LAST MILE MILANO

people & parcels

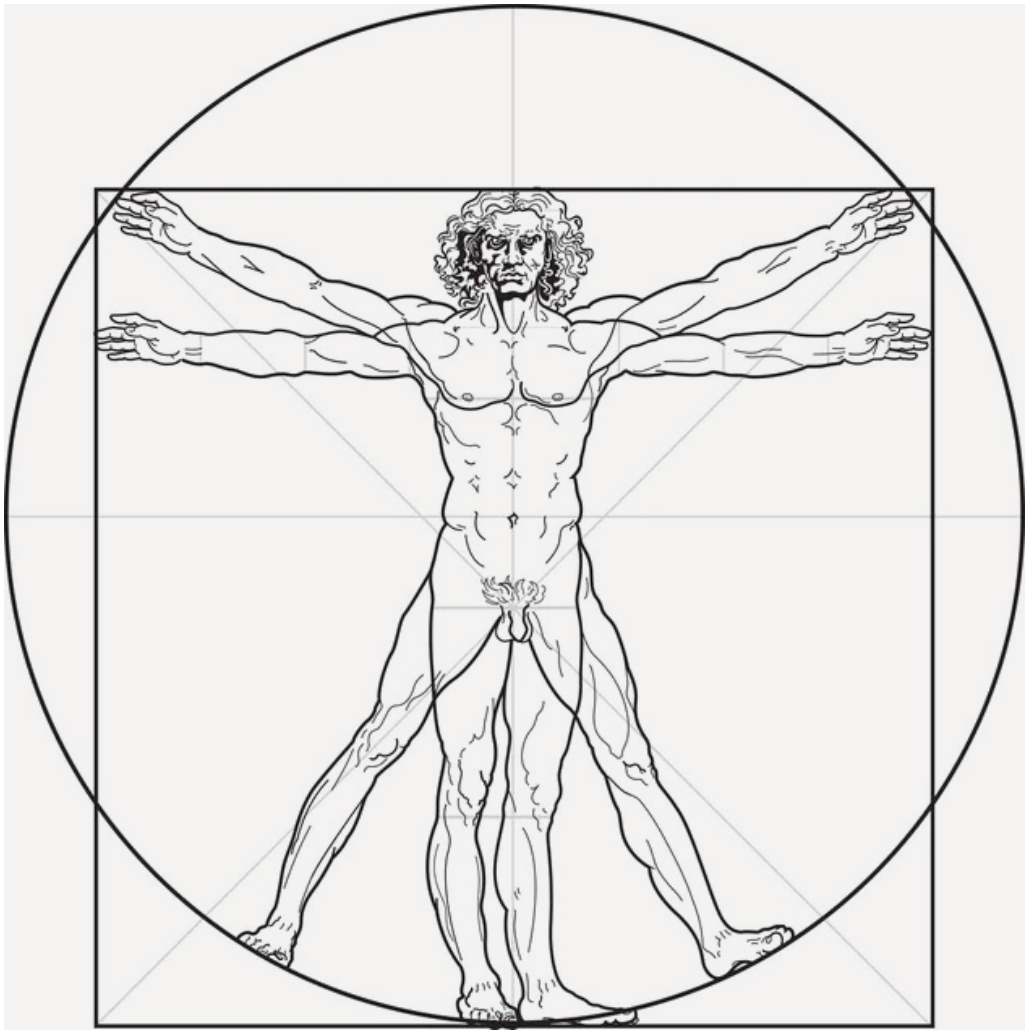
TU Delft

23/06/2026

CP 11

COMPLEX PROJECTS

BODIES & BUILDINGS



COMPLEX PROJECTS

A ONE OFF

COMPLEX PROJECTS

COMPLEX PROJECTS

MILANO CENTRALE

MILANO CENTRALE

MILANO CENTRALE

MULTI MODAL TRAINSTATION

MILANO CENTRALE

MULTI MODAL TRAINSTATION

regional trains
long distance trains
metro
tram
taxi
bike
scooter
foot

MILANO CENTRALE

MULTI MODAL TRAINSTATION

+

PARCEL LOGISTICS HUB

MILANO CENTRALE

MULTI MODAL TRAINSTATION

+

PARCEL LOGISTICS HUB

parcel sorting
MEV delivery
parcel trains
parcel lockers

MILANO CENTRALE

MILANO CENTRALE

RESEARCH QUESTION

“In what ways does the function of a parcel logistics hub influence the layout and program of a station within a car free Milan?“

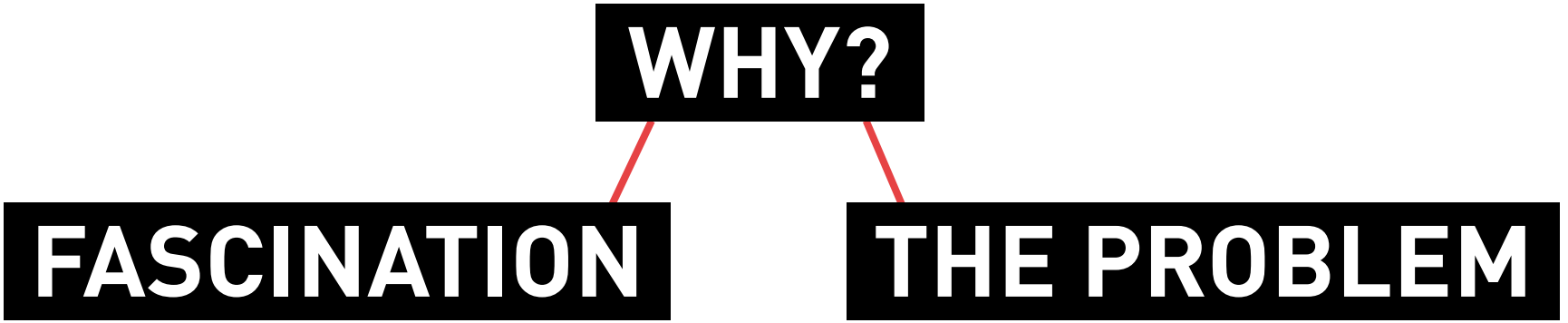
RESEARCH QUESTION

“In what ways does the function of a parcel logistics hub influence the layout and program of a station within a car free Milan?“

COMPLEX PROJECTS

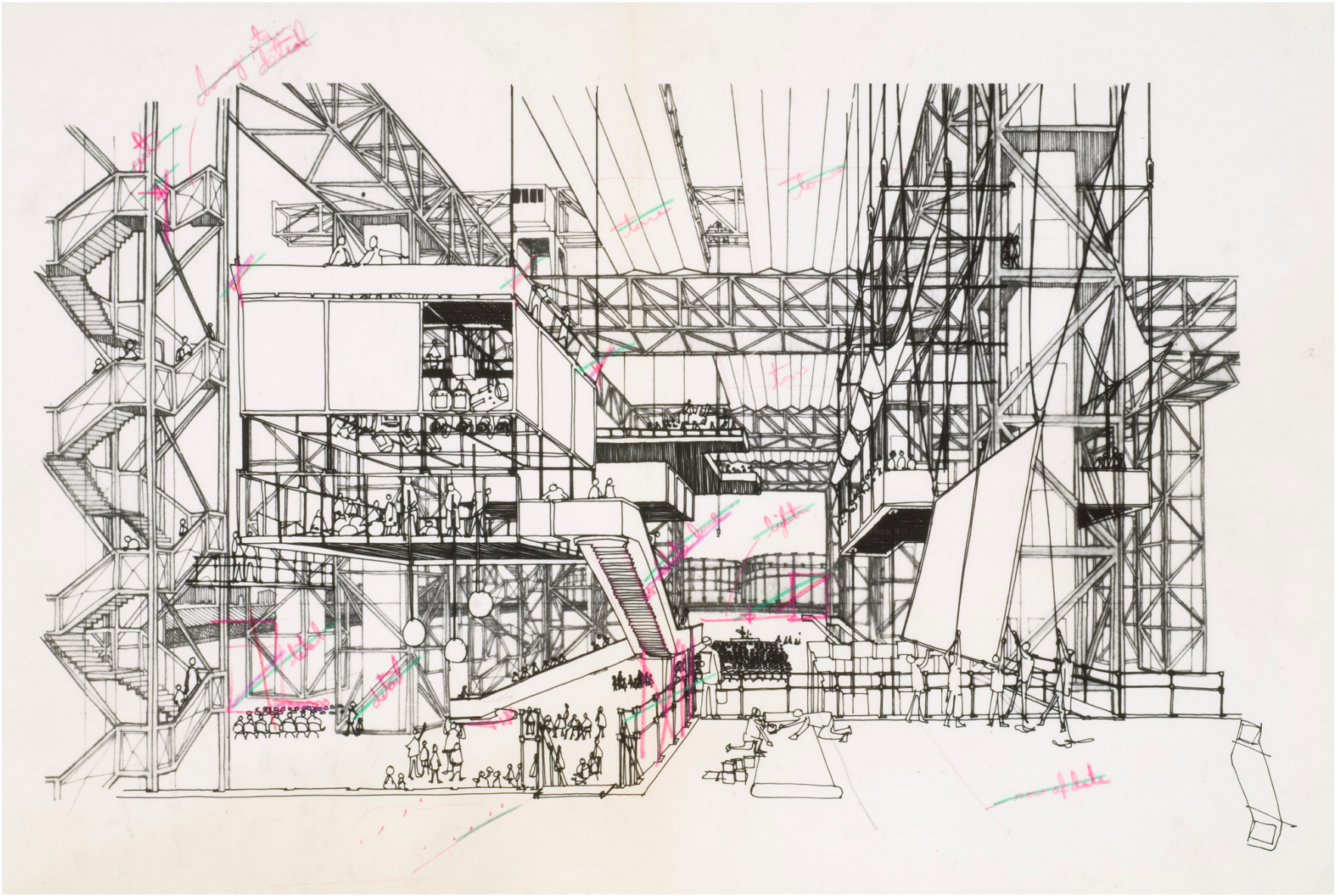
WHY?

COMPLEX PROJECTS



FASCINATION

FASCINATION



fun palace, cedric price

FASCINATION

lloyds building, richard rogers

FASCINATION

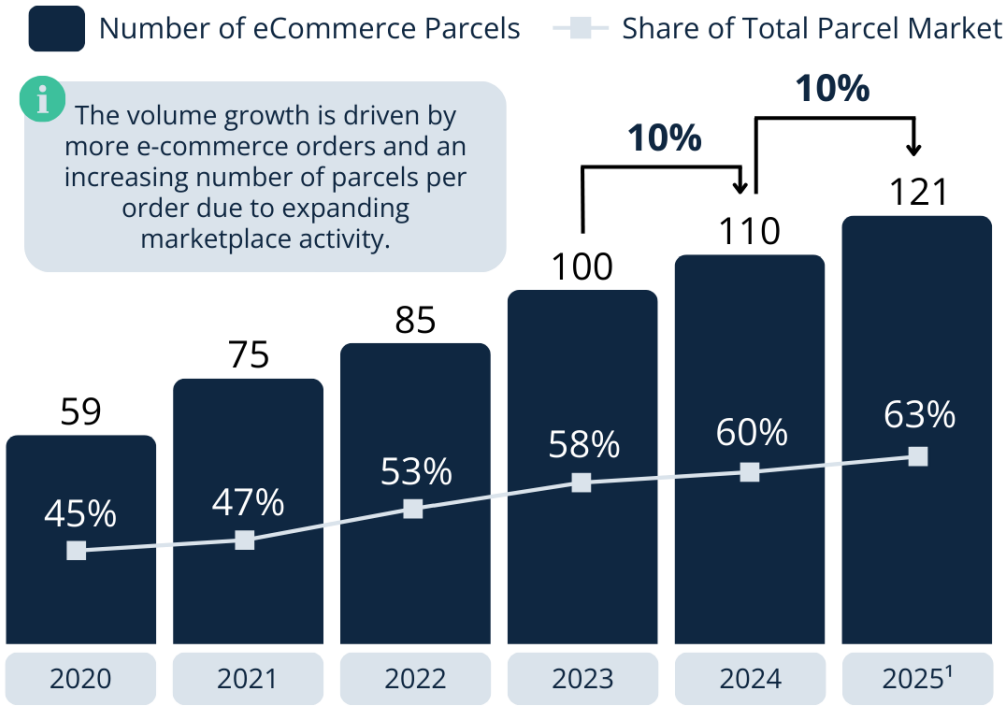
milan metro station

THE PROBLEM

RELEVANCE

+10% Growth Pushes E-Commerce Parcel Volume to 121 Billion in 2025

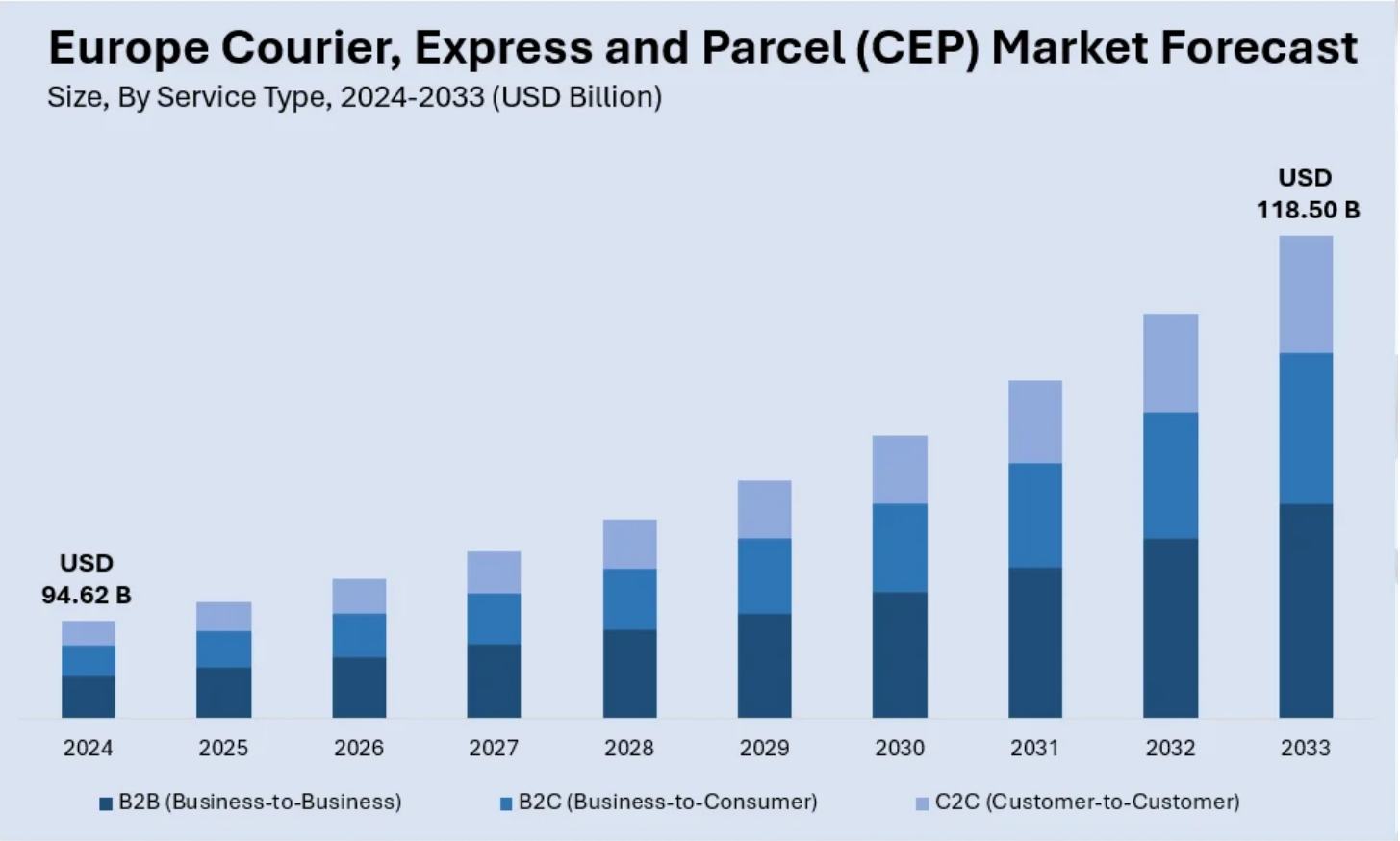
Development of the global B2C e-commerce parcel market (excluding returns) in billions, and its share of the total parcel market



(1) Forecast
Source: ECDB, Pitney Bowes.

ECDB

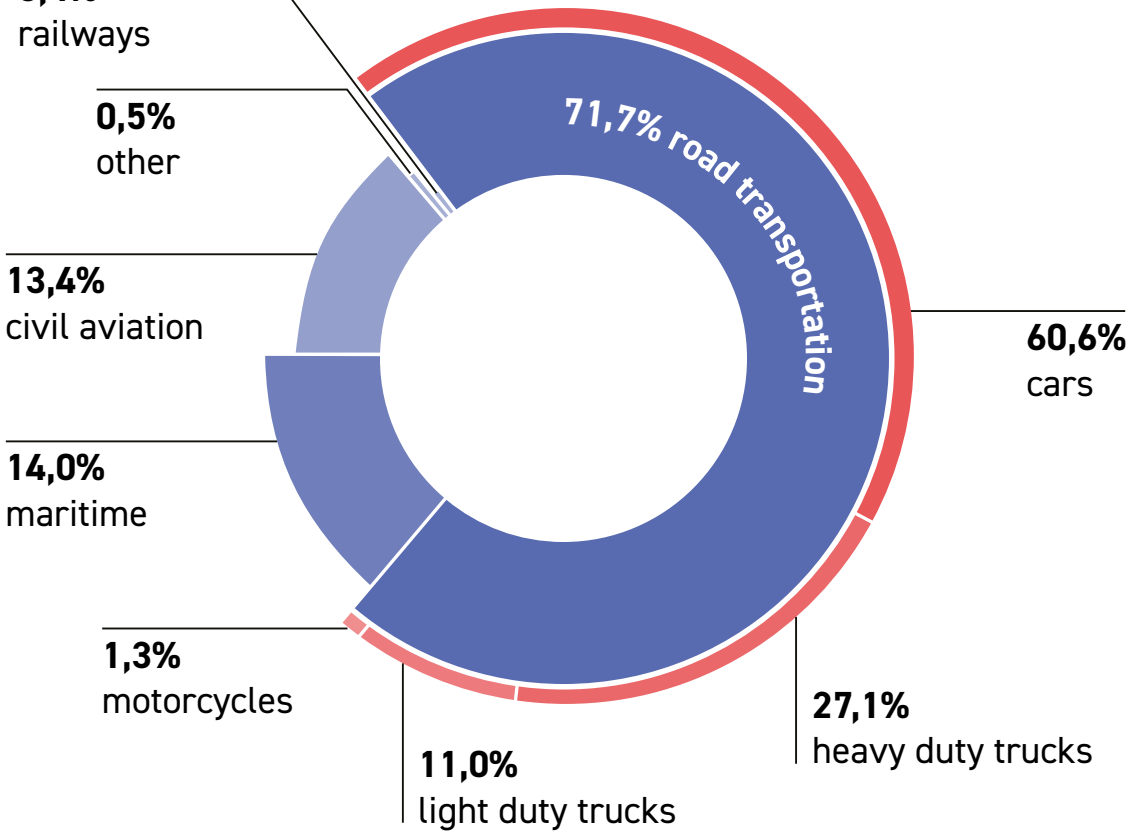
RELEVANCE


Europe Courier, Express and Parcel (CEP) Market Forecast
Size, By Service Type, 2024-2033 (USD Billion)
USD
94.62 B
USD
118.50 B
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
B2B (Business-to-Business)
B2C (Business-to-Consumer)
C2C (Customer-to-Customer)

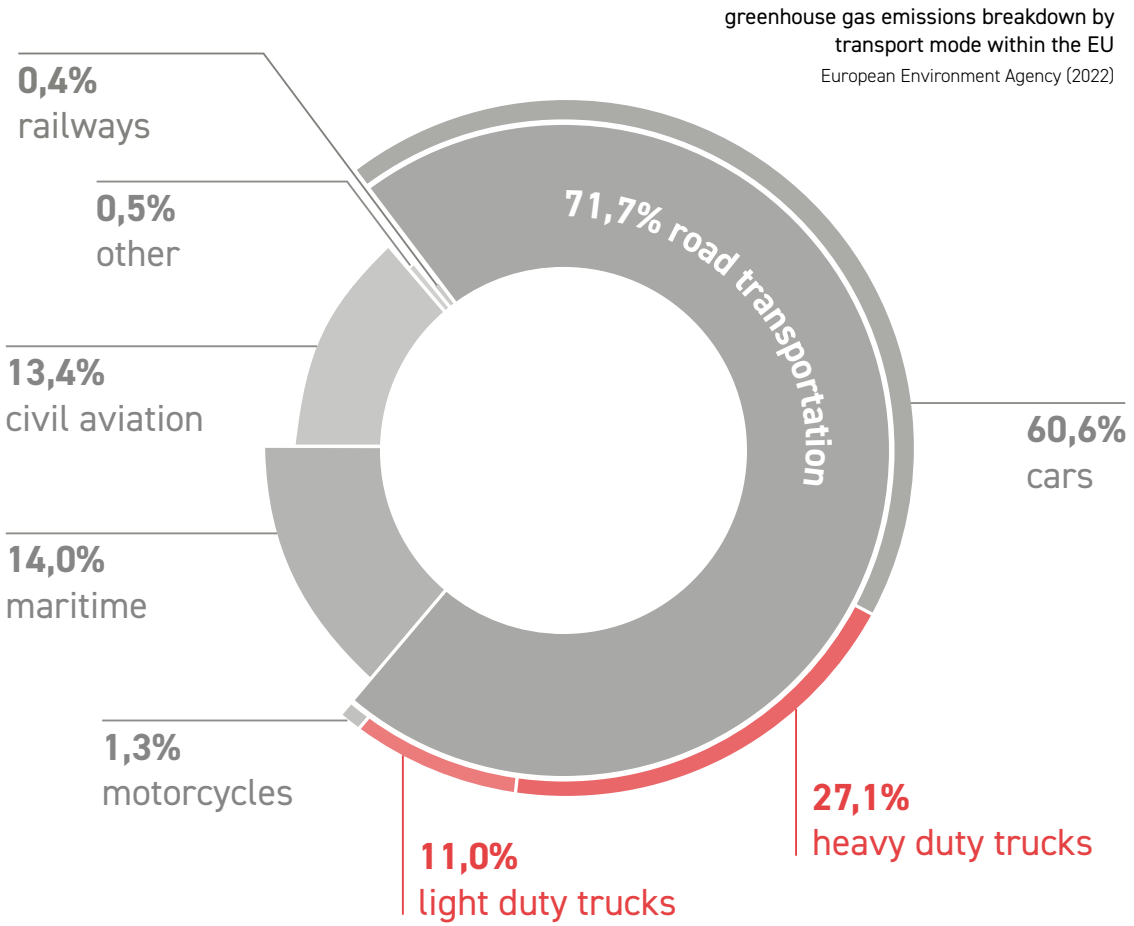
RELEVANCE

greenhouse gas emissions breakdown by transport mode within the EU

European Environment Agency (2022)



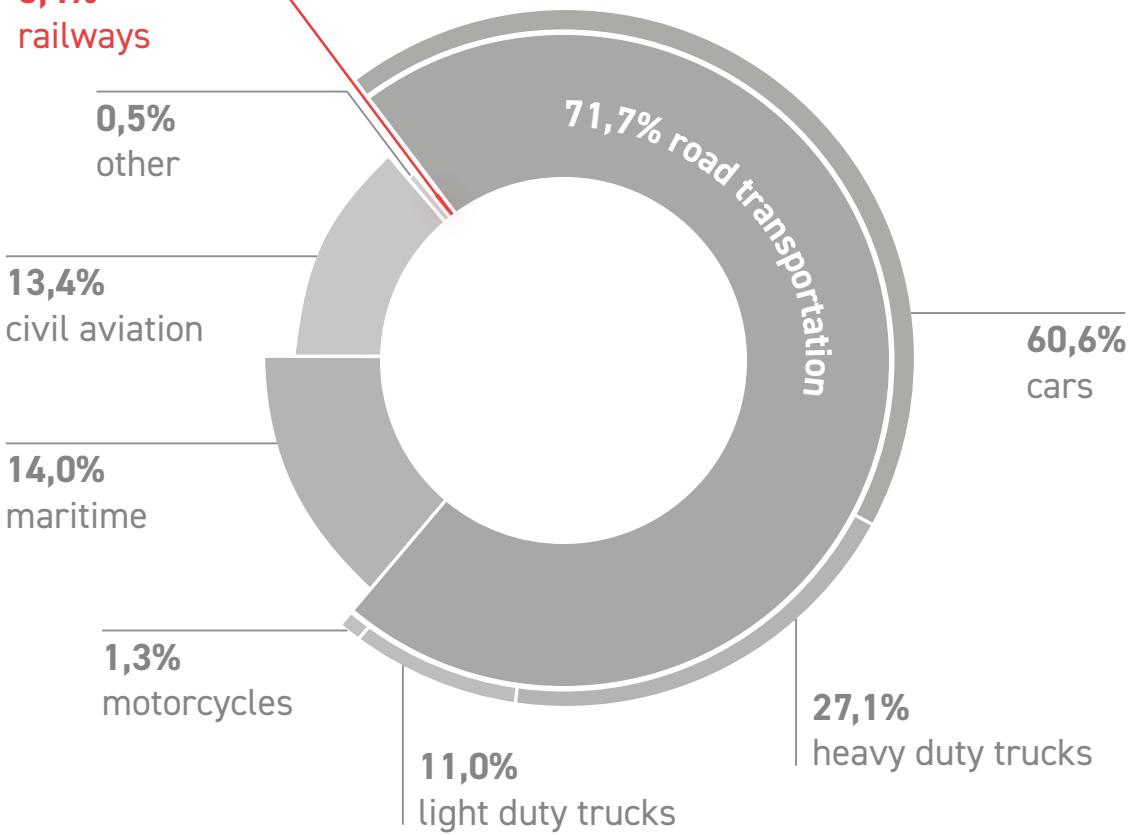
RELEVANCE


greenhouse gas emissions breakdown by transport mode within the EU
European Environment Agency (2022)
0,4% railways
0,5% other
13,4% civil aviation
14,0% maritime
1,3% motorcycles
11,0% light duty trucks
27,1% heavy duty trucks
60,6% cars
71,7% road transportation

RELEVANCE

greenhouse gas emissions breakdown by transport mode within the EU

European Environment Agency (2022)



RAIL

SNCF TGV La Poste

CONGESTION

vehicles stuck in traffic

CONGESTION

136 hours per year

tomtom traffic index, 2025

RELEVANCE

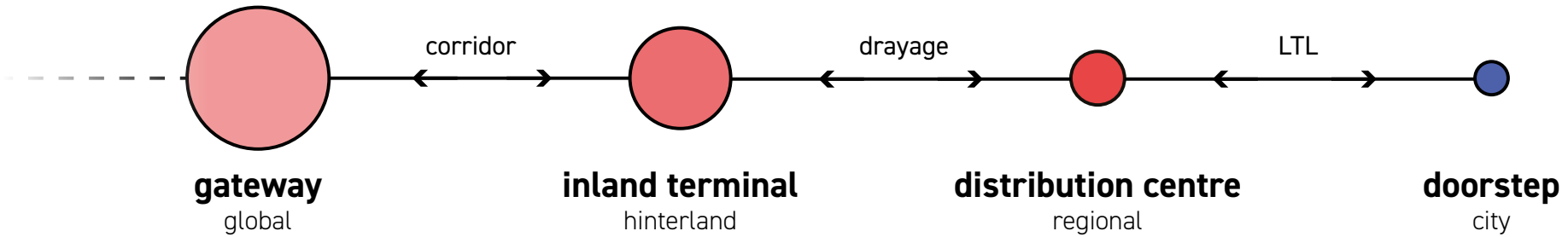
“First of all, we need to act on mobility. In Milan, we aim to reduce private road transport by **50% by 2030** and make the city **a cycling and pedestrian city by 2050**, Grandi announced.“

Elena Grandi, 2024

SOLUTION

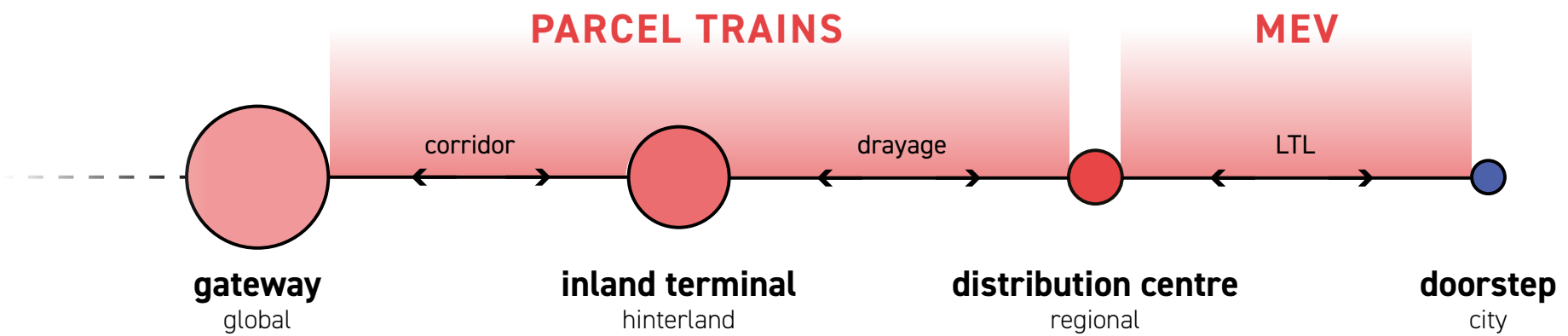
the solution

LOGISTIC CHAIN



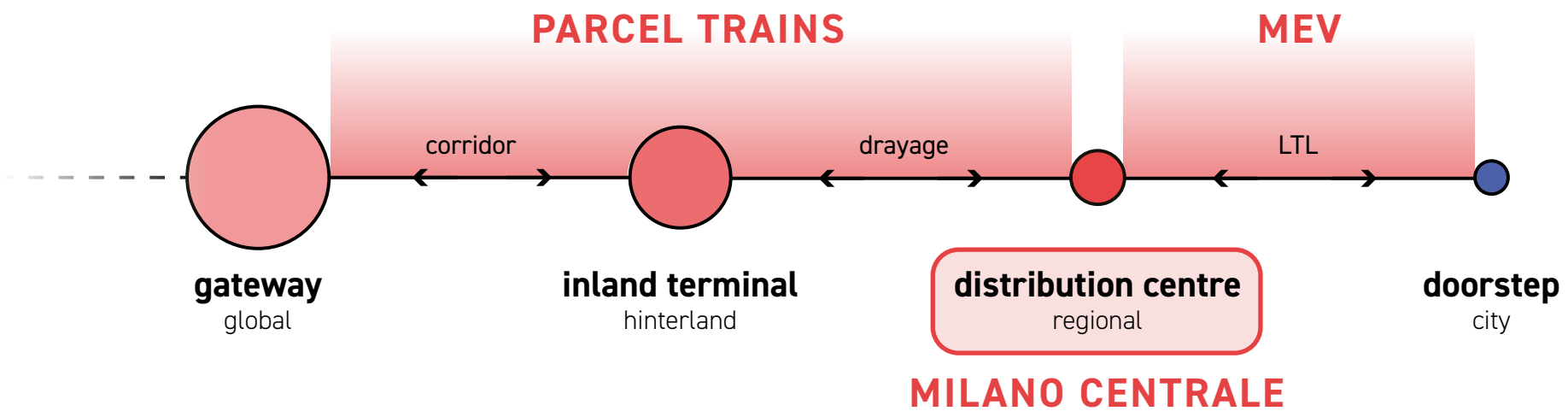
the solution

LOGISTIC CHAIN



the solution

LOGISTIC CHAIN



ROAD FREIGHT

delivery freight truck

ROAD FREIGHT

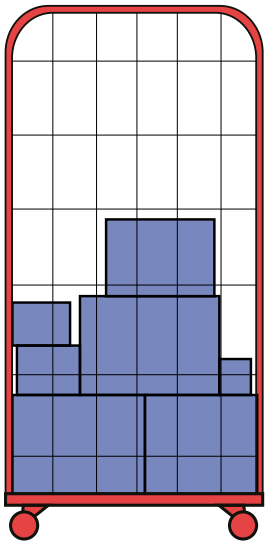
delivery freight truck

PARCEL TRAINS

orion logistics, converted parcel train

the solution

MEV



roll cage

rollable cage holding items

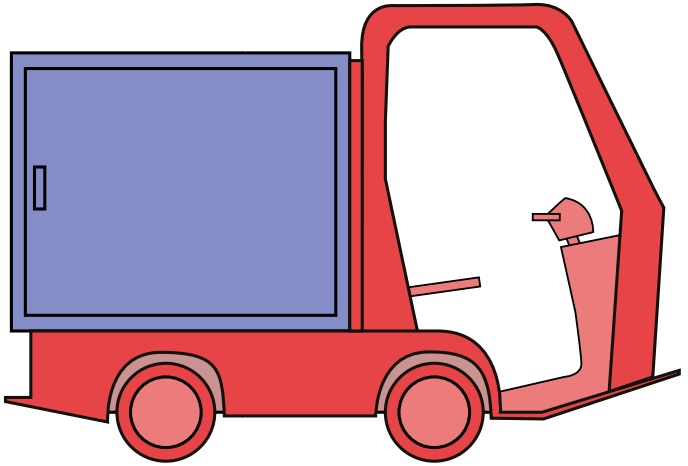
the solution

MEV DELIVERY

posteitaliane, micro electric vehicle

the solution

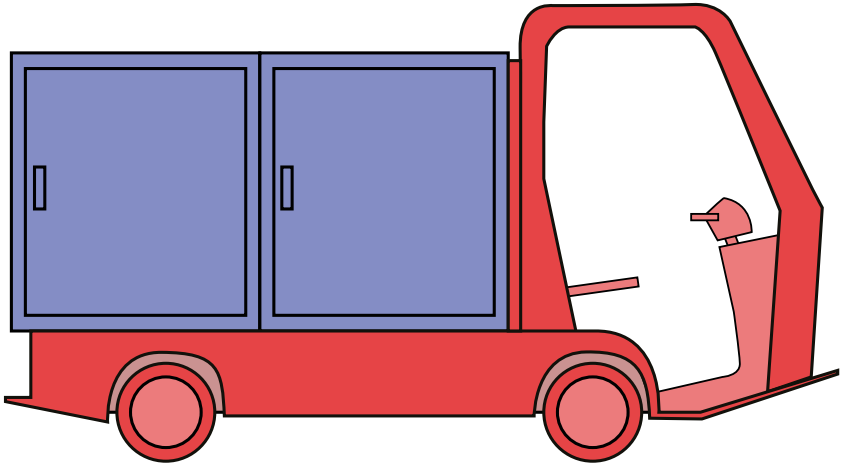
MEV



micro electric vehicle (MEV)
micro vehicle with storage loadout

the solution

MEV

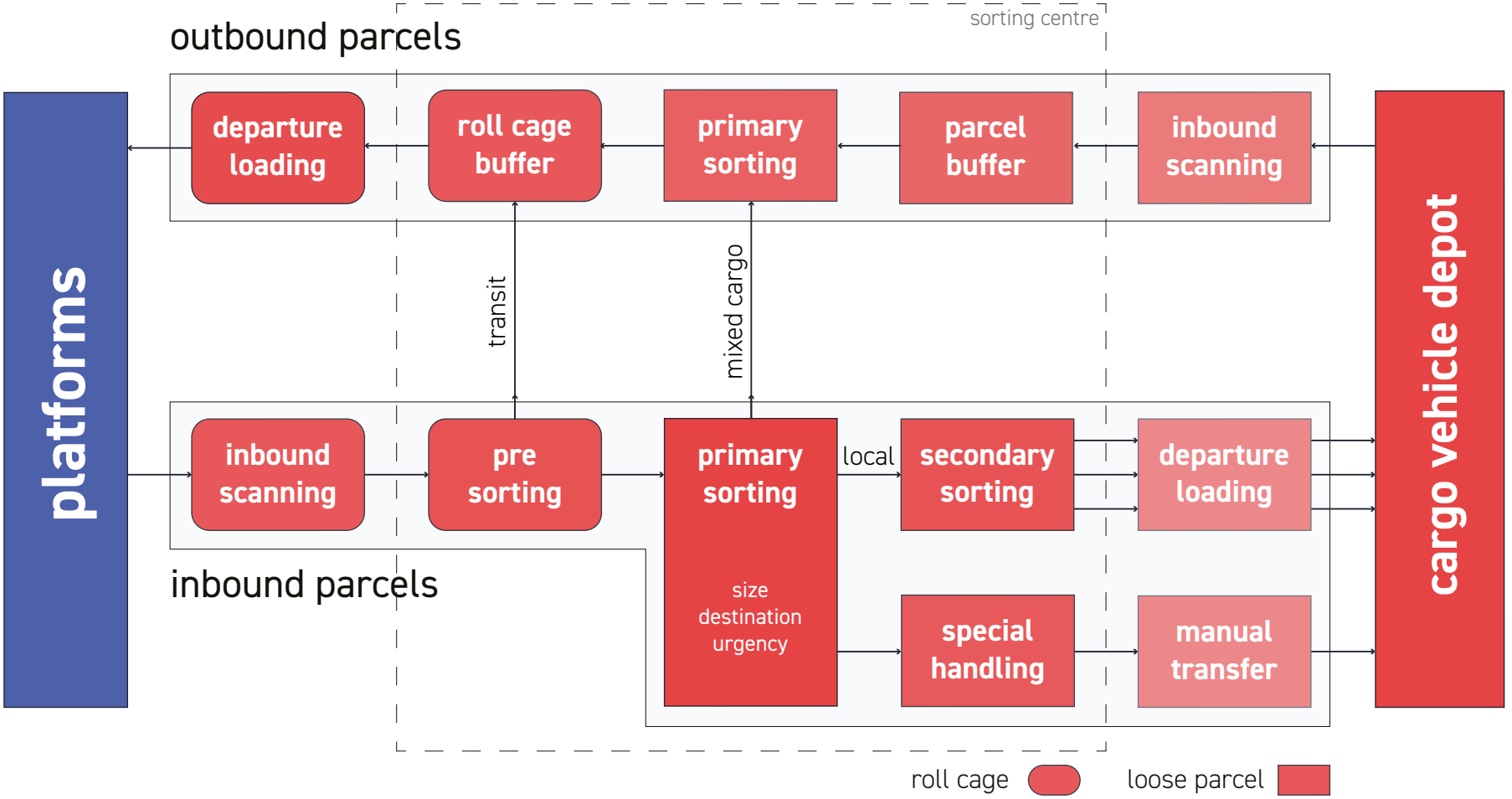


micro electric vehicle (MEV)

