
MOBILITY HUB

∞NNECT THE FEIJENPOORT

P5

Bin Wei
5089050

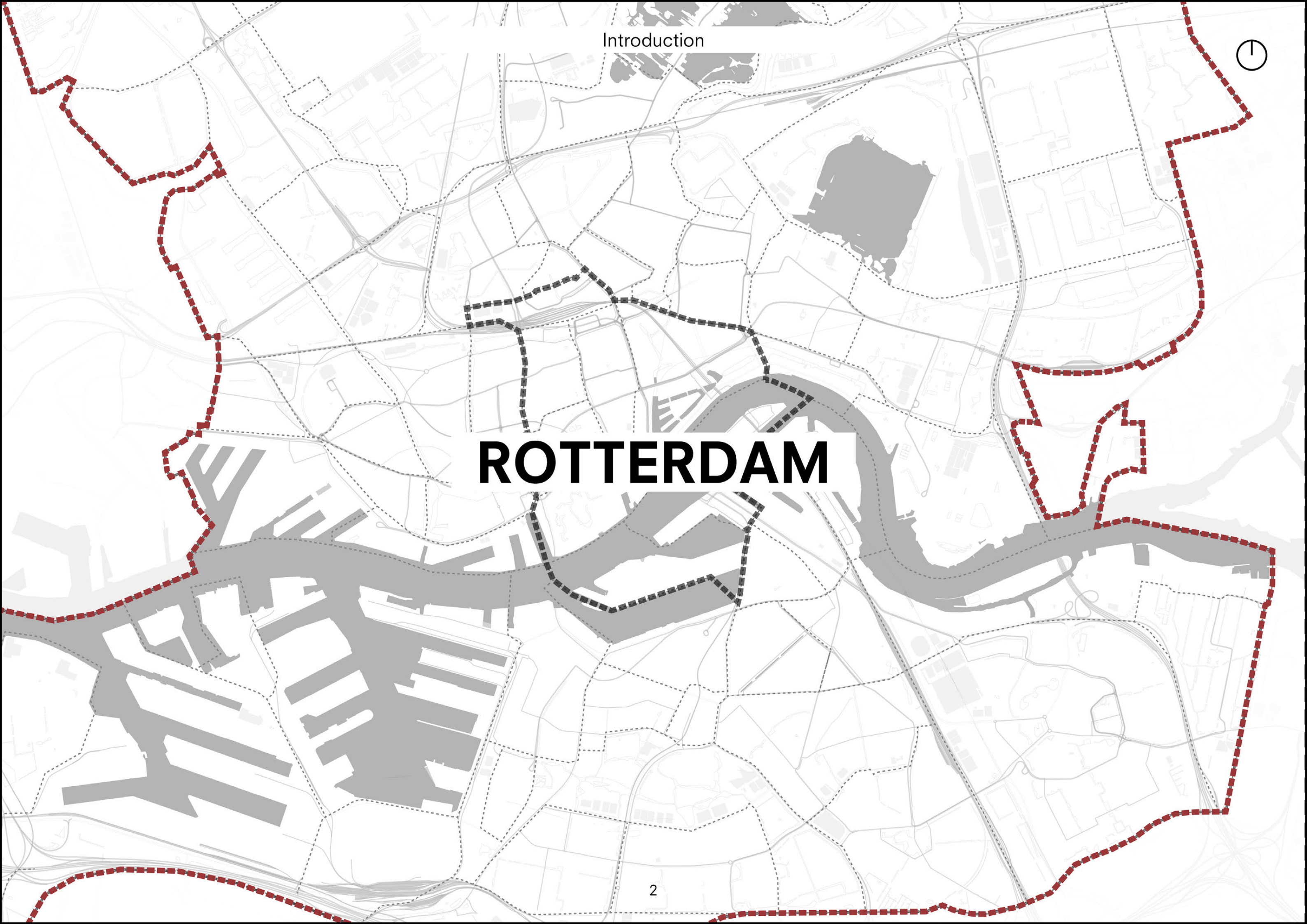
17/09/2021

Complex Project
Hotel New York





ROTTERDAM





Centre of Rotterdam

42668

POPULATION

2

TRAIN STATIONS

6

METRO STATIONS

36

TRAM STOPS



Introduction

Feijenpoort

Feijenoord District + Poort (Gateway)

76539

POPULATION

1

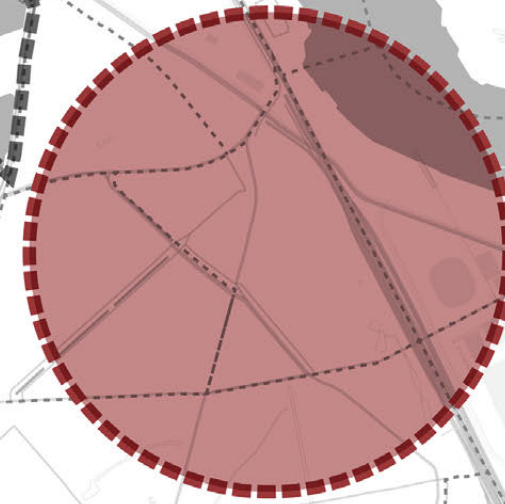
TRAIN STATION

0

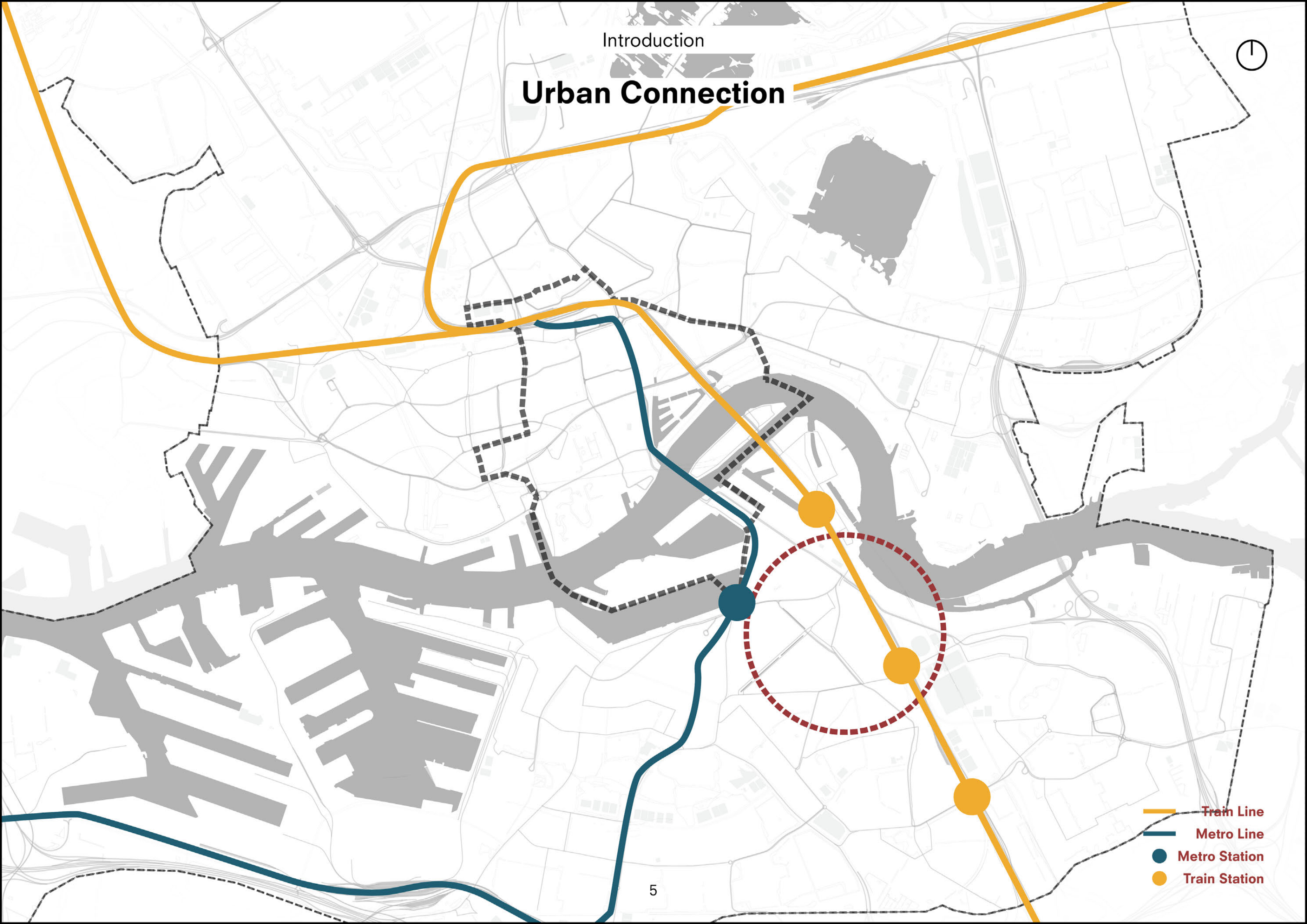
METRO STATION

12

TRAM STOPS



Urban Connection

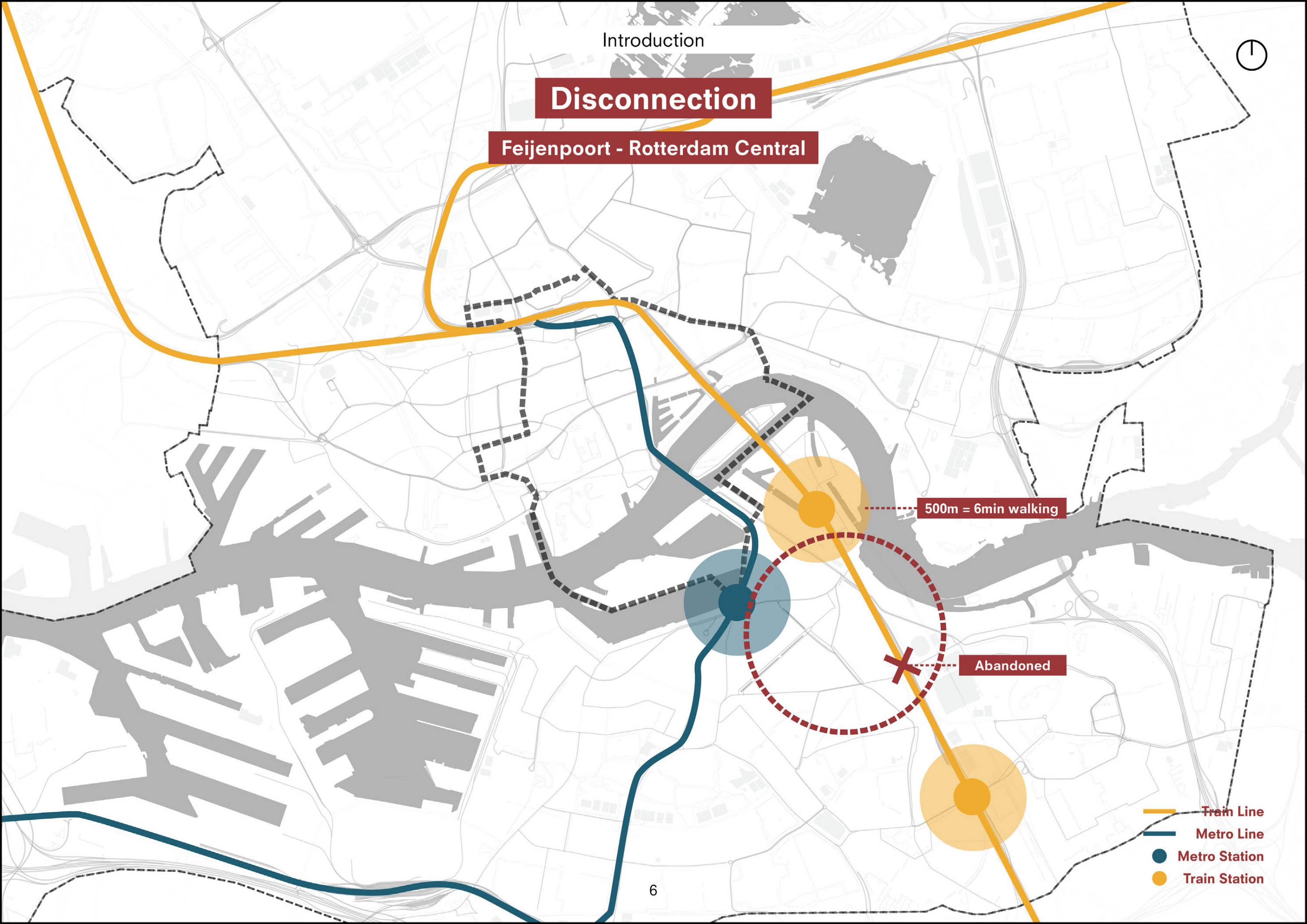


- Train Line
- Metro Line
- Metro Station
- Train Station

Introduction

Disconnection

Feijenpoort - Rotterdam Central



500m = 6min walking

Abandoned

- Train Line
- Metro Line
- Metro Station
- Train Station



Disconnection

WEST - EAST



 Train Line

Introduction

Disconnection

WEST - EAST

Residential Area

Waterfront Area
+
Commercial Area
+
Recreation Area



Disconnection

Congested Street - Low Mobility

Average Traffic Speed

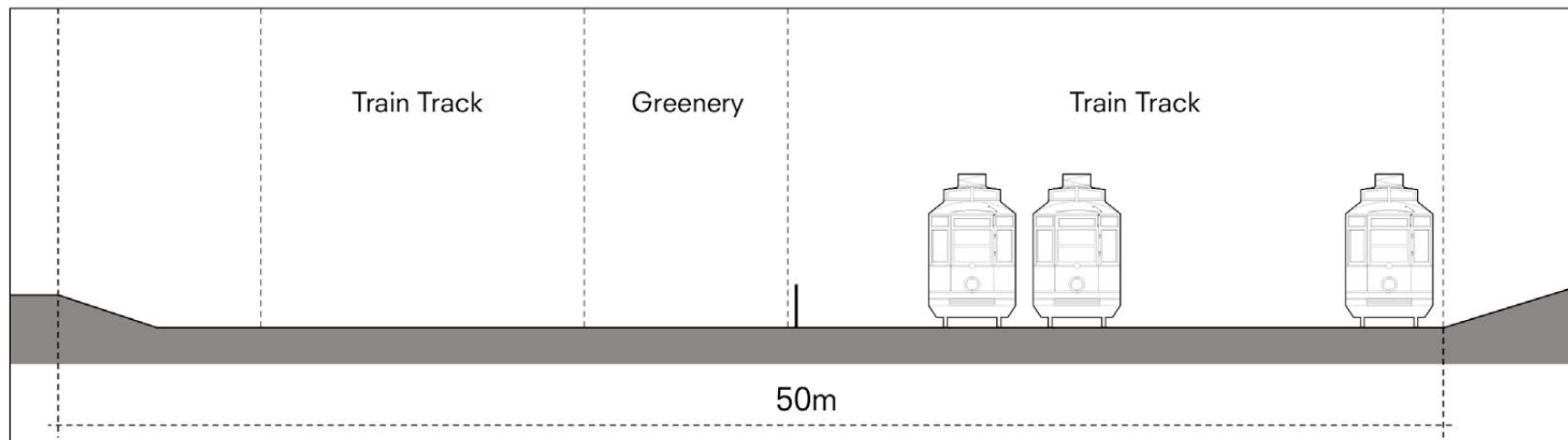
25.2 km/h

Traffic Speed Limit

50.0 km/h

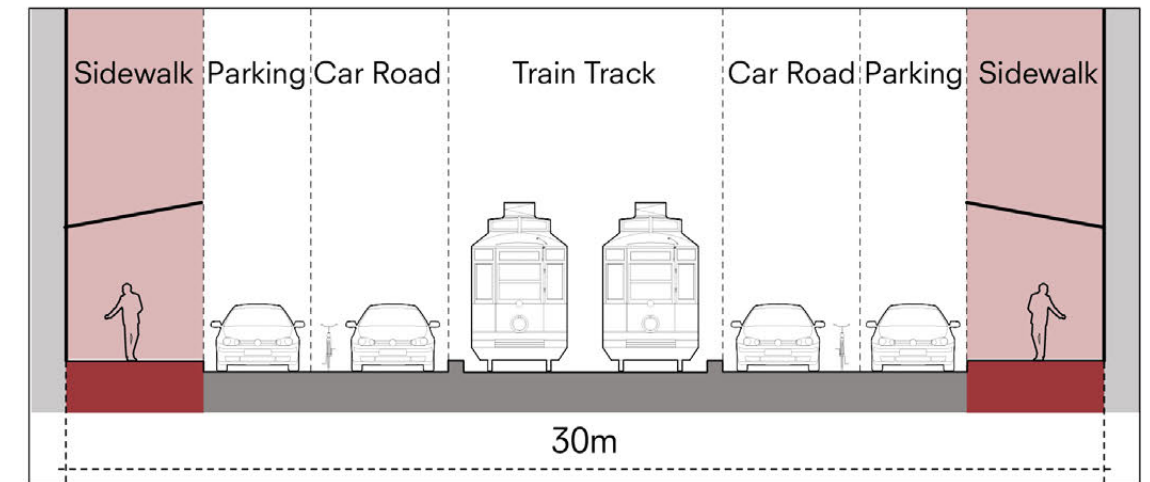
Space for Urban Life

0%



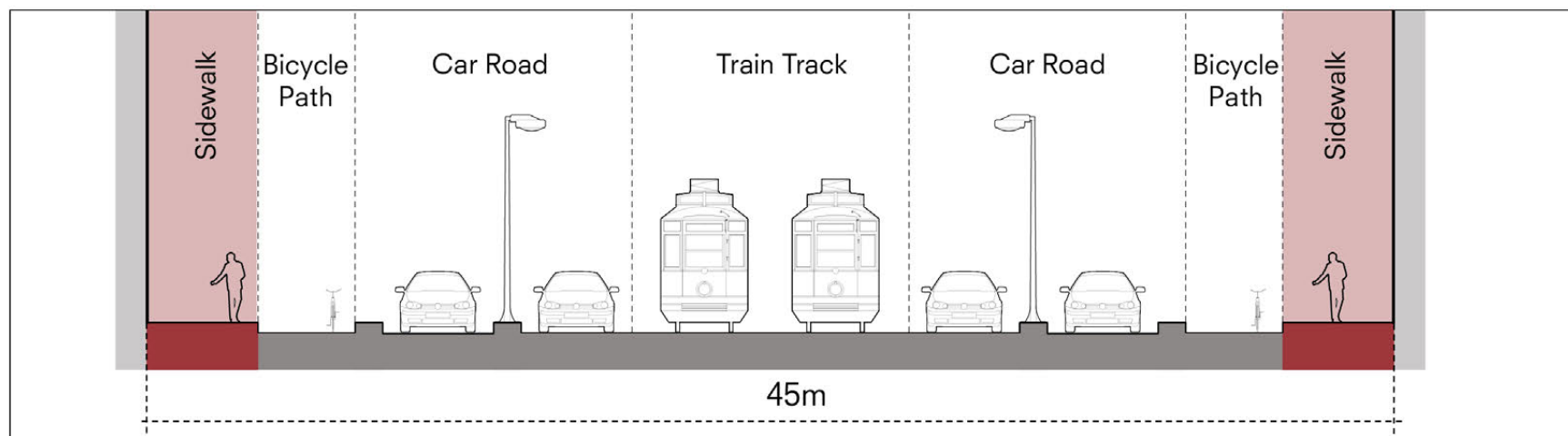
Street of City Level

26.1%



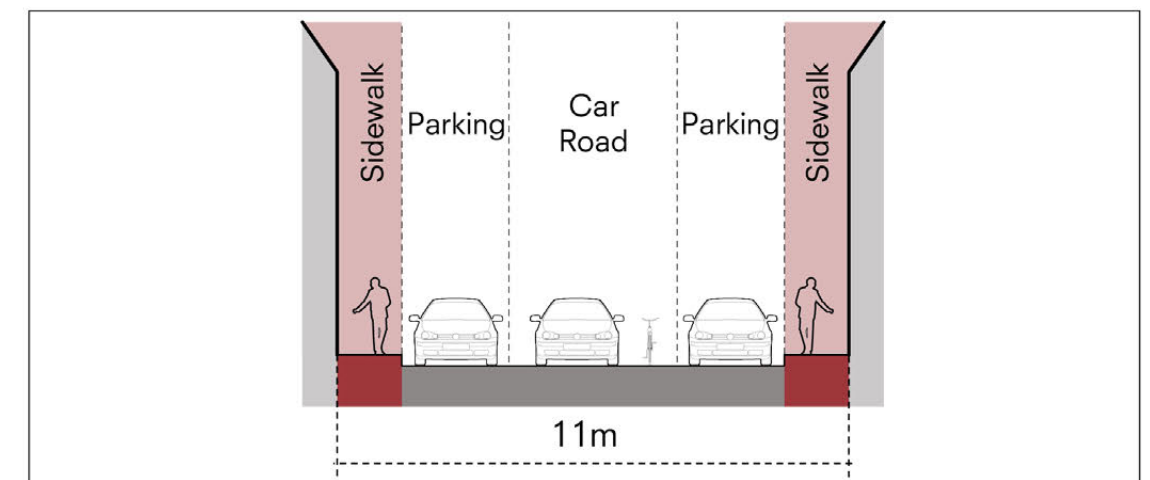
Street of Neighbourhood Level

18.1%



Street of District Level

24.3%



Street of Community Level

Disconnection

Pour Urban Life



Street Culture Festival in Rotterdam Central



Commercial Street in Feijenpoort

Disconnection

Pour Urban Life



Departure Point

Tedious Urban Life on Street

Destination

Problem Statement

Disconnection of the Feijenpoort

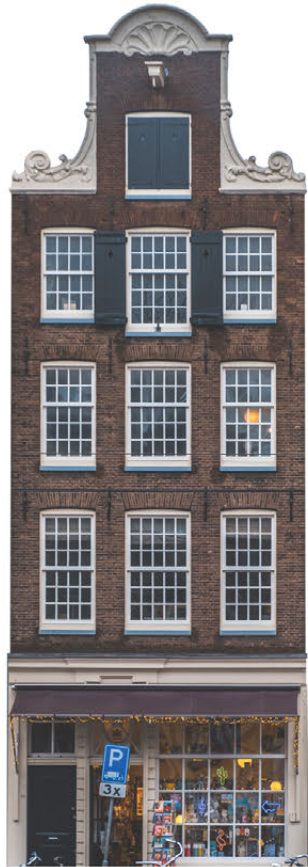


Street

Streets --- a metropolitan thoroughfare, an arena where strangers encounter on another, come face to face with the size and heterogeneity of urban life.

- Jukes, P. *A Shout in the Street*

Street



Area 1

**Street connects urban areas by
Transportation and Social Activities**

Area 2

Design Project

MOBILITY HUB

+

STREET

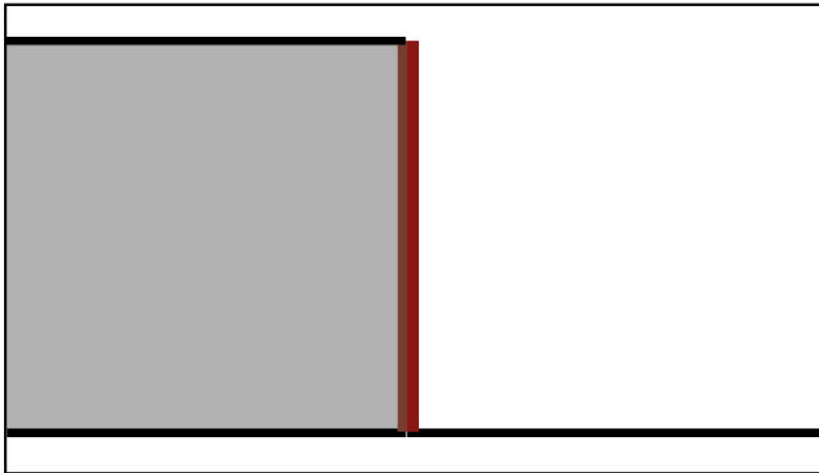


∞NNECT
THE FEIJENPOORT

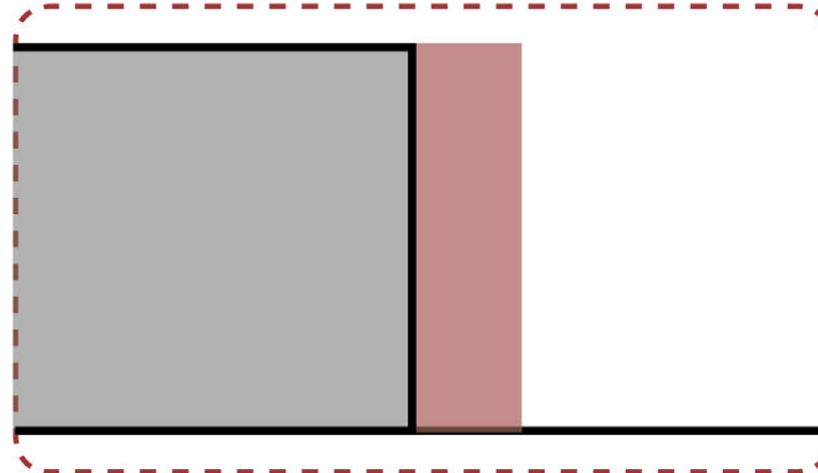
Research Question

How can the **MOBILITY HUB** facilitate the east-west **CONNECTION** in Feijepoort area on neighbourhood level by using the idea of **STREET?**

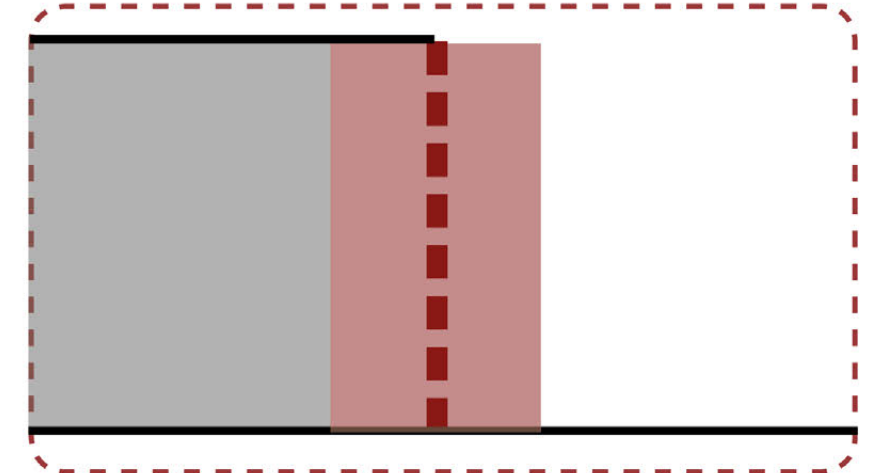
Boundary of Street



Solid Boundary

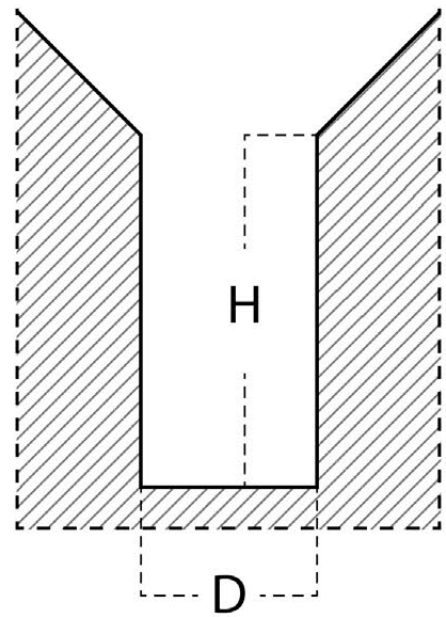


Soft Boundary

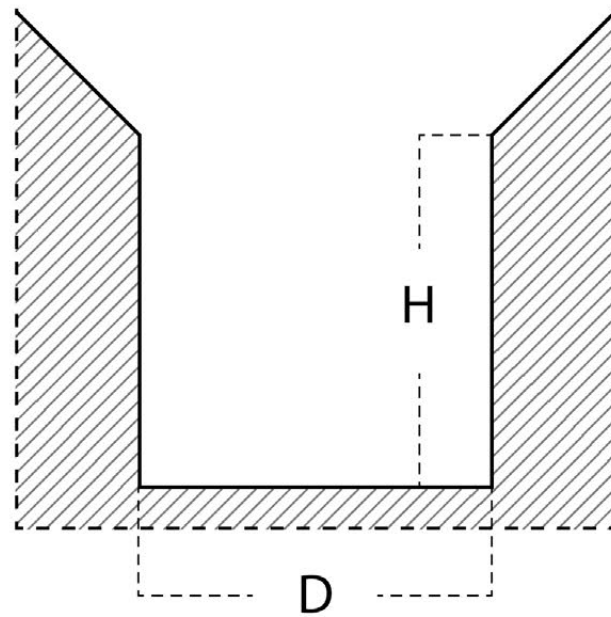


Blurry Boundary

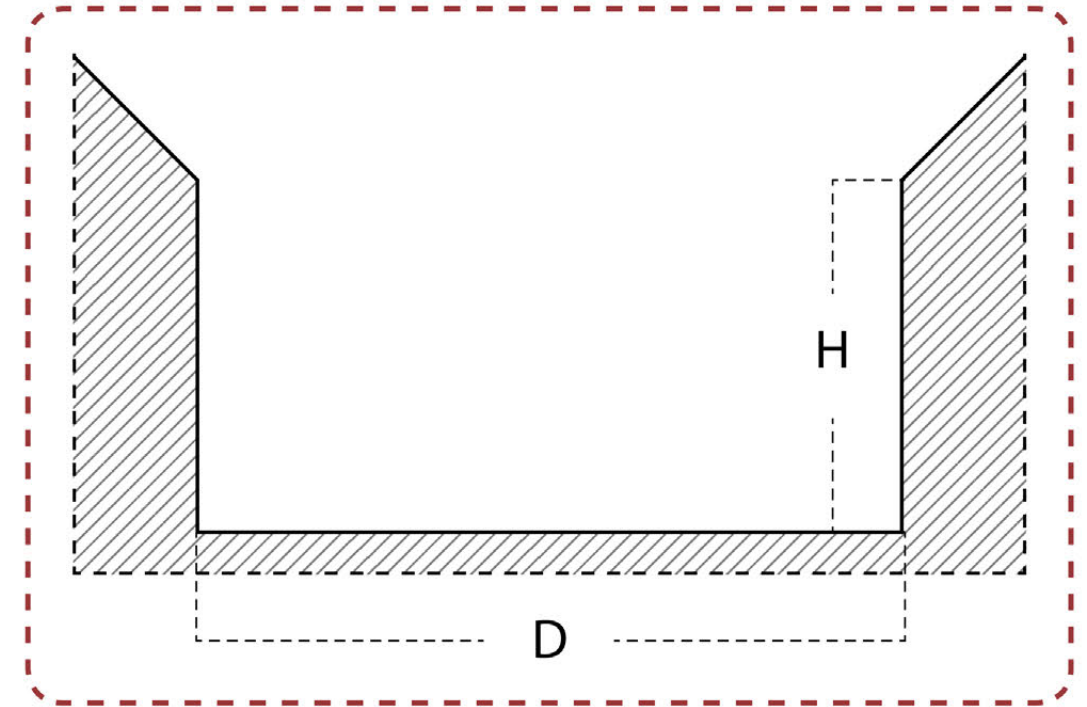
Proportion of Street



Narrow & Intimate (D/H=0.5)

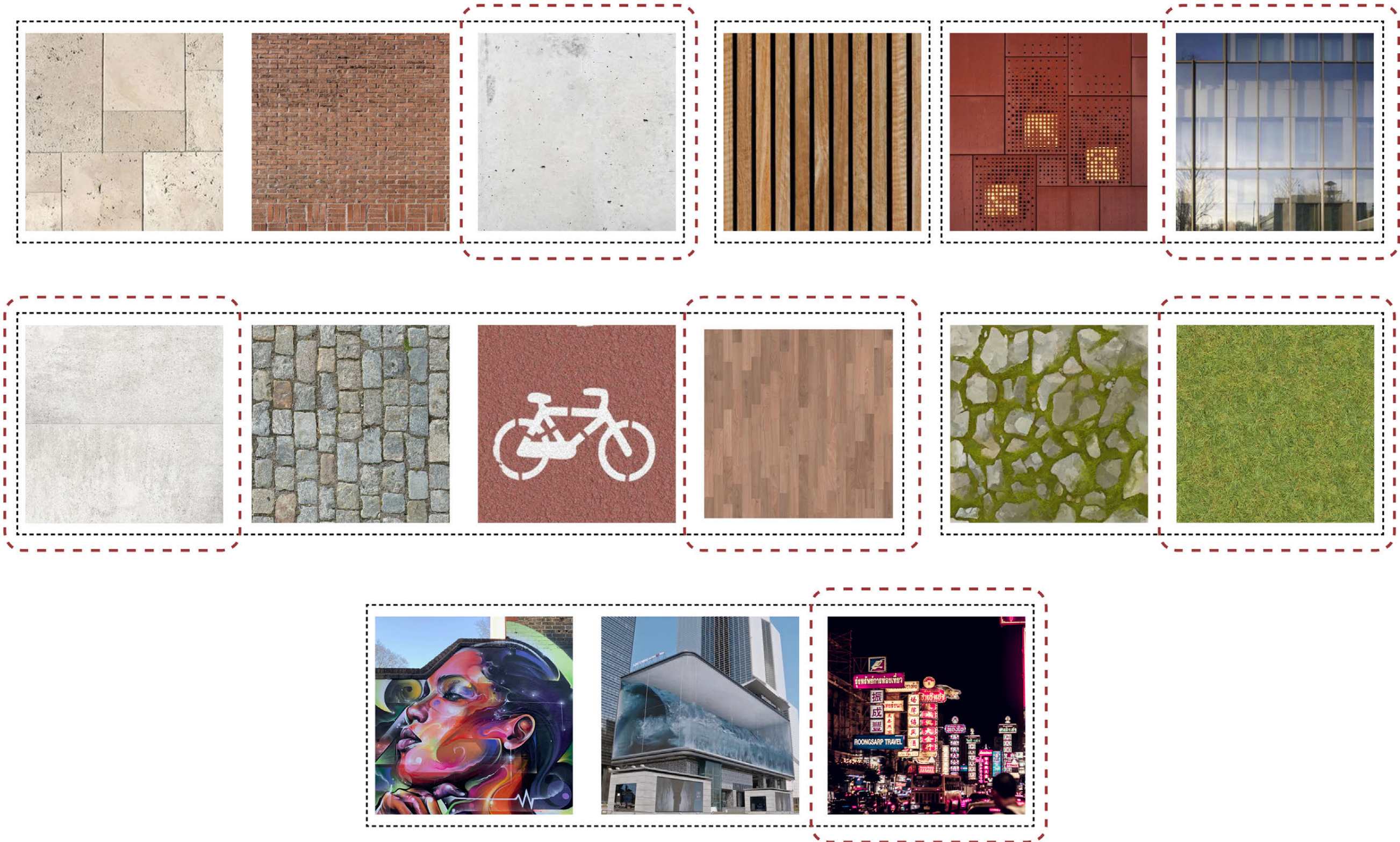


Median (D/H=1)



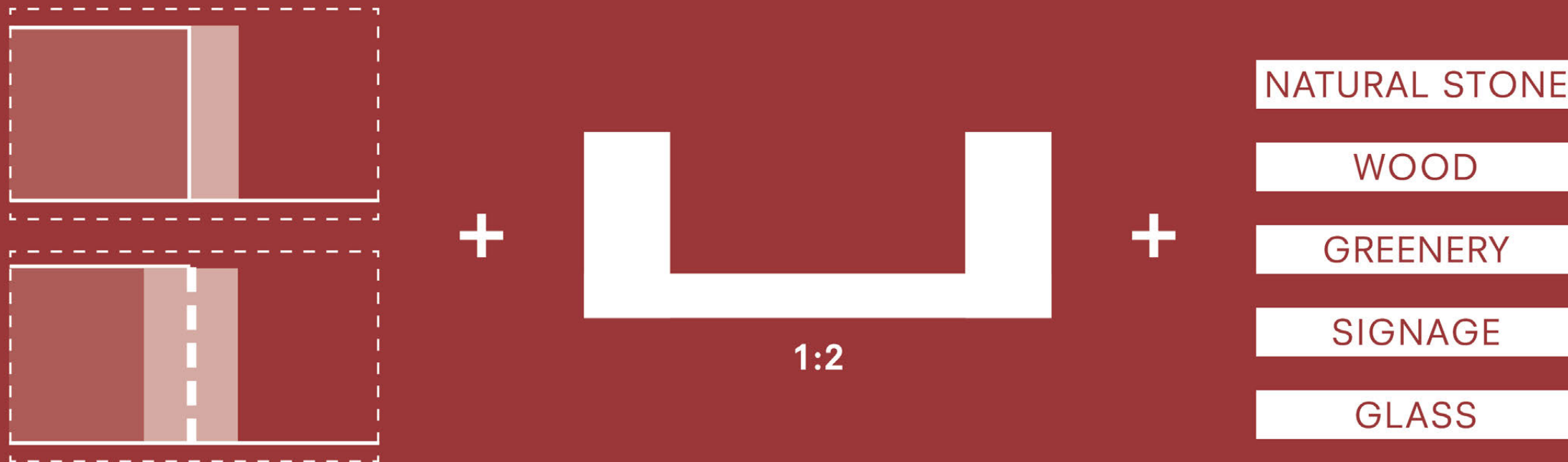
Open up & Public (D/H=2)

Material of Street



Conclusion 1

Design the **STREET(void)** as **ARCHITECTURE(solid)**





Research

Activities on Street

Street as the Dining Hall

Activities on Street

Street as the Chat Room

Activities on Street

Street as the Dance Hall

Activities on Street

Street as the Performance Stage

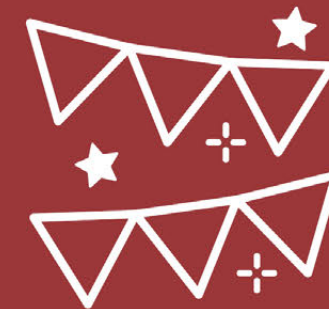


Activities on Street

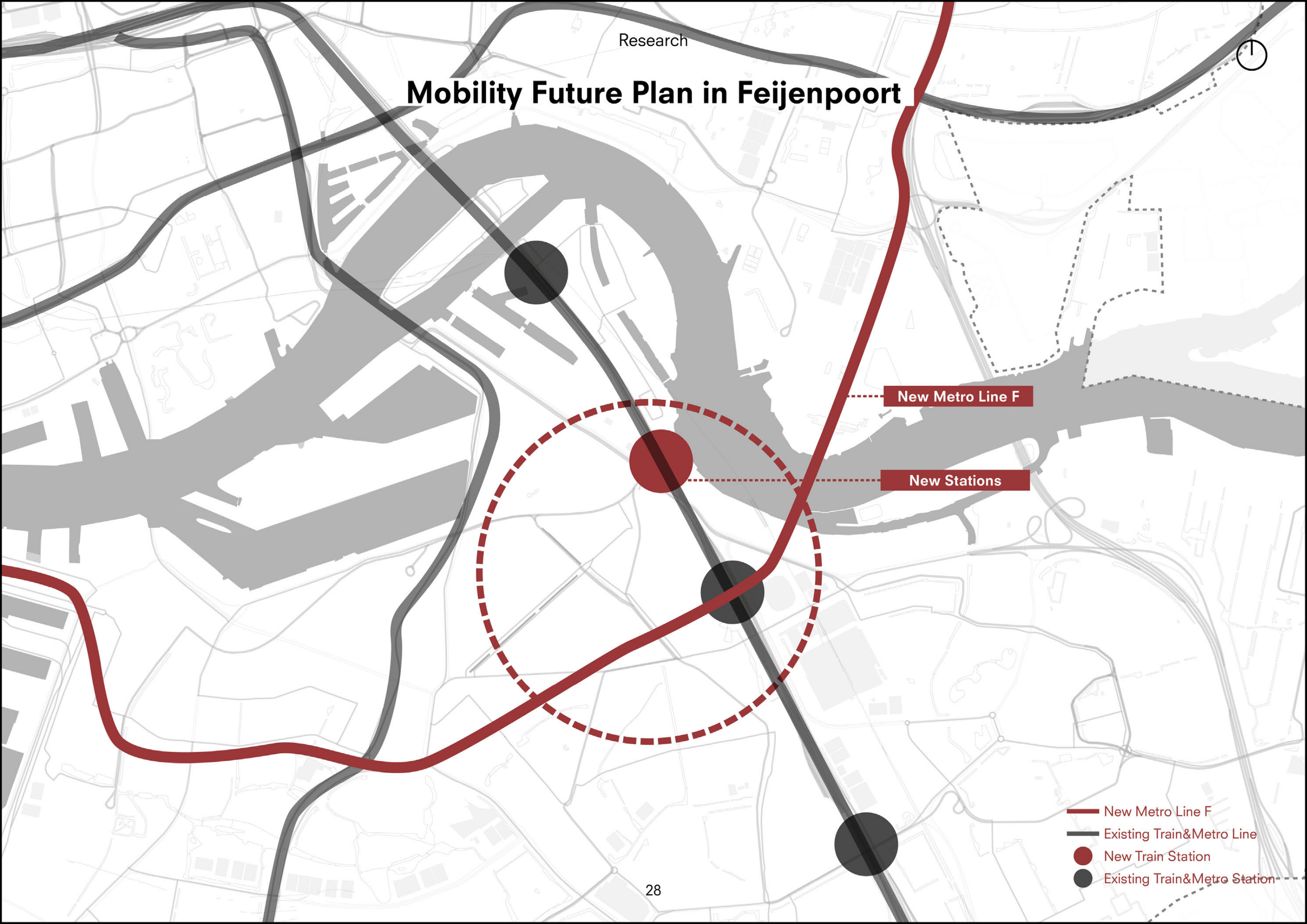
Street as the Celebration Hall

Conclusion 2

Design the **STREET** as
a **SEQUENCE** of **URBAN PROGRAMS**



Mobility Future Plan in Feijenpoort



New Metro Line F

New Stations

- New Metro Line F
- Existing Train&Metro Line
- New Train Station
- Existing Train&Metro Station



Future Plans in Feijenpoort




Project of Parkstad

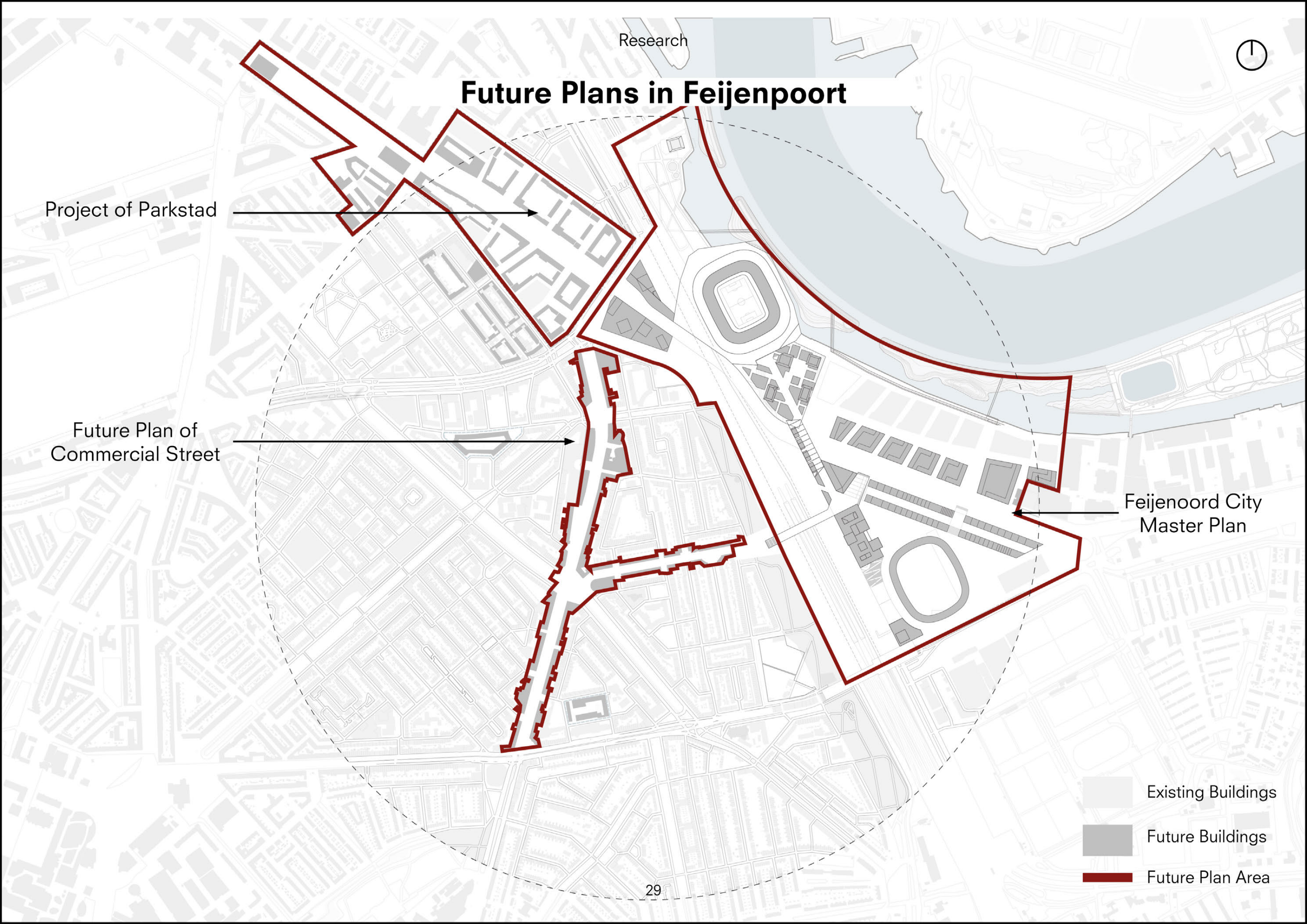


Future Plan of Commercial Street



Feijenoord City Master Plan

-  Existing Buildings
-  Future Buildings
-  Future Plan Area









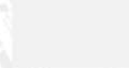


Research

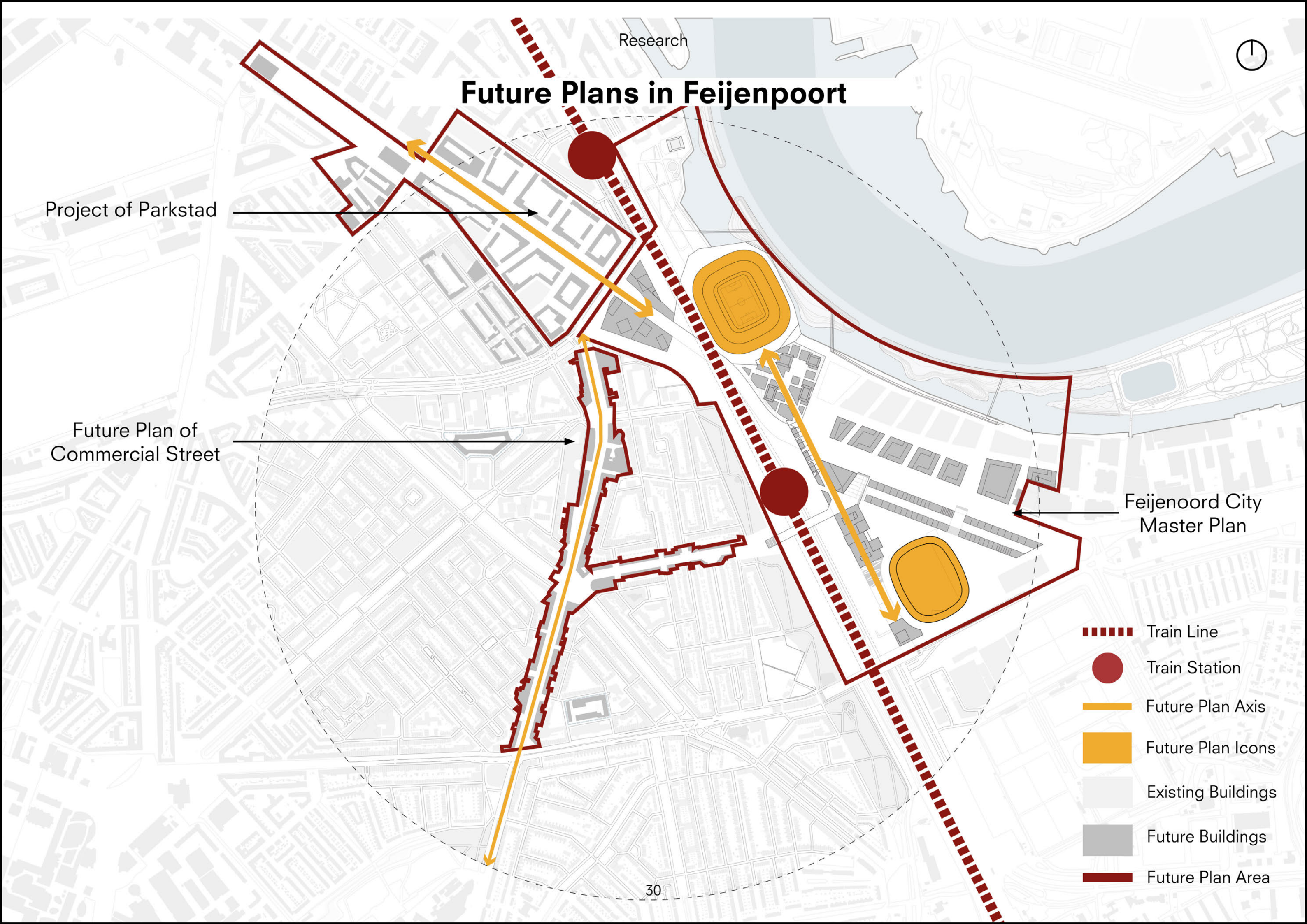
Future Plans in Feijenpoort

Project of Parkstad

Future Plan of Commercial Street

Feijenoord City Master Plan

-  Train Line
-  Train Station
-  Future Plan Axis
-  Future Plan Icons
-  Existing Buildings
-  Future Buildings
-  Future Plan Area



