

ELEVATED GARDEN



POLITECNICO DI MILANO

**MAJOR: LANDSCAPE ARCHITECTURE.
LAND LANDSCAPE HERITAGE.
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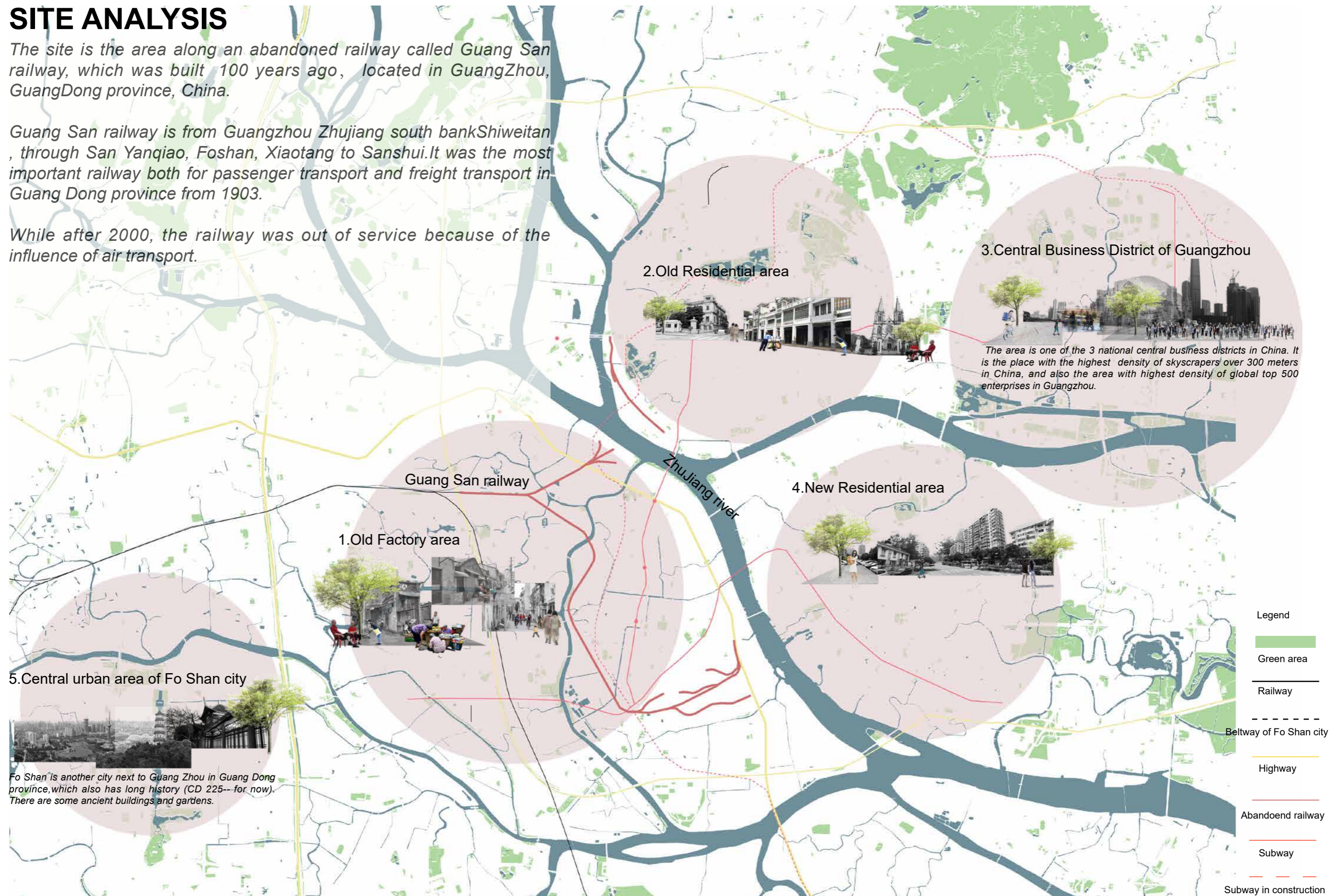
SITE ANALYSIS

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The site is the area along an abandoned railway called Guang San railway, which was built 100 years ago, located in GuangZhou, GuangDong province, China.

Guang San railway is from Guangzhou Zhujiang south bank Shiweitan, through San Yanqiao, Foshan, Xiaotang to Sanshui. It was the most important railway both for passenger transport and freight transport in Guang Dong province from 1903.

While after 2000, the railway was out of service because of the influence of air transport.



2. Old Residential area

3. Central Business District of Guangzhou

The area is one of the 3 national central business districts in China. It is the place with the highest density of skyscrapers over 300 meters in China, and also the area with highest density of global top 500 enterprises in Guangzhou.

Guang San railway

Zhujiang river

4. New Residential area

1. Old Factory area

5. Central urban area of Fo Shan city

Fo Shan is another city next to Guang Zhou in Guang Dong province, which also has long history (CD 225--- for now). There are some ancient buildings and gardens.

Legend

Green area

Railway

Beltway of Fo Shan city

Highway

Abandoned railway

Subway

Subway in construction

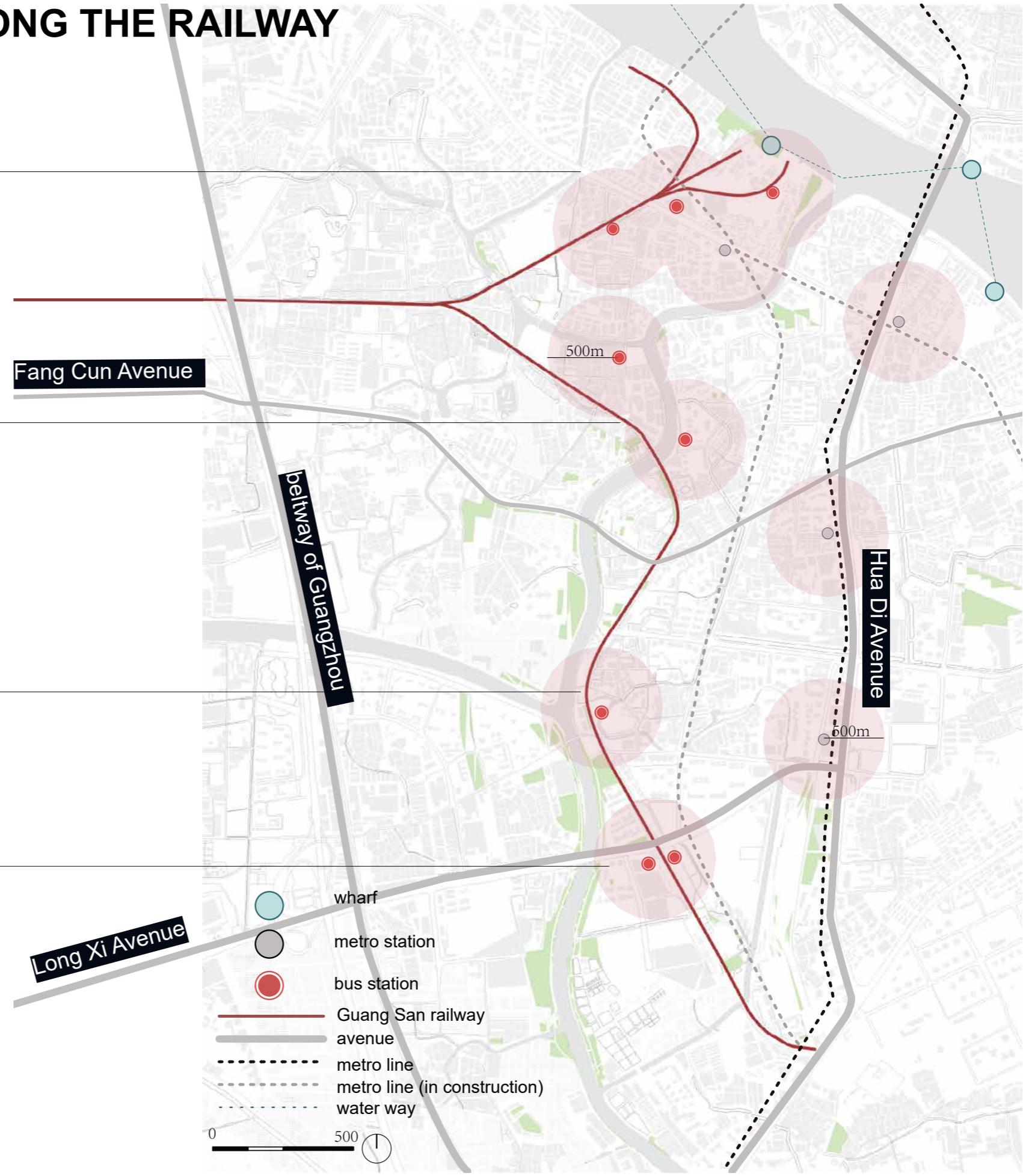
TRANSPORTATION ANALYSIS ALONG THE RAILWAY

Shi Wei Tang is not only the end of Guang San railway, but also the important traffic node because of the wharf and metro line.

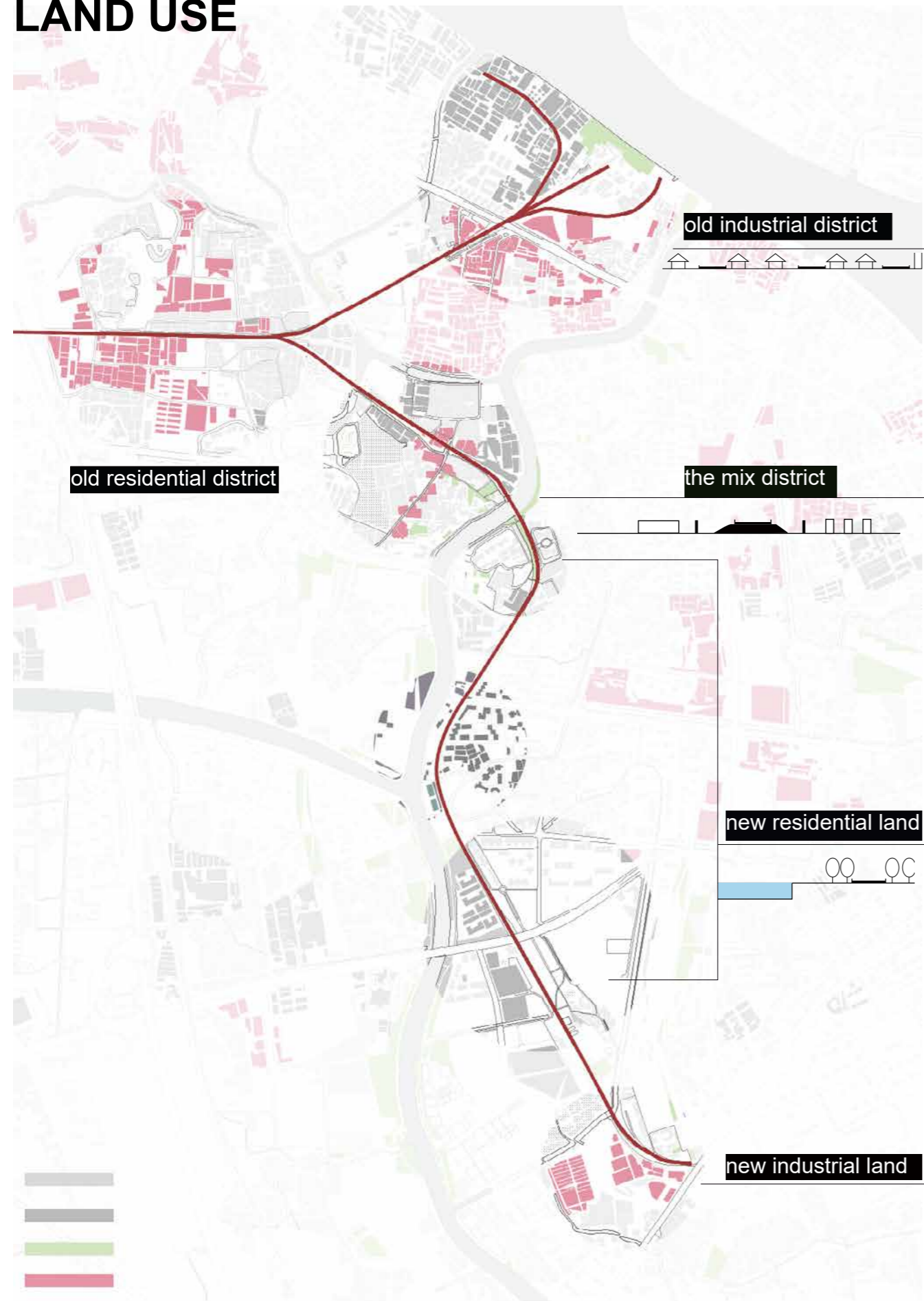
Fang Cun is not convenient and there is one bus stop near by.

Materials Science zone is a new factory area and the transportation is not complicated for now. Although it is next to the river, there is no wharf for transportation.

Fang Yuan Ju is the new residential area and most of the buildings are taller than old residential area.



LAND USE



railway level is same as ground level



It was the important factory land in Guang Zhou and now most of the factories are abandoned.

railway level is higher than ground level



The district is complex because of kinds of land use.

railway is hidden in the green area



The railway is abandoned totally in the city.

the end of railway



The railway is buried by the sand or cement in the new industrial area.

SITE SITUATION

The site is in the mix district between the main stream and branch of Hua Di river. The site includes the railway layer, Fang Cun road and the street on the north side of railway.

The land use is complex around site including residential land, commercial buildings and factory land.



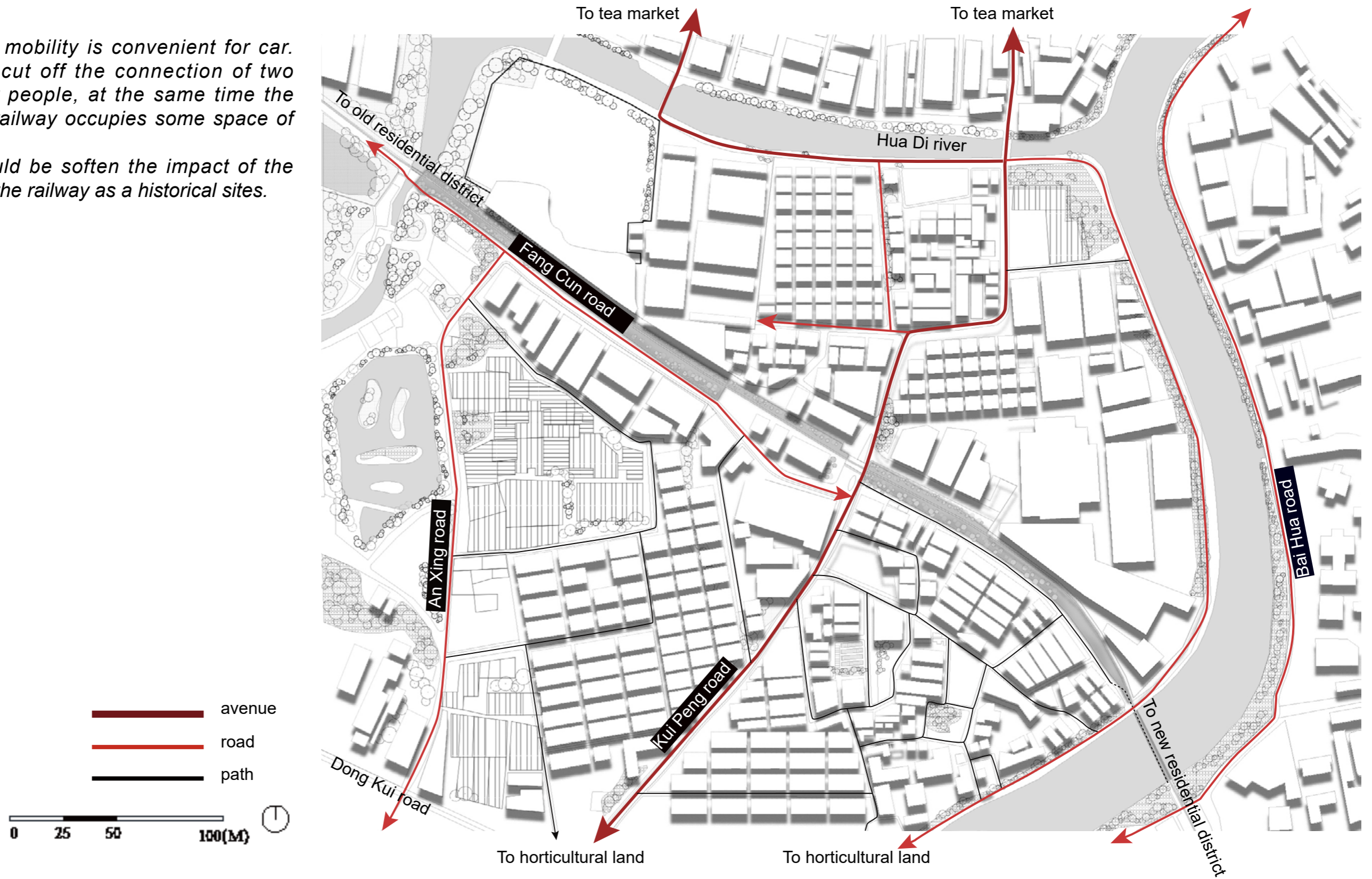
-  residential district
-  commercial land
-  factory land



Mobility

In this area, the mobility is convenient for car. But the railway cut off the connection of two sides streets for people, at the same time the embankment of railway occupies some space of street.

The project should be soften the impact of the railway and keep the railway as a historical sites.



Existing Traffic Node

The 3 nodes are the entrances of the site. Not only these nodes should be the space to gather people, but also the important traffic node for connection by crossing the railway.

NODE 1 The beginning of site



The node is the entrance of the site to connect old residential area and mix community. The slope take place of the embankment from node 1.

