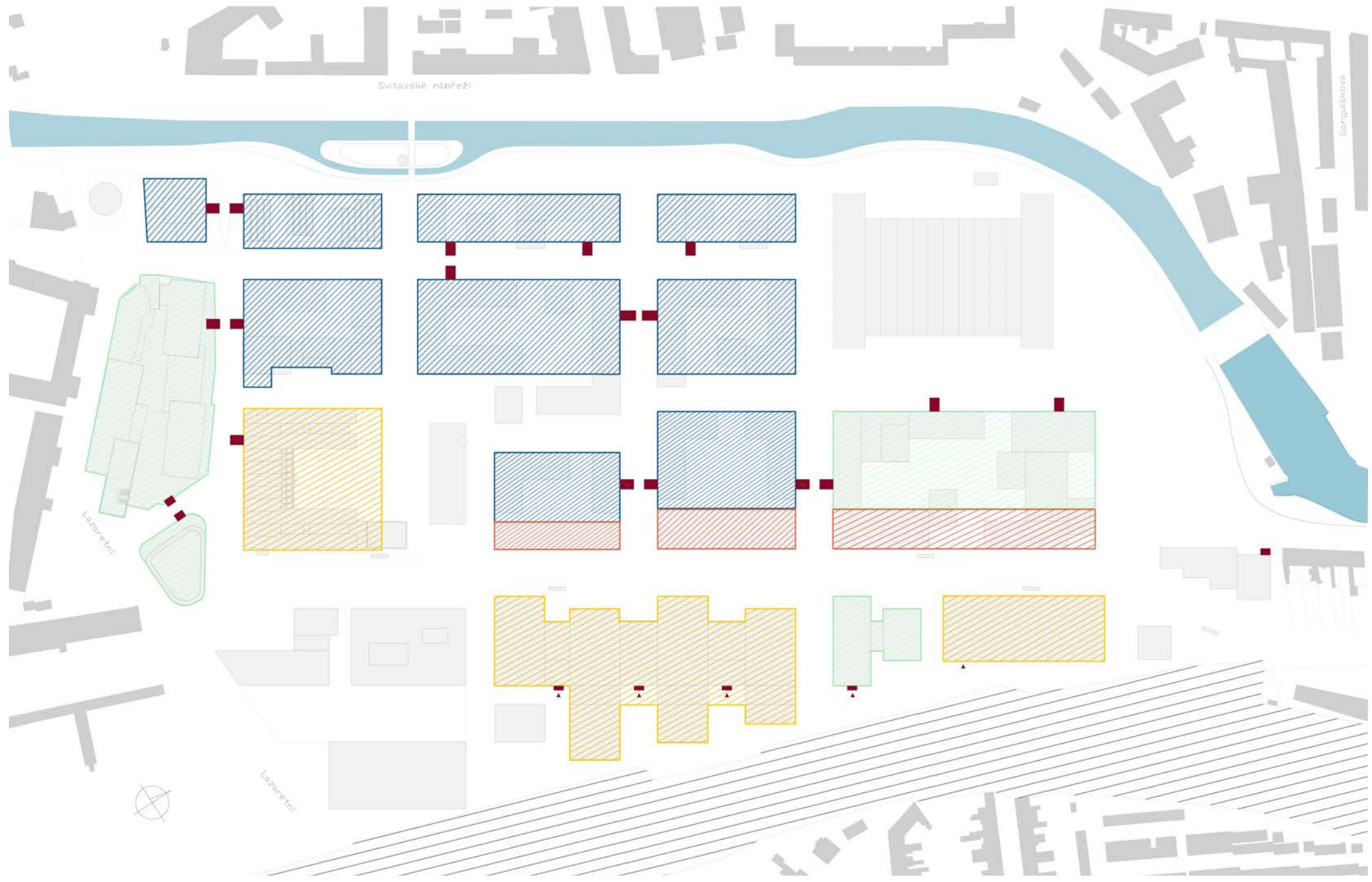
6.3 bus circulation

- the bus stops are located along the main road



6.4 underground parkings

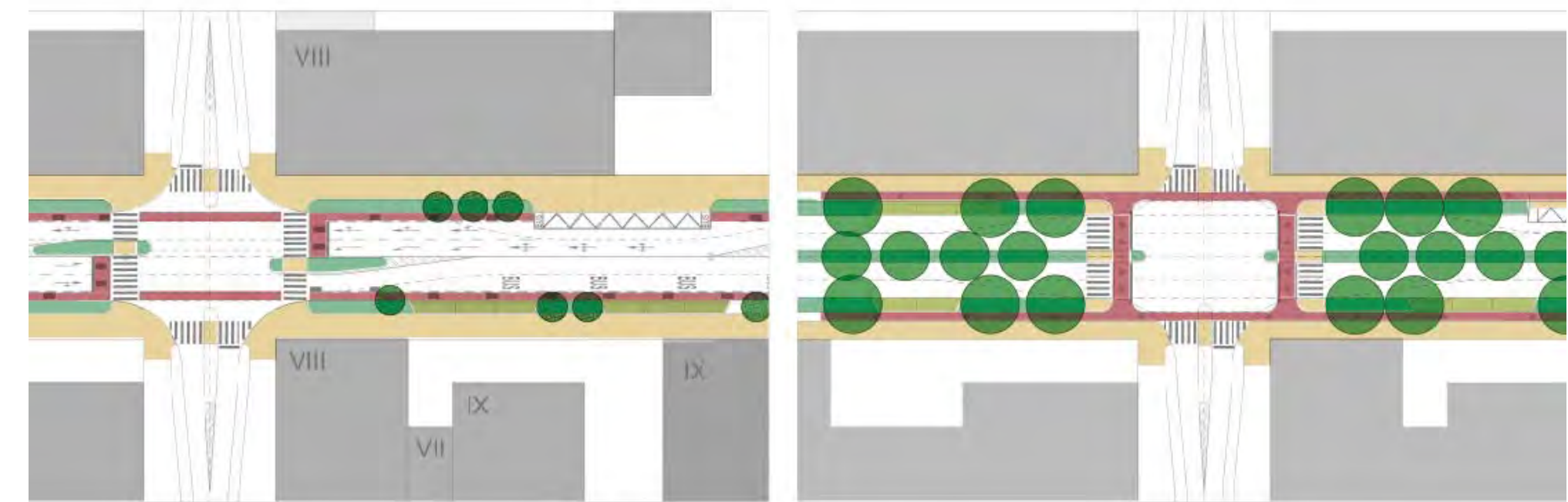
- the vast majority of the car parking is facilitated in underground car parks.
- the entrances of the underground car parks are located in the residential street in order not to slow down traffic in the main street
- a percentage of these car parks need to be public to also meet the needs of visitors that come to restaurants or other facilities in the site.



6.5 outdoor visitor parking

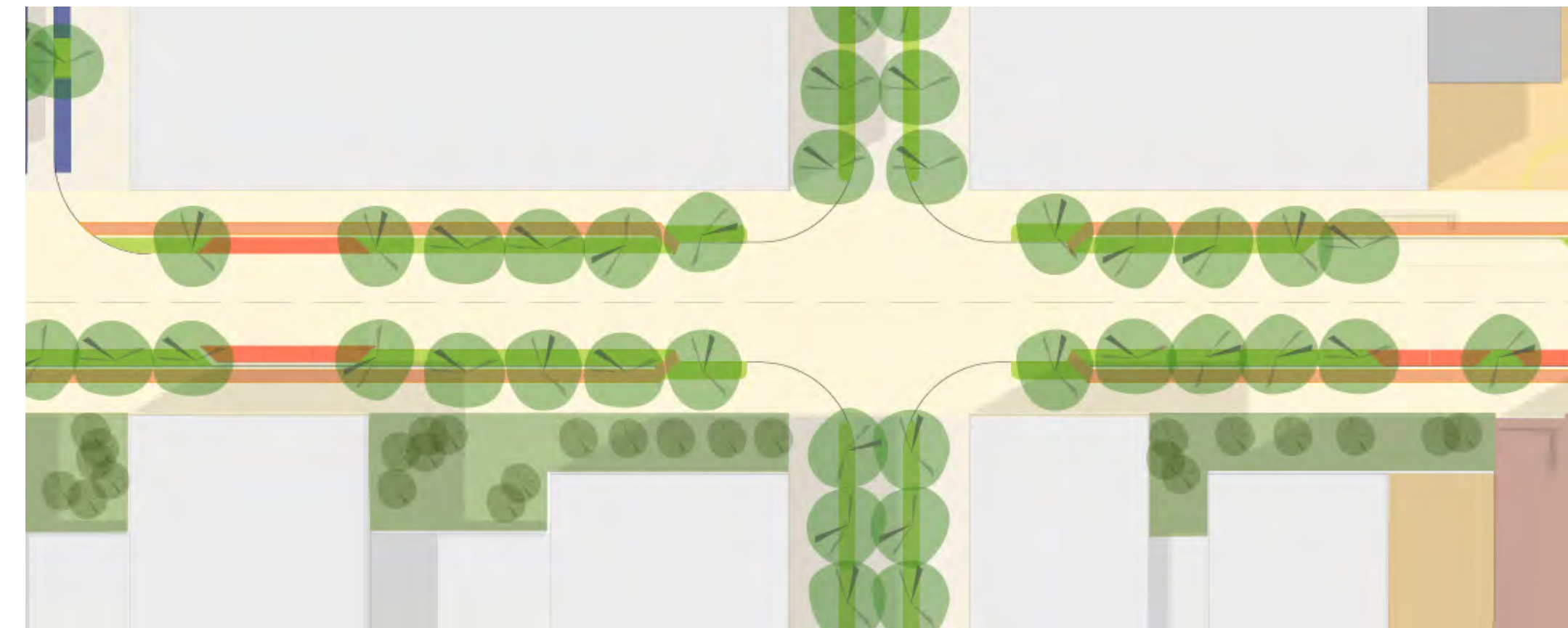
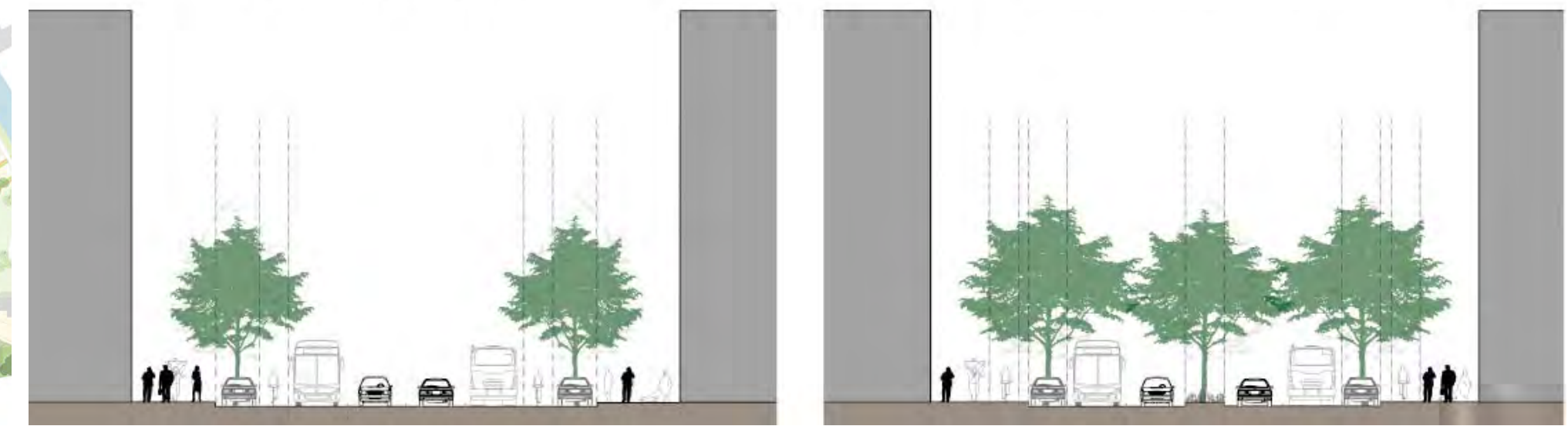
- a small number of car parks is provided in the streets to facilitate short term visitor parking



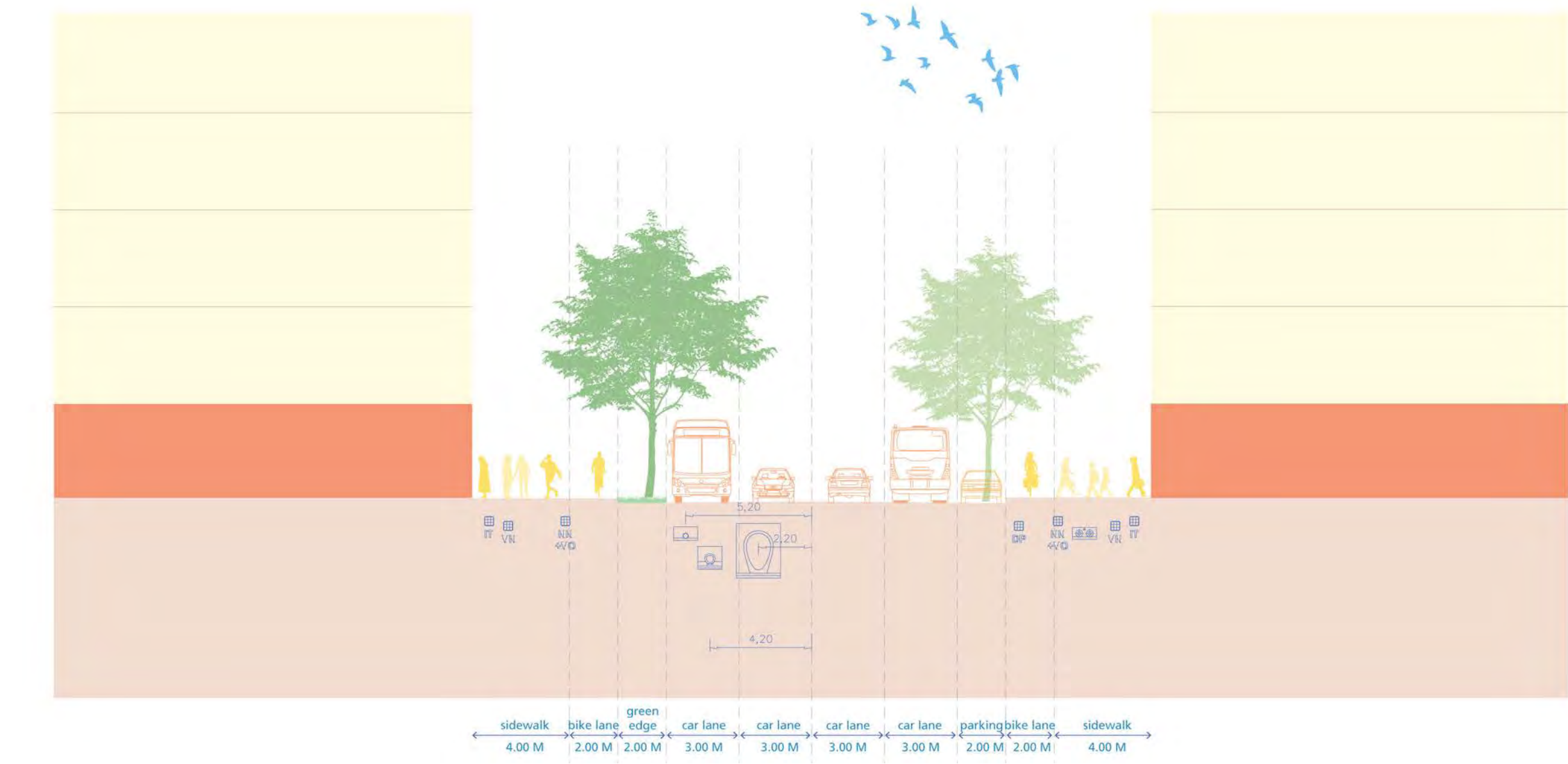


profile main street, original proposal

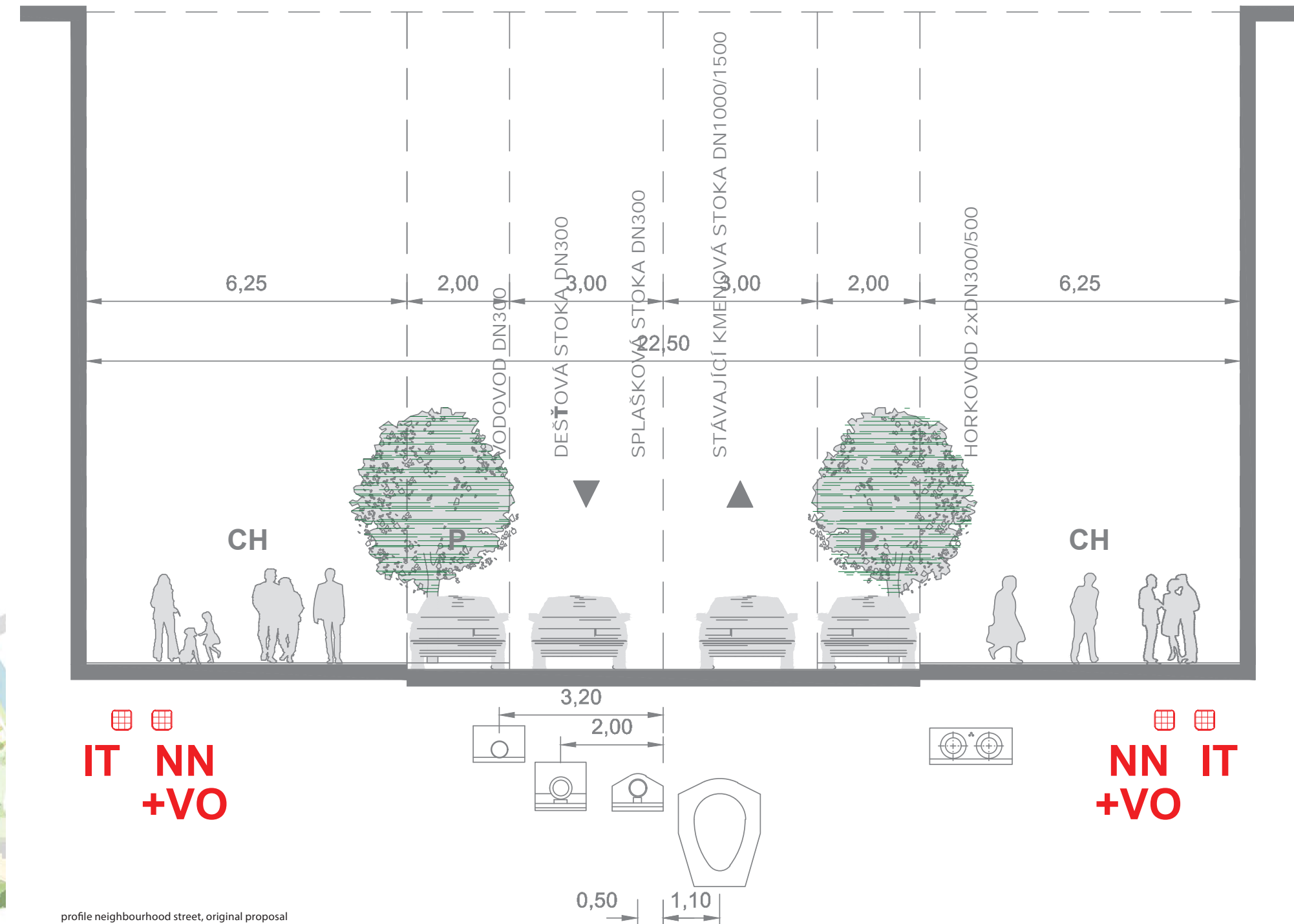
profile main street, proposal by BALJON in workshop, rejected



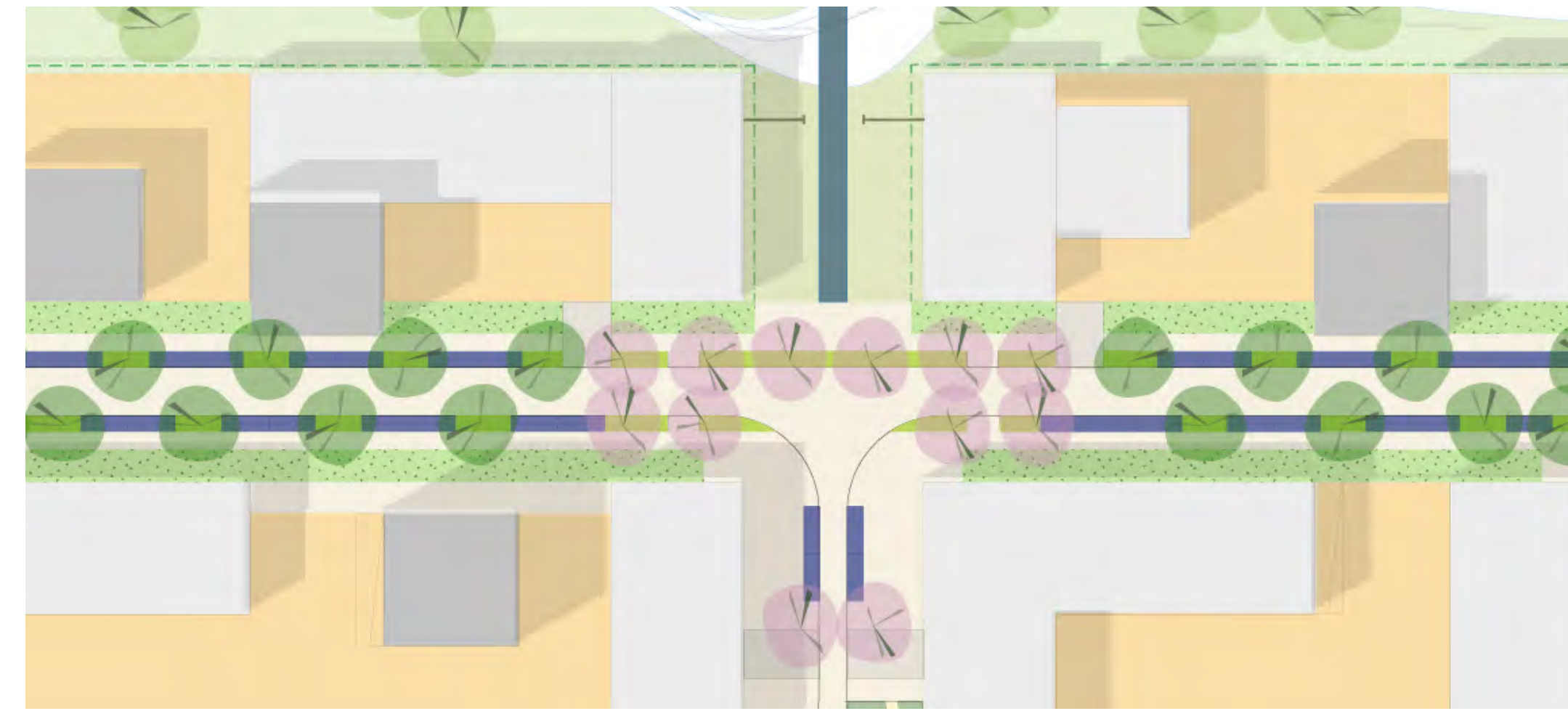
- trees between the parking
- wide zones for pedestrians and cyclists separated from motorised traffic
- at intersections the cyclists are on the road according to Tsjech traffic legislation



- the trees have a green character
- the streets are lined with trees
- trees between parallel parking
- richly planted verges border onto the pedestrian zones providing shade and a park like environment
- the rich planting in the street contributes to the urban biodiversity



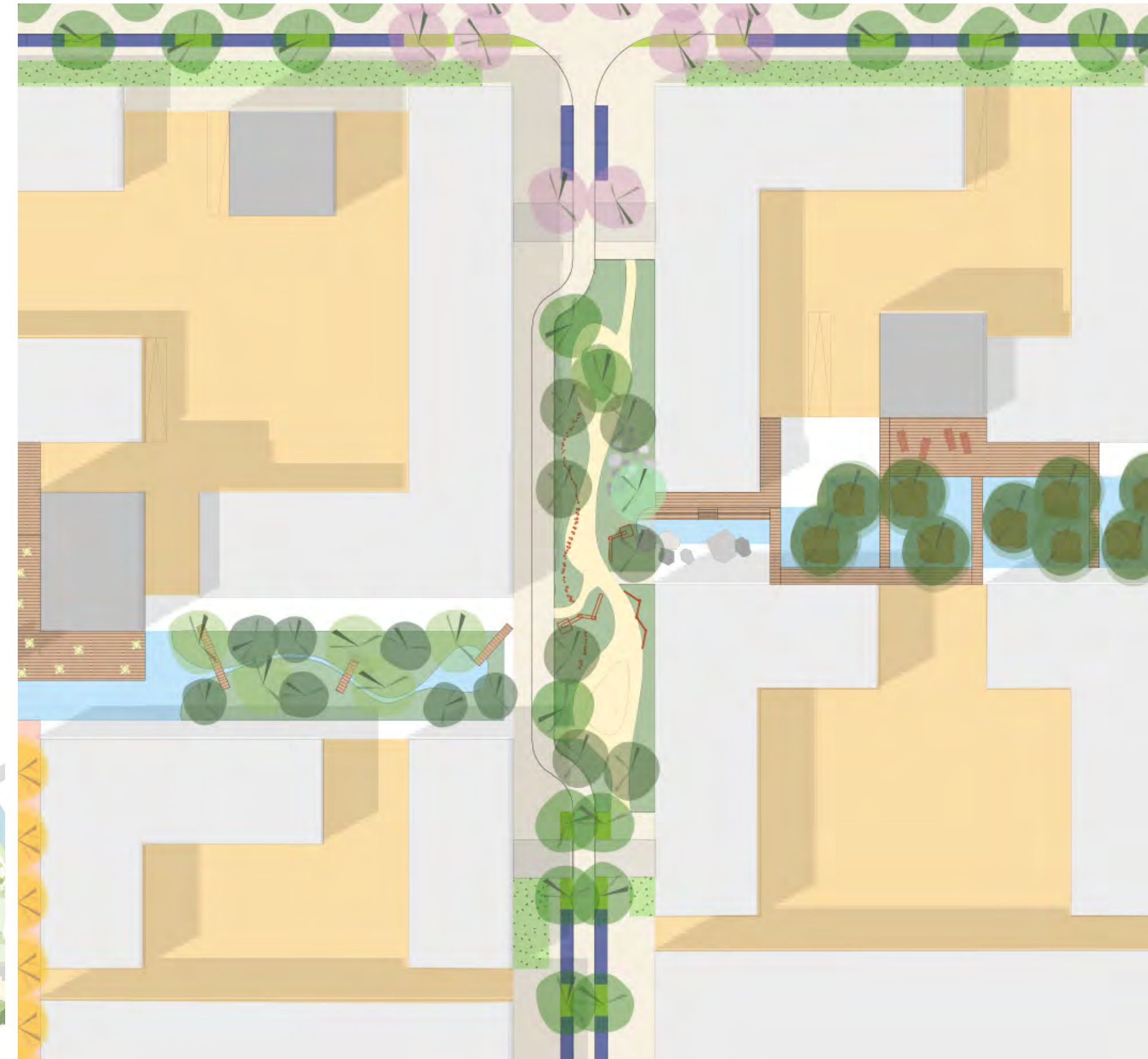
profile neighbourhood street, original proposal