Conclusion 3

The **FUTURE PLANS**
do **NOT COHERE** in Feijenpoort



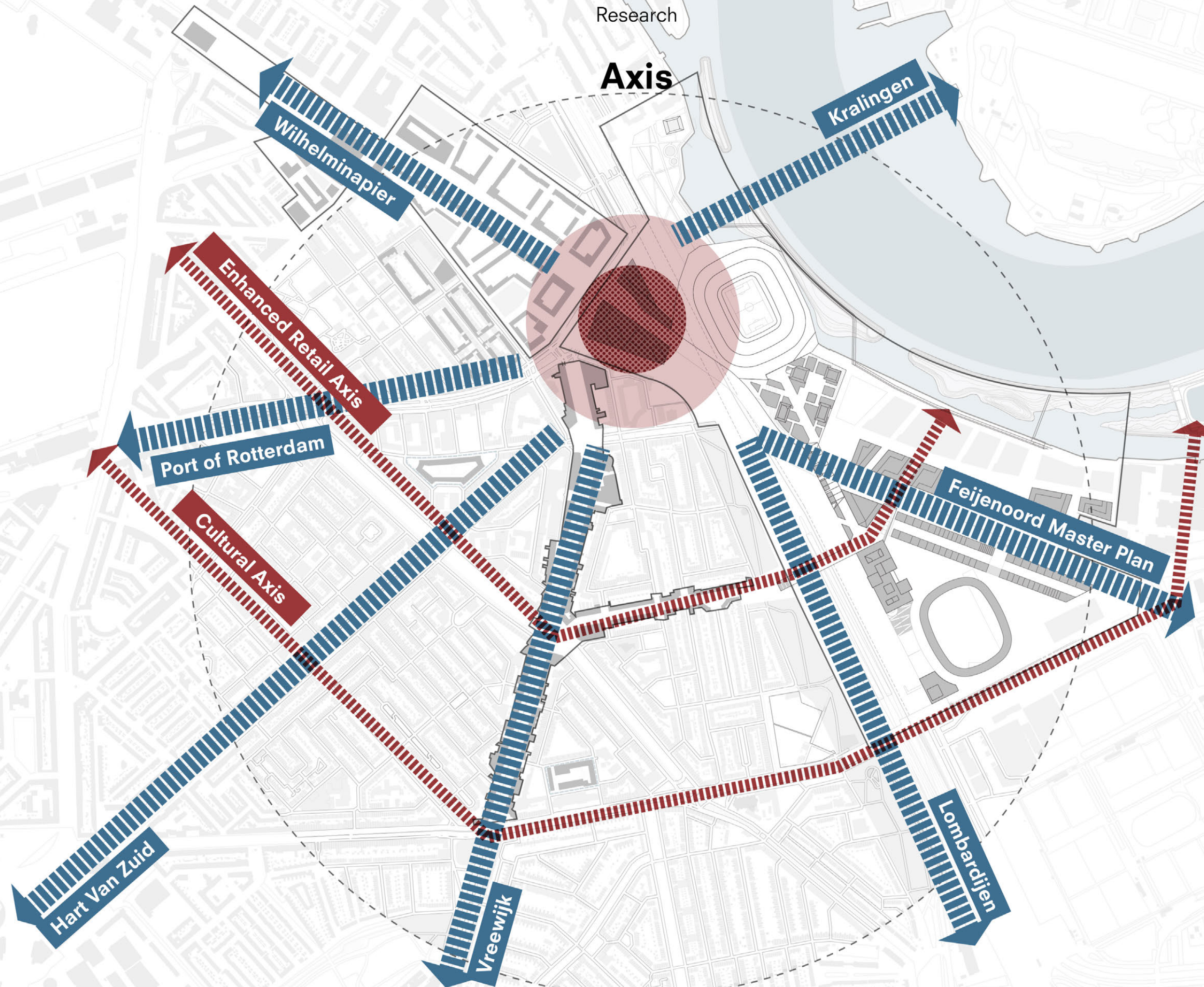
Group Strategy - Convergent Zone



Research

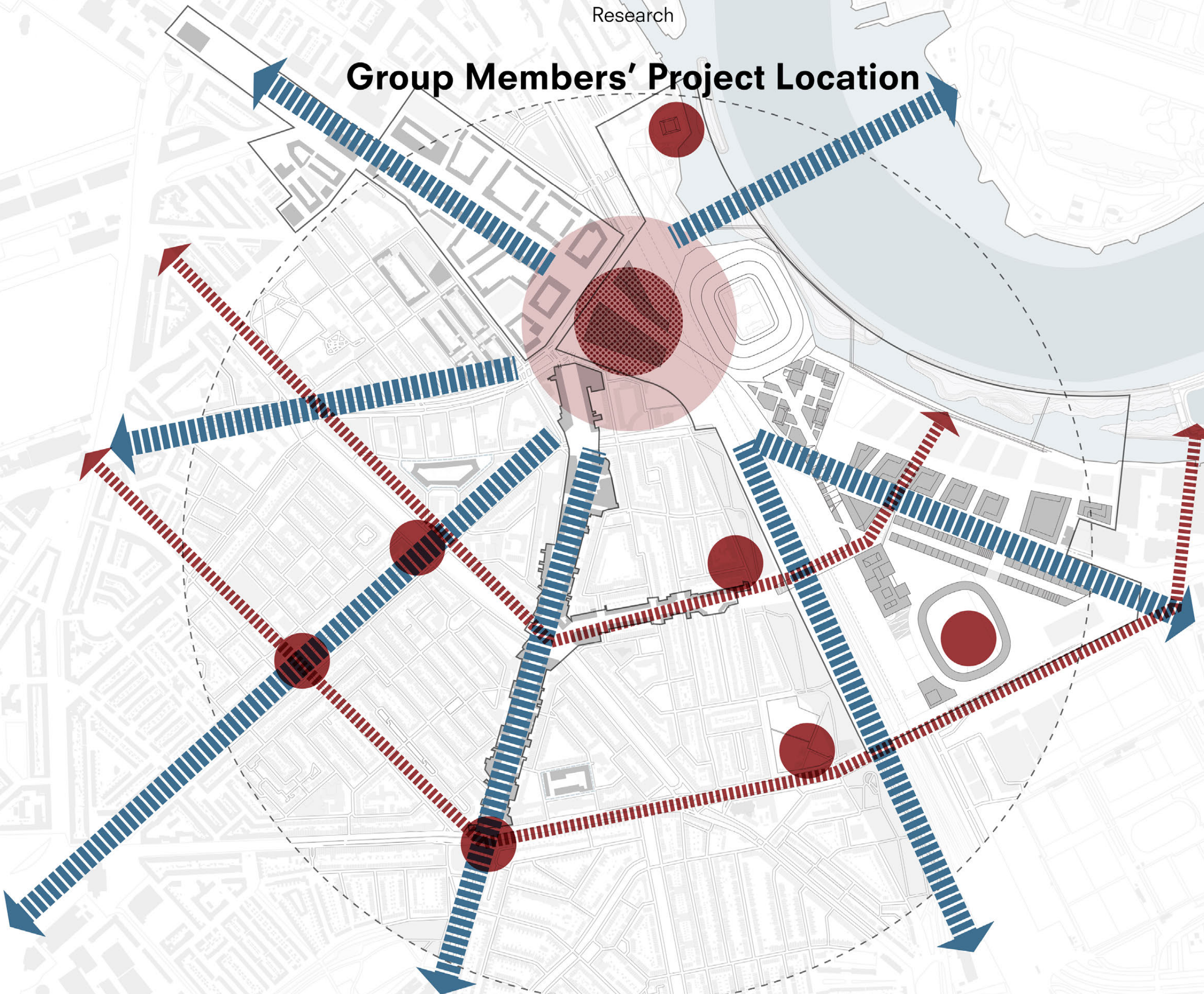


Axis



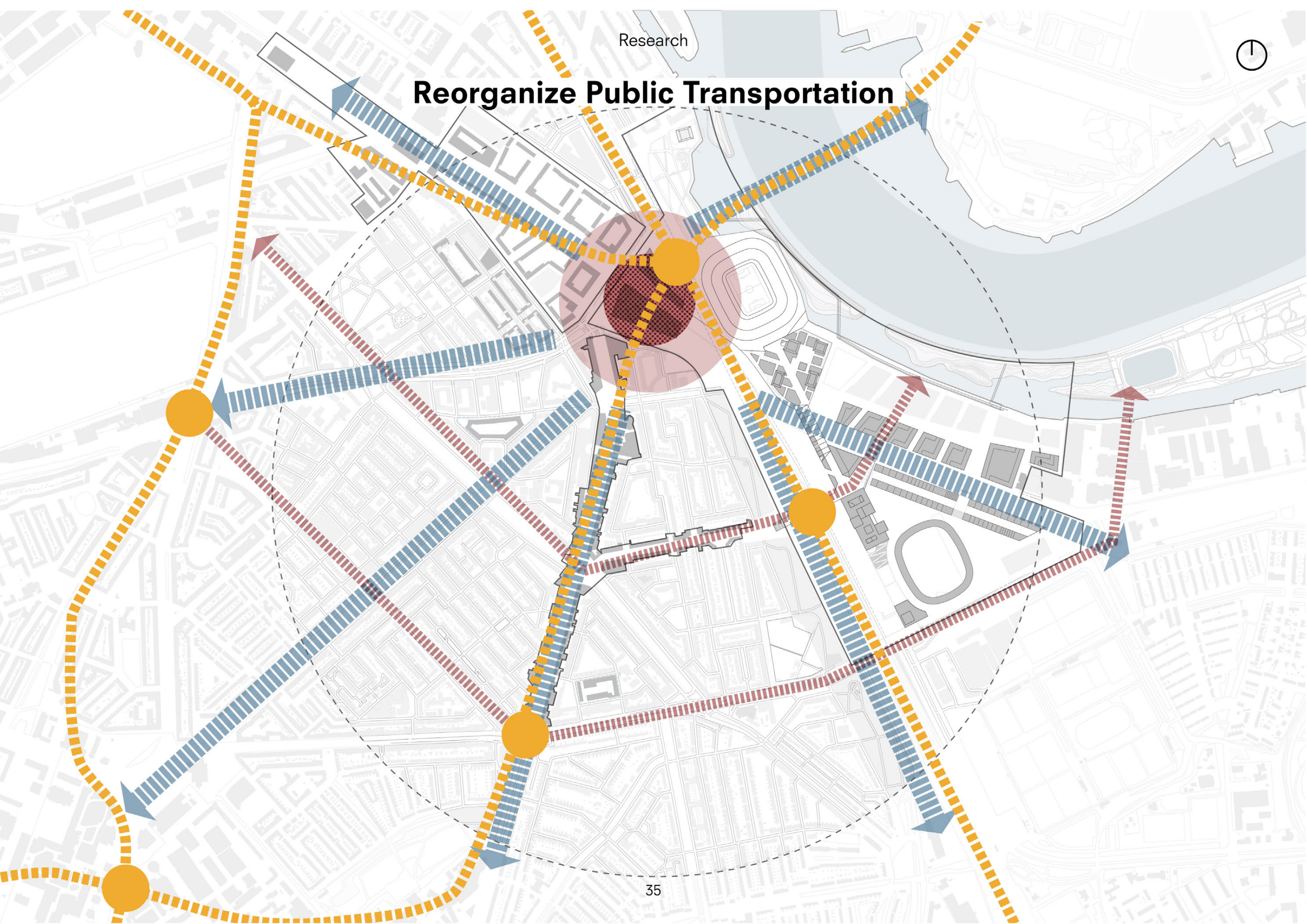


Group Members' Project Location





Reorganize Public Transportation





Connect the Green

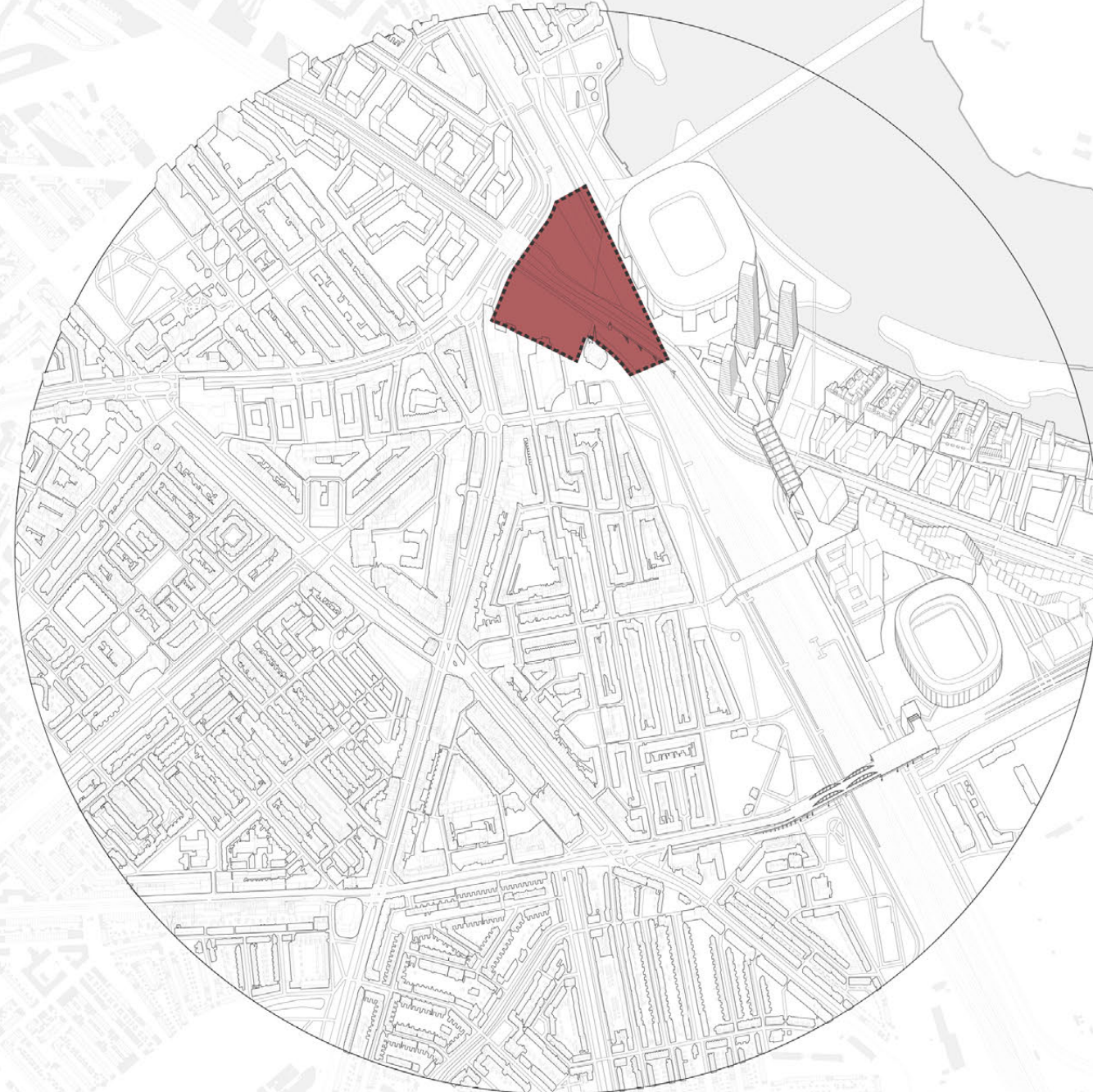


Research

Strategy

Locate the **MOBILITY HUB** in
the **CONVERGENT ZONE**

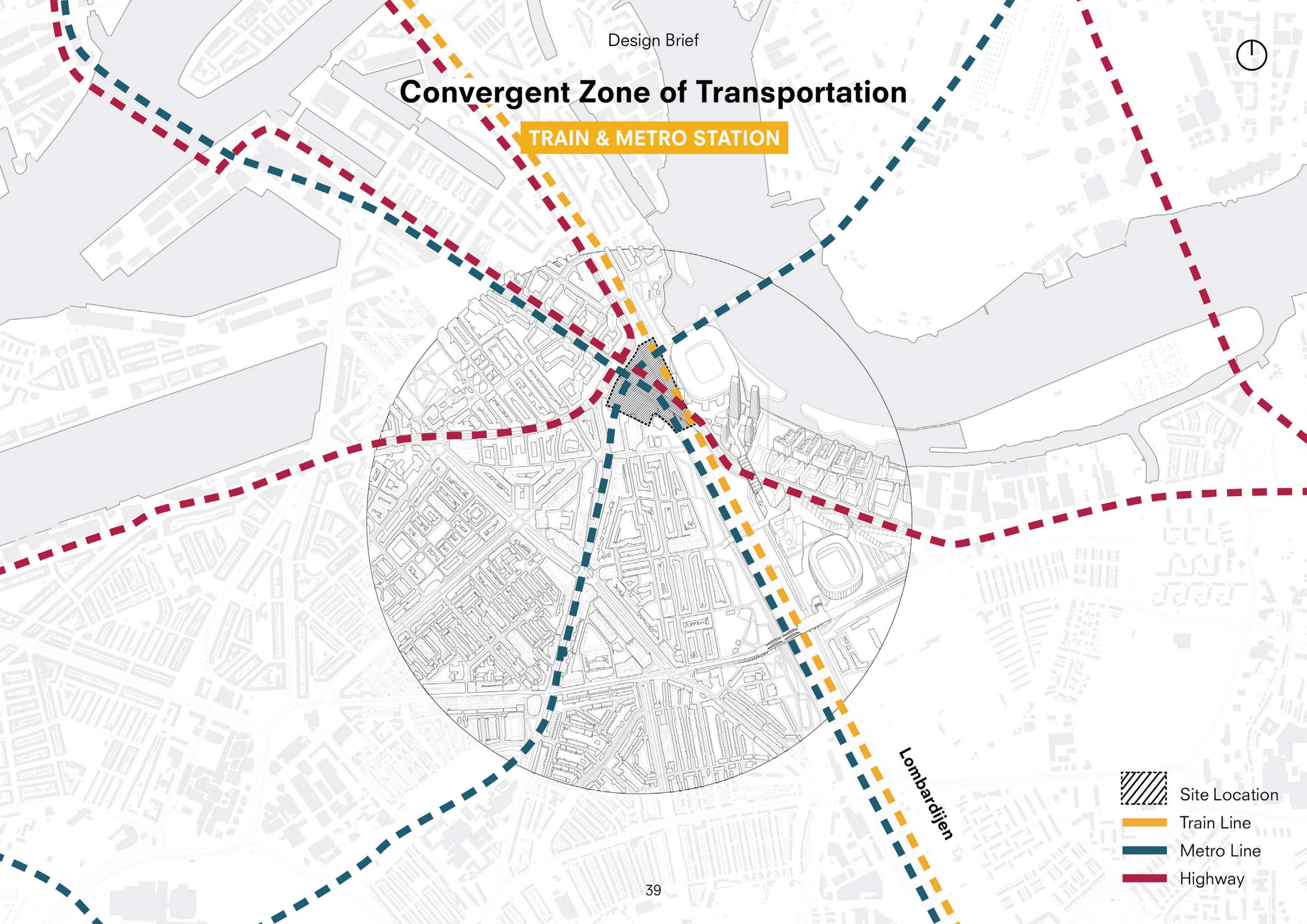
Site Location





Convergent Zone of Transportation

TRAIN & METRO STATION



-  Site Location
-  Train Line
-  Metro Line
-  Highway

Lombardijen



Convergent Zone of People & Event

EVENT STREET

People from
Parkstad

People from
Persoonshaven

**Feyenoord
Soccer Event**

People from
De Veranda

**People
from De Strip**

**Urban Life from
Beijerlandse laan**

**Urban Life from
Varkenoordse Park**



Site Location



Flow of Urban Life



Convergent Zone of Ecological Area

LANDSCAPE PARK



-  Viaduct
-  Site Location
-  Green Area
-  Green Axis

Urban Ambition - Connect the Feijenpoort



Program

Landscape Park

Connect the Greenery

City Event Street

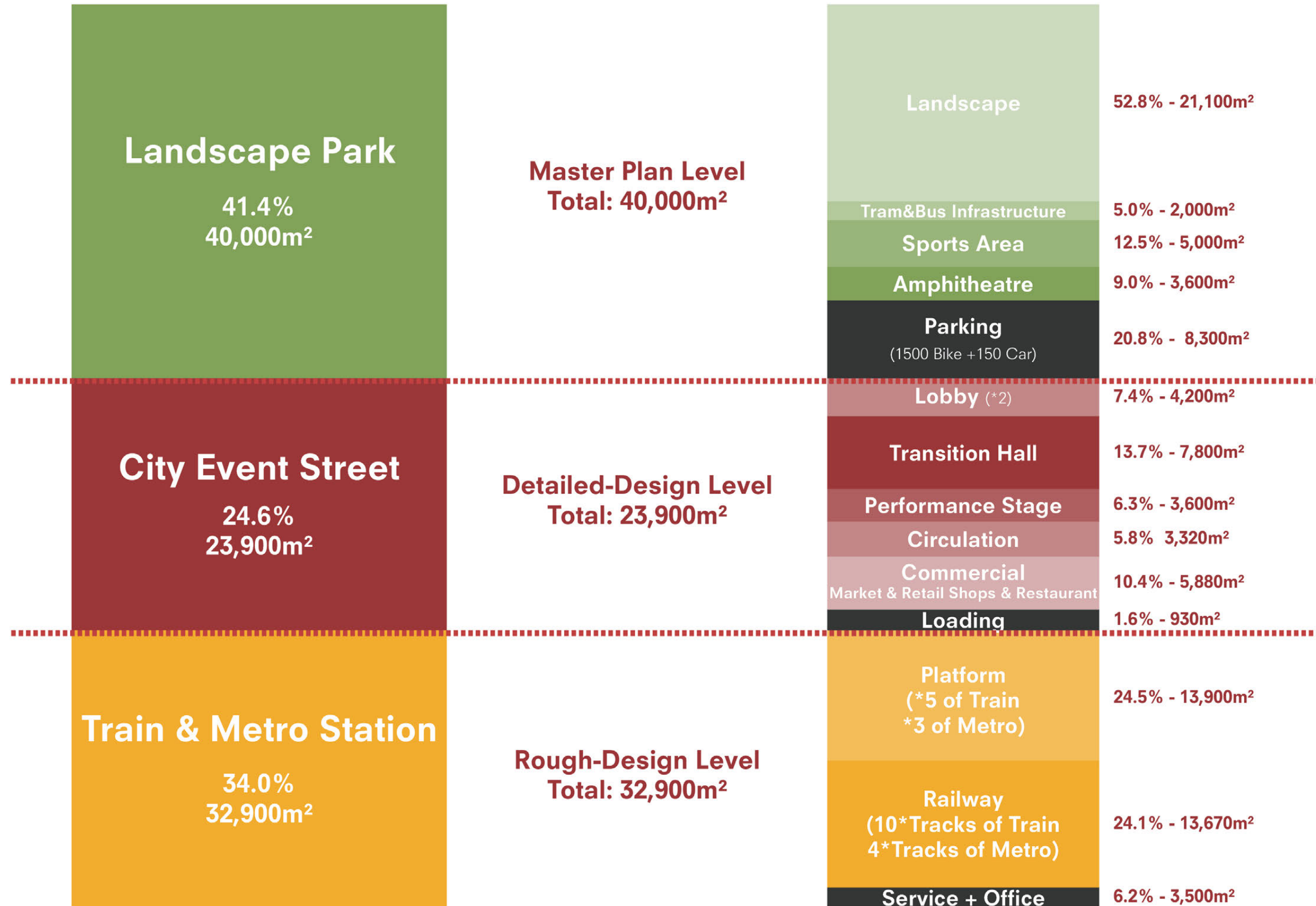
Connect the west and east part of Feijenpoort

Train & Metro Station

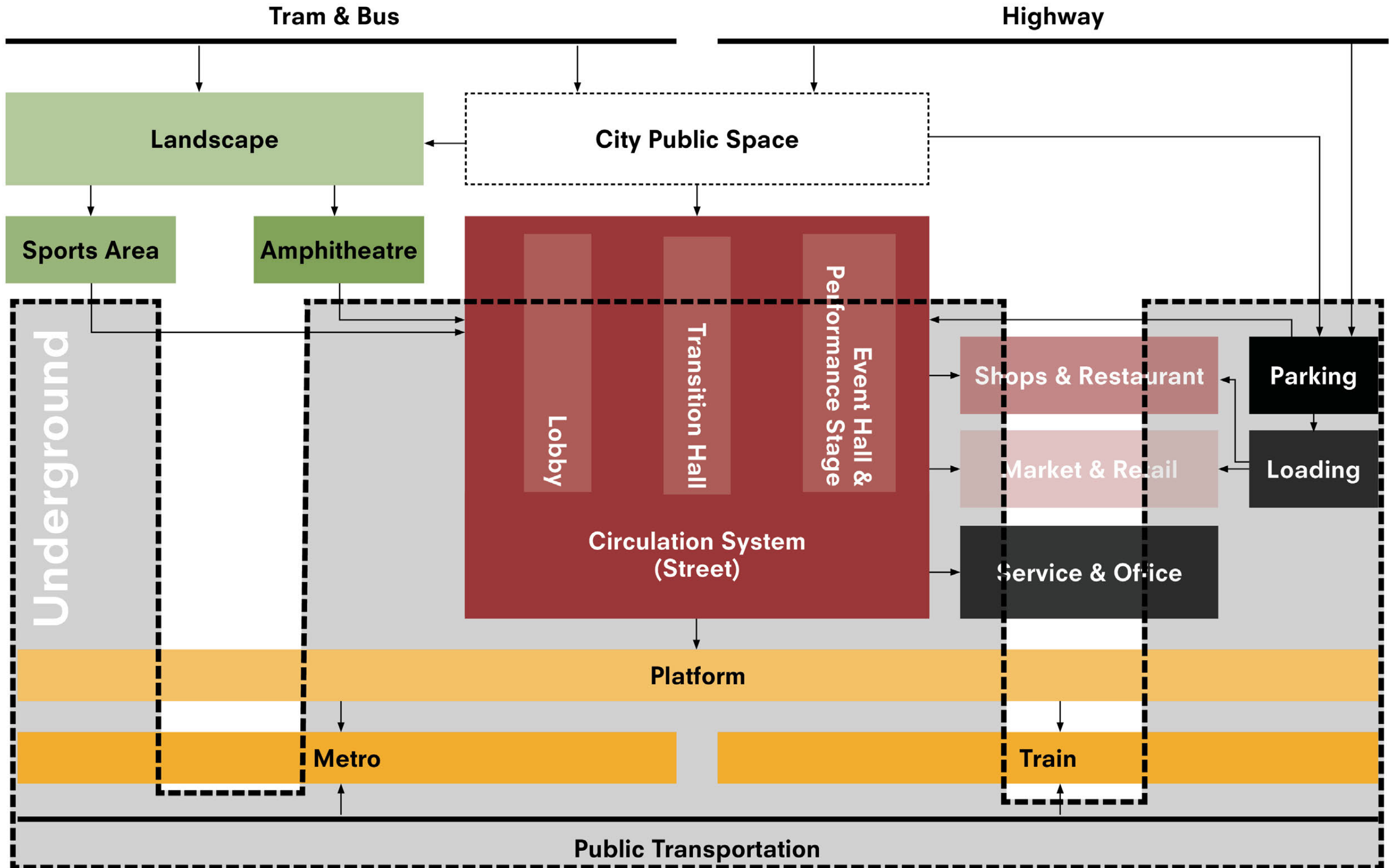
Connect the Feijenpoort with Rotterdam



Program



Program



Jungle in the Program

Landscape Park

Connect the Greenery

City Event Street

Connect the west and east part of Feijenpoort

Train & Metro Station

Connect the Feijenpoort with Rotterdam



Jungle in the Program

Landscape Park

Connect the Greenery

City Event Street

Connect the west and east part of Feijenpoort

Train & Metro Station

Connect the Feijenpoort with Rotterdam



Jungle in the Program

Landscape Park

Connect the Greenery

City Event Street

Connect the west and east part of Feijenpoort

Train & Metro Station

Connect the Feijenpoort with Rotterdam



Street - Commercial



Street - Performance



Street - Festival



Concept

Concept - Street



Street Section Typology

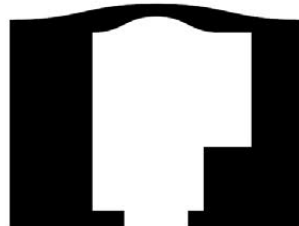
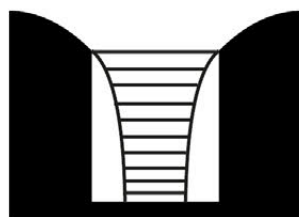
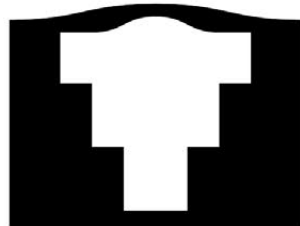
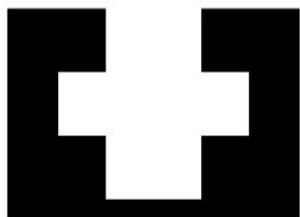
1:2