NODE 2 The main gathering place in the site



Node 2 is the only existing passage crossing the railway both for cars and people to connect north and south street.

NODE 3 The end of site

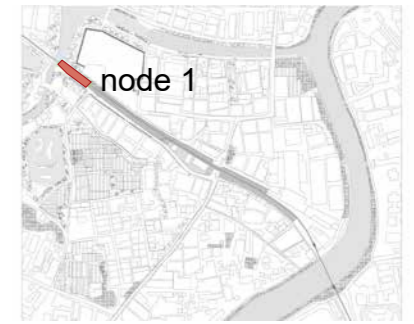


The bridge takes the place of the embankment to cross the Hud Di river from node 3 and goes to the new residential area.



Node 1 Existing Elevation

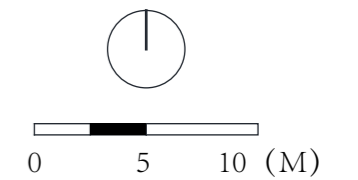
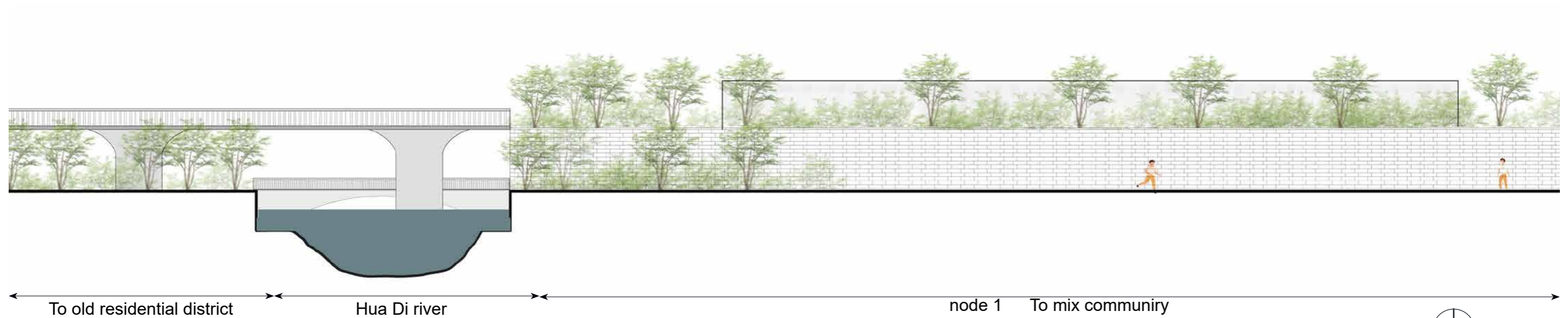
Node 1 is the begining of the mix community.
Hua Di river divides the mix community and old residential district.



South Elevation

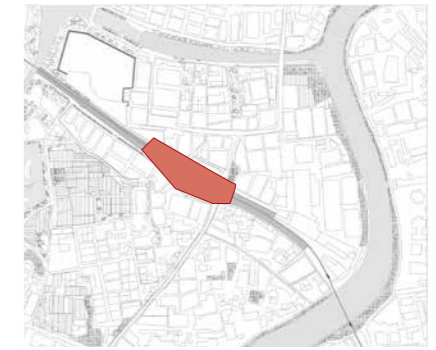


North Elevation

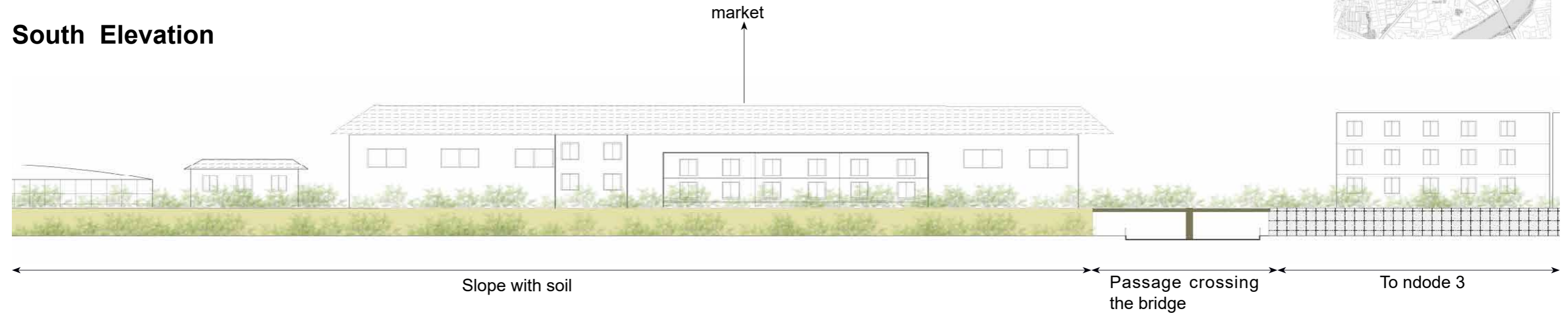


Node 2 Existing Elevation

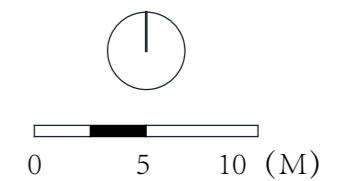
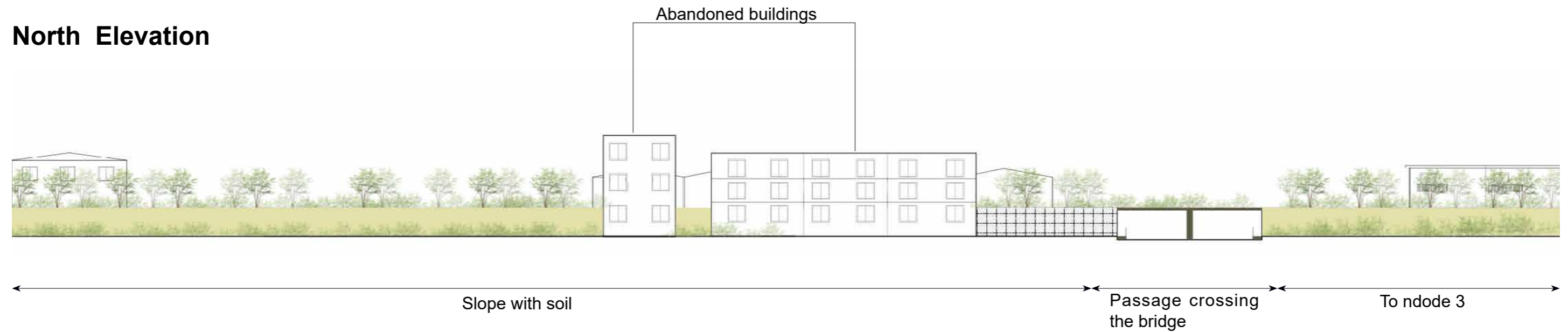
Node 2 is the only existing passage to connect north and south streets both for cars and people crossing the railway.
Also the node is the gathering place for people because of the market.



South Elevation



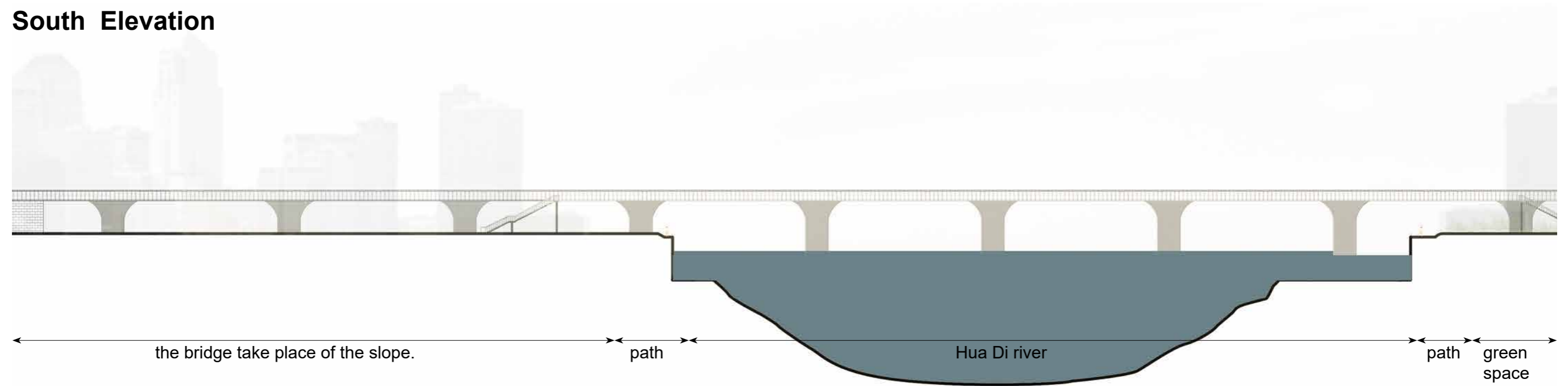
North Elevation



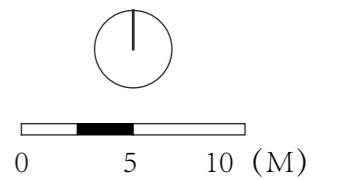
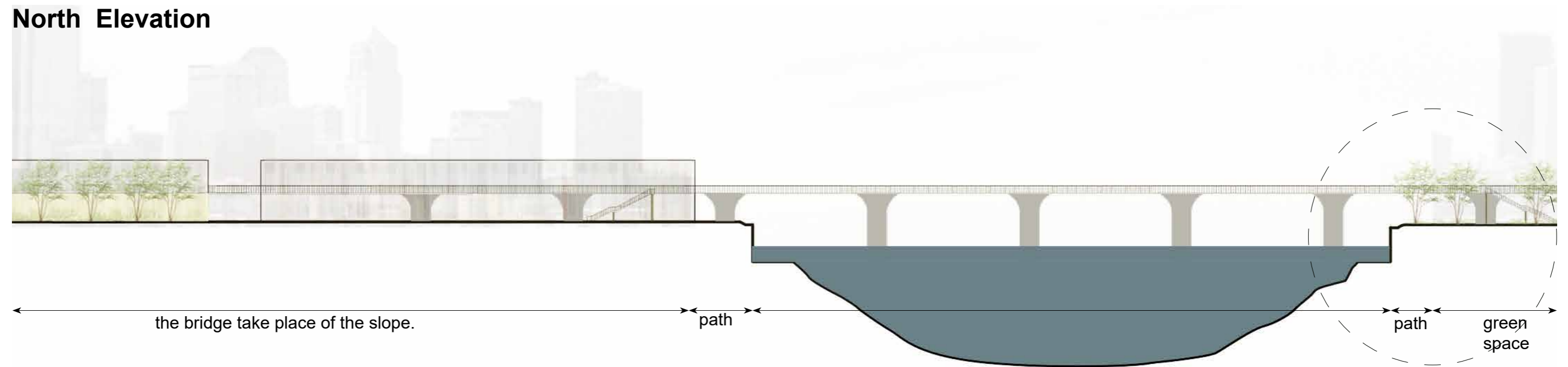
Node 3 Existing Elevation

Node 3 is the end of site. The railway crosses the river by bridge and goes into the new residential area in GuangZhou.

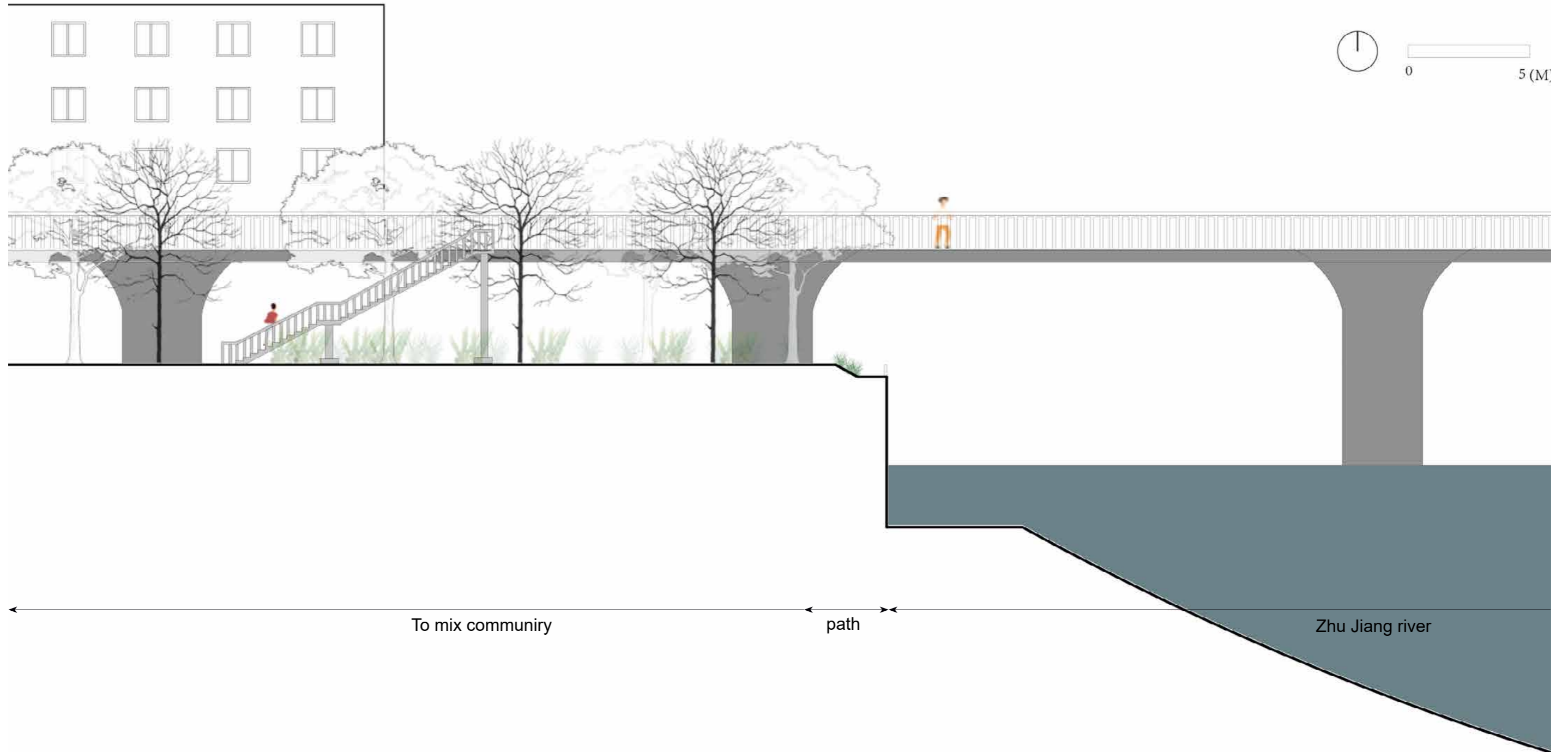
South Elevation



North Elevation

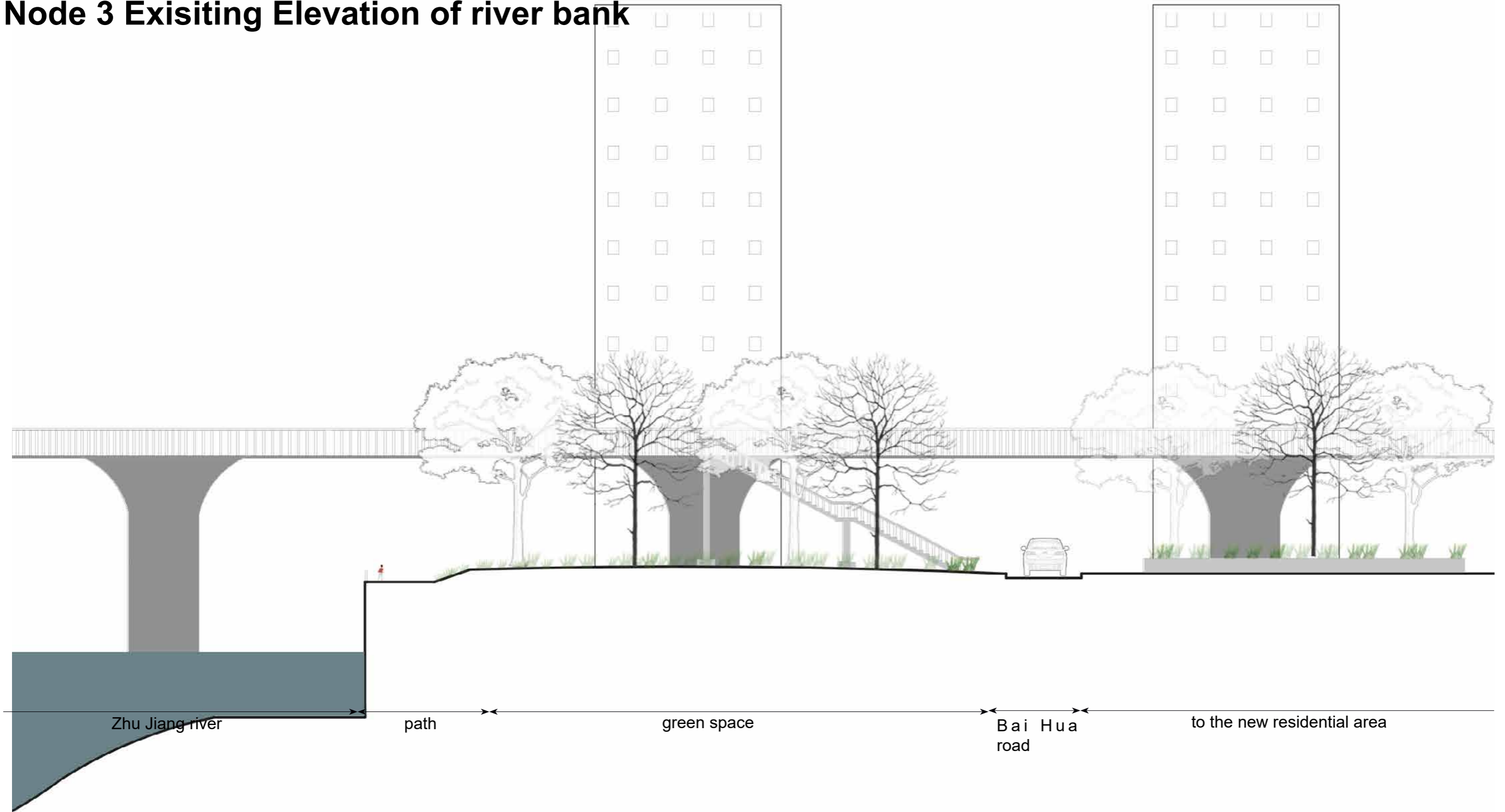


Node 3 Existing Elevation of river bank

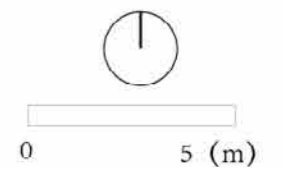


The river bank is the end of the site.
There is the path to cross the railway along the river, which connects the north side and south side for people.

