



COMPLEX PROJECTS **SKY HUB**

An innovative aviation facility in city centre

I-Tan Chen

03/07/2024 P5 Presentation



AIRPORT



BERLIN



MATERIAL

INTRODUCTION

RESEARCH

DESIGN BRIEF

CONCEPT

IMPLEMENTATION

DEVELOPMENT

CONCLUSION

INTRODUCTION

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DESIGN BRIEF

CONCEPT

IMPLEMENTATION

DEVELOPMENT

CONCLUSION

Introduction

BERLIN



Introduction

MOBILITY

AIR ACCESS



GROUND ACCESS



Introduction

AIR SPACE



Introduction

AIR SPACE



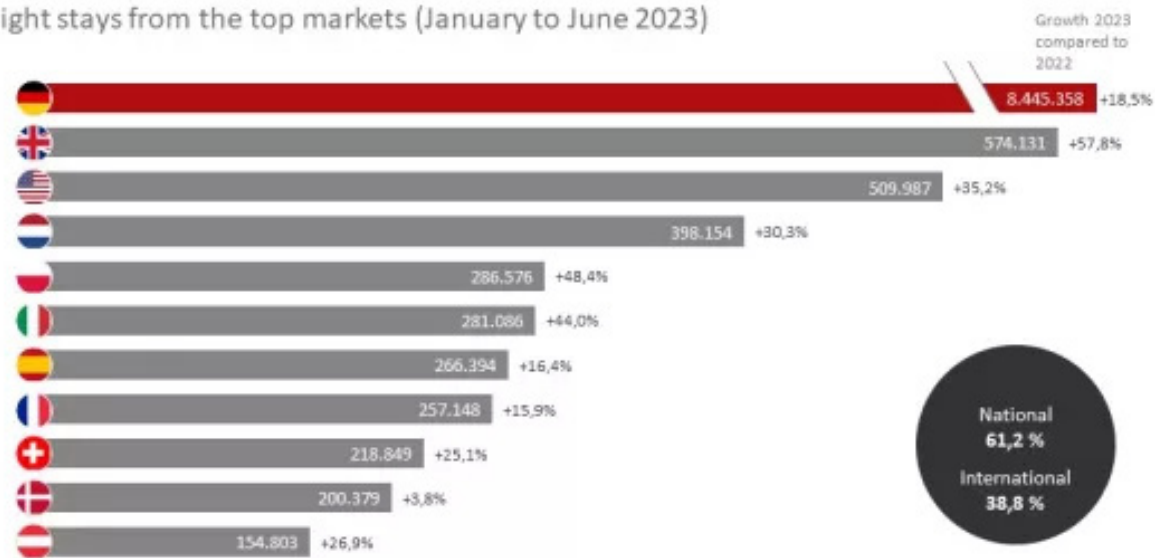
**WHAT CAN WE DO TO ACCESS
THE SKY OF FUTURE BERLIN?**

Introduction

TOURIST INCREASE

Germany – most important source market for Berlin

Overnight stays from the top markets (January to June 2023)



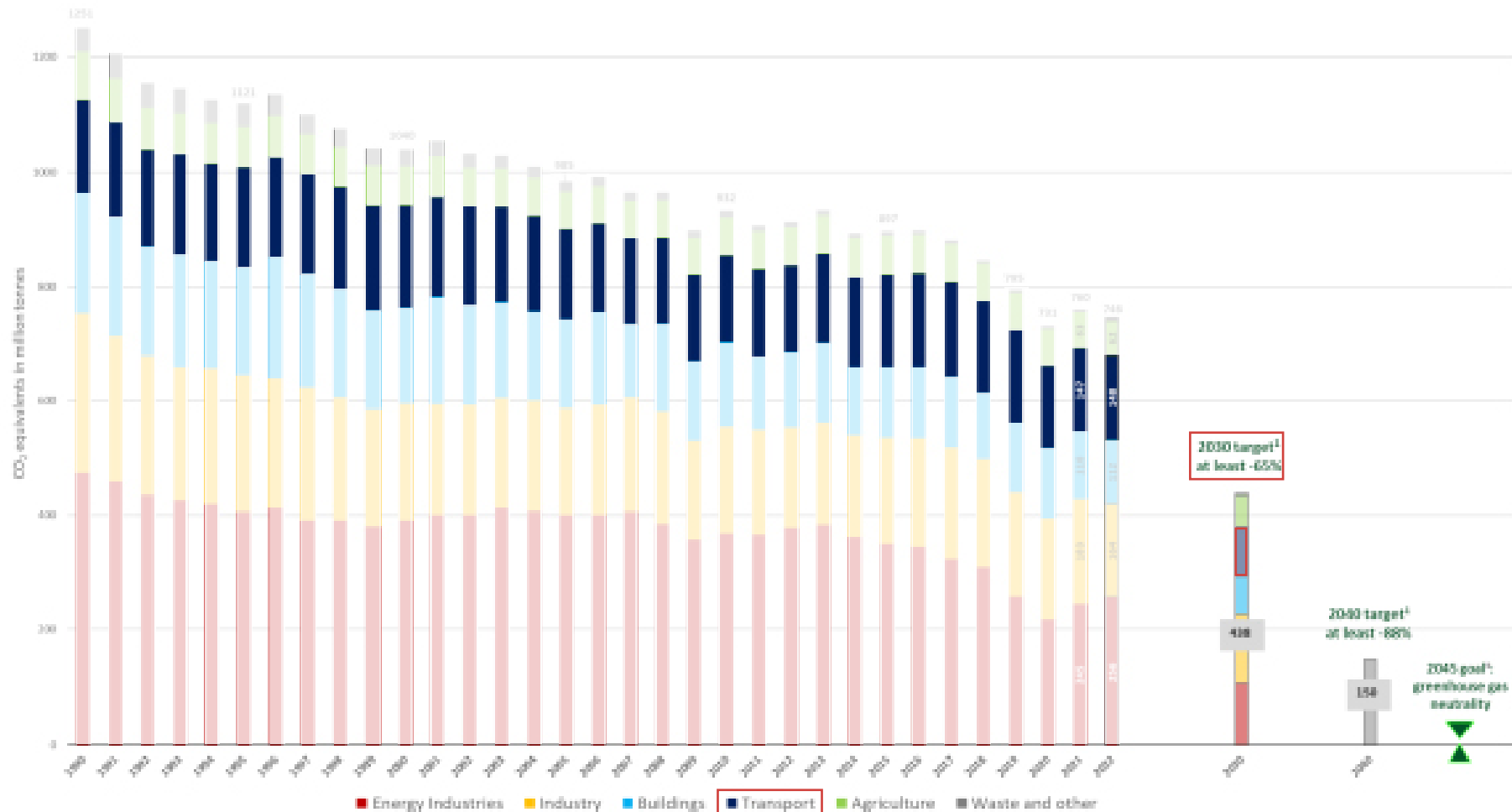
8 Quelle: Amt für Statistik Berlin-Brandenburg (Berlin, August 2023)

VISIT BERLIN

GREENHOUSE GAS DEDUCTION

Greenhouse gas emission trends in Germany by sector 1990-2022

Data: UBA 2023 (2022 data preliminary).



1) 2030, 2040 and 2045 targets as stated in the Climate Action Law.

Note: Without emissions from land use, land-use change and forestry (LULUCF). With the 2021 climate law reform, Germany introduced GHG emissions sink targets for this sector (-25mn t CO₂ eq by 2030, -35mn t by 2040 and -40mn t by 2045).

Introduction

CAR-FREE AREA



BERLIN CITIZENS PROPOSE THE LARGEST **CAR-FREE AREA** IN THE WORLD.
(TOMORROW CITY, 2022)

3000 KM CYCLING NETWORK



Journalism for the
energy transition



17 Nov 2021, 13:08 [Edgar Meza](#) (/about-us-clew-team)

City of Berlin agrees expansion of bicycle network to 3,000 kilometres

[#Mobility](#) (/topics/Mobility)

Tagesspiegel

The city of Berlin has approved a plan to expand its bicycle route network to a total of 3,000 kilometres, Tagesspiegel [reports](#) (<https://www.tagesspiegel.de/berlin/senat-beschliesst-radverkehrsplan-3000-kilometer-fahrradnetz-entstehen-in-berlin/27805286.html>) . "We will increase the proportion of environmentally friendly, climate-friendly, and city-friendly cycling by making cycling attractive and safe – even over longer distances," said transport senator Regine Günther, a member of the [Green Party](#) (<https://www.cleanenergywire.org/experts/green-party>) . The city government is aiming to increase the share of bicycle traffic in the capital to 23 percent by 2030, up from 18 percent in 2018. The city agreed on a cycling network measuring 2,371 kilometres in total. Of these, 865 kilometres form a priority network on the most important connections for cyclists. Additionally, the plan will create 550 kilometres of new cycling paths on main roads that are not part of the network, and 100 kilometers of high-speed bike connections, for a total of 3,000 kilometres of city bike lanes.

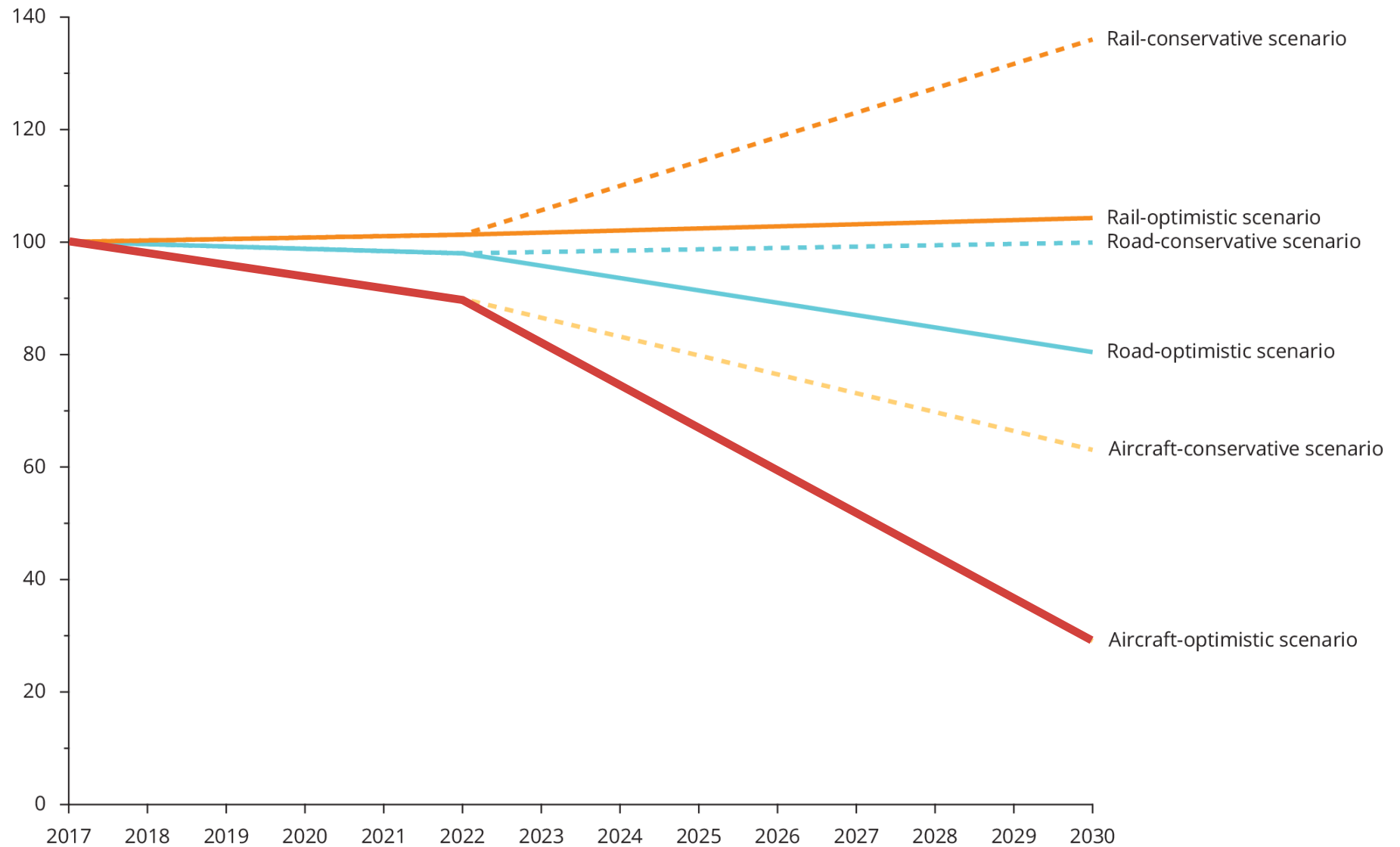
At the federal level, the German government [announced plans](#) (<https://www.cleanenergywire.org/news/germany-plans-double-cycling-within-ten-years>) earlier this year to double the number of bicycle users by the end of the decade and increase the total distance covered by cyclists in Germany each day from 112 million kilometres in 2017 to 224 kilometres by 2030.

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Introduction

NOISE MITIGATION

Percentage change in number of people highly annoyed



PROBLEM STATEMENT





RESEARCH QUESTION

How can we establish an innovative aviation infrastructure into a city centre?

Introduction

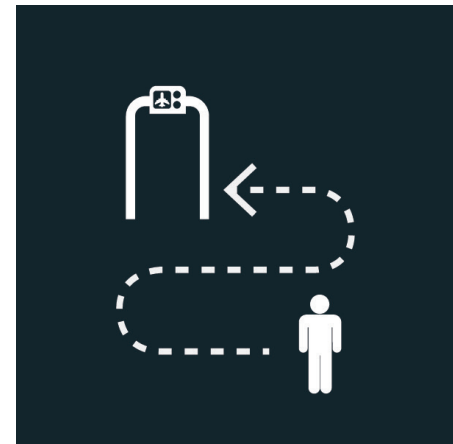
PROJECT AMBITIONS



**Redefine the future of
aviation**



**Interlock vertiport with
City centre**



**Optimise the flow
within future air
mobility**

INTRODUCTION

RESEARCH

DESIGN BRIEF

CONCEPT

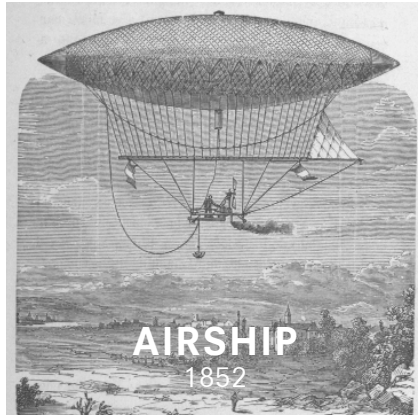
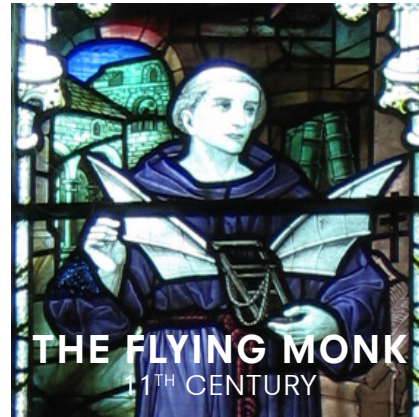
IMPLEMENTATION

DEVELOPMENT

CONCLUSION

Research

AVIATION FOR PEOPLE



WHAT IS AN “AIRPORT”?

AIRPORT

noun

a place where planes land and take off and that has buildings for passengers to wait in

(Oxford Advanced Learner’s Dictionary, 2024)

SCENARIO

An aerial photograph of Berlin, Germany, featuring the Fernsehturm (TV Tower) prominently in the center. The tower's spherical observation deck and spire are visible against a blue sky with wispy clouds. Below the tower, the dense urban landscape of Berlin is visible, including various residential and commercial buildings, green spaces, and a church with a green dome. The lighting suggests late afternoon or early morning.

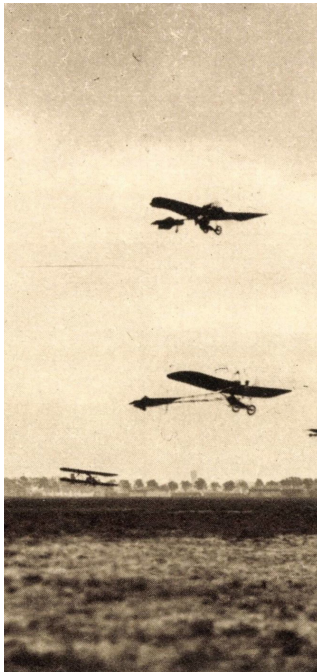
What if Berlin established a new aviation facility to facilitate European Union's ambition?

Research

AIRPORT IN BERLIN

JOHANNISTHAL

1909 - 1952/95



ABANDONED

STAAKEN

1915 - 1953



ABANDONED

TEMPELHOF

1923-2008



ABANDONED

GATOW

1935 - 1994



MUSEUM

TEGEL

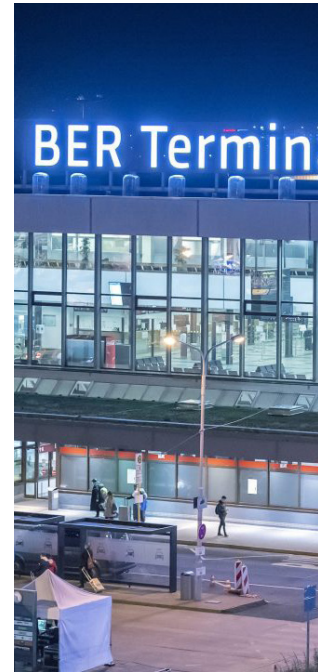
1974 - 2020



DECOMMISSIONED

BERLIN BRANDENBURG

from 2020



CURRENT

FUTURE MOBILITY IN SKY

URBAN AIR MOBILITY(UAM)

an air transportation system for passengers and cargo in and around urban environments.

(European Union Aviation Safety Agency, 2024)

Research
EVTOL



Electric Vertical Take Off and Landing
aircraft



POTENTIALS & LIMITATIONS

Zero emission

NO carbon emission during flight

Lower operation cost

Improved energy **EFFICIENCY**

Safety & Quieter operation

Less **NOISE** and more independent motors

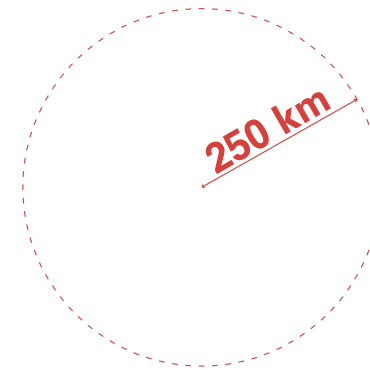
Faster charging

Fast charging within the planned **5** minutes

Greater flexibility

A wide range of **SHAPES** and **SIZES**

Potential



Flight Distance

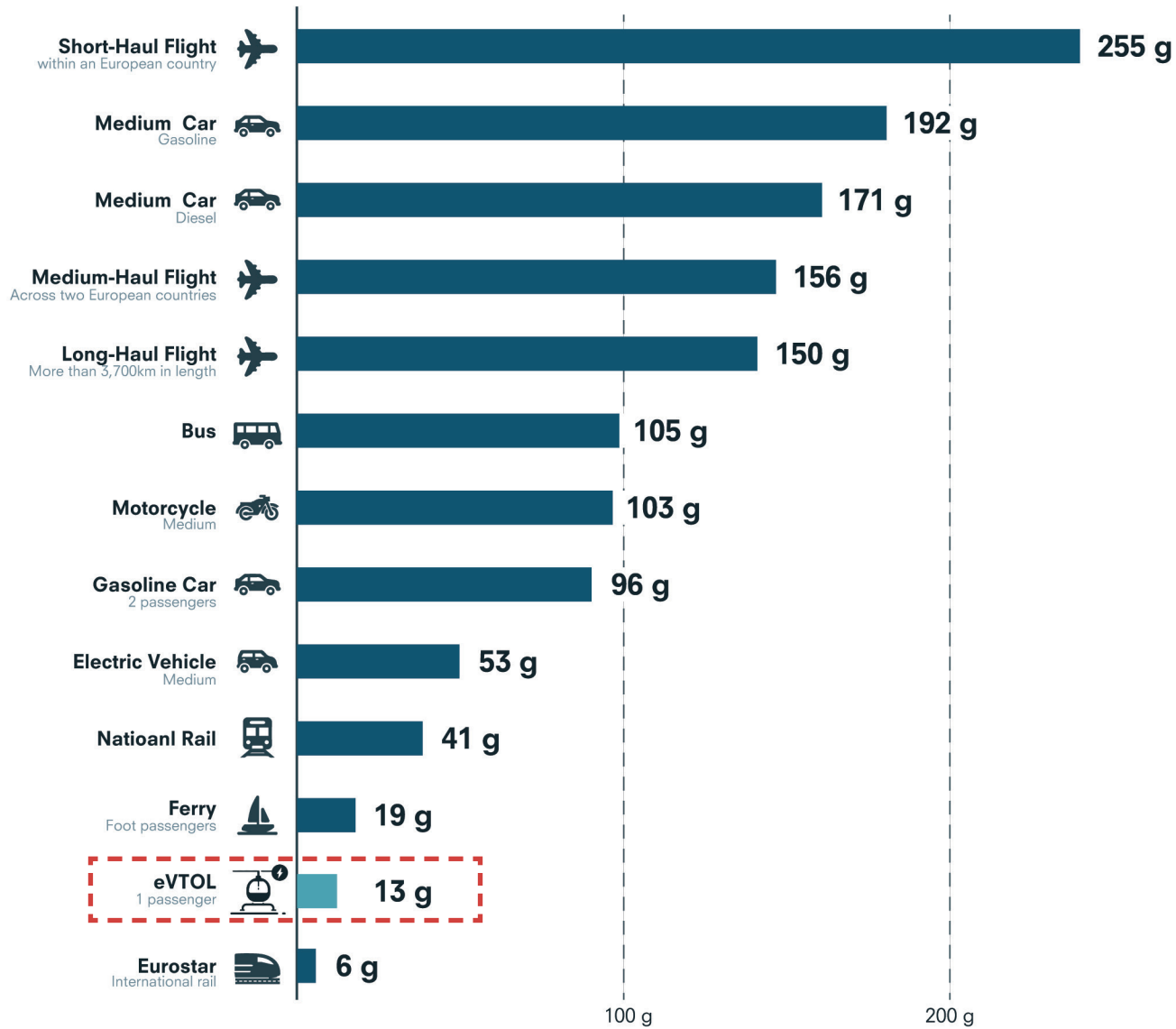
Only available for **regional** flights

Limitation

FLIGHT DISTANCE LIMITATION

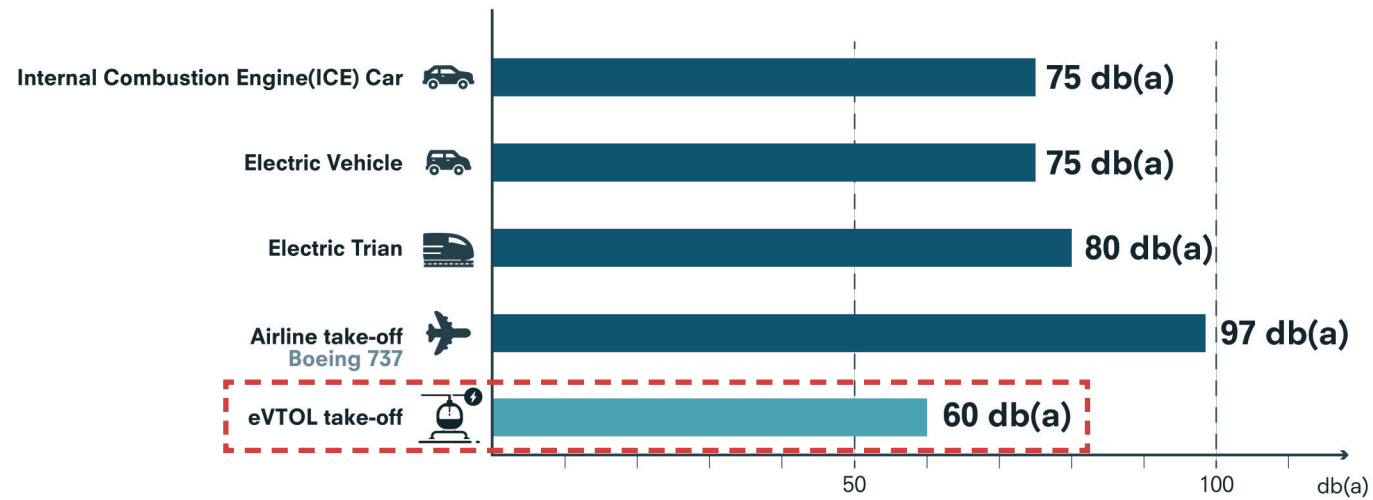


THE CARBON FOOTPRINT OF TRANSPORTATION



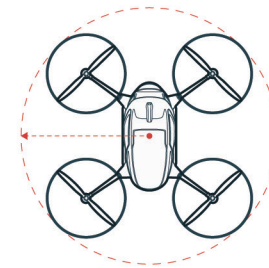
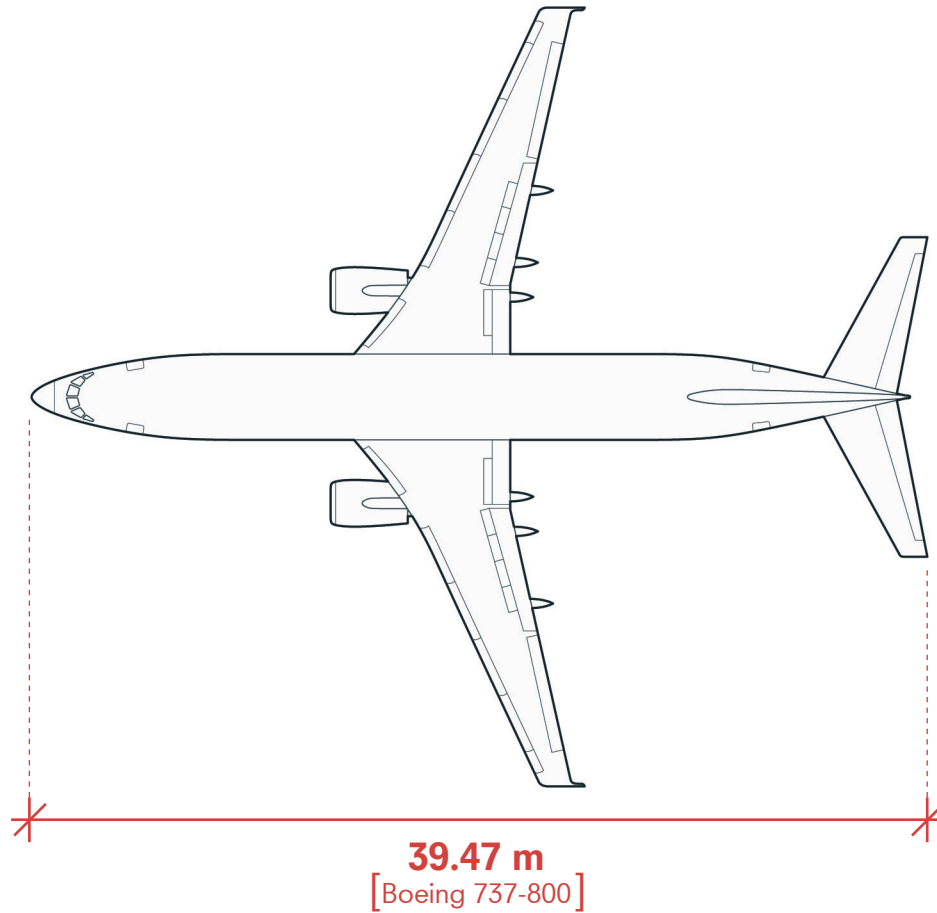
Research