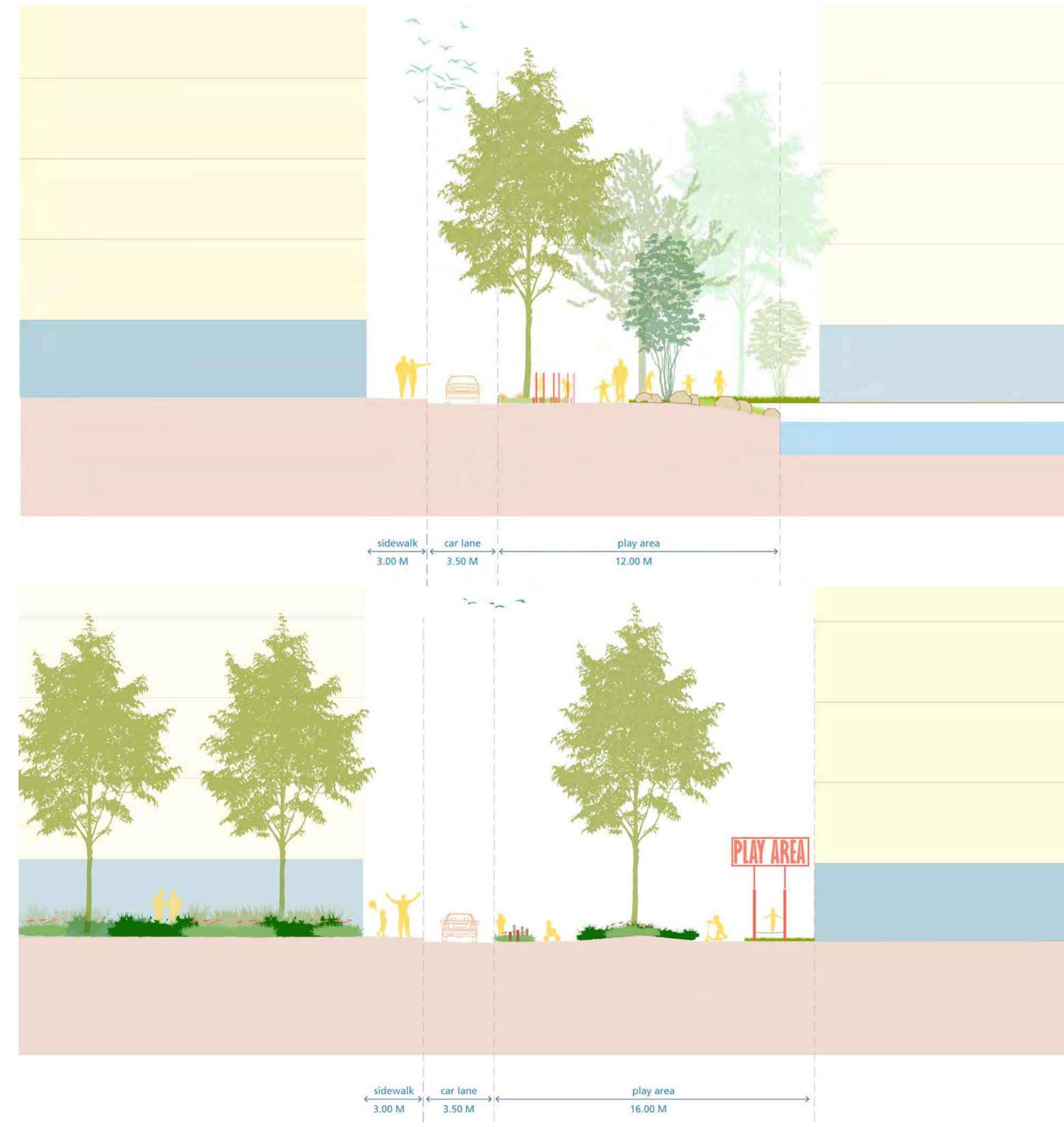
green edge sidewalk parking car lane car lane parking sidewalk green edge
4.00 M 2.25 M 2.00 M 3.00 M 3.00 M 2.00 M 2.25 M 4.00 M

6.8 zoom : play street

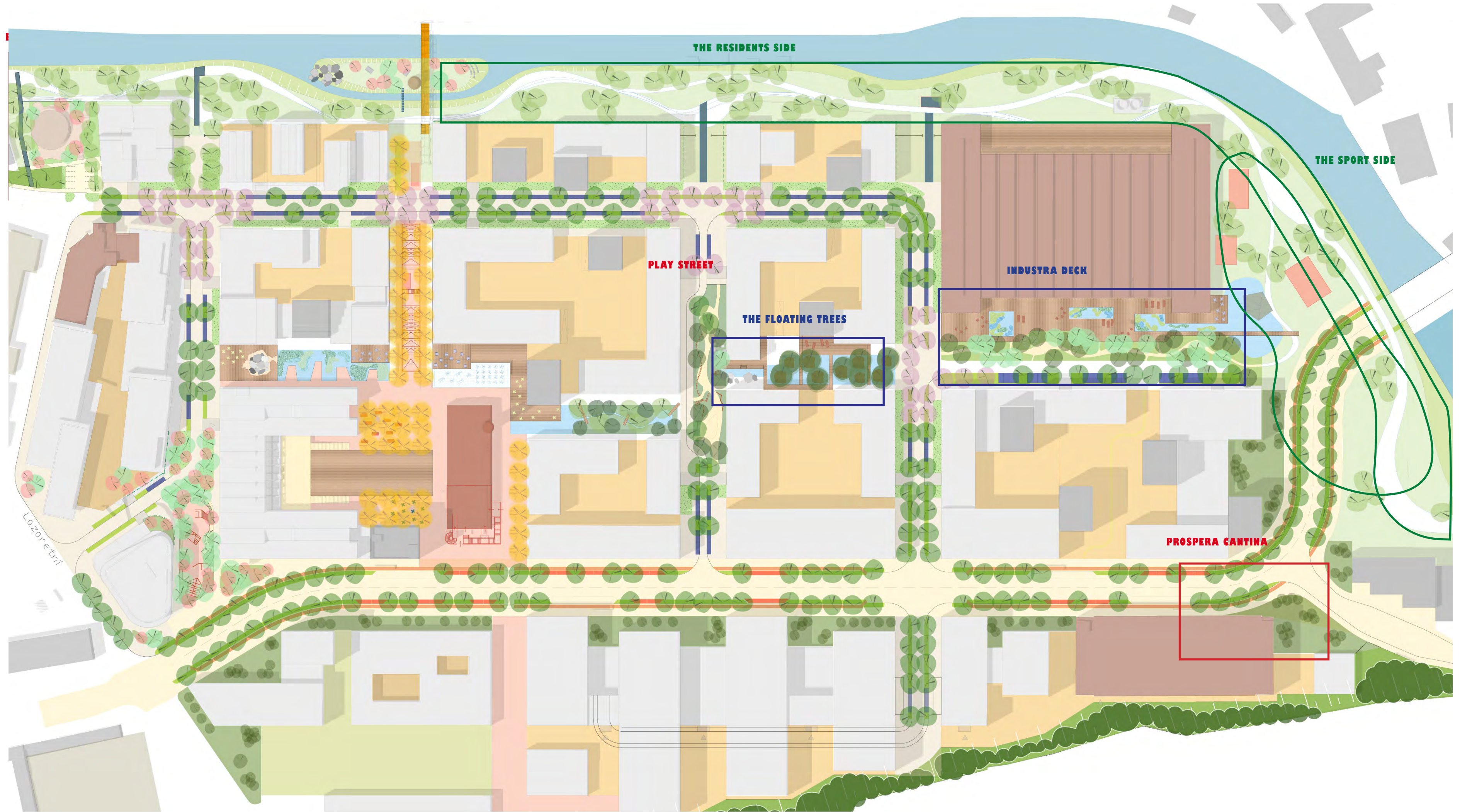
- this street is located in the heart of the residential area
- the street gives access to four underground car parks
- between the underground car parks the street has an asymmetrical profile allowin a wide green zone to occur
- to optimise the width of the green zone the street is a one way street. this makes it a safe street for children
- the wide green zone is positioned on the sunny side of the street.
- this zone is designed as woody, lush green environment where children can play by adding a circuit and natural play equipment
- the one way traffic also contributes to the low car intensity in the neighbourhood streets



6.8 play street, sections



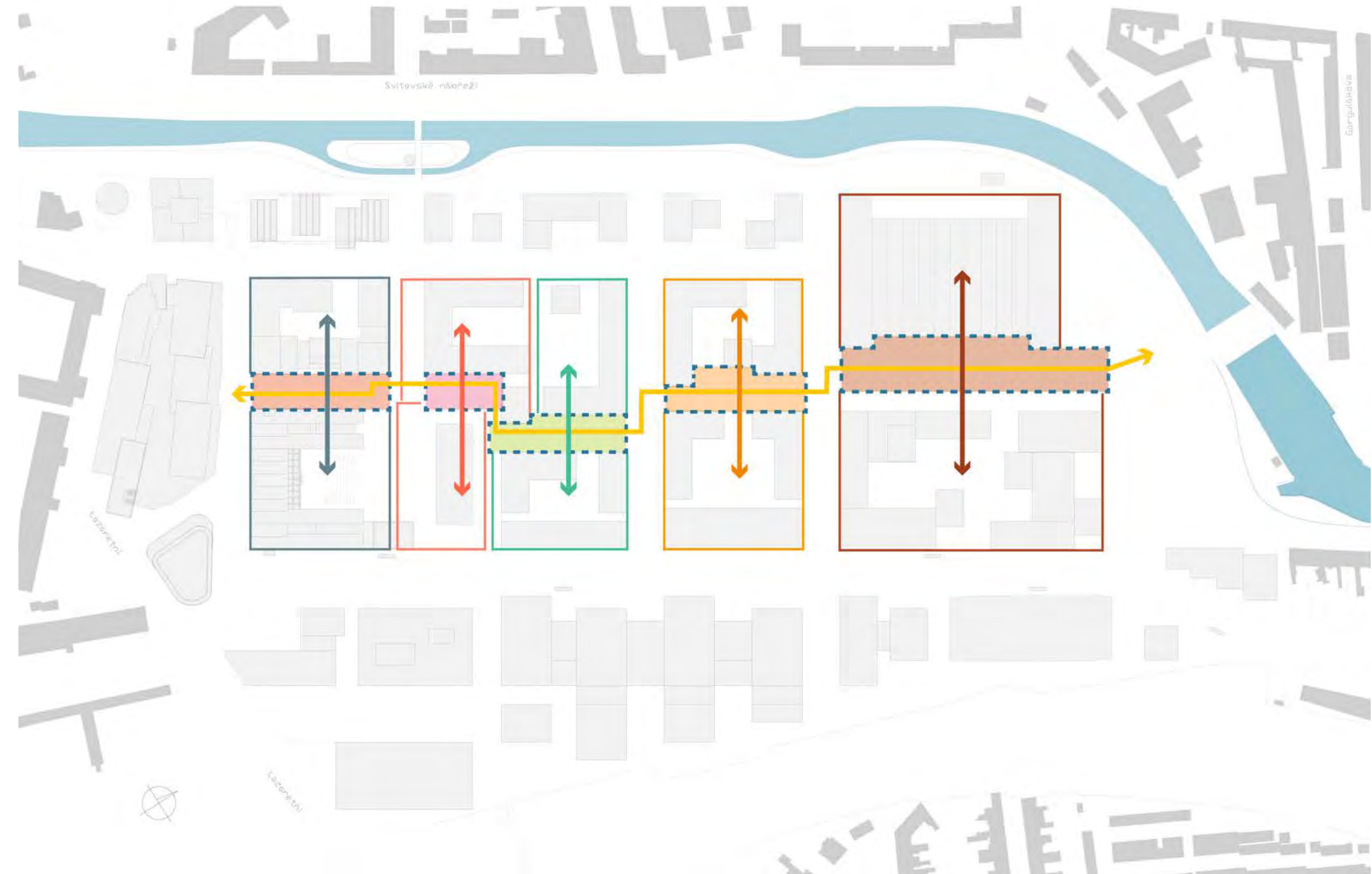
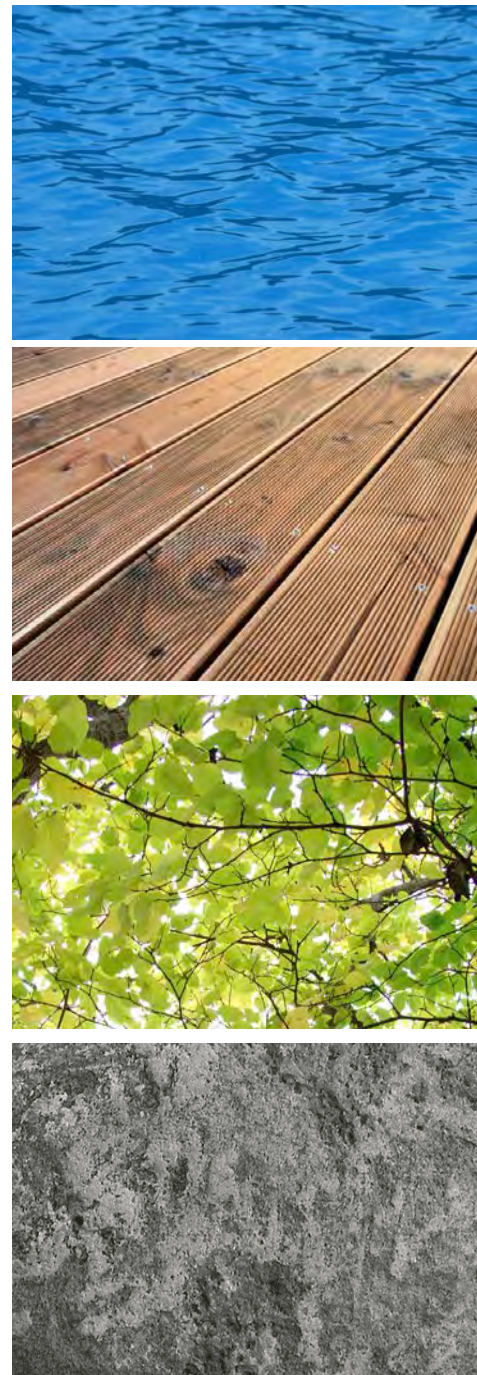
A PALETTE OF MEETING PLACES



THE URBAN PONDS

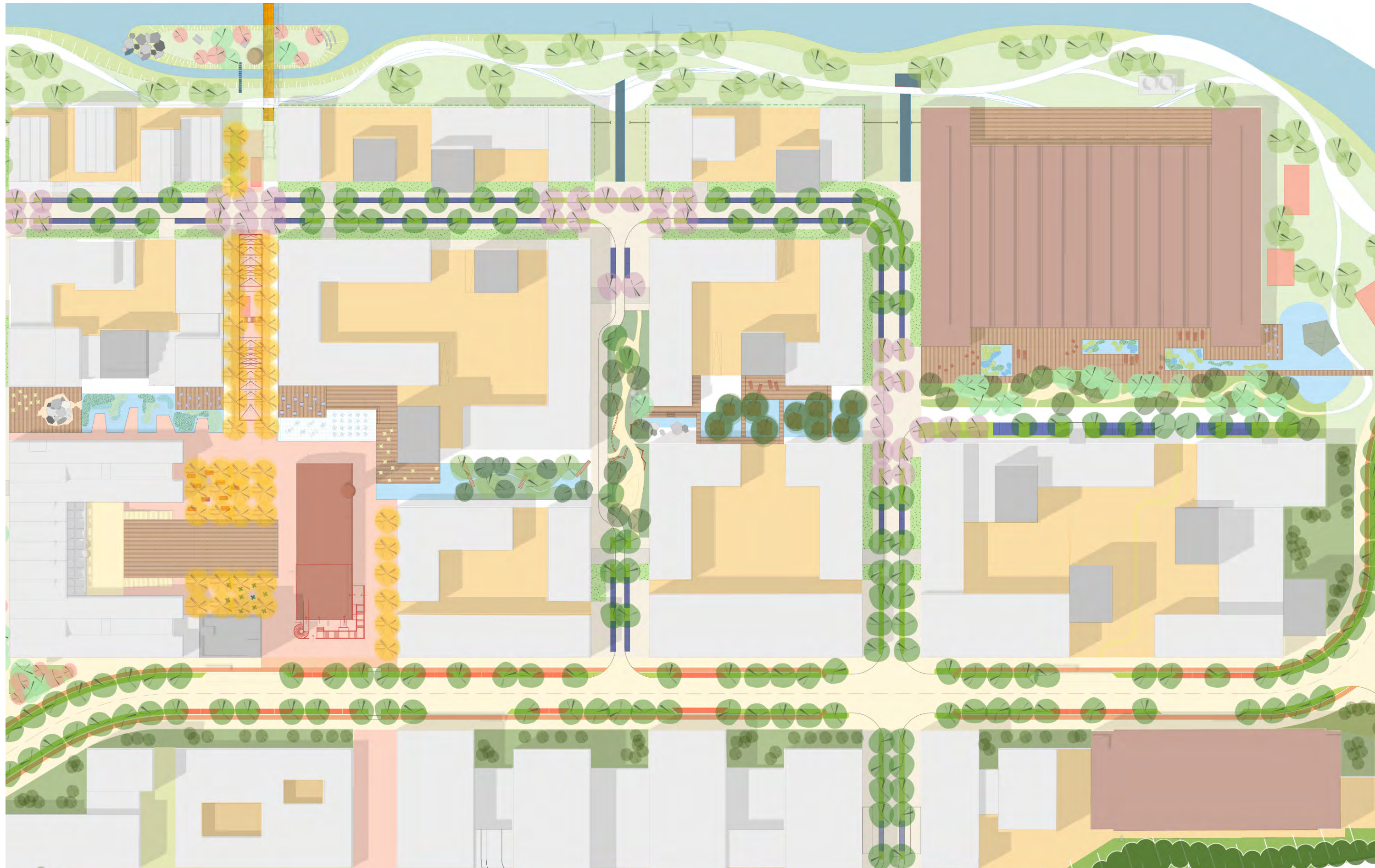
7.1.0 urban ponds

- pedestrian zone with series of water related public spaces
- character of the ponds responds to building programme
- cool landscape: water in public space against heat stress
- variation in unity: urban ponds respond to the direct environment and are recognizable in their materiality: water, timber decks, vegetation (trees and watervegetation), stone and boulders
- rain proof design: rain water buffering and infiltration in most ponds
- water features generate playful environments
- inviting to different user groups and activating spaces and enhancing retail and F&B



7.1.0 urban ponds - names

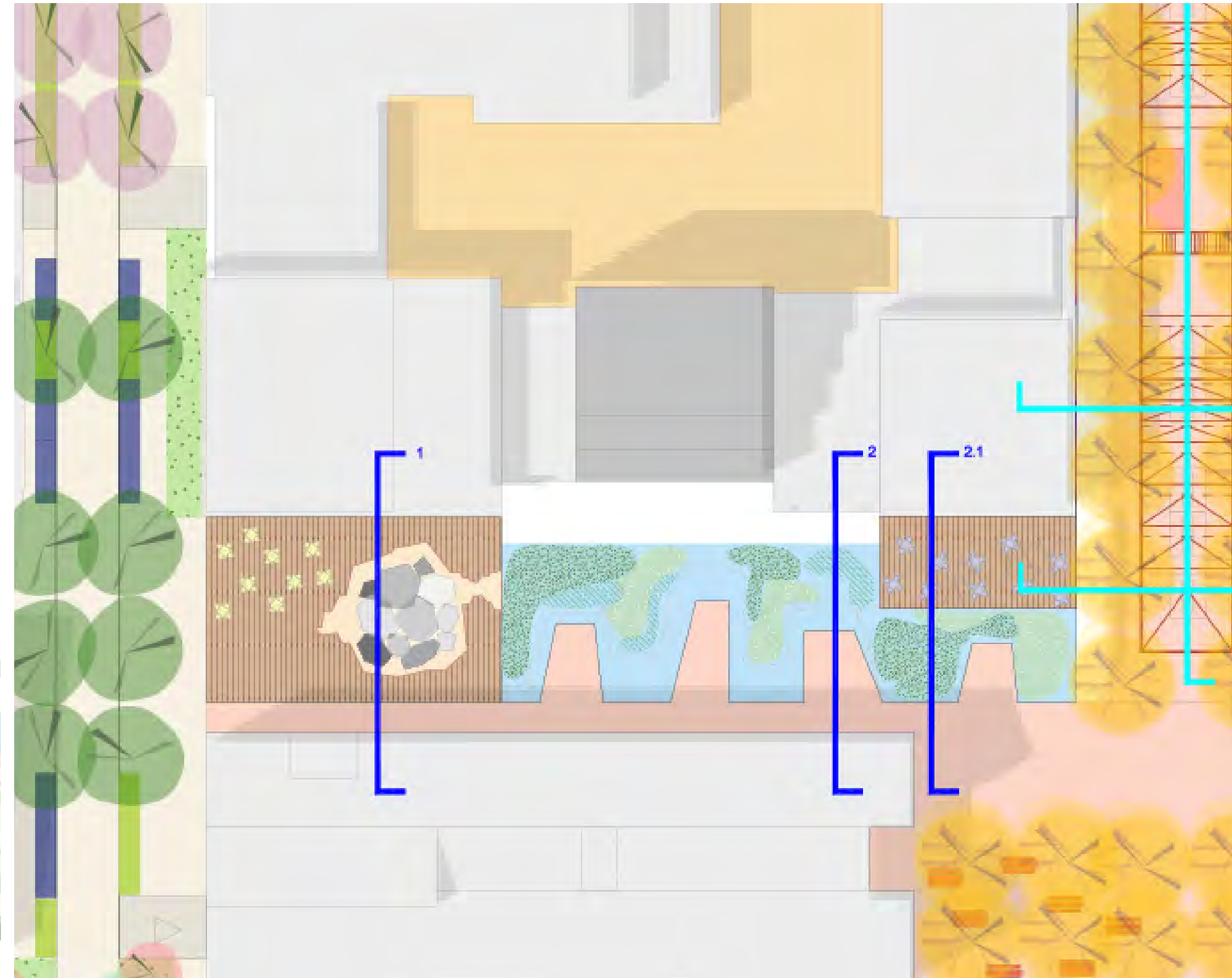




THE SOURCE

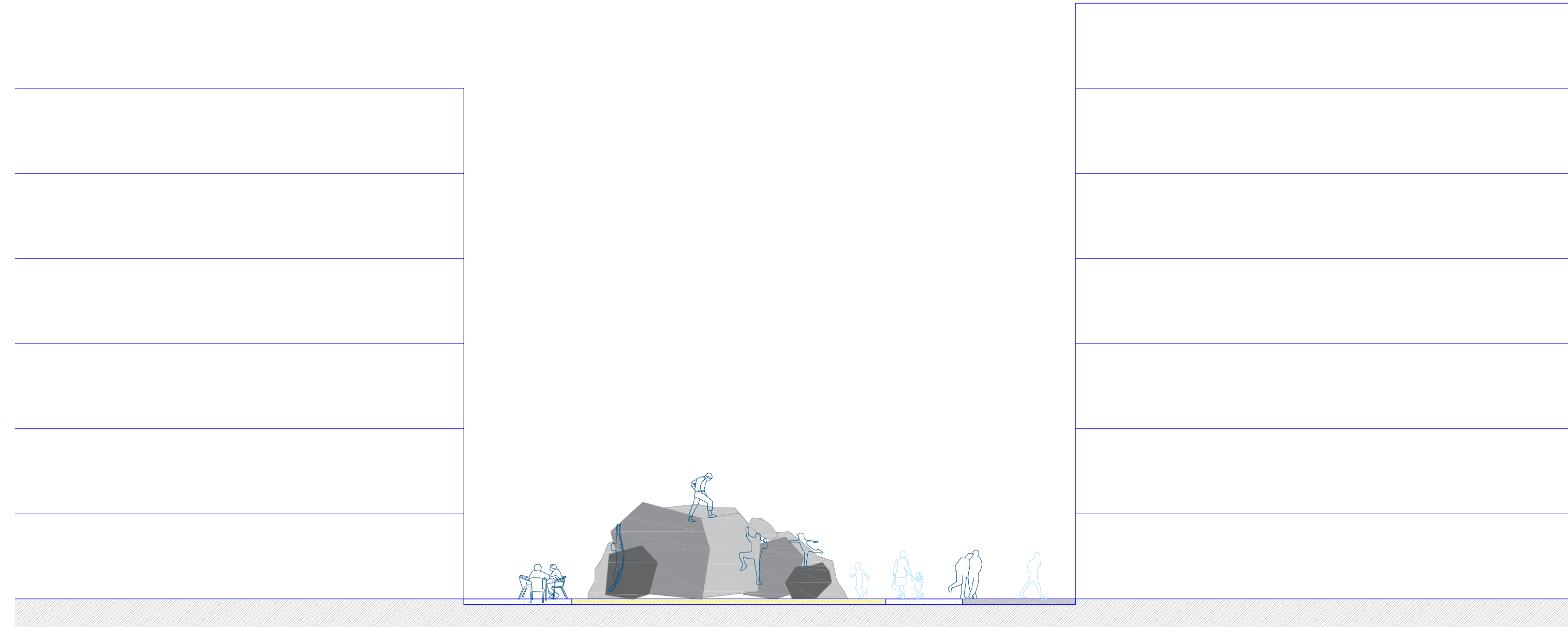
7.1.1 urban pond - the source

- first urban pond
- timber deck with large boulders inviting for play and sports
- water cascading from the centre of the boulders symbolising the source
- from the source the water flows into a still open pond
- the pond has inviting edges: deck and piers for interaction with waters edge
- water vegetation
- inviting for F&B, meeting place for young people
- rainwater retention and infiltration: water level can vary by 40cm



