

crossing the border

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Connecting green zone with the city center of Strasbourg

Research



Old Town

There is a strict line between the old town with its traditional urban and architectural face and the districts developed in the XX century.



Old Town

This area is represented by the narrow streets filled with traditional timber framing structures.



Vauban

One of the districts that lies on the former fortification site, it is named after a great military engineer Sébastien Le Prestre de Vauban, responsible for the fortification systems implemented in Strasbourg in the XVII century.



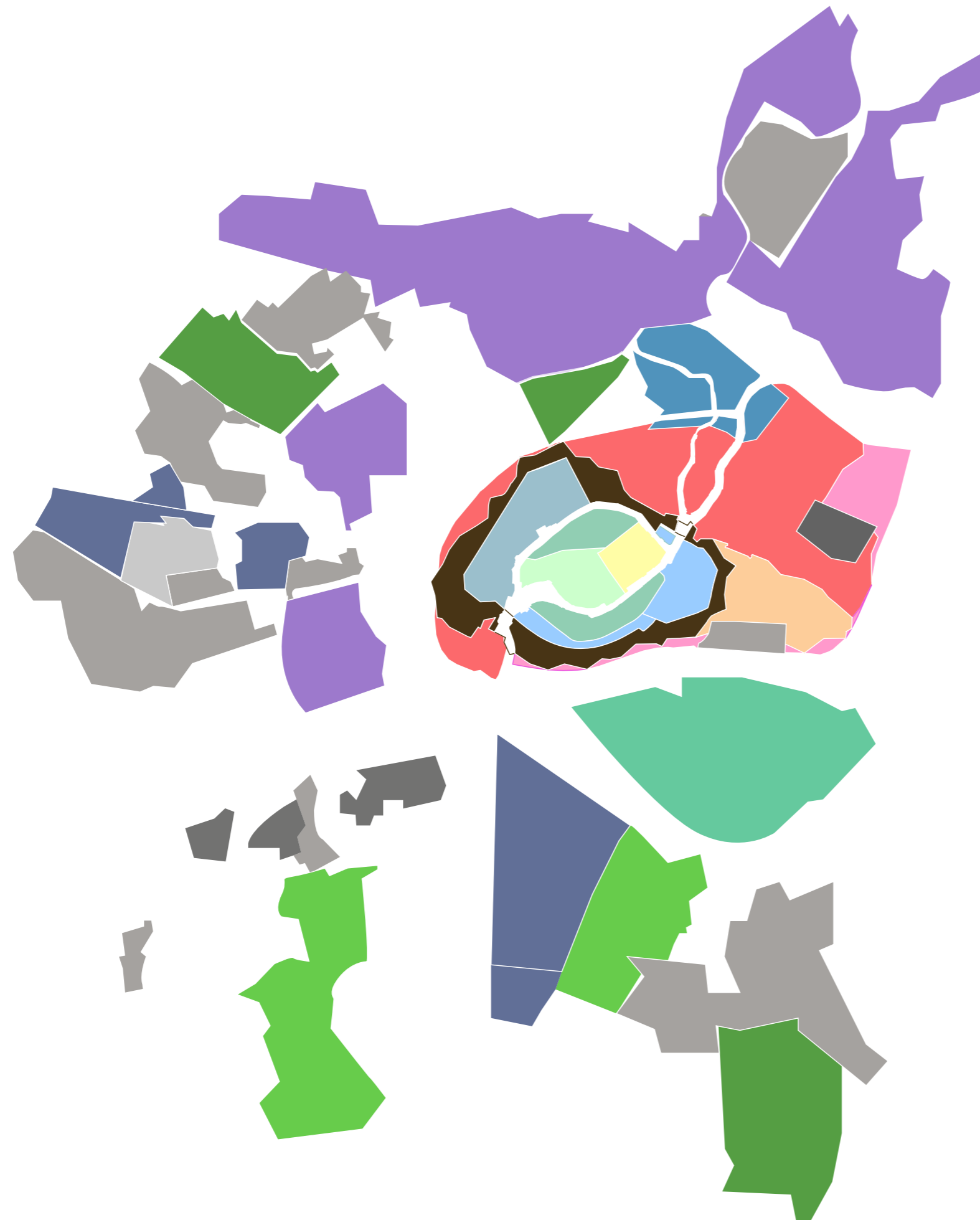
Esplanade

Located on the site of the former citadel, the name derives from the esplanade that existed between the fortification and the city center. Neighborhood was developed in the 60s. XX century and having all the necessary amenities it is liked by its residents.



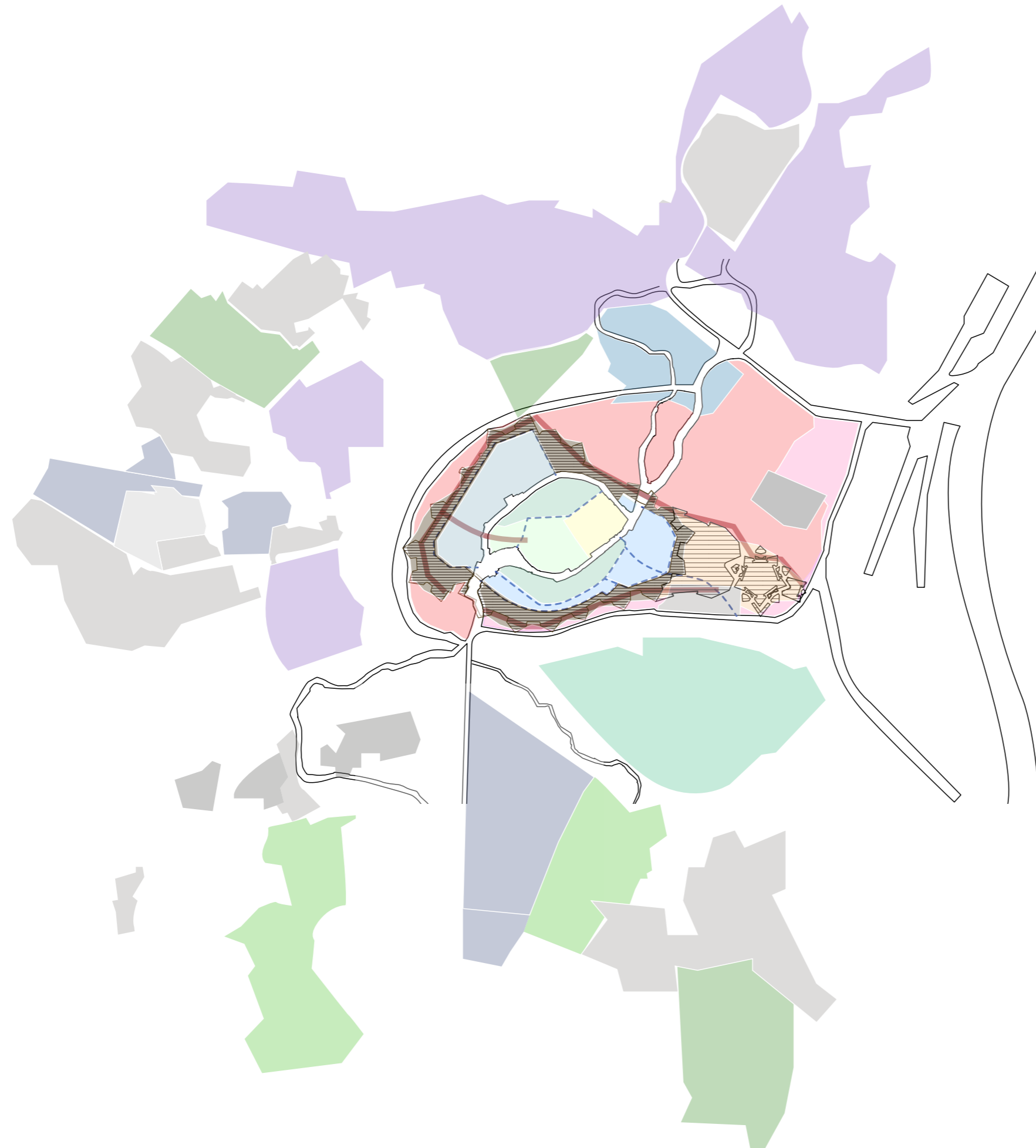
Neudorf

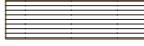
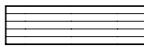


This neighborhood became an important district after the II World War. Developed mostly in the XX century, the northern strip is under redevelopment to create a stronger connection to the city center.



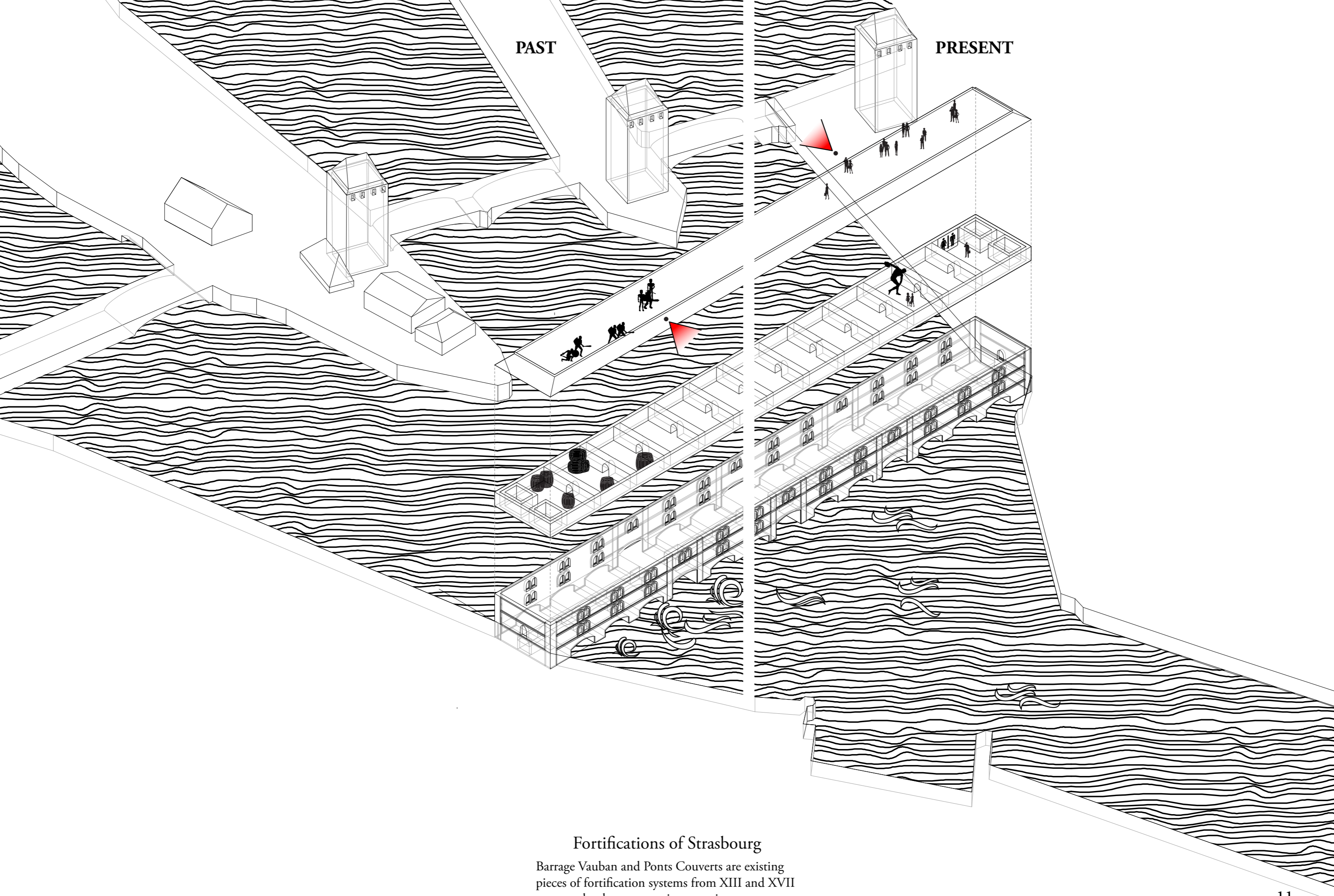
Growth of Strasbourg

	- urban - development		
- roman - empire	1 c. BC	camp of Argentorate	
	since 1100	1st extension	
- medieval - town	1200- 1250	2nd extension	
	since 1370	3rd extension	
	1404- 1476	4th extension	
- fortification - development	1630- 1675	fortified ramparts	
	1681- 1700	Vauban	
- faubourgs -	1784	Robertsau	
	1850	Schiltigheim	
	1862	Cronembourg	
	1890	Koenigshoffen Est	
- Neustadt -	1887	Neudorp	
	1900	Cronembourg	
	1910	Neuhof Stockfeld	
- Laforgue - plan	1870	destruction of the Citadele	
	1871- 1914	5th extension	
		1st world war	
- Grands Ensembles -	1935- 1937	6th extension	
		2nd world war	
	1953	Cite Rotterdam	
	1957	Molkenbronn	
	1958	Cite de l'Ill	
	1959	Neuhof-Meinau	
	1960	Cite des Hirondelles	
	1960	Esplanade	
	1962	Cronembourg	
	1969	Hautepierre	
	1970	Elsau	
	1950- 1998	Quartier Europeen	
- Garden cities -	1960	Meinau	
	1962	Ostwald	
	1980	Kable	
- Commercial zones -	1970	Plaine des Bouchers	
	1985	Hautepierre -sud	



- fortified ramparts 
- Vauban's fortification 
- former canals 
- excision of the city 

Fortifications of Strasbourg



PAST

PRESENT

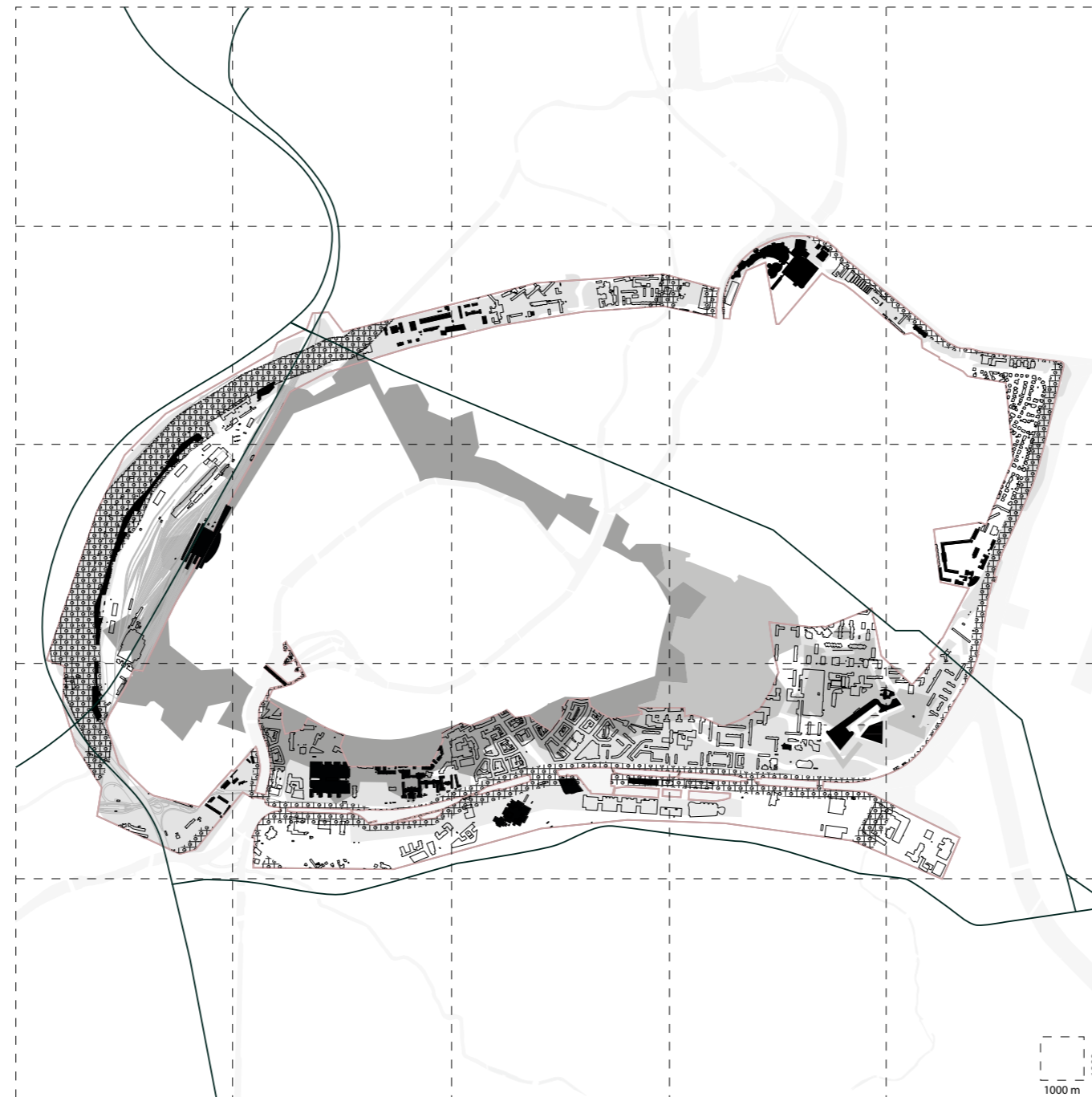
Fortifications of Strasbourg























Barrage Vauban and Ponts Couverts are existing pieces of fortification systems from XIII and XVII century that became tourist attractions.



Fortifications of Strasbourg

Citadele was a part of fortification system that was partially ruined in the siege of Strasbourg in 1870 and later demolished in 1896. The remaining gate and bastions are part of the public park.