Node 3 Existing Elevation of river bank

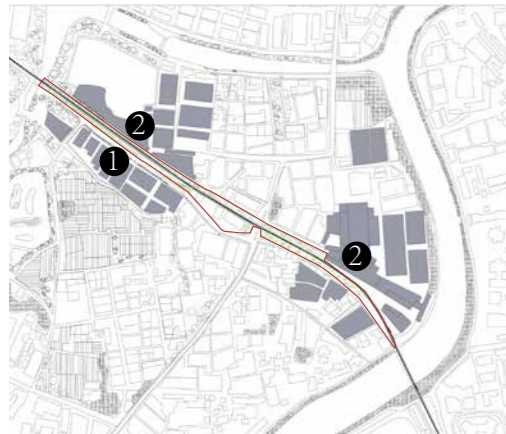


At the other side, the railway crosses the river by bridge to go in to the new residential area.



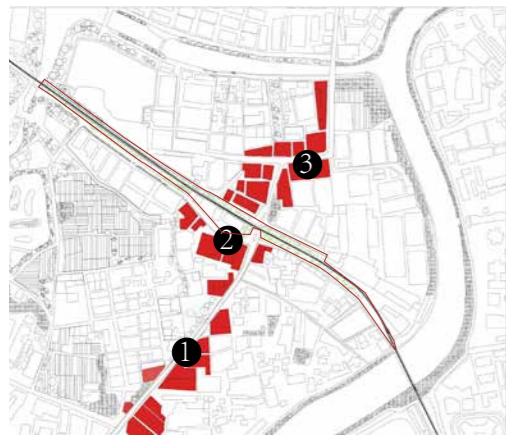
Building and walls in the site

Factory buildings



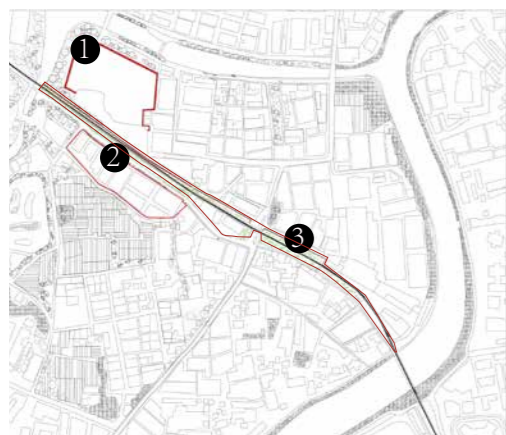
These factories are in use. There are some vans parking on the streets. Therefore, the road in front of factories should be unblocked and have some space for parking.

Commercial Buildings on the Kui Peng road



There are many shops and markets along the Kui Peng road. It brings about the traffic jam some times. The project should create a square for commercial activities.

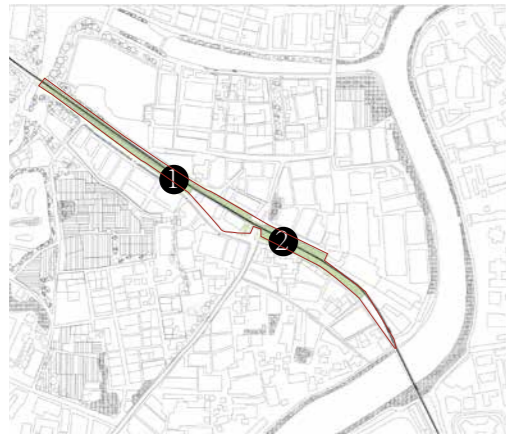
Wall



The wall along the railway cut off the connection of two sides of street

Landscape analysis

Railway



1

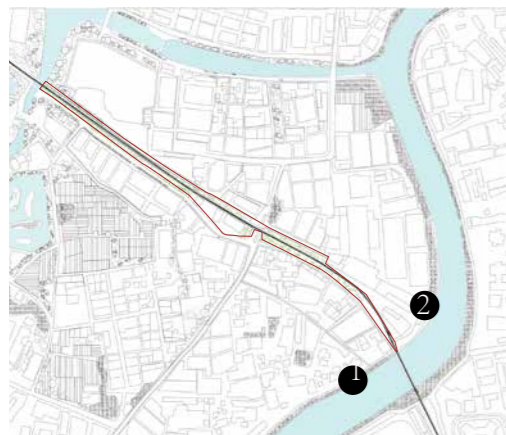


2



The space along the railway has been changed into planting area by residents. In the project, it is important to create some space for planning.

Green area along the river



1



2



There are some green space along the Hua Di river at the end of site. It is possible to connect site with green space to create complicated green space system.

Flower Nursery



1



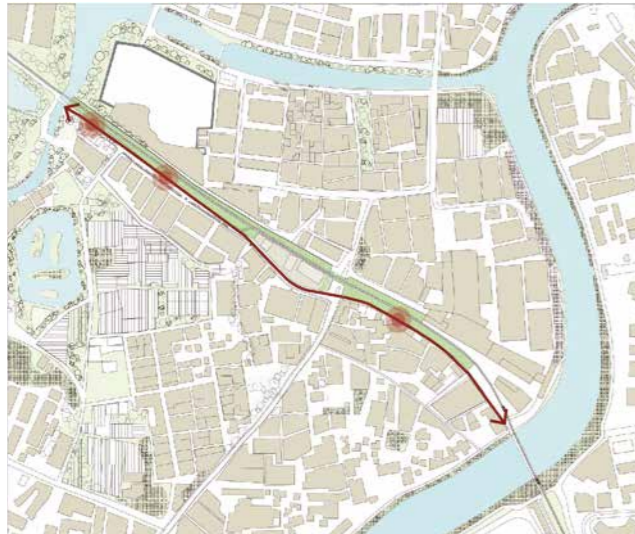
2



On the south side of the railway, there some flower nursery land.

The view along the street

The South Side Street



The plants on the roadsides make the road too narrow to pass for cars. The project should reorganize the green space.

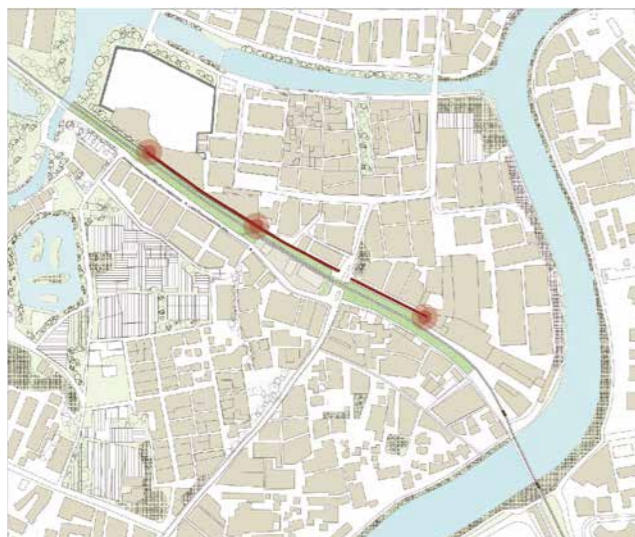


The roadside parking lots make the street more narrow. The project should create more parkinglots along the Kui Peng road.



The embankment of railway occupies much space of street. It is possible to modify the soil to make more room for street.

The North Side Street



Few people get to this side because of the embankment of rialway. The project should connect the two streets crossing the railway horizontally.



The wall of the railway cut of the connection of two streets. It is important to remove the wall and connect two streets.

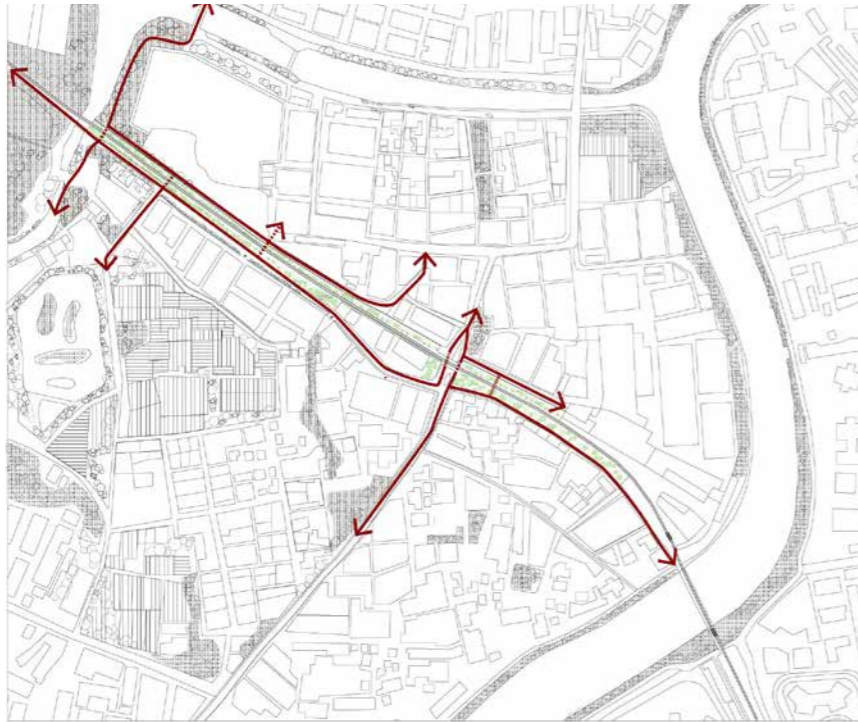


The roadside parking lots make the street narrow. It is necessary to create more parking lots along the path.

STRATEGY

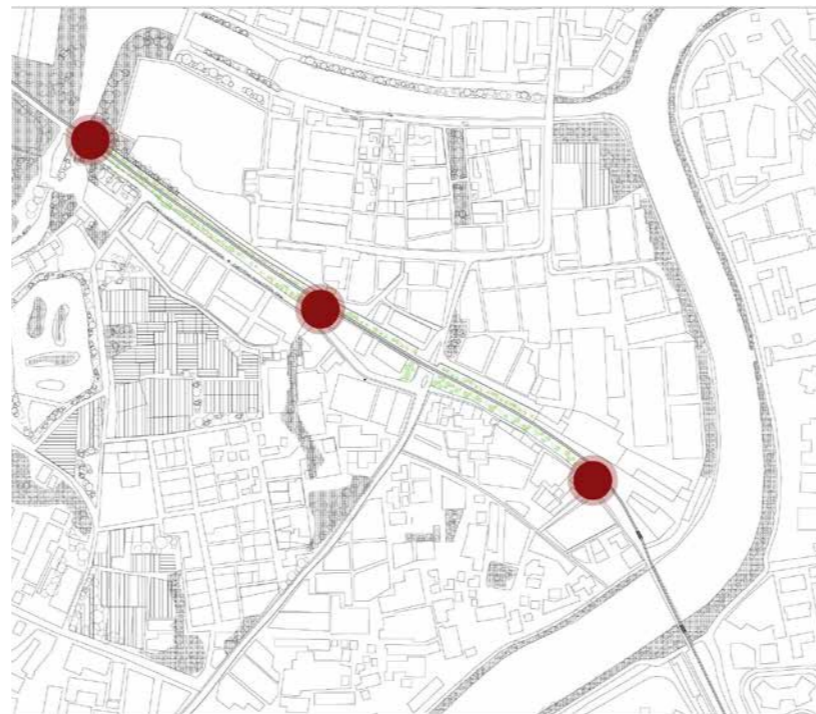
Project aims ---- horizontal and vertical connection

Step 1 Connect Horizontally



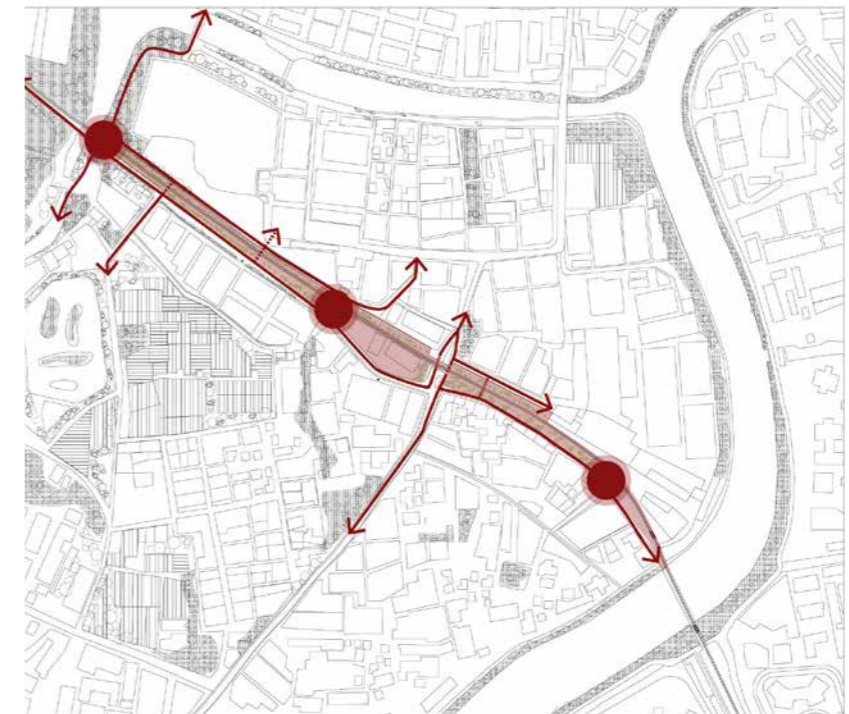
Connect two sides acrossing the railway

Step 2 Connect Vertically



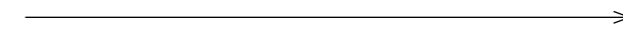
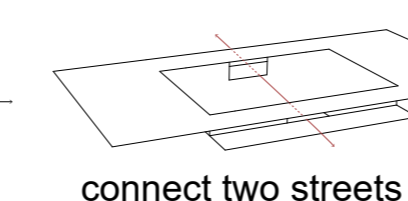
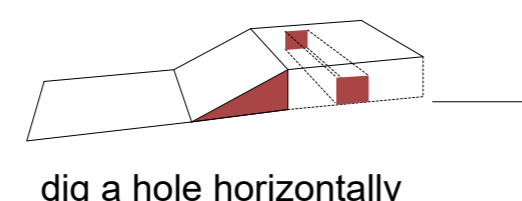
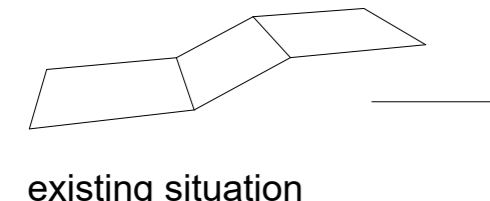
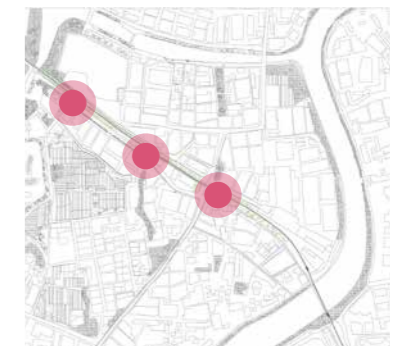
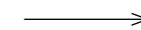
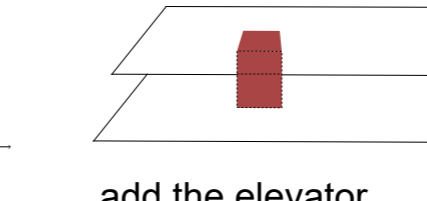
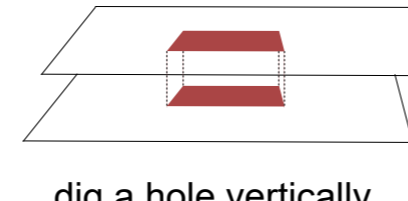
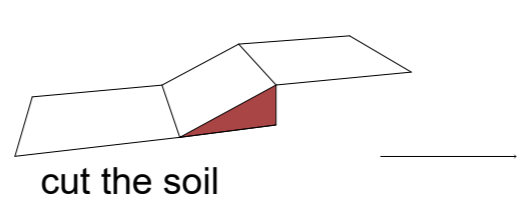
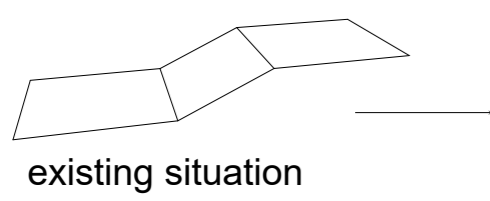
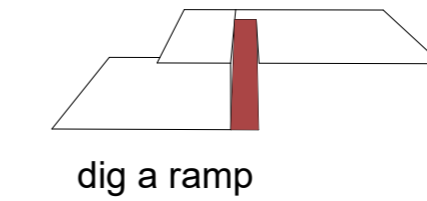
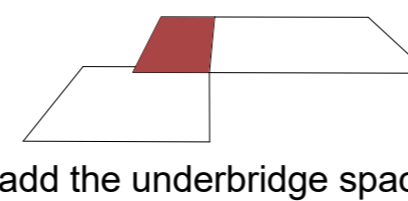
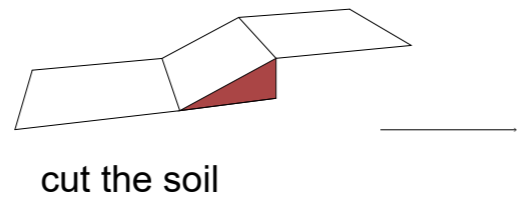
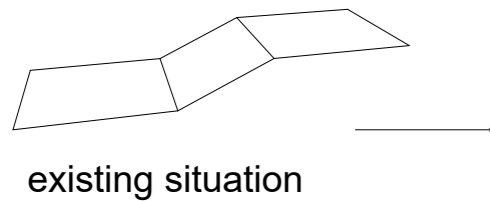
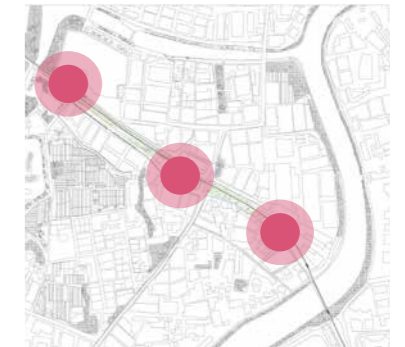
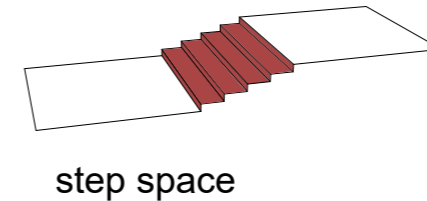
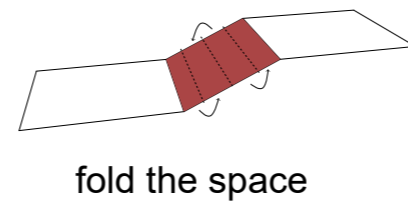
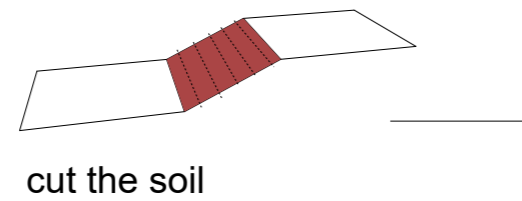
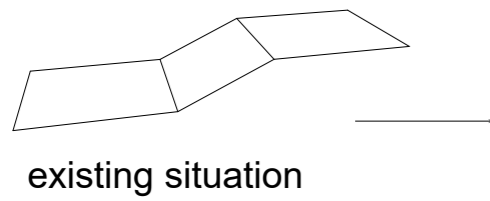
Design the traffic nodes to connect two different layers vertically.