micro vehicle with storage loadout

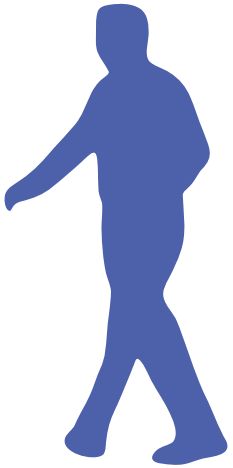
the solution

LOGISTIC CHAIN



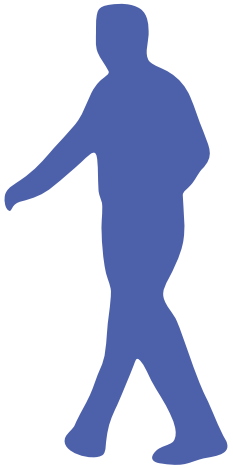
the solution

PEOPLE



the solution

PEOPLE & PARCELS



the solution

PEOPLE & PARCELS

the solution

A NEW STATION

URBAN STRATEGY

urban

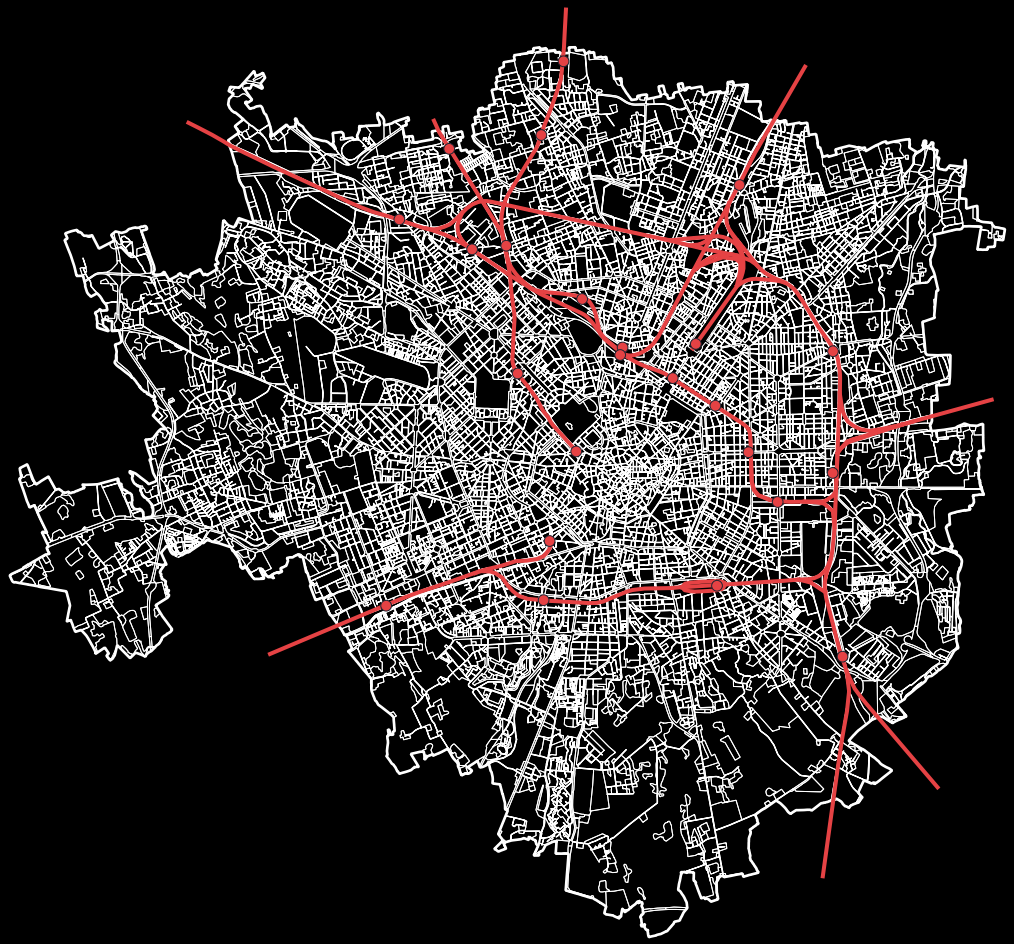
ITALY

urban

ITALY

urban

MILANO



urban

SYSTEM

urban

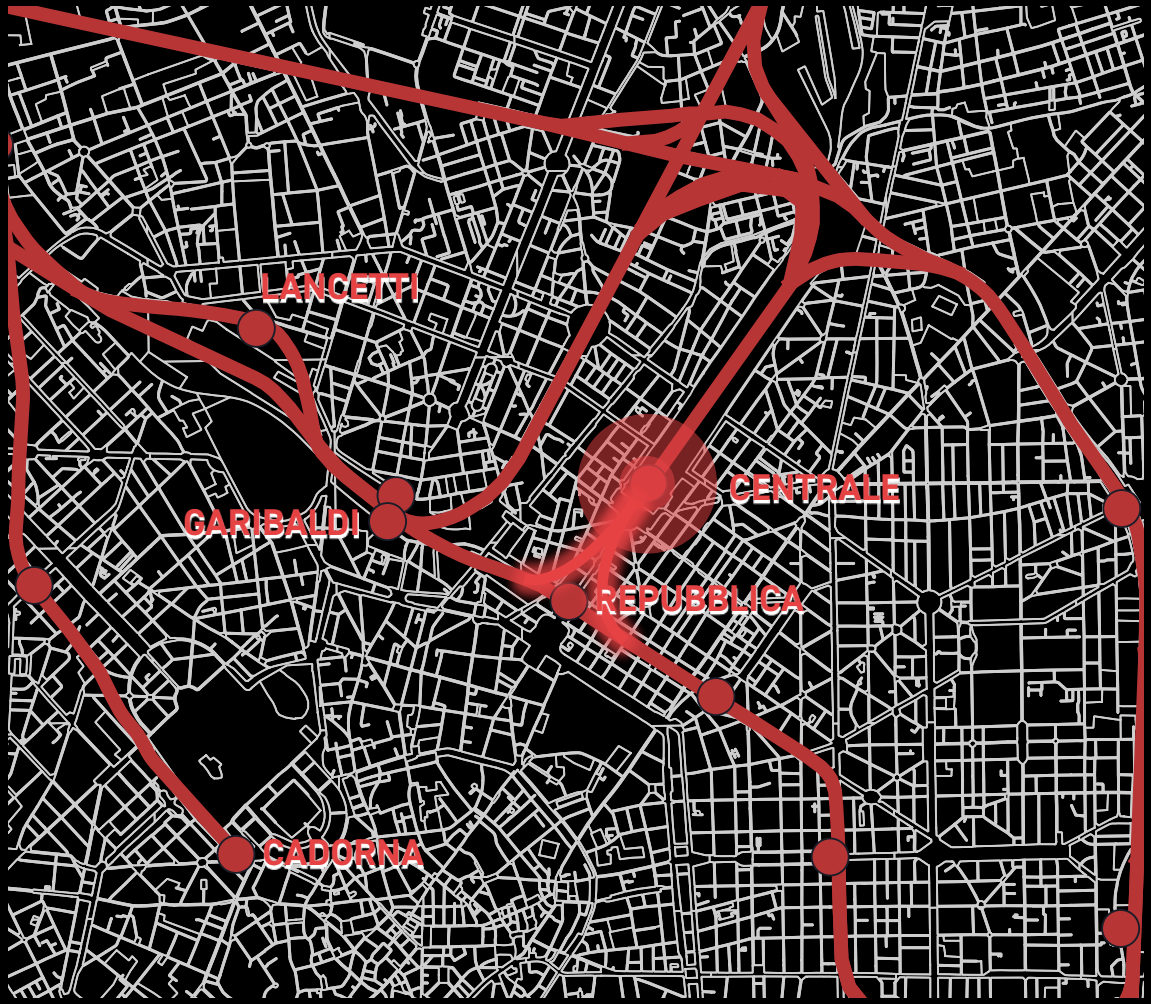
SITE LOCATION

urban

REGION

urban

CONNECTION



urban

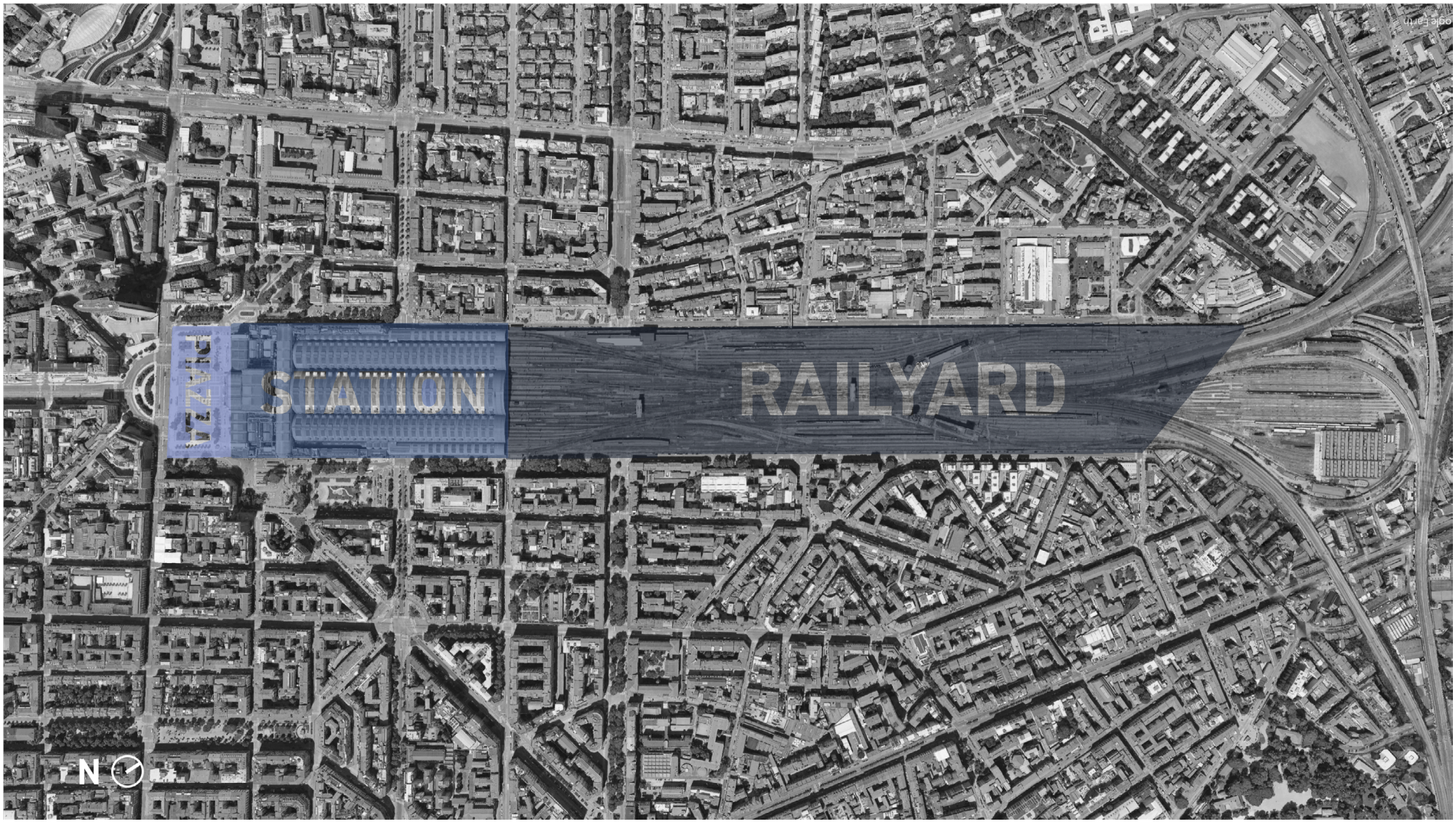
ZOOM IN

urban

SITE VIEW

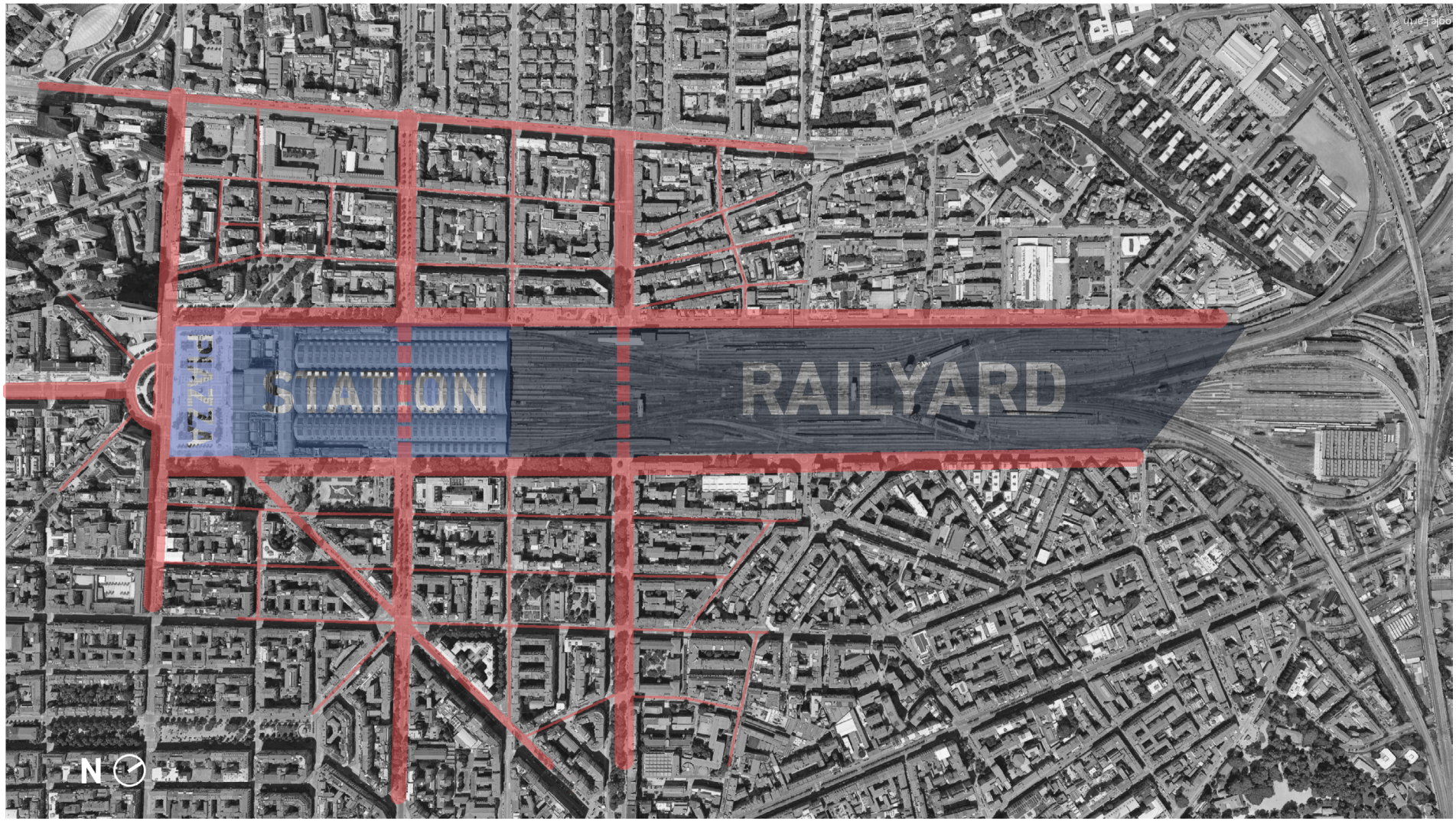
urban

SITE VIEW



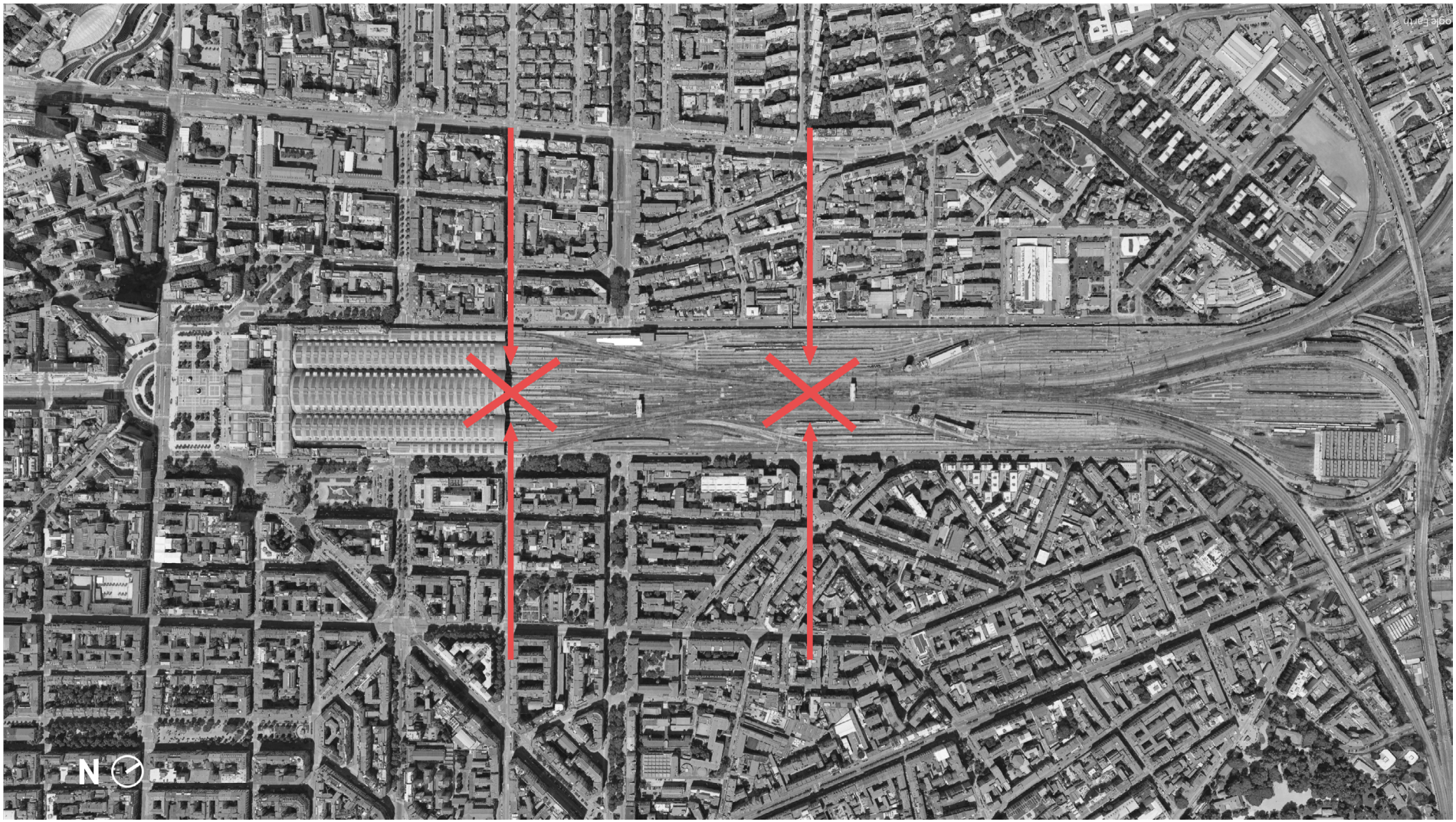
urban

SITE VIEW



urban

SITE VIEW

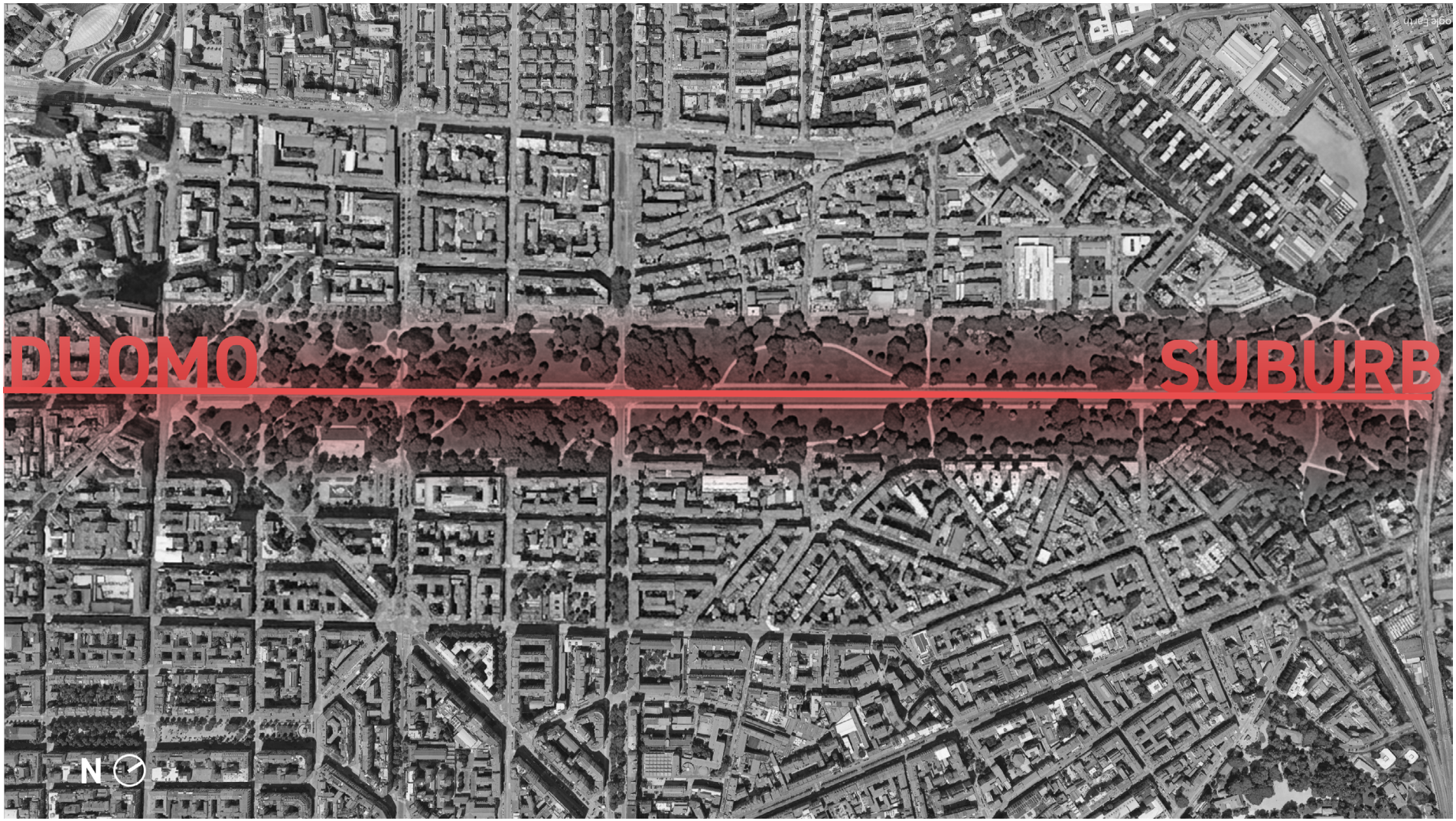


urban

SITE VIEW

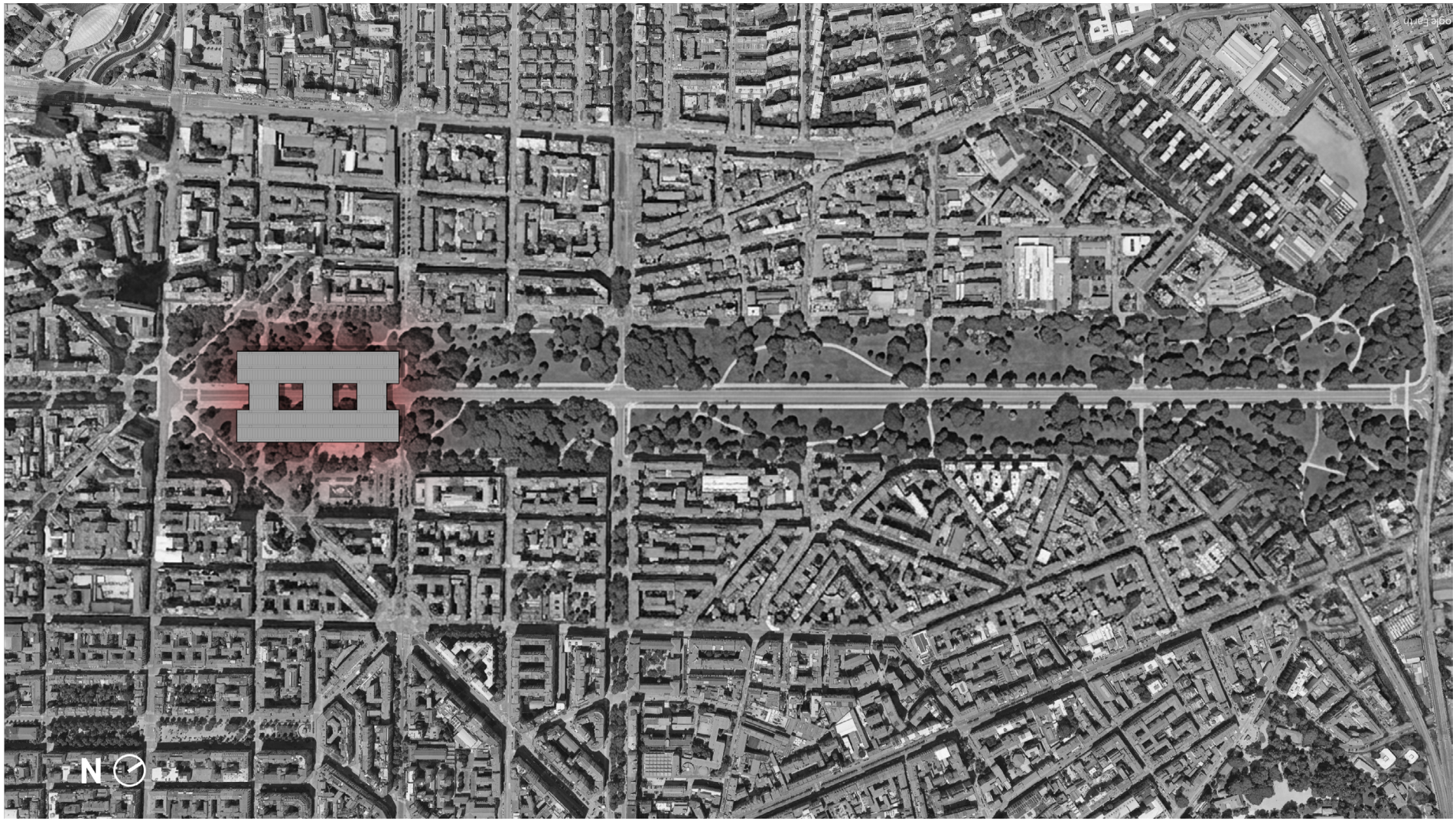
urban

SITE VIEW



urban

SITE VIEW



urban

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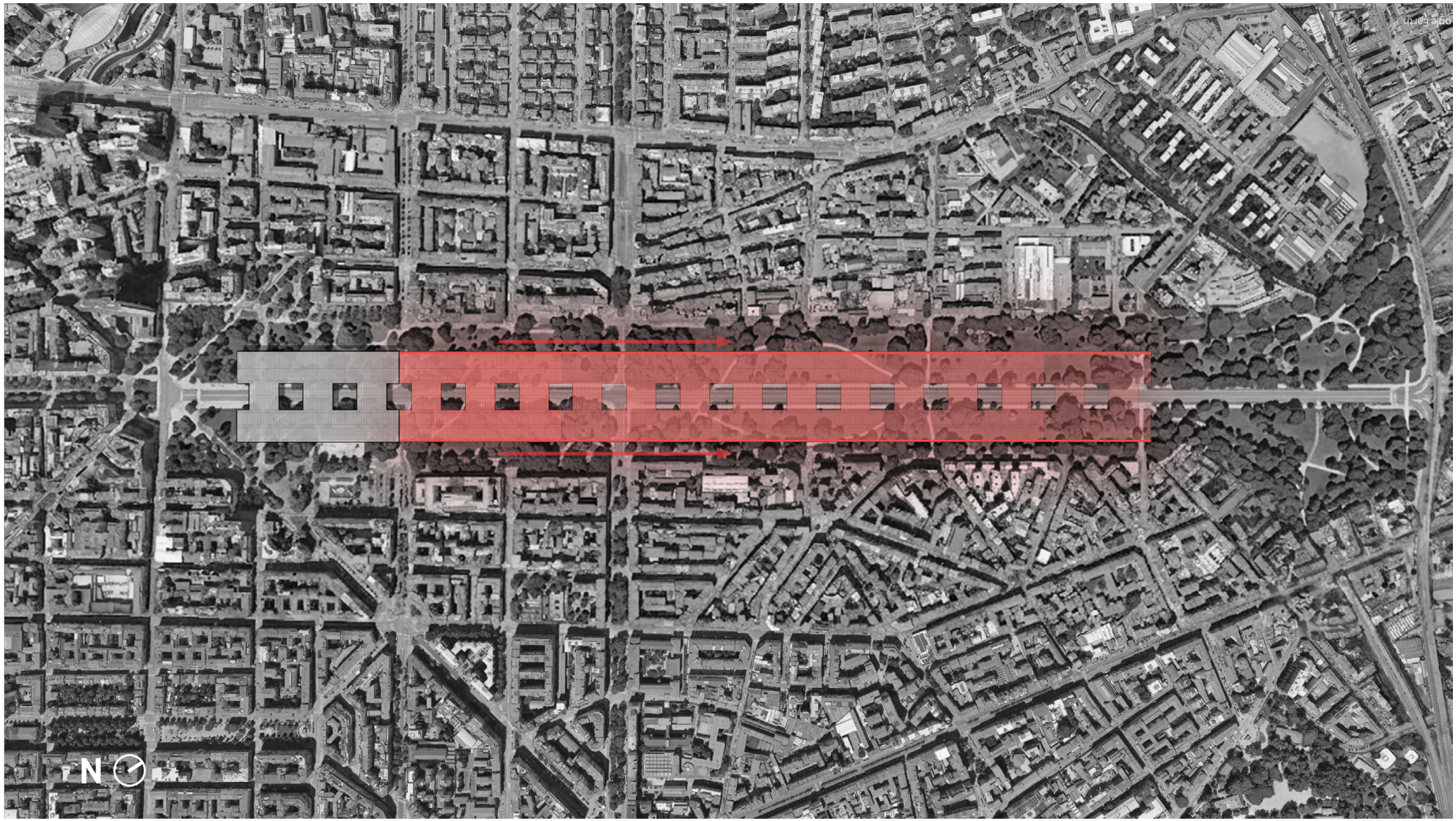
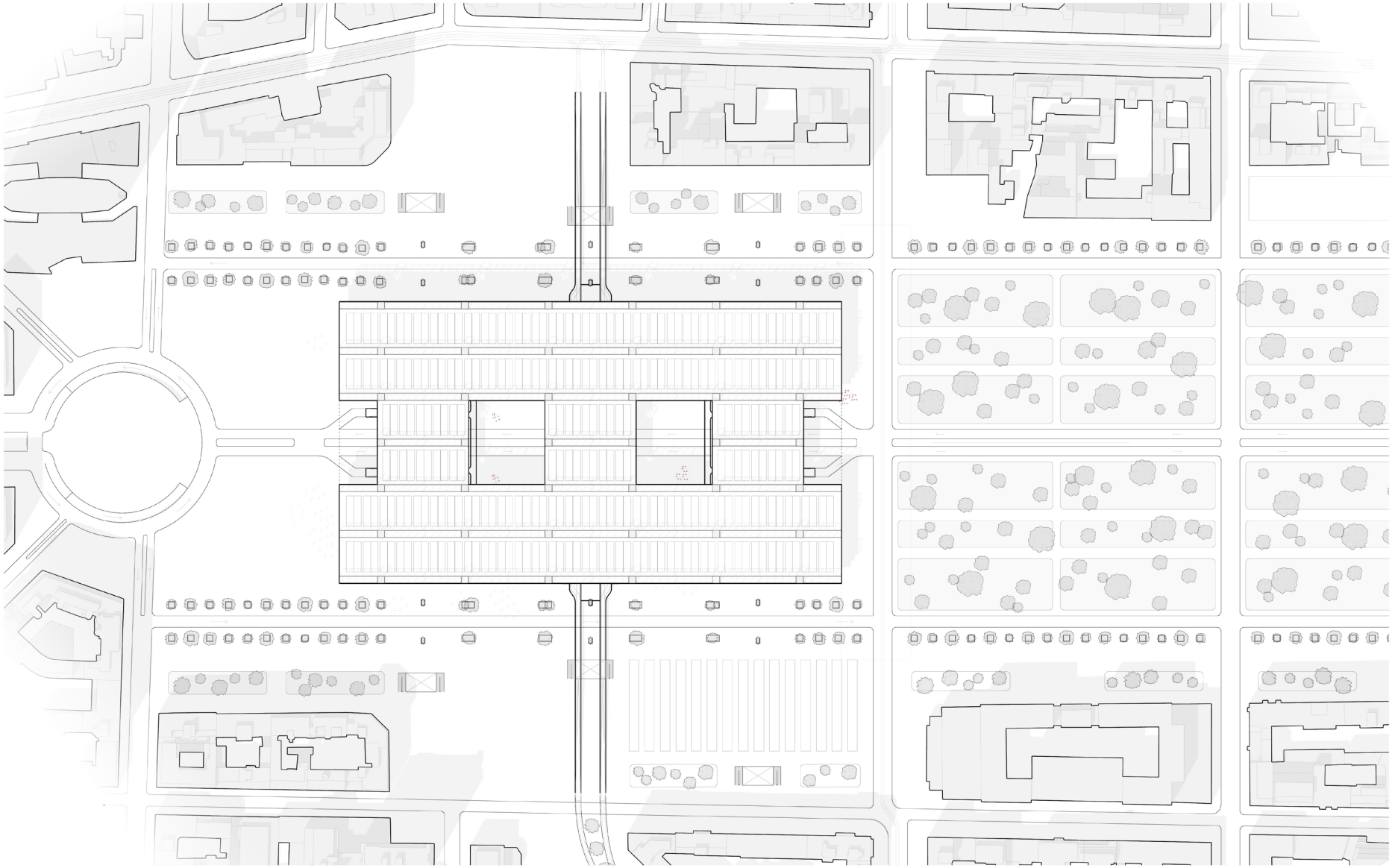