NOISE POLLUTION



Research

FROM AIRCRAFT TO EVTOL



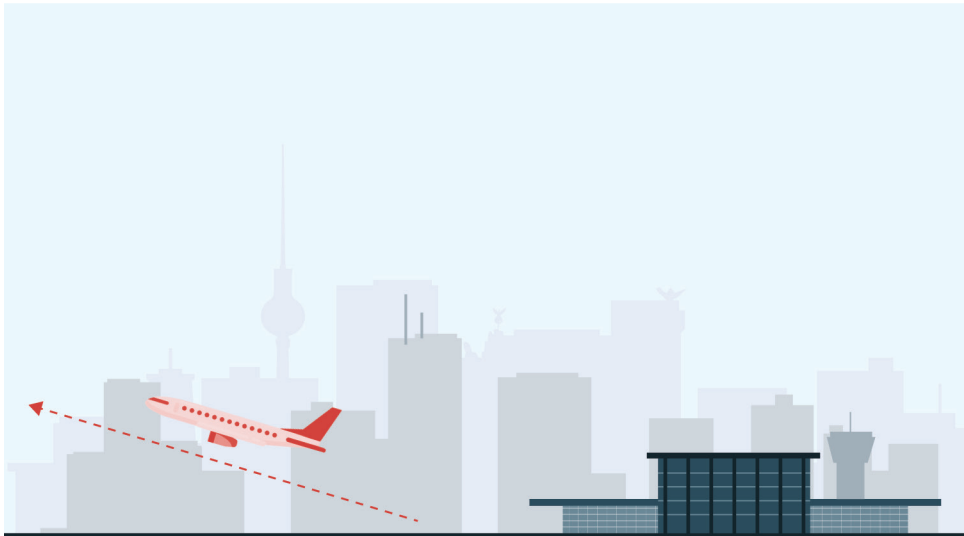
8.0 - 13.8 m
Wingspan diameter

0 1 2 3 5 10

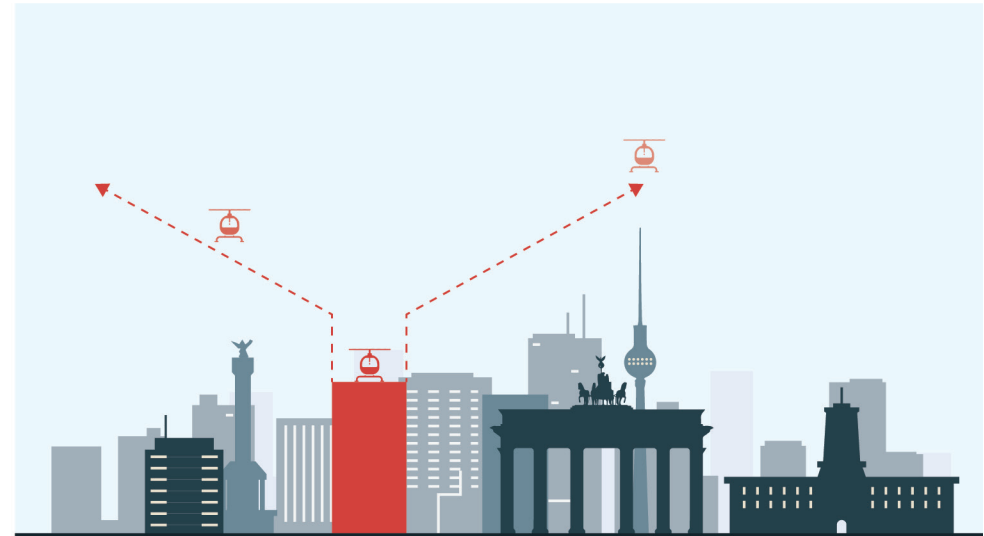
Research

FROM AIRCRAFT TO EVTOL

AIRCRAFT - AIRPORT



EVTOL - VERTIPORT



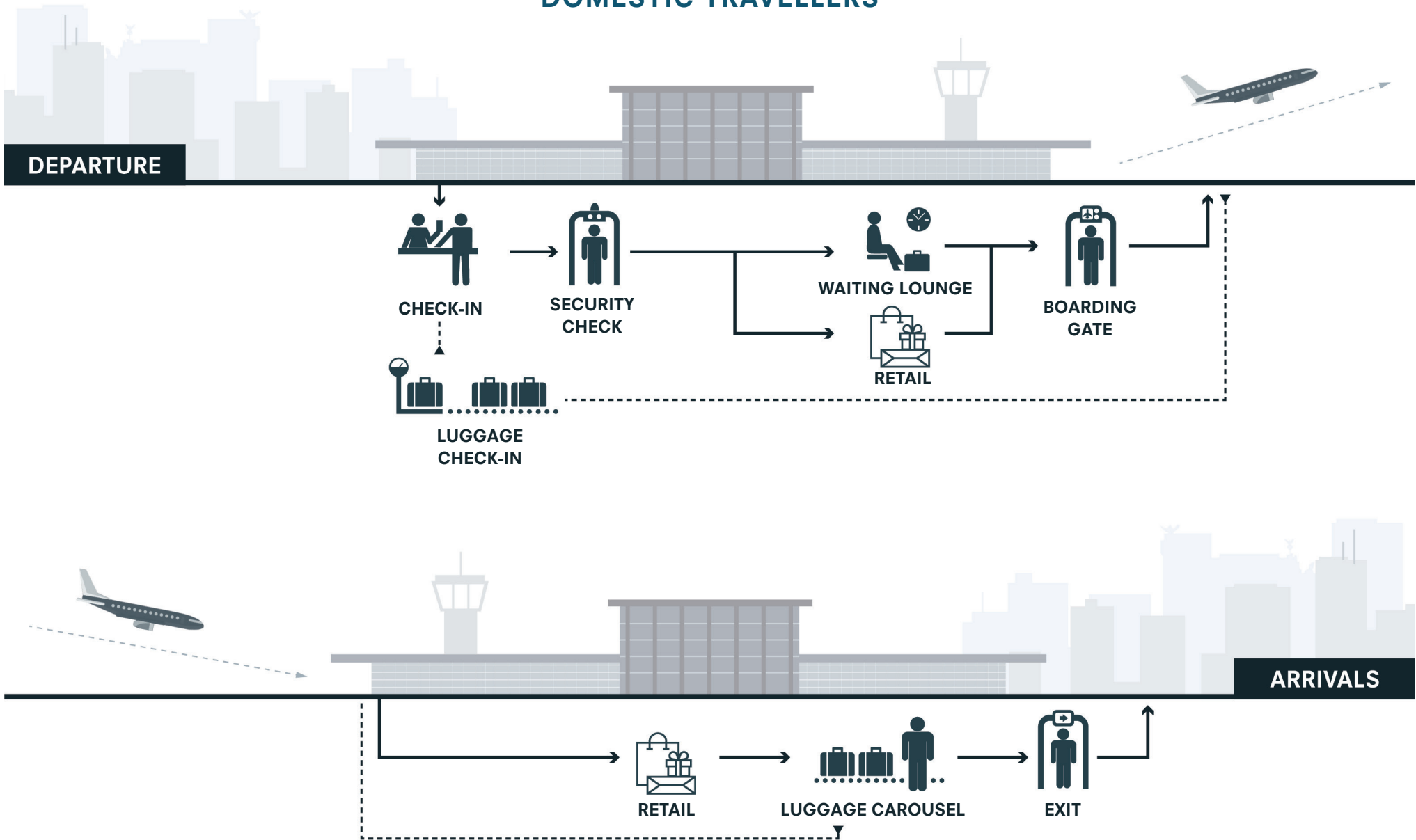
Research

PROCEDURE IN AIRPORT



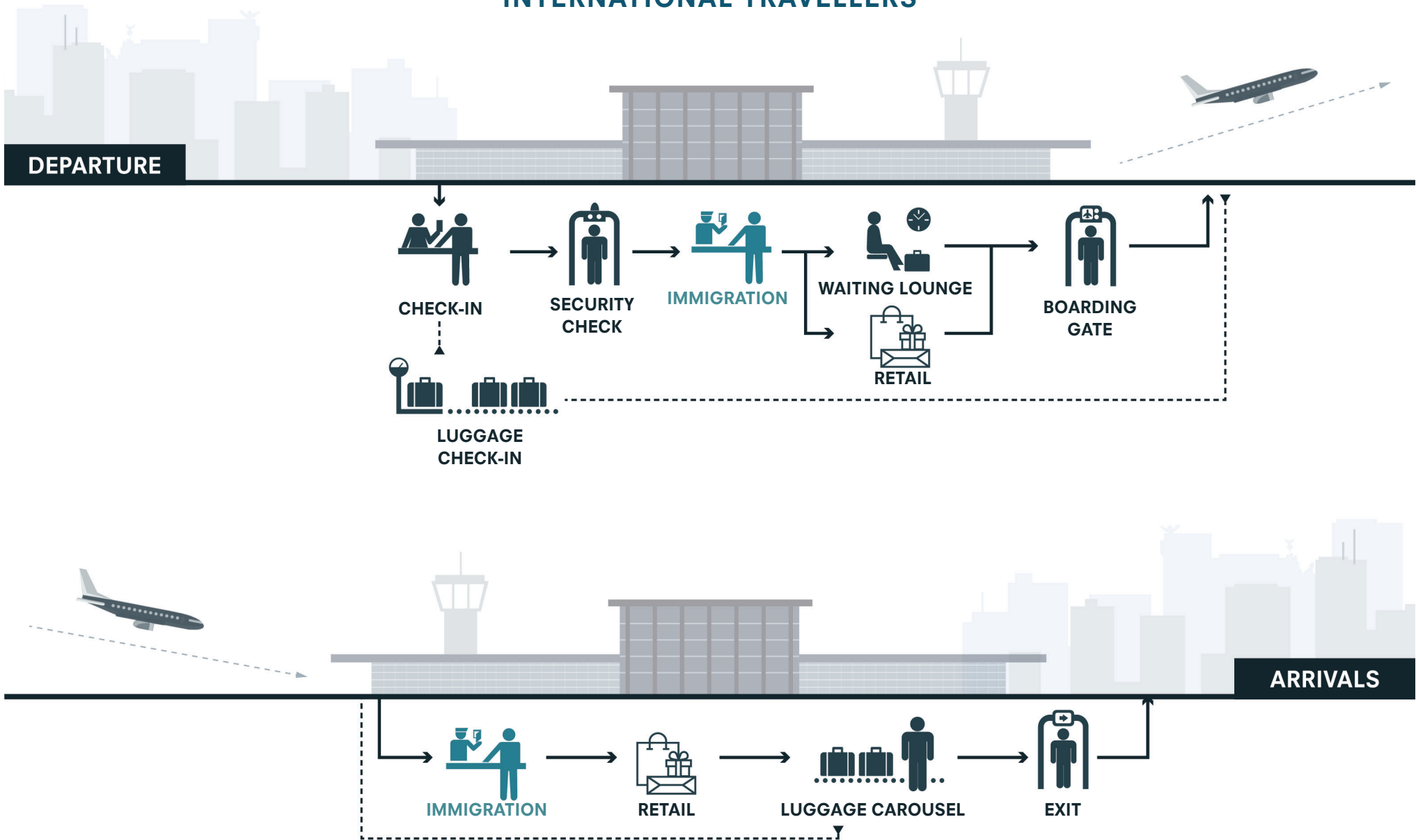
PROCEDURE IN AIRPORT

DOMESTIC TRAVELLERS



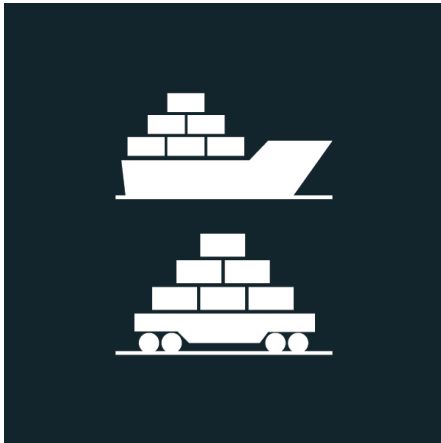
PROCEDURE IN AIRPORT

INTERNATIONAL TRAVELLERS



Research

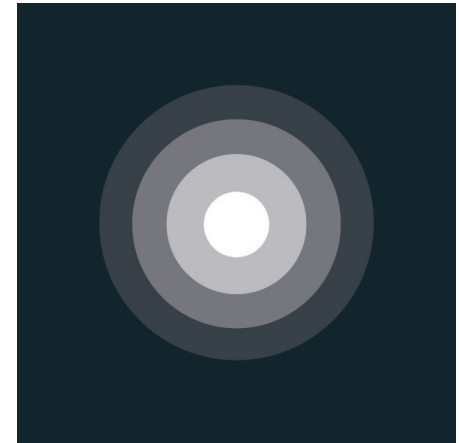
MATERIAL RESEARCH



Accessibility



Re-use



Prominence

INTRODUCTION

RESEARCH

DESIGN BRIEF

CONCEPT

IMPLEMENTATION

DEVELOPMENT

CONCLUSION

DESIGN BRIEF

Client

Programme

Site

Design Brief

INVOLVED PARTIES

STAKEHOLDERS

HARDWARE



SOFTWARE



CLIENTS

State of Berlin



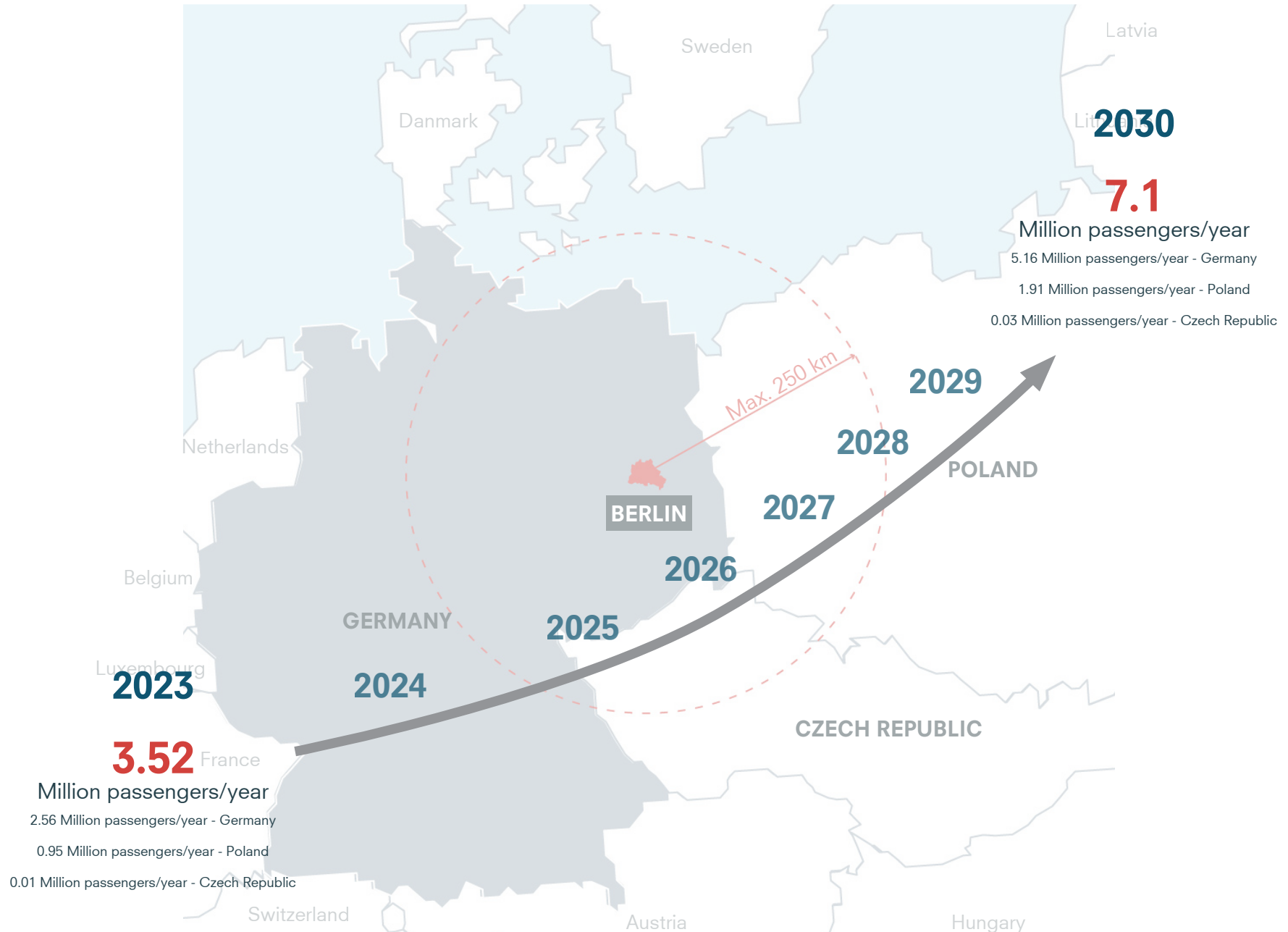
Federal republic of Germany



CONSULTANTS

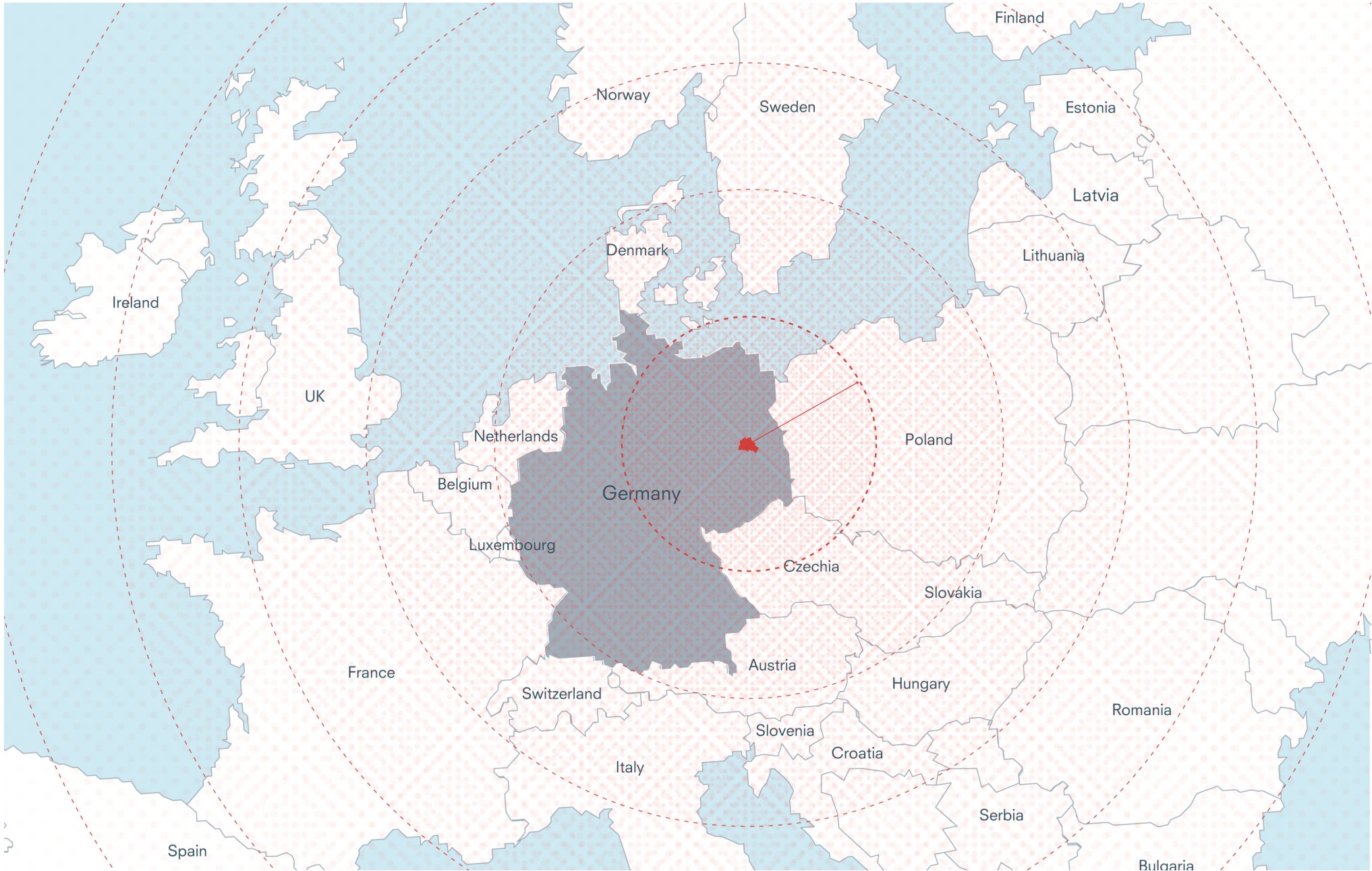


PASSENGER TARGET



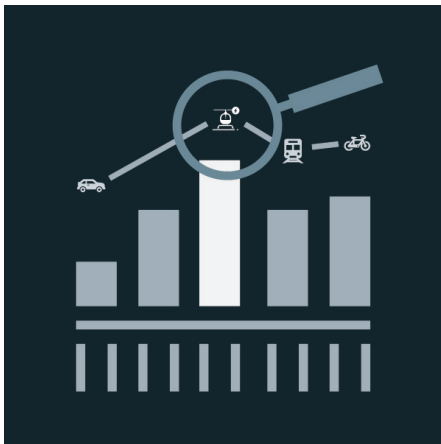
Design Brief

FUTURE(?)



Design Brief

CLIENT AMBITIONS



Benchmark



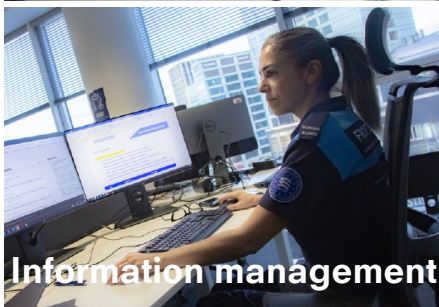
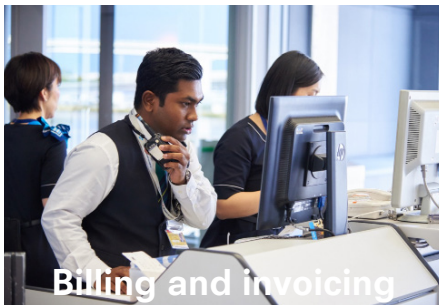
Security



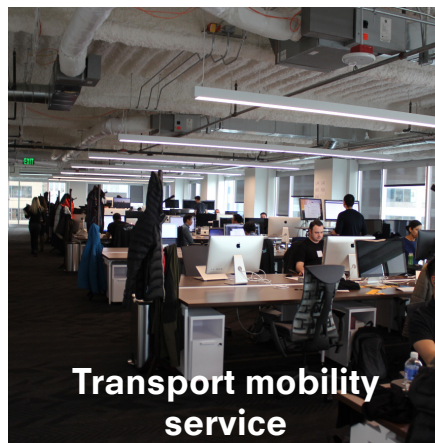
Sustainability

Design Brief

USER GROUPS



Administration



Stakeholders



Passengers

DESIGN BRIEF

Client

Programme

Site

Welcome to New Terminal

What is the architectural fundamental of a vertiport?

FROM GROUND TO AIR

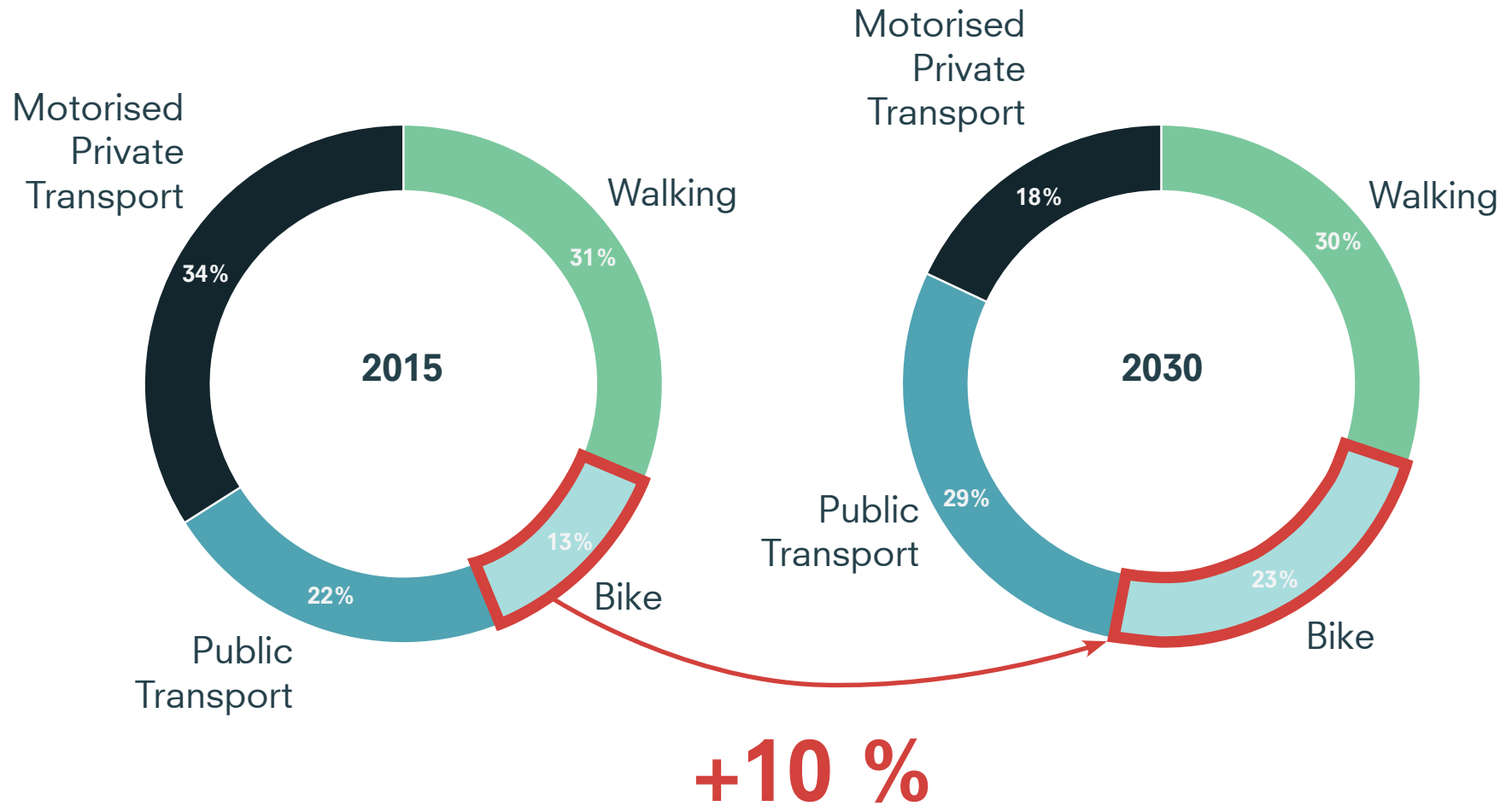




GROUND

Design Brief

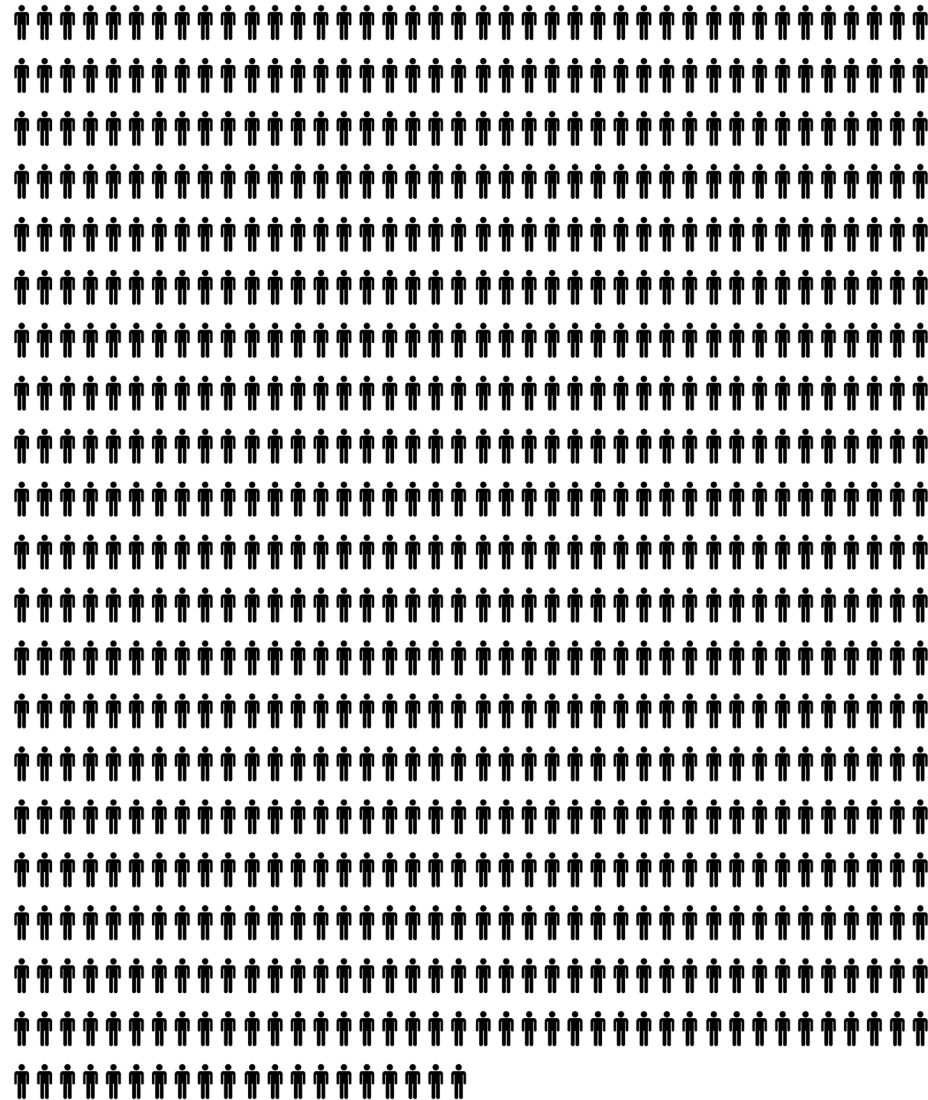
CURBSIDE



AIR



TERMINAL CAPACITY



820 passengers/hour

7.1 million passengers/year

Design Brief

EVTOL CAPACITY

VOLOCOPTER

Volocity



Capacity:
1 passengers + 1pilot + luggage(s)

Payload:
440 lb (199.6 kg)

Dimension:
Wingspan 37ft diameter (11.3 m)

AIRBUS

CityAirbus



Capacity:
4 passengers + 1pilot

Payload:
550 lb (250 kg)

Dimension:
Wingspan 26.3ft diameter (8 m)

LILIUM

eVTOL jet



Capacity:
6 passengers + 1pilot

Payload:
970 lb (440 kg)

Dimension:
Wingspan 45.6 ft (13.9 m)/Length 27.9 ft (8.5 m)

Kelekona

Drone-bus(prototype)



Capacity:
40 passengers + 1pilot

Maximum payload:
10,000 lb (4,536 kg)

Dimension:
45ft diameter (13.7 m)

Design Brief

EVTOL CAPACITY

VOLOCOPTER

Volocity

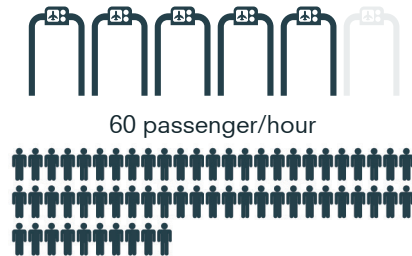
15 Flights/ hour



AIRBUS

CityAirbus

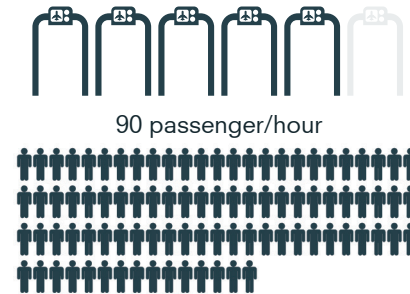
15 Flights/ hour



LILIUM

eVTOL jet

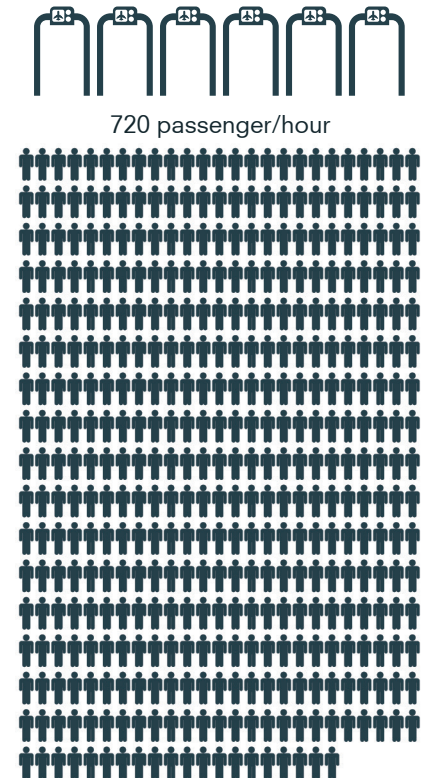
15 Flights/ hour



Kelekona

Drone-bus(prototype)

18 Flights/ hour



Design Brief

EVTOL MODULE

VOLOCOPTER

Volocity



Dimension:

Wingspan dia. 11.3 m

Gate: 13.6 m

Safety area: 19.8 m

FATO: 17 m

TLOF pad: 9.4 m

AIRBUS

CityAirbus



Dimension:

Wingspan dia. 8.0 m

Gate: 9.6 m

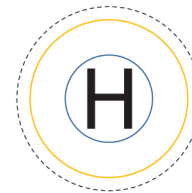
Safety area: 14 m

FATO: 12 m

TLOF pad: 6.65 m

LILIUM

eVTOL jet



Dimension:

Wingspan dia. 13.9 m

Gate: 19.6 m

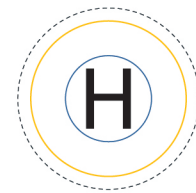
Safety area: 28.6 m

FATO: 24.45 m

TLOF pad: 13.6 m

Kelekona

Drone-bus(prototype)



Dimension:

Wingspan dia. 13.7 m

Gate: 16.5 m

Safety area: 24 m

FATO: 20.55 m

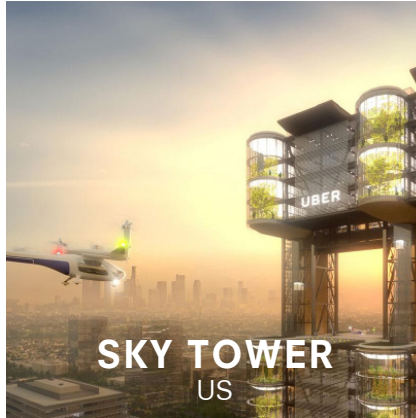
TLOF pad: 11.4 m

0 1 5 10 20 30

Design Brief

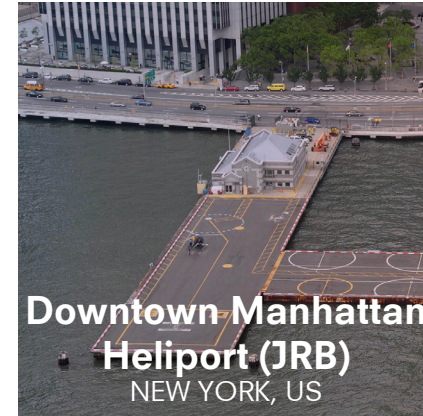
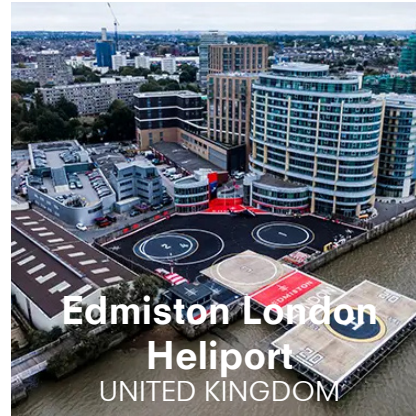
SELECTED PRECEDENTS

VERTIPTS



MODULE [APRON]

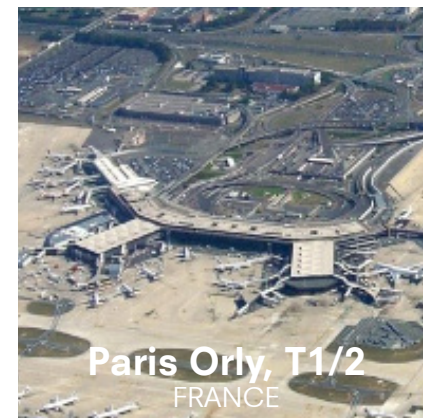
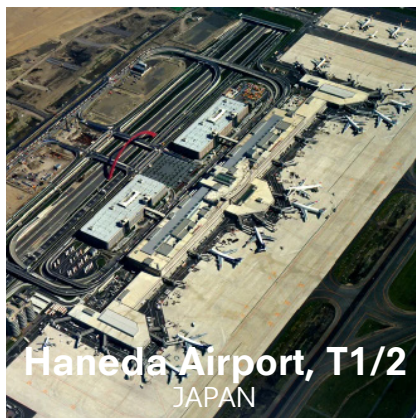
HELIPTS



LANDSIDE

SCALE and PROPORTION [Landside/Airssid]

