THE VILLAGE OF SPRINGS

Enhancing landscape values of Tushemisht, Albania.
Towards a sustainable recreational and urban development.









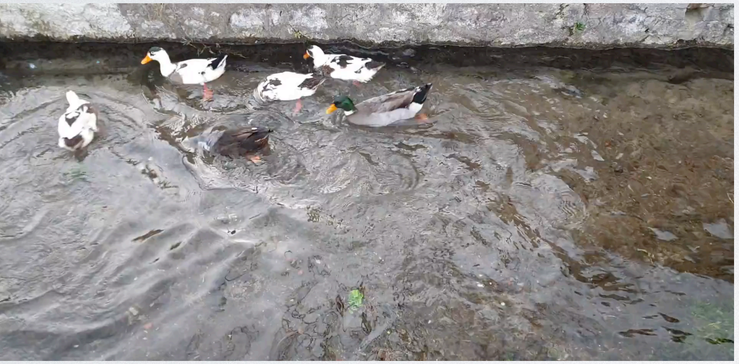


Lake Ohrid

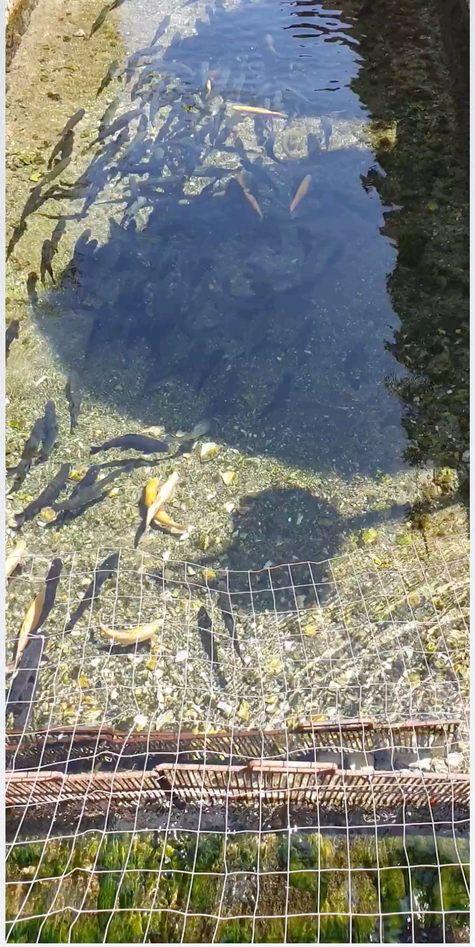


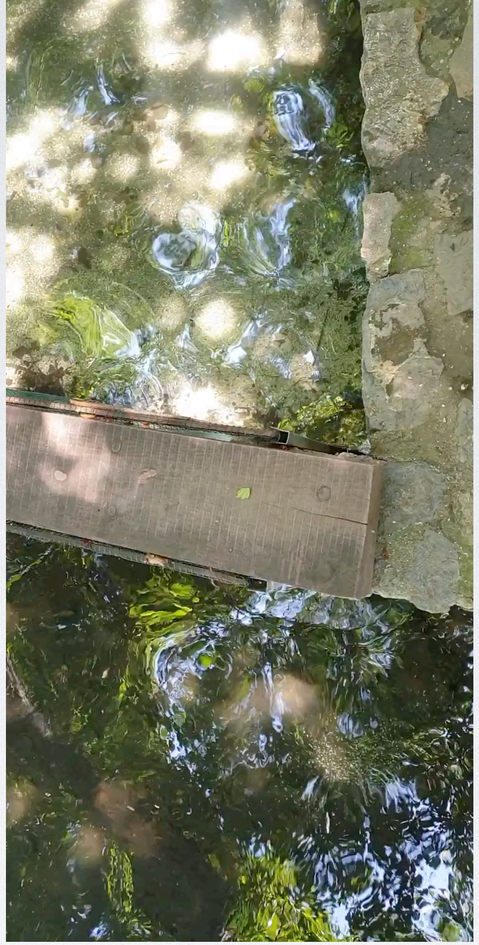






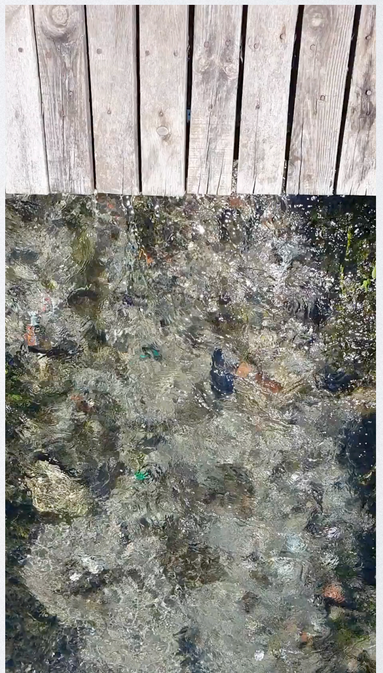






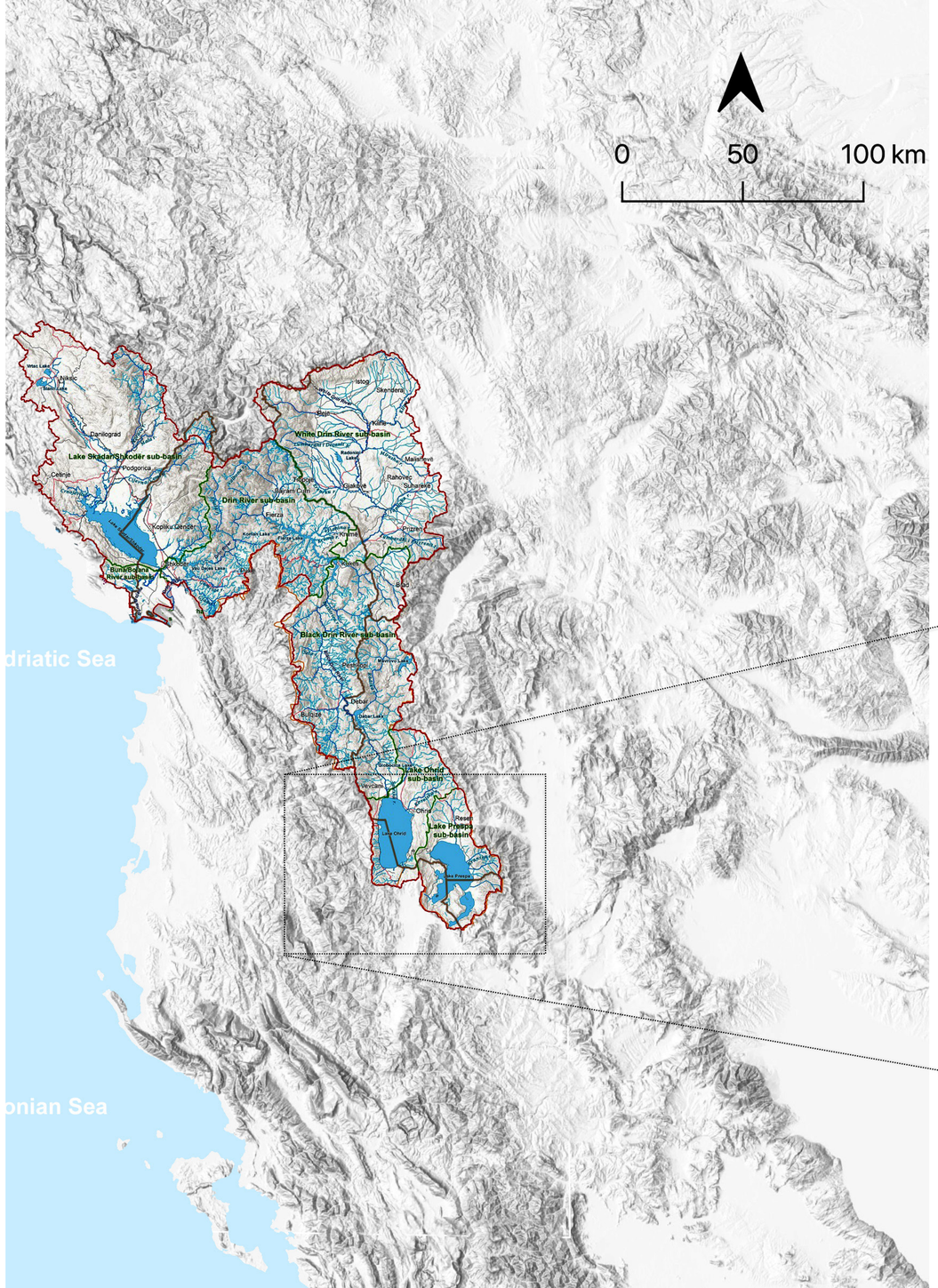


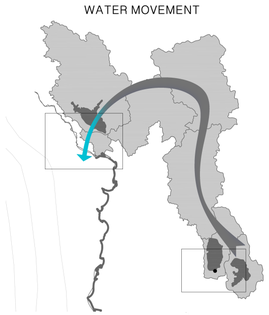




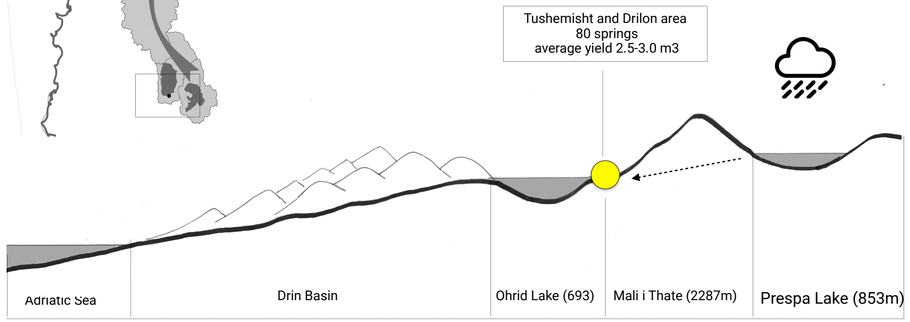


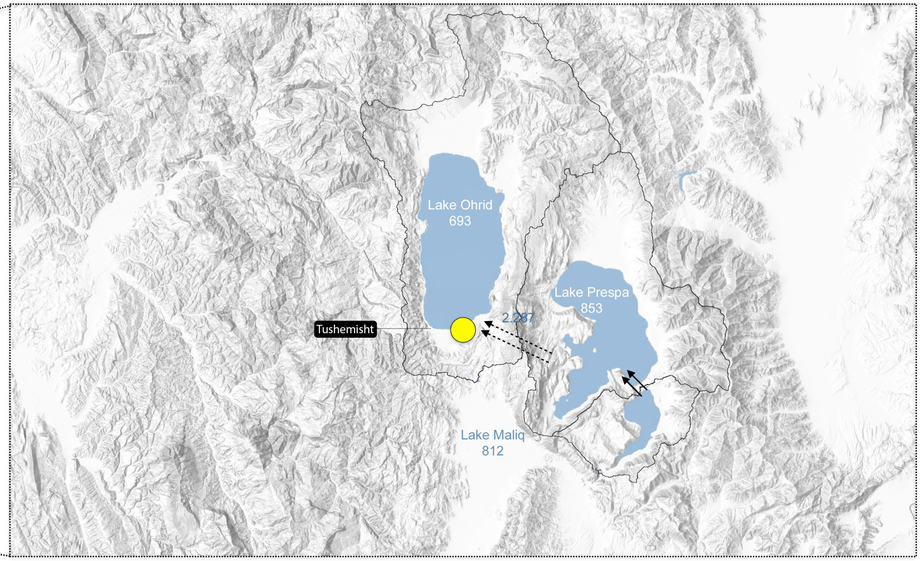


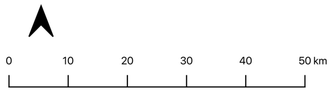




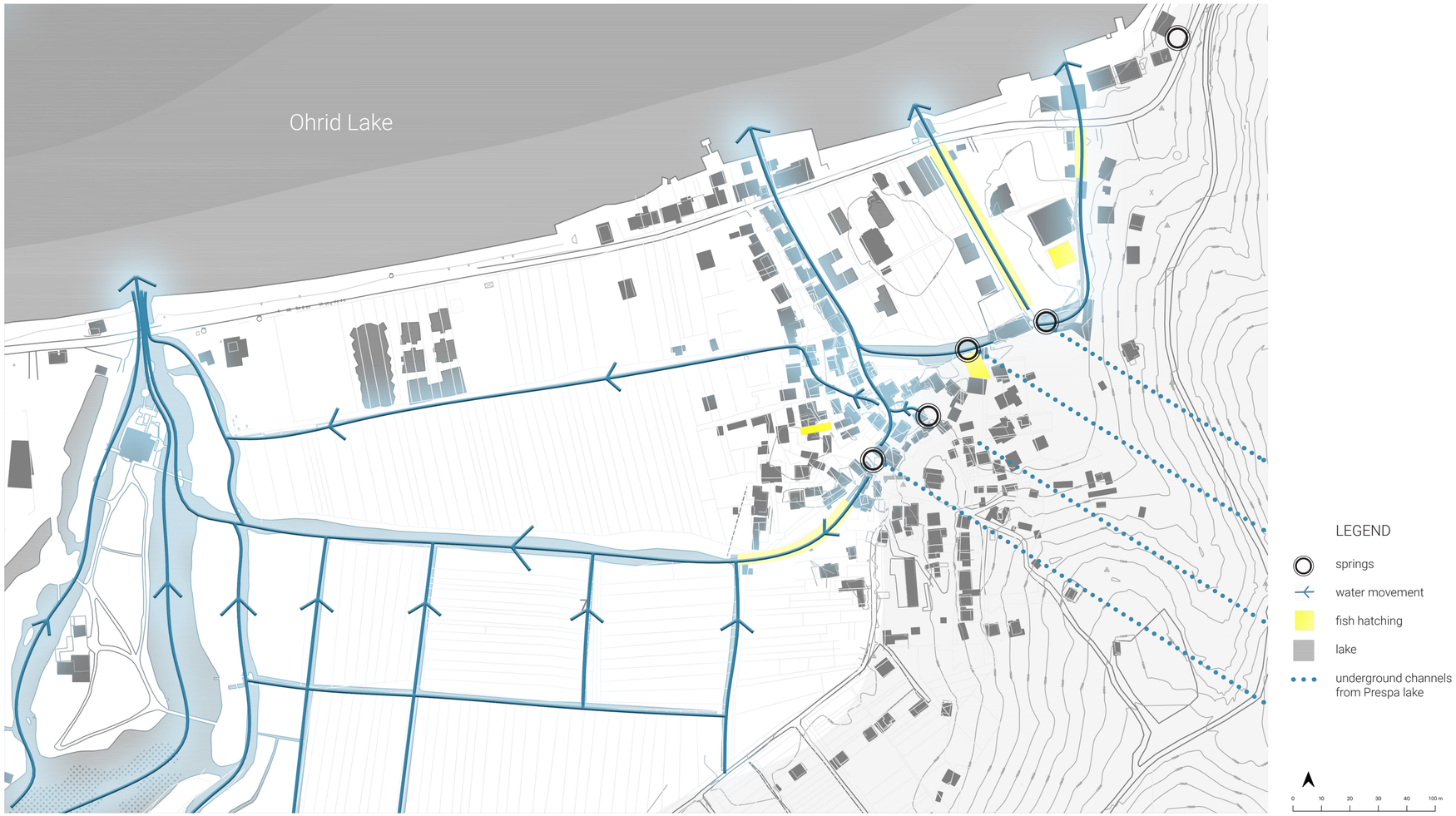
PRESPA-OHRID TRANSBOUNDARY RESERVE







water bodies
underground channels
sluices



WATER SOURCES AND FLOWS



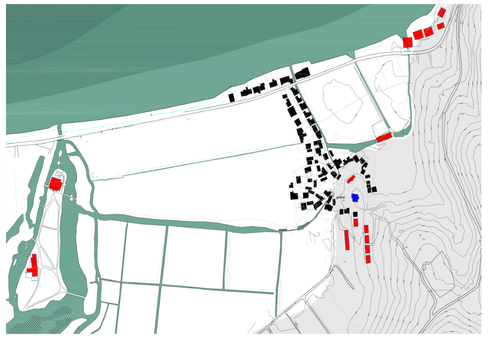
1800



1800-1850



1850-1969



1969-1990

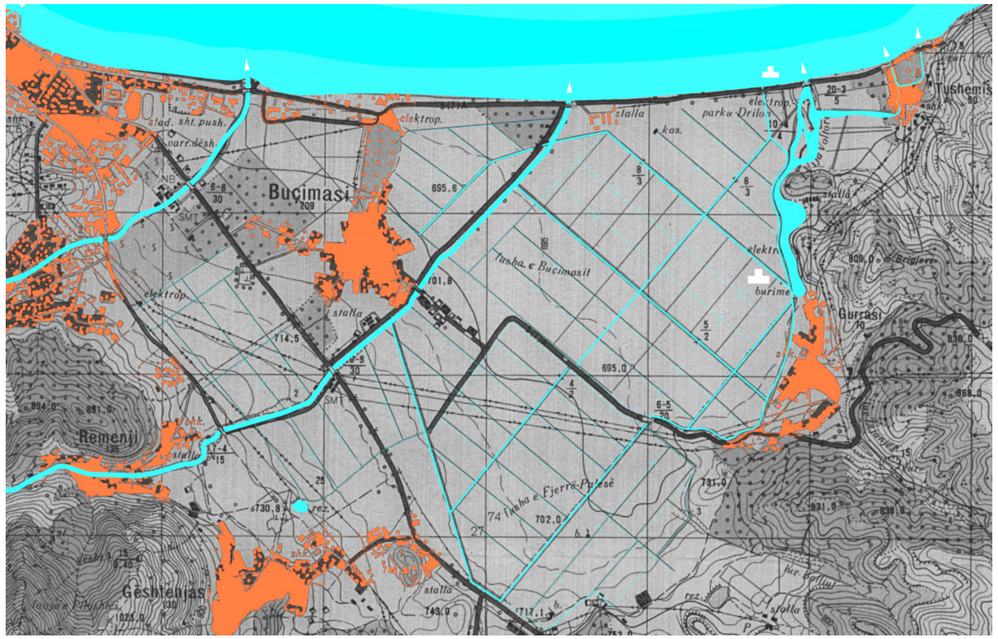


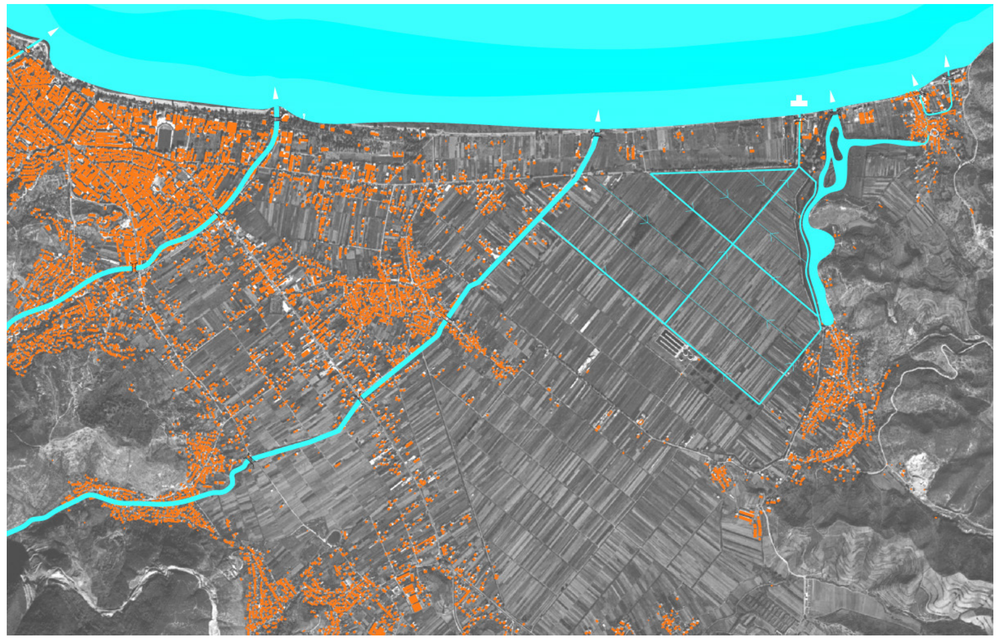
1990-2005



2005-2020

HISTORICAL DEVELOPMENTS





POGRADEC VALLEY 1979 - 2019

PROBLEM STATEMENT

As the result and the fast and uncontrolled growth, in the past 20 years,







Tushemisht 1980









Tushemisht 2020



Apartment blocks built in the last 5 years

RESEARCH QUESTIONS

1. How to create a **sustainable** urban and recreational **development** of Tushemisht village and surroundings while preserving and enhancing its **landscape features**, mostly related to **water** elements and its sensorial qualities such as the lake shore, fresh water springs and ditches, agriculture fields and the surrounding hills?

2. How could Tushemisht village **water streams** and **water elements** be used as one important leading **principle** for design?

3. How to make the existing presence of **water** such as lake, springs, canals and streams more **expressive**, working with recreational needs and human perception?

- what policy instruments and spatial interventions would be necessary to guarantee a sustainable development of Tushemisht village?

- what is the existing relation between water and the units of housing in the intact parts of the village and how could it be preserved and enhanced in the possible future developments?

SITE ANALYSIS

SITE ANALYSIS

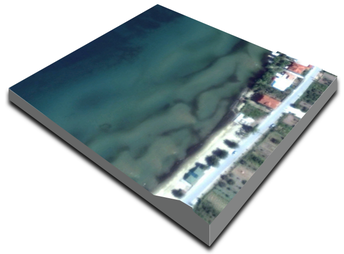
LANDSCAPE TYPOLOGY
SENSORIAL MAPPING
WALKING EXPERIMENT
PATTERNS (PLOT ORIENTATION & SIZES)
WATERWAYS TYPOLOGY

HOUSING TYPOLOGY
WATER-HOUSE RELATION
TEXTURE & COLOUR PALETTE
DENSITY INDICATORS
WATER USES

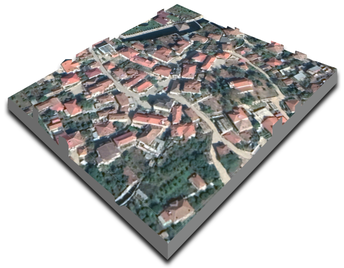
LANDSCAPE TYPOLOGIES



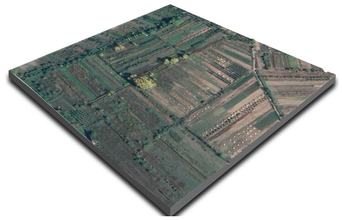
- The lake area and its coast represent the boundary between the inhabited area (humanity) and the immensity of the lake (nature) in its pure state. The lake shore area is most affected by rapid urbanisation. The lake shore is mainly sandy except for the eastern area where it joins the rocky hilly area.



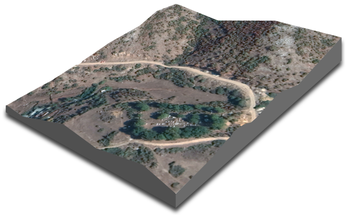
- The village is characterised by mainly 2 storey buildings distributed in an irregular manner. Freshwater canals flow through the village, oscillating from private to public space, creating the characteristic sound and smell of water. The area along the lake consists mainly of multi-family flats of 5-6 storeys for tourist use.



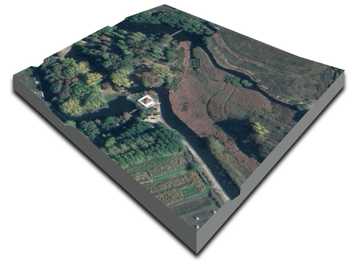
- The agricultural area, though affected by sporadic construction, still retains its former agricultural character where the main crops cultivated are cereals, orchards and medicinal plants.



- The hilly area that surrounds the village creates the impression of an enclosed space and has an impressive view over Lake Ohrid.



- The River area located at the mouth of the Drilon River has an idyllic character landscape with large aquatic surfaces reflecting the sky and weeping willows. The river has a dense hygrophilous vegetation and a very rich wildlife and incomparable natural beauty and scenery.






sequence No. 01


sequence No. 02


sequence No. 03


sequence No.04


sequence No. 05


sequence No. 06


sequence No. 07


sequence No. 08


sequence No. 09


sequence No. 10


sequence No. 11


sequence No. 12