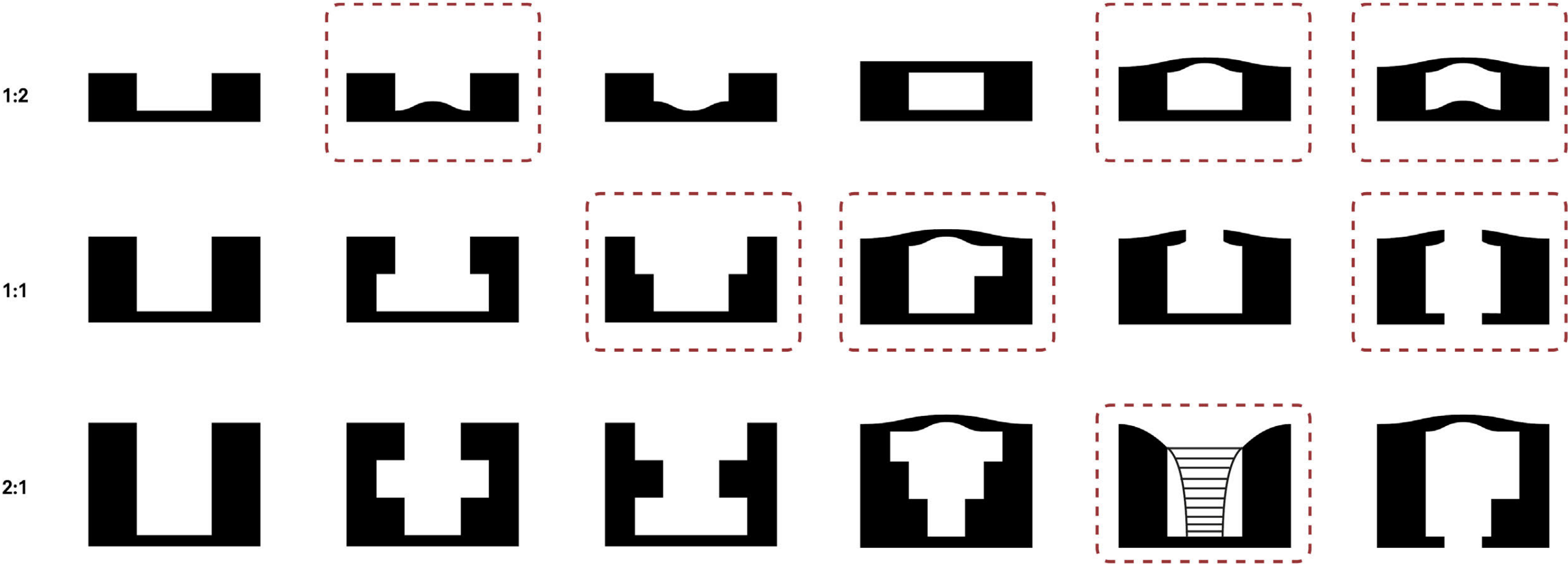
1:1



2:1



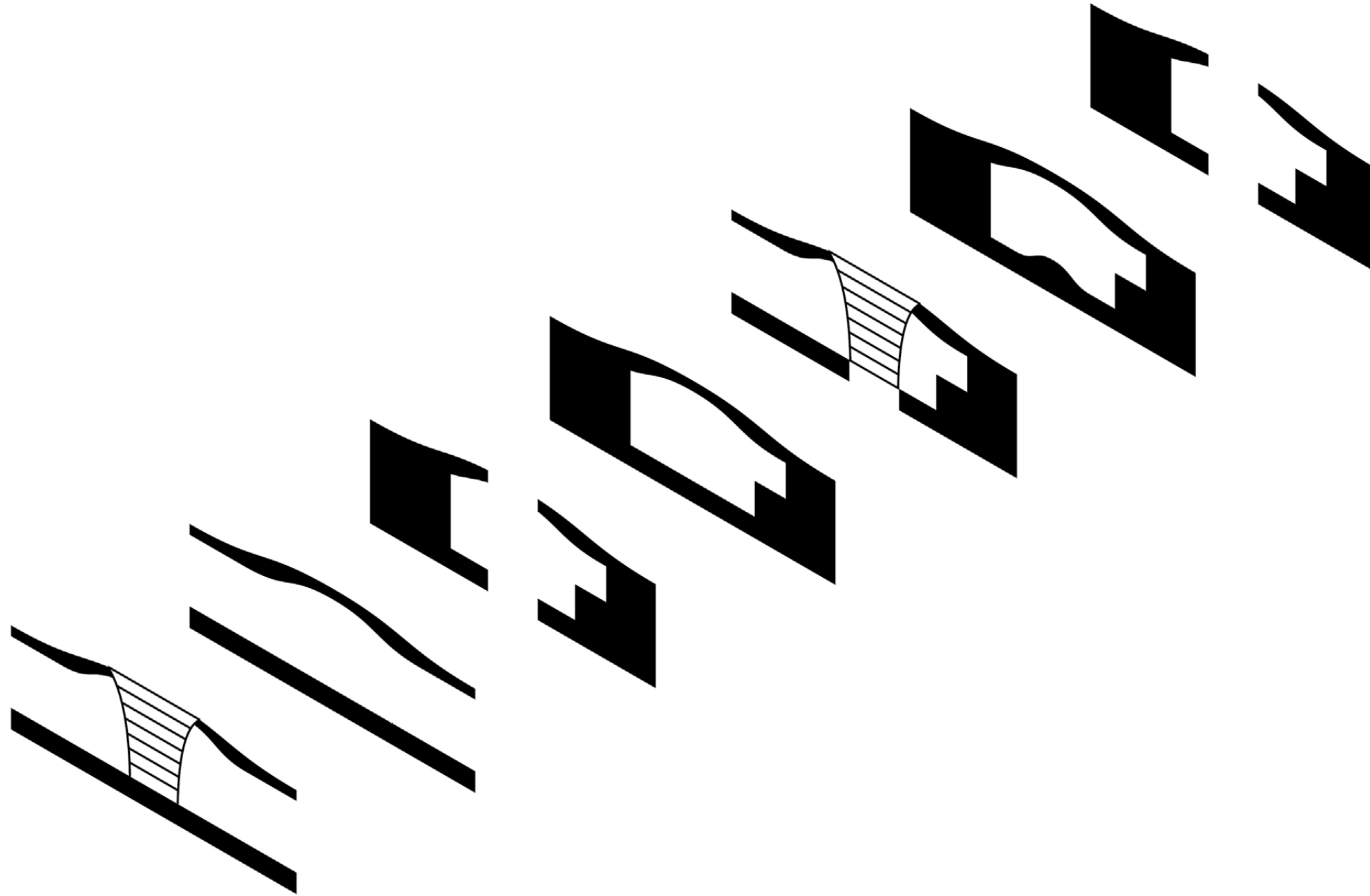
Street Section Typology



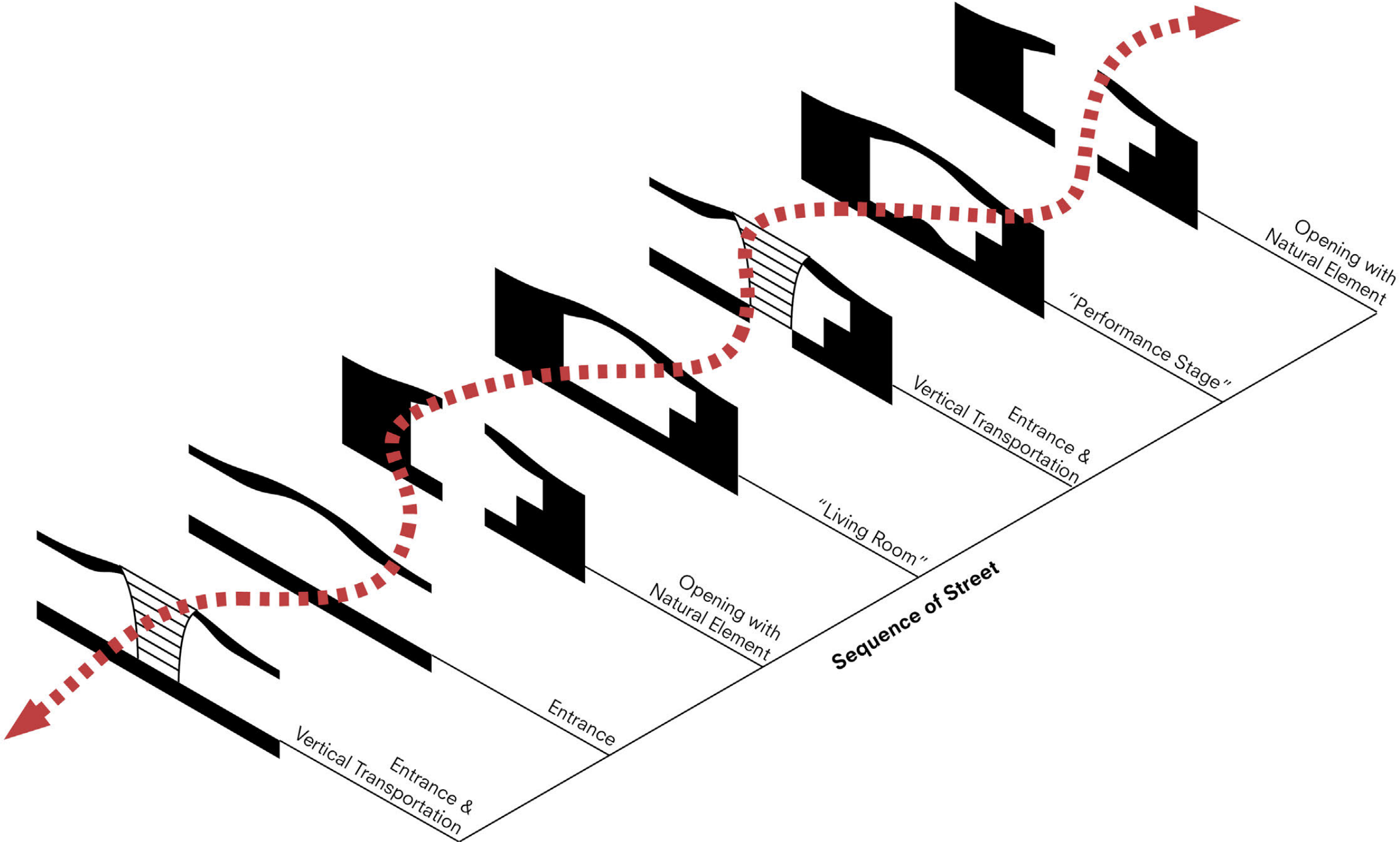
Street Sections



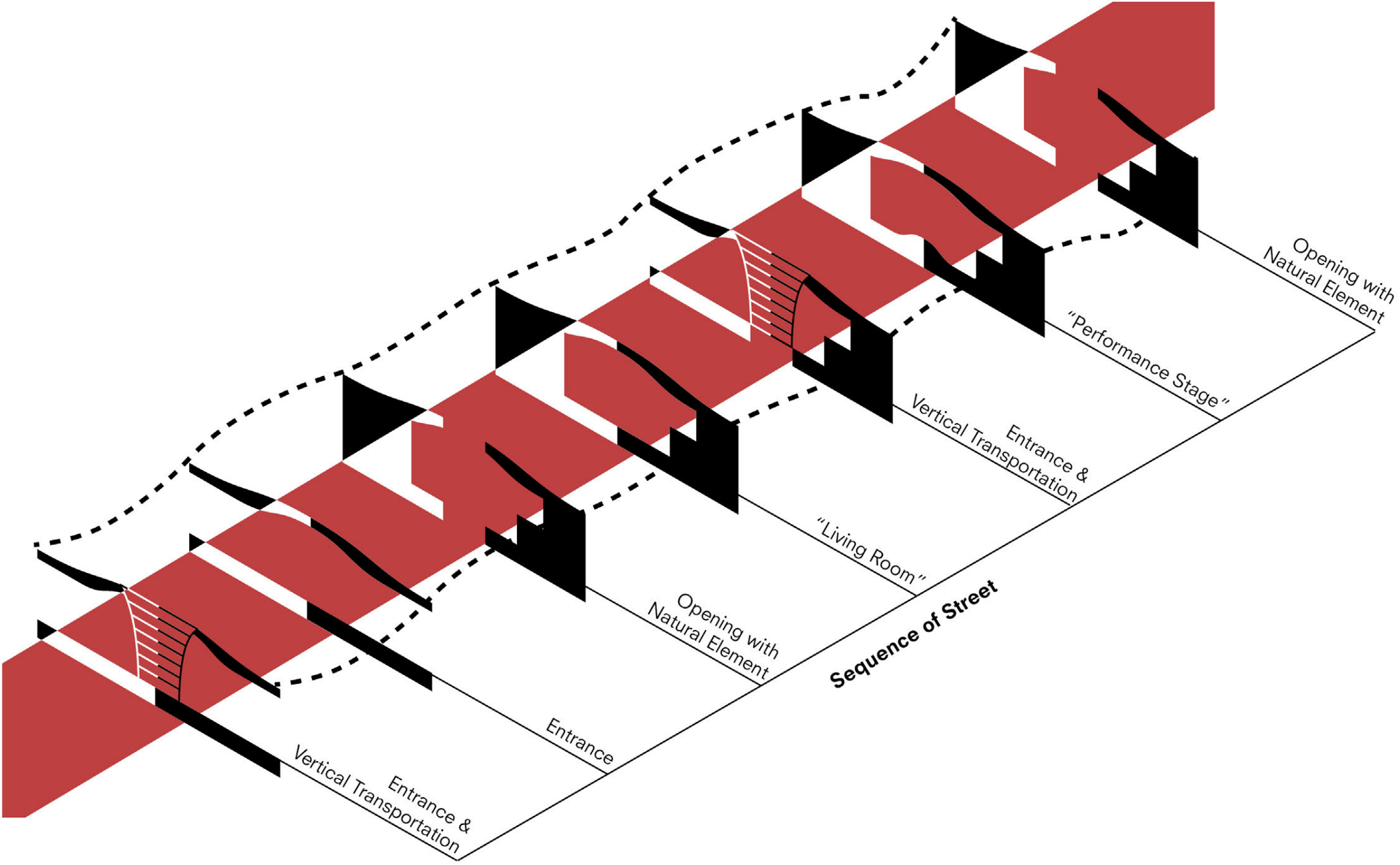
Street Sections



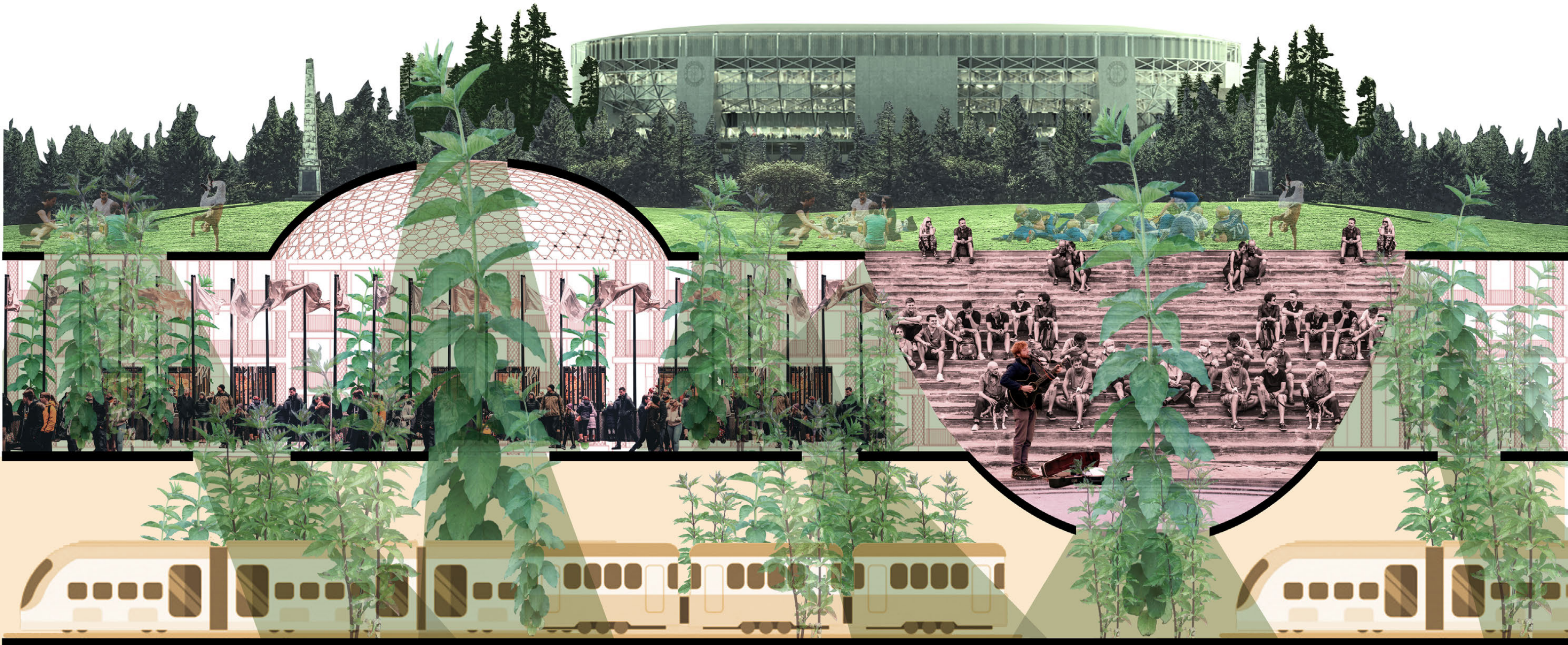
Sequence of Programs



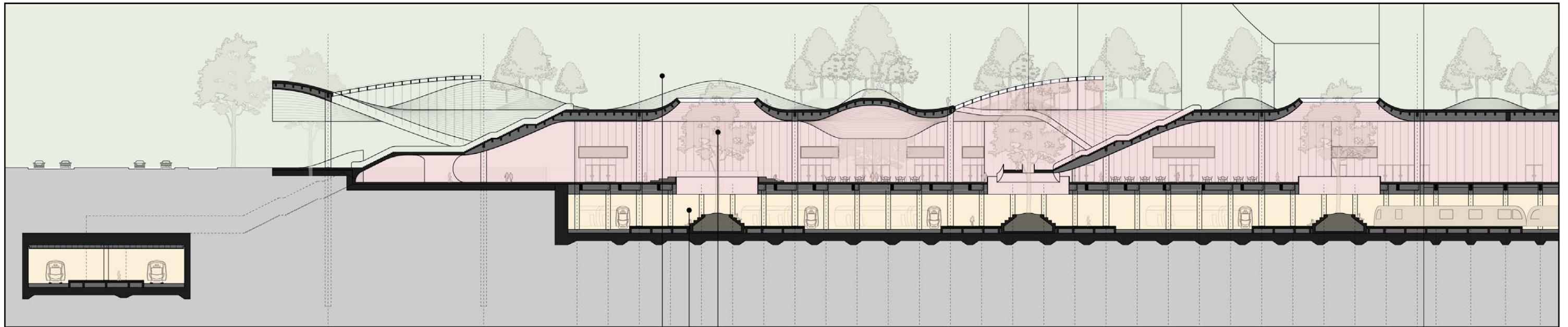
Sequence of Programs



Event Street connects all levels



Event Street connects all Programs



Landscape Park

Event Street

Train & Metro Station

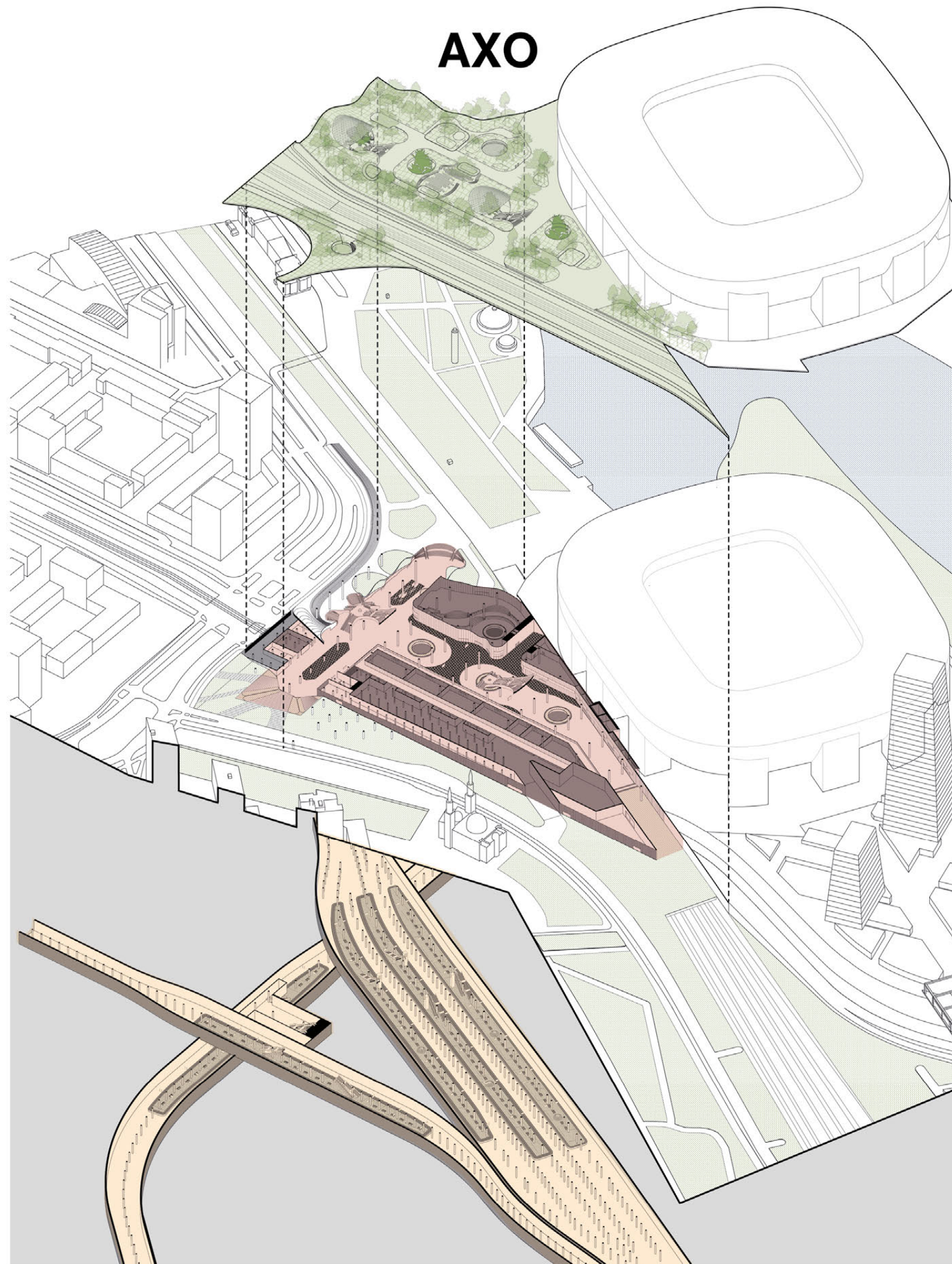
Design

AXO

Landscape Park

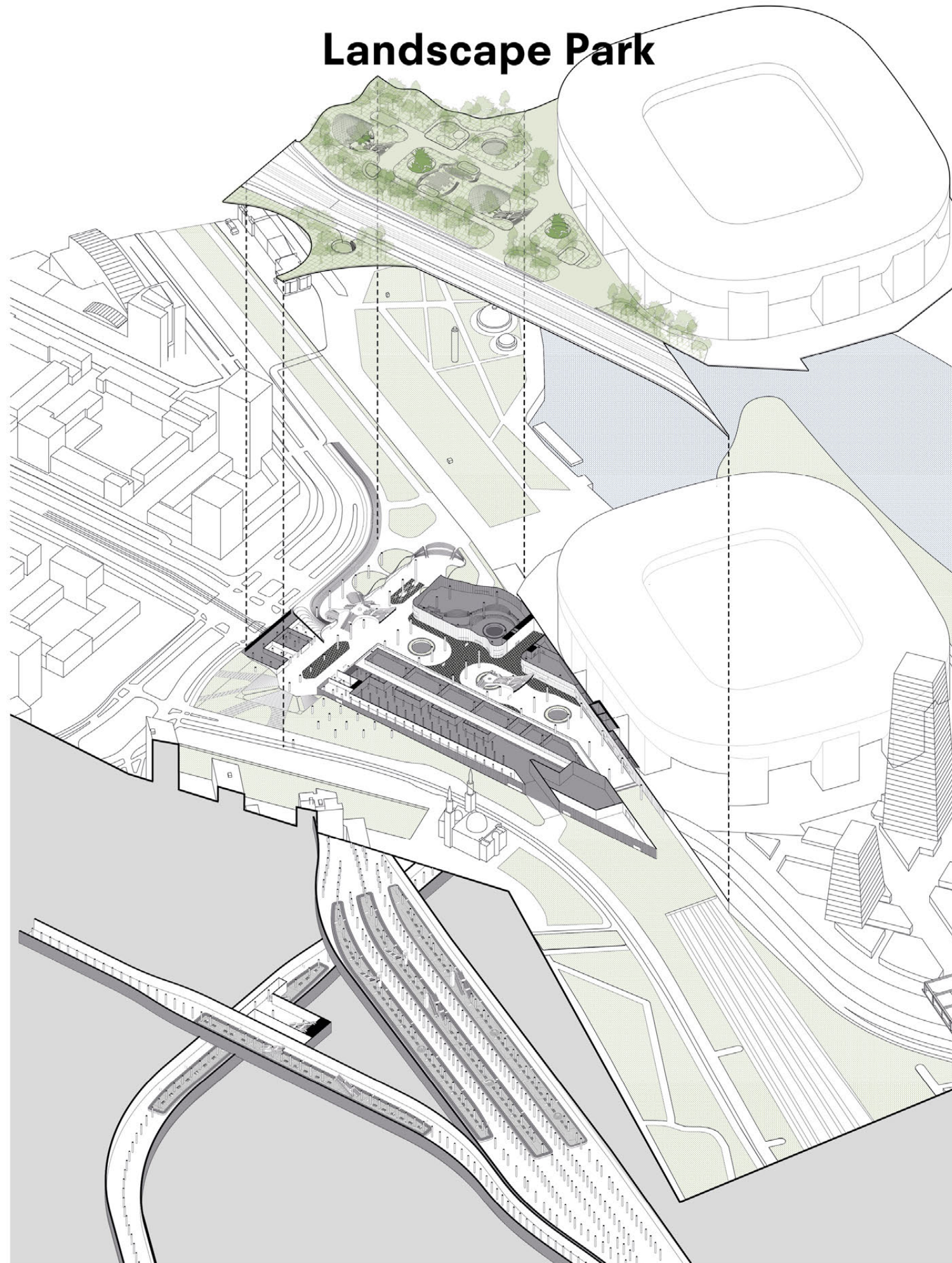
City Event Street

Train & Metro Station

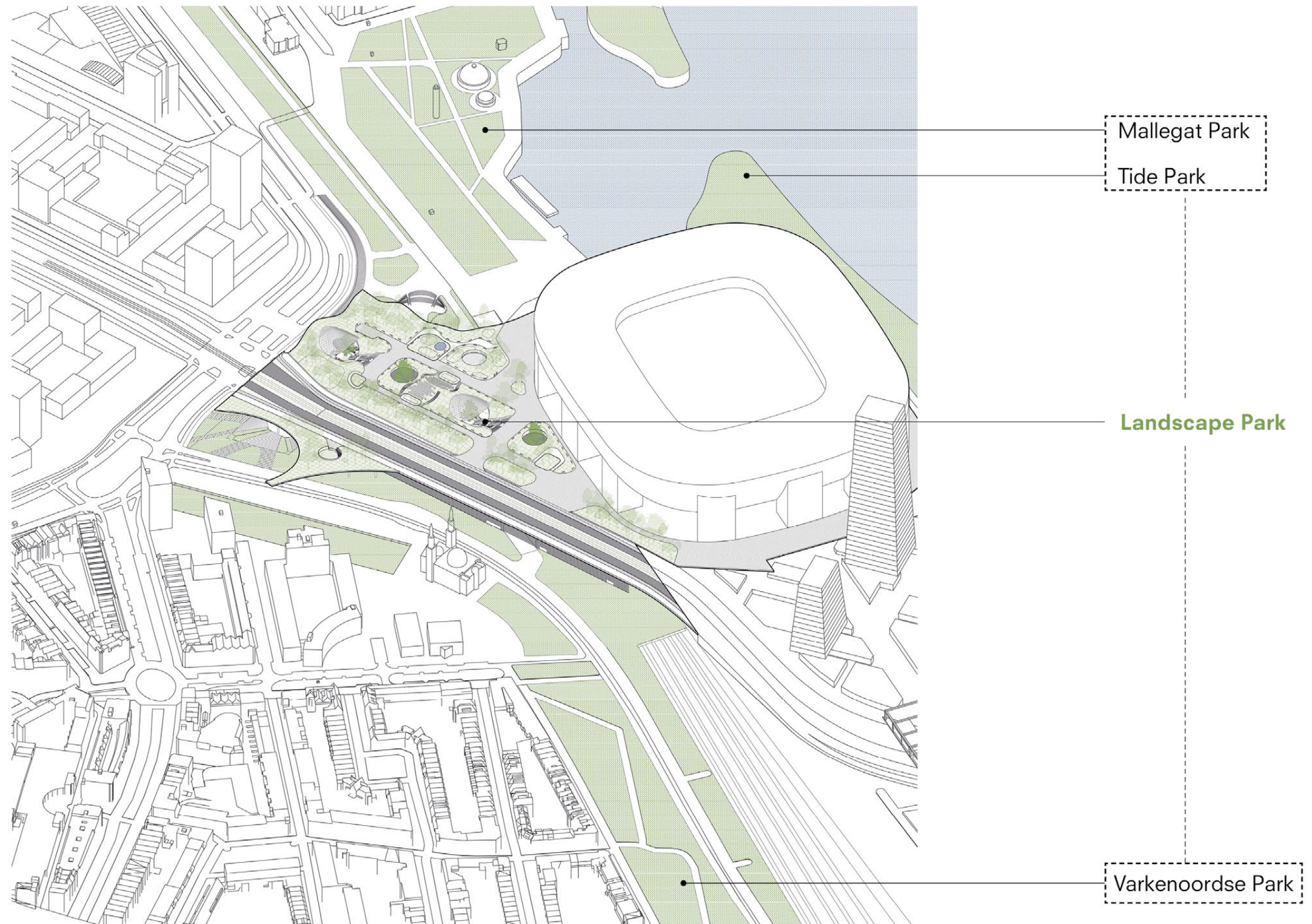


Landscape Park

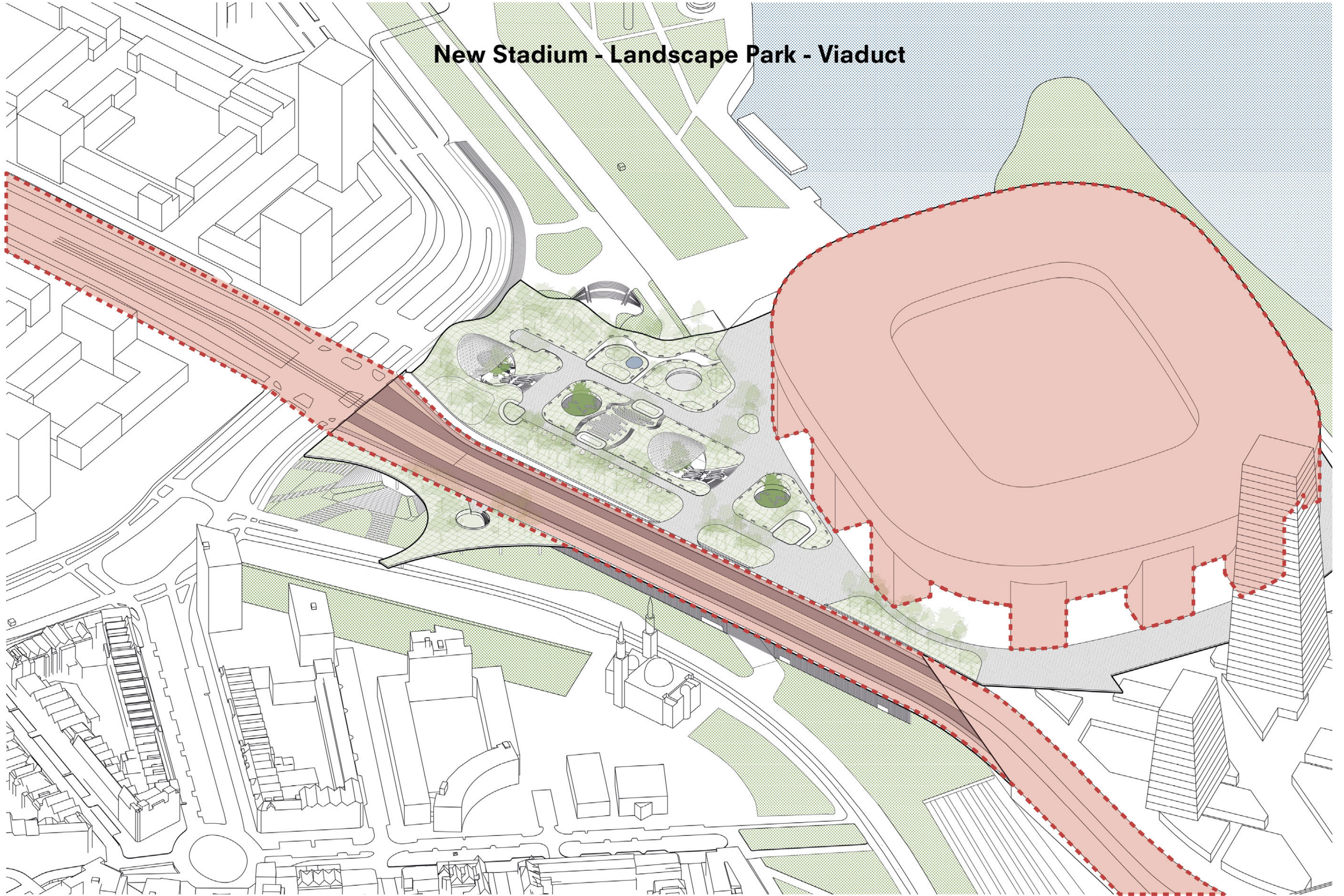
Landscape Park



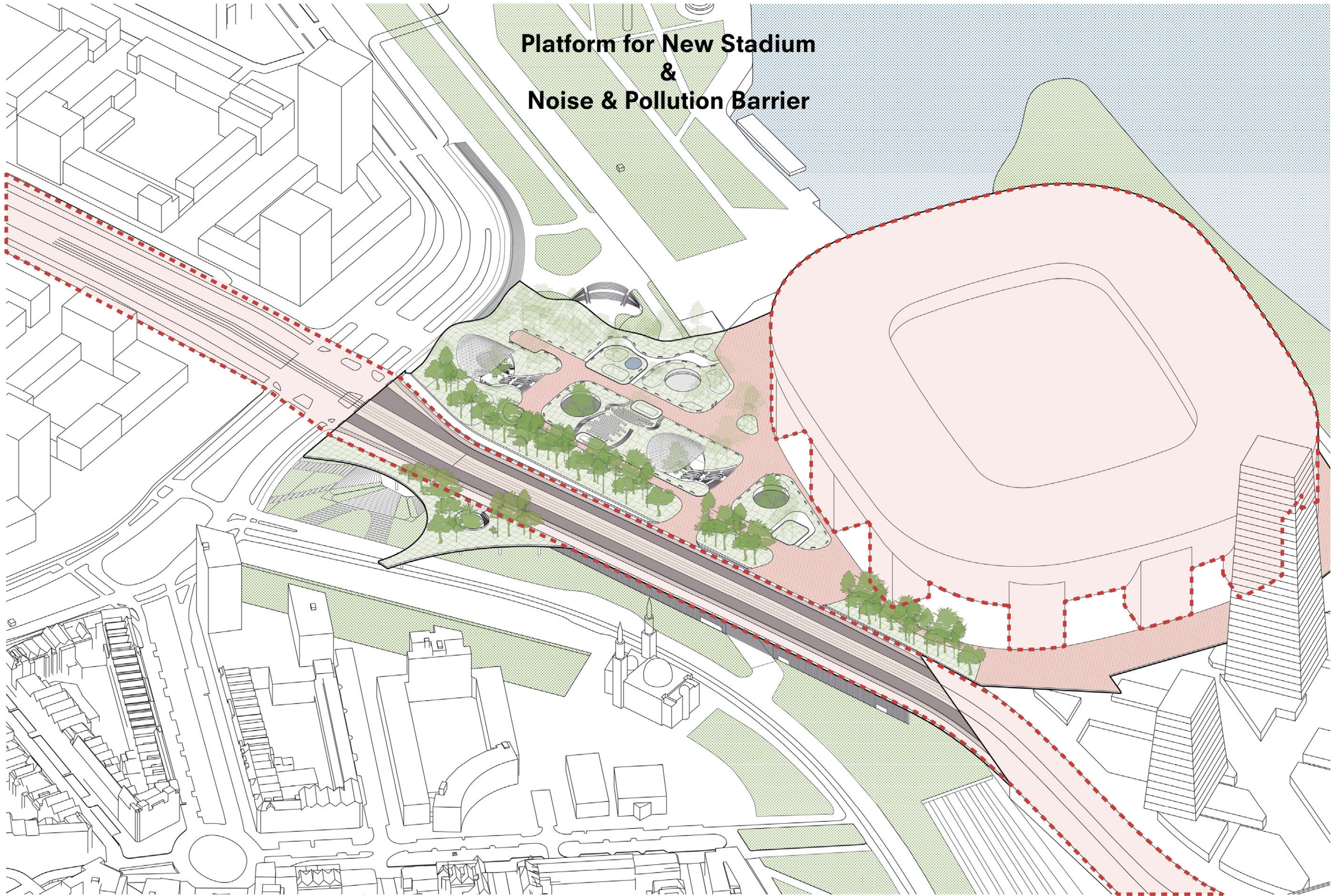
Landscape Park Completes Ecological Circle



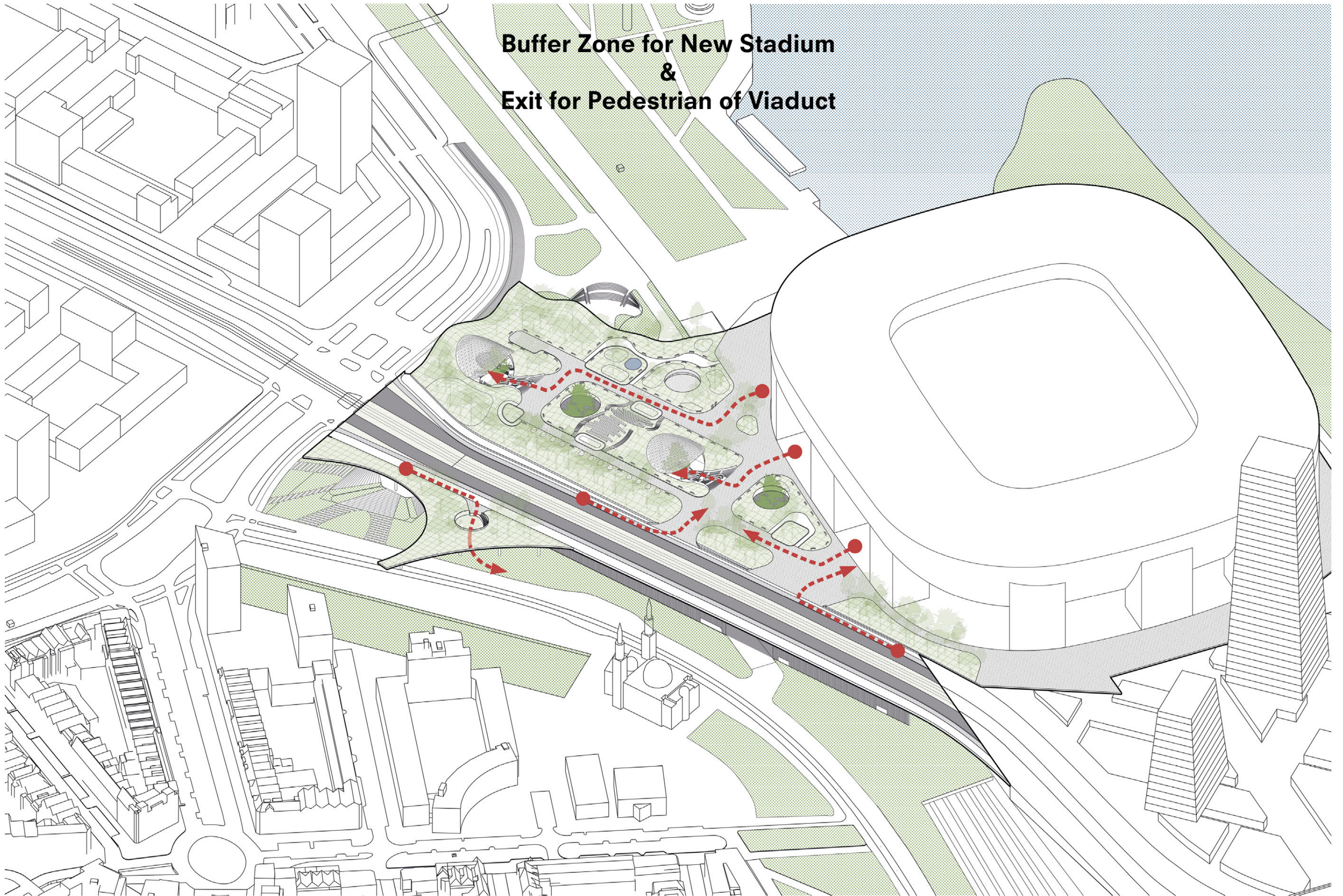
New Stadium - Landscape Park - Viaduct



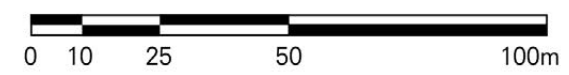
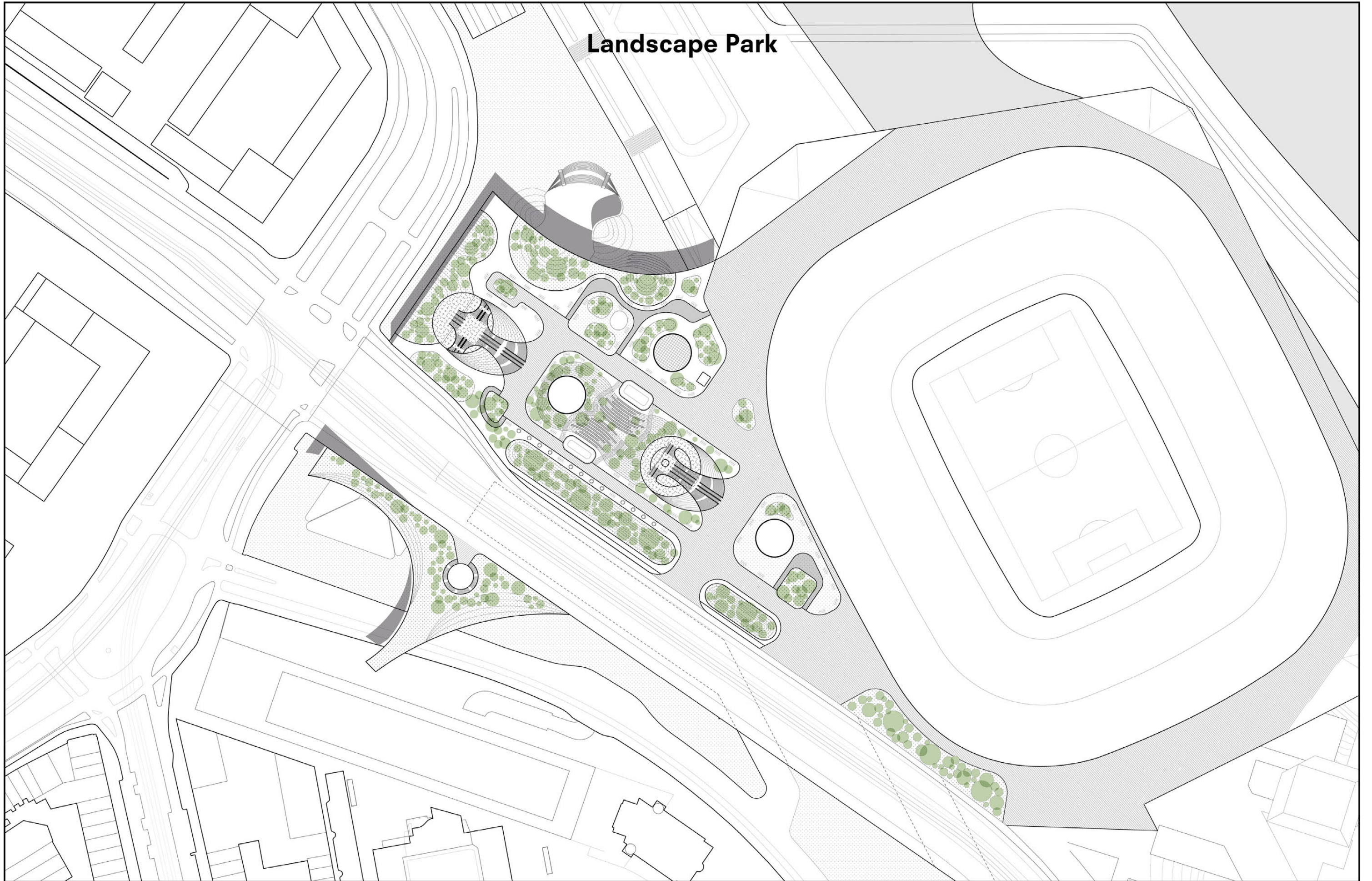
**Platform for New Stadium
&
Noise & Pollution Barrier**



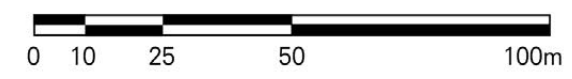
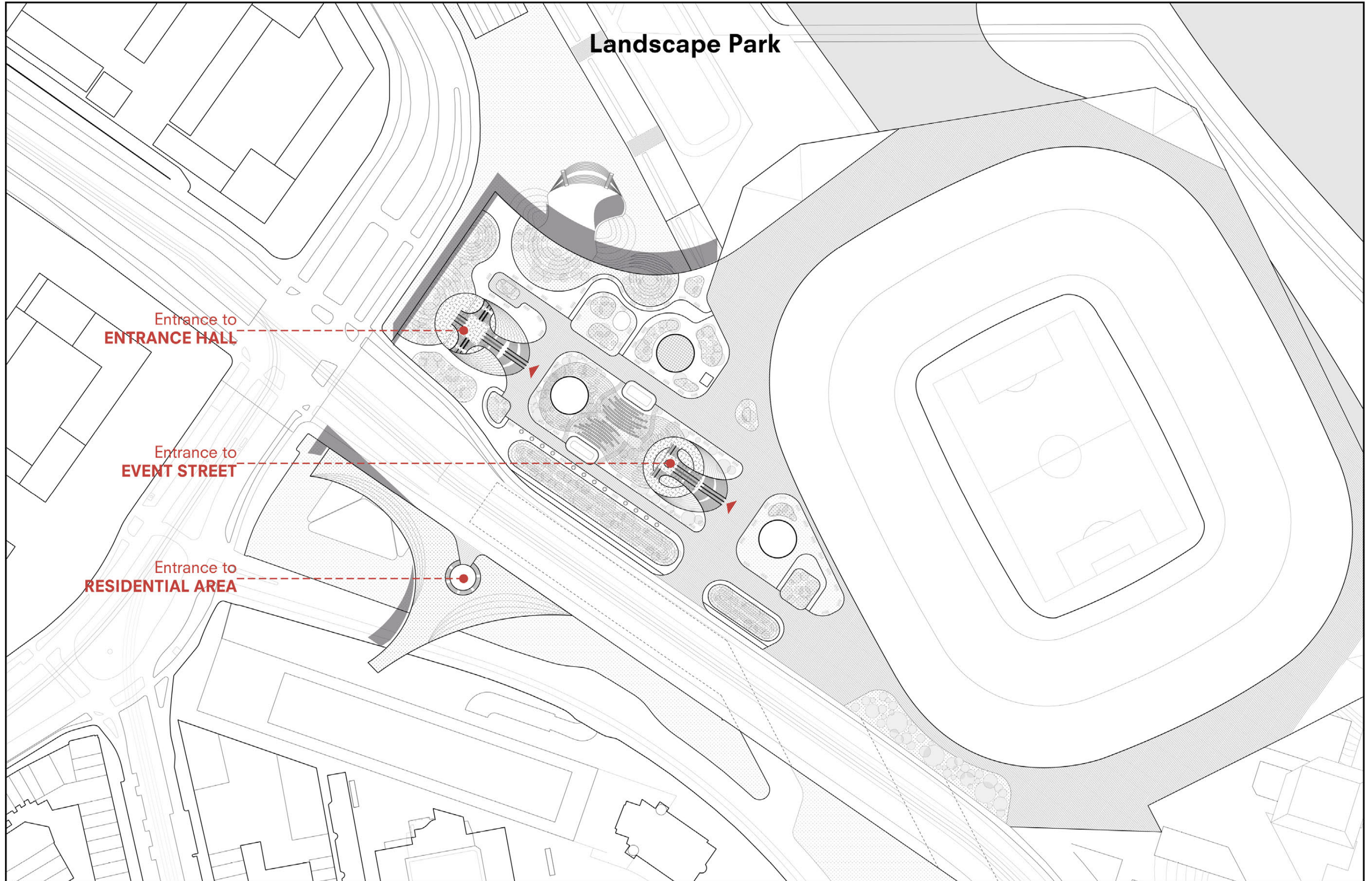
**Buffer Zone for New Stadium
&
Exit for Pedestrian of Viaduct**



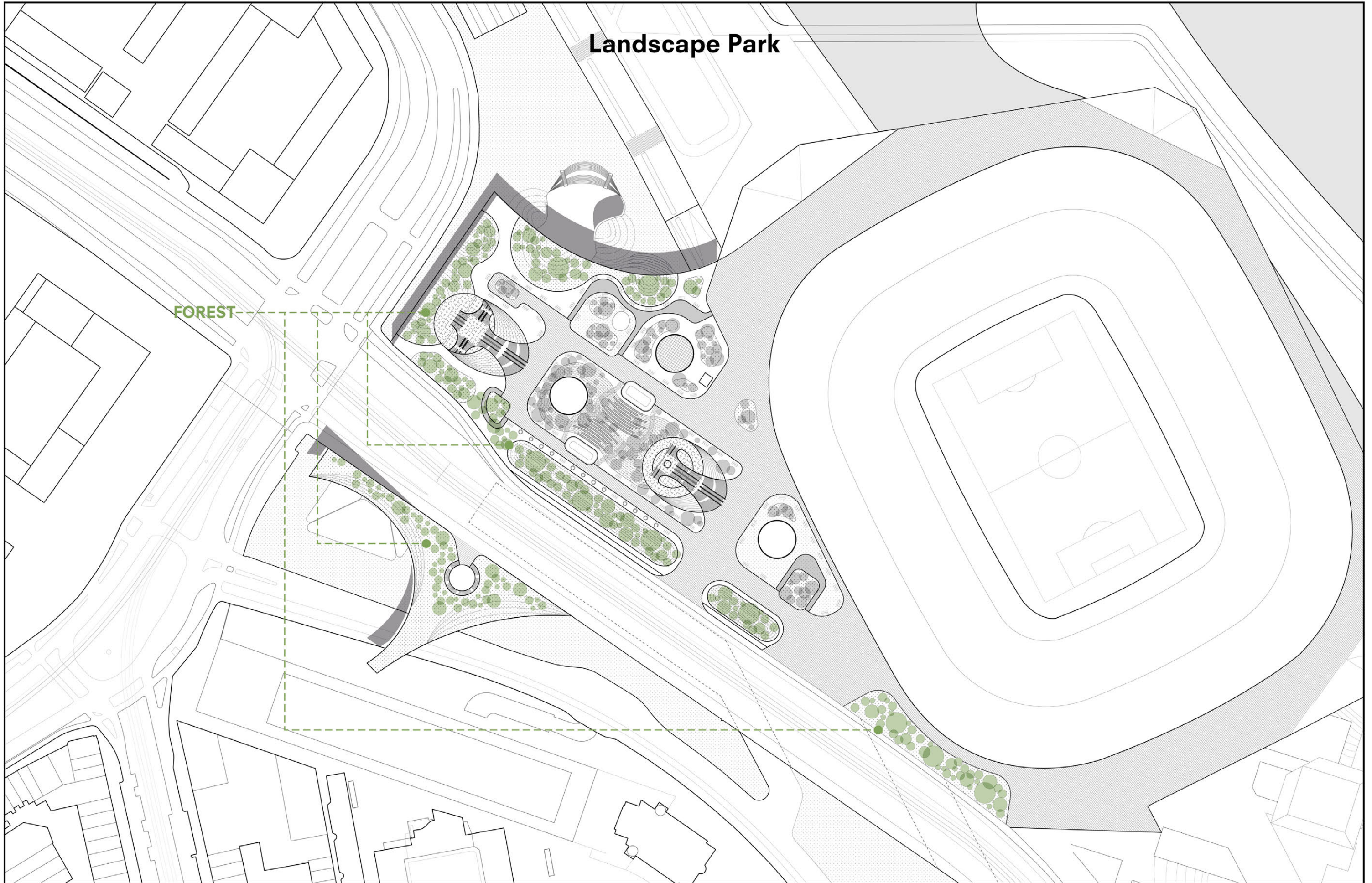
Landscape Park



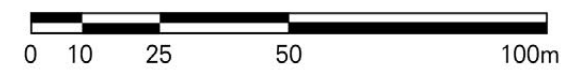
Landscape Park



Landscape Park

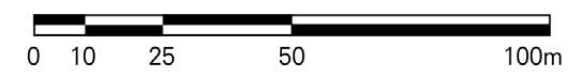
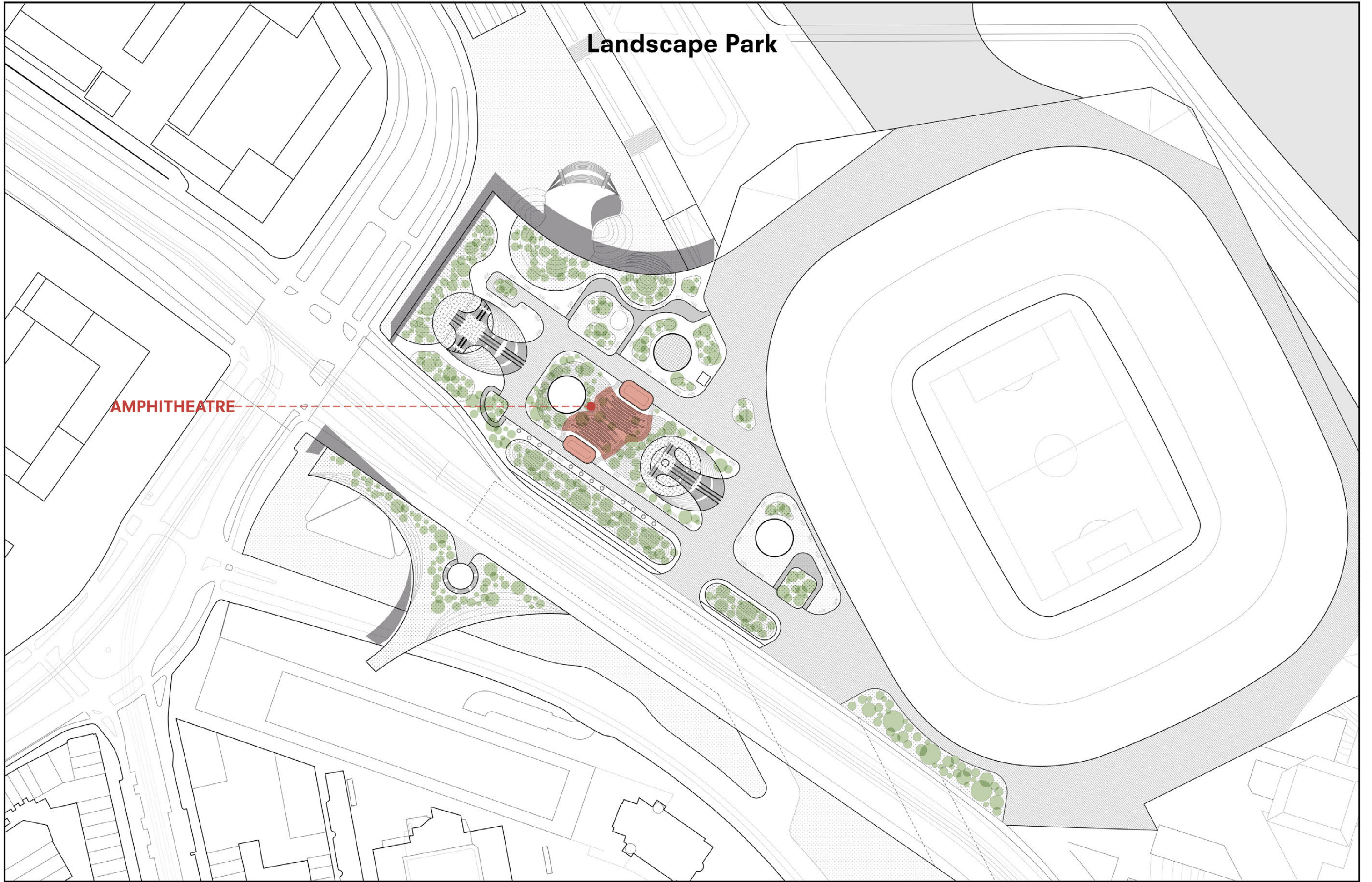


FOREST

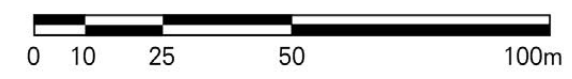
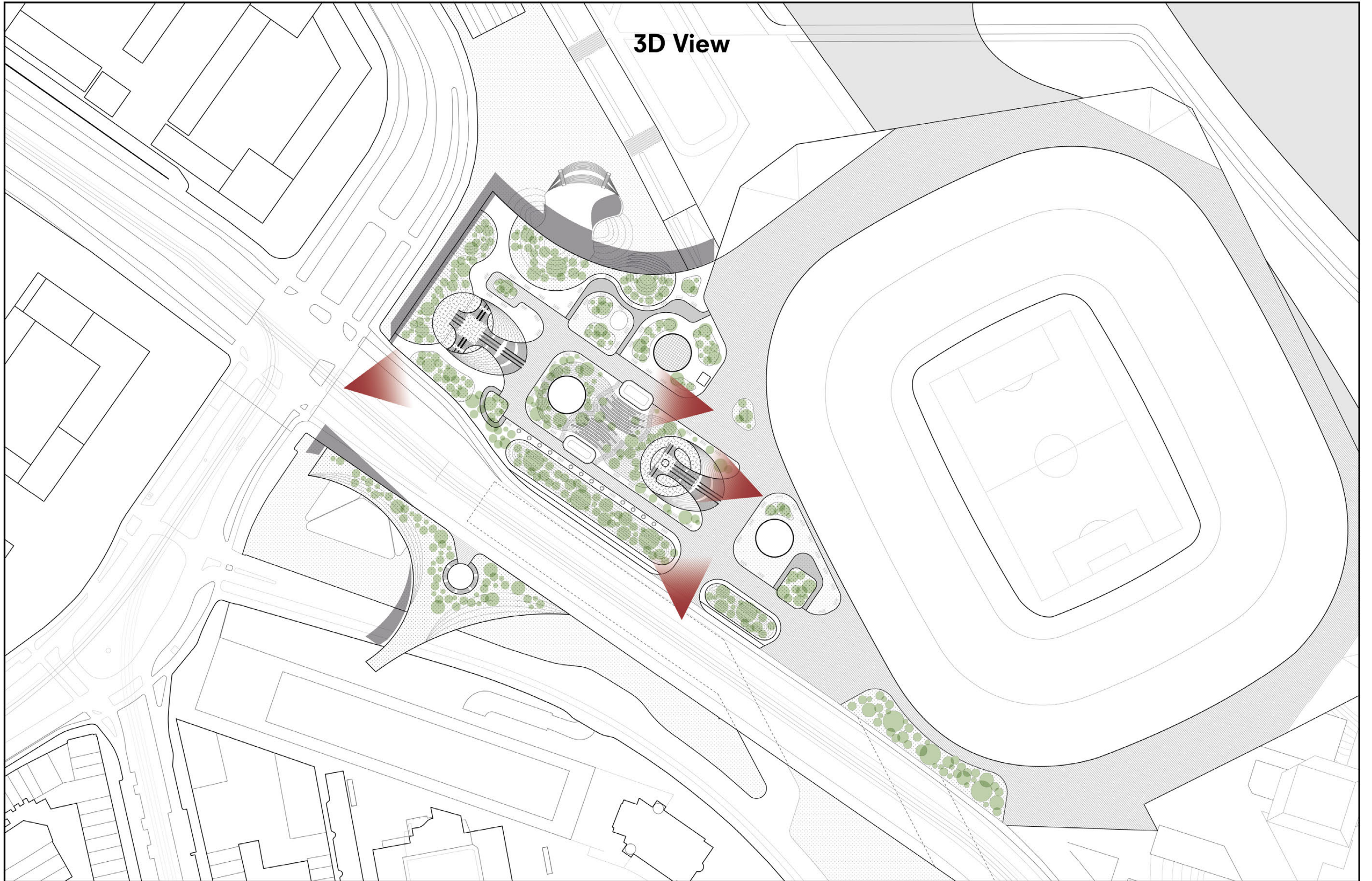


Landscape Park

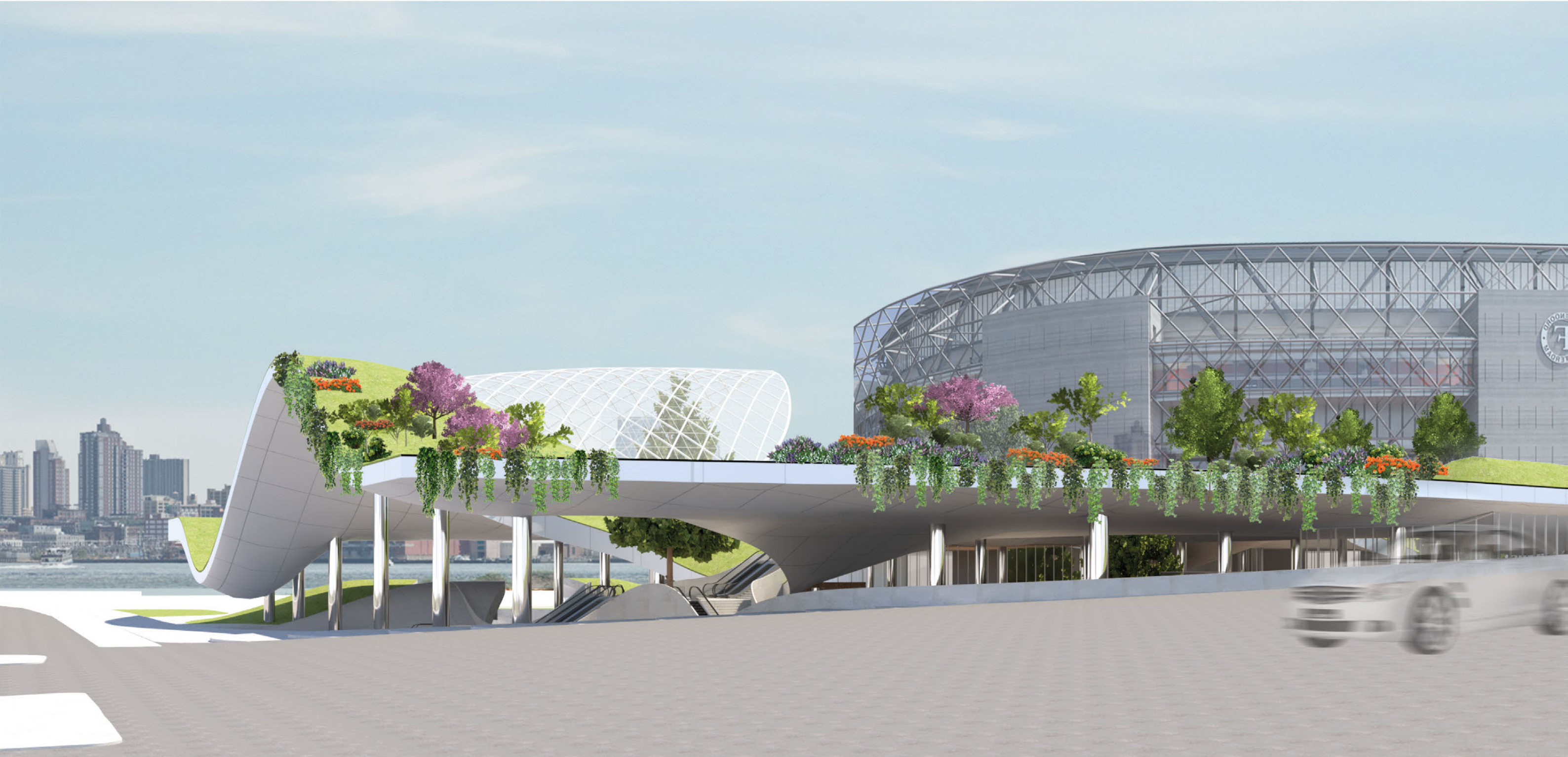
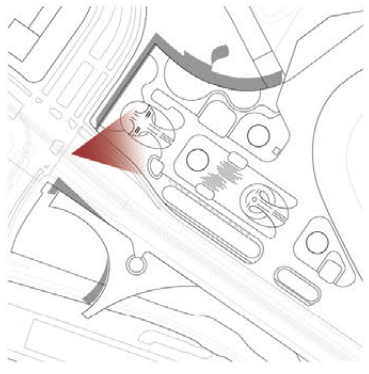
AMPHITHEATRE



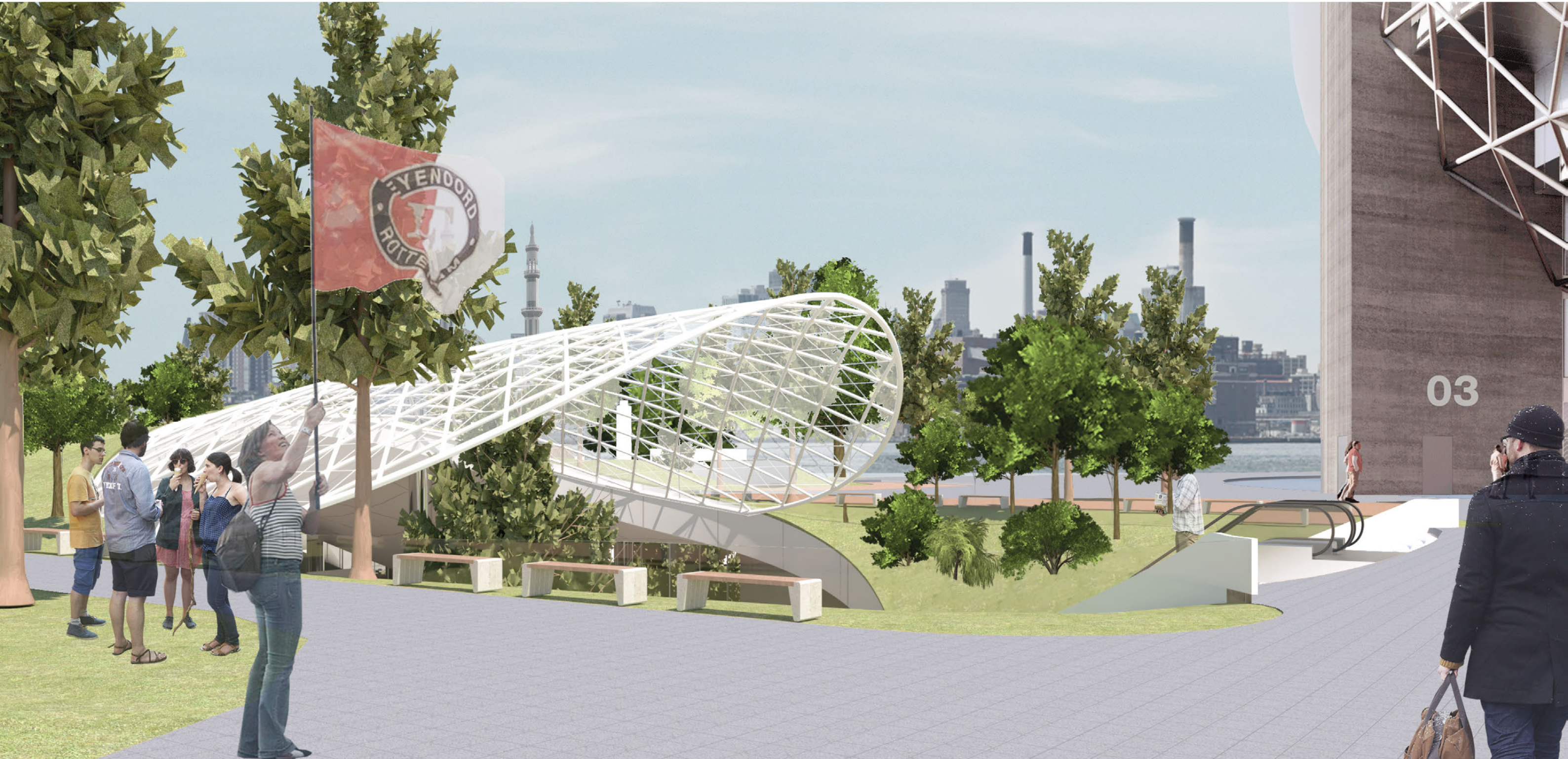
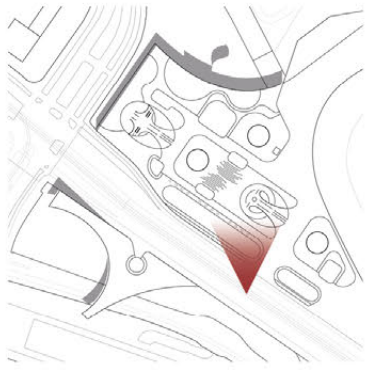
3D View



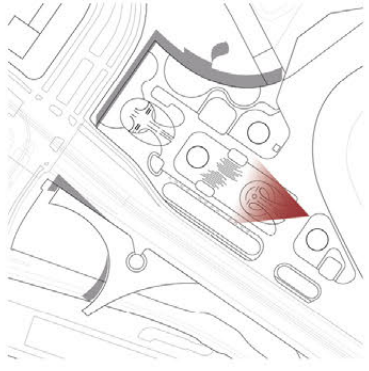
Start of the Viaduct Ramp

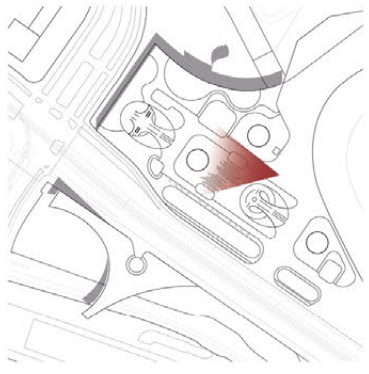


Exit of the Viaduct



From Stadium to the Street Entrance

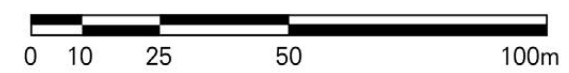
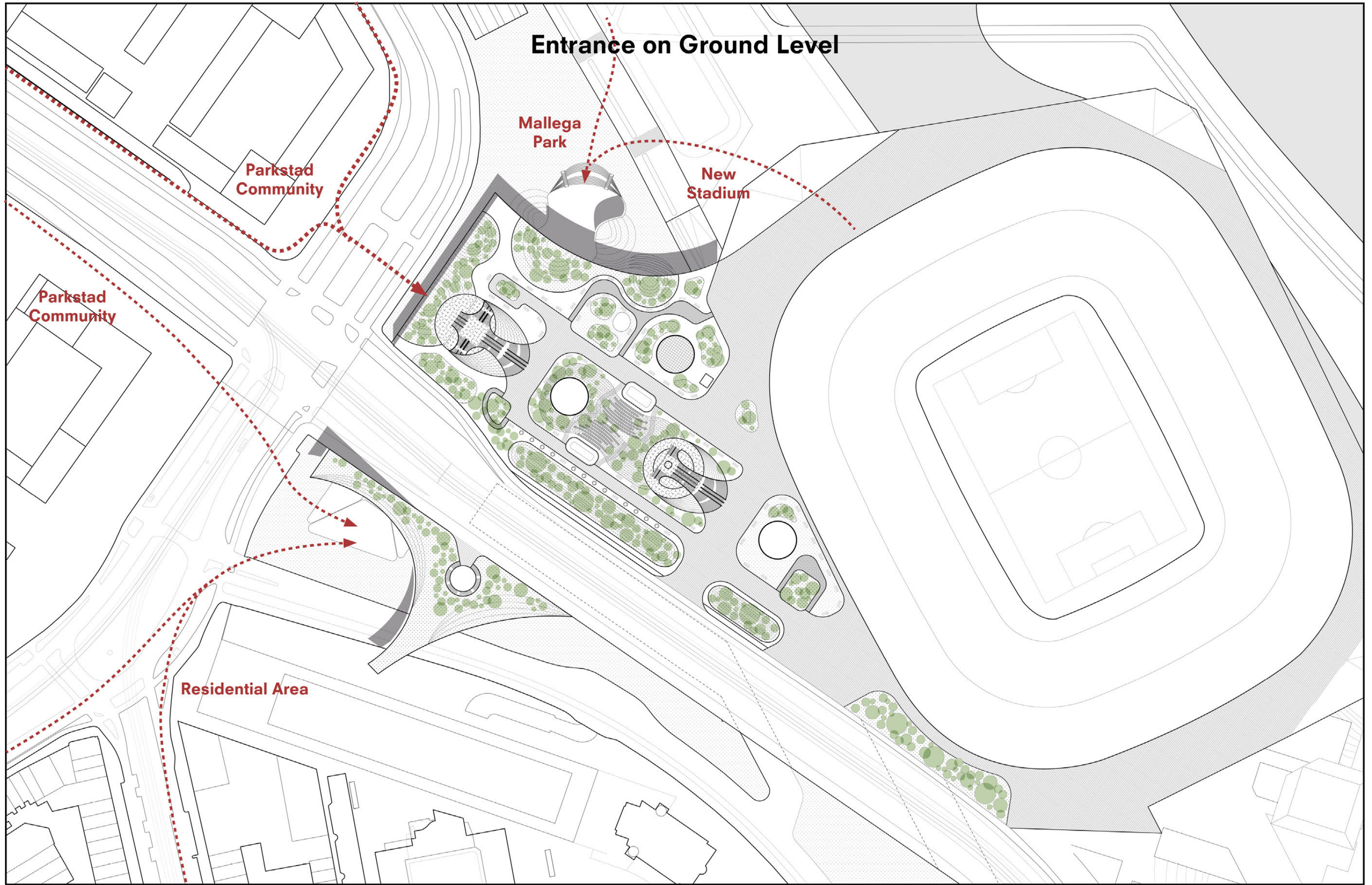