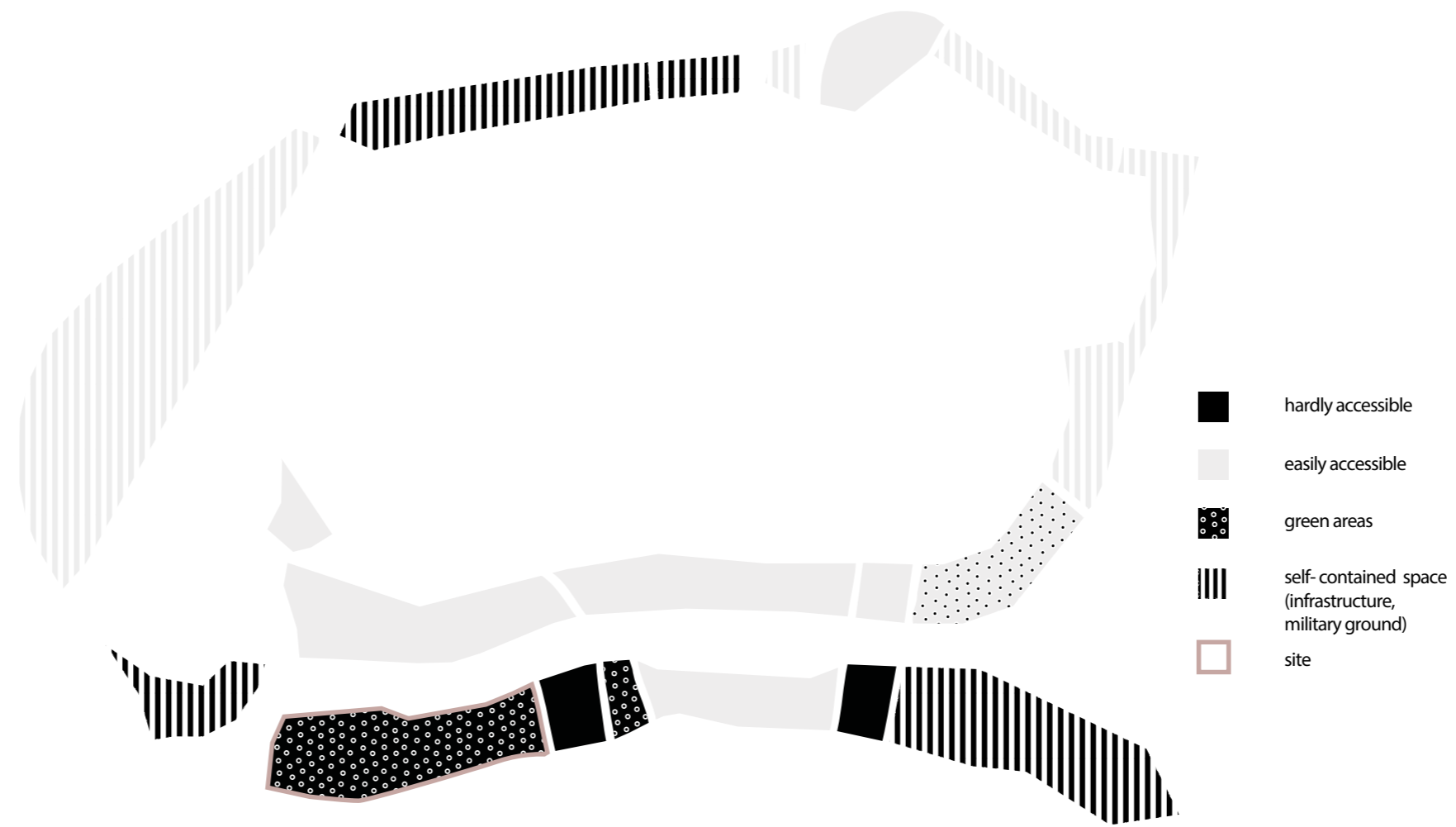


transportation	healthcare	cultural	bureaucracy	religion	military	legend
 Central Train Station opened: 1841 rebuilt: 1883 modernized: 2007	 NCH (the new civil hospital) opened: 2008	 City of music and dance hall opened: 2006	 City And Eurometropole Strasbourg EPIDE employment agency opened: 2007	 Trés-Sainte-Trinité church opened: 1966	 Citadel of Strasbourg built: 1685 partially demolished: 1870	 XVIIc fortified ramparts
 André Malraux media library opened: 2008		 University of Strasbourg opened: 1538 divided: 1970s fused: 2009	 Palace of Europe opened: 1950 rebuilt: 1977		 Ponts Couverts built: 1250 partially demolished: 1870	 late XVII c Vauban's fortification
			 EU administrative offices opened: 1980		 Barrage Vauban built: 1690 modernized: 2010	 XIXc city reconstruction military ground
					 Training Center built: 1945 opened: 2006	 heavy traffic: car roads, train track rail
					 Turenne Barracks built: 1893	 public edifice
						 Rhine river
						 protected ecological green zone
						 ZONE- sum of a former military zone



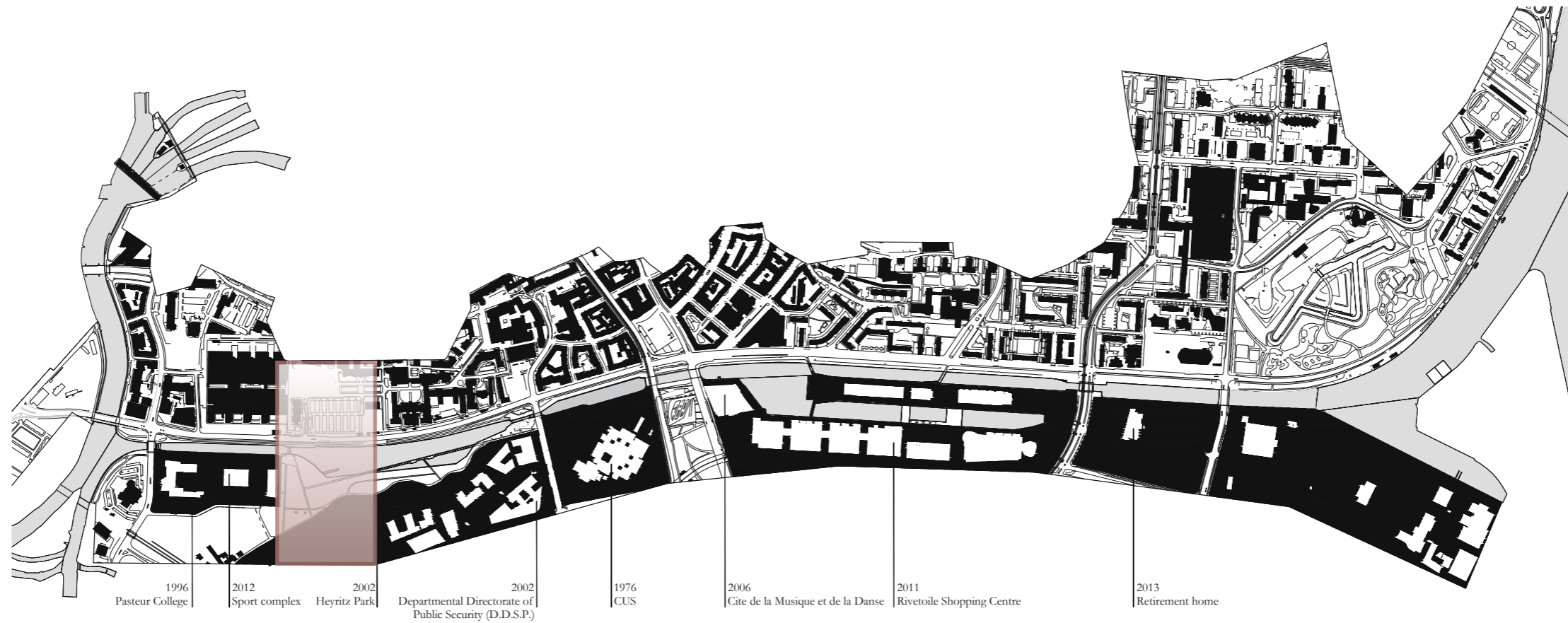
City as pedestrian archipelago

Strasbourg, according to the pedestrians, is an archipelago of territories adapted to the walking practise.



Zone as Archipelago

Zone itself is a heterogeneous body, which bits and pieces are very often self-contained spaces of infrastructural character.



Cross border metropolis project Strasbourg Kiehl- progress of the urban redevelopment

Cross border metropolis urban redevelopment

It is an urban plan shared by cities Strasbourg and Kiehl. There is a great progress in the urban redevelopment of the area in the last 15 years.



Park Heyritz

The project, finished and opened to the public in 2014, is one of the recent redevelopments in the zone.

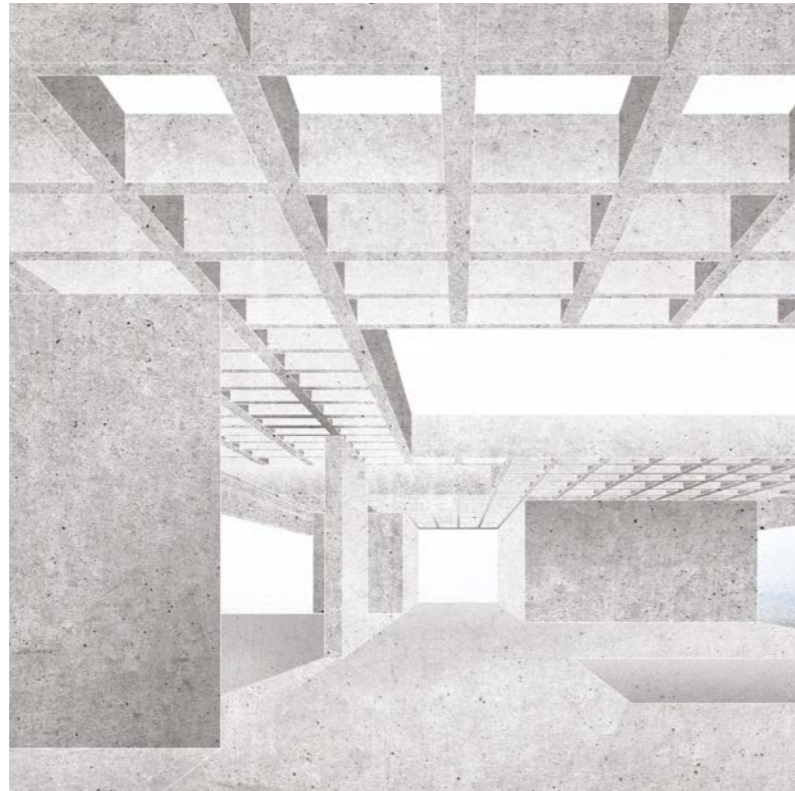


OLD TOWN

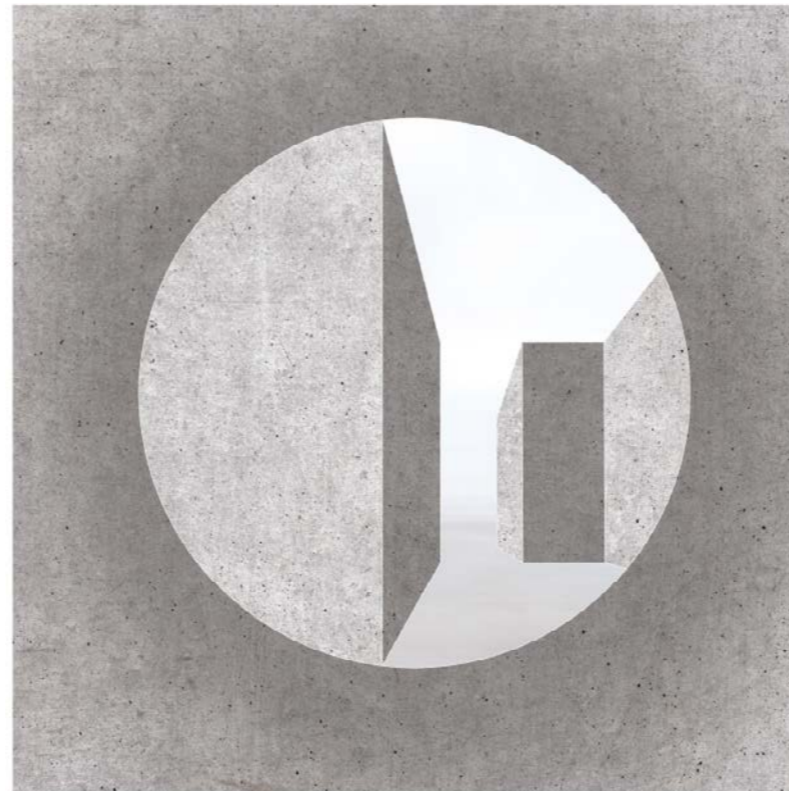
GREEN BELT

boundary vs border





Infinite Grid



Threshold



Overpowering Nature

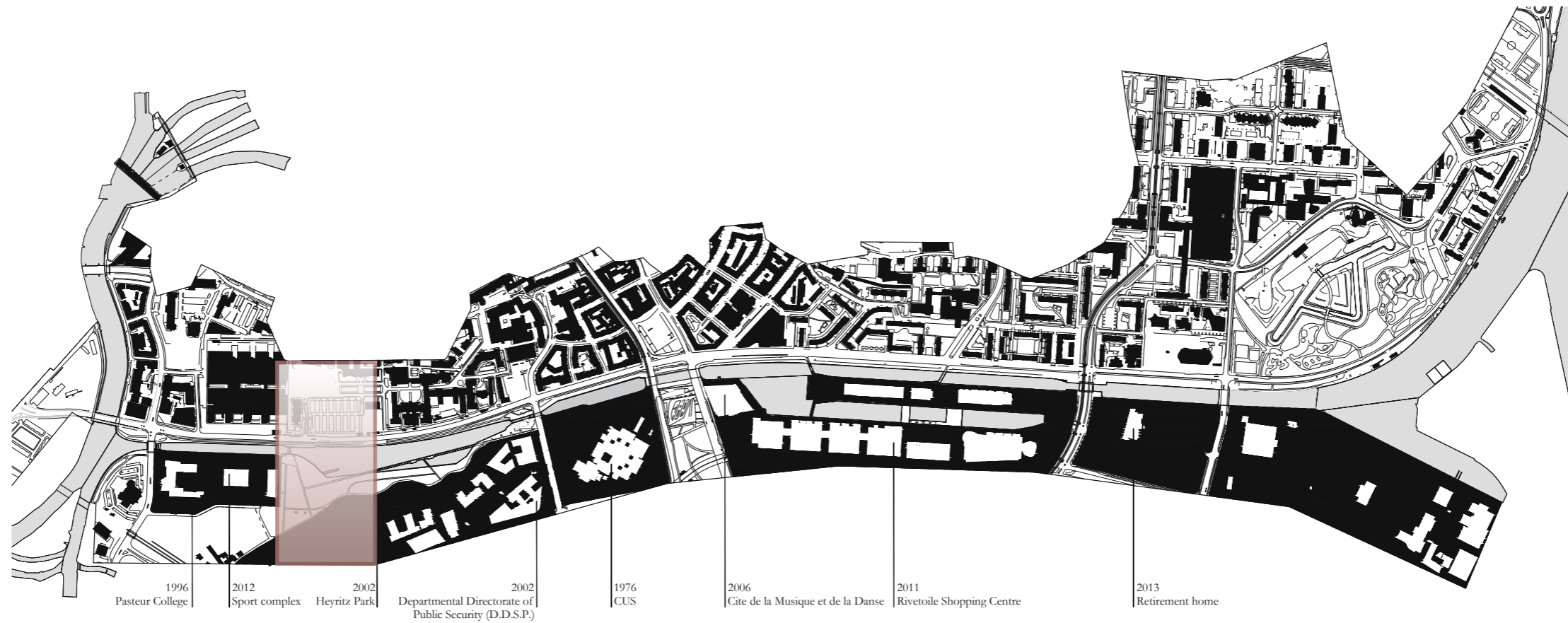
Morphology of the zone

Threshold, infinite grid and overpowering nature were the three elements I distinguished as necessary to create a zone in the urban conditions.

How can the division between the old and new districts be overcome to create a city condition that is more connected and transitional?

How can the boundary be addressed on the spatial and architectural level?

Design Proposal



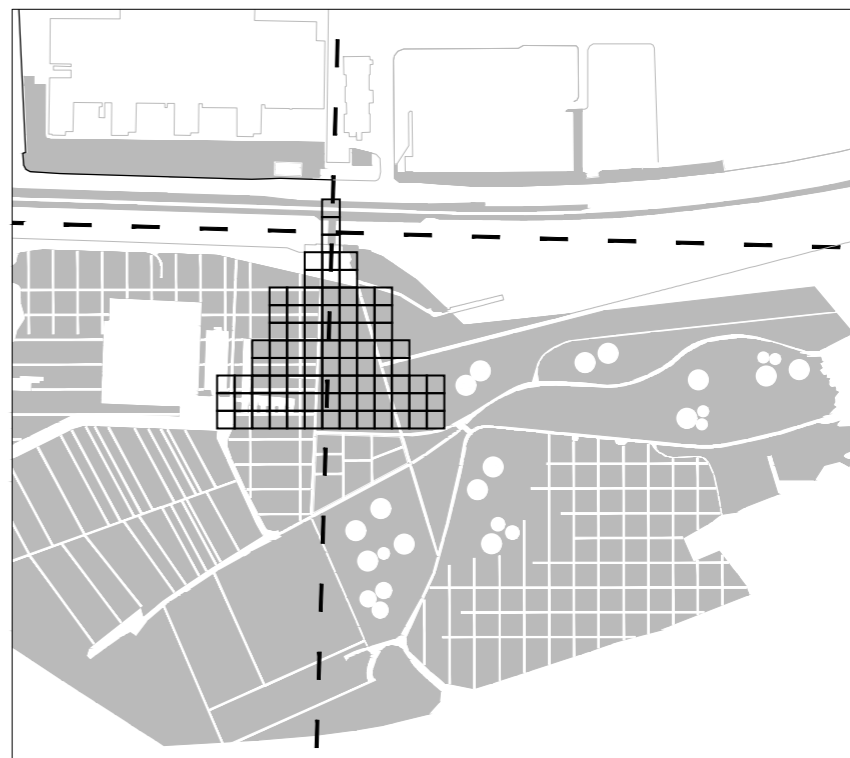
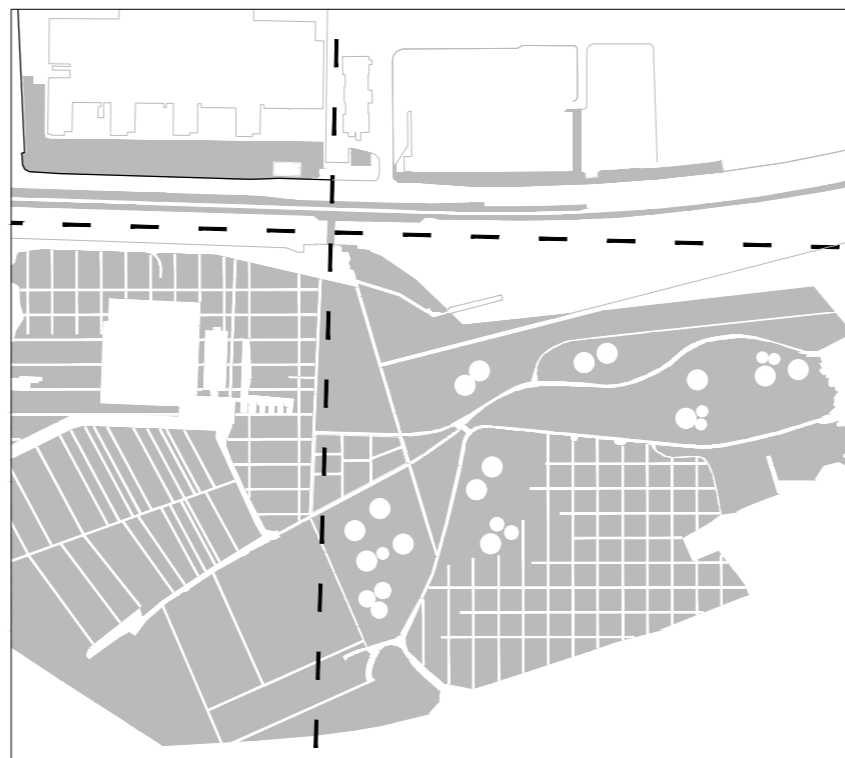
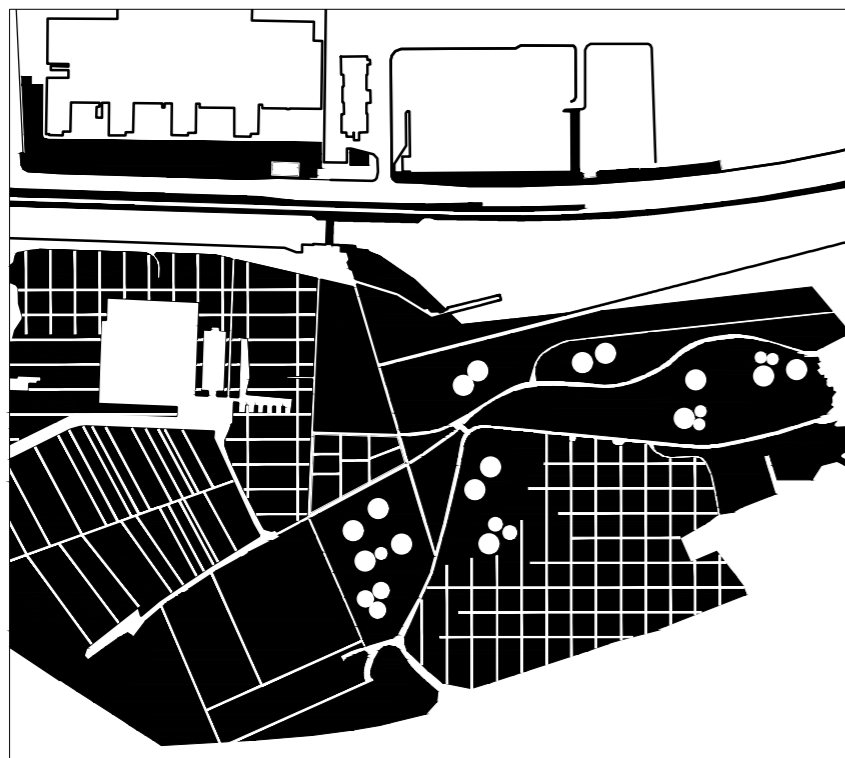
Cross border metropolis project Strasbourg Kiehl- progress of the urban redevelopment

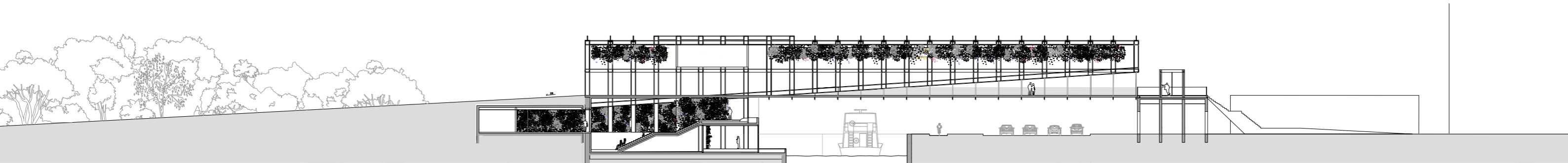
Port du Rhin urban redevelopment



Site

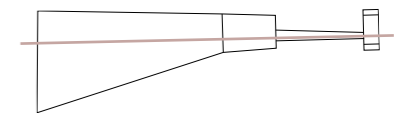
Park Heyritz contrasts with Menachem Taffel street, which creates traditional boundary condition.