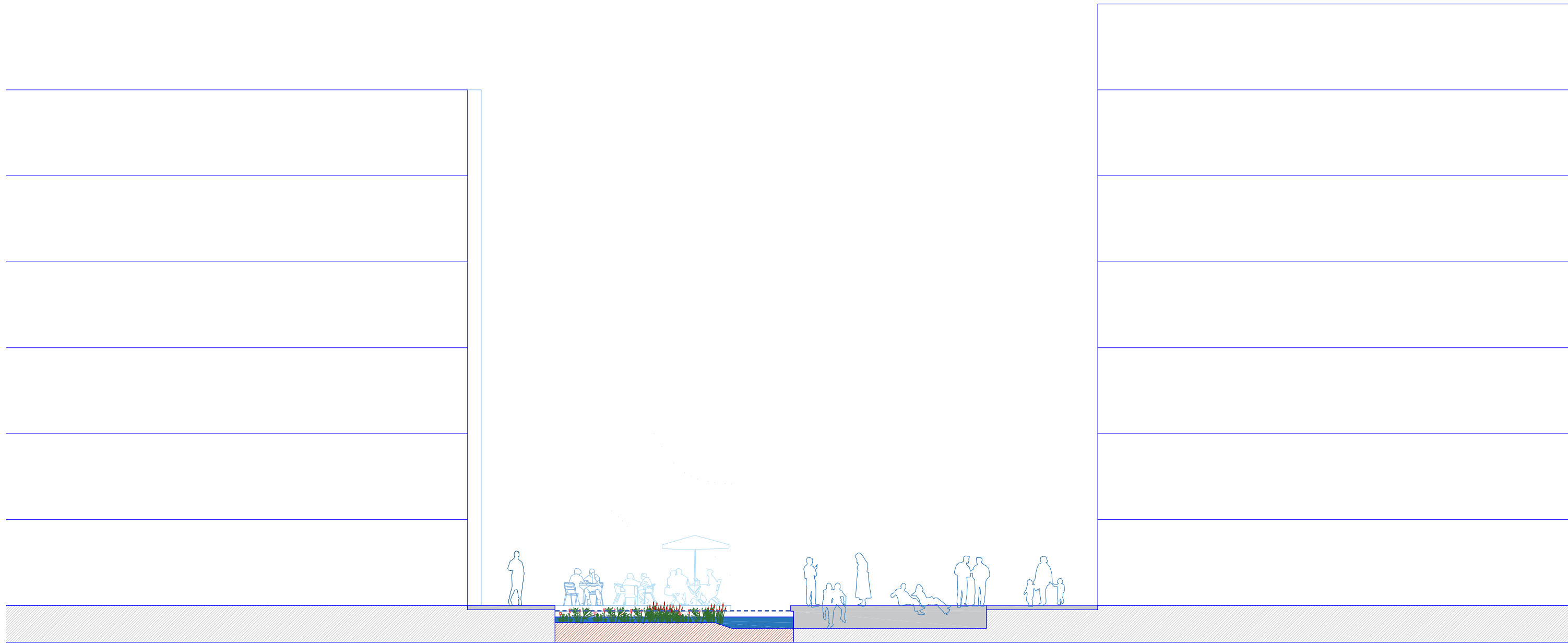
7.1.1 urban pond - the source

profile 1



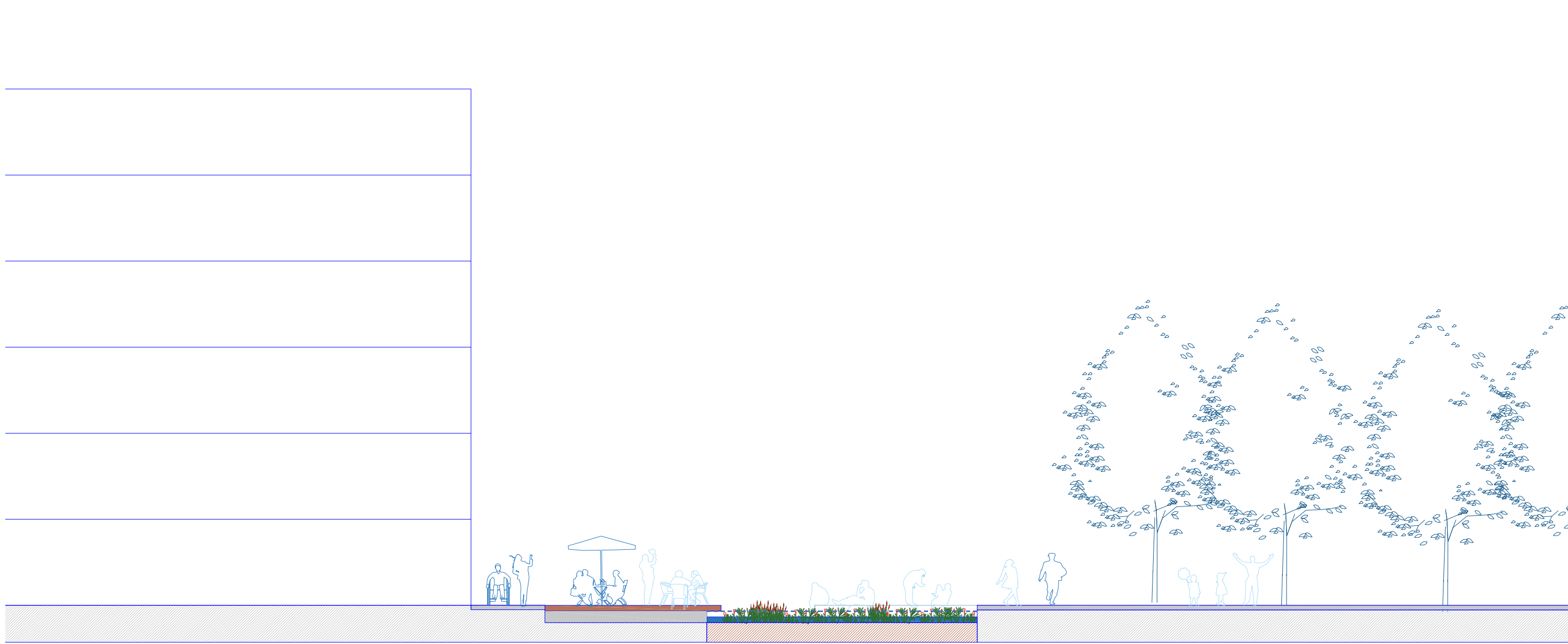
7.1.1 urban pond - the source

profile 2
- the dashed line indicates the high water level after rain



7.1.1 urban pond - the source

profile 2.1
- the dashed line indicates the high water level after rain



references



cafe terraces on wooden deck



boulders sculptures to climb on



informal seatings on wooden deck

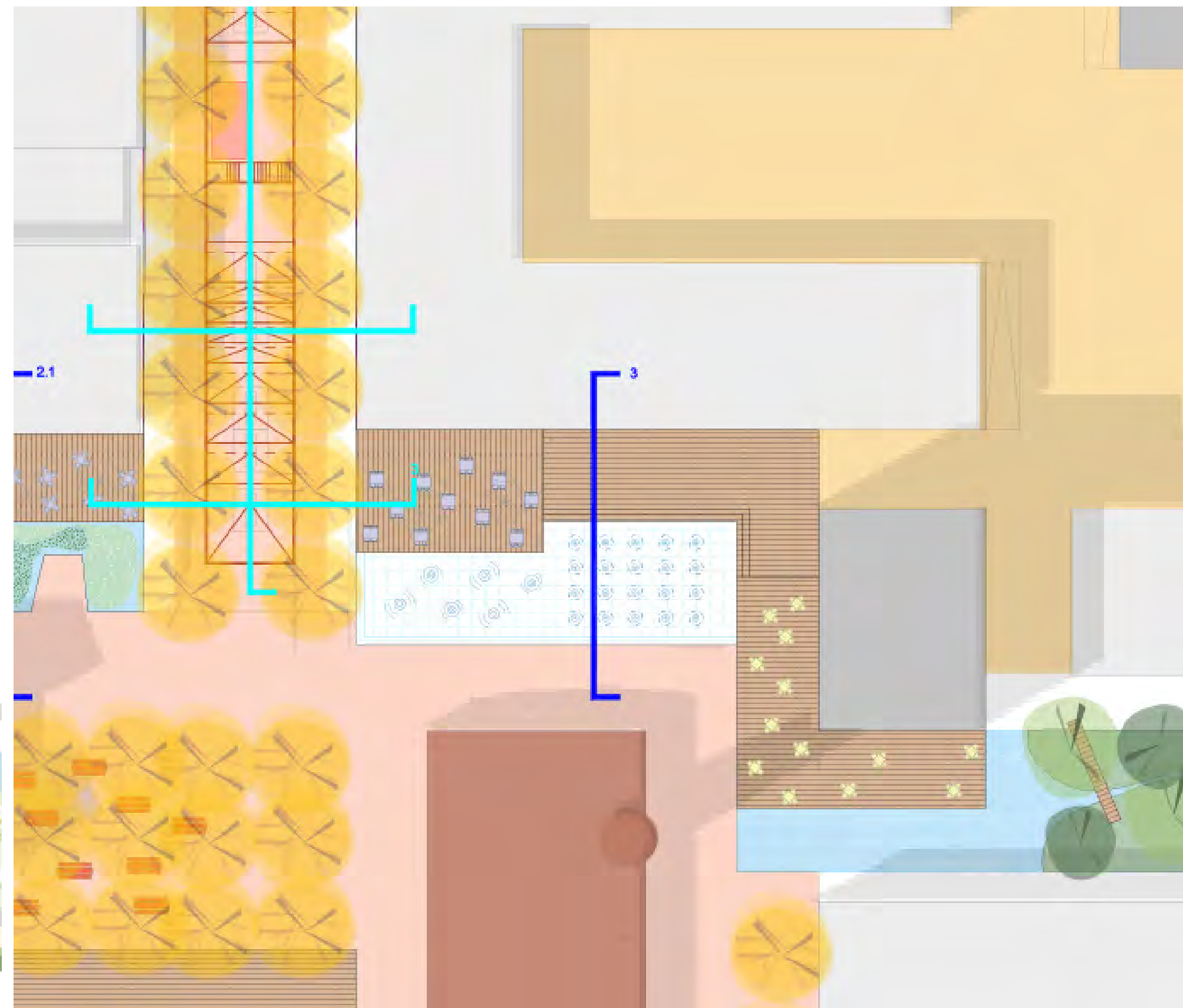


small piers to enjoy the water element

THE JETS SQUARE

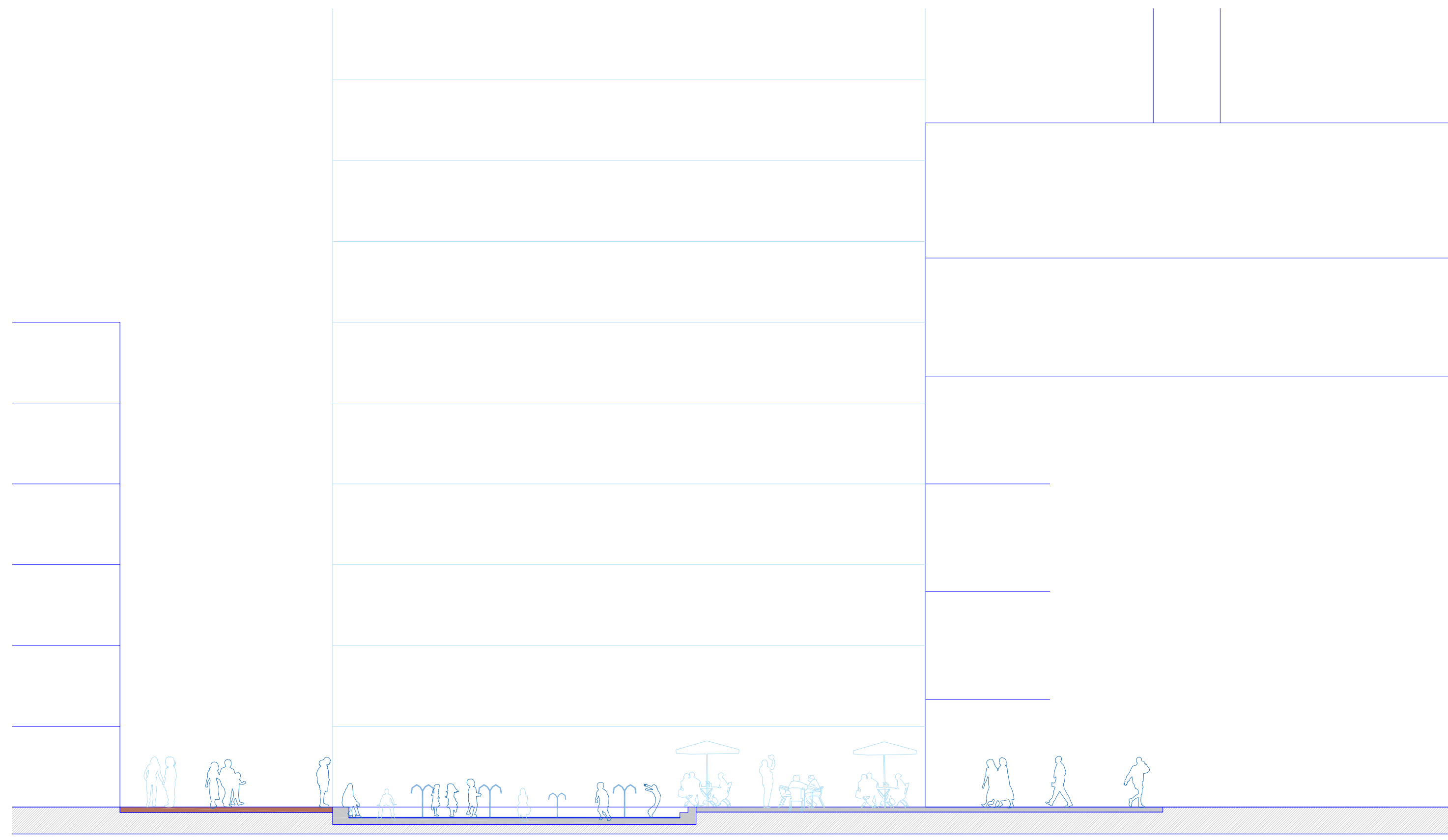
7.1.2 urban pond - the jet square

- part of the Urban Pond and the Central Square
- playful water element, interesting for children
- enhancing F&B: within site of the terraces
- flexible urban space: if the water is switched of the square can be used for other purposes



7.1.2 urban pond - the jet square

profile



view



references



water jets as play element for kids

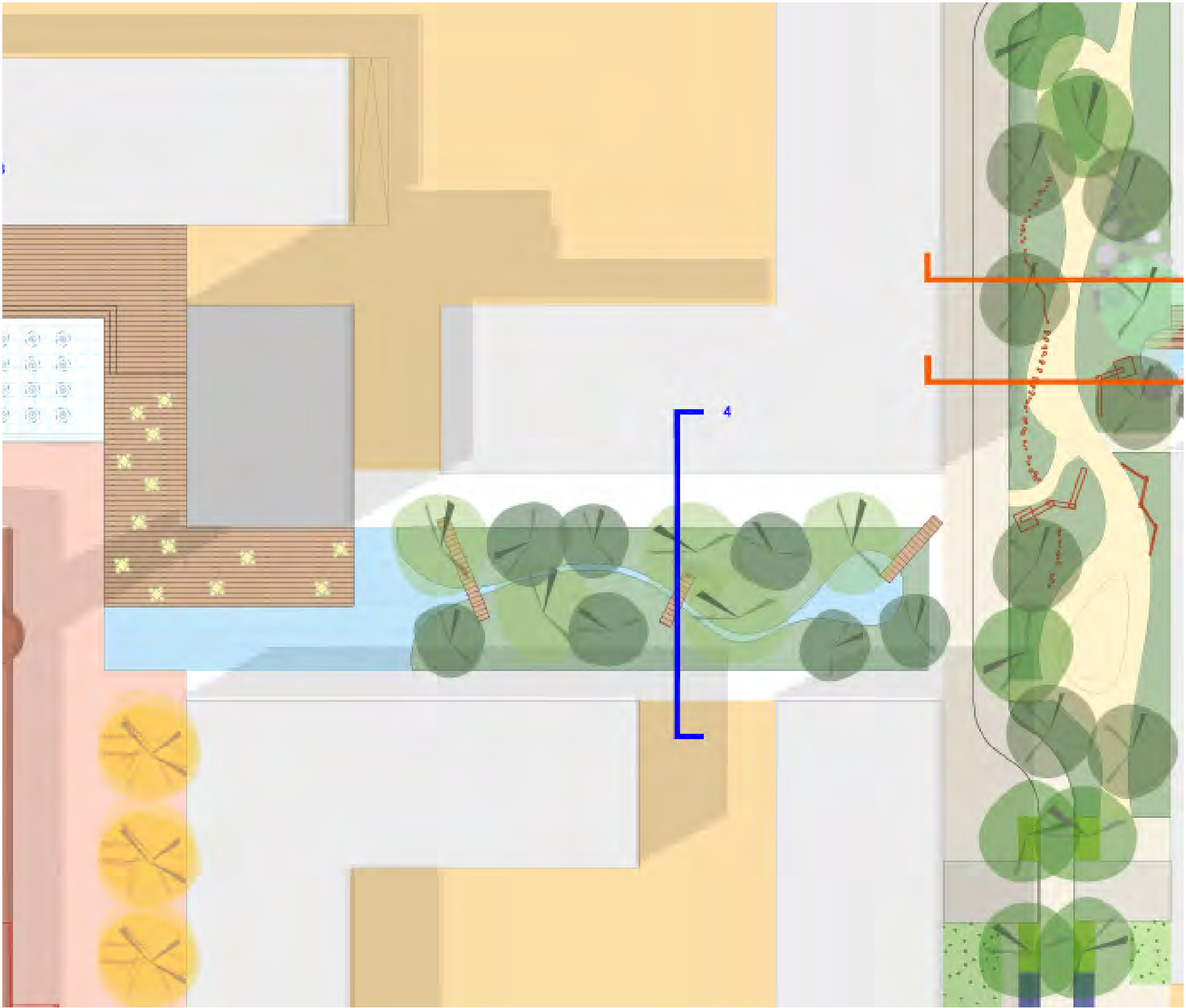


cafe terraces and informal seatings for parents to watch kids playing in water



water jets can become a light feature in the evening or for specific events

THE RIVULET



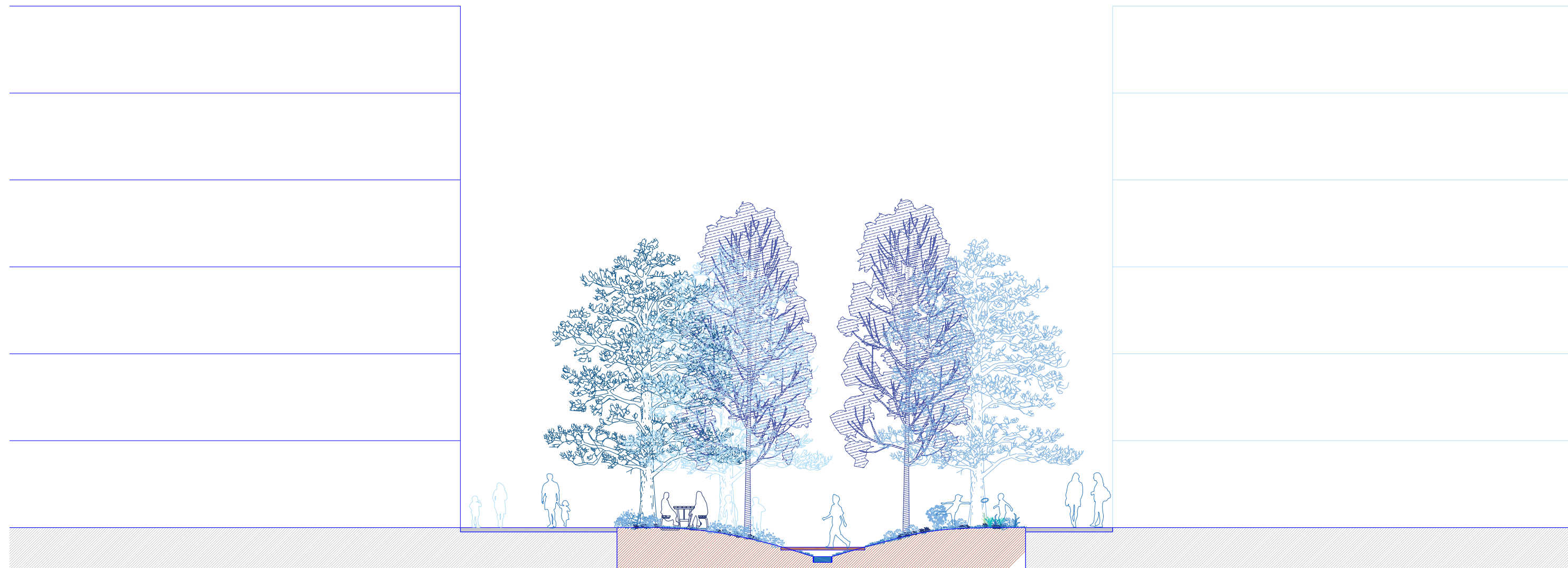
7. MEETING PLACES

7.1.3 urban pond - the rivulet

- water related park, shaded, cool in summer
- water is small and refined, shallow but special: a mirror
- embedded in the residential area
- informal meeting place for the community: meeting on the banks of the rivulet



profile



references



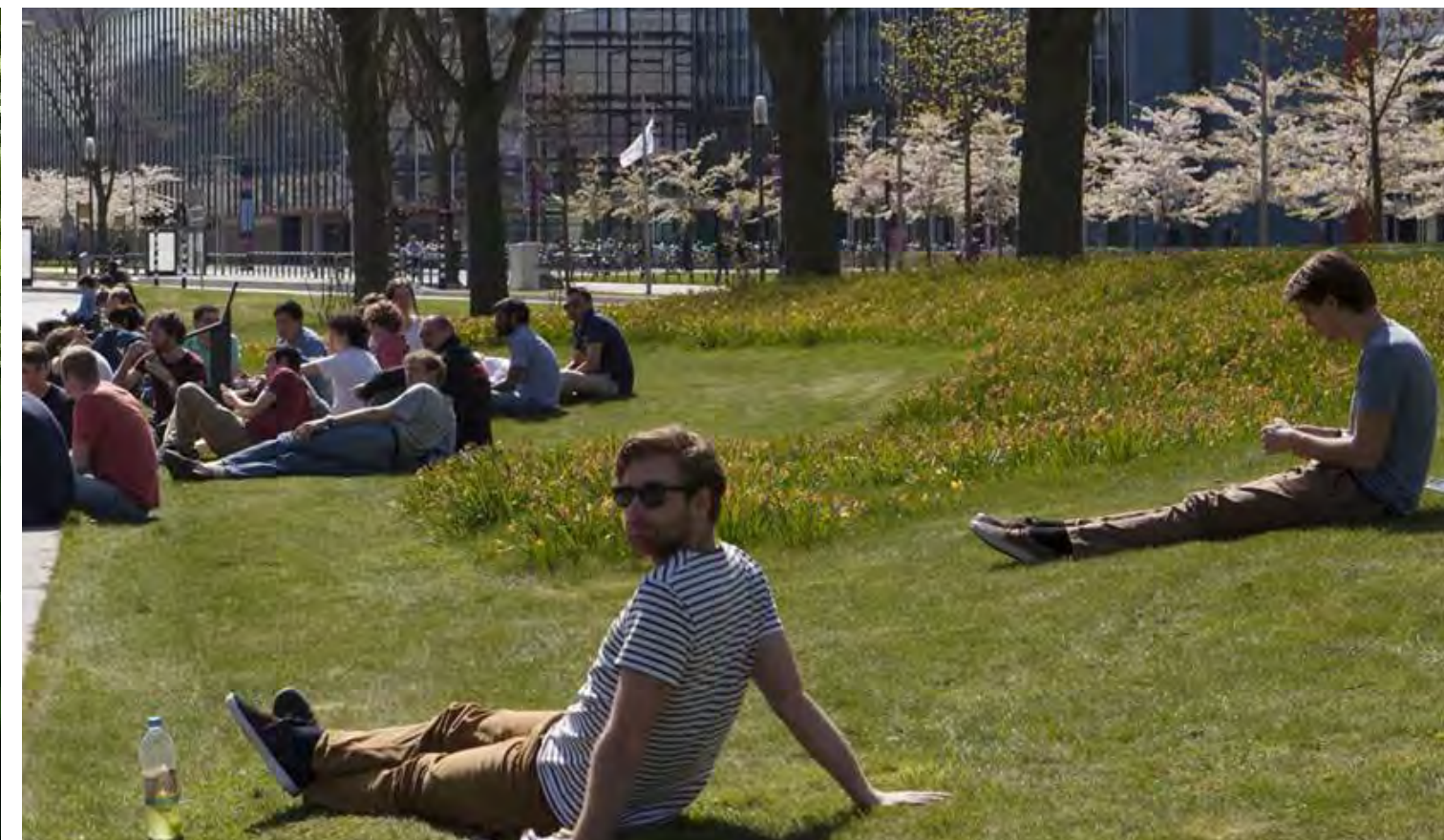
thin water rivulet runs through the vegetation



water as a mirror of the surrounding vegetation

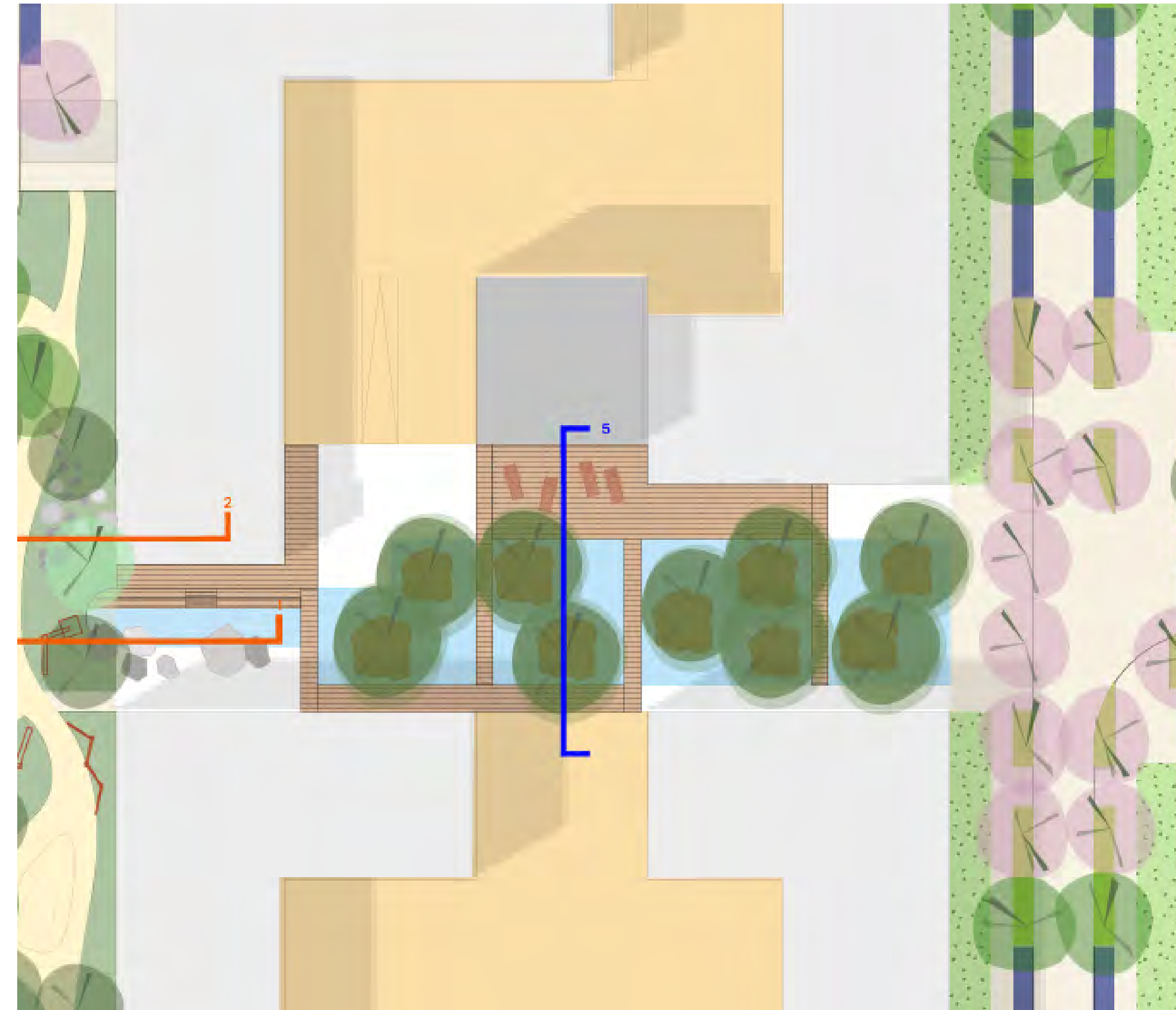


wooden deck as suspended path between the banks



relaxed informal slopes where people can gather or enjoy free time

THE FLOATING TREES



7. MEETING PLACES

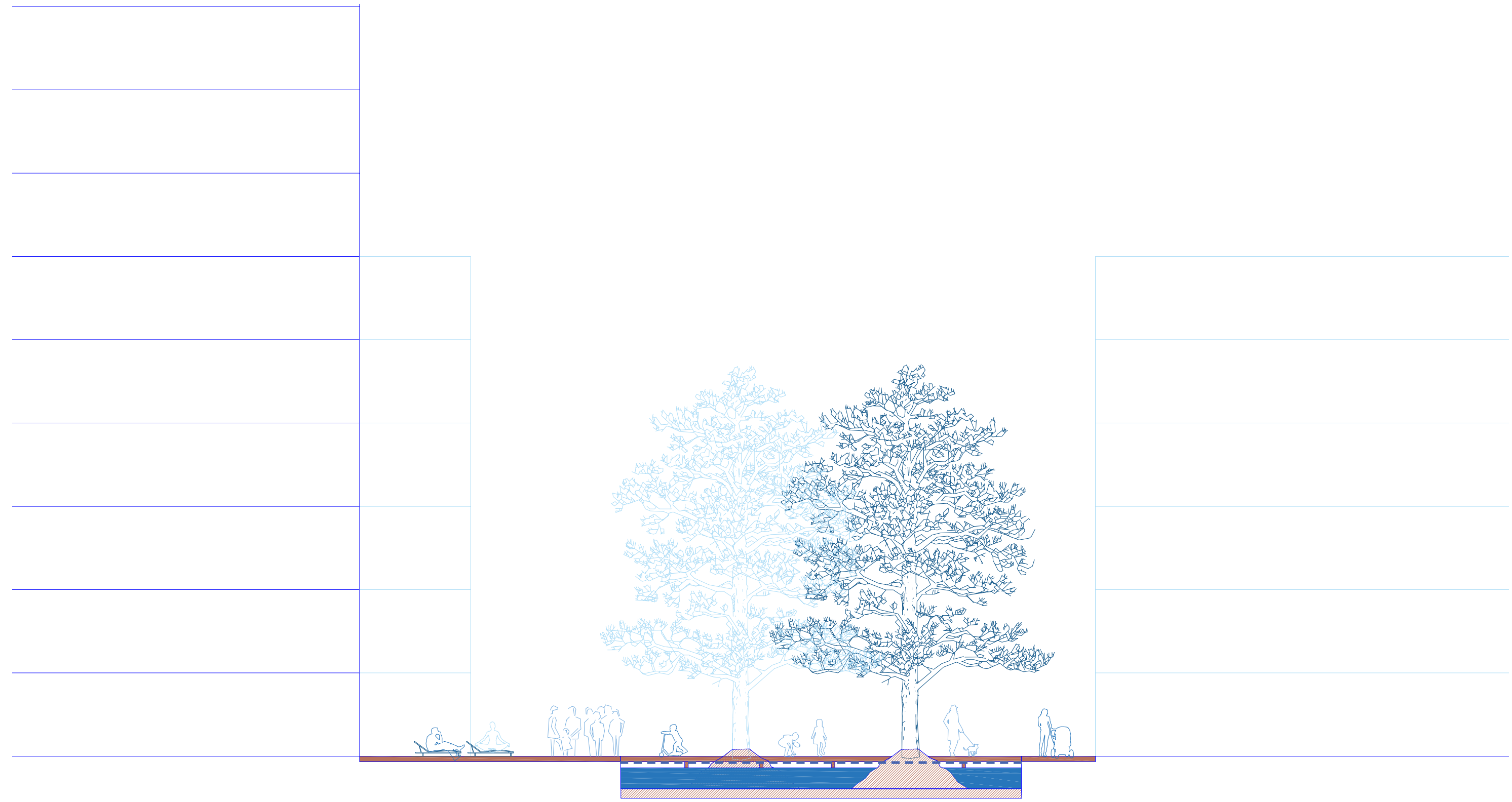
7.1.4 urban pond - floating trees

- open water with marshland trees
- large trees (Taxodium / Swamp cypress) as eye catchers-
- rain water buffer and infiltration: maximal 40 cm
- relaxing meeting place