AIRPTS



PROGRAMME ANALYSIS

Design Brief

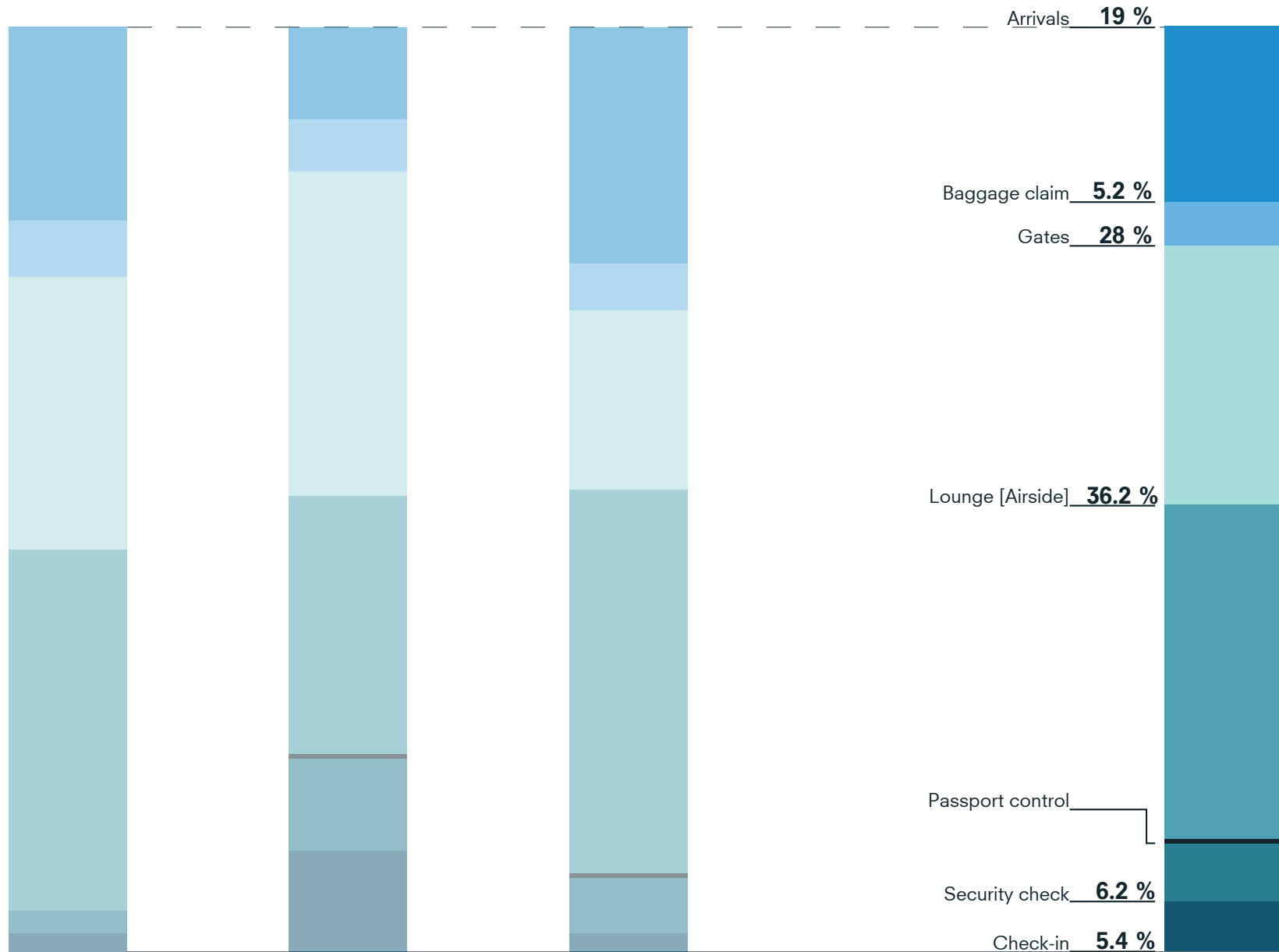
BENCHMARKING

Haneda Airport T1

London City Airport

Paris Orly T1/2

VERTIPORT



Design Brief

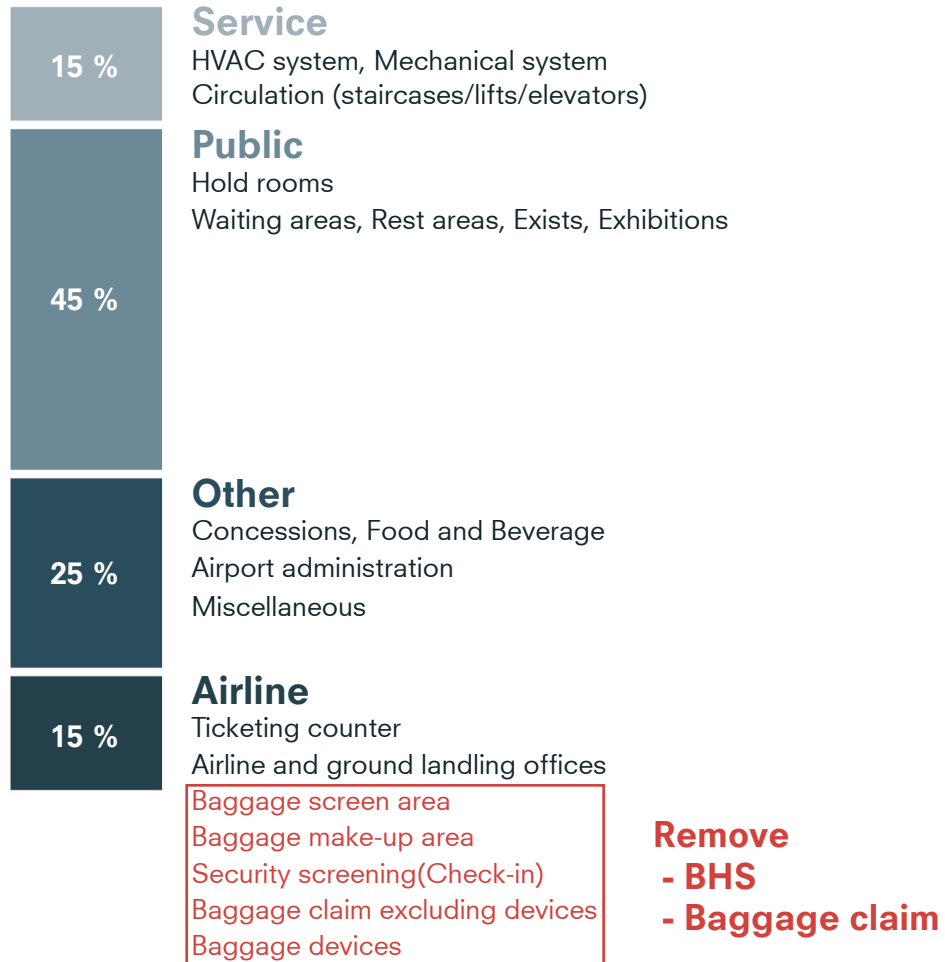
FUTURE VERTIPORT



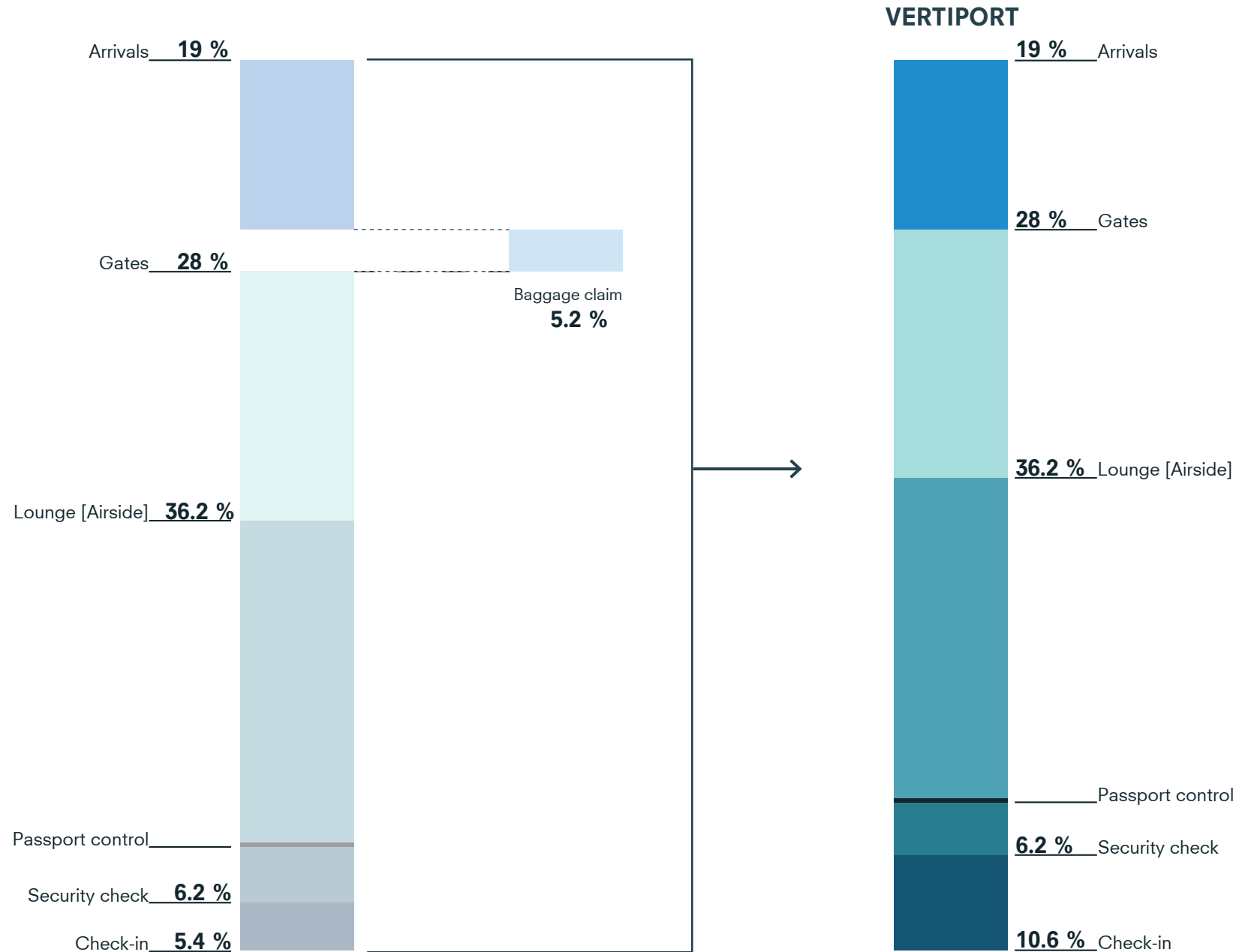
ONLY carry-on luggage

Design Brief

KEY FUNTIONS

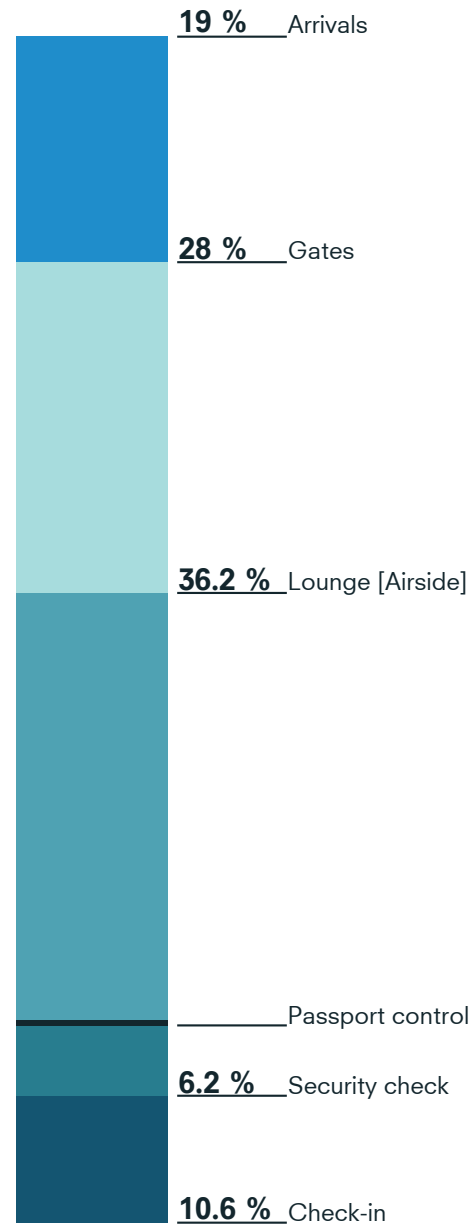


PROGRAMME ADJUSTMENT



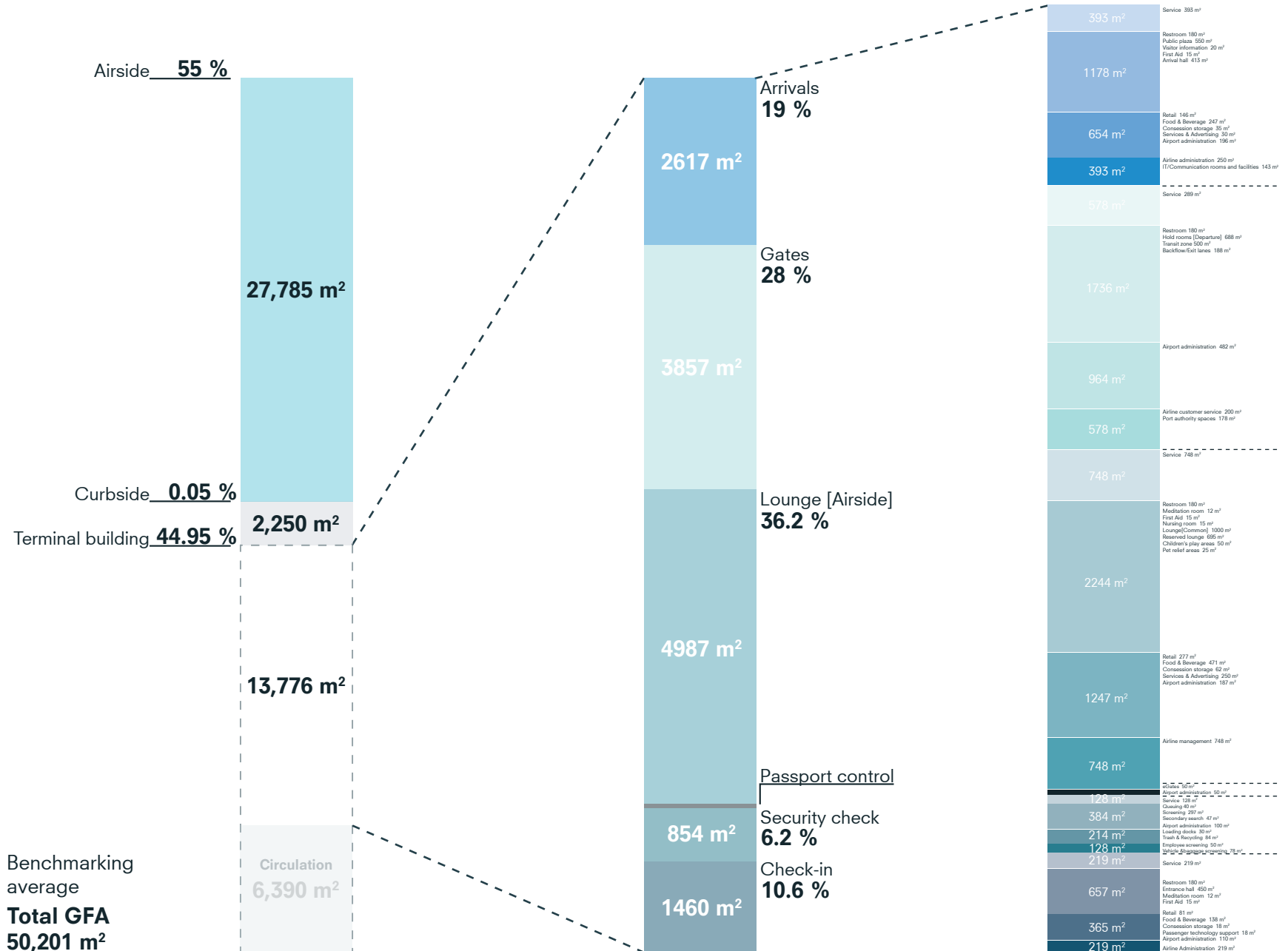
Design Brief

PROGRAMME



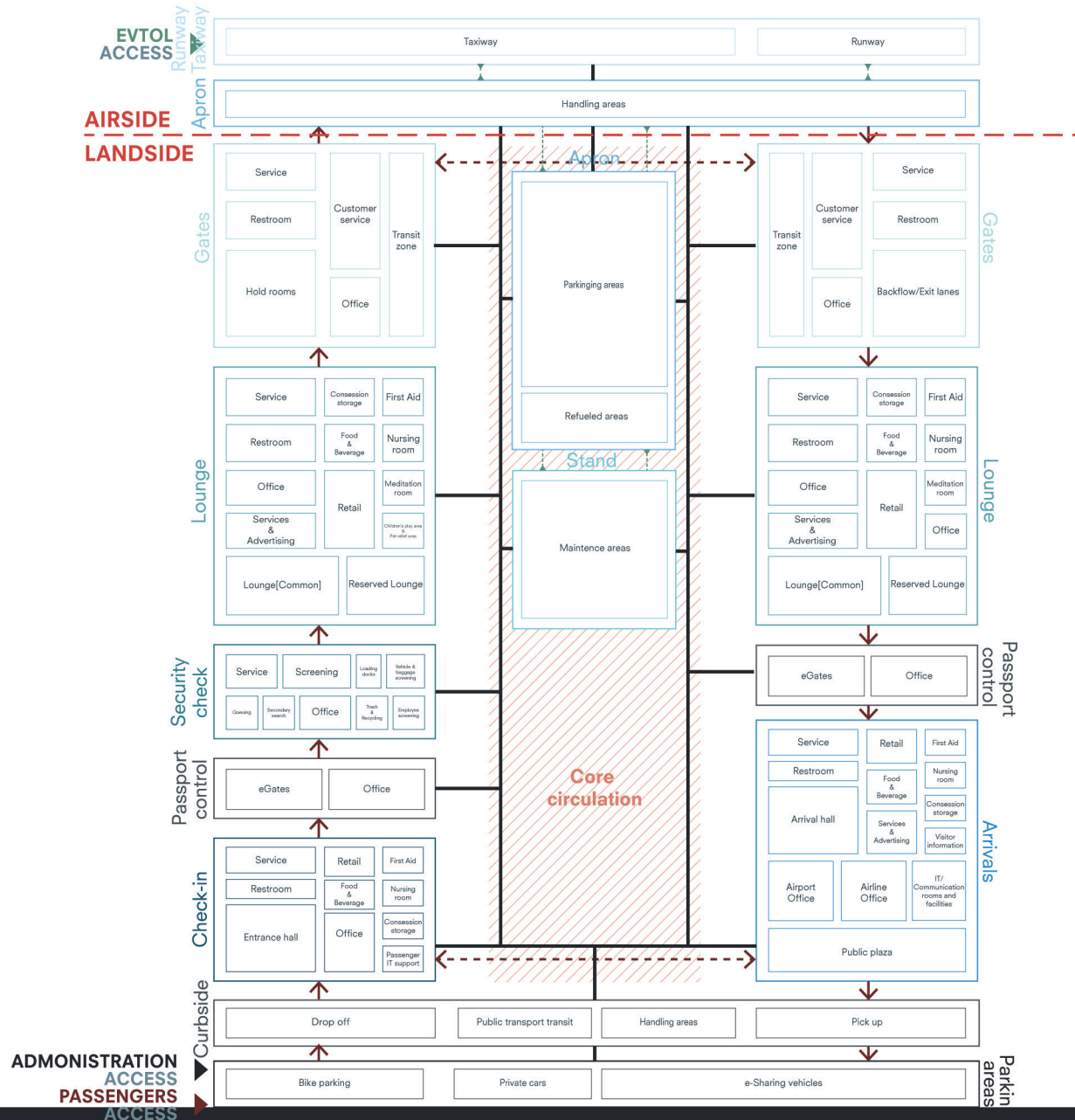
Design Brief

PROGRAMME BREAKDOWN



Design Brief

RELATION SCHEME



Design Brief

PROGRAMME AMBITIONS



Airside
Efficiency



Terminal Building
Service Quality
Service Level A



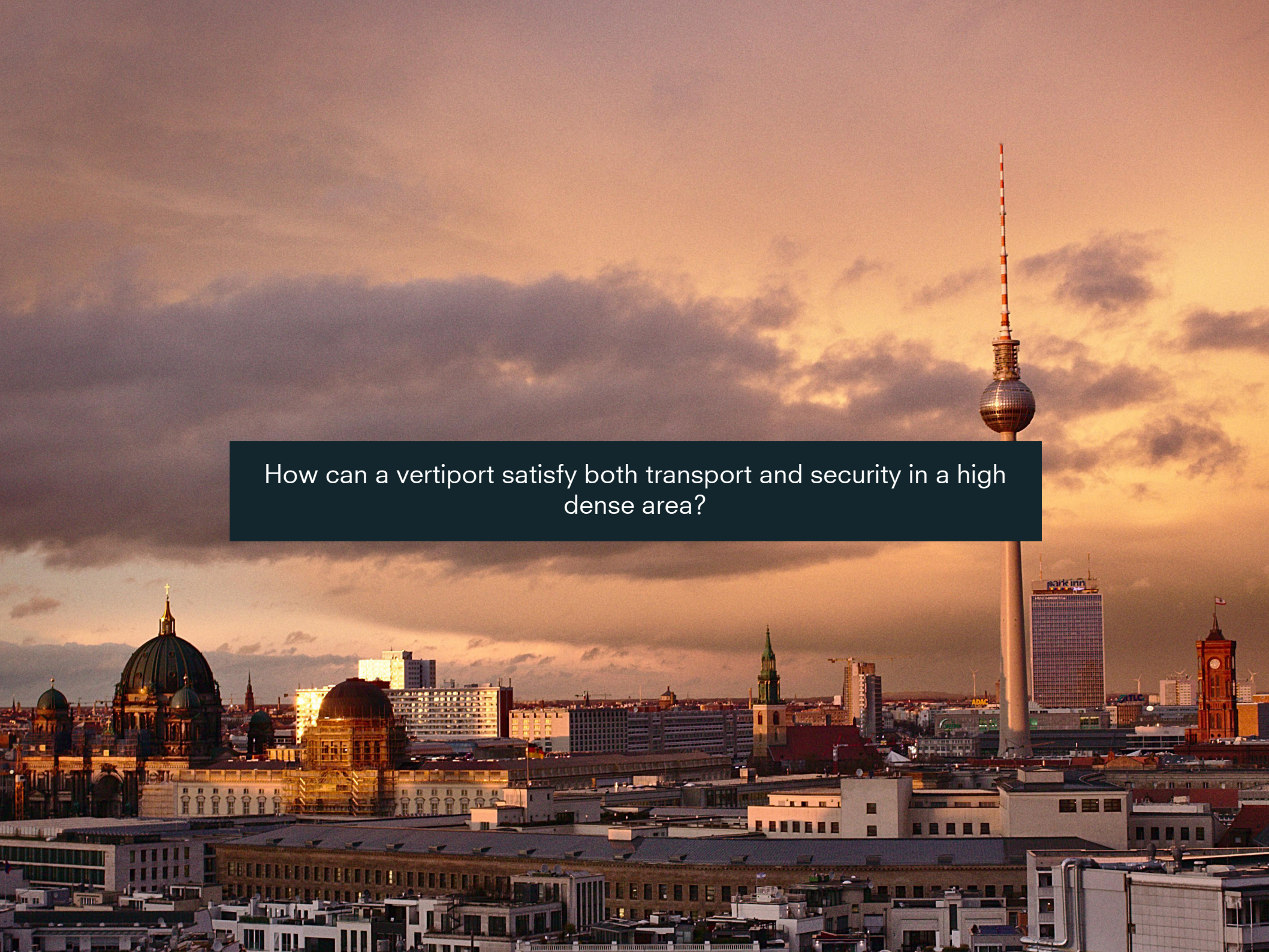
Landside
Contiguity

DESIGN BRIEF

Client

Programme

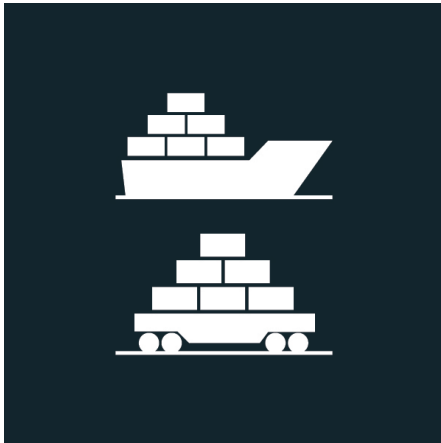
Site



How can a vertiport satisfy both transport and security in a high dense area?