Step 3 Reuse The Embankment



Modify the soil of embankment to make use of the space of railway.

Connection ----modify the soil to connect the pieces of space vertically also Horizontally



The Second Layer Masterplan



- residential district
- commercial land
- factory land



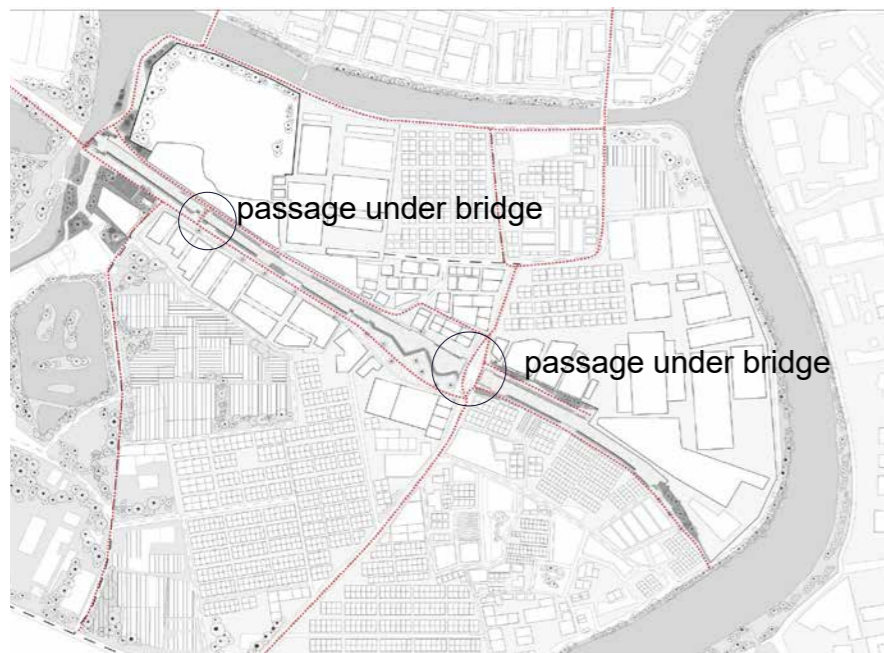
The First Layer Masterplan



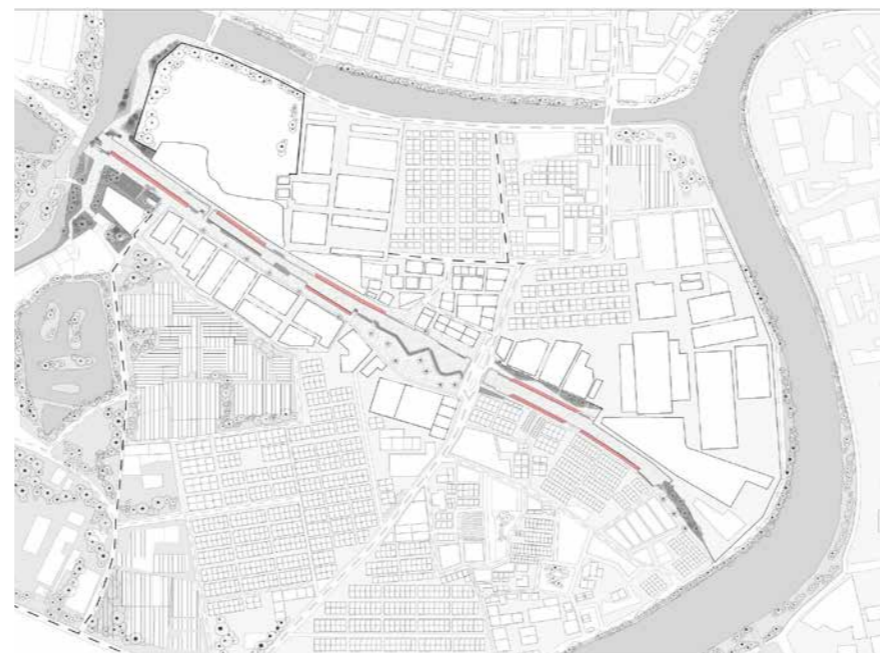
0 25 50 100(M)



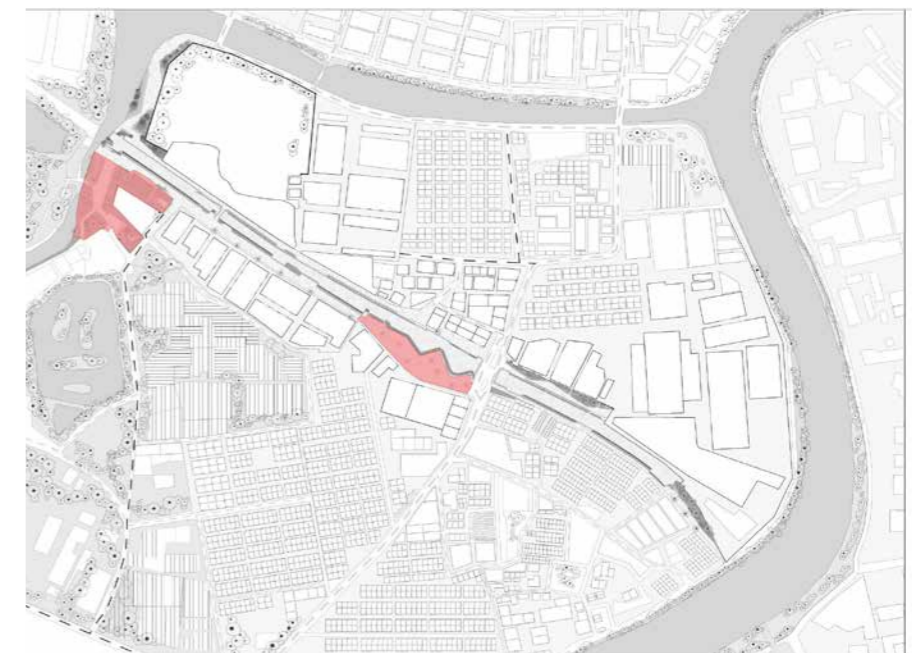
New mobility system for people



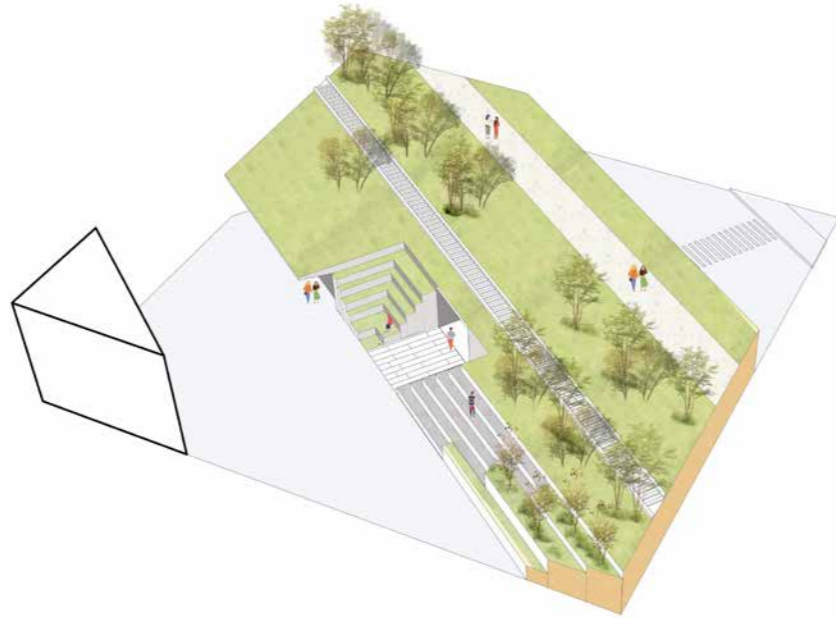
New parking lots



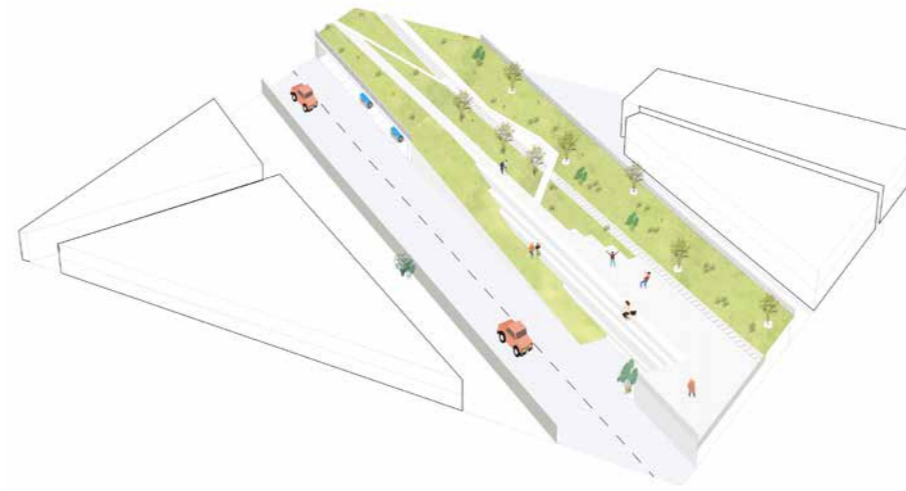
The main activity land on the first layer



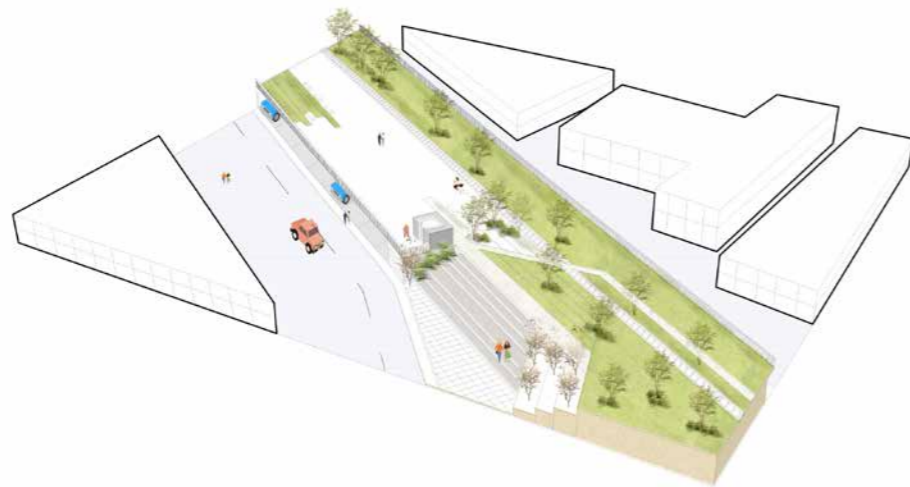
Connect two sides streets



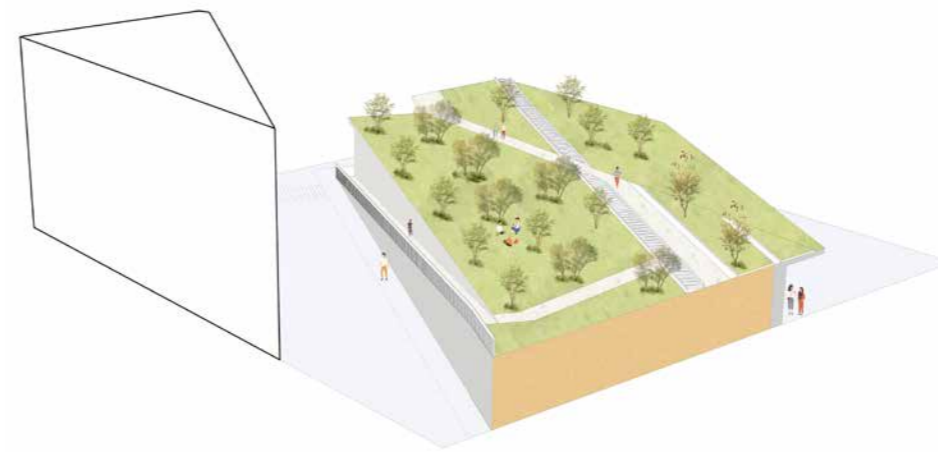
Connect two layers by ramp



Connect two layers by elevator with steps



Connect two layers by ramp

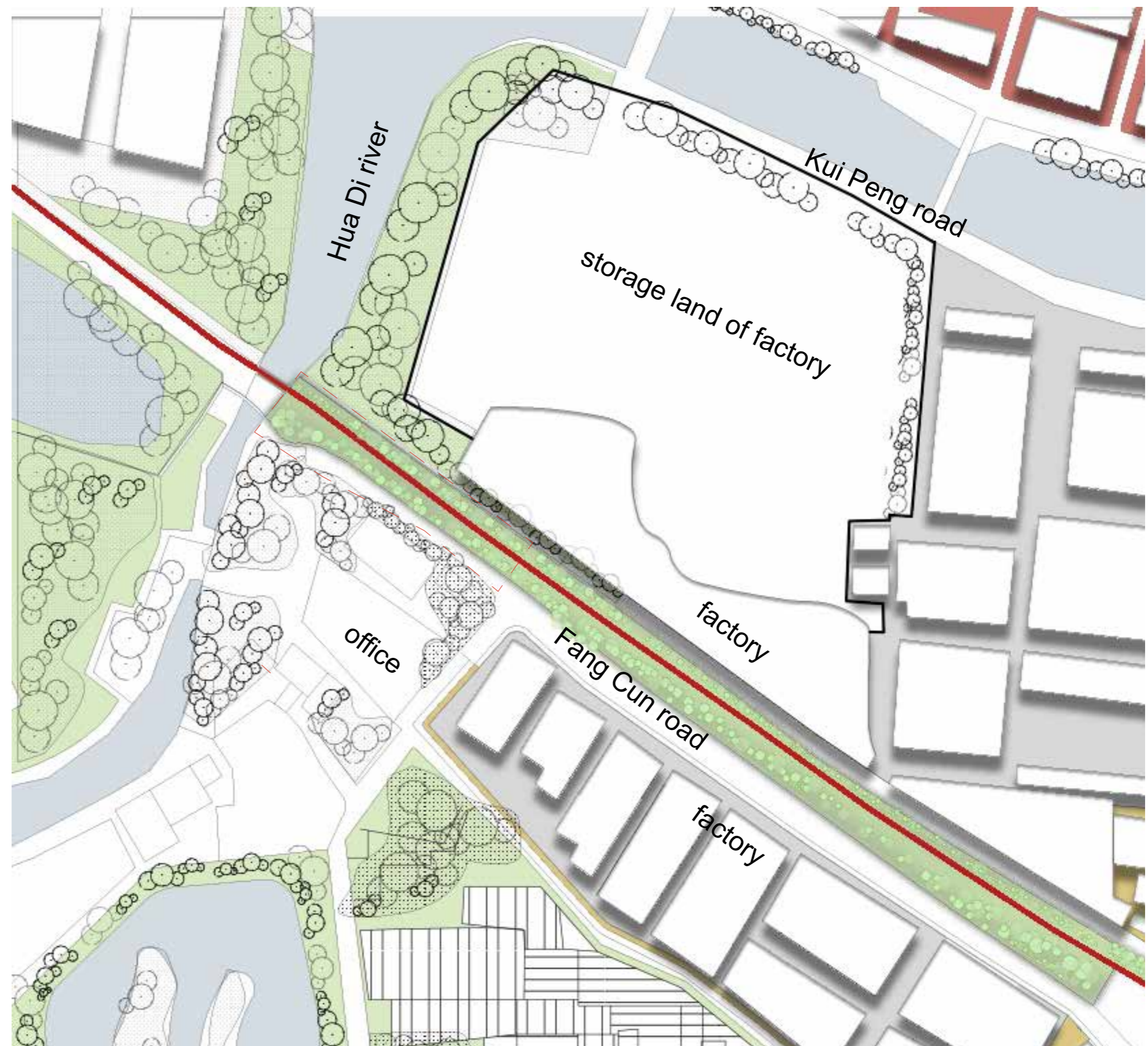


NODE 1 The beginning of railway park

Existing Plan

The node is next to the river and connects the mixed community with old residential area. The factories are around the site. Few residents get there but workers.