7.1.4 urban pond - floating trees

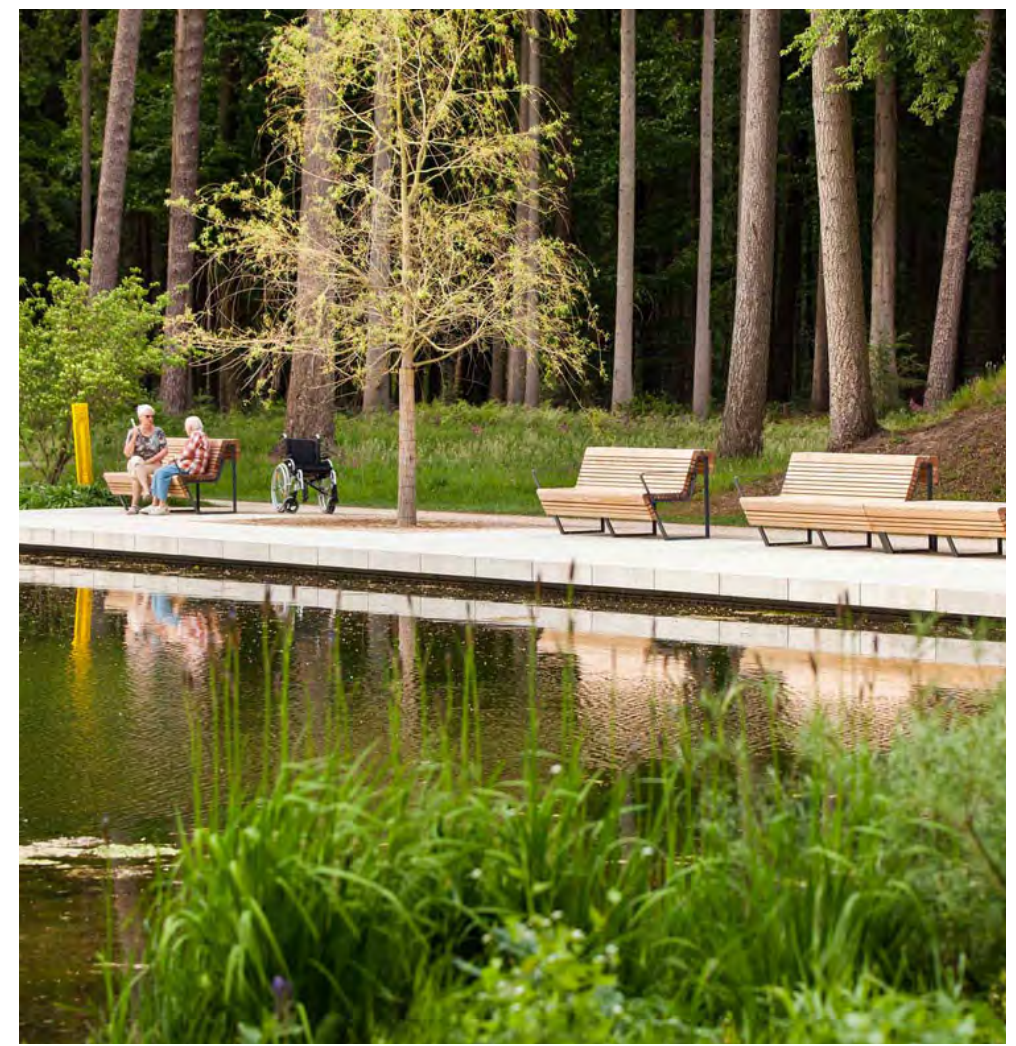
profile
- the dashed line indicates the high water level after rain



Taxodium trees grows over the water



suspended wooden pathsallows to walk between the water and the vegetation

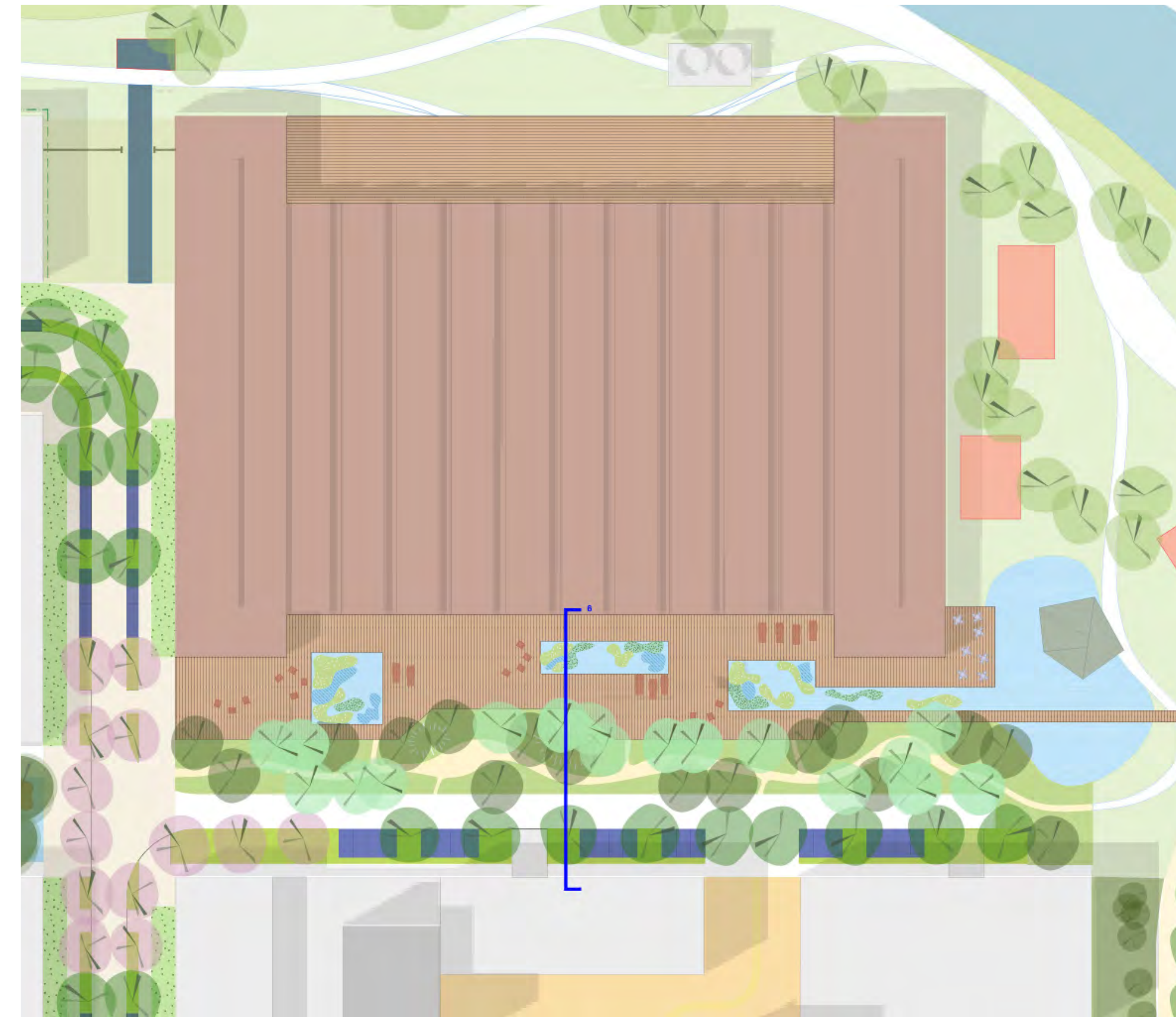


wooden deck as platform for gathering and relax

7.1.4 urban pond - floating trees

references

THE INDUSTRA DECK



7. MEETING PLACES

7.1.5 urban pond - Industra deck

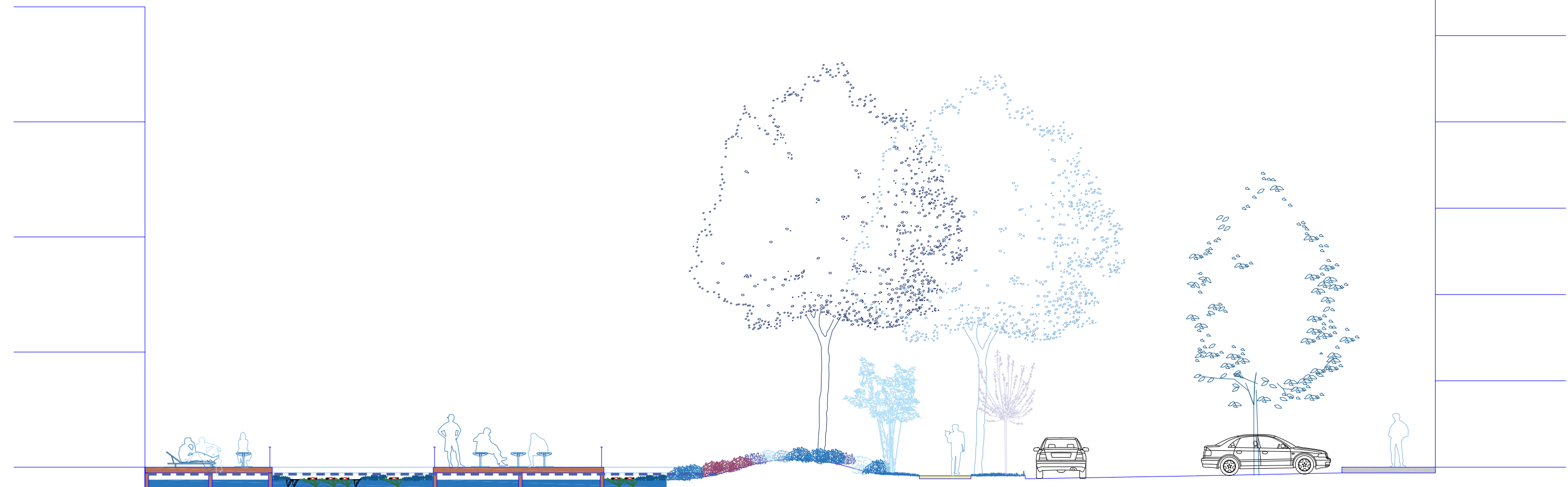
- linking urban ponds and riverside
- deck of the scale of the industra building
- meeting place relating to the riverside park with informal sports facilities
- inverse landscape: ponds within the deck



7.1.5 urban pond - Industra deck

profile

- the dashed line indicates the high water level after rain

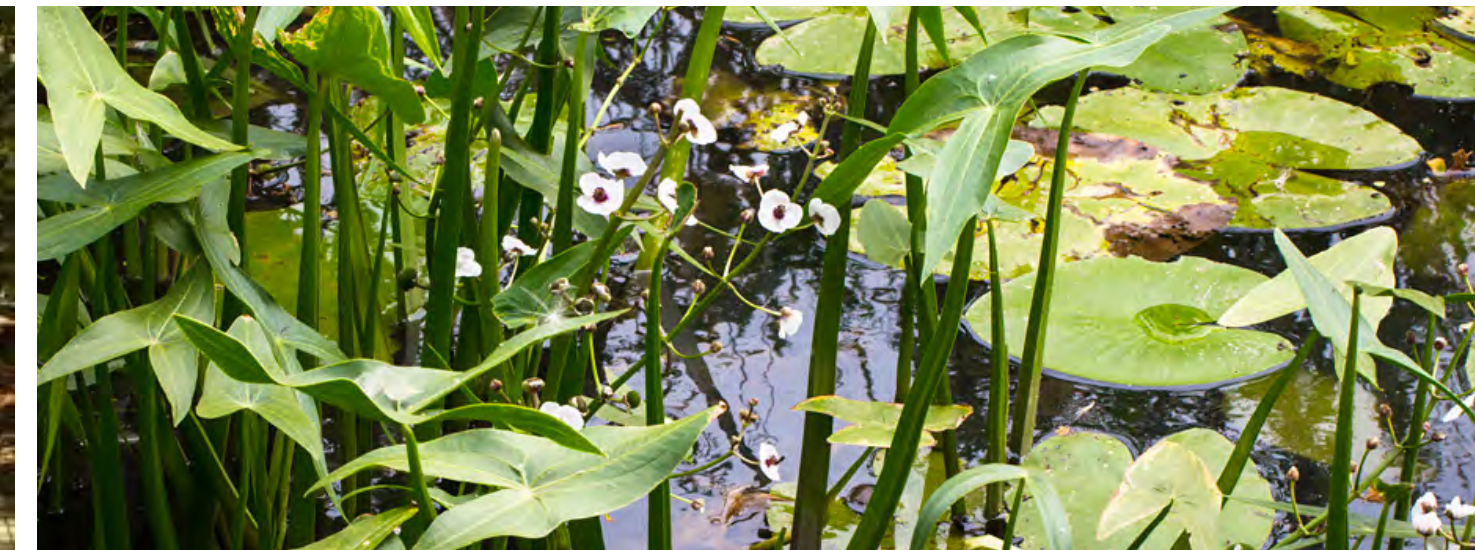


7.1.5 urban pond - Industra deck

references



work breaks on the wooden deck under trees shades



waterplants as main vegetation



wooden furnitures



wooden deck floats over the water



gathering place can have different settings according to the users

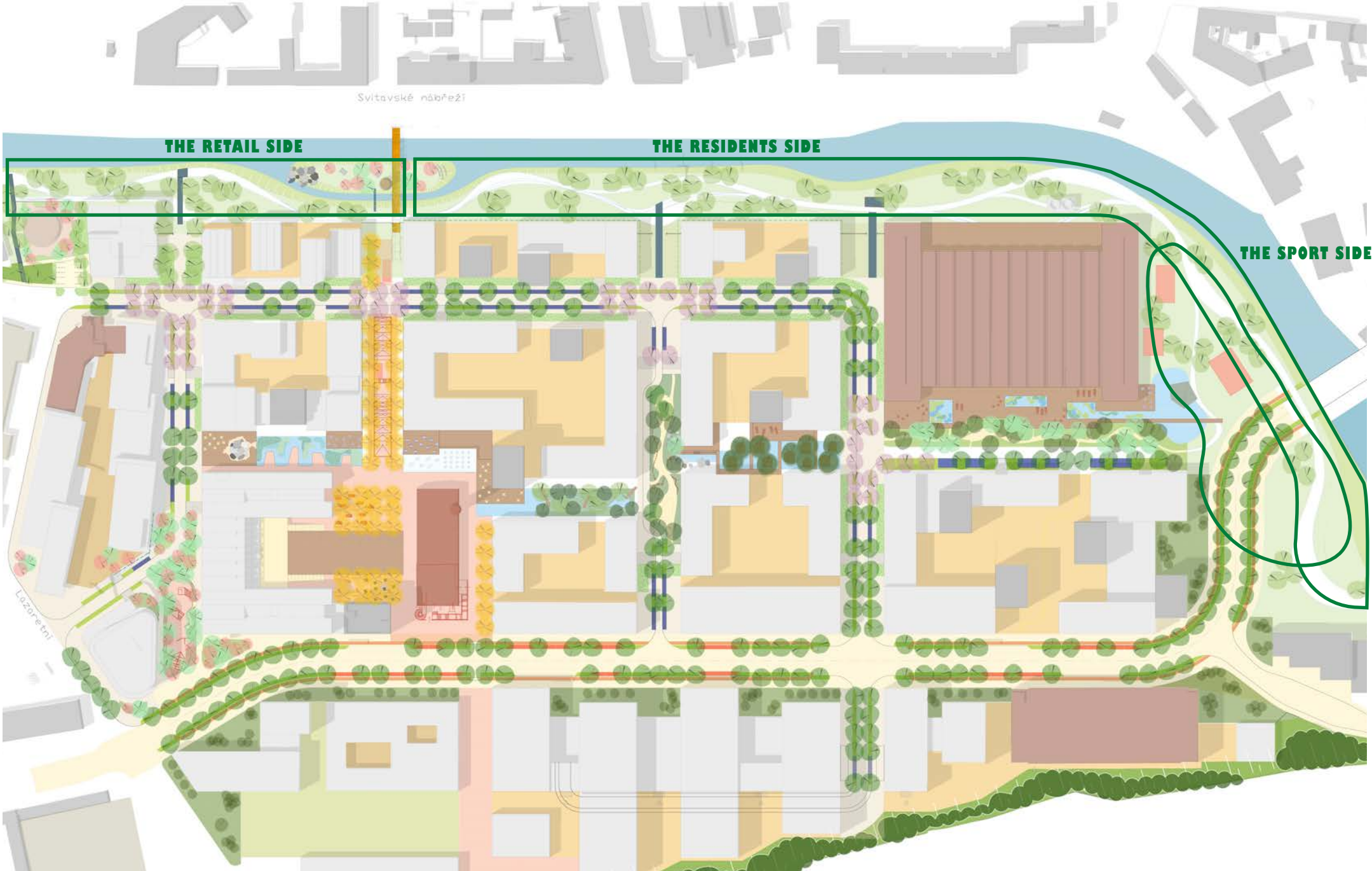
THE RIVER PARK

7.2.0 the river park

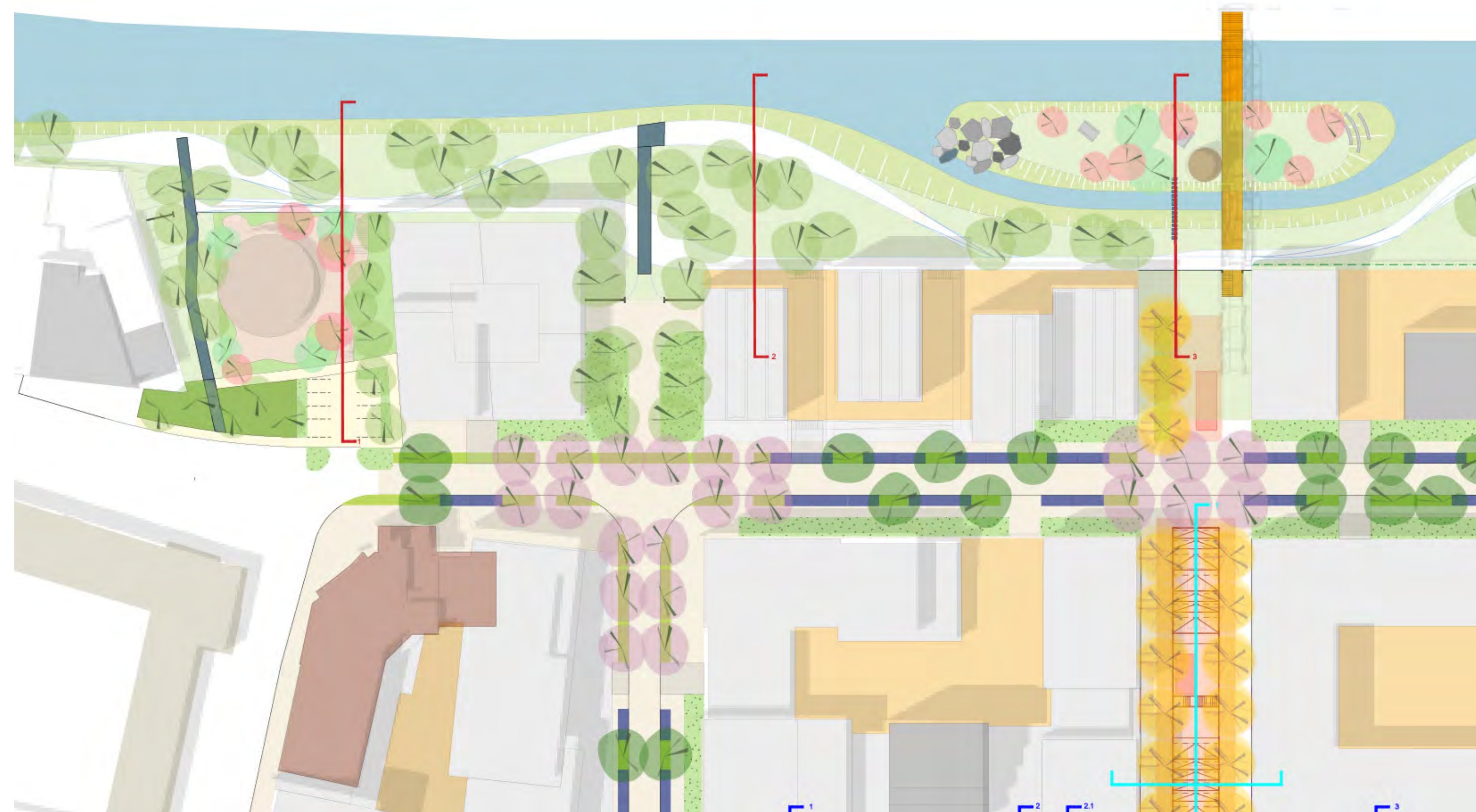
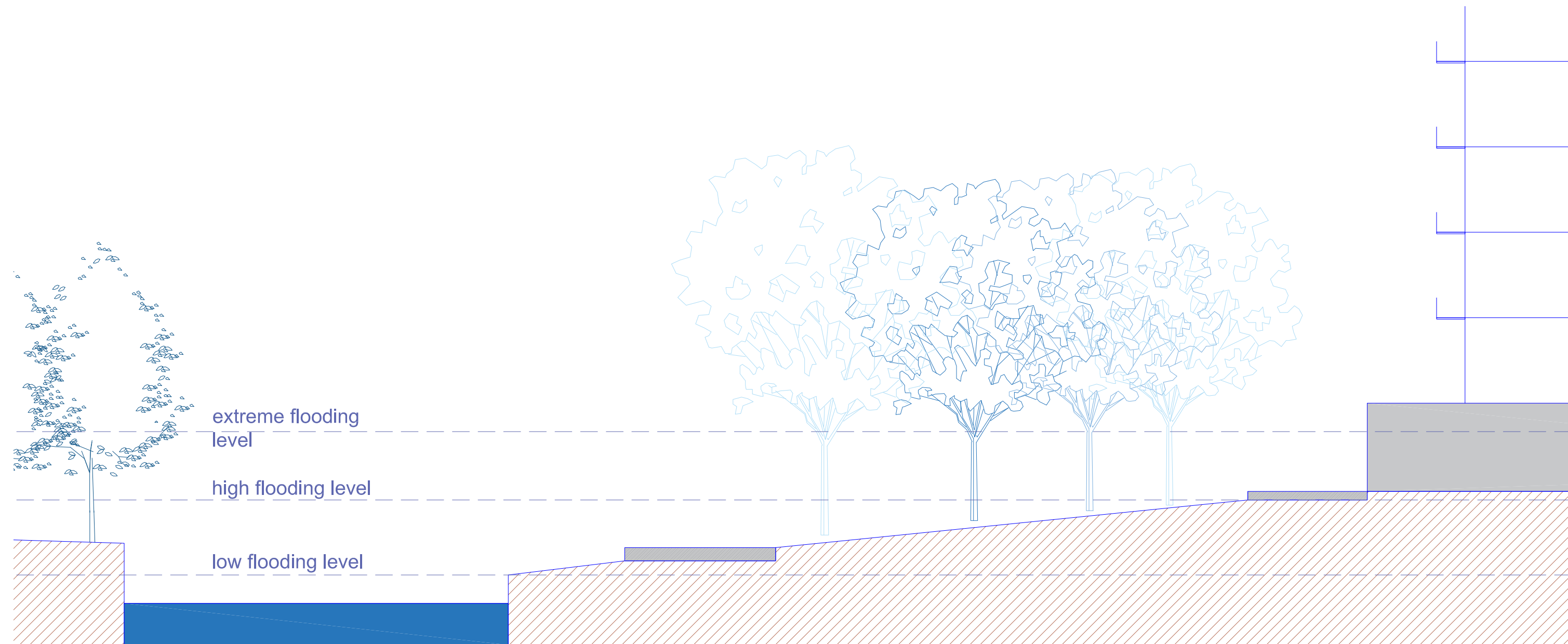
- river park as natural as possible
- flexible space allowing for natural dynamics: designed for flooding (fixed and sturdy furniture)
- flooding as an attraction and experience
- focussing on views along the river in stead of across
- temporary installations for summer events