Design Brief

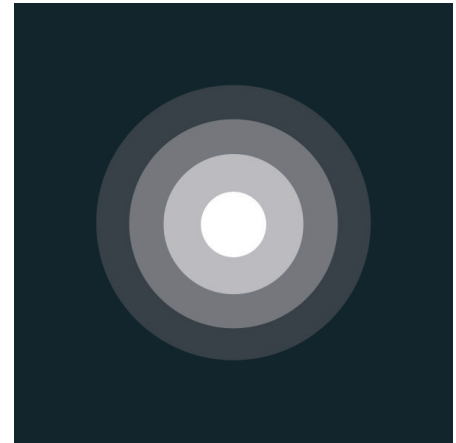
AREA REQUIREMENTS



Accessibility



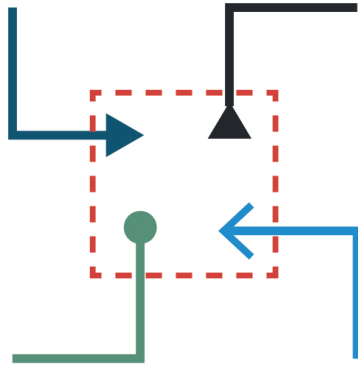
Re-use



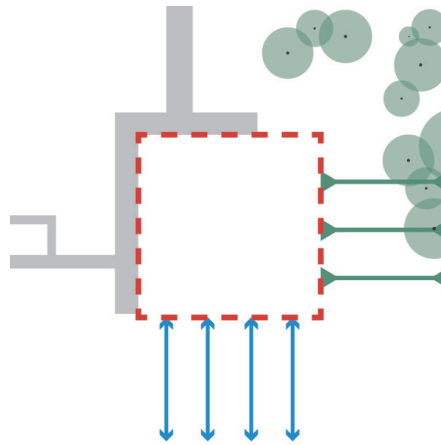
Prominence

Design Brief

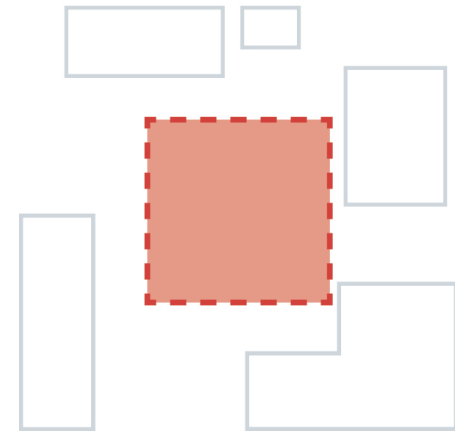
LOCATION REQUIREMENTS



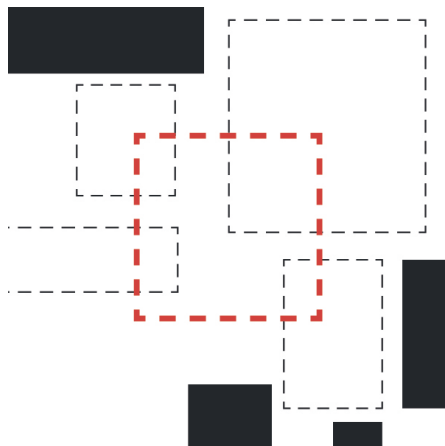
Multiple access



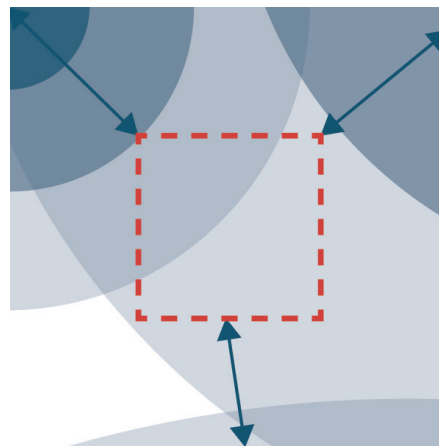
Environmental concerns



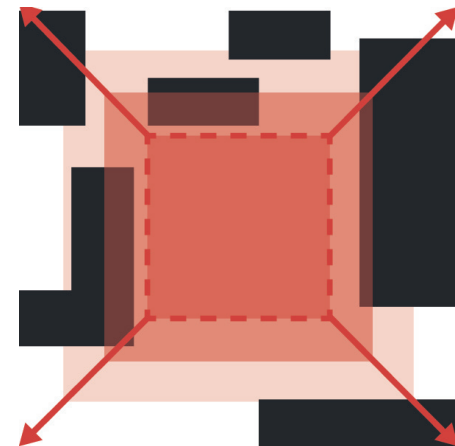
Prominent location



Vacant plot



Business connectivity



Neighbourhood catalyst

Design Brief

RUMMELSBURGER BUCHT



Design Brief

LAND USE



Design Brief

CONNECTIVITY



Design Brief

FUTURE PLAN



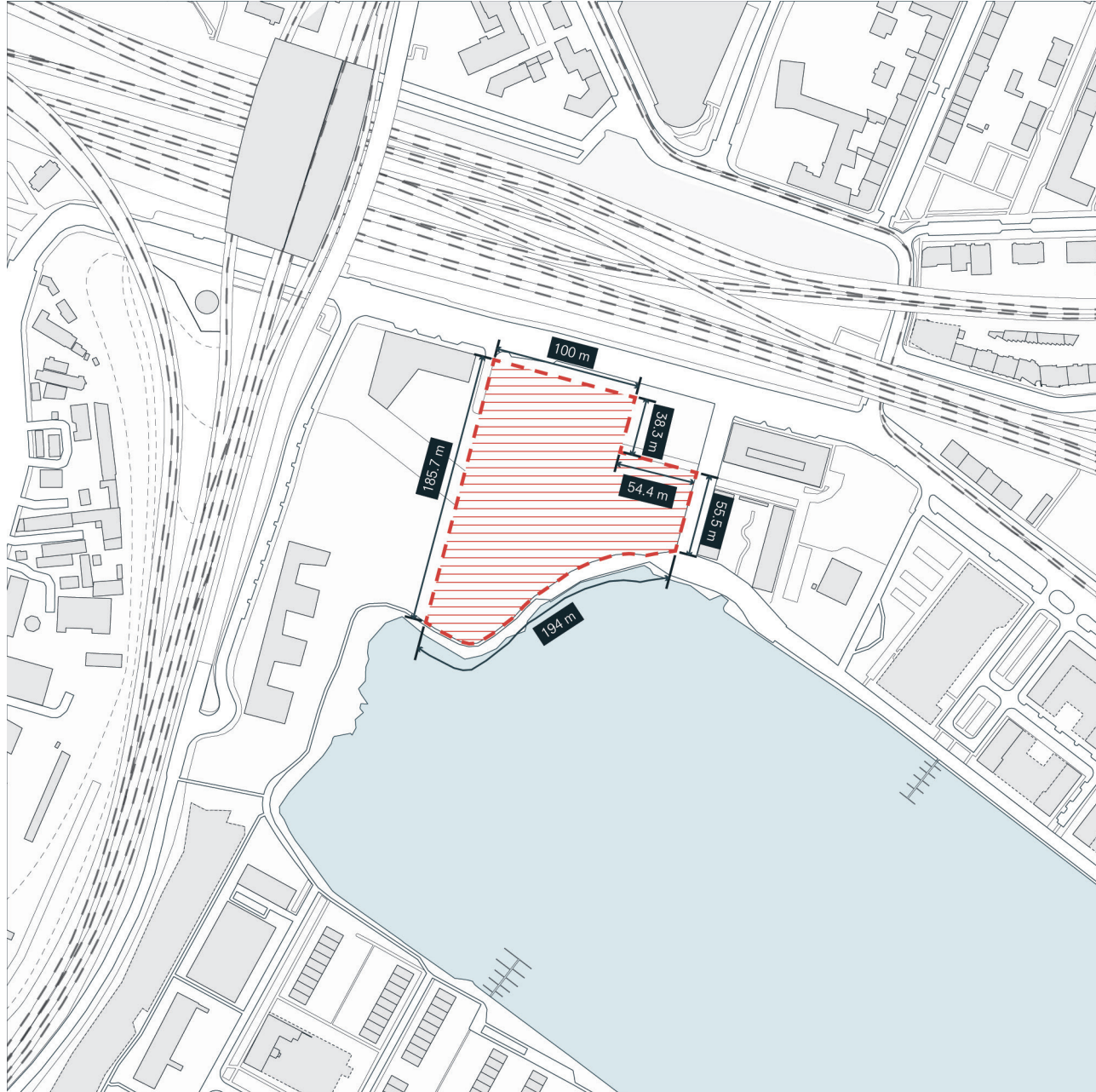
Design Brief

SITE



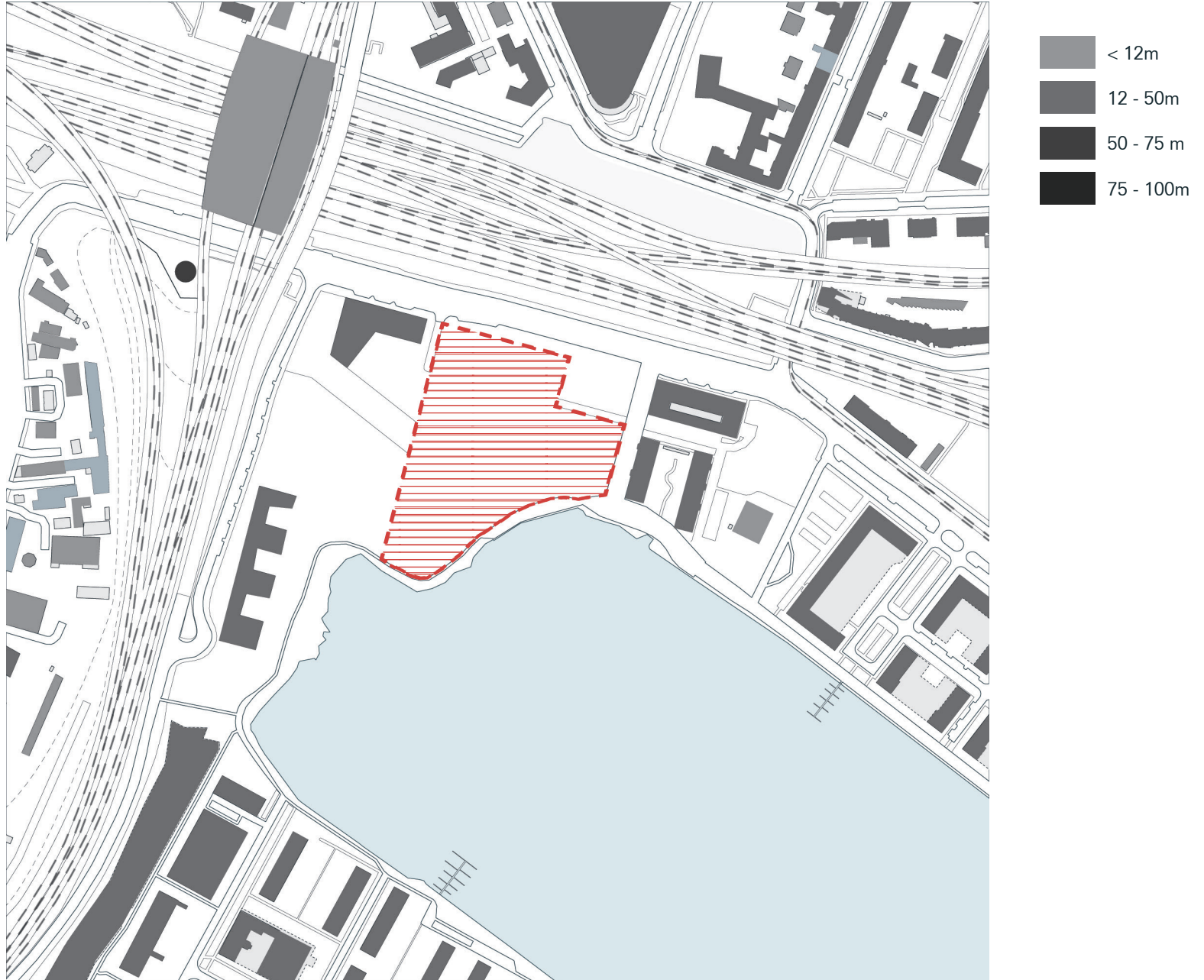
Design Brief

BUILDABLE PLOT



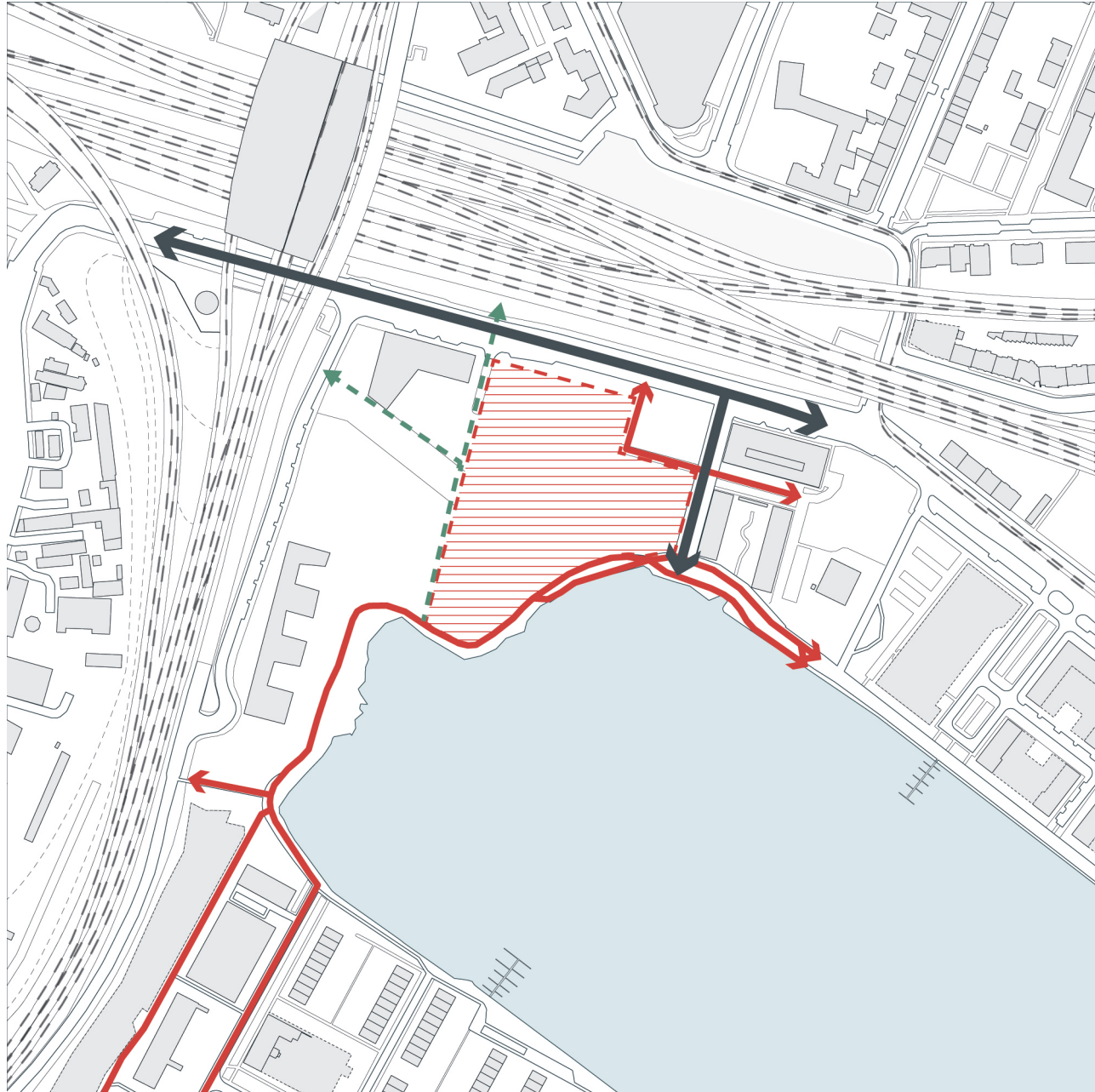
Design Brief

BUILDING HEIGHT



Design Brief

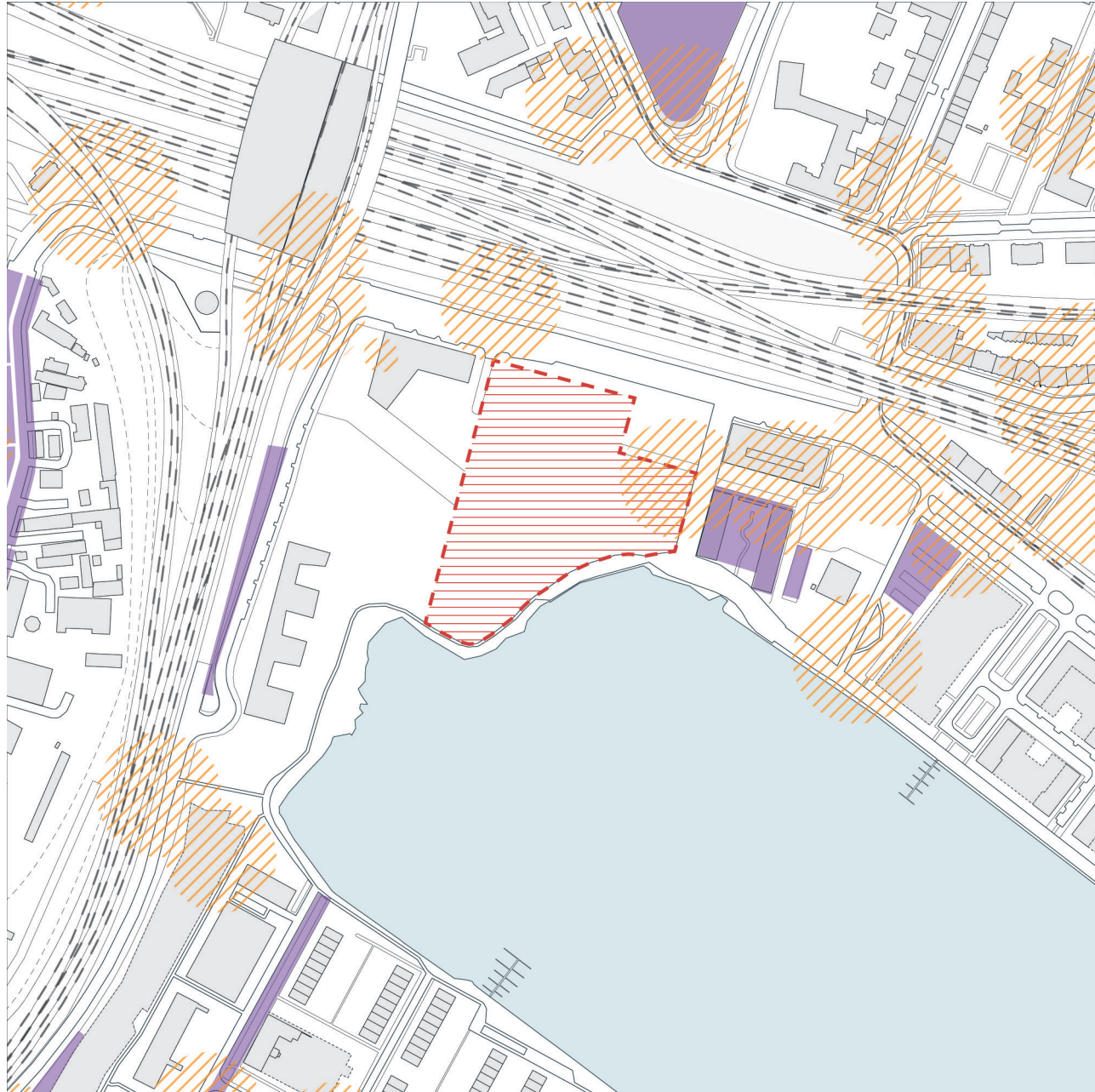
ACCESS





- ↔ Main access
- ↔ Secondary access
- - - → Potential access

Design Brief

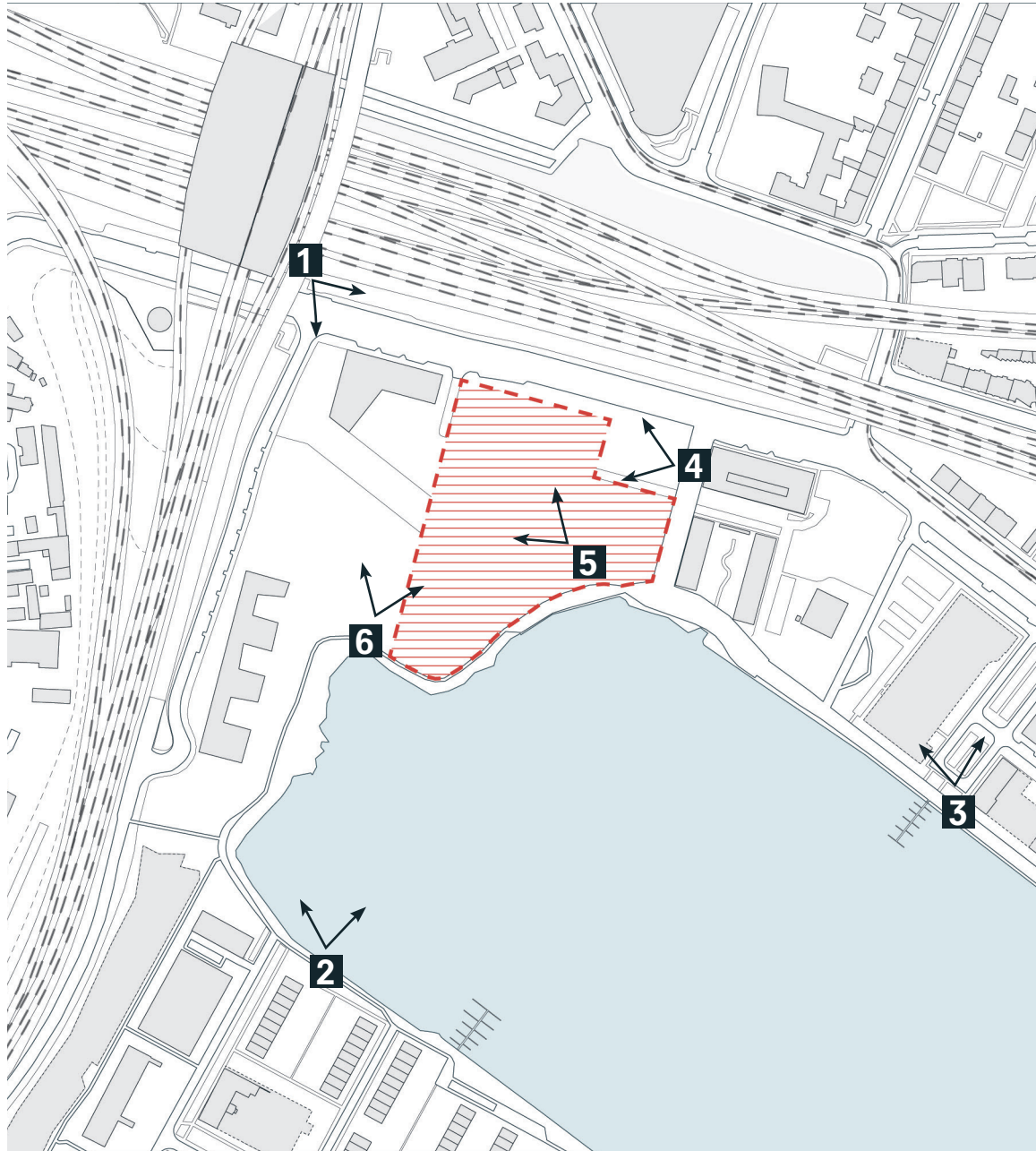
PARKING AREA



-  existing carpark
-  shared alternatives

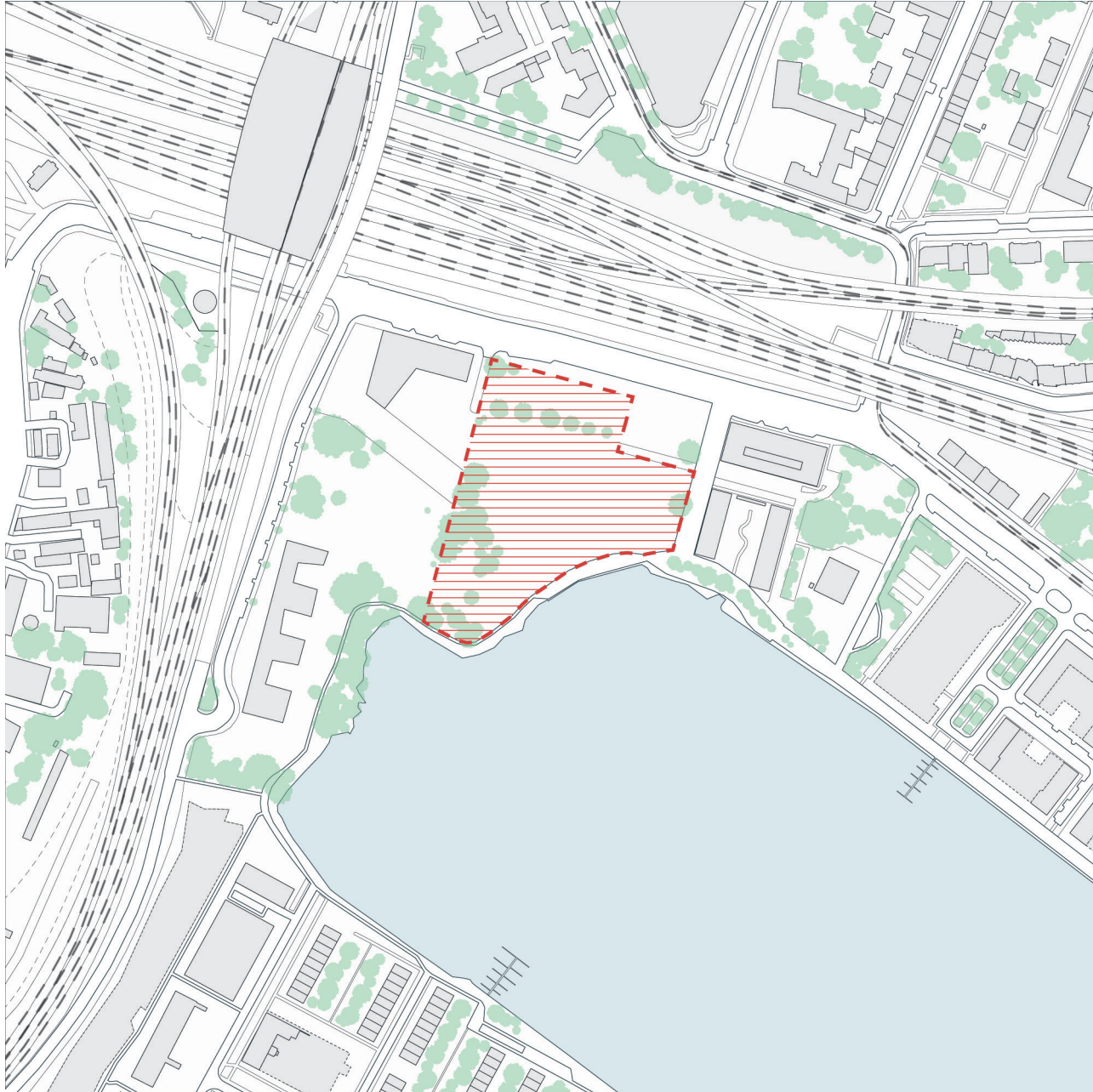
Design Brief

EXISTING CONDITIONS



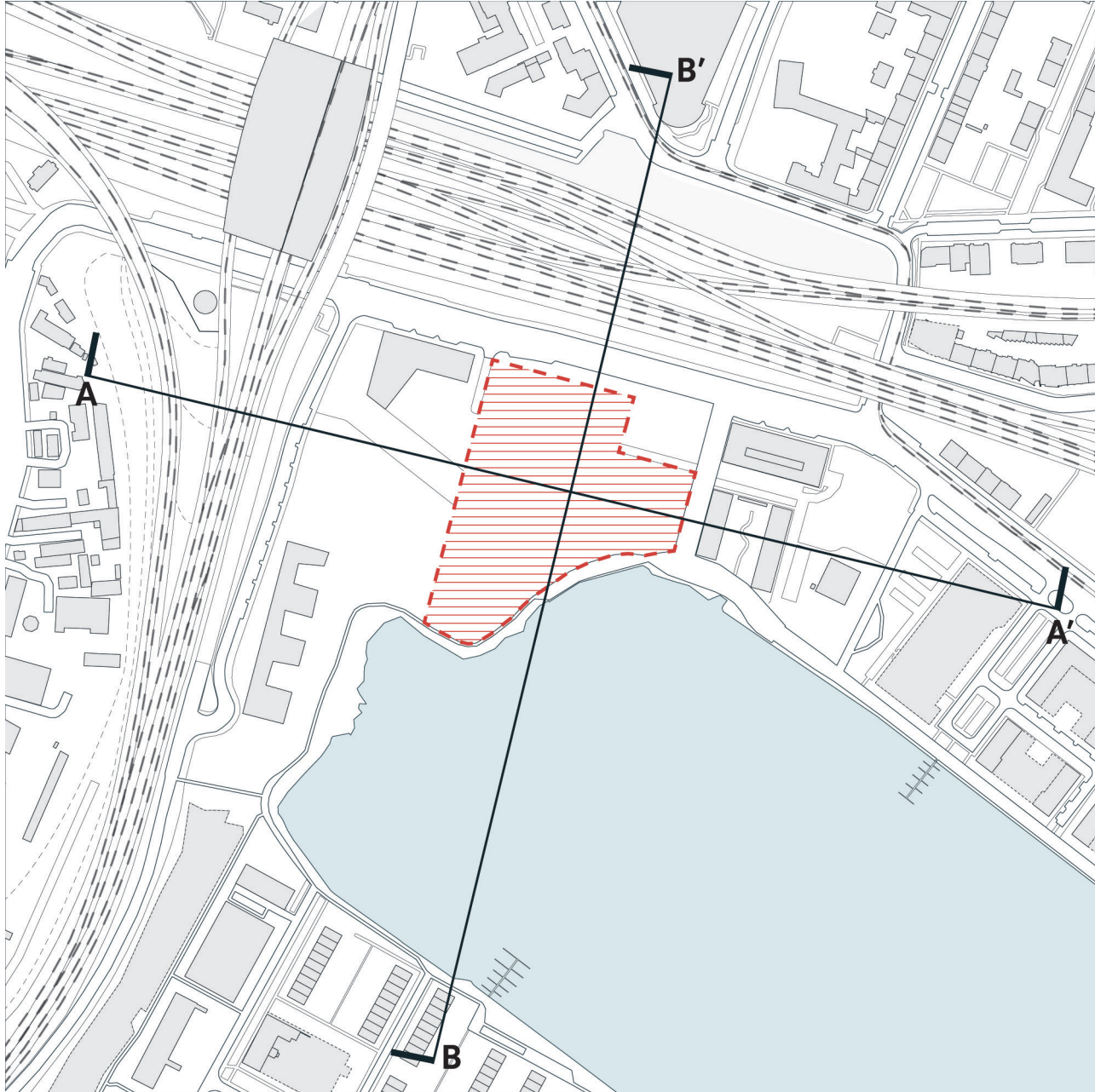
Design Brief

LANDSCAPE



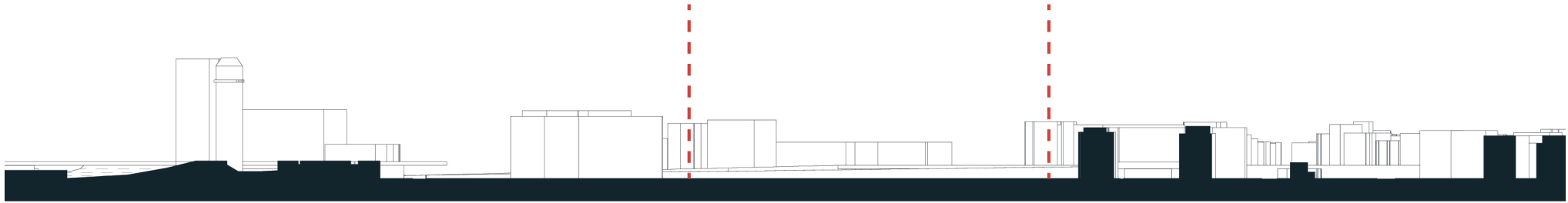
Design Brief

SECTIONS

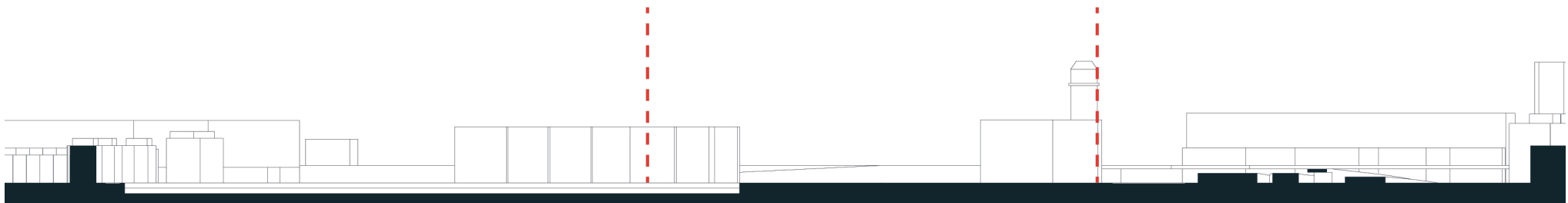


Design Brief

SECTIONS



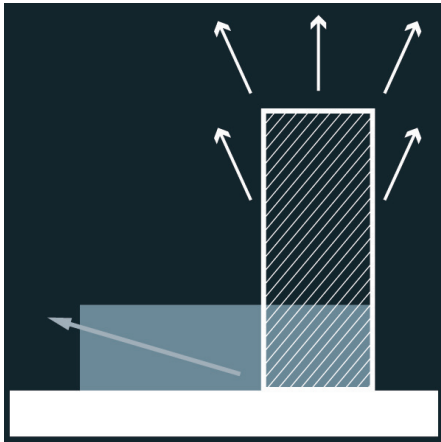
Section A-A'



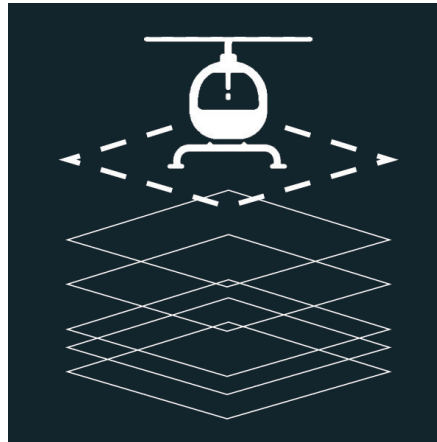
Section B-B'

Design Brief

SITE AMBITIONS



**From HORIZONTALITY
to VERTICALITY**



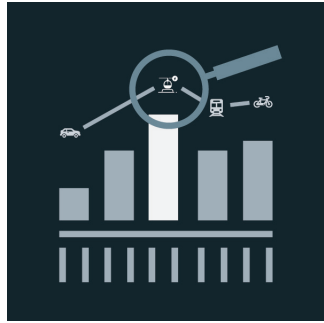
New layer of mobility



Integrated urban landscape

Design Brief

AMBITION OVERVIEW



Benchmark



Security



Sustainability



Airside

Efficiency



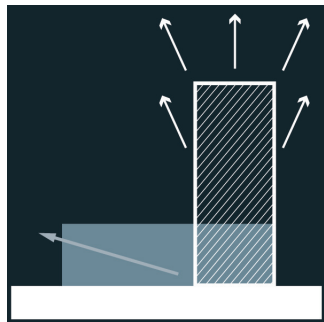
Terminal Building

Service Quality

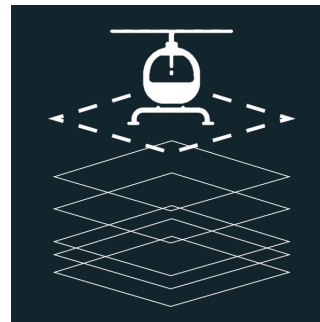


Landside

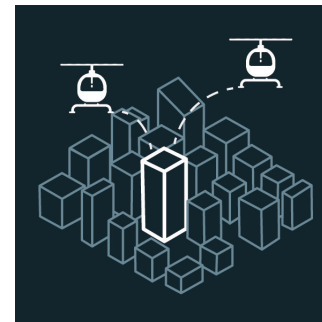
Contiguity



**From HORIZONTALITY
to VERTICALITY**



New layer of mobility



Integrated urban landscape

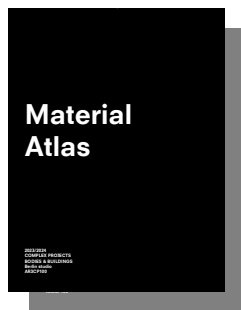
Design Brief

MATERIAL

THE TOOLS

WHAT?

GROUP VISION



RE-POSITION

MATERIAL ATLAS
"BIBLE"

HOW?

DESIGN FRAMEWORK

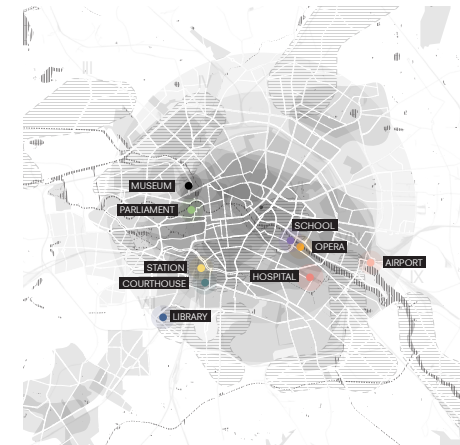


MATERIAL AS STAR OF THE SHOW

TYPOLOGIES
CONCEPTS
MATERIALS

WHERE?

URBAN STRATEGY



LOCATION

ACCESSIBILITY
RE-USE
PROMINENCE

Design Brief

MATERIAL

XL

CITY SCALE

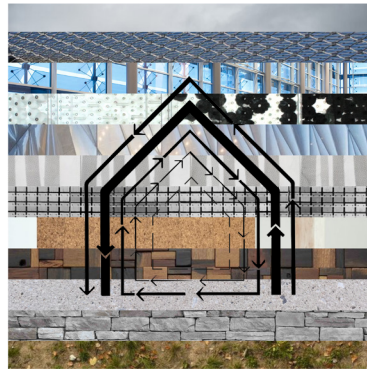


SITE LOCATION

ACCESSIBILITY
RE-USE
PROMINENCE

L

PROJECT SCALE

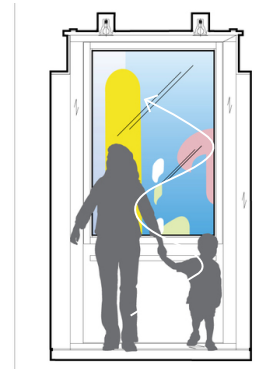


**PROJECT
MATERIALISATION
//CONCEPT**

MATERIAL MATRIX
INDEX SHEET
<20 POINTS?