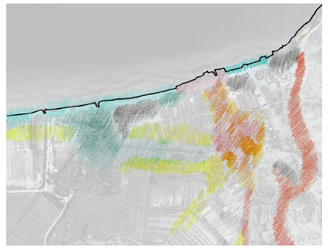

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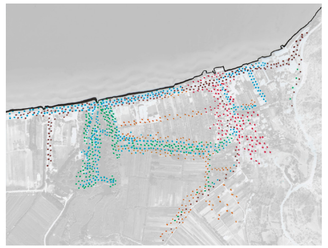

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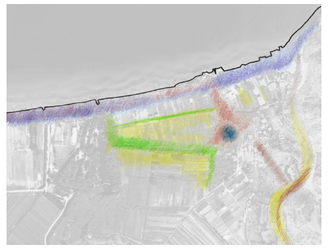
Sight.
Dominant colors are divided into two groups, human and natural. In the first group are the colors of the lake, the greenery and the yellow soil of the hill, in contrast to the built part.



Smell.
The aromas in the village of Tushemisht vary greatly according to the season or even the hours of the day. However, what remains in the memory of a visitor of the village are the aromas of fruit trees as well as the characteristic aroma of water, especially in the green areas. The road area along the lake is quite polluted especially in the beach period in the two months of July and August.



Touch and Taste
This map shows the different main types of surface encountered while walking through the village. From soft natural surfaces to hard ones like asphalt or stone alleys. The sense of taste is also an important part of sensory mapping for this village where fruit trees occupy a large area.



Sound.
The soundscape of the village consists of the sounds of the lake waves and the sound of water flowing through the canals of the village. In the agricultural part and as close as possible to the river bank, the sounds of birds are heard, breaking the tranquility of this area. People's voices are the next layer of sound.



HOUSING TYPOLOGIES





HOUSE-WATER RELATION



Lake



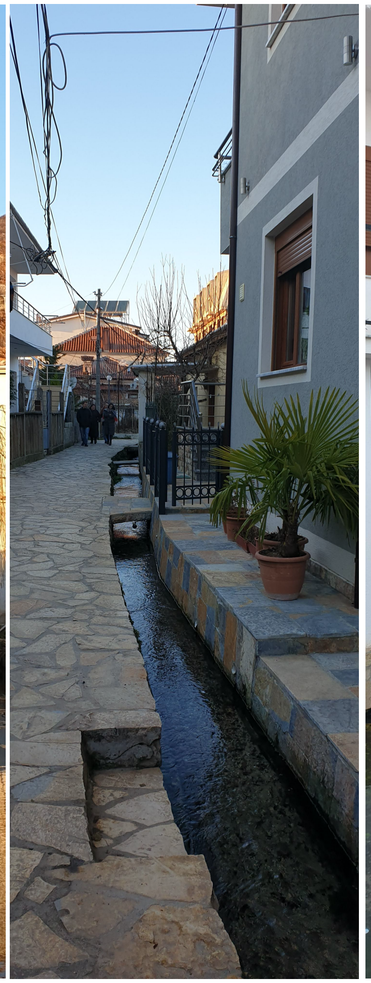
Brook



Canal



Pond



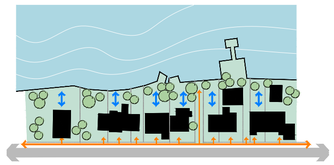
Trench

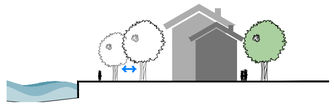


Fountain

the lake



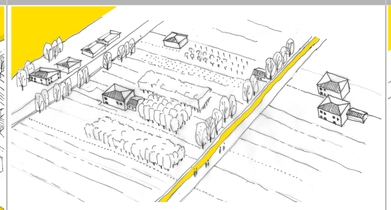


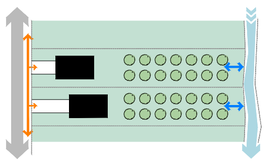


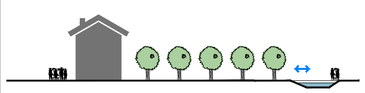
Data and information about the typology			
Number of floors			
Building use	Housing	Hotel	Market
Water use	Fishing	Recreation	
Accessibility	Pedestrian	Automobile	Boat
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)			



the brook



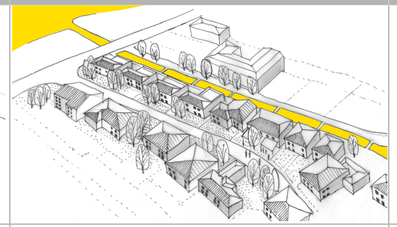


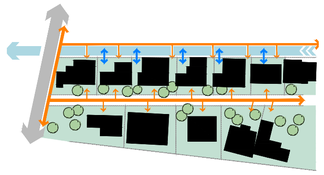


Data and information about the typology			
Number of floors	2 floors		
Building use	Housing	-	-
Water use	Buffer	-	Irrigation
Accessibility	Pedestrian	Automobile	-
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)			
Footprint	m²		



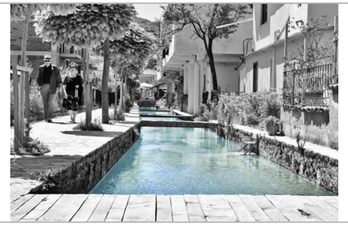
the canal



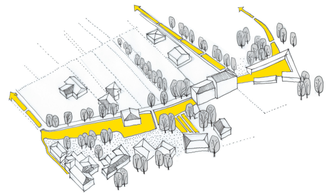


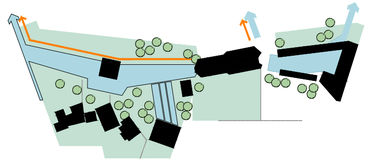


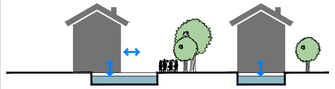
Data and information about the typology			
Number of floors	2 floors		
Building use	Housing	-	-
Water use	Buffer	Recreation	Domestic use
Accessibility	Pedestrian	-	-
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)			
Footprint	m²		



the pond



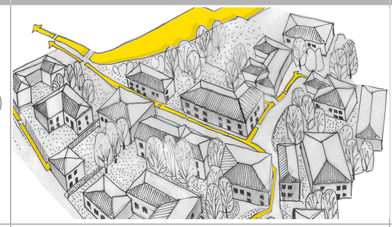


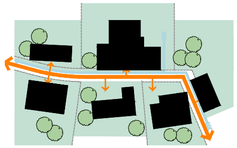


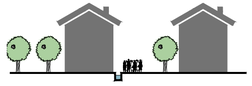
Data and information about the typology			
Number of floors	2-3 floors		
Building use	Housing	Hotel	-
Water use	Fish Hatchery	Recreation	Domestic use
Accessibility	Pedestrian	-	-
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)			
Footprint	m²		



the trench



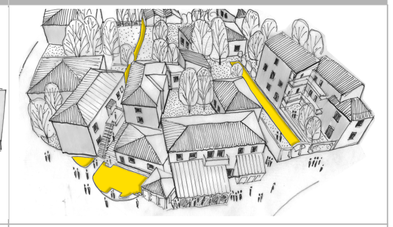


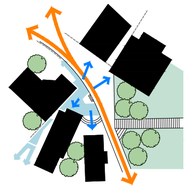


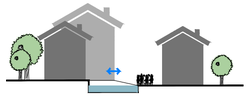
Data and information about the typology			
Number of floors	2-3 floors		
Building use	Housing	-	-
Water use	Border	Recreation	Domestic use
Accessibility	Pedestrian	-	-
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)			
Footprint	m²		



the fountain



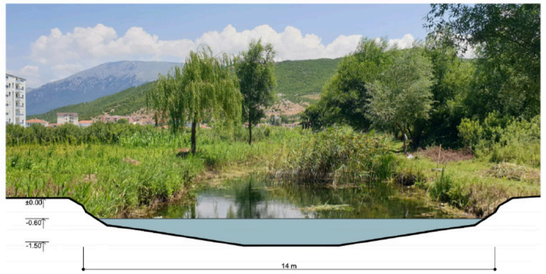


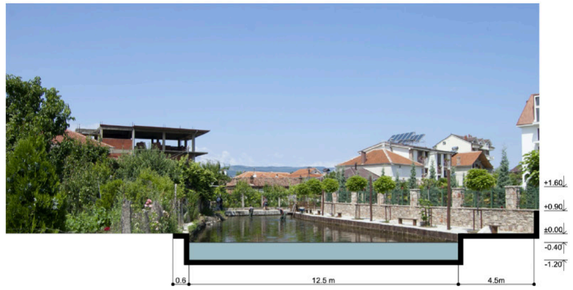


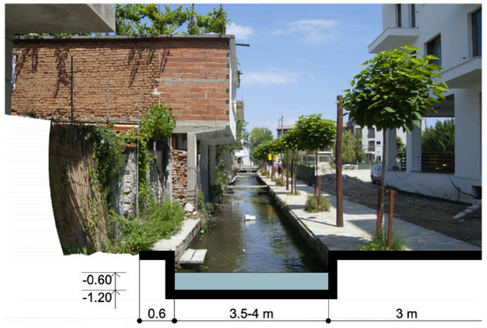
Data and information about the typology			
Number of floors	2-3 floors		
Building use	Housing	Hotel	-
Water use	Drinking	Recreation	Domestic use
Accessibility	Pedestrian	-	-
Permeability			
Vegetation			
OSR (Open Space Ratio)			
FSI (Floor Space Index)			
BCR (Building Coverage Ratio)	0.65		
Footprint	3162 m²		