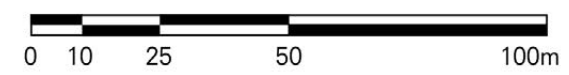
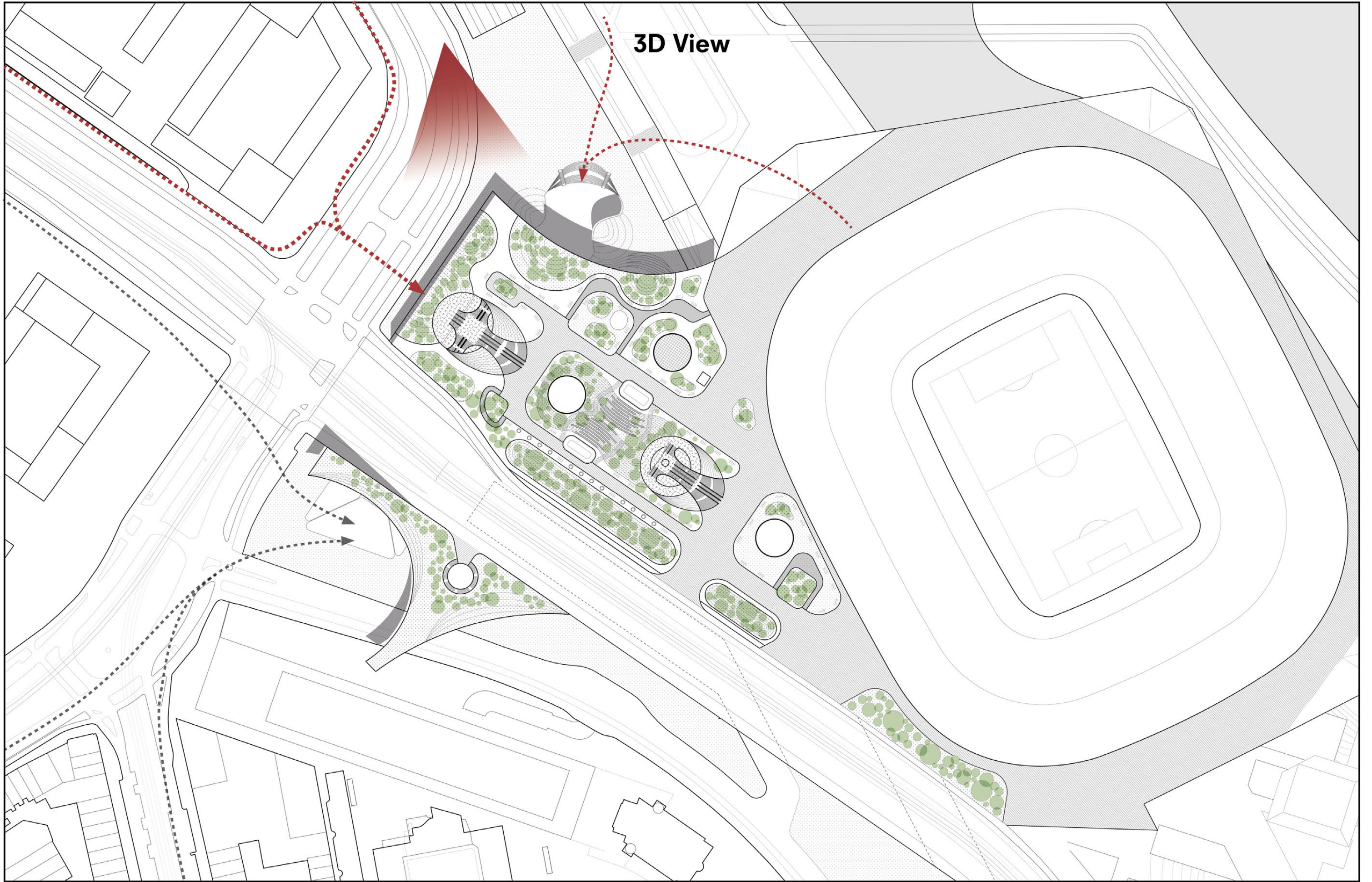
Urban Implementation

Amphitheatre

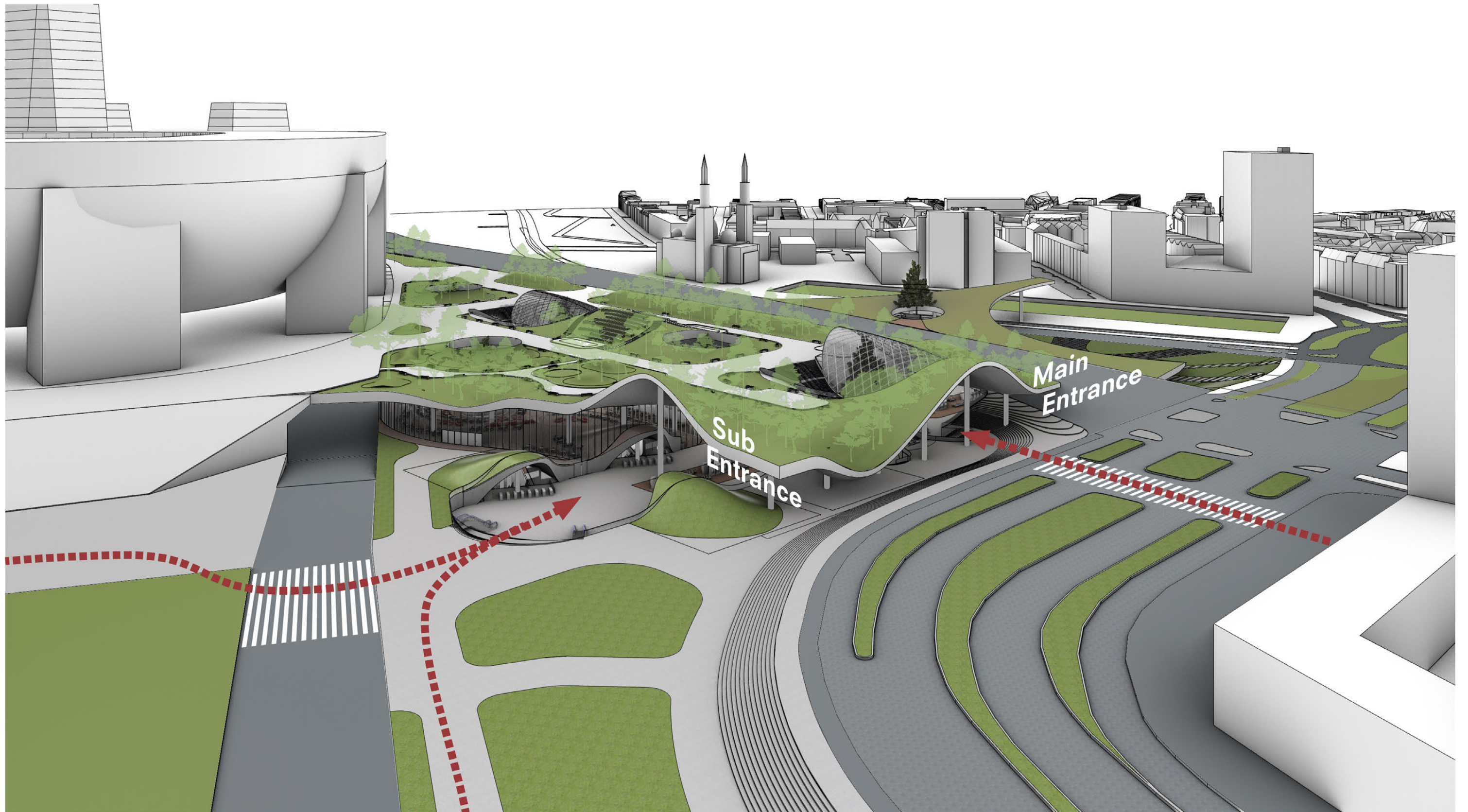




3D View



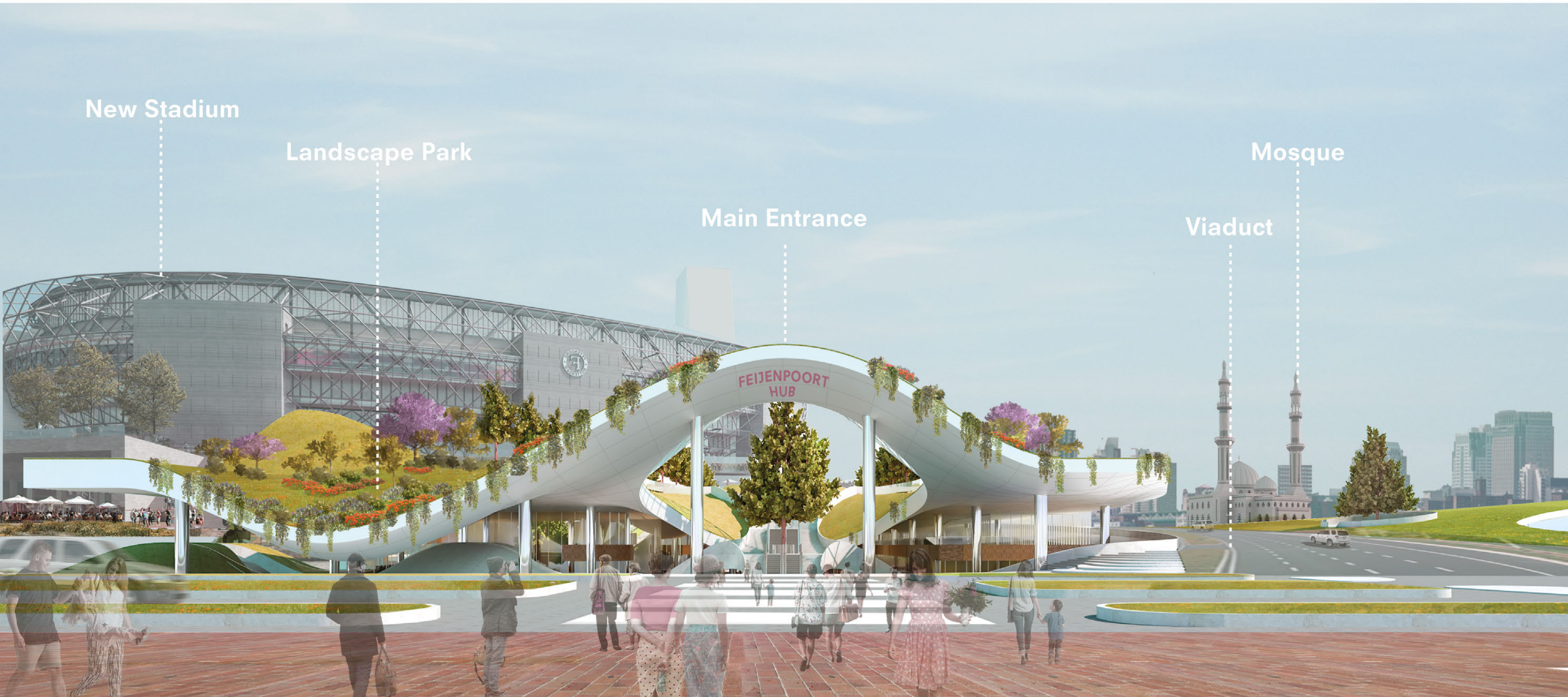
Curved Edges of Roof Indicate Entrance



Main Entrance



Main Entrance with Urban Background

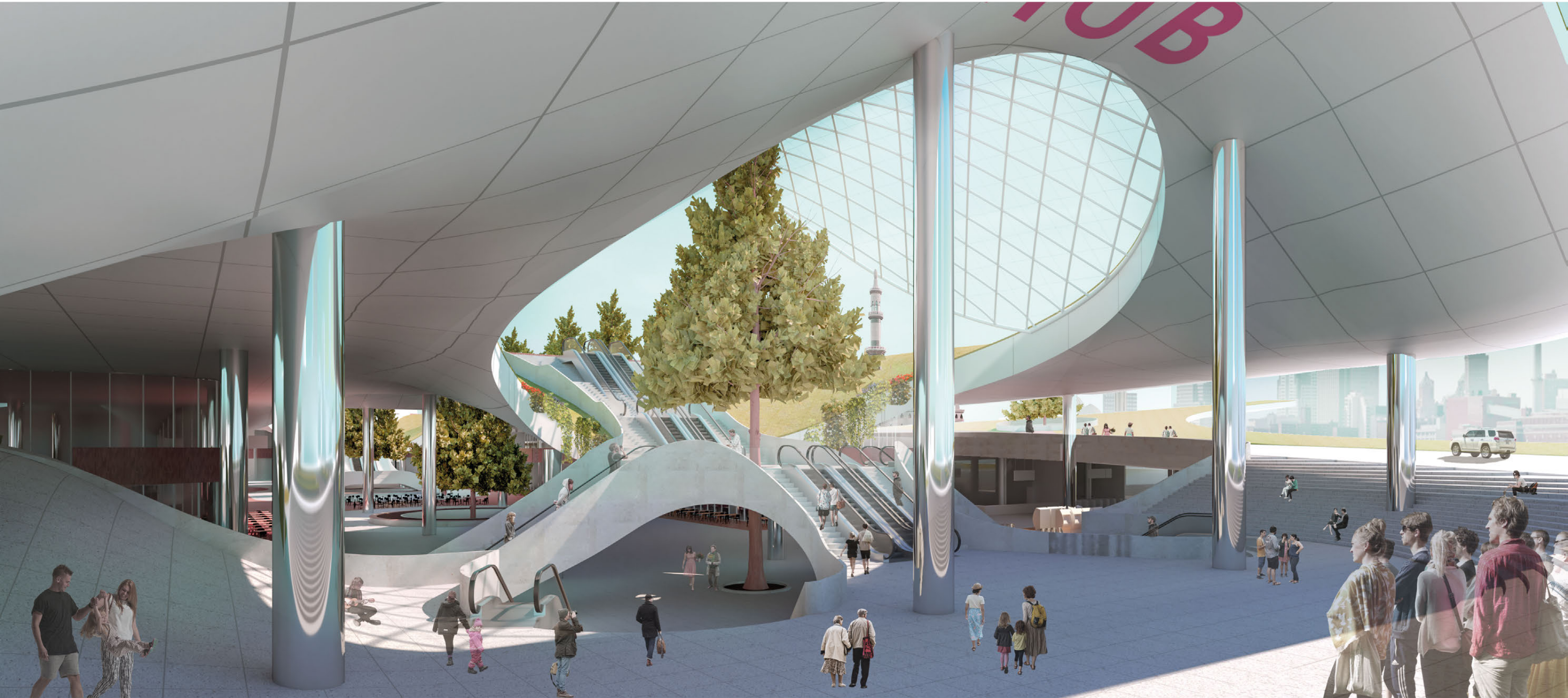


Main Entrance



Urban Implementation

Main Entrance



Main Entrance

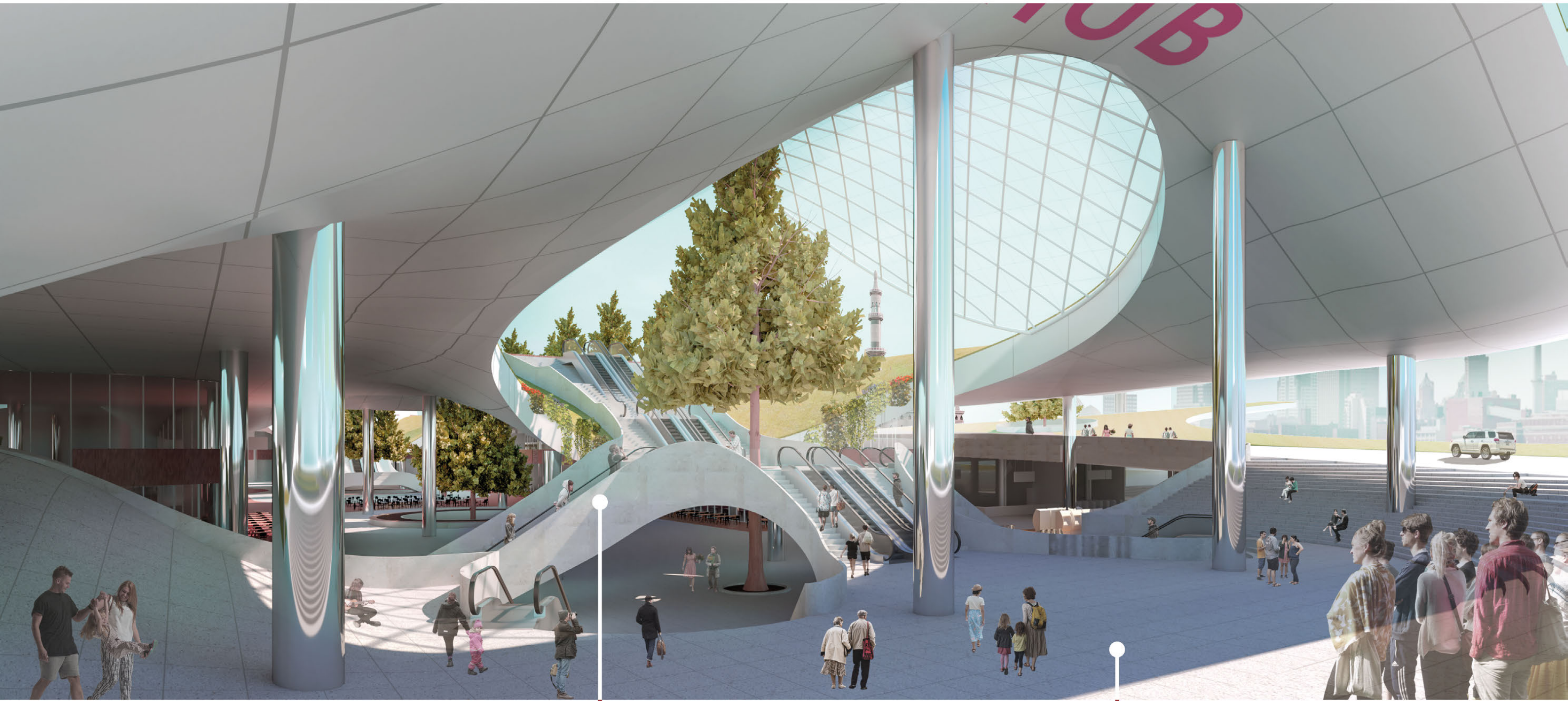


To Street &
Train Station

To Landscape Park
& New Stadium

To Street &
Metro Station

Material



Concrete (Light Gray)

As the structure of the free-
shape Staircase

Cooperate with ceiling.

Natural Stone (Gray)

Gray Colour as the
background of the space.

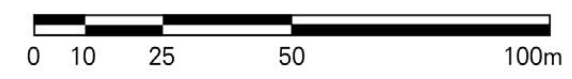
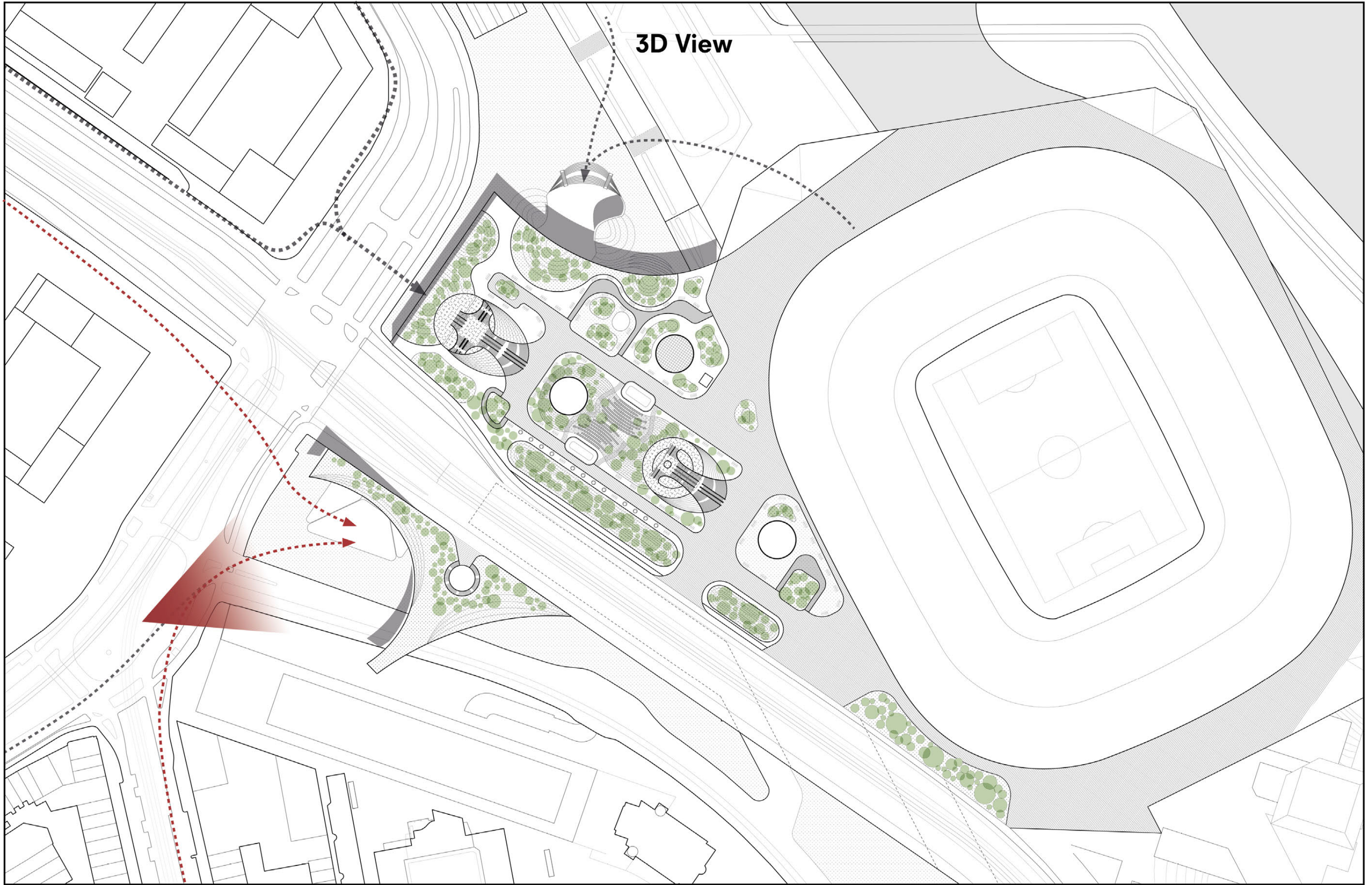
Cooperate with ceiling.



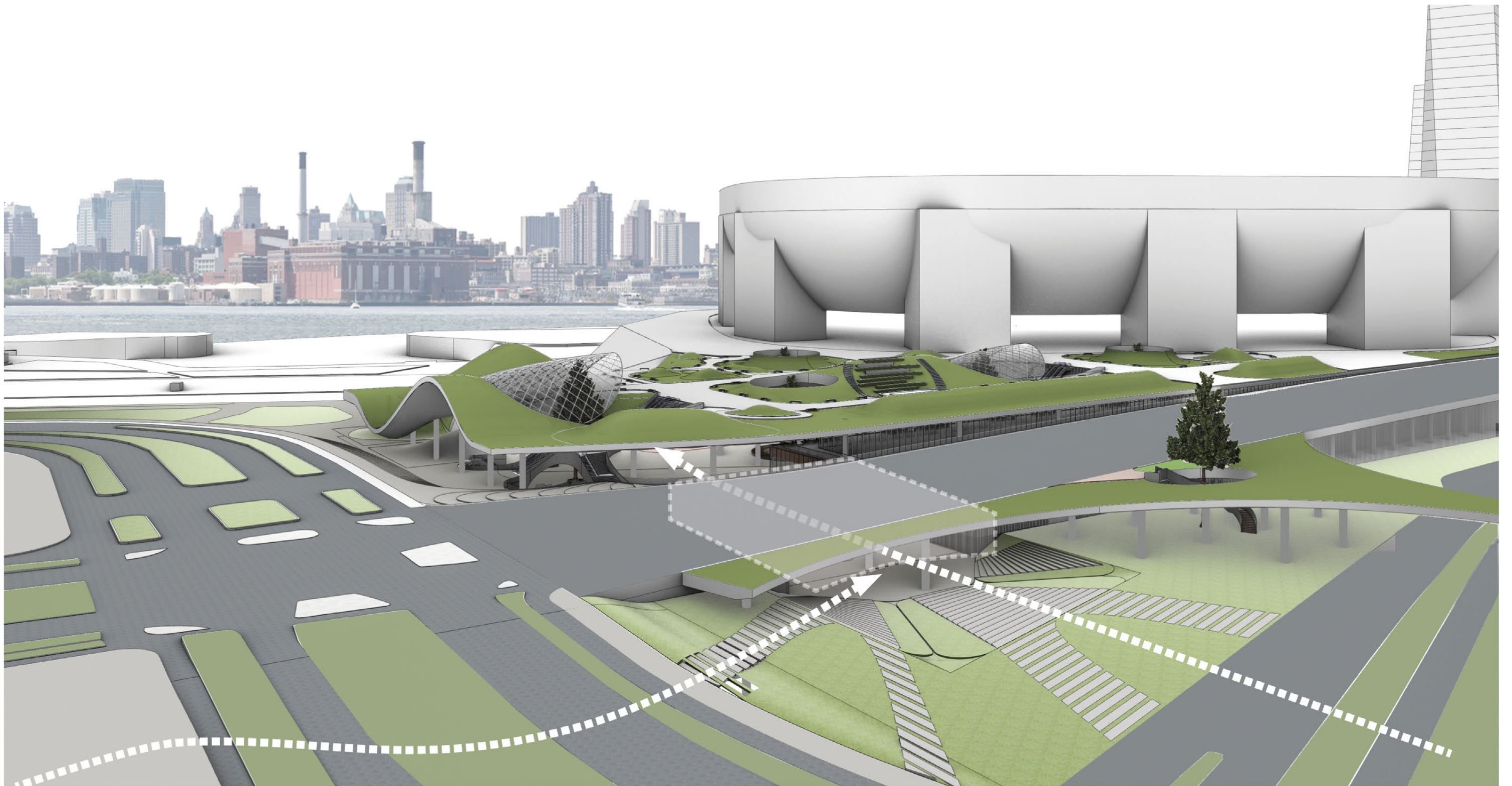
Sub Entrance



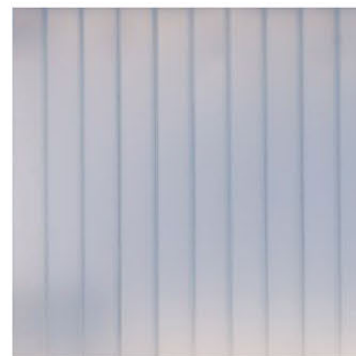
3D View



Sub Entrance for Residential Area



Sub Entrance for Residential Area



Ultra White U-glass

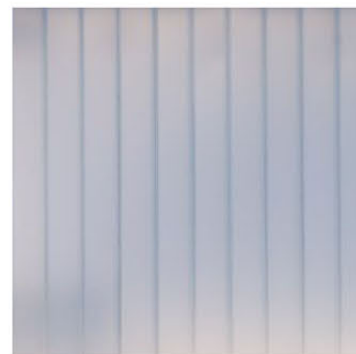
For Bike Parking & Renting

Change the solid concrete surface of current Viaduct into semi-transparent urban surface

Sub Entrance for Residential Area



Delft City Hall and Train Station
Delft, Netherlands



Ultra White U-glass

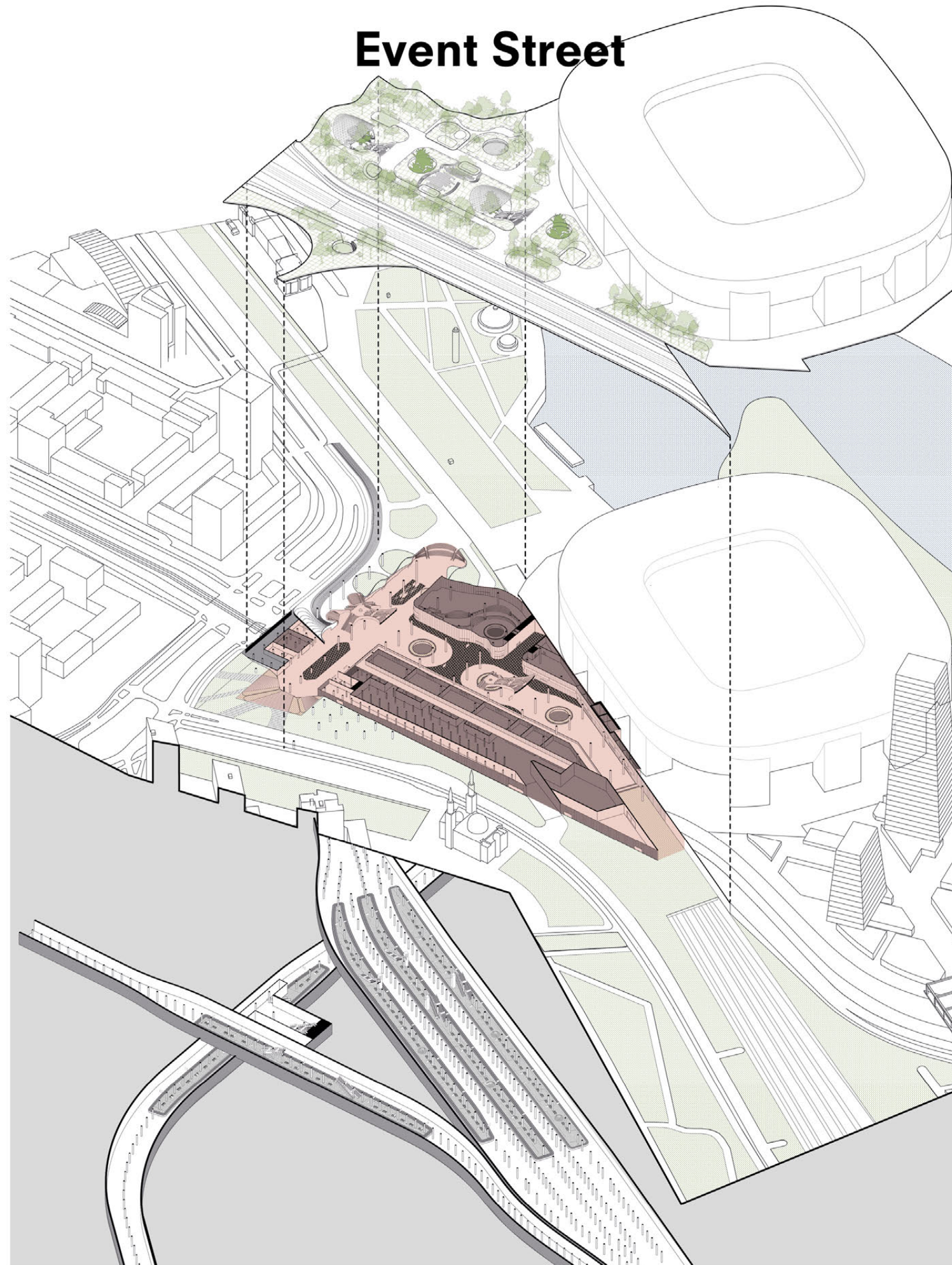
For Bike Parking & Renting

Change the solid concrete surface of current Viaduct into semi-transparent urban surface