M

KEY SPACE SCALE

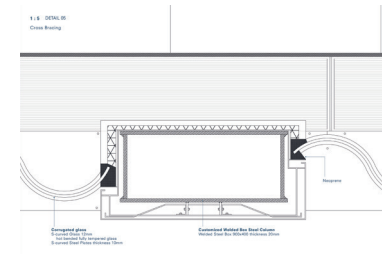


**MATERIAL
EXPRESSION**

DESIGN FRAMEWORK
MATERIAL INDEX
PALETTE

S

DETAIL SCALE



**PREFAB
CONFIGURATION**

PREFAB
CONSTRUCTION
METHODOLOGY

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CONCEPT

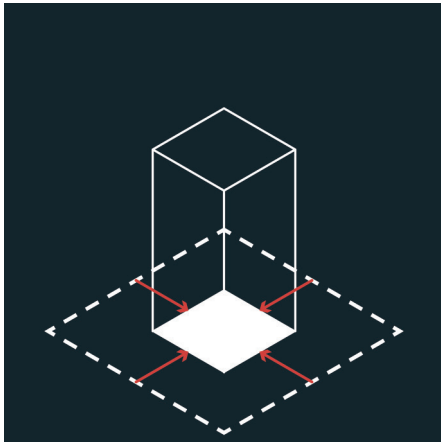
IMPLEMENTATION

DEVELOPMENT

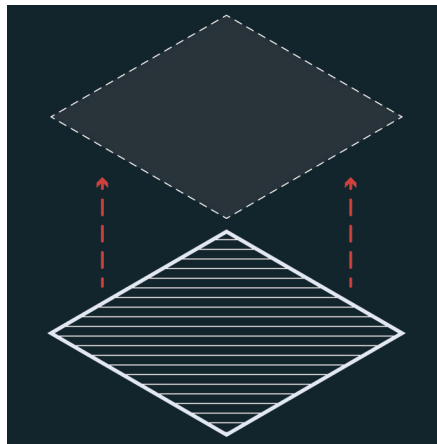
CONCLUSION

Concept

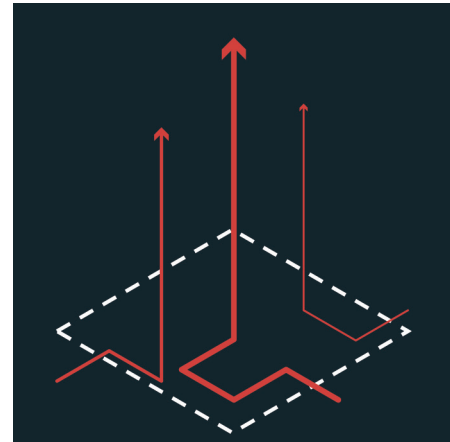
DESIGN CHALLENGES



**Minimise building
footprint**



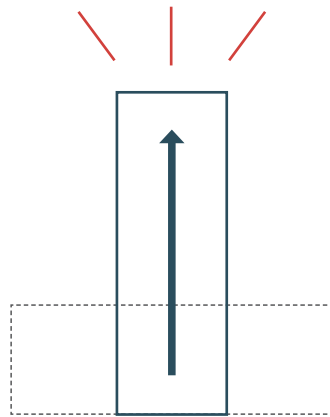
From GROUND to AIR



Flow

Concept

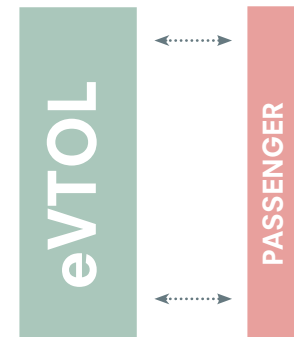
DESIGN AMBITIONS



Verticality



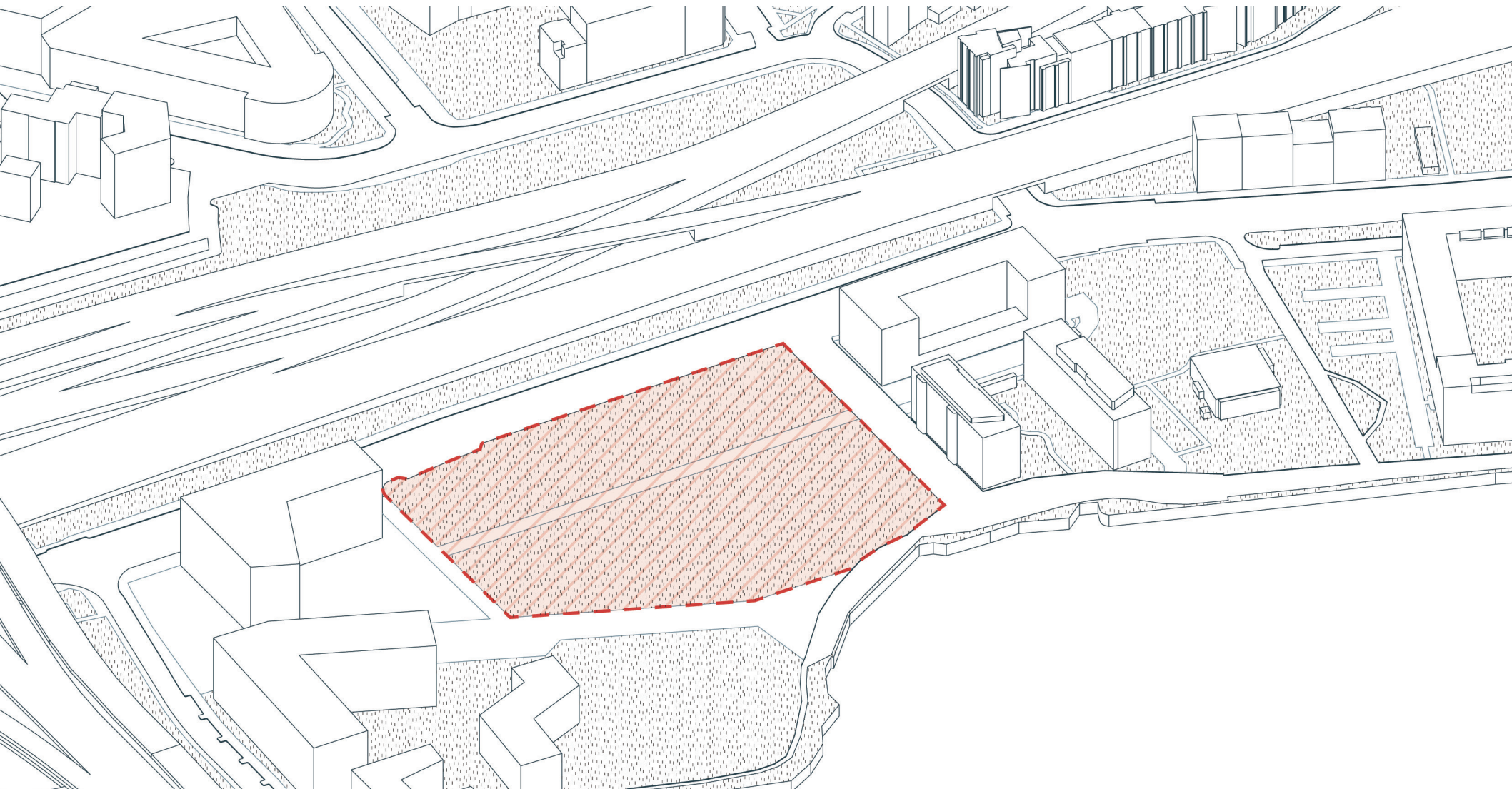
From GROUND to AIR



Separate flow

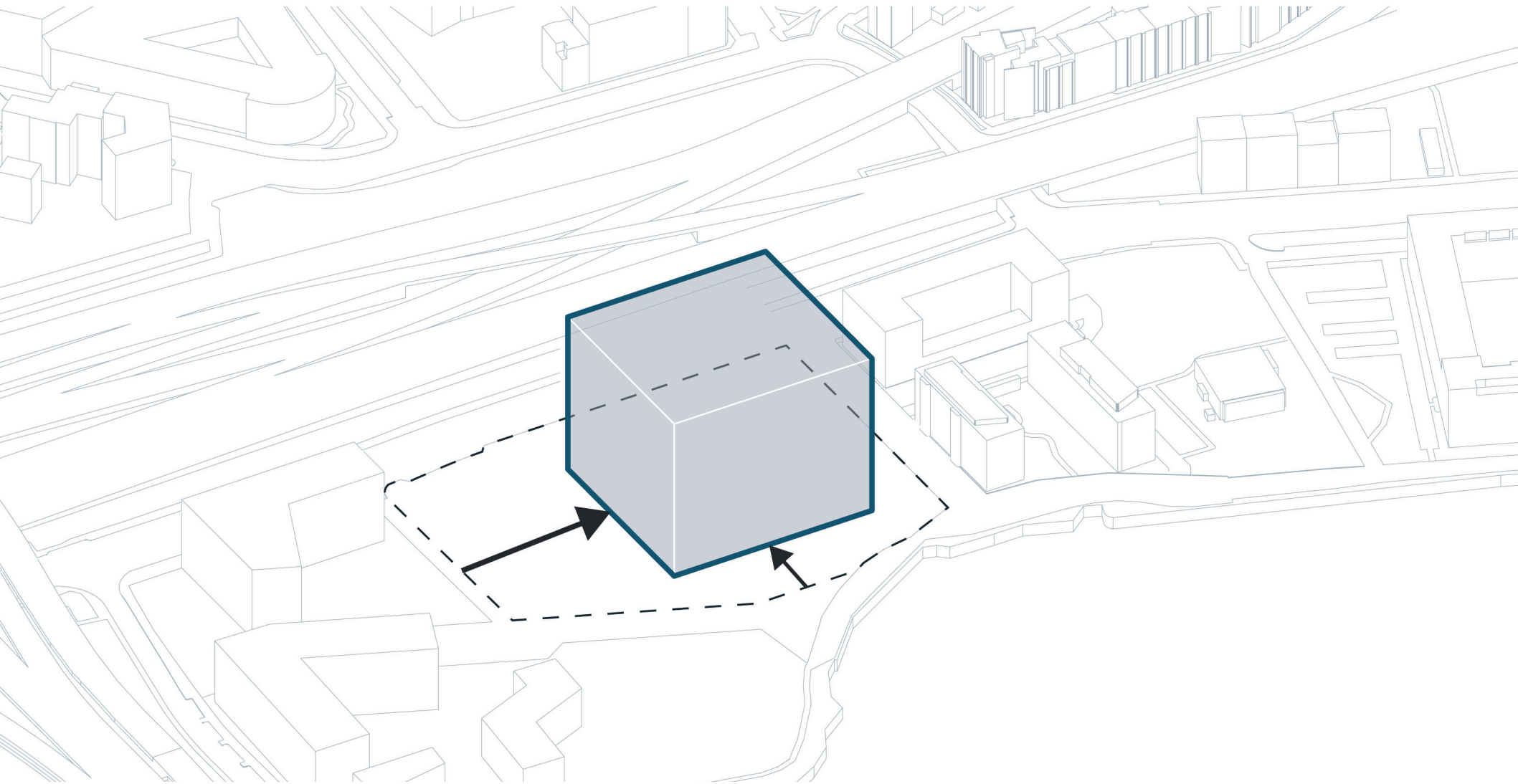


Concept



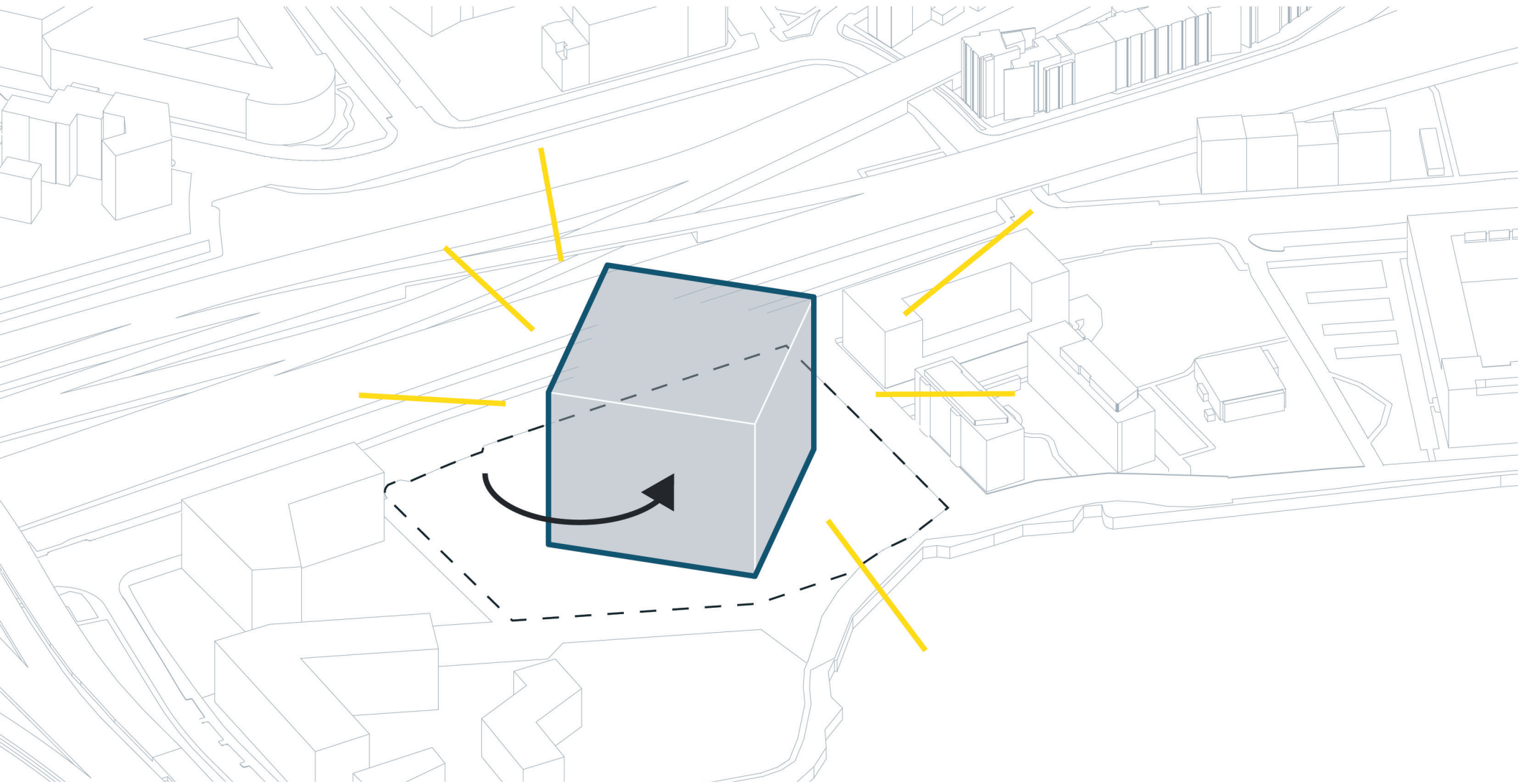
Concept

MINIMISE



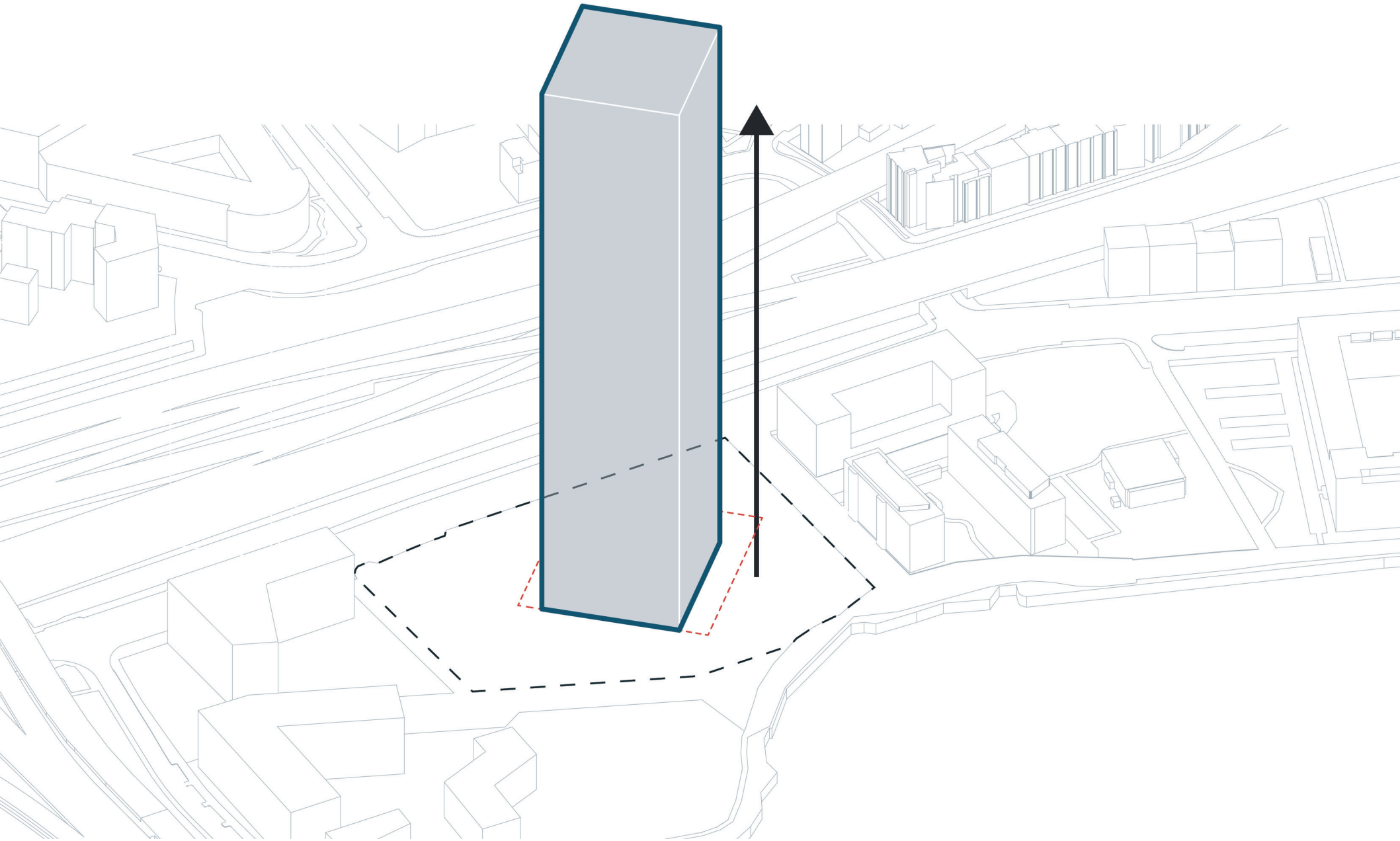
Concept

RE-ORIENT



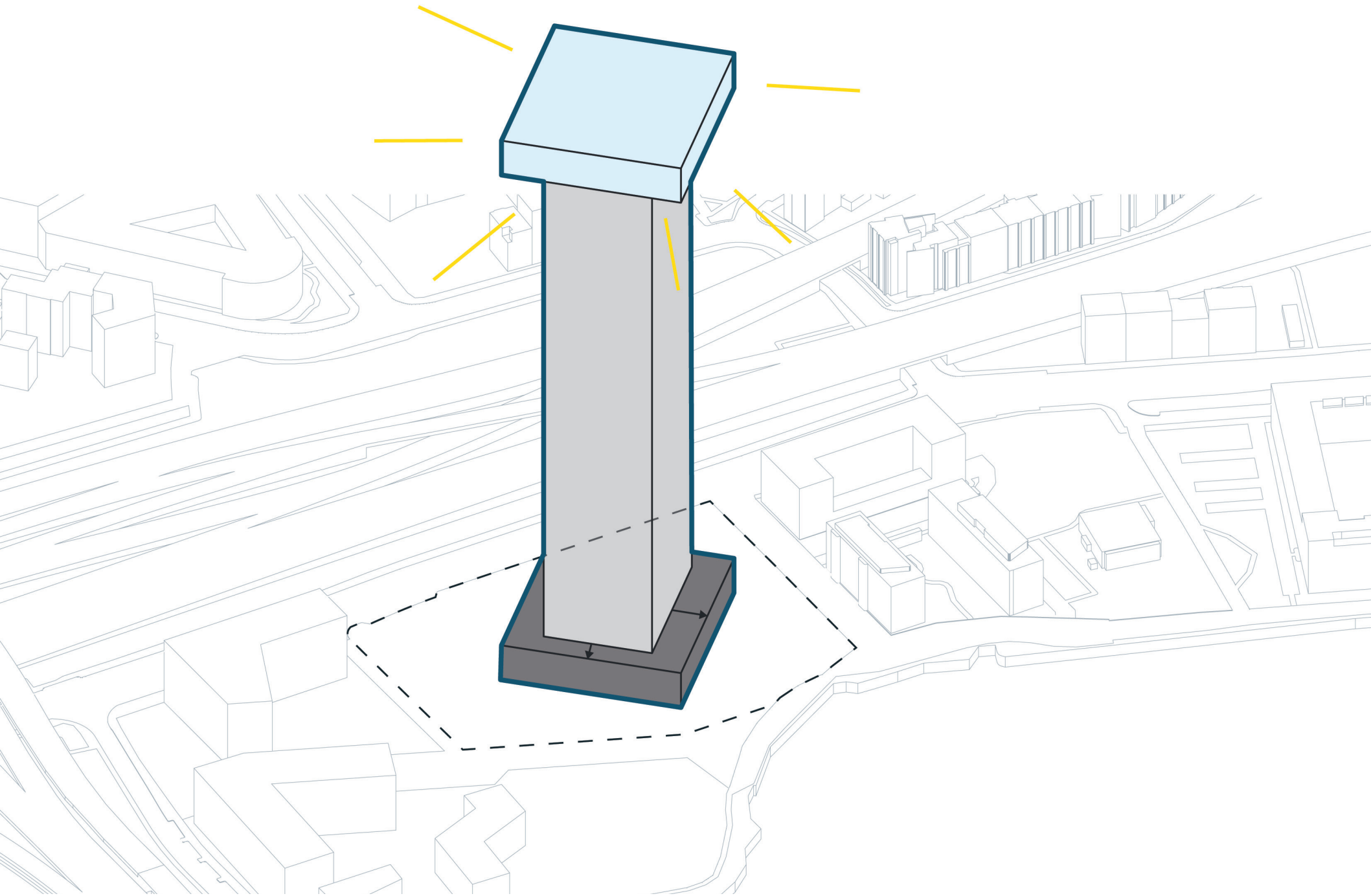
Concept

VERTICALISE



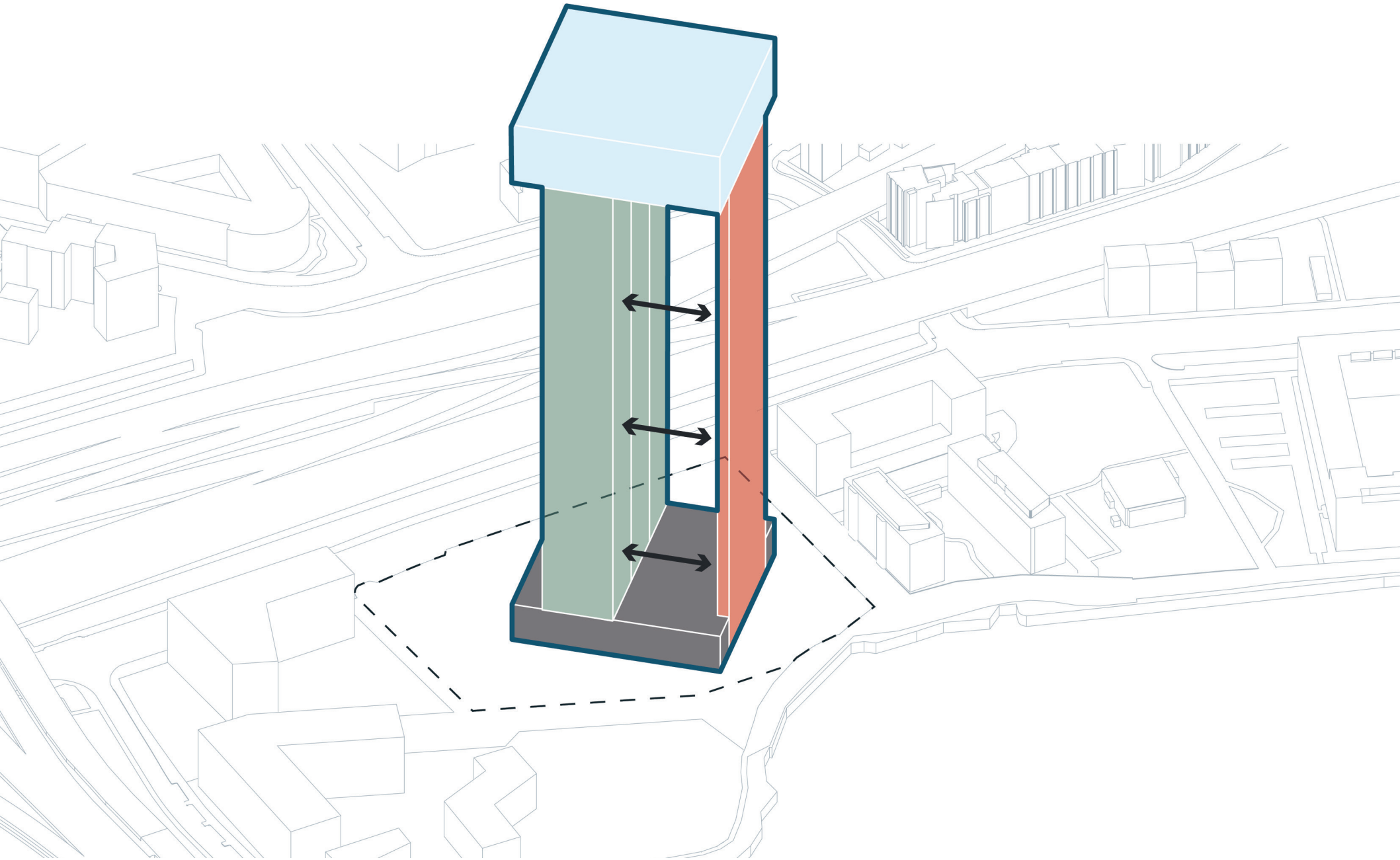
Concept

GROUND - AIR



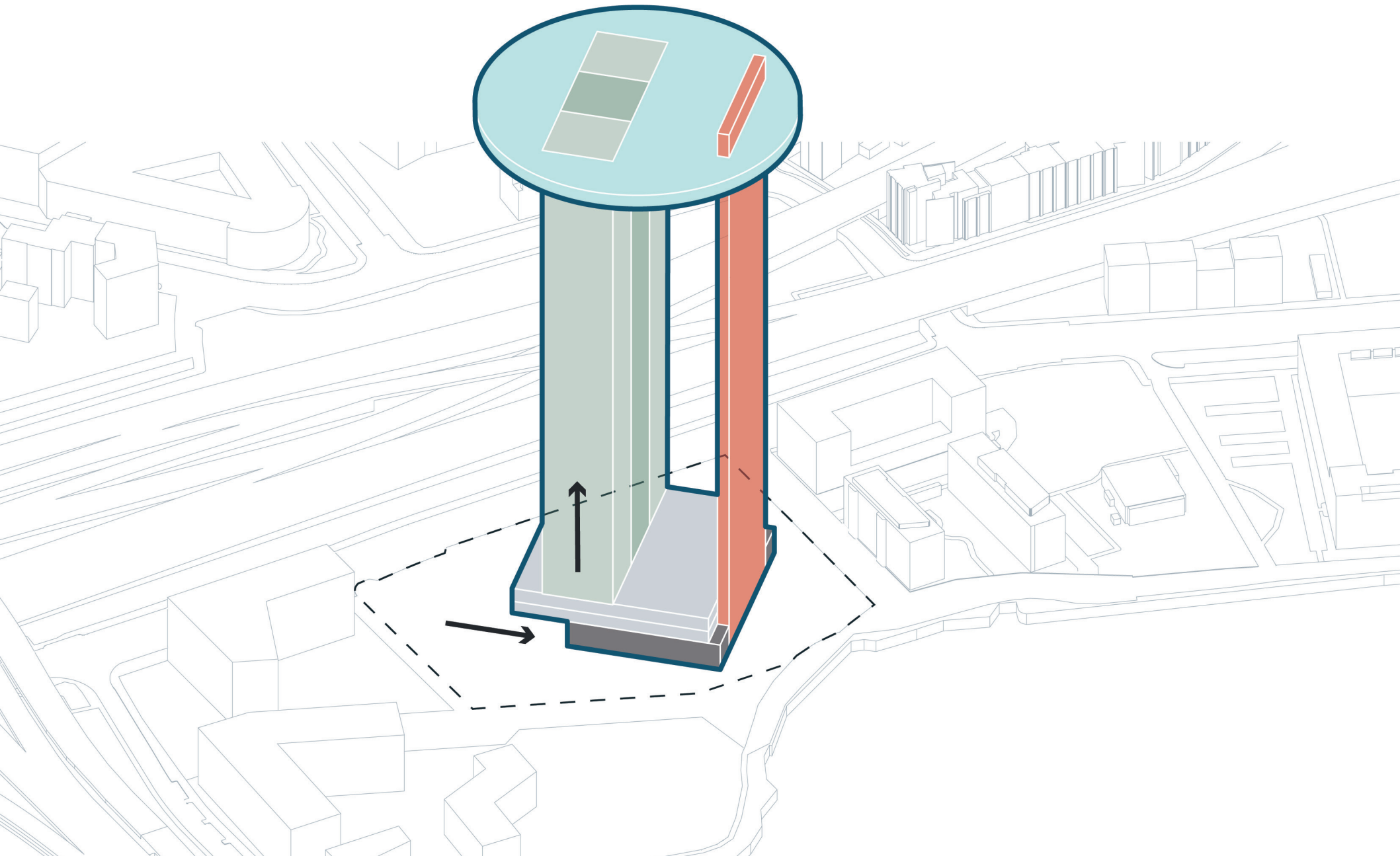
Concept

SEPARATE



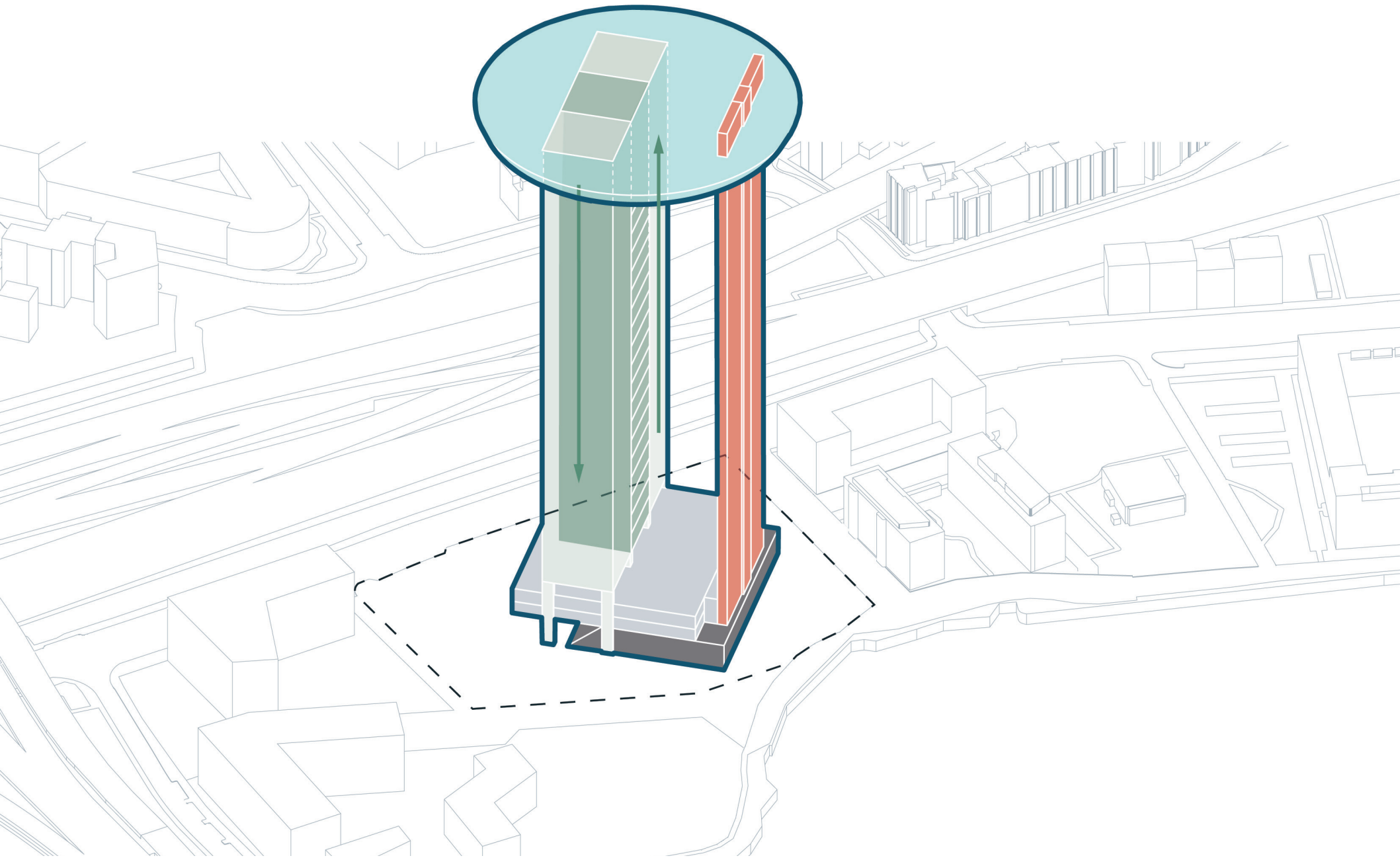
Concept

LIFT & SET BACK



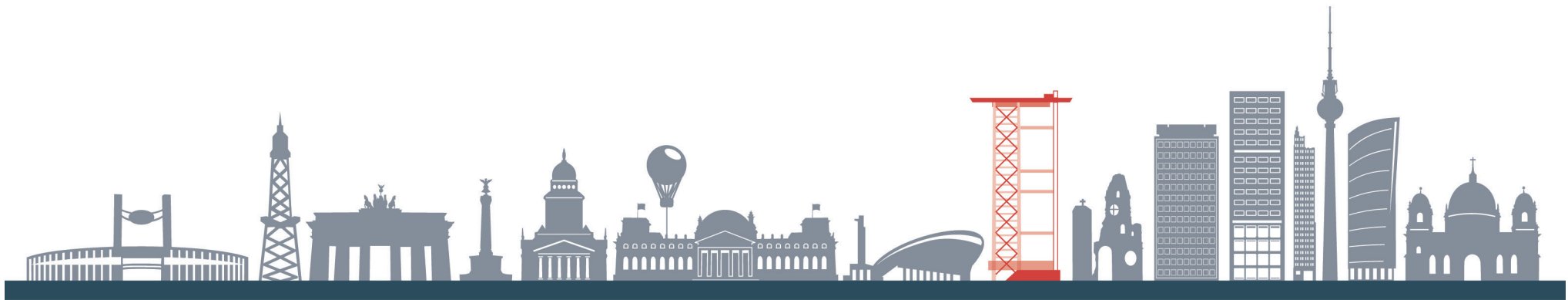
Concept

FINAL MASSING



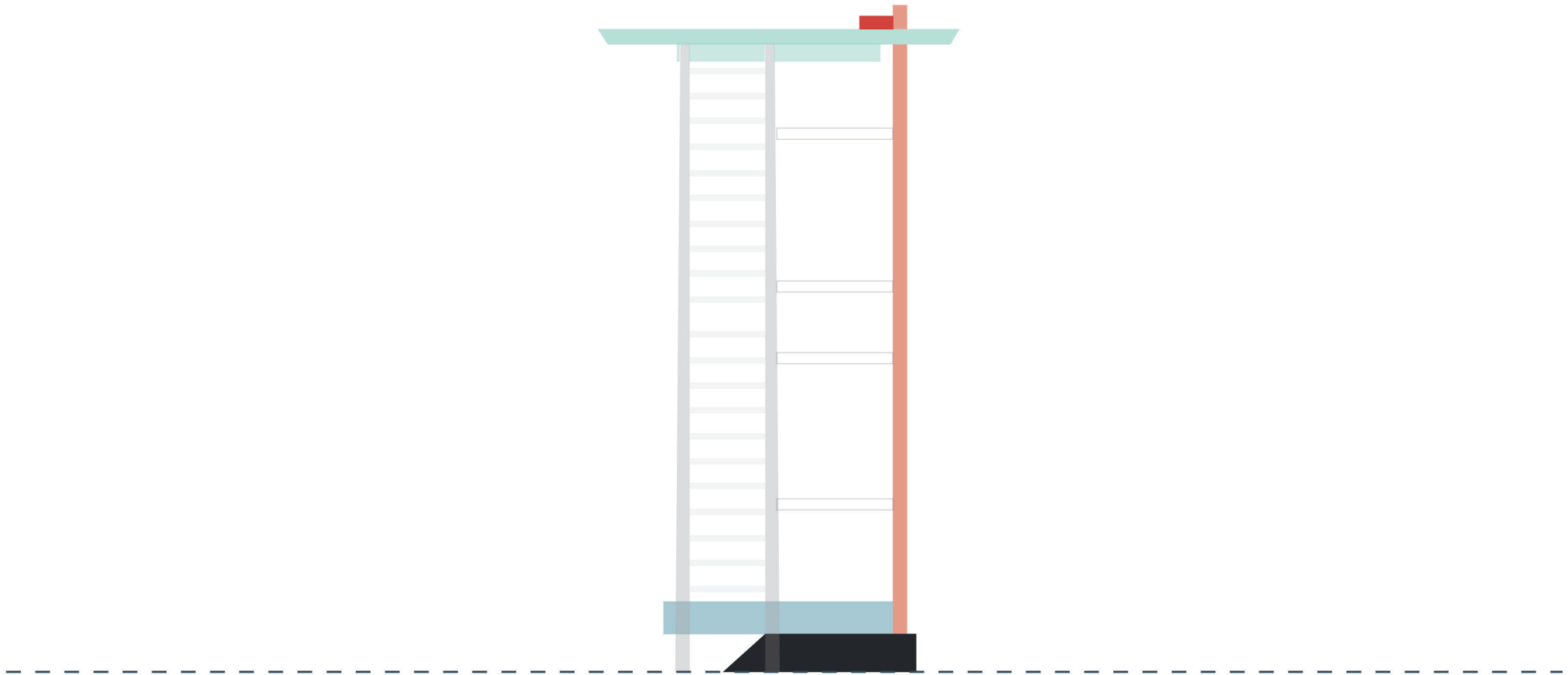
Concept

SKYLINE PROFILE



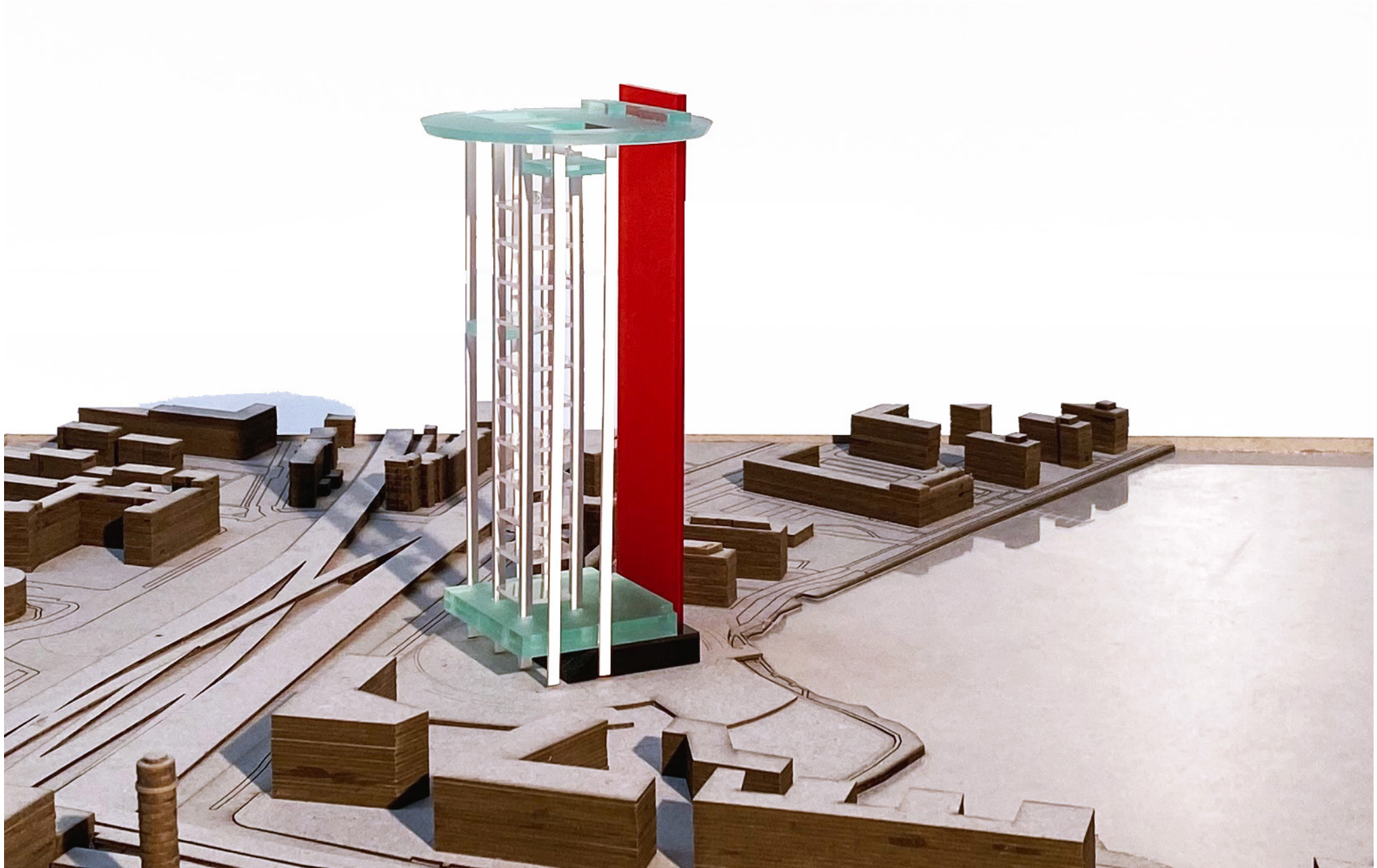
Concept

BUILDING EXPRESSION

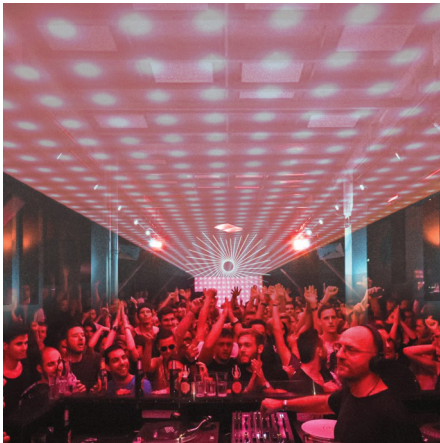


Concept

BUILDING EXPRESSION



PASSENGERS' LIFT EXPERIENCE



Departure

ENCLOSED EXPERIENCE

CABIN EFFECT



Arrival

CITY ATTRACTION

CITYSCAPE



Visitor

EXPRESS ROUTE

MOVEMENT

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Master plan

Organisation

Functions

Flow

IMPLEMENTATION

Master plan

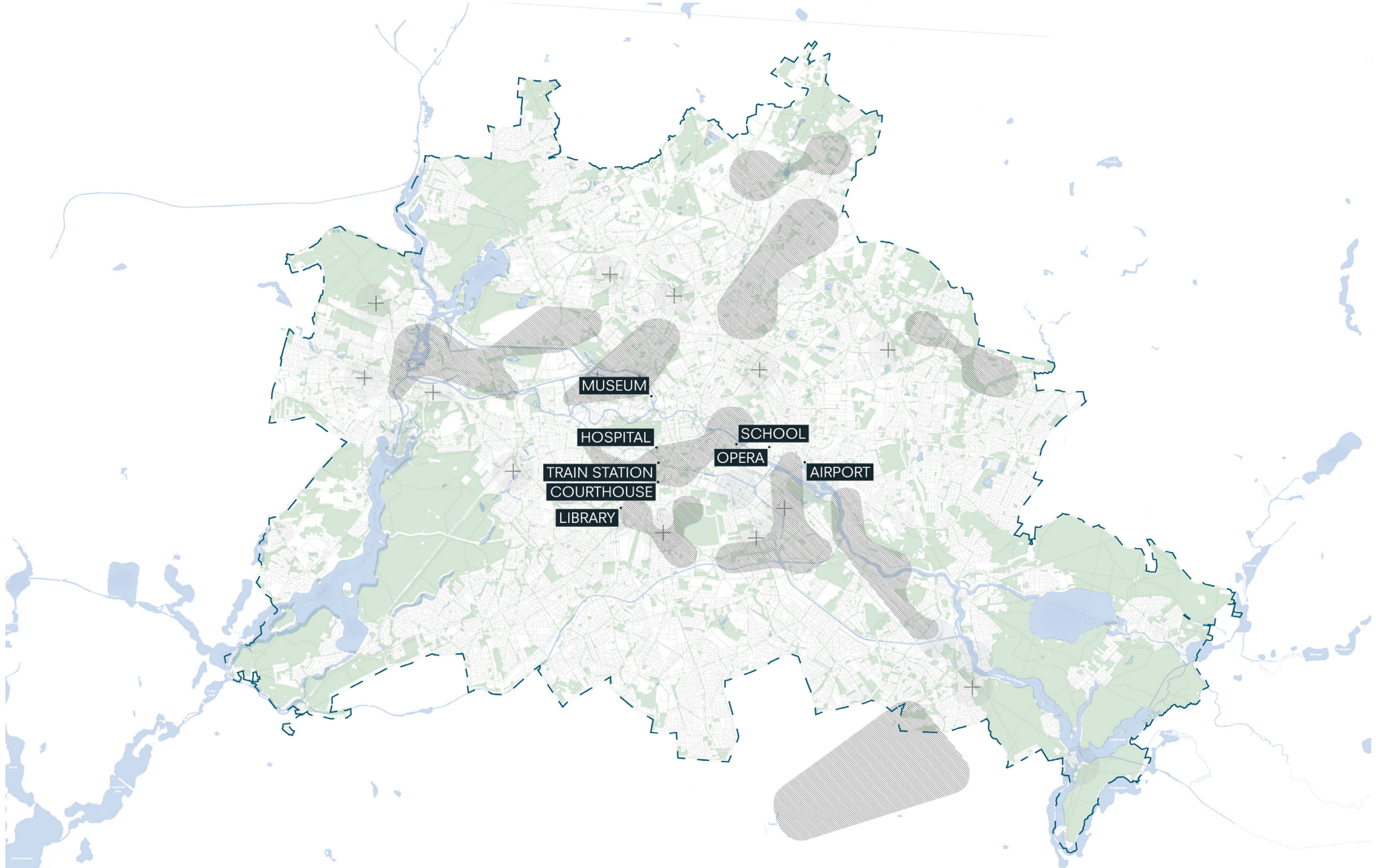
Organisation

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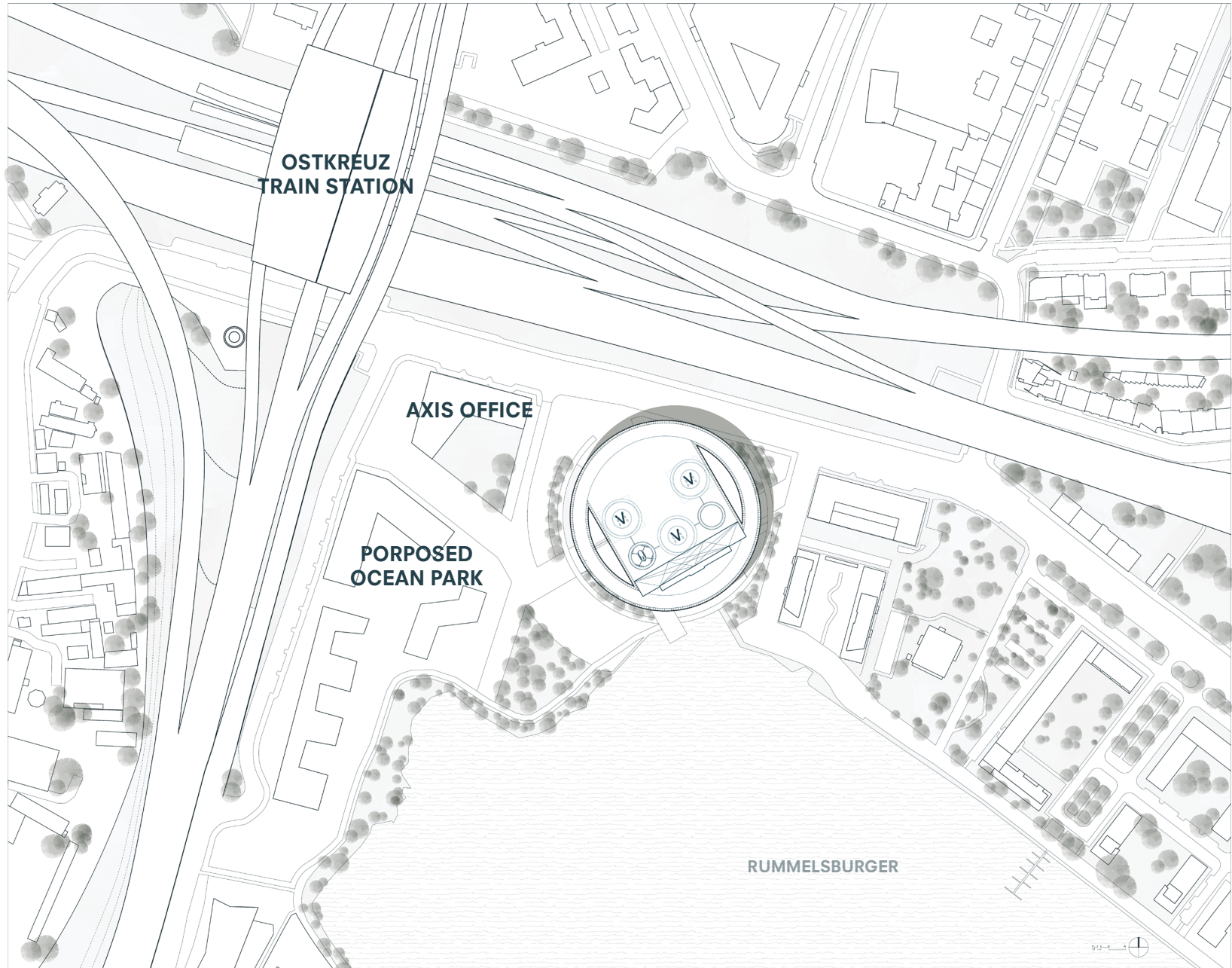
Master plan

