

Cleanse water before entering the river, substituting the fences that go along the private zone, with different divisions that answer to their context.

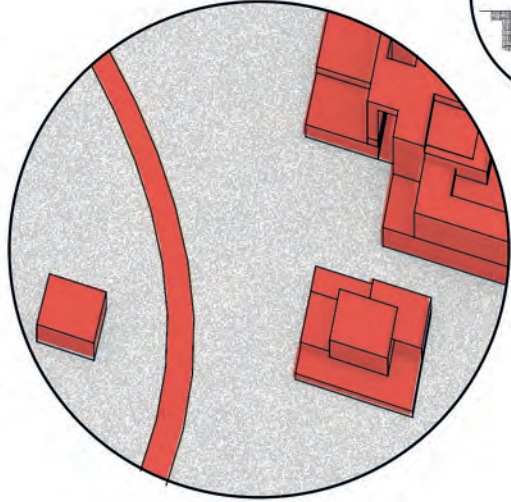
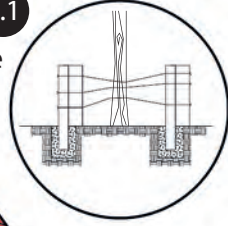
Aimed to diffuse barriers, create new habitats and restore the natural environment of the river valley.

URBAN STÄTTA

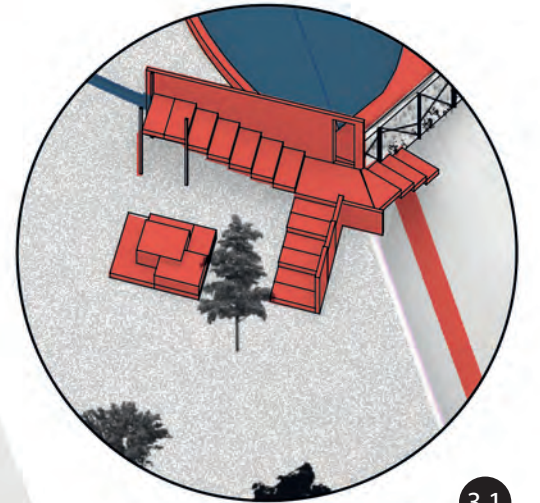
Gathering and learning area

"Green fence" structure

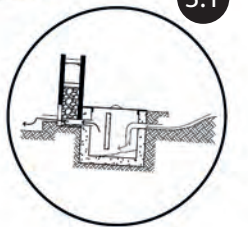
1.1



Walking path and ludic elements



3.1

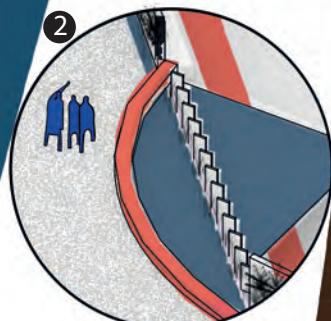


"Filter Wall" structure

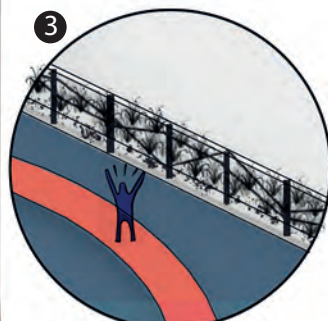
ACE465-URBAN PROTOTYPES KARLA PATRICIA OLVERA COVARRUBIAS



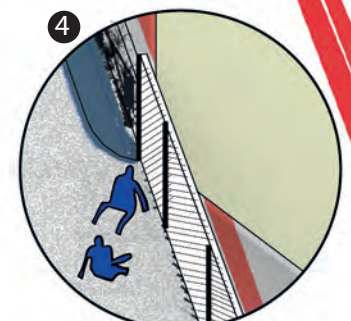
"Green fence" stätta



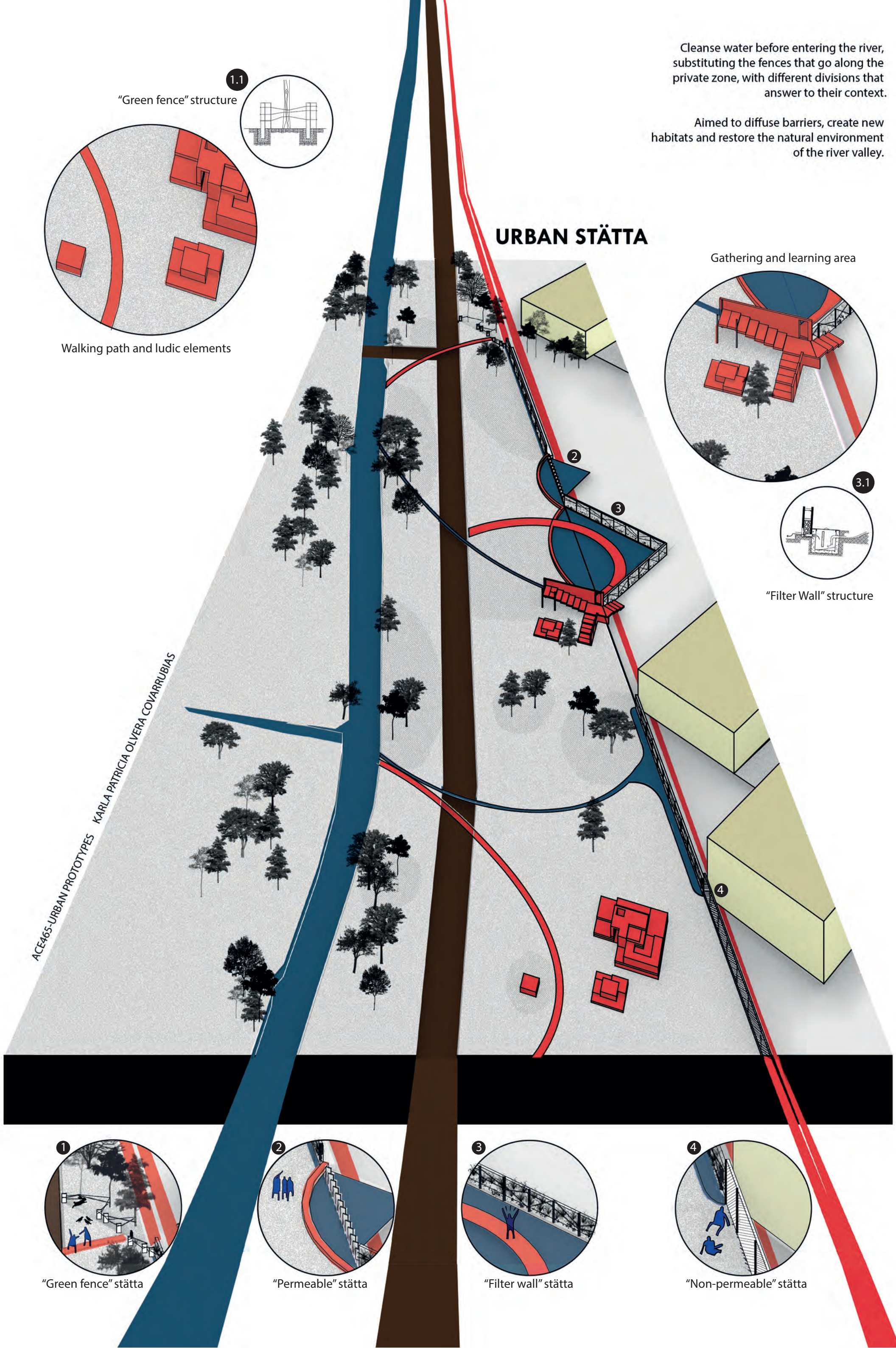
"Permeable" stätta



"Filter wall" stätta



"Non-permeable" stätta



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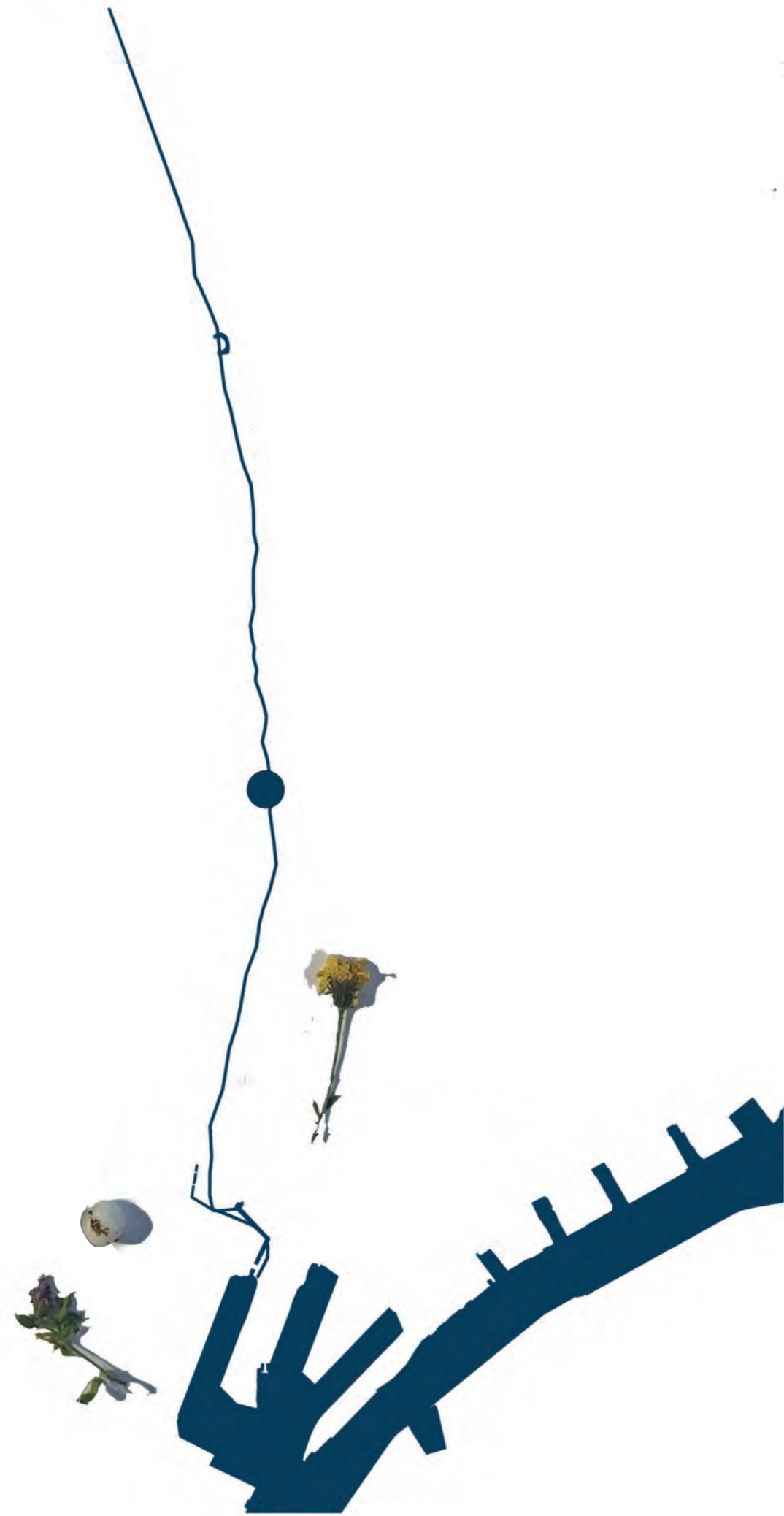
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KVILLEBÄCKEN

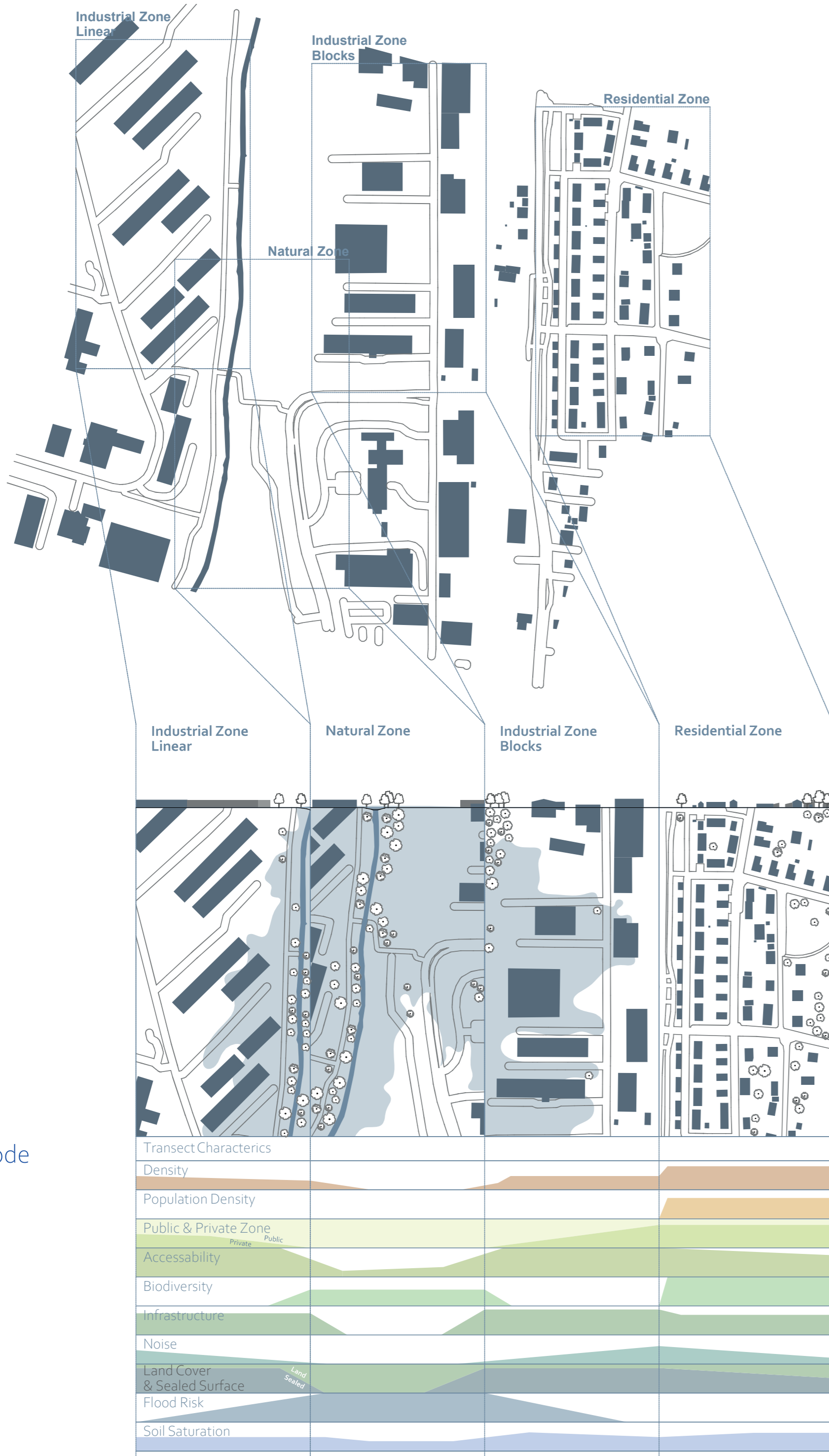
Exercise 1.2: River valley transect

Karla Patricia Olvera Covarrubias, Karolin Savitri Klein, Tove Matsson

Site visit: from Skändla to Jubileumsparken



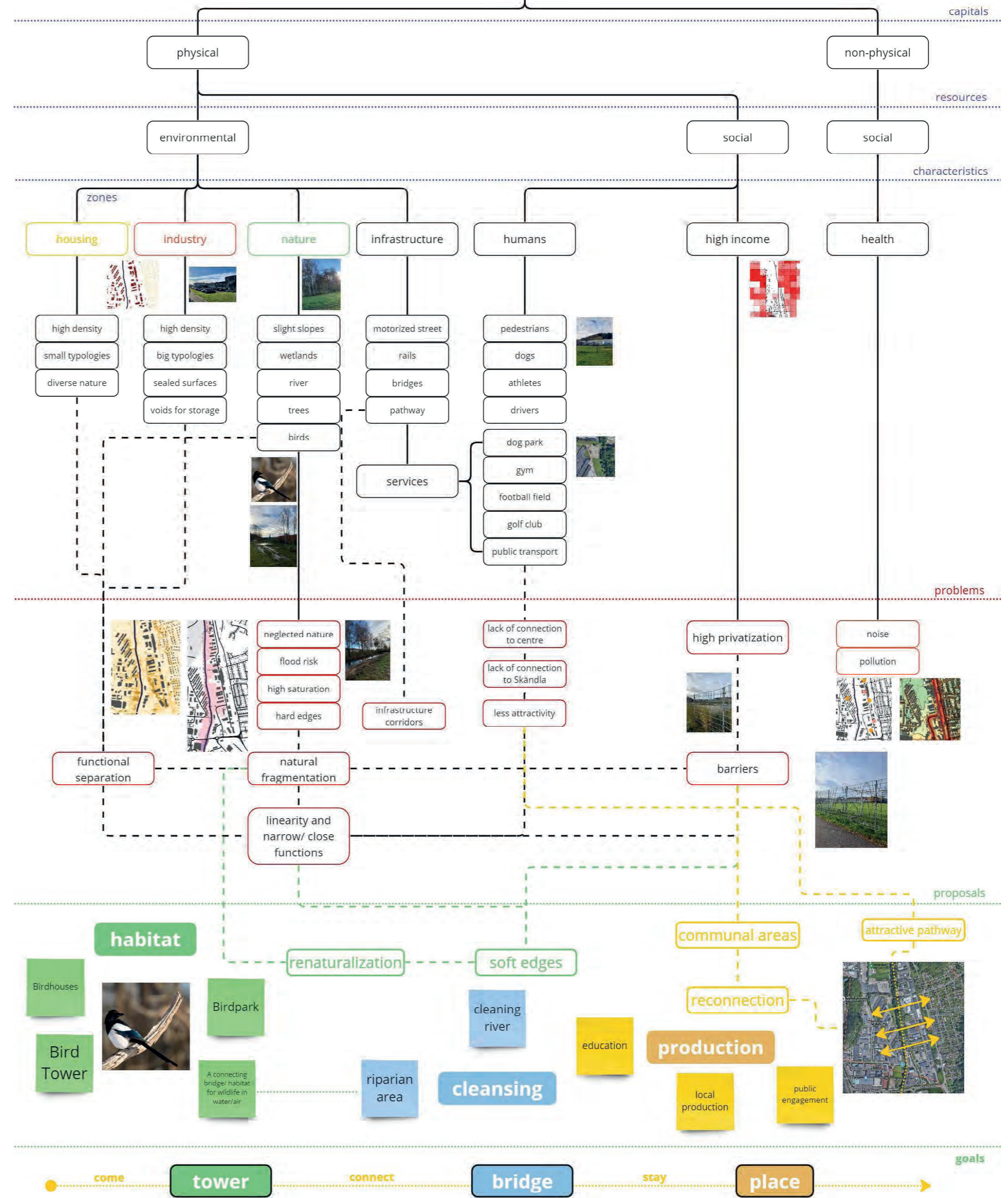
Zoning & Colour coding

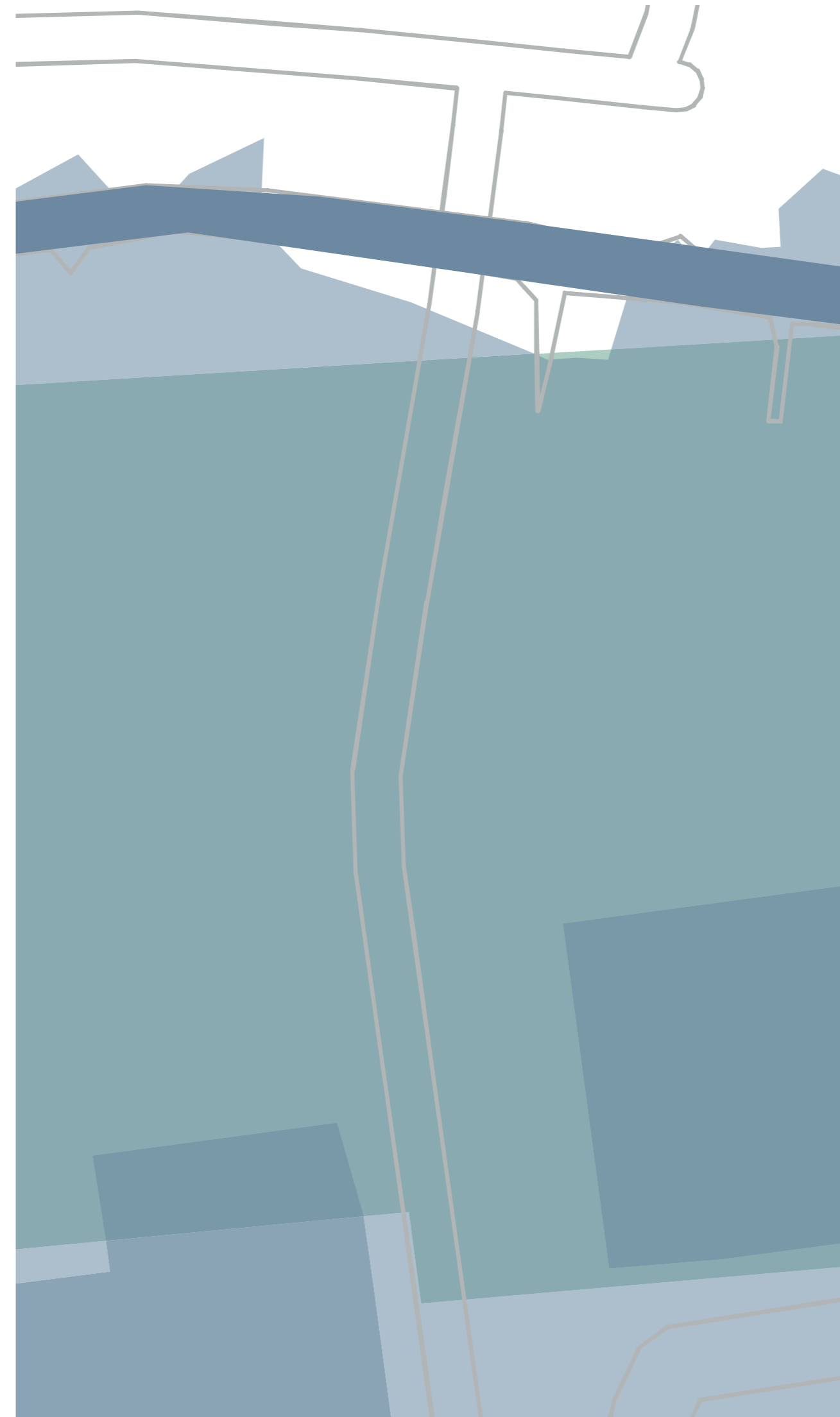
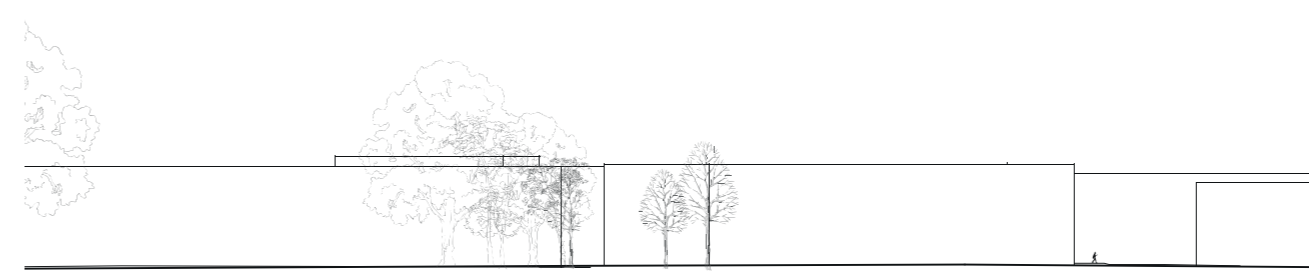
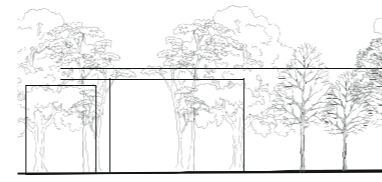