WATERWAYS


±0.00
-0.60
-1.50
14 m


+1.60
+0.90
±0.00
-0.40
-1.20
0.6
12.5 m
4.5m


-0.60
-1.20
0.6
3.5-4 m
3 m


0.4
4.2 m

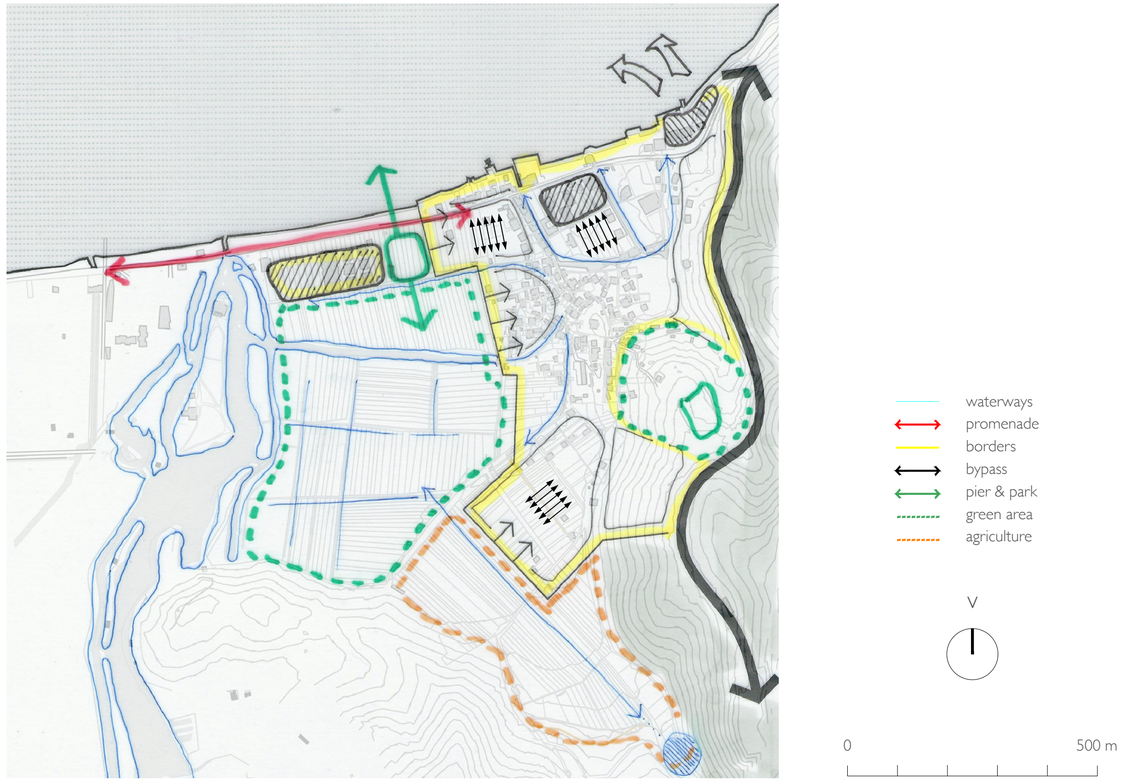

1.2 m


0.3
2.8 m


0.9m
0.6
2 m
3.5 m

FIRST STEP INTO THE DESIGN

1. General urban structure
2. Strengthening of water presence and its relation to housing units.
3. Design guidelines with basic rules.
4. Preserving and enhancing pattern orientation.
5. New bypass.
6. The pier as a recreation facility.
7. The fruit park
8. Harbour as a transport and commercial hub.



DESIGN STRATEGY

- NEW VISION PLAN
  - GENERAL PLAN
  - WATER STRUCTURE & ROUTINGS
  - BORDERS
  - ROAD RELOCATION
- ZONING
  - RULES
  - TYPOLOGIES
- SPATIAL ELEMENTS
  - PROMENADE
  - PIER & POCKET PARK
  - FRUIT PARK
  - HABOUR

NEW VISION PLAN

Tushemisht 2050


Harbour
Pier
Green buffer area
Cemetery
New extension
Waterway
Reservoir
Agriculture fields
New road - Bypass
New road - Bypass
Historical centre
Pocket park
Promenade
Ring canal
Fruit park
Drilon National Park
Wetland

GENERAL PLAN

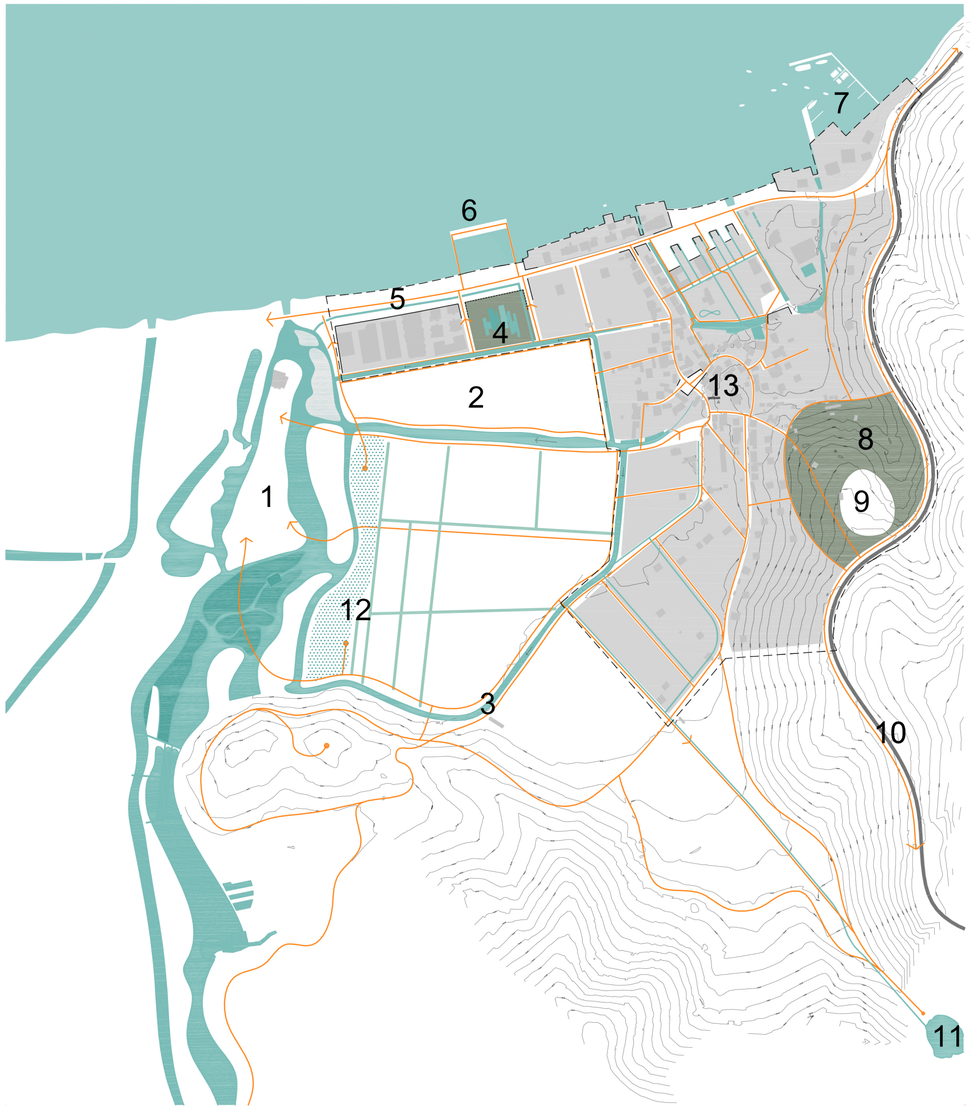


current plan

0 500



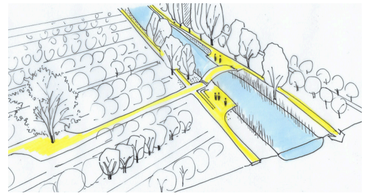
routing system



new plan for 2050







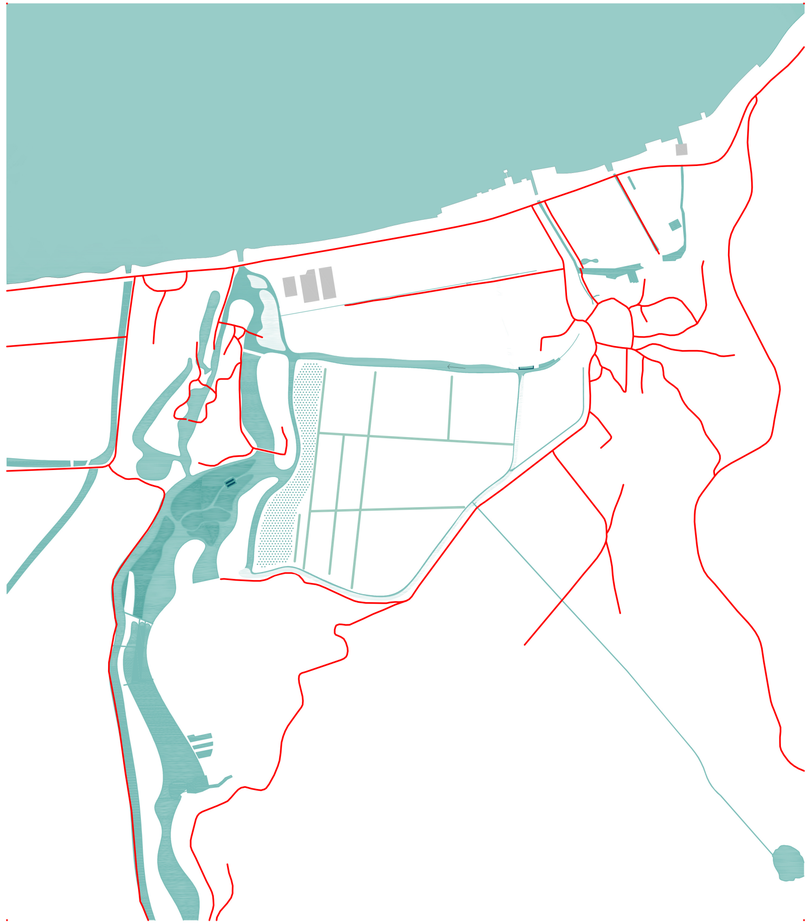
LEGEND

1	national park of Drilon
2	fruit park
3	ring canal
4	pocket park
5	promenade
6	pier
7	harbour
8	green area
9	cemetery
10	bypass
11	reservoir
12	watching tower
13	center
	border
	routing
	buffer zone
	urban area
	wetland
	waterways

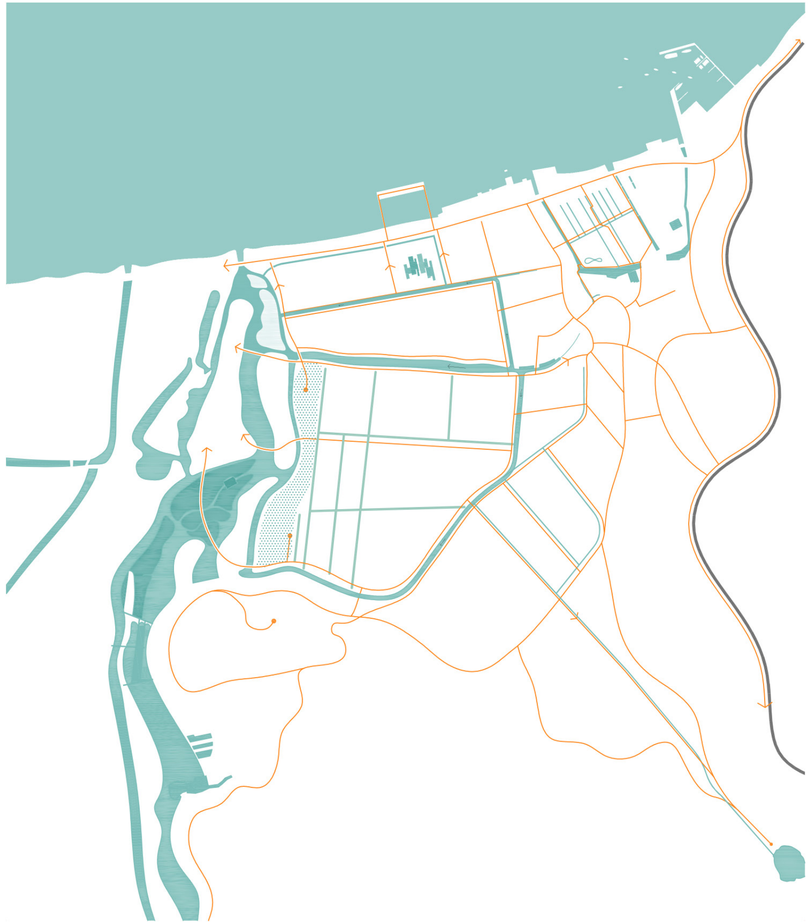
V

0 500 m

WATER STRUCTURES AND ROUTINGS



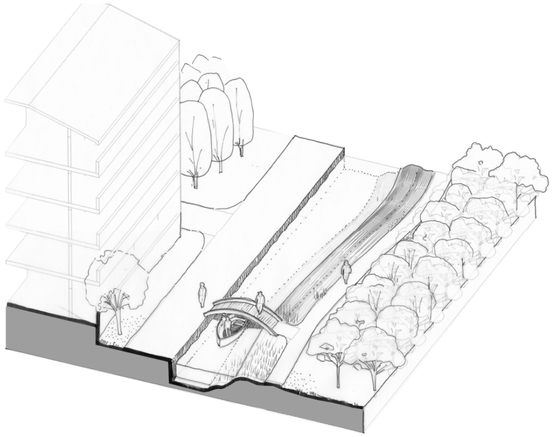
existing structure



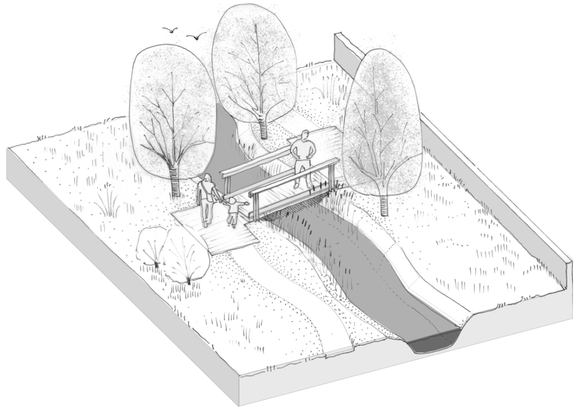
new proposed structure

NEW BORDERS OF THE VILLAGE

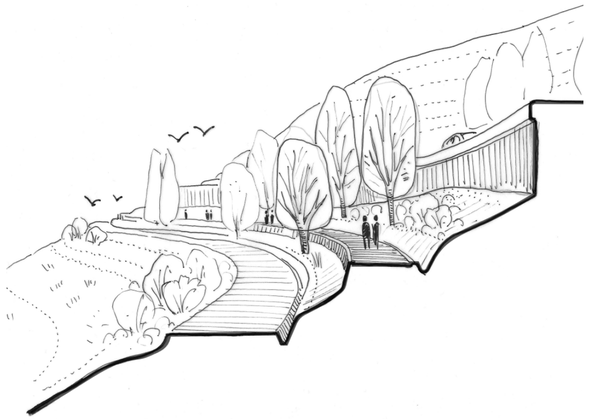




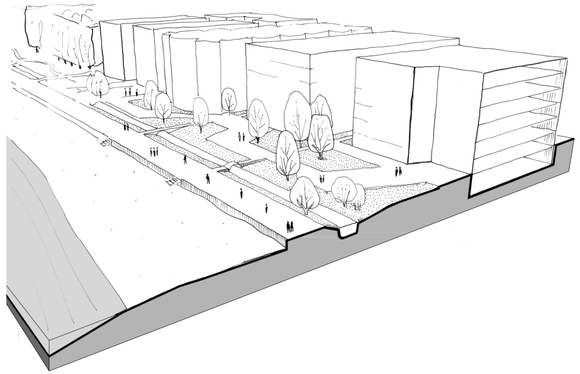
Section 1-1 showing the transition from urban (village) to the fruit park. From urban system to the man-made landscape. From one side the hard edge of the new proposed water ring, and the other side the soft, natural edge.