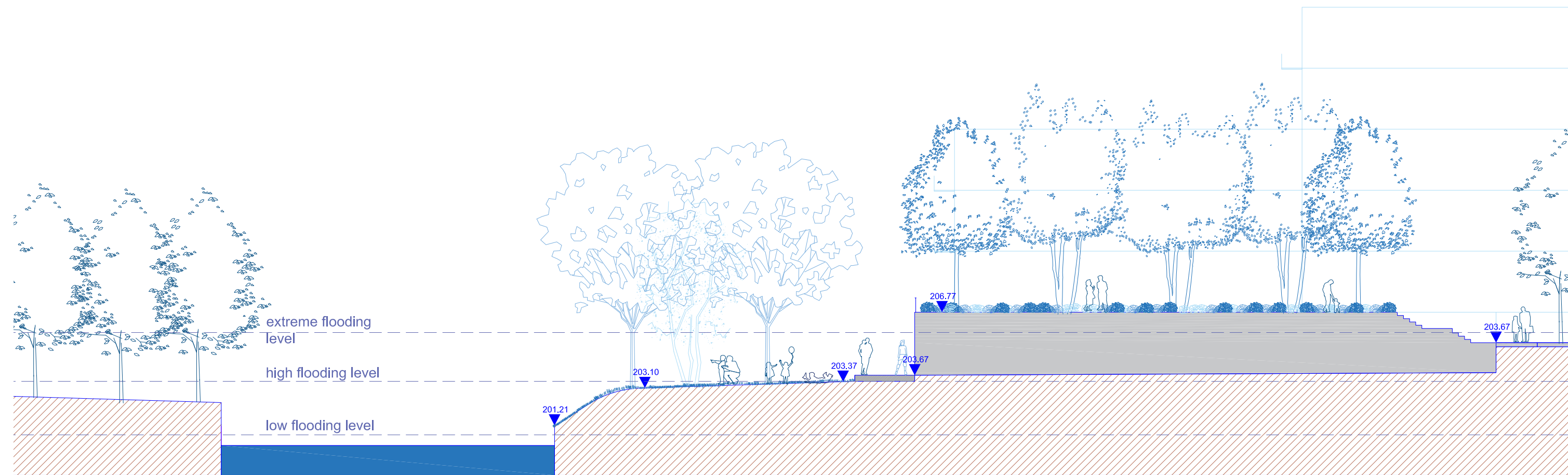
7.2.0 the river park - names



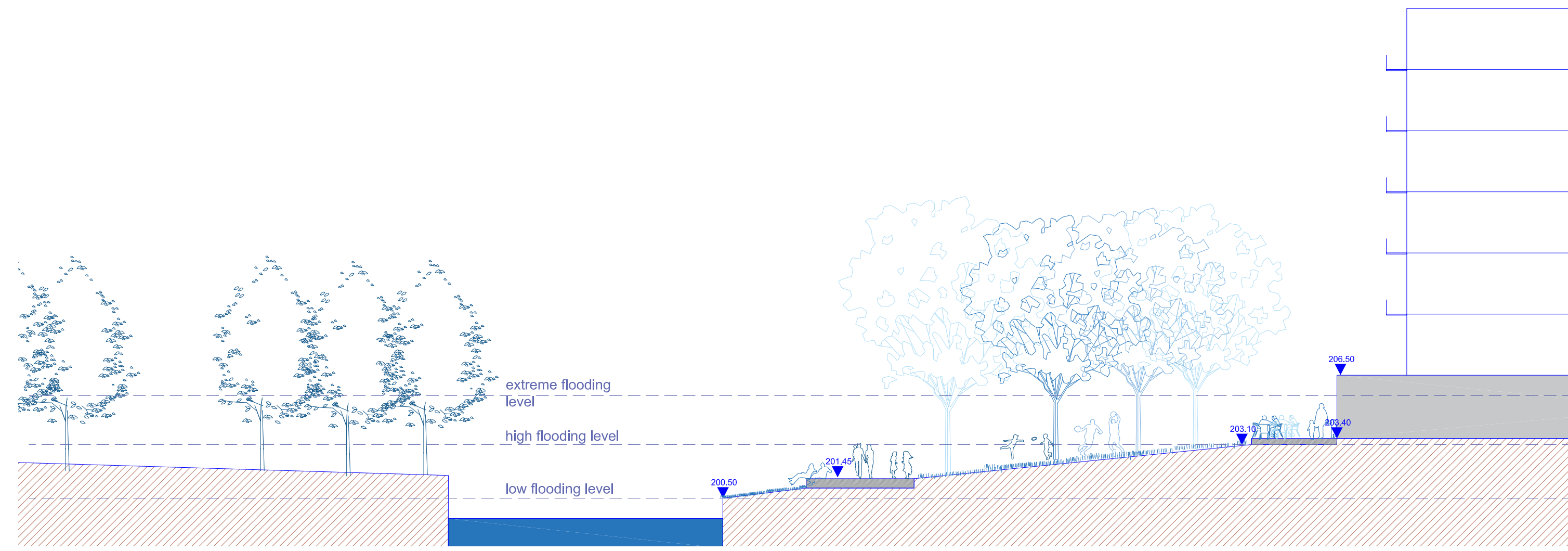
indicative flooding levels

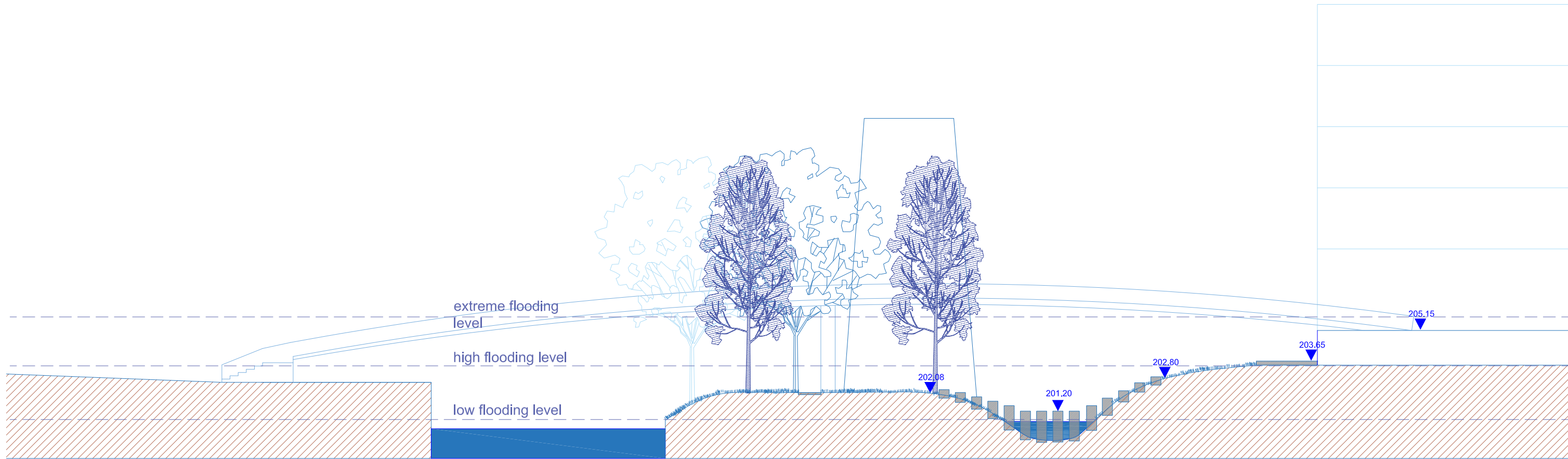


profile 1



profile 2





references



references

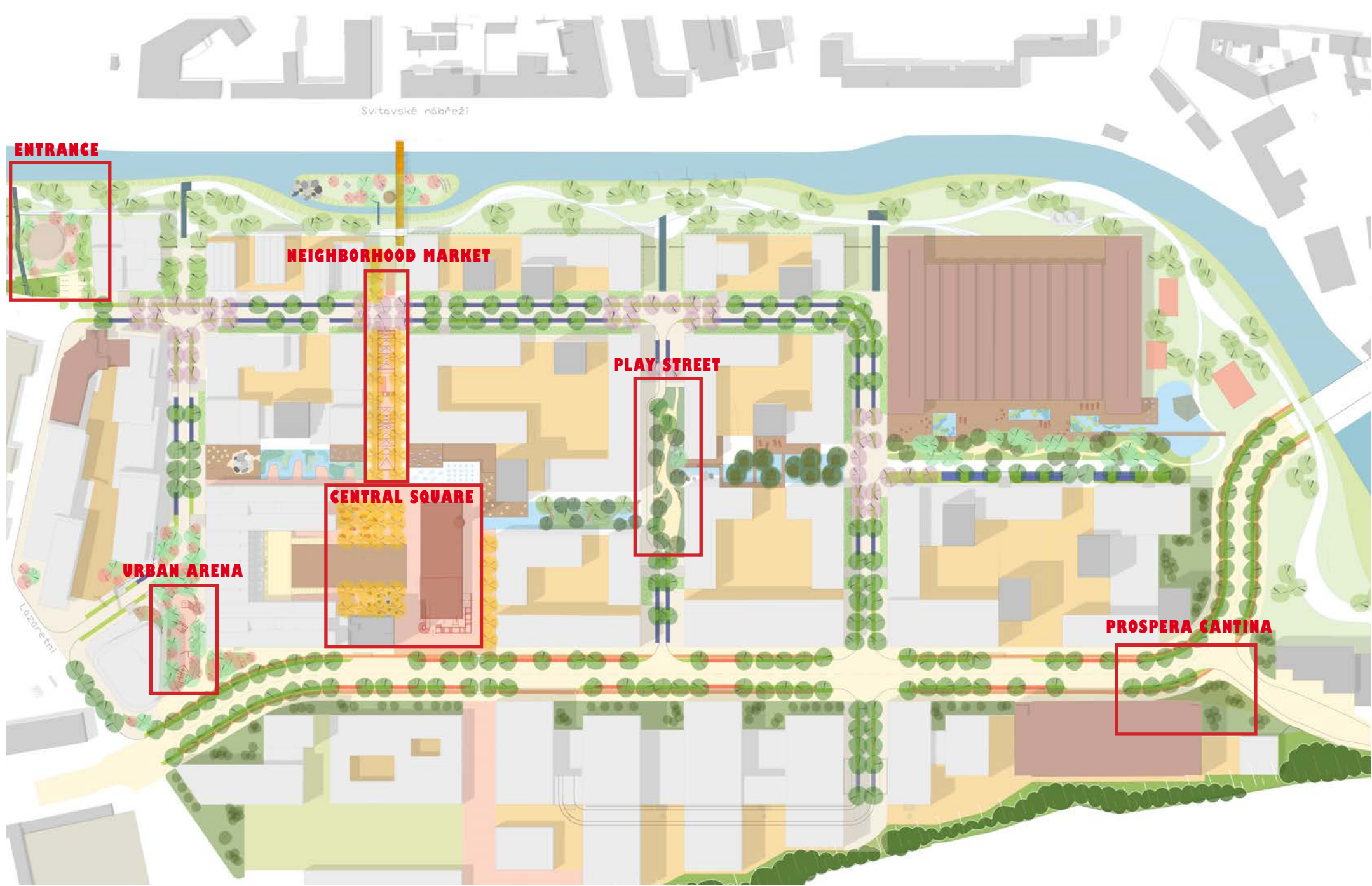


THE COMMUNITY NODES

7. MEETING PLACES

7.3.0 the community nodes

- this chapter addresses the various types of gathering places
- the Entrance is an open and inviting area that links the site with the river
- the Central Square is the main meeting place surrounding the Firma building as a central focal point and with many leads to activate the space
- the Urban Arena is an active urban sports related outdoor arena inviting residents and workers to be fit and healthy
- the Play Street is a quiet one way street with a wide park zone inviting children to play safely
- the Industra Square is a long and inviting bank along the creek with the Industra building as a back drop and activator
- the Prospera Cantina is a small square in a green environment for special events and private dining, it could even be a luxurious garden for dining, inviting for the whole of Brno



THE ENTRANCE

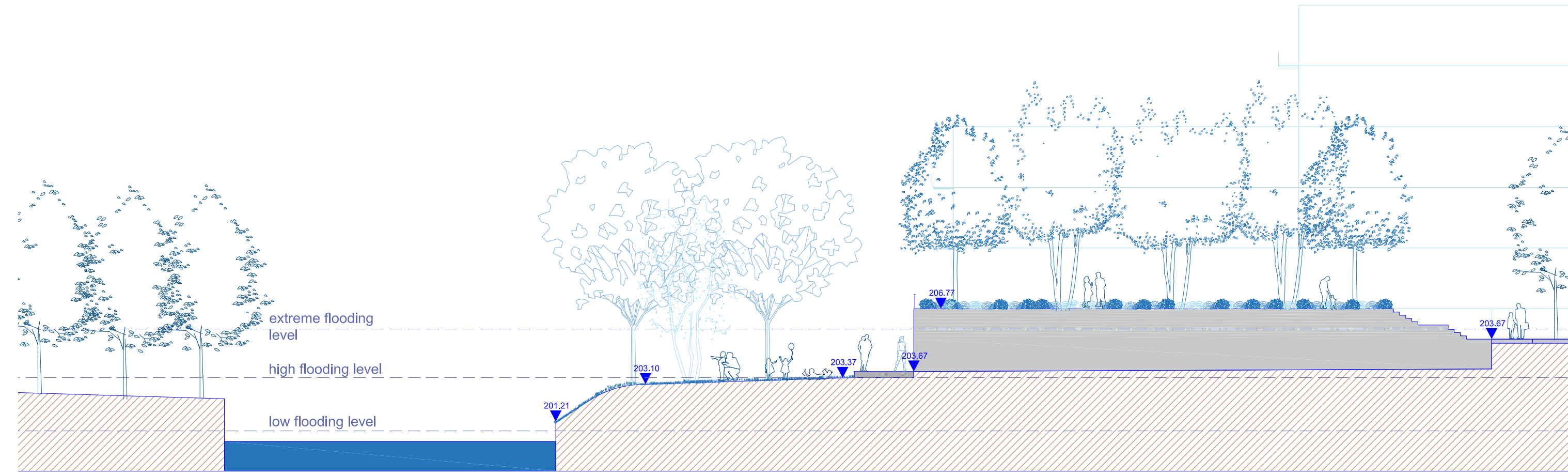
7.3.1 entrance

- the Entrance is an open and inviting area that links the site with the river
- the character of the riverbank continues to the entrance setting the atmosphere of the area as a water front
- a lookout point visible from the Entrance contributes to this experience
- the busstop is moved to the west



7.3.1 entrance

profile





sandy areas for playing



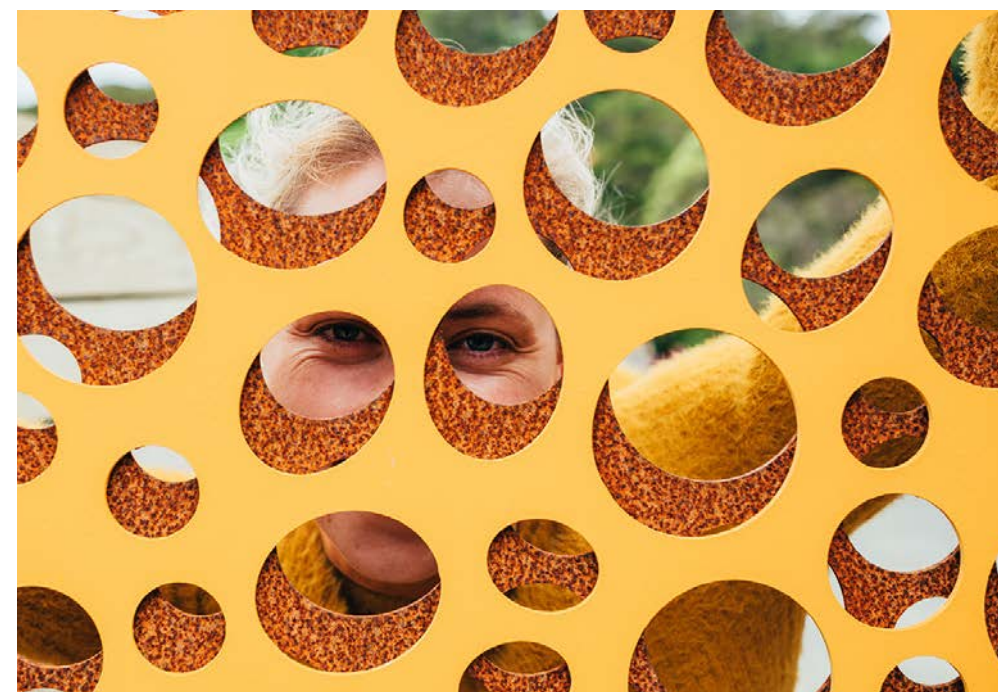
epdm ground surrounded by green islands



kindergarden playground surrounded by green environment



wooden play equipment surrounded by green



colored and playful fence

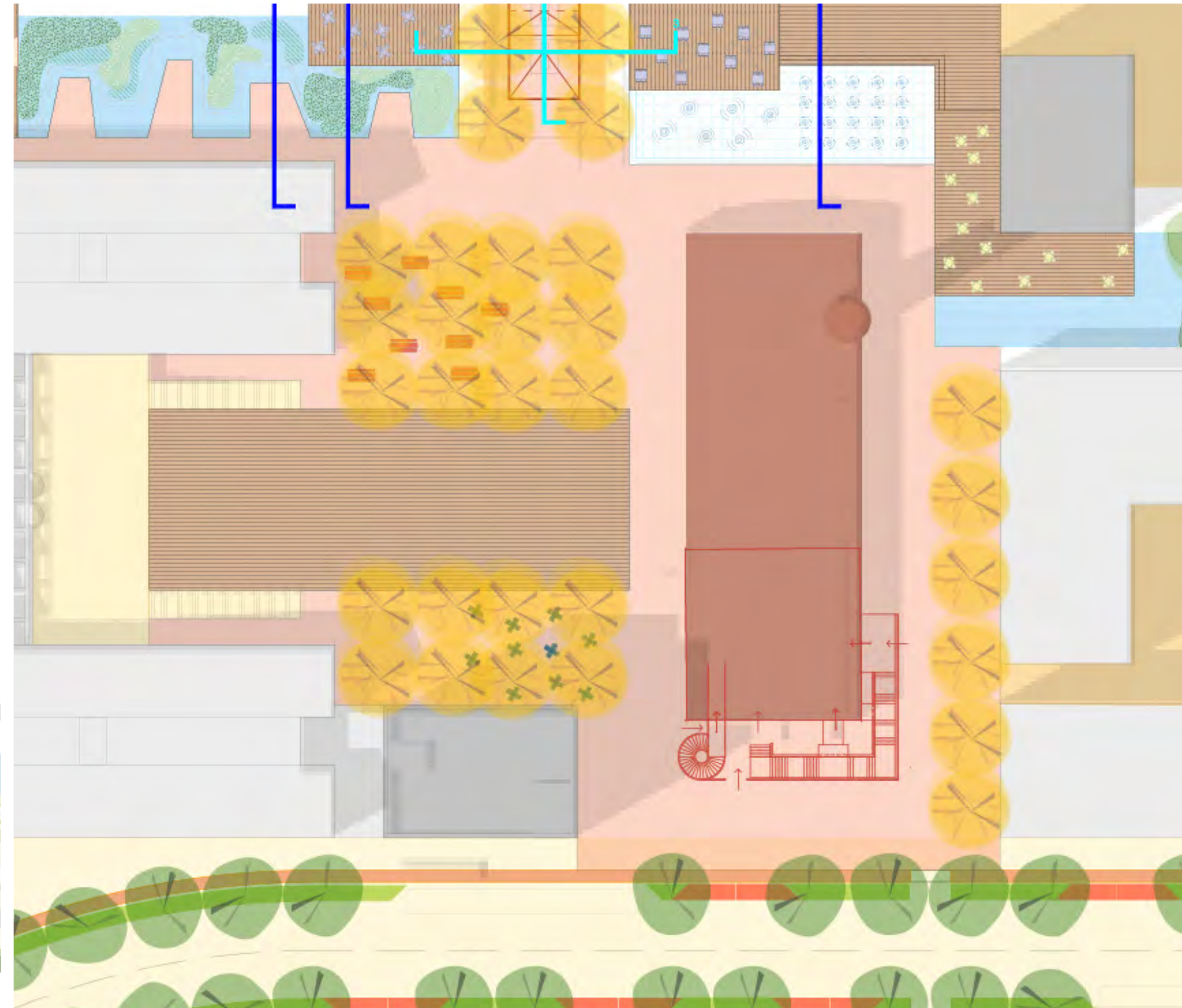


green buffer on the building side

THE CENTRAL SQUARE

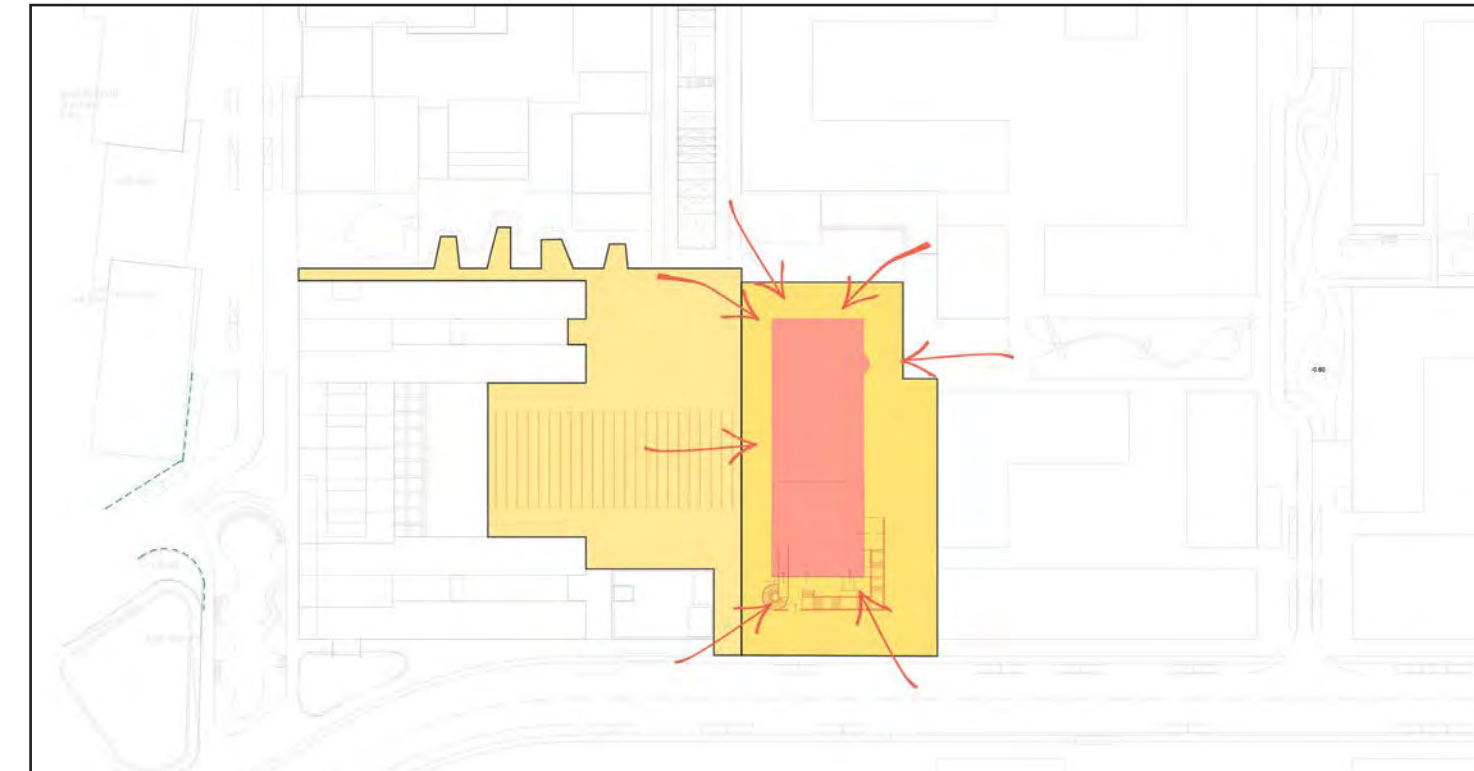
7.3.2 central square

- the Central Square is the main meeting place surrounding the Firma building as a central focal point and with many leads to activate the space
- the square is all around the building, every facade matters and every side is activated
- the square is at the cross point of the two main pedestrian routes, inviting people to stop and enjoy the plaza and its F&B
- the reception pavillion hinges the main street with the Firma building and gives access to all floors and especially the party rood
- the Urban Ponds meets the Central Square with a sequence of seating elements, terraces and stairs, a waterplaza for play and a canal where the chimney mirrors in the water
- the timber deck of the stairs continues in the Square providing a stage for events and a clear view of the Firma facade
- large trees on positioned on the columns of the carpark below provide shade and intimacy
- the trees are large and high and there is a clear view underneath the trees to the facade.

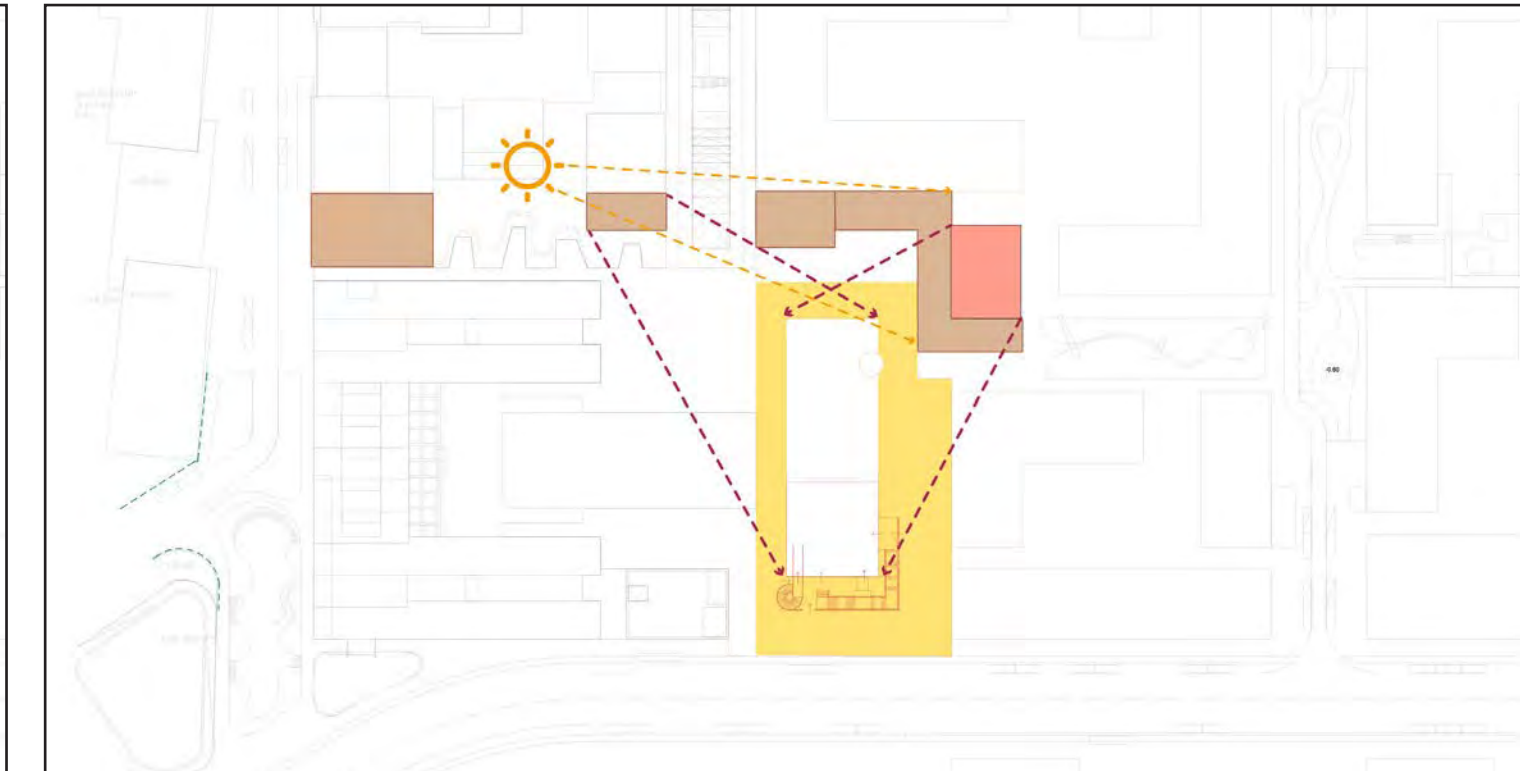


7.3.2 central square

design principles



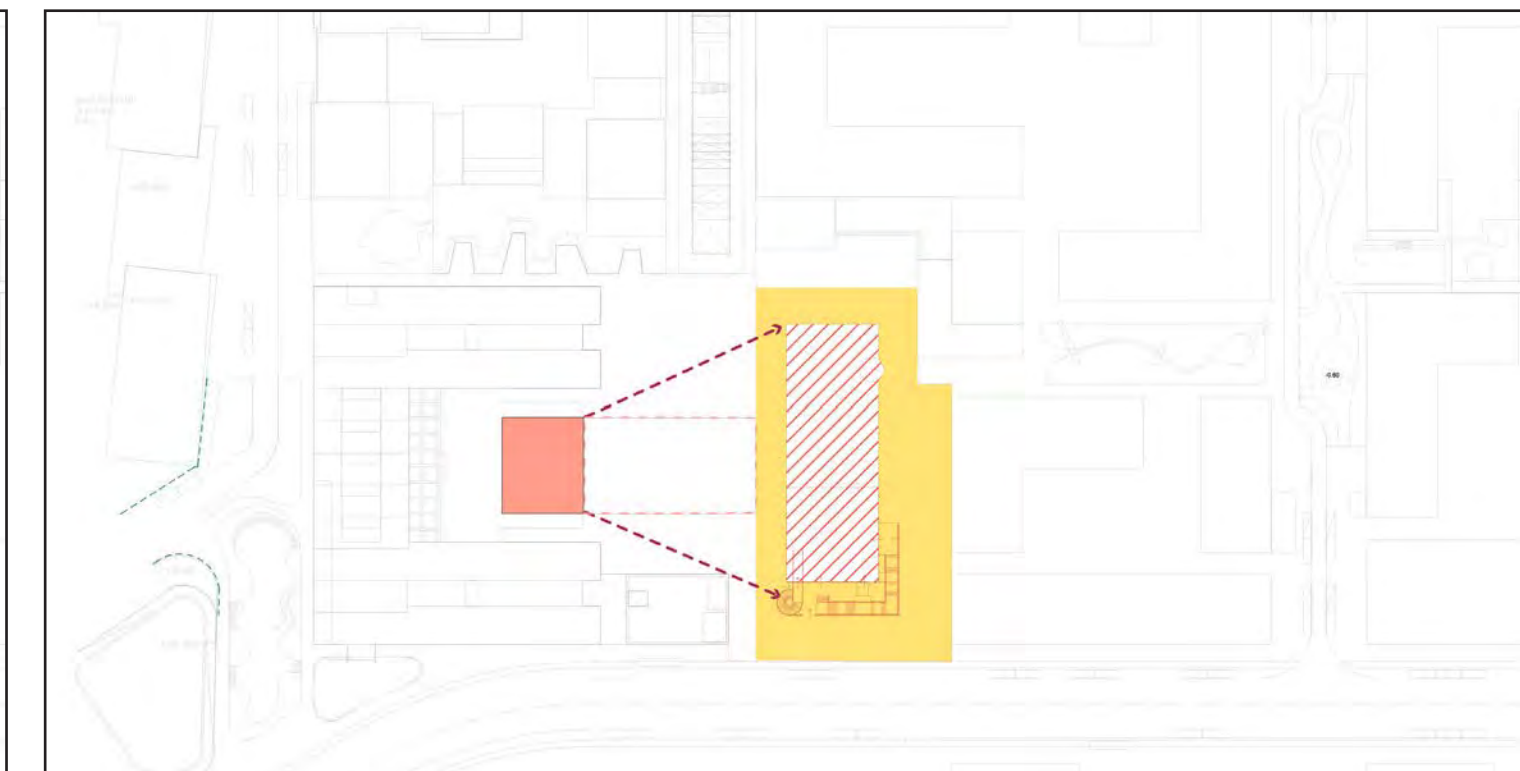
the Firma Building stands on the Central Square



terrace in the afternoon sun, facing the full length of the Firma Building



the Creek meets the Central Square creating a water plaza, mirror canal, bank and timber deck (terrace)