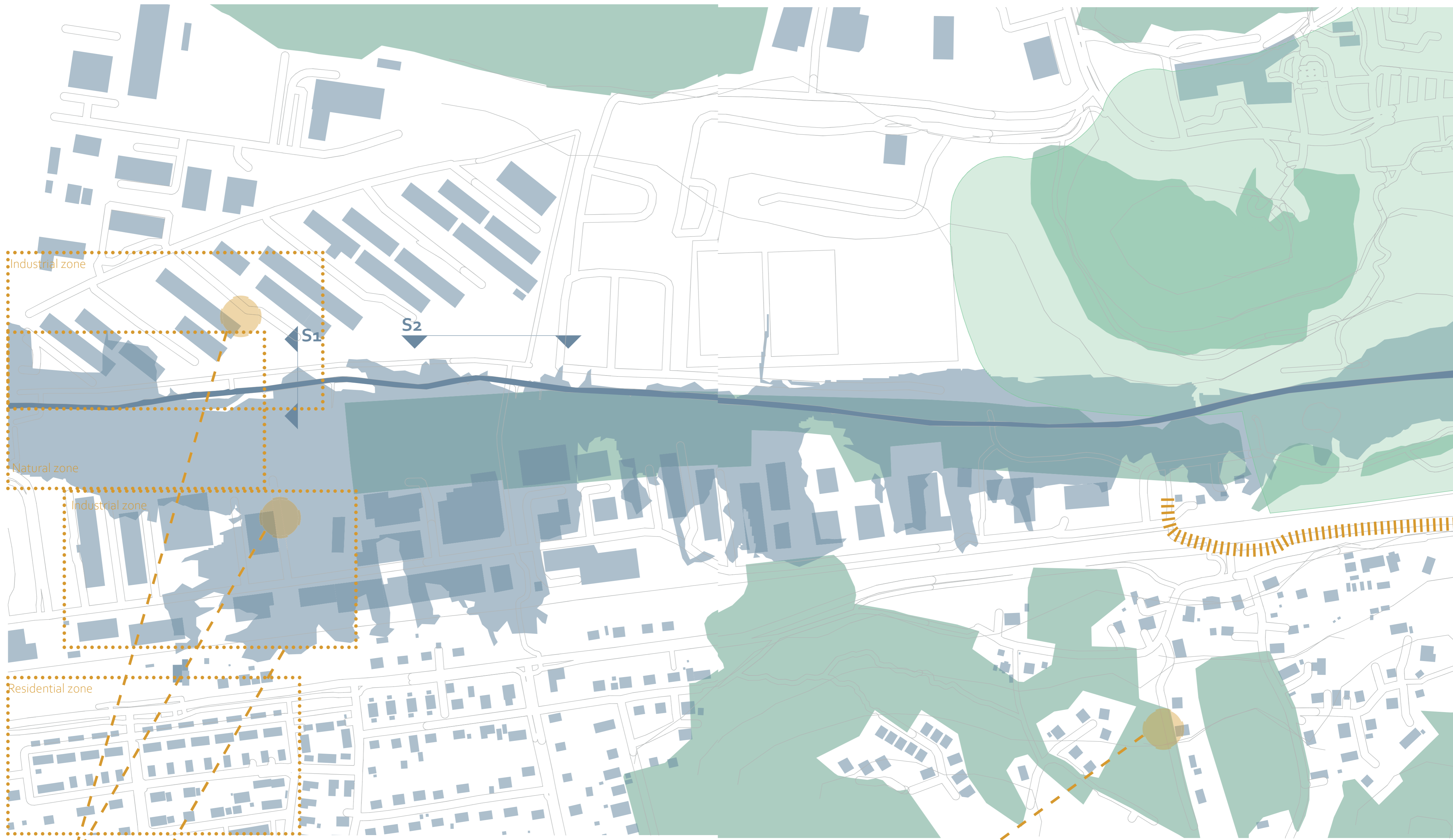
Zones

Colour code

Assets in Kvillebäcken



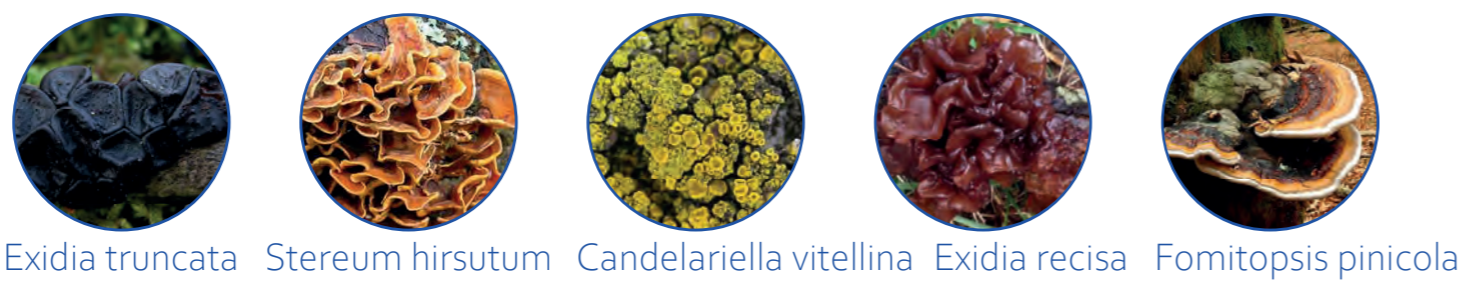




Industry 2m flood line

- Sealed surfaces in industrial and residential zone
- Fences of industry and railways are framing the riparian area

Mushrooms



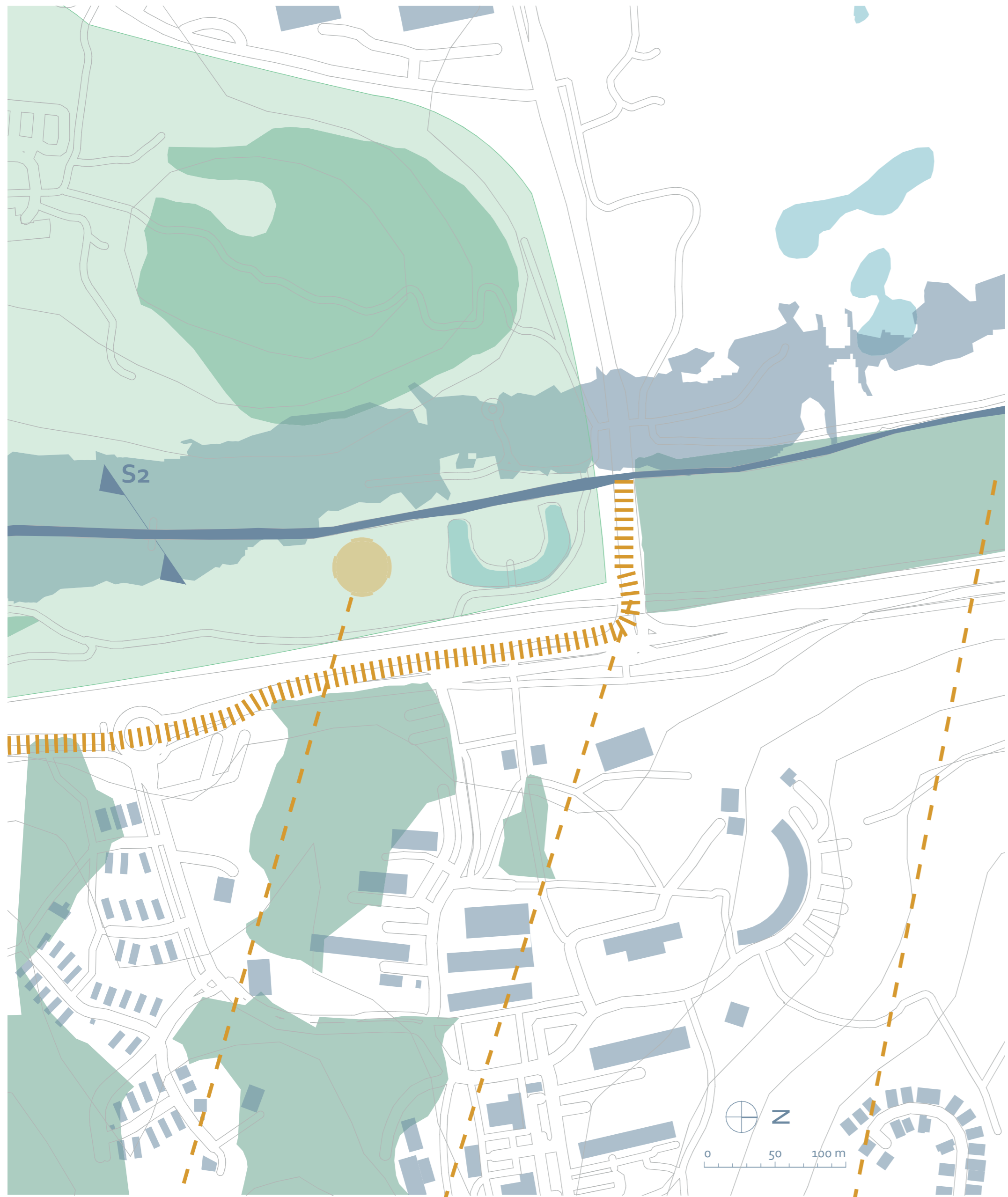
Exidia truncata Stereum hirsutum Candelariella vitellina Exidia recisa Fomitopsis pinicola

Tree species in residential area



Alder Aspen Silver birch Goat willow Norway maple

Biodiverse riparian area disappeared through human activities
Tree species' richness visible in residential area



Gold course

Non-accessibility

Natural reserve

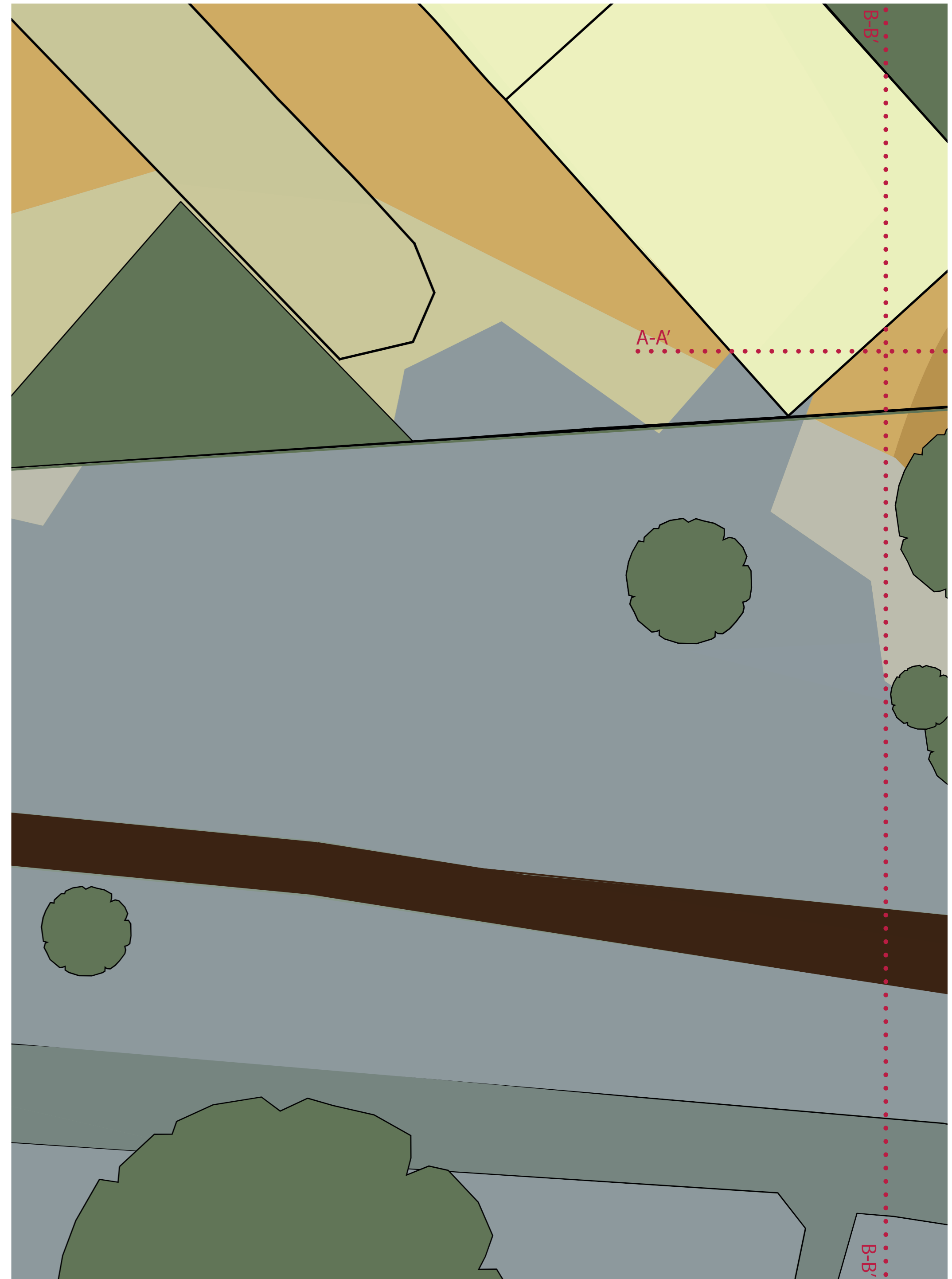
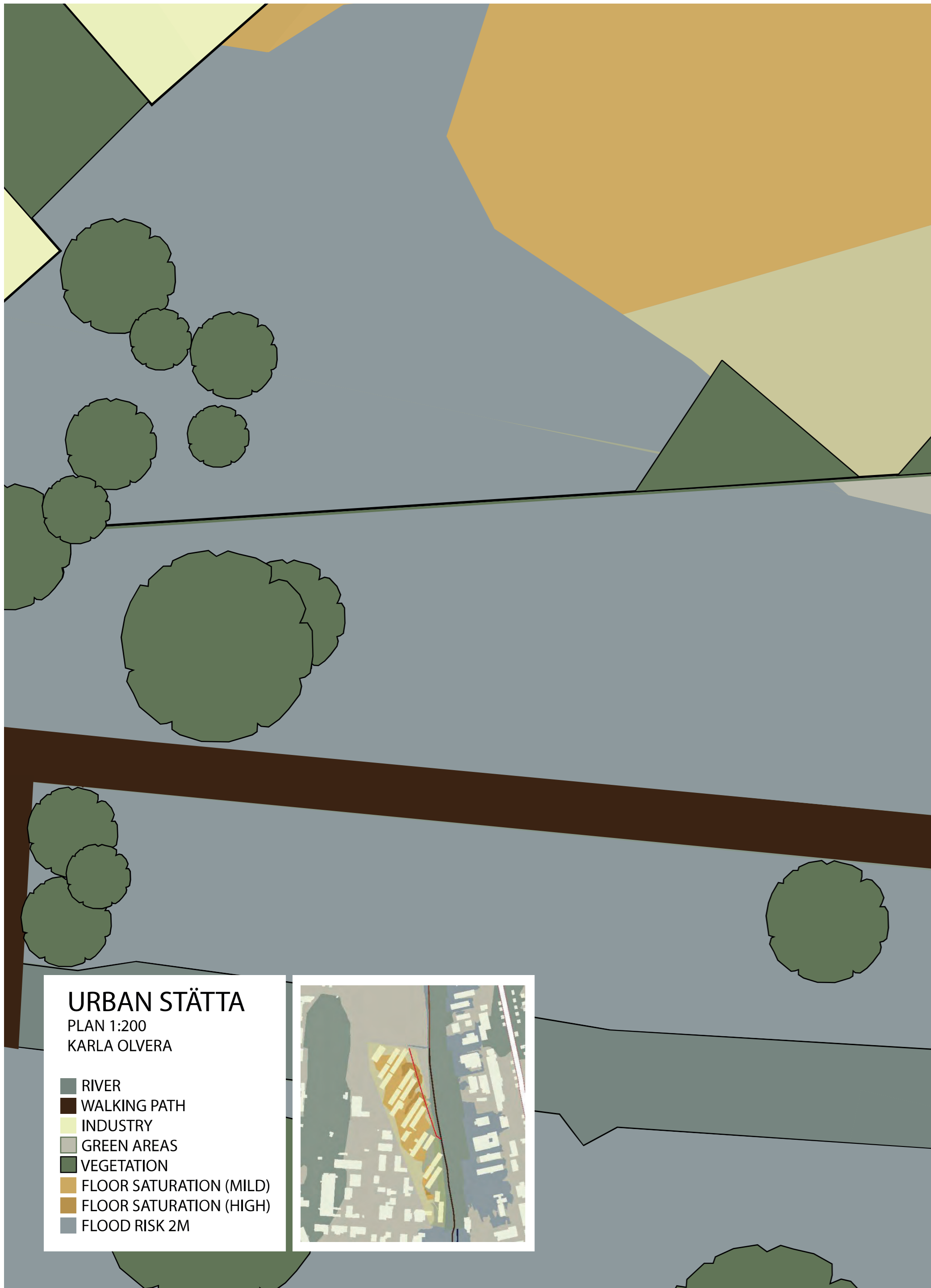
- Cultivated land —————>
- Hardened surfaces —————>
- Fillings, cleaning and dredging —————>
- Land degradation
- Limited migration
- Loss of wetlands

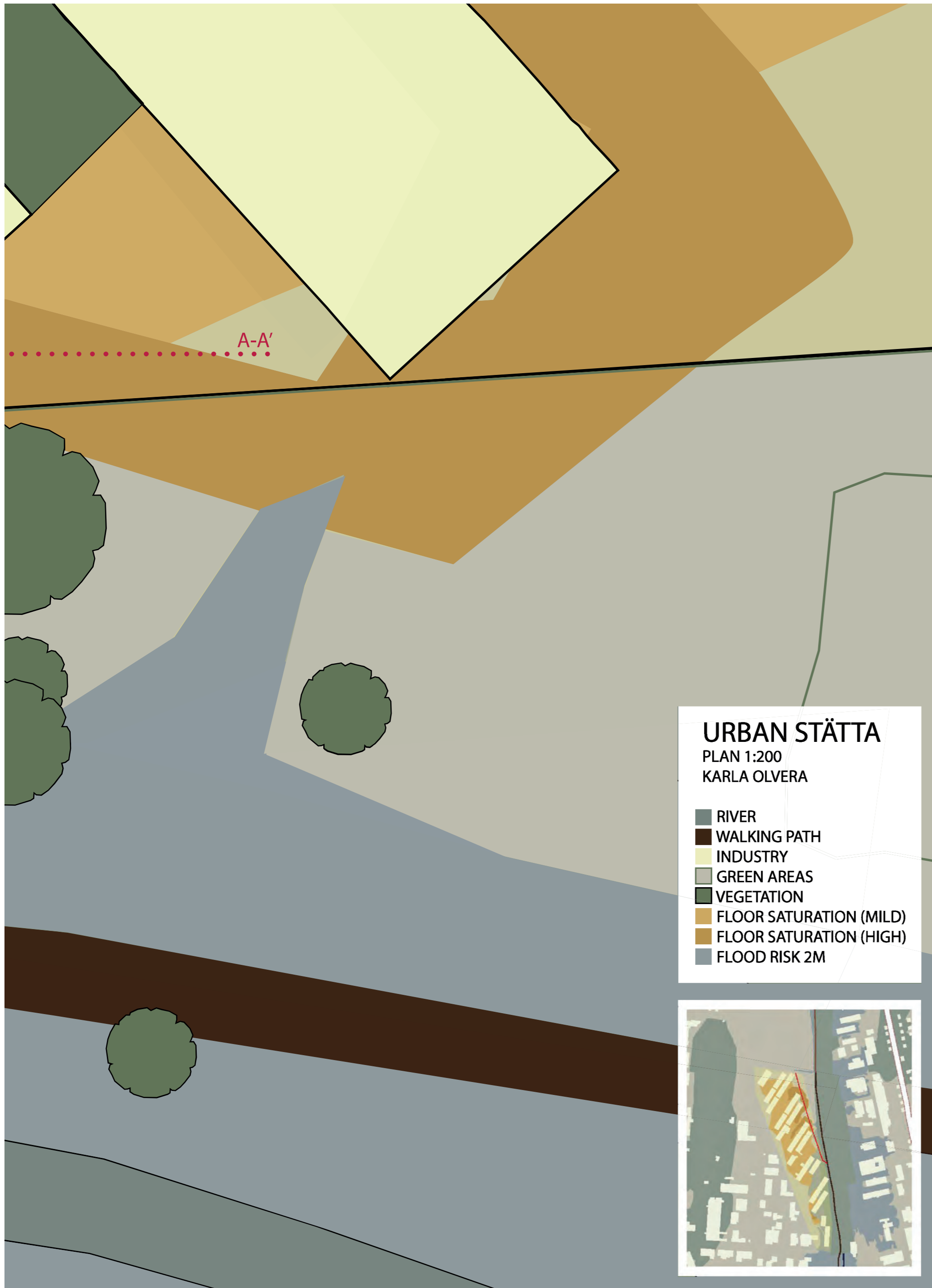
- High value of area with protected species
- Wetland