Section 2-2 showing the transition from urban (village) to the agriculture area. From urban system to the man-made landscape. This boarder of 10 meters width consists of a reactivated water line connecting the water reservoir with the new ring channel.

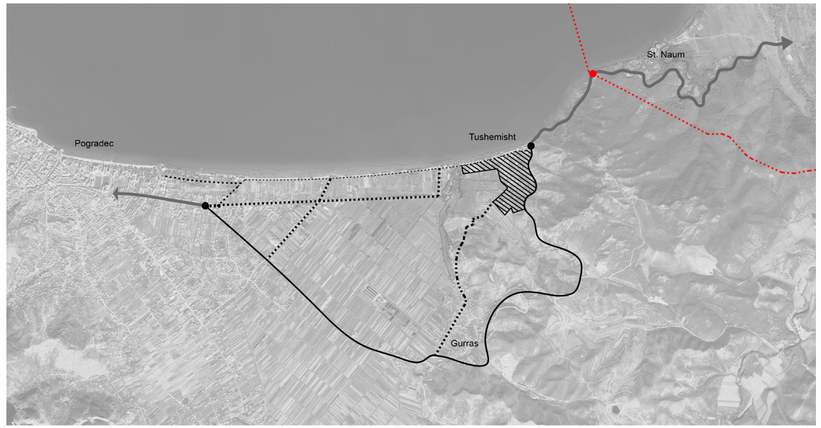


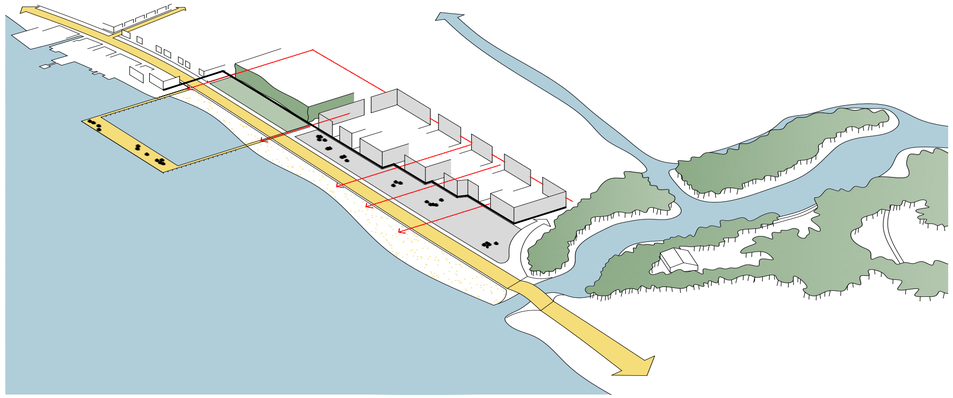
Section 3-3 showing the transition from urban (village) to the hilly area. From the urban system to natural landscape. This border consists of a line formed by the new road as well as a bicycle and pedestrian track.

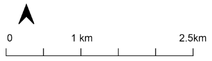


Section 4-4 showing the transition from the uban area (the village) to the lake are. From urban system to natural landscape.

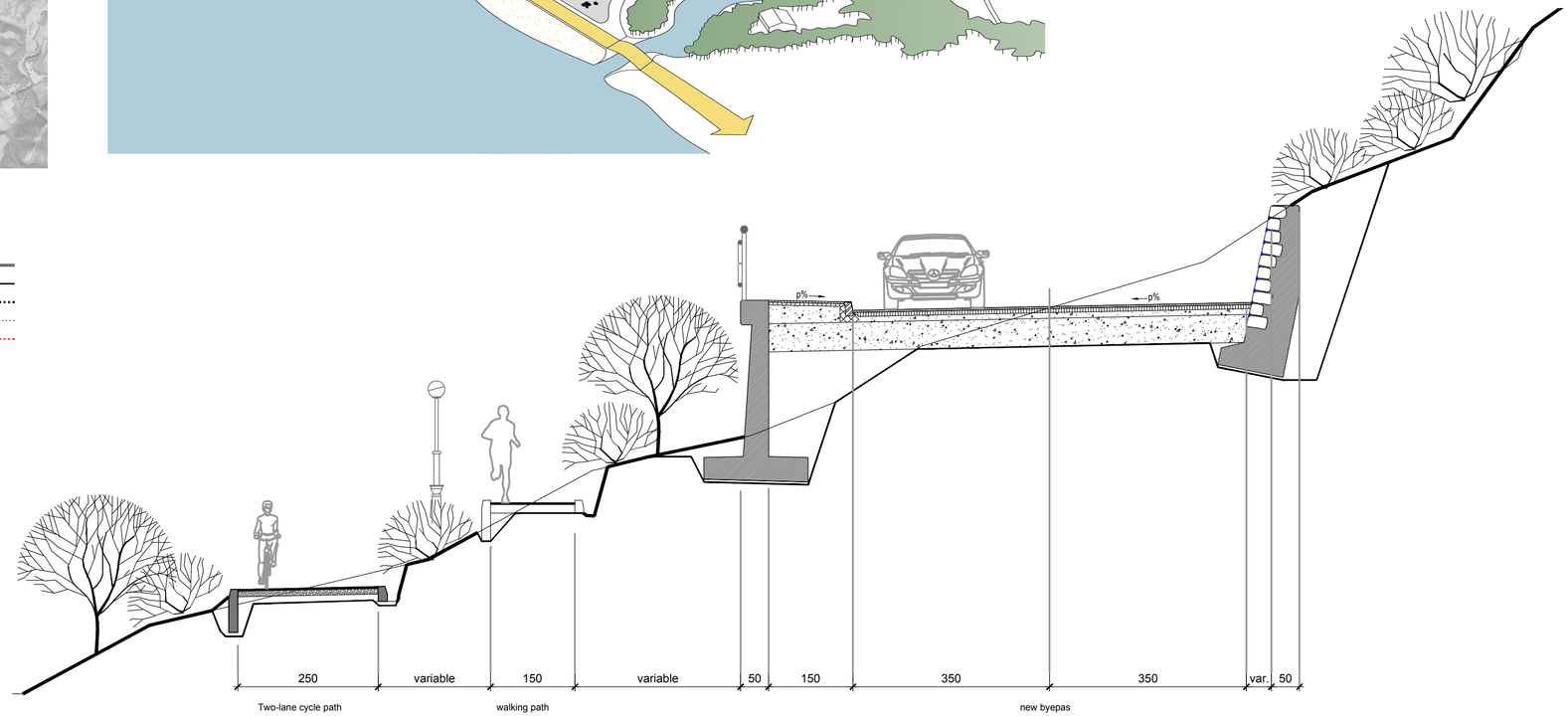
ROAD RELOCATION







Border crossing
New nodes
Current road
Bye pass
Low traffic
Promenade
Border crossing



ZONING

Rules & Typologies

ZONING PLAN, RULES AND TYPOLOGIES



- lake Ohrid
- nature (hilly area)
- agriculture area
- fruit park
- new urban boundary
- new bypass
- old center
- new public spaces
- historic area
- mixed use residential, multiple-family
- residential single-family, type A
- residential single-family, type B
- residential single-family, type C
- residential single-family, type D
- commercial, business
- cemetery
- green area
- national park
- promenade
- beach area
- future possible extension