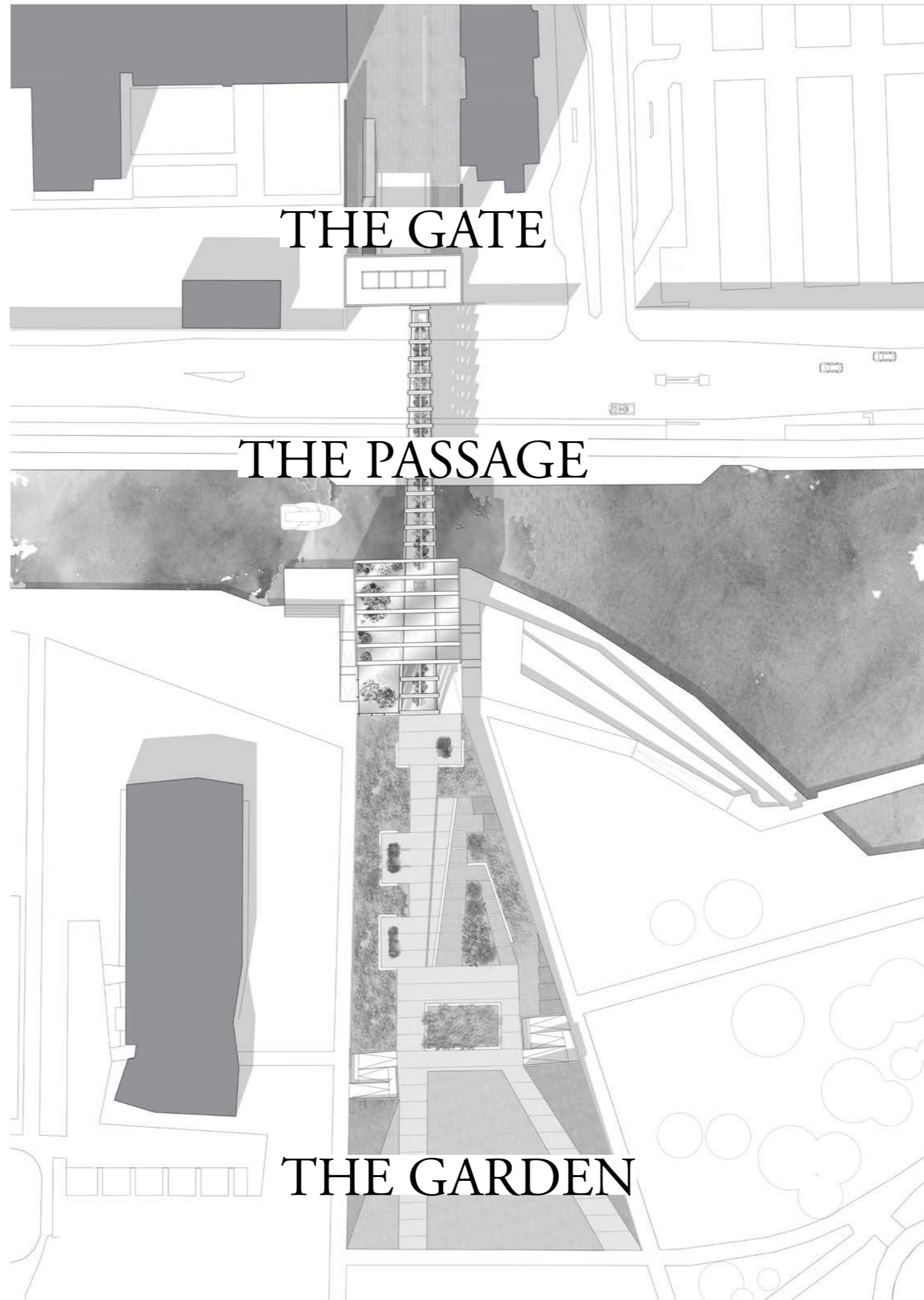


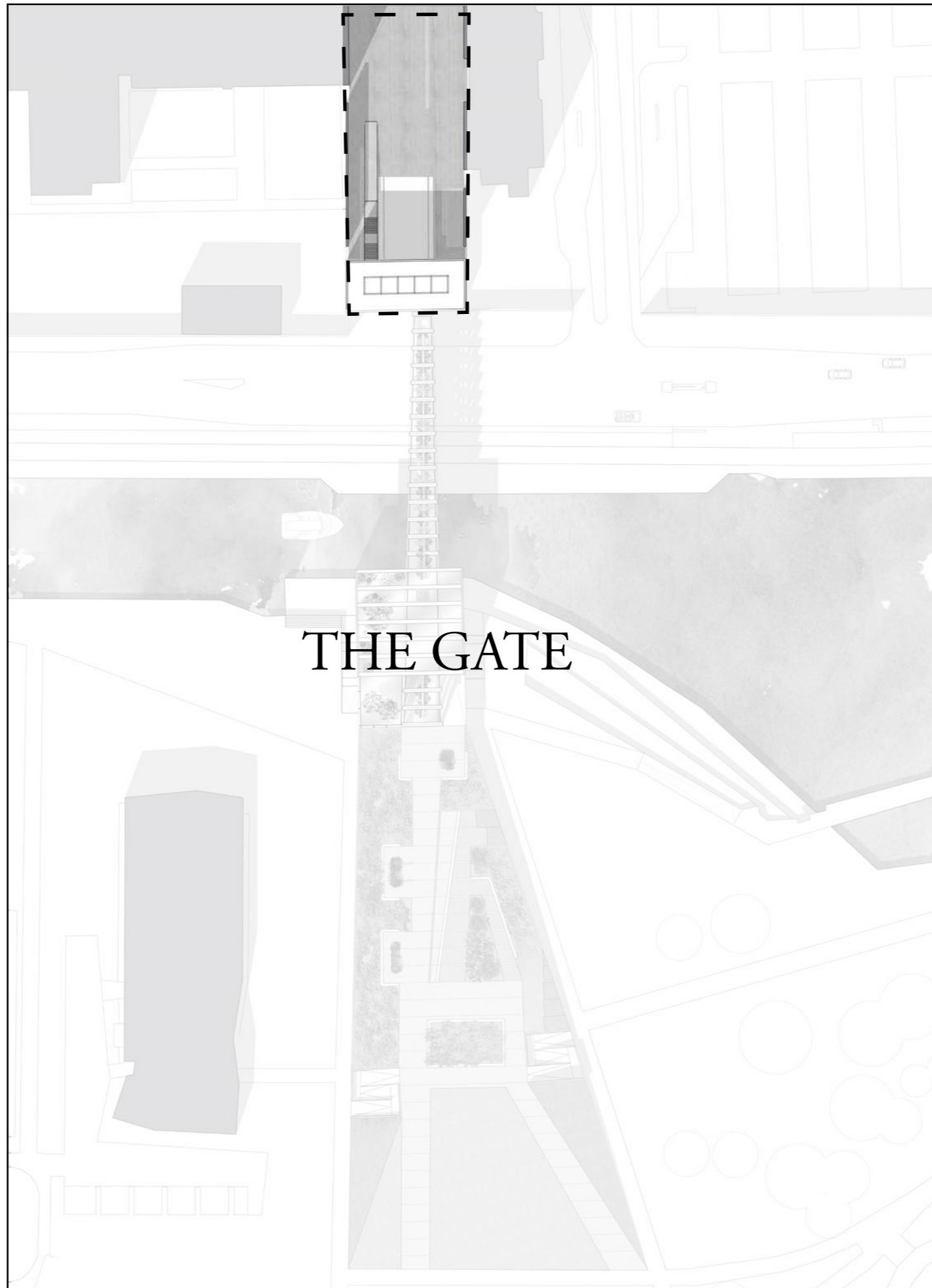


Connecting two realities

This section represents the goal of the proposal. It shows the undisturbed connection between the urban and green sides of the city. It highlights the imbalance that comes from placing the gravity point of the proposal on the green side.

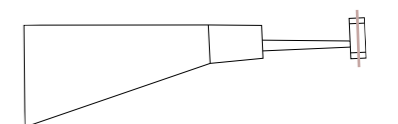






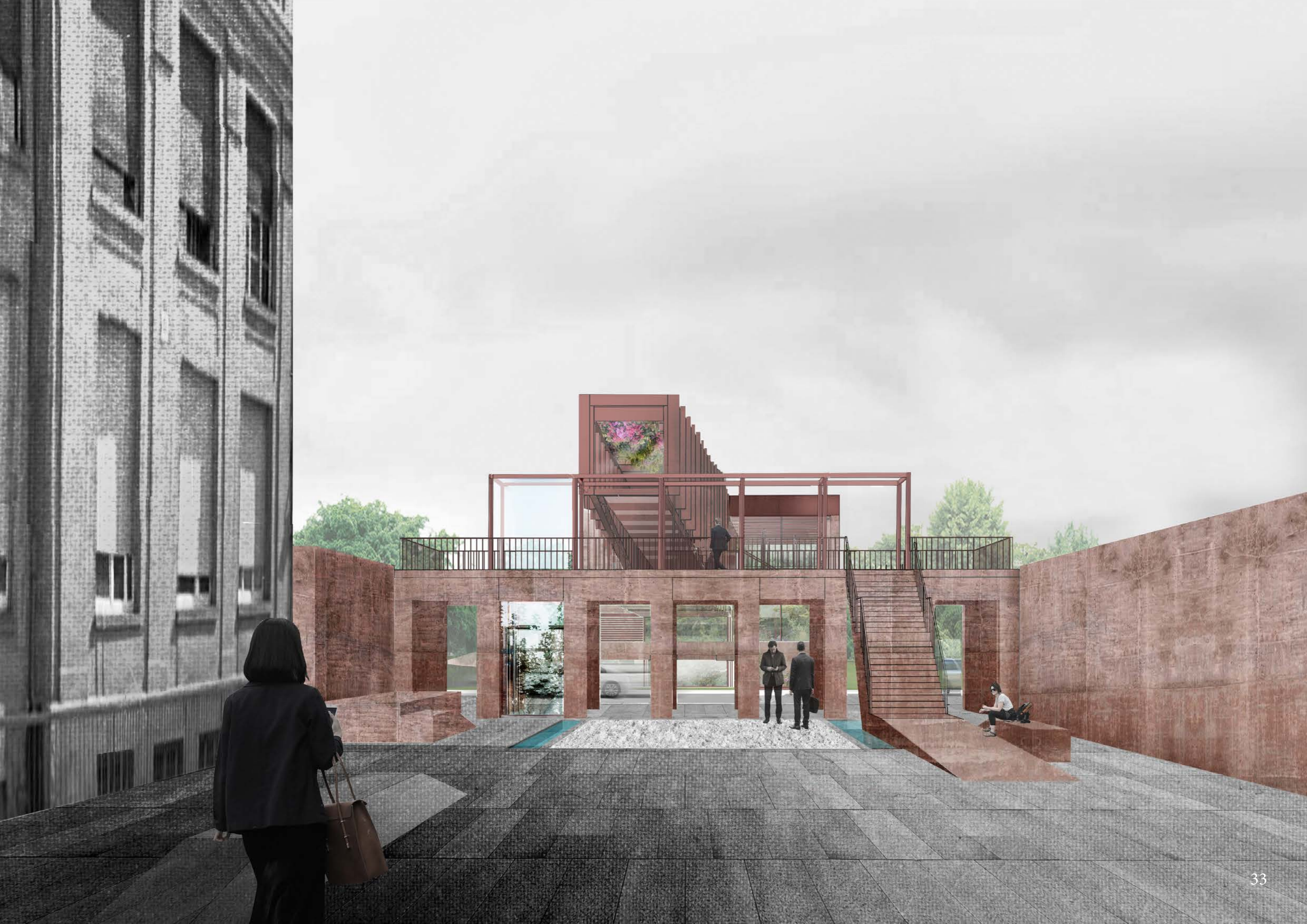
THE GATE

Urban side includes urban patio framed by the gate to the bridge and a garden.





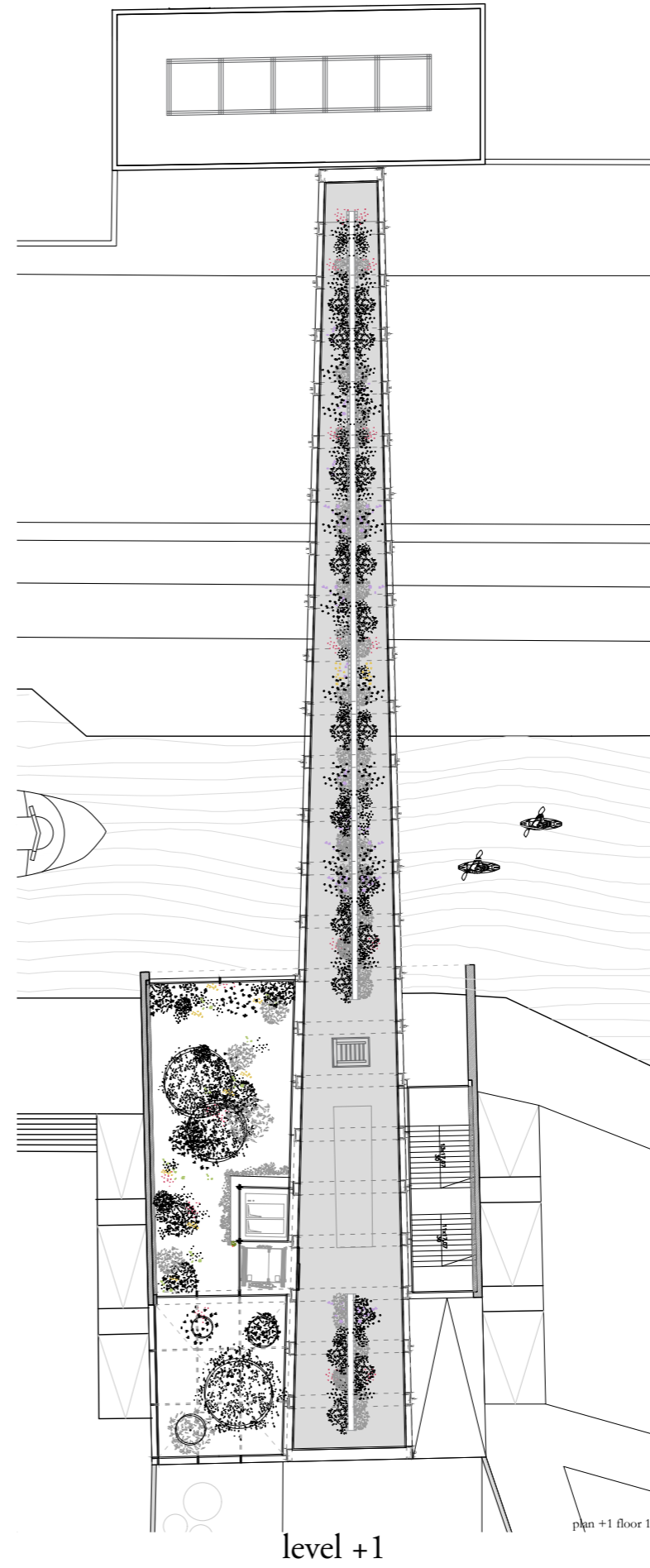
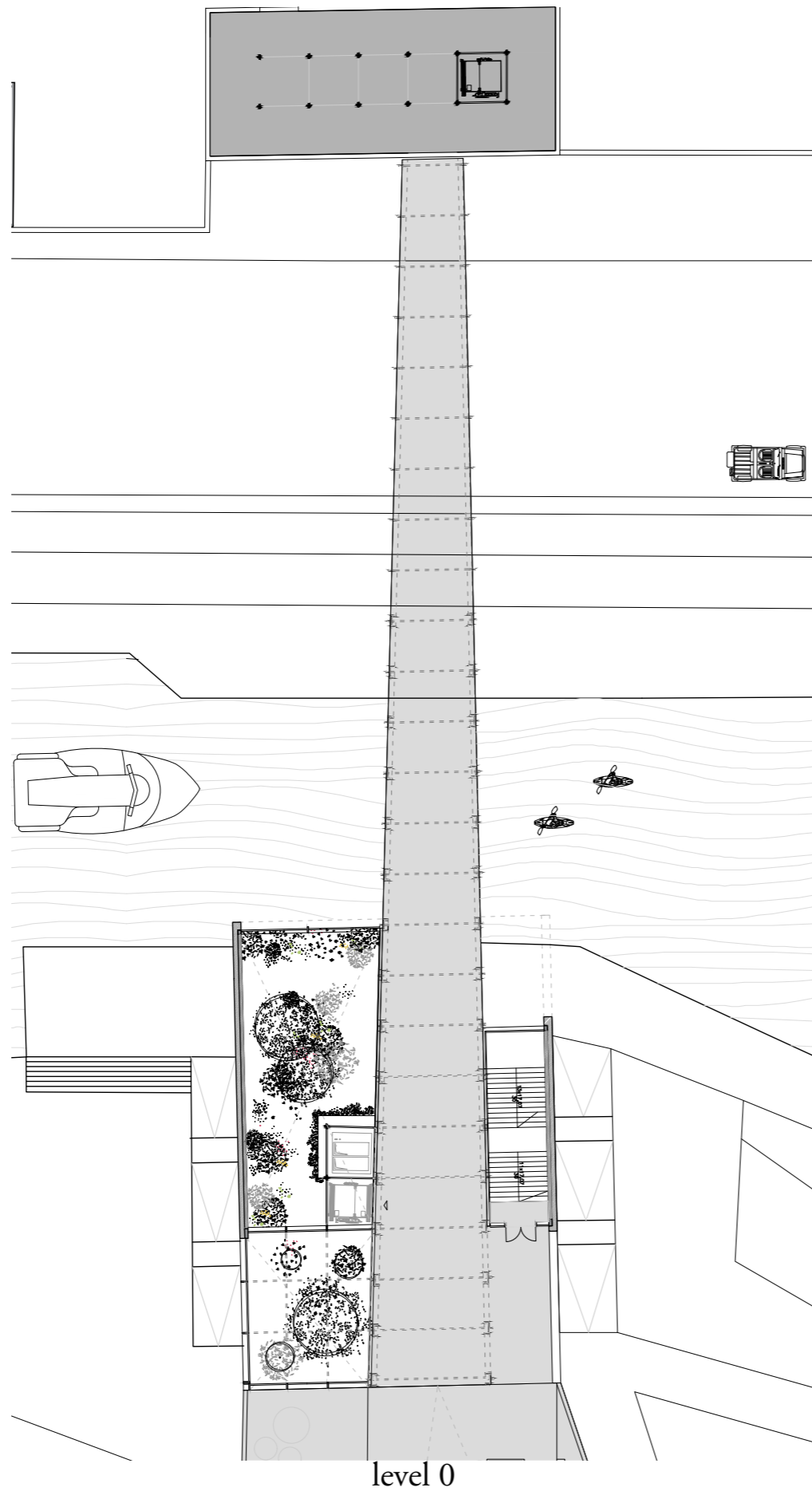




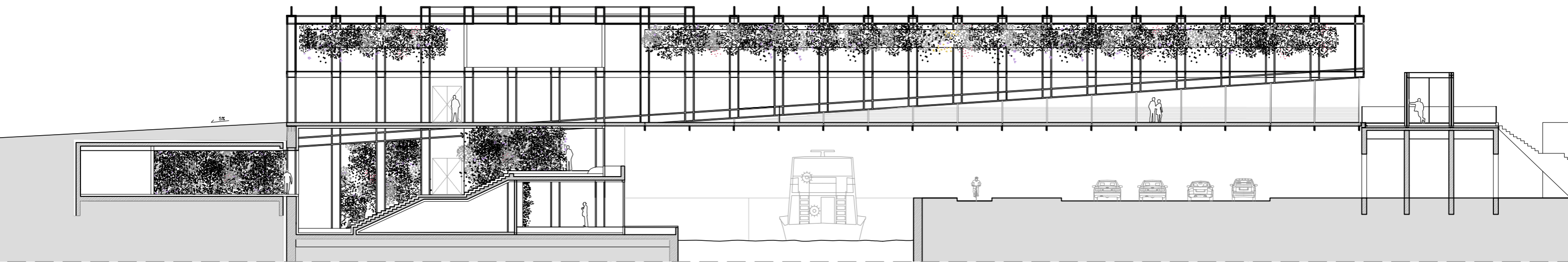


THE PASSAGE

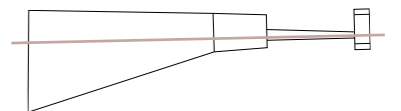
Bridge connects the urban and green side of the city.