urban

SITE VIEW

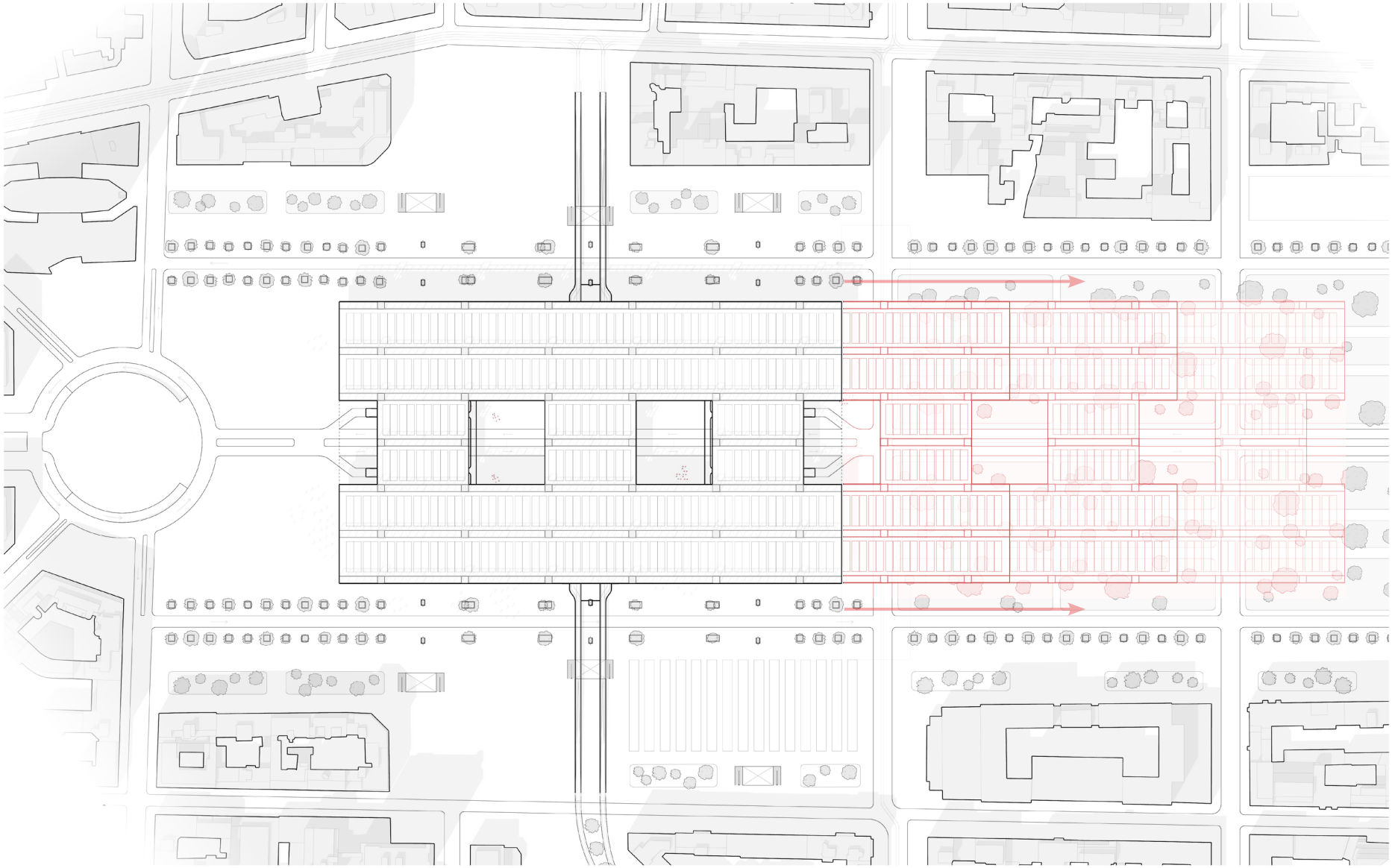
ROOF PLAN



site plan
zoomed out gf

1:1800

ROOF PLAN



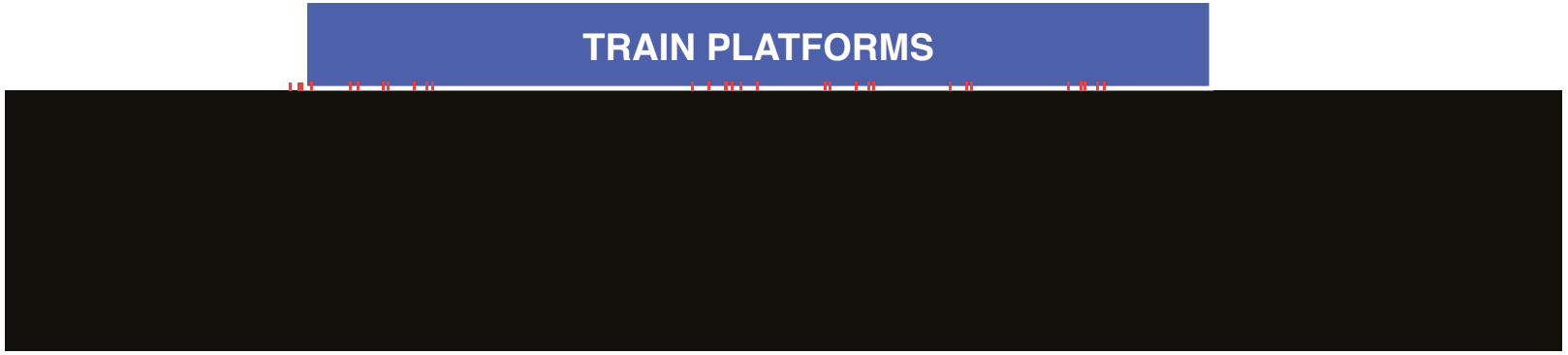
site plan
zoomed out gf

1:1800

CONCEPT

concept

SECTION DIAGRAM



concept

SECTION DIAGRAM

concept

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concept

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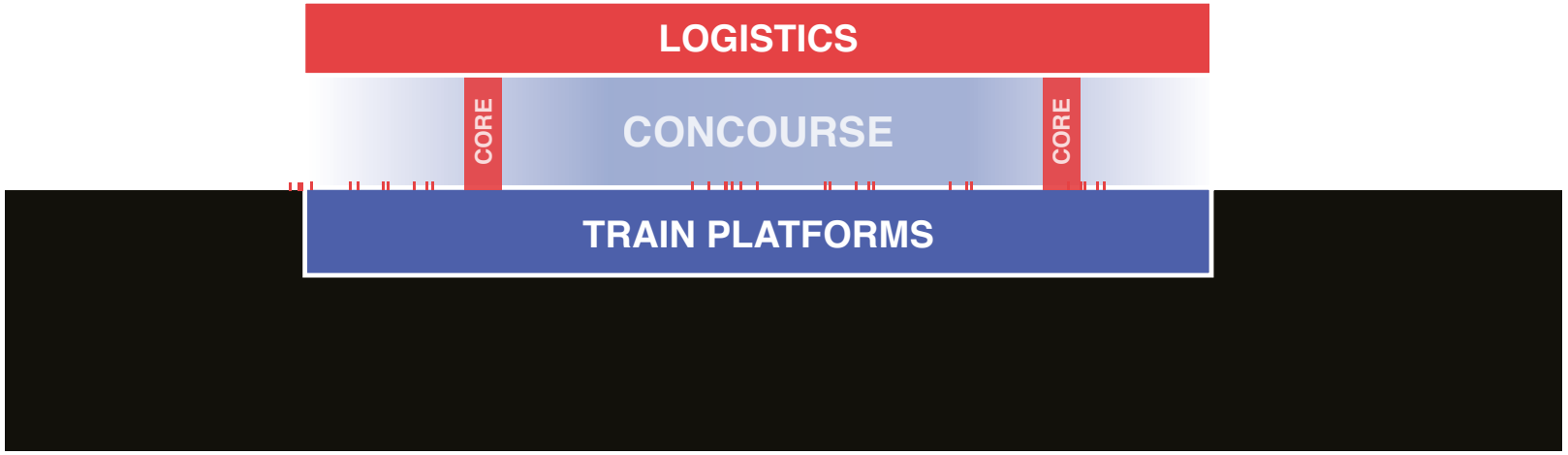
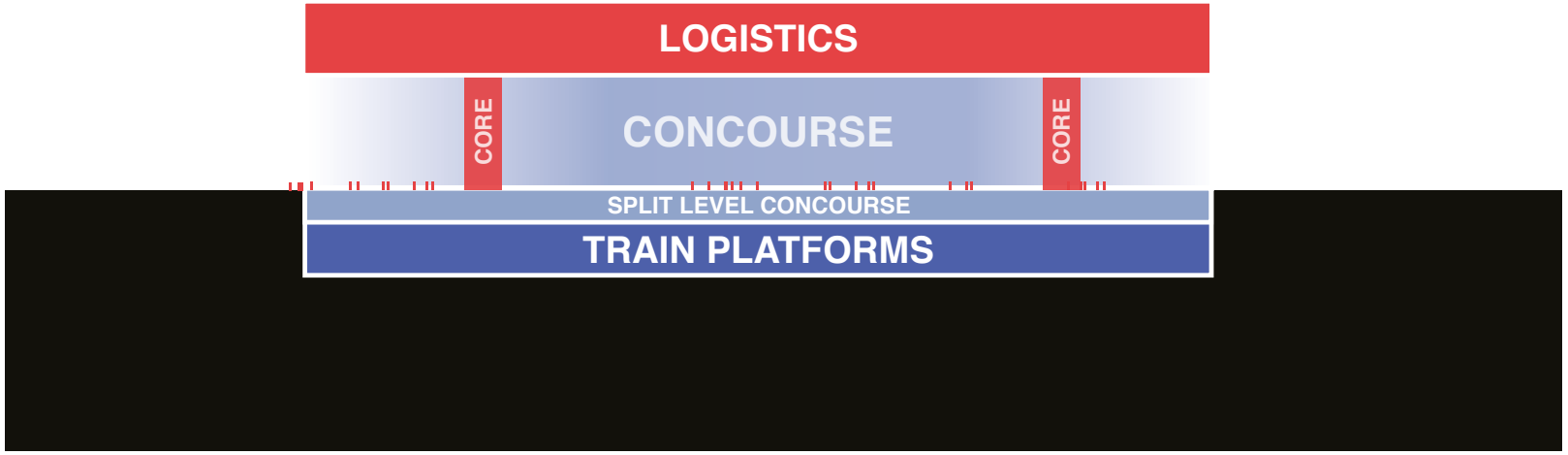
concept

SECTION DIAGRAM



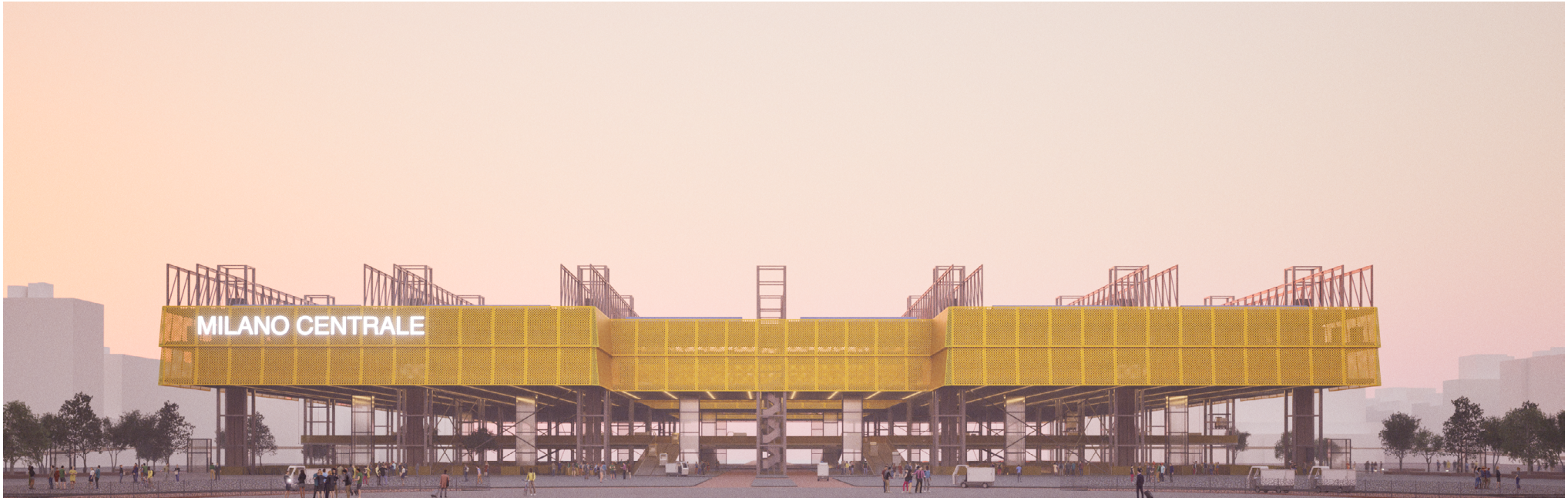
concept

SECTION DIAGRAM



concept

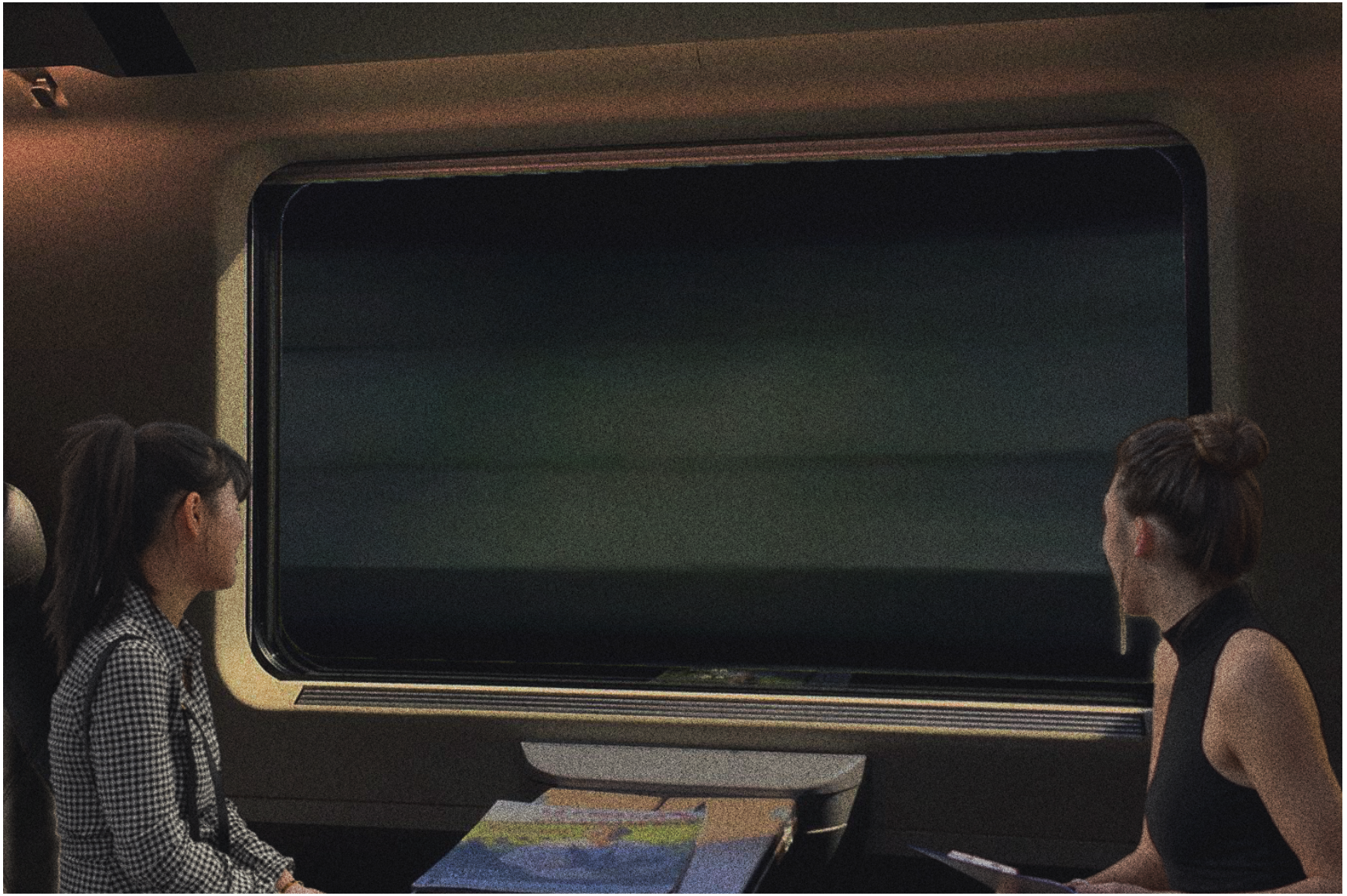
IMPRESSION



LETS GO!