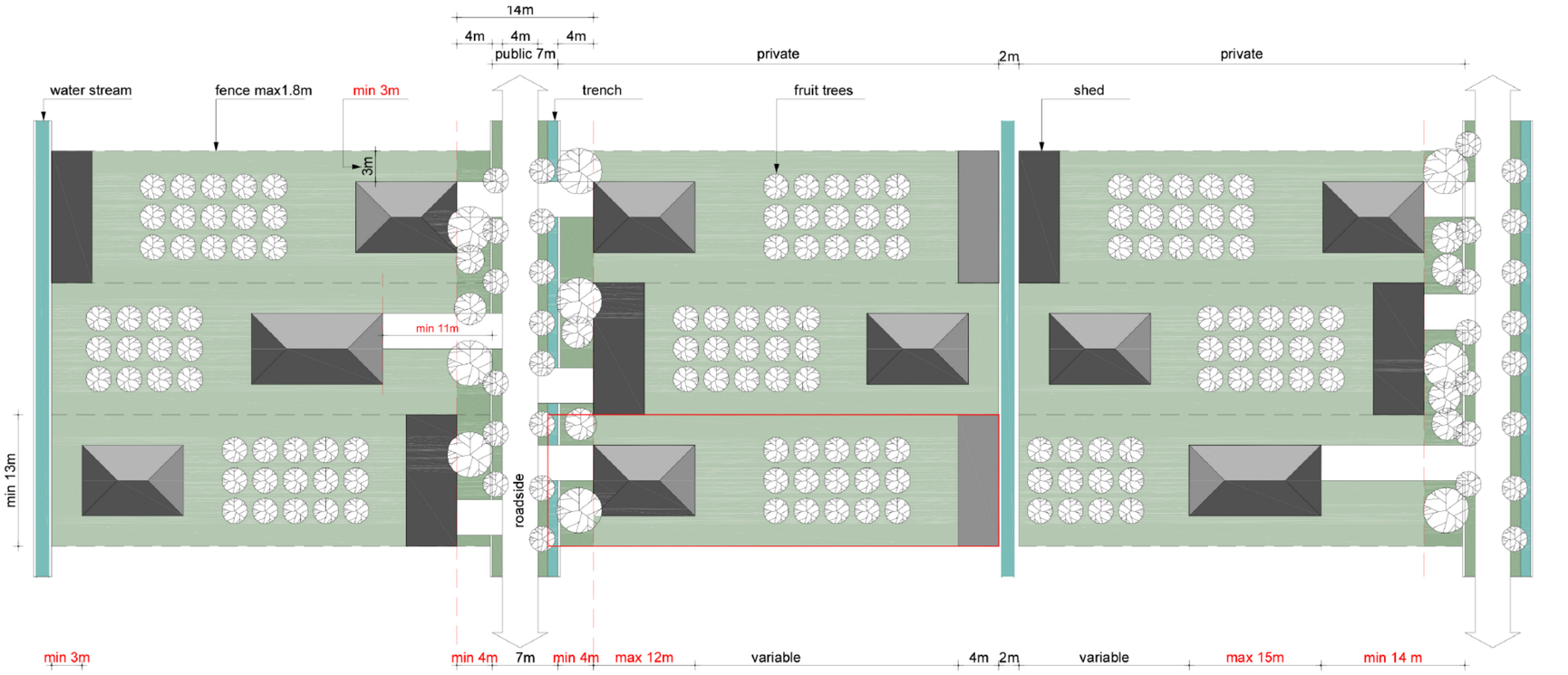
North

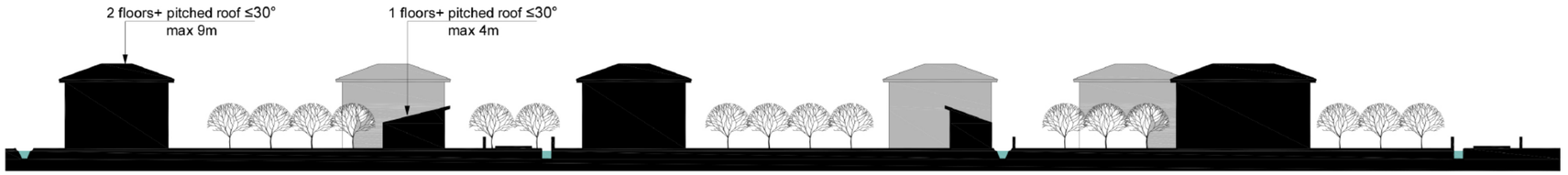
Type A

type A

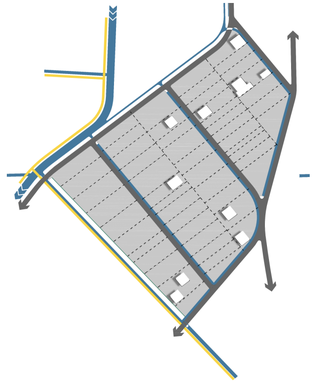
type B

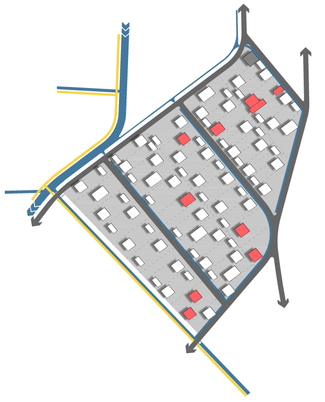
type C



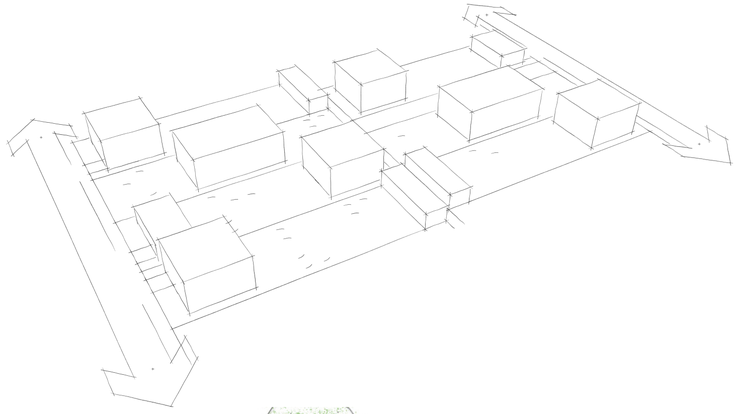


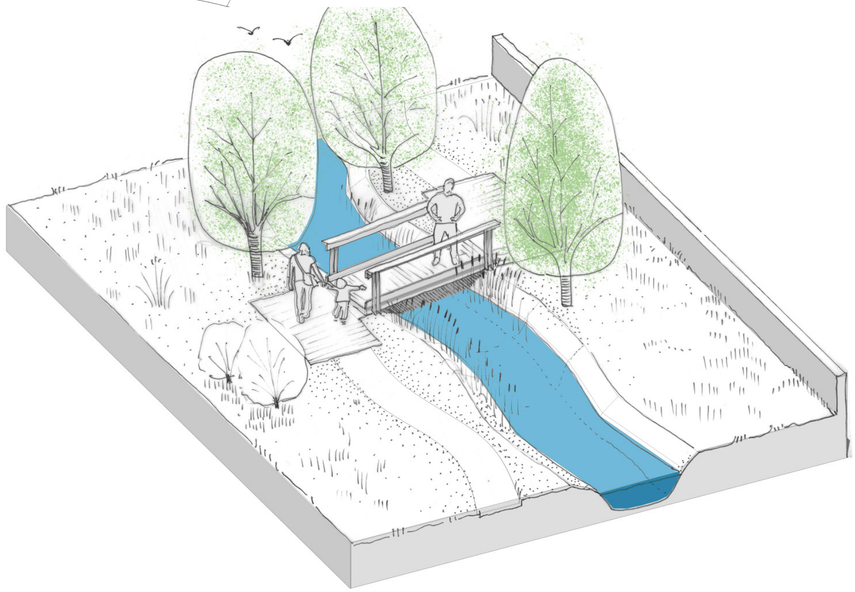


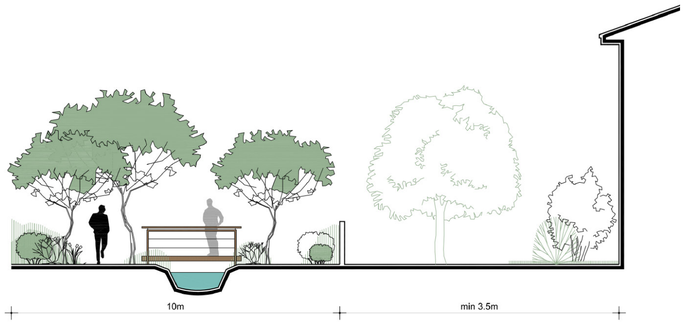


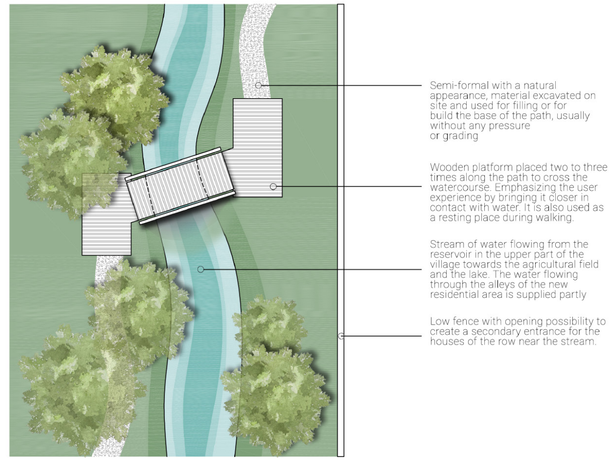


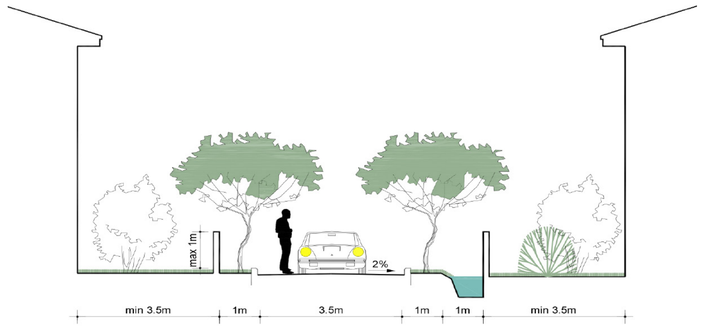
Details of public spaces as well as restrictions on distances.

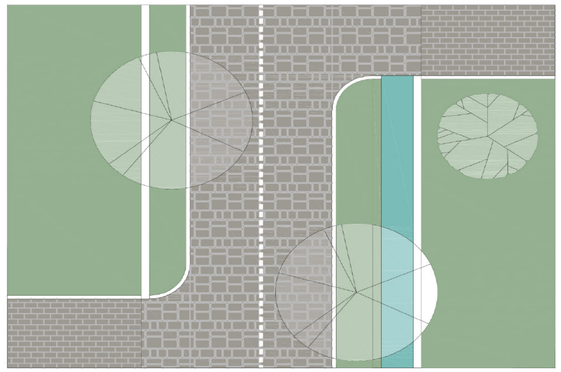






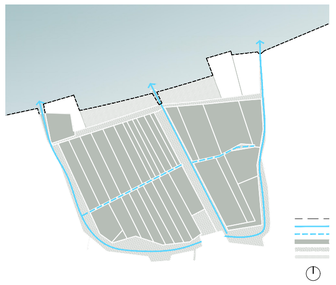




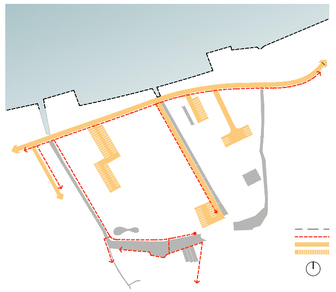


Type B

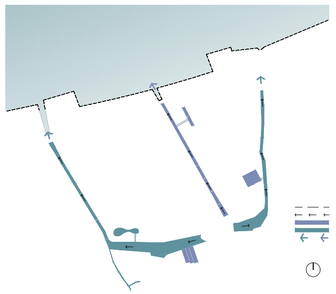


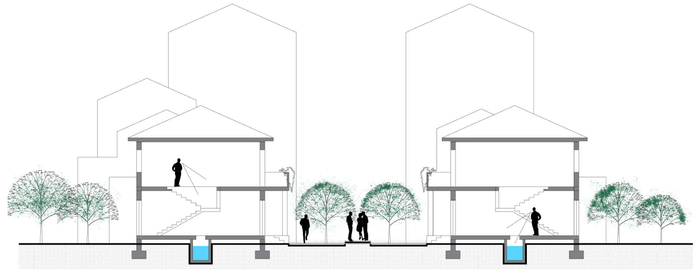








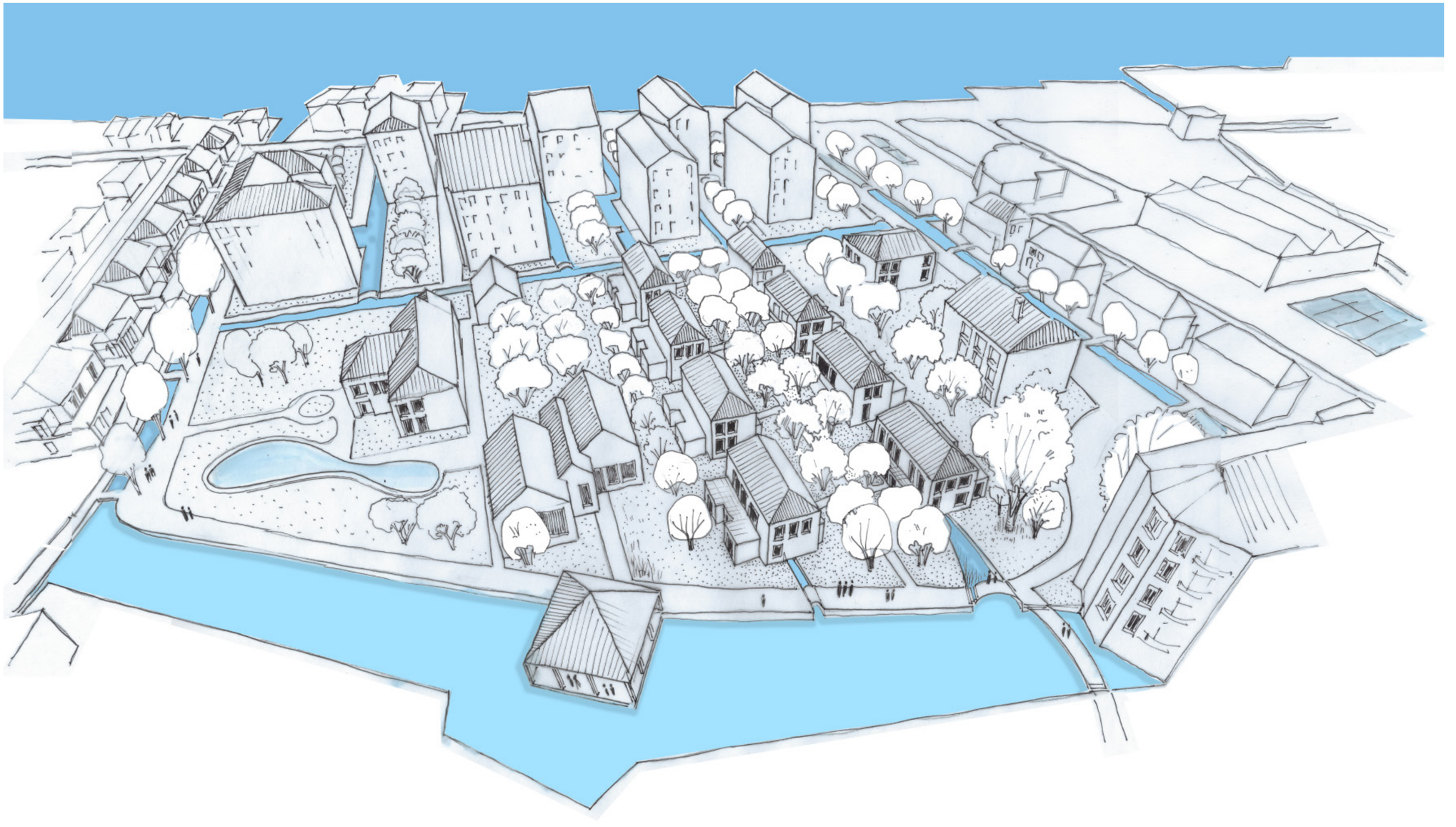




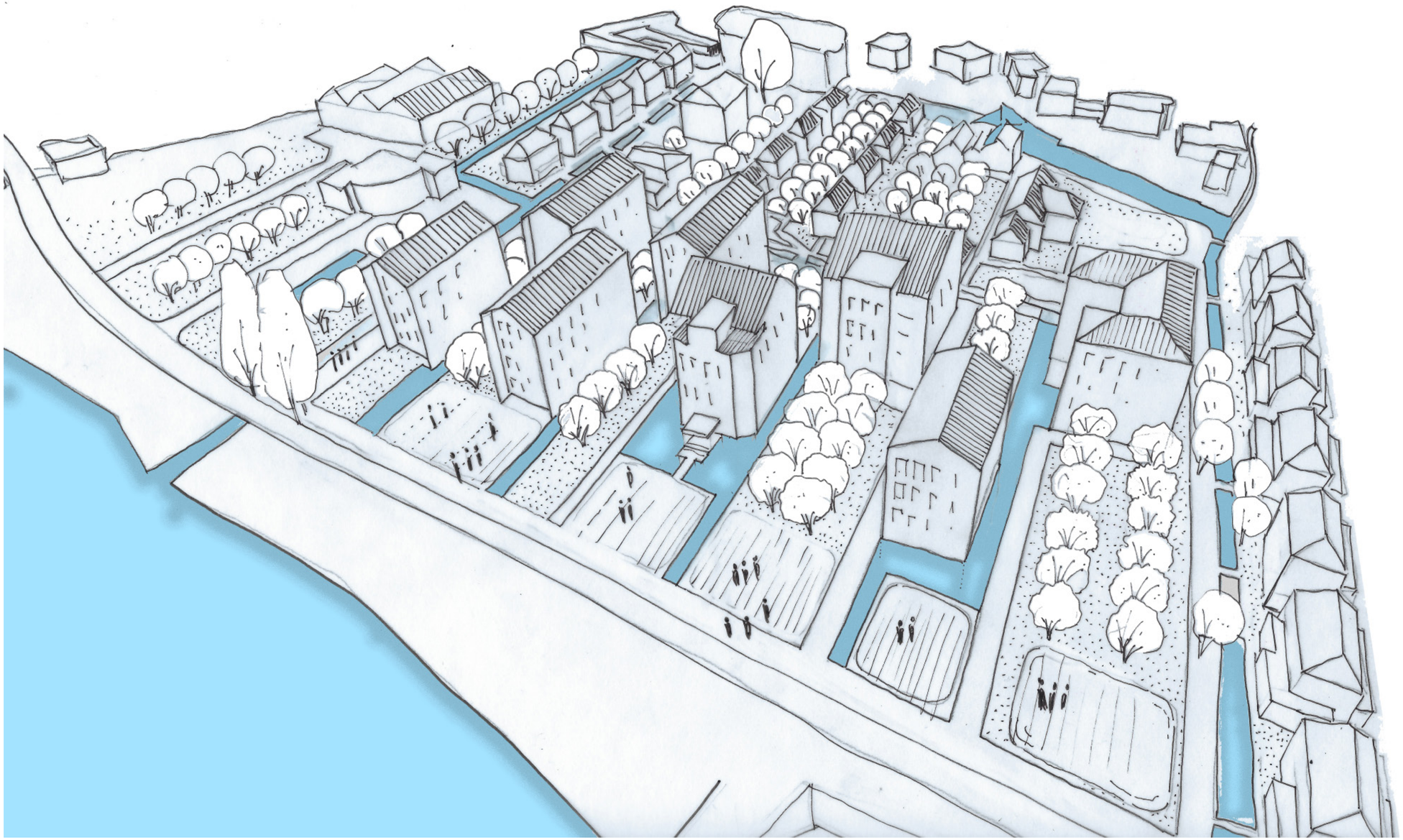






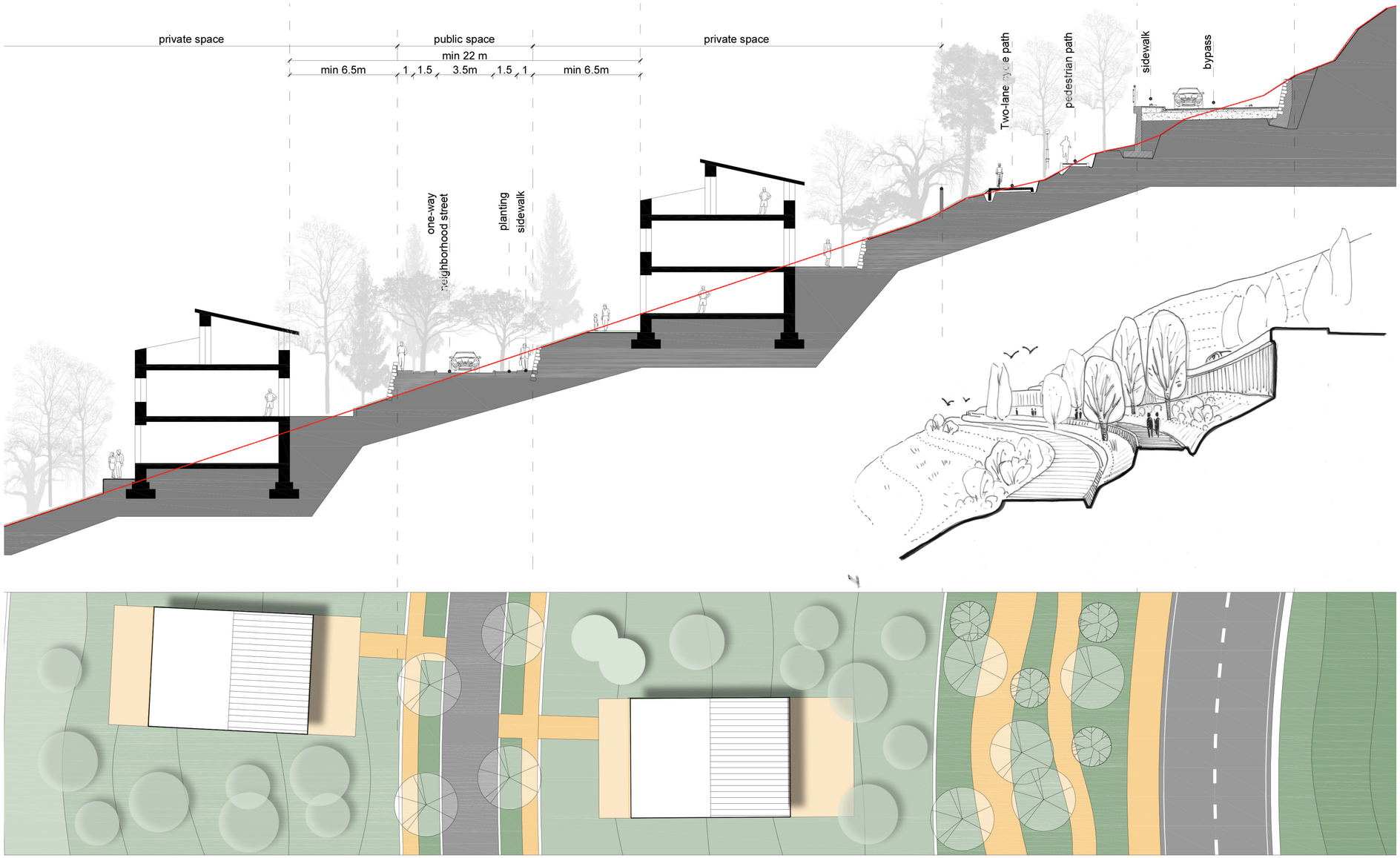


Bird view perspective (South side)