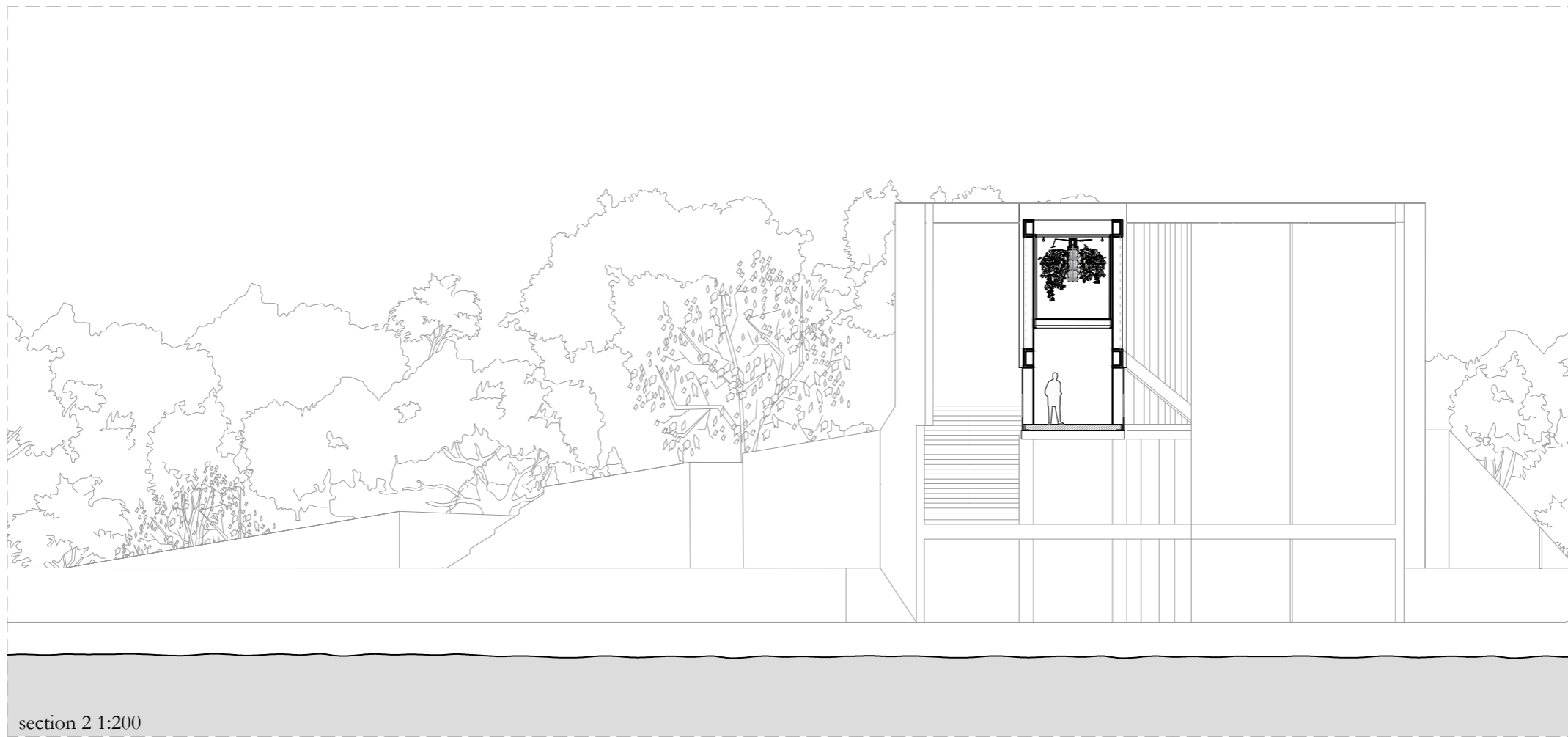


Bridging structure



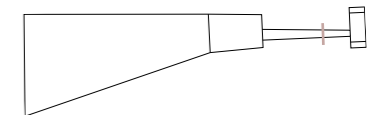
City- greenery passage





section 2 1:200

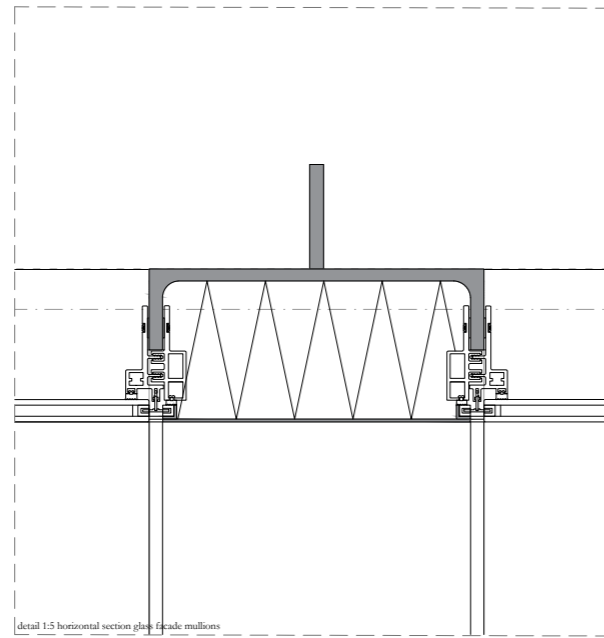
Bridge



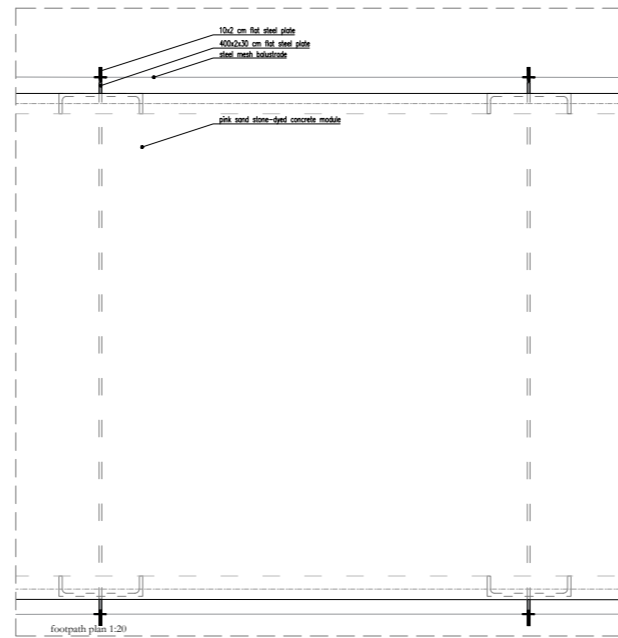




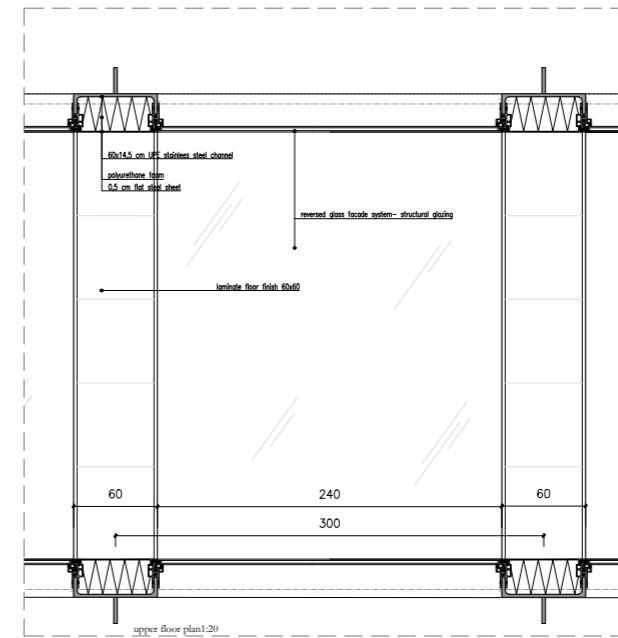




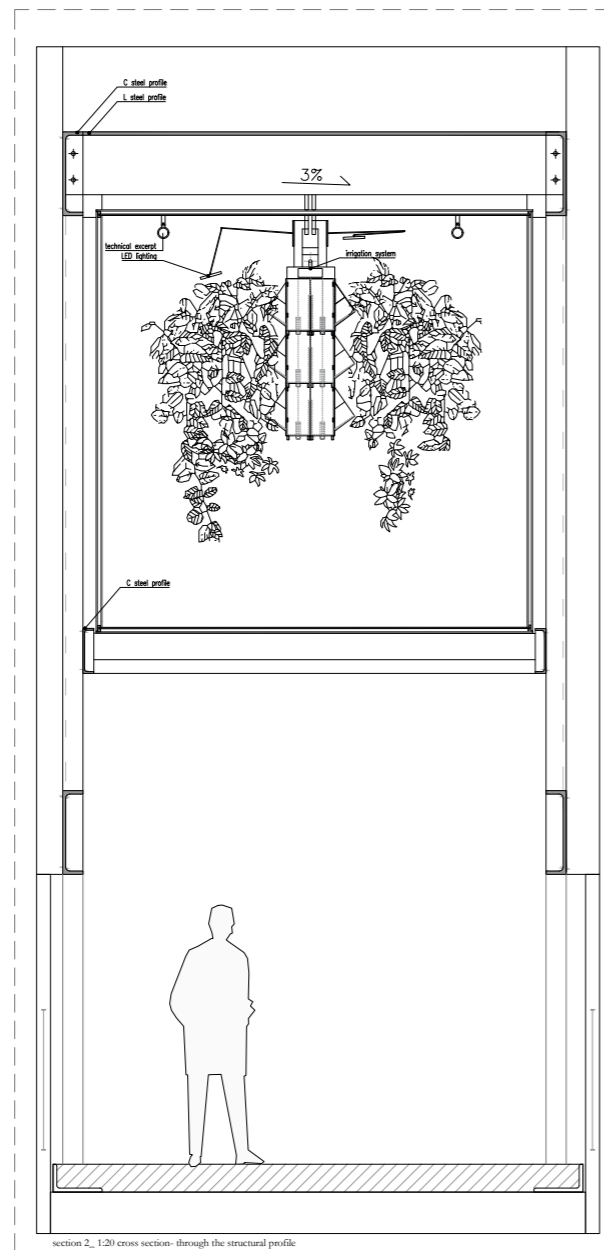
detail 1:5 horizontal section glass facade mullions



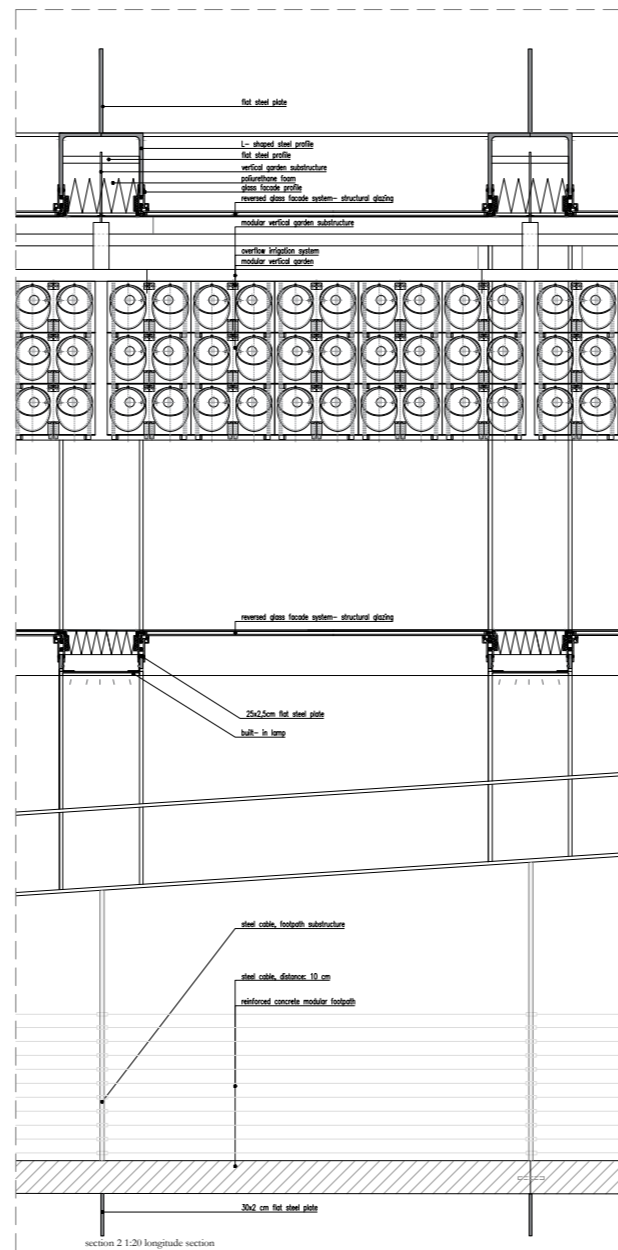
footpath plan 1:20



upper floor plan 1:20



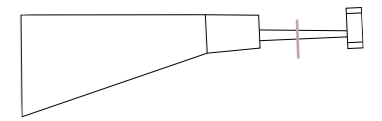
section 2_1:20 cross section- through the structural profile