TRANSIT

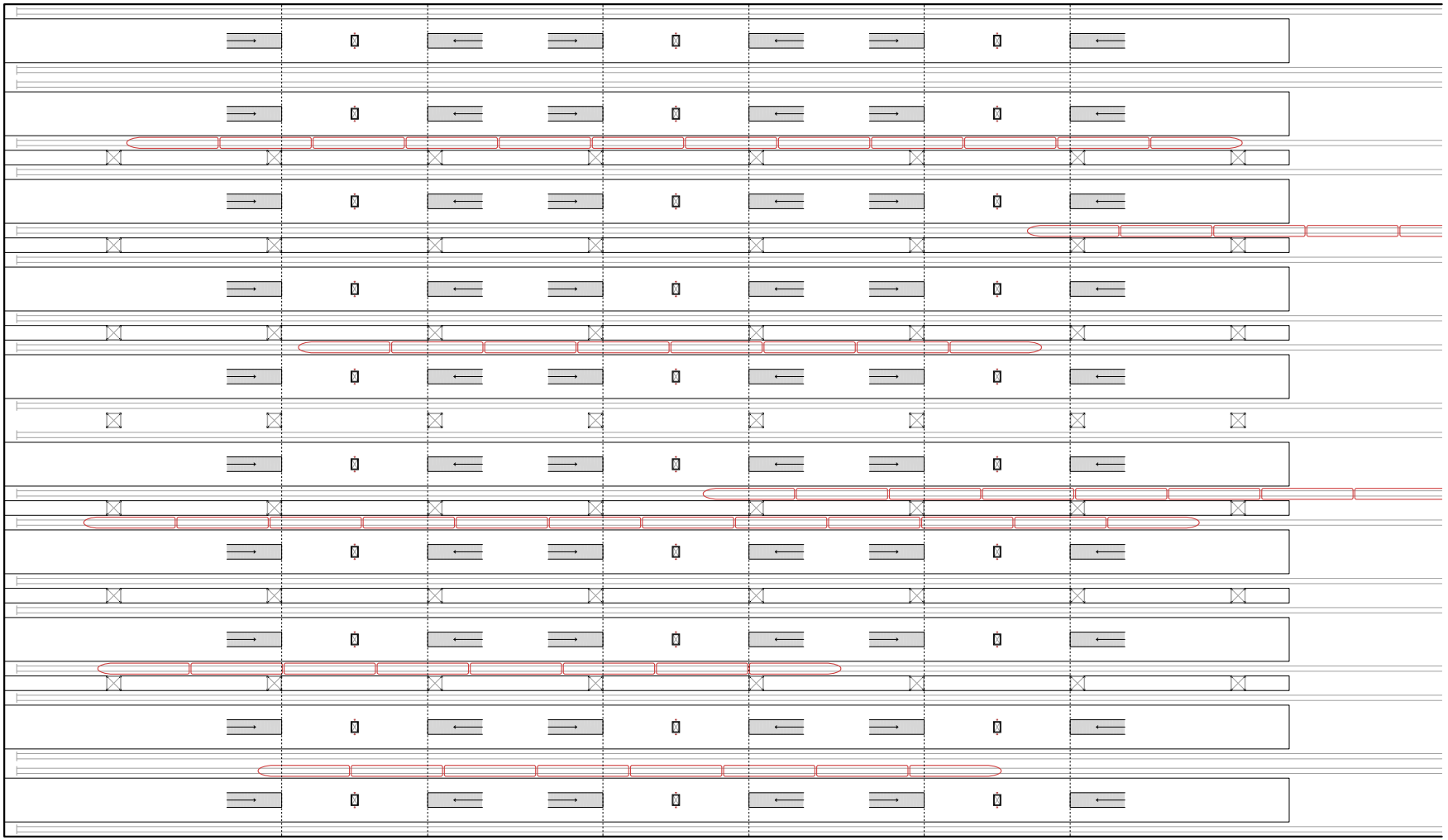
TUNNEL



ARRIVAL

PLATFORMS

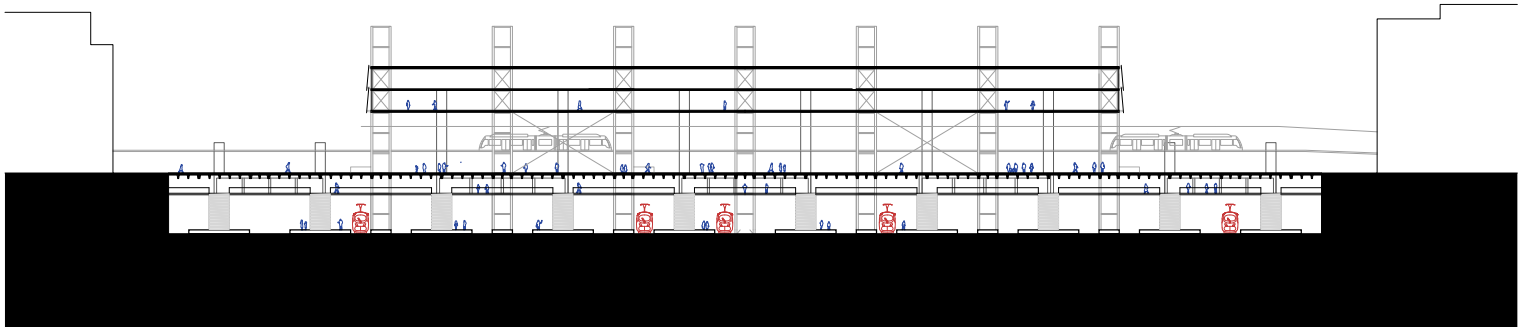
PLATFORMS

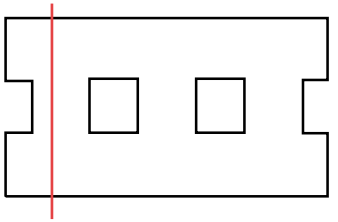


-2
platforms

1:1000

SHORT SECTION - A

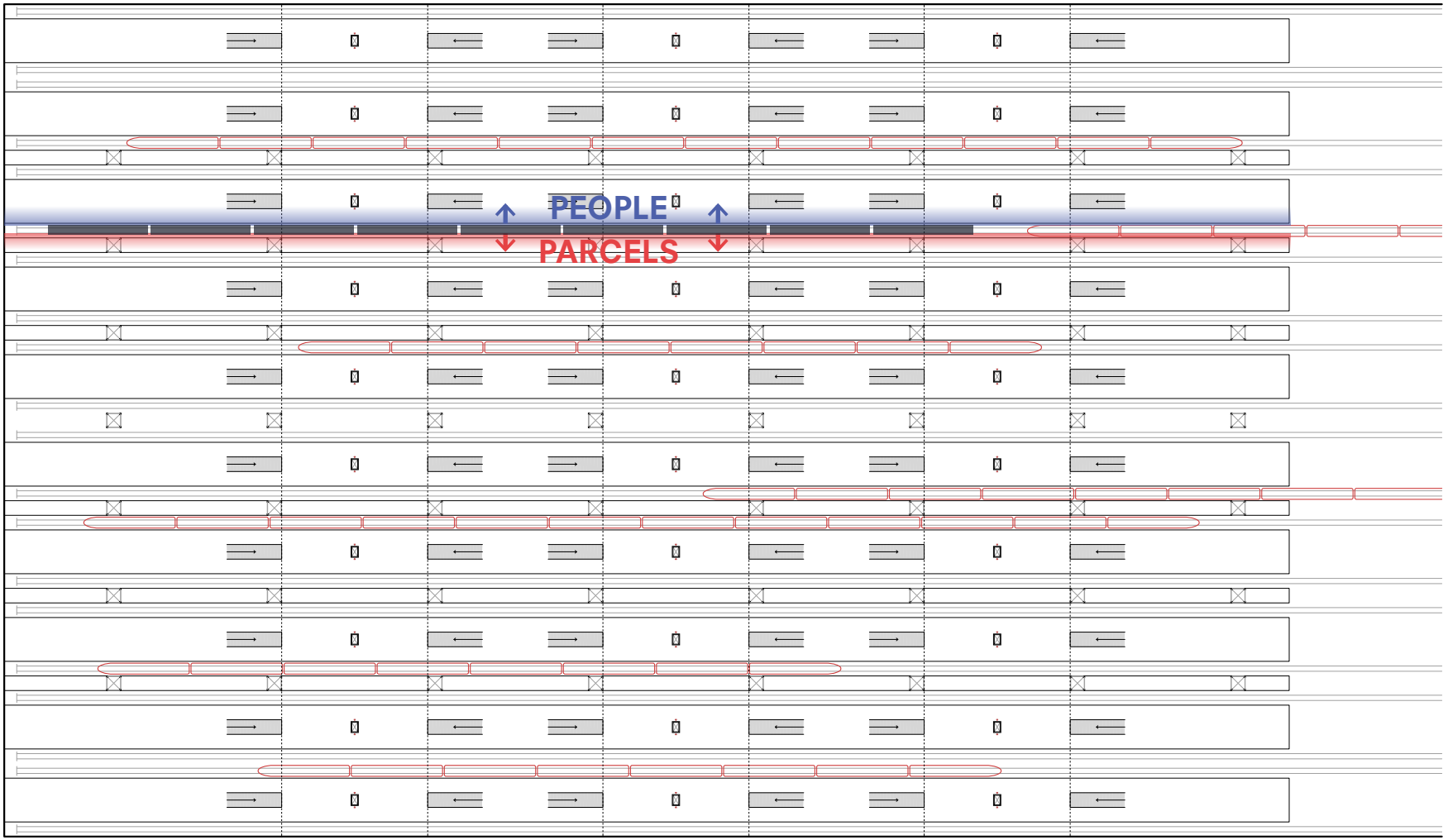




short section
NW - SE

1:1000

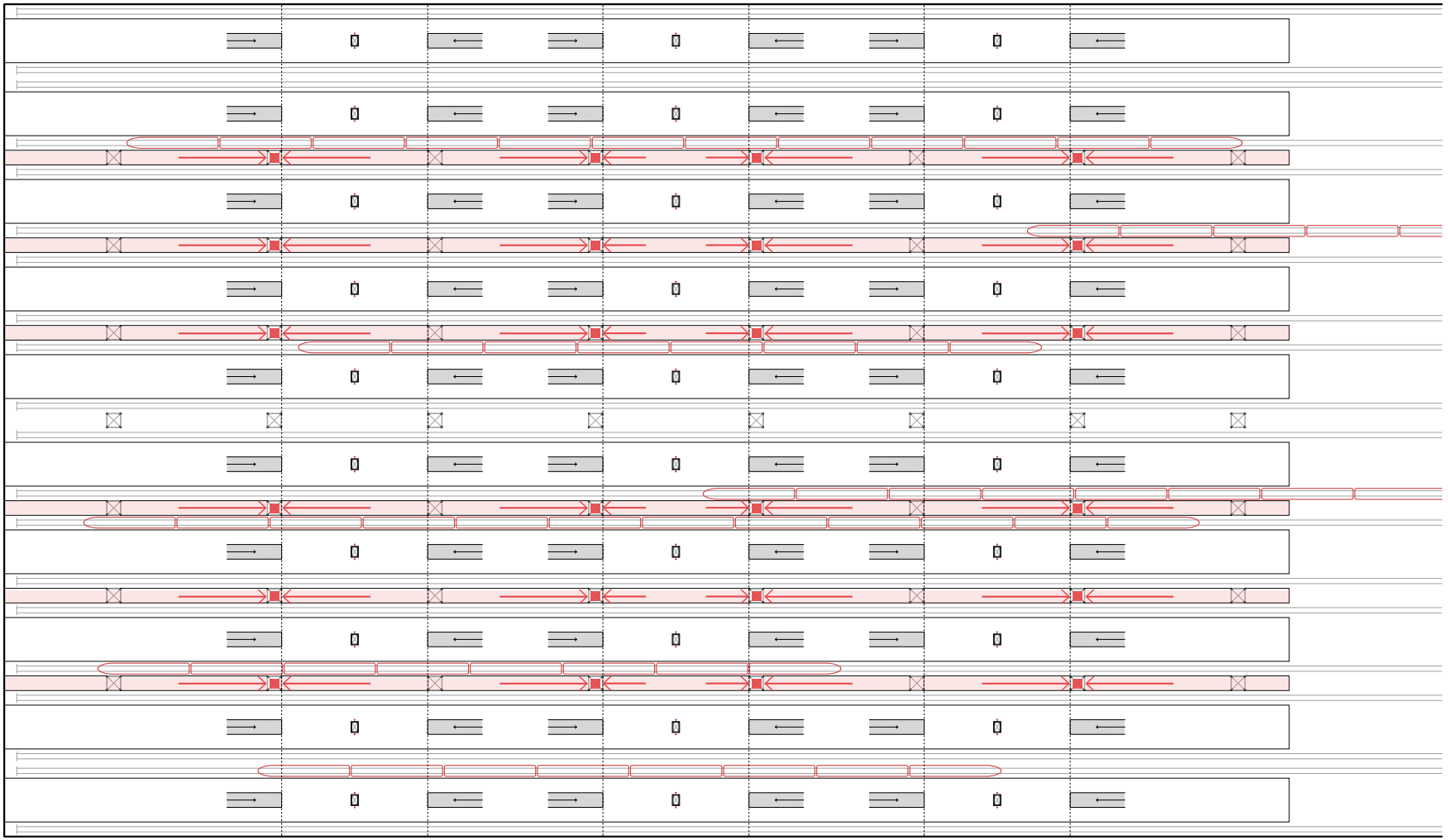
PLATFORMS



-2
platforms

1:1000

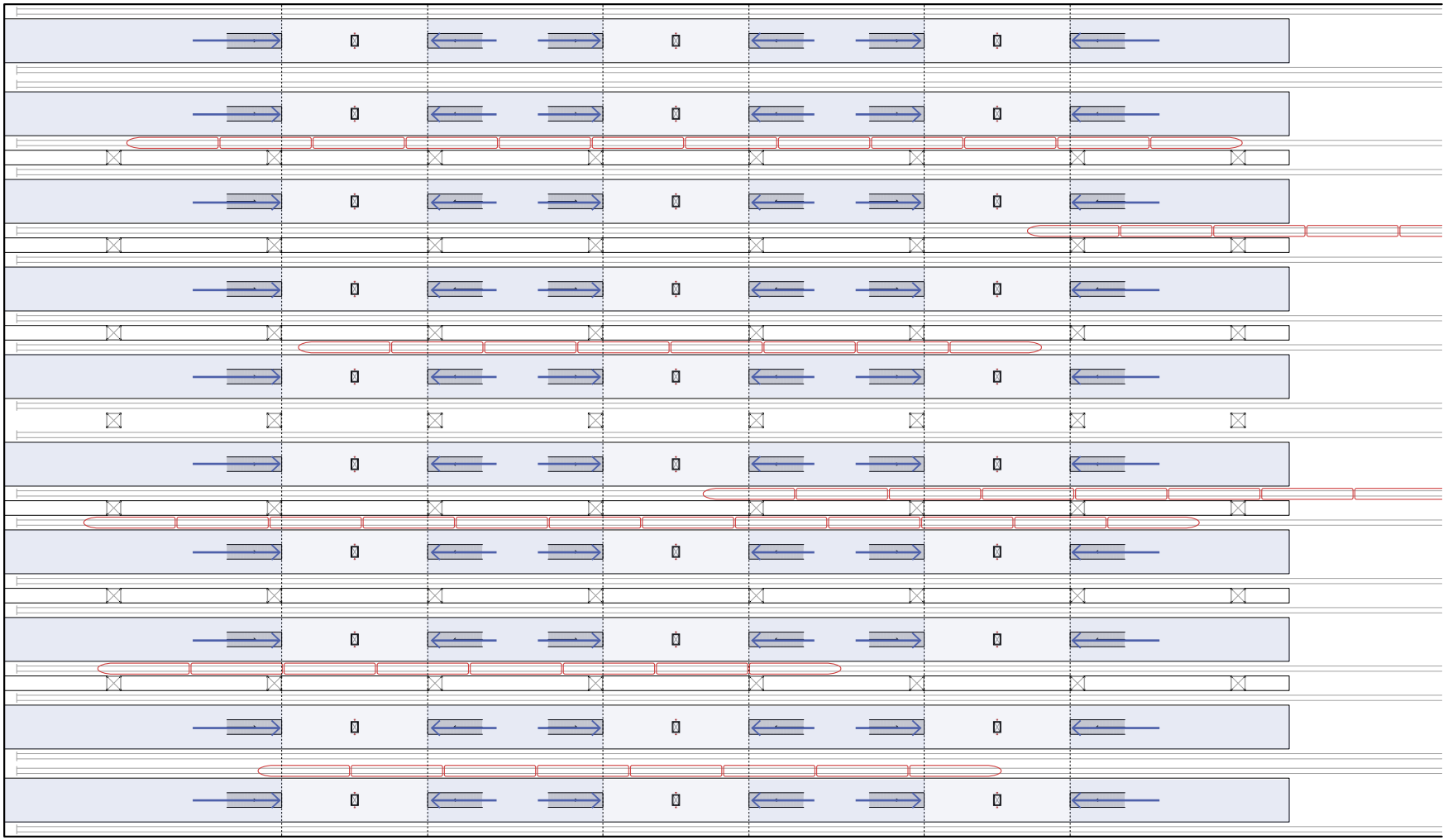
LOGISTICS PLATFORMS



-2
platforms

1:1000

PASSENGER PLATFORMS



-2
platforms

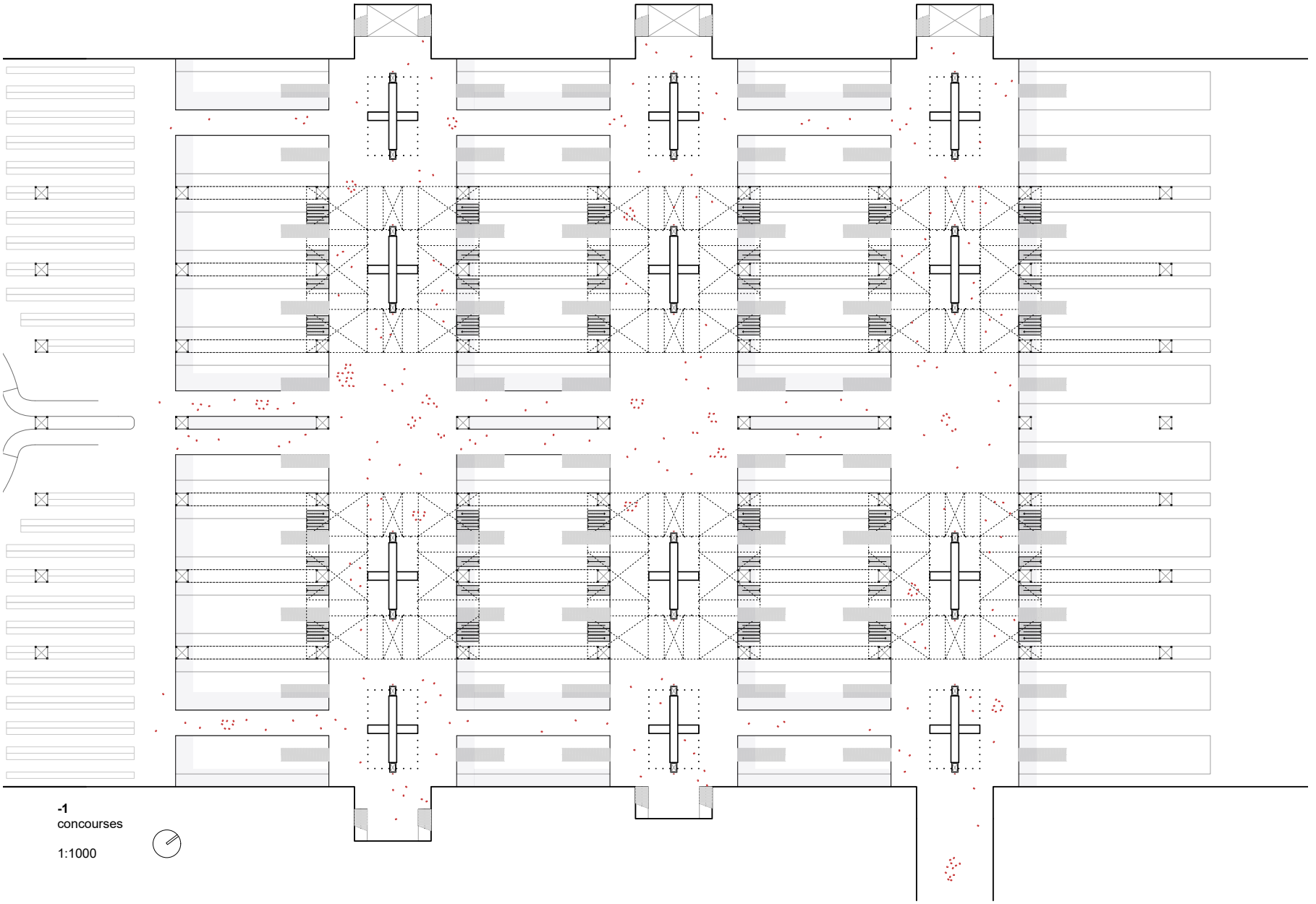
1:1000

PLATFORMS

PLATFORMS

CONCOURSE

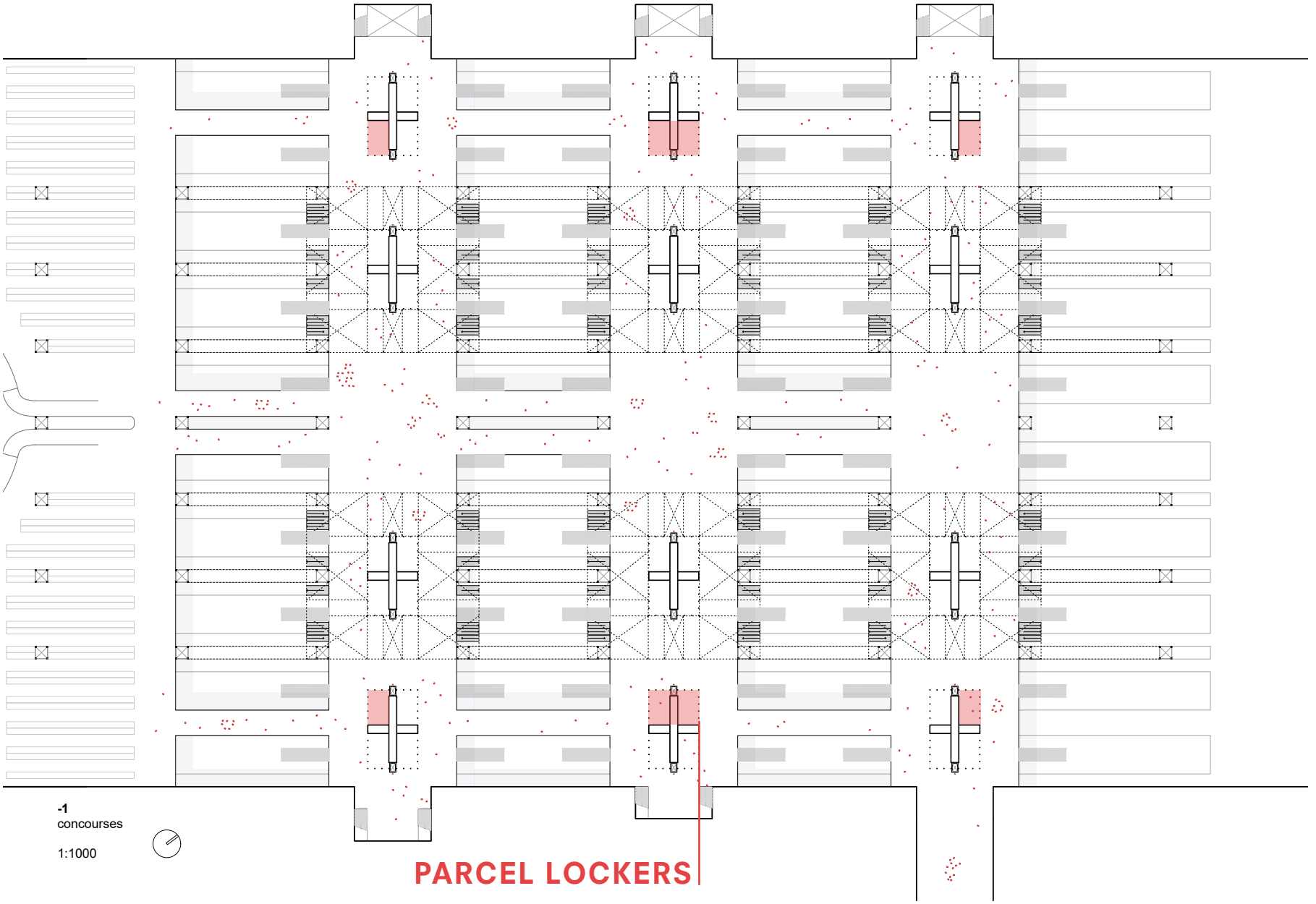
CONCOURSE



-1
concourses

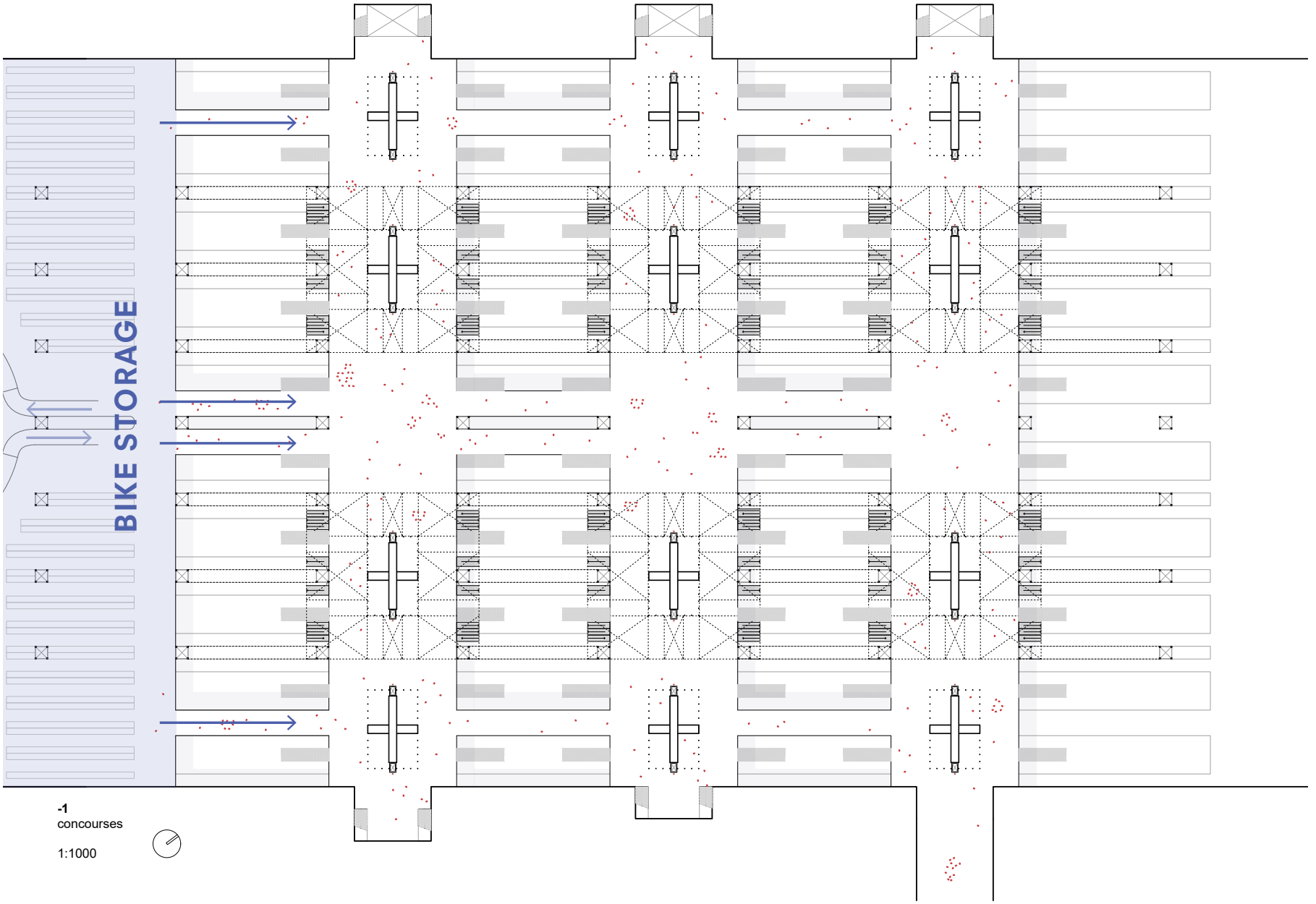
1:1000

CONCOURSE



CONCOURSE

CONCOURSE



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concourses

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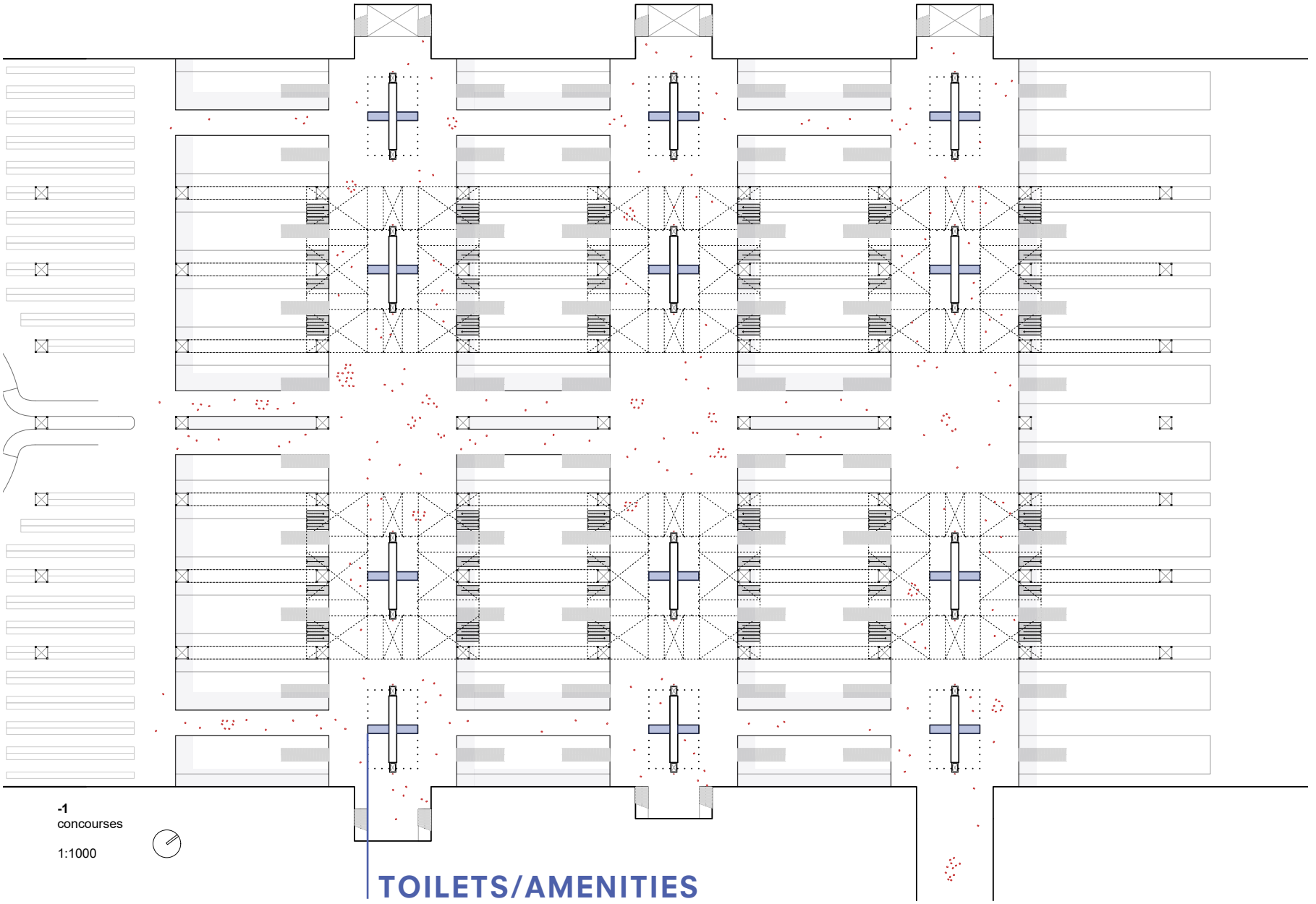
CONCOURSE

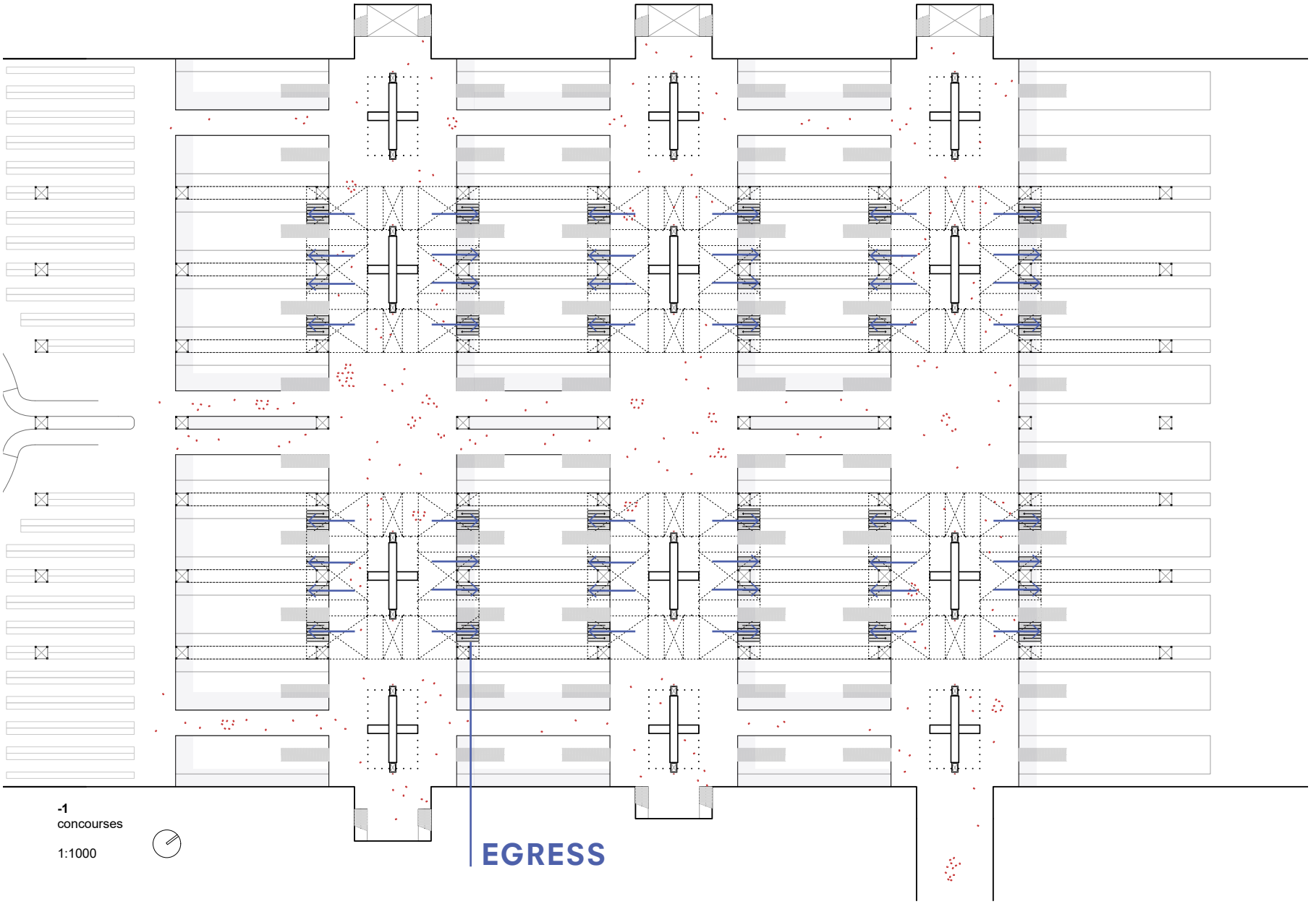
CONCOURSE

CONCOURSE



CONCOURSE FLOW

CONCOURSE



-1
concourses

1:1000

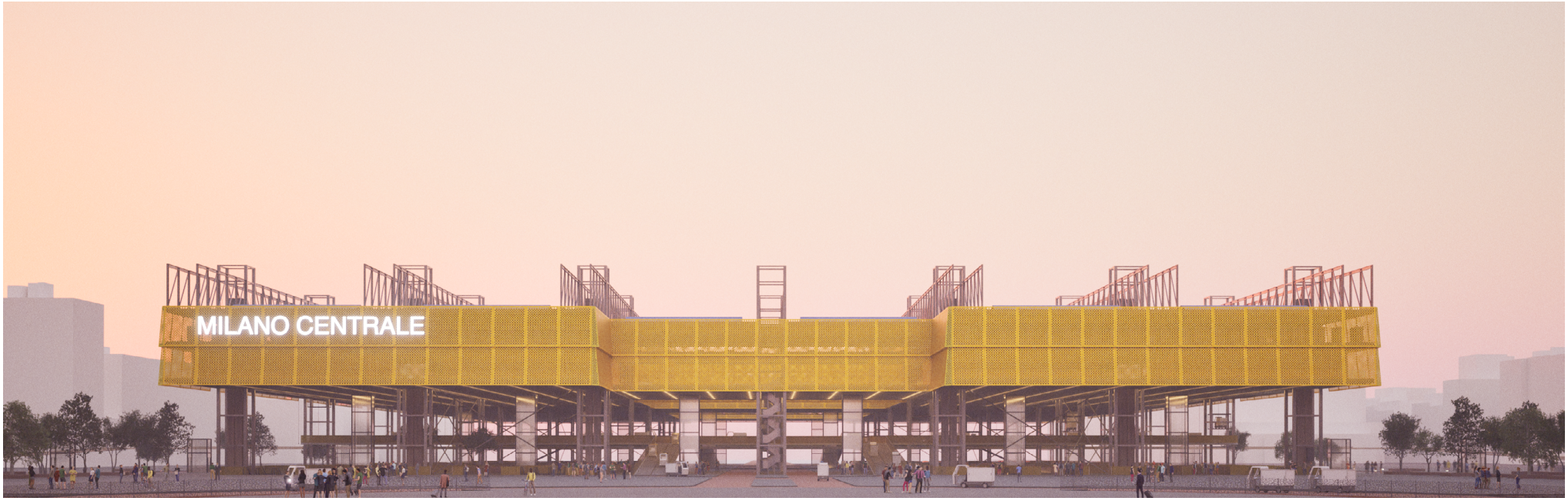
CONCOURSE

URBAN PLAN

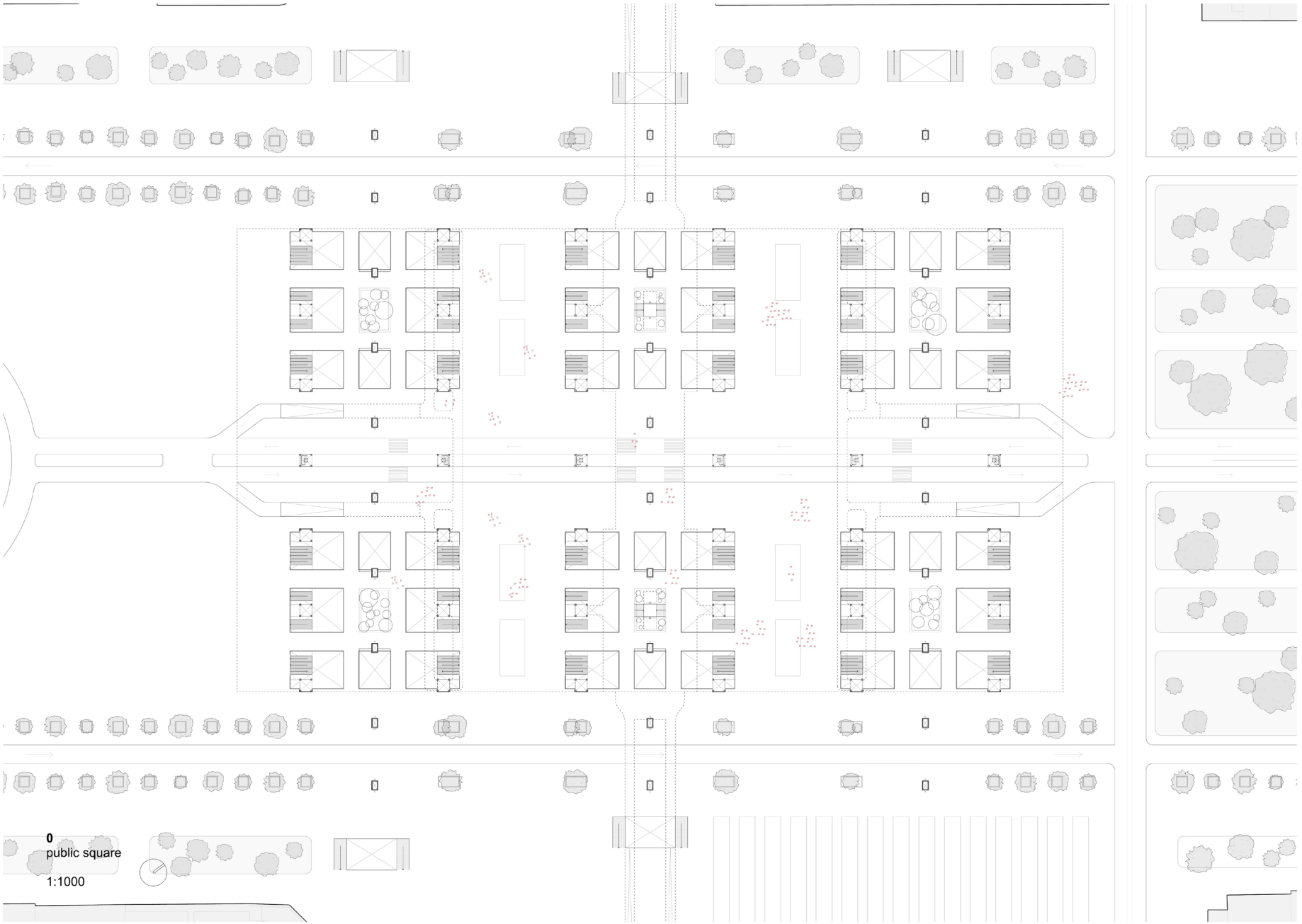
site plan
zoomed out gf

1:1800

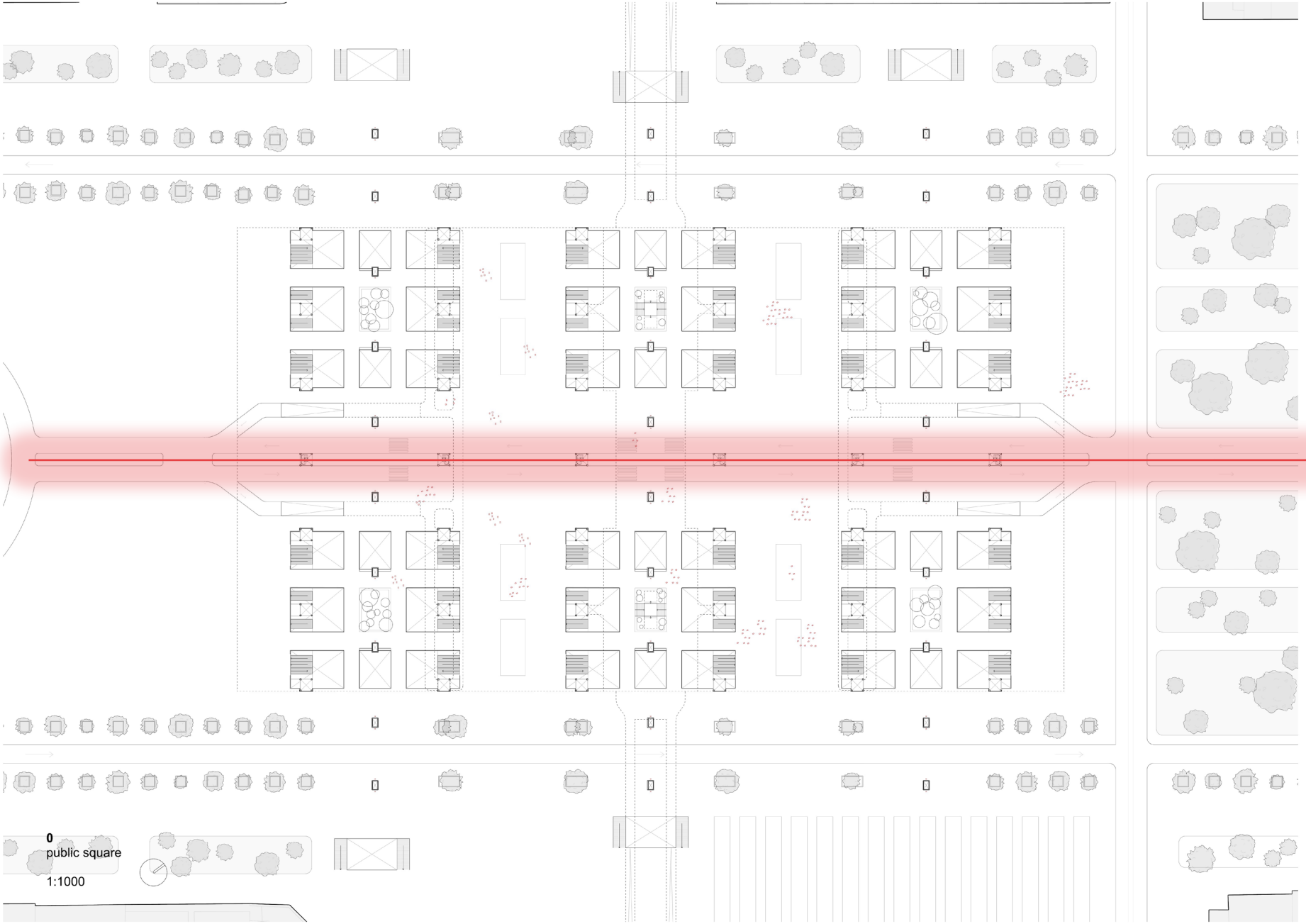
GROUND FLOOR



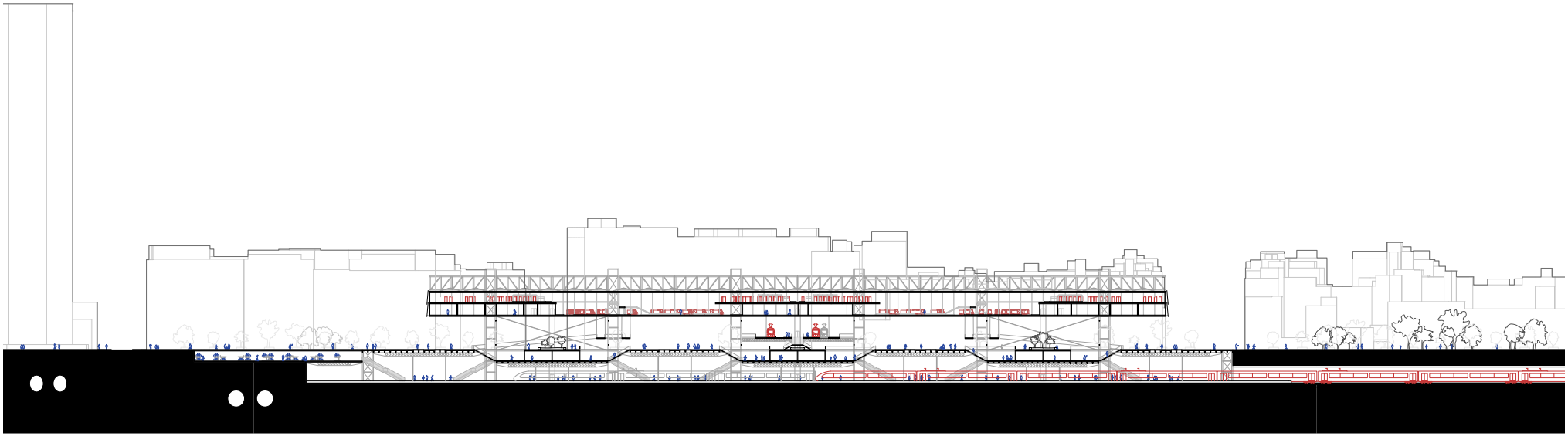
GROUND FLOOR

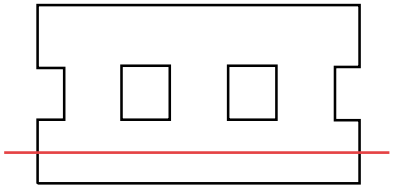


GROUND FLOOR



LONG SECTION - B

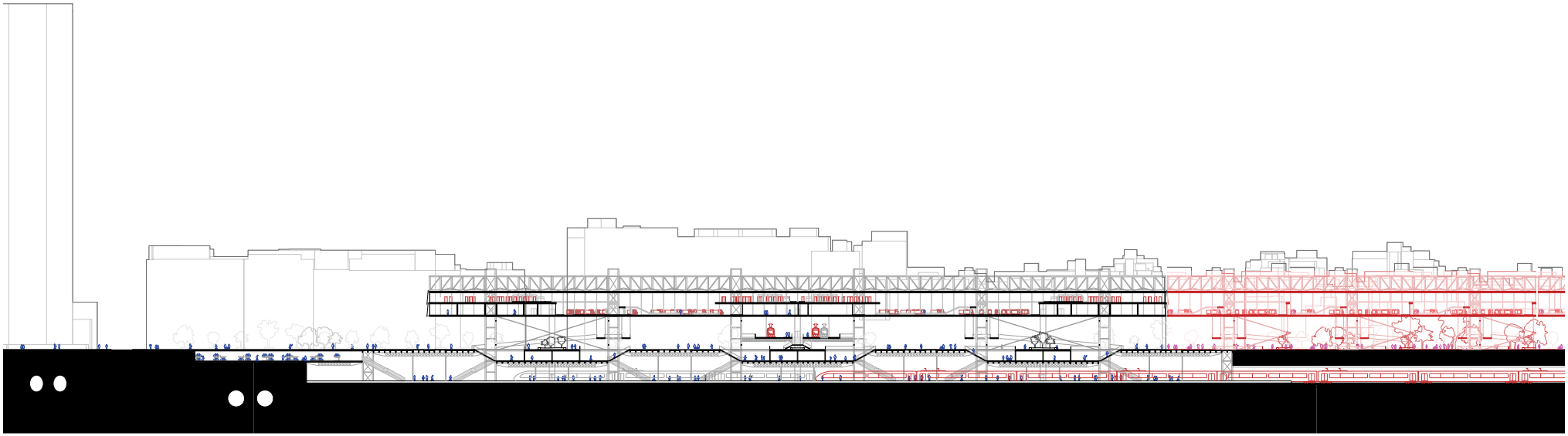


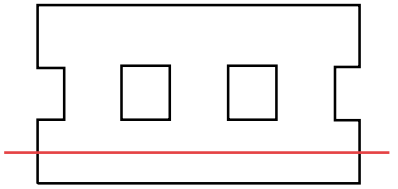


long section
SW - NE

1:1000

LONG SECTION - B





long section
SW - NE

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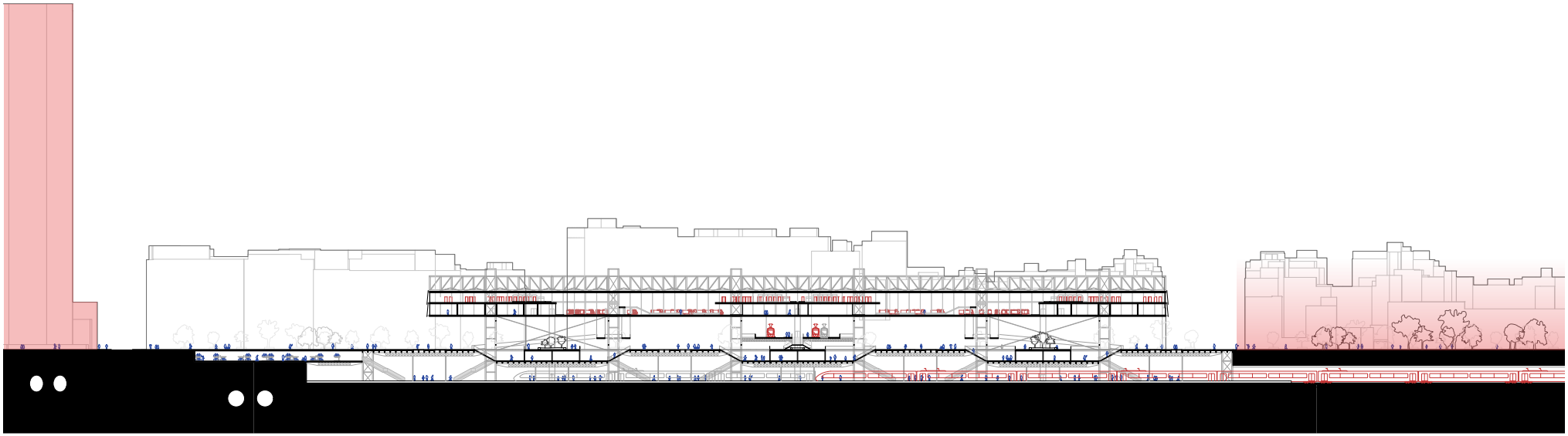
LONG SECTION - B