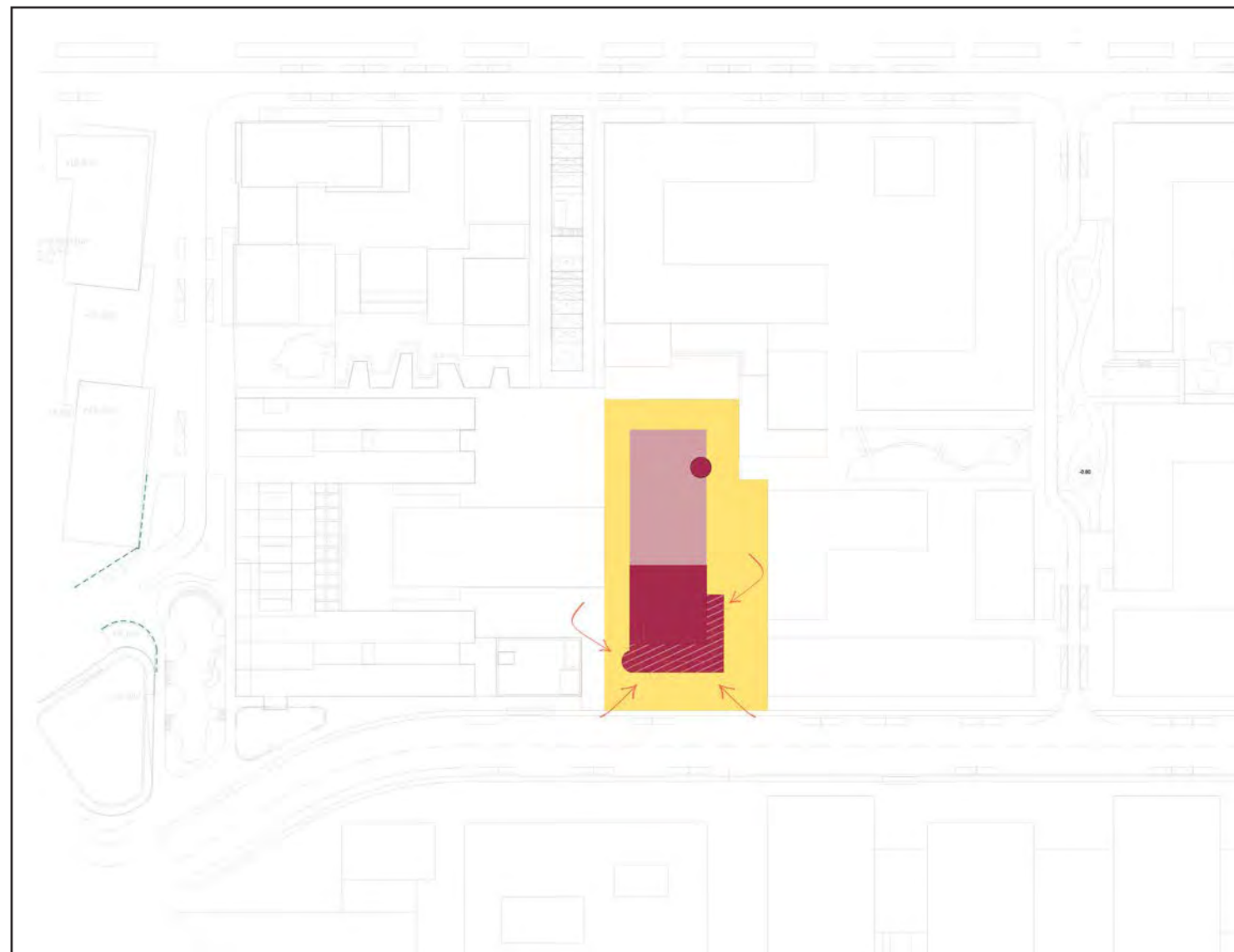


stairs (amphitheatre) with view of the full length of the Firma Building

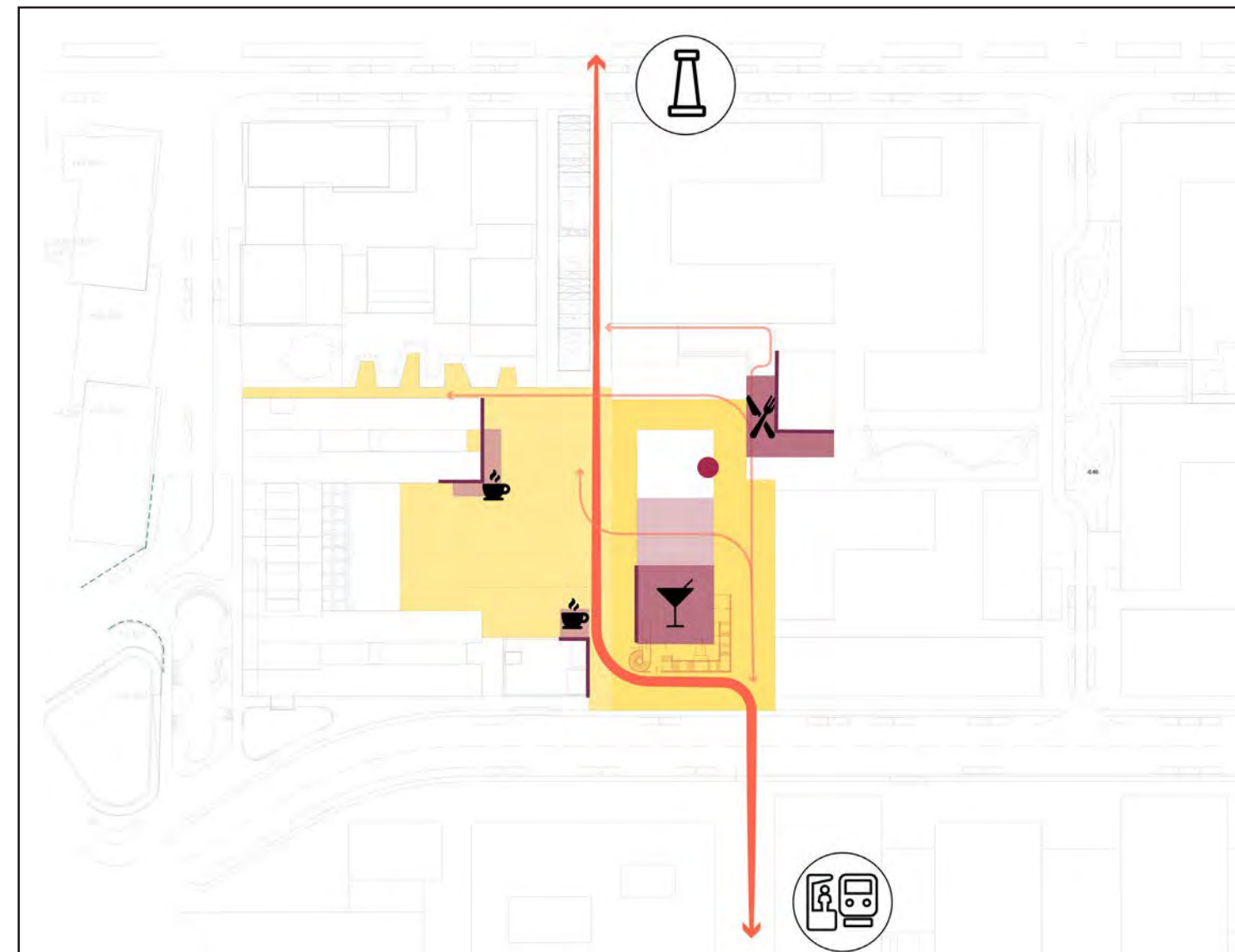
7. MEETING PLACES

7.3.2 central square

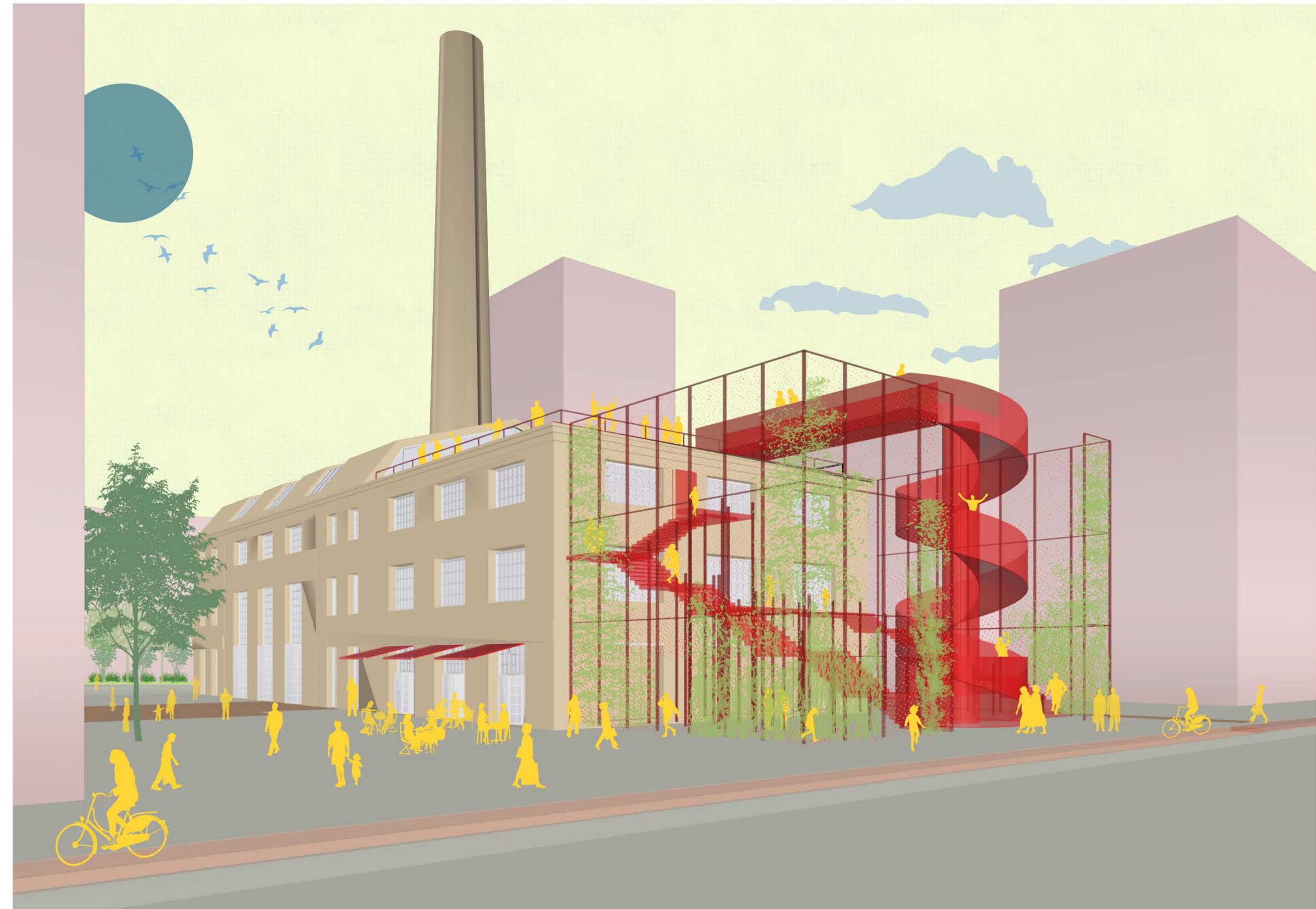
design principles

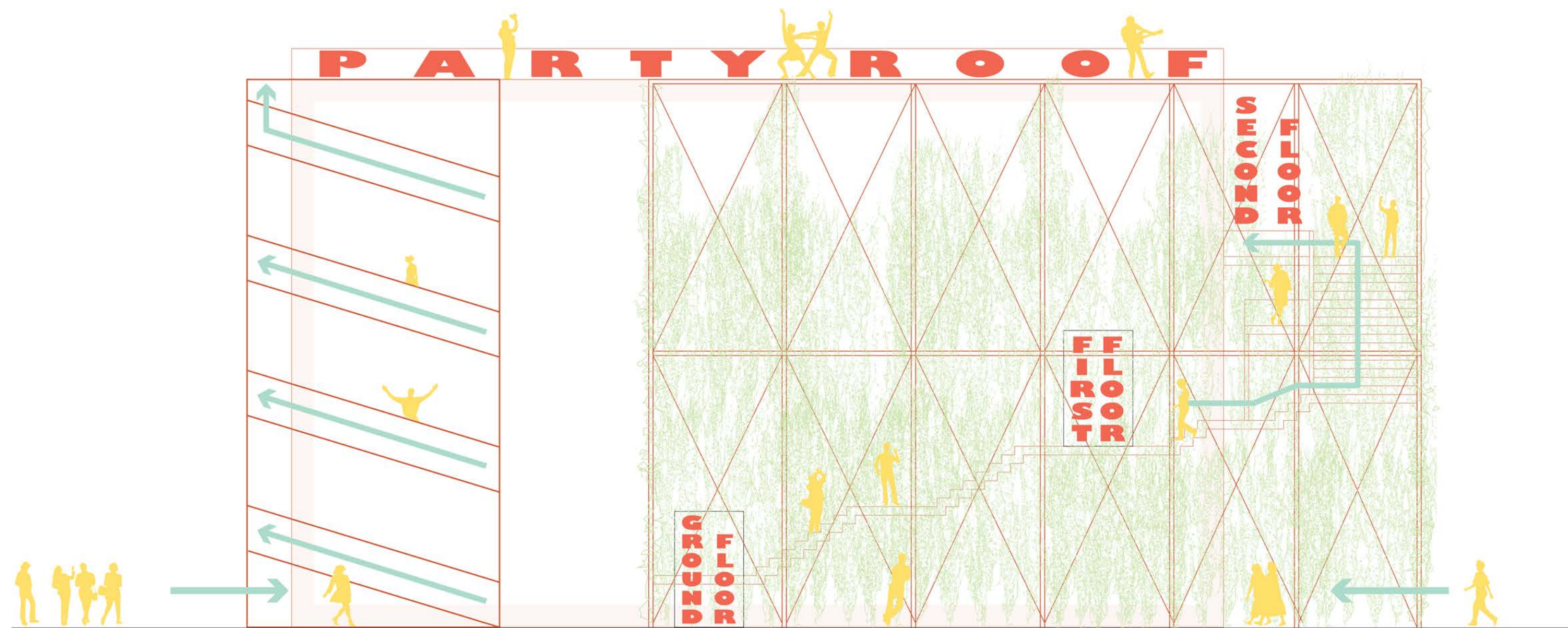


the Firma Building is extended by a reception pavillion, an iconic open structure attracting attention from the main street

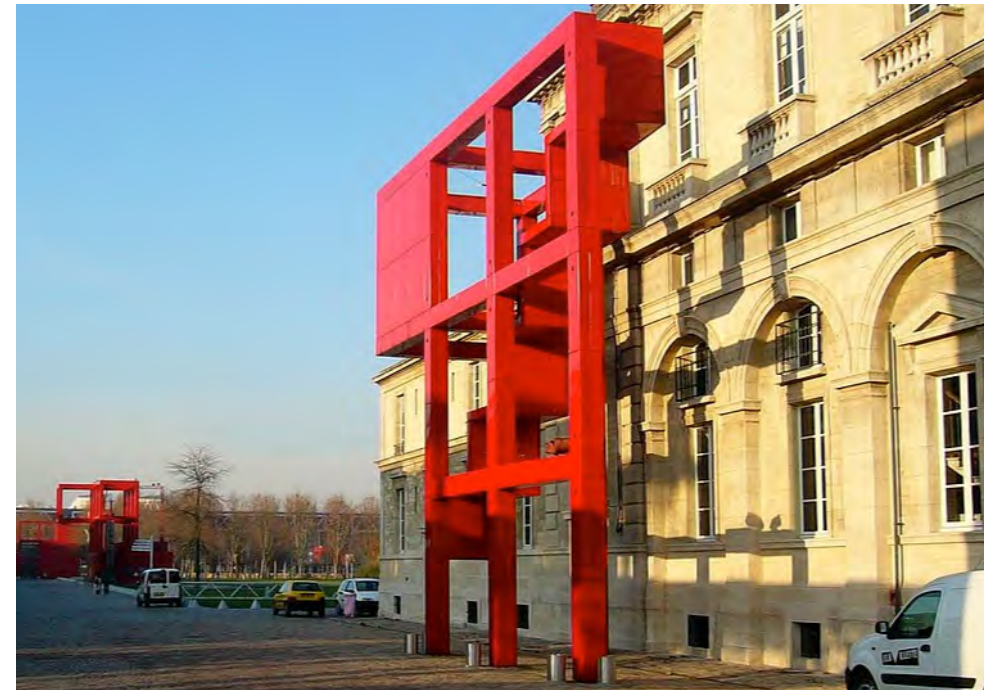


the Square is activated by the F&B and the routing through is. The reception pavillion makes the south entrance a special experience





references



the structure is attached to the existing building in a non-invasive approach



transparent and green



steel structure, industrial atmosphere



F&B in front of the Firma Building



special lighting



water plaza



composition of stairs leading at the different levels of the building



inviting stairs as an experience to enter the Firma Building



continuation of the paths inside the structure by suspended foot-bridges



cafes terraces under the grid of trees



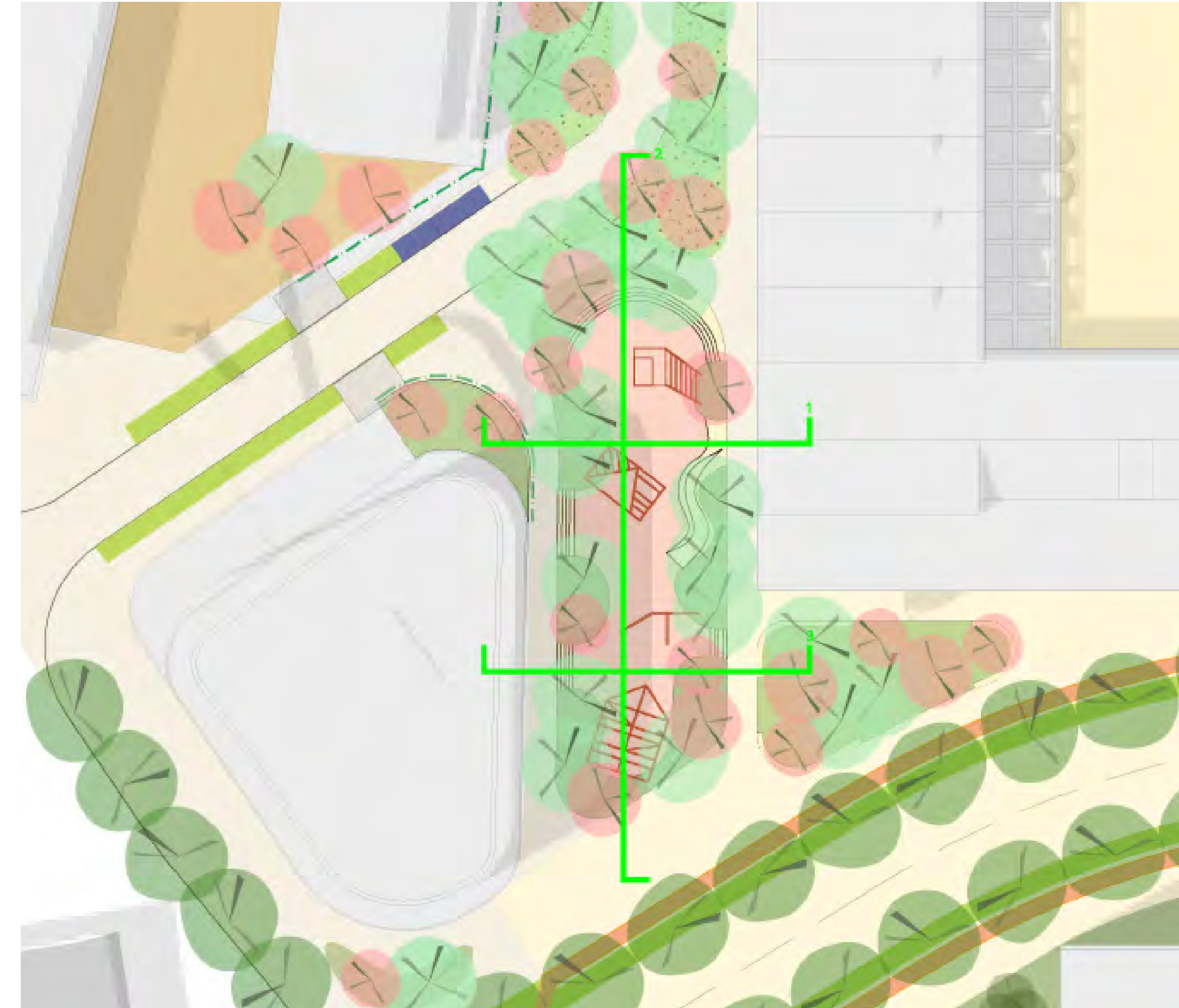
public events makes use of the stairs as podium