Bird view perspective (North side)

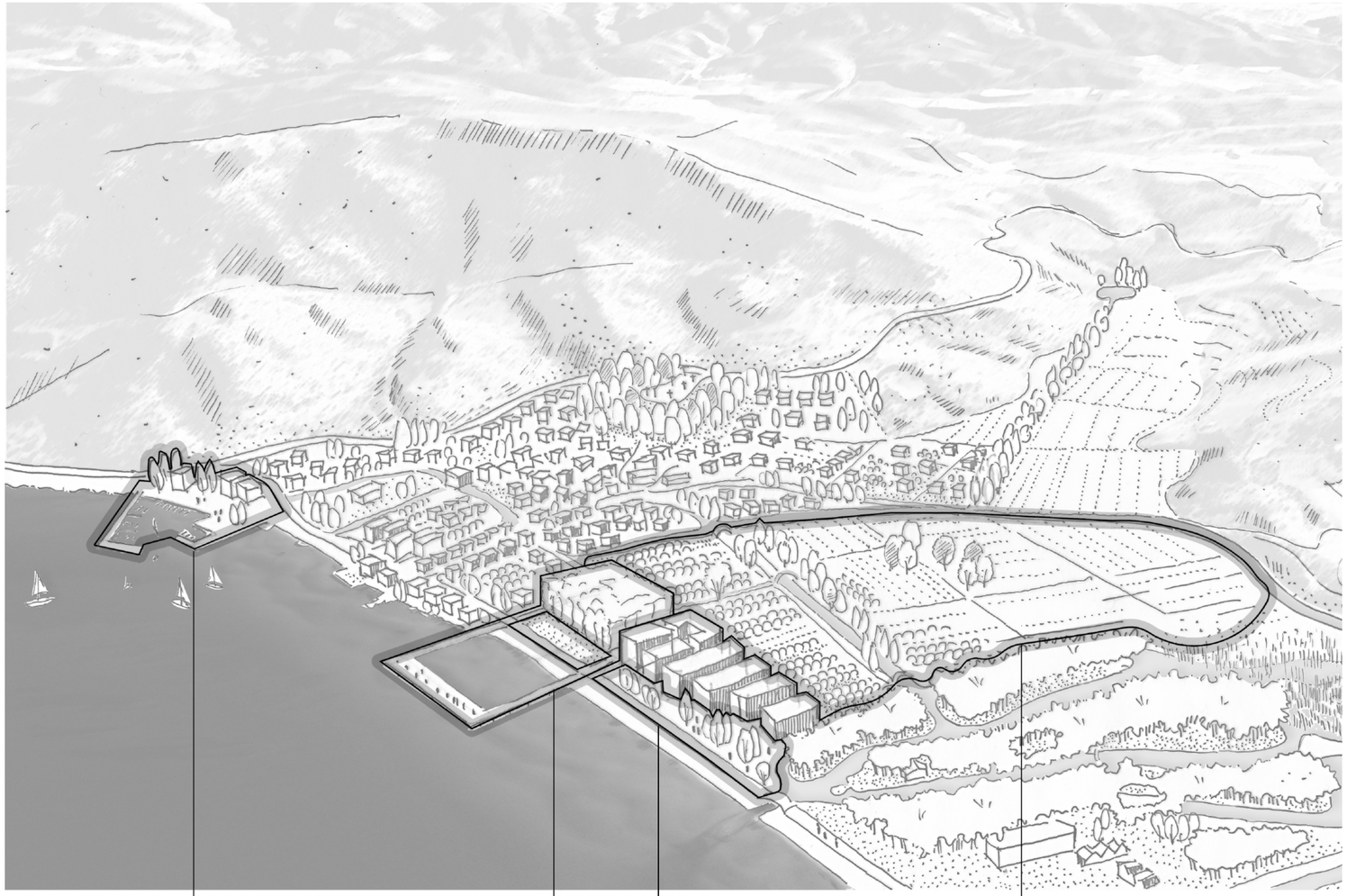
ZONE C


private space
public space
private space
min 22 m
min 6.5m
1
1.5
3.5m
1.5
1
min 6.5m
one-way neighborhood street
planting
sidewalk
Two-lane bicycle path
pedestrian path
sidewalk
bypass

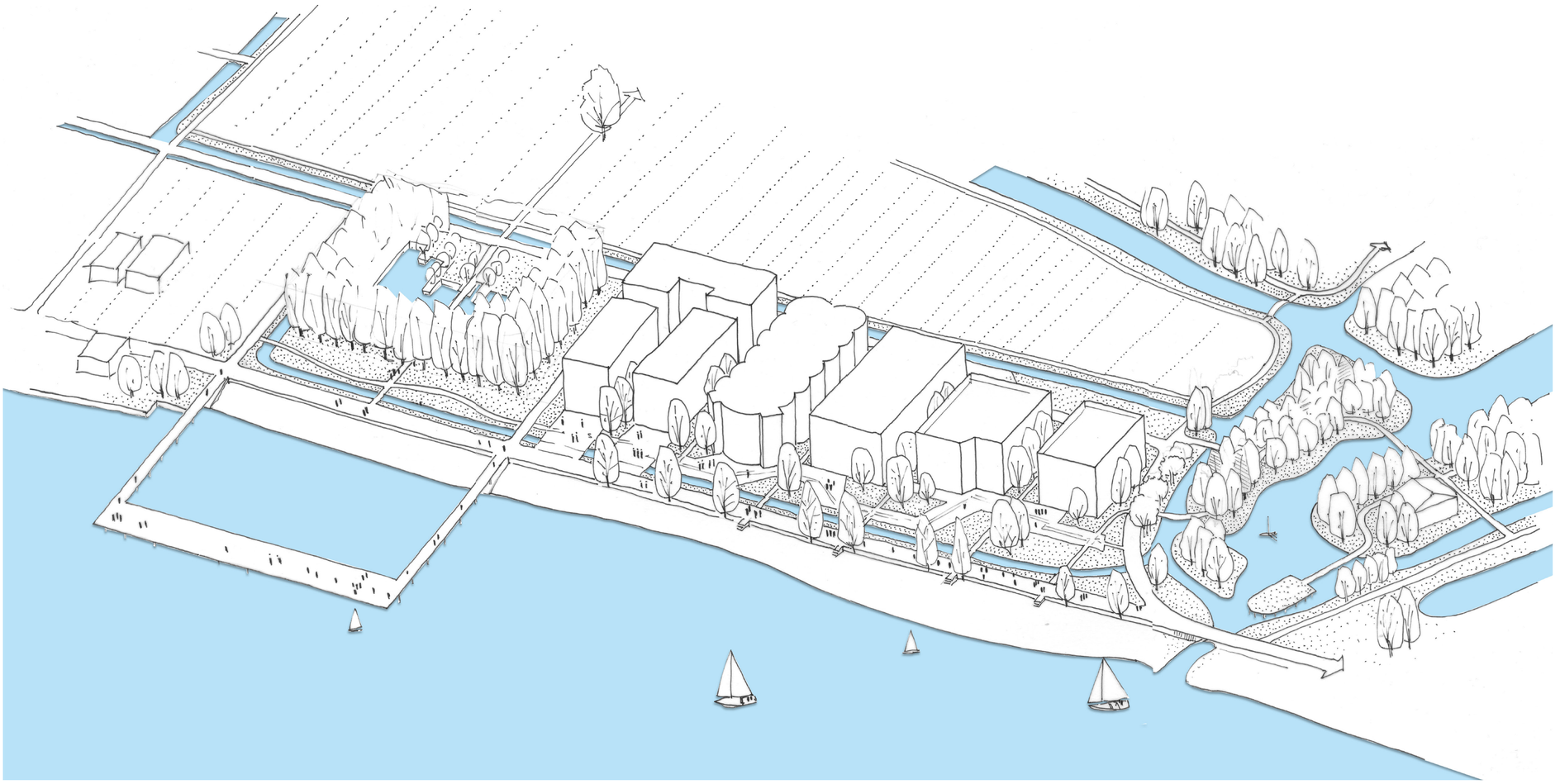
SPATIAL ELEMENTS

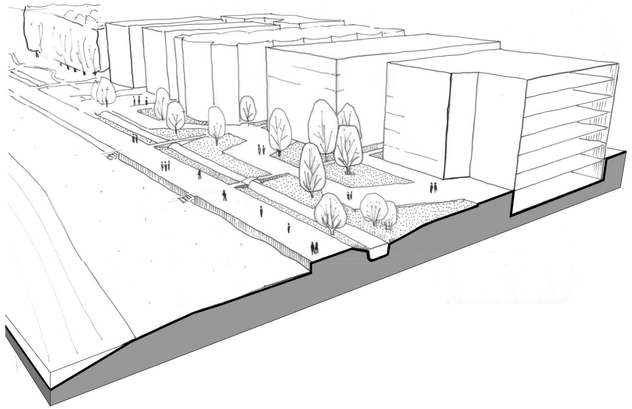
Pier, Pocket Park, Promenade and Fruit Park

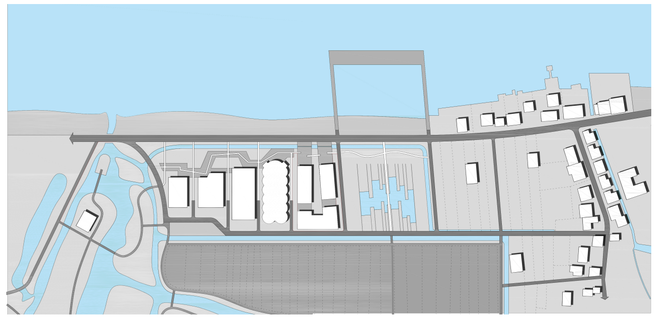
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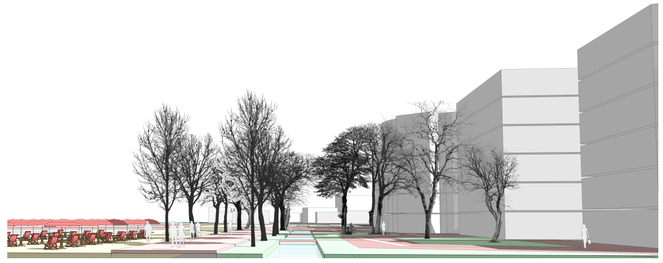