Event Street & Interior

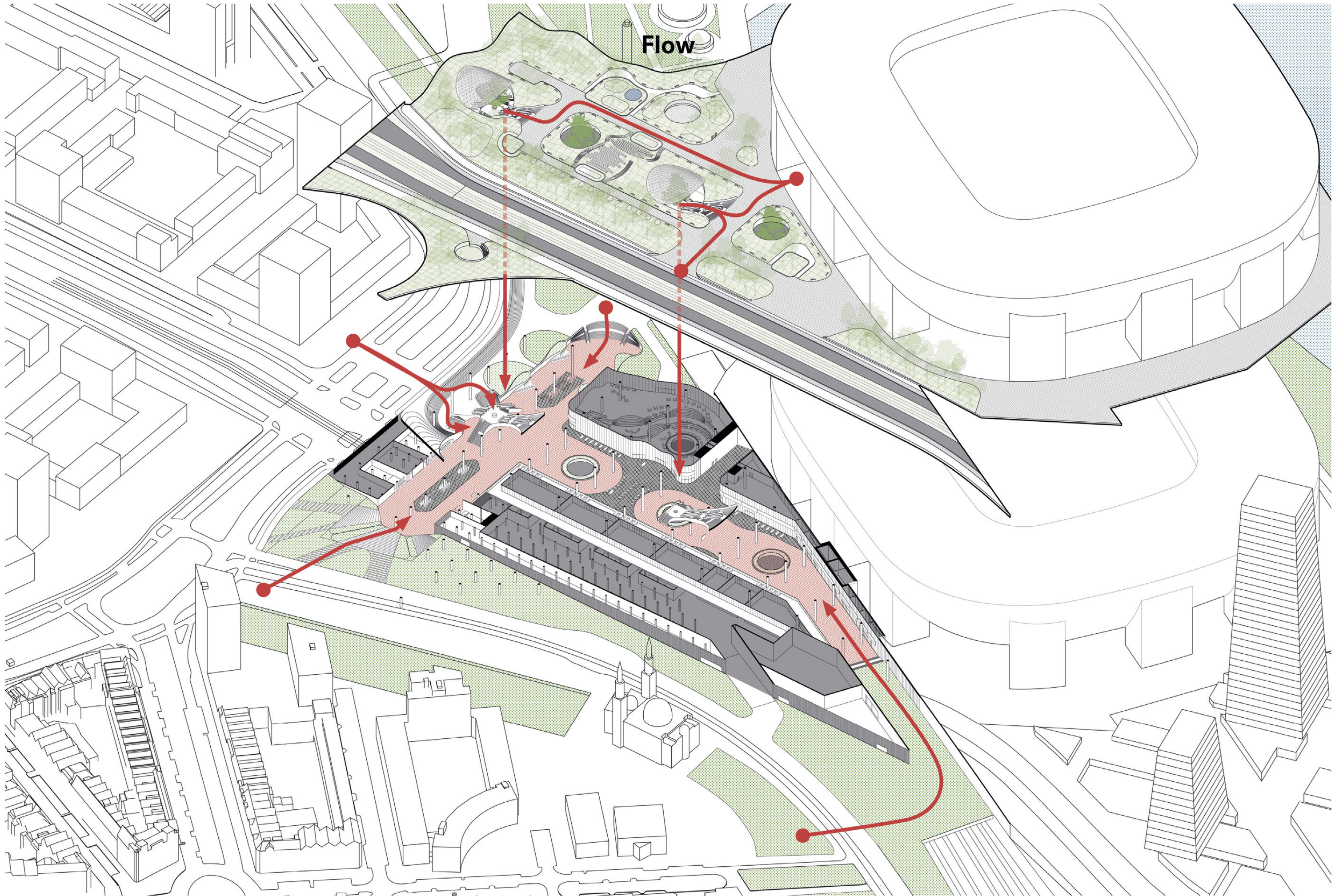
Event Street

City Event Street

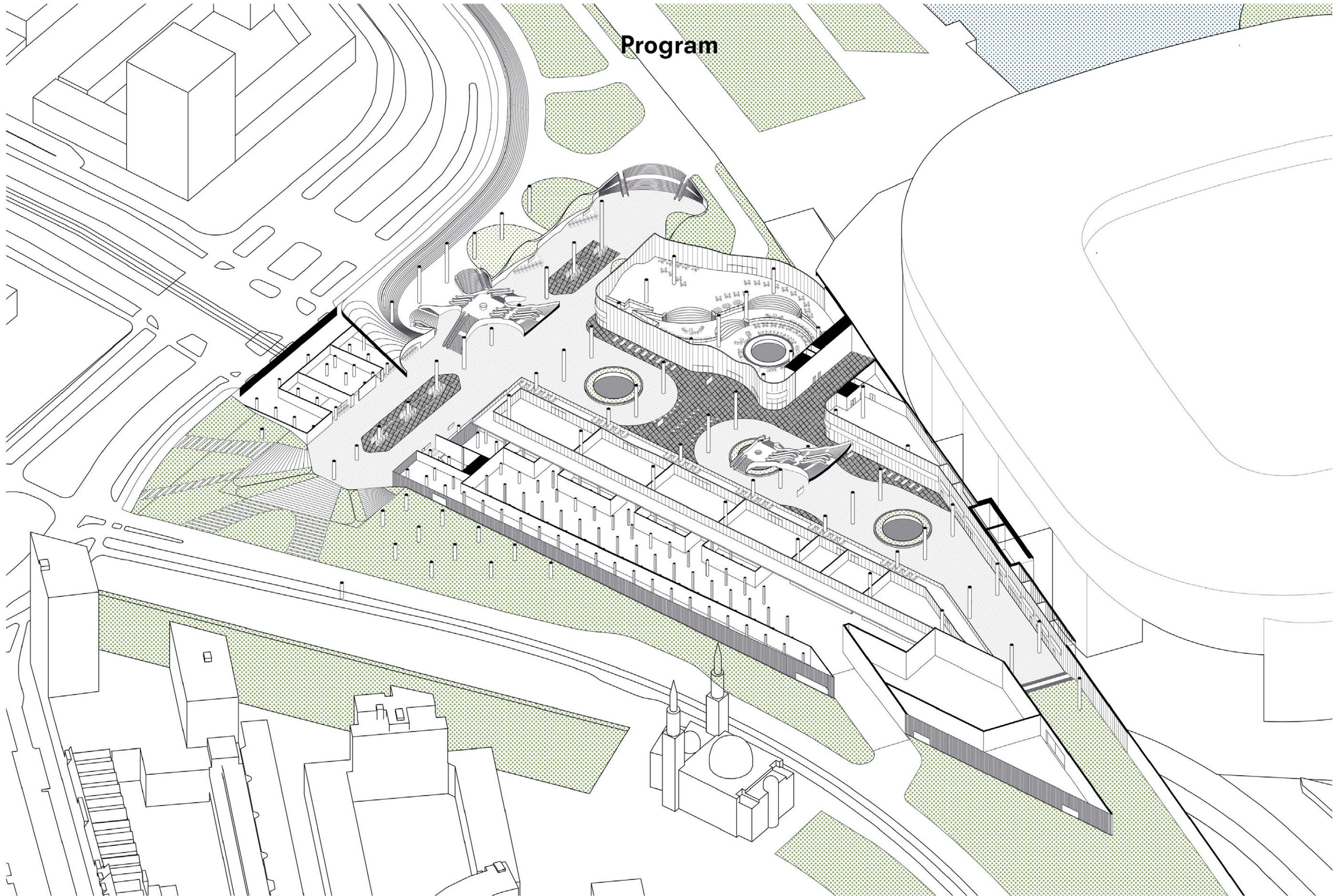


Event Street & Interior

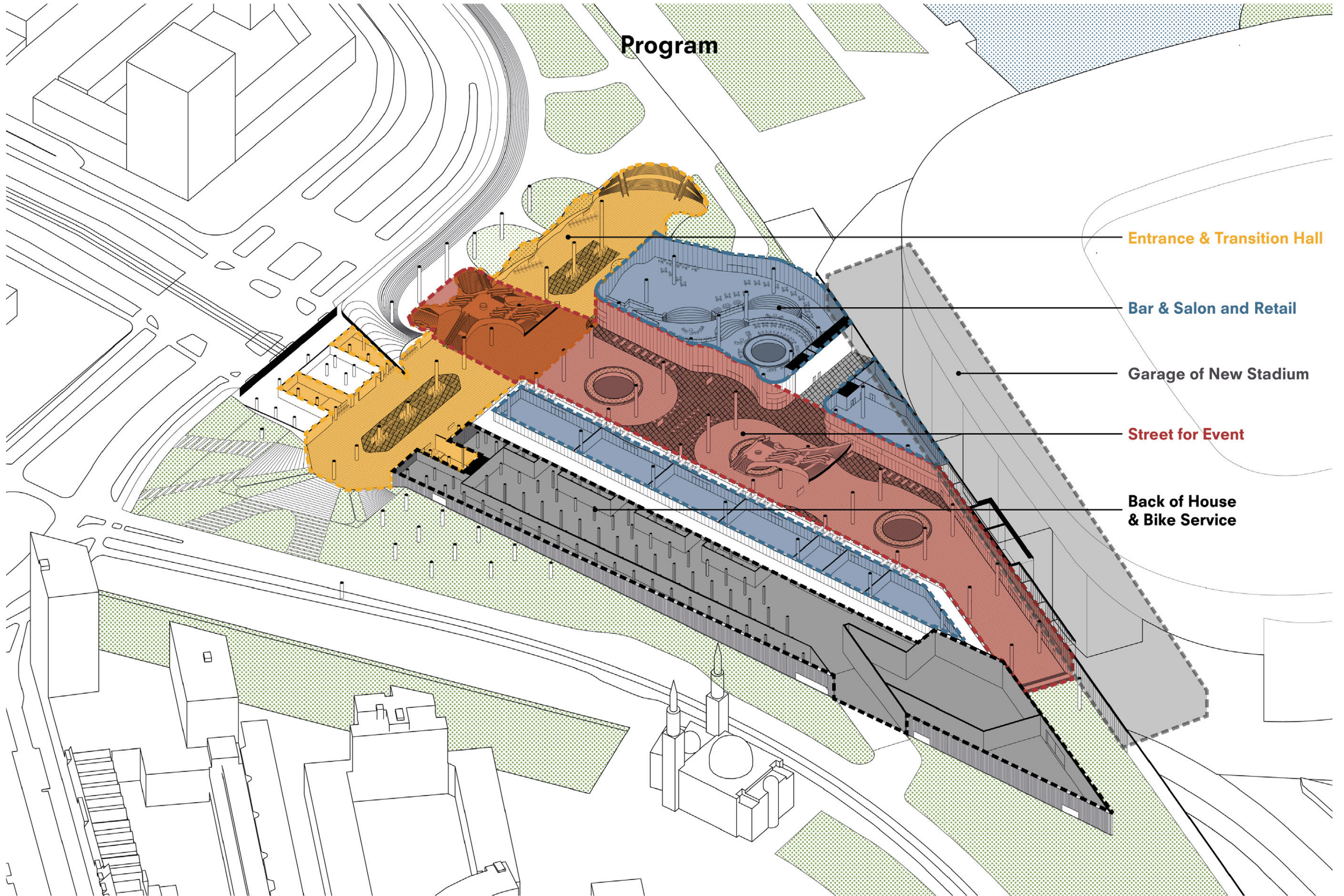
Flow



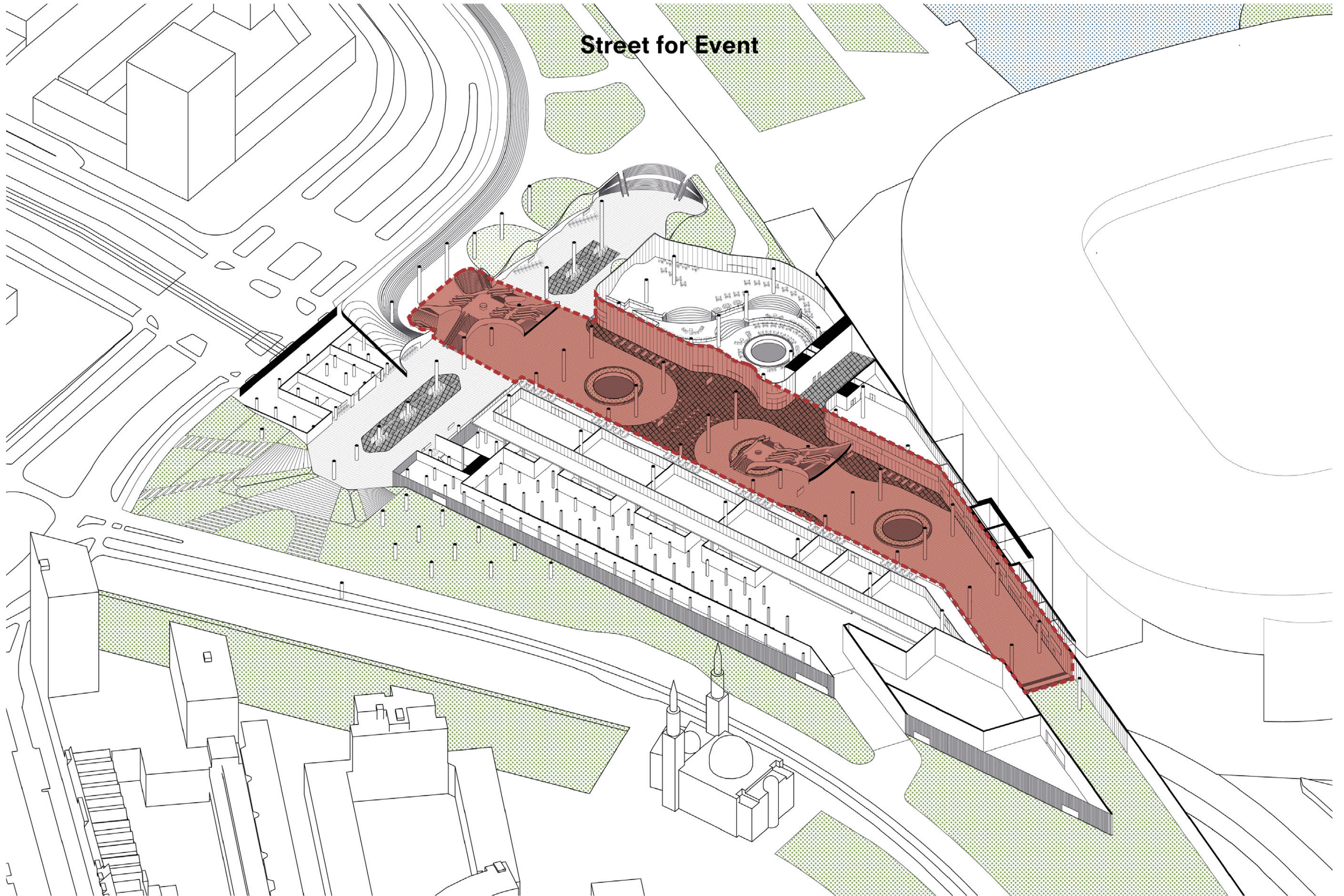
Program



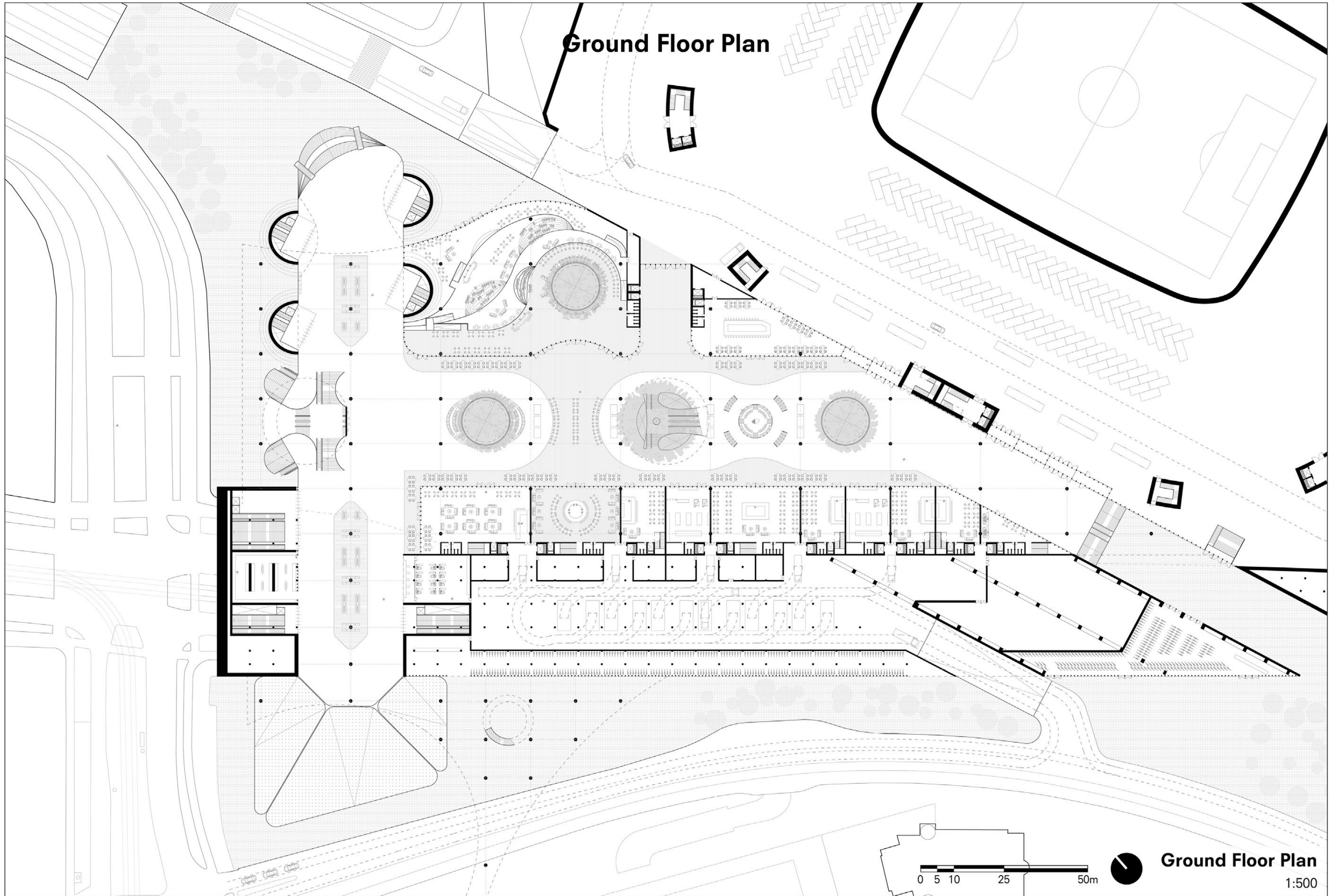
Program



Street for Event



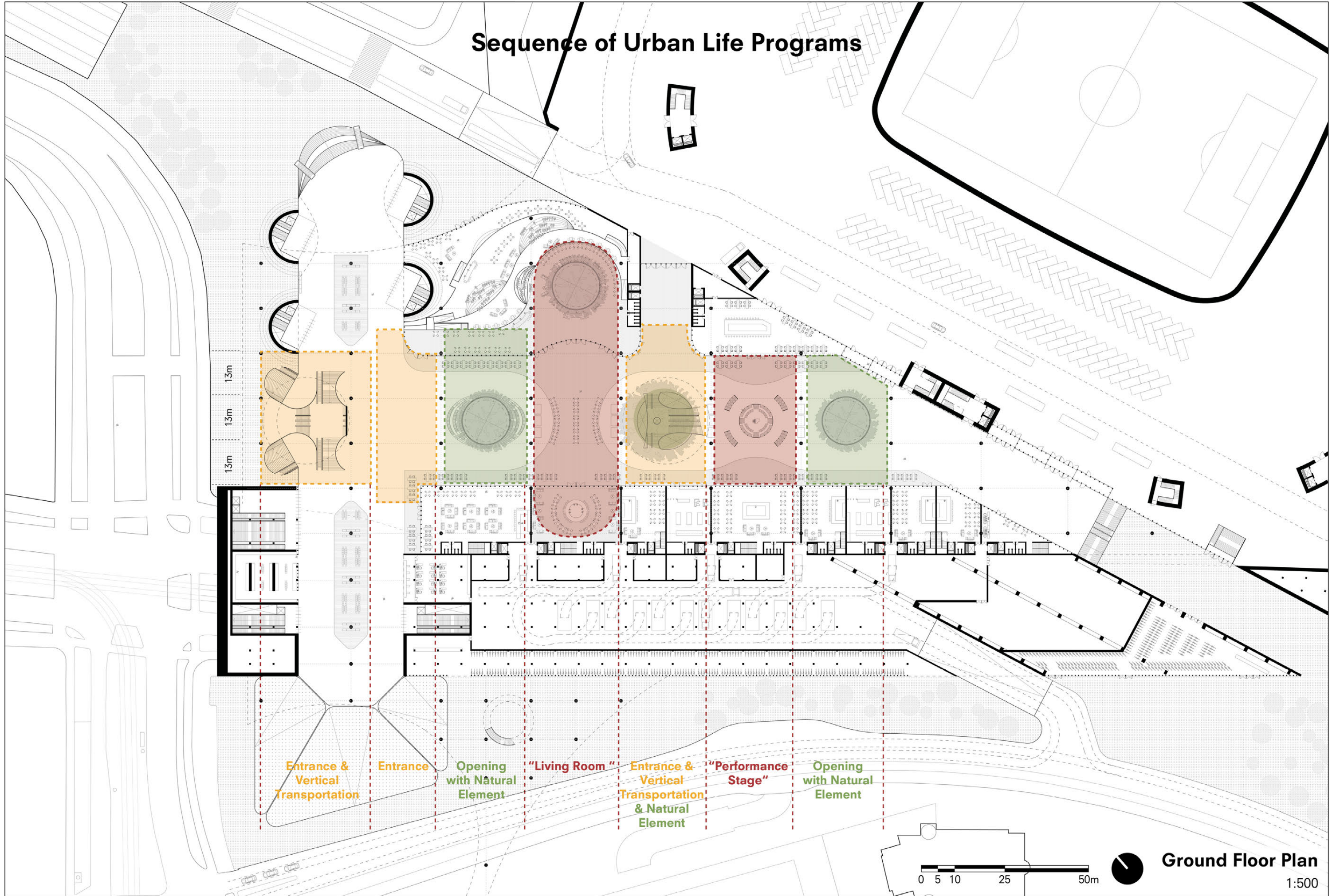
Ground Floor Plan



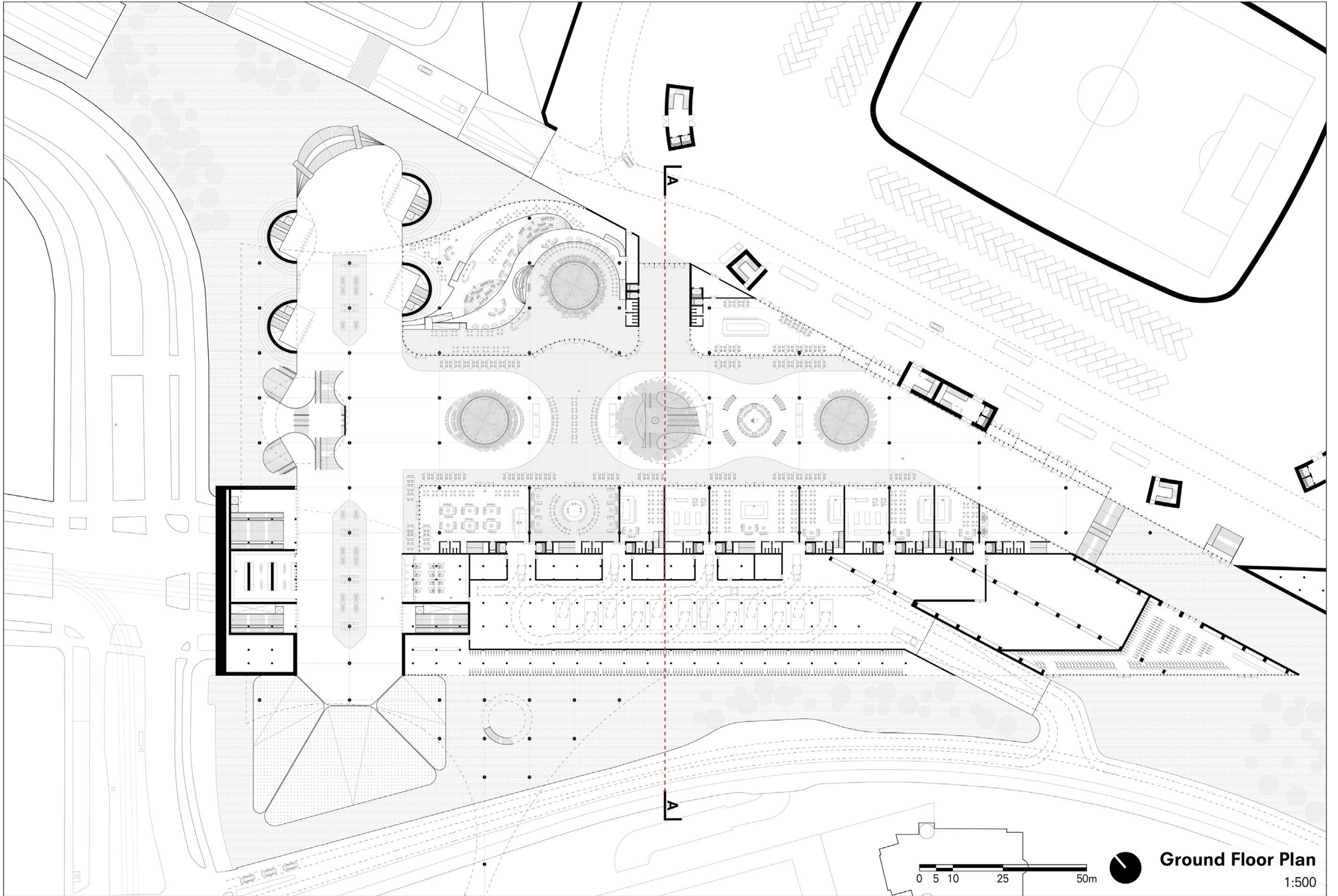
Ground Floor Plan

1:500

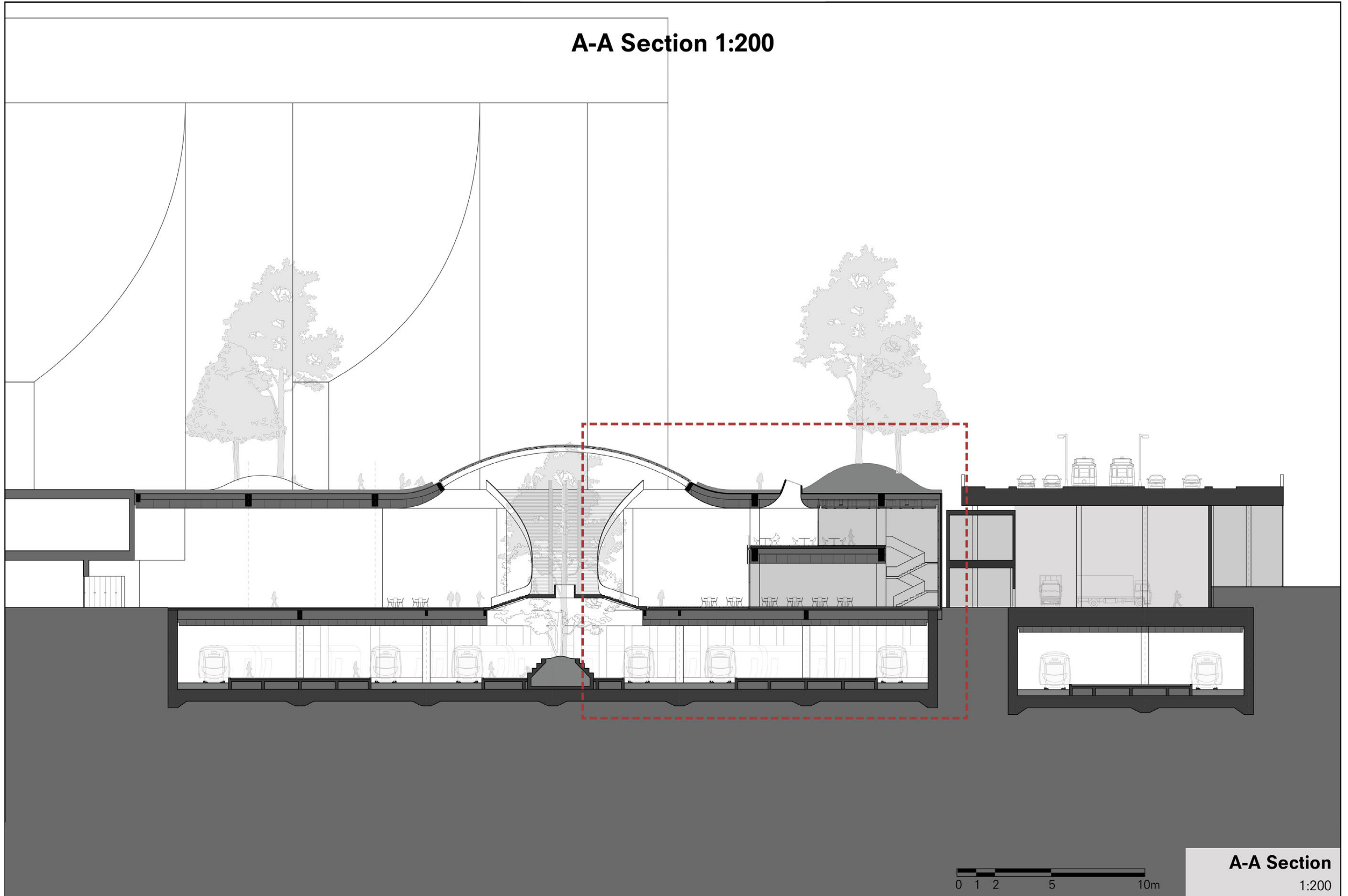
Sequence of Urban Life Programs



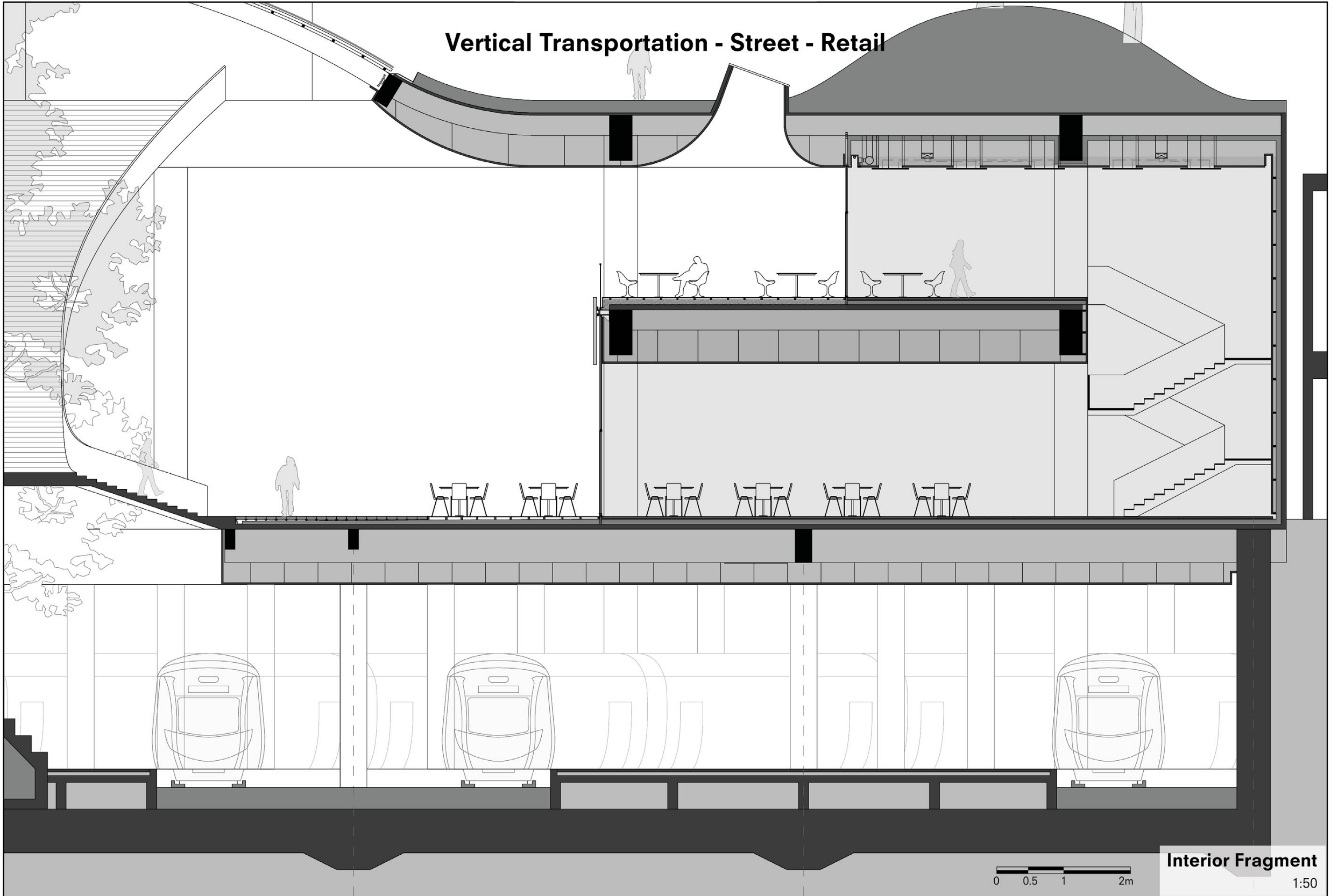
Event Street & Interior



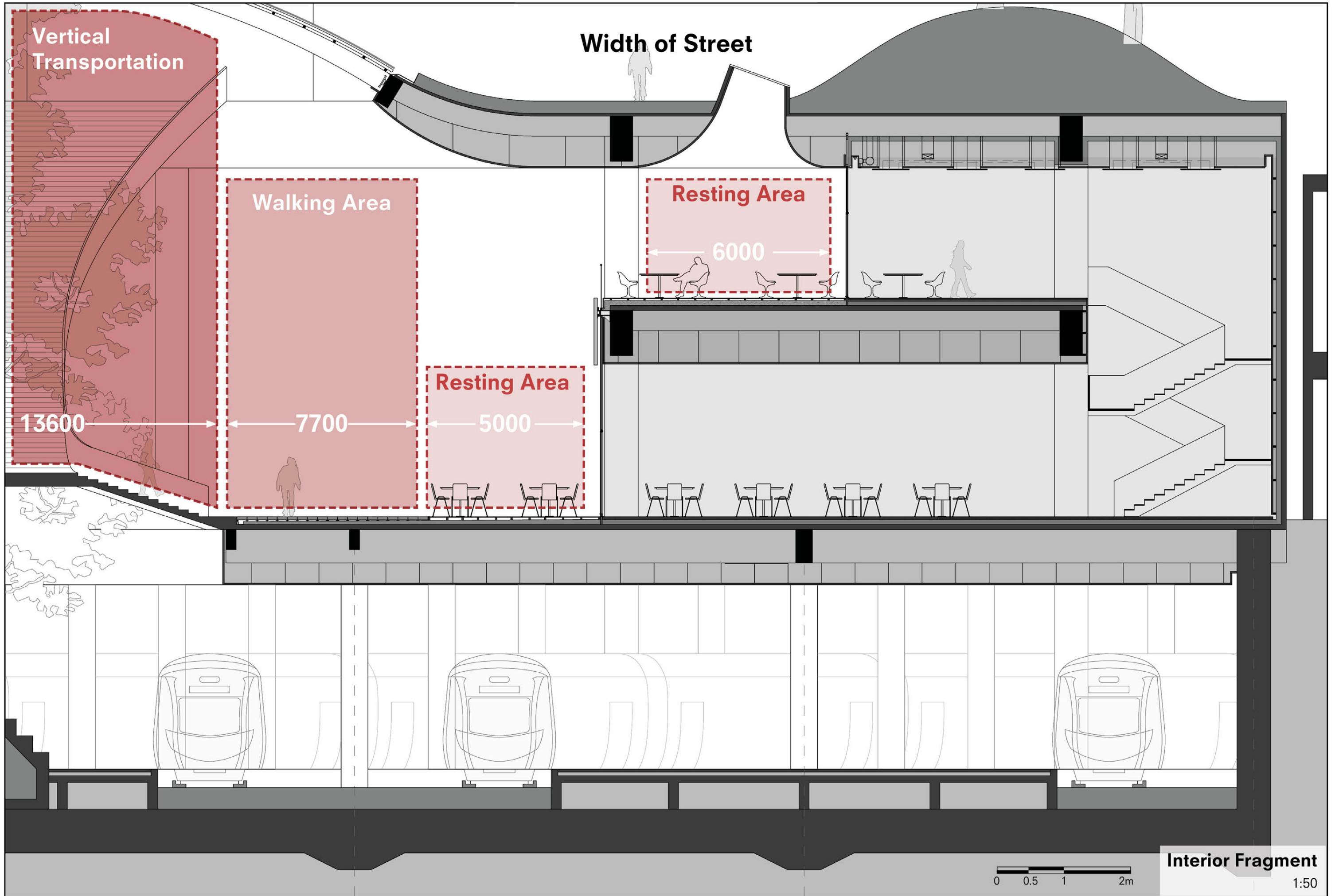
A-A Section 1:200



Vertical Transportation - Street - Retail

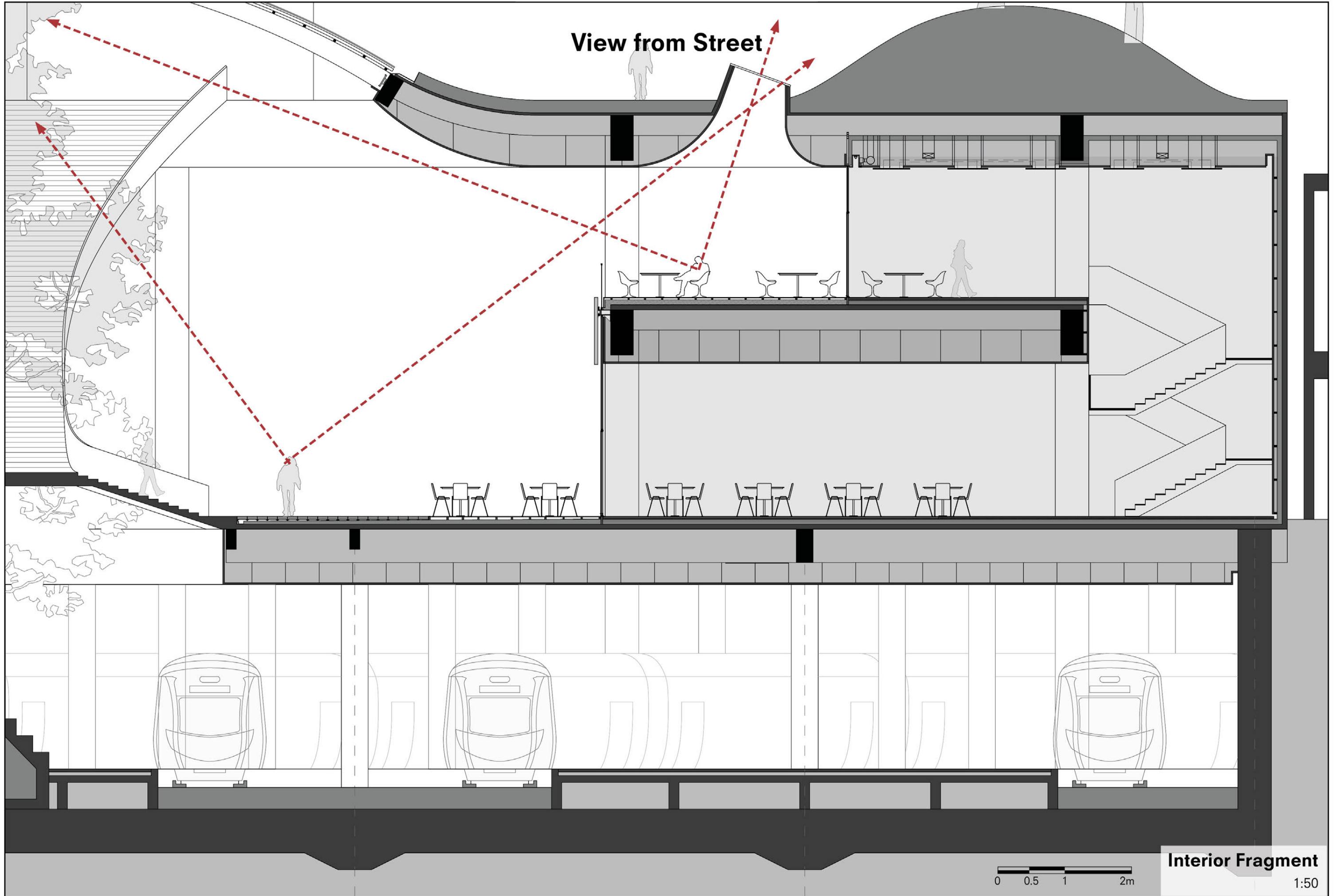


Event Street & Interior



Event Street & Interior

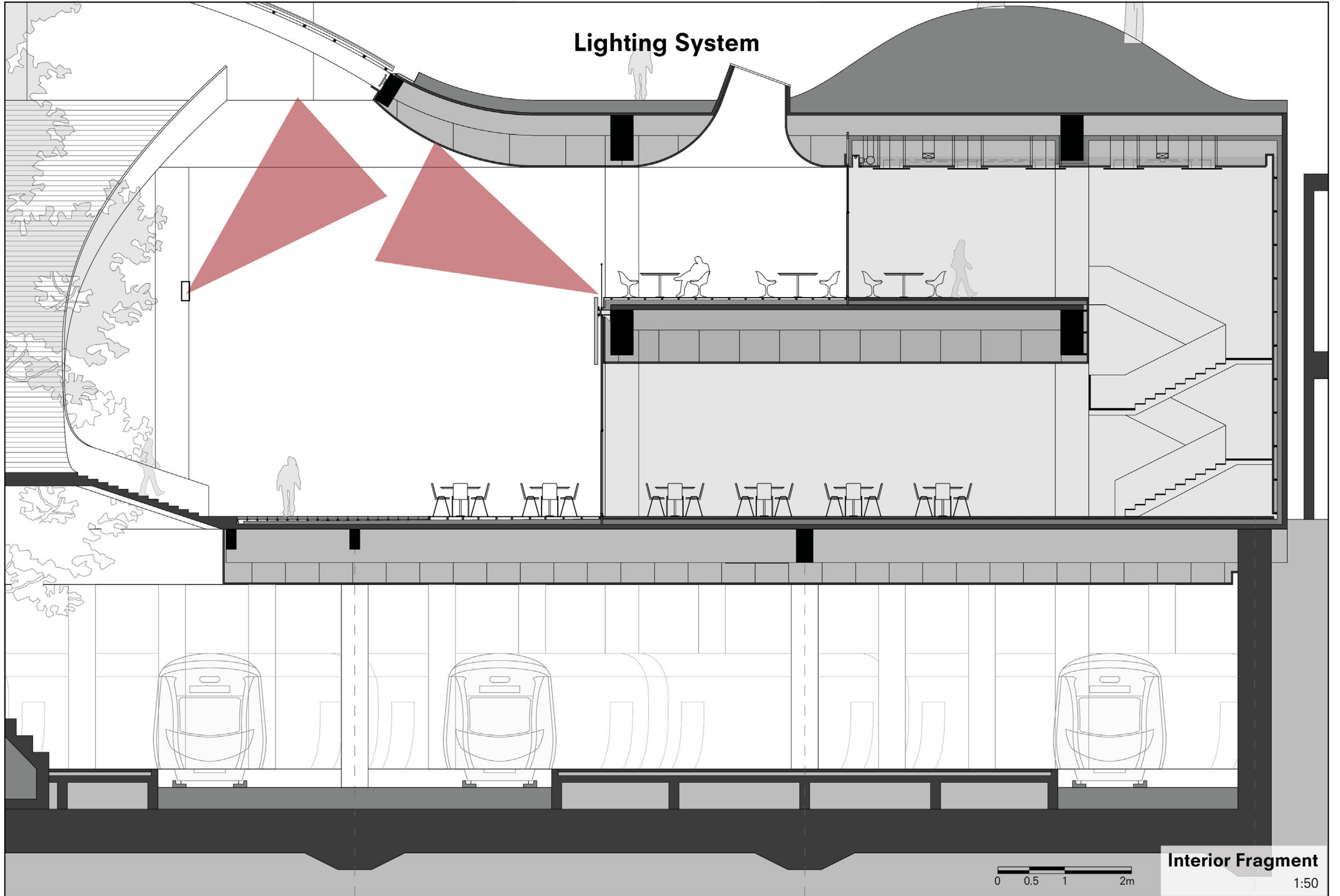
View from Street



Interior Fragment

1:50

Lighting System

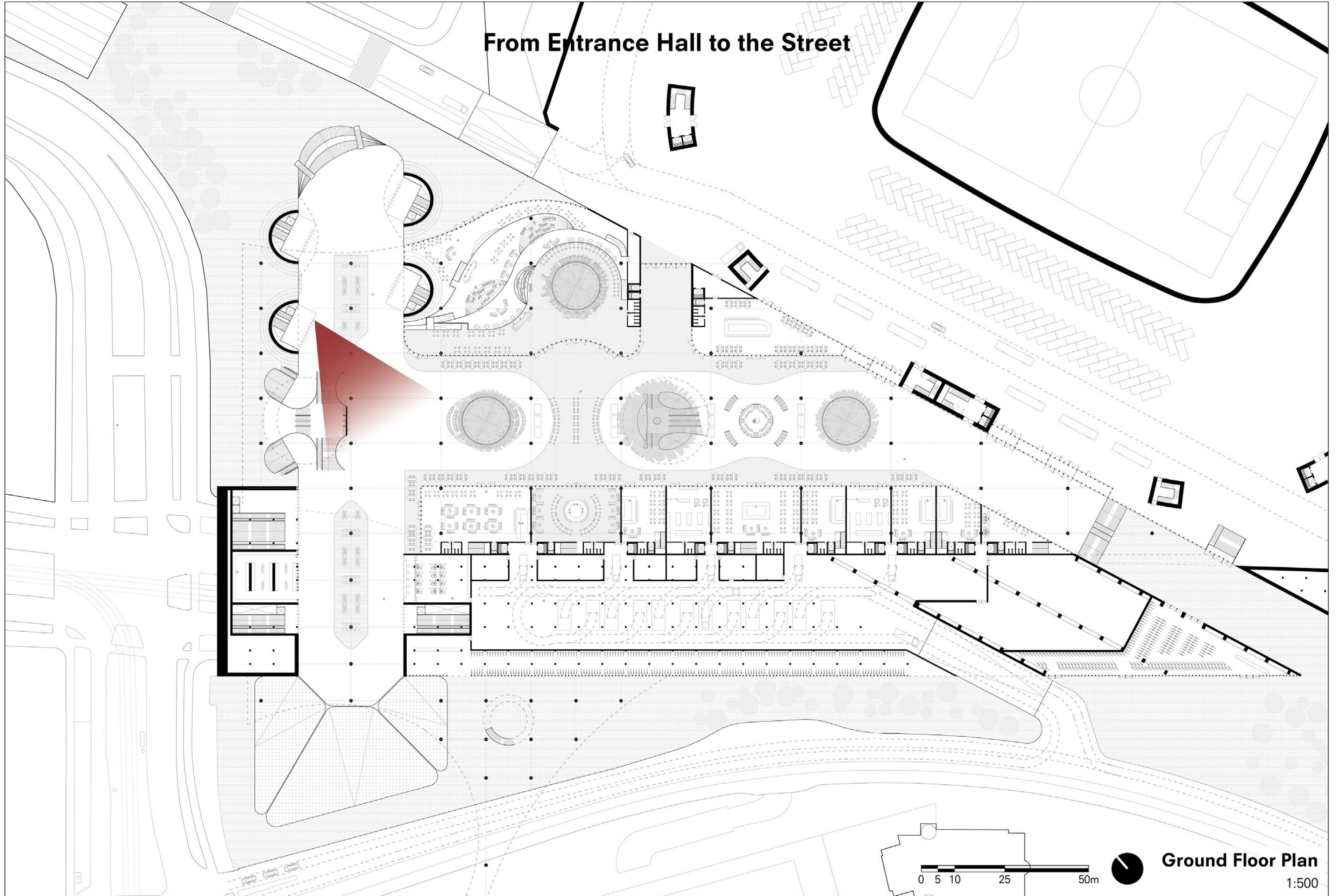


Interior Fragment

0 0.5 1 2m

1:50

From Entrance Hall to the Street



Ground Floor Plan

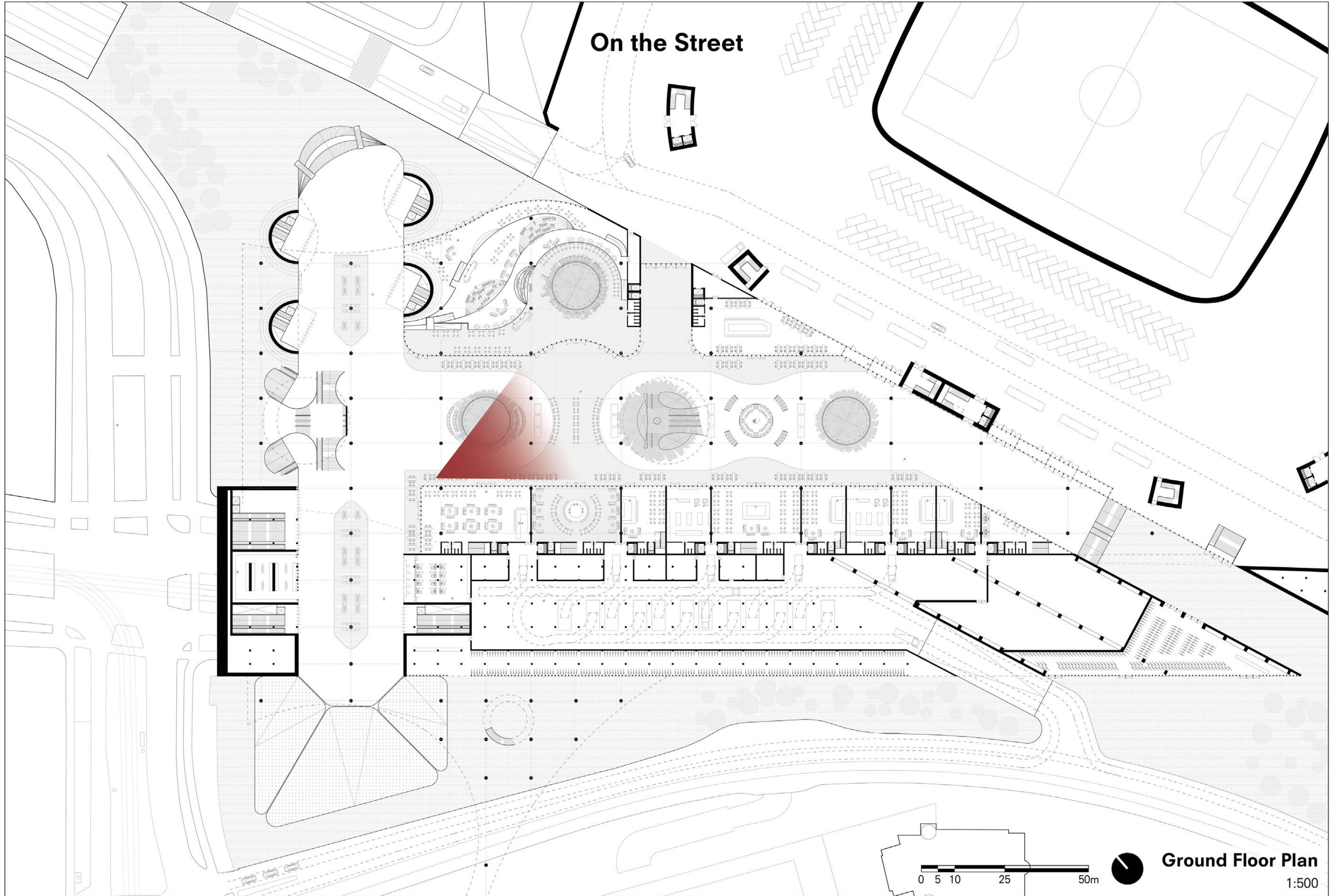
1:500

From Entrance Hall to the Street



Event Street & Interior

On the Street



Jungle & Natural Light on the Street & Visual Connection



Material



Double Glazing (Frame-less)

- Keep the space simple.
- Create the visual connection.
- Continuous curved ceiling.

Clear Anodized Aluminium Panel

- 3250 * 3250 mm
- Keep the space simple. Reflect the light.
- Cooperate with Natural Stone Floor



Laminate Board

- Cooperate with Jungle

Material



Polished Chrome

Reflective surface makes itself disappear.
Help the greenery become the main character in Street,

Natural Stone (Gray)

Gray Colour as the background of the space.
Cooperate with ceiling.