PROTOTYPE: URBAN STÄTTA

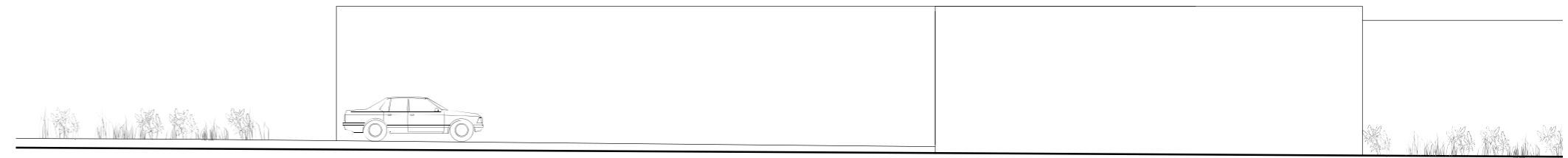


"KVILLEBÄCKEN RIVER THROUGH PLANTS"
VEGETATION RECOLLECTED IN SITE VISIT

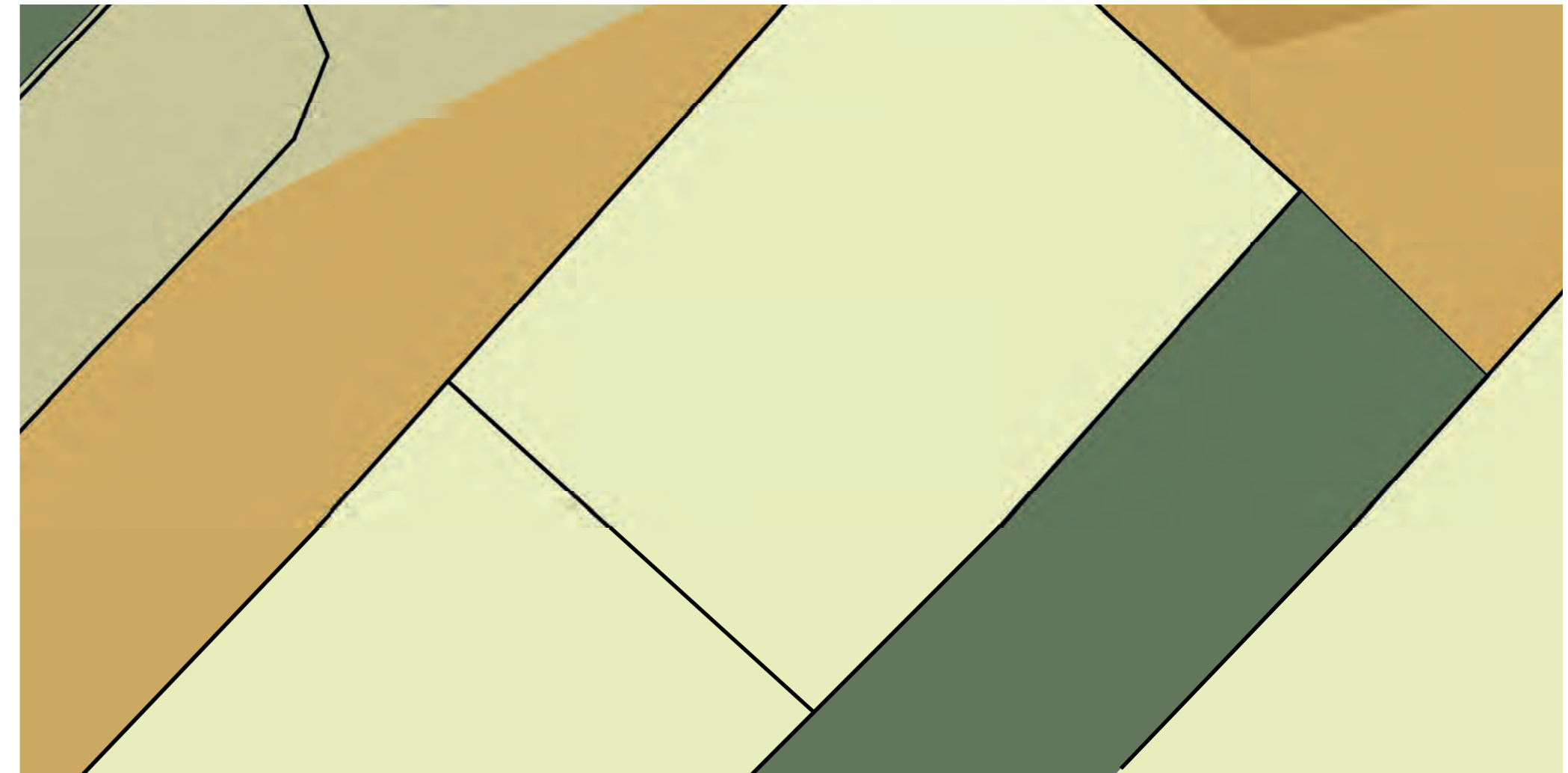




URBAN STÄTTA
SECTION 1:200
Karla Olvera



SECTION A-A'



FLOOR SATURATION- MEDIUM TO HIGH



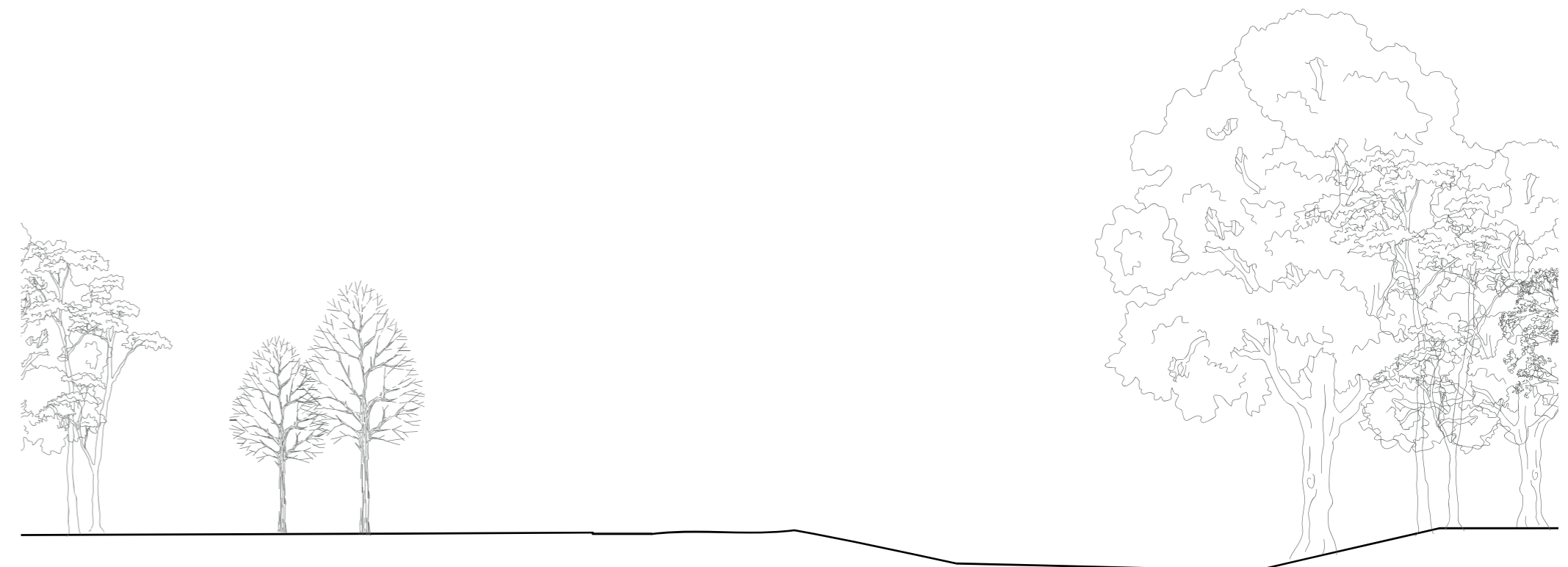
VEGETATION-INDUSTRY RELATION



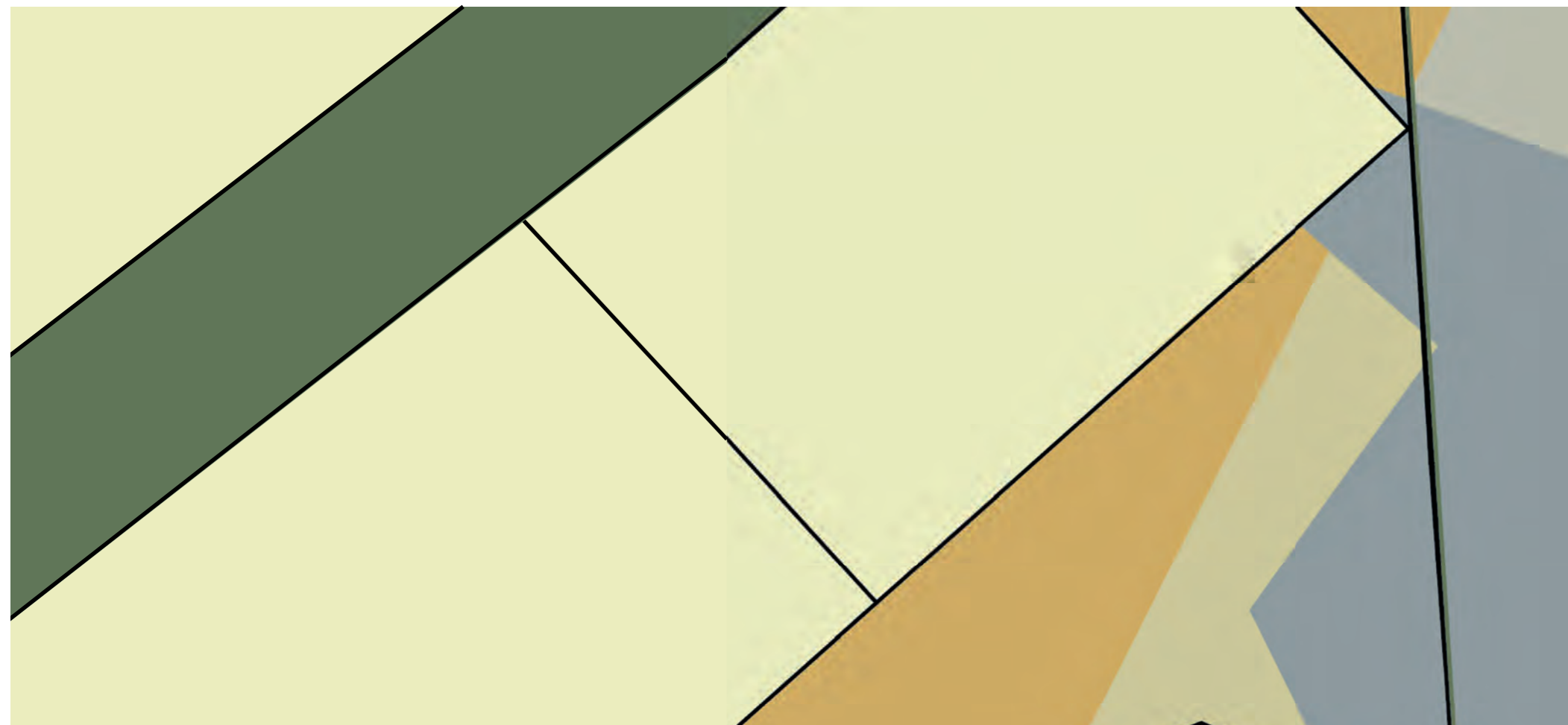
FLOOD RISK 2M



URBAN STÄTTA
SECTION 1:200
Karla Olvera



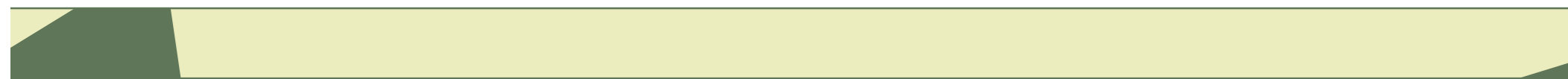
SECTION B-B'