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SW - NE

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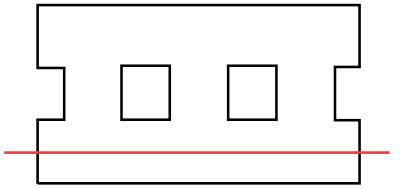
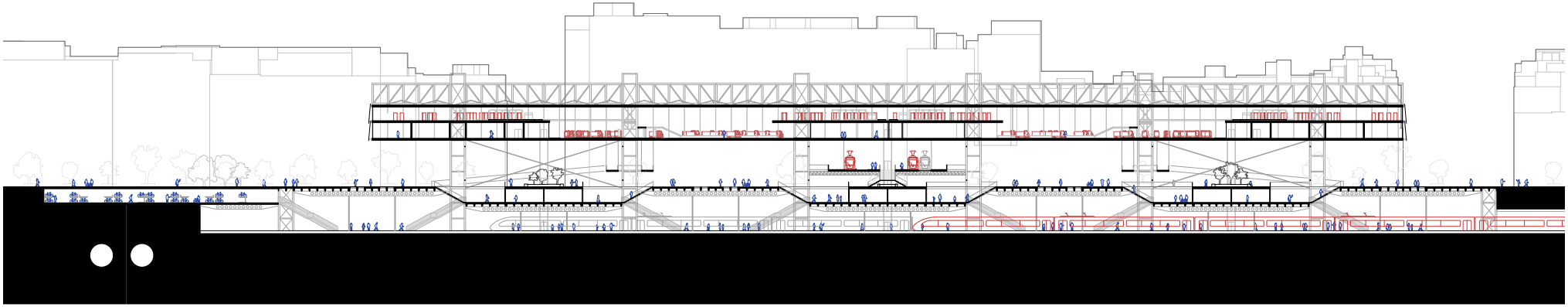
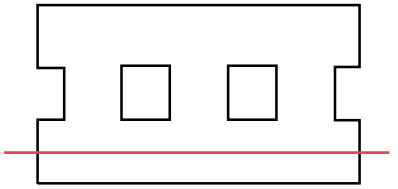


LONG SECTION - B

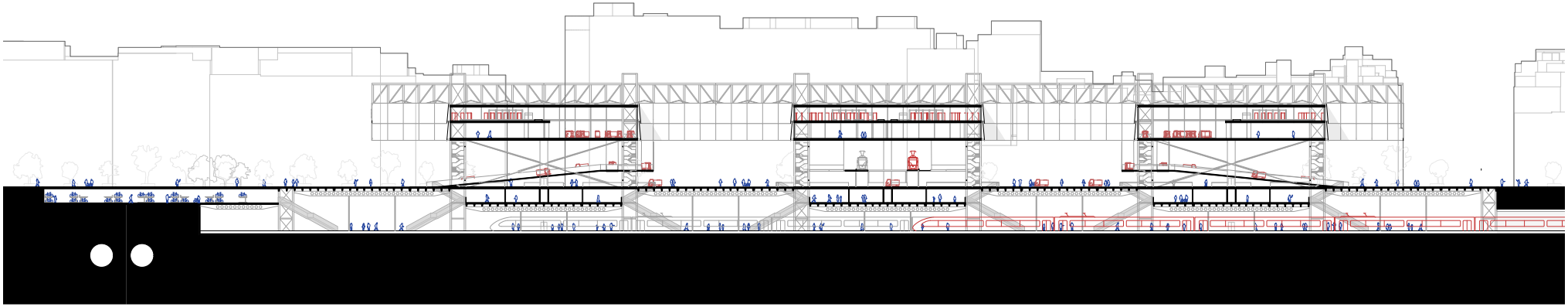


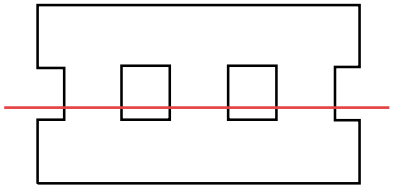
long section
SW - NE

1:1000



LONG SECTION - C

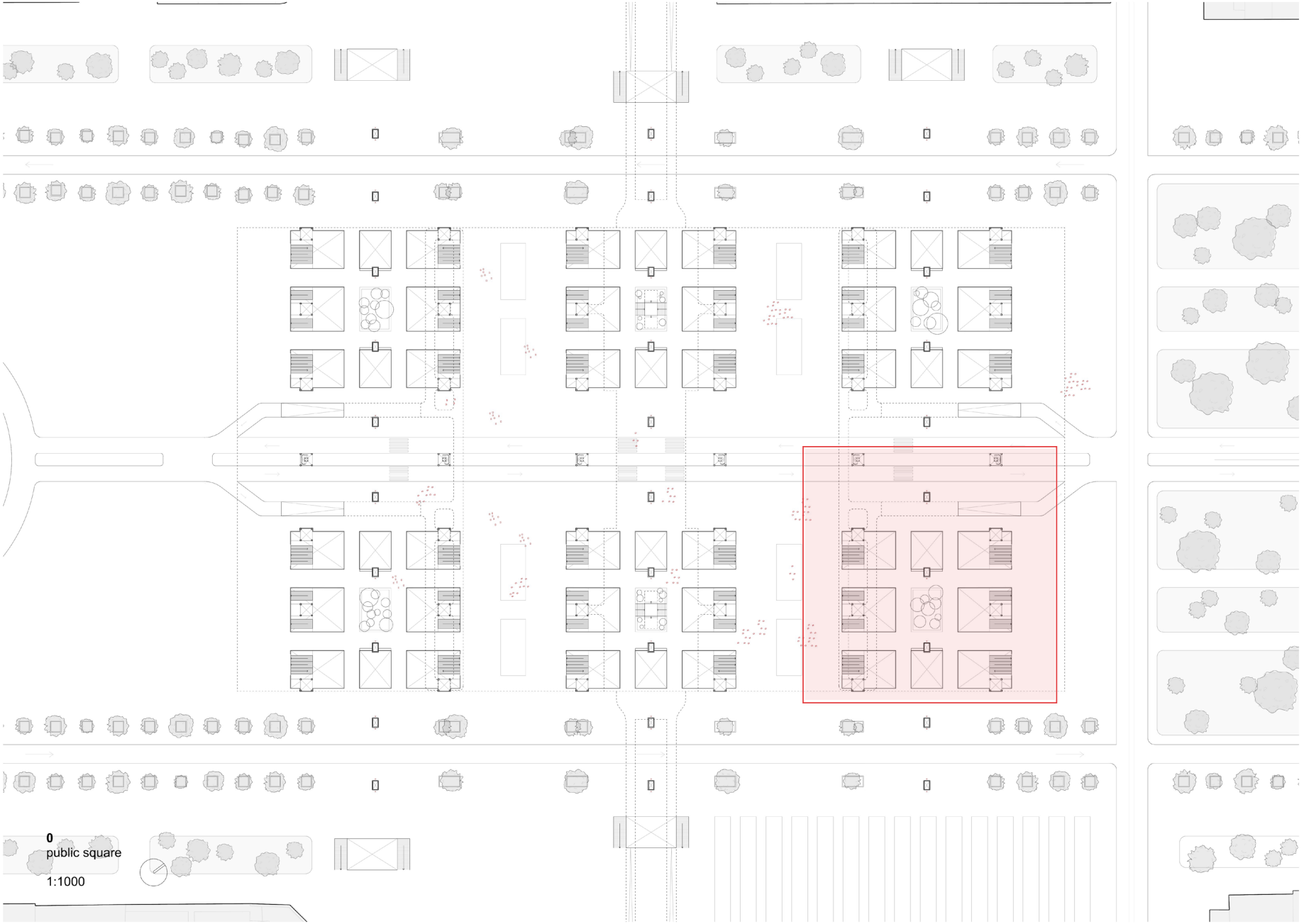




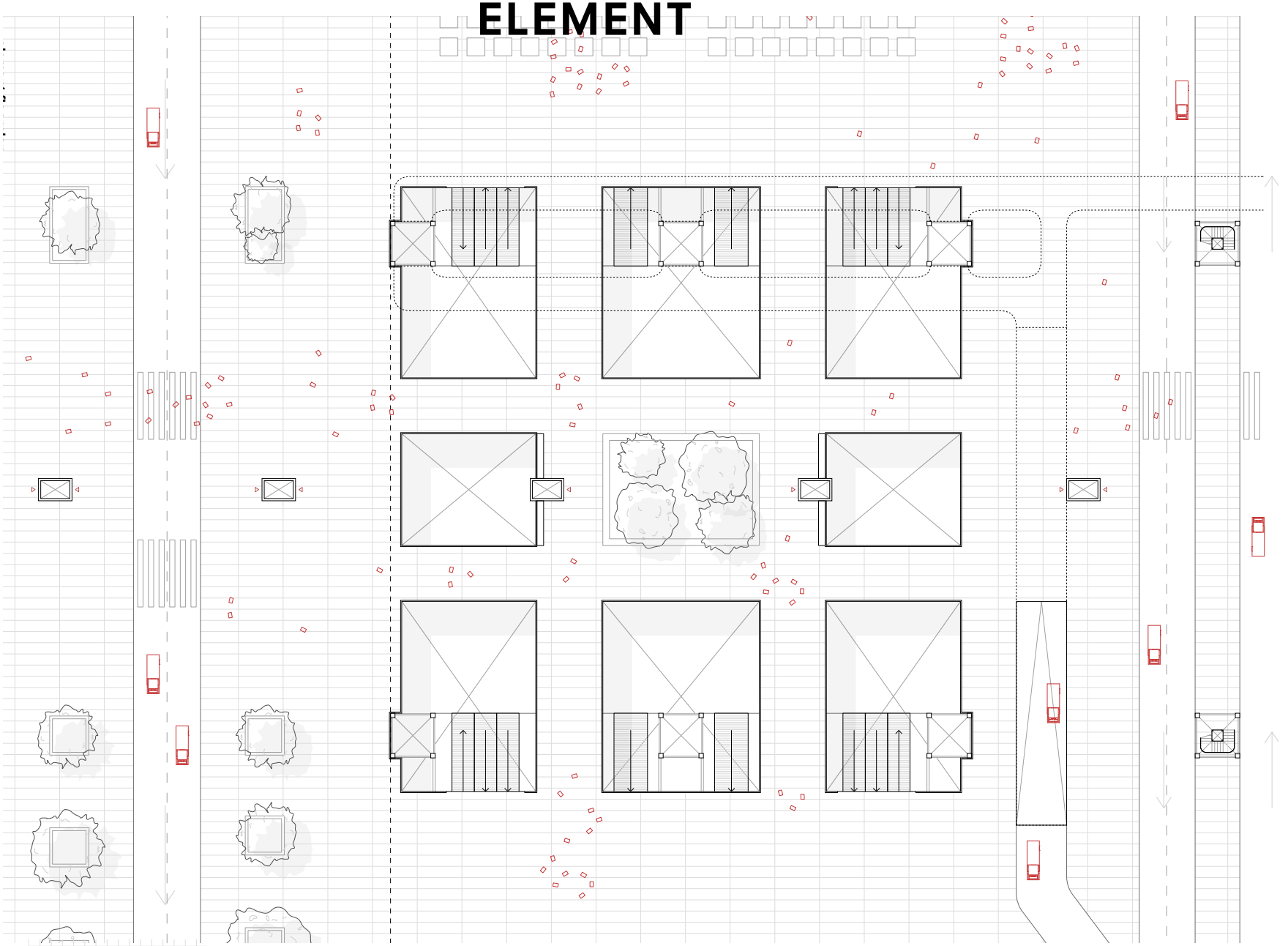
long section
SW - NE

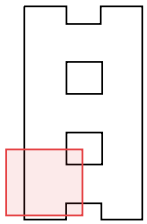
1:1000

GROUND FLOOR



ELEMENT

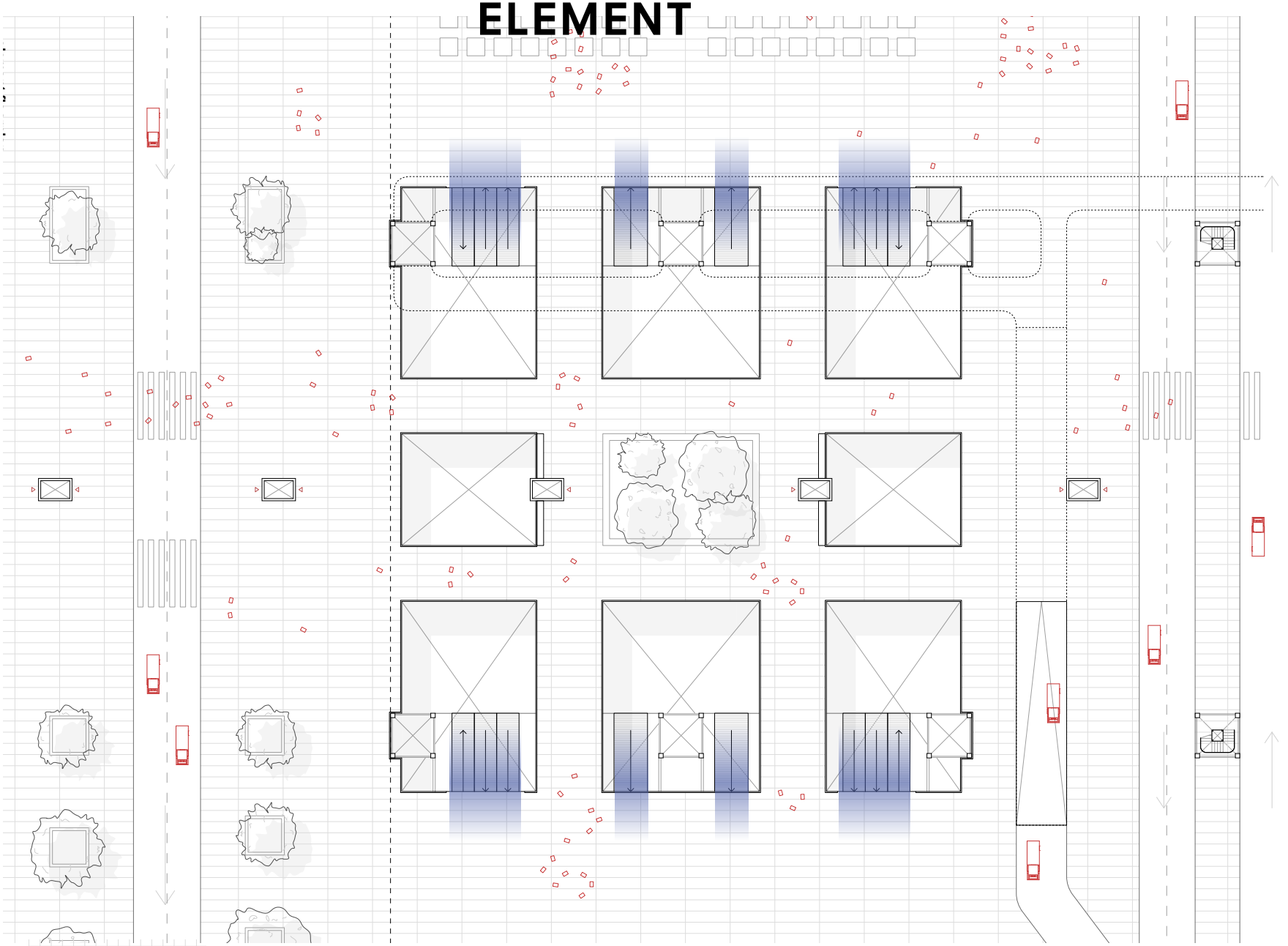


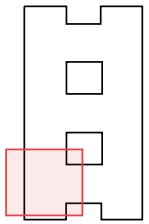


element floorplan
zoomed in

1:300

ELEMENT

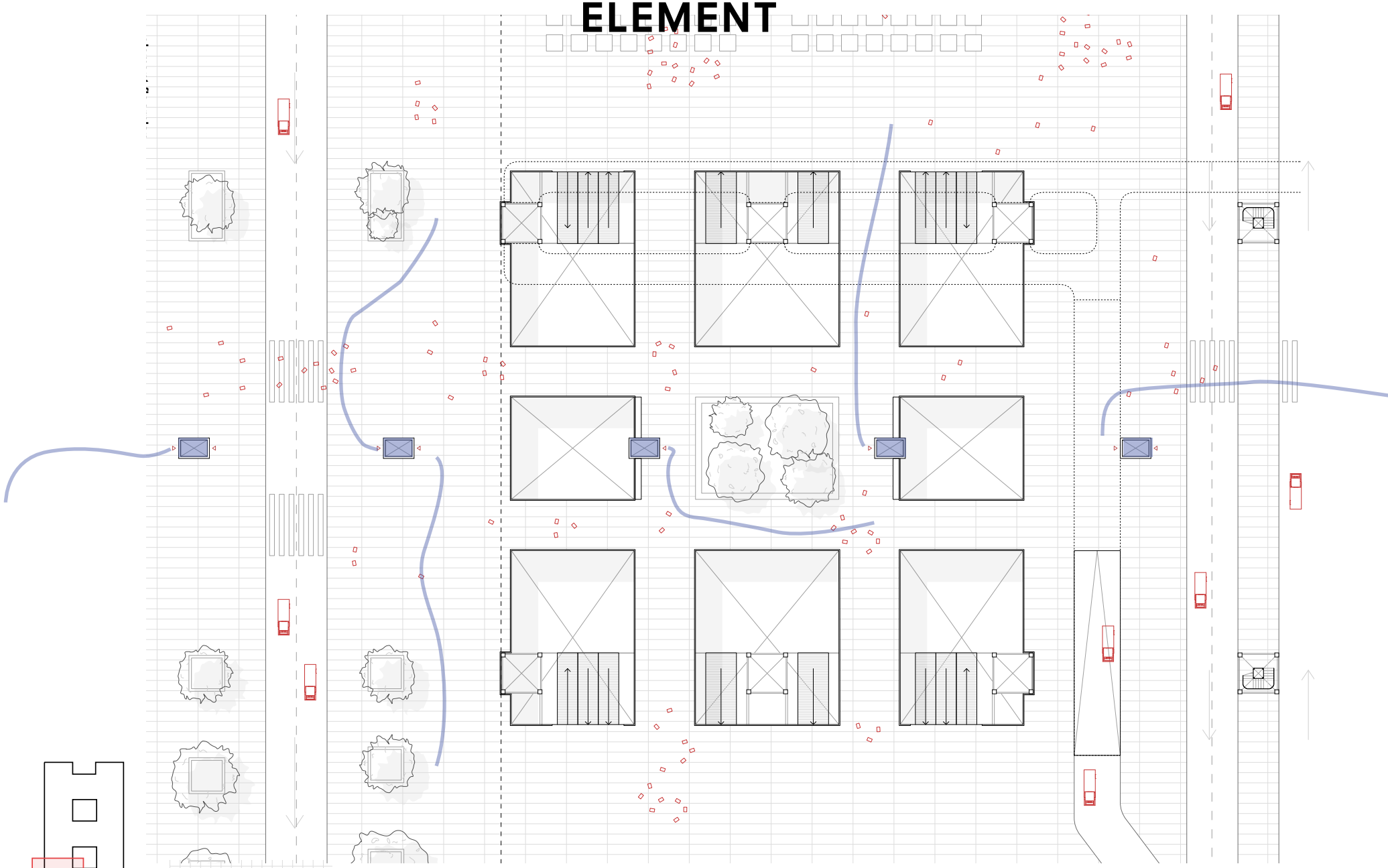


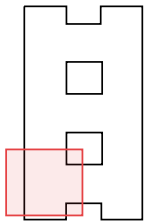


element floorplan
zoomed in

1:300

ELEMENT

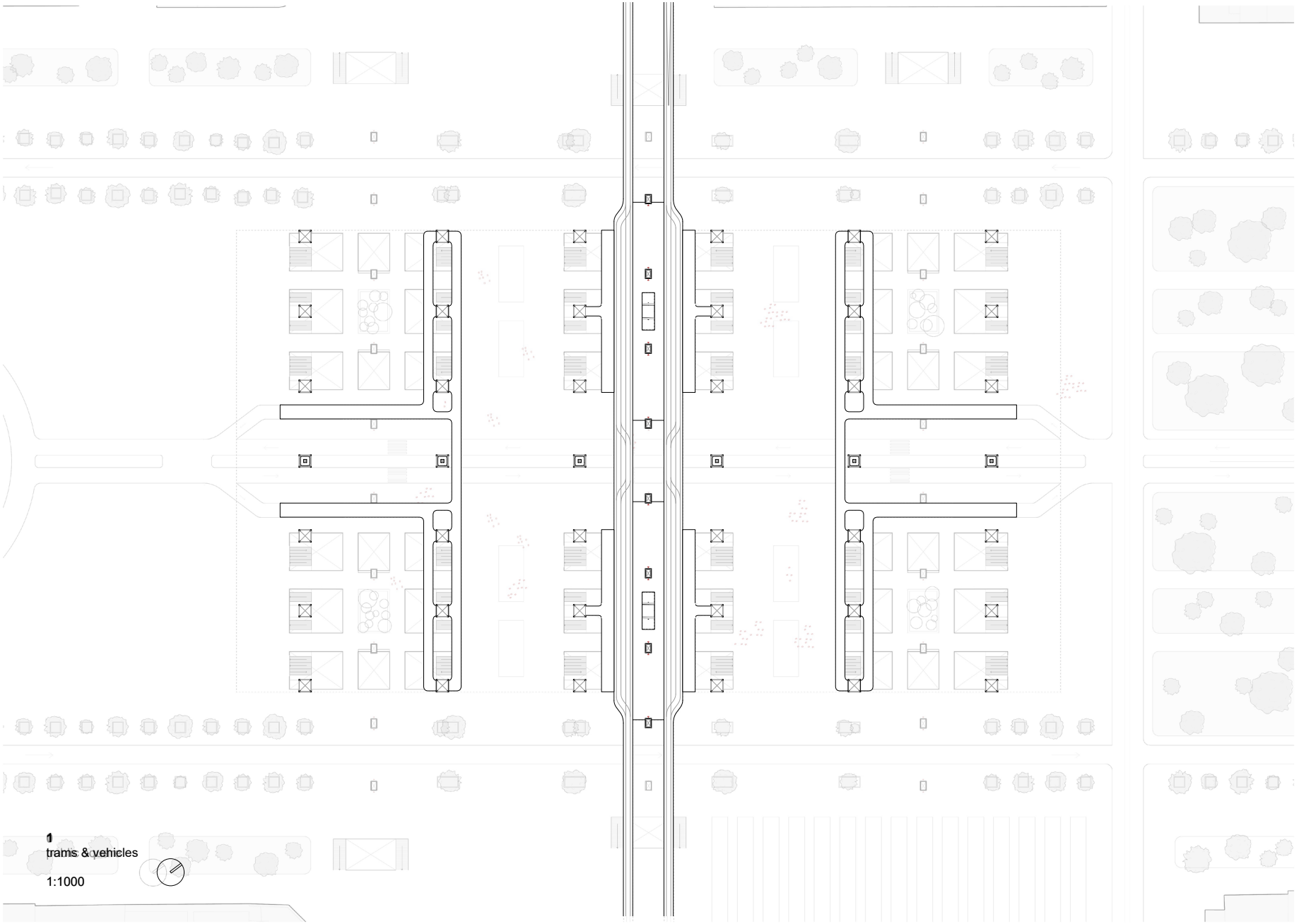




element floorplan
zoomed in

1:300

VEHICLE FLOOR



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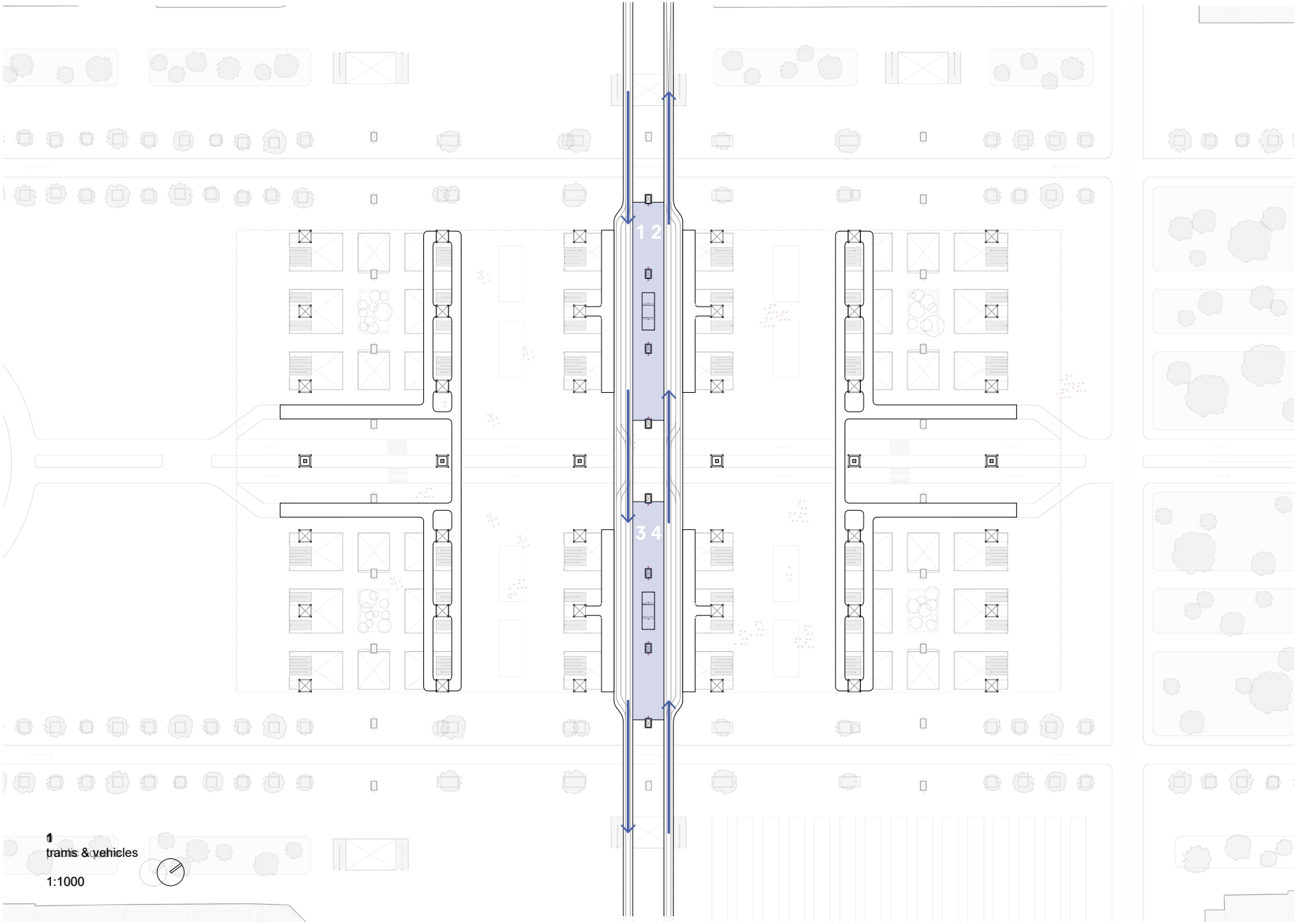
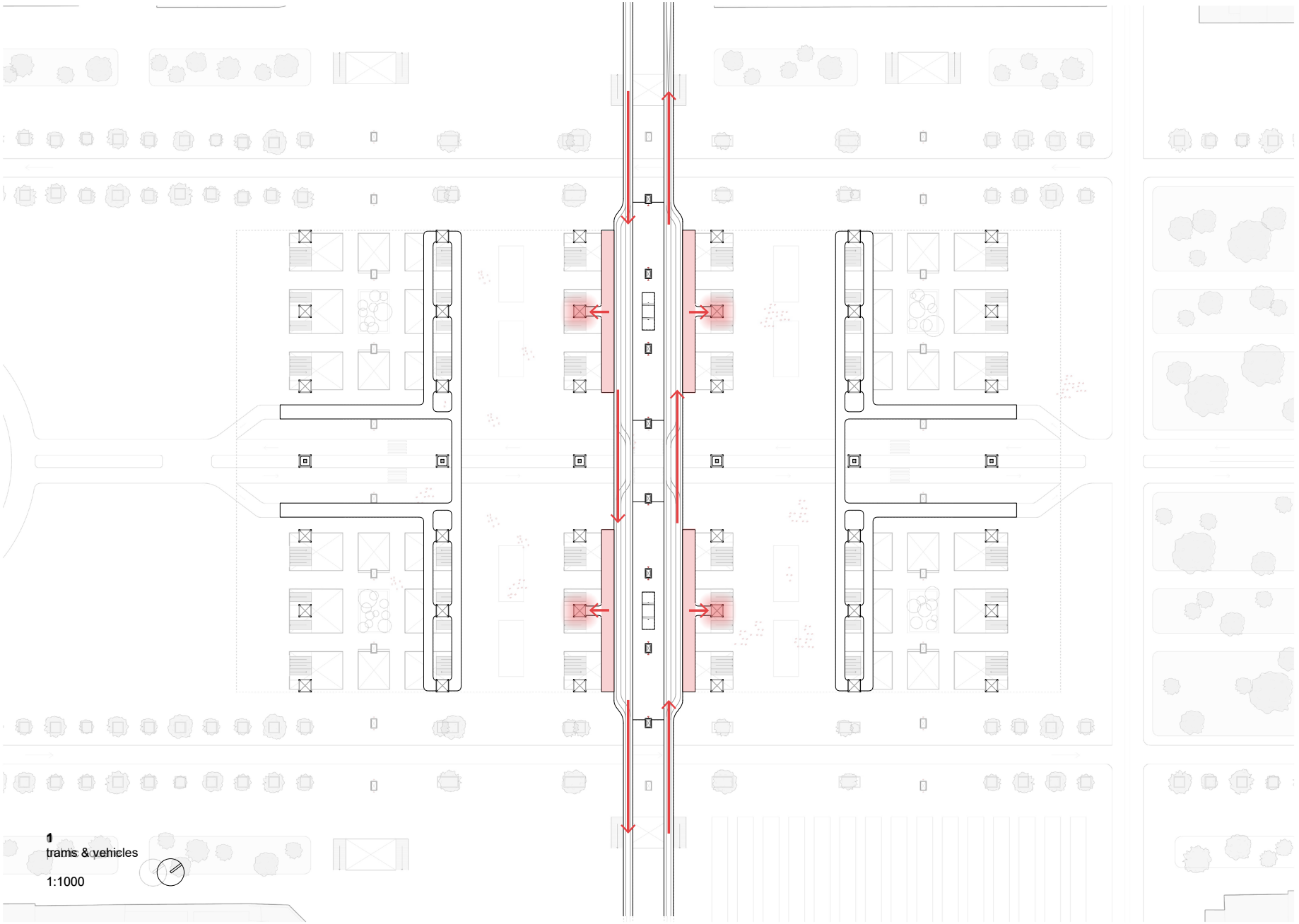
trams & vehicles
1:1000