MATERIAL URBAN VISION

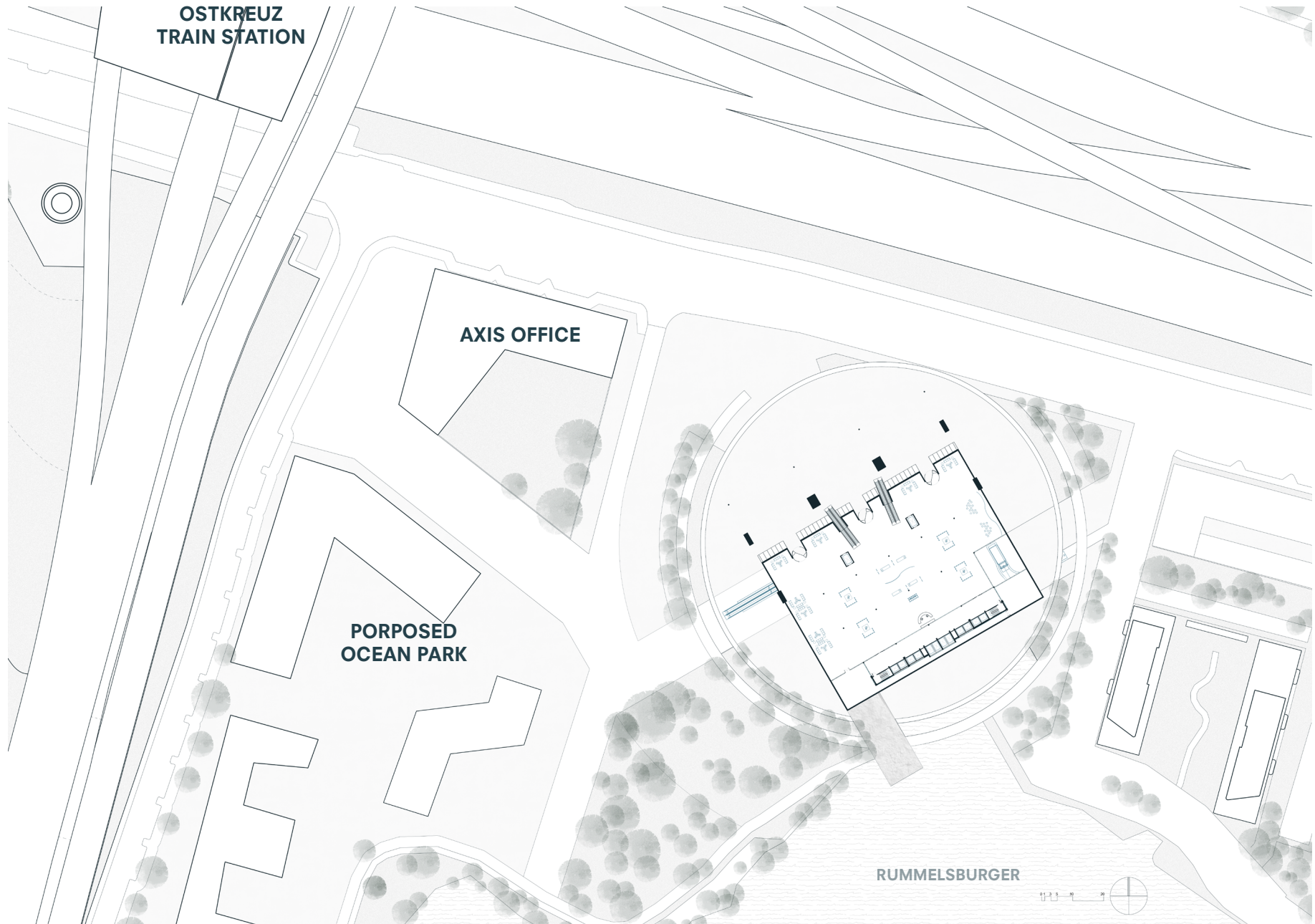


Master plan

SITE PLAN



URBAN IMPLEMENTATION



IMPLEMENTATION

Master plan

Organisation

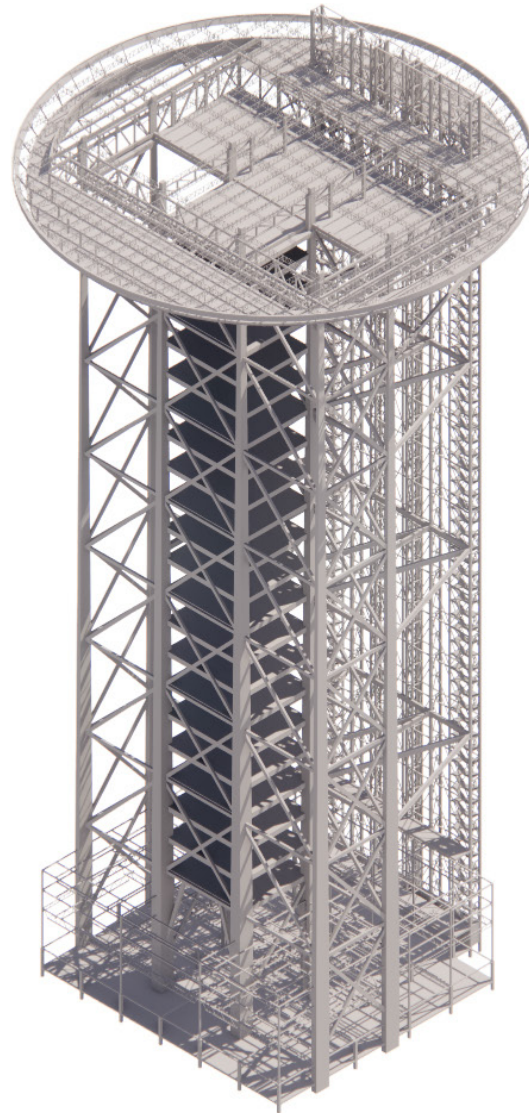
Functions

Flow

Organisation **BUILDING**



Organisation **STRUCTURE**



IMPLEMENTATION

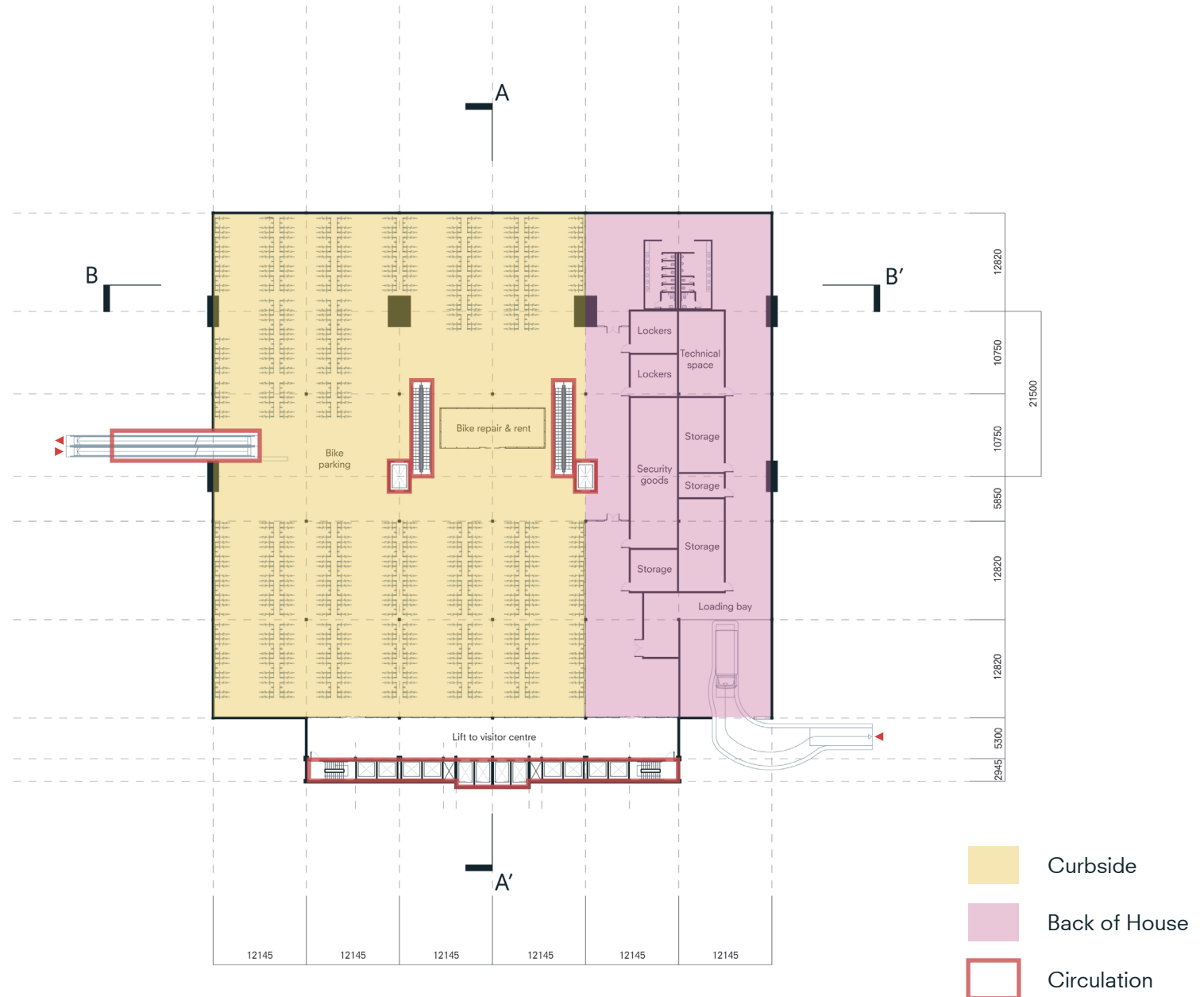
Master plan

Organisation

Functions

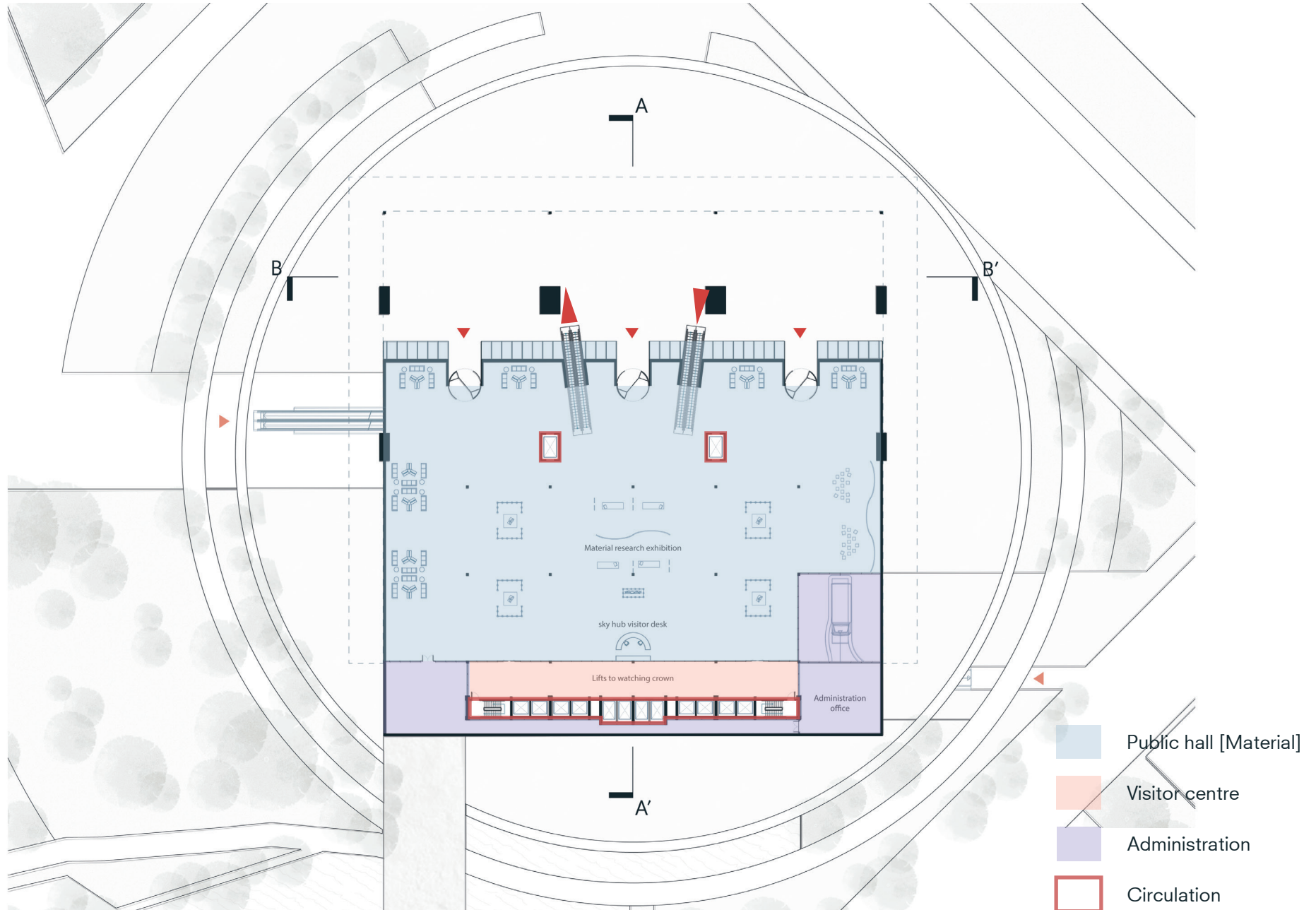
Flow

Functions BASEMENT



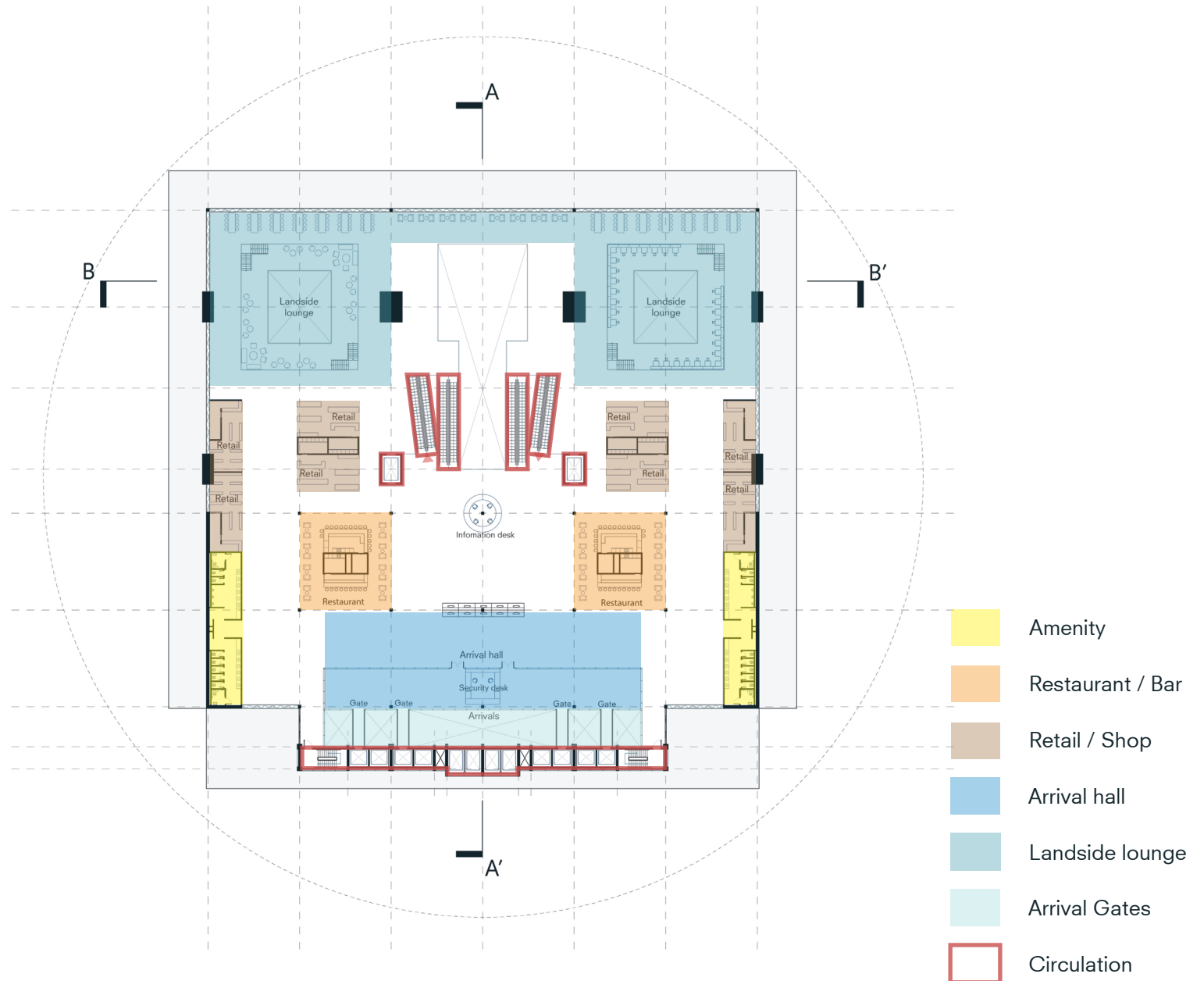
Functions

LEVEL 0



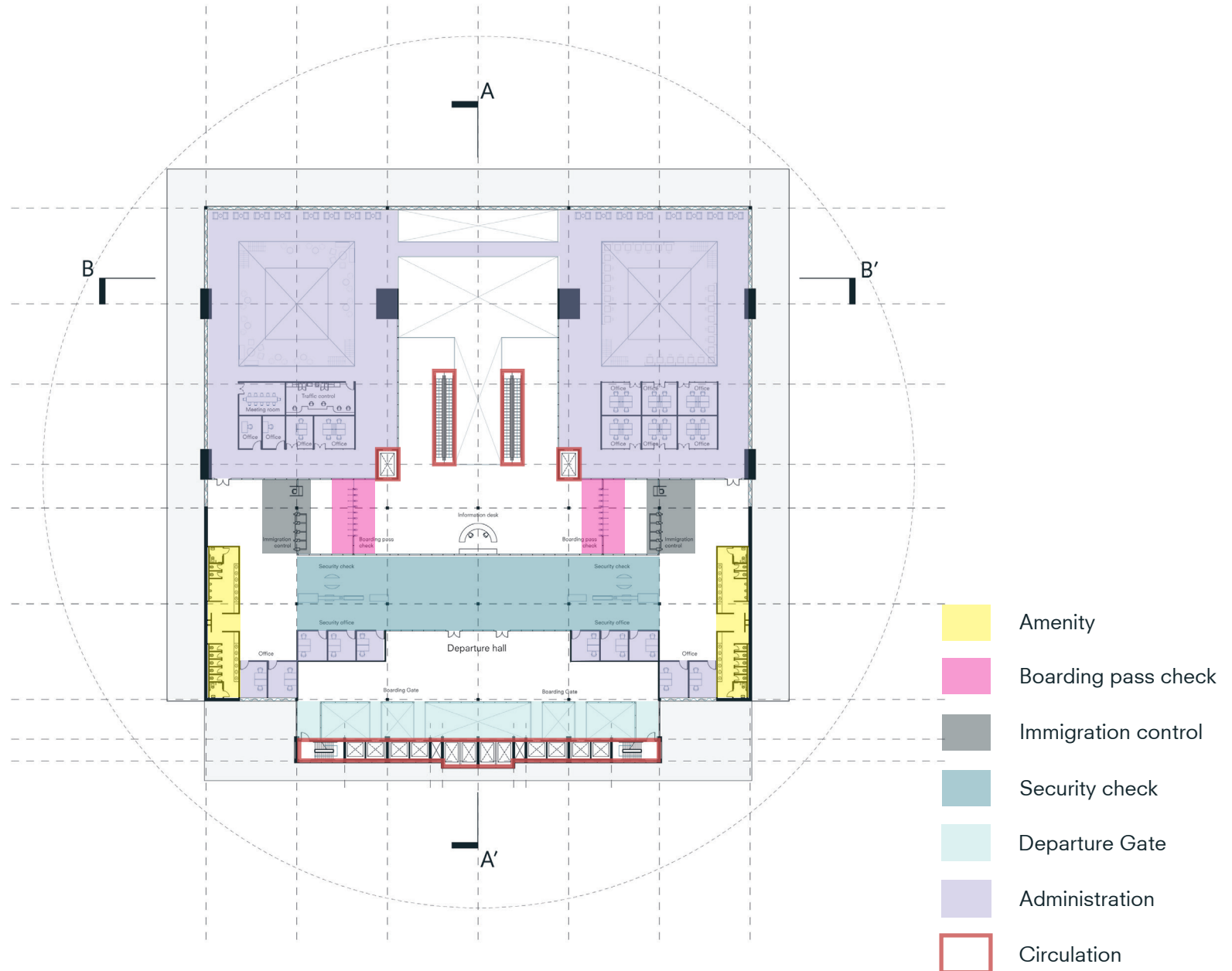
Functions

LEVEL 1



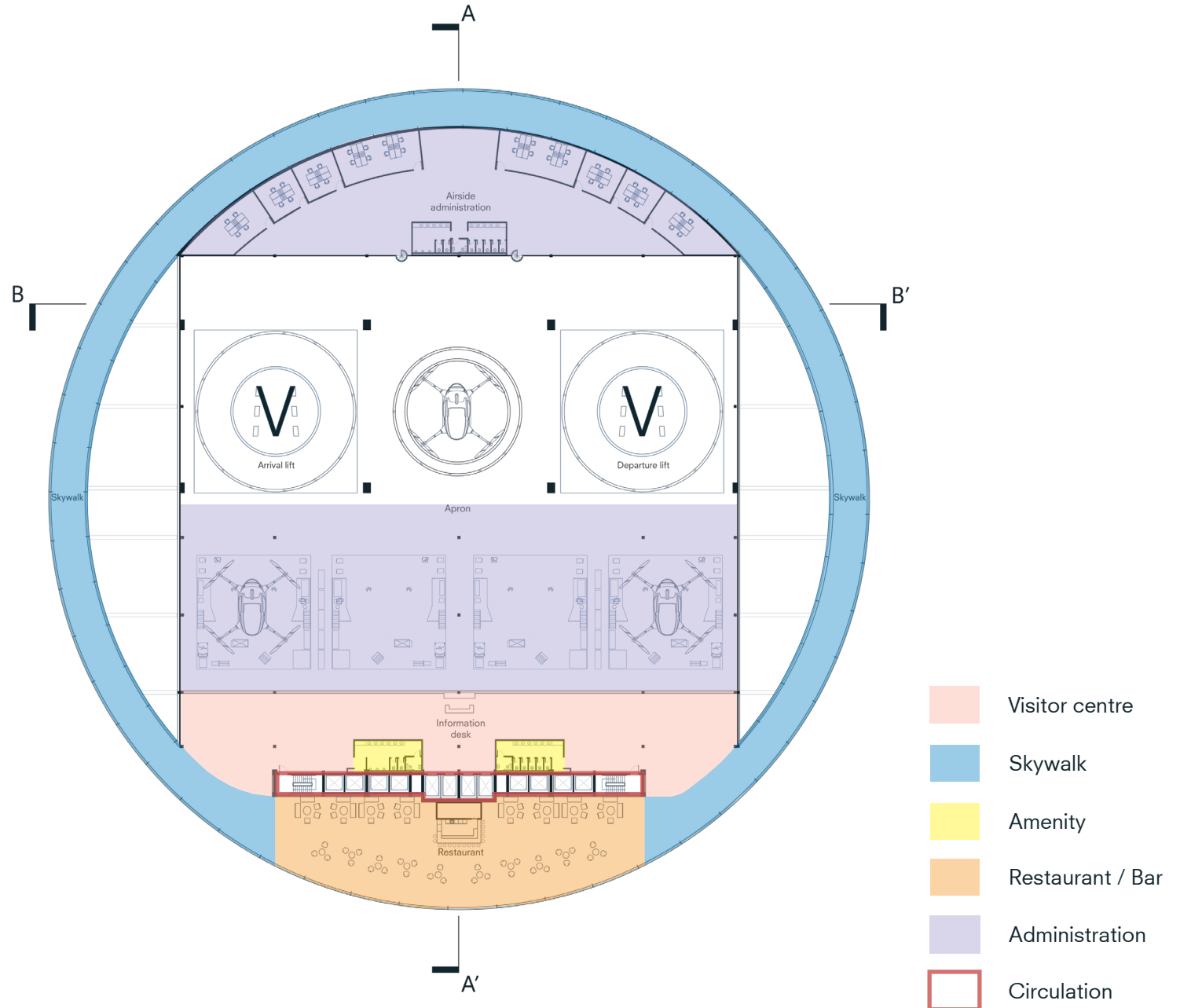
Functions

LEVEL 2



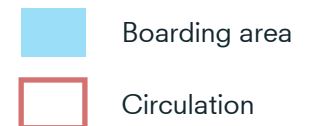
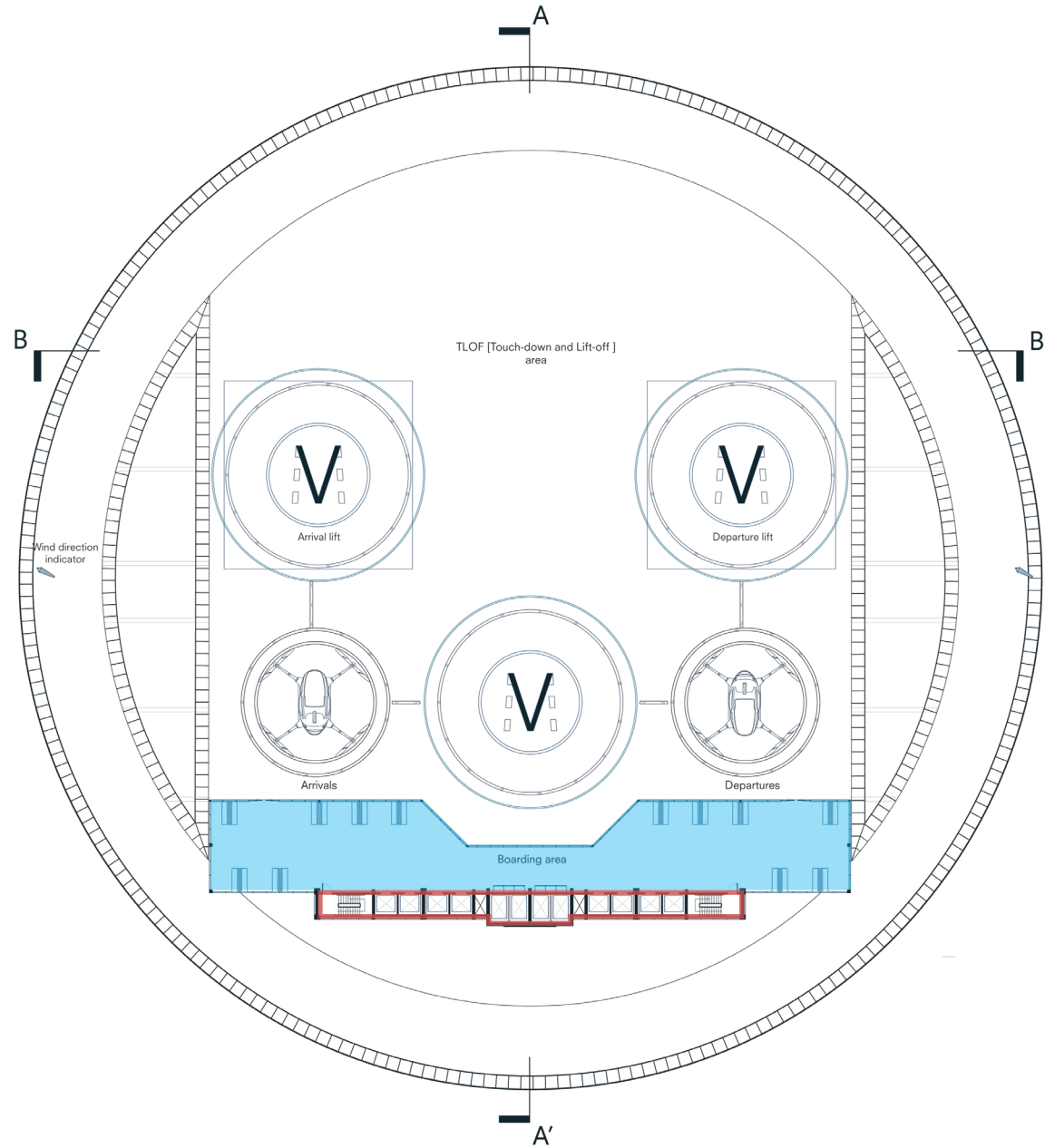
Functions