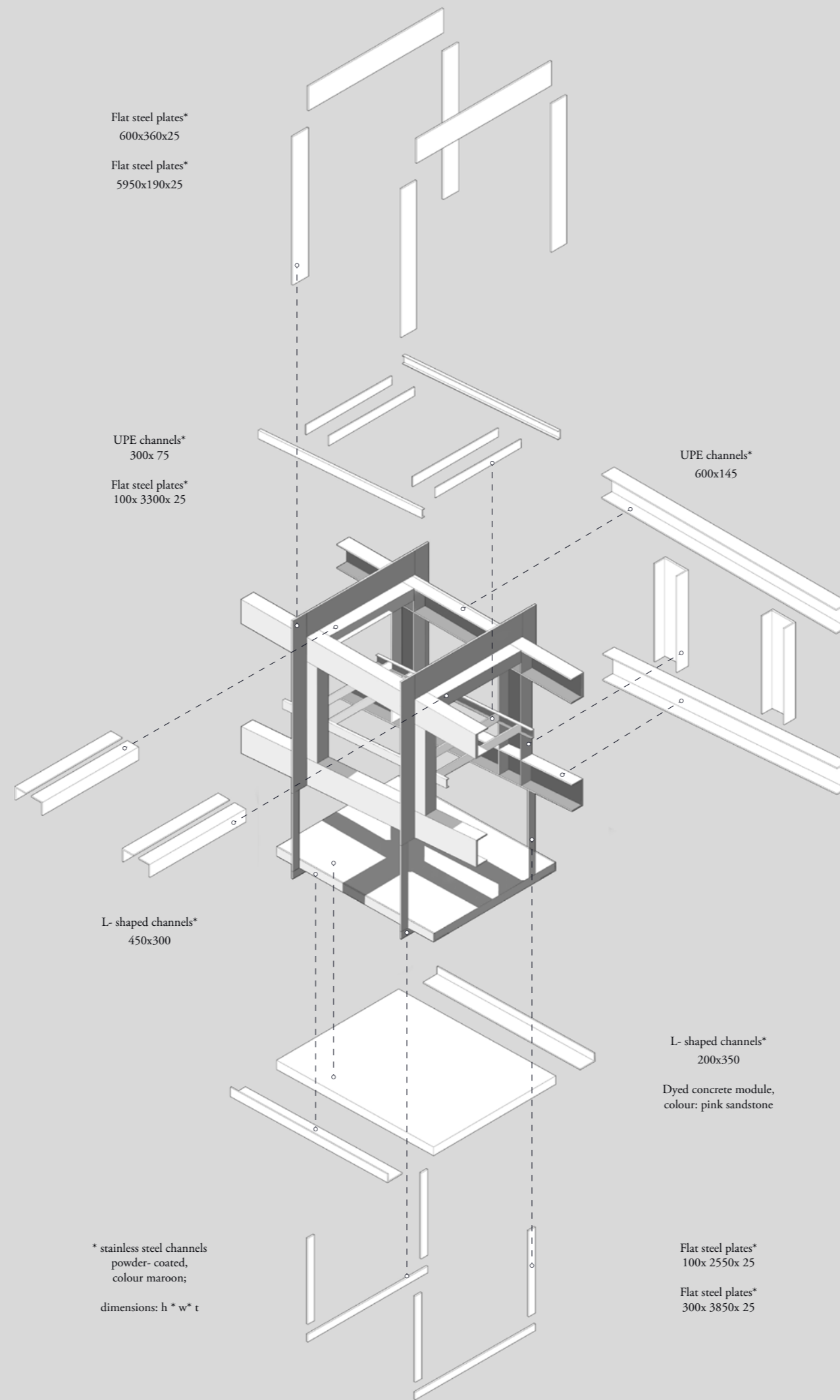


section 2_1:20 longitudinal section



facade 1:20





Flat steel plates*
600x360x25

Flat steel plates*
5950x190x25

UPE channels*
300x 75

Flat steel plates*
100x 3300x 25

UPE channels*
600x145

L- shaped channels*
450x300

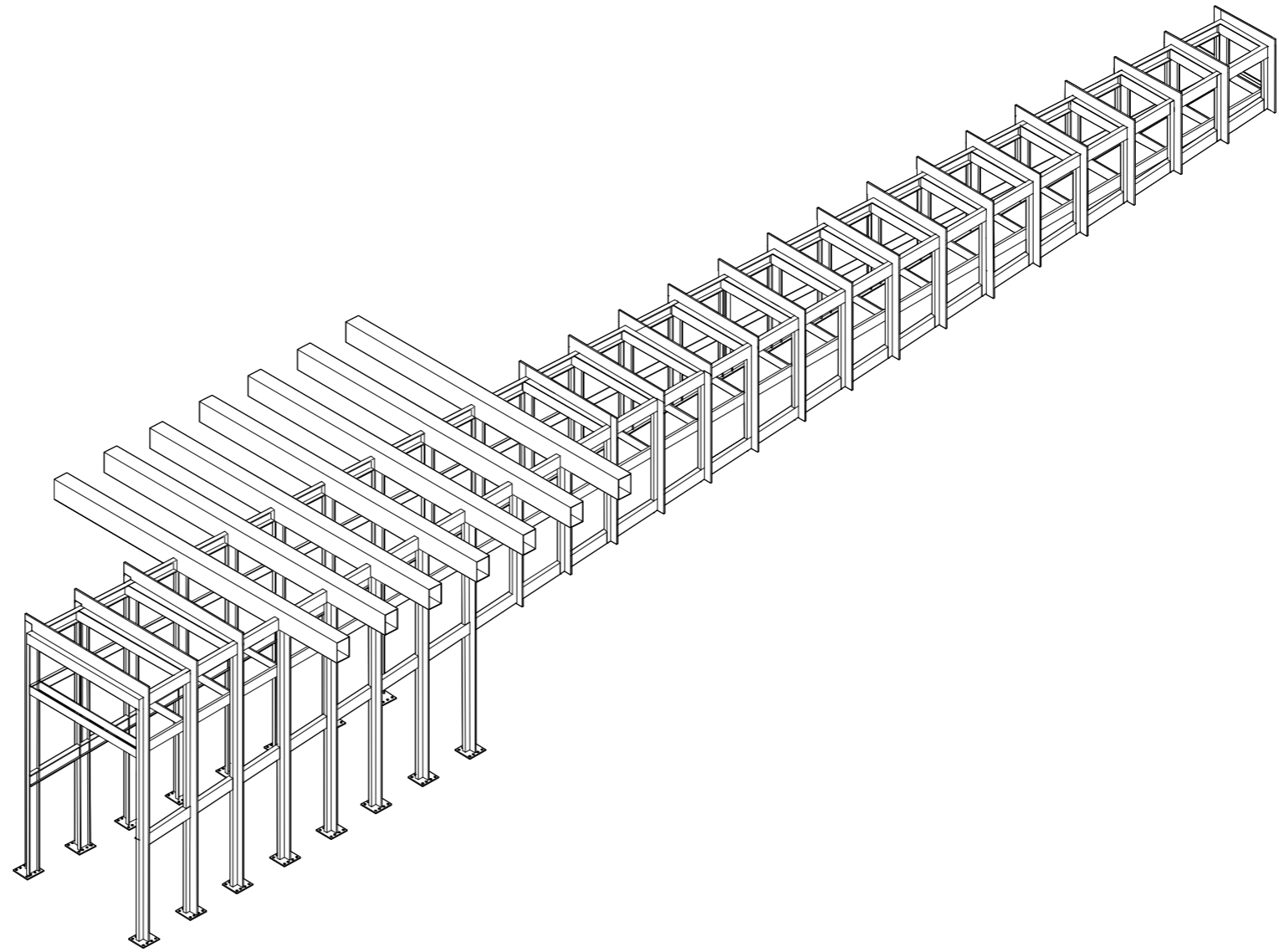
L- shaped channels*
200x350

Dyed concrete module,
colour: pink sandstone

* stainless steel channels
powder- coated,
colour maroon;
dimensions: h * w * t

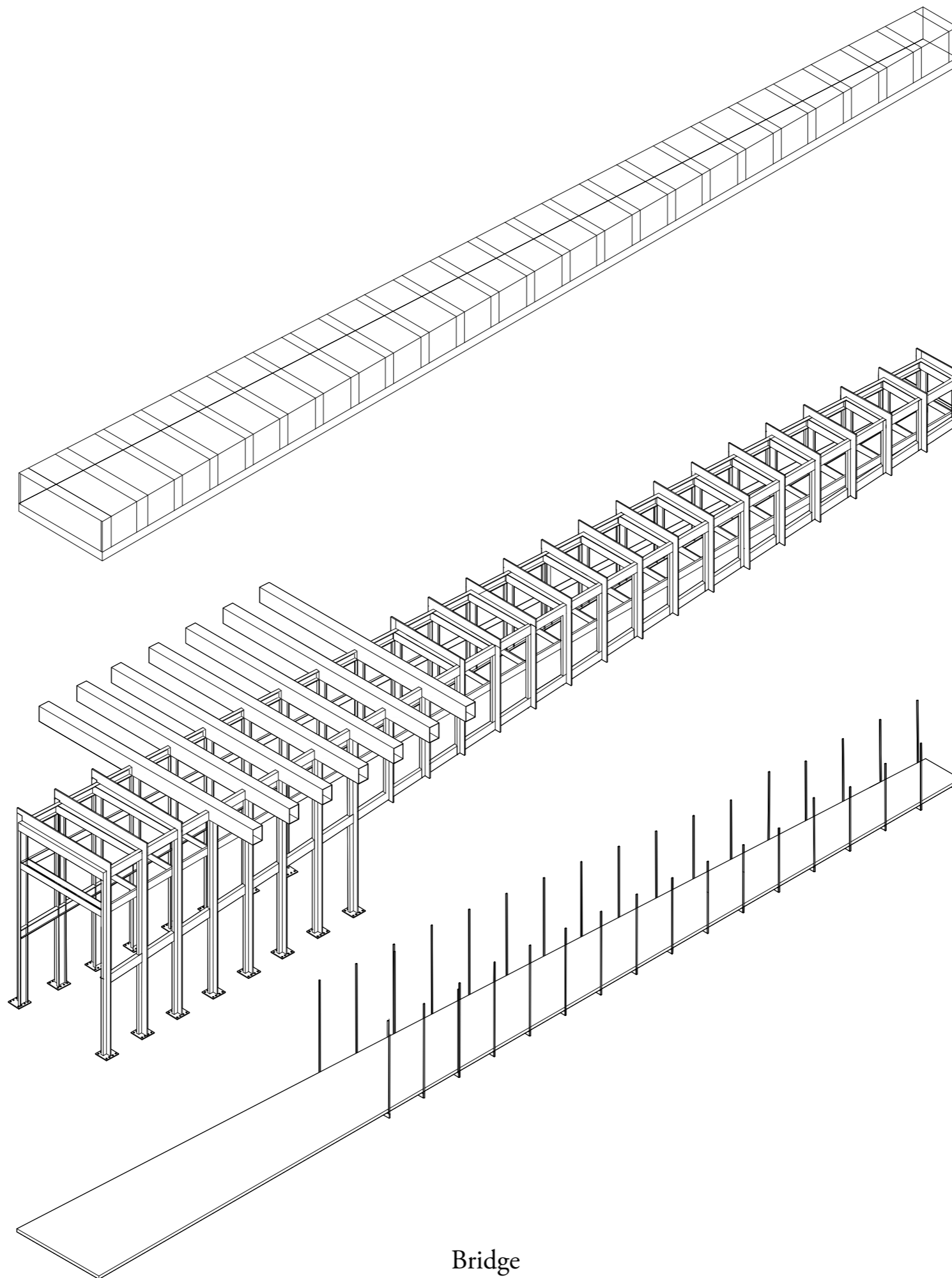
Flat steel plates*
100x 2550x 25

Flat steel plates*
300x 3850x 25



Vierendeel frames

The passage is provided by two steel Vierendeel frames with a total span of 75 meters, including 50 meter long overhang.



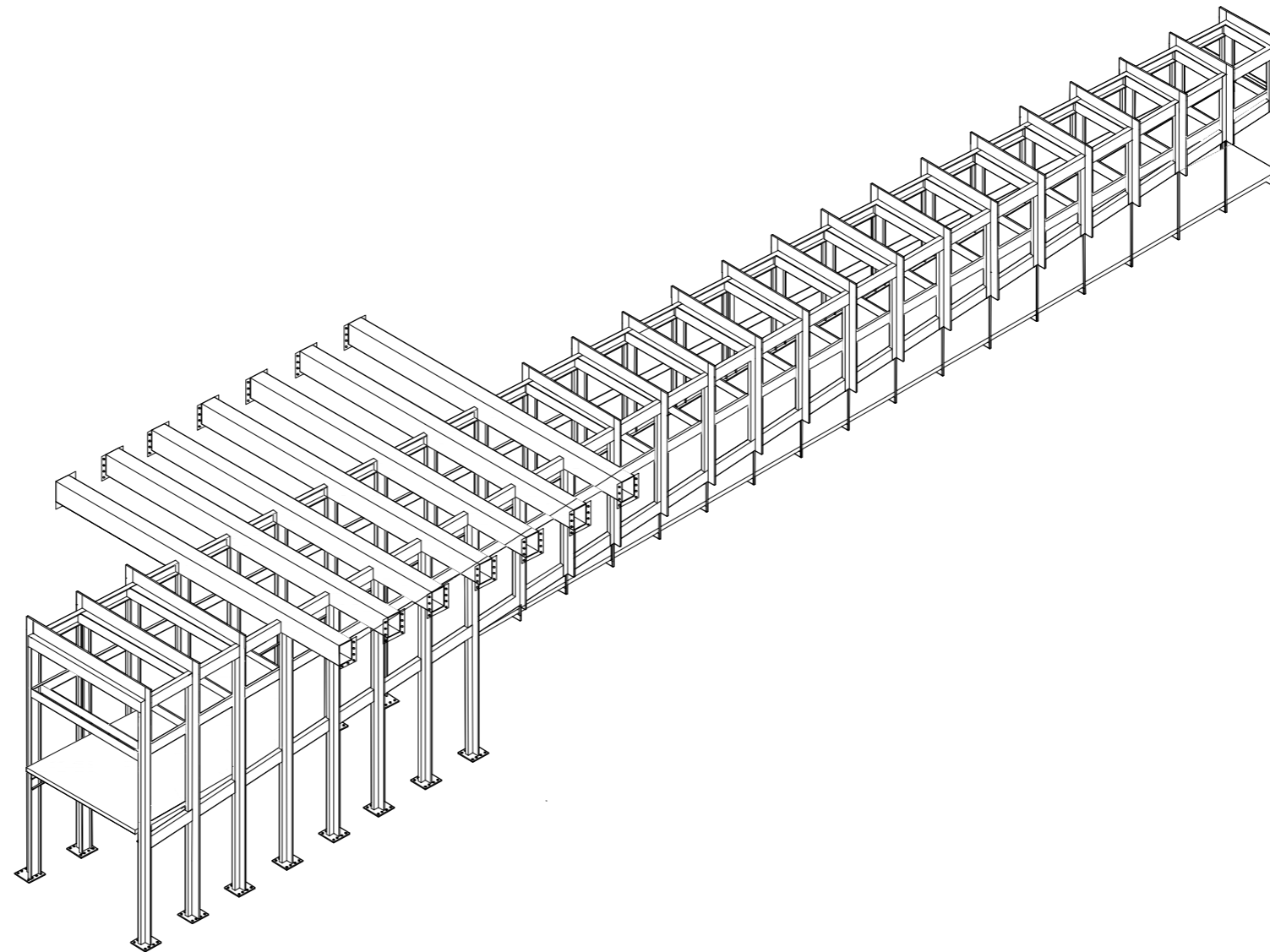
glazed garden box located on the mezzanine

Vierendeel frames with the rigid joints in between them

concrete footbridge placed on the steel structure joint together with the main bearing structure

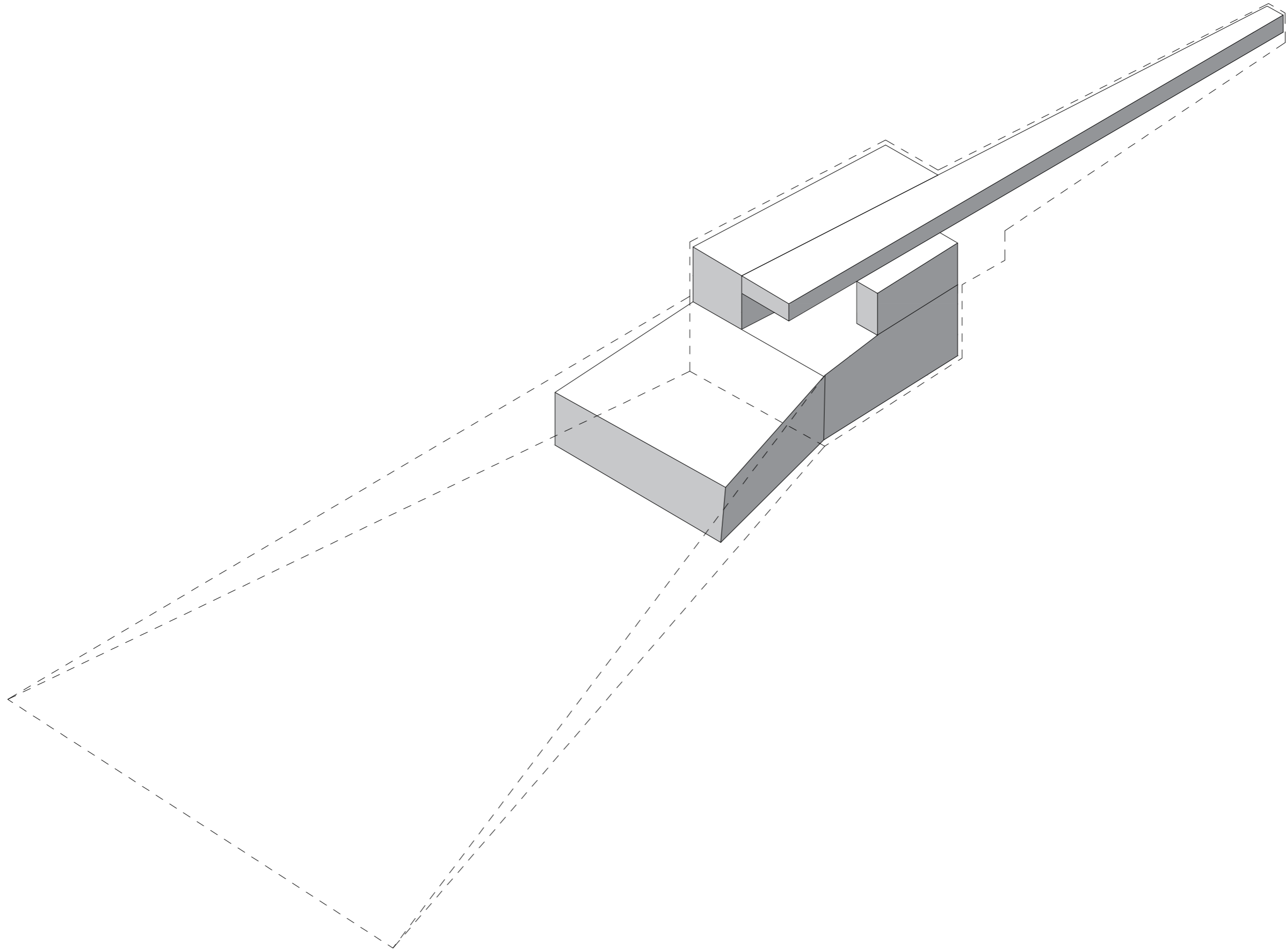
Bridge

The bridge carries a footbridge that hangs underneath it and a flower garden, which is nested on the frames' mezzanine.



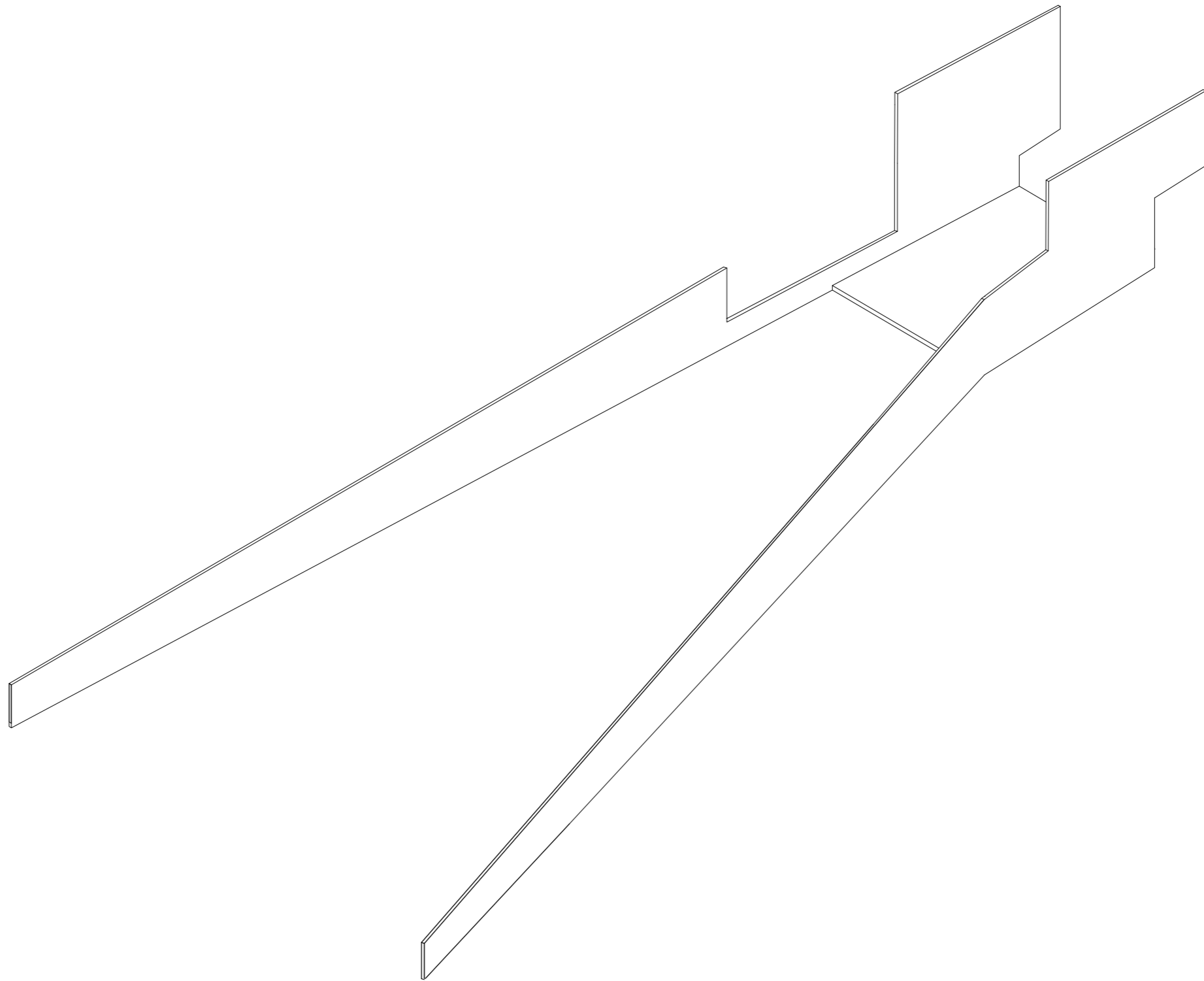
Bridge

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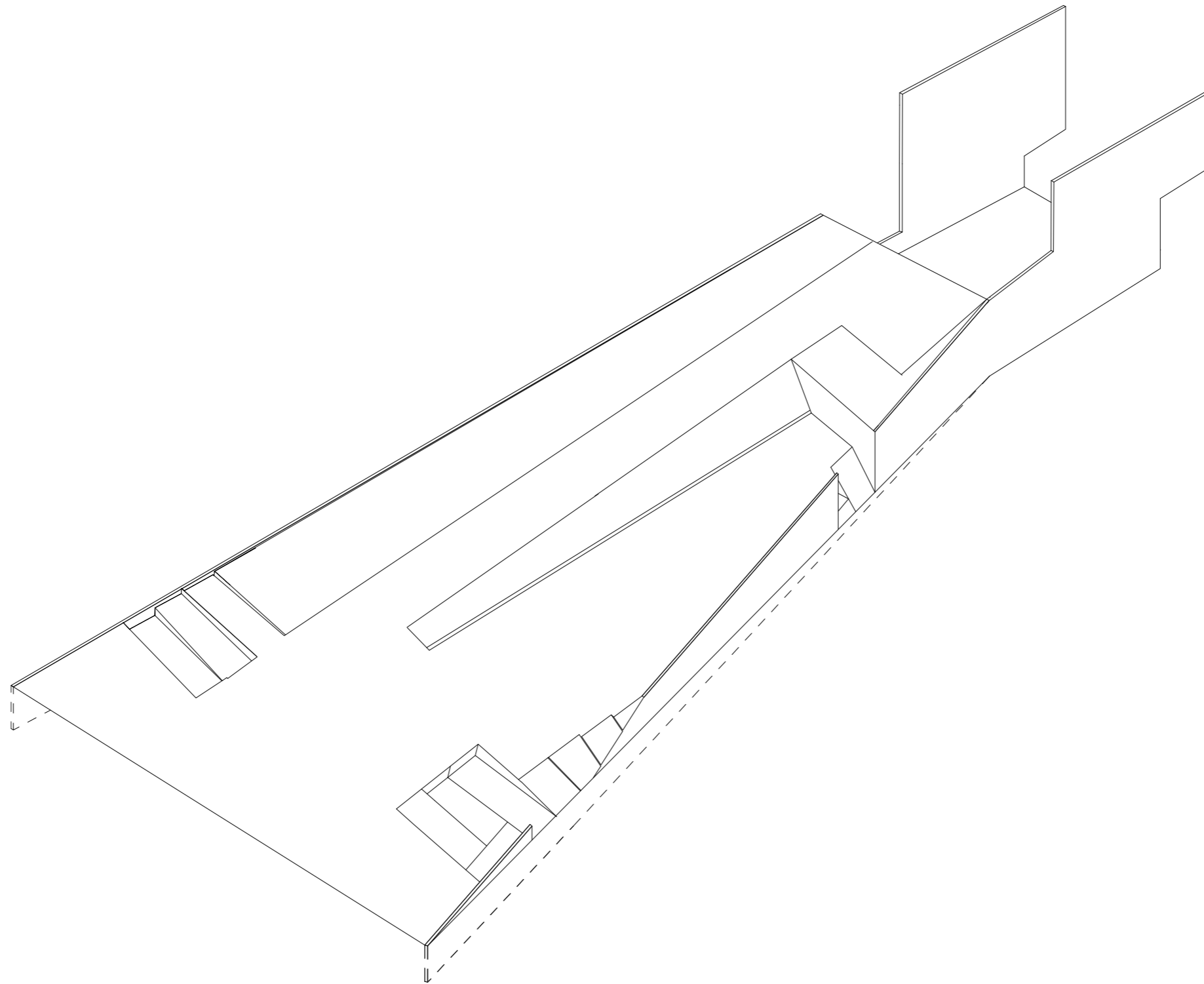
Indoors, outdoors

There is an interplay between what is open and what is enclosed.