PROMENADE



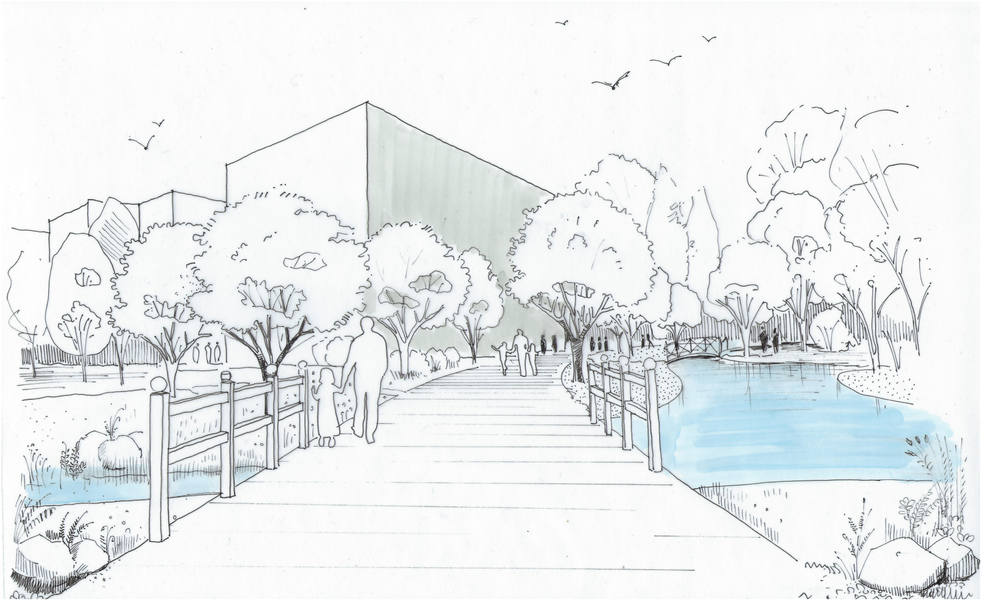






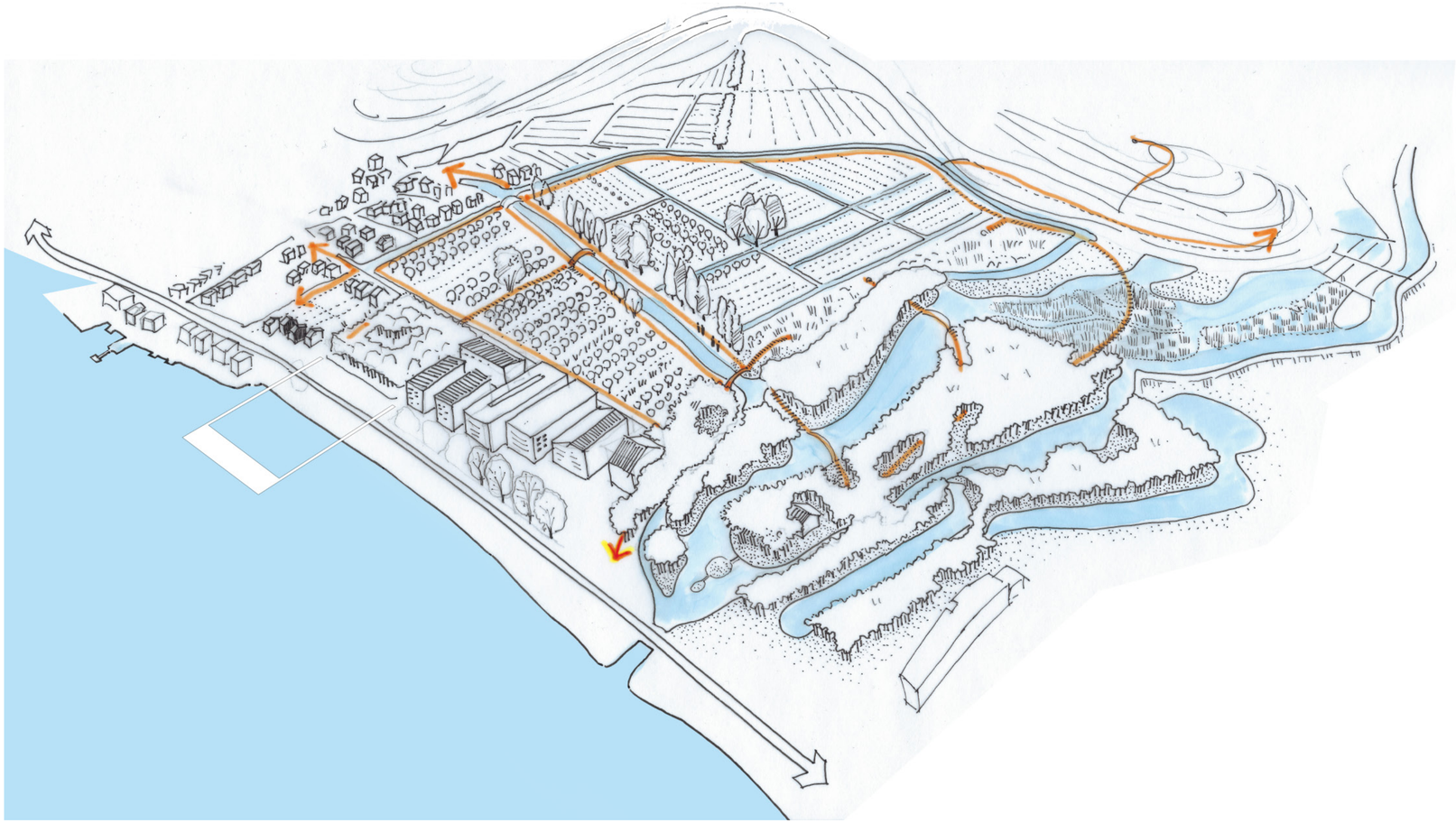


Entrance to the village



Entrance to the fruit park

FRUIT PARK



FRUIT PARK



Irrigation water

Recreational water

Reeds area

Fish farming

Marshy area

North



Routing map

Birdwatching

Belvedere

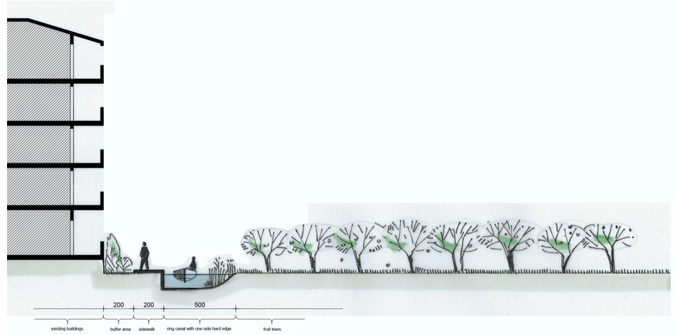
Selling points

Routing

Link to the existing points

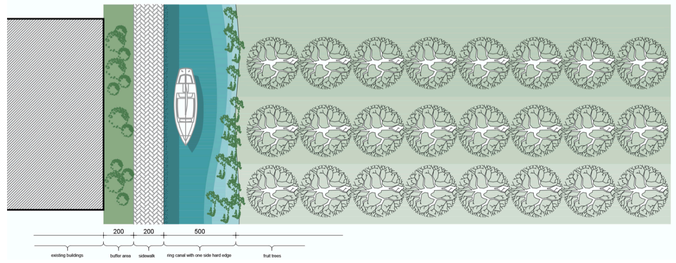
Main entry to the park

North

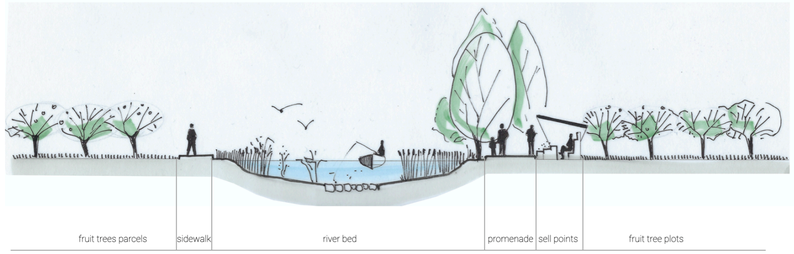


Section 1-1

Part of the ring canal separating the fruit production landscape from the new build area. On the park side the edge is soft, natural and vegetated and on the other side it will be vertical and hard edge making a better connection with the new build urban area.







Section 2-2

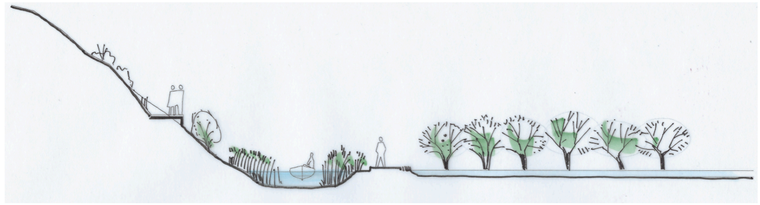
The existing river connecting the springs with the park. The river bed will be deepened and filled up with stone to keep it free of obstacles and make the water run faster. The existing trees will be preserved and other new trees will be planted to protect the edge of the river as well as to shade the new promenade. Along the main promenade small sales units with sustainable materials will be created to support the local products on the spot.



Section 3-3

New overpass points on river will be created to enable the free movement of pedestrians in the park. Bird observation points towards the new wetlands would make it possible for tourists to observe the wildlife without spoiling it.





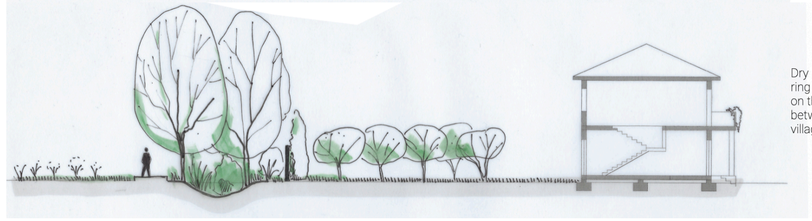
Section 4-4

From one side there is the foot of the hill and the path going up looking above the entire park . According to the slope there would be filling or digging up the hill.
On the other side there are the fruit parcels and some irrigation canals.



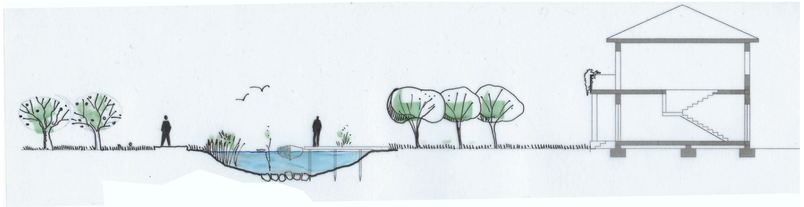
Section 5-5

The ring canal going along a limited access road.



Section 6-6

Dry canal connecting the reservoir to the ring canal. The line of trees and the shrubs on the bed of the canal act as a buffer area between the agriculture area and the village.



Section 7-7

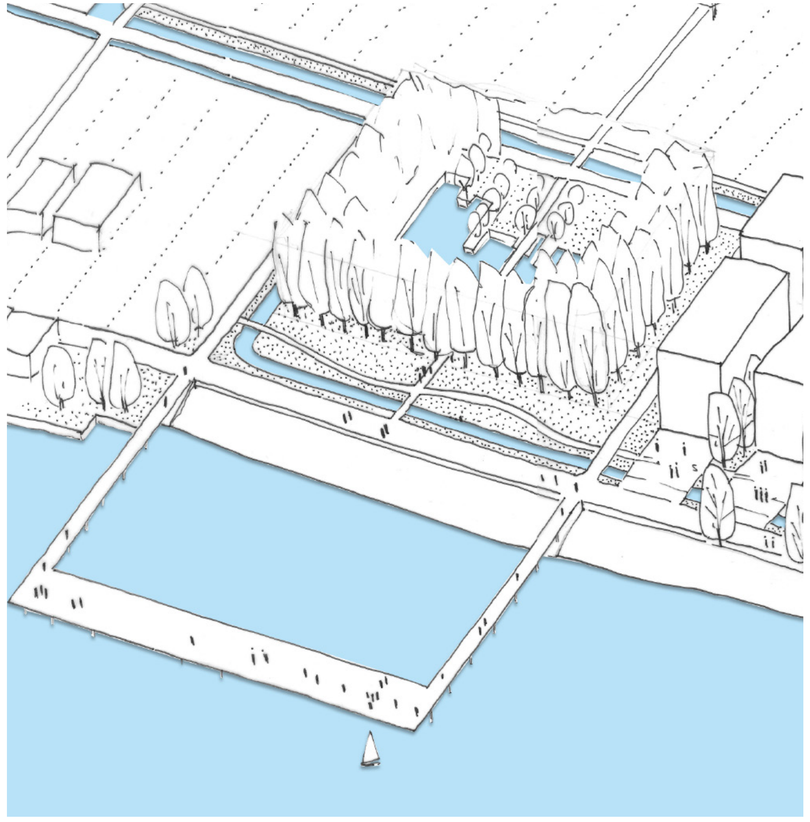
Houses near the new ring canal with small decks to connect the back garden to the water. On the other side of the canal a 2m wide sidewalk part of the new pedestrian paths splitting up the fruit parcels from the water ring.

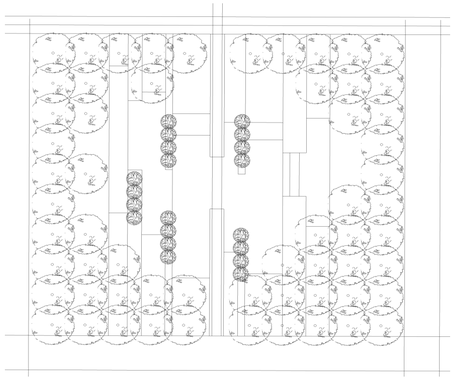


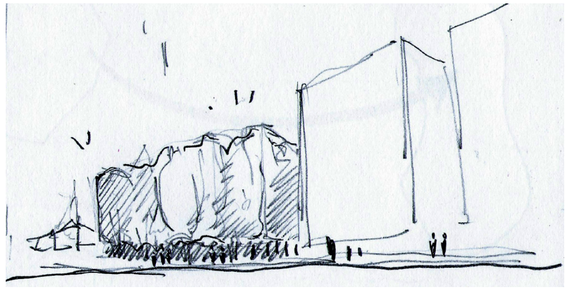
Section 8-8

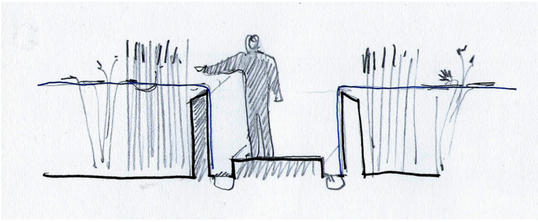
The main entrance from the village, connecting the fruit park to the centre of the village. The main source of the water coming up from the source in the form of a deep narrow concrete canal