CROWN LEVEL



Functions

TLOF LEVEL



IMPLEMENTATION

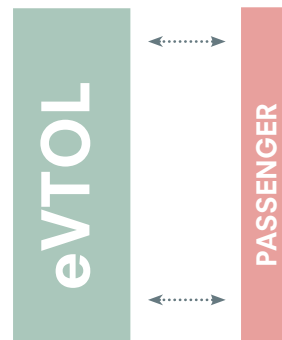
Master plan

Organisation

Functions

Flow

Flow CONCEPT



Separate flow

Flow SECTION A

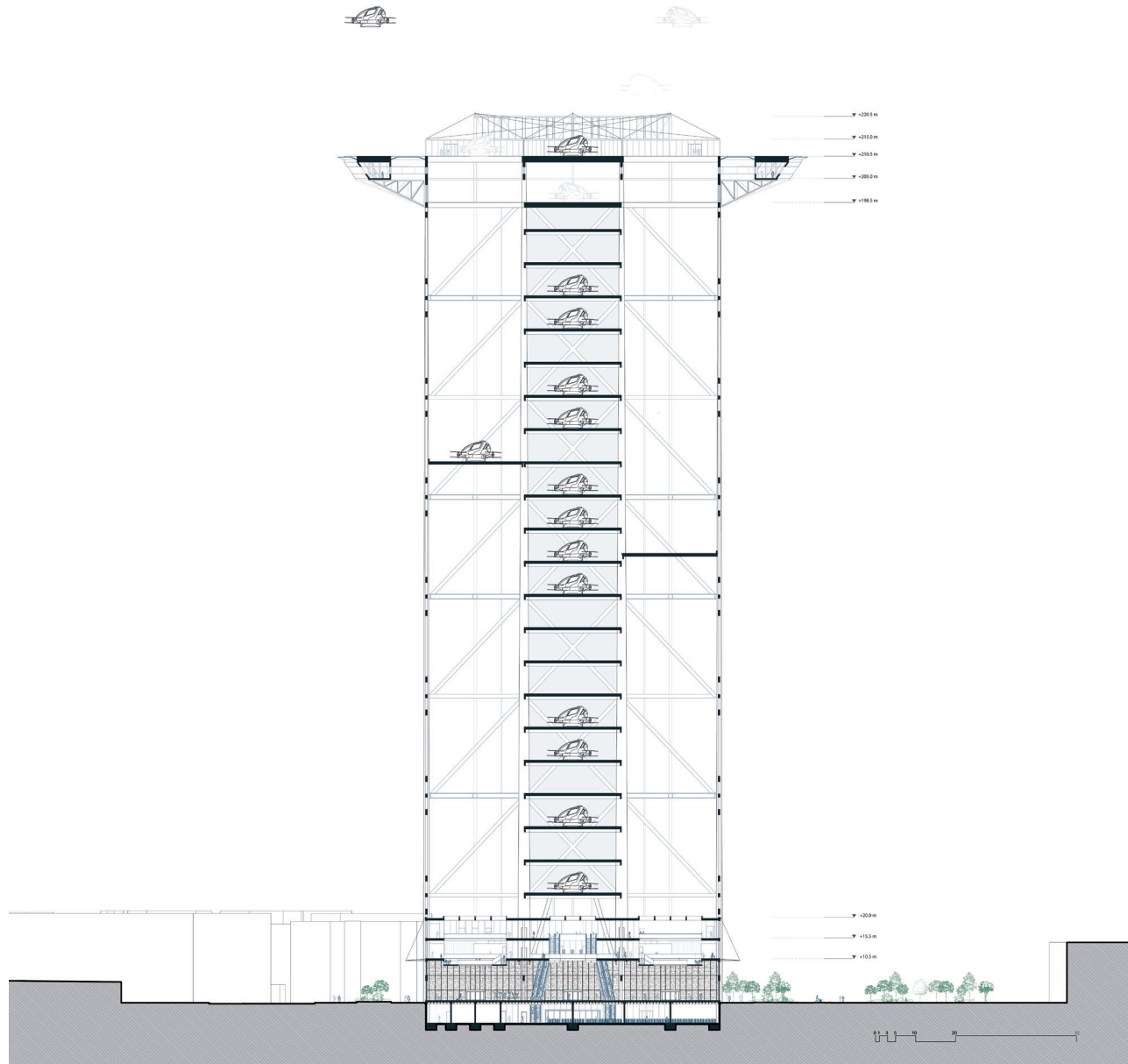


Flow

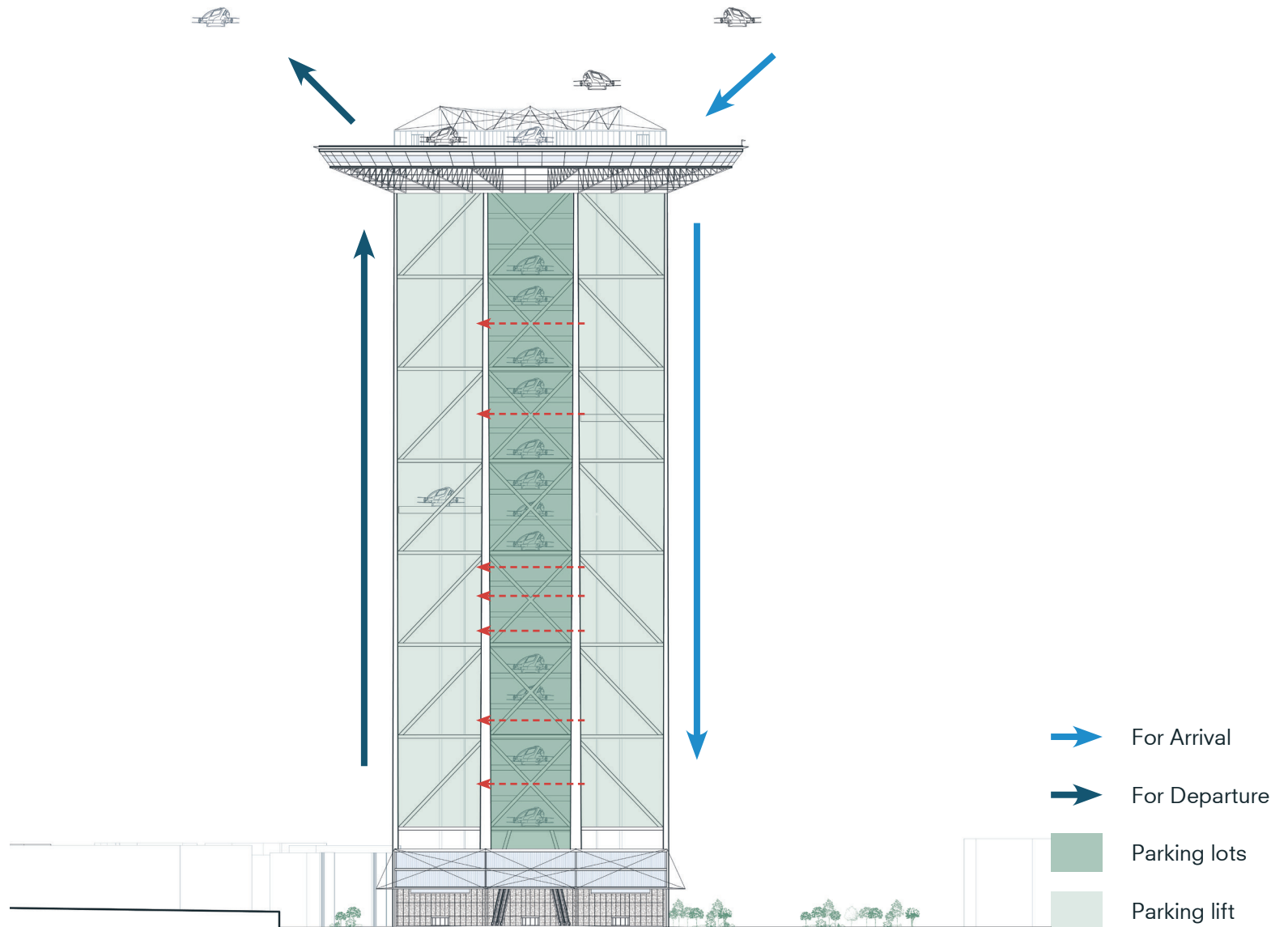
VERTICAL MOVEMENT



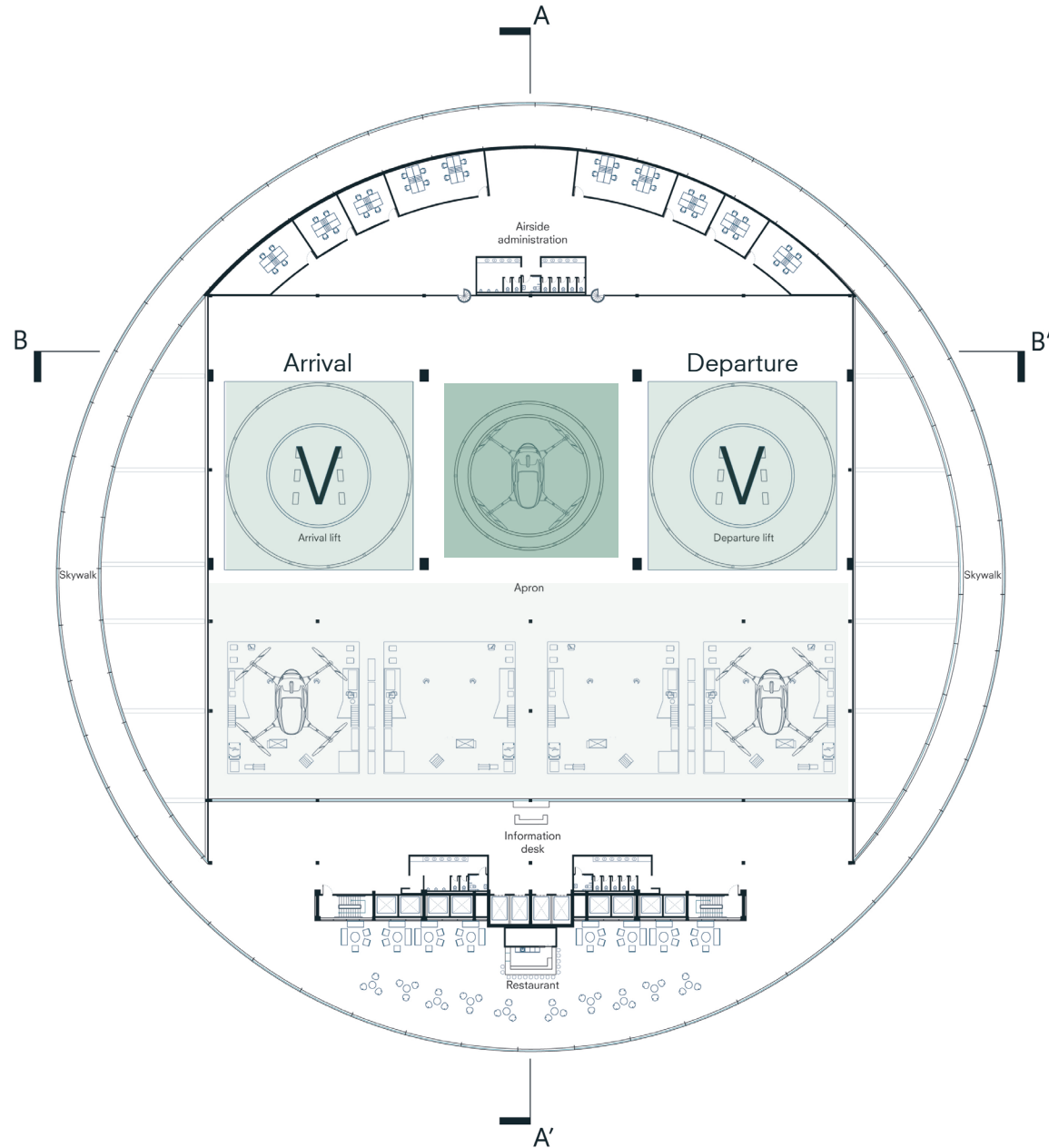
Flow SECTION B



Flow EVTOL OPERATION

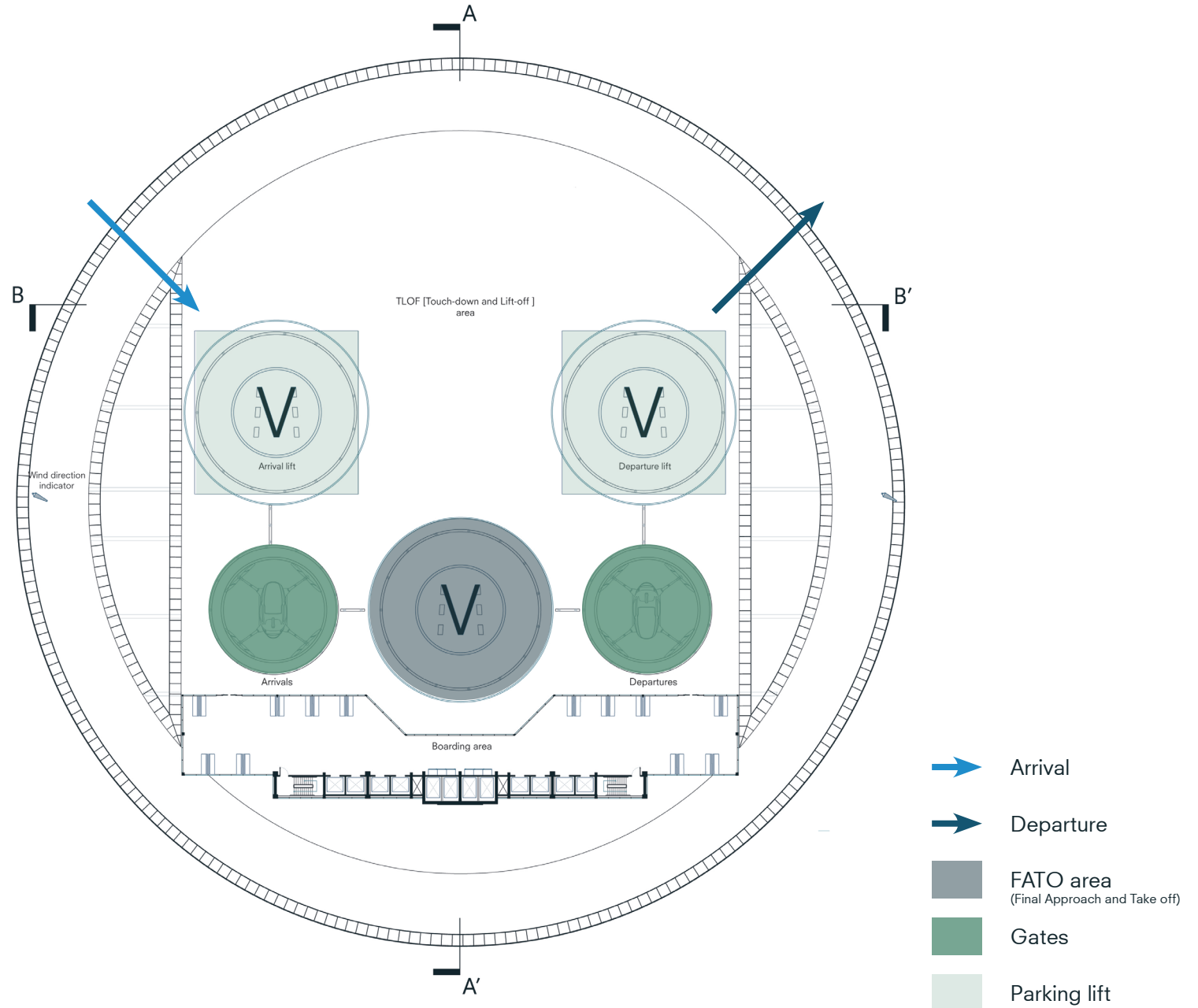


Flow CROWN LEVEL



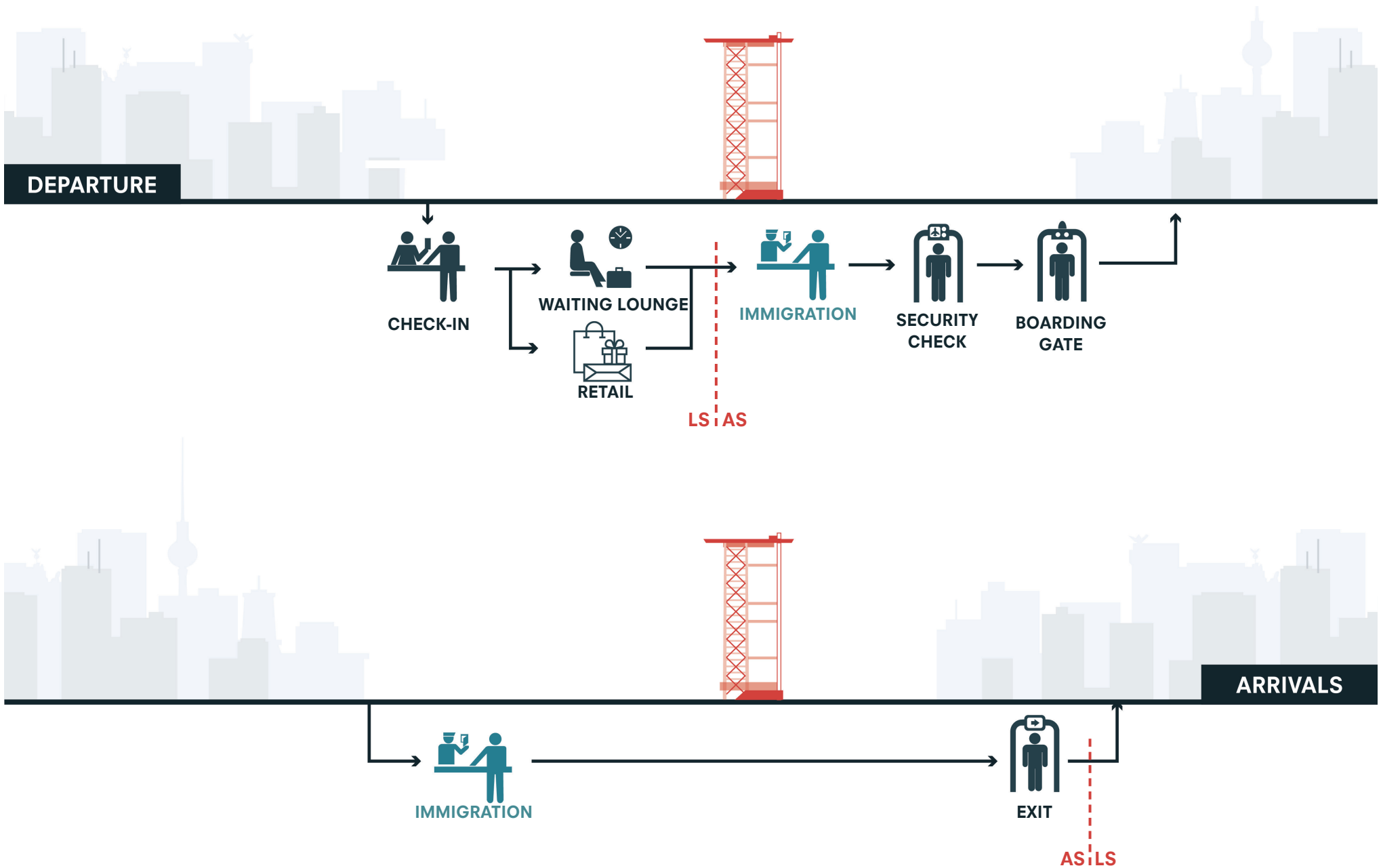
- Parking lots
- Parking lift
- Apron

Flow TLOF LEVEL



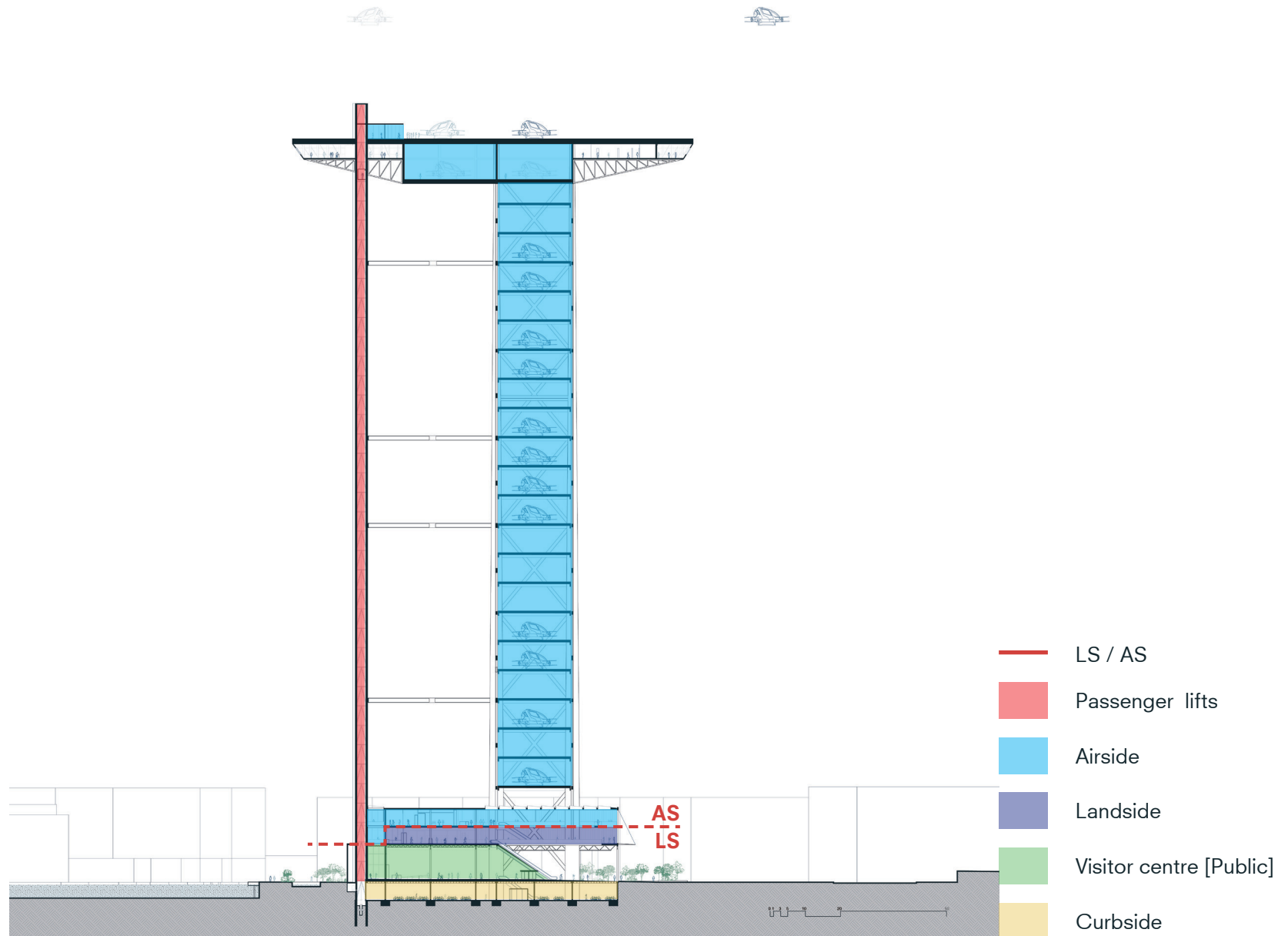
LANDSIDE & AIRSIDE ?