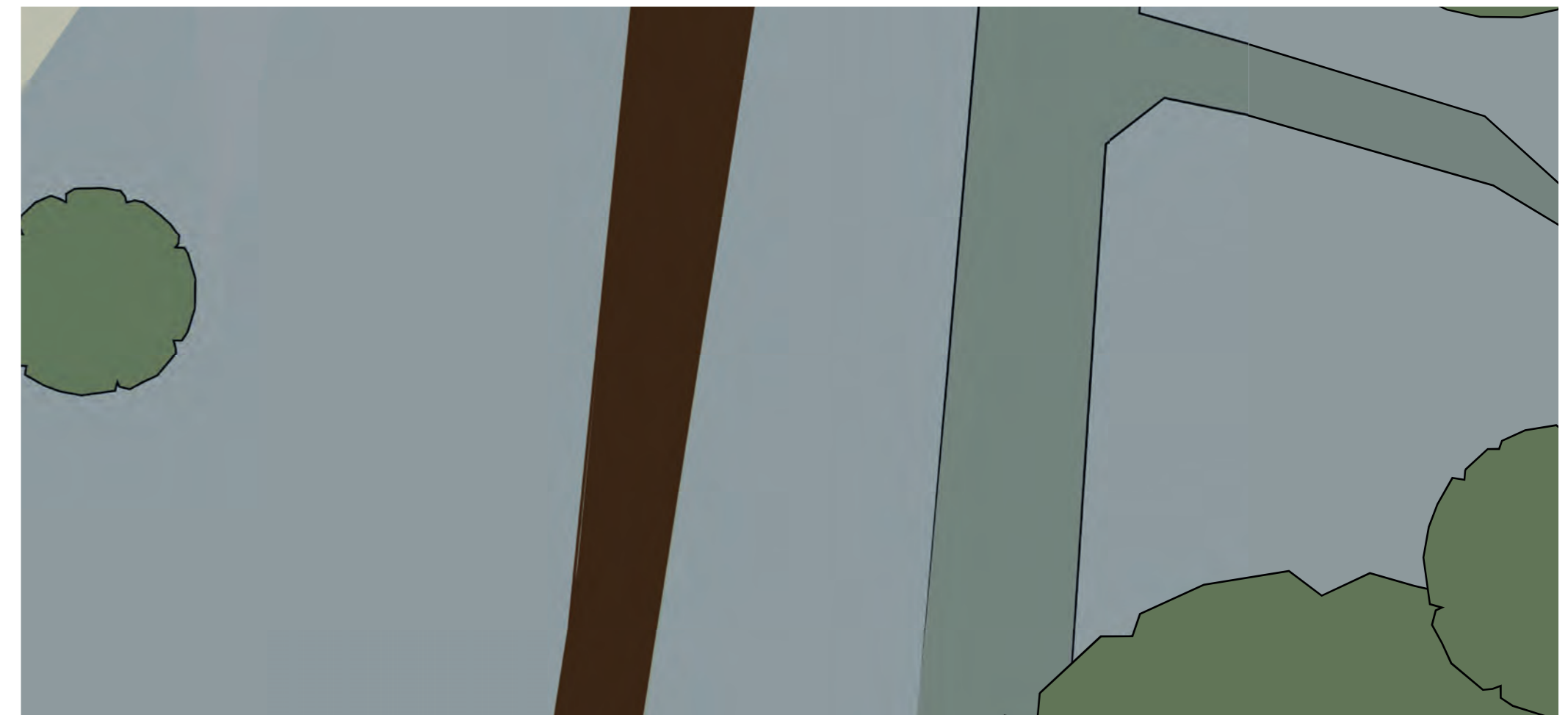
FLOOR SATURATION- MEDIUM TO HIGH



VEGETATION-INDUSTRY RELATION



FLOOD RISK 2M



FLOOR SATURATION- MEDIUM TO HIGH



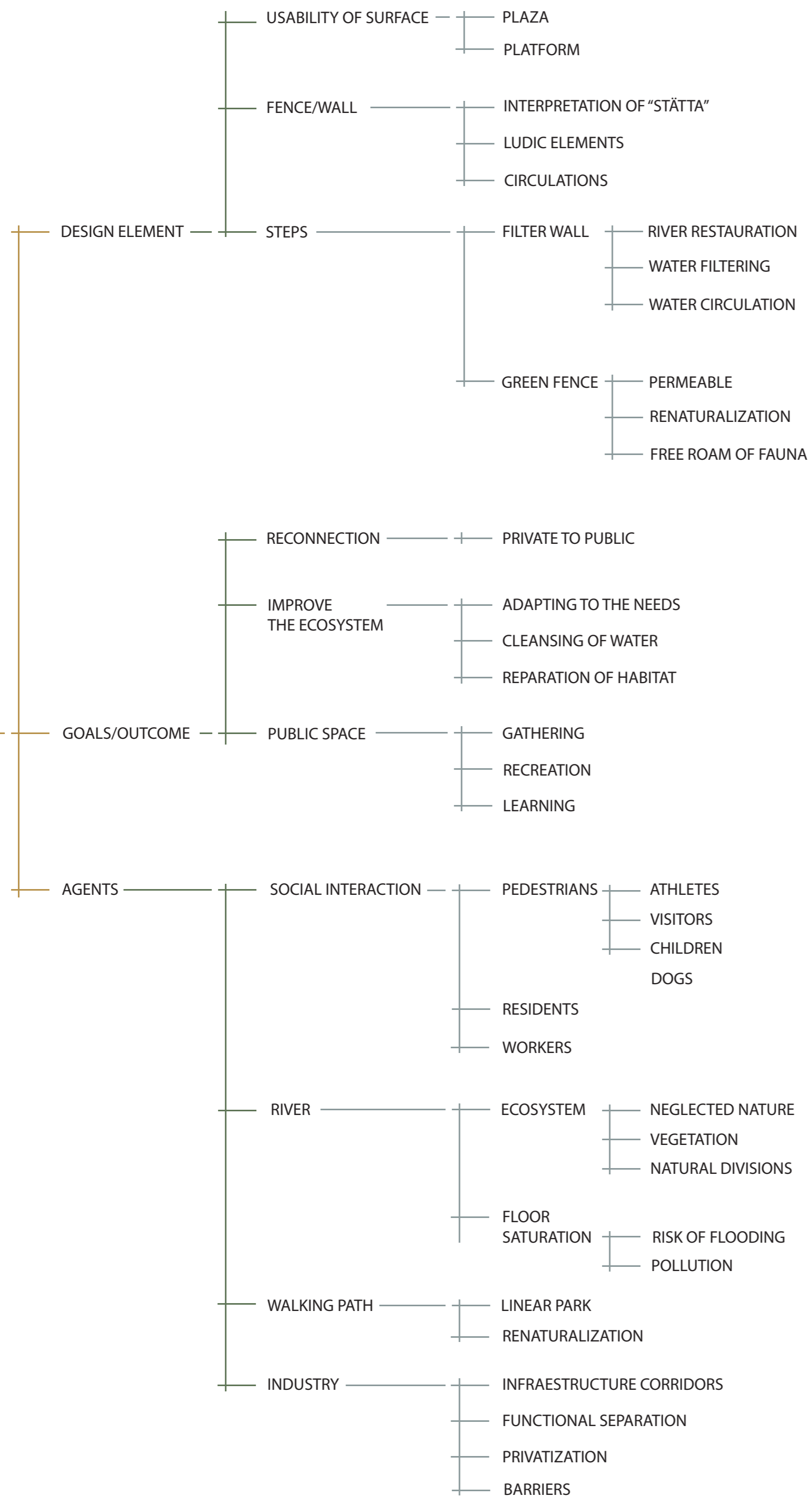
VEGETATION-INDUSTRY RELATION



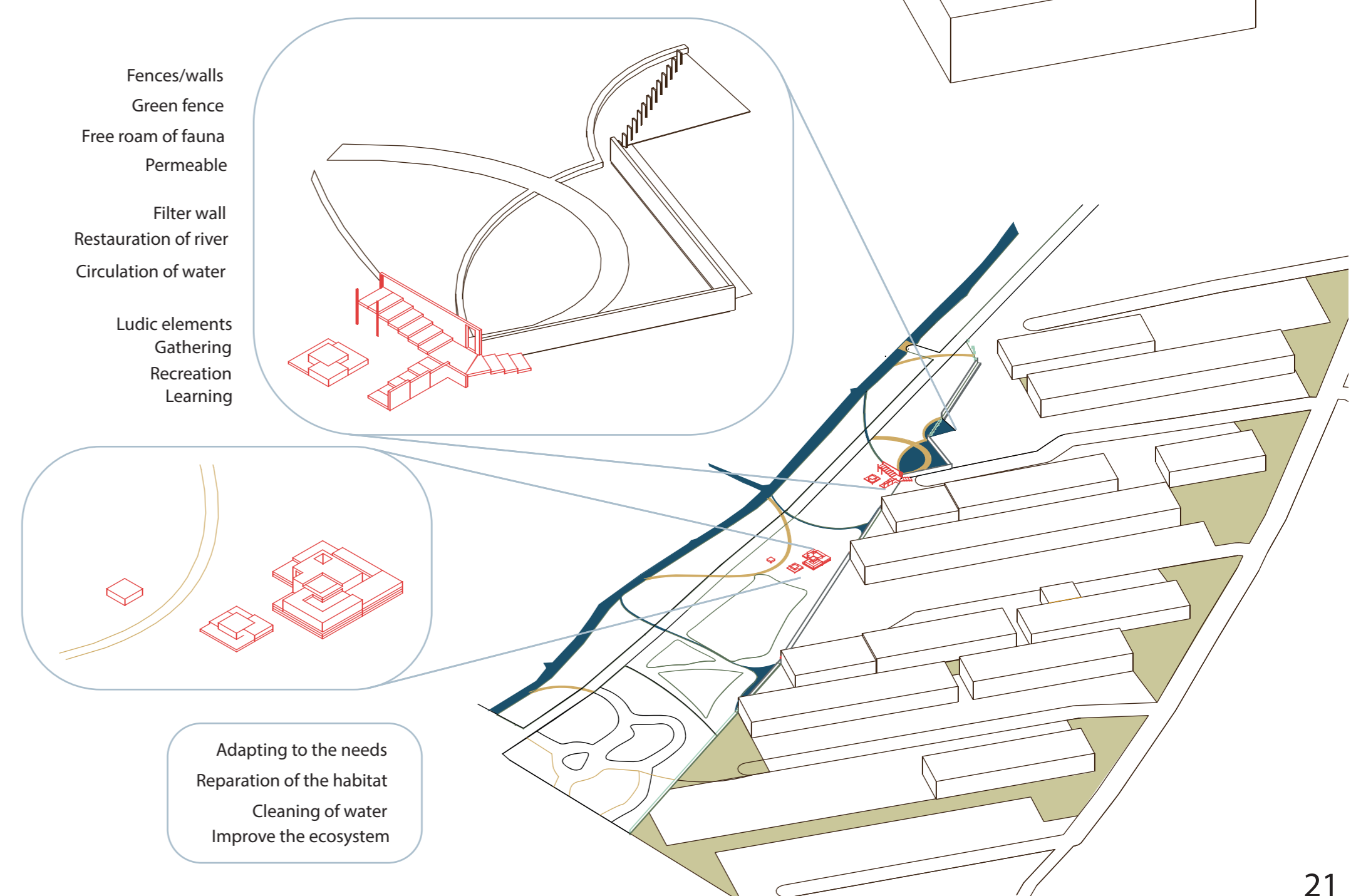
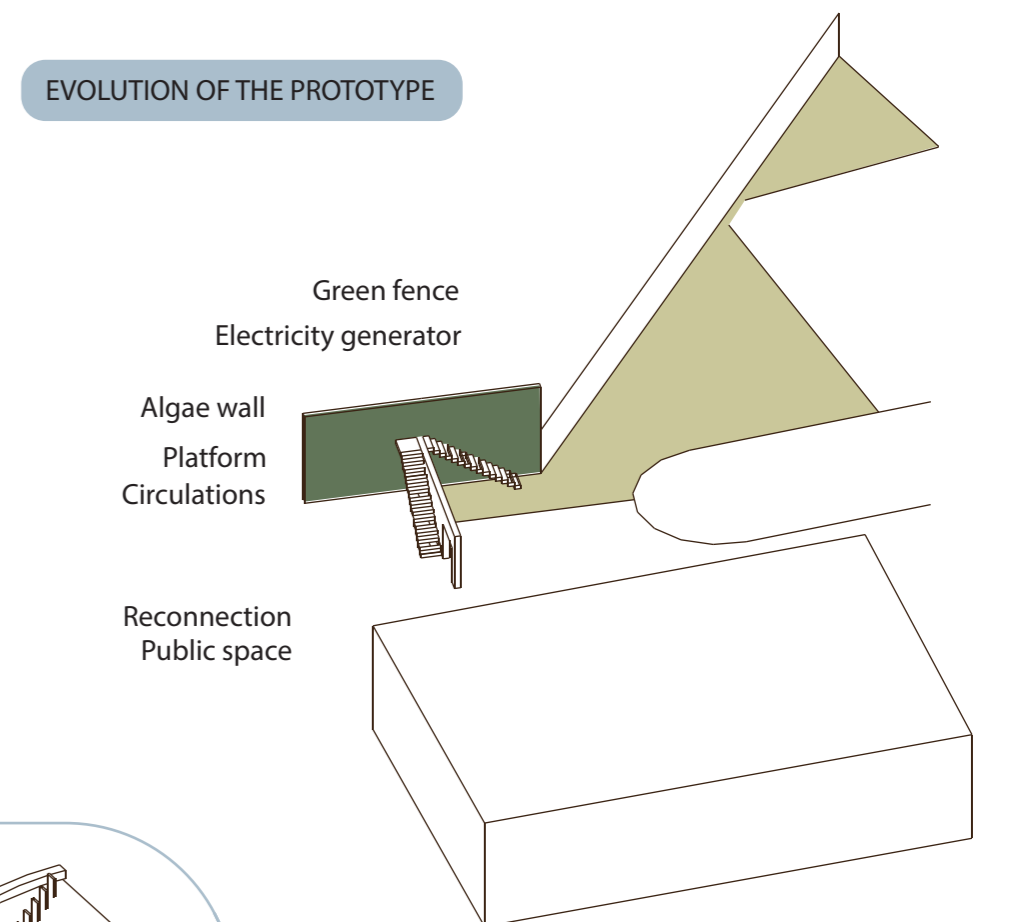
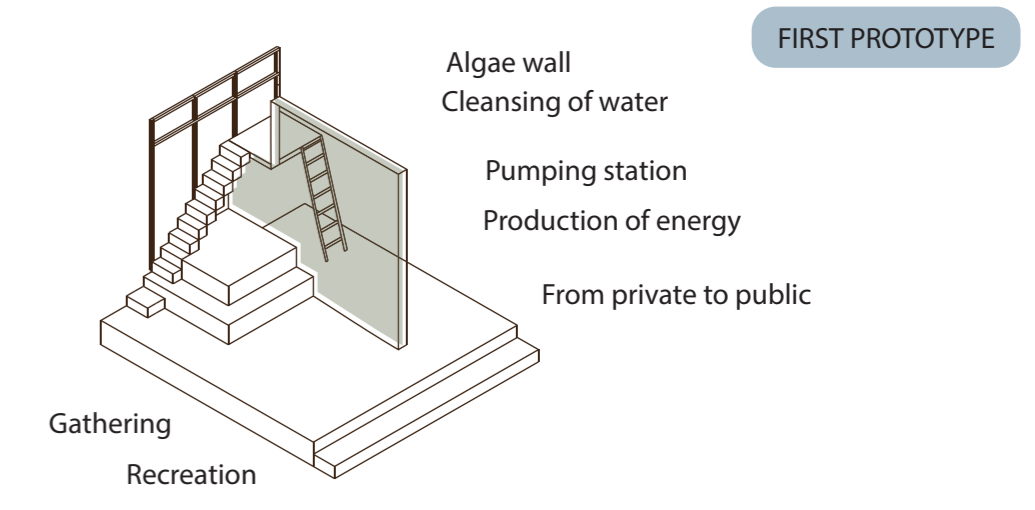
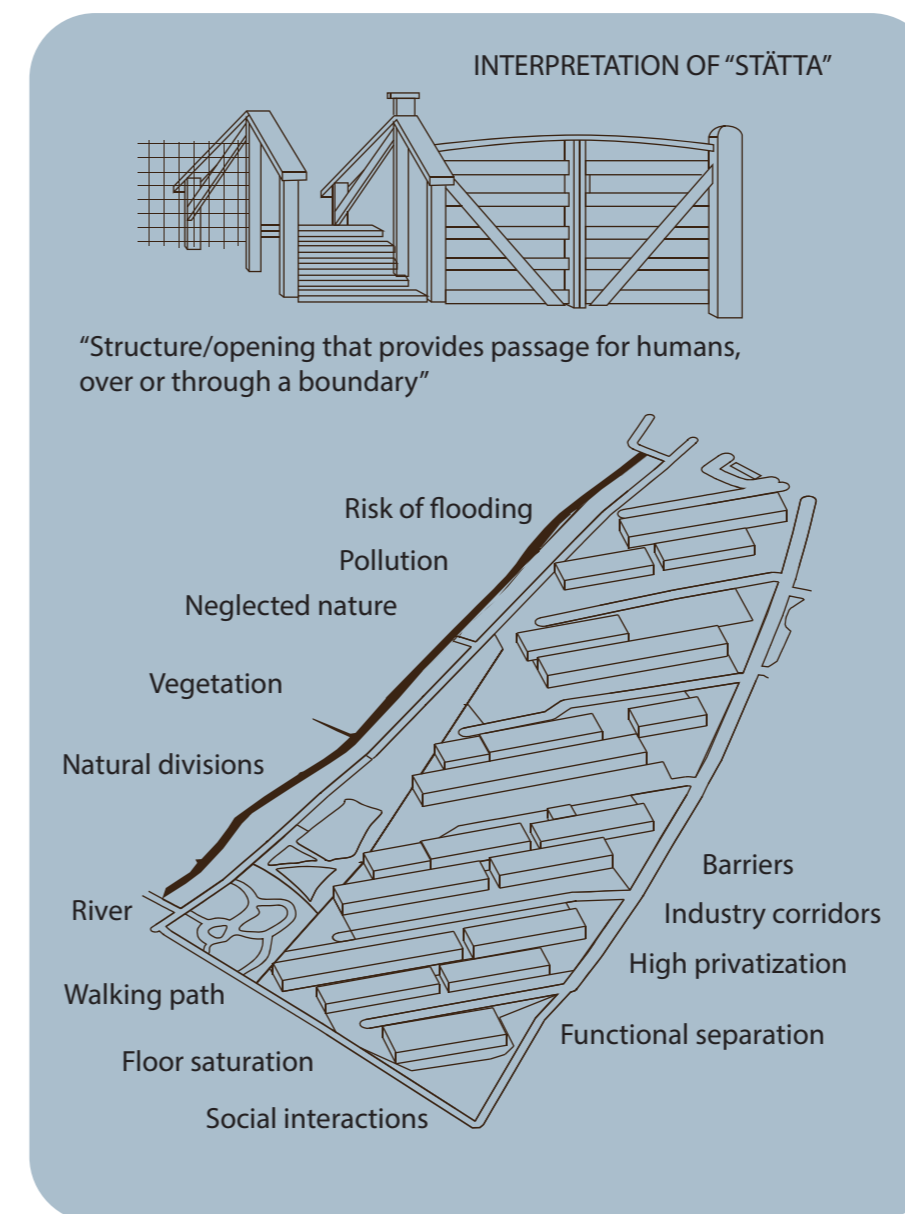
FLOOD RISK 2M



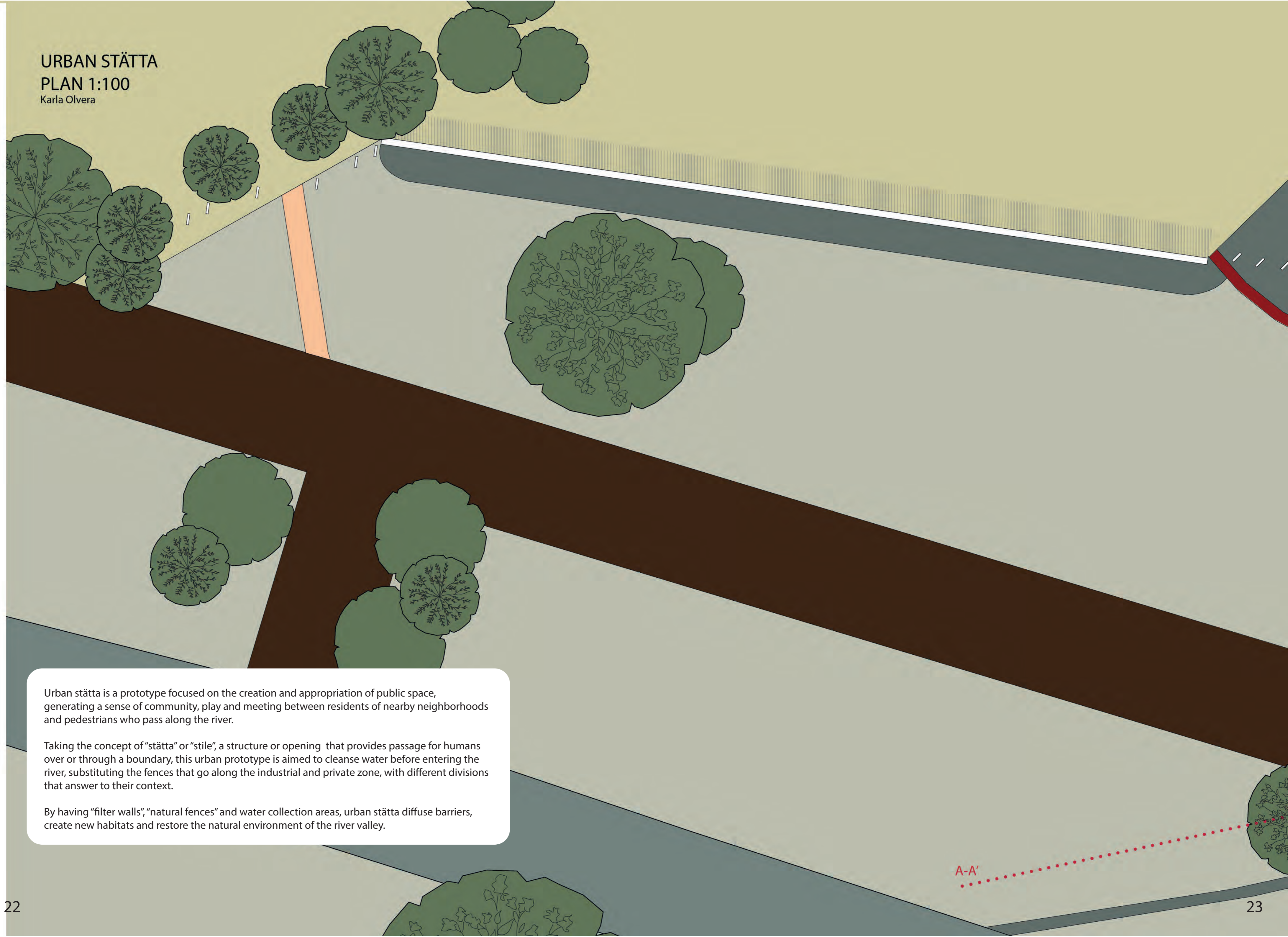
PROTOTYPE
URBAN STÄTTA



URBAN STÄTTA
Evolutionary tree
Karla Olvera



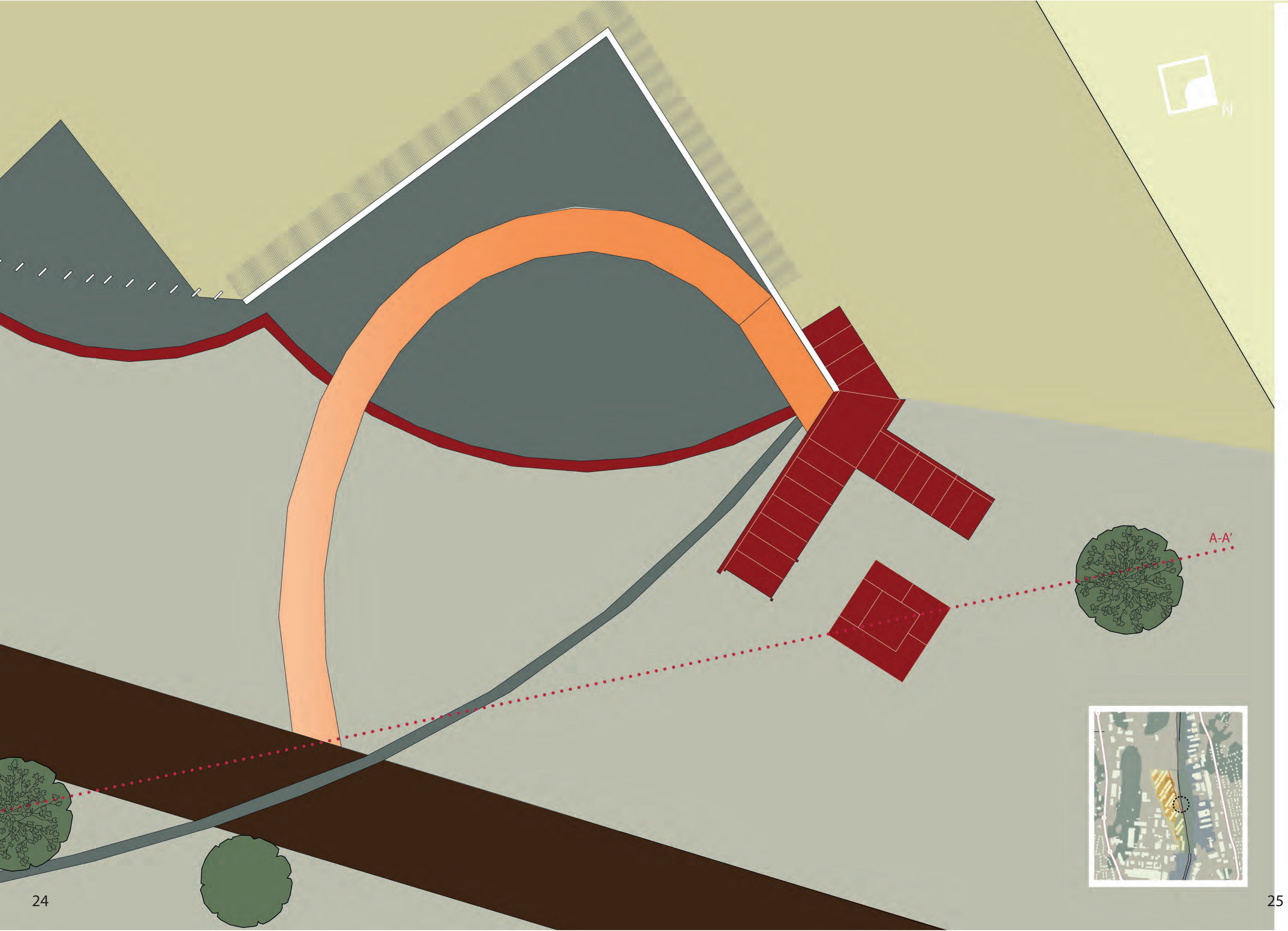
URBAN STÄTTA
PLAN 1:100
Karla Olvera



Urban stätta is a prototype focused on the creation and appropriation of public space, generating a sense of community, play and meeting between residents of nearby neighborhoods and pedestrians who pass along the river.

Taking the concept of “stätta” or “stile”, a structure or opening that provides passage for humans over or through a boundary, this urban prototype is aimed to cleanse water before entering the river, substituting the fences that go along the industrial and private zone, with different divisions that answer to their context.

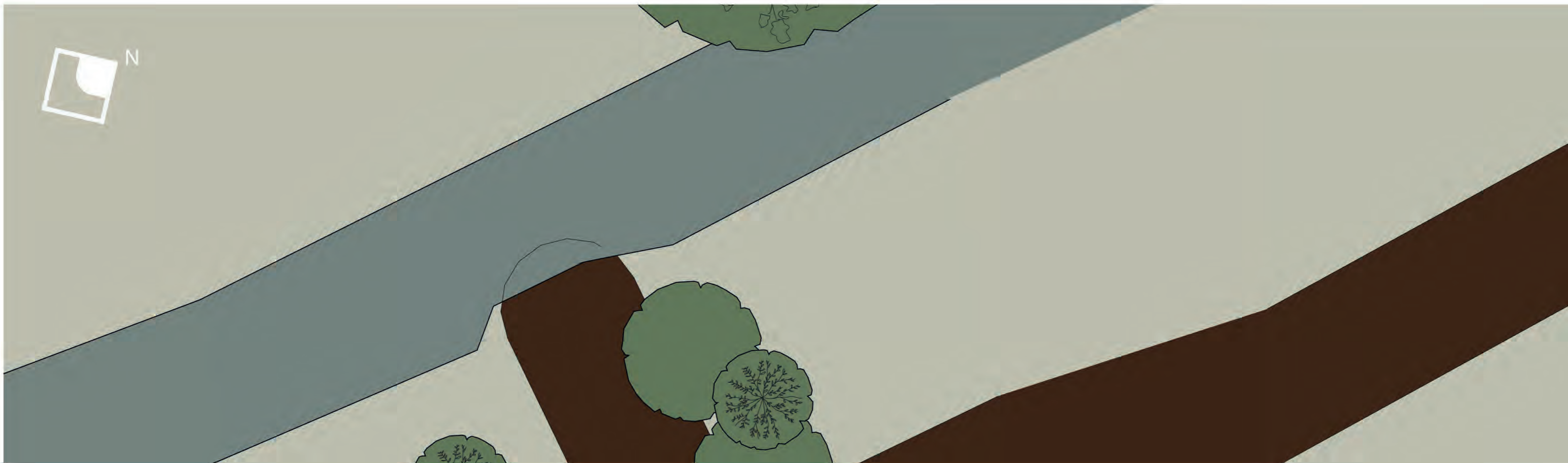
By having “filter walls”, “natural fences” and water collection areas, urban stätta diffuse barriers, create new habitats and restore the natural environment of the river valley.