It is necessary to make the green space for workers also connect south and north streets in this node.



Strategy

Step 1 Connect Horizontally



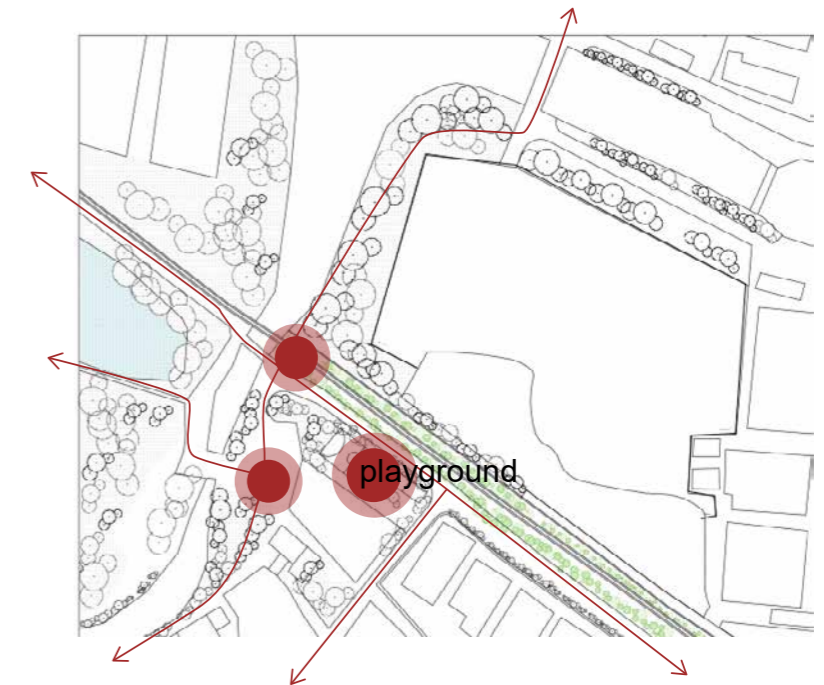
Cross the railway to connect two streets.

Step 2 Connect Vertically



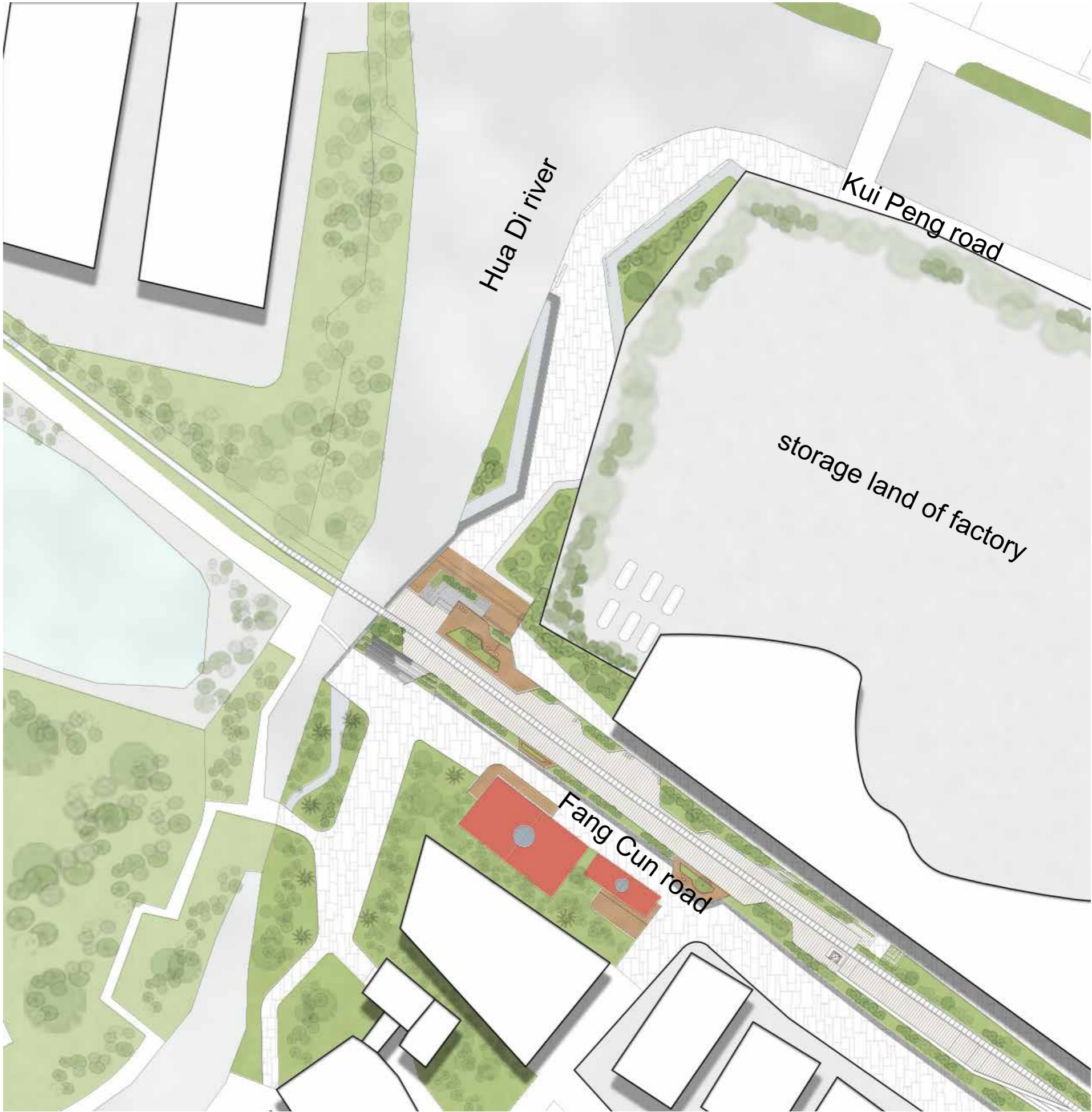
Modify the soil slope to connect two layers.

Step 3 Design the activity center

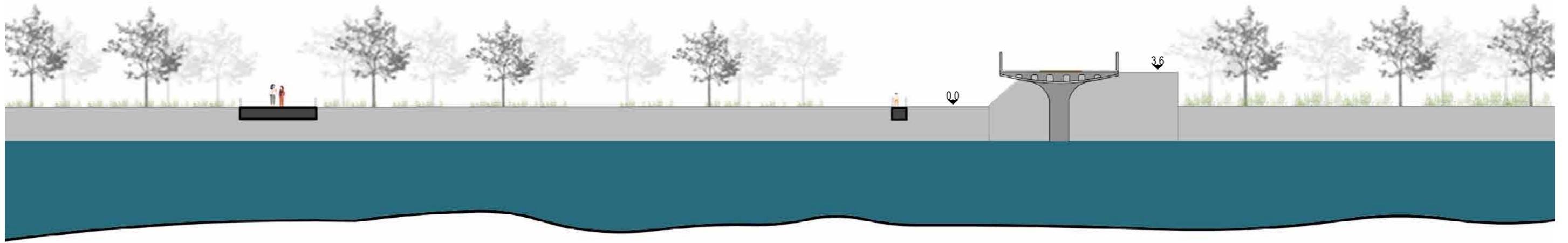
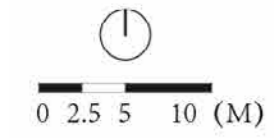


Make use of the abandoned land.

Masterplan

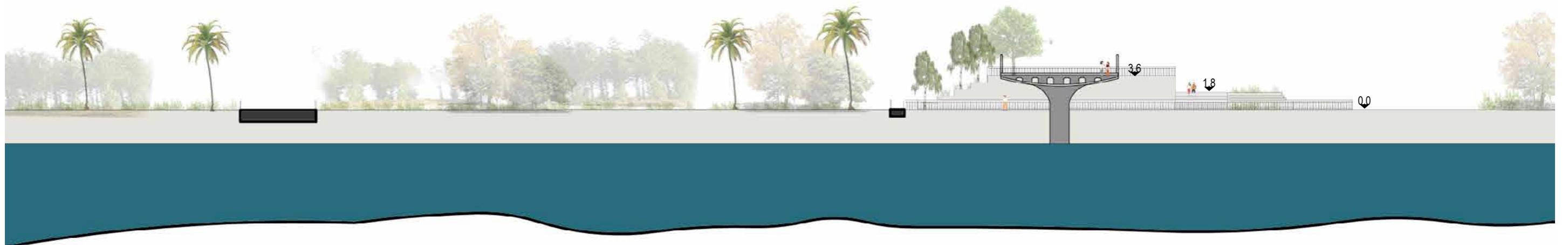
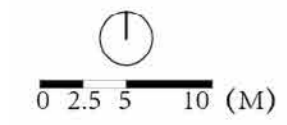


Existing section

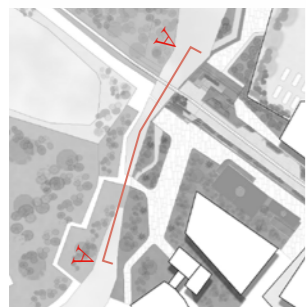


Section A-A

Project section



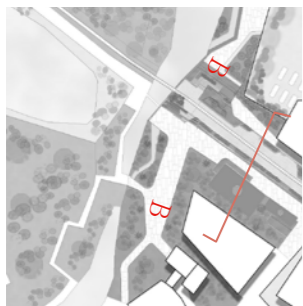
Section A'-A'



Existing section

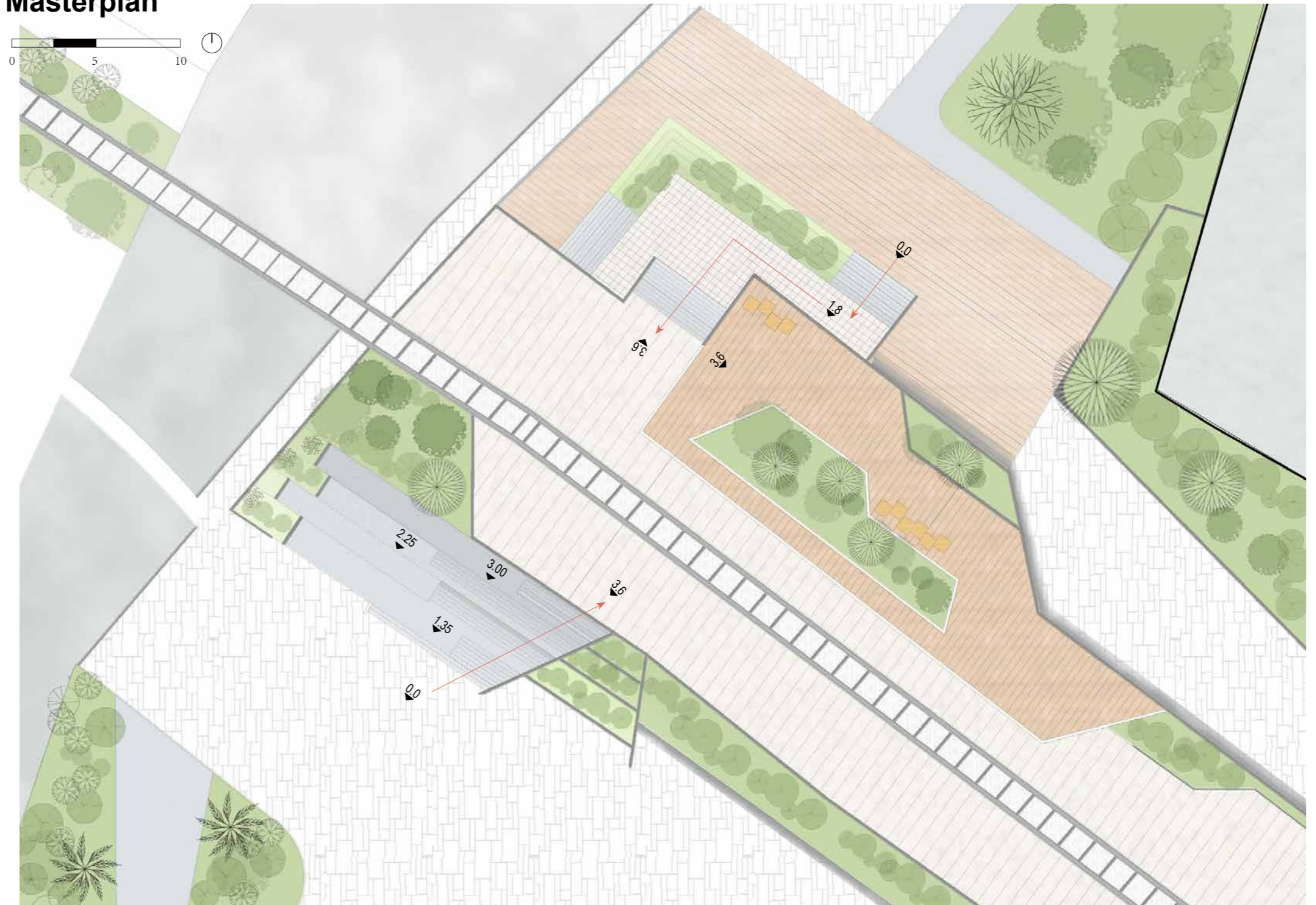


Project section

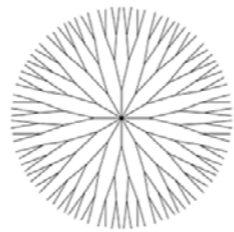


Vertical Connection

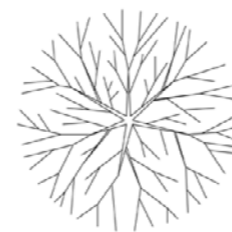
Masterplan



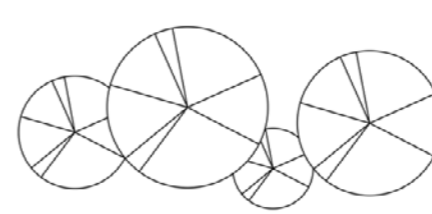
Cocos nucifera L.



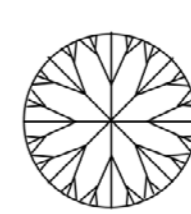
Albizia julibrissin
Durazz.



Ficus microcarpa
Linn. f.



shrub

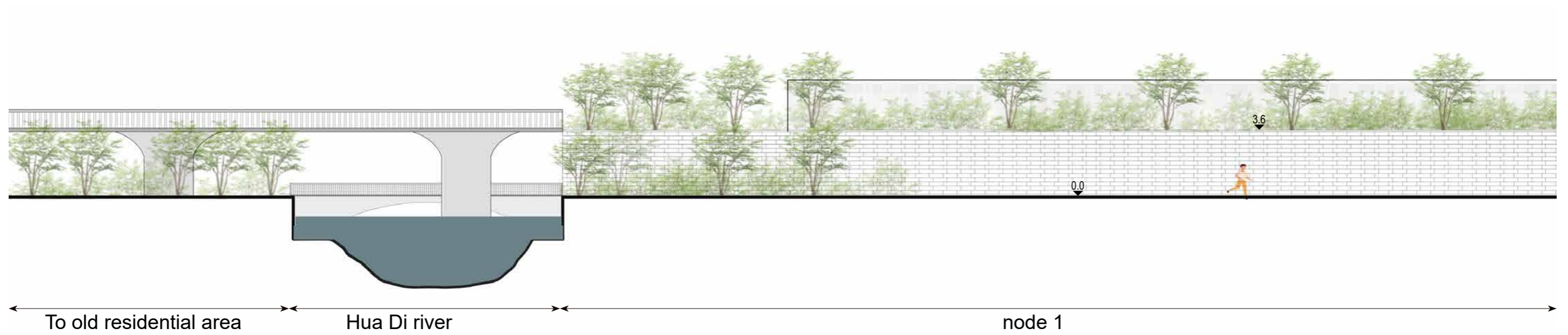
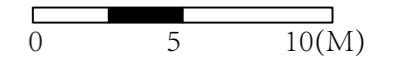