Retaining walls

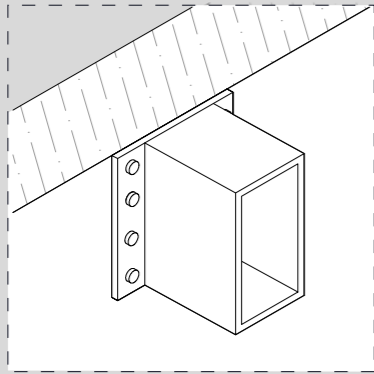
The reinforced concrete walls ground the bridge structure as well as the garden that rises up to 5 meters high.



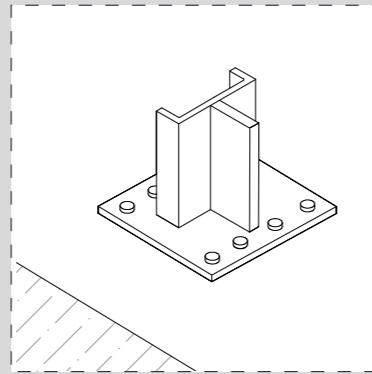
Garden

The retaining walls hold walkpaths, communal gardens and different types of local greenery that grows on the hill.

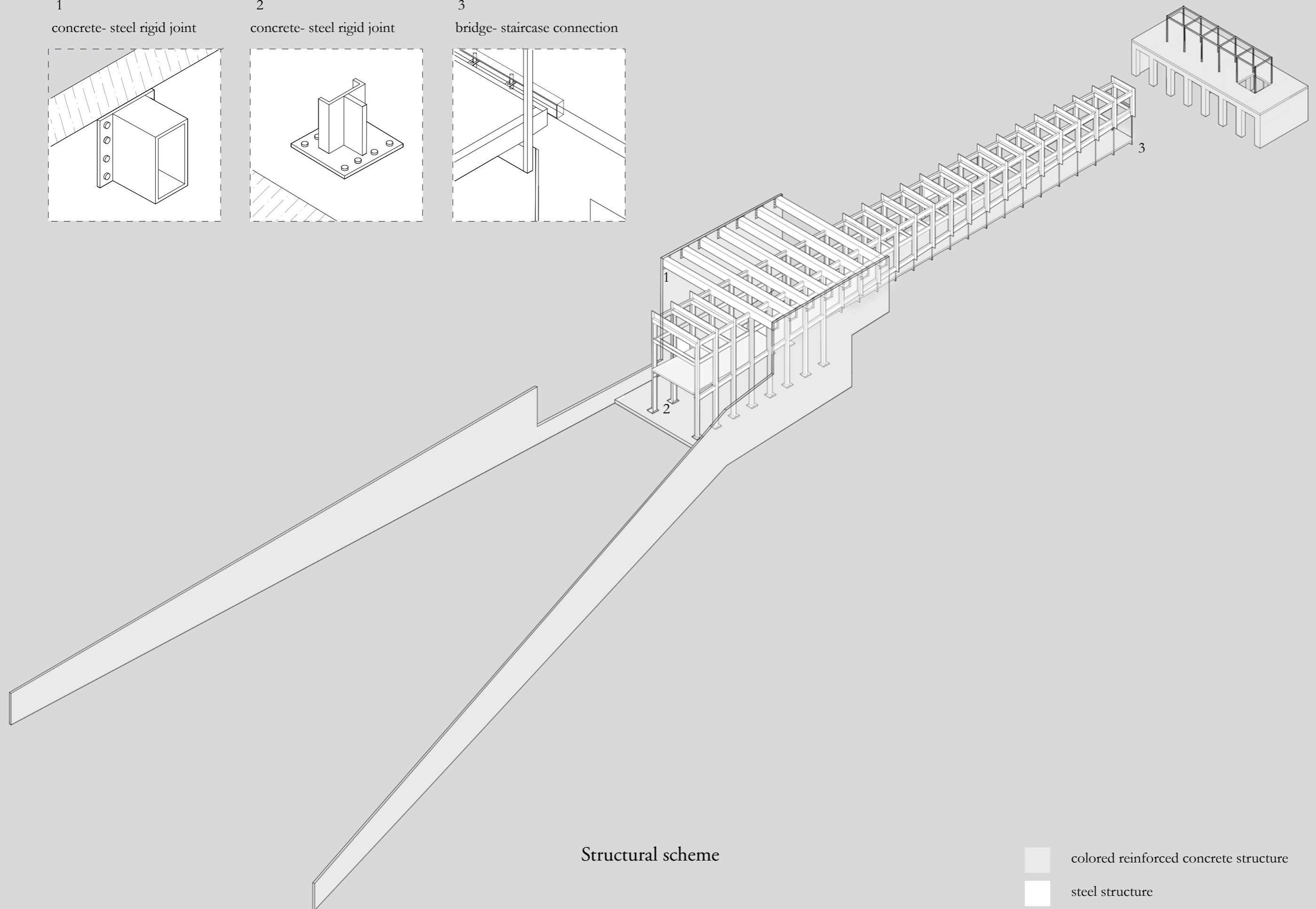
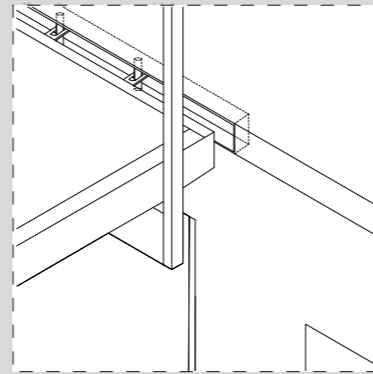
1
concrete- steel rigid joint





2
concrete- steel rigid joint



3
bridge- staircase connection



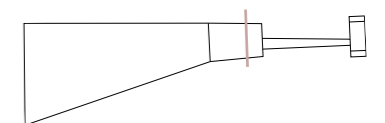
Structural scheme

-  colored reinforced concrete structure
-  steel structure





section 4 1:200

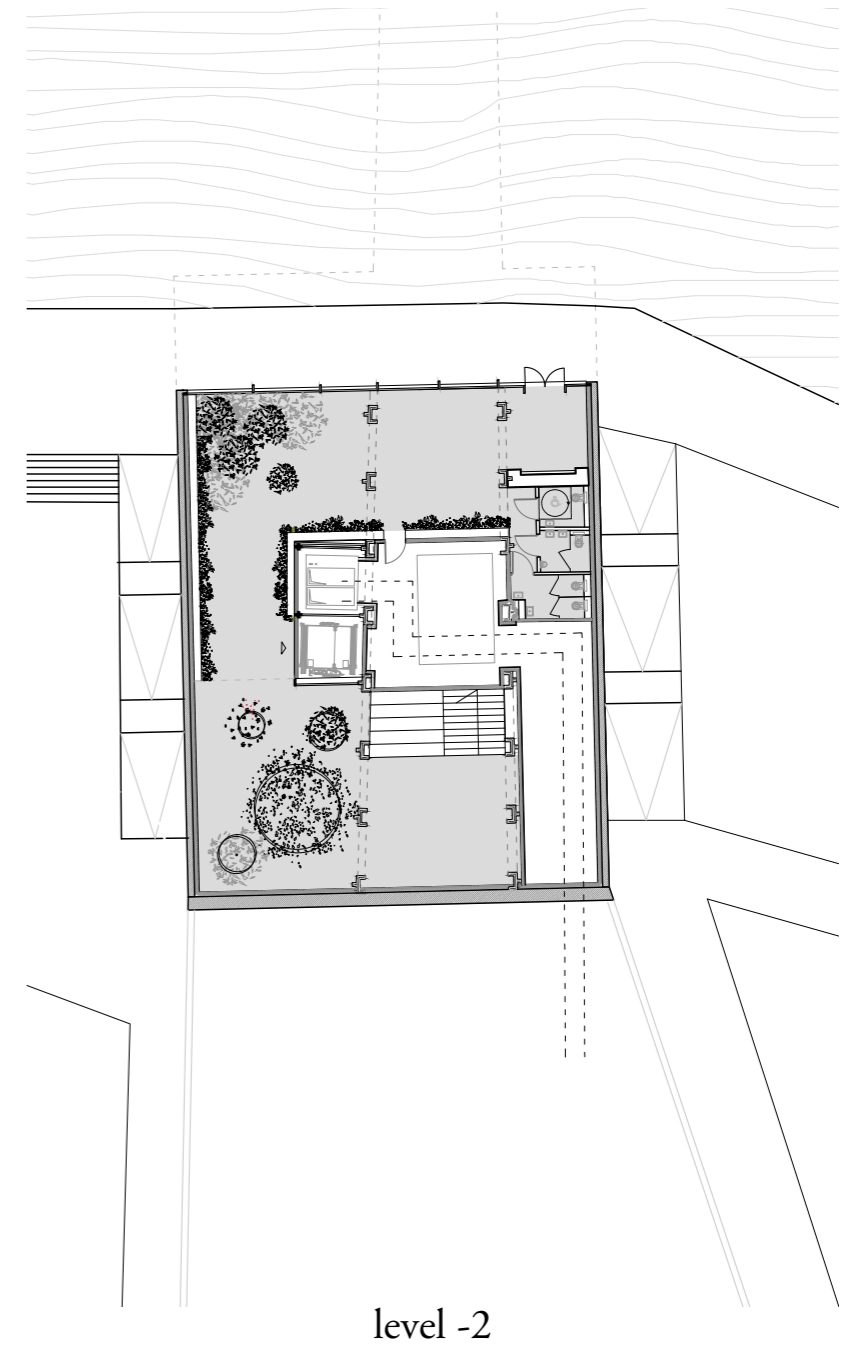
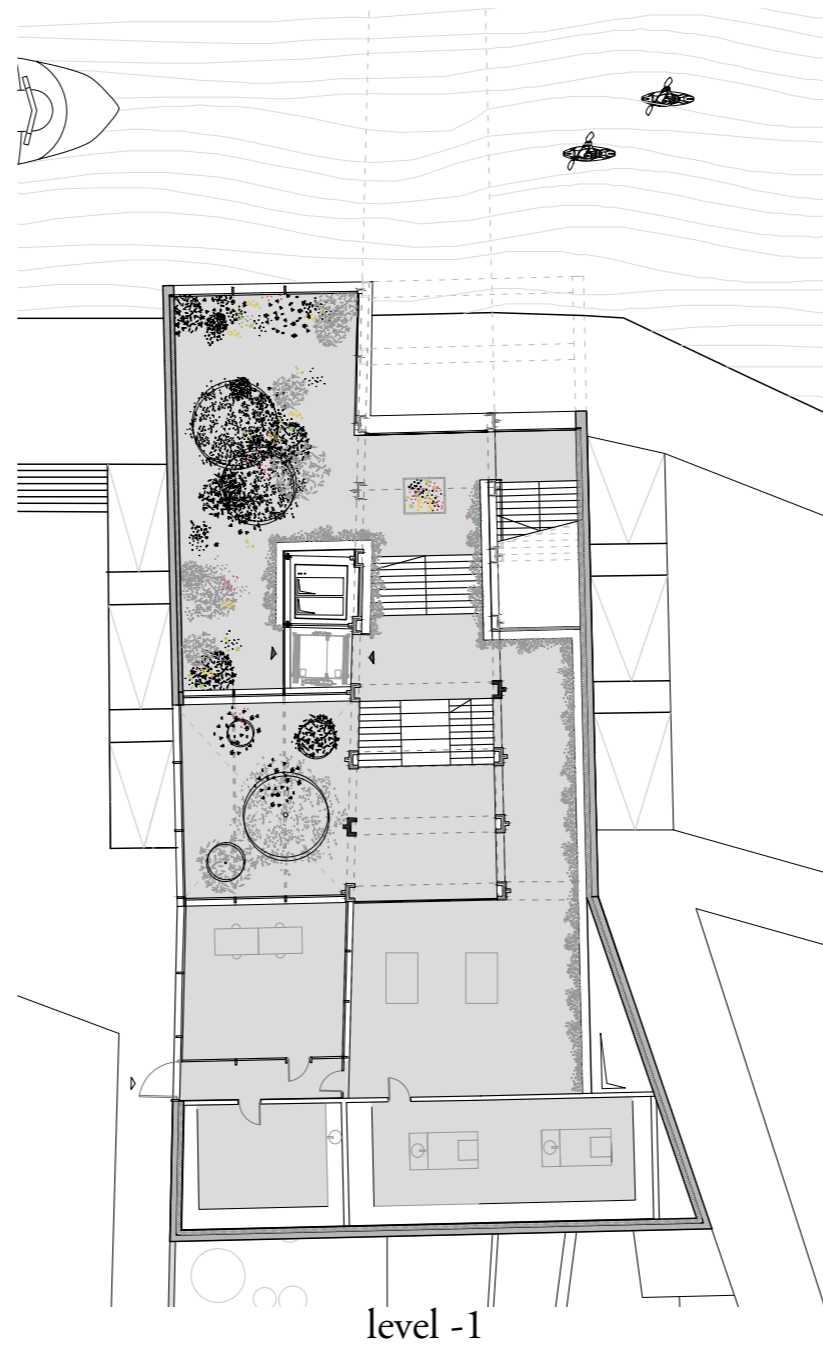
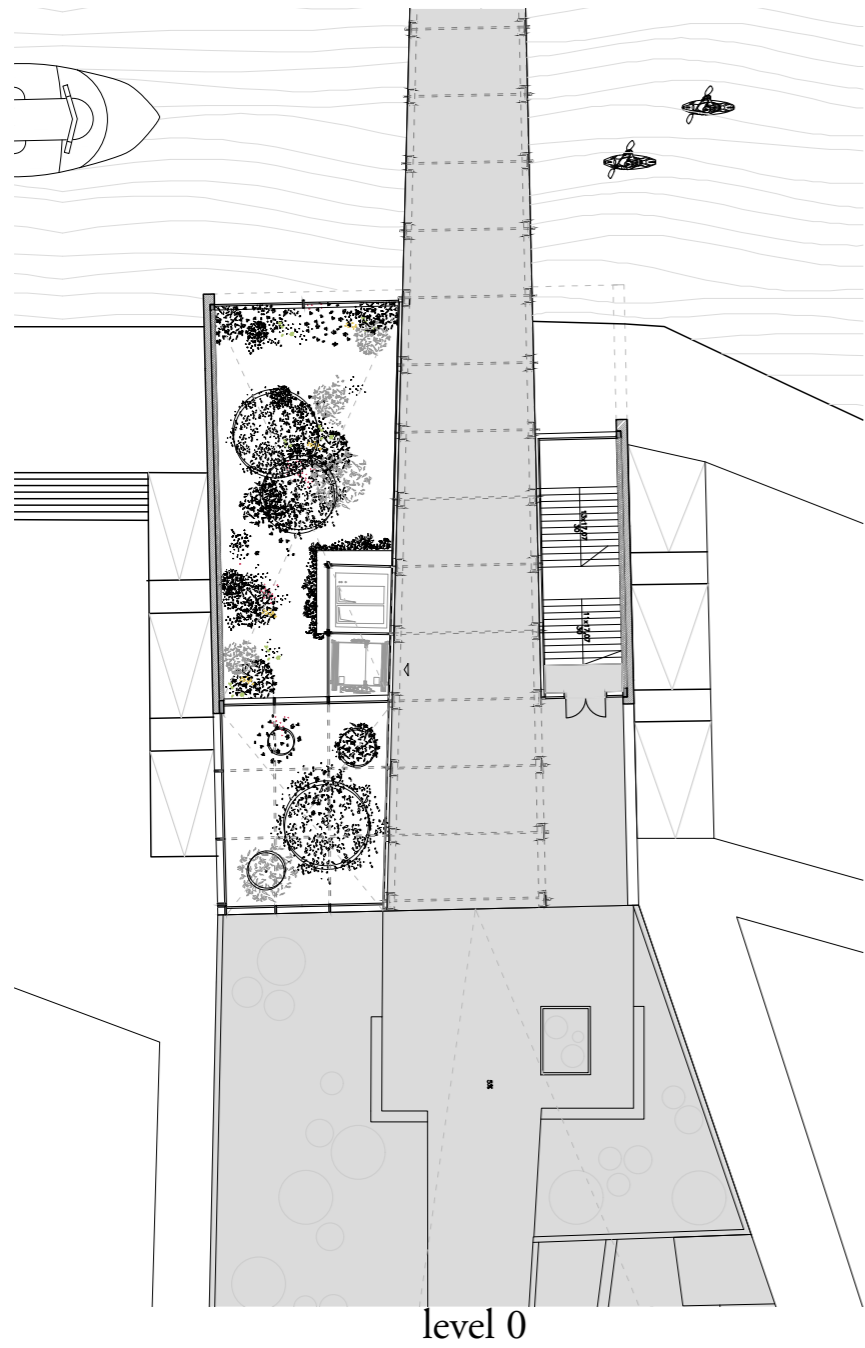


“Threshold” cross section

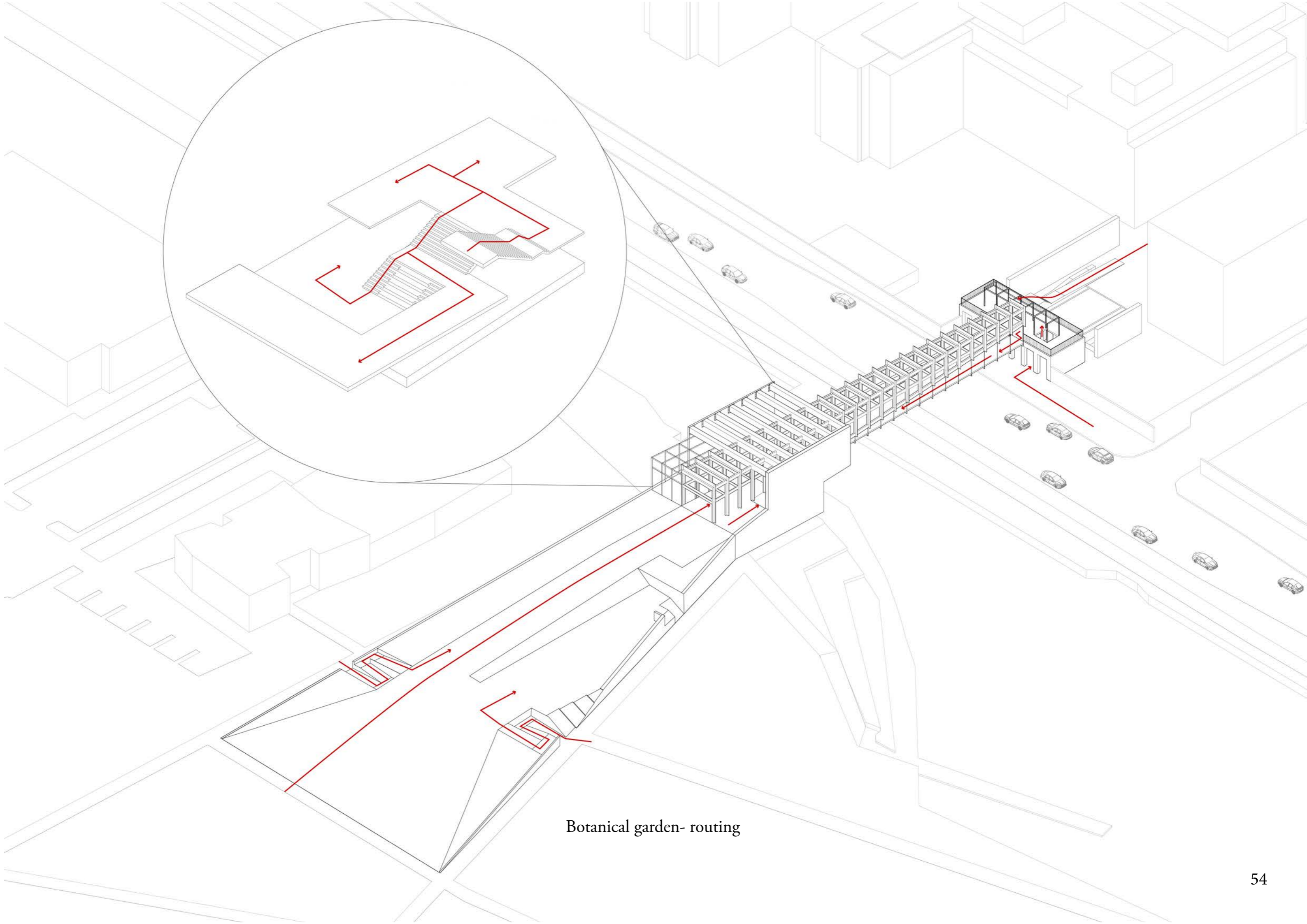
Reinforced concrete core becomes a threshold, where colorful, lush greenery is imposed on a city realm.