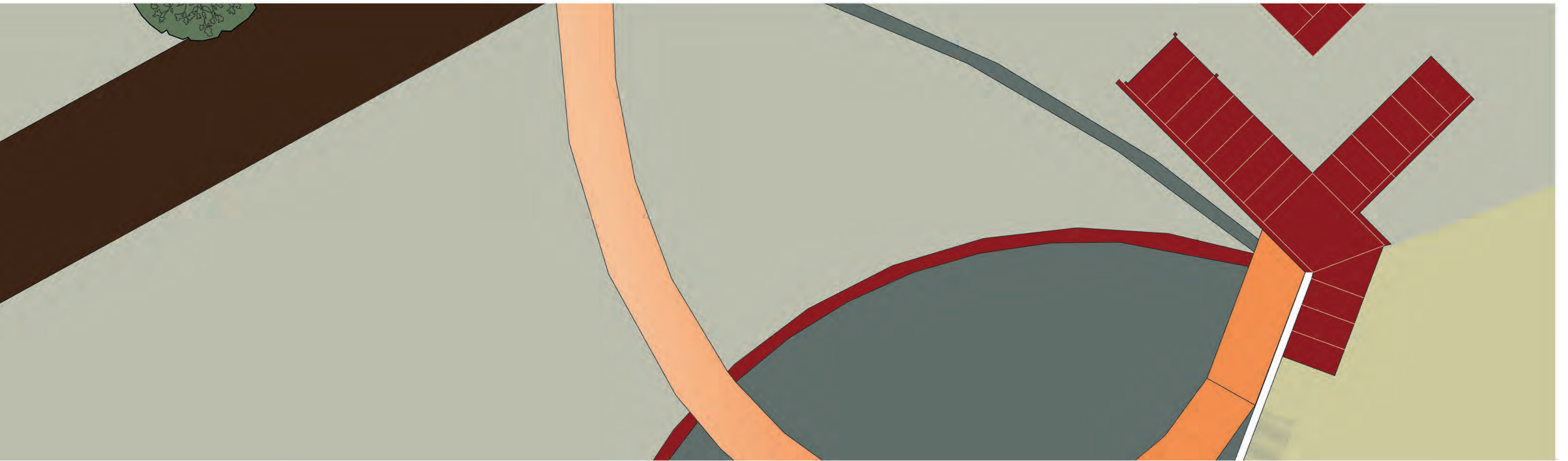


A-A'

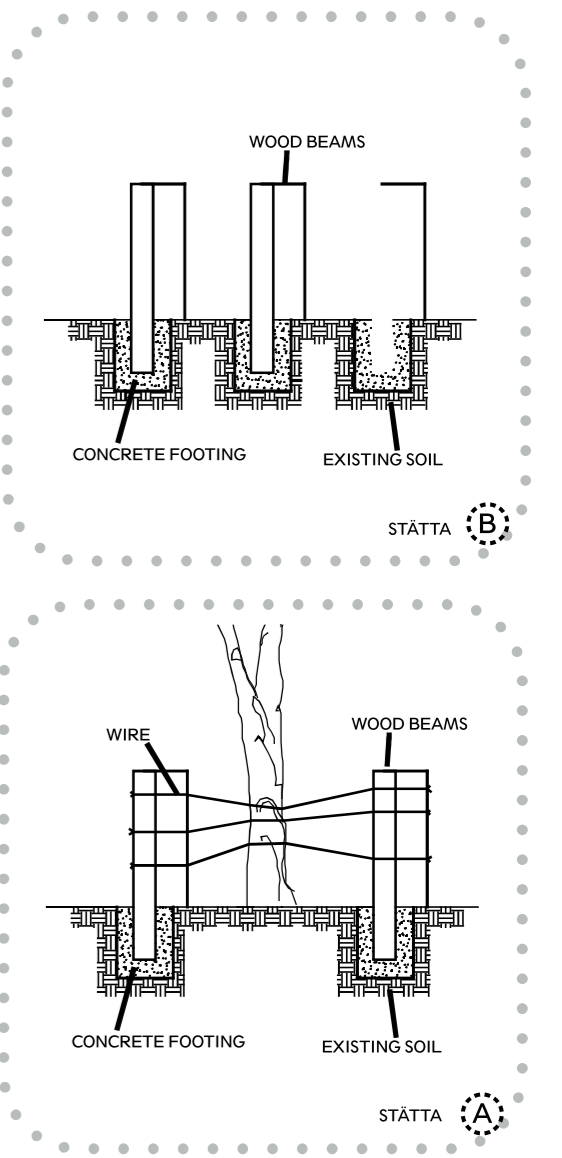
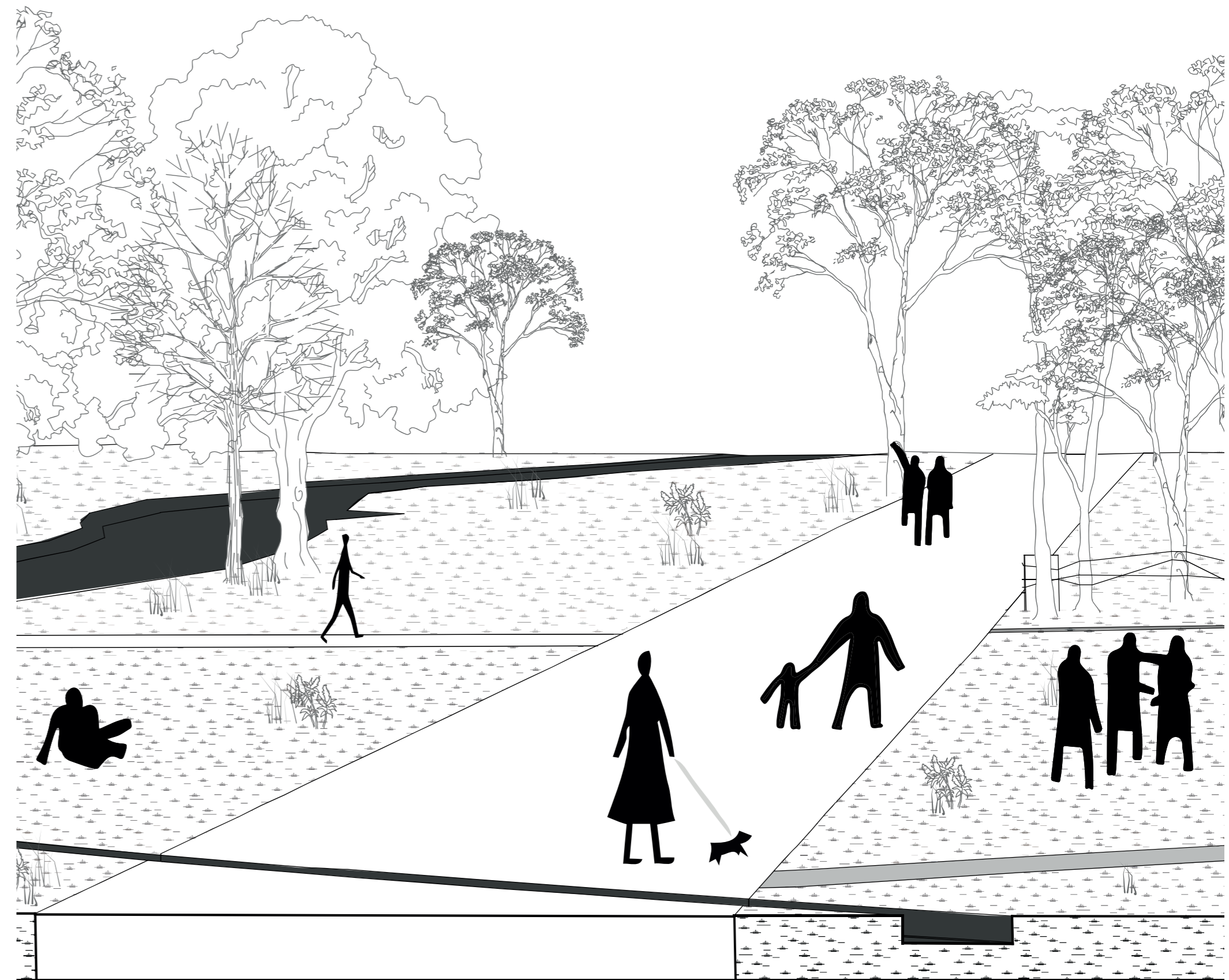
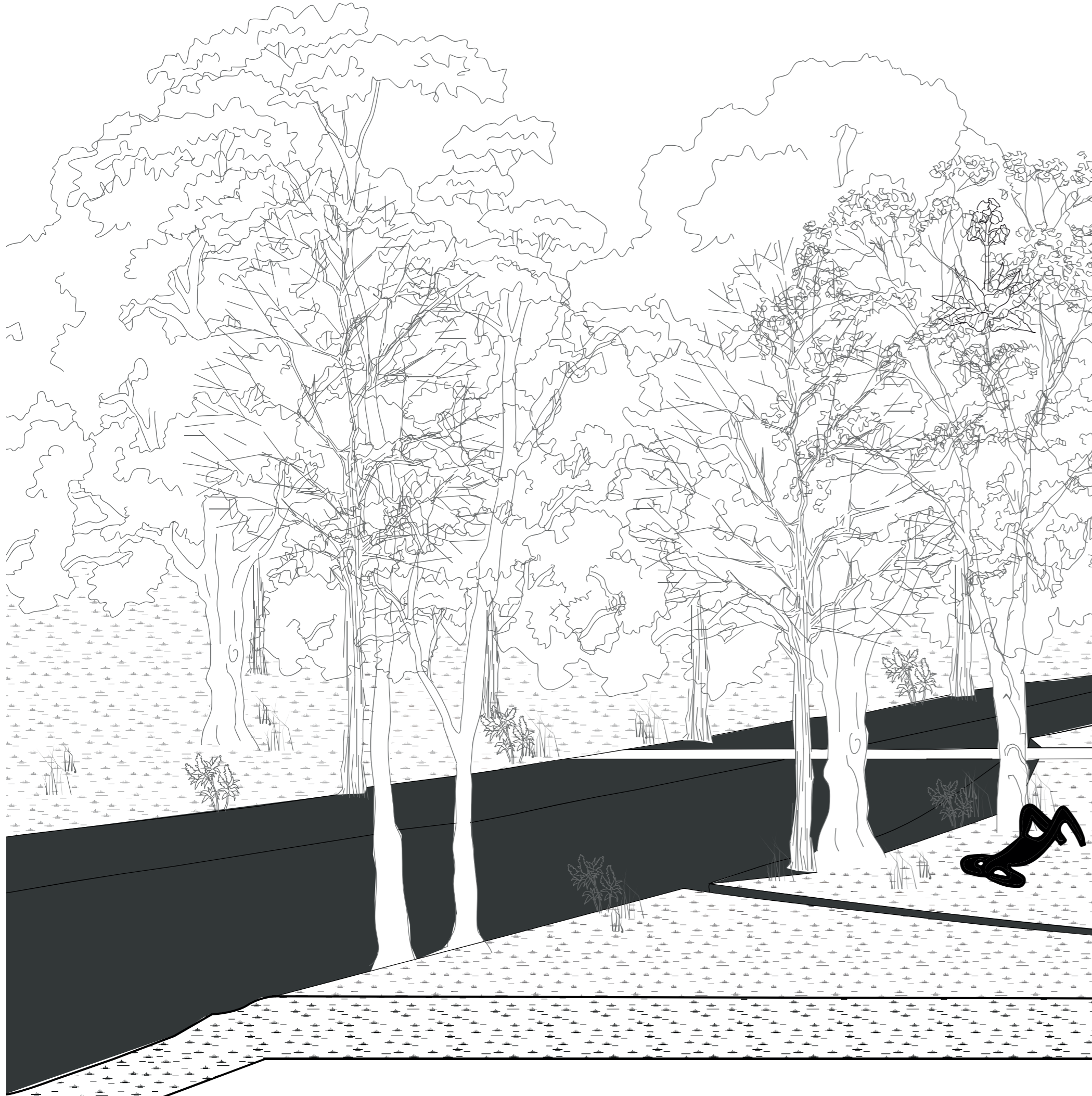


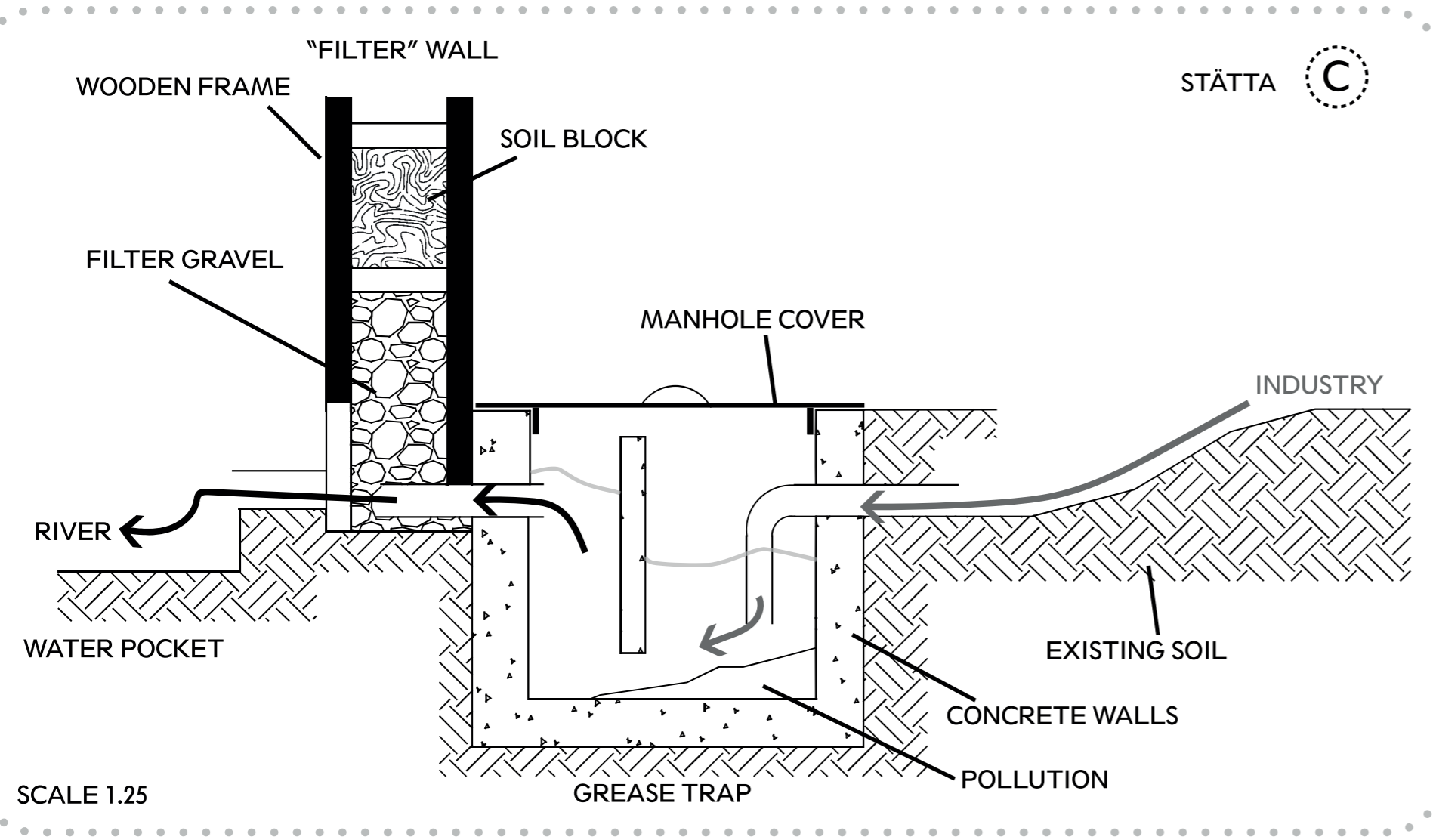
URBAN STÄTTA
SECTION A-A' 1:100
Karla Olvera



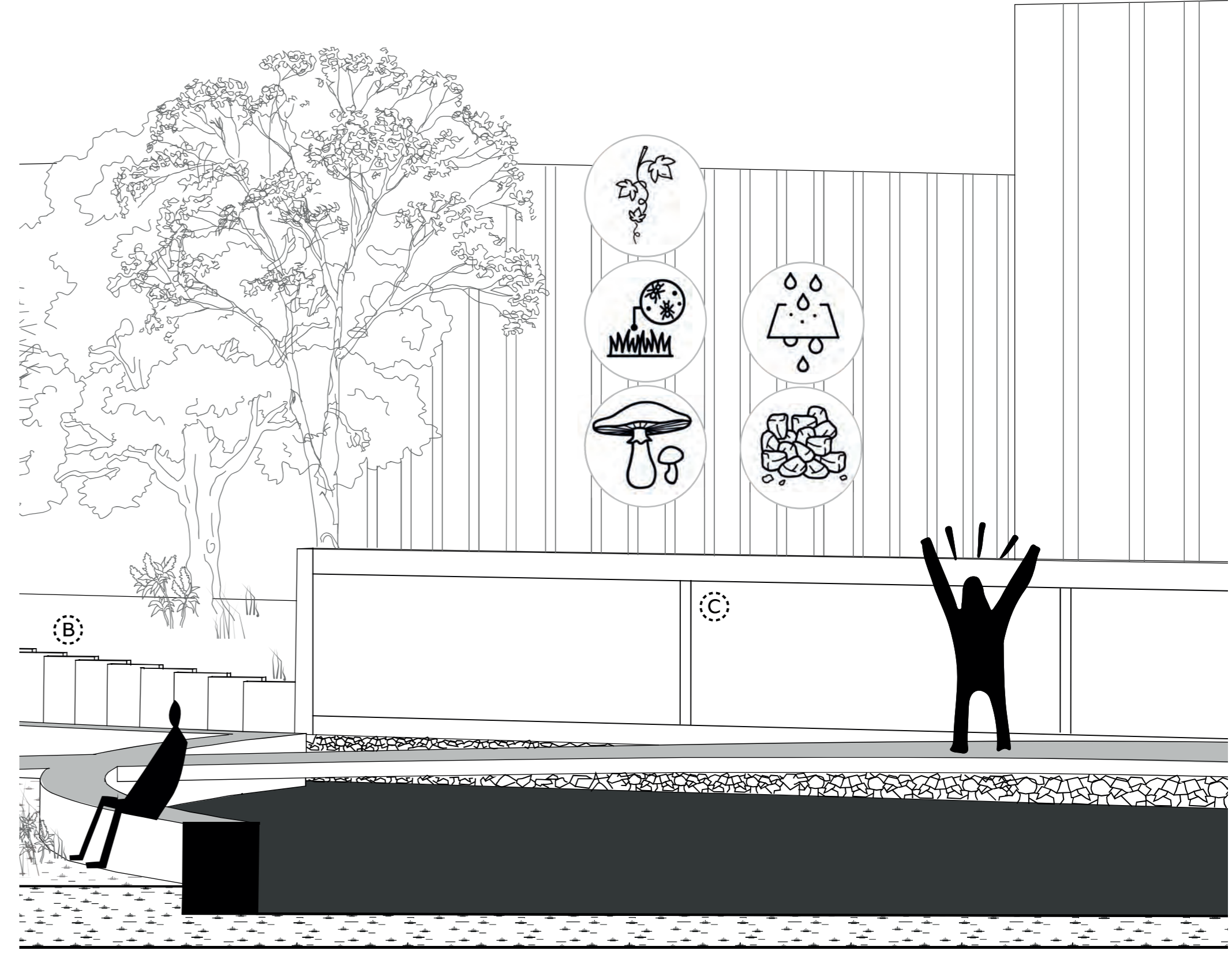
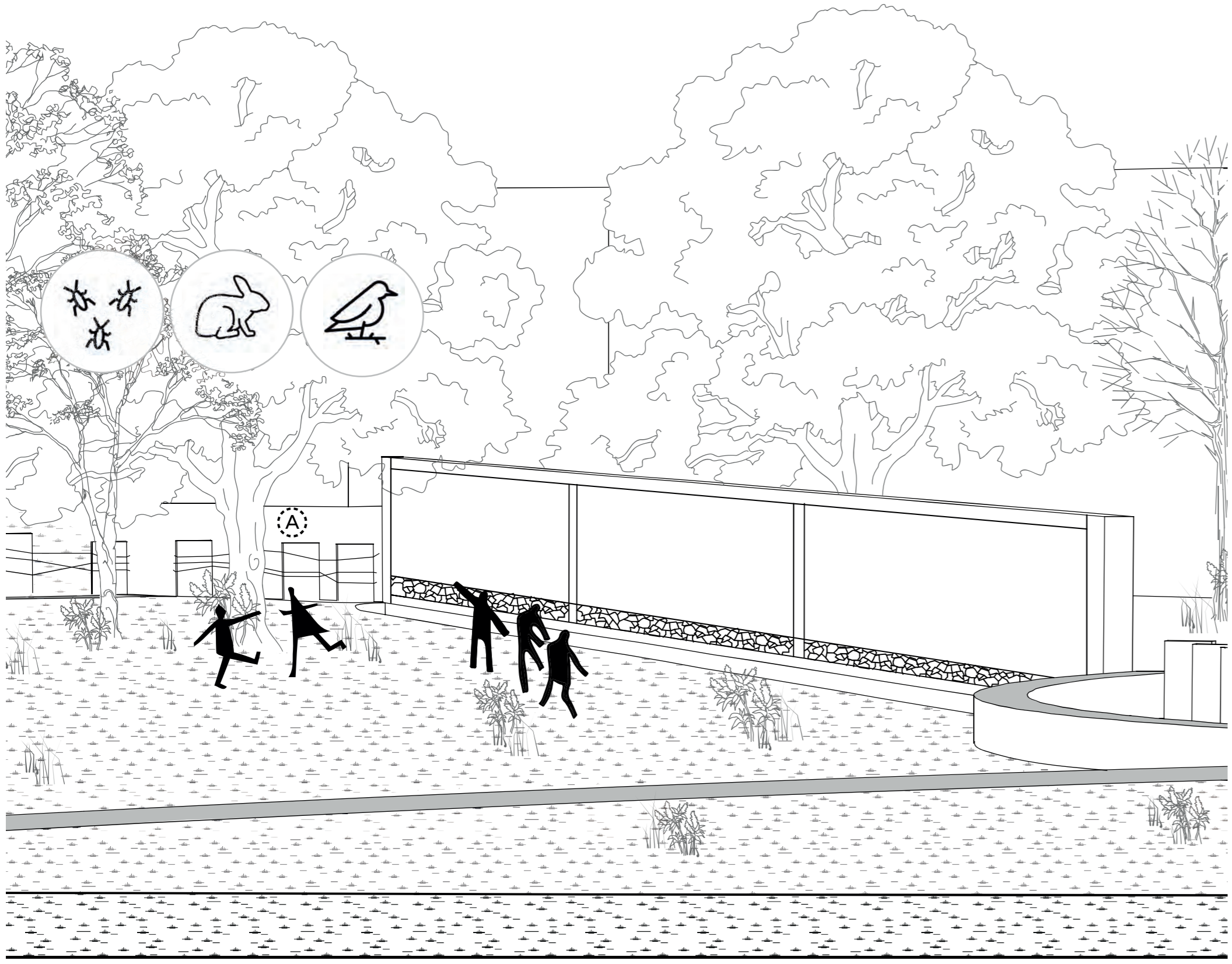