TRAM PLATFORMS



TRAM PLATFORMS



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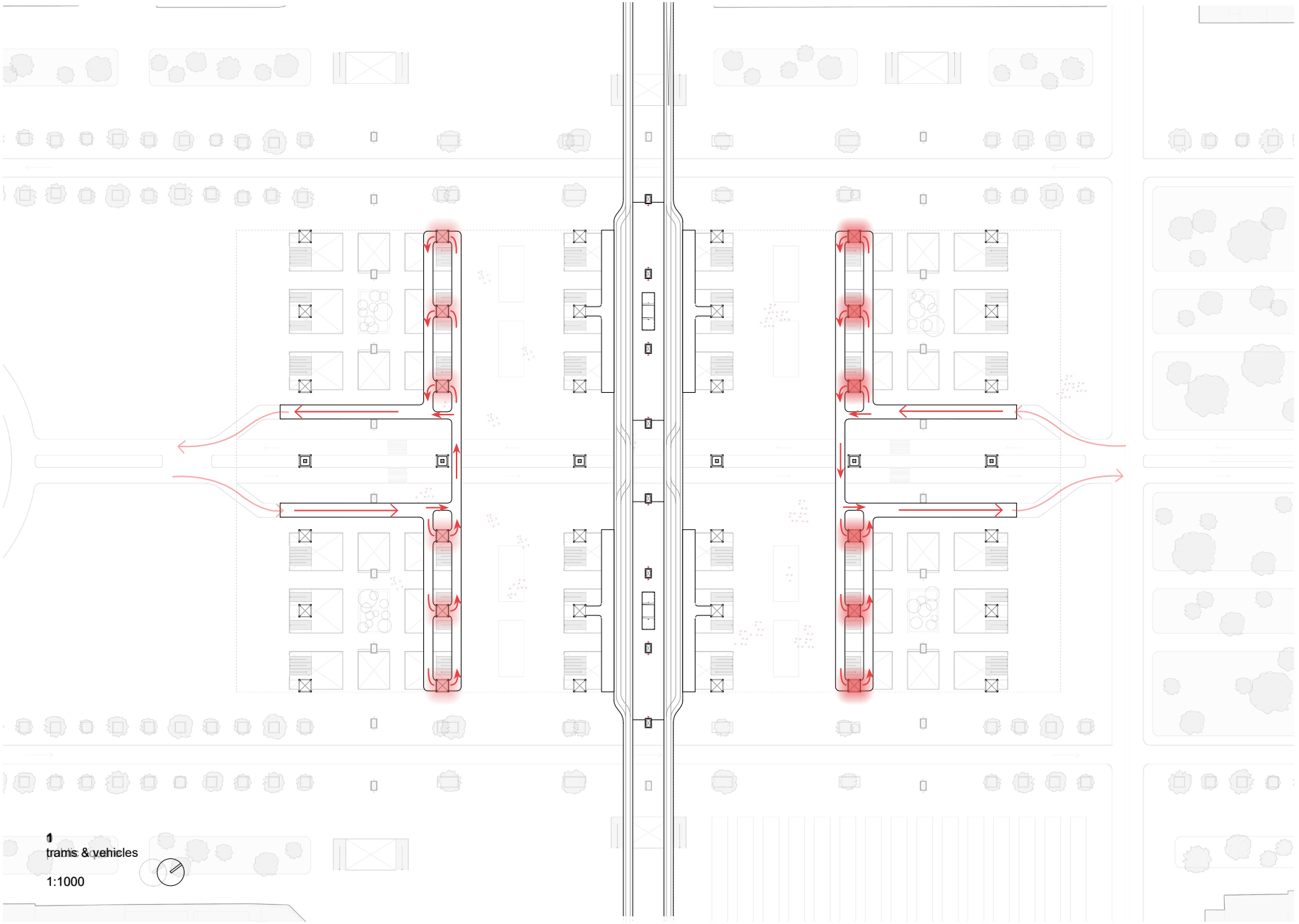
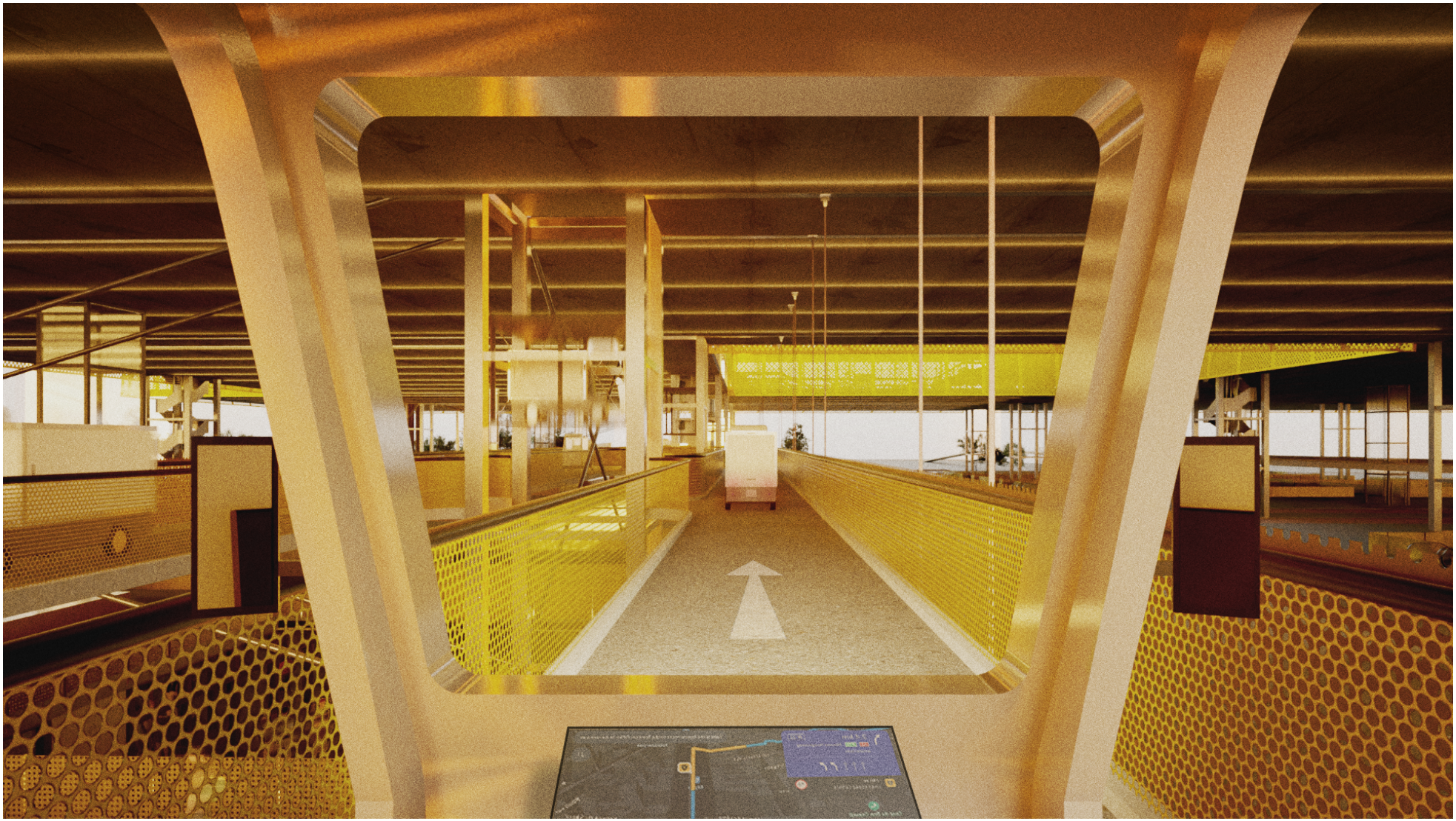
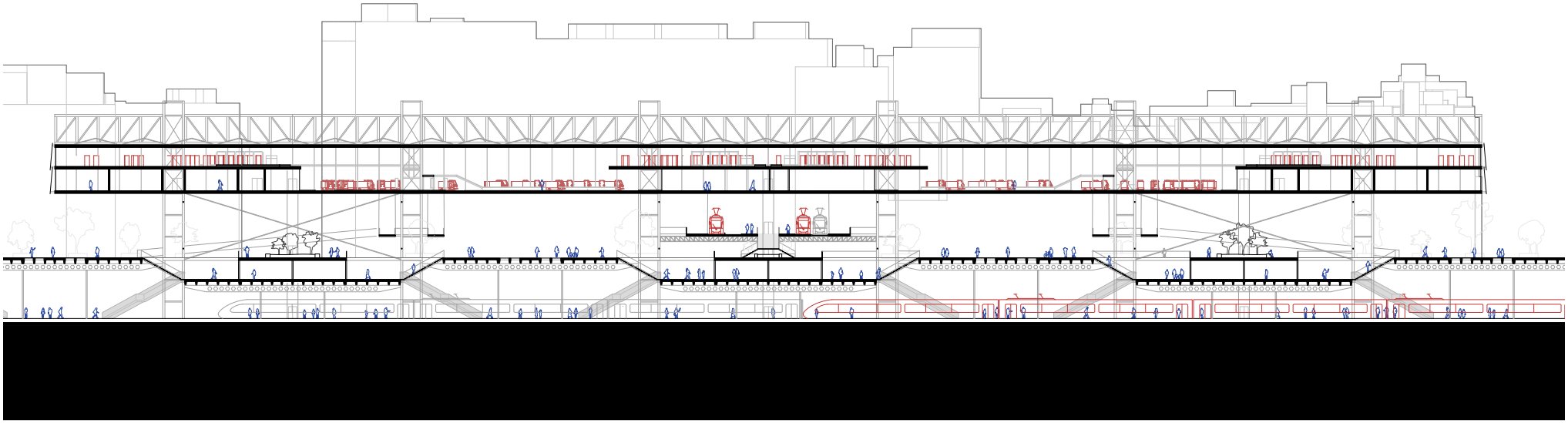


VEHICLE FLOOR

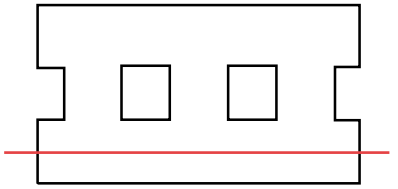


LONG SECTION - B

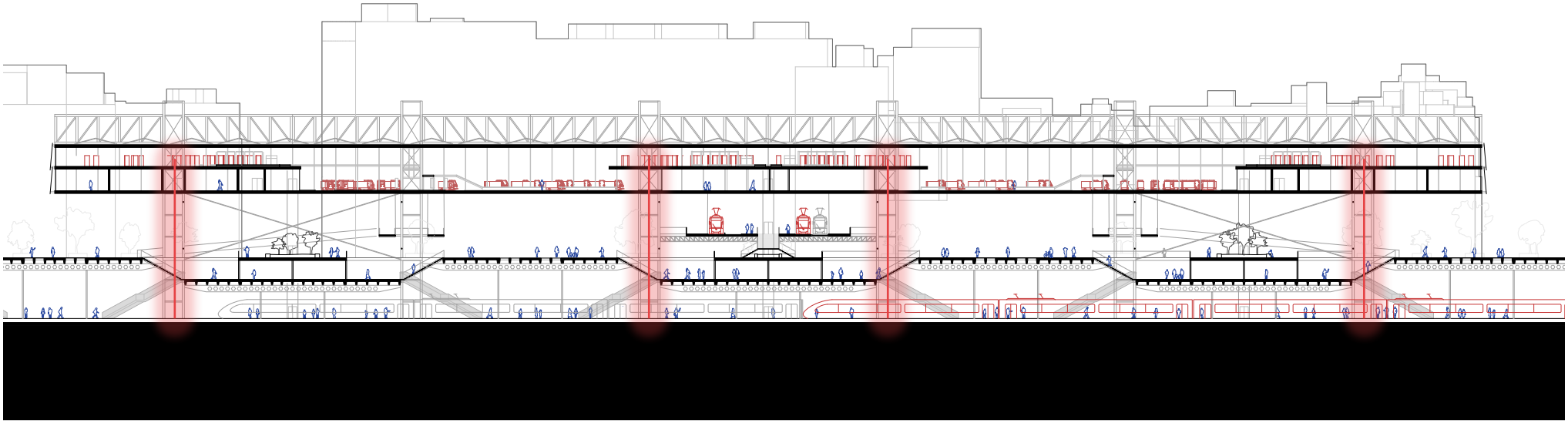


long section
SW - NE

1:1000

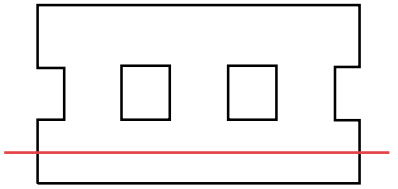


LONG SECTION - B

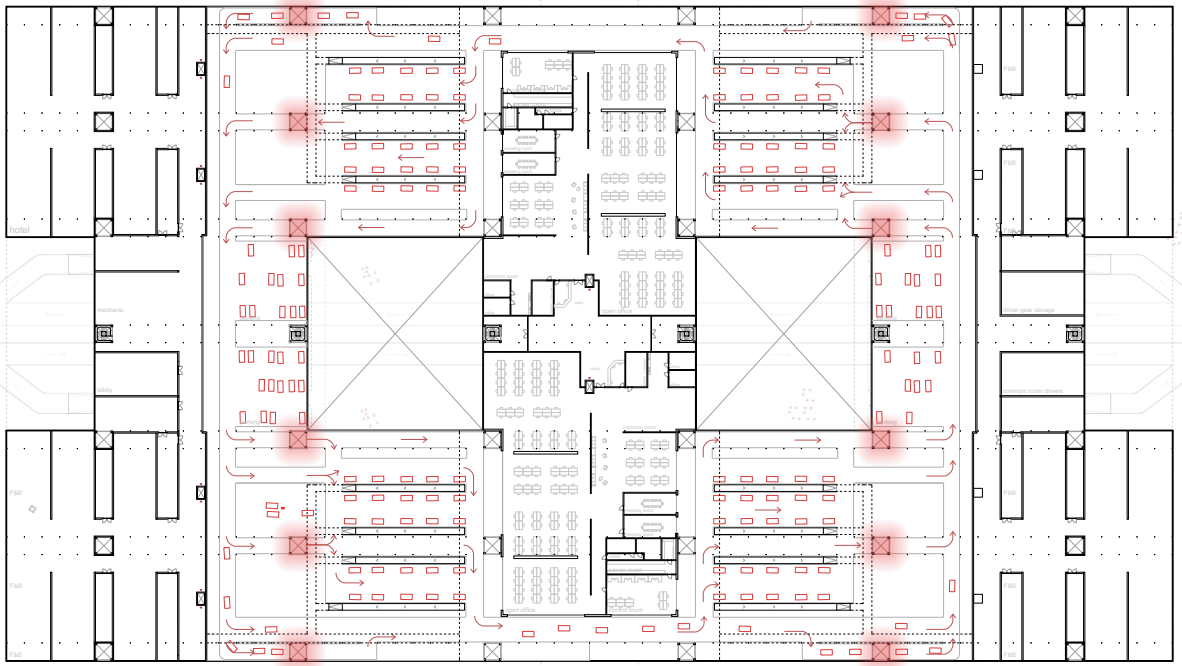


long section
SW - NE

1:1000



LOGISTICS



2
logistics

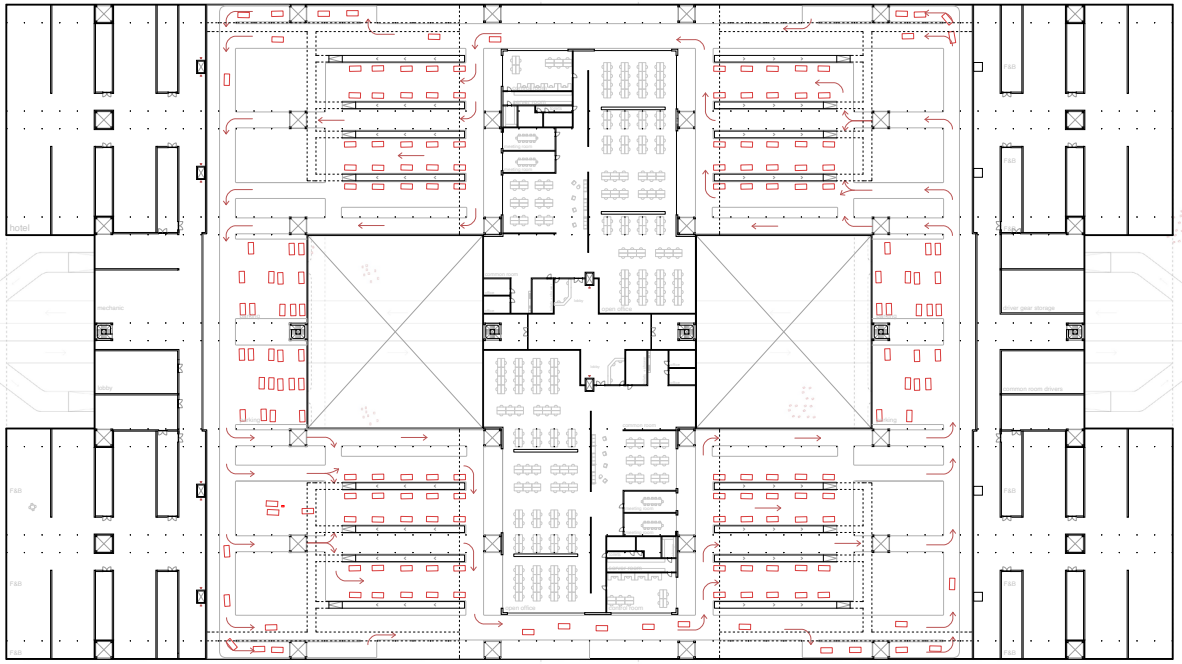
1:1000

facade

SE FROM STREET

LOGISTICS FLOOR

LOGISTICS



2
logistics

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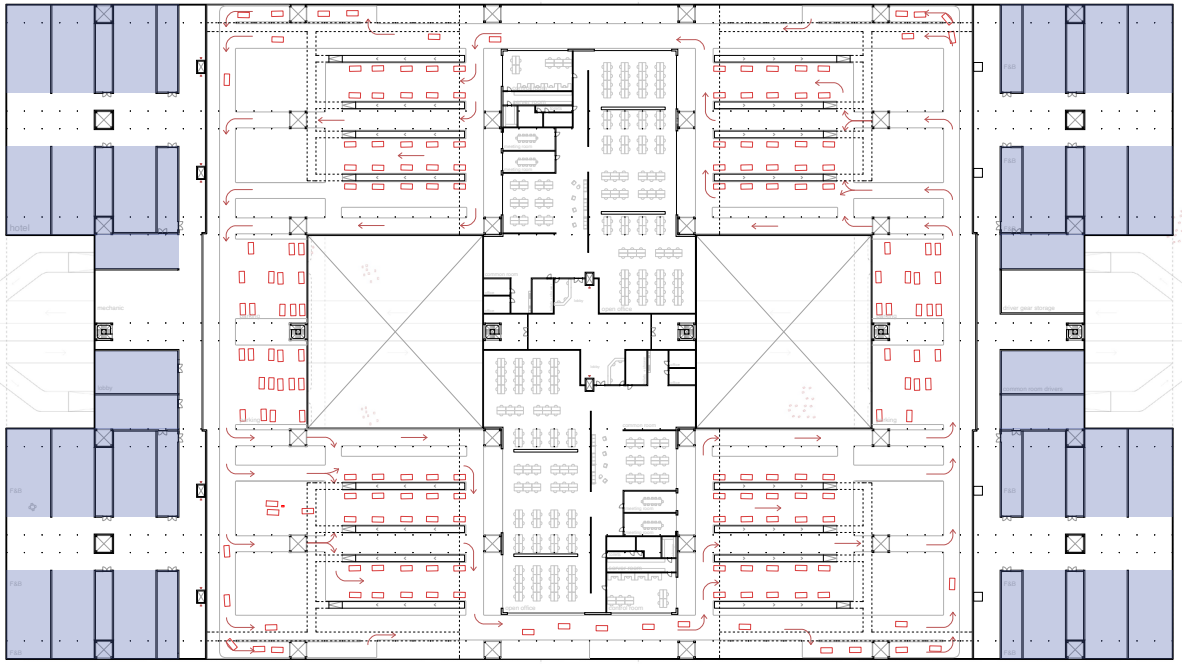
LOGISTICS



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logistics

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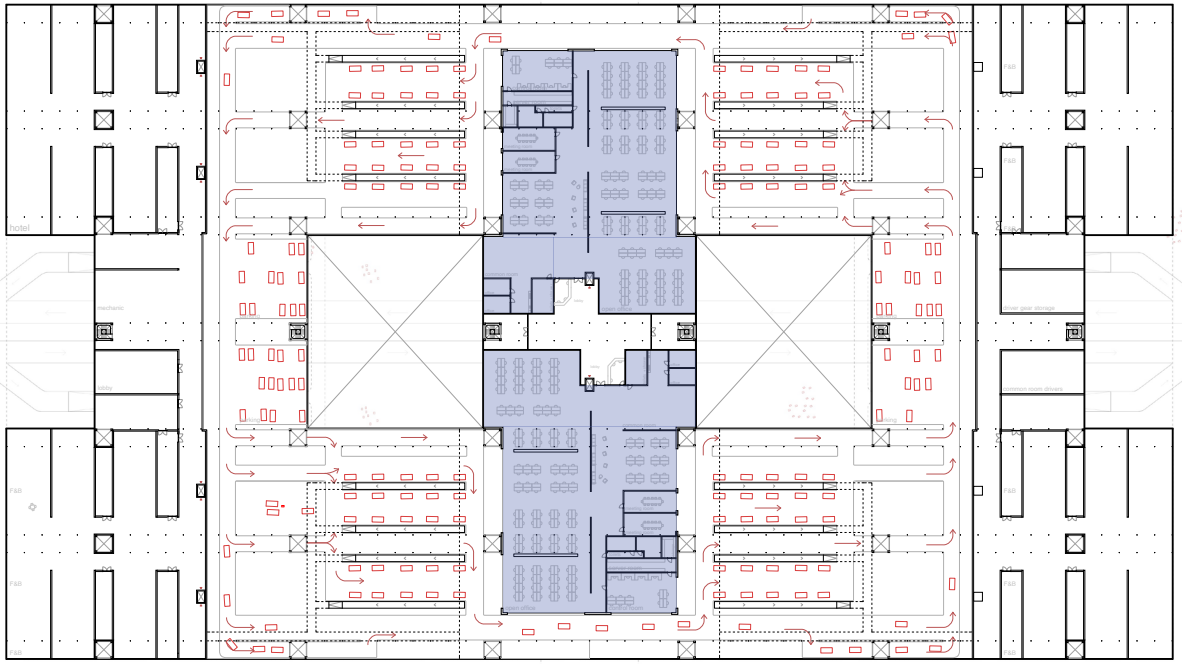
LOGISTICS



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logistics

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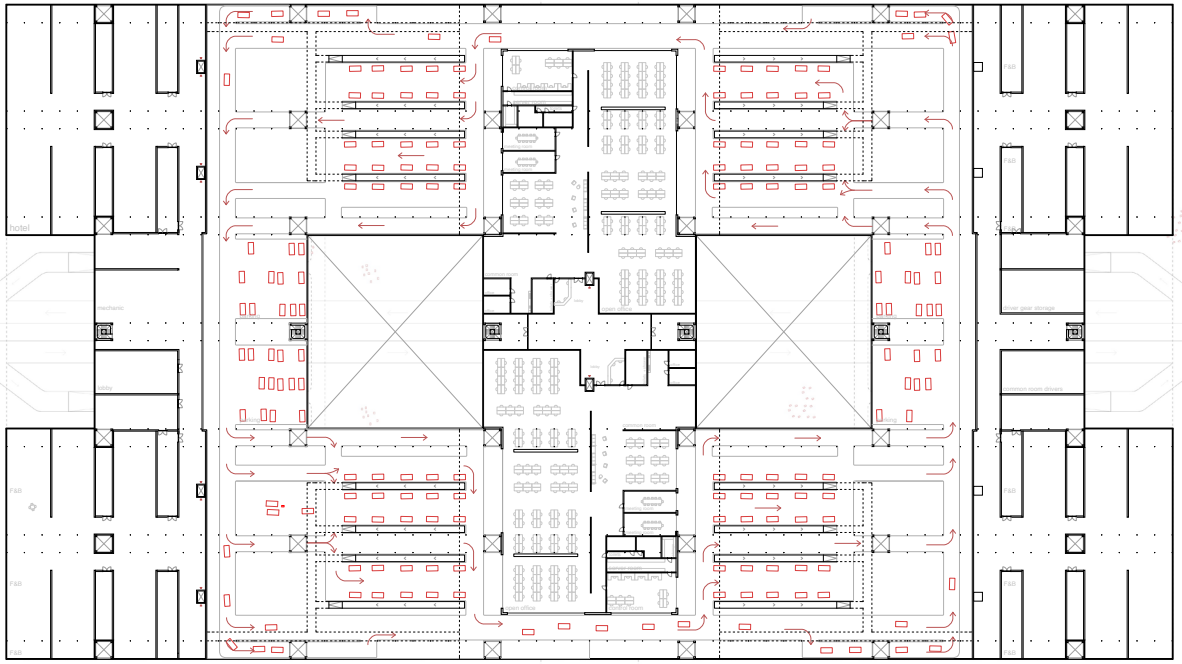
LOGISTICS FLOOR

LOGISTICS



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logistics

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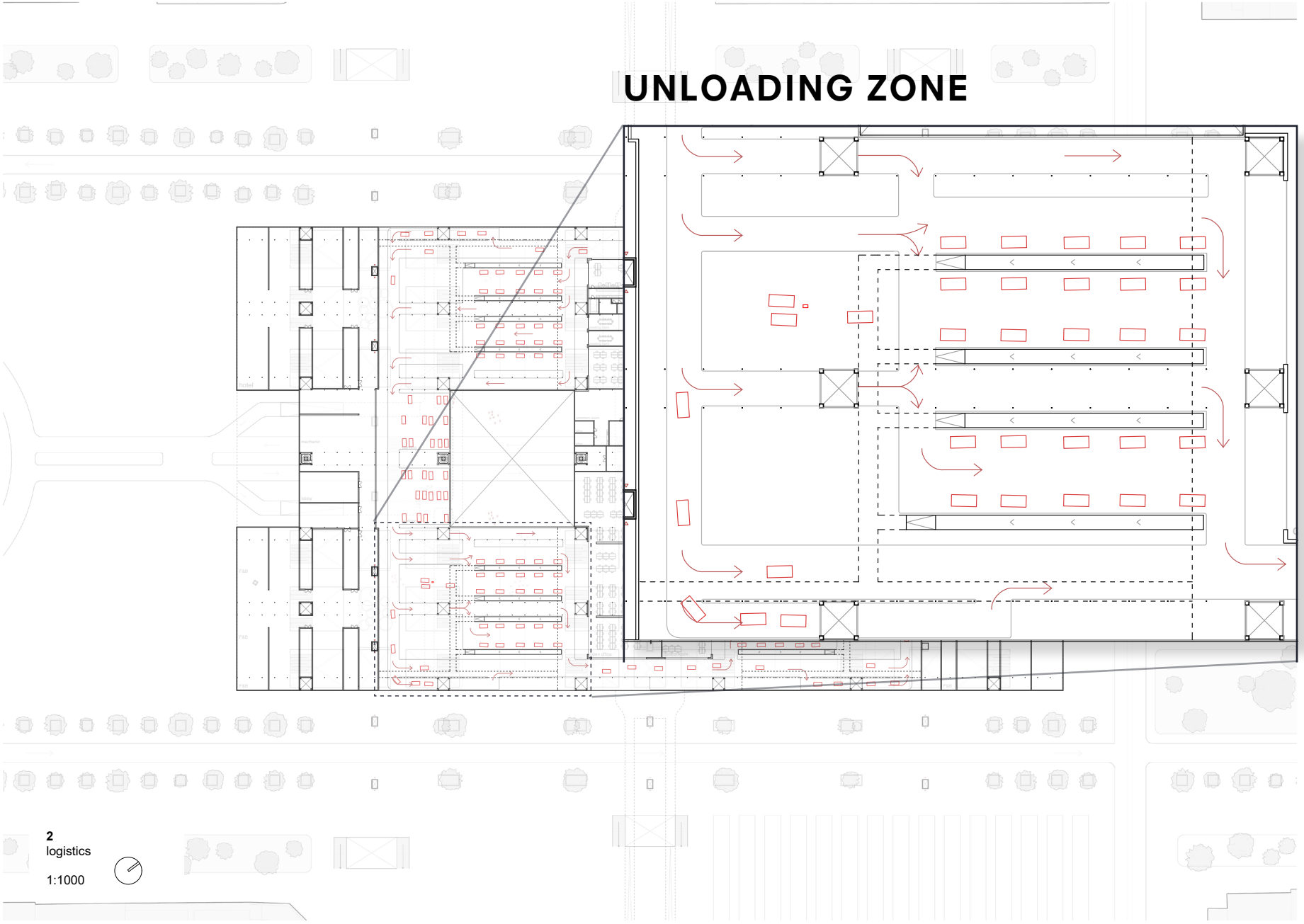
LOGISTICS

UNLOADING ZONE



2
logistics

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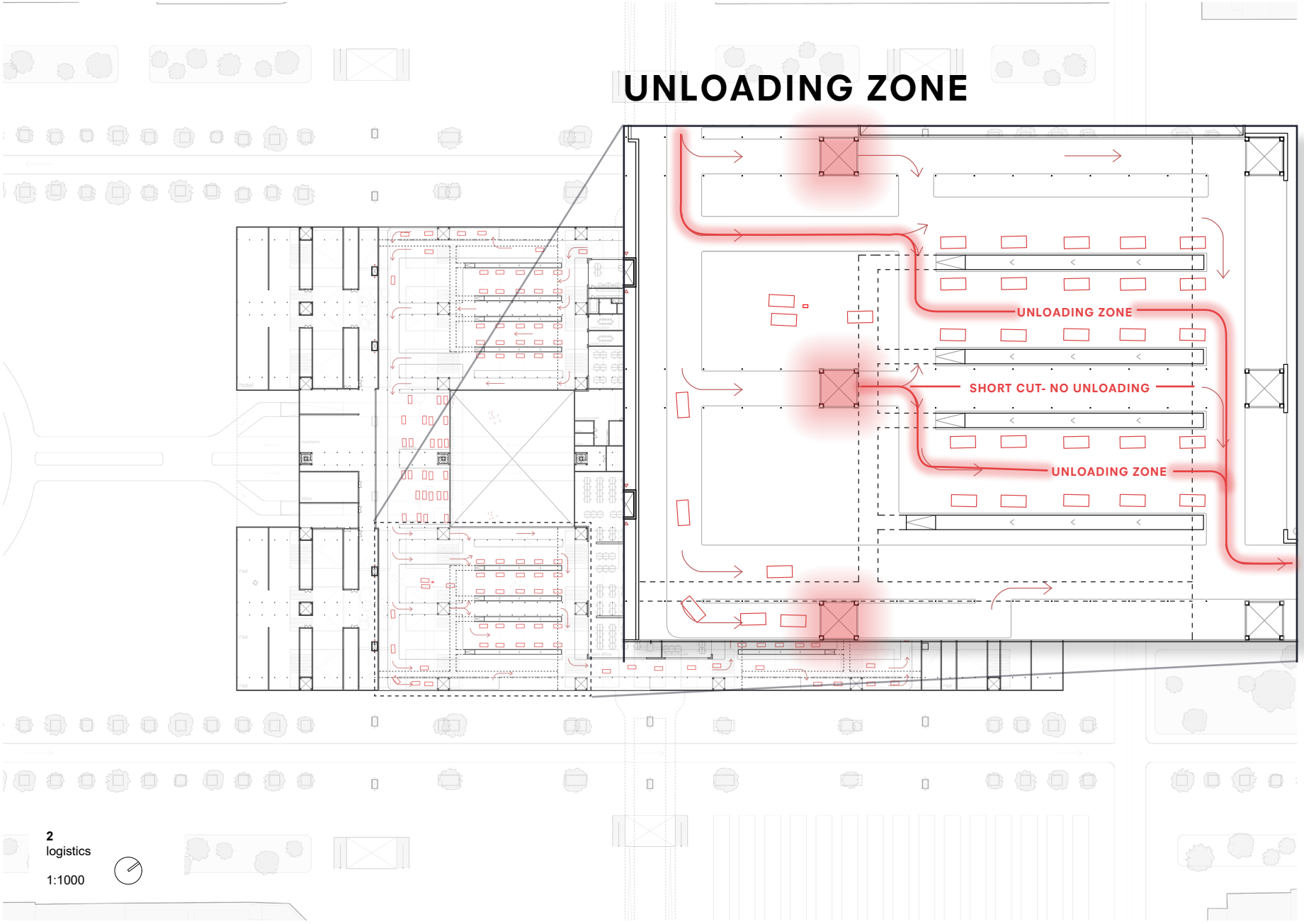
LOGISTICS

UNLOADING ZONE



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logistics

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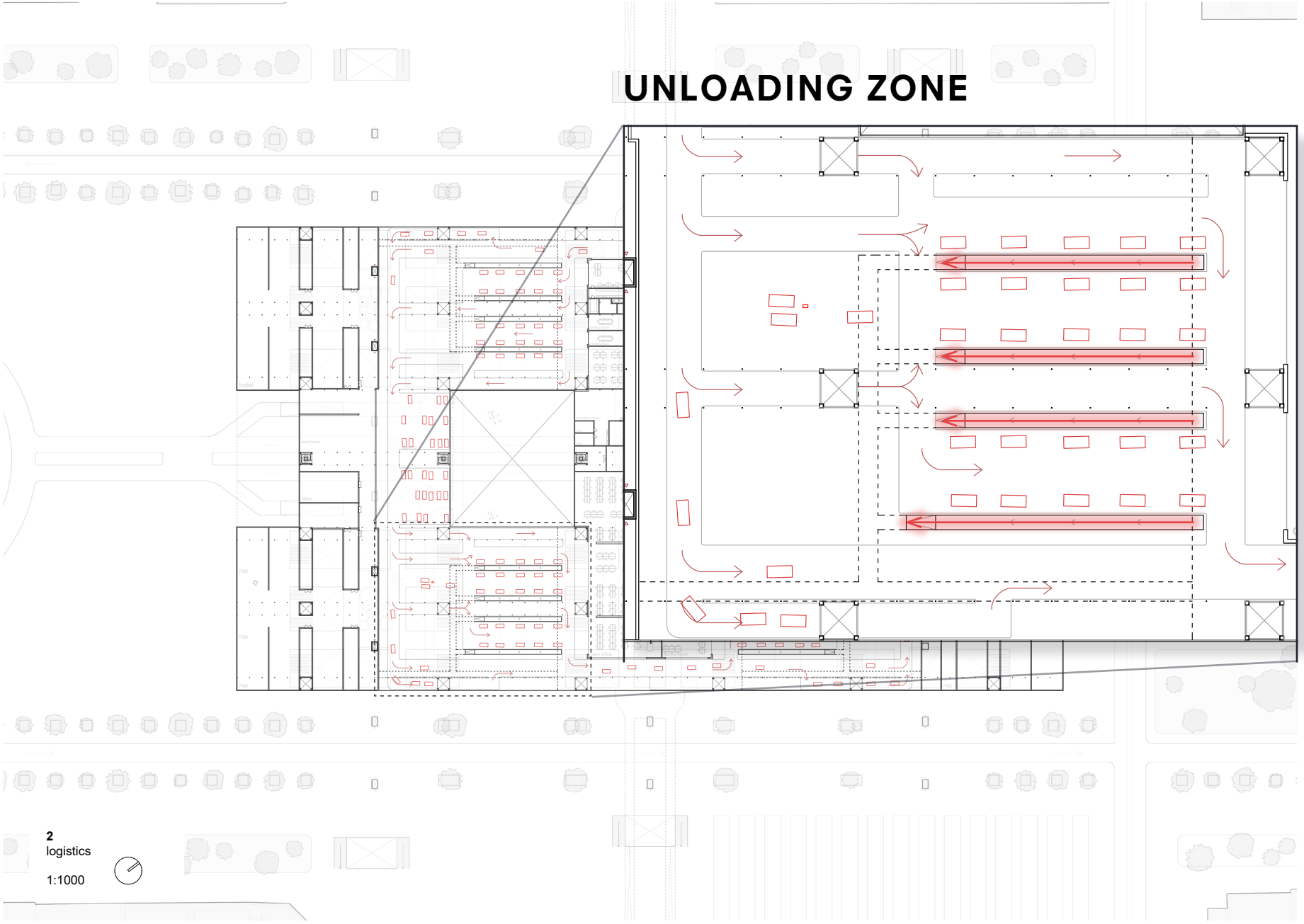
LOGISTICS