Parallel Parquet

Indicate the space for people to sitting.
Cooperate with Jungle

Signage



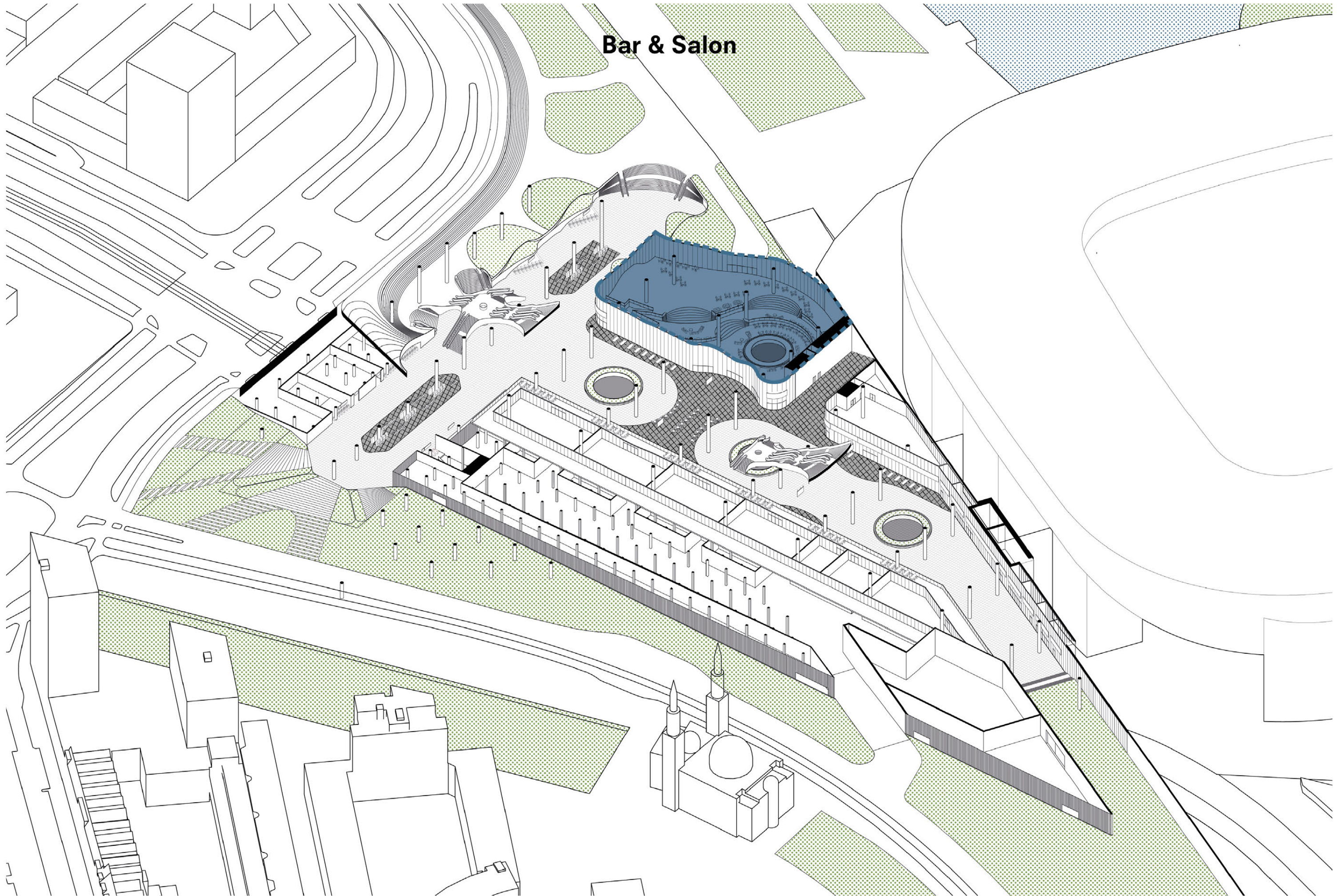
For Mobility Hub

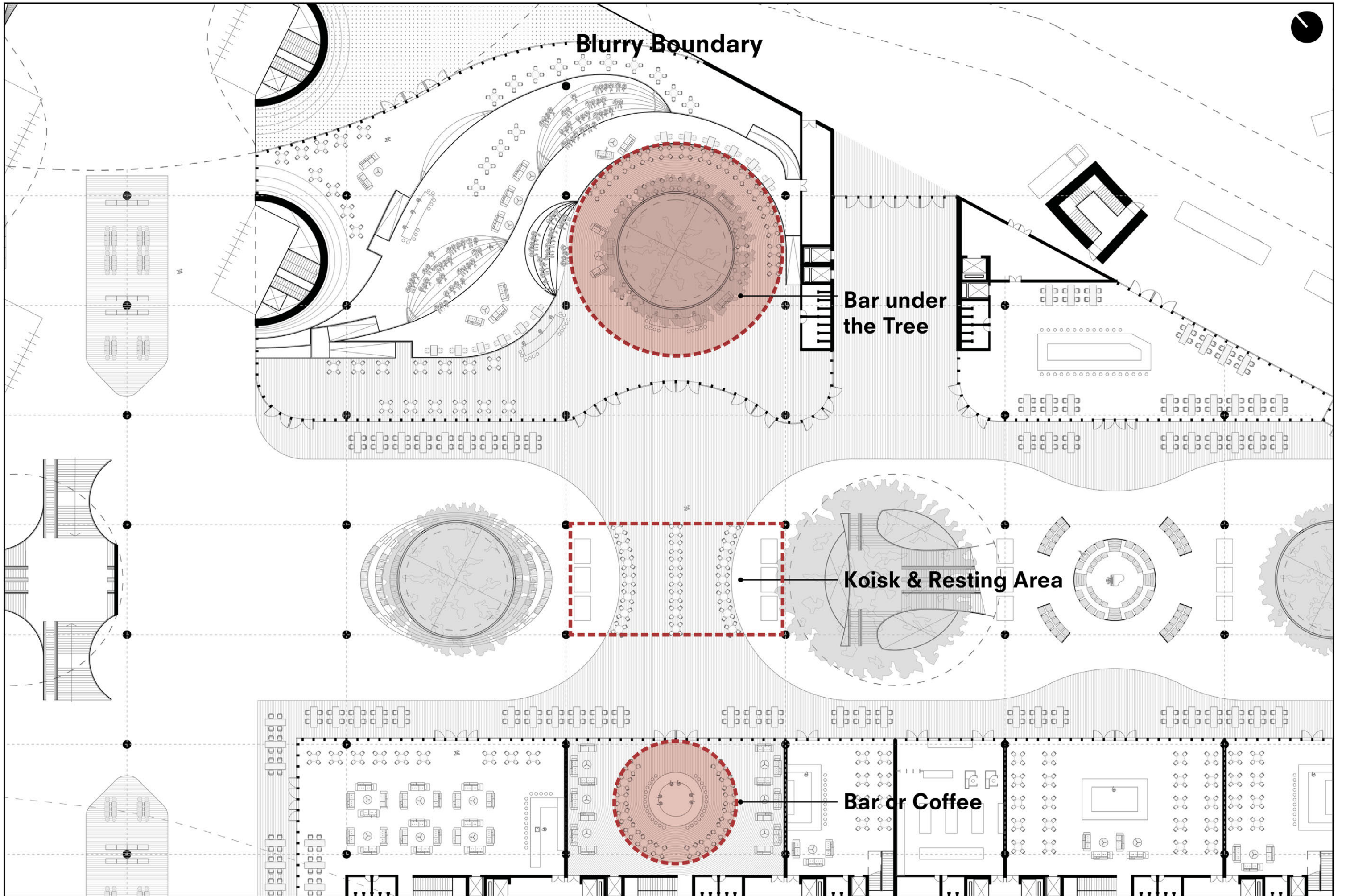
Hanging from the Ceiling

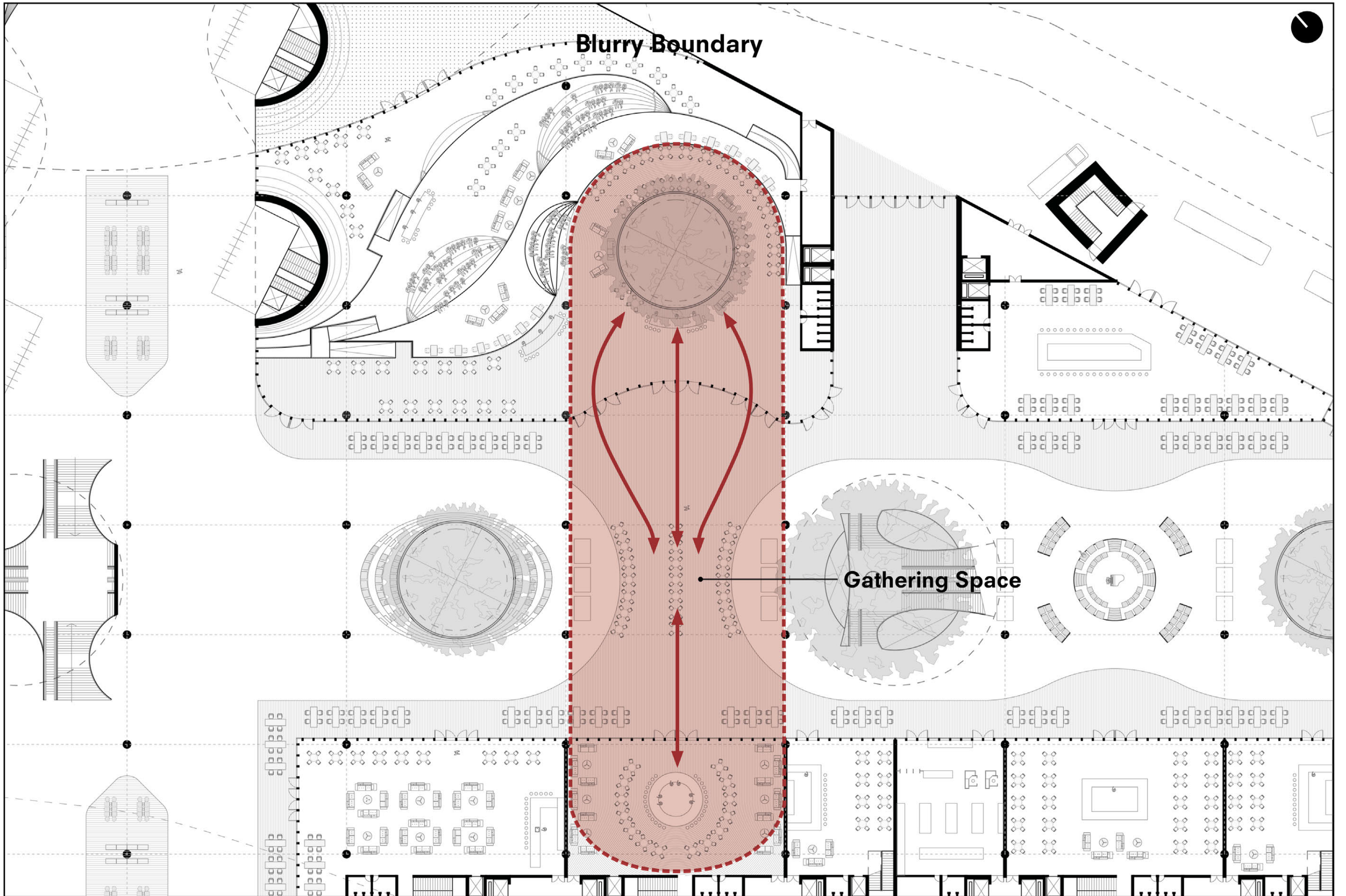
For Retail

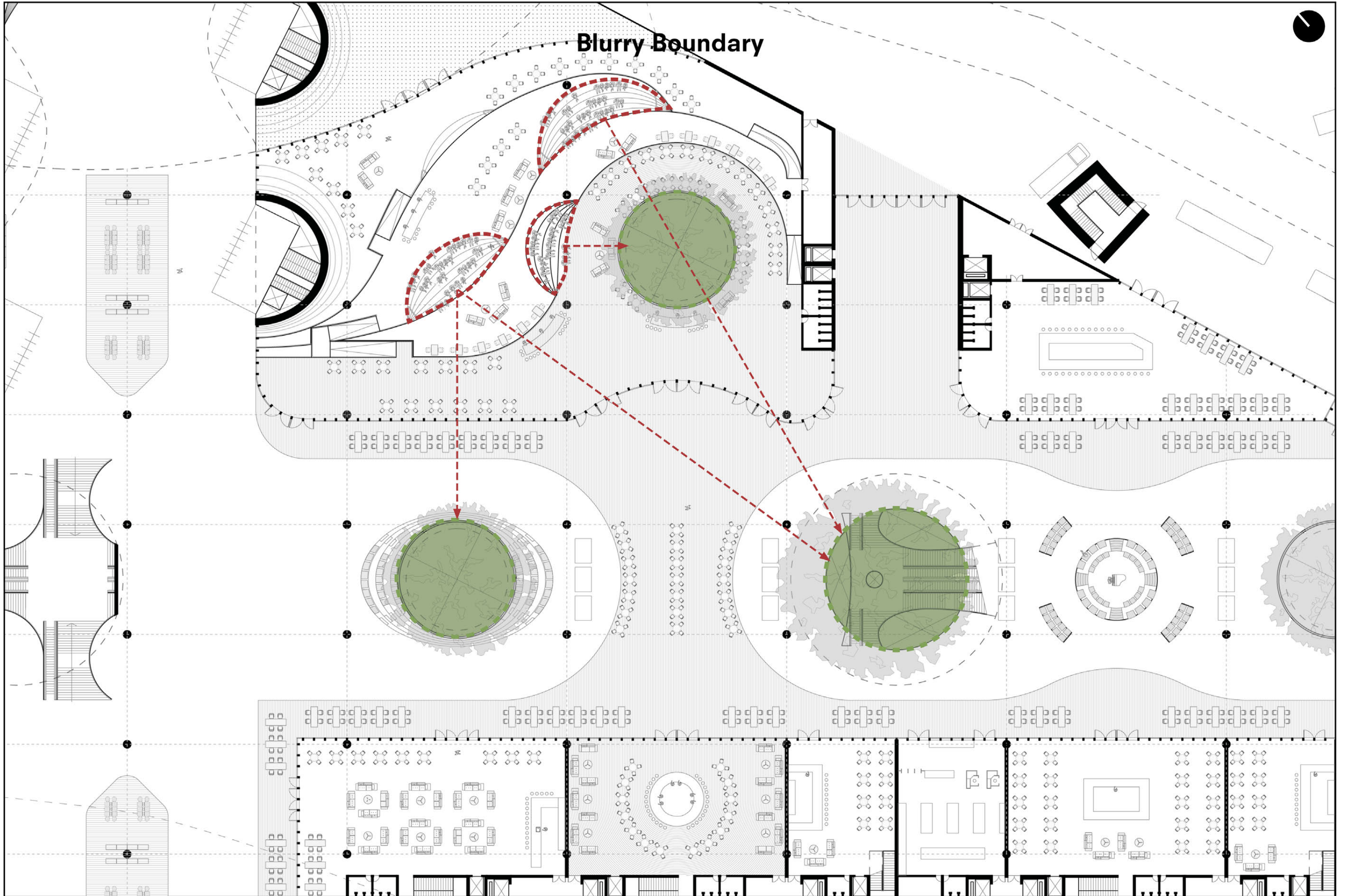
Laminate Board as the
Background

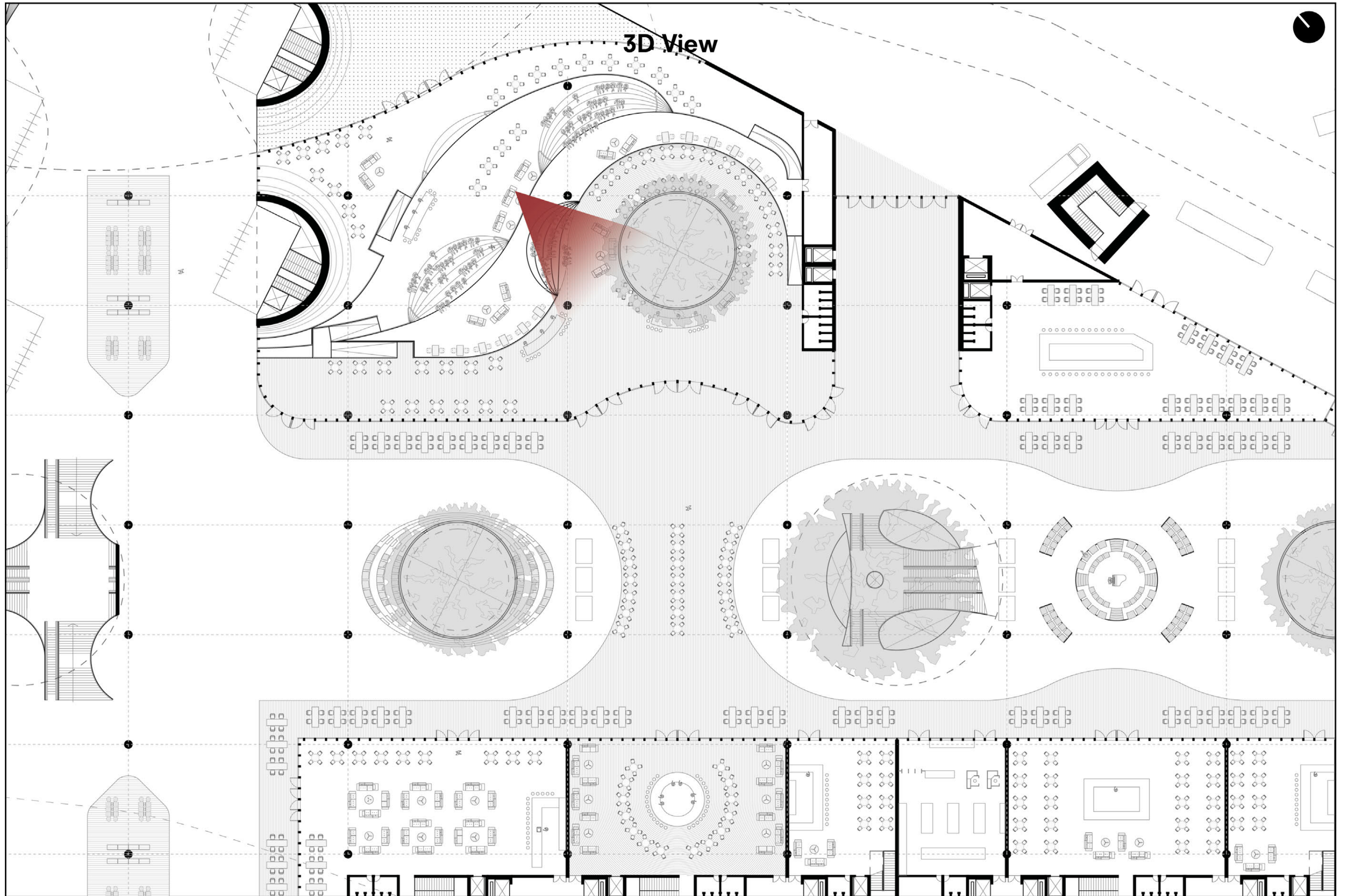
Bar & Salon











Salon & Bar



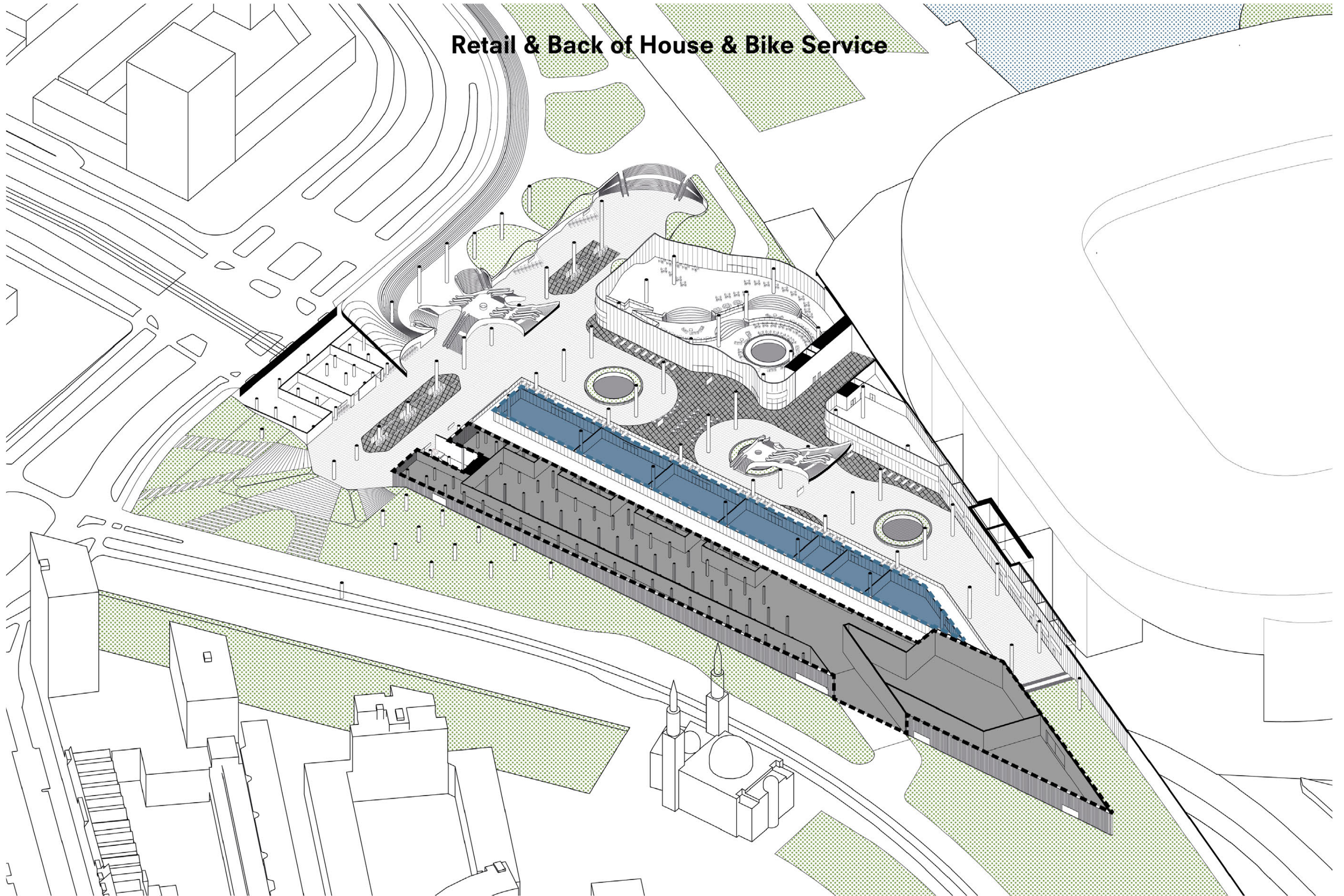
Salon & Bar



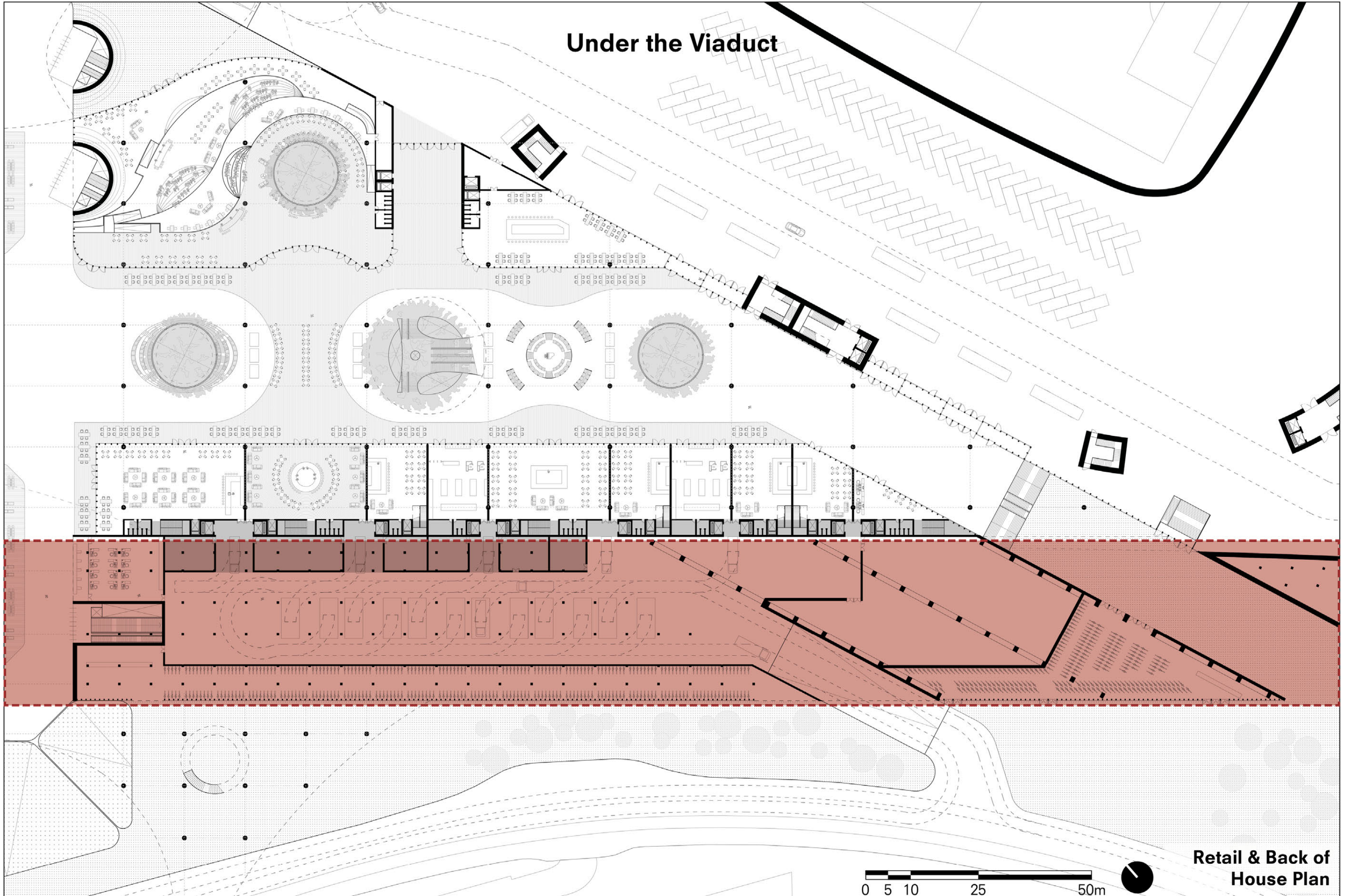
Parallel Parquet

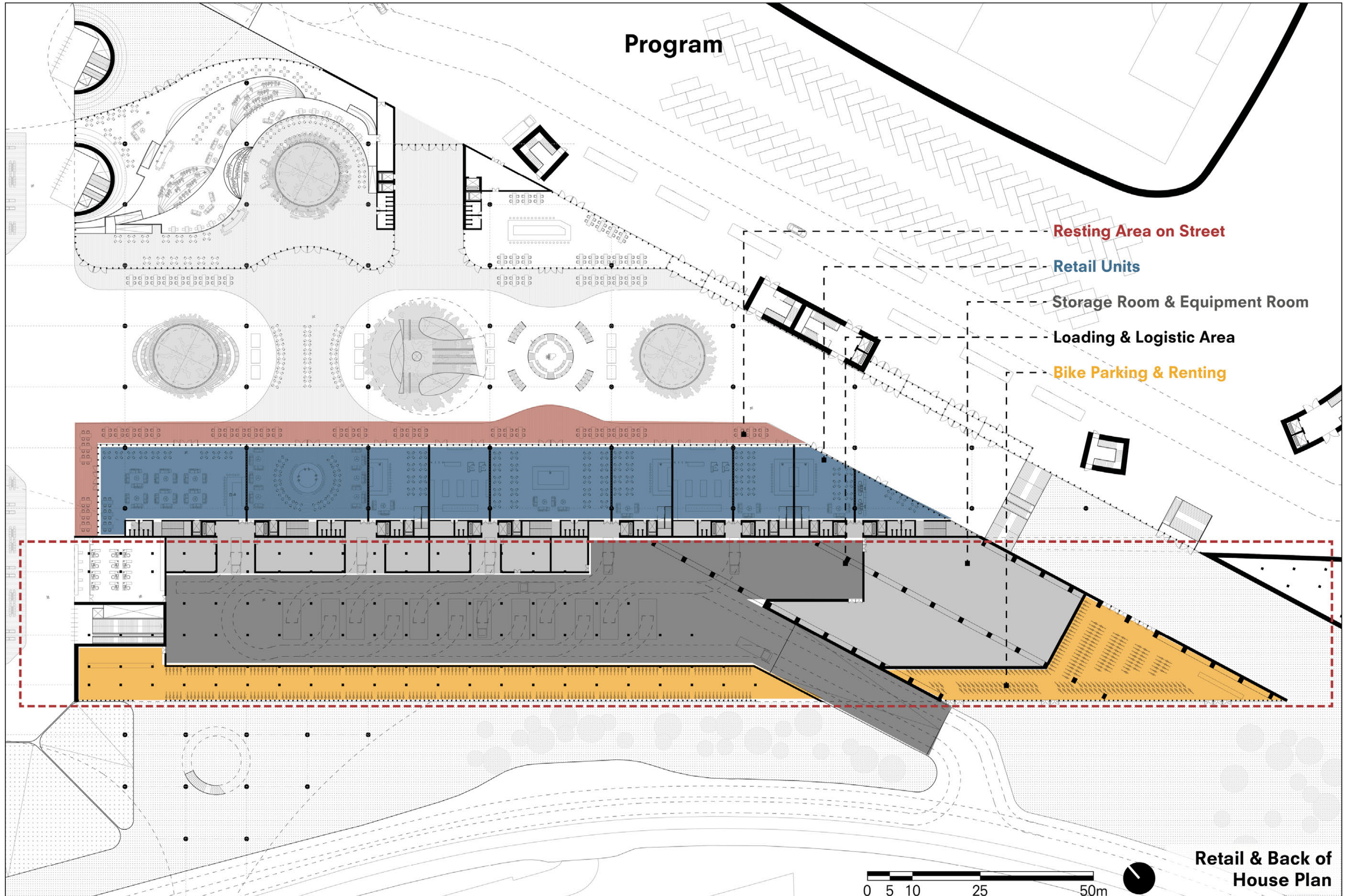


Retail & Back of House & Bike Service

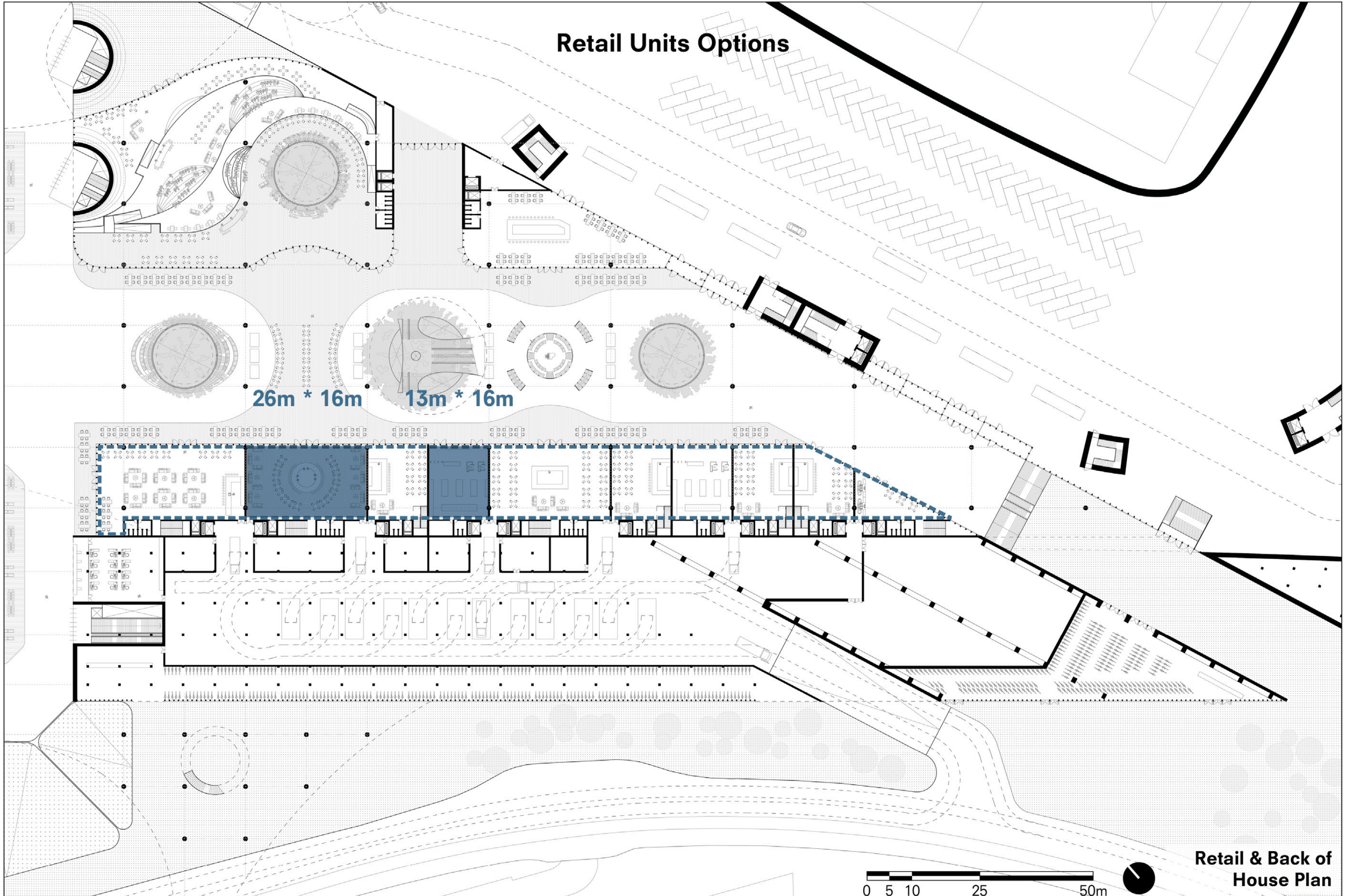


Under the Viaduct

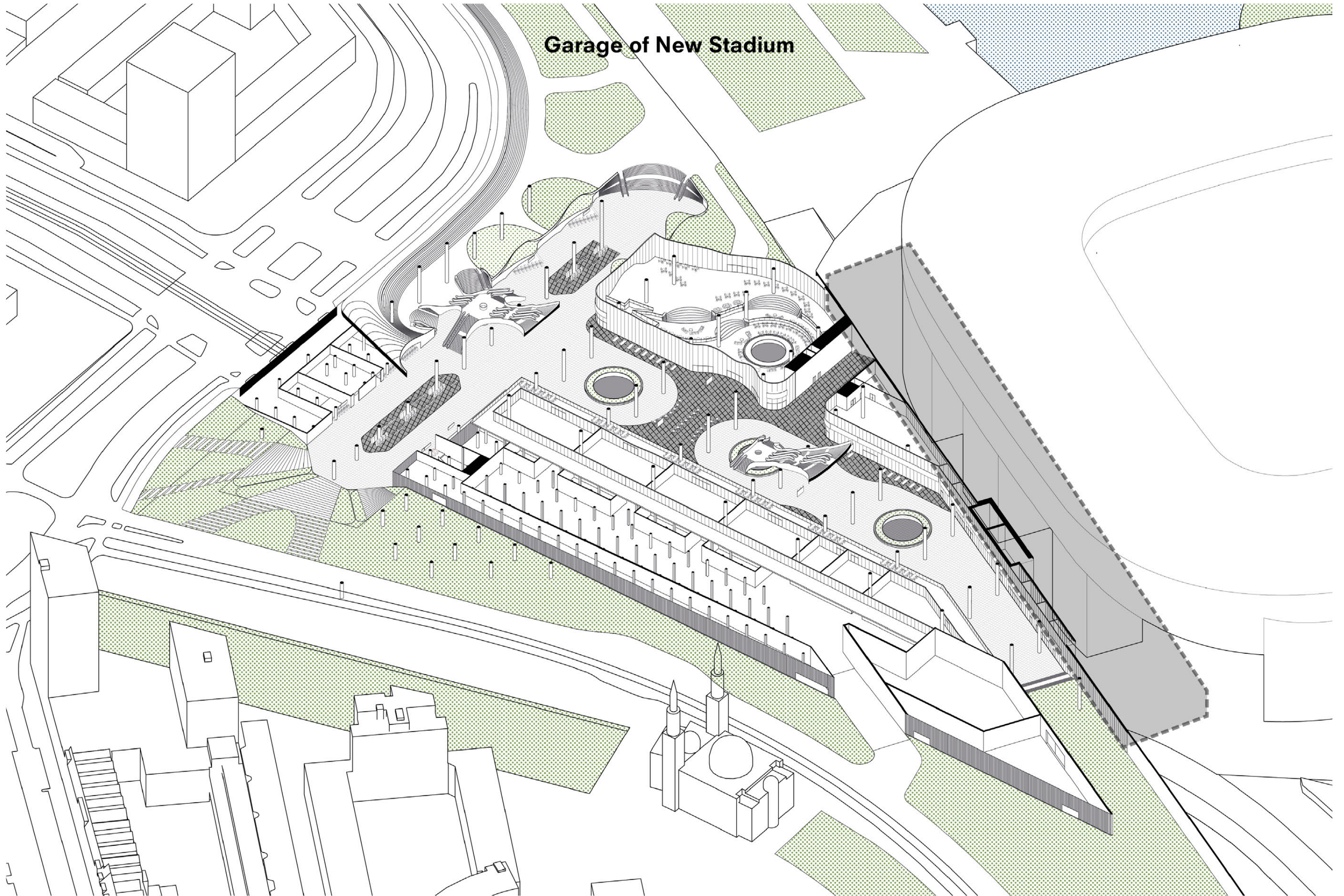


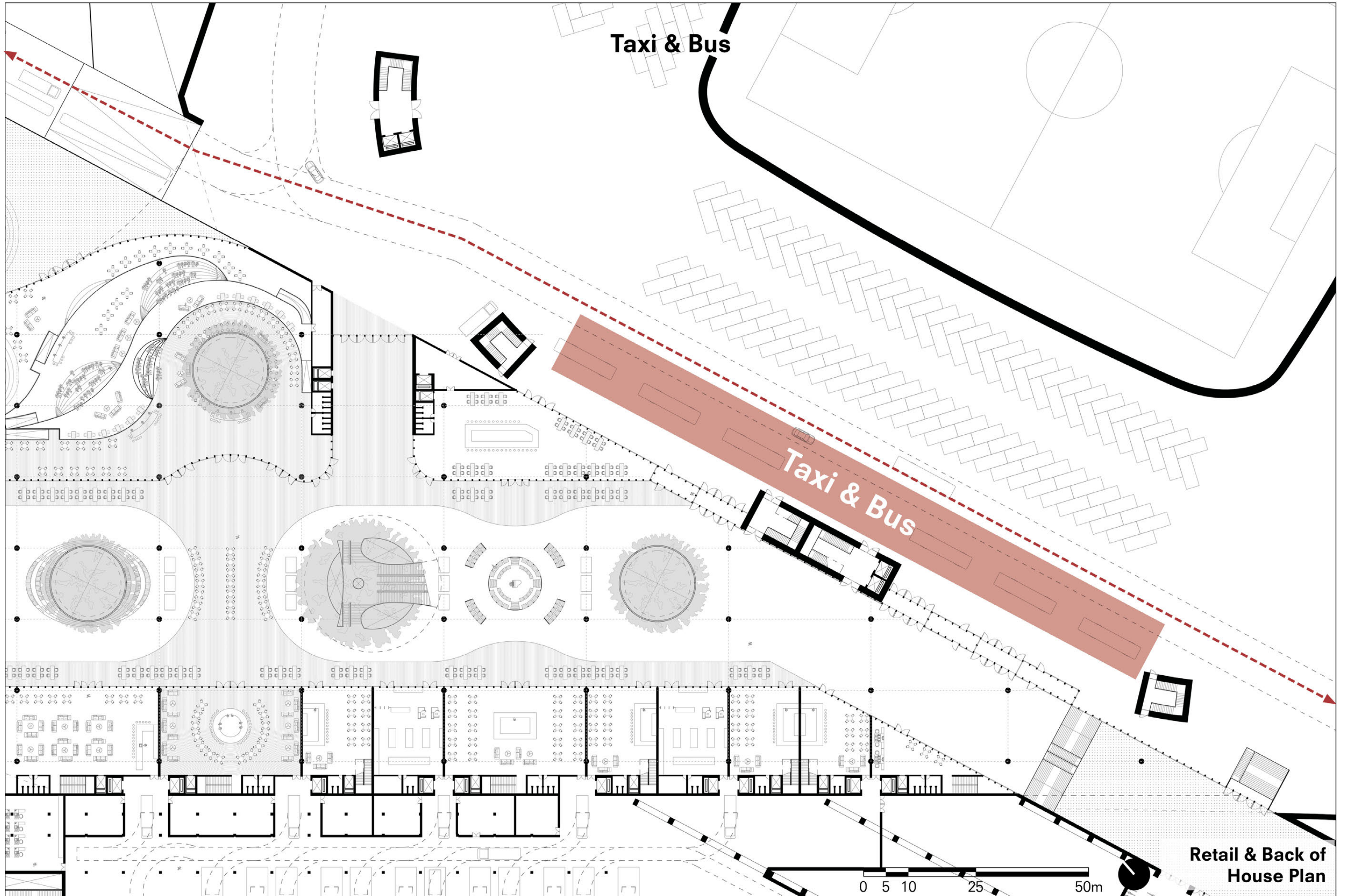


Retail Units Options



Garage of New Stadium





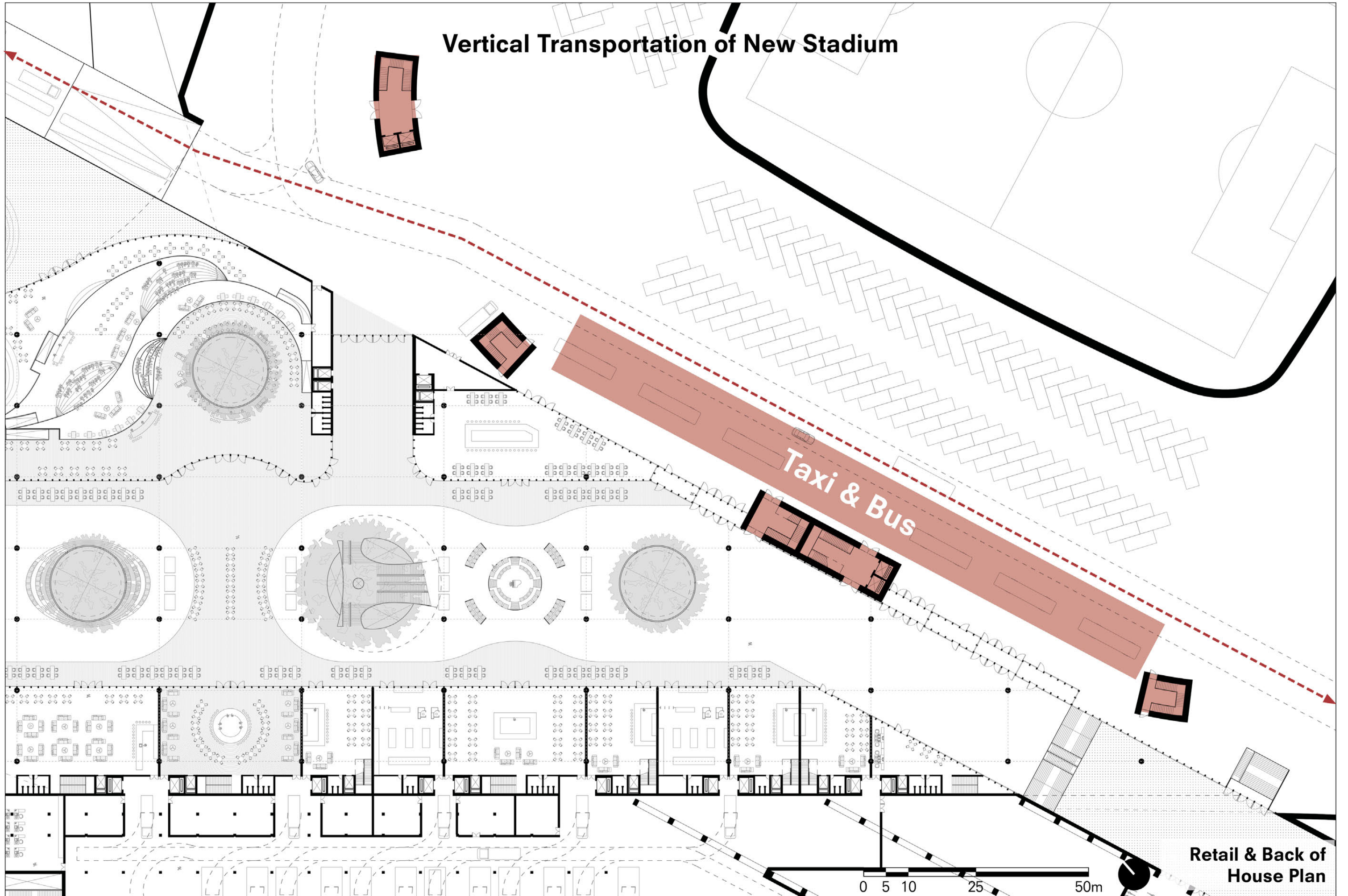
Taxi & Bus

Taxi & Bus

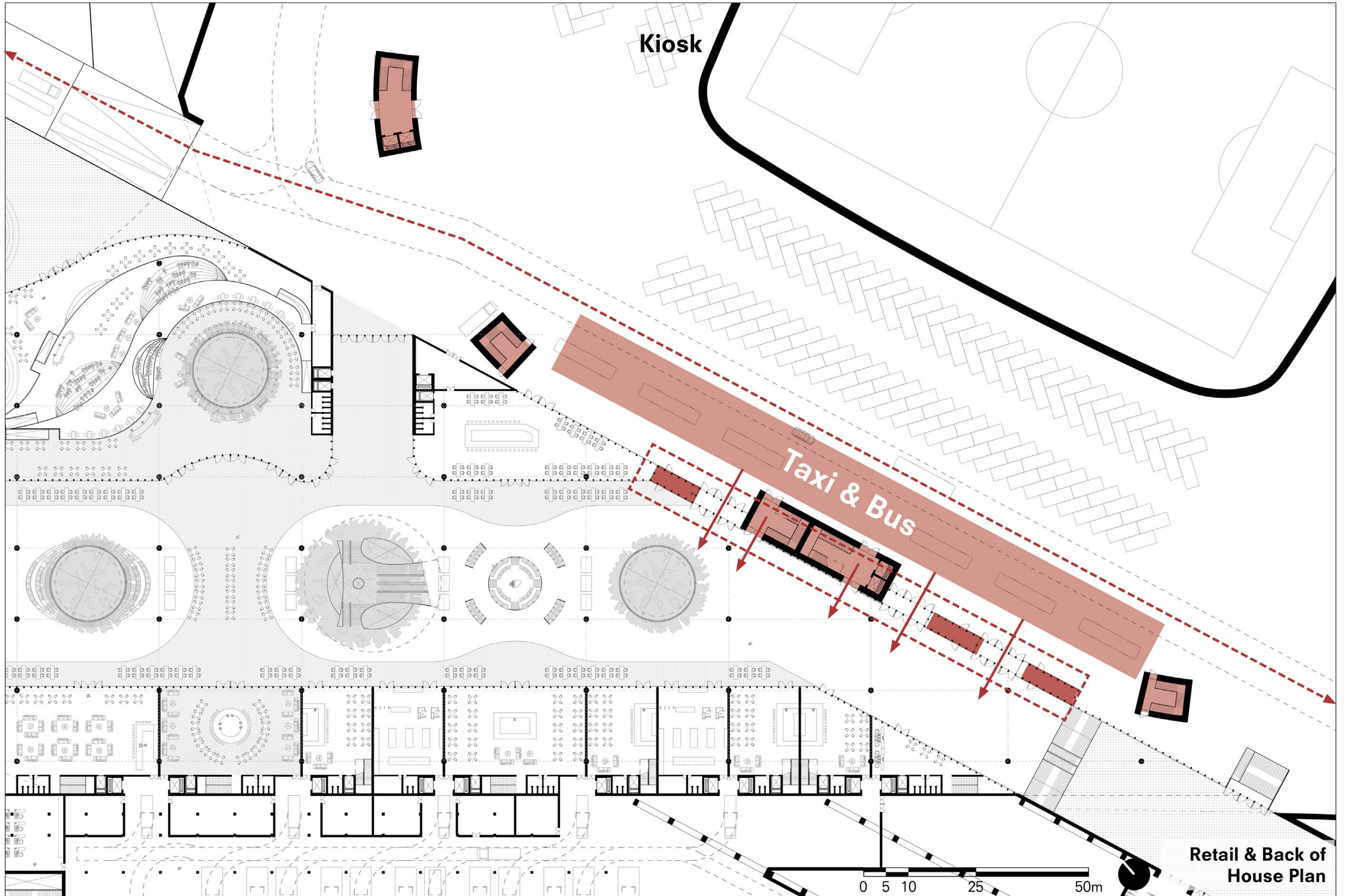
Retail & Back of House Plan

0 5 10 25 50m

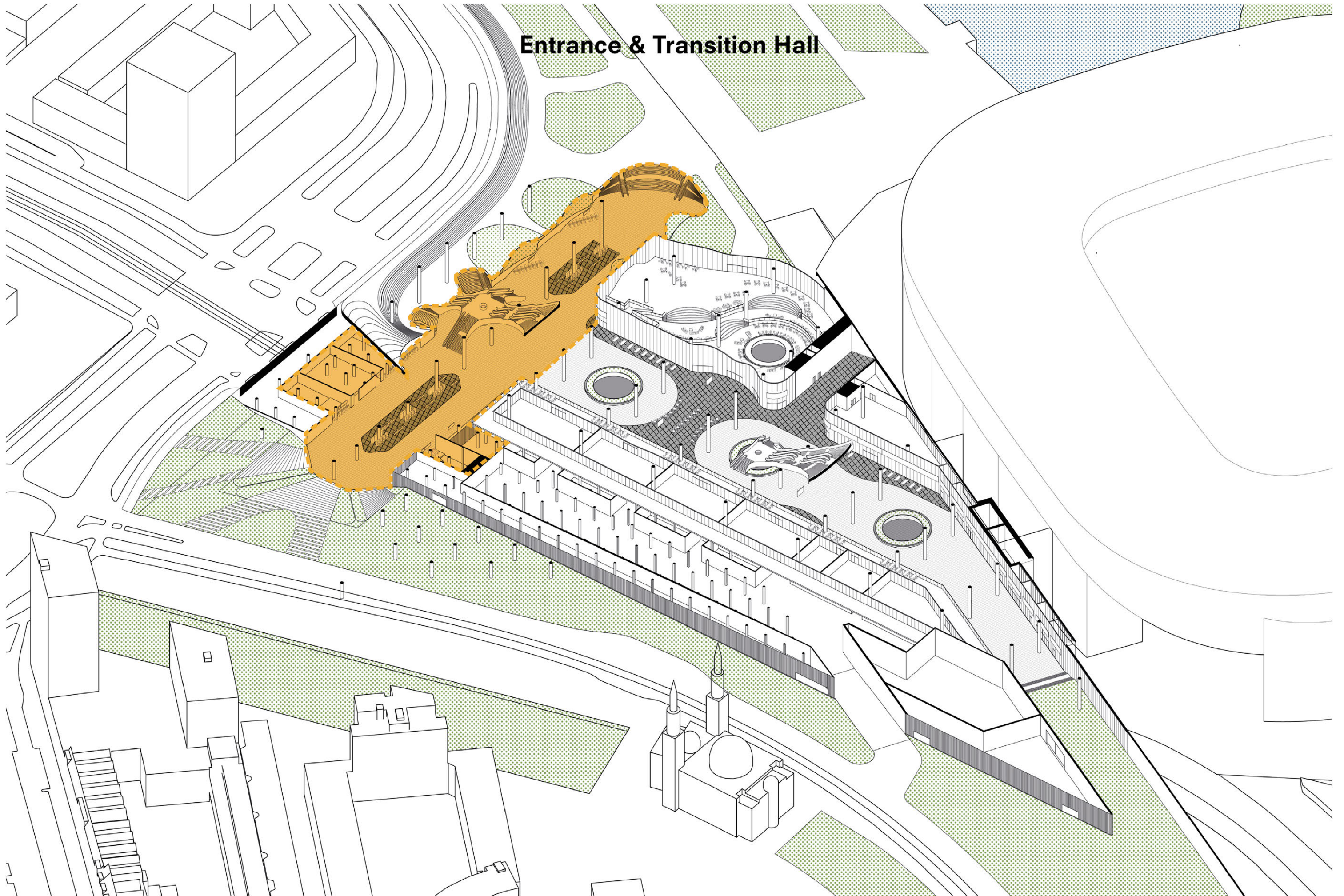
Vertical Transportation of New Stadium



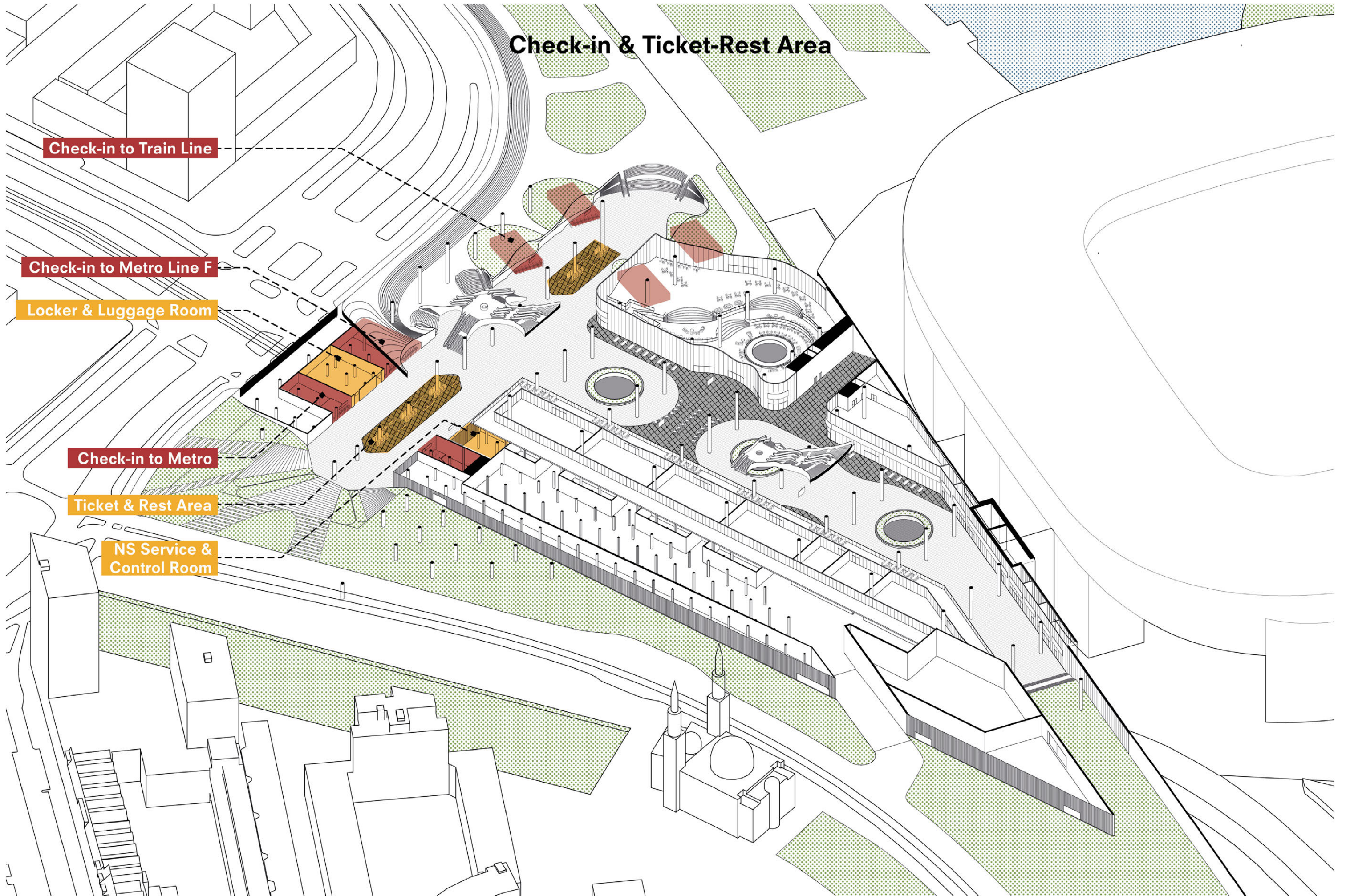
Event Street & Interior



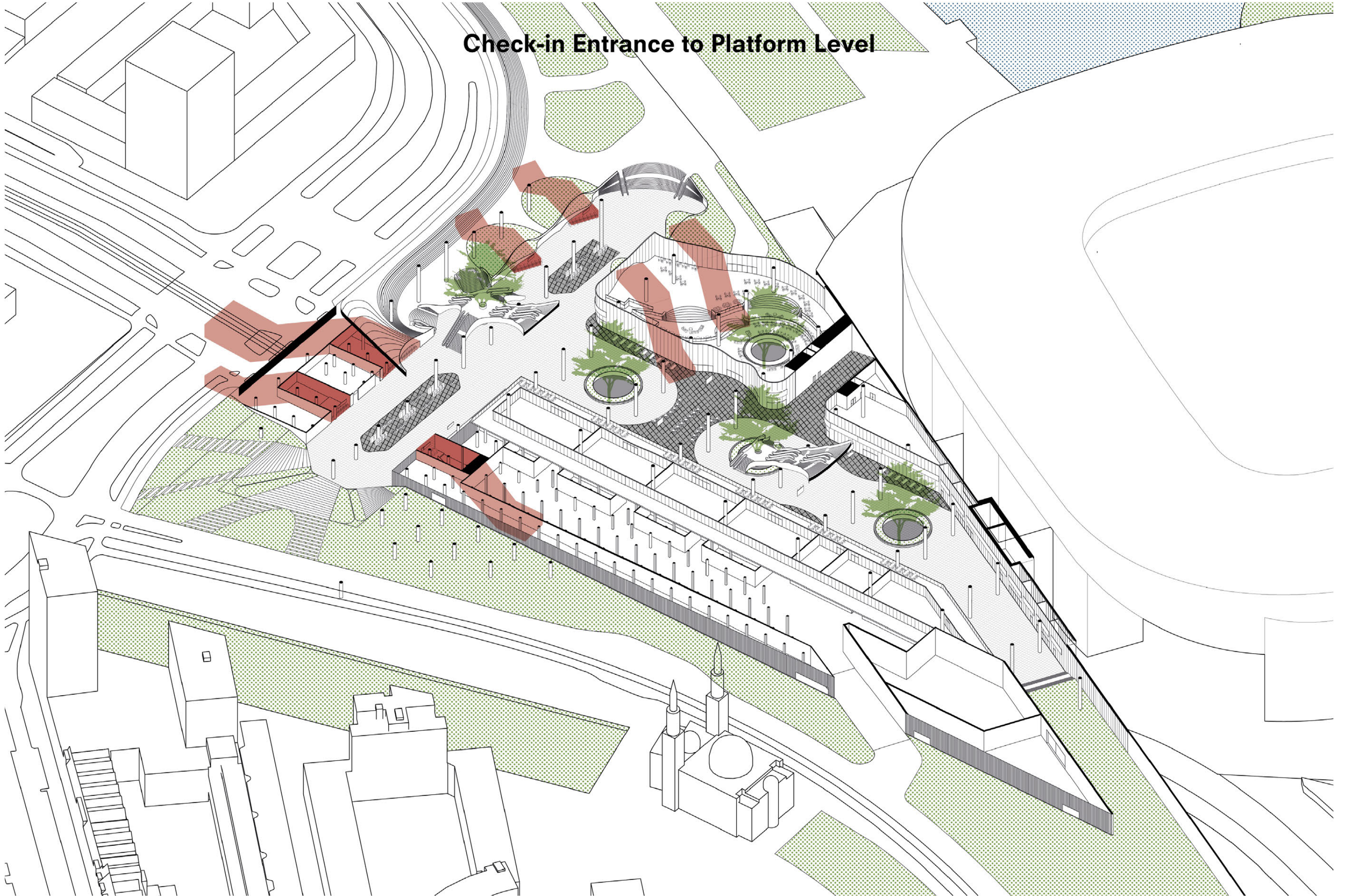
Entrance & Transition Hall



Check-in & Ticket-Rest Area



Check-in Entrance to Platform Level

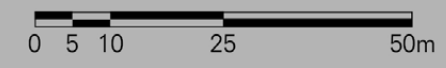
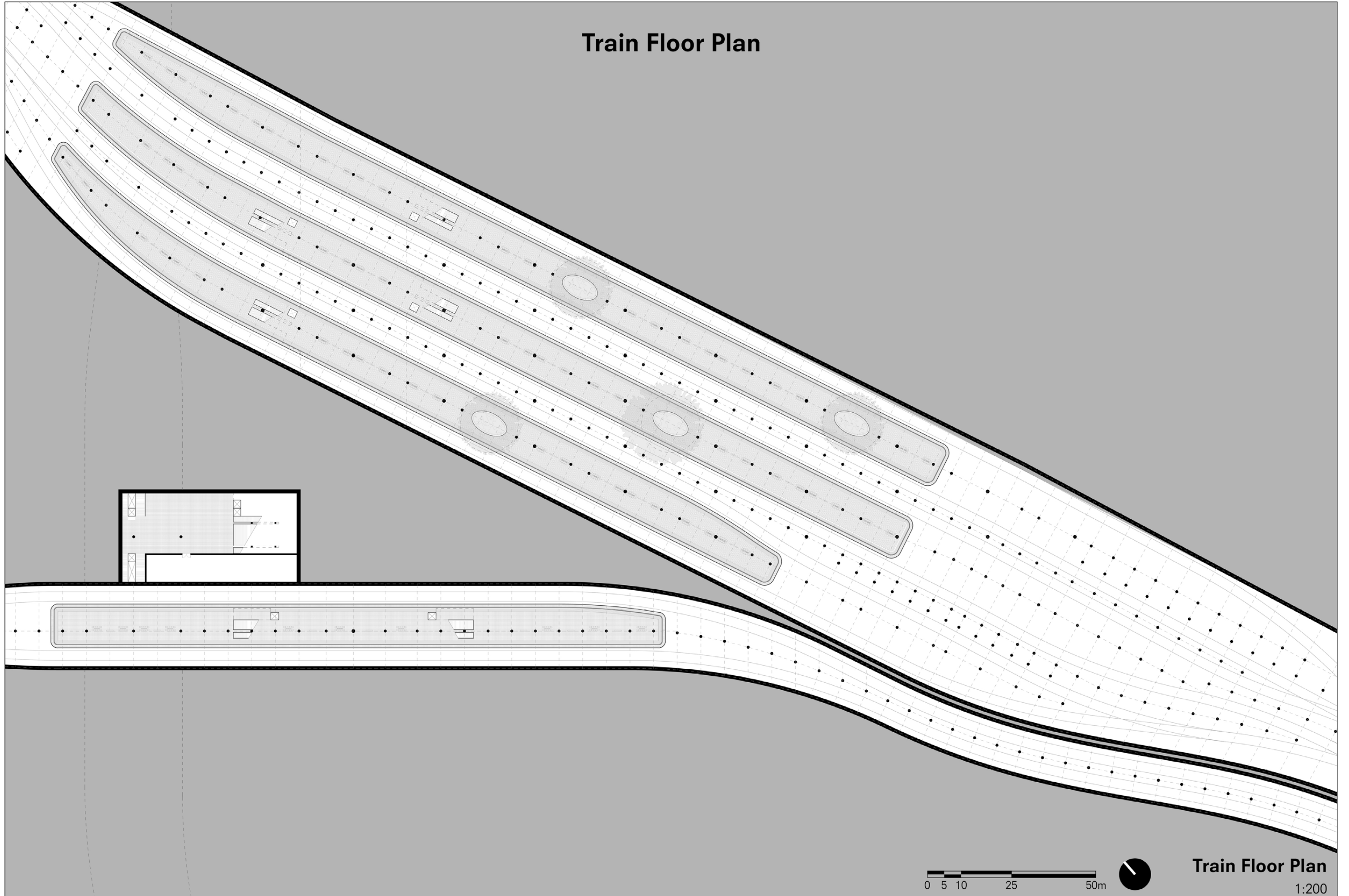