URBAN STÄTTA
3D SECTION 1.50
Karla Olvera





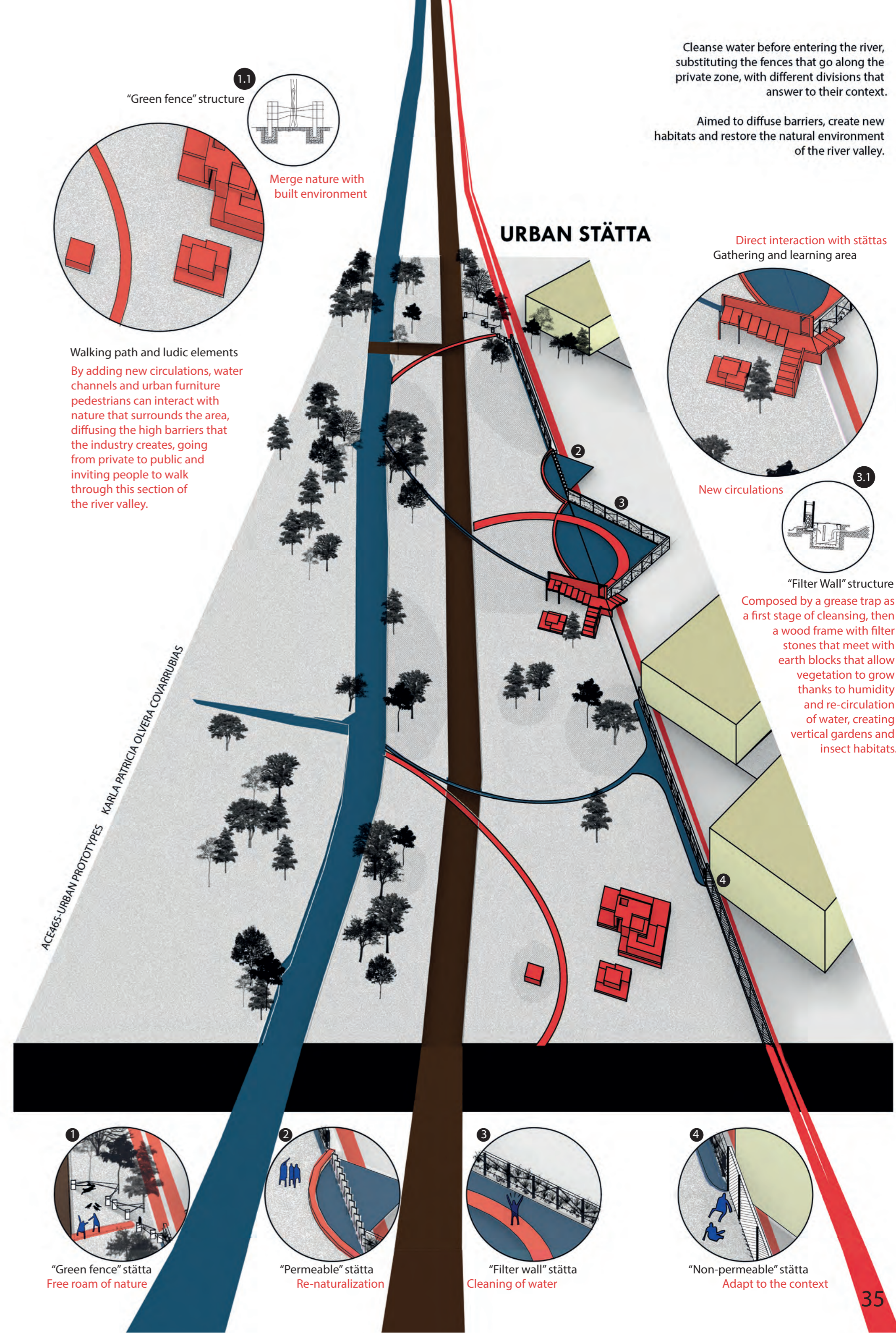
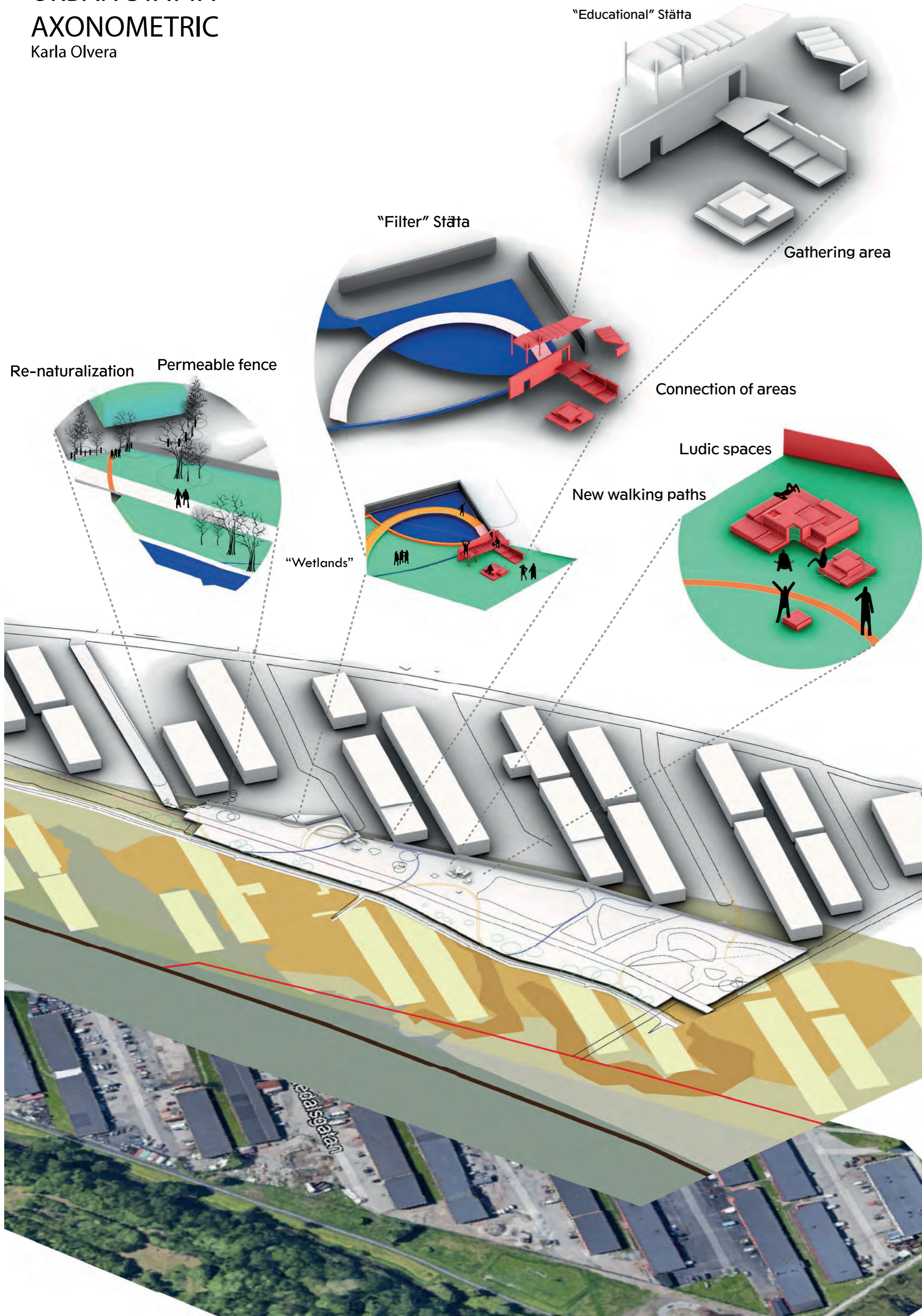
URBAN STÄTTA
Evolutionary tree
Karla Olvera



URBAN STÄTTA

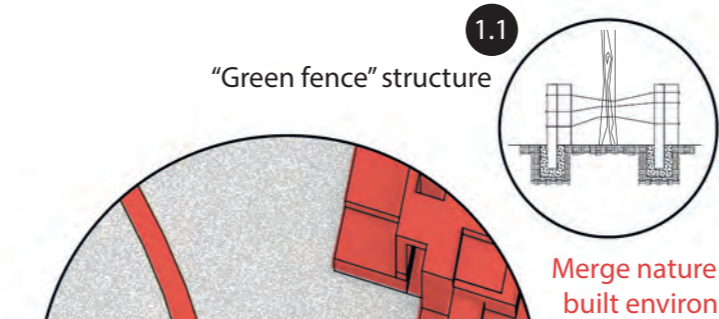
AXONOMETRIC

Karla Olvera



Cleanse water before entering the river, substituting the fences that go along the private zone, with different divisions that answer to their context.

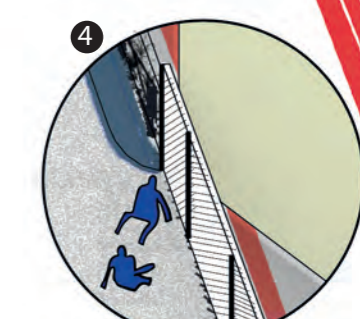
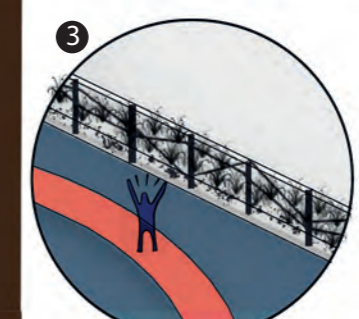
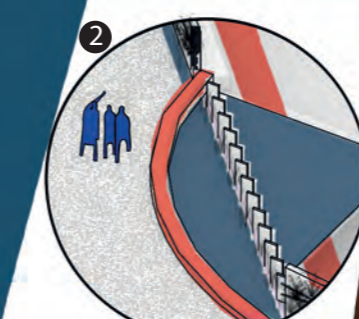
Aimed to diffuse barriers, create new habitats and restore the natural environment of the river valley.



Walking path and ludic elements
By adding new circulations, water channels and urban furniture pedestrians can interact with nature that surrounds the area, diffusing the high barriers that the industry creates, going from private to public and inviting people to walk through this section of the river valley.

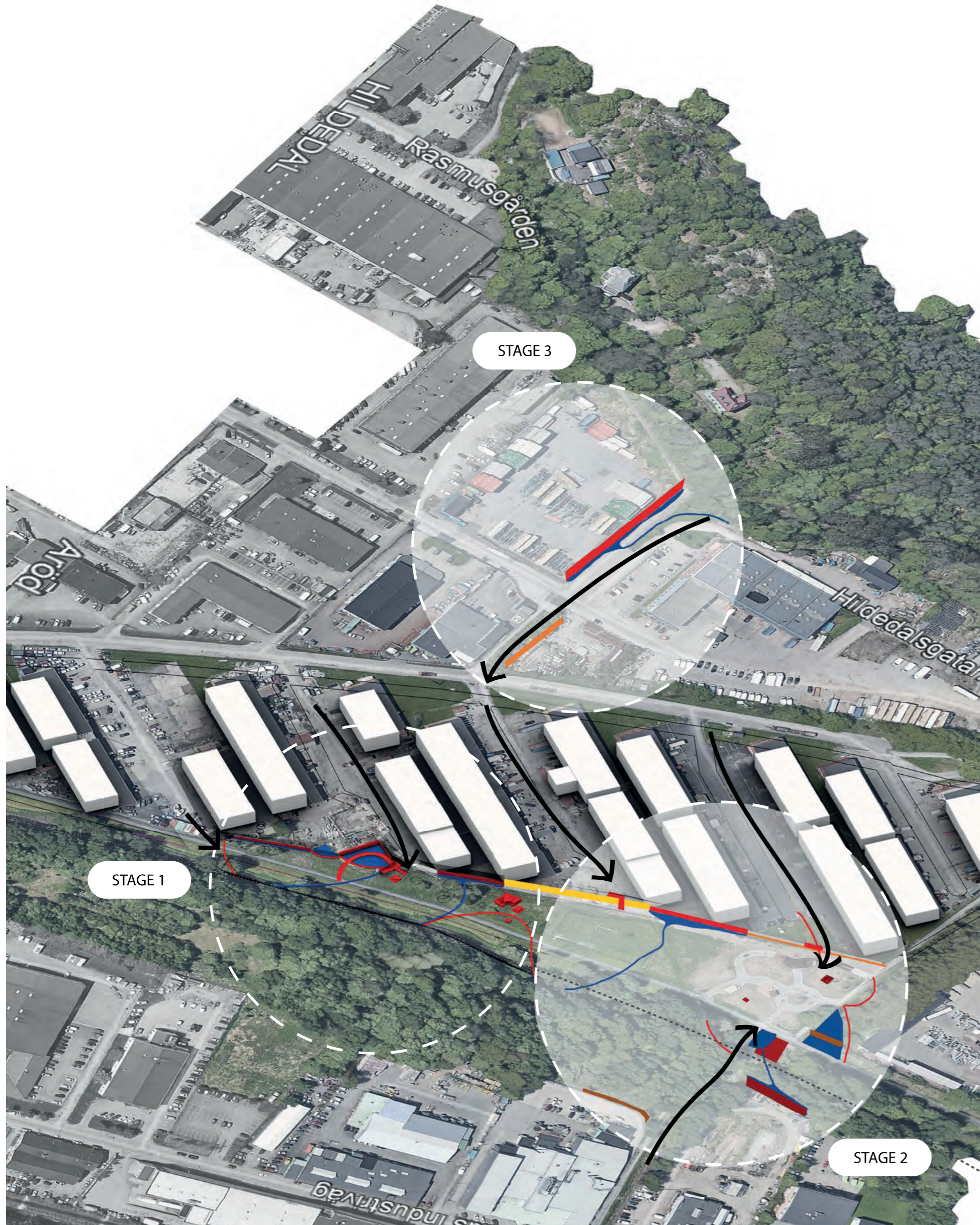


"Filter Wall" structure
Composed by a grease trap as a first stage of cleansing, then a wood frame with filter stones that meet with earth blocks that allow vegetation to grow thanks to humidity and re-circulation of water, creating vertical gardens and insect habitats.



URBAN STÄTTA
GROWTH SYSTEM
Karla Olvera

- FILTER WALL
- STÄTTA FURNITURE
- WALKING PATHS
- PERMEABLE FENCE
- WATER POCKETS
- WATER CHANNELS
- NON-PERMEABLE WALL
- CONNECTION OF ZONES
- RIVER



URBAN STÄTTA
SWOT Analysis
Karla Olvera

DIVERSE PROTOTYPE DESIGNS:
The project offers different responses according to its needs and context. By adapting with 4 versions of "stättas" the prototype is versatile and can be applied effectively in different scenarios.

PASSIVE ARCHITECTURE DESIGN:
By cleaning water with sedimentation and filtering, the prototype is energy-efficient.

CLEANING OF WATER:
With the "urban stätta" the main focus is to clean water before it arrives to the river, with a filtration system that responds to the environmental emergencies.

INTERACTIVE:
The inclusion of ludic elements adds dimension to the project, inviting people to participate and create a community.

REGENERATION OF NATURAL HABITAT:
The project's focus on regenerating the natural habitat of the river is a key strength.

LINEAR DESIGN LIMITATION:
The linear design of the project may pose limitations in terms of coverage. It targets specific areas that might limit the project's reach.

RISK OF BEING PERCEIVED AS FRAGMENTED:
The risk of being perceived as fragmented is a potential weakness. Design adjustments may be necessary to ensure that the project is perceived as a cohesive and integrated solution.

UNCOVERED OUTDOOR ELEMENTS:
The presence of uncovered outdoor elements could pose challenges during adverse weather conditions.

STRENGTHS
OPPORTUNITIES

S
O

W
T

WEAKNESSES
THREATS

POSSIBLE EXPANSIONS:
The potential for expansion offers a unique opportunity to scale the project's impact. The impact and outcomes that the prototype might make can be easily replicated in other areas with similar contexts.

CITY AND BACKPLAN AREA GROWTH:
With the anticipated growth of the city and the Backplan area, the project is well-positioned to contribute positively to urban development.

RELATIVE CONNECTION TO HIKING TRAIL AND NATURAL AREAS:
The project's relative connection to the hiking trail and natural areas north of the river presents opportunities for synergies. Enhancing this connection can promote recreational activities, tourism, and a coexistence with the natural landscape.

FLOODING:
The risk of elements becoming obsolete during flooding events is a tangible threat.

CHEMICAL POLLUTION AND FILTRATION SYSTEM:
If there is any chemical hazard or pollution, the filtering wall would not work as it only filters heterogeneous mixtures.

DISUSE DUE TO PEDESTRIAN CHOICES:
The potential for disuse if pedestrians prefer alternative routes along the highway is a significant threat. Conducting community outreach, understanding user preferences, and enhancing the attractiveness of the river path can help address this threat.