Magnolia
Grandiflora Linn

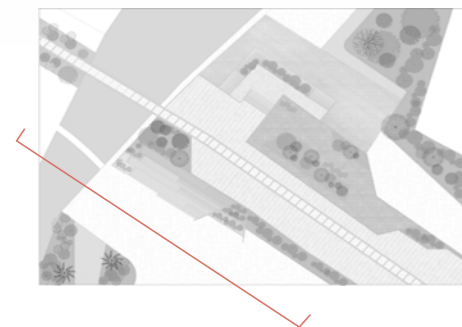
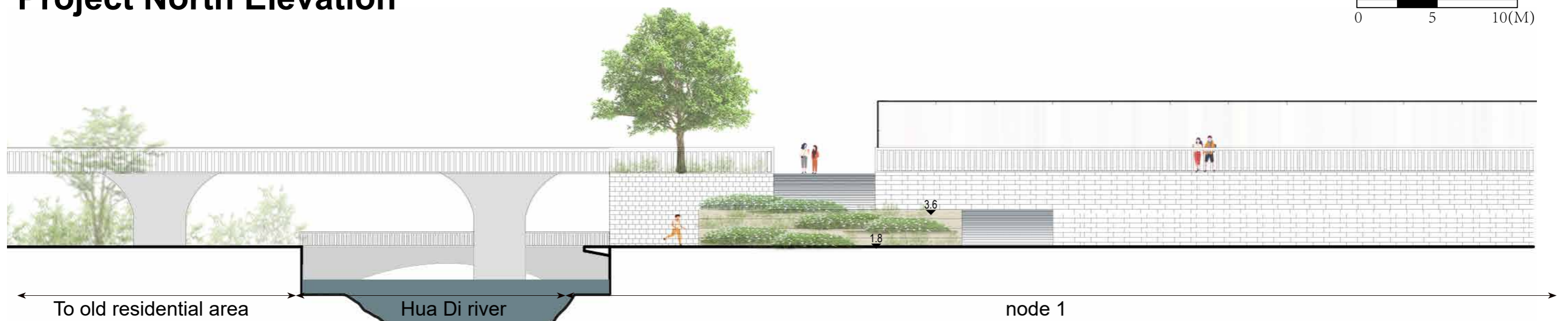
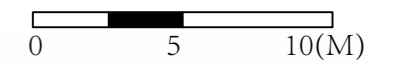


Salix

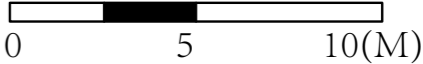
Existing North Elevation



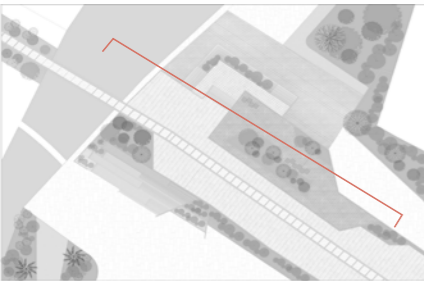
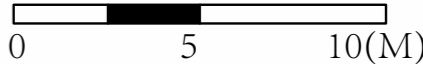
Project North Elevation



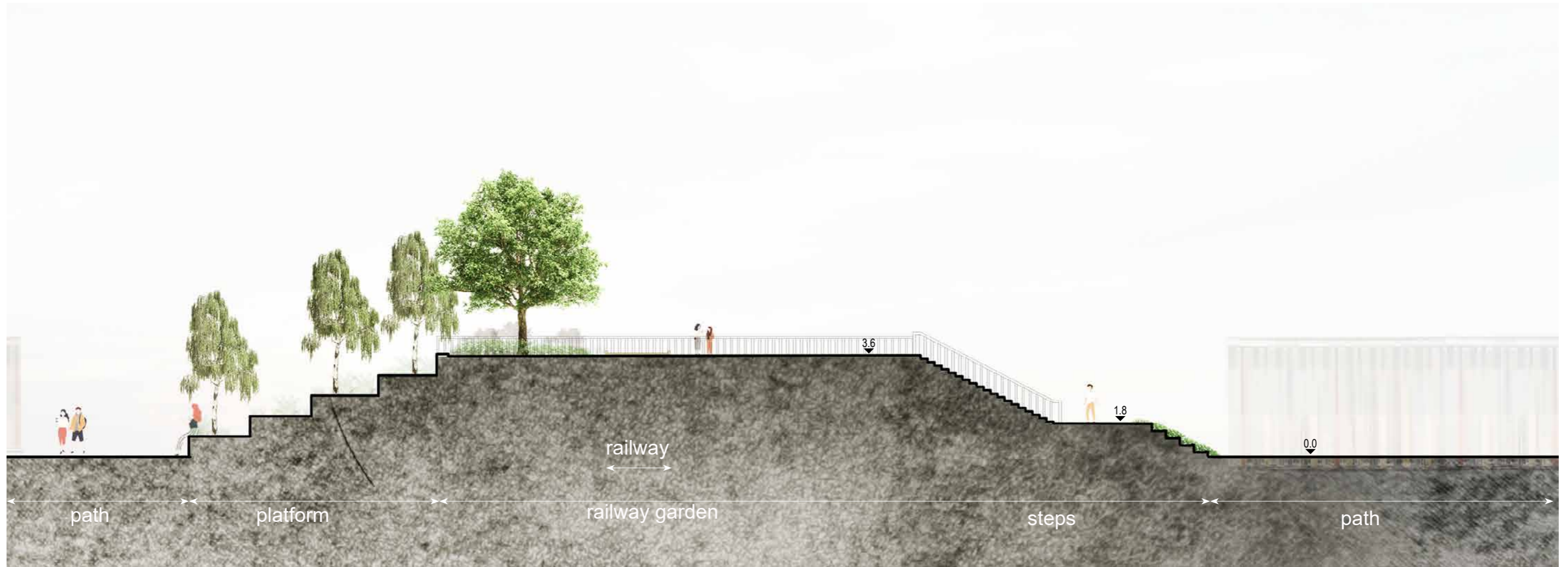
Existing South Elevation



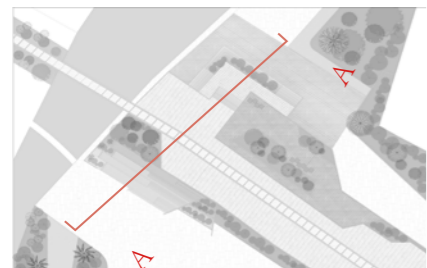
Project South Elevation



Project Section



Section A-A



Project Section



Section B-B

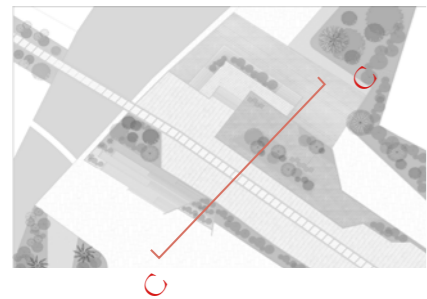
0 5(M)



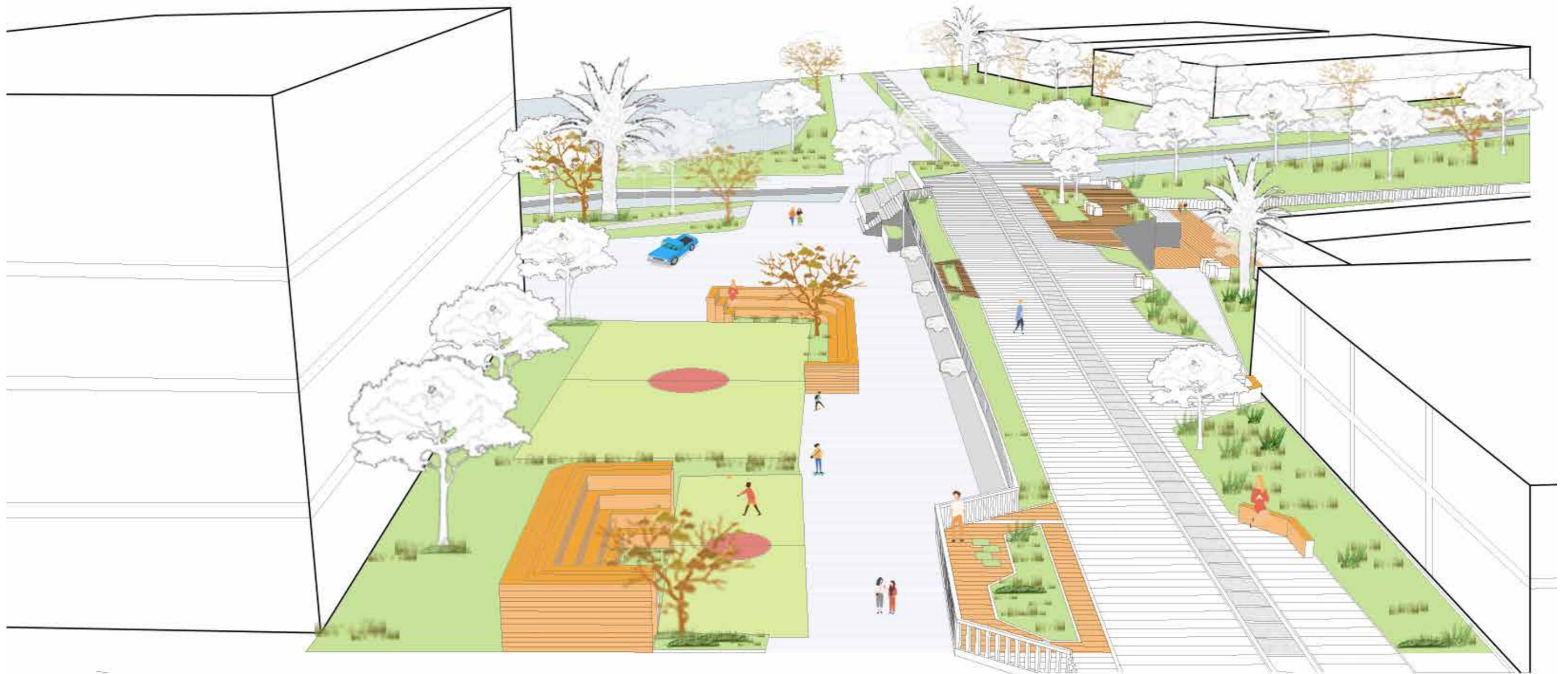
Project Section



Section C-C

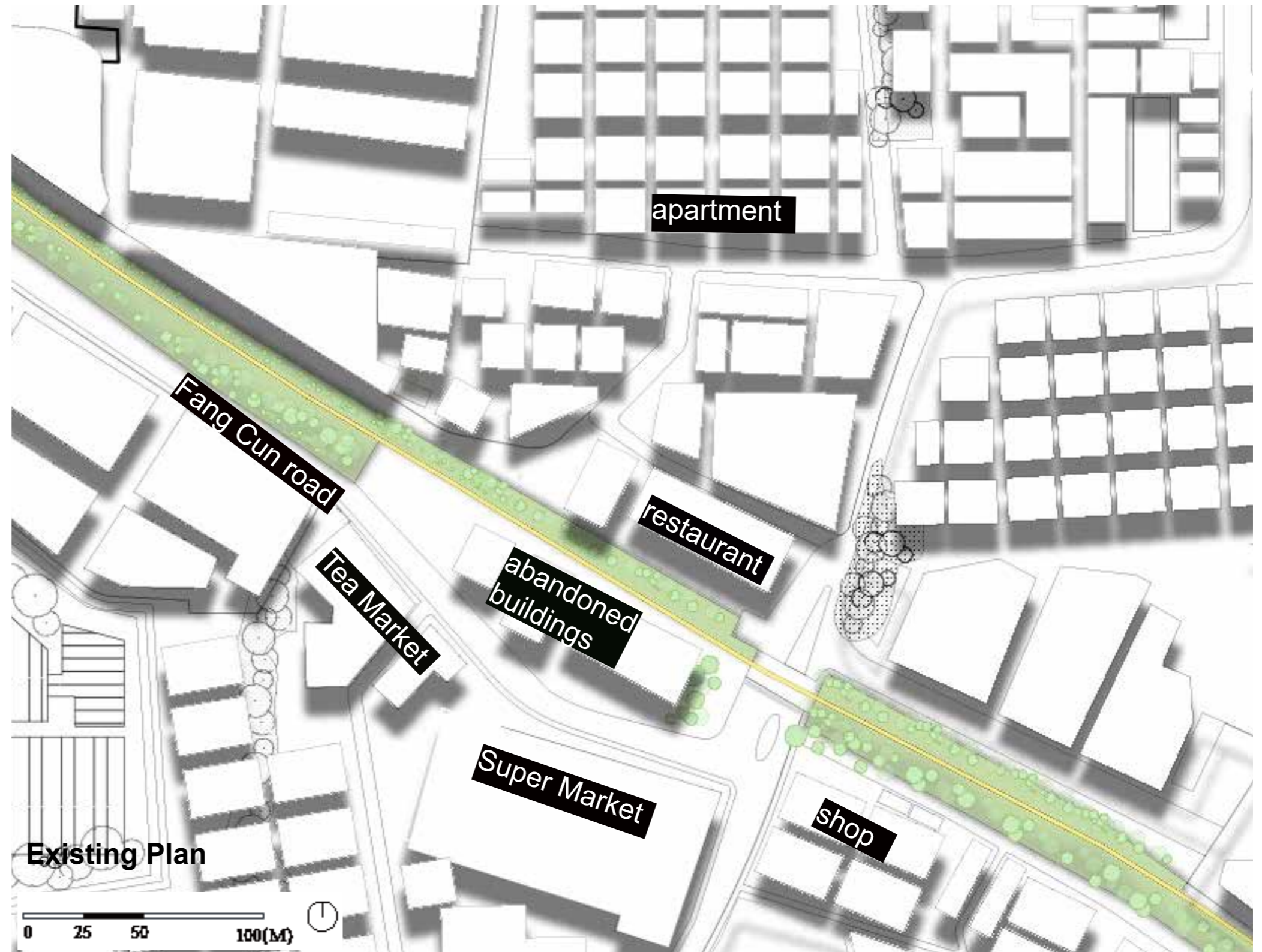


Node 1 The beginning of elevated garden

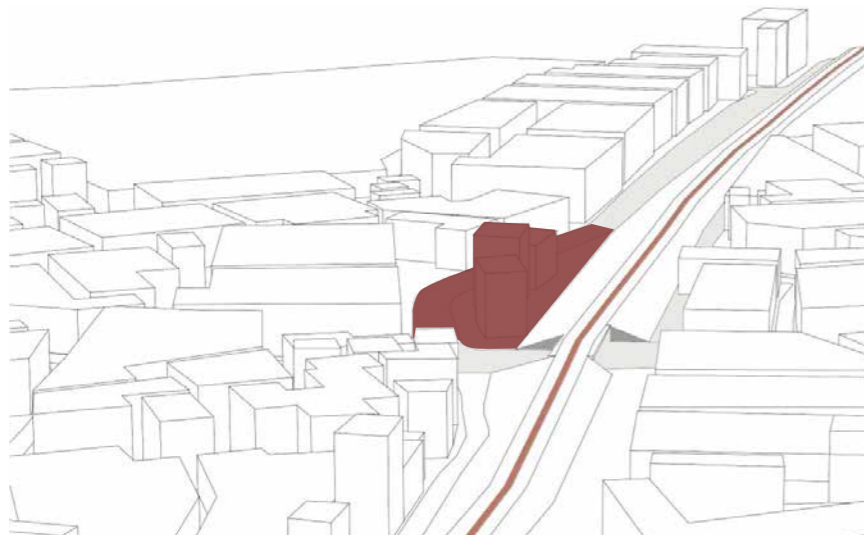


NODE 2 The center of mobility and activity.

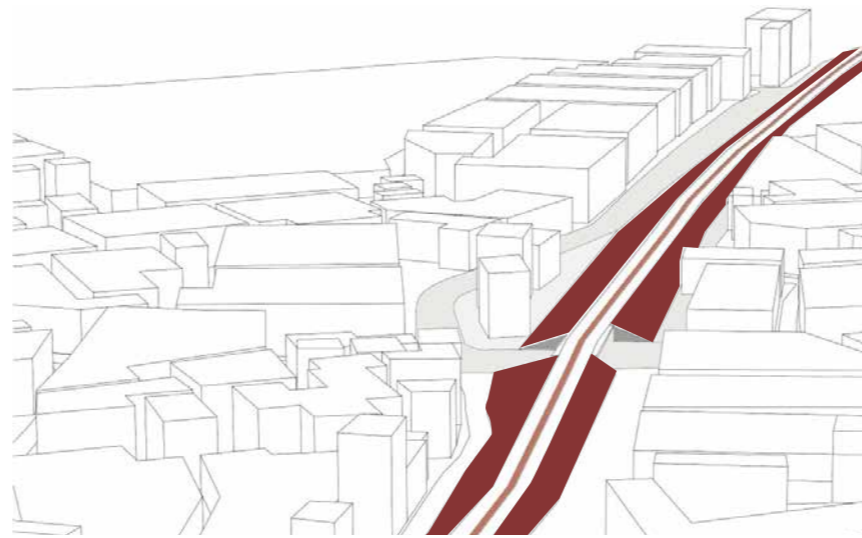
The second node is an activity and mobility center. The project should demolish the abandoned buildings to expand the square at the ground level, and change the slope to connect two layers



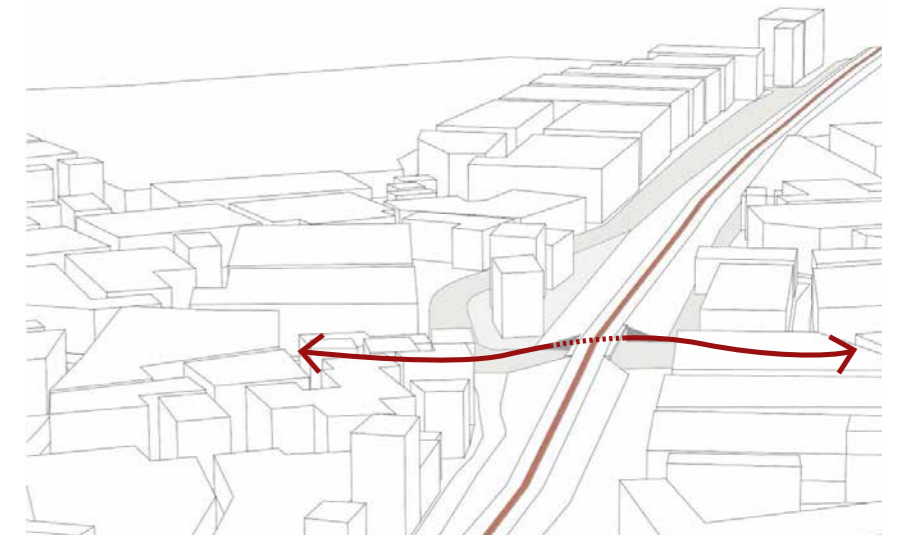
Strategy



Change the abandoned land into the square, which is the activity center of project.