UNLOADING ZONE



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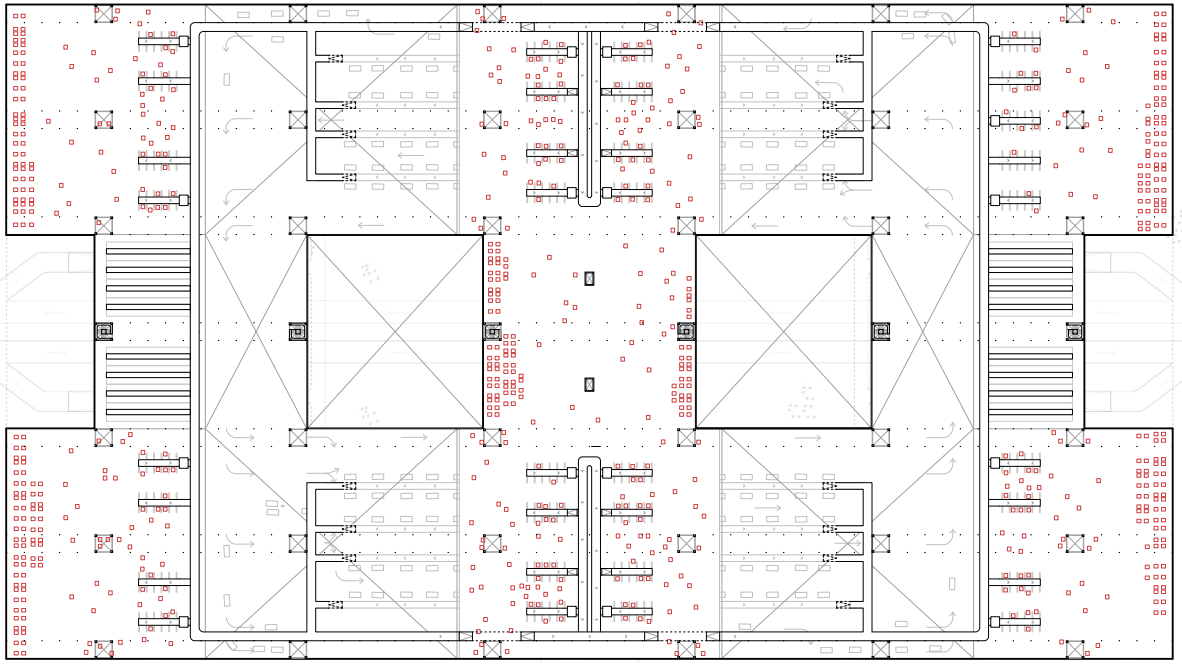
logistics

1:1000

LOGISTICS

LOGISTICS

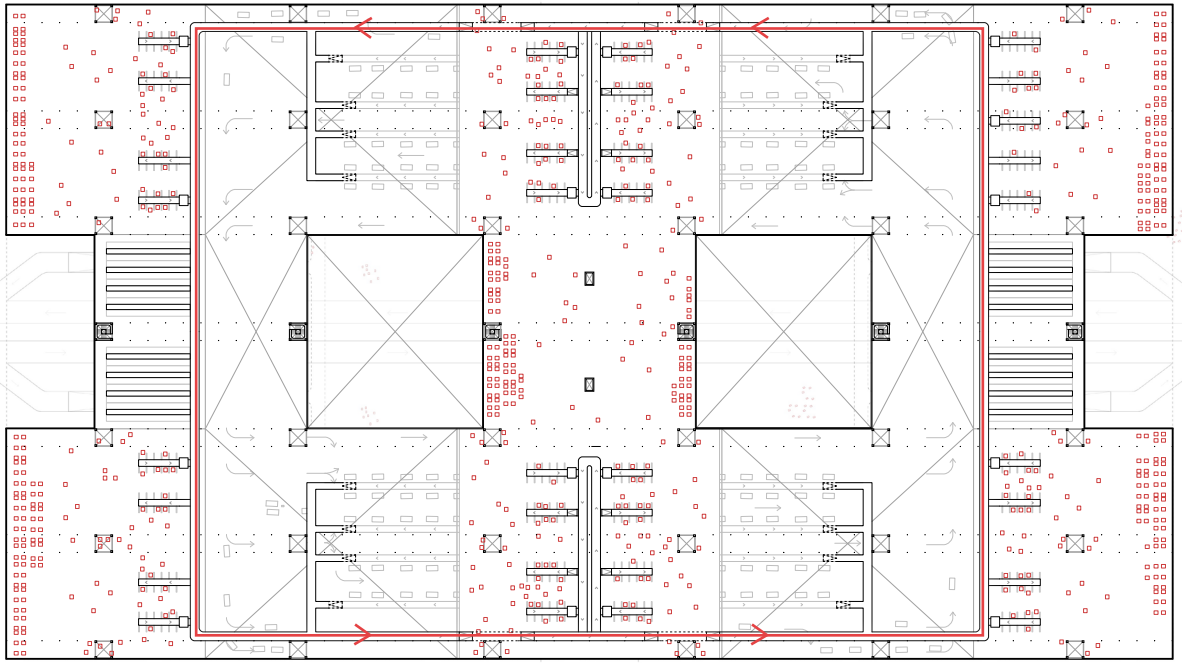


3
logistics

1:1000

LOGISTICS FLOOR

LOGISTICS

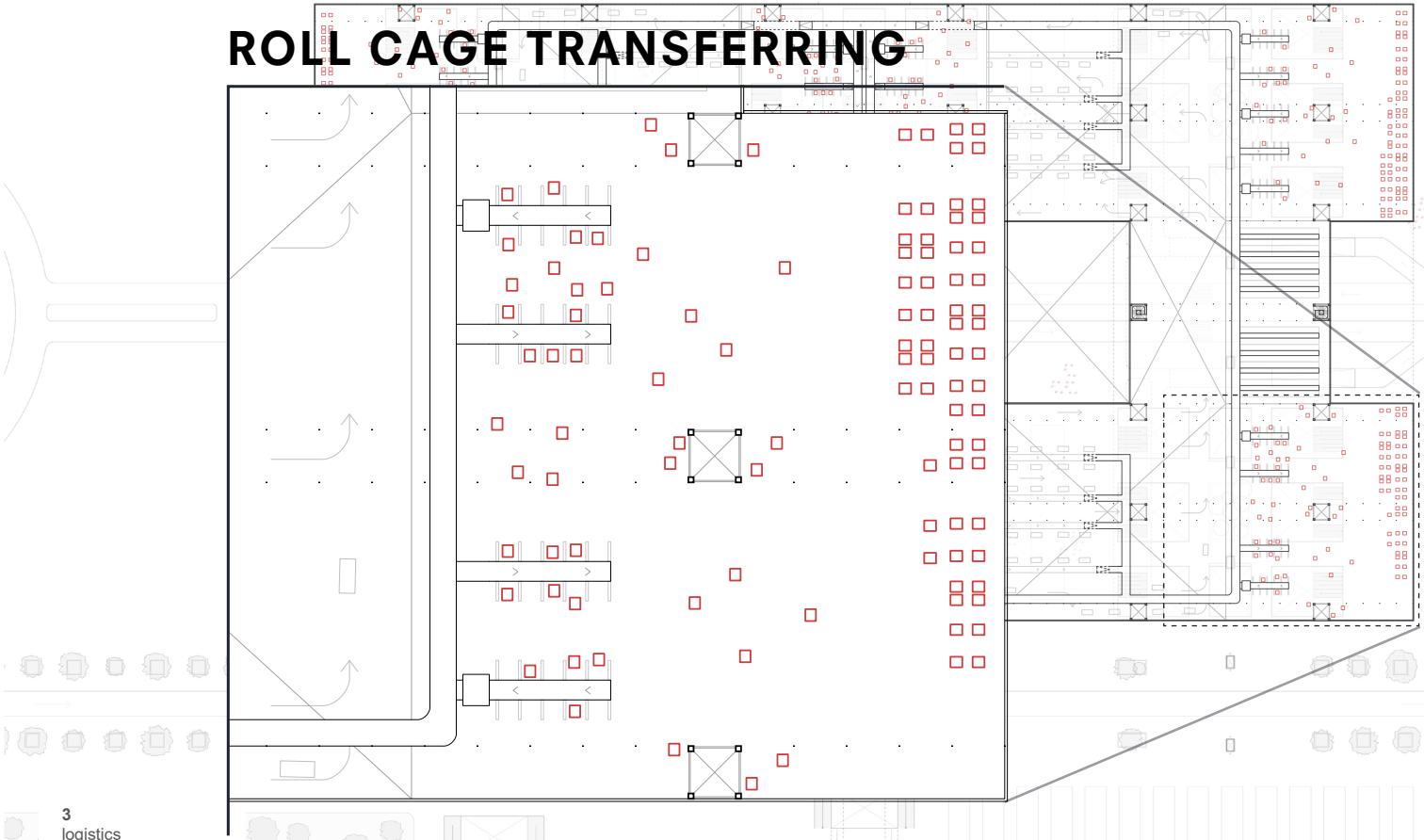


3
logistics

1:1000

LOGISTICS

ROLL CAGE TRANSFERRING



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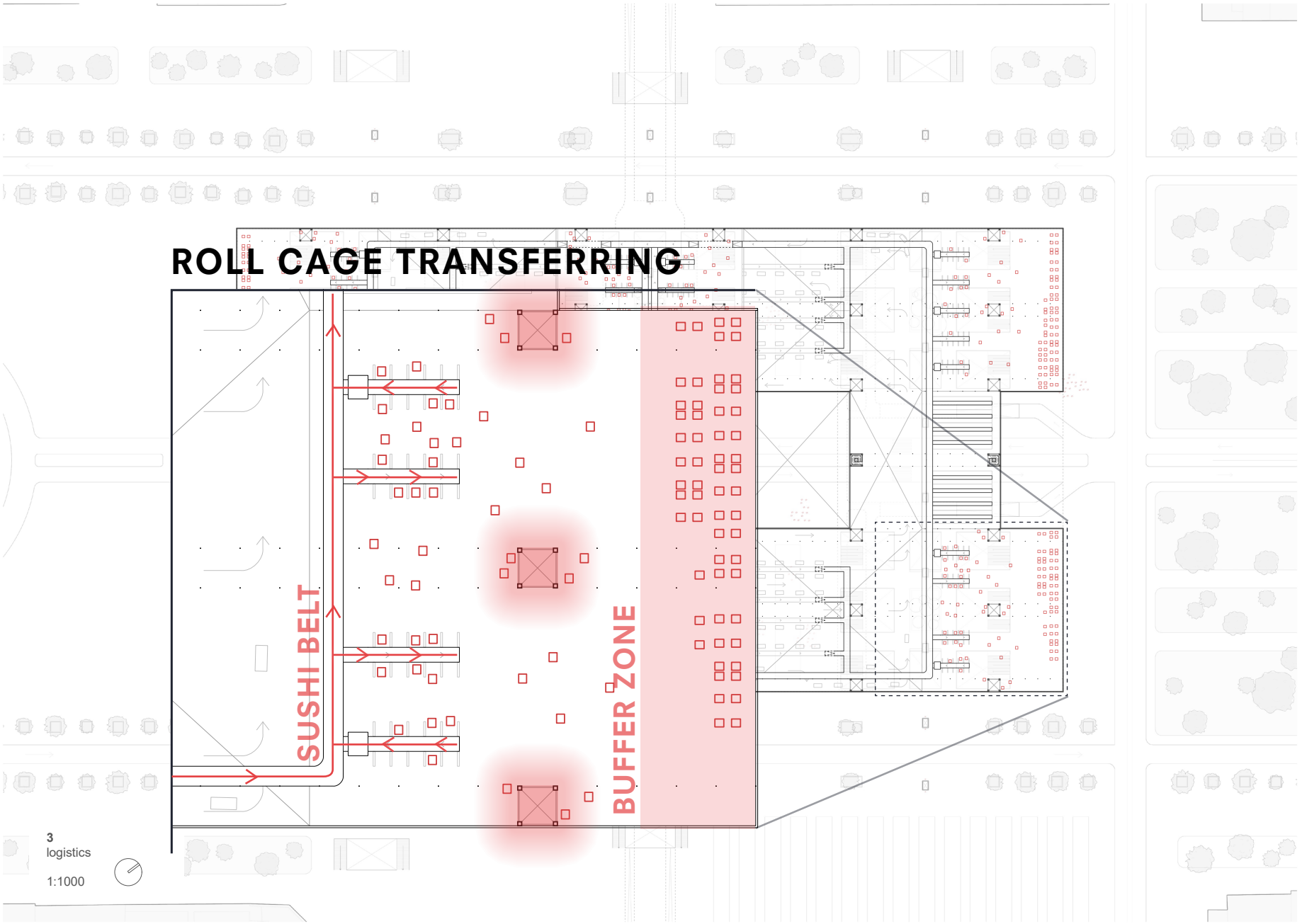
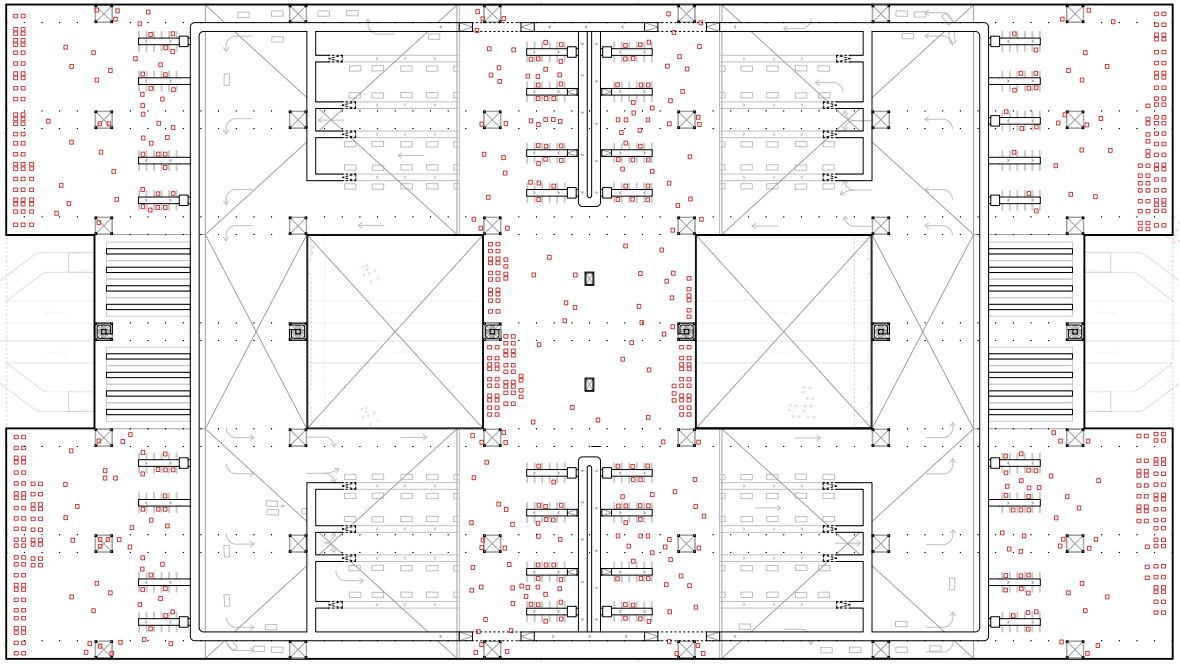
logistics