Train & Metro Station

Train & Metro Station



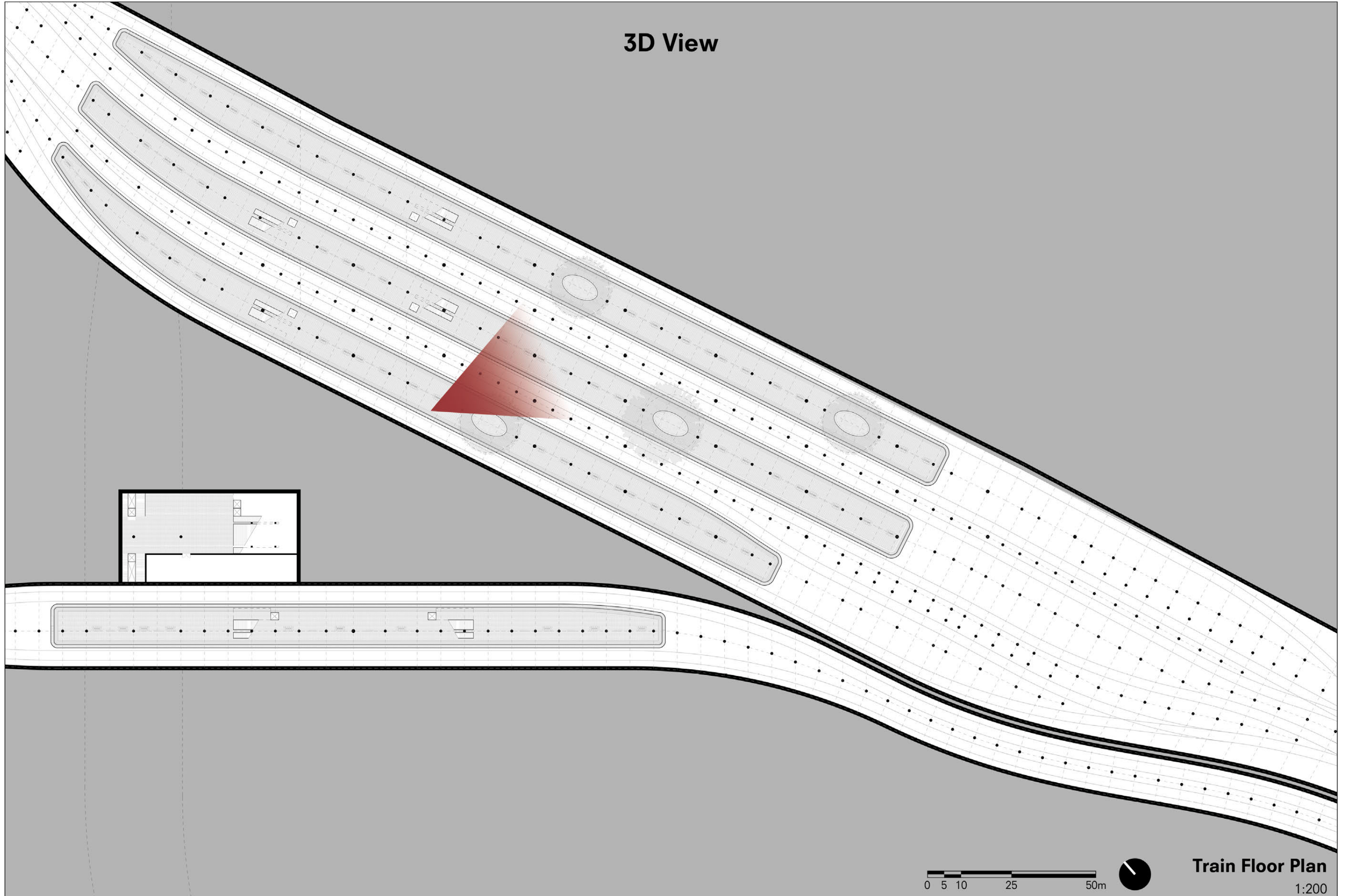
Train Floor Plan



Train Floor Plan

1:200

3D View



Train Floor Plan

1:200

Train Platform

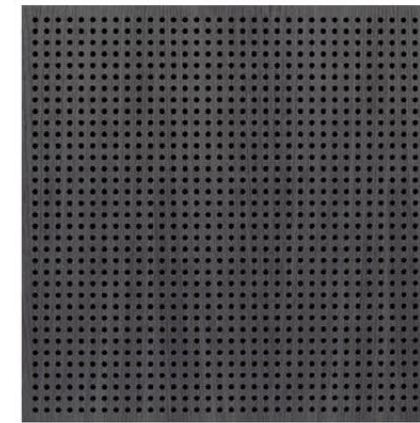


Train Platform Material



Clear Anodized Aluminium Panel

Acoustic Ceiling
Microperforated Panel (Black)



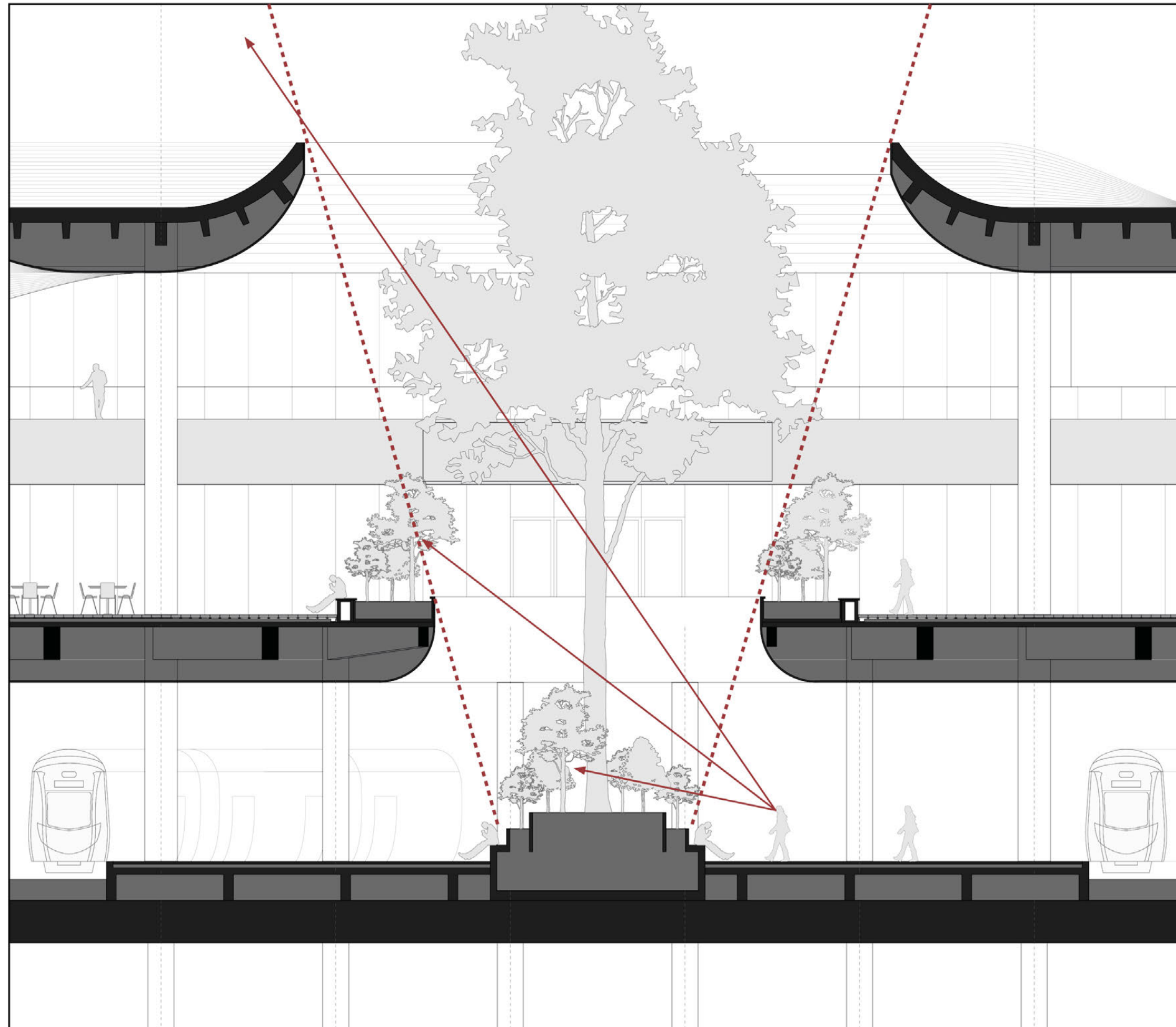
Natural Stone (Gray)

Polished Chrome

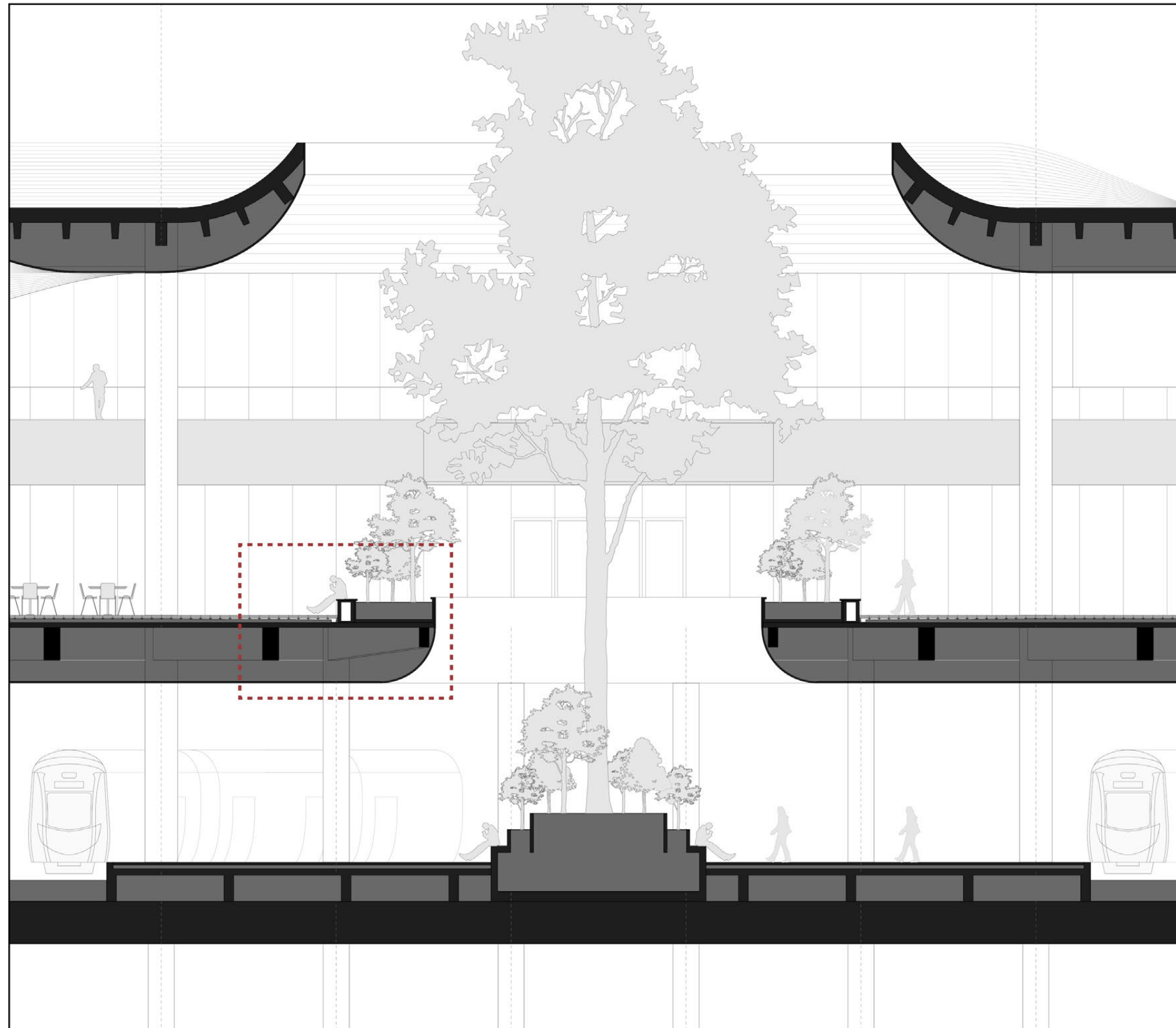
Tile (Red)



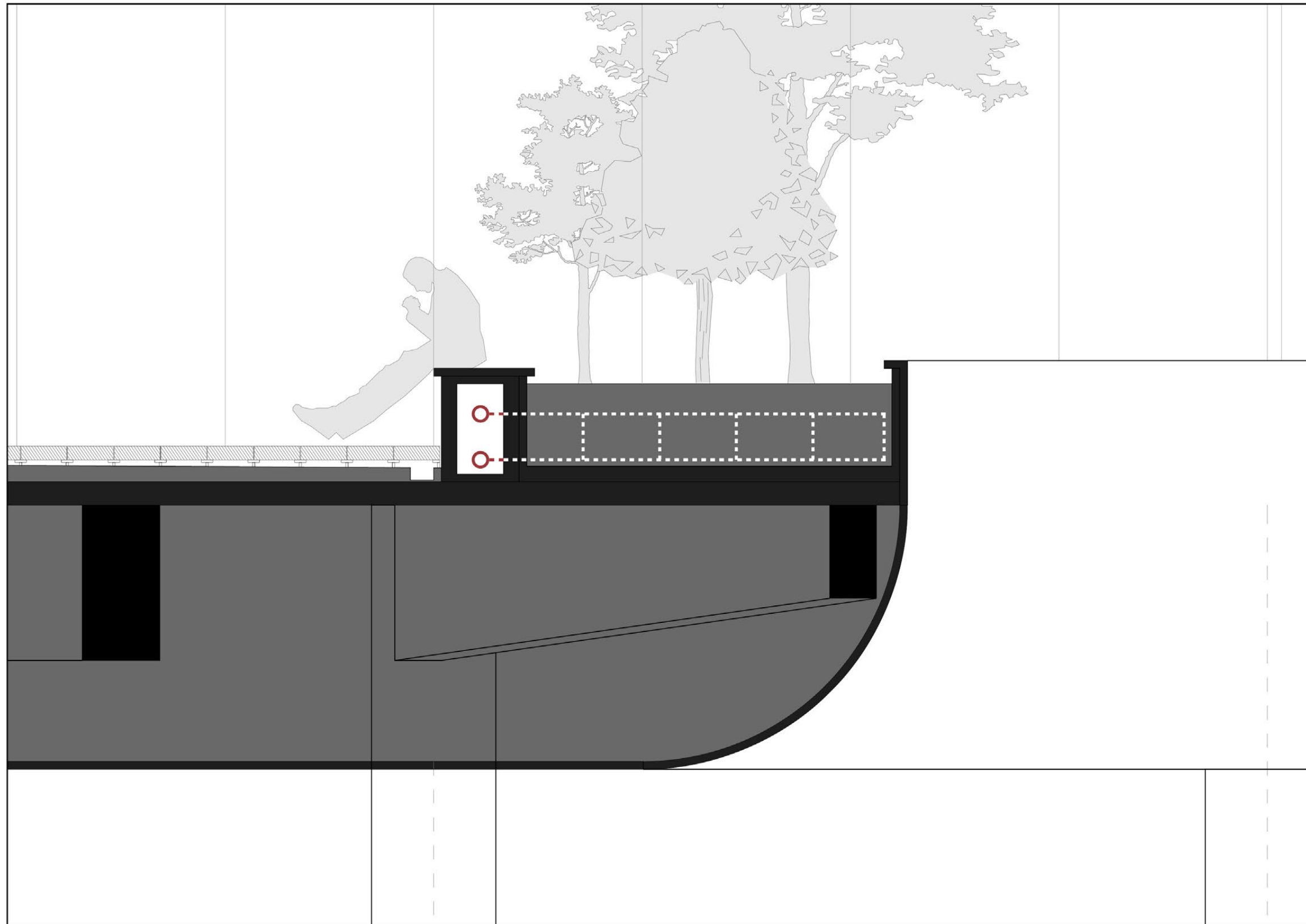
Natural Core Section



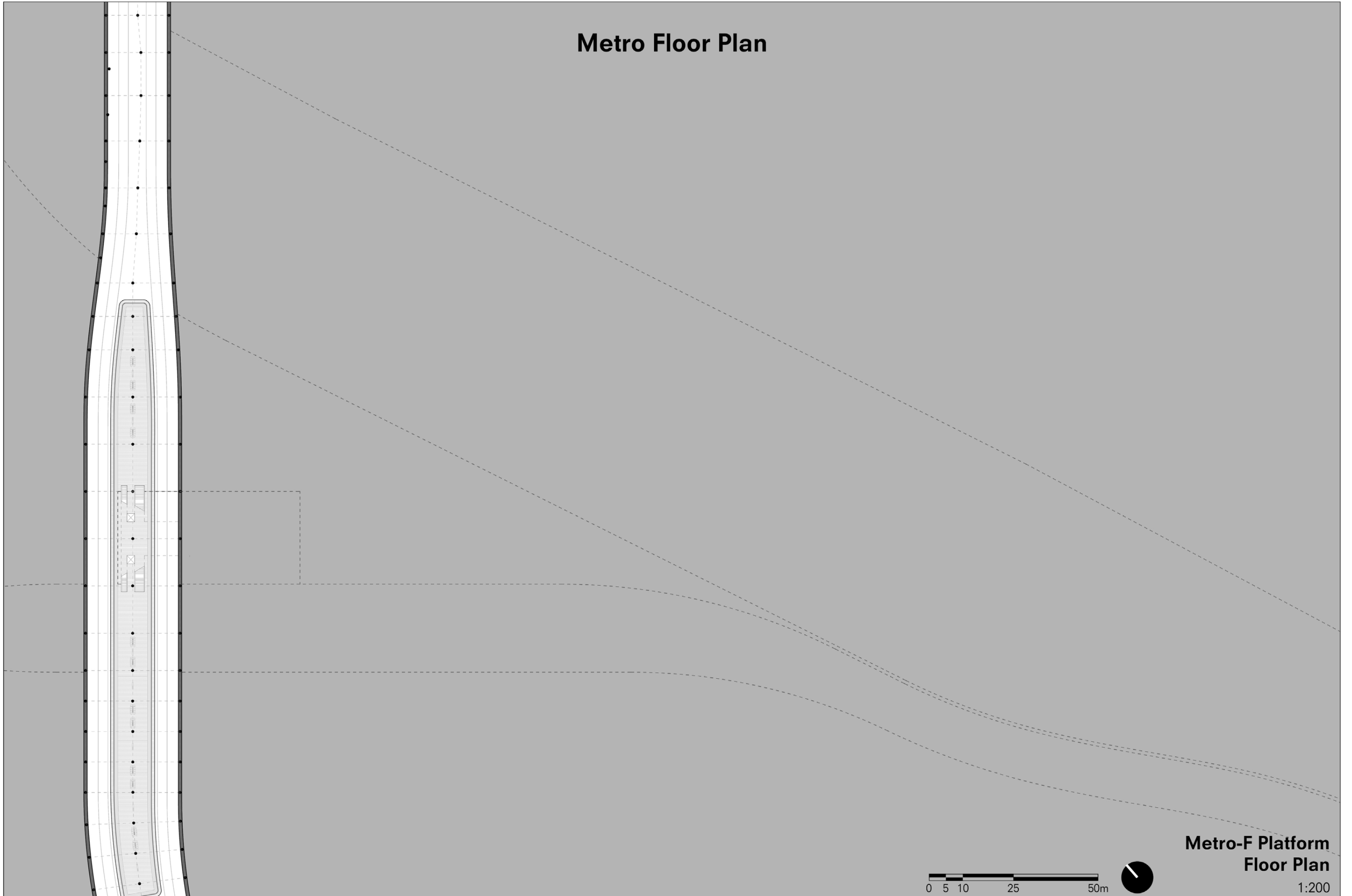
Natural Core Section



Life Maintain System



Metro Floor Plan



**Metro-F Platform
Floor Plan**

0 5 10 25 50m



1:200

Structure

Structure

Concrete Frame Structure

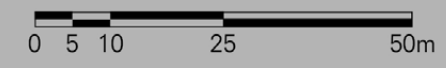
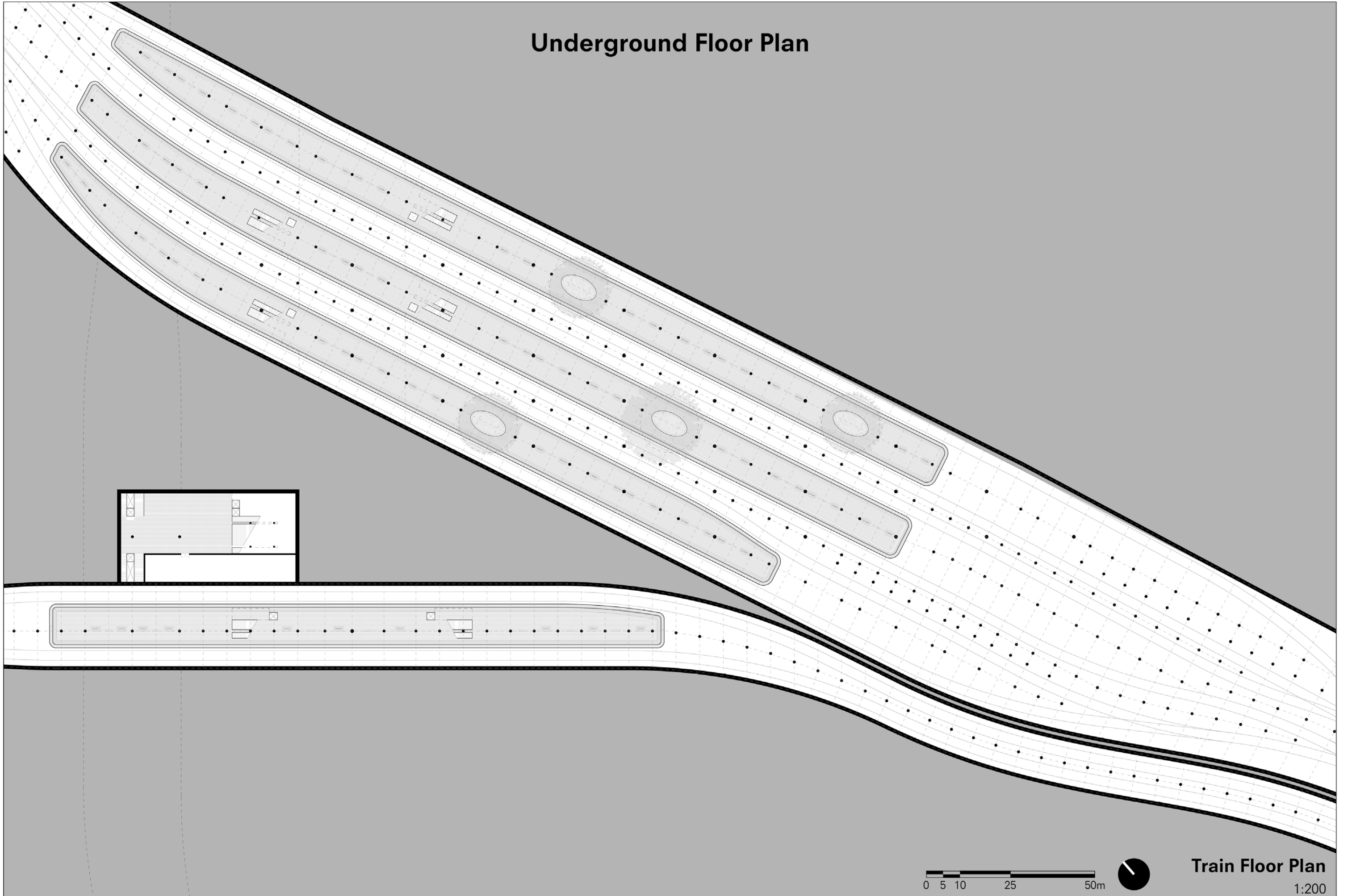


Concrete Column + Prestressed Concrete Beams



**Two Different Direction
Structure Grid in Layers**

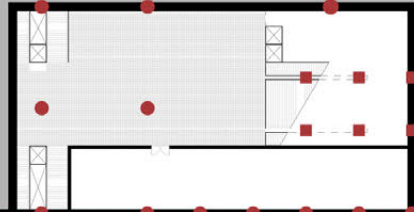
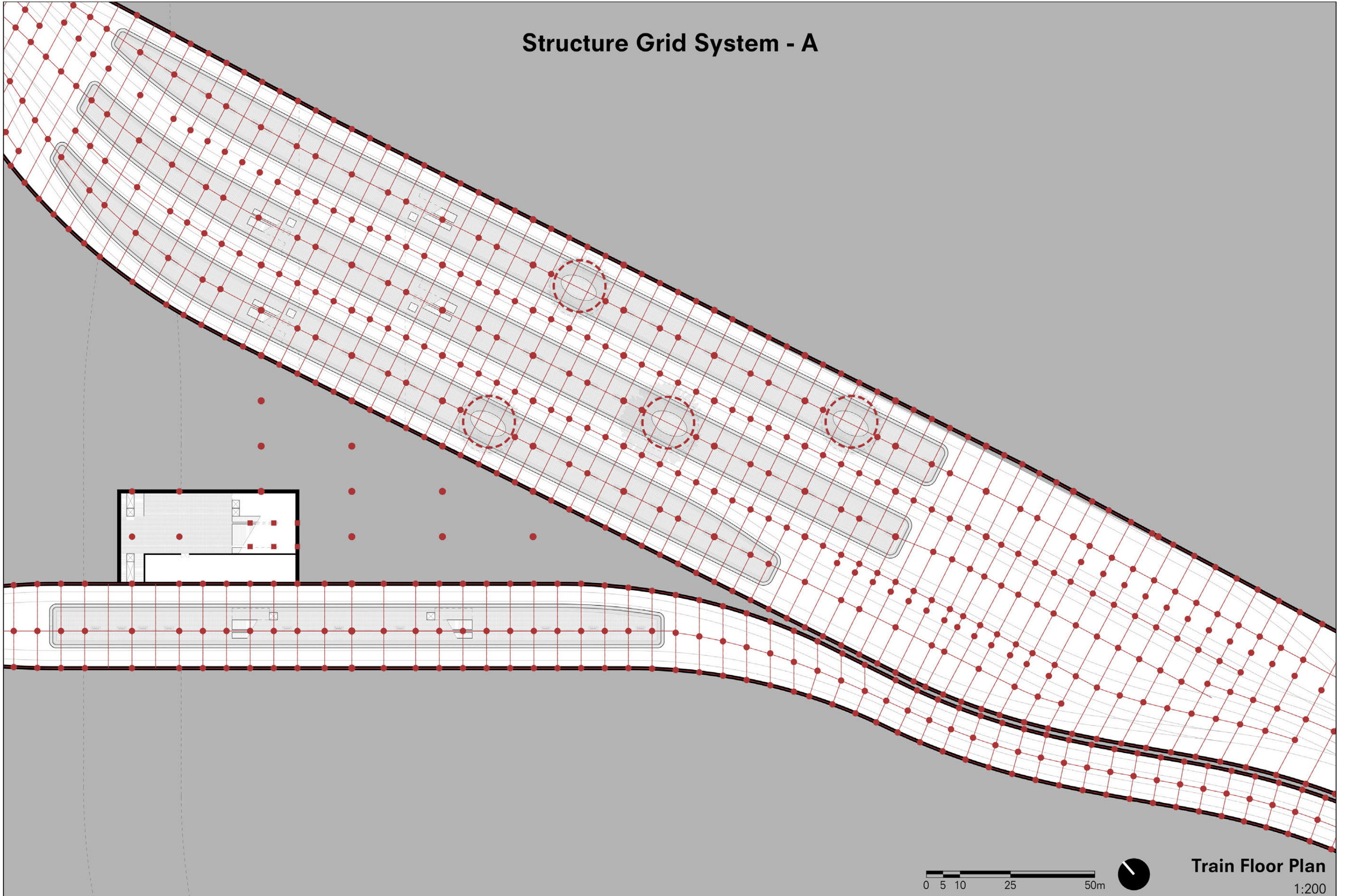
Underground Floor Plan



Train Floor Plan

1:200

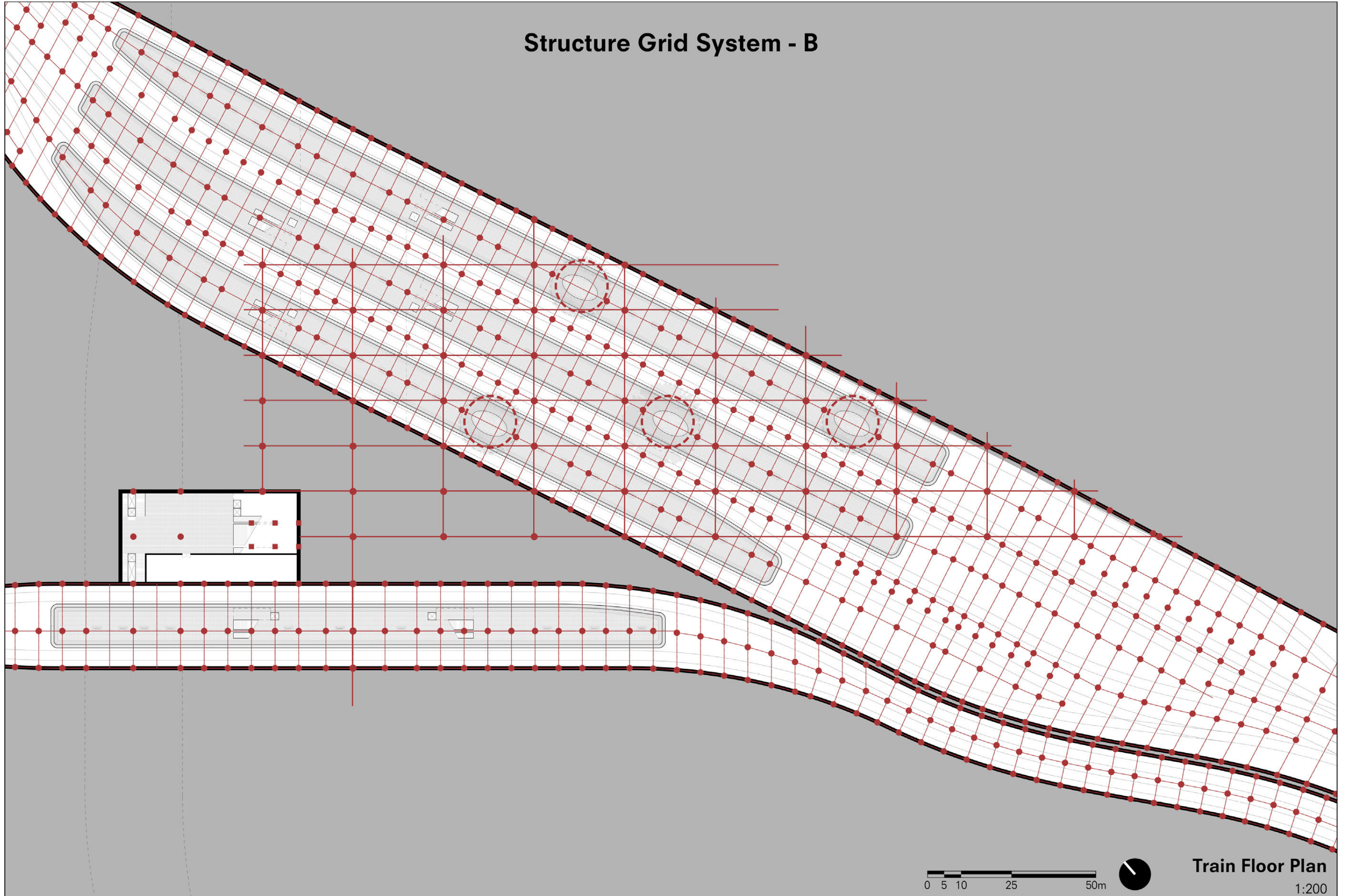
Structure Grid System - A



Train Floor Plan

1:200

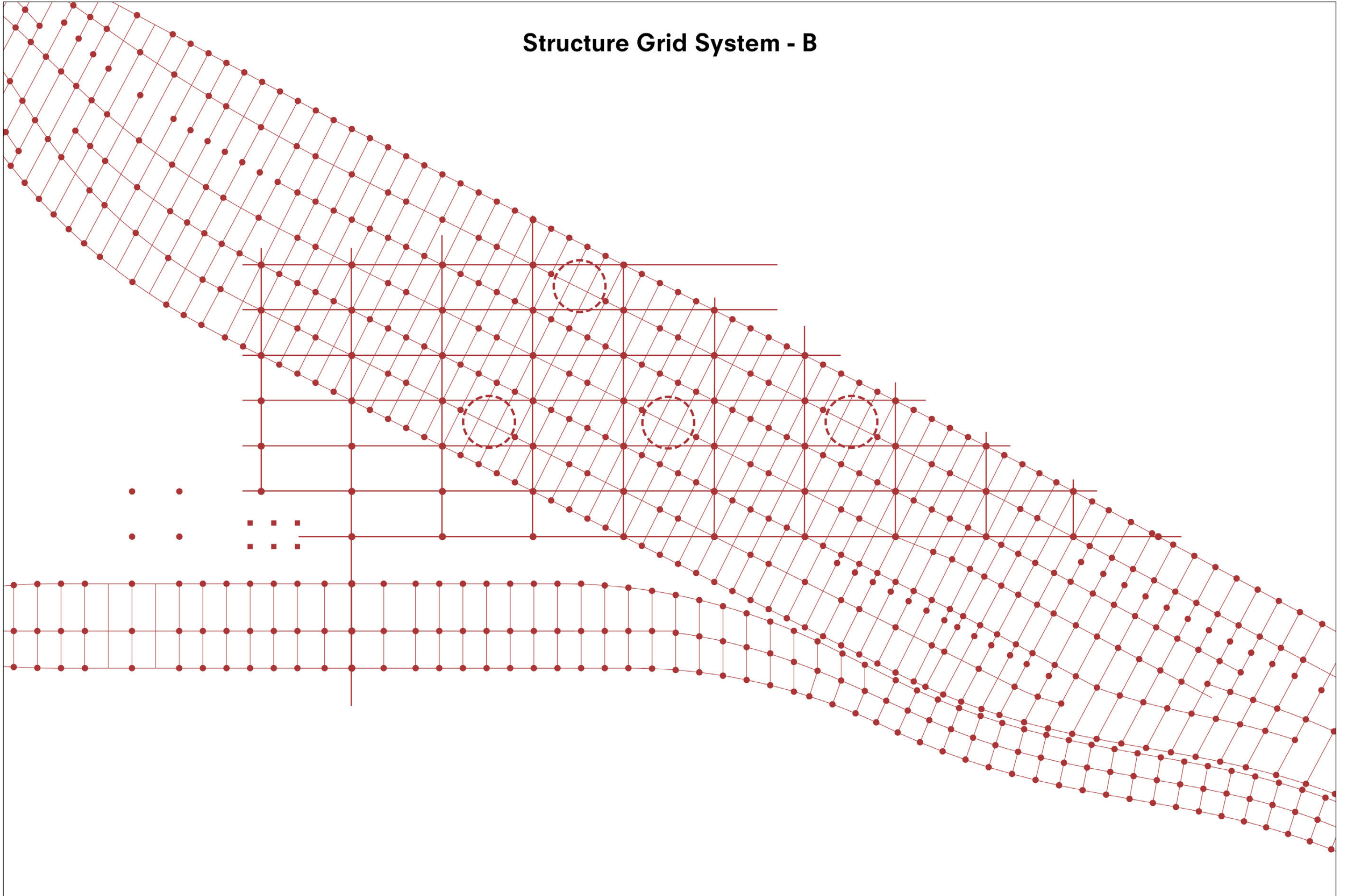
Structure Grid System - B



Train Floor Plan

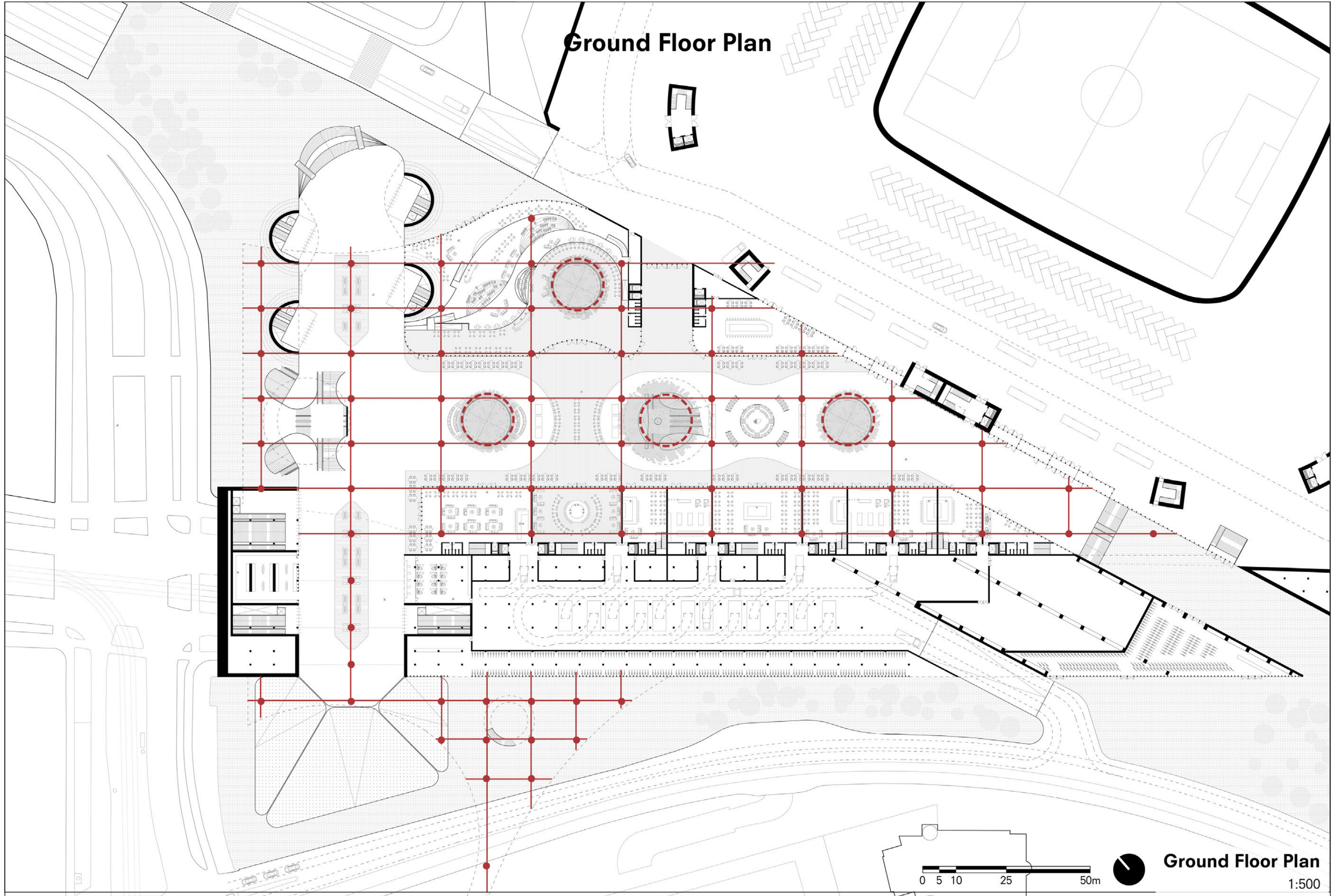
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Structure Grid System - B



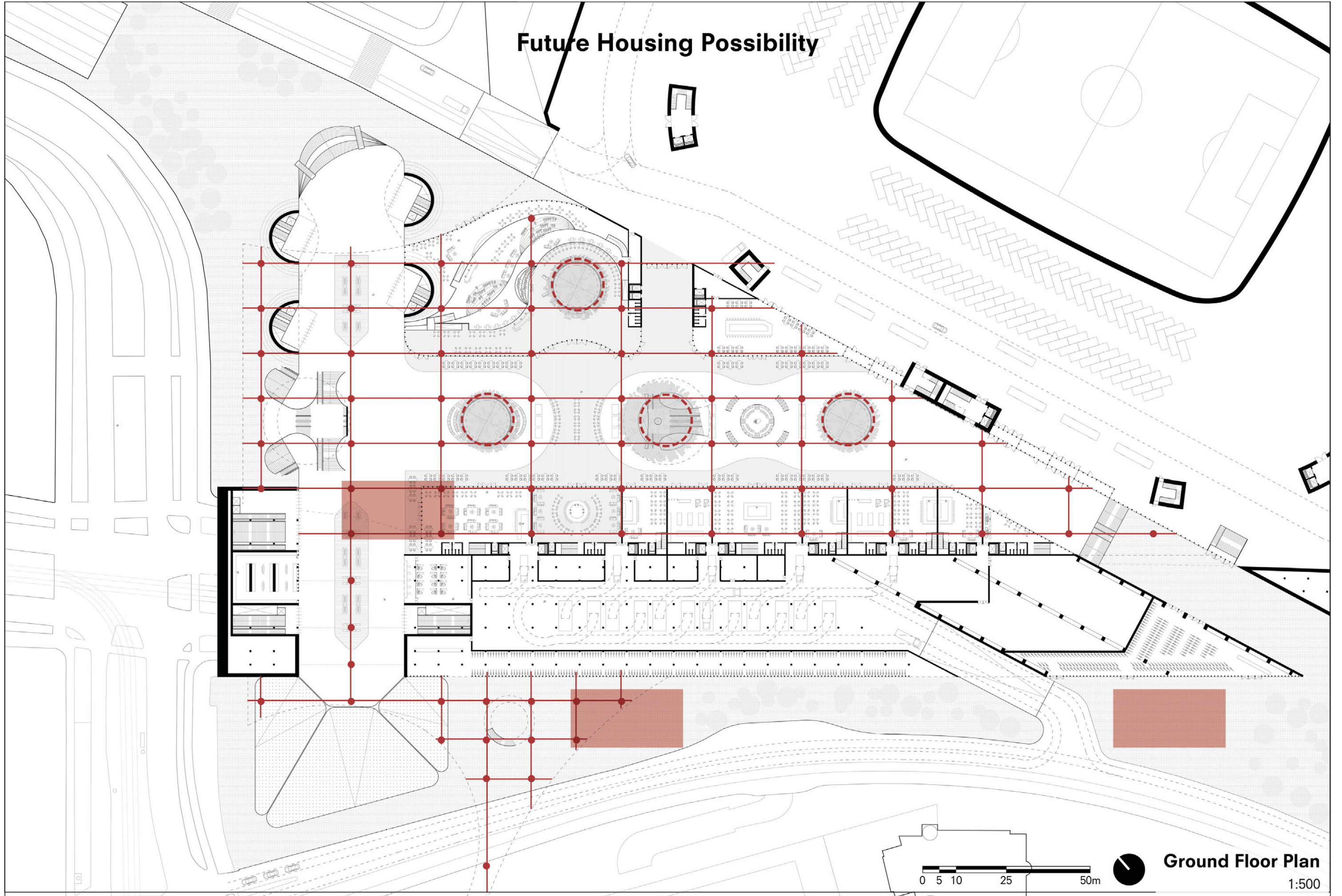
Structure

Ground Floor Plan

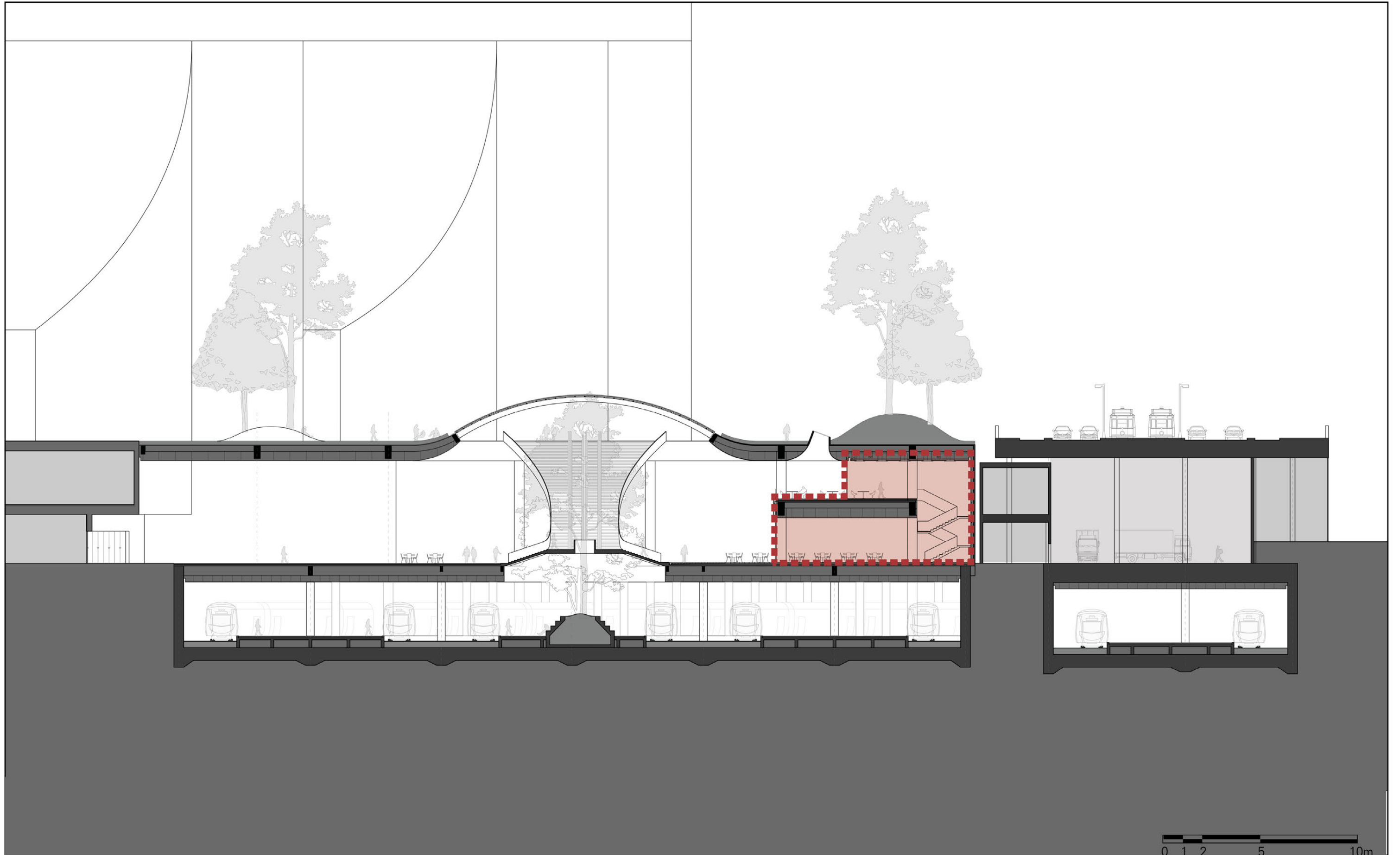


Structure

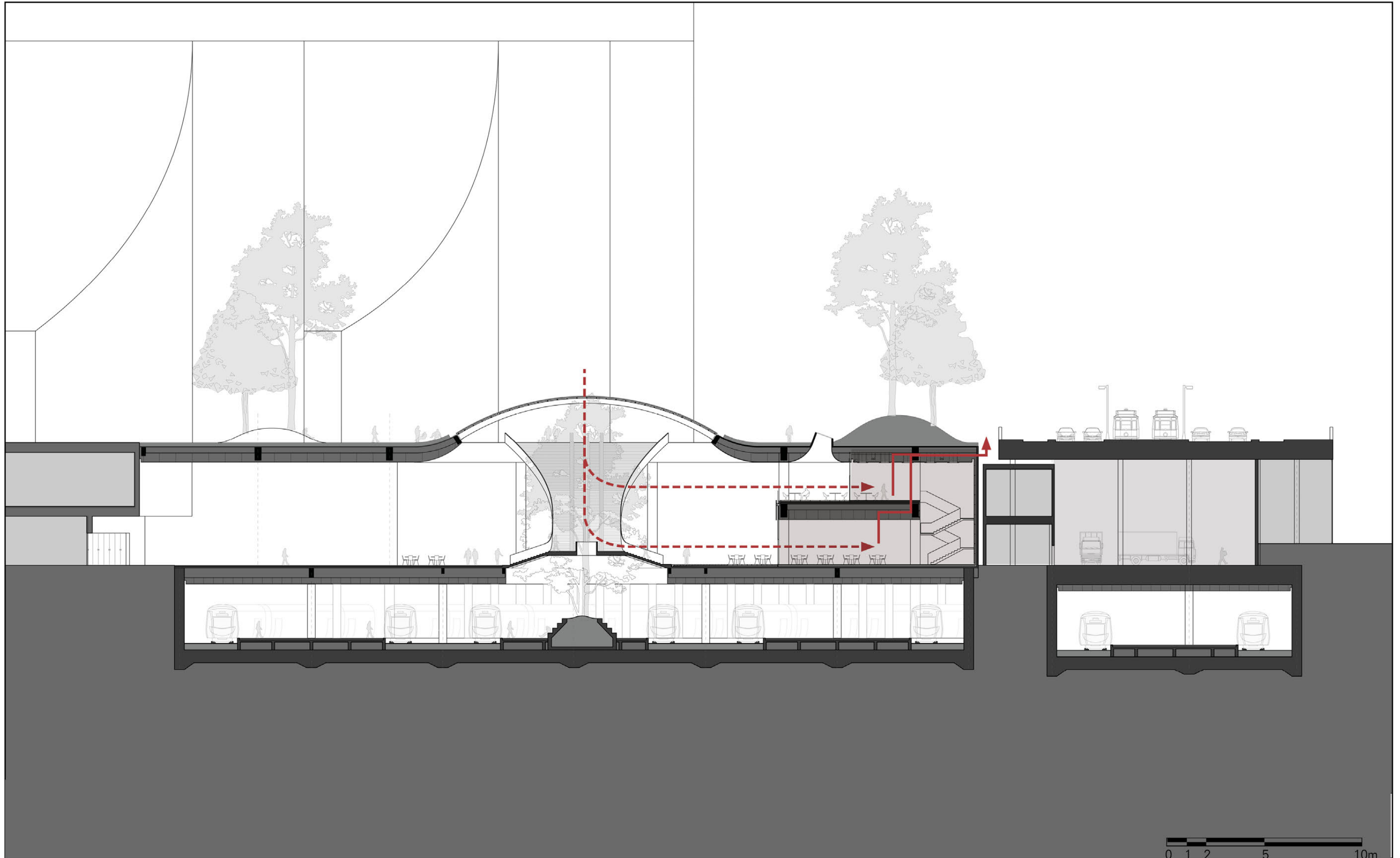
Future Housing Possibility



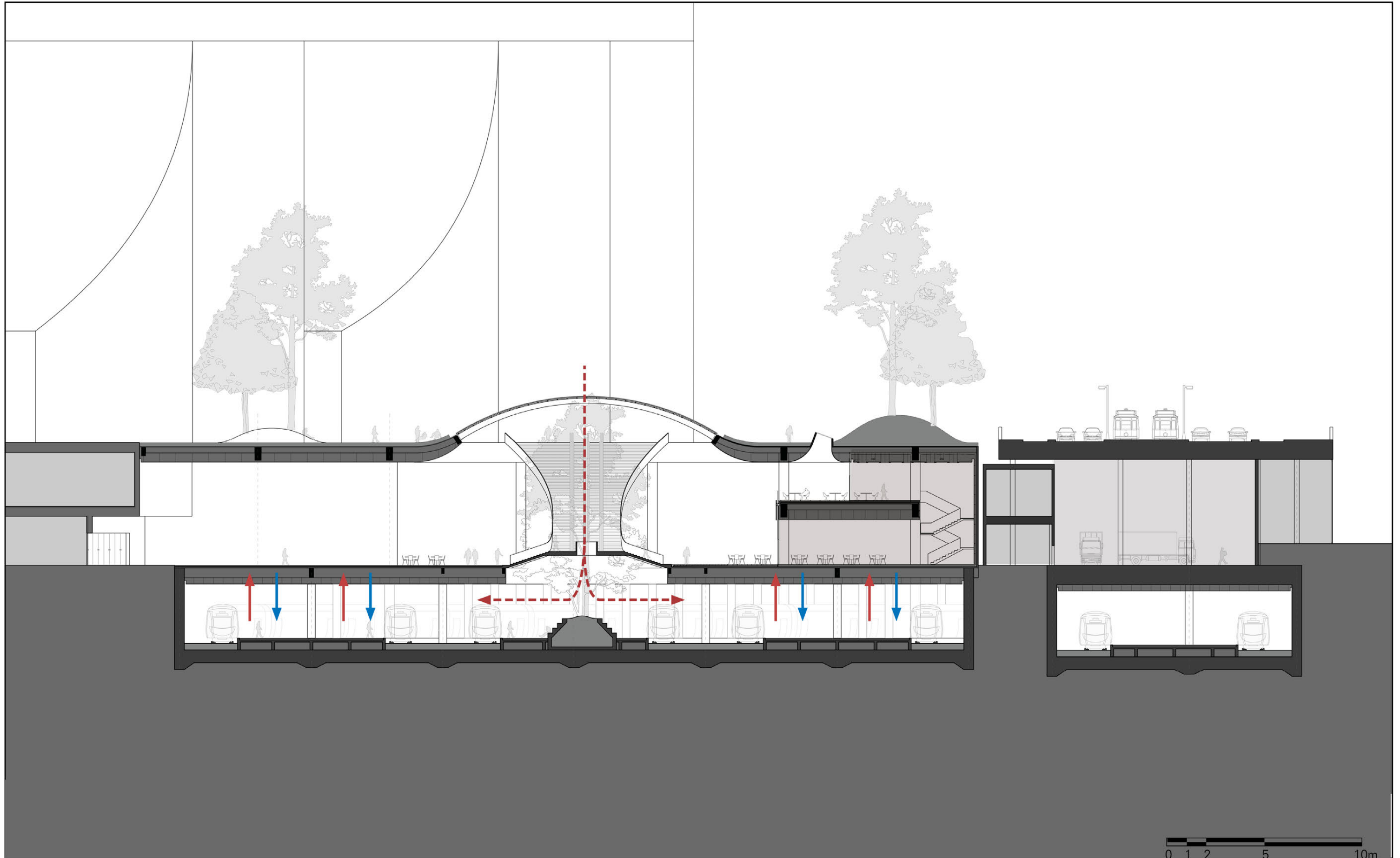
Insulation



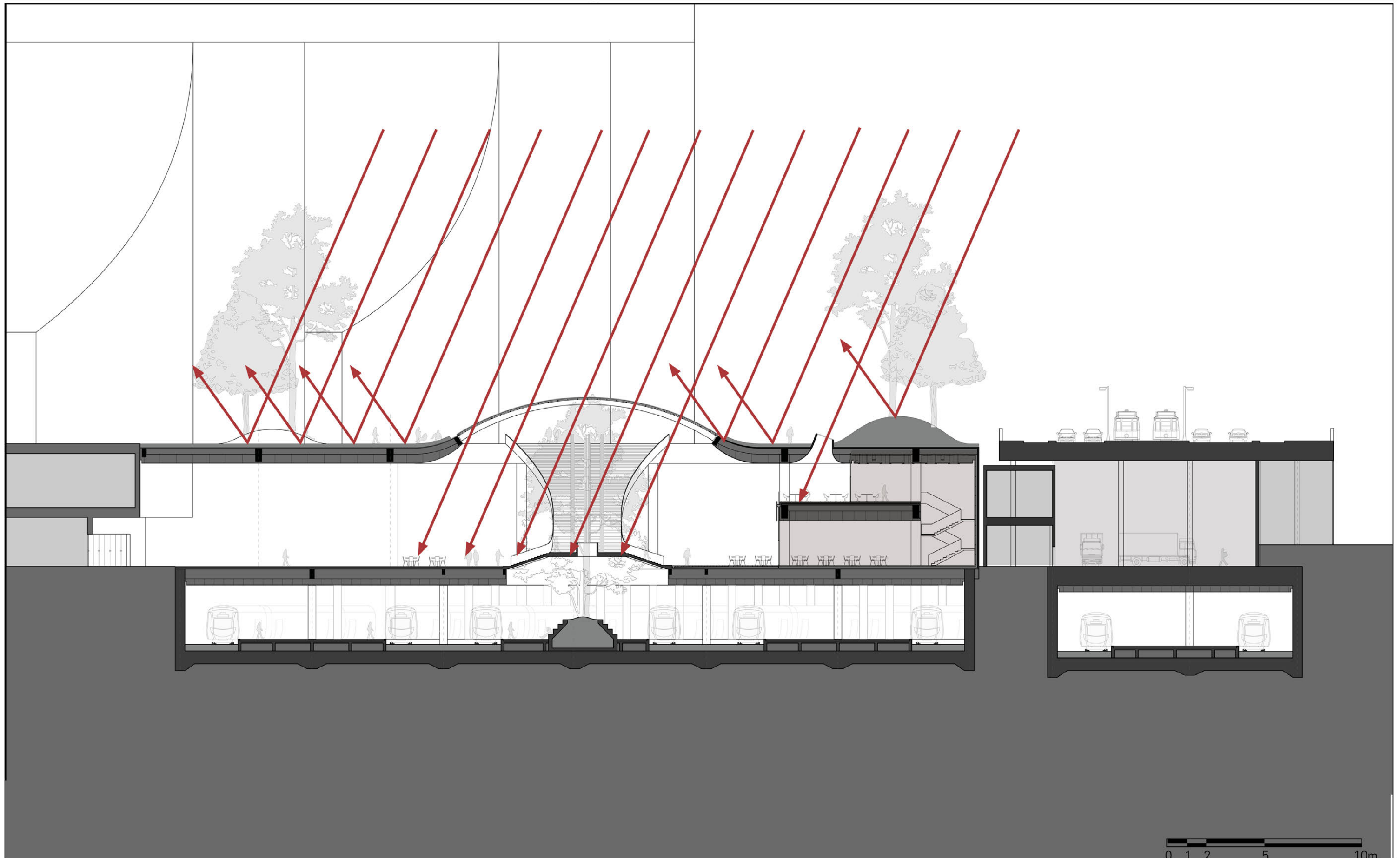
Ventilation - Natural Ventilation + Mechanical Discharge