landscape fence as an informal marking of the office garden

references

THE URBAN ARENA

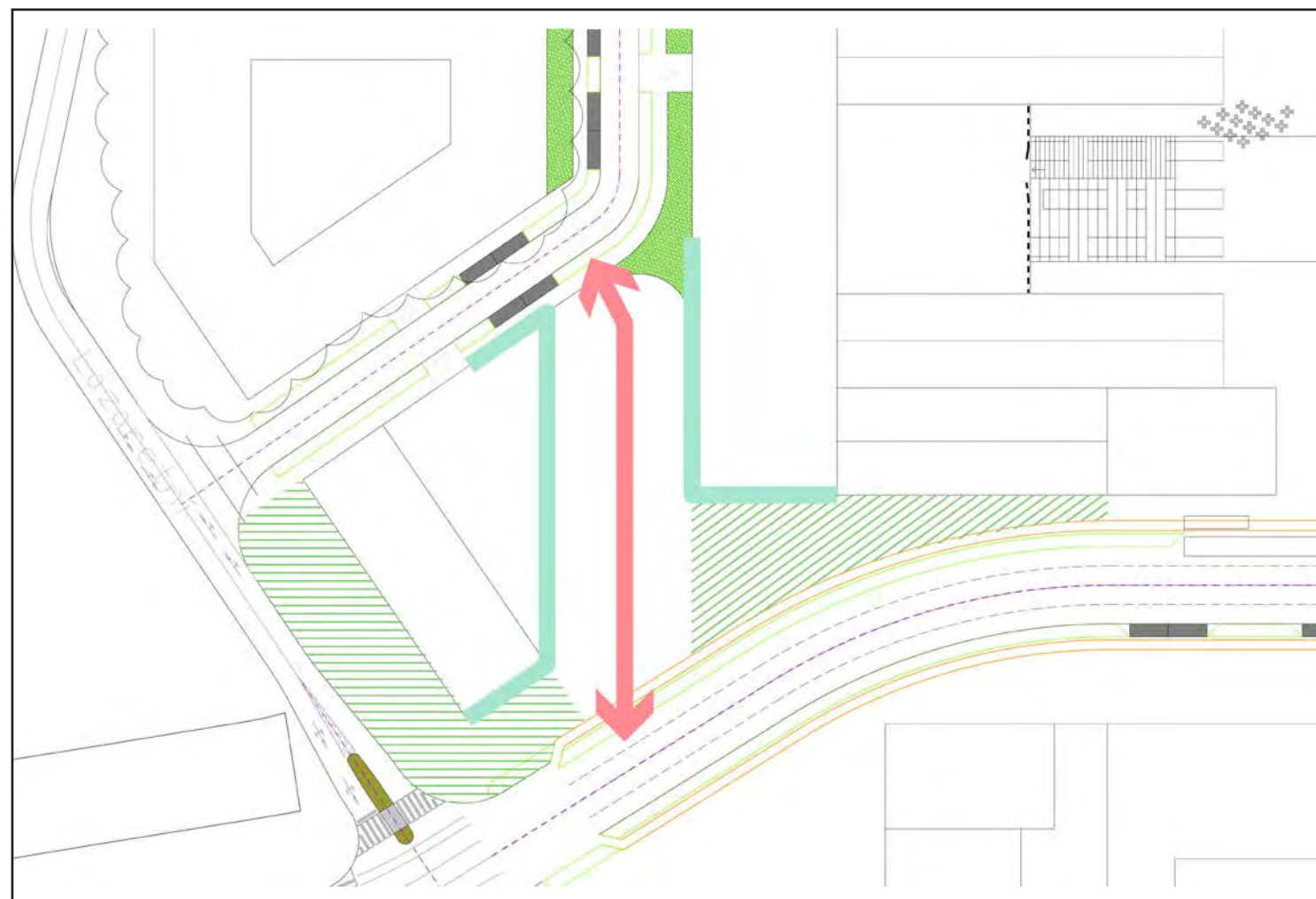


7. MEETING PLACES

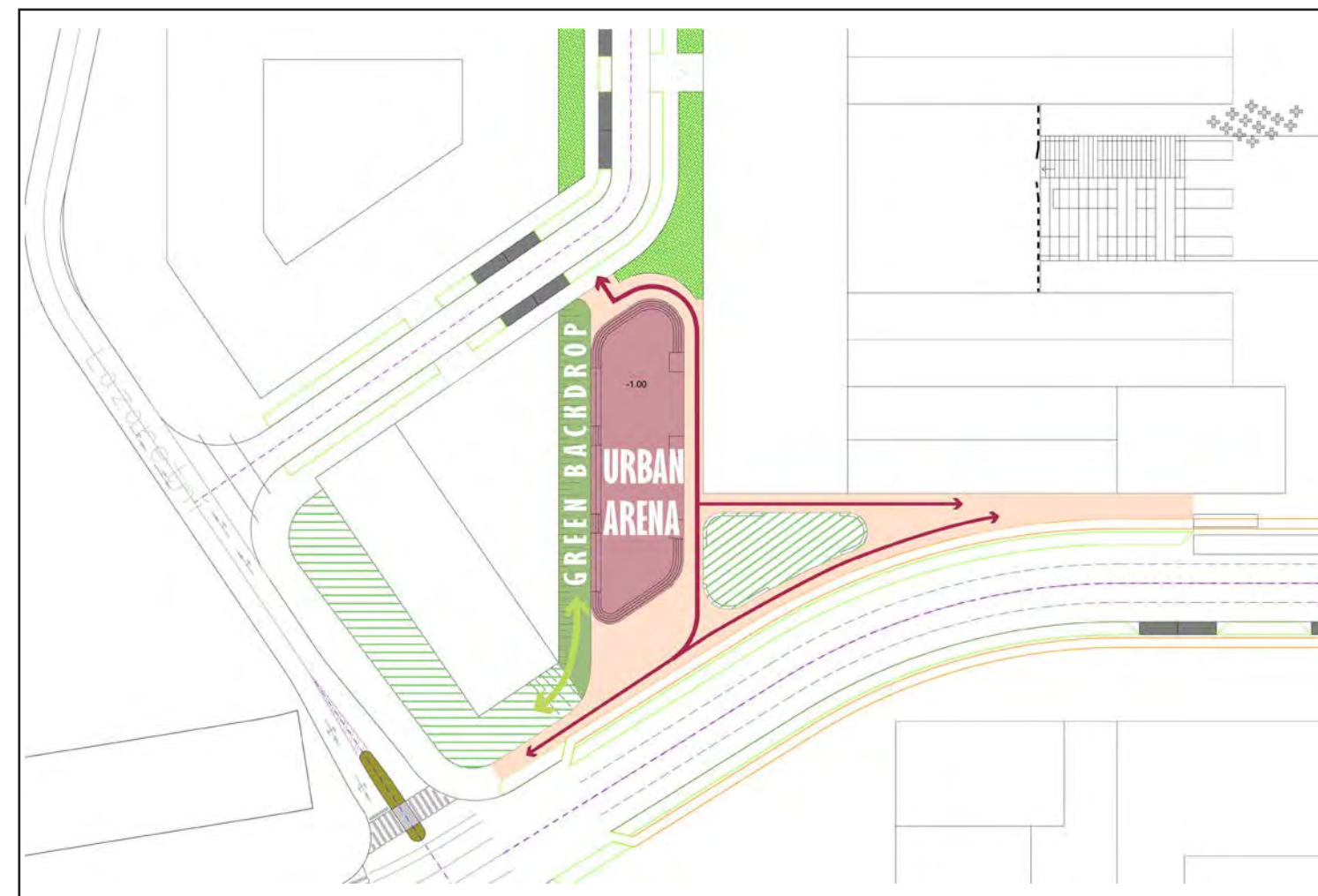
7.3.3 urban arena

- the Urban Arena is an active urban sports related outdoor arena inviting residents and workers to be fit and healthy
- the Arena is an urban plaza in a green environment, the surrounding buildings should have green facades
- the Arena is a sunken plaza, to define the place and offer seating possibilities all around
- the level change offers possibilities for exercise and sports
- structures are added for urban sports like free running, fitness and calisthenics
- all added structures need to be within one defined colour palette and ideally are made out of recycled industrial objects (circular)
- the Urban Arena is also a water square: after heavy rain it functions as a rain water buffer for a period of maximum 24 hours, then the water is infiltrated

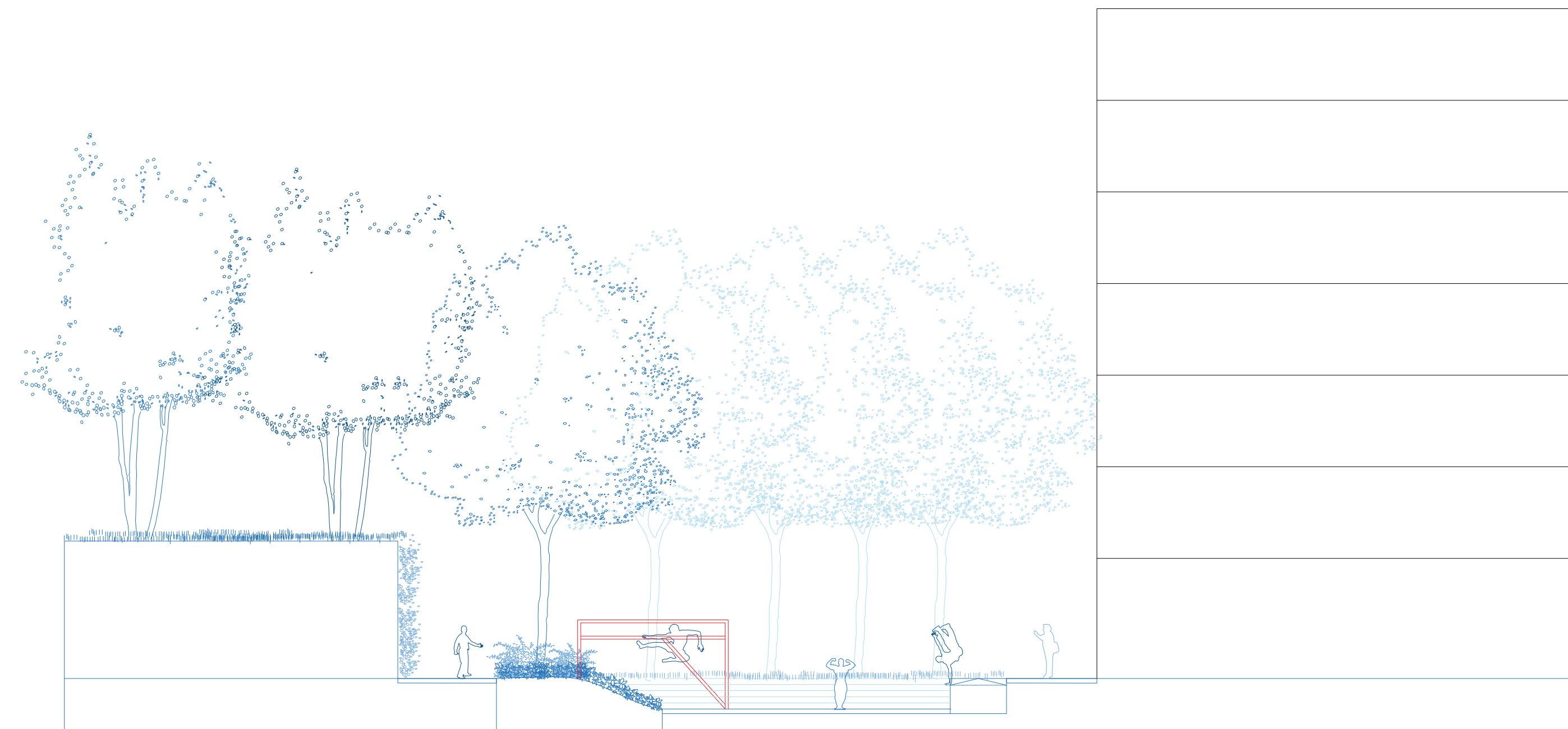


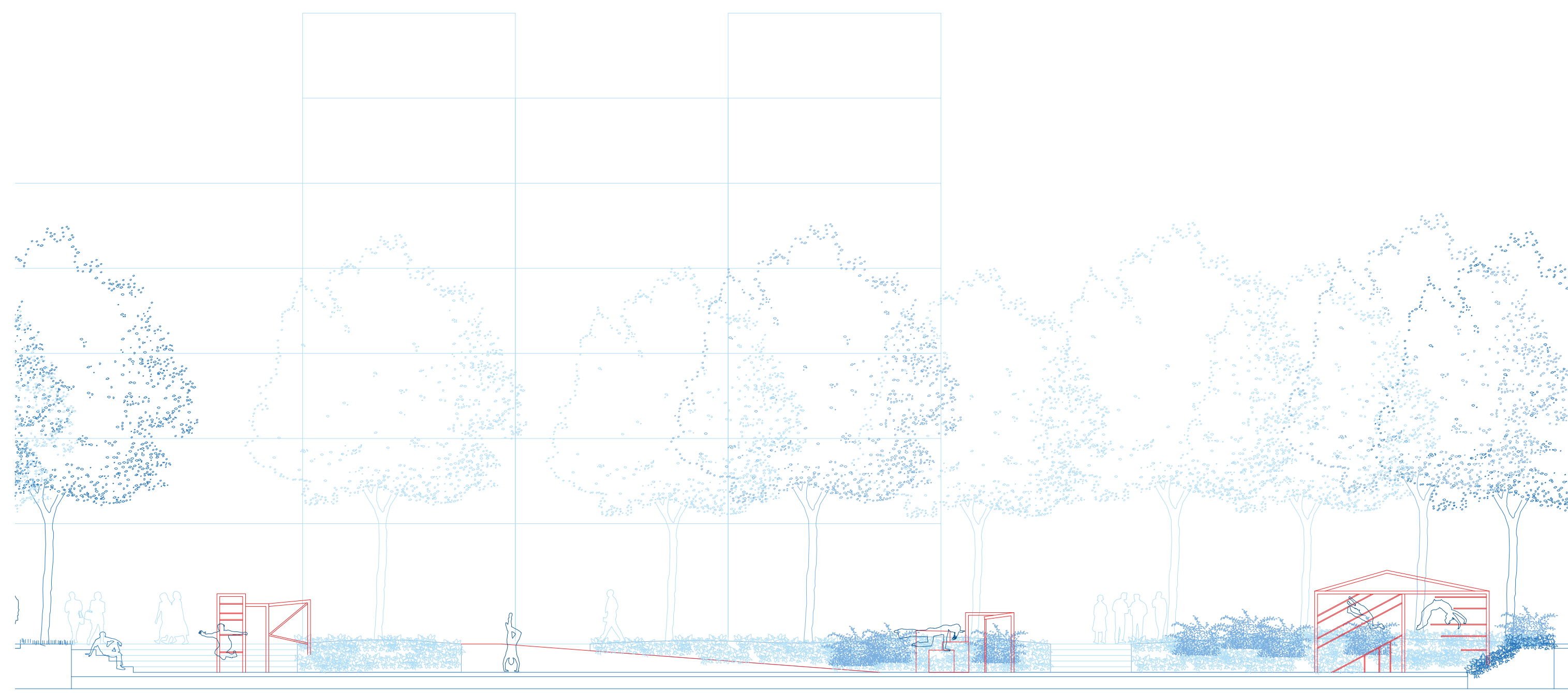
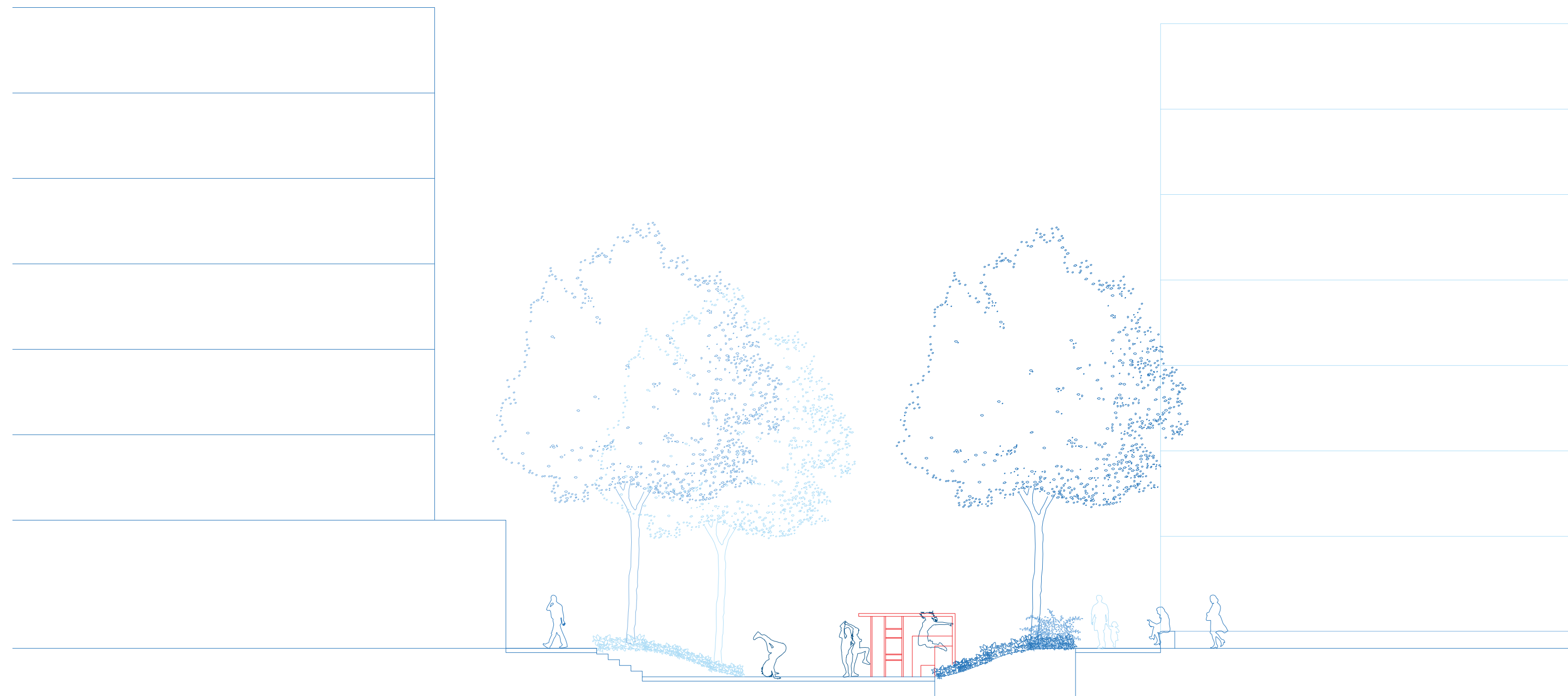


urban arena surrounded by green facades, a stepping stone between main street and neighbourhood street



urban arena in a green environment, visible from the main road



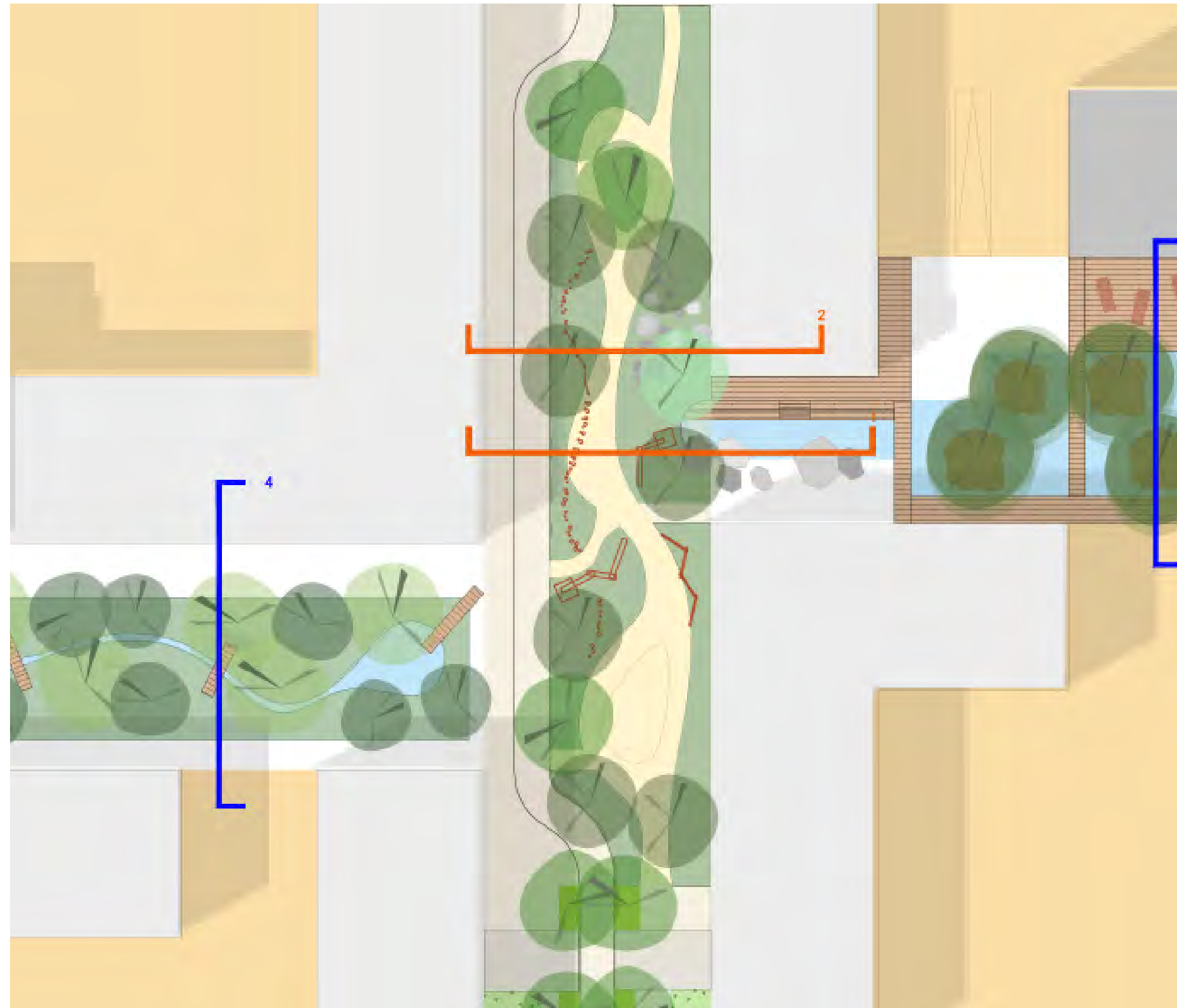




THE URBAN ARENA

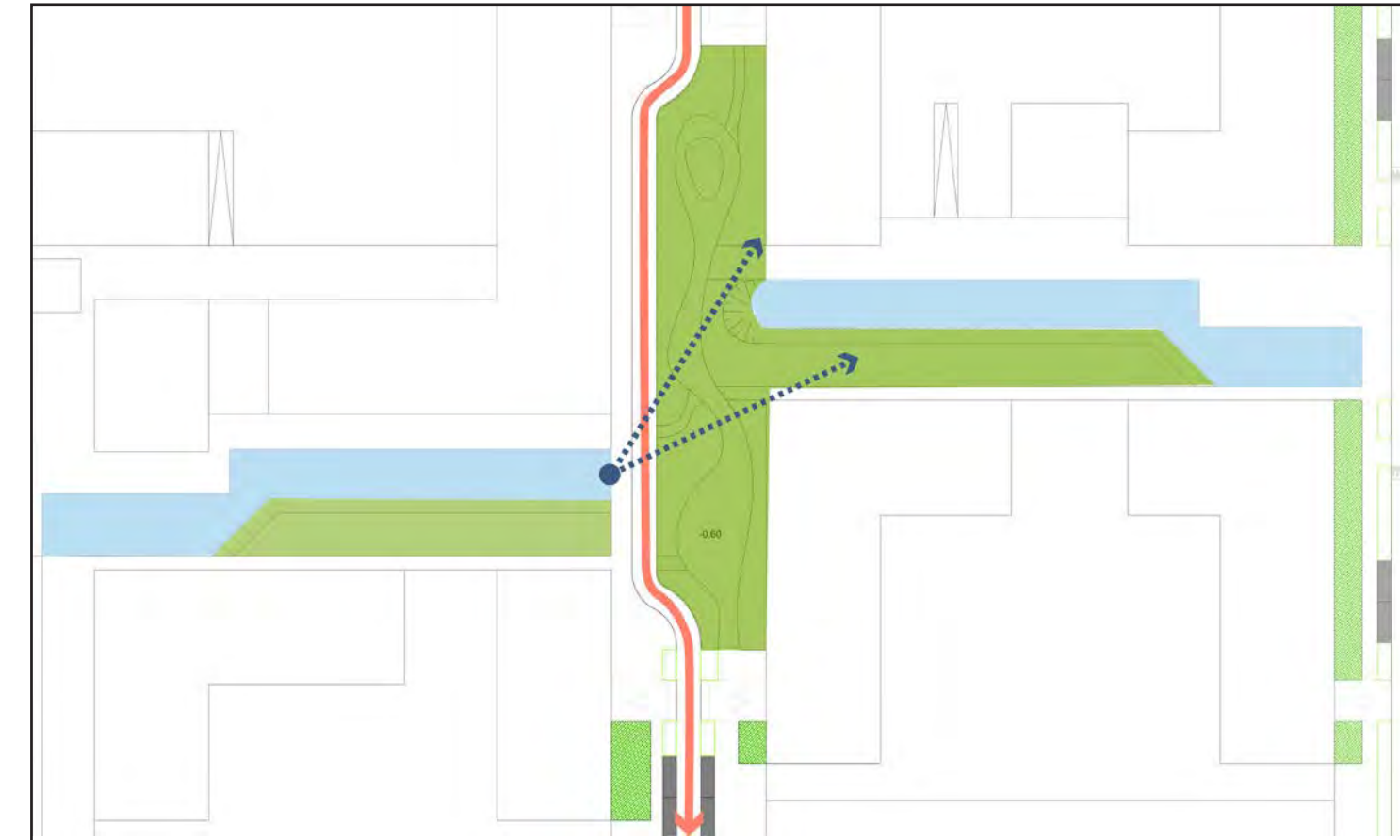
7.3.4 play street

- the Play Street is a quiet one way street with a wide park zone inviting children to play safely
the playground has a natural atmosphere, the play equipment has the character of a nature playground