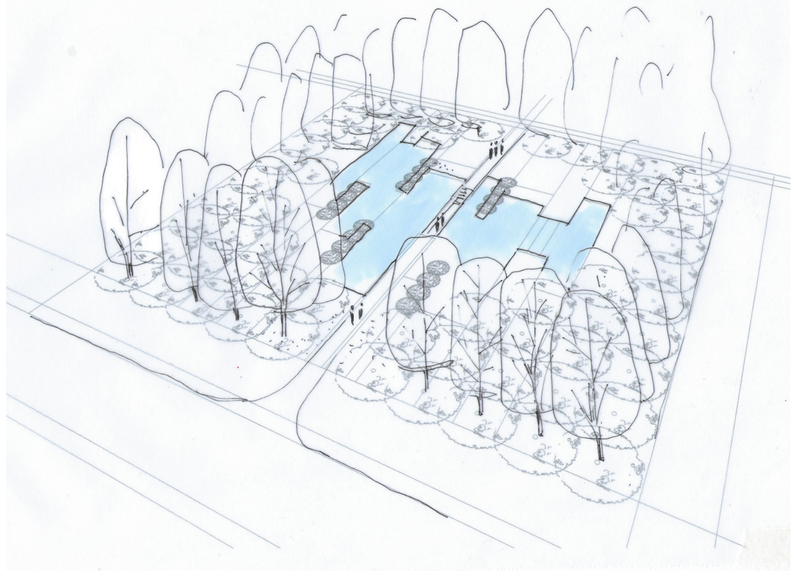
PIER & POCKET PARK

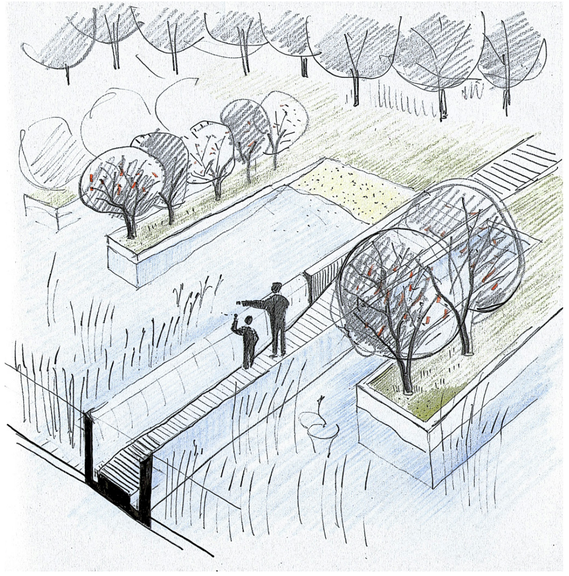






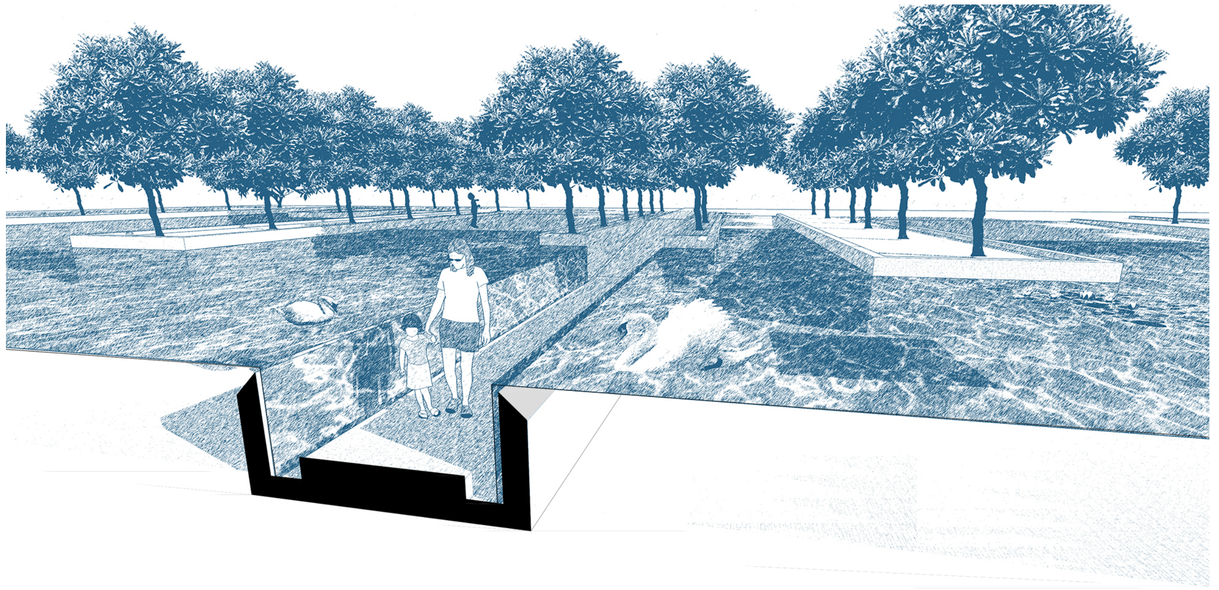


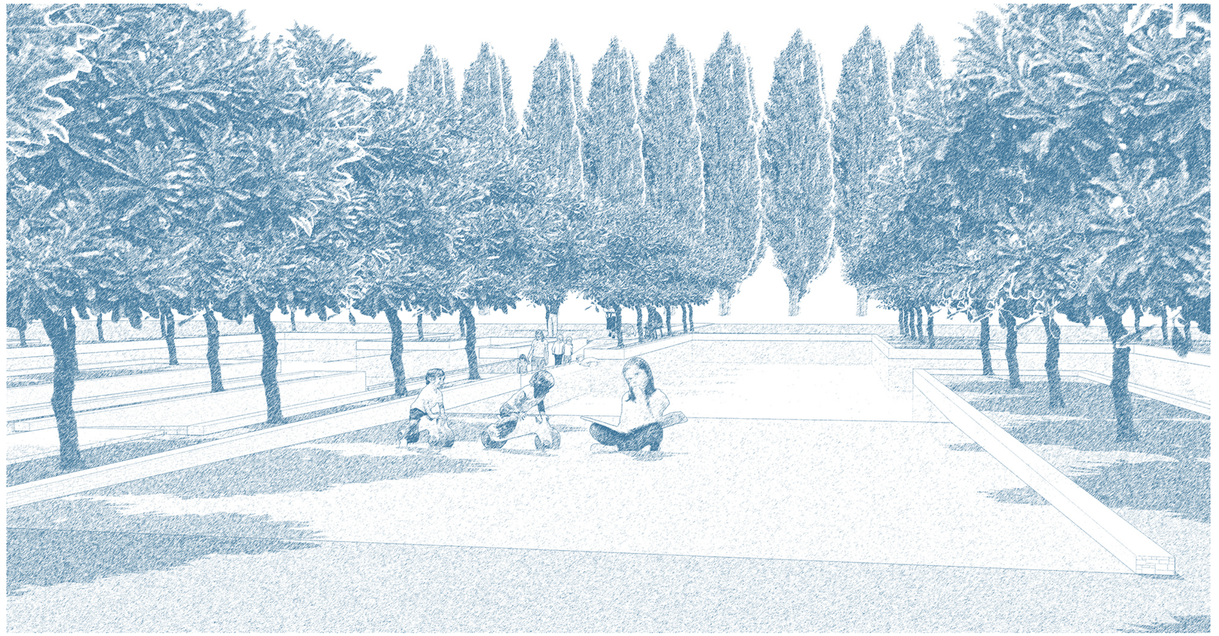


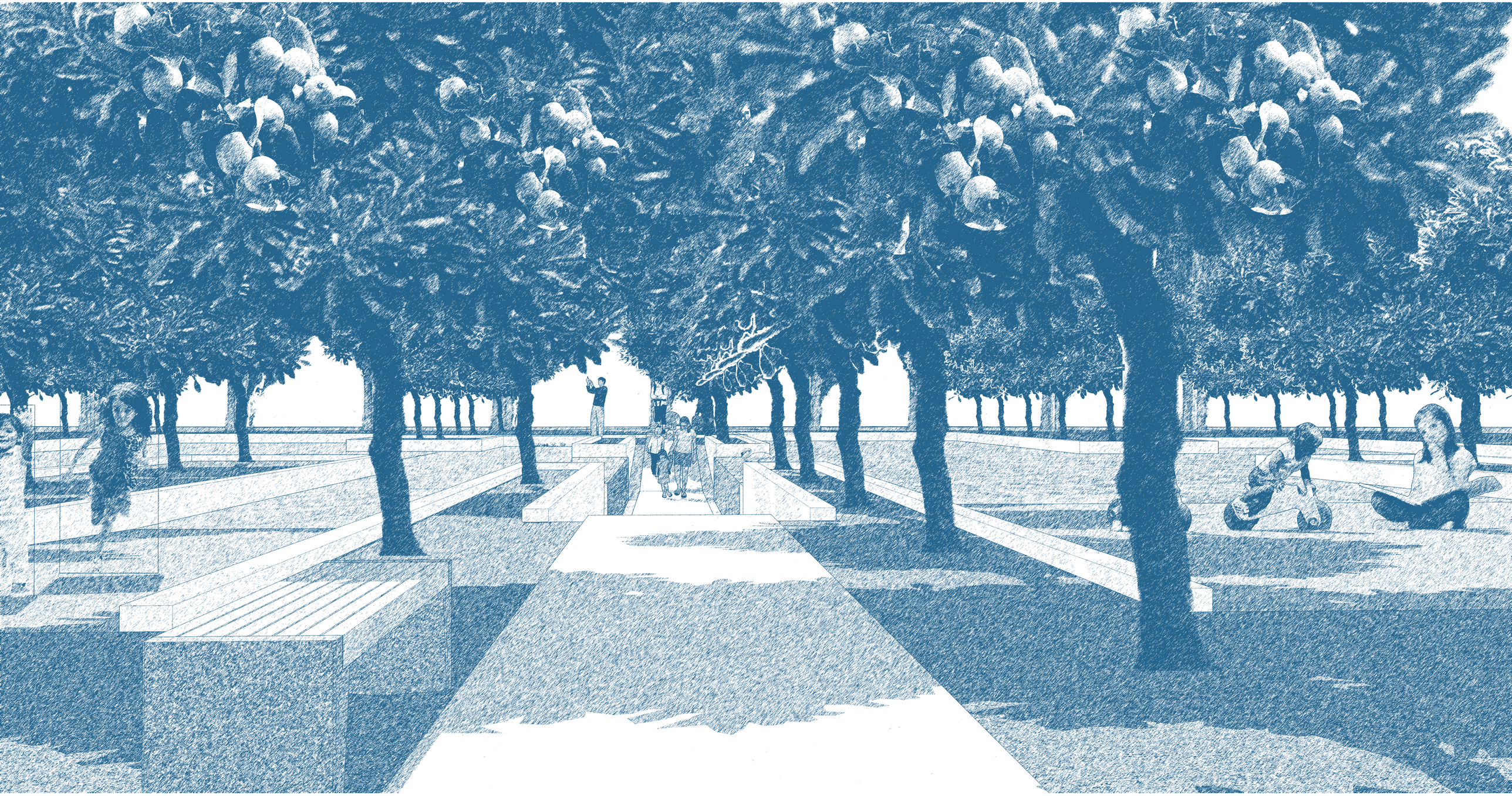






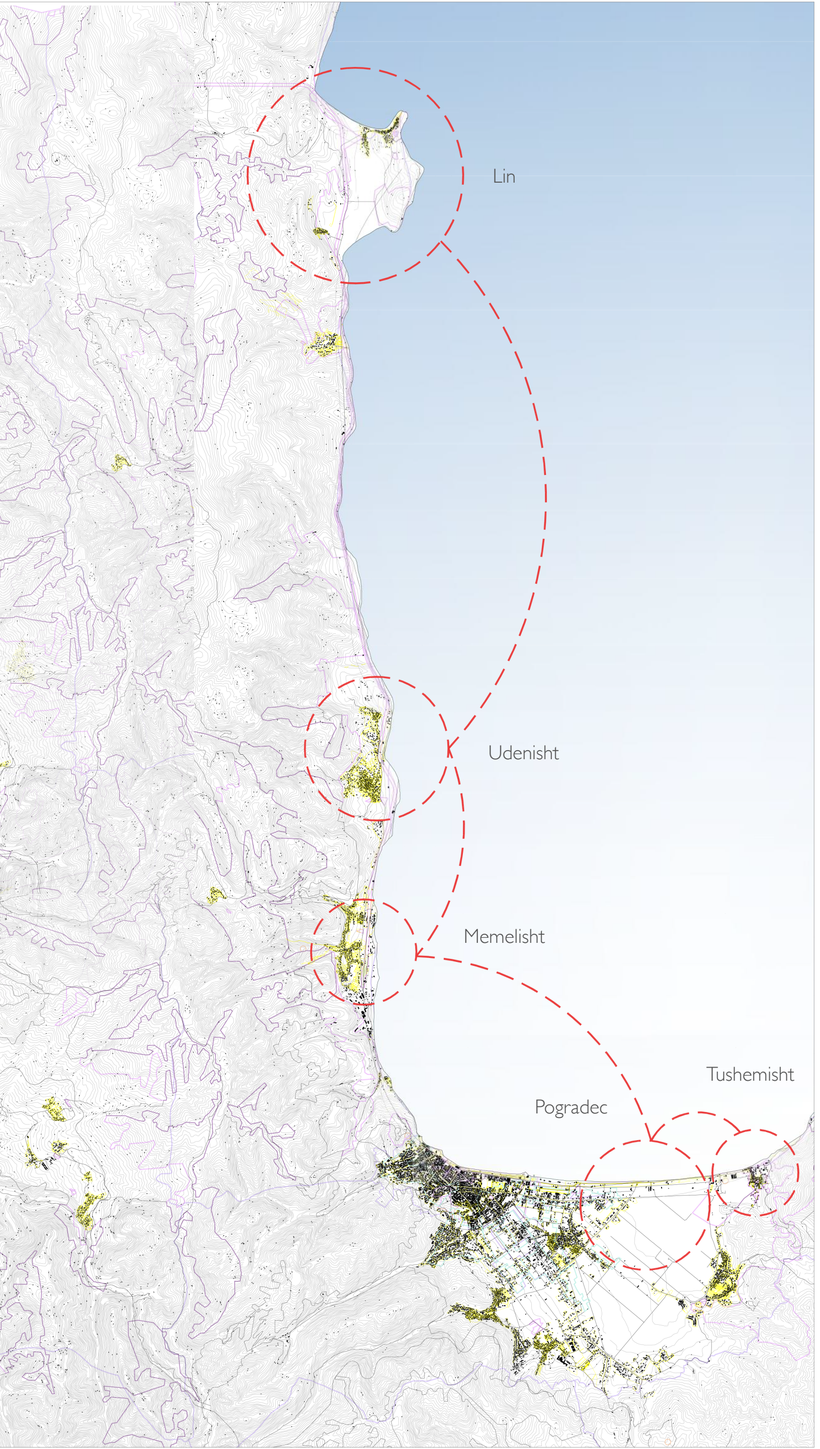






LAKE OHRID

Possible developments in the region





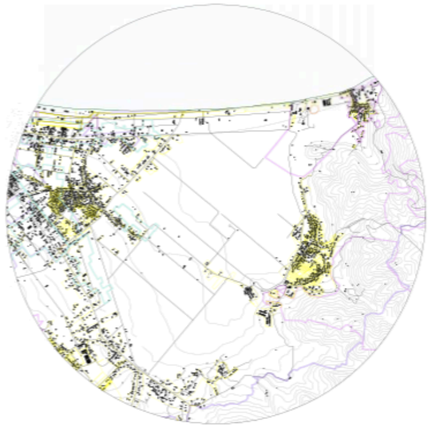
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Udenisht

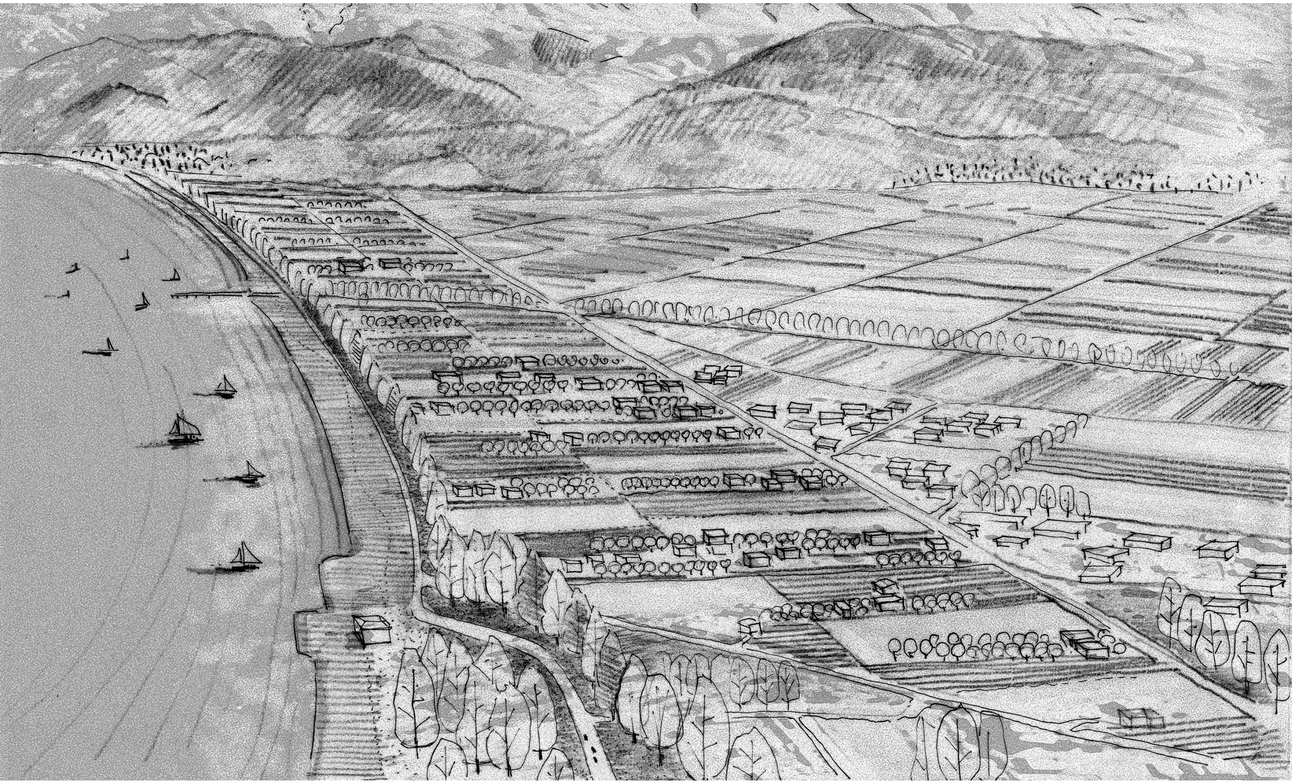


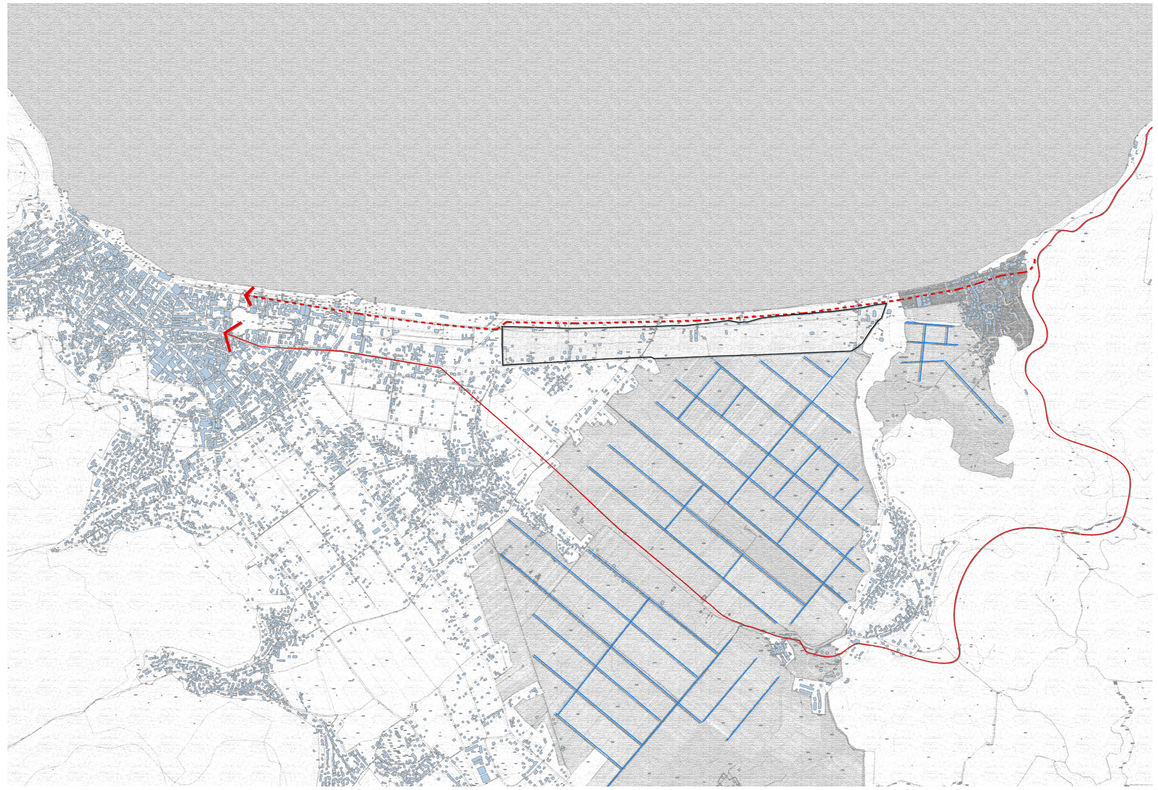
Memelisht



Pogradec

POGRADEC VALLEY





CITY OF POGRADEC
LOW DENSITY TOURIST FACILITIES
AGRICULTURE AREA
VILLAGE OF TUSHEMISHT
SHORELINE PROMENADE
BYEPASS
IRRIGATION SYSTEM

V

0 2.5 km

PROJECT TIMELINE

	BORDERS	ROUTINGS	FRUIT PARK	POCKET PARK	
	BYPASS	WATER STRUCTURE	PROMENADE	PIER	HARBOUR



START | 2030 | 2035 | 2040 | 2045 | 2050

REFLECTIONS ON THE DESIGN



THE DESIGN:

SAFEGUARDS THE GENIUS LOCI WHILE DEALING WITH INFORMALITY.

WILL INCREASE THE POTENTIAL FOR THE MODERN-DAY TOURISM

WILL INCREASE THE SOCIAL AND ECONOMICAL WELLBEING OF THE INHABITANTS OF THE REGION.

CAN BE USED FOR OTHER AREAS FACING SIMILAR PROBLEMS.

Thank you