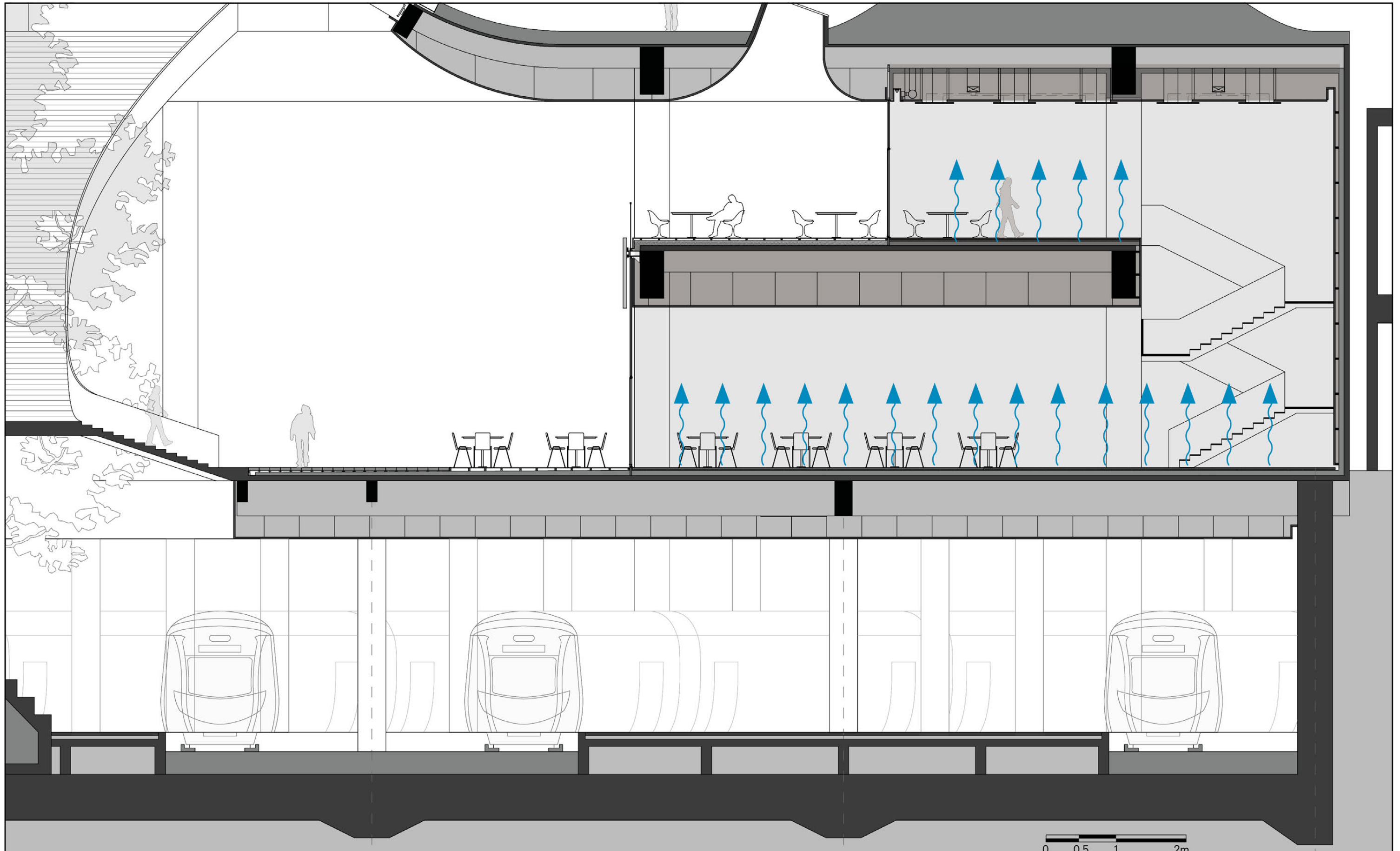
Ventilation - Mechanical Supply & Discharge



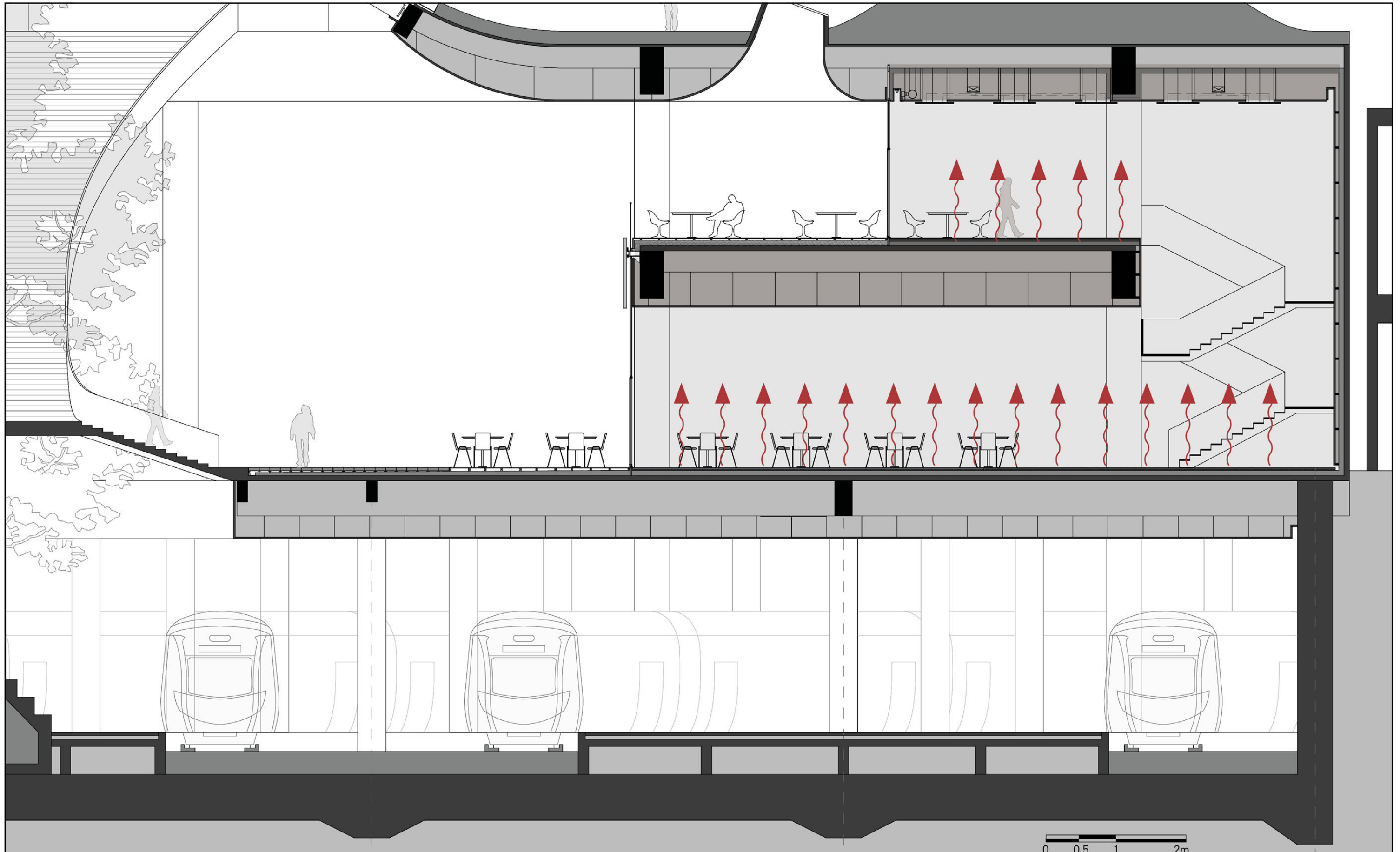
Cooling - Natural Light and Shading



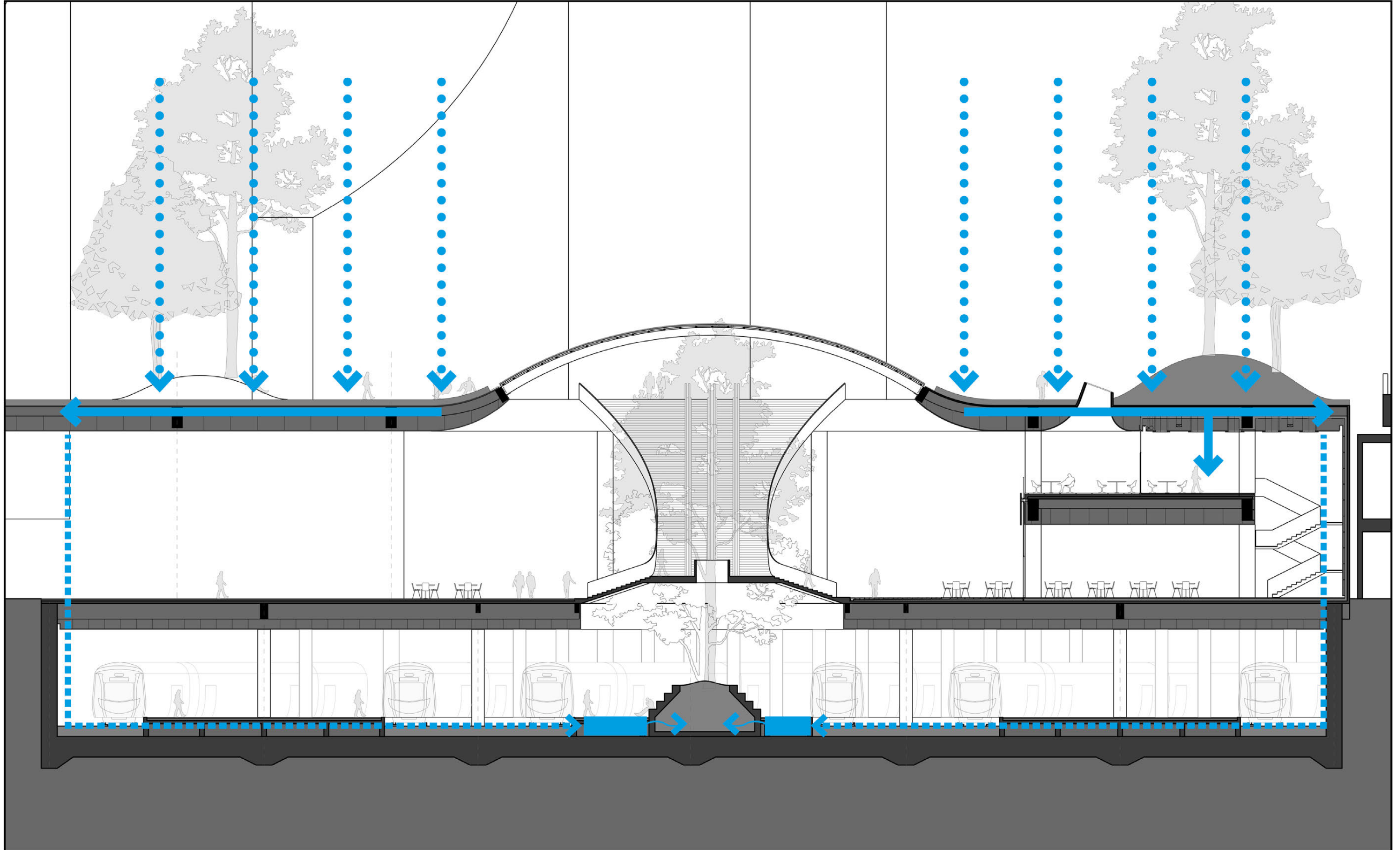
Cooling - Water Based Cooling for Necessary Program



Heating - Warmup Underfloor Mat System

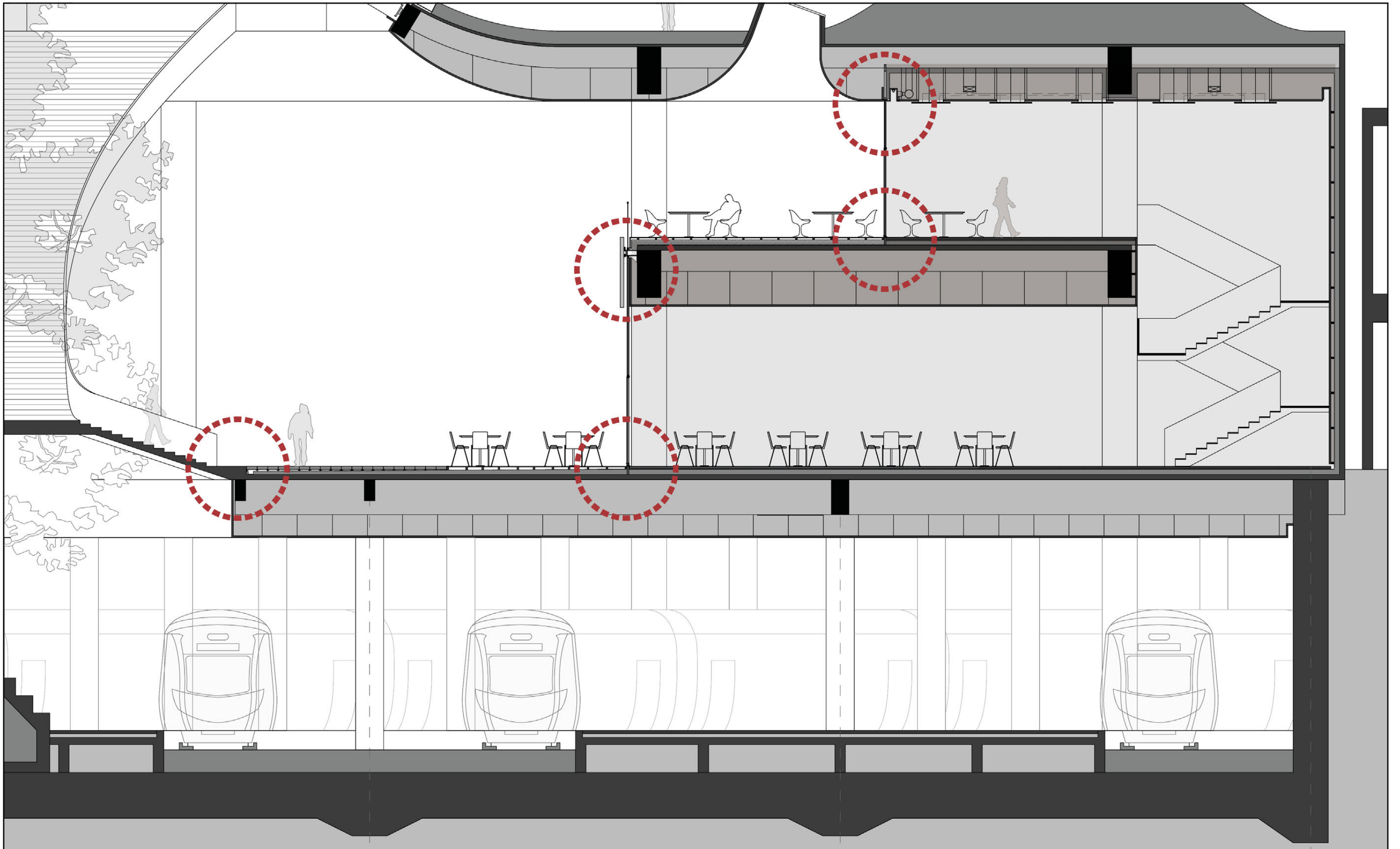


Rain Water Use

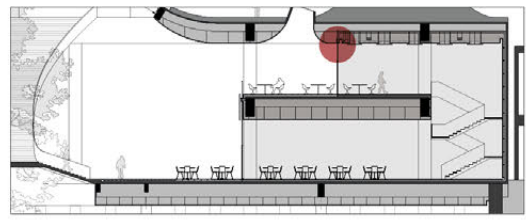


Detail

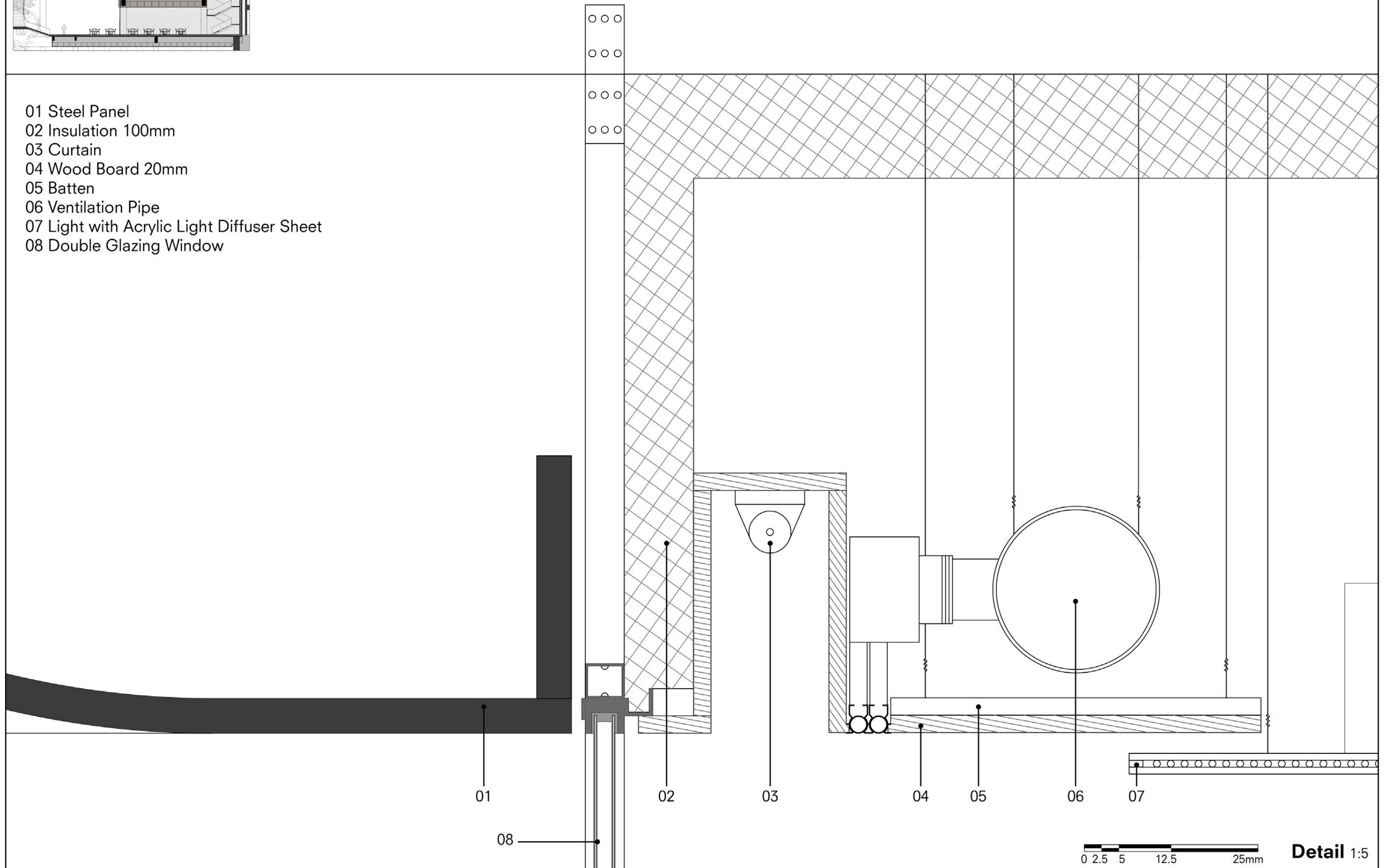
Detail



Detail



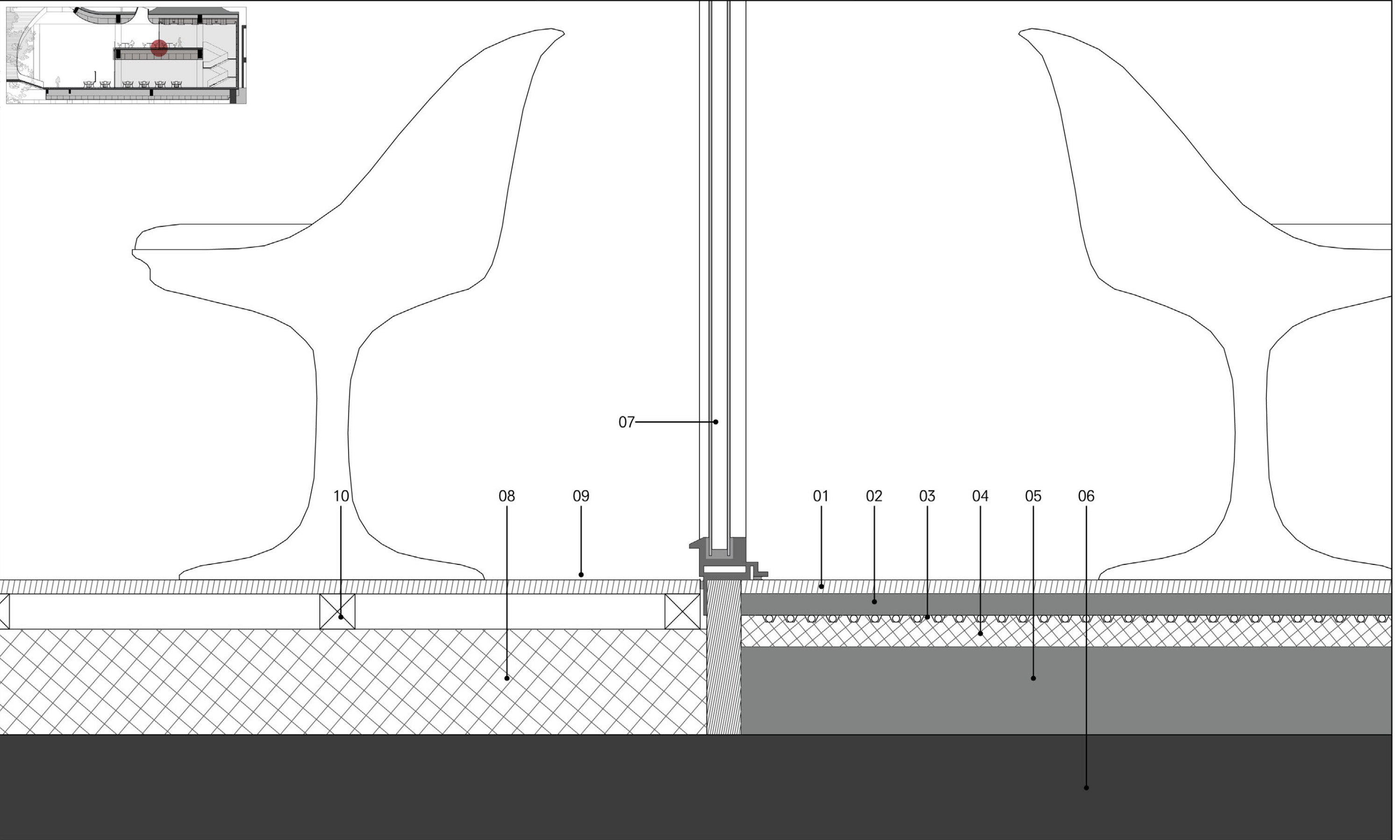
- 01 Steel Panel
- 02 Insulation 100mm
- 03 Curtain
- 04 Wood Board 20mm
- 05 Batten
- 06 Ventilation Pipe
- 07 Light with Acrylic Light Diffuser Sheet
- 08 Double Glazing Window



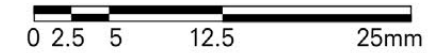
0 2.5 5 12.5 25mm

Detail 1:5

Detail

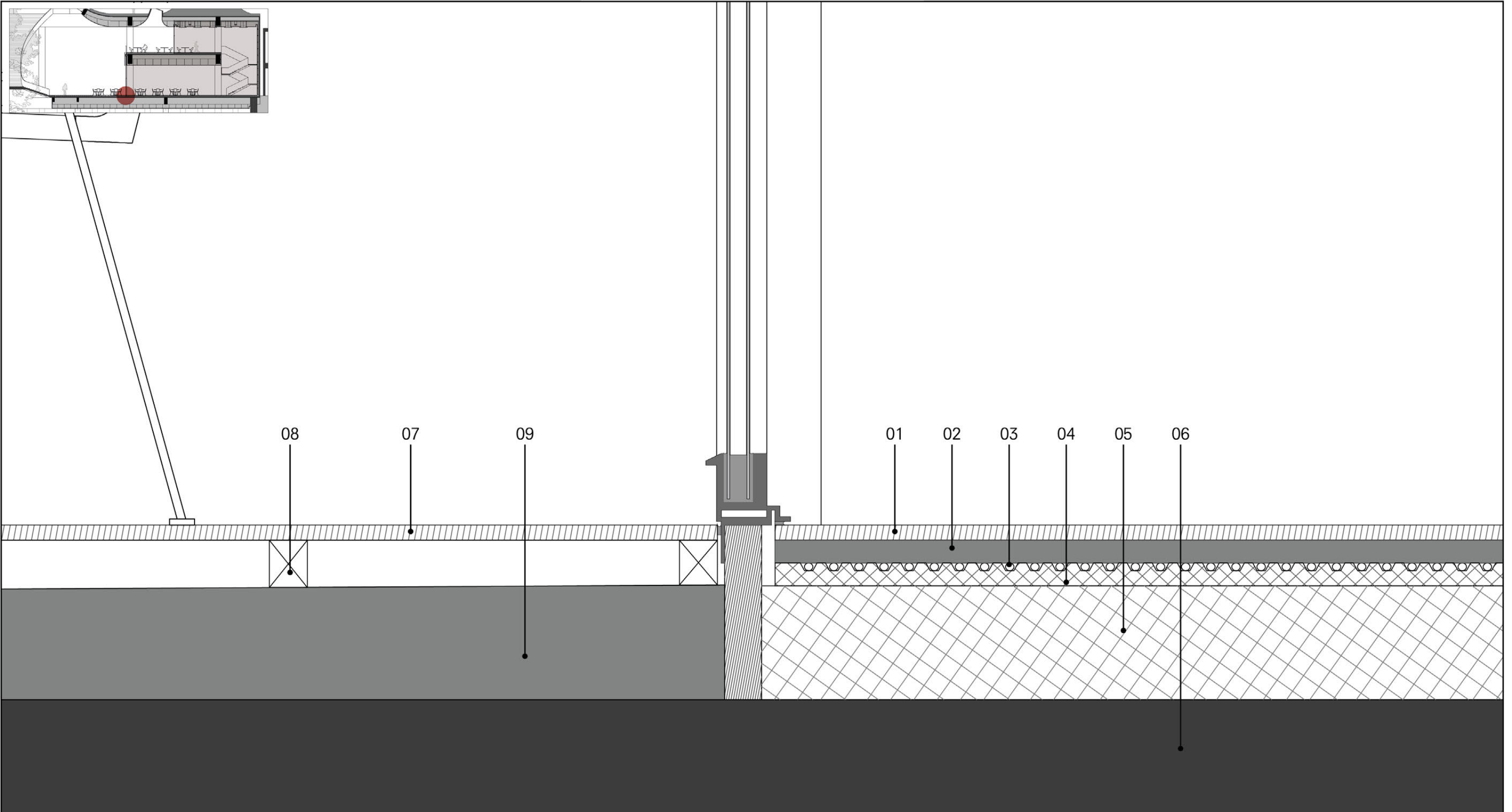


- | | | |
|---------------------------------|------------------------|--------------------|
| 01 Wood Board 20mm | 05 Concrete 80mm | 09 Wood Board 20mm |
| 02 Concrete 30mm | 06 Concrete Slab 100mm | 10 Batten |
| 03 Warmup Underfloor Mat System | 07 Double Glazing Door | |
| 04 Warmup Insulation Board 40mm | 08 Insulation 100mm | |



Detail 1:5

Detail

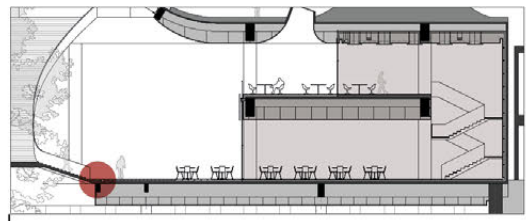


- 01 Wood Board 20mm
- 02 Concrete 30mm
- 03 Warmup Underfloor Mat System
- 04 Warmup Insulation Board 40mm
- 05 Insulation 100mm
- 06 Concrete Slab 100mm
- 07 Wood Board 20mm
- 08 Batten
- 09 Concrete

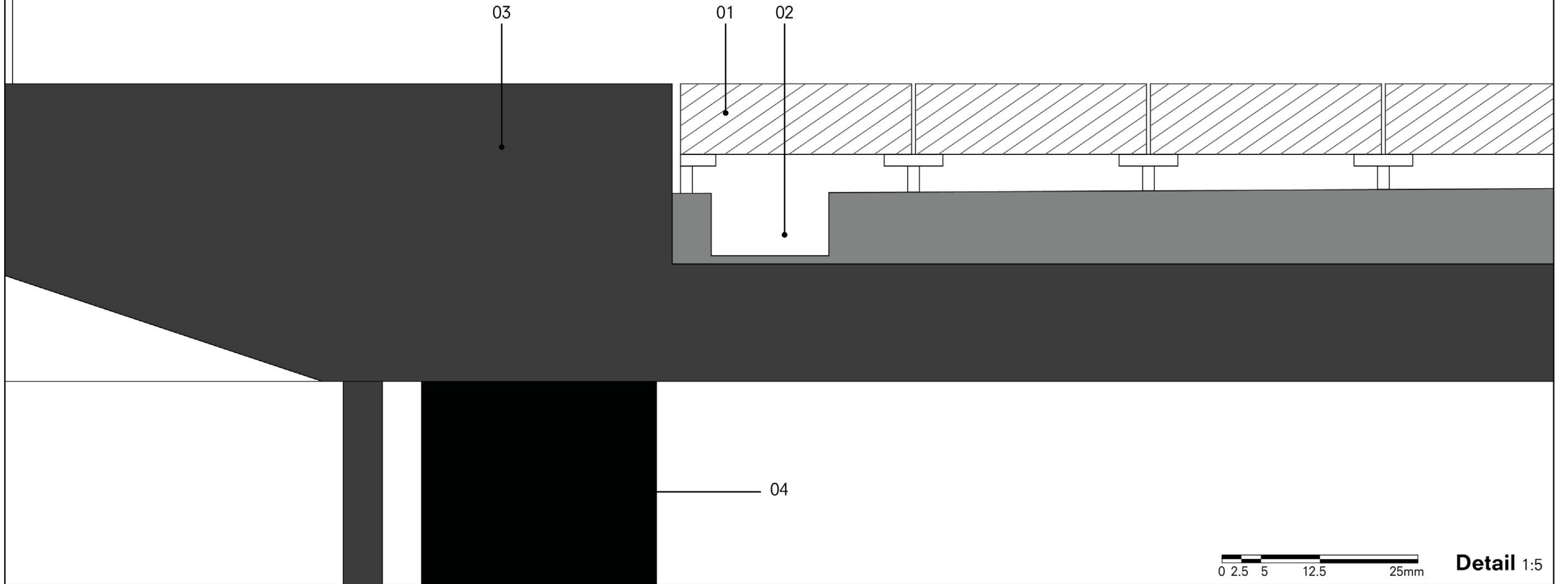
0 2.5 5 12.5 25mm

Detail 1:5

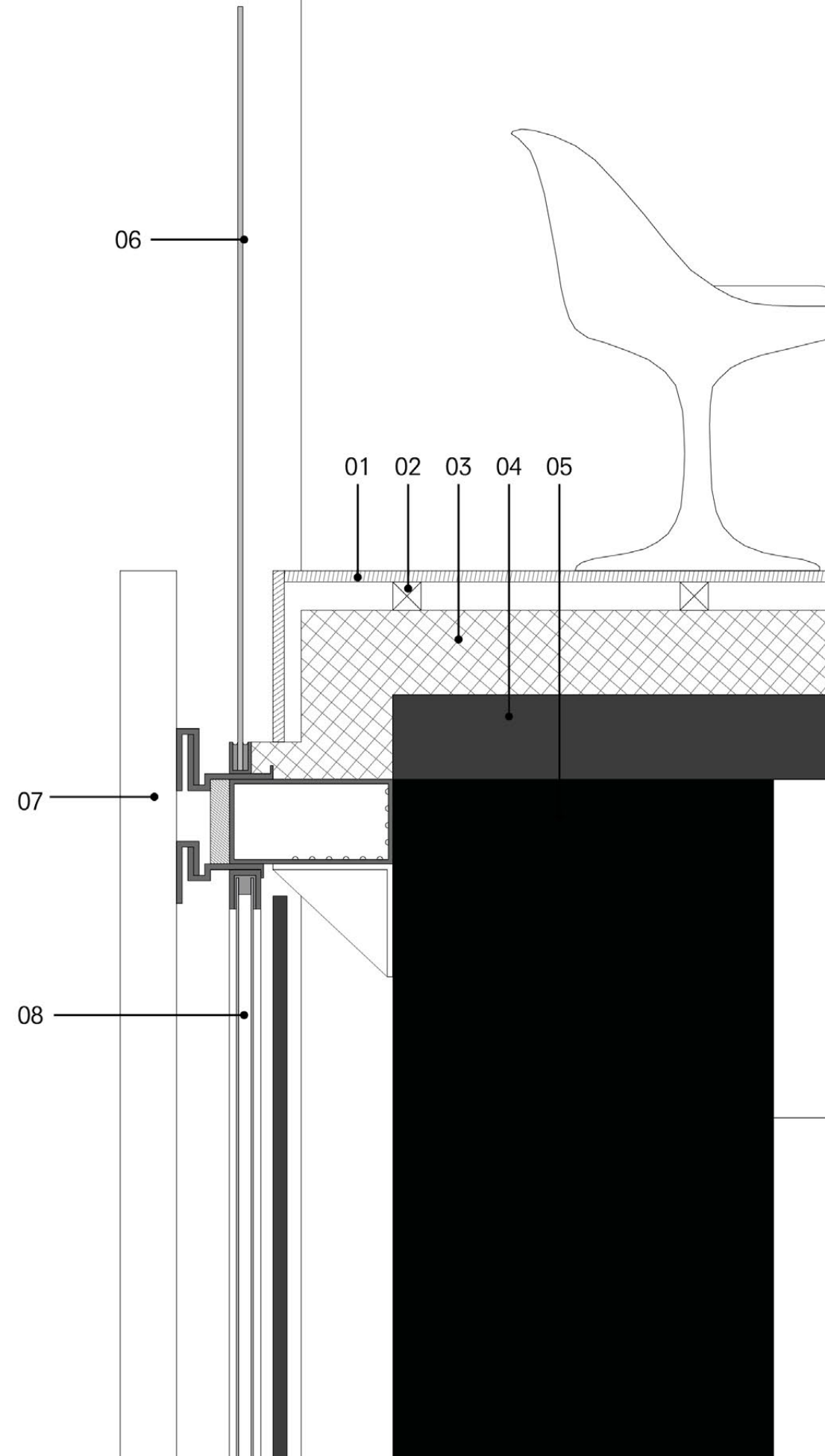
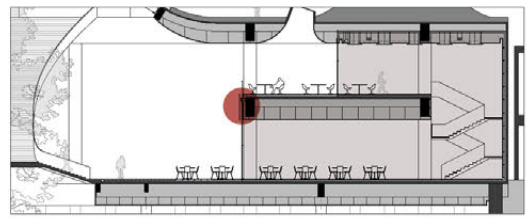
Detail



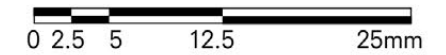
- 01 Natural Stone Tile 296mm x 140mm x 90mm
- 02 Gutter
- 03 Concrete Slab
- 04 Prestressed Beam



Detail

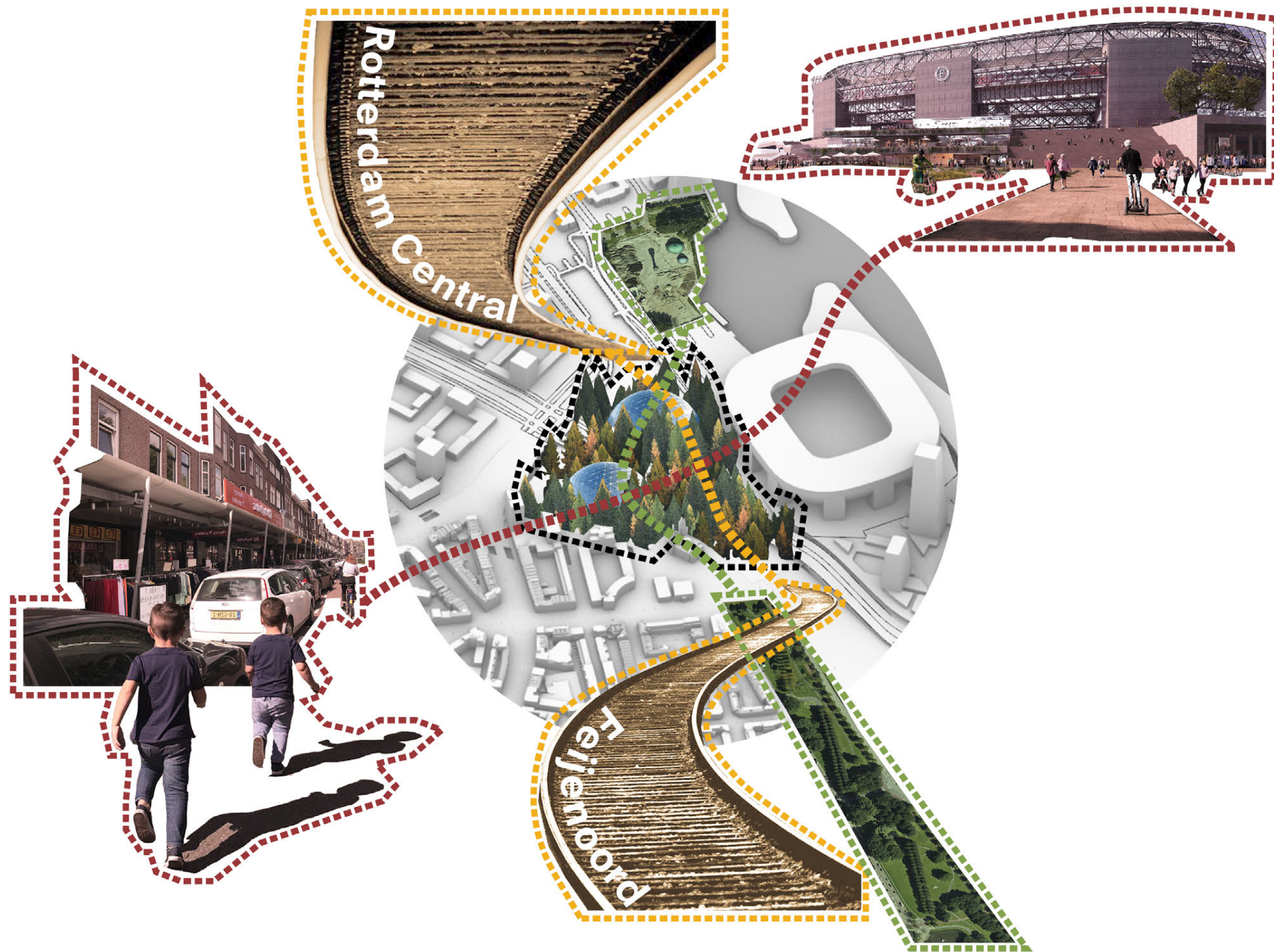


- 01 Wood Board 20mm
- 02 Batten
- 03 Insulation 100mm
- 04 Concrete Slab 100mm
- 05 Prestressed Beam
- 06 Glass Balustrade
- 07 Signage
- 08 Double Glazing Window



Detail 1:10

Urban Ambition

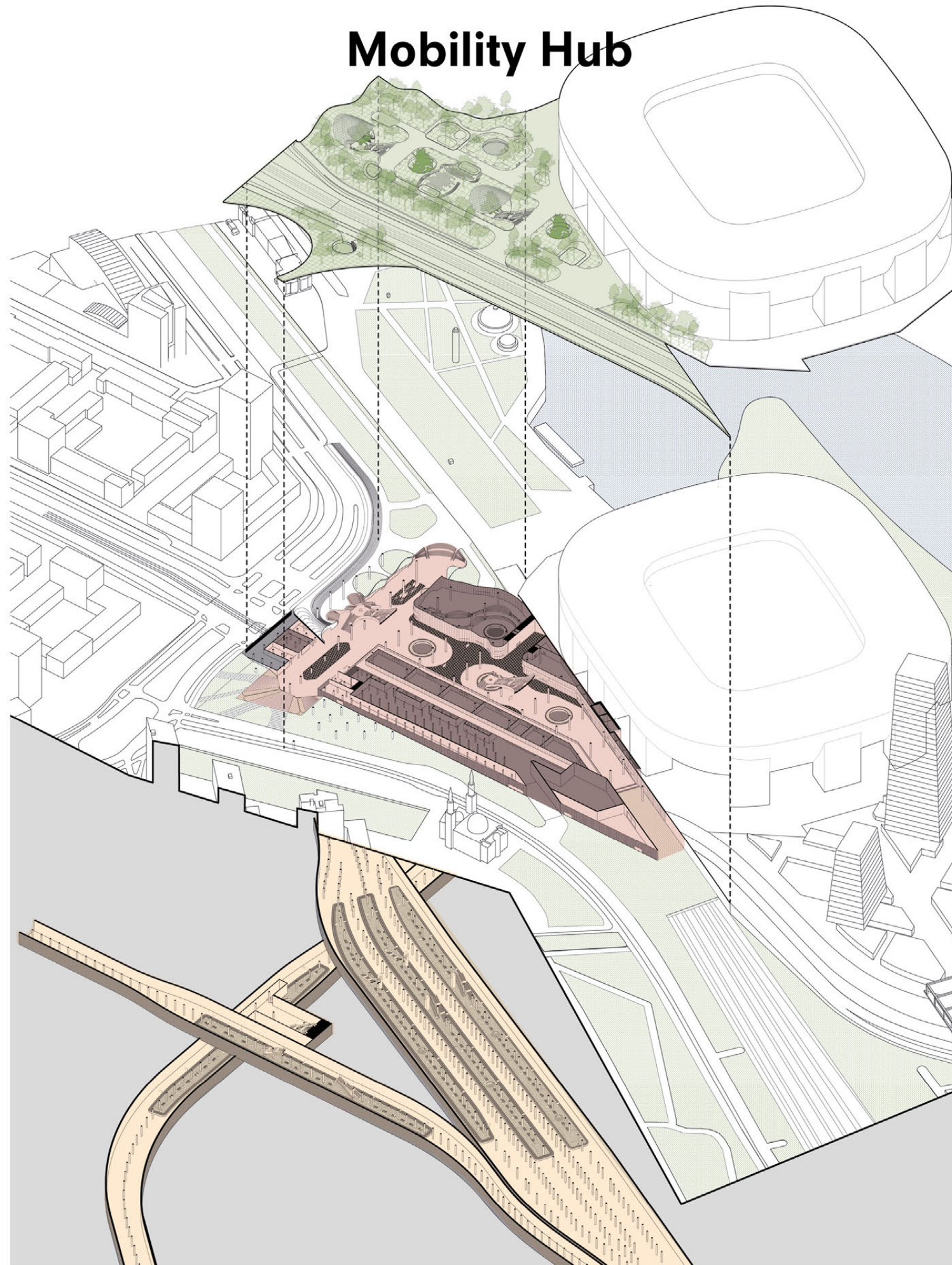


Mobility Hub

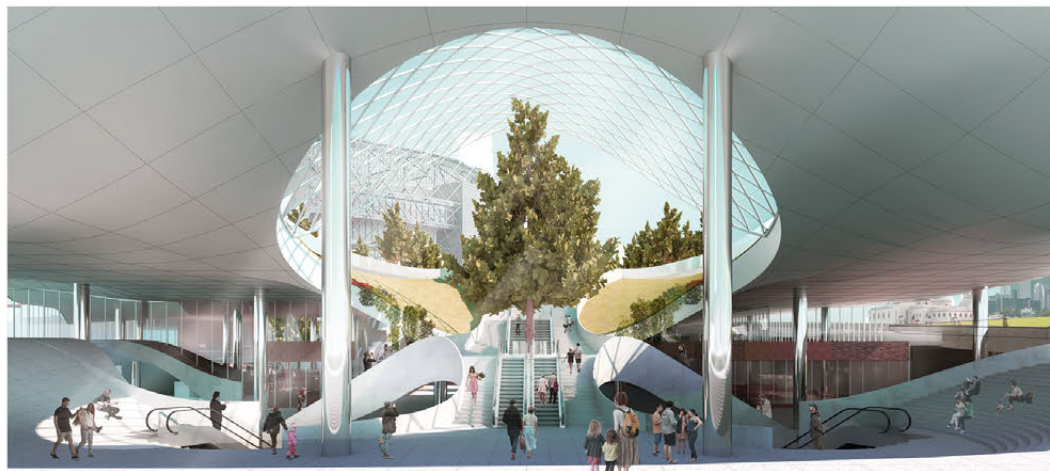
Landscape Park

City Event Street

Train & Metro Station



Conclusion



Thank You