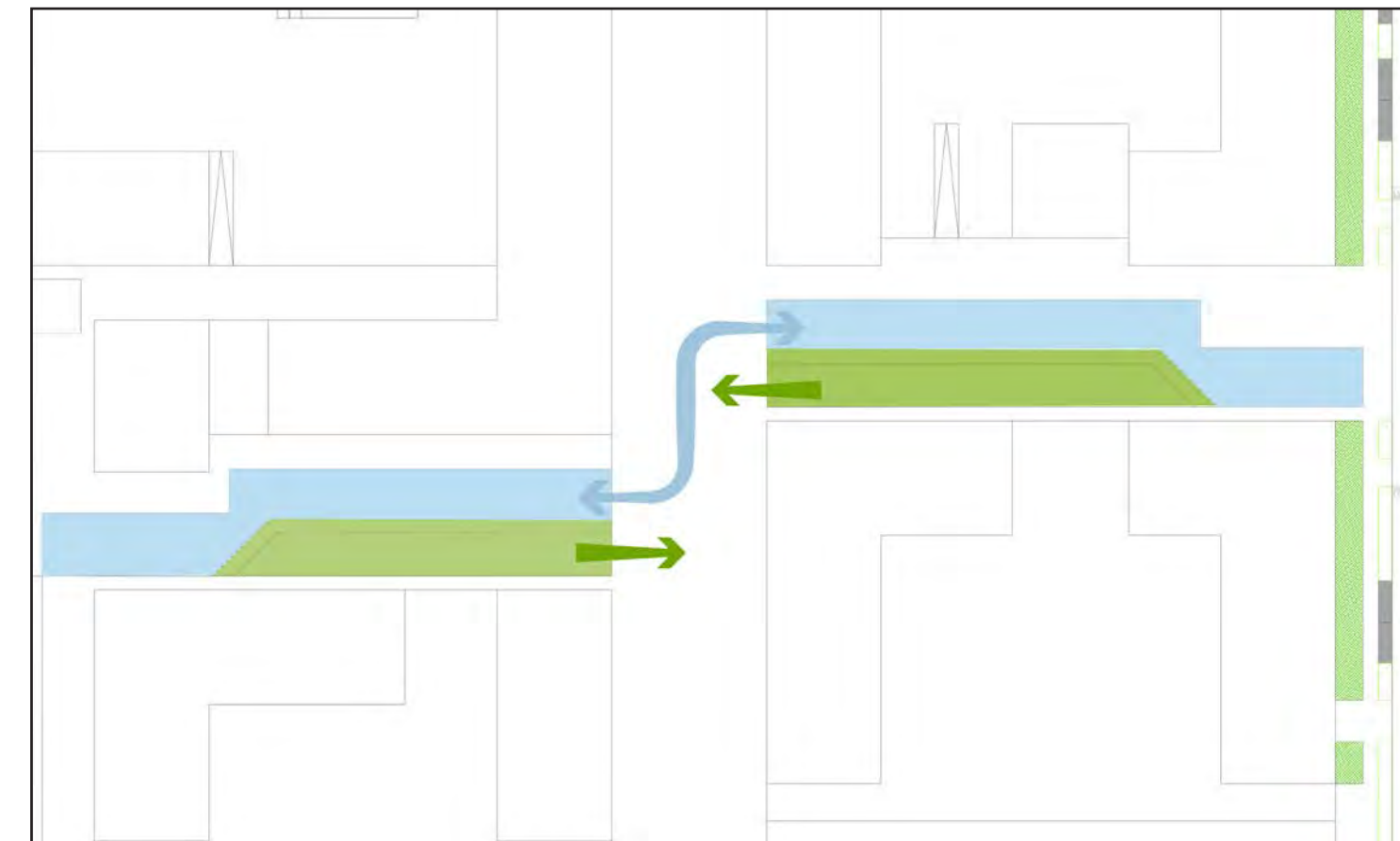


7.3.4 play street

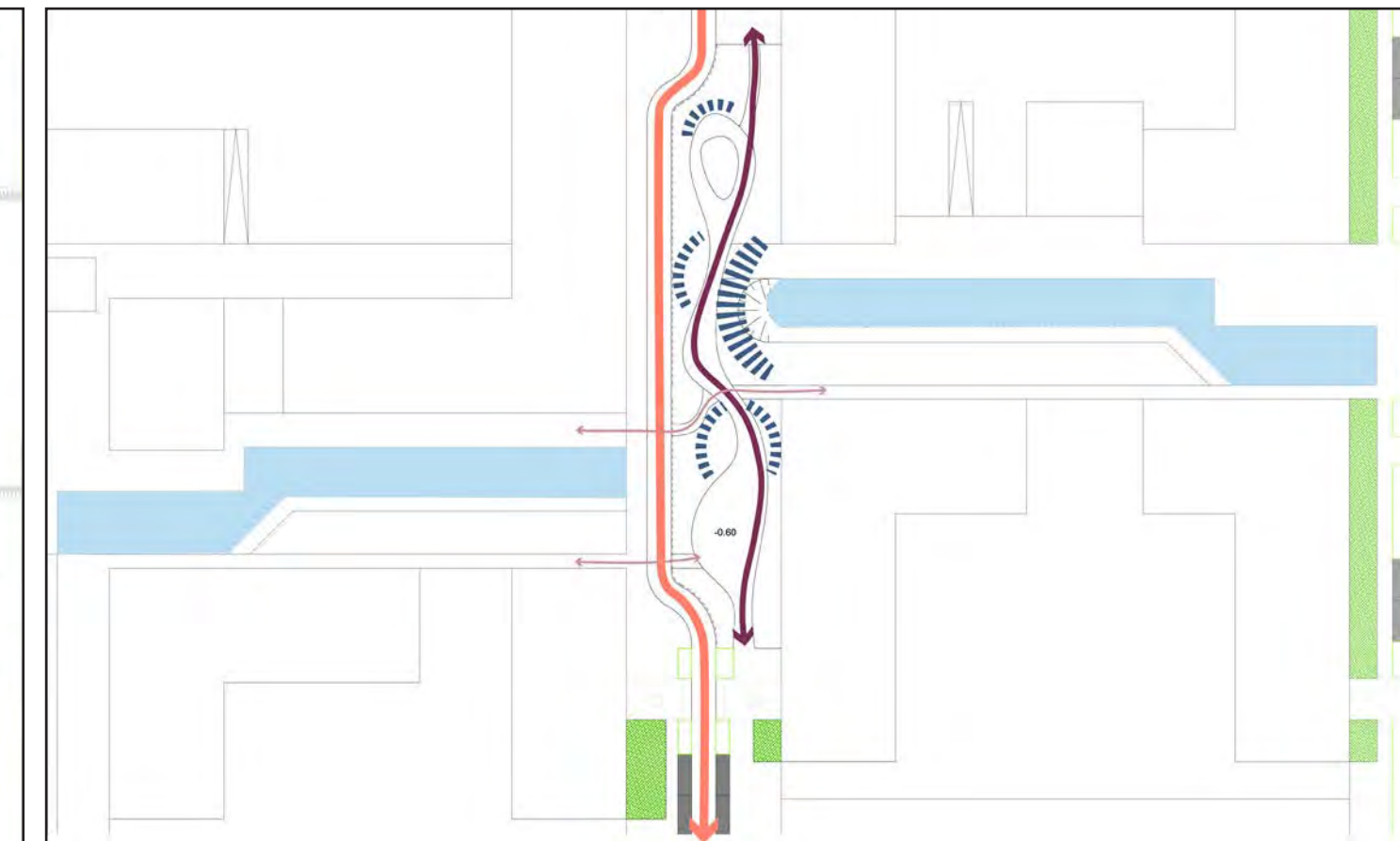
design principles



one way street with park zone on the sunny side, visual connection to the water

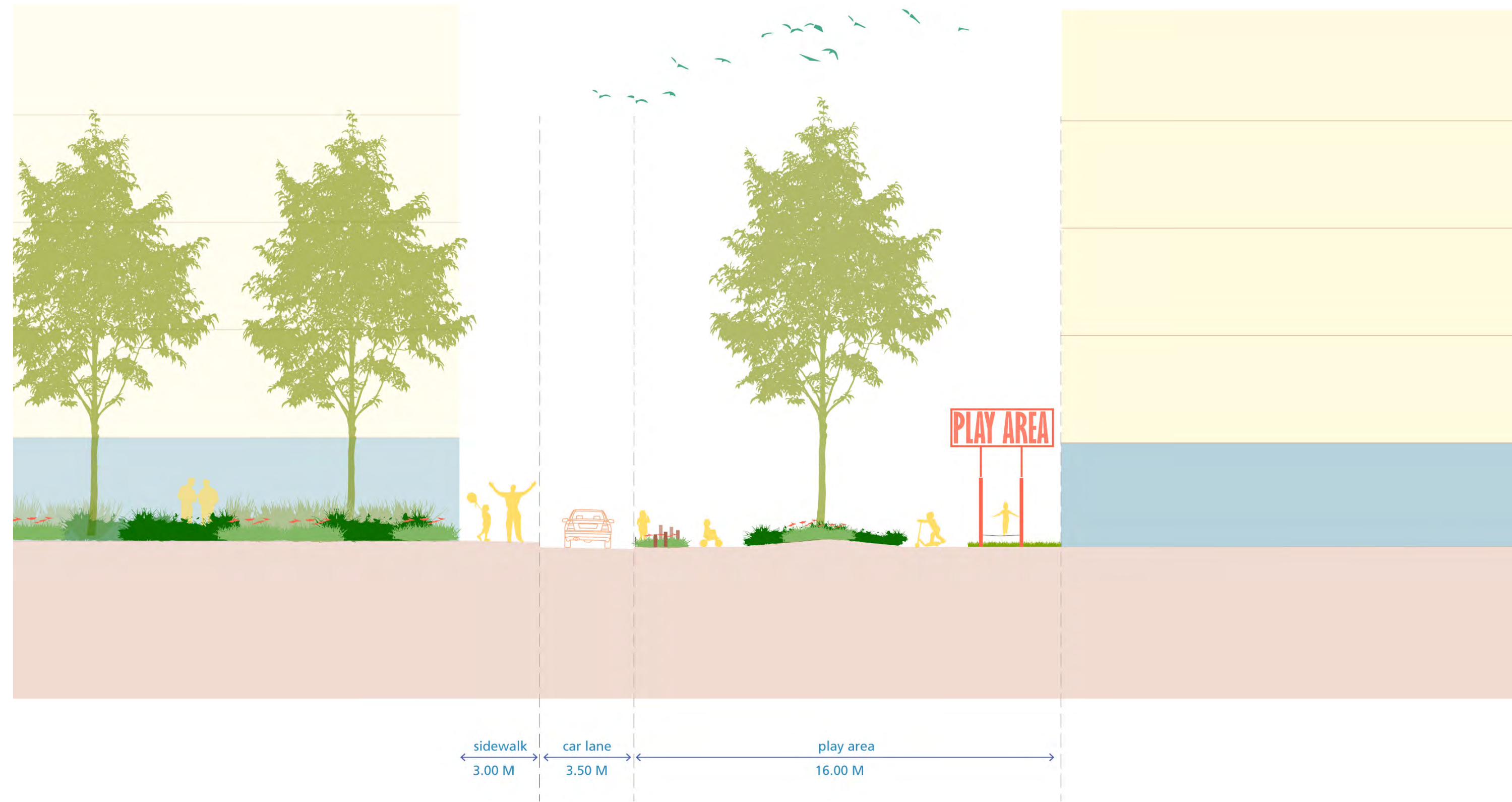


connecting green and water

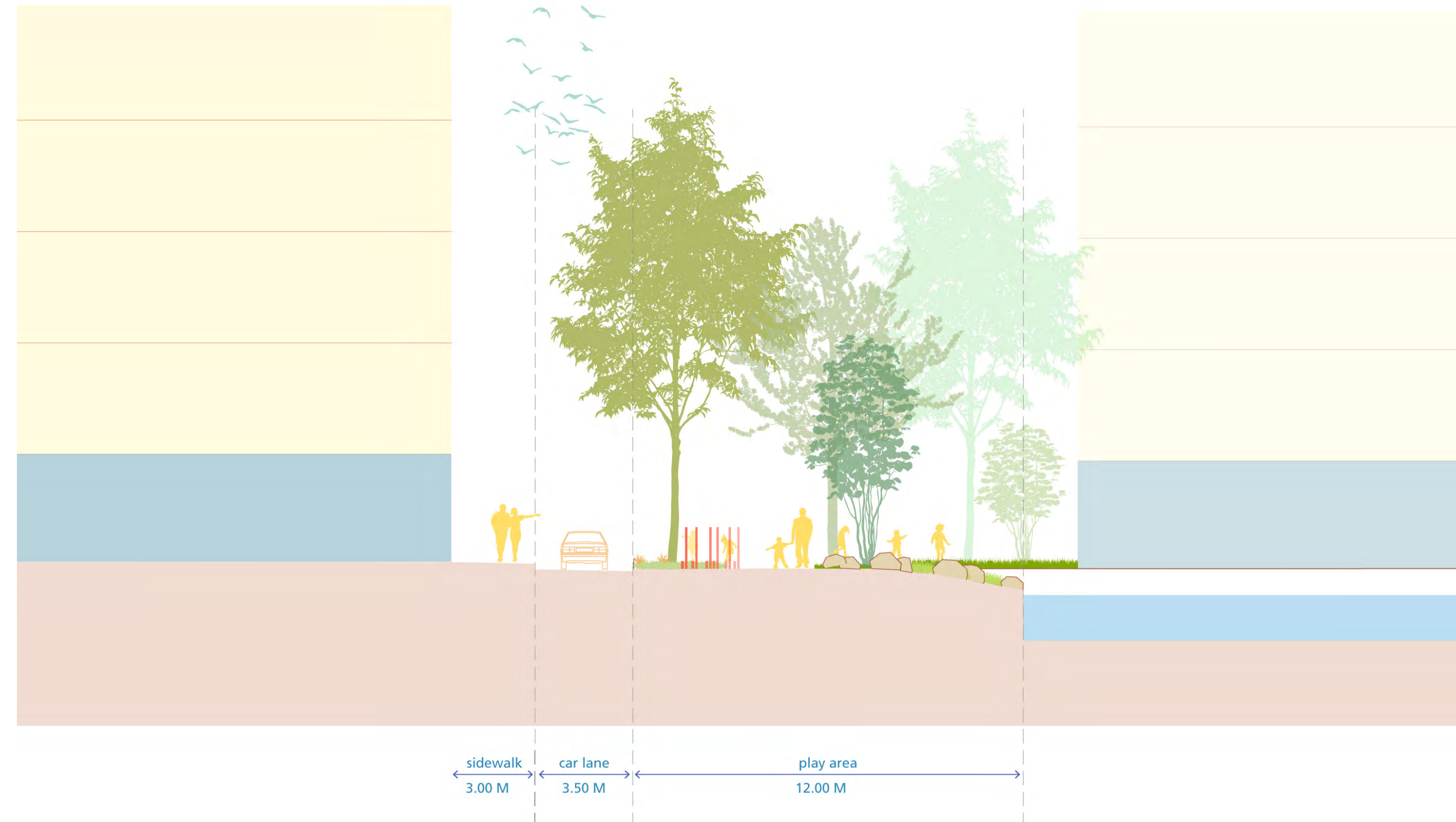


circuit with playing elements and connecting pedestrian routes

profile 1

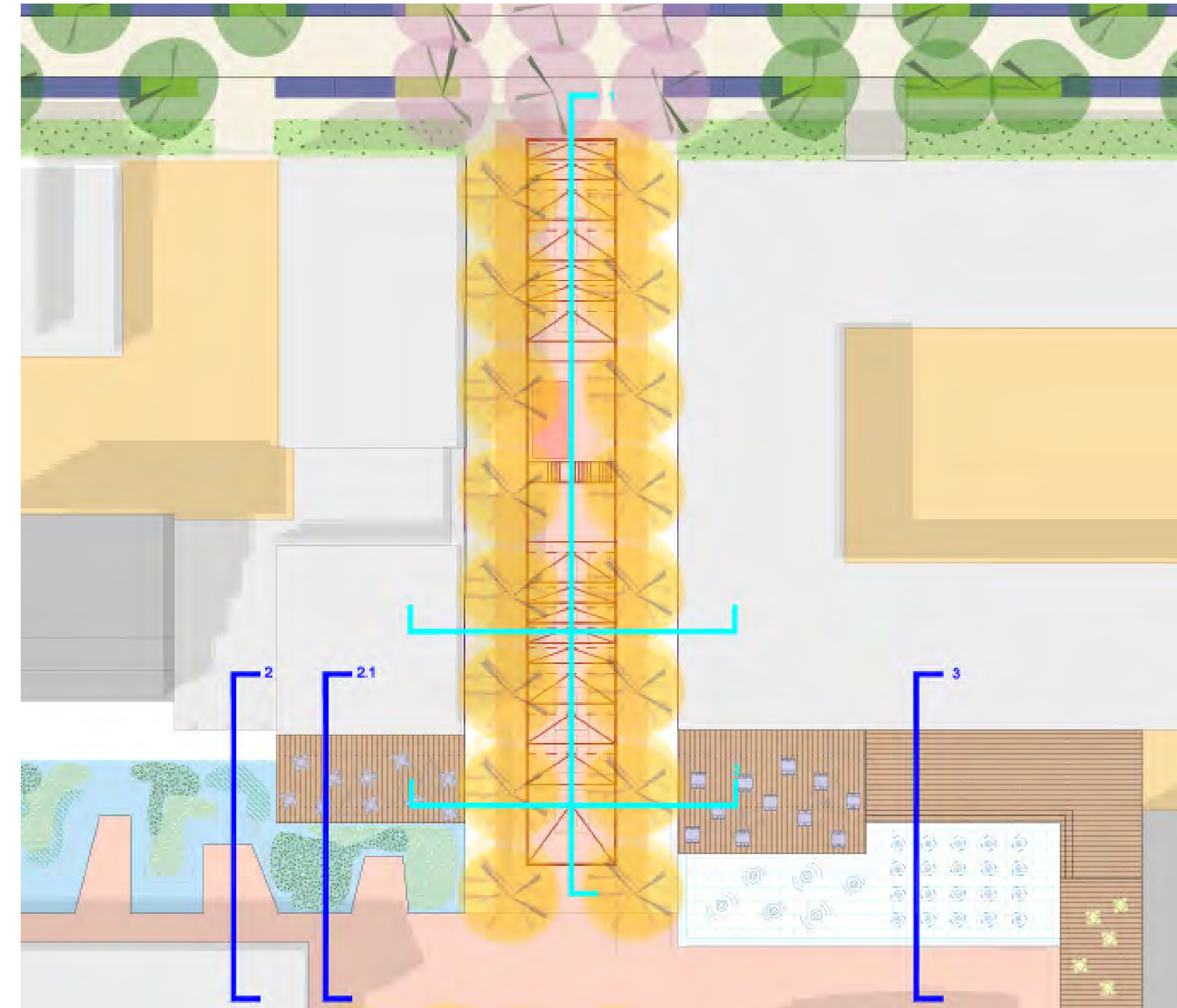


profile 2





THE NEIGHBORHOOD MARKET

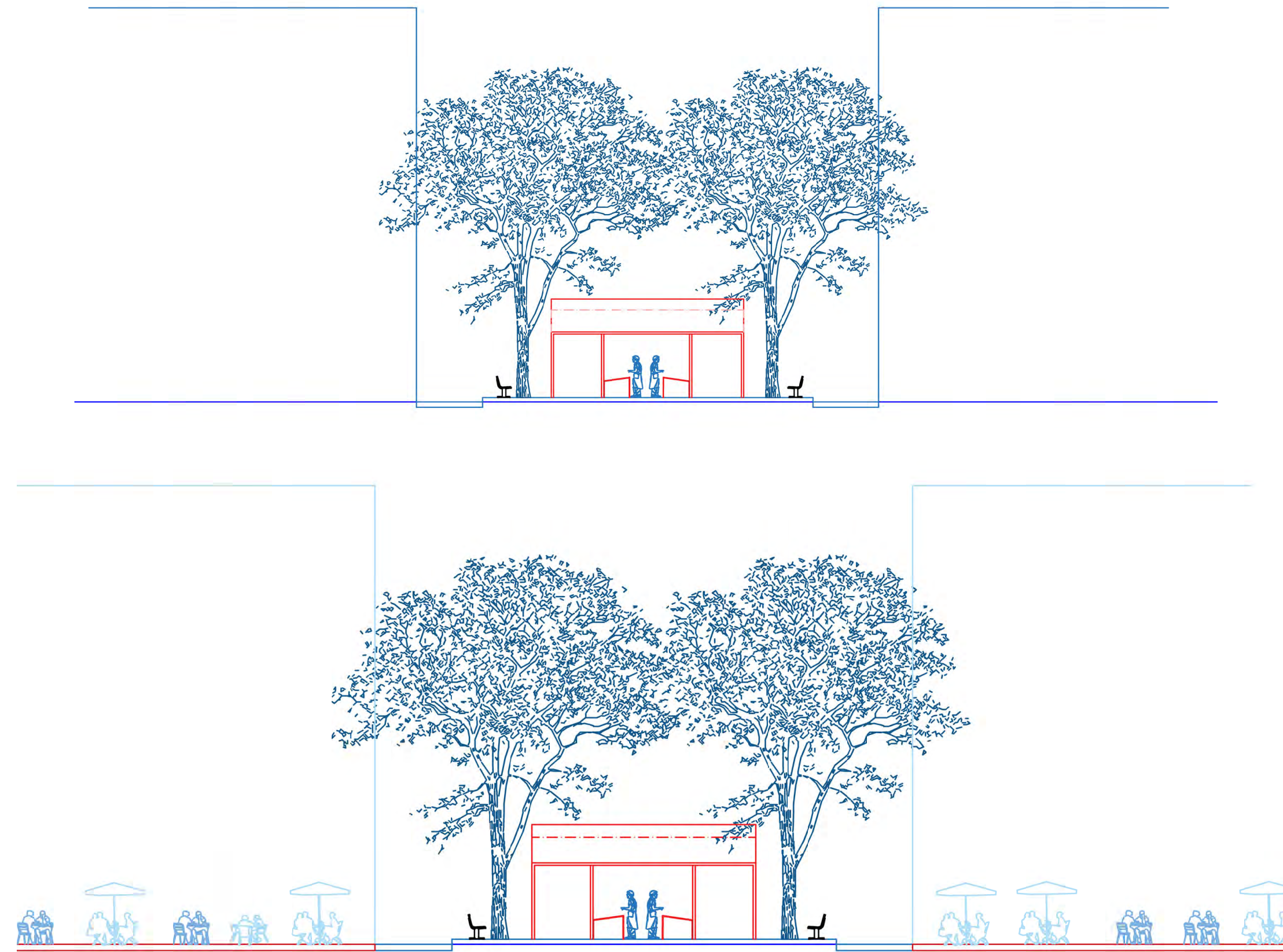
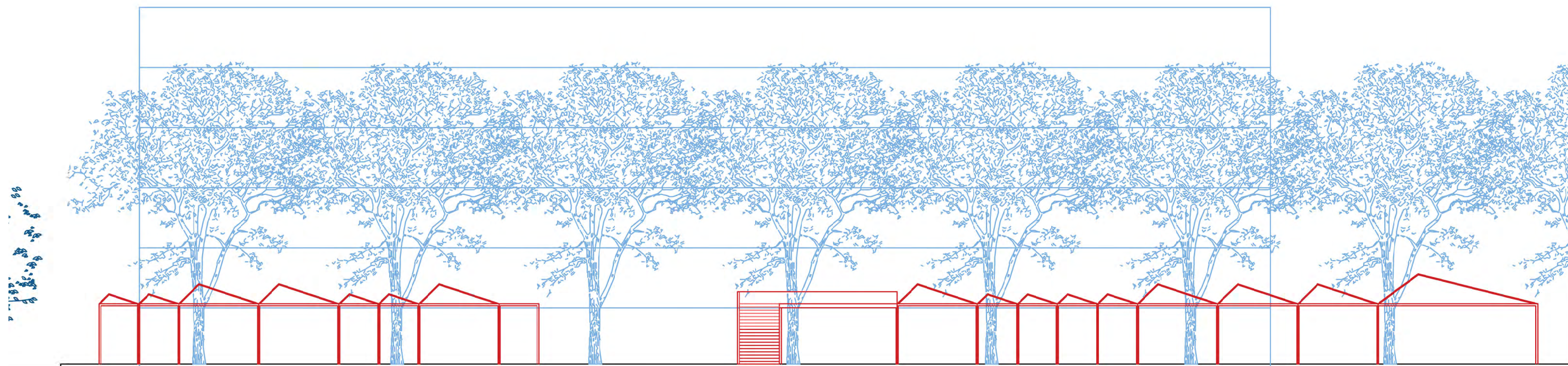


7. MEETING PLACES

7.3.5 neighborhood market

- a vibrant meeting place for the community
- flexible in use for markets and small events
- it can host different activities from day to day to yearly
- the market structure refers to the shed roofs of the industrial buildings of the past
- the trees in the street together with the market stalls create an intimate atmosphere
- a shady place also pleasant in summer
- the market are complementary to the retail functions in the ground floor





view



references



various spots for different activities and events



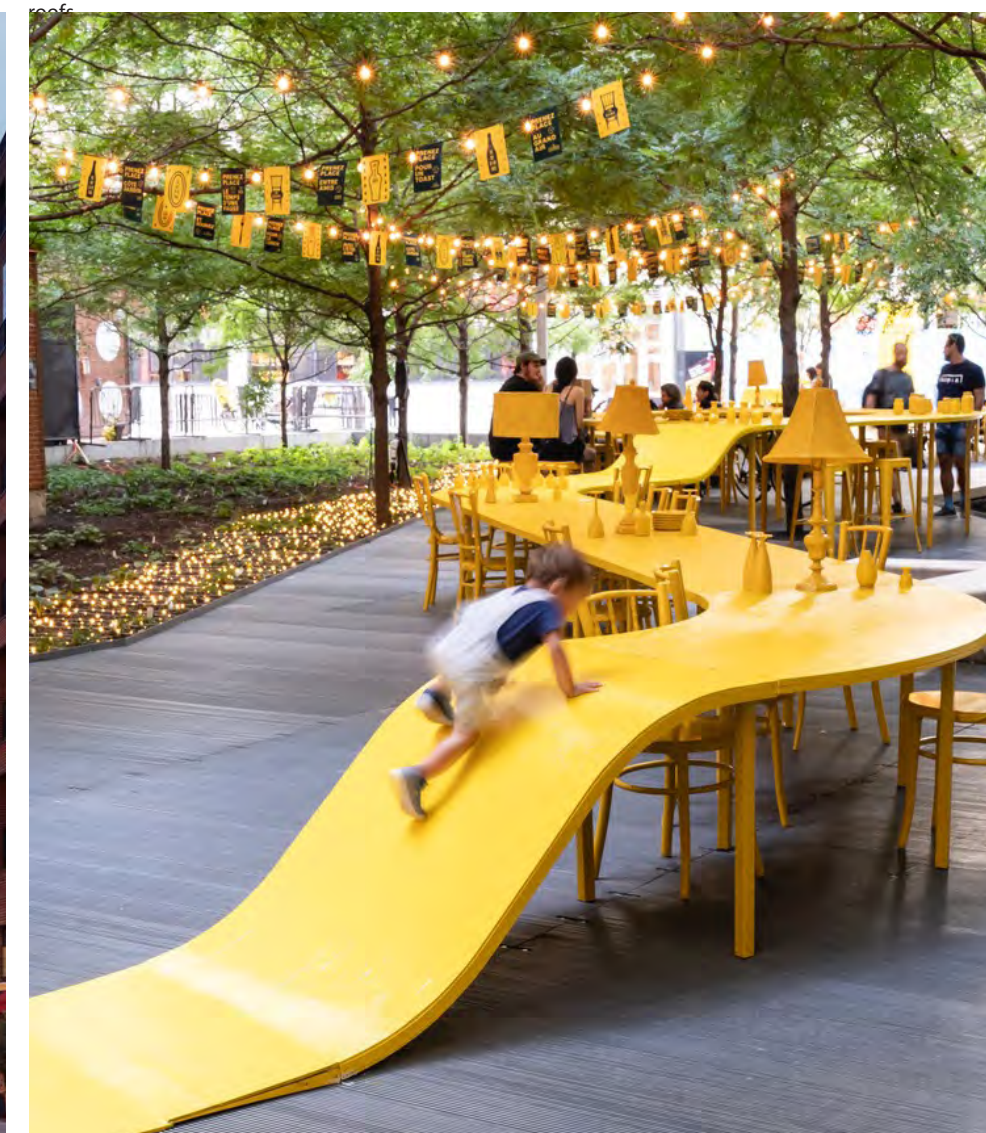
the structure mimics the shades of the industrial building's



in between the markets stalls there will be place for informal activities



the market attracts people being an icon of the district



residents can meet and share in a friendly and flexible environment



different typologies of markets according to weekly based calendars or special

7.3.5 neighborhood market

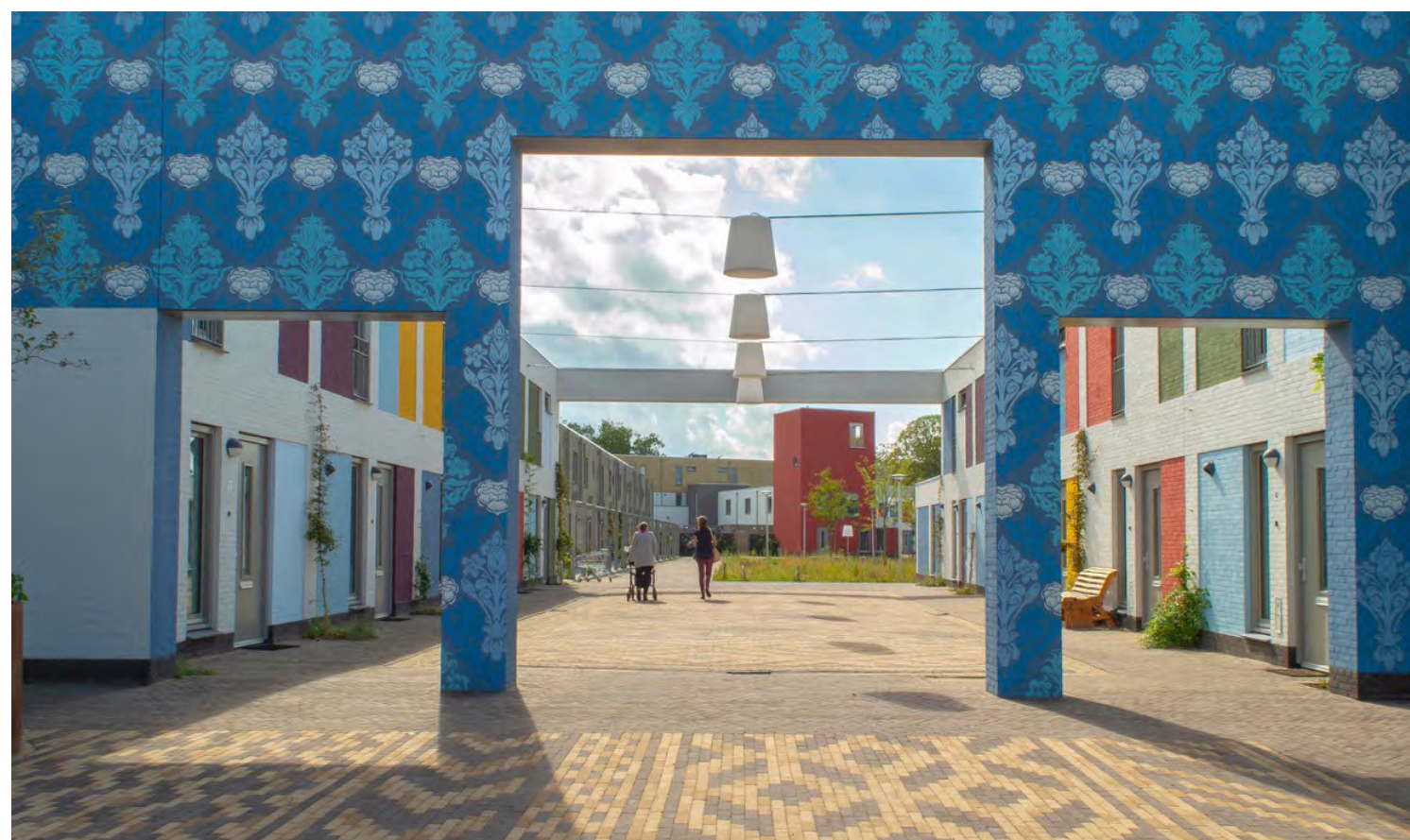
references



the area between the bridge and the market can be underlined by a special pavement



the market can host special events



the area between the bridge and the market can be seen as an entrance gate to the river



relationship between the retail and f&b in the groundfloor and the market

GARDENS AND COUTYARDS



- along the main street many offices are located
- the office have front gardens through which the workers and guests are invited
- the front gardens can express the identity of the companies
- the front gardens can be a relaxing place to meet or to have lunch



references