1:1000

LOGISTICS


ROLL CAGE TRANSFERRING
SUSHI BELT
BUFFER ZONE
3
logistics
1:1000

LOGISTICS



3
logistics

1:1000

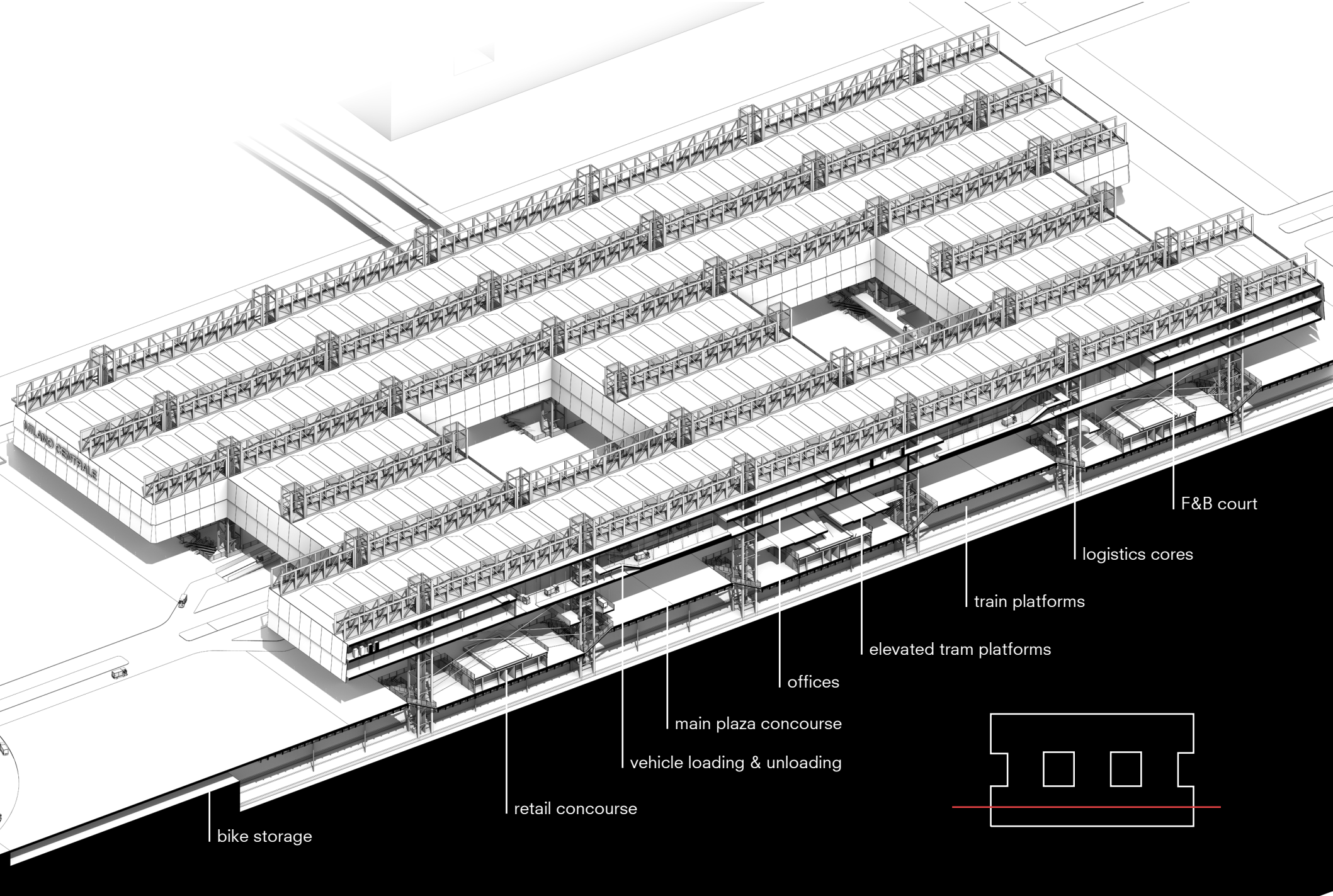
facade

SE FROM STREET

STRUCTURE

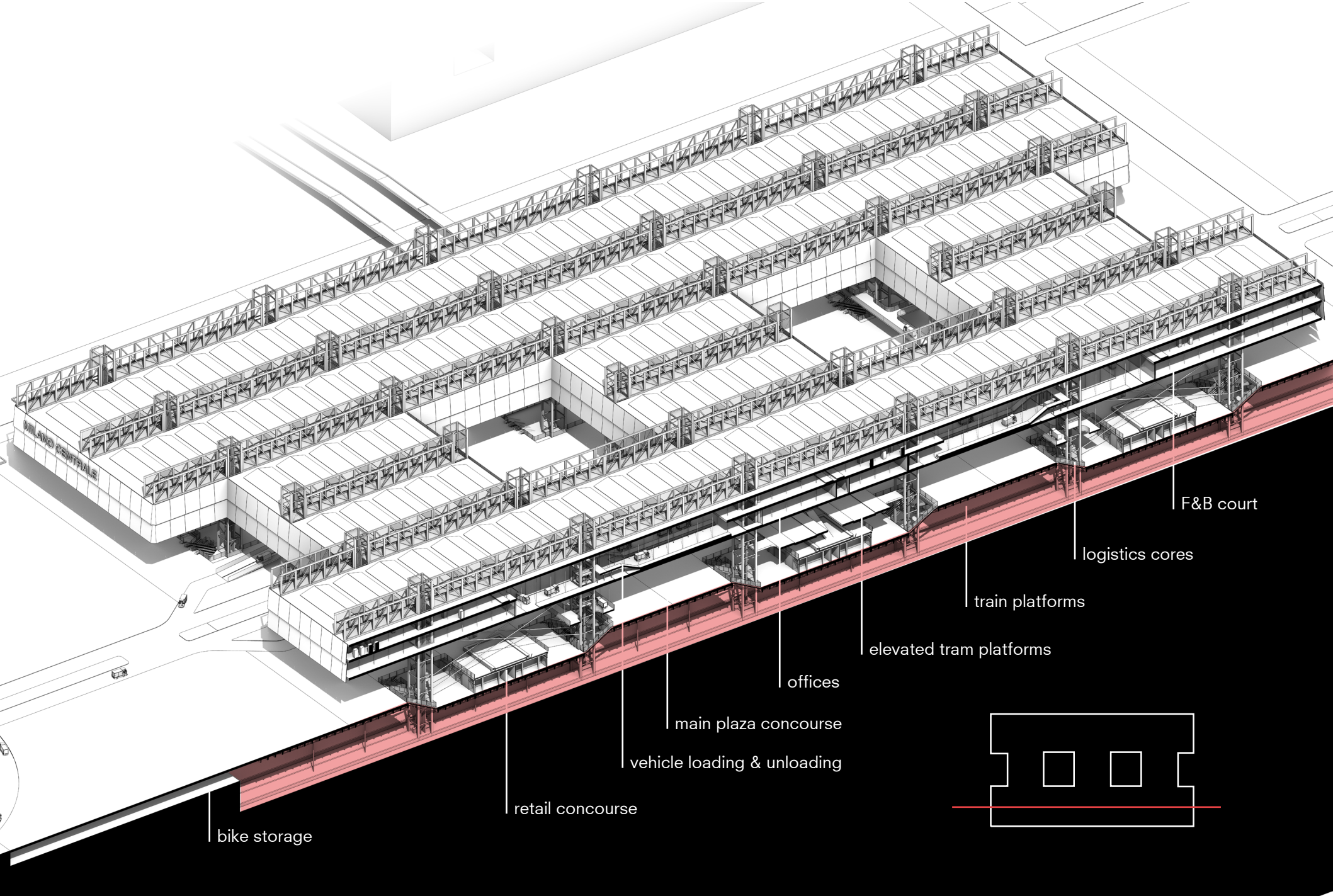
sections

SECTIONAL AXONOMETRIC



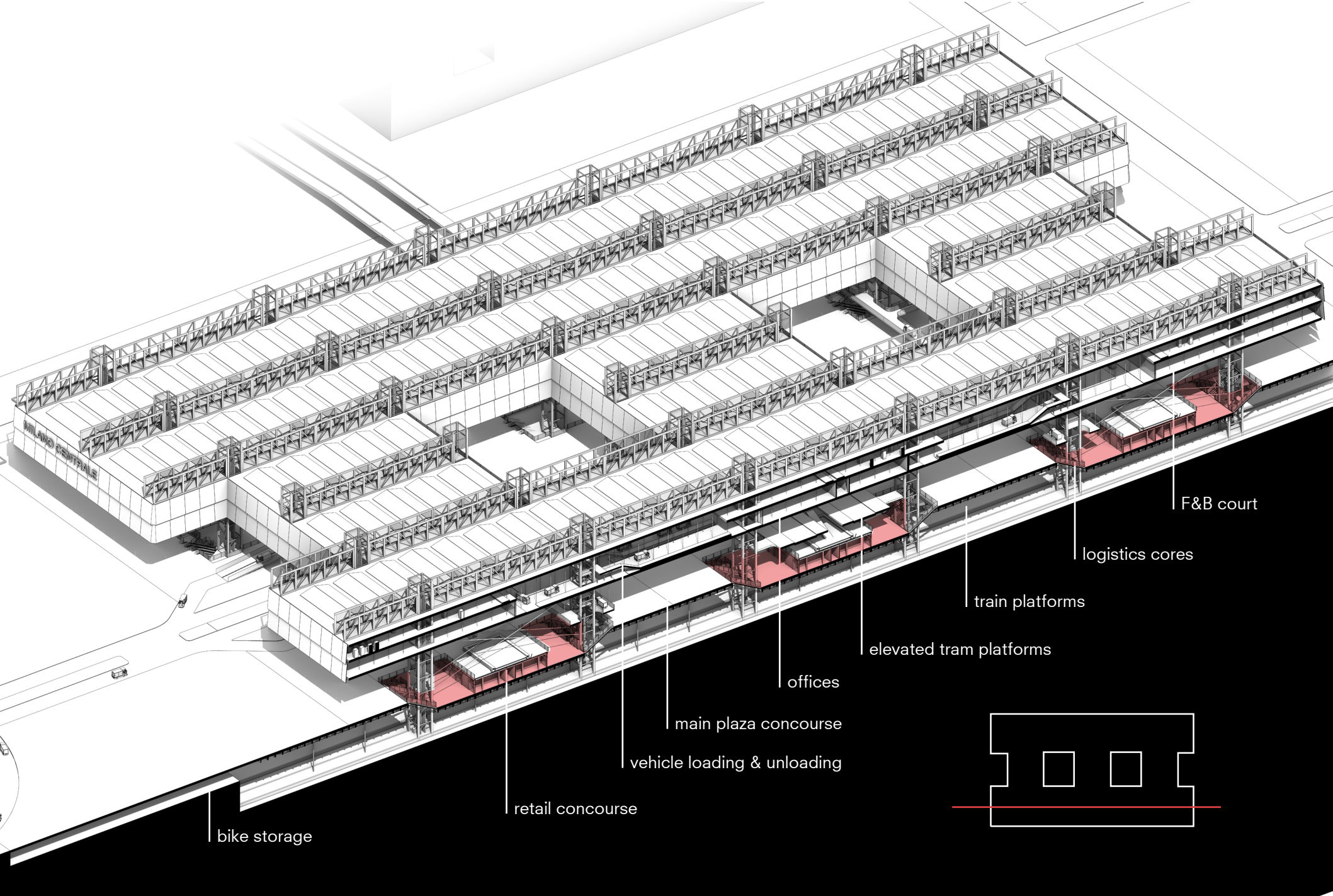
sections

SECTIONAL AXONOMETRIC



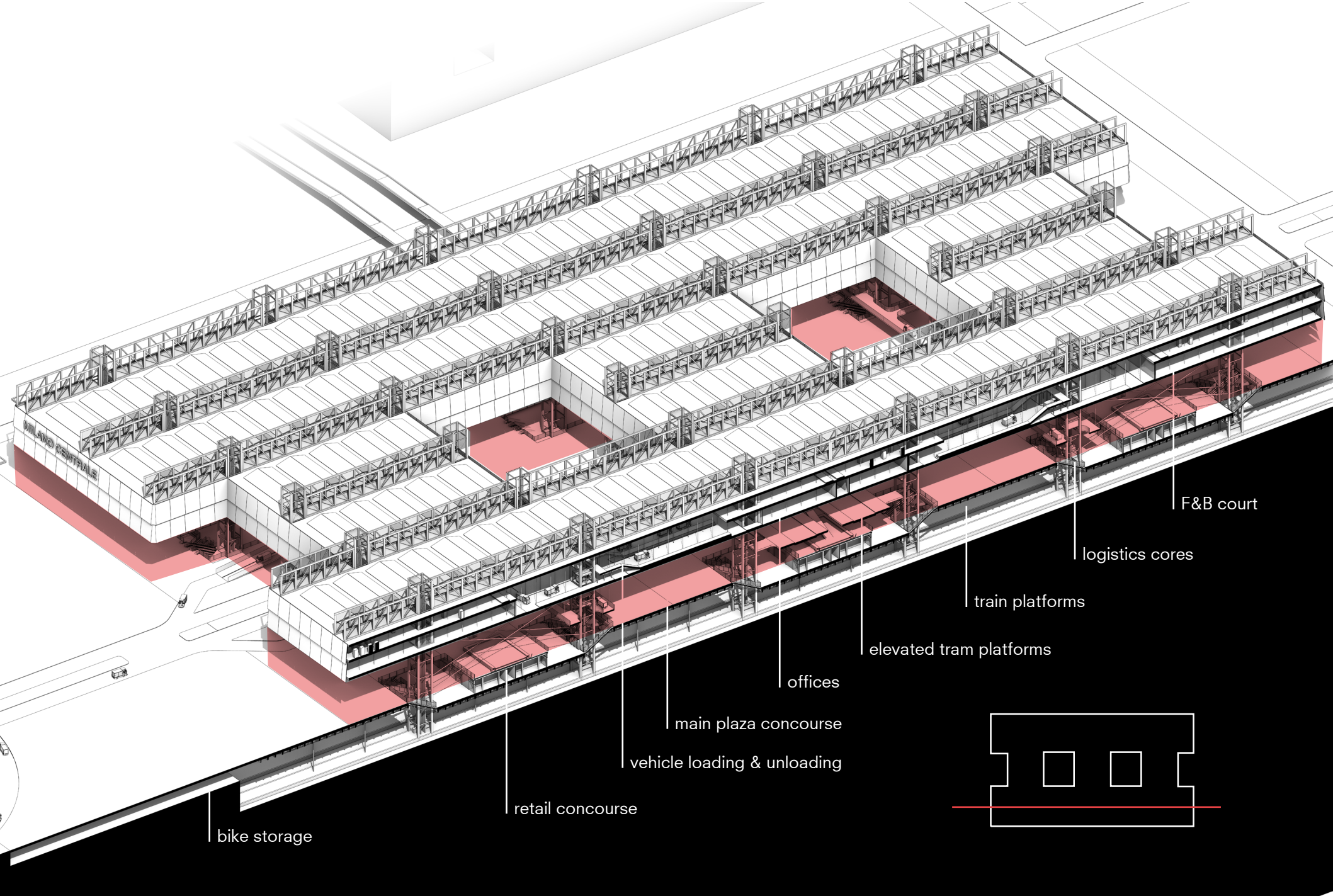
sections

SECTIONAL AXONOMETRIC



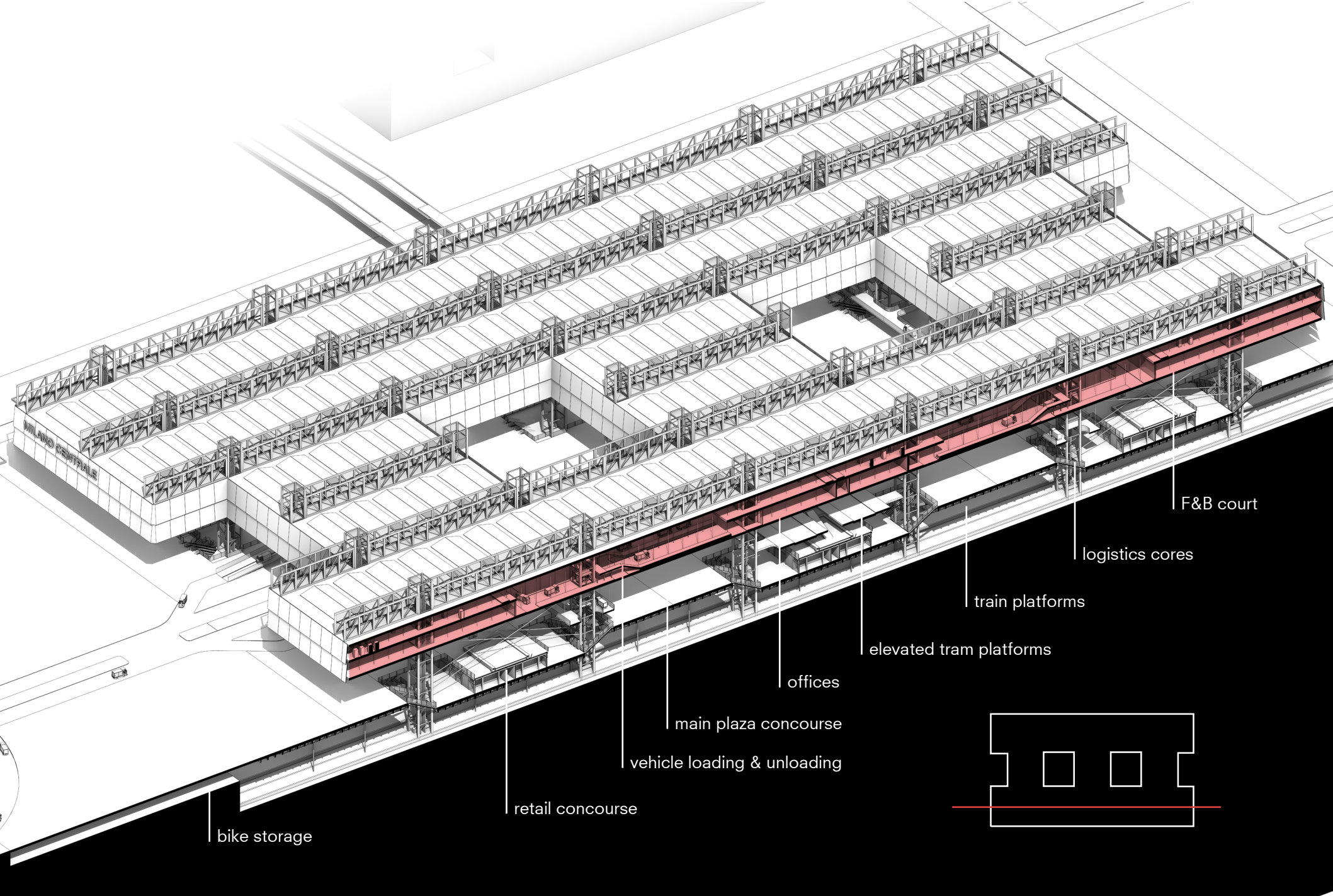
sections

SECTIONAL AXONOMETRIC



sections

SECTIONAL AXONOMETRIC



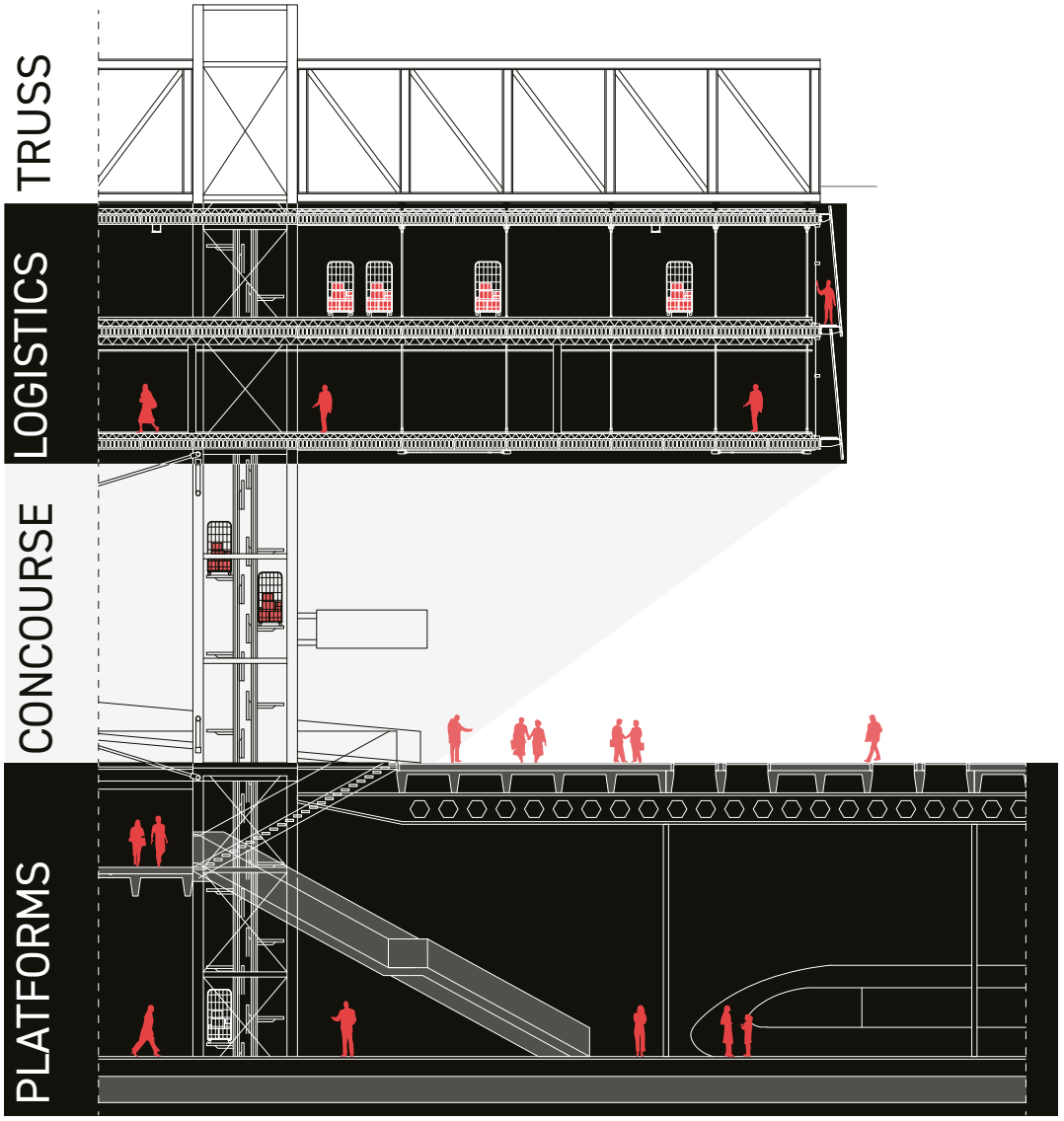
FRONT VIEW

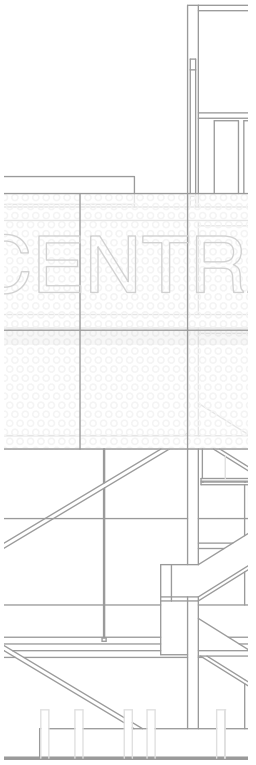
fragment

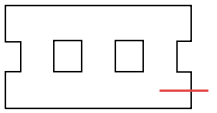
FACADE FRAGMENT

fragment

FACADE FRAGMENT





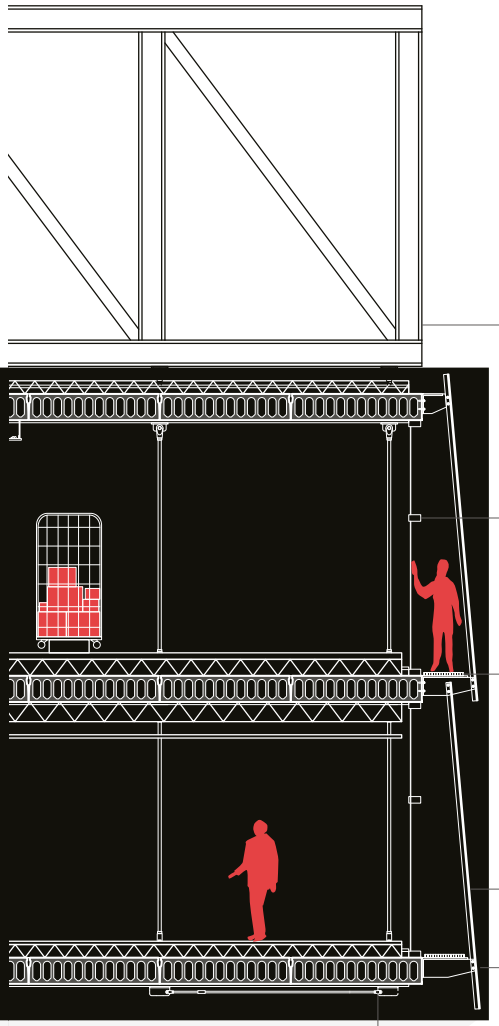


fragment

FACADE FRAGMENT

TRUSS

LOGISTICS



steel pratt truss

single glazed facade

metal grate walkway for maintenance

perforated metal cladding

brackets bolted to hollow core slab

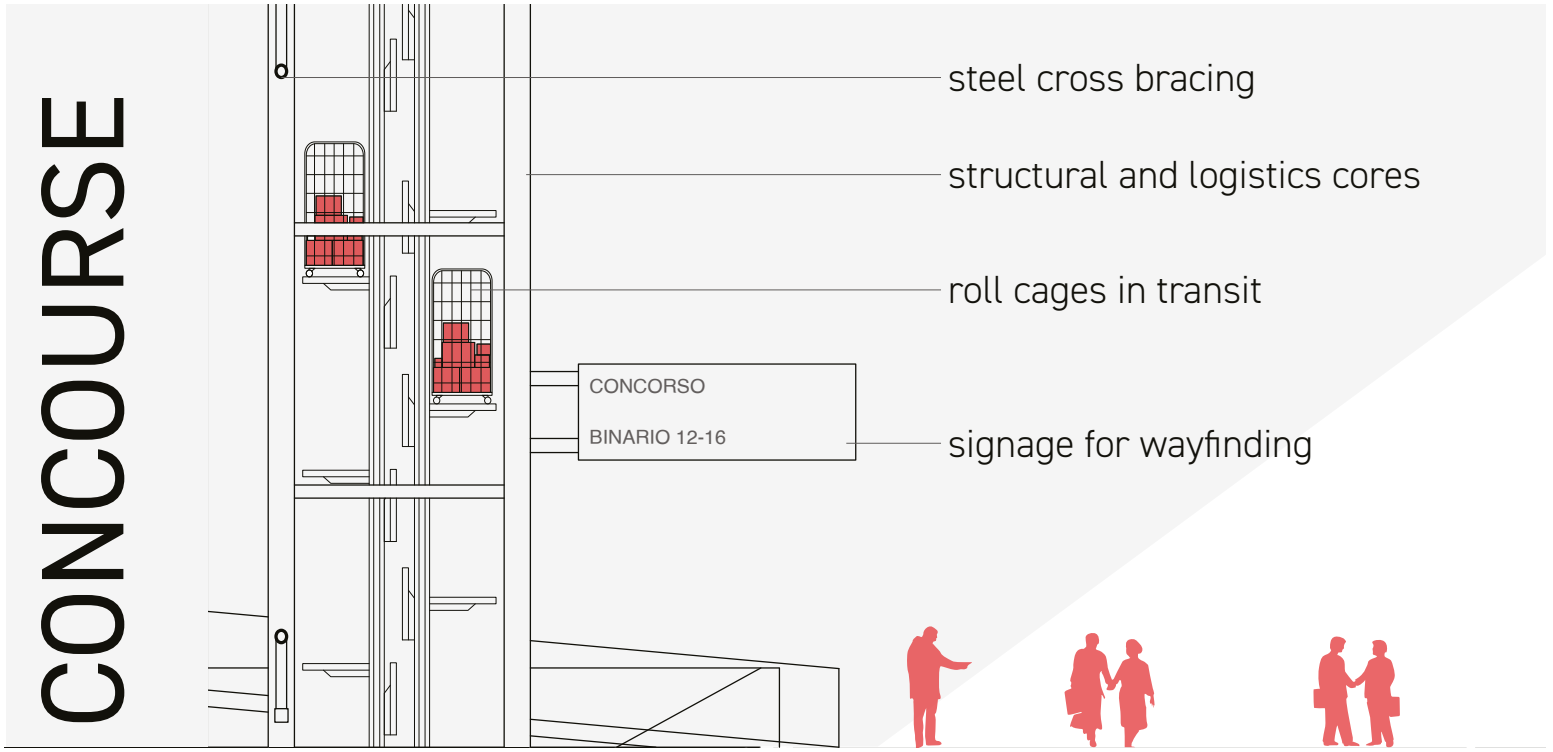
tension cables for rigidity

fragment

FACADE FRAGMENT

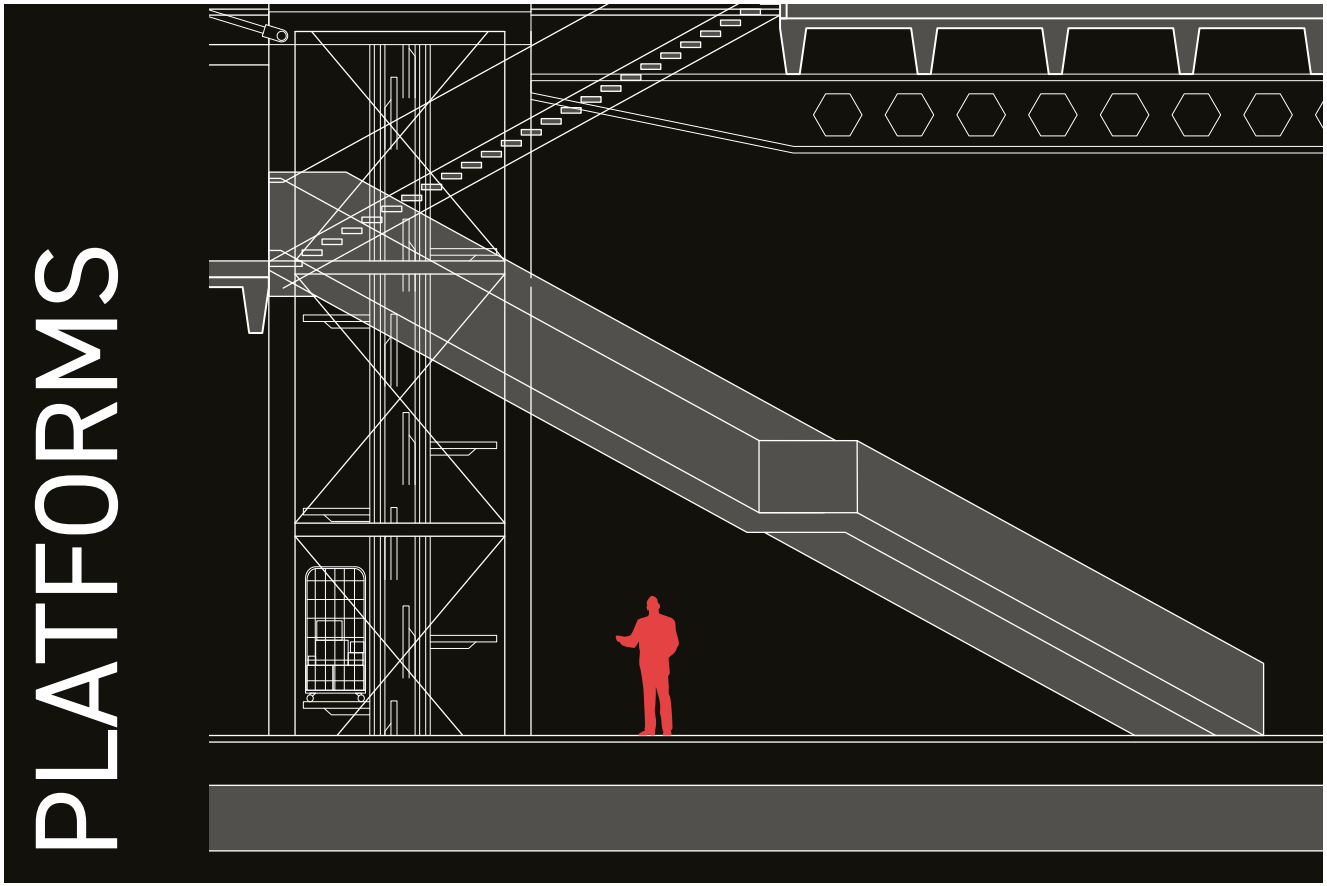
fragment

FACADE FRAGMENT



fragment

FACADE FRAGMENT



fragment

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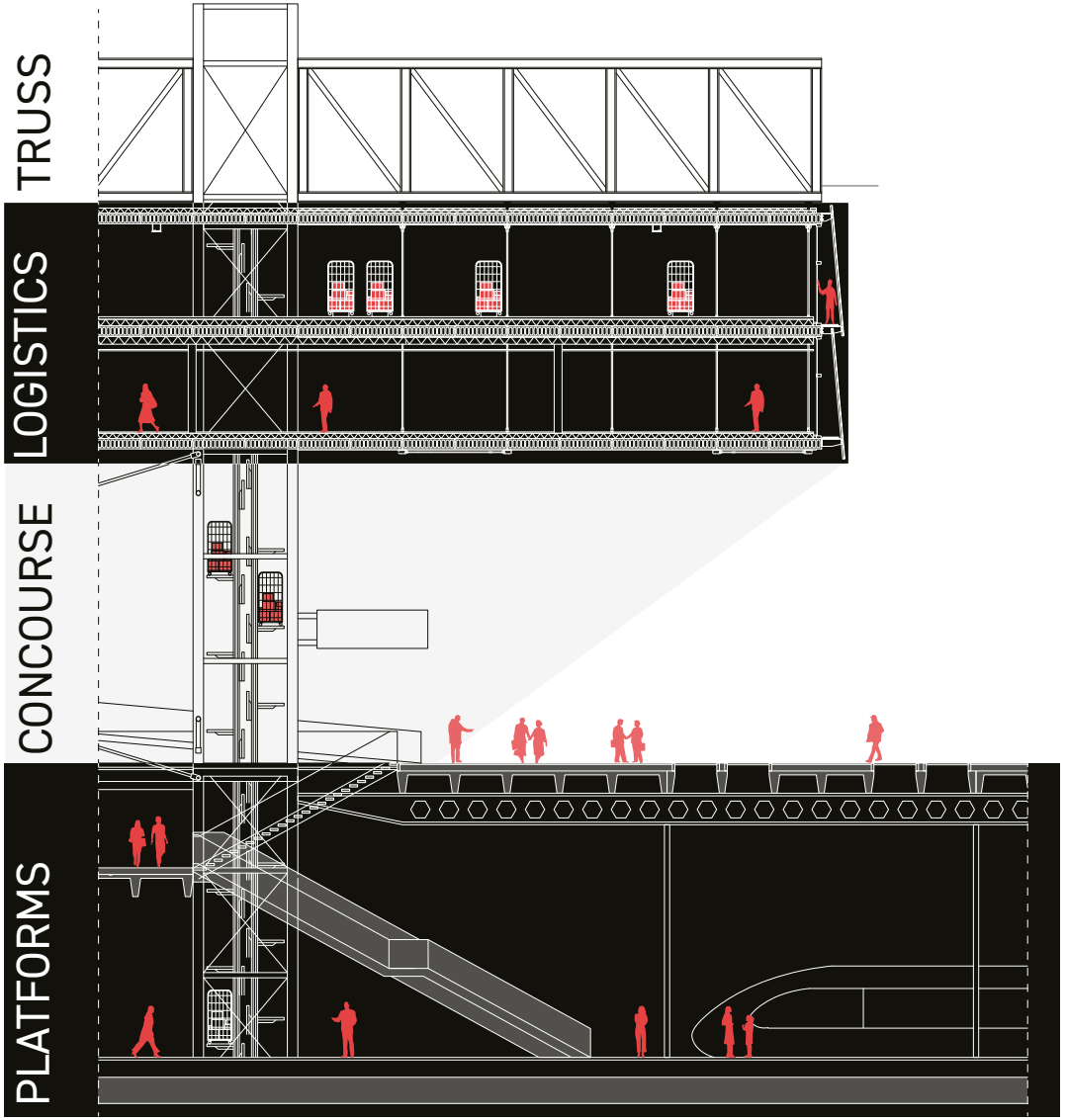
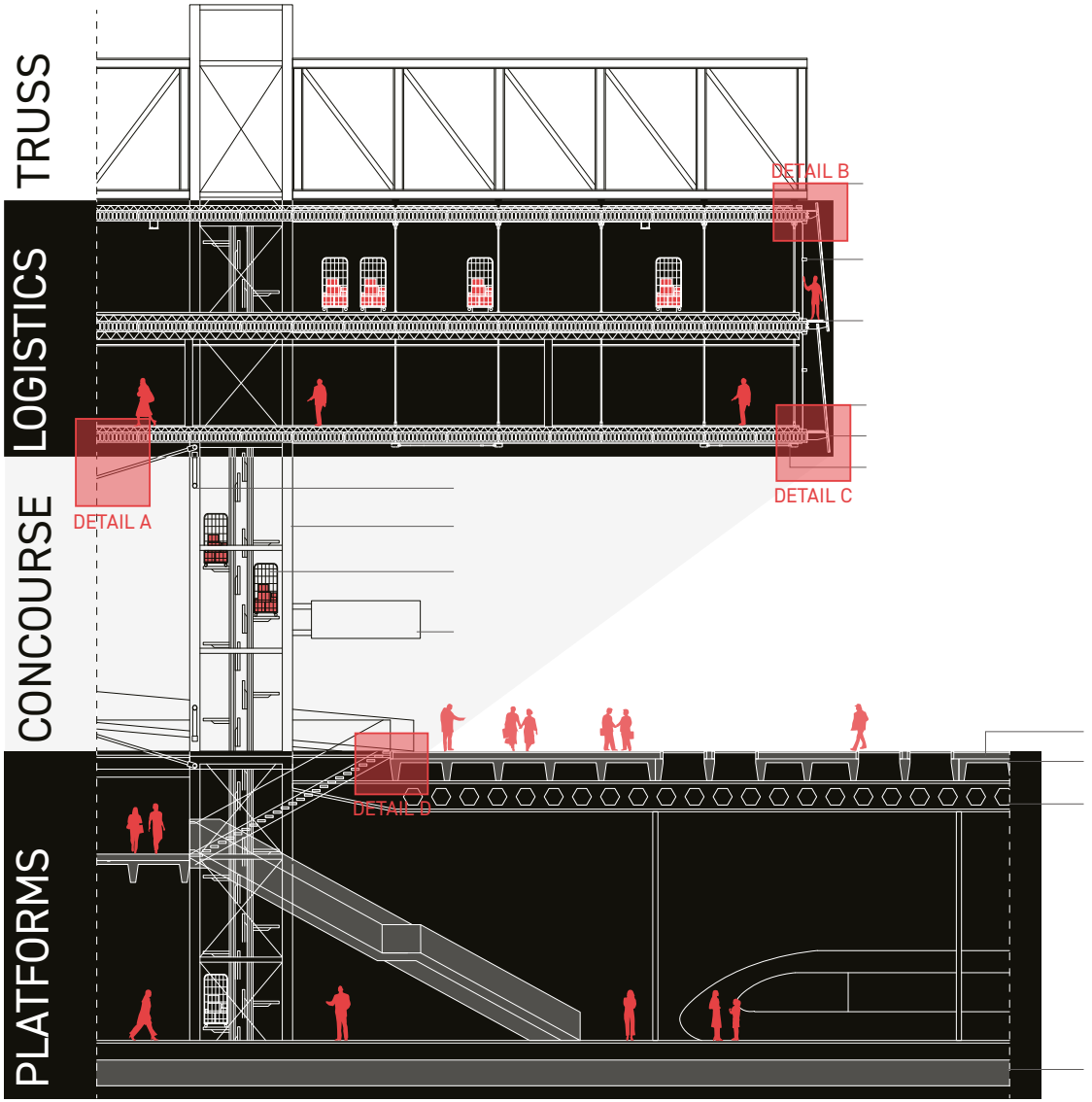


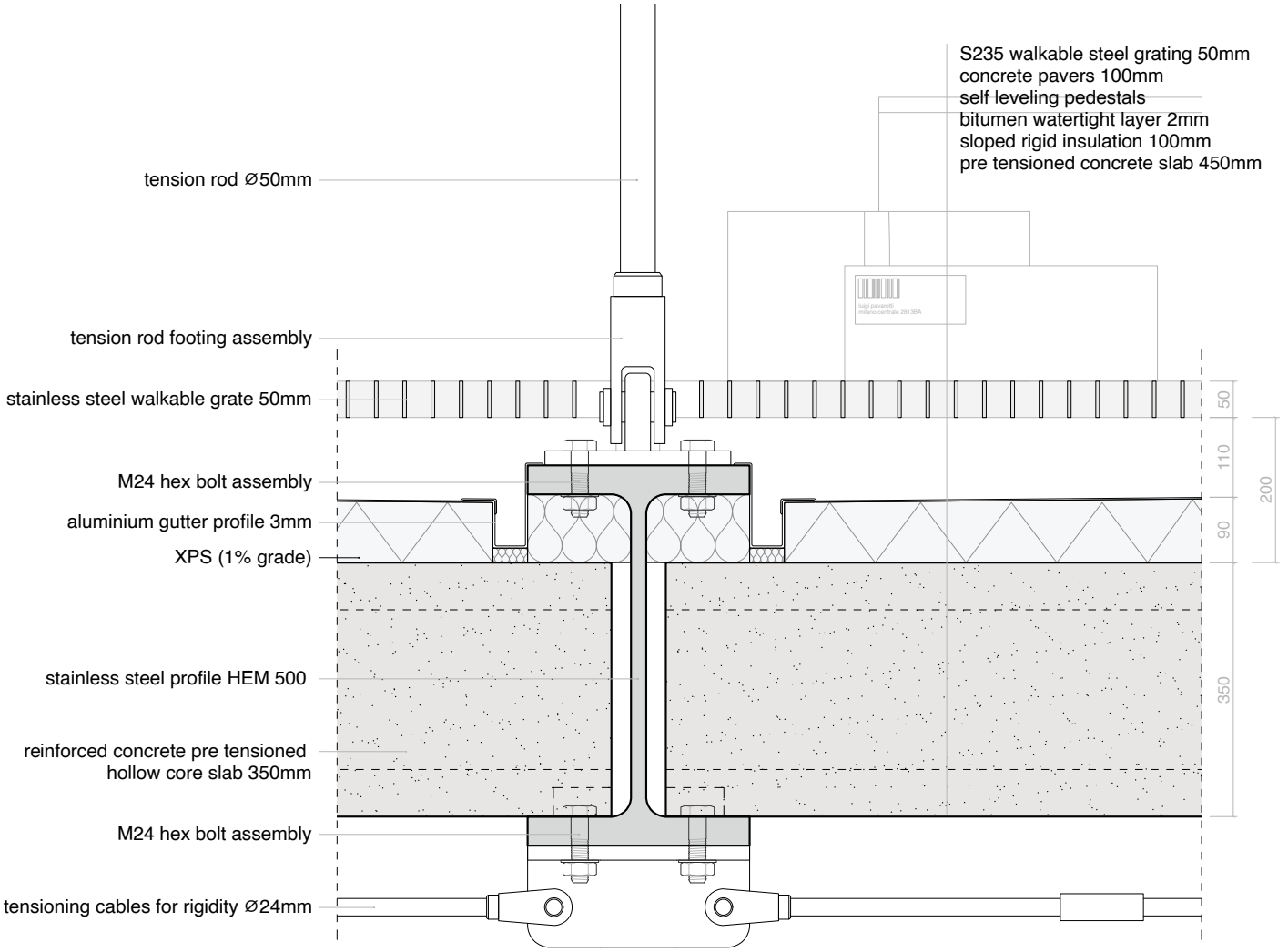
fragment

FACADE FRAGMENT



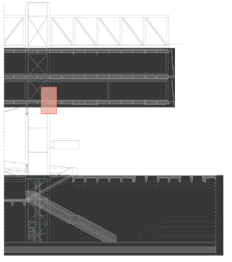
fragment

DETAIL A



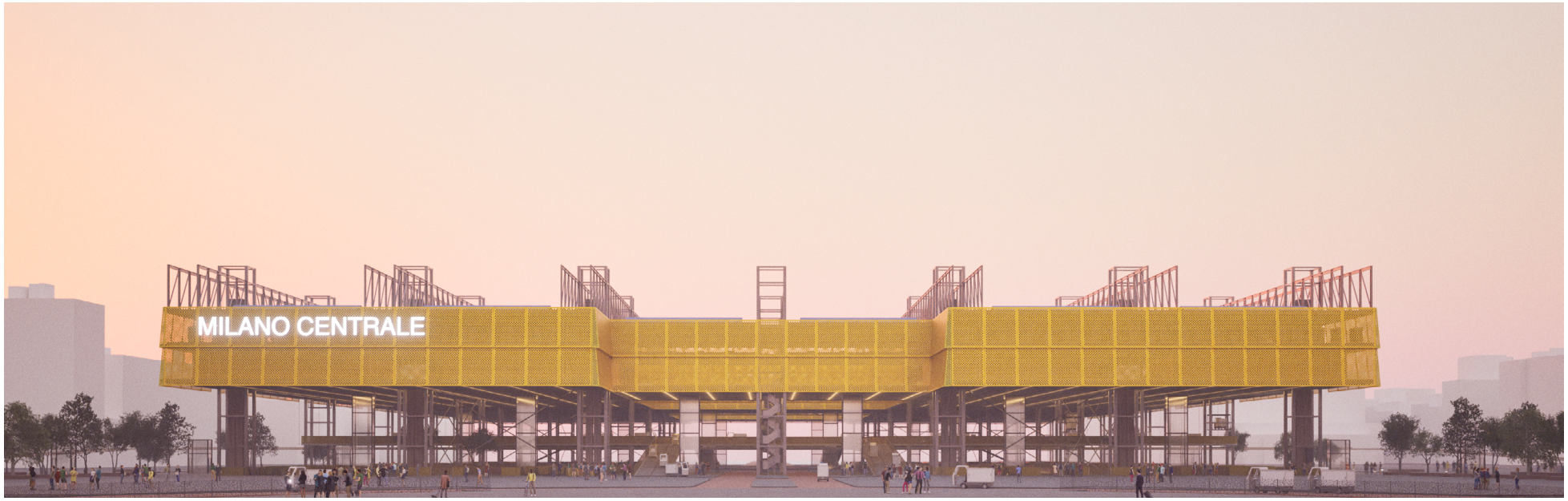
detail A
floor suspension connection

1:5



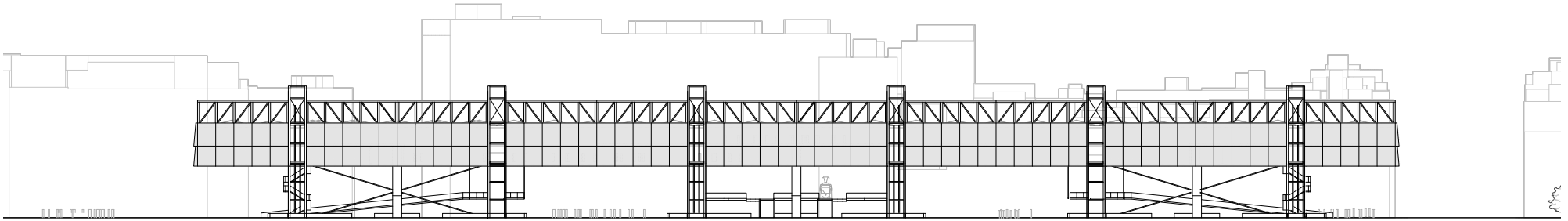
facade

SW ELEVATION



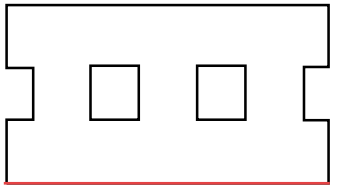
facade

SE ELEVATION



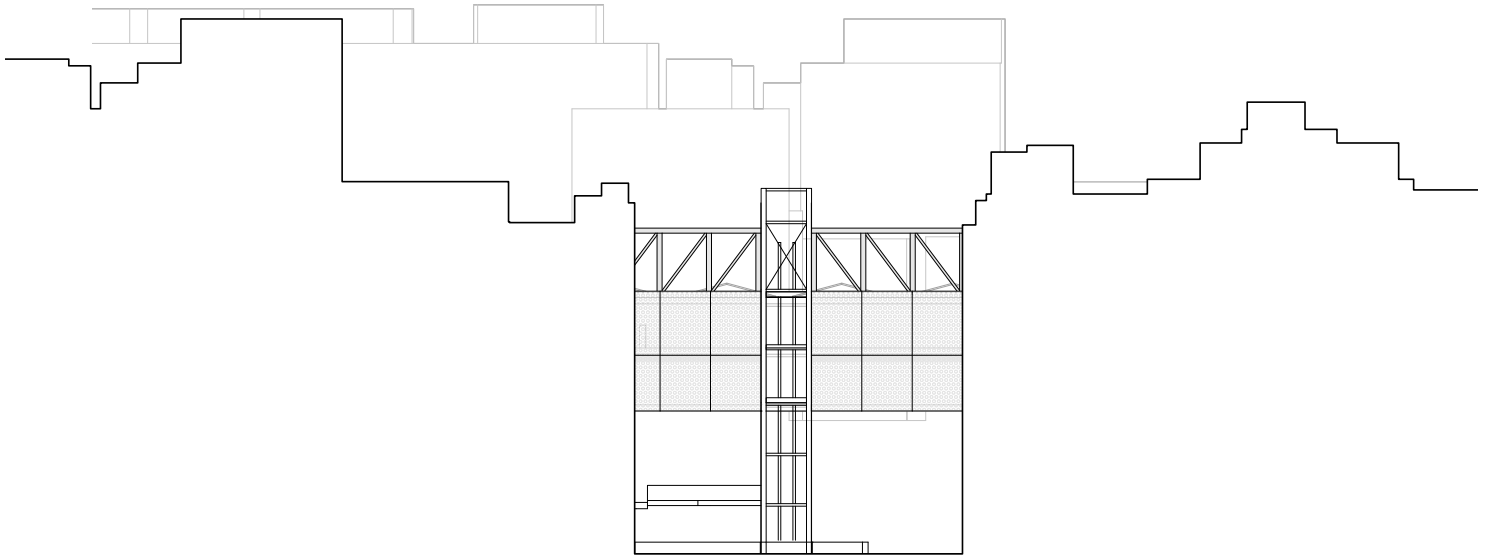
elevation
SE

1:1000

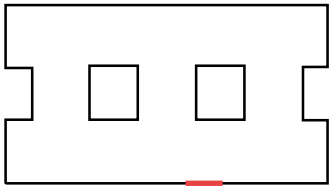


facade

SE FROM STREET



elevation from street
SE



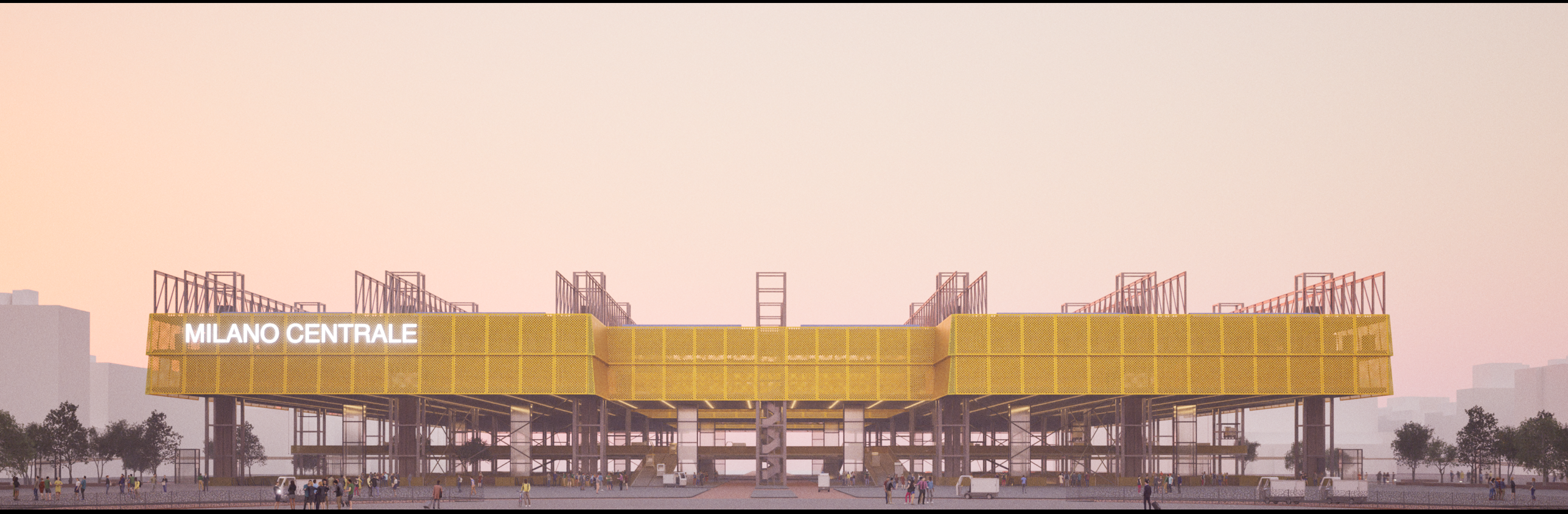
facade

SE FROM STREET

Posteitaliane
brt
DHL
Posteitaliane

MILANO CENTRALE

1
4
5
2
6
3
7
10
14
18
21
8
11
15
19
22
9
1
16
20
1
17
23
Clear

Treni
Trains
Uscita Exit
SALI E TABACCHI
VALORI BOLLATI

THANK YOU!