KVILLEBÄCKEN

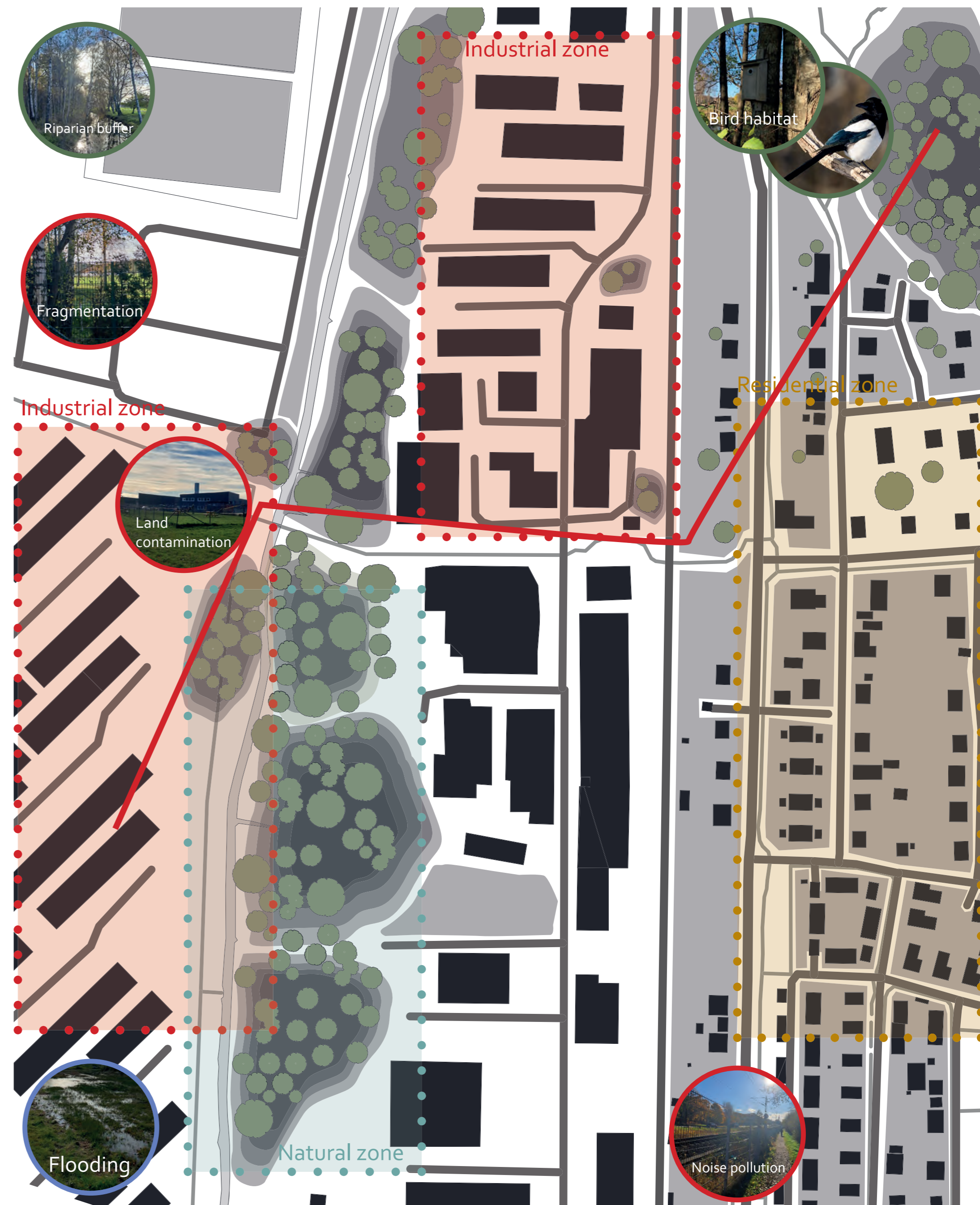
River sections and assets

Exercise 1.2 YR. 1, ACE 465 Urban Prototypes

Karla Patricia Olvera Covarrubias, Karolin Savitri Klein, Tove Matsson

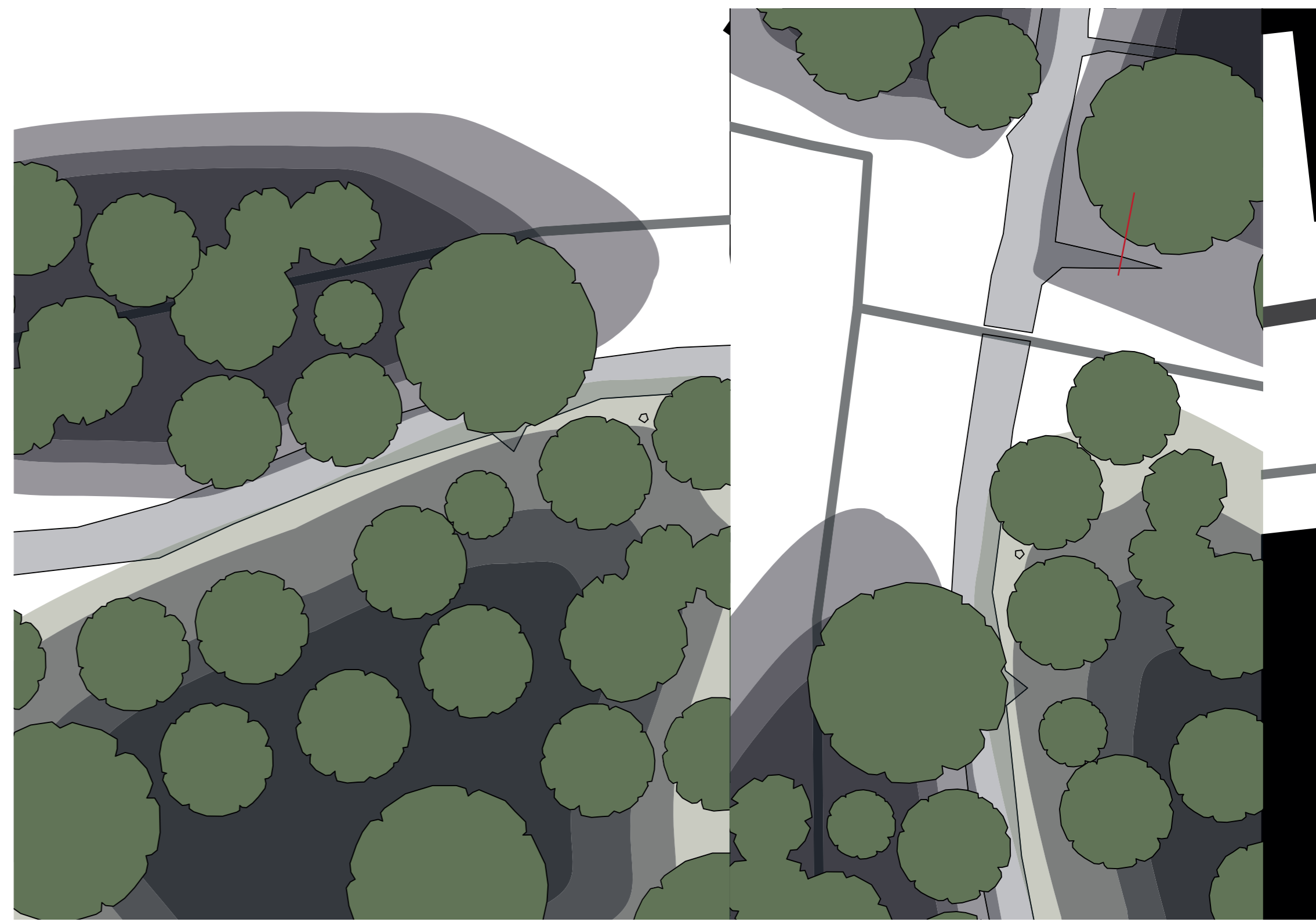
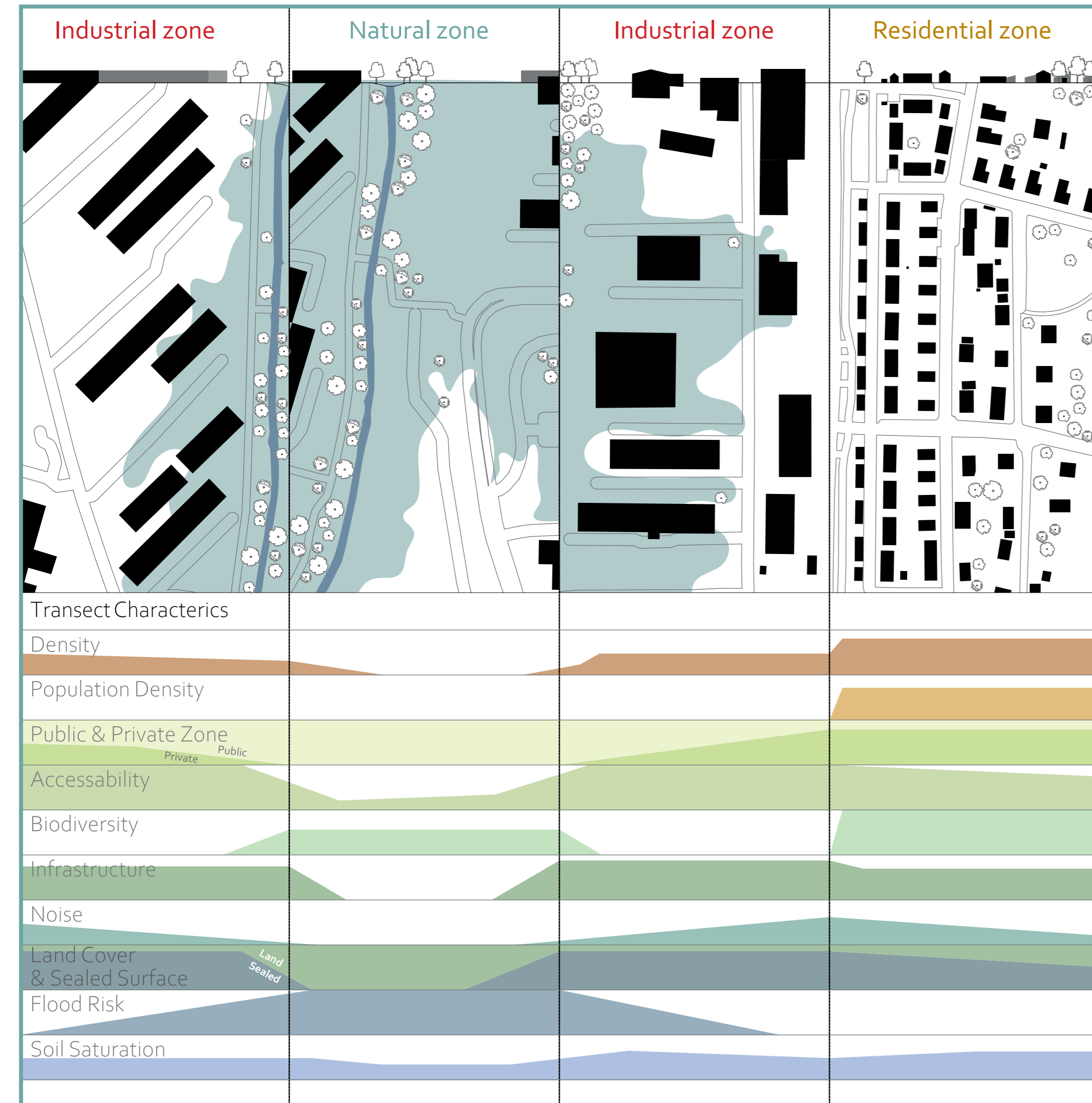
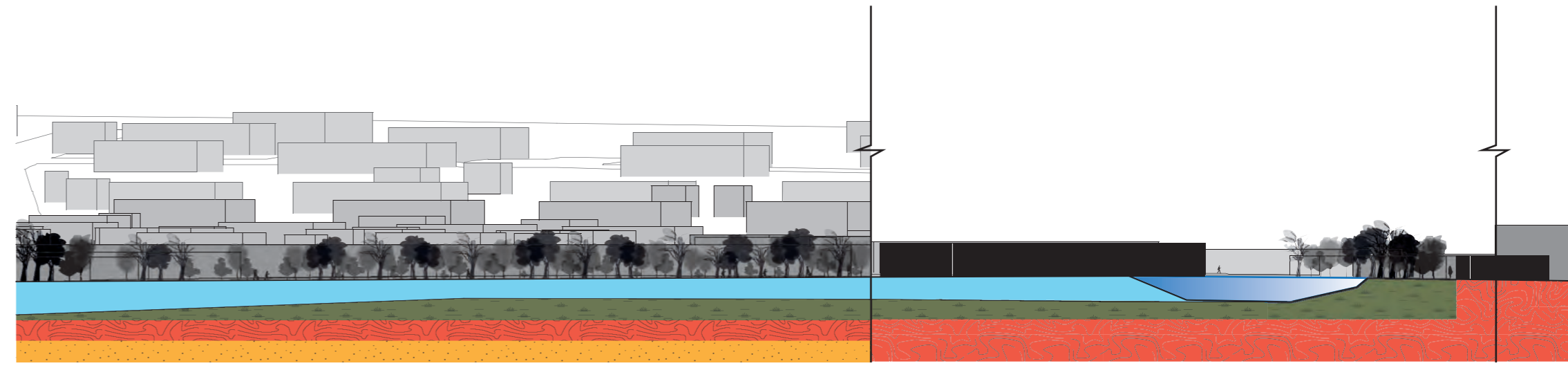


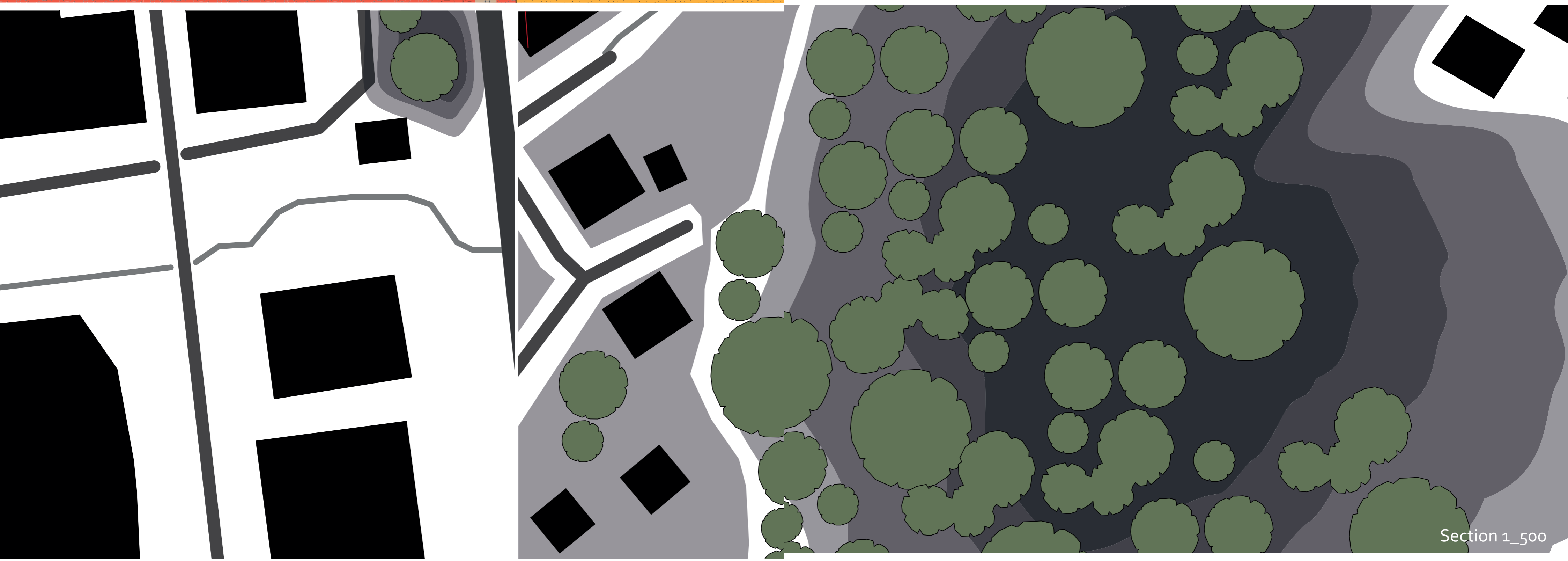
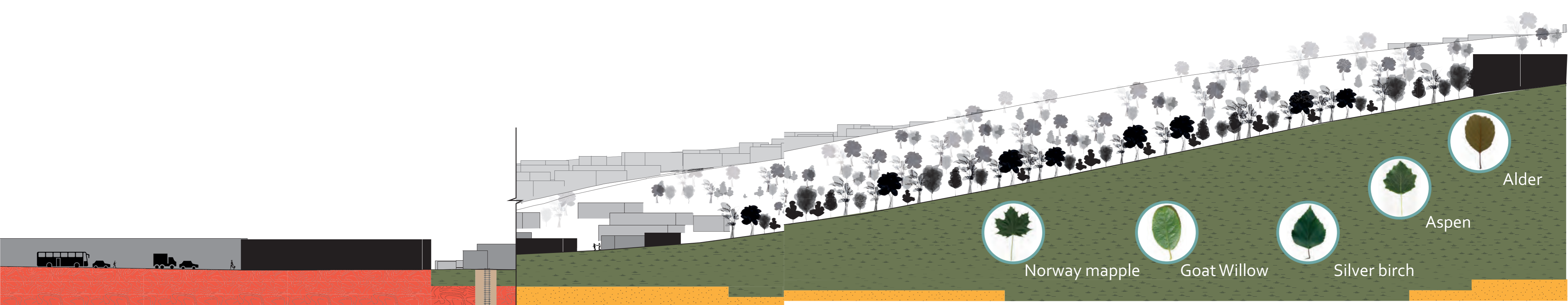
"KVILLEBÄCKEN RIVER THROUGH PLANTS"
VEGETATION RECOLLECTED IN SITE VISIT



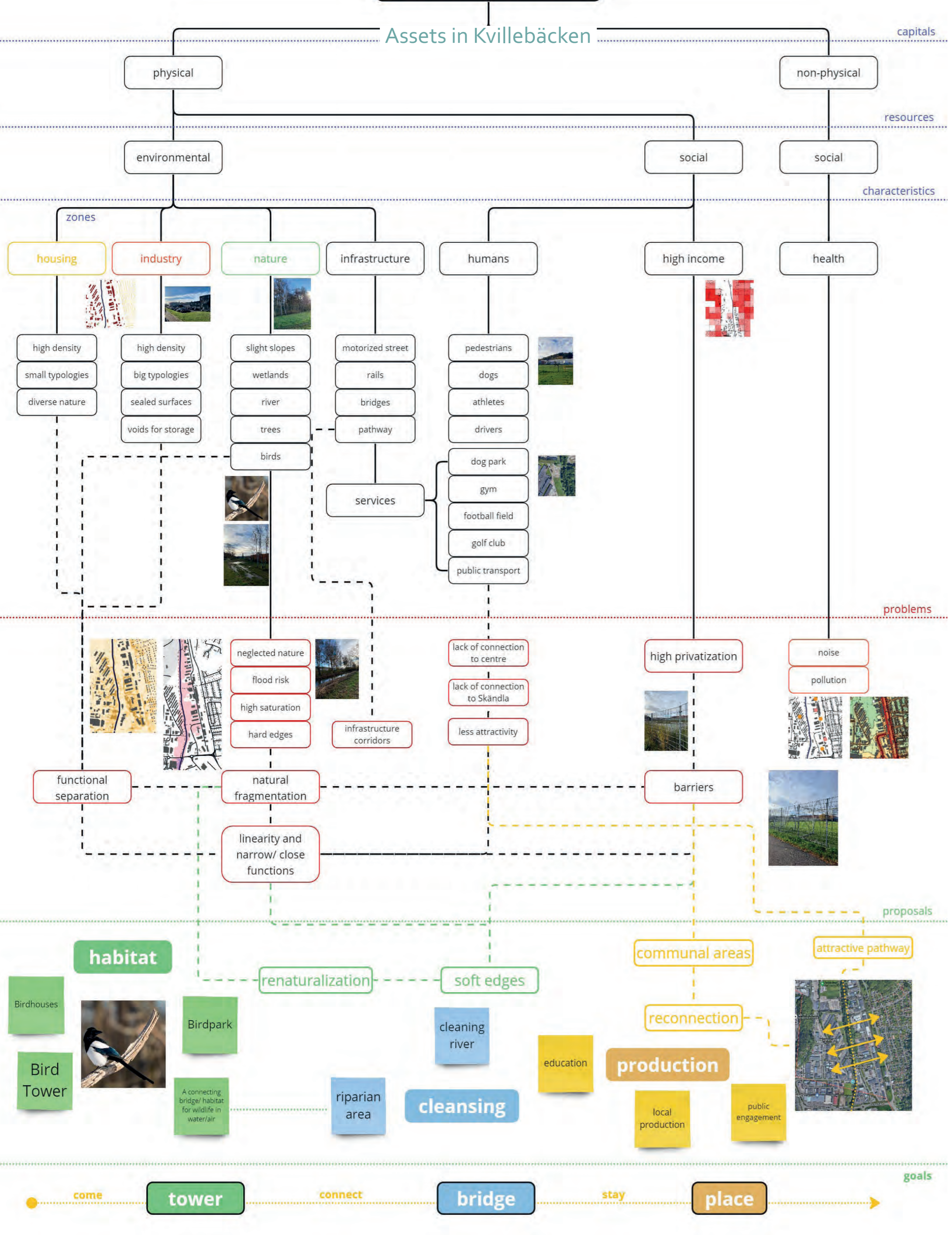


Kvillebäcken Transect Groups





Assets in Kvillebäcken

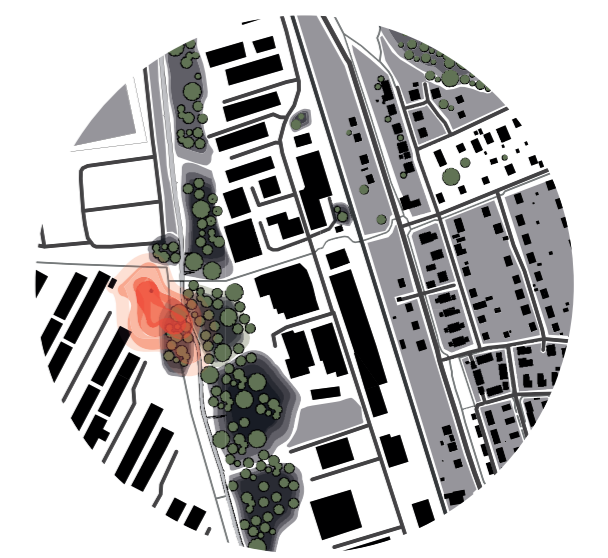


URBAN STÄTTA

KVILLEBÄCKEN RIVER | URBAN PROTOTYPES
 KARLA PATRICIA OLVERA COVARRUBIAS

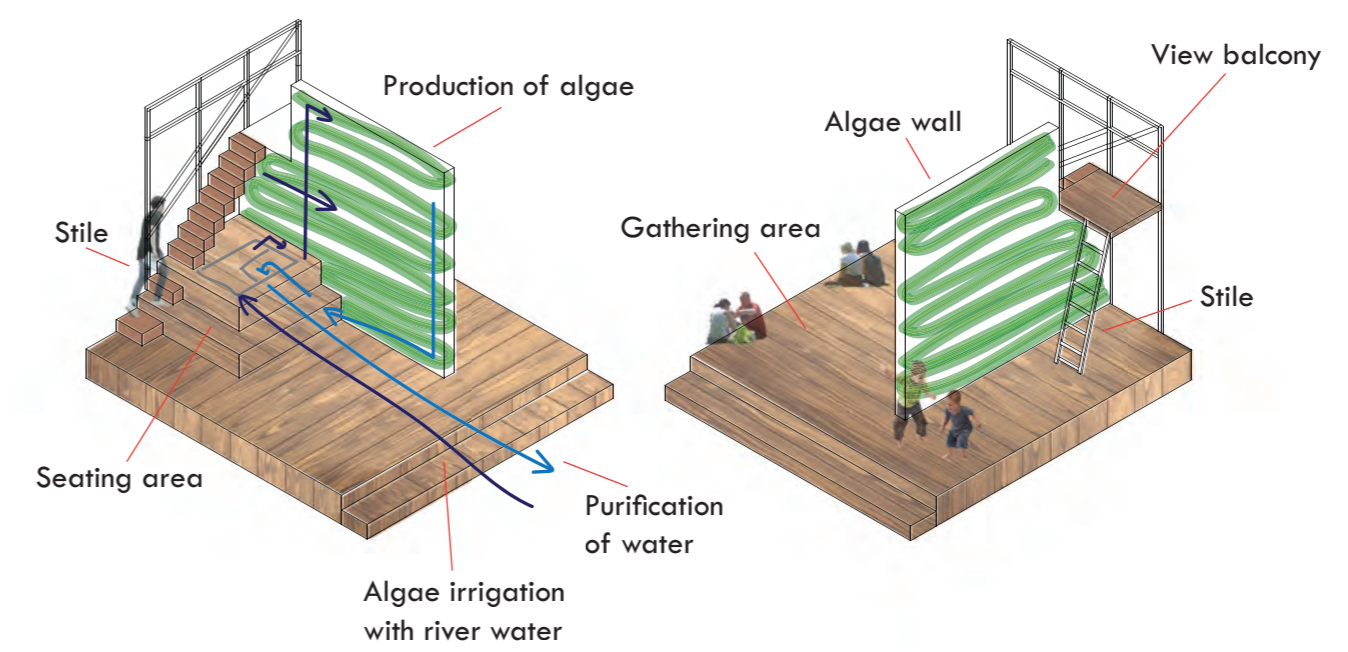


STÄTTA/STILE:
 Structure or opening that provides passage for humans over or through a boundary. Common forms include steps, ladders, or narrow gaps.