Change the slope into step to connect the two layers.

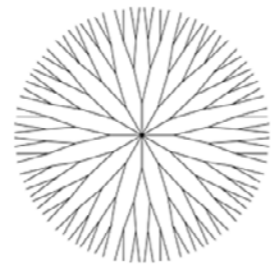


Add the pedestrians under the bridge.

Masterplan



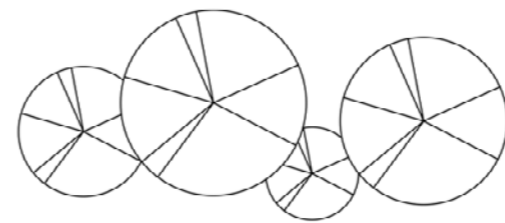
Cocos nucifera L.



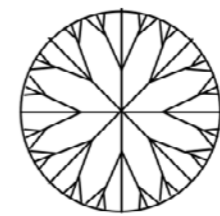
Albizia julibrissin
Durazz.



Ficus microcarpa
Linn. f.



shrub



Magnolia
Grandiflora Linn



Salix

Existing North Elevation

0 5 10(M)



Project North Elevation

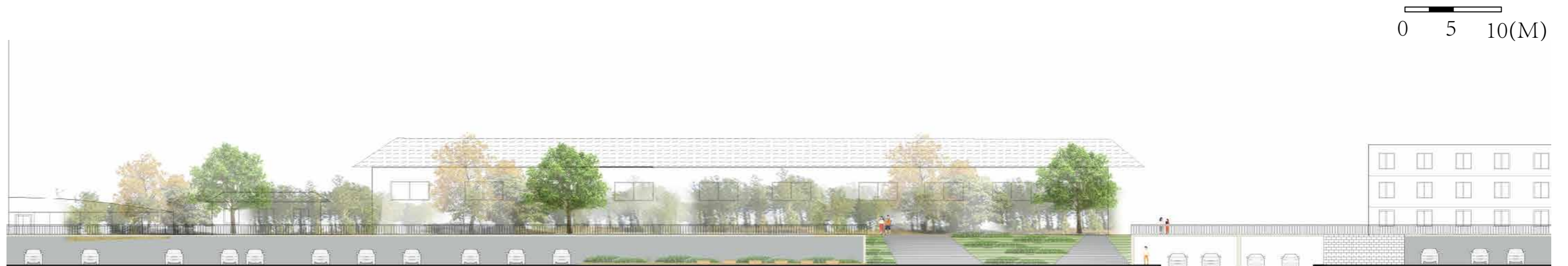
0 5 10(M)



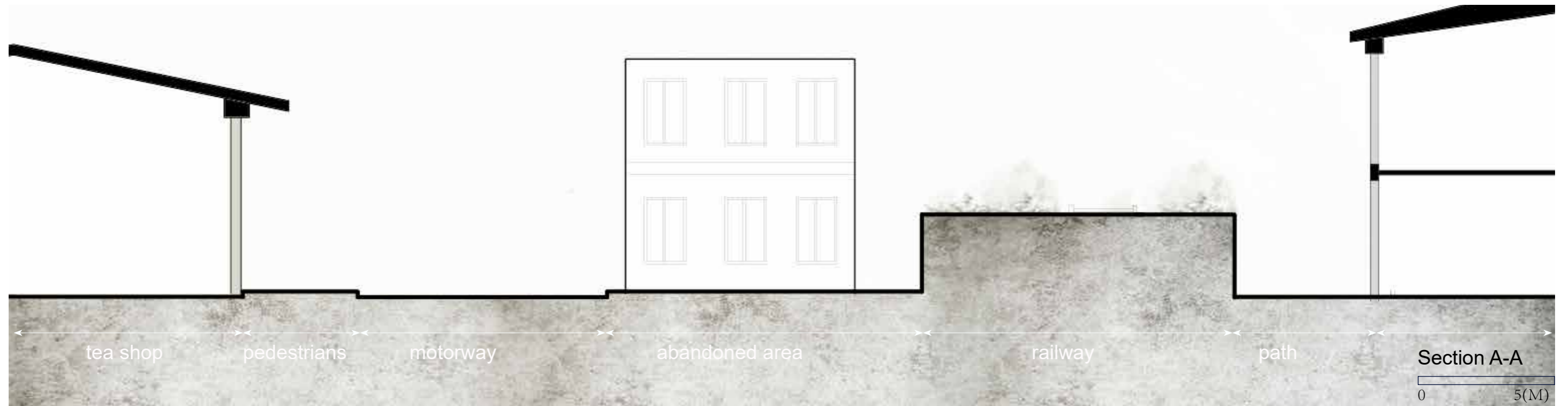
Existing South Elevation



Project South Elevation



Existing section



Project section



Existing section

Section B-B

0 5(M)



Project section

Section B'-B

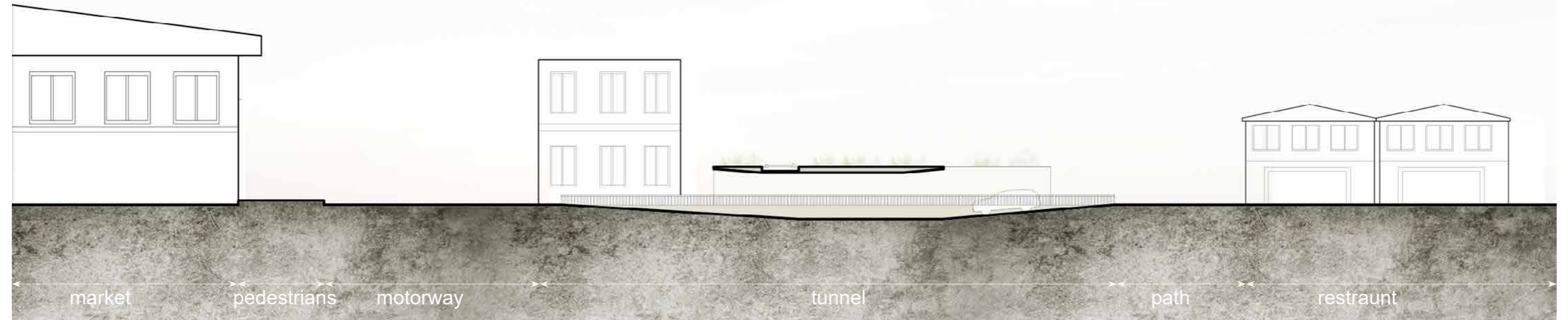
0 5(M)



Existing section

Section C-C

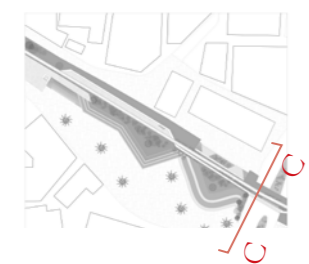
0 5(M)



Project section

Section C'-C'

0 5(M)



NODE 2 The activity and transportation center



NODE 3 The end of railway park

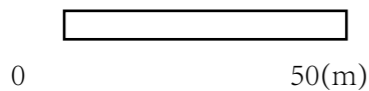
At third node, the soil slope ends and is taken place of the pillars for crossing the Hua Di river and connecting new residential area.

The project shoule expand the green area to the river side at the ground level.

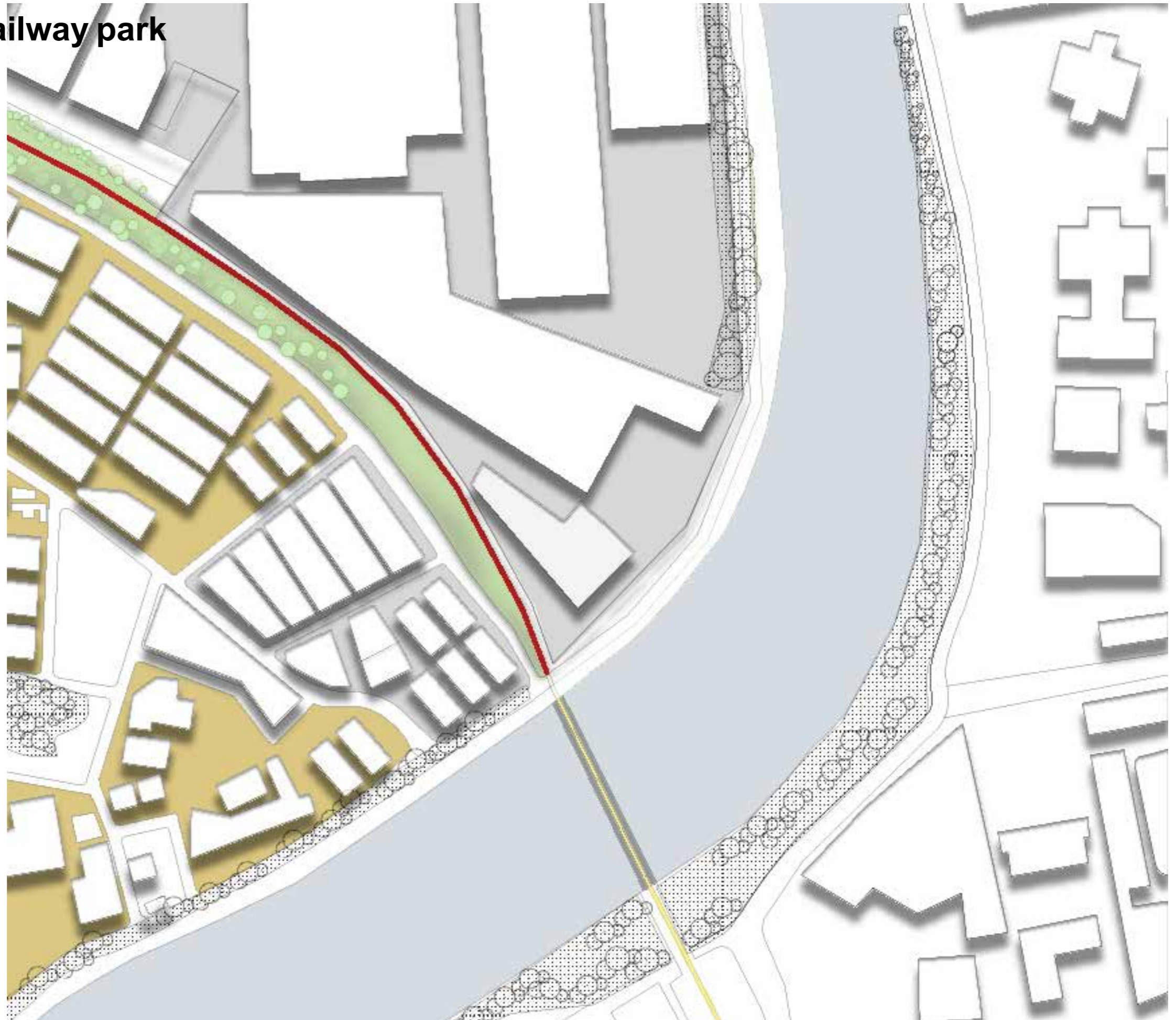
At north side, enrich the plants at the ground level along the wall.

Also, create the vercital connction space for two layers.