Exterior/ interior threshold



Botanical garden- levels 0, -1, -2



Botanical garden- routing

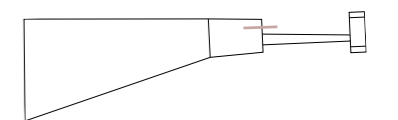
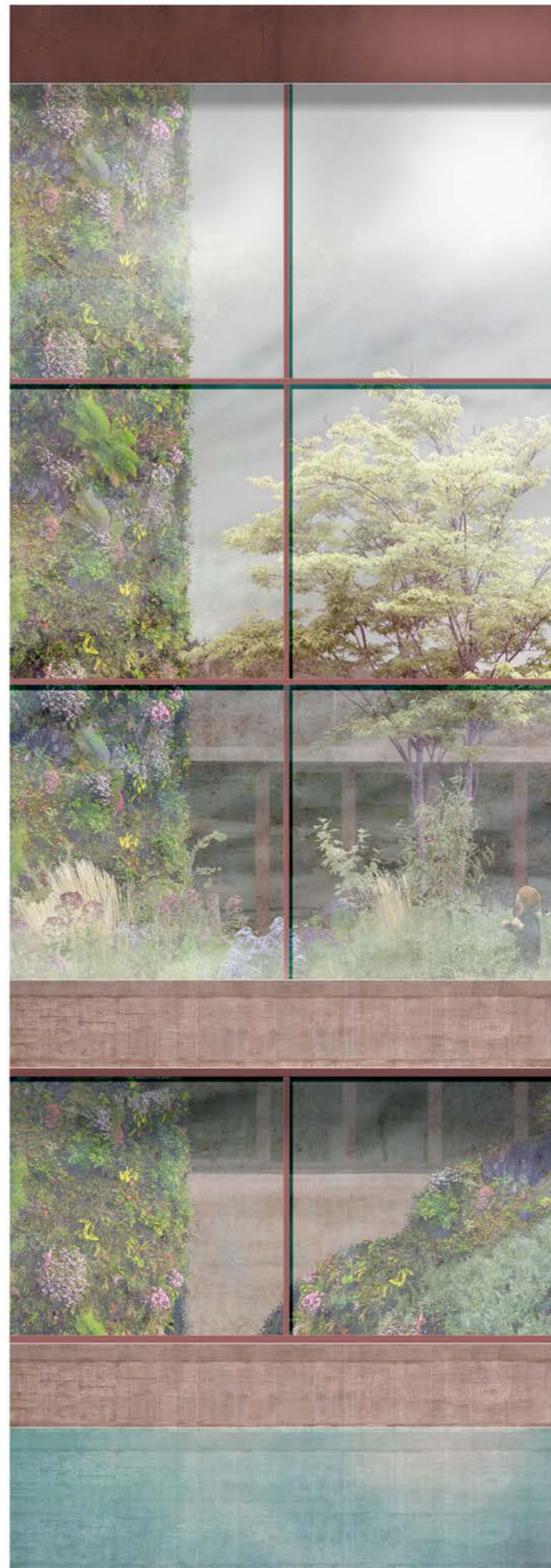
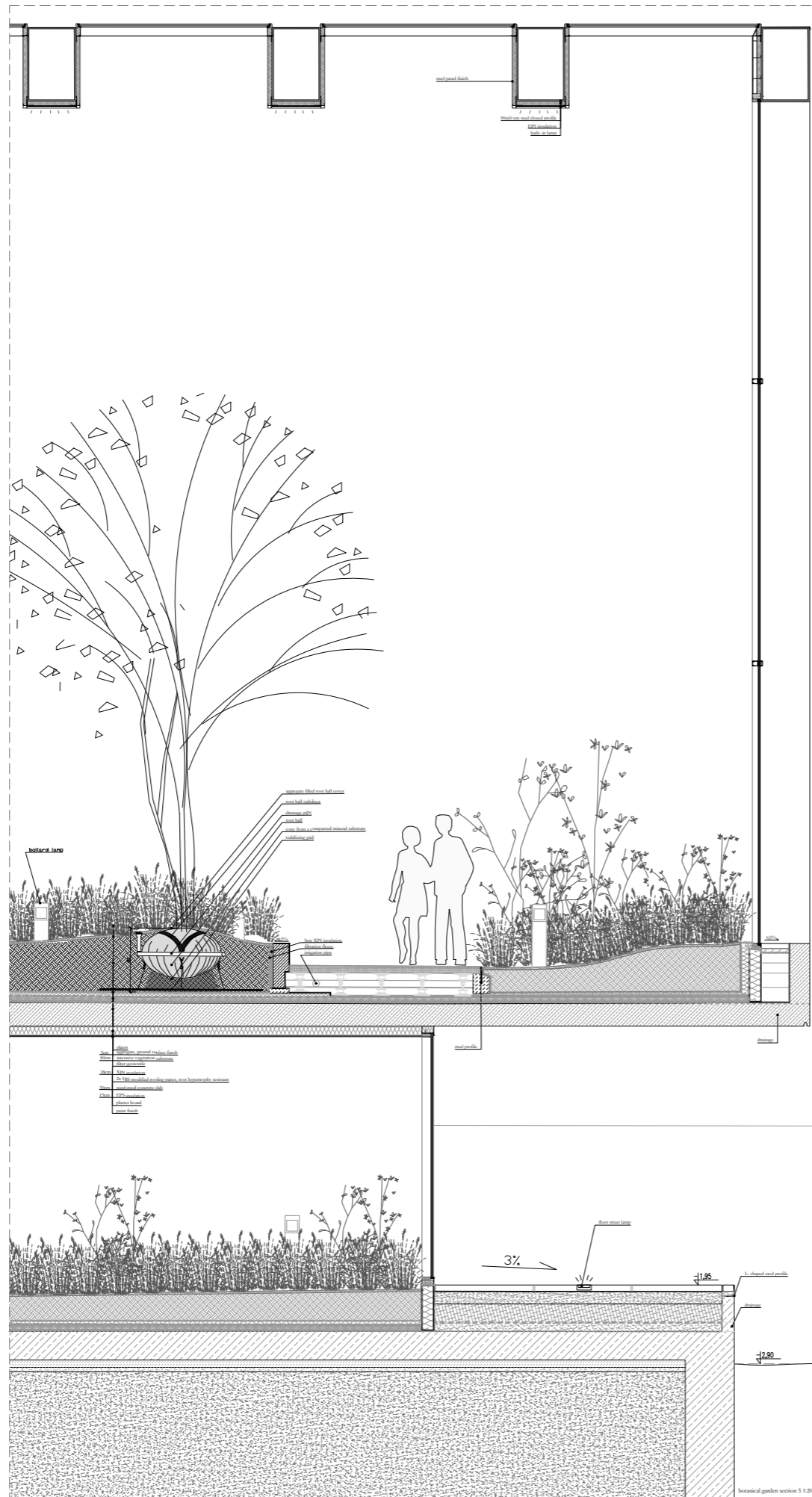


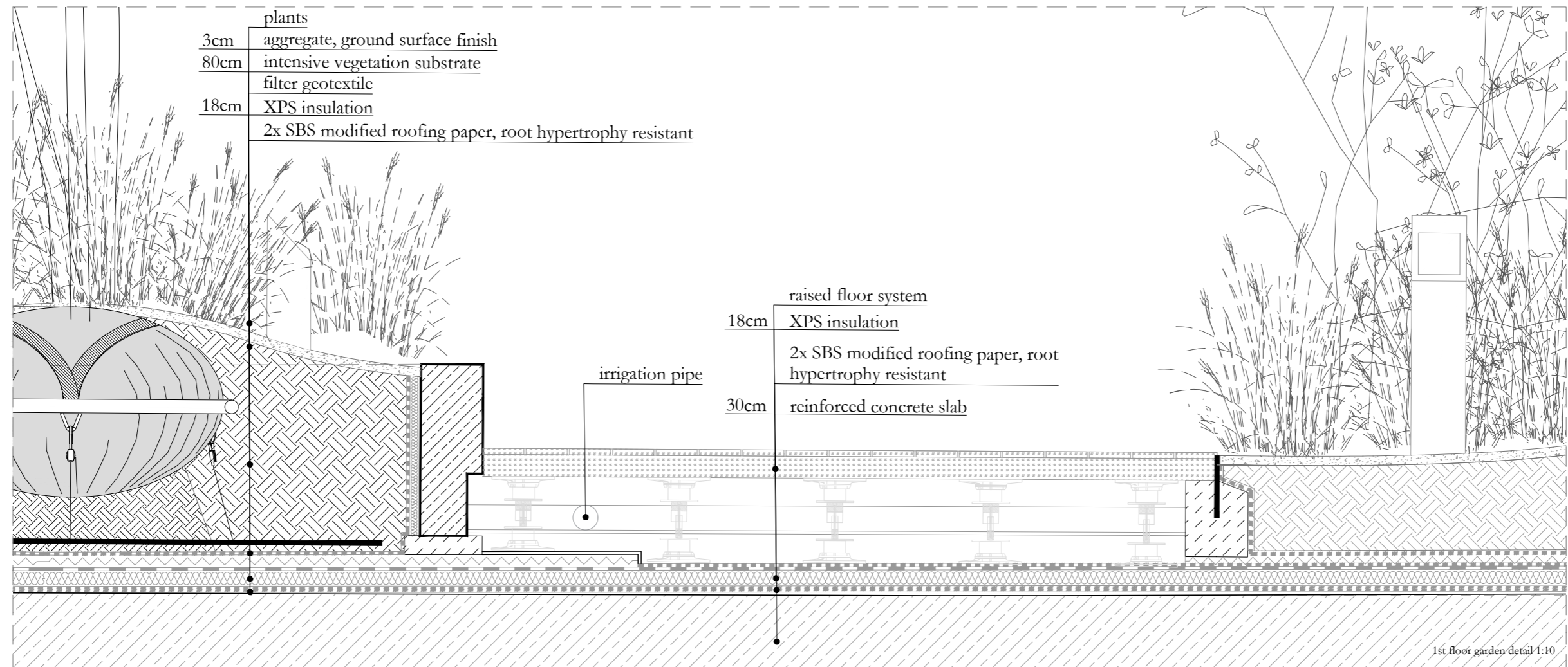
Promenade



Botanical garden

Landing of the bridge is filled with greenery and flowers with which visitors can interact while walking down the stairs between levels -1 and -2.





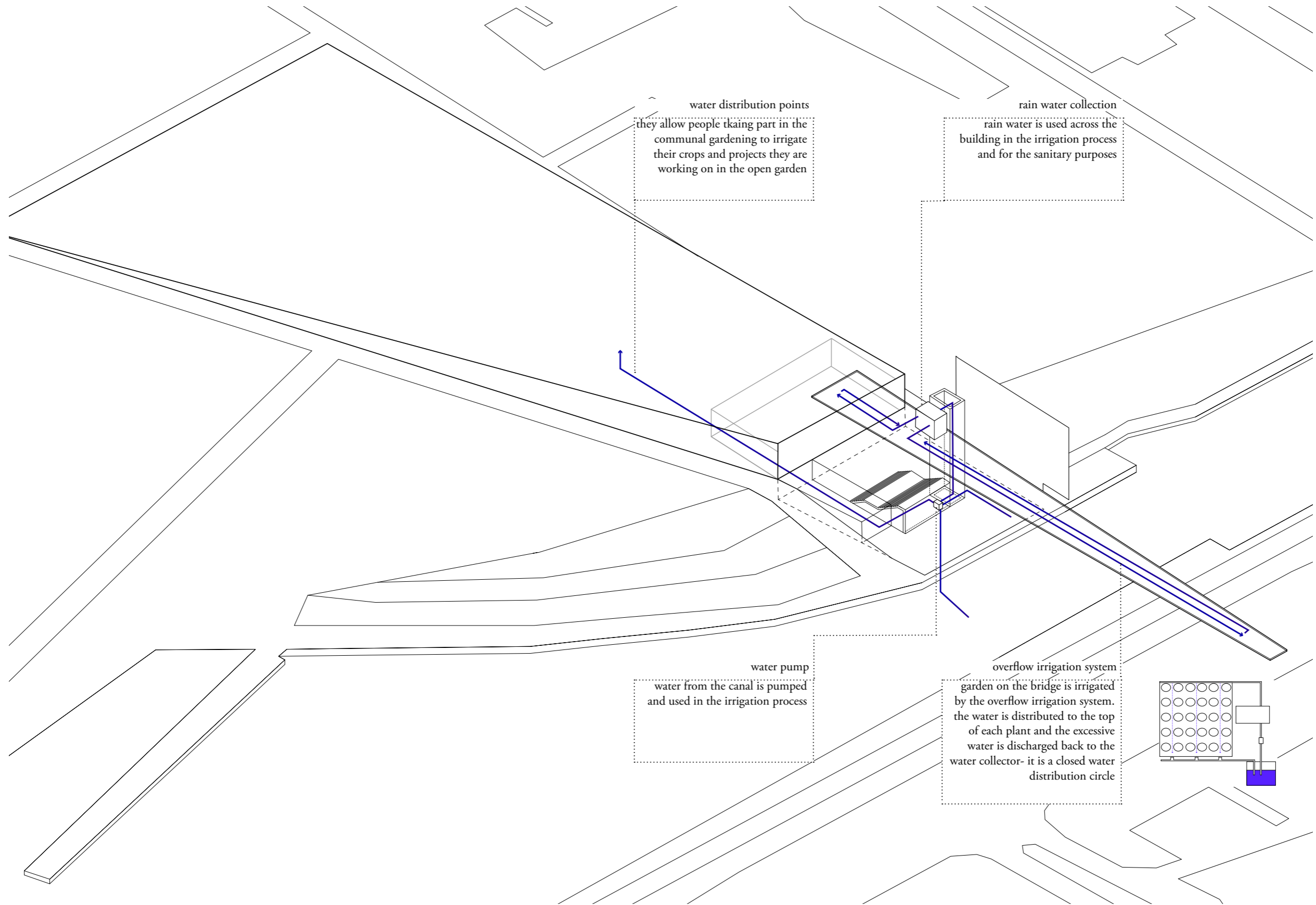


Eastern Facade Day, Night Conditions

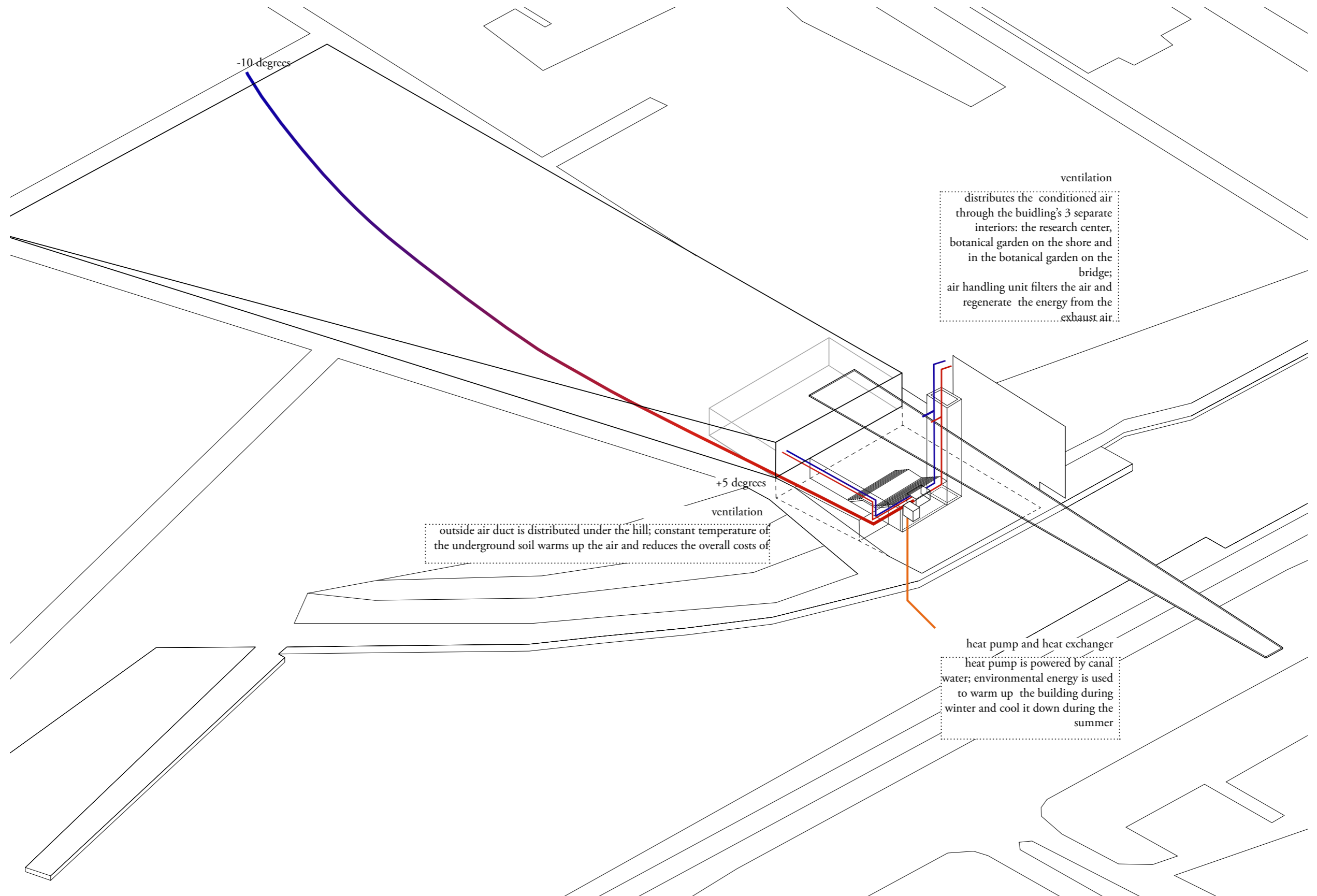
This is the only side of the project that can be perceived as a whole object.