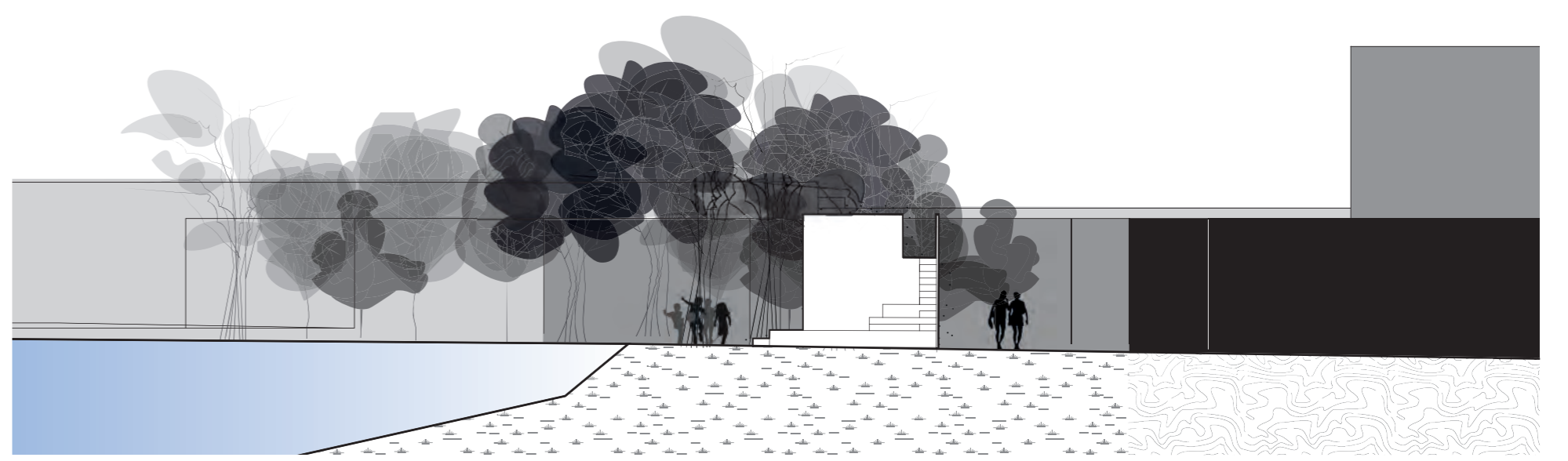
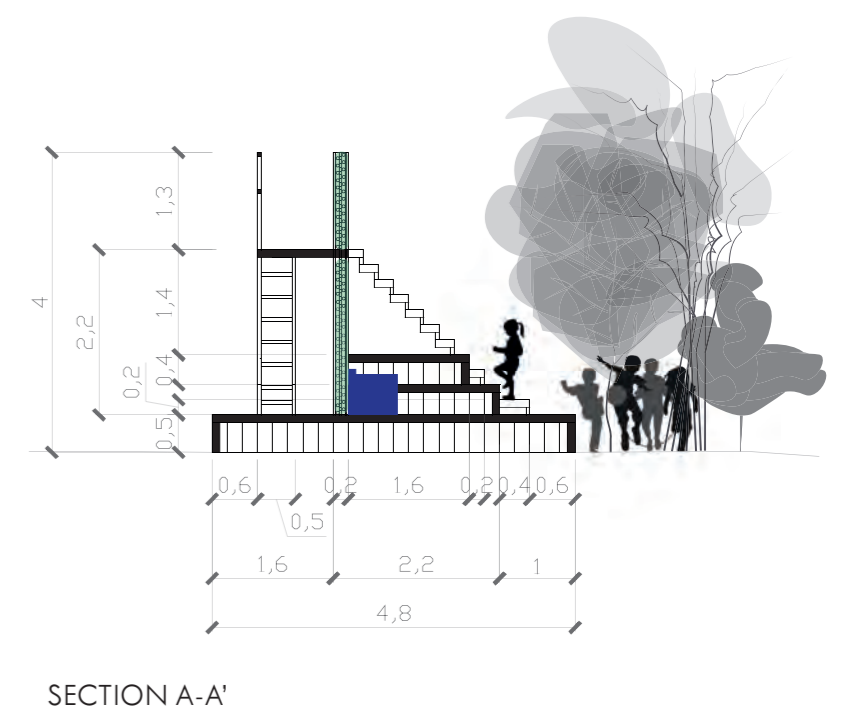
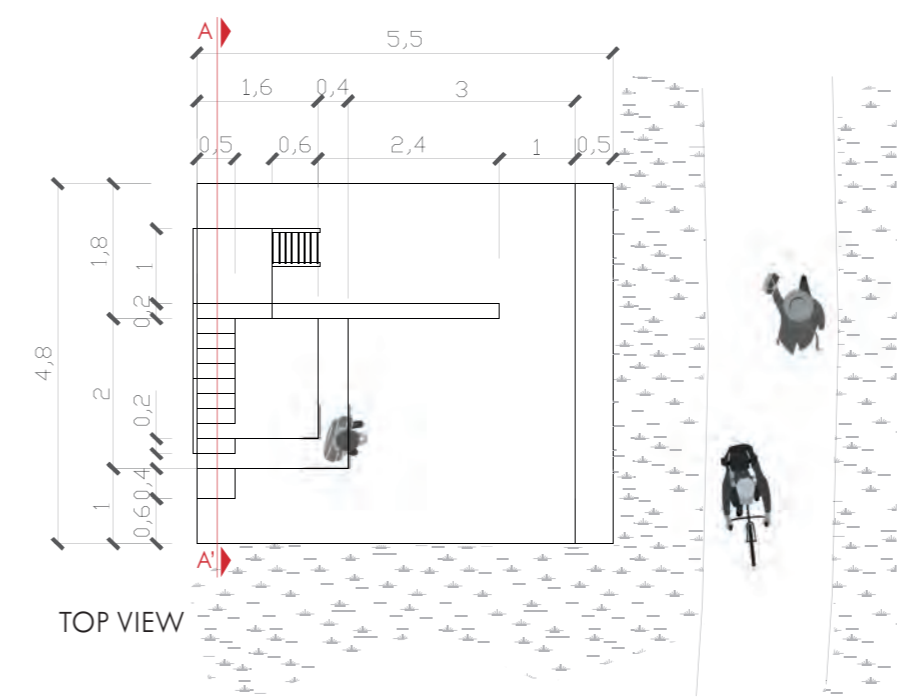
Placement of the prototype

“Urban stätta is a prototype focused on the creation and appropriation of public space, generating a sense of community, play and meeting between residents of nearby neighborhoods and pedestrians who pass along the river”.



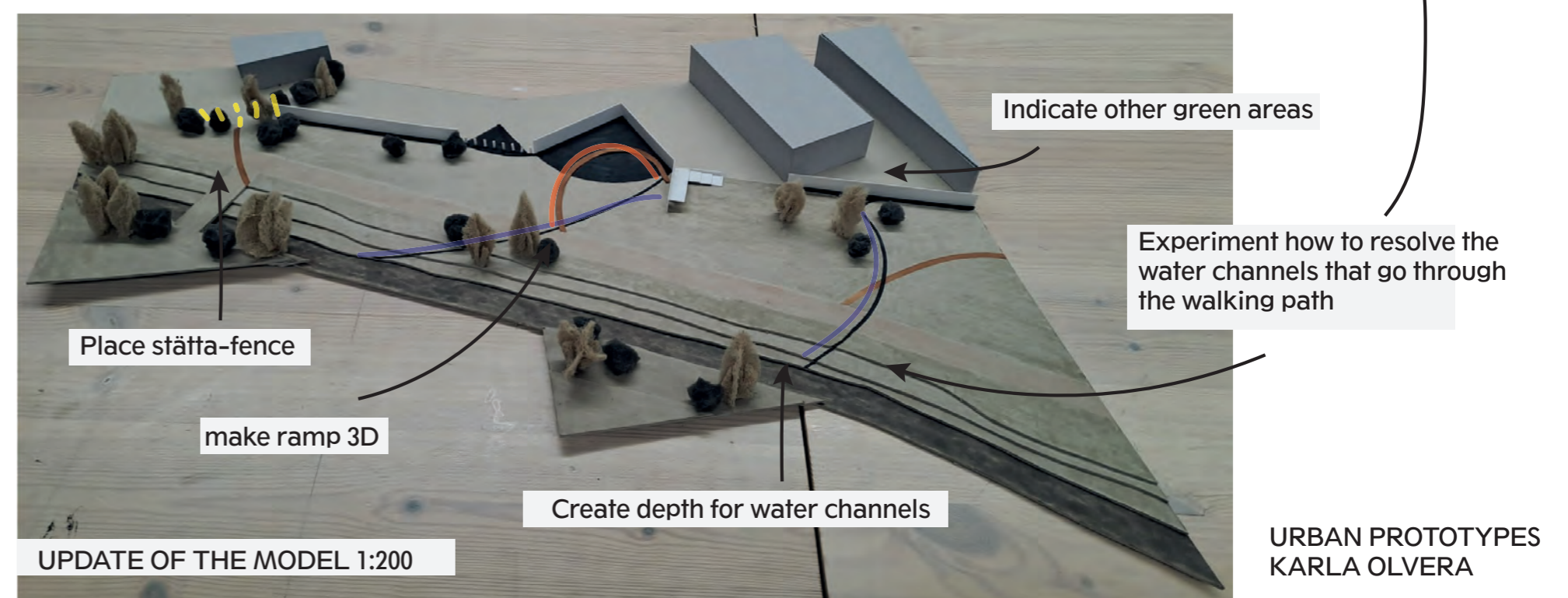
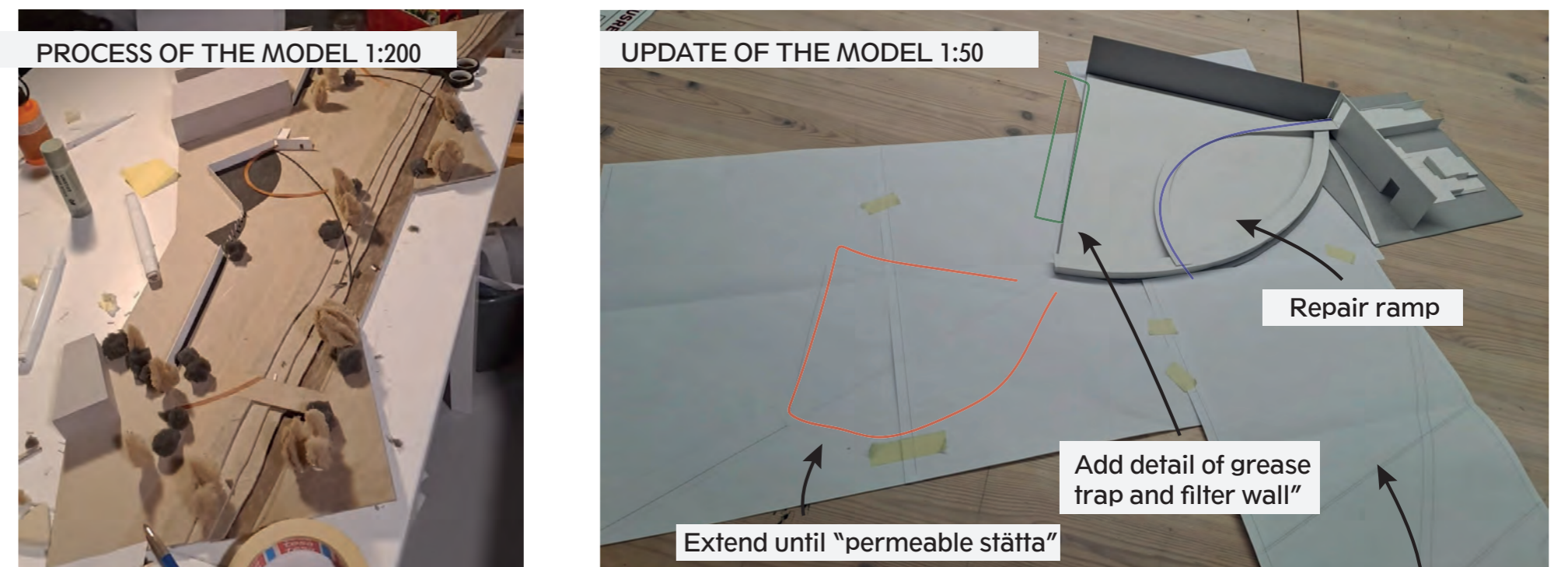
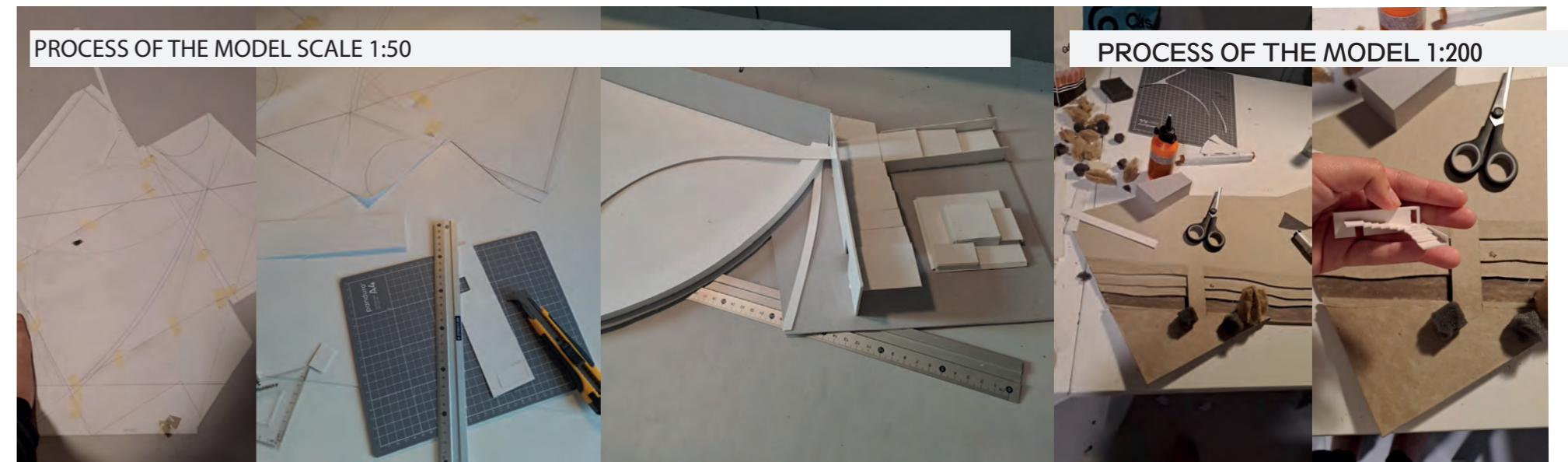
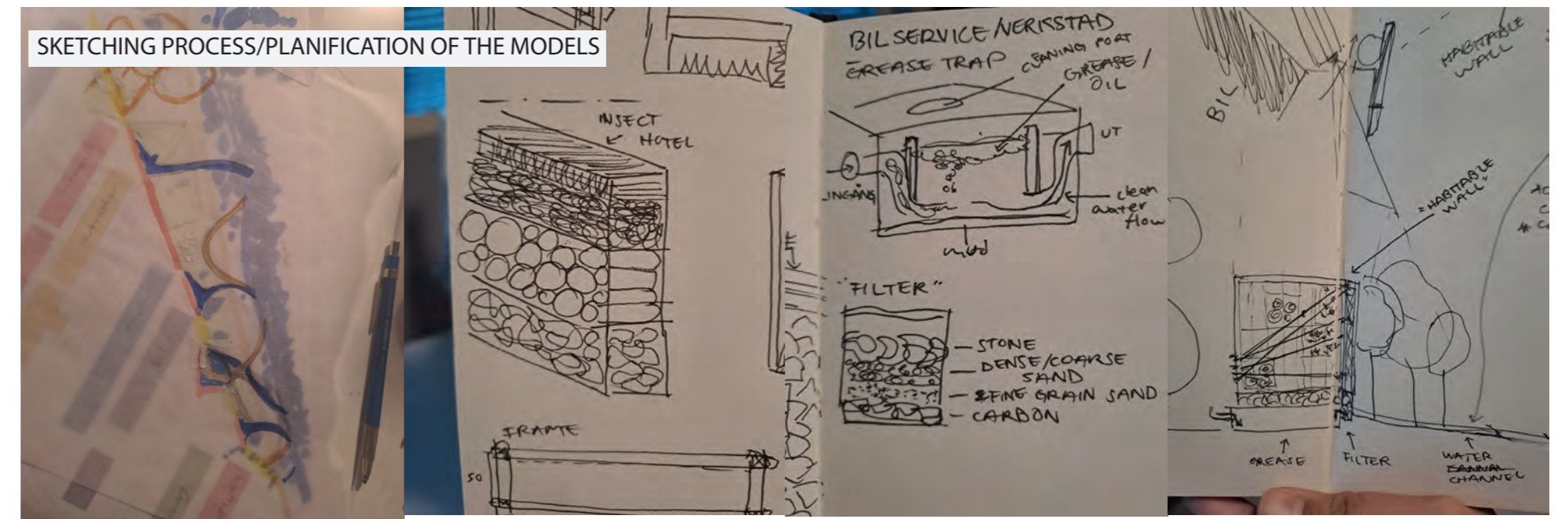
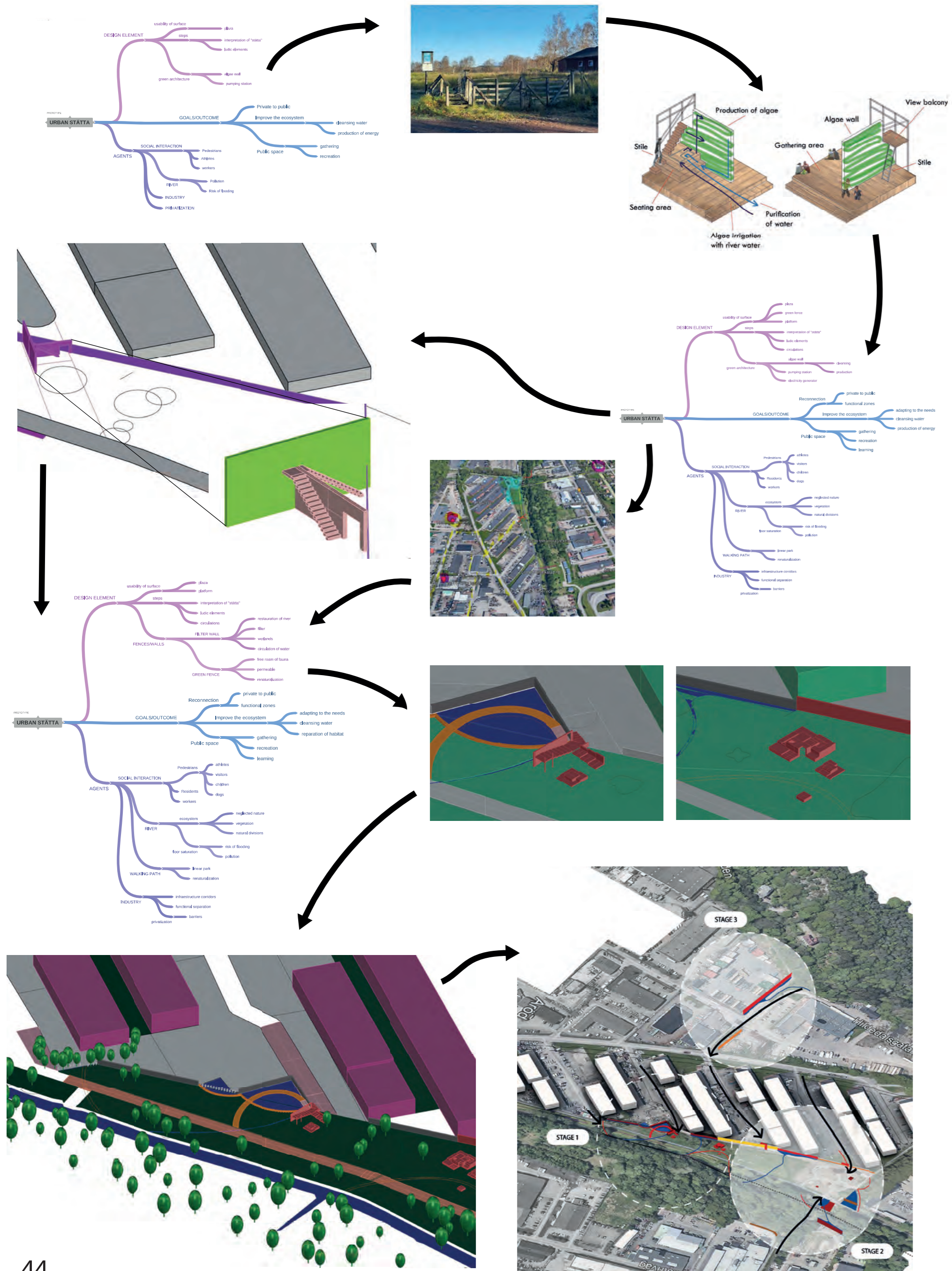
DESIGN INTENTIONS:
 -Production of energy and cleansing of water through cultivation of algae.
 -Public space for sitting and gathering.
 -Recreation and learning area.
 -Discourse on privatization of the river (Golf Club)

- | | |
|--------------------------|---------------|
| AGENTS | ACTORS |
| Infrastructure corridors | Pedestrians |
| Neglected nature | Residents |
| High privatization | Children |
| Functional Separation | Athletes |
| Barriers | Dogs |
| Pollution | |



URBAN STÄTTA EVOLUTIONARY TREE

Karla Olvera



URBAN PROTOTYPES
KARLA OLVERA



"KVILLEBÄCKEN RIVER THROUGH PLANTS"
VEGETATION RECOLLECTED IN SITE VISIT