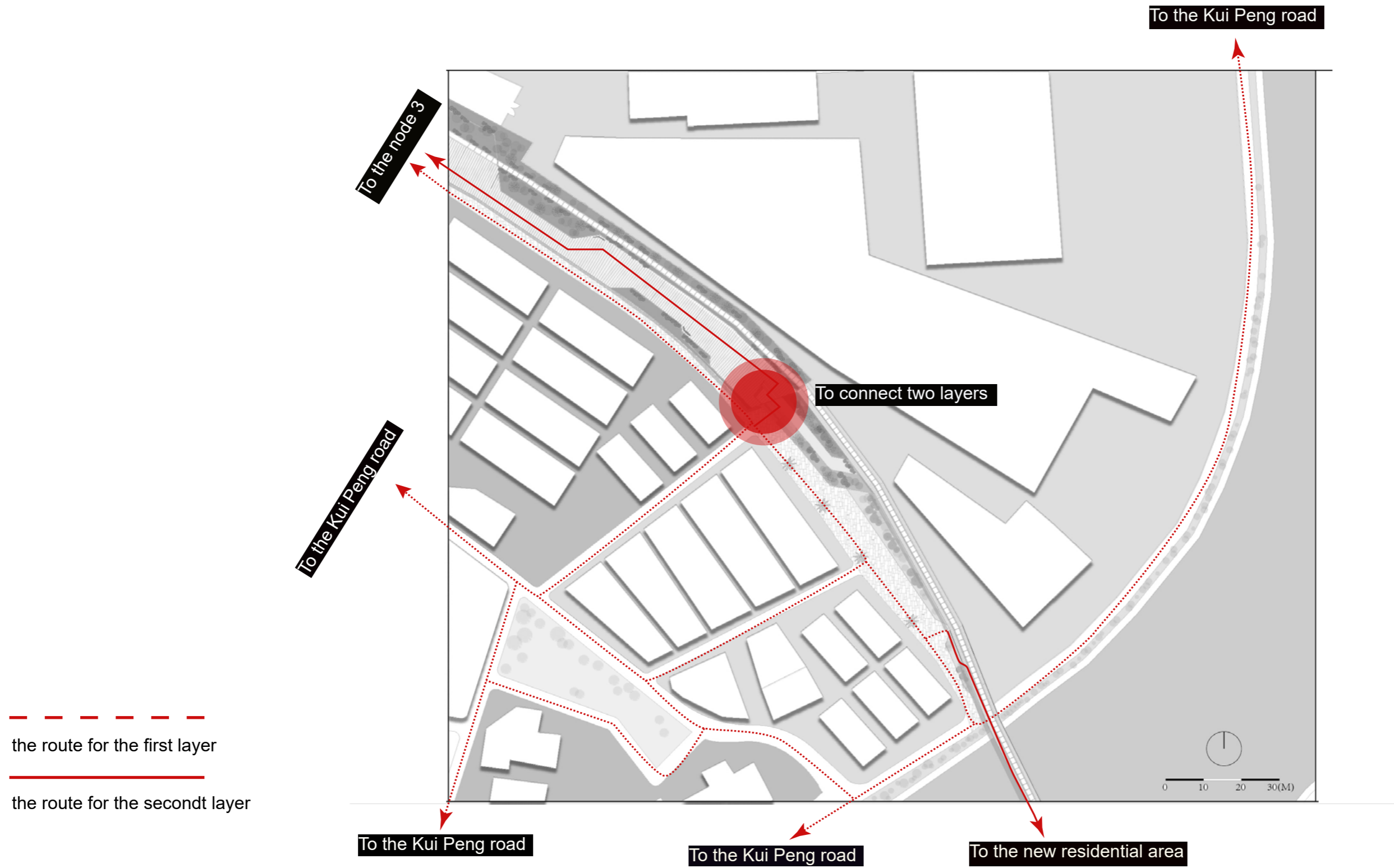
Exisiting Plan



- residential district
- commercial land
- factory land



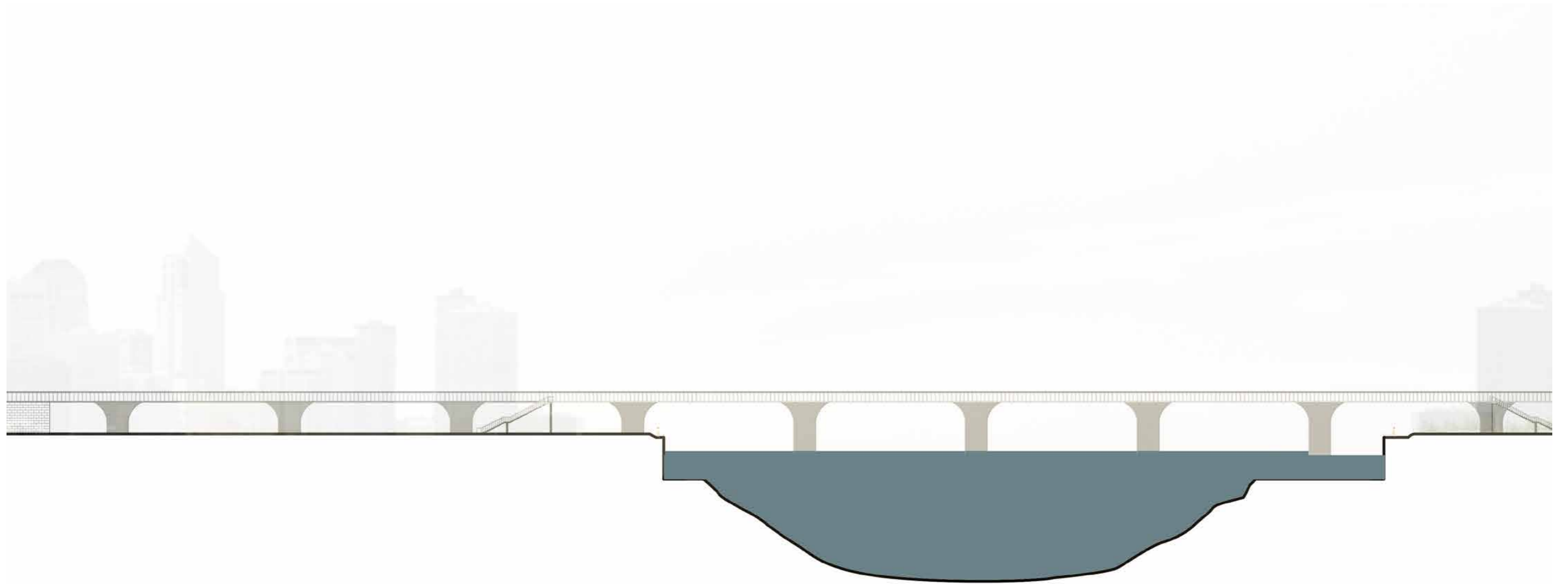
Strategy



Masterplan



Existing North Elevation



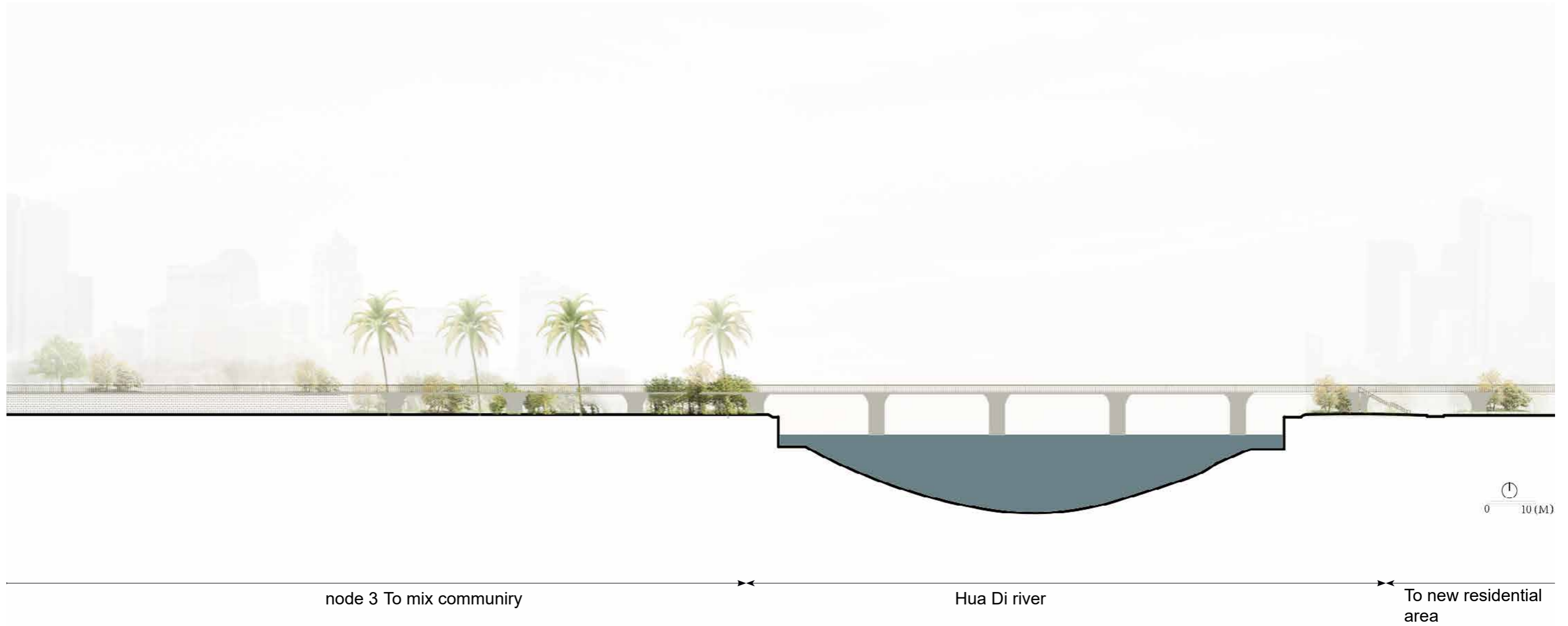
node 3 To mix community

Hua Di river

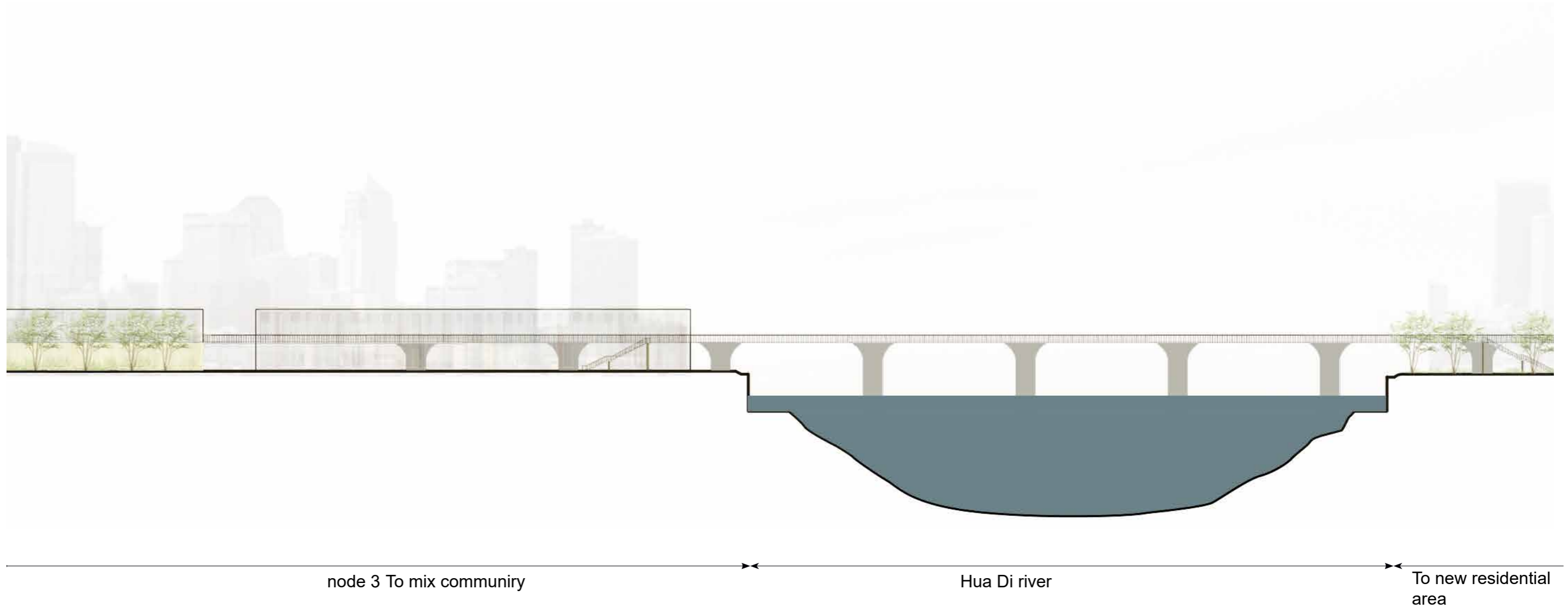
To new residential area



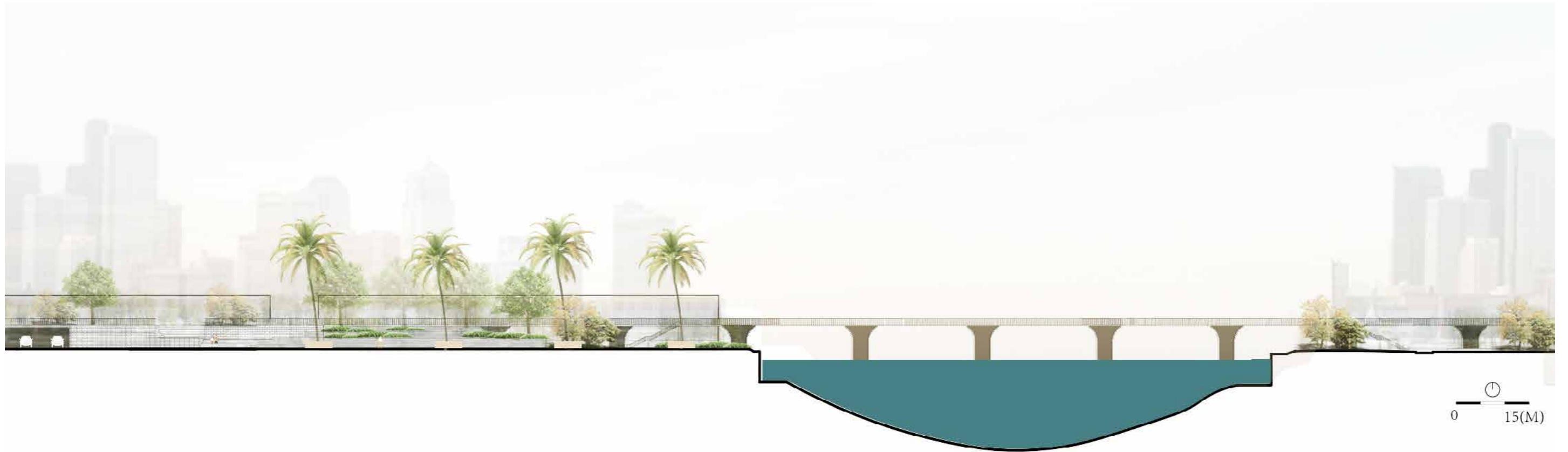
Project North Elevation



Existing South Elevation



Project South Elevation



node 3 To mix community

Hua Di river

To new residential area



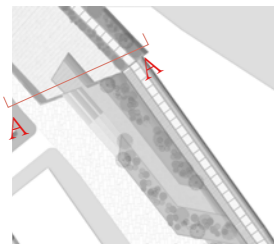
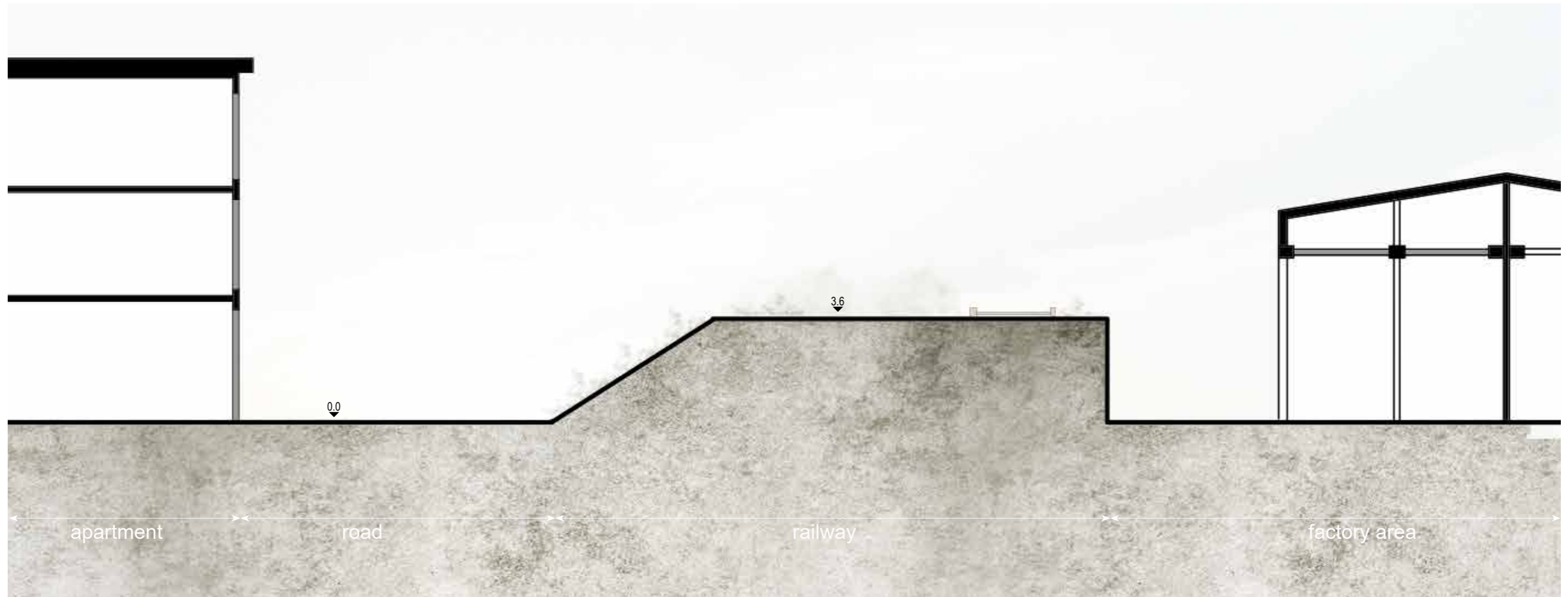
Vertical Connction

Masterplan



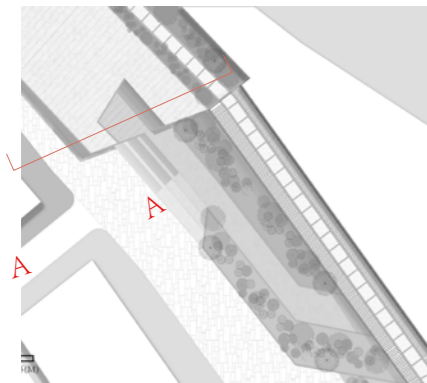
Existing Section

Section A-A



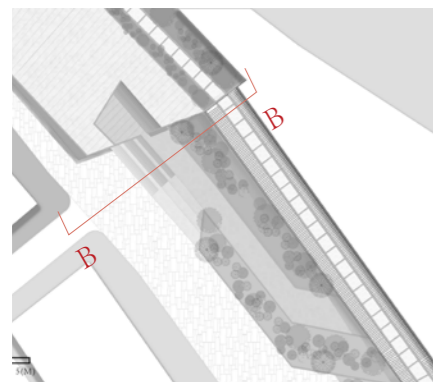
Project Section

Section A'-A'



Existing Section

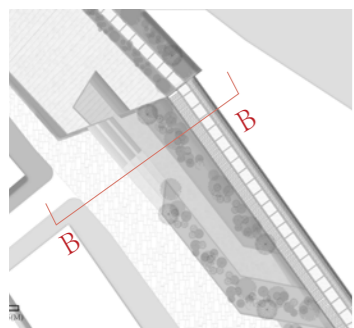
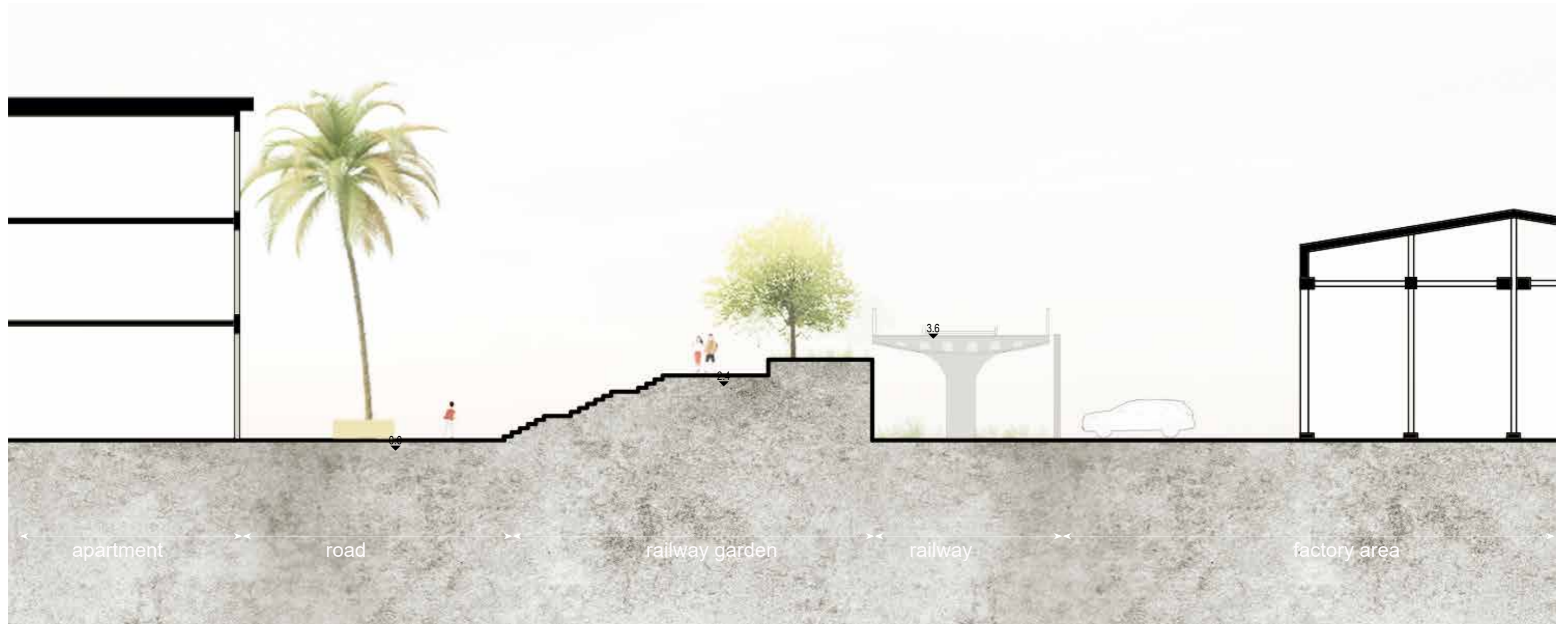
Section B-B



Project Section

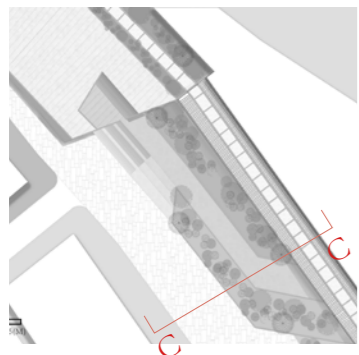
Section B'-B'

0 5(M)



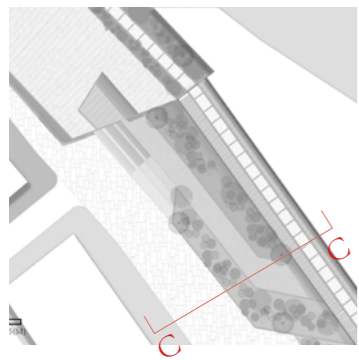
Existing Section

Section C-C



Project Section

Section C'-C'



Node 3 Vertical connection



Thanks for listening!

Looking forward to your valuable suggestions!