Western Facade Day, Night Conditions



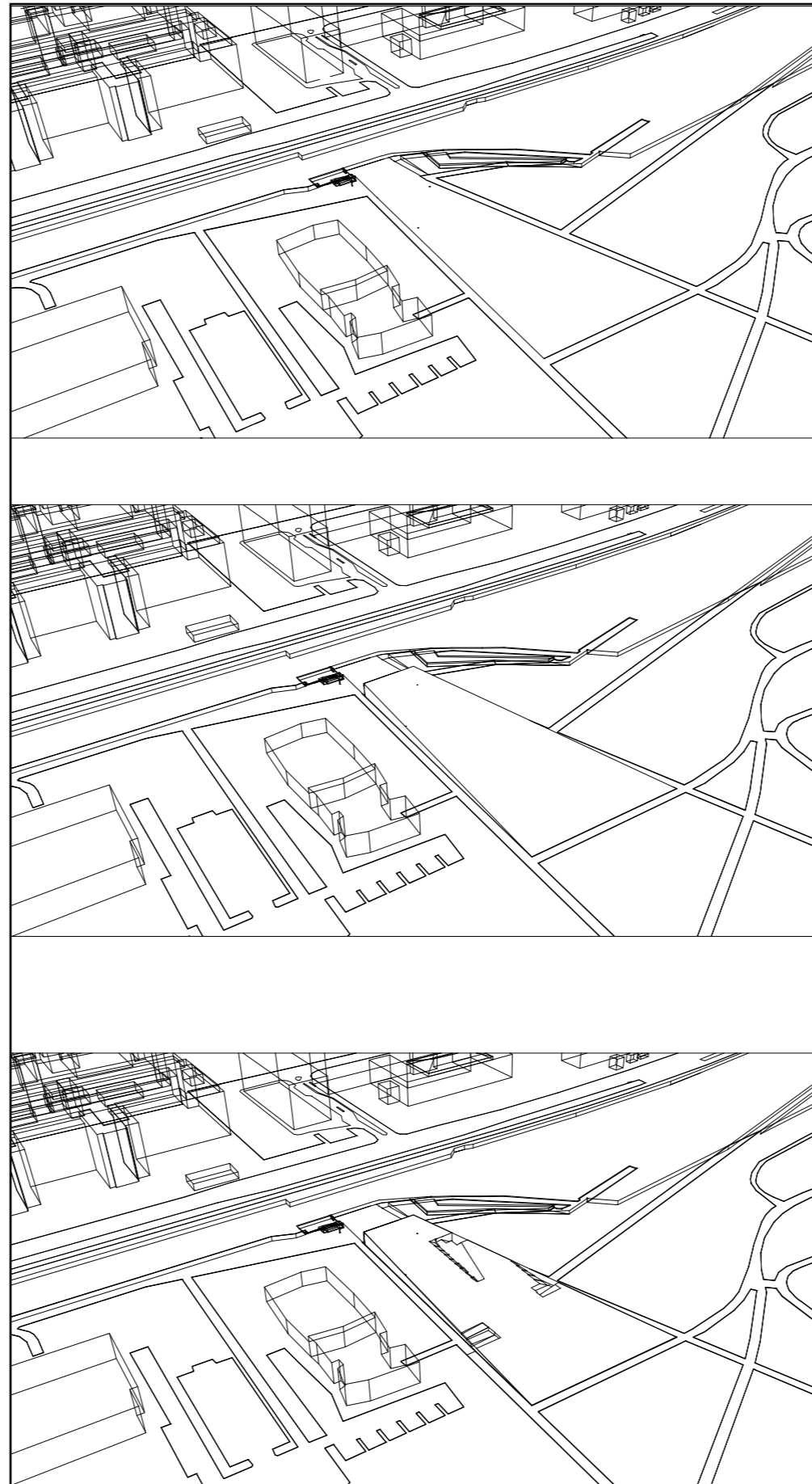
Irrigation



Ventilation & Heating

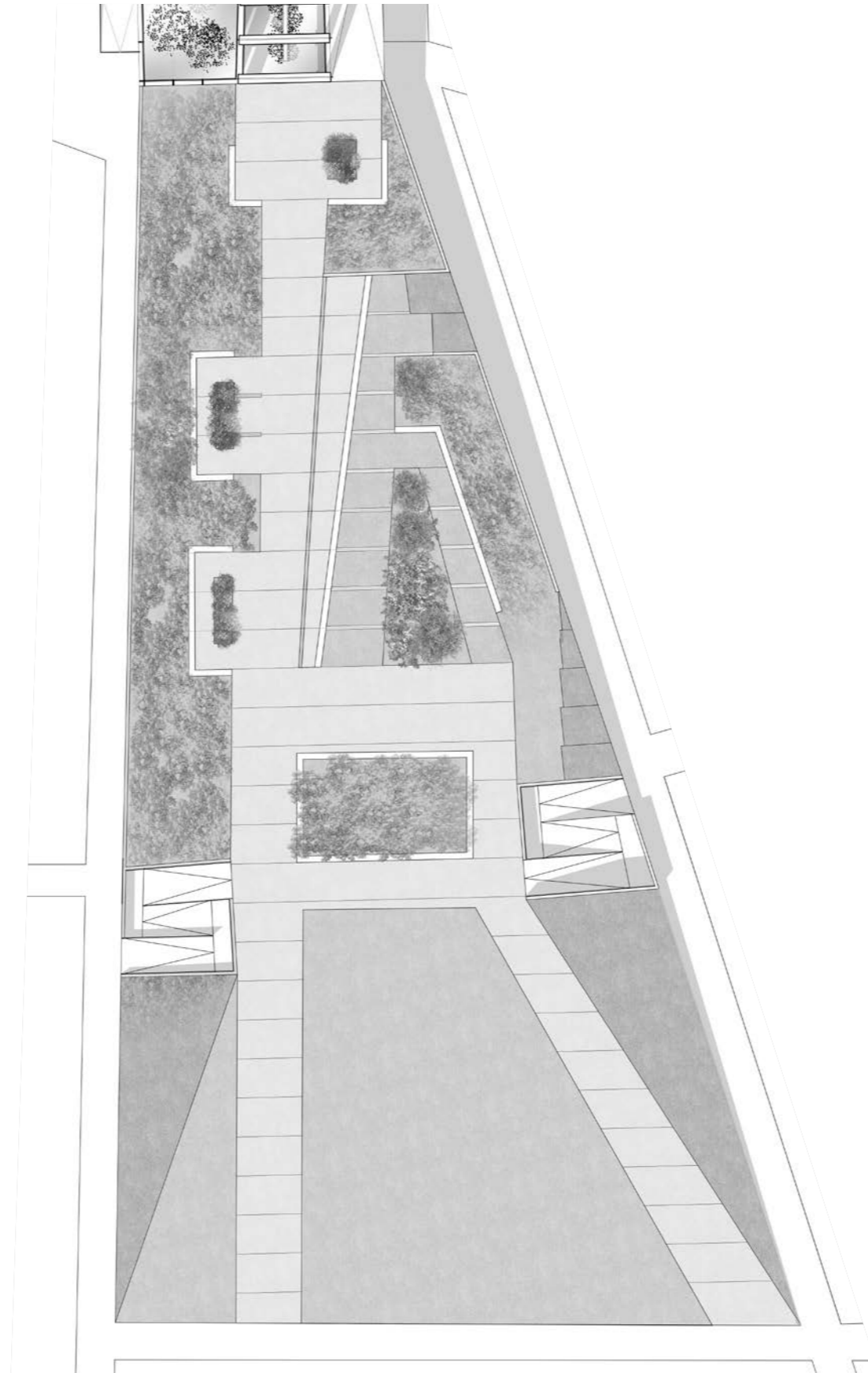


Outdoor garden plugs in the project to the existing park and greenery on the southern part of the site.



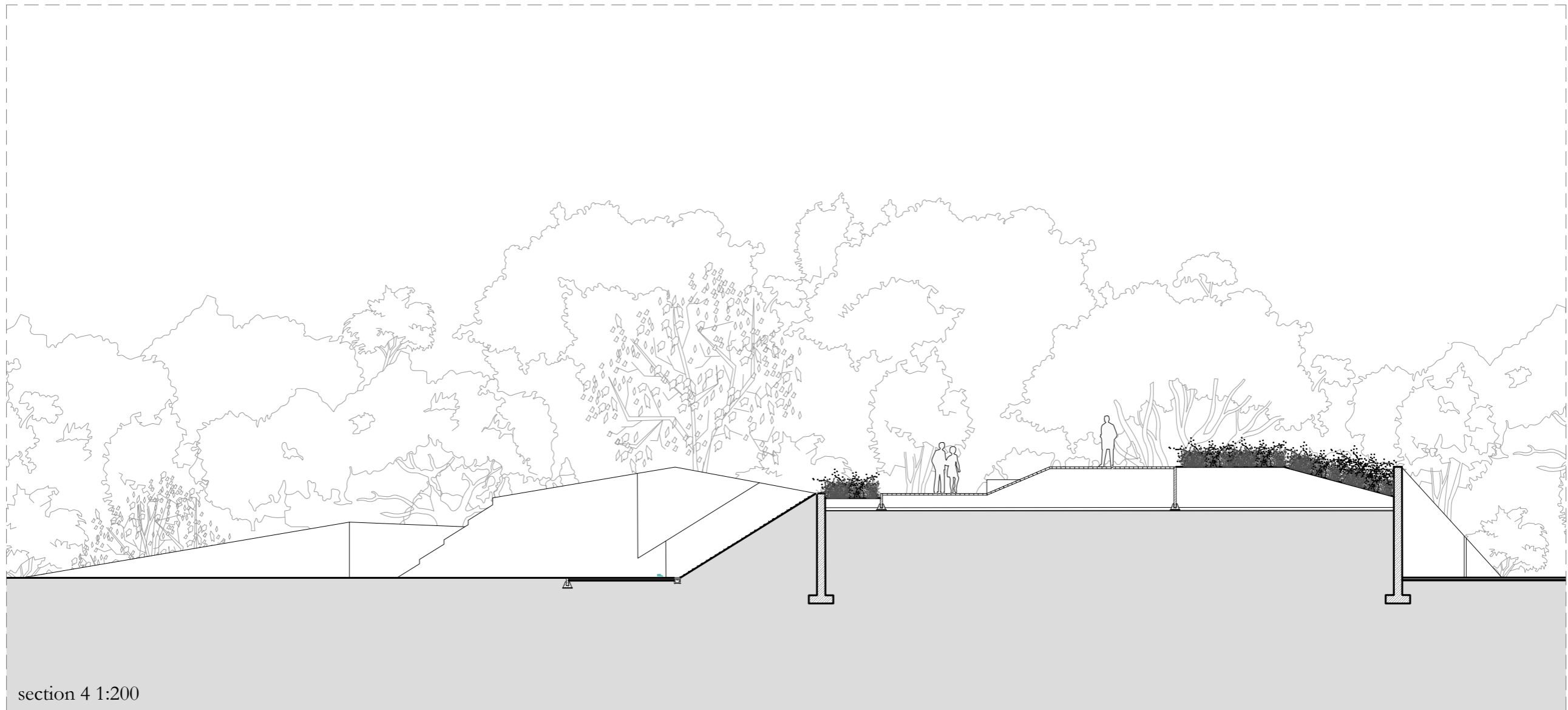
Development of the hill

Rising up 5 meters above the ground level, the garden becomes part of the physical connection to the old town and highlights the importance of the greenery as a building's tissue in this architectural development.



Tectonics of the hill

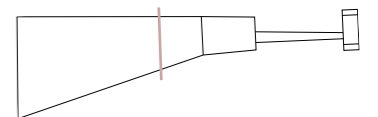
By excavating eastern part of the hill there is a clear space for leisure, filled with wild bushes and sitting space.

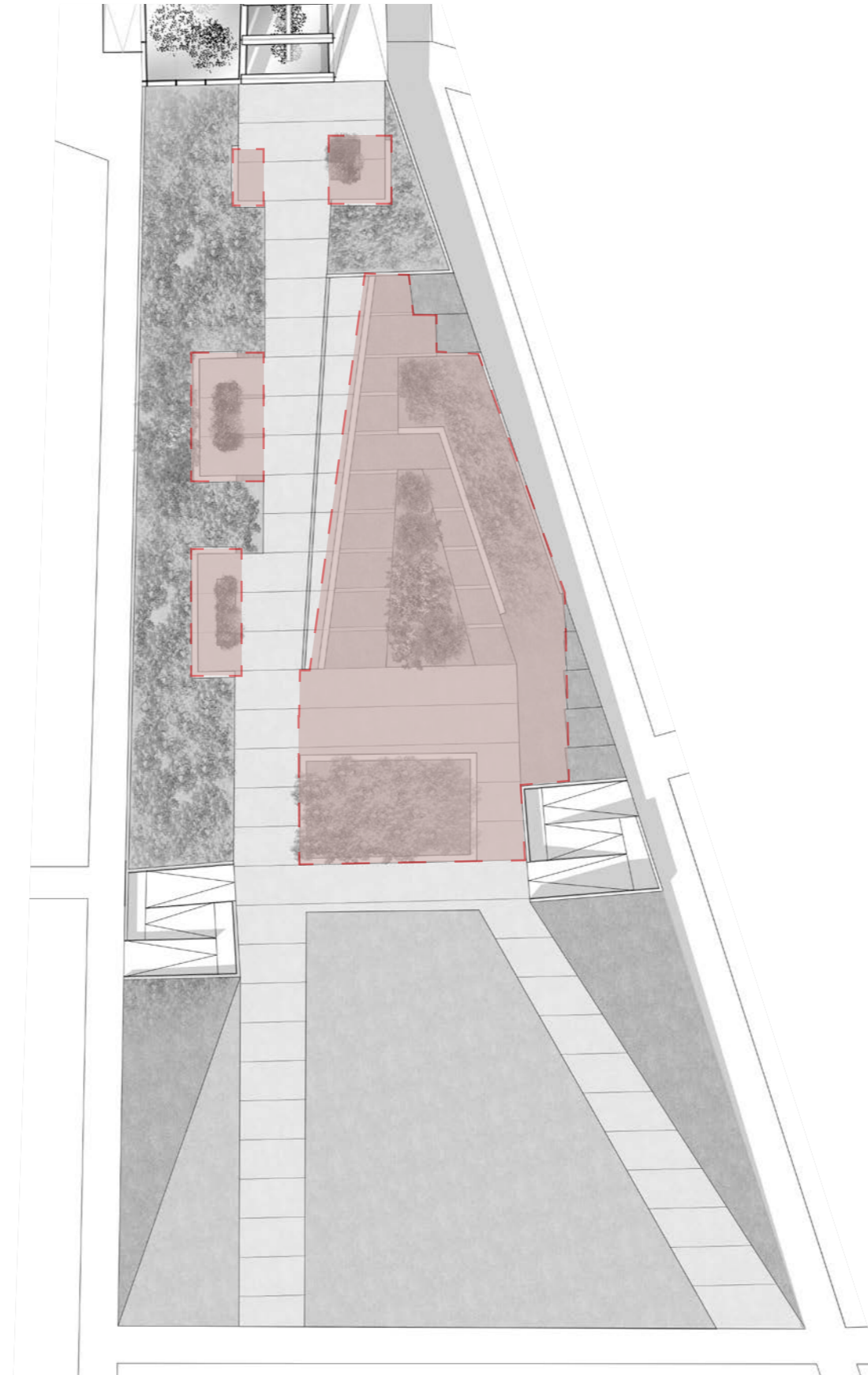


section 4 1:200

Glimpse into a garden

Small cutouts within the retaining wall allow strollers to see what is happening on the hill at any given moment.



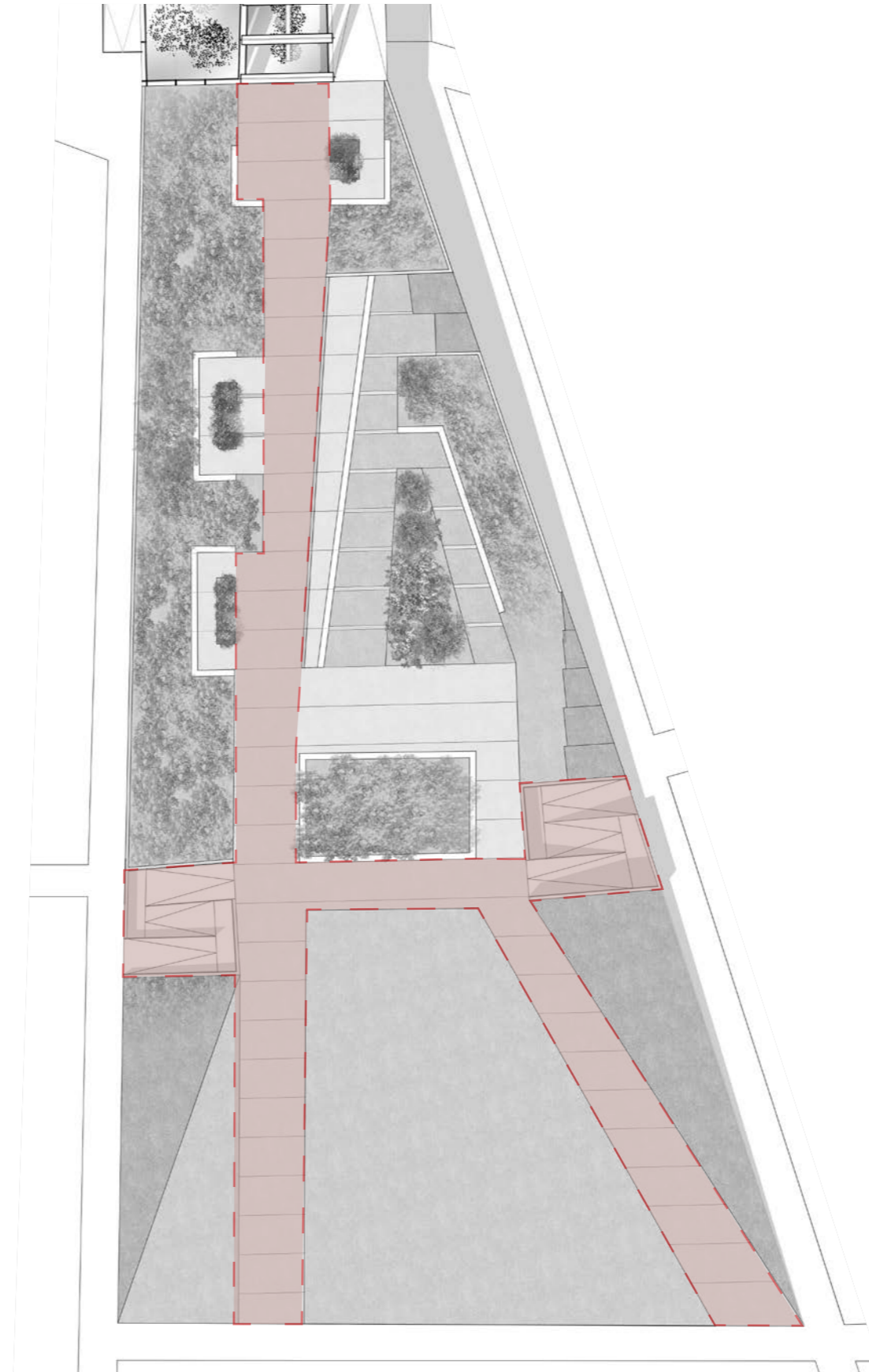


Leisure areas

By excavating eastern part of the hill there is a clear space for leisure, filled with wild bushes and sitting space.







Walking areas

Western strip of the hill is a clear connection between the bottom and the top of the height.