Flow PROCEDURE



Flow

LANDSIDE & AIRSIDE



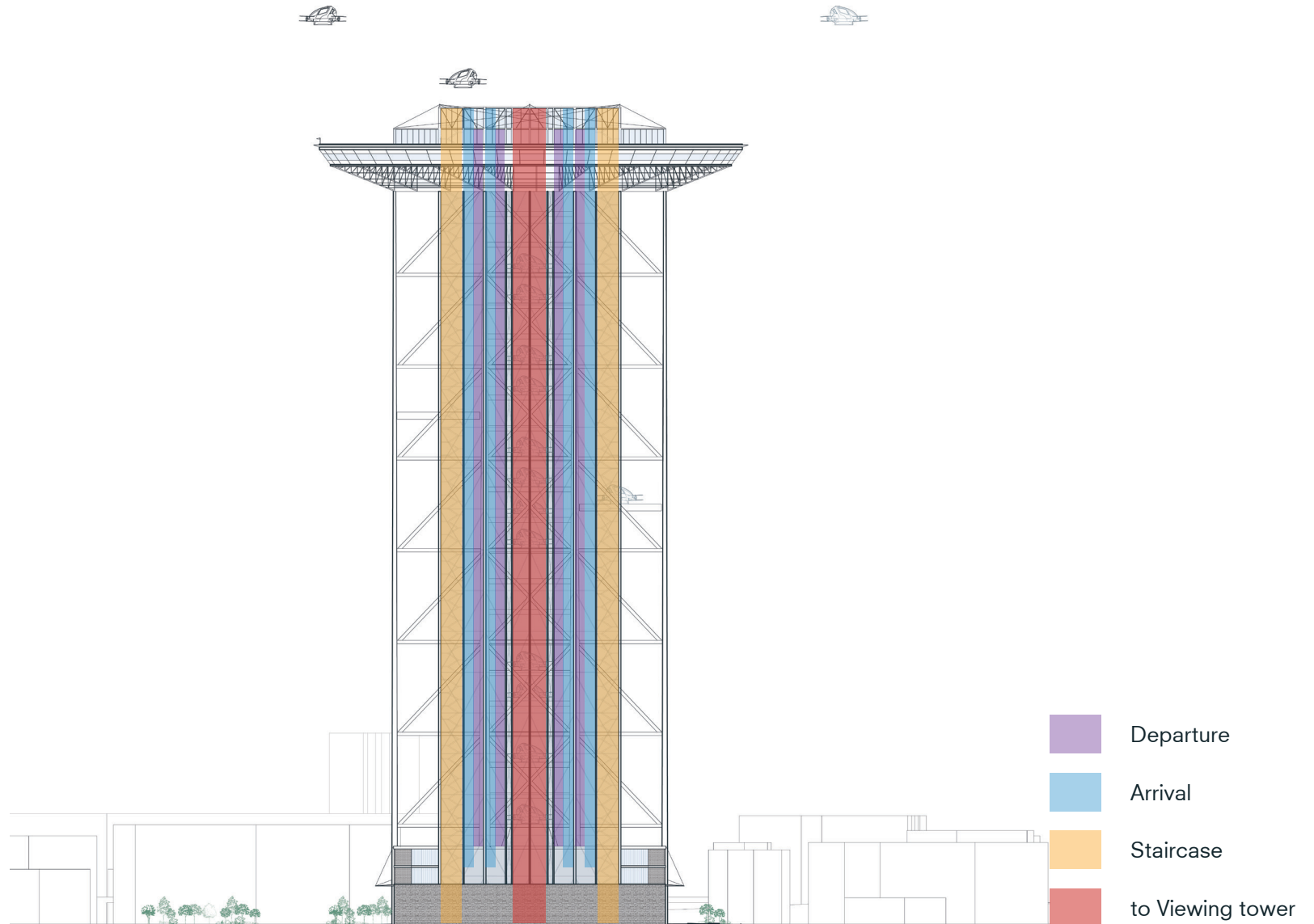
Flow **CONCEPT**



From GROUND to AIR

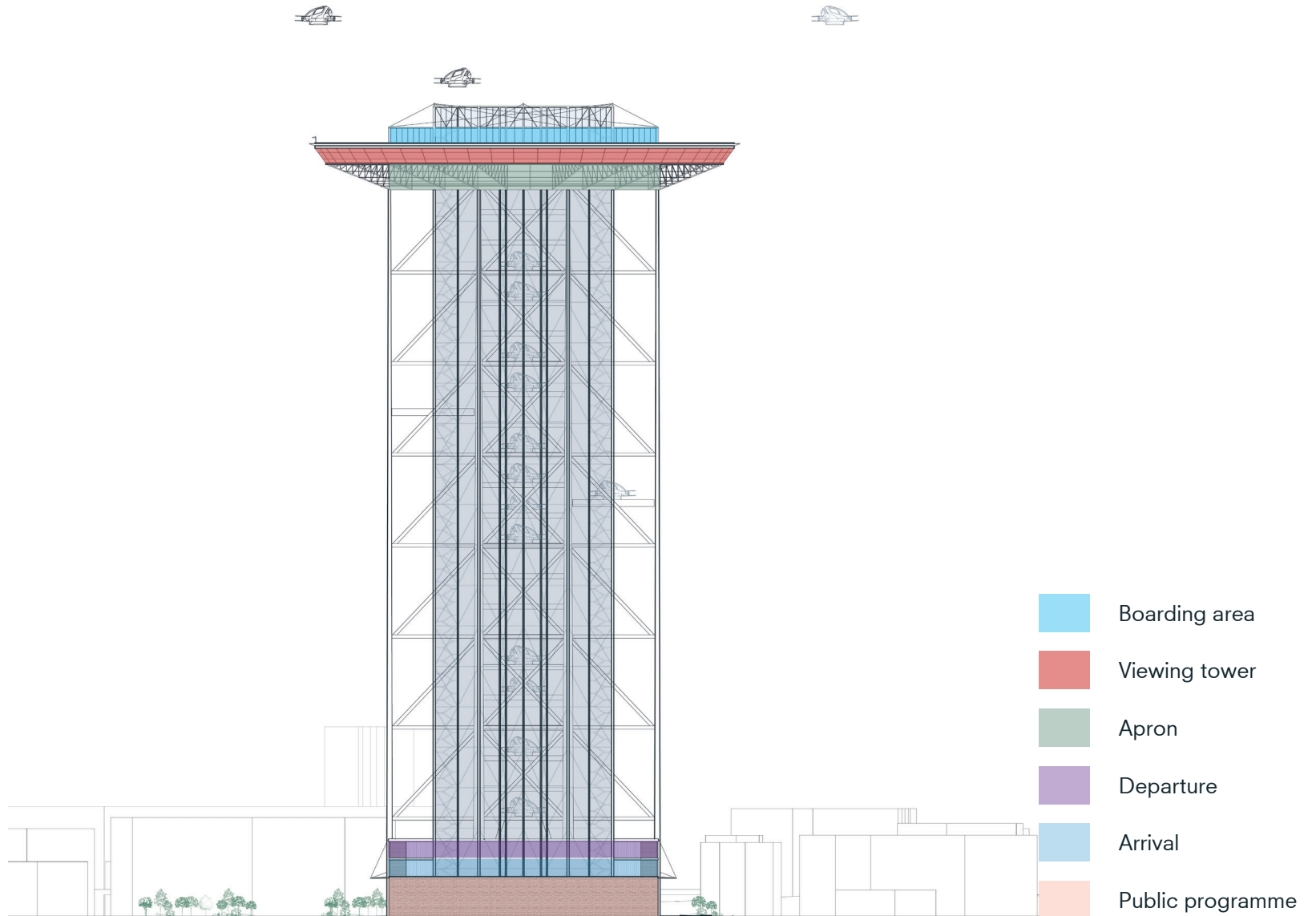
Flow

VERTICAL MOVEMENT



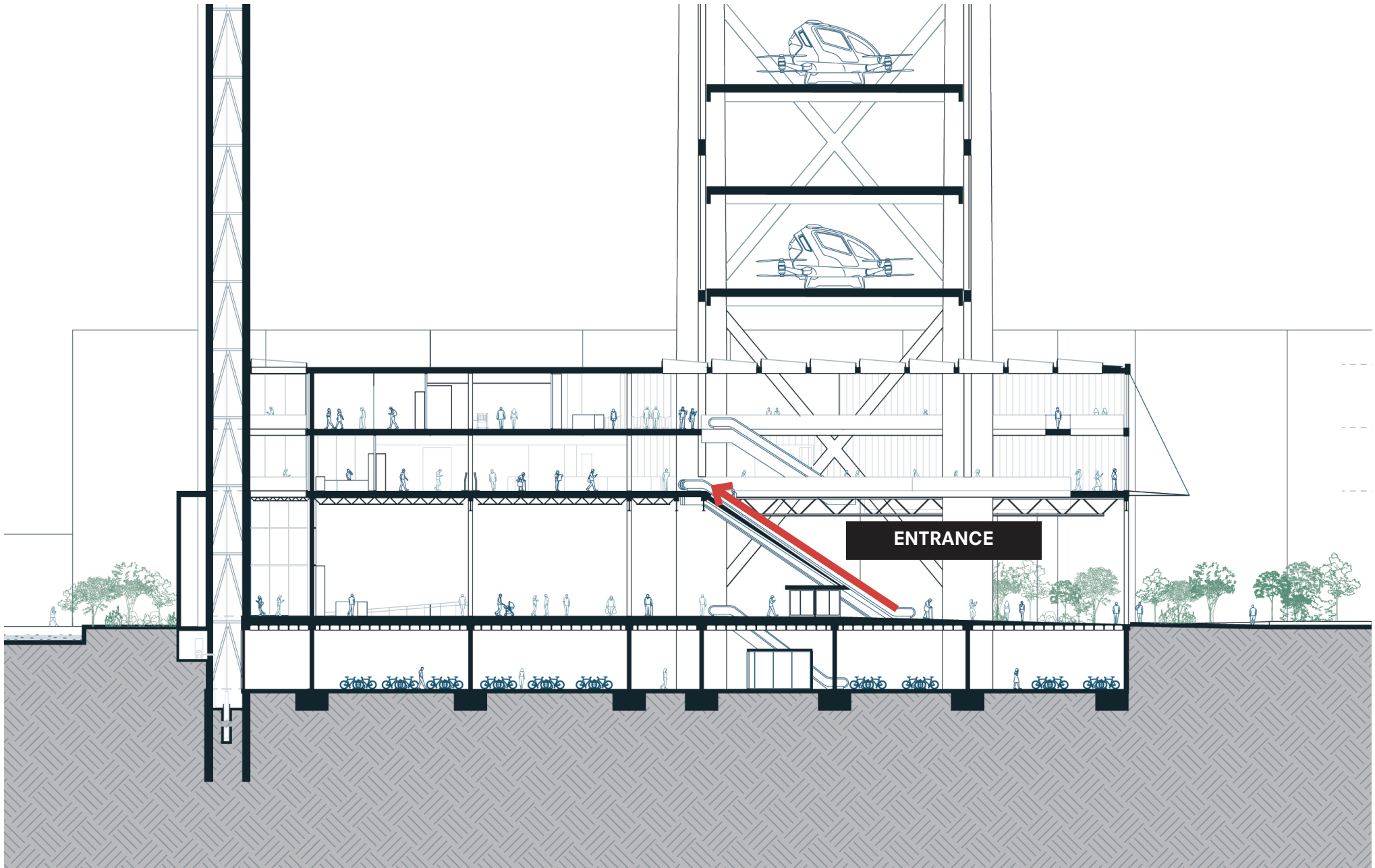
Flow

HORIZONTAL MOVEMENT

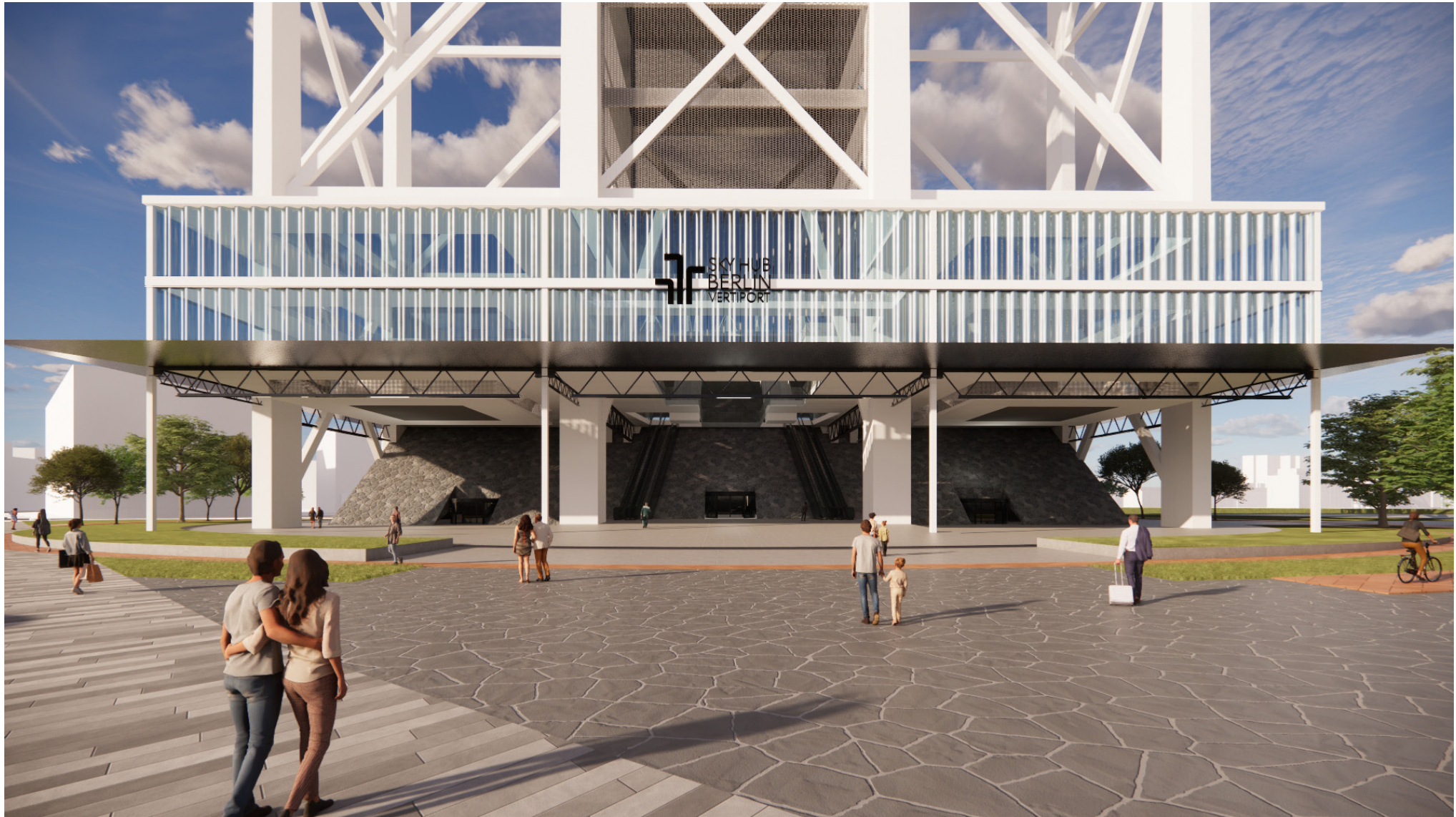


DEPARTURE

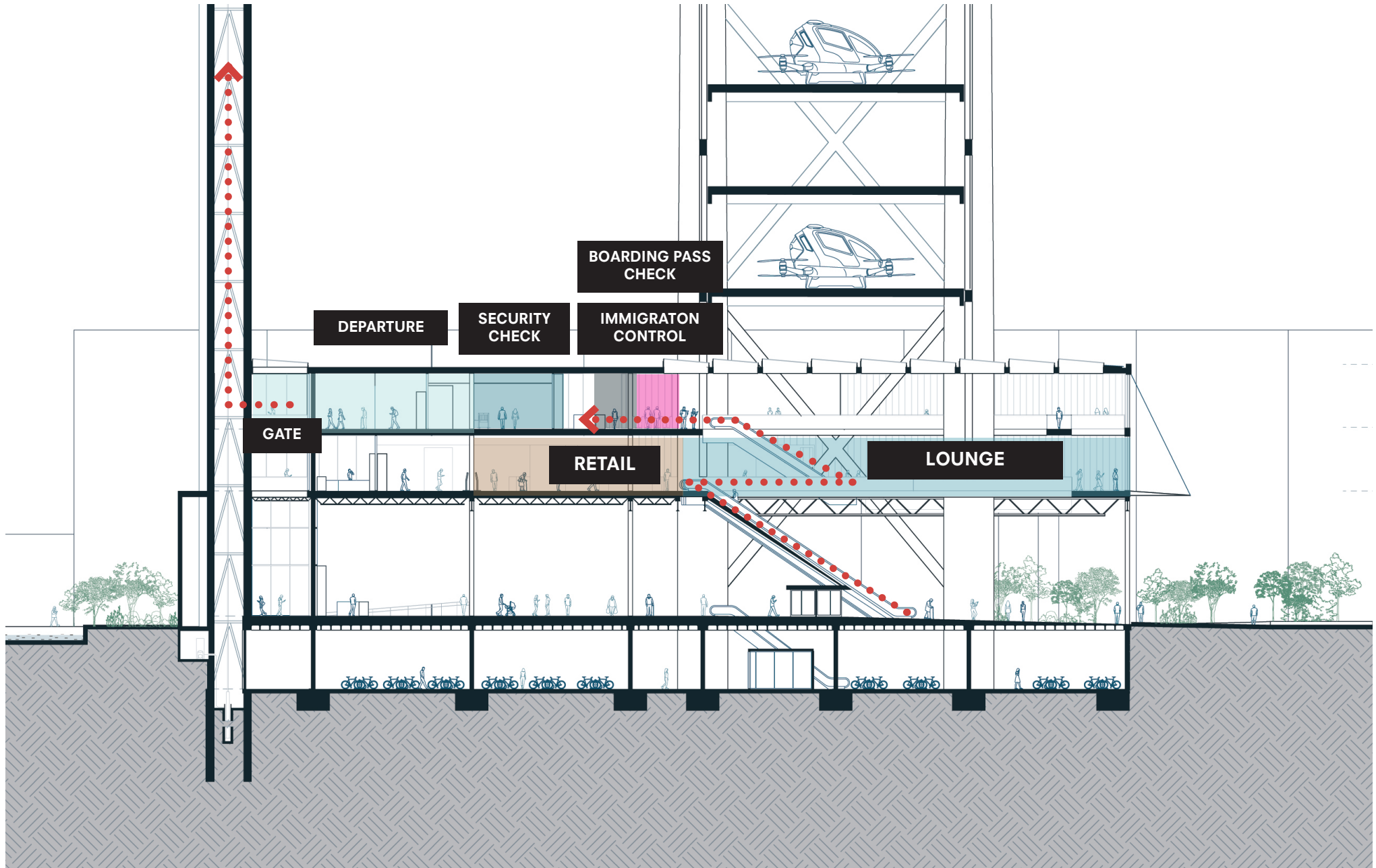
Flow DEPARTURE



Flow
DEPARTURE



Flow DEPARTURE



Flow
DEPARTURE

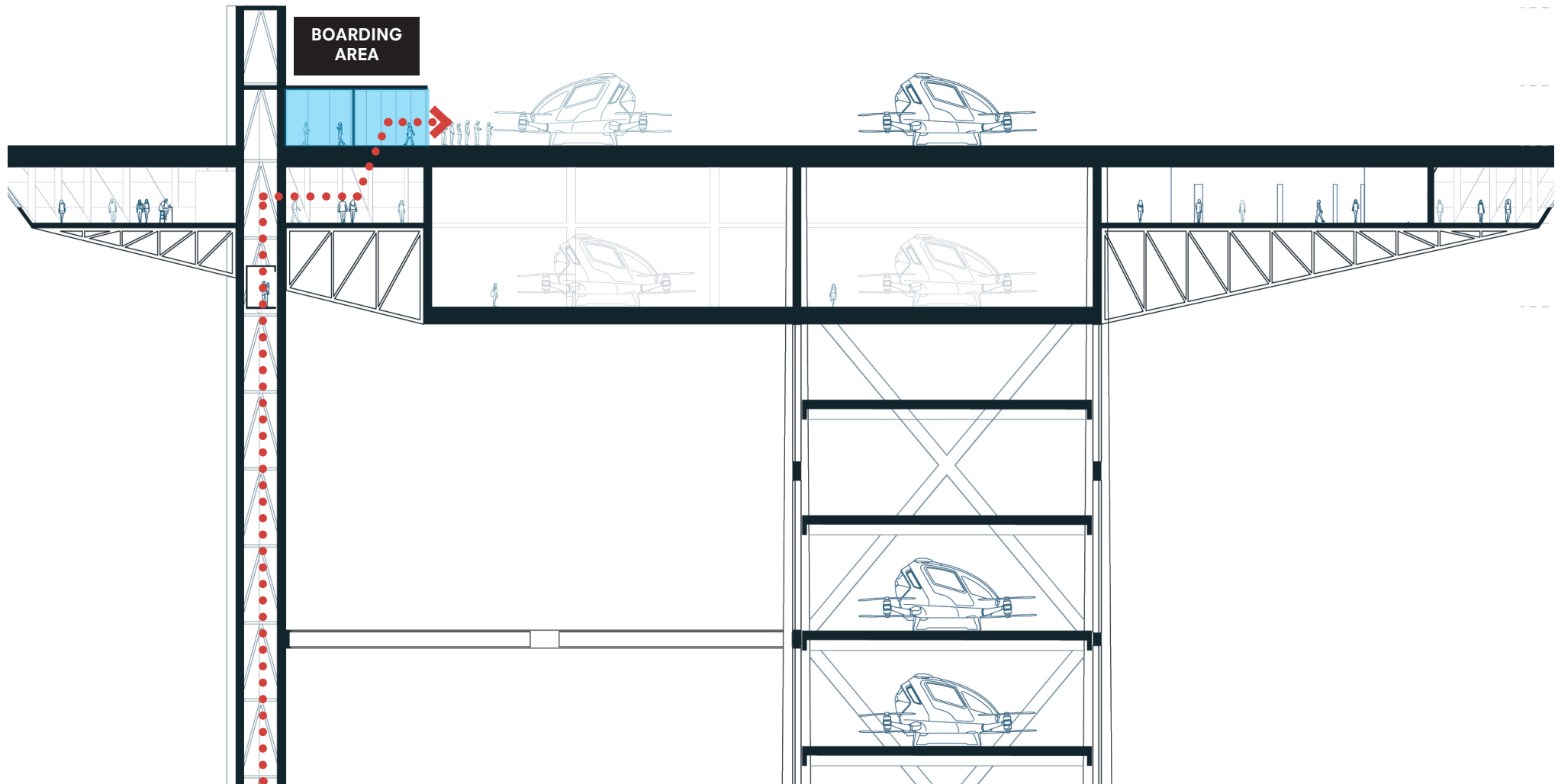


Flow

DEPARTURE



Flow DEPARTURE



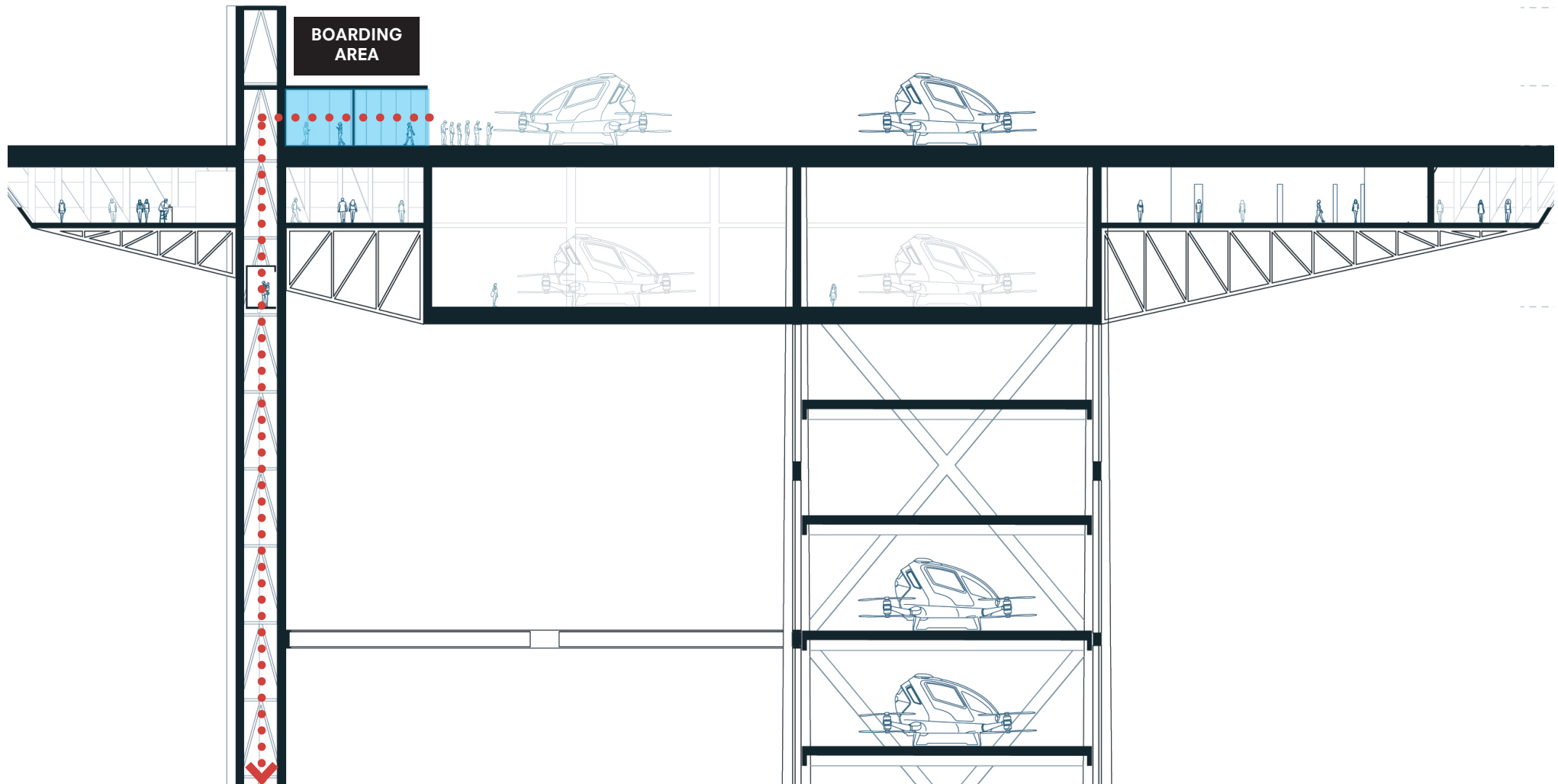
Flow

DEPARTURE



ARRIVAL

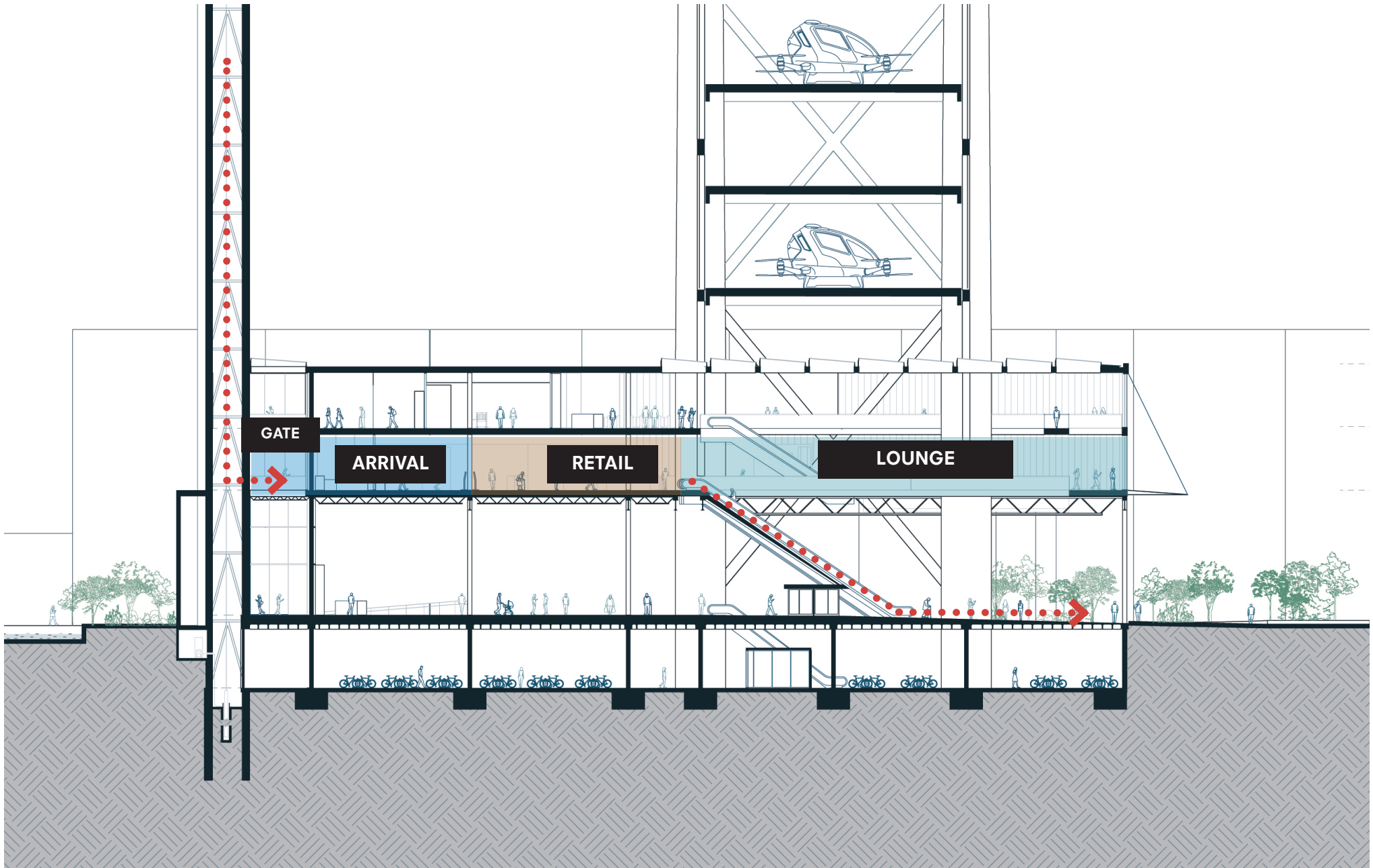
Flow ARRIVAL



Flow
ARRIVAL



Flow ARRIVAL



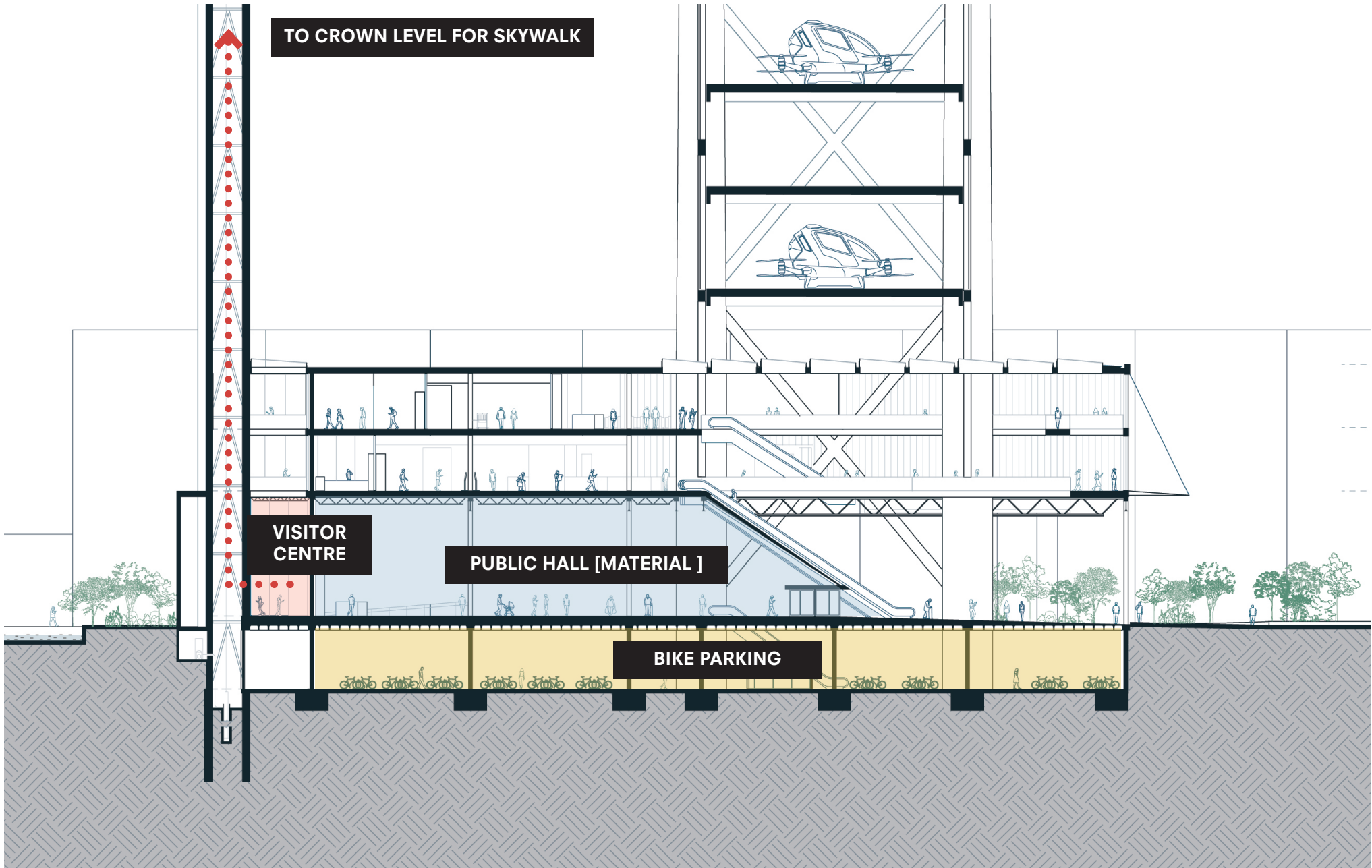
Flow ARRIVAL



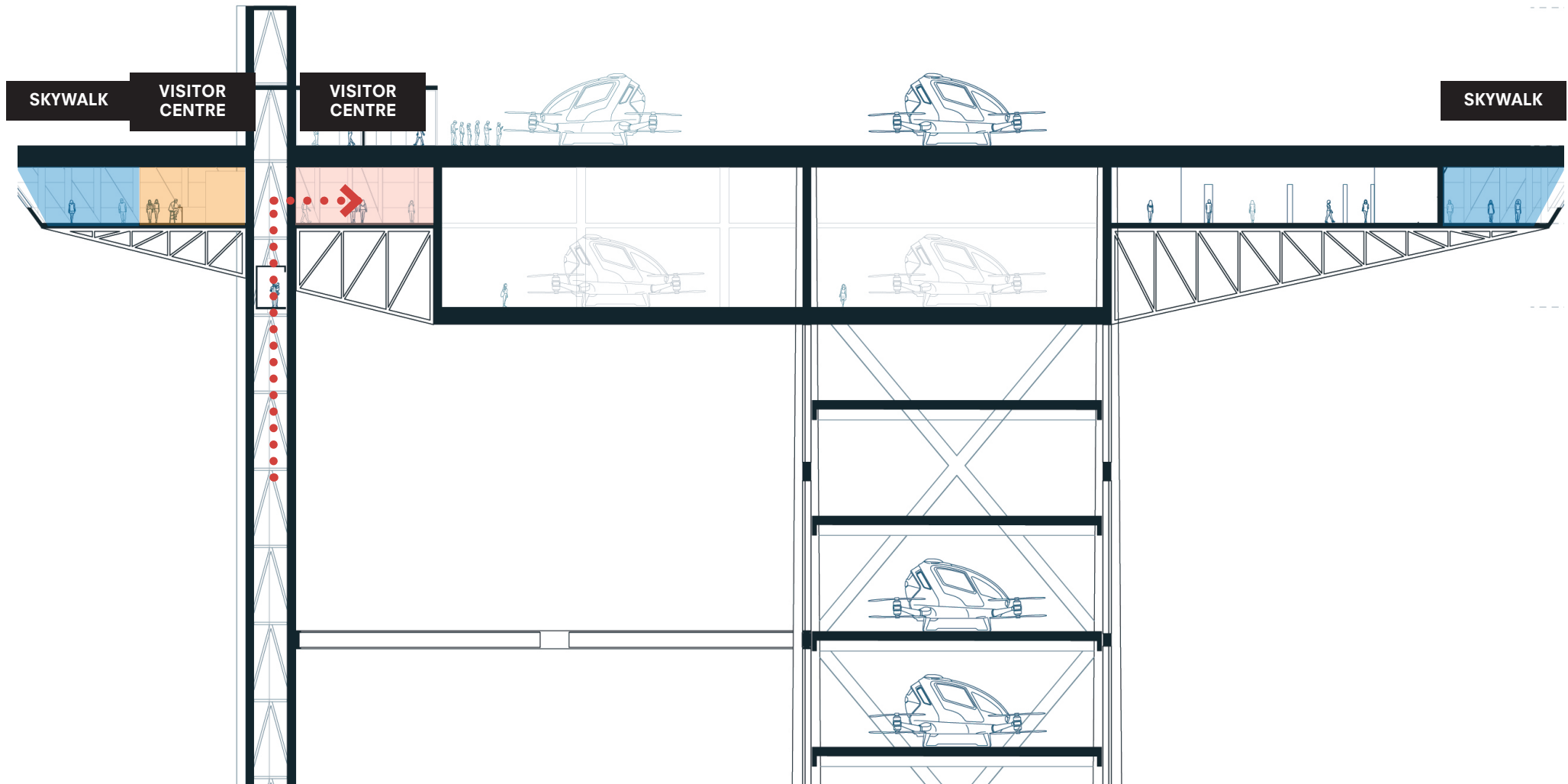
Flow ARRIVAL



Flow PUBLIC PROGRAMME



Flow PUBLIC PROGRAMME



Flow
SKYWALK



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DEVELOPMENT

Structure

Climate

Materialisation

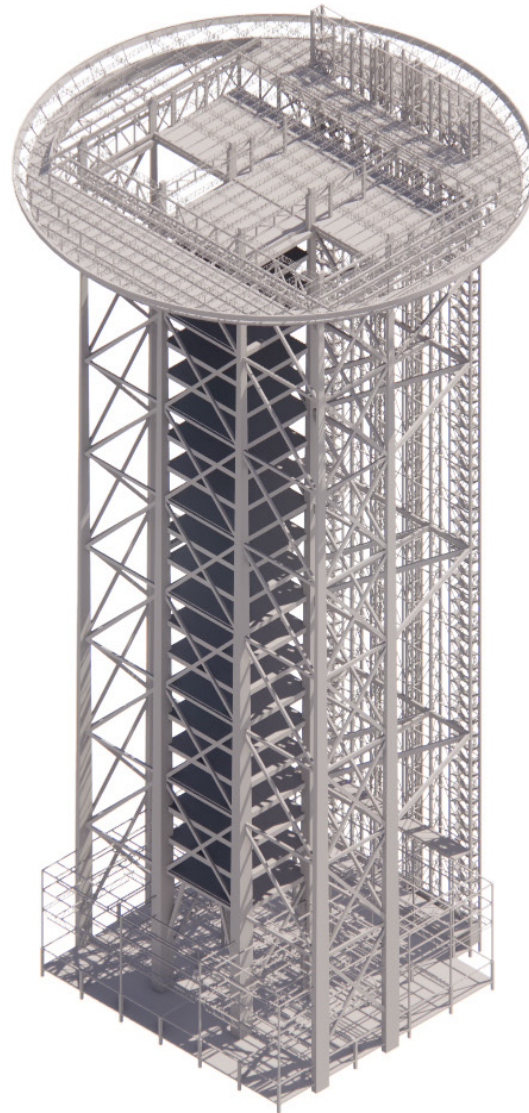
Detail

STRUCTURE PRINCIPLE



Structure

STRUCTURE SYSTEM



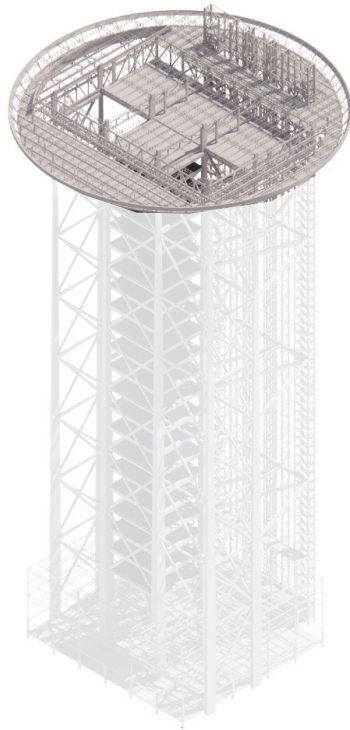
Structure

STRUCTURE SYSTEM



Structure

STRUCTURE SYSTEM



CROWN

TRUSS

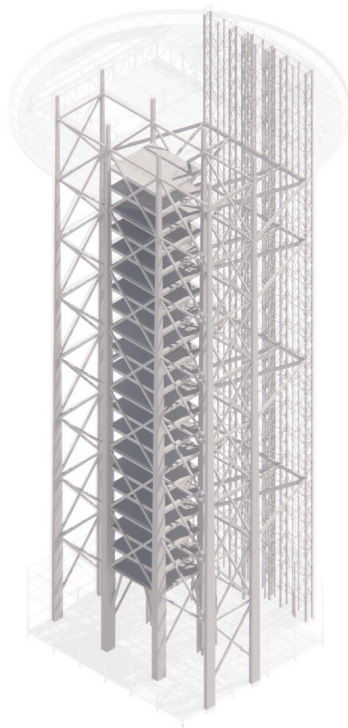


LIFT

PLINTH

Structure

STRUCTURE SYSTEM



CROWN

LIFT

TRUSSED TUBE



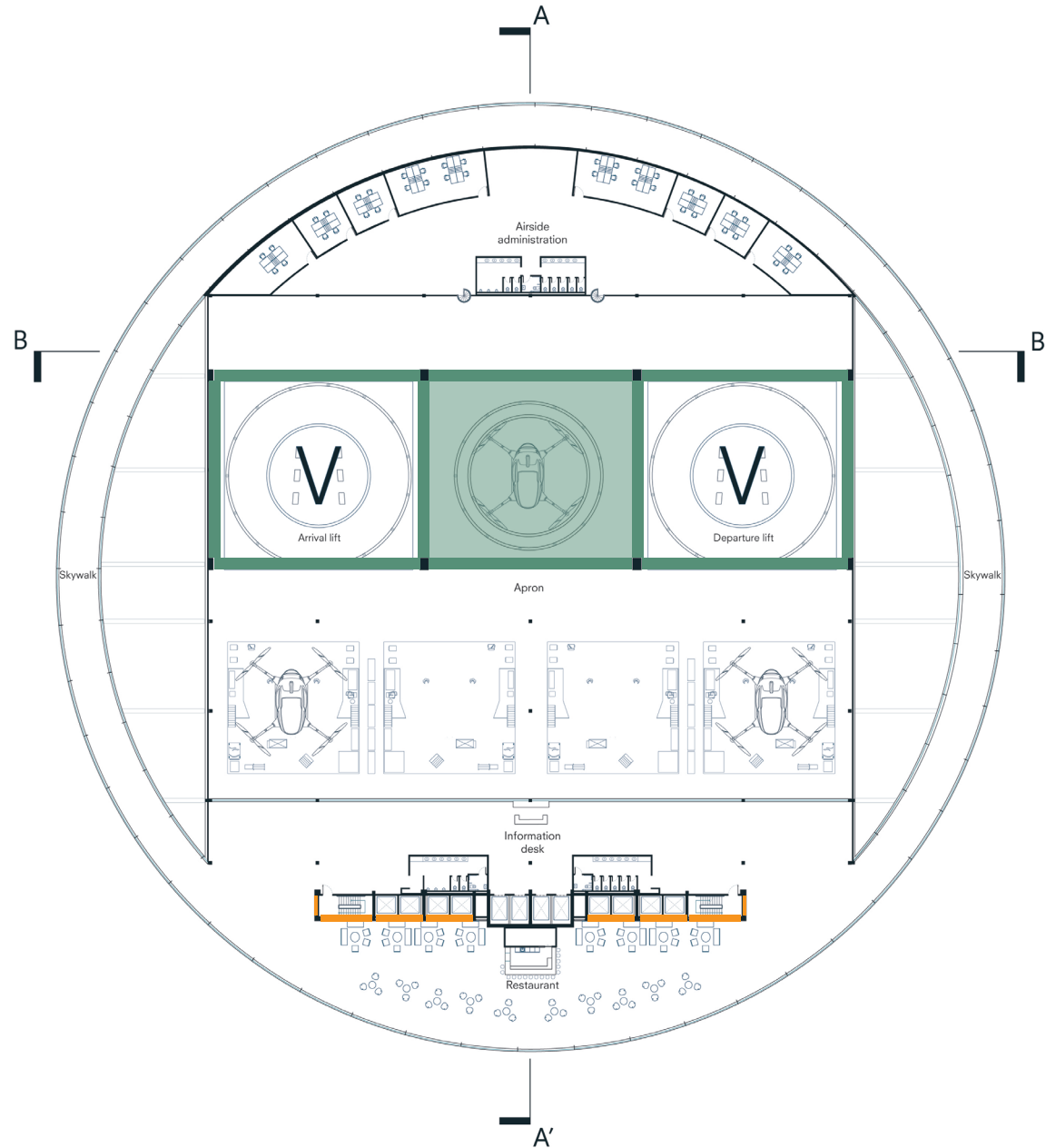
TRIANGULAR
SPINE STEEL
FRAME



PLINTH

Structure

STRUCTURE LAYOUT



TRIANGULAR SPINE STEEL FRAME

— Steel frame

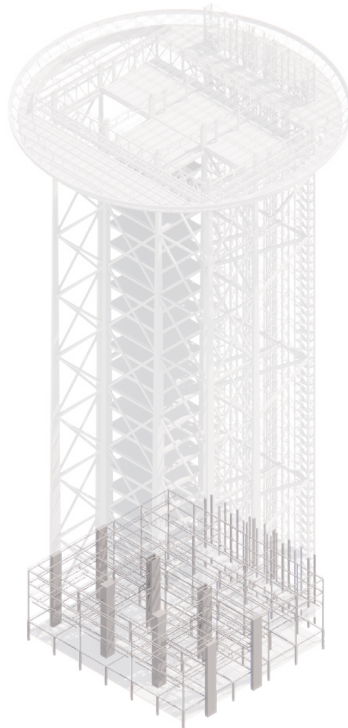
TRUSSED TUBE

Core

Bracing support

Structure

STRUCTURE SYSTEM



CROWN

LIFT

PLINTH

THREE-WAY
STEEL FLOOR
SYSTEMS



DEVELOPMENT

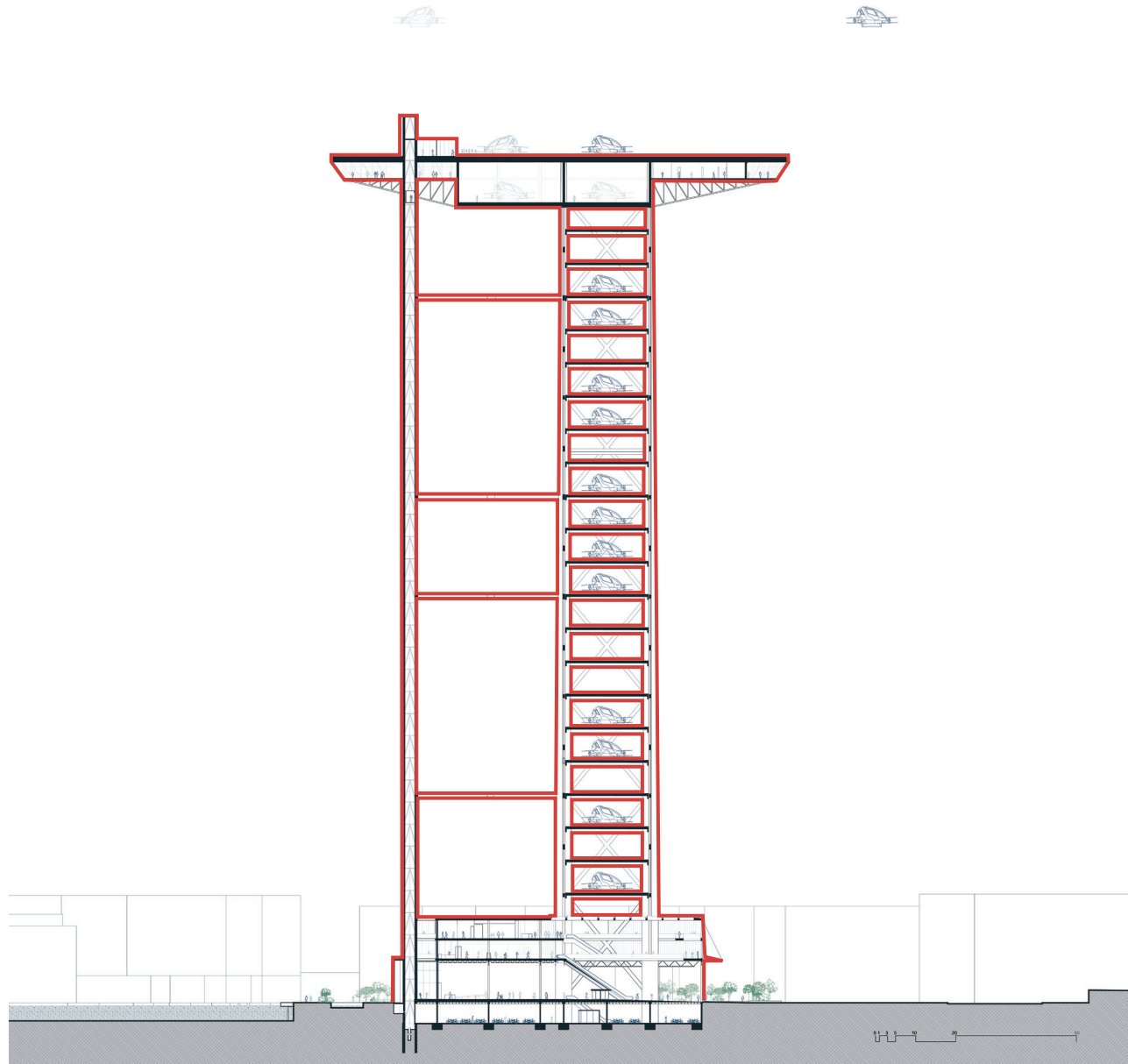
Structure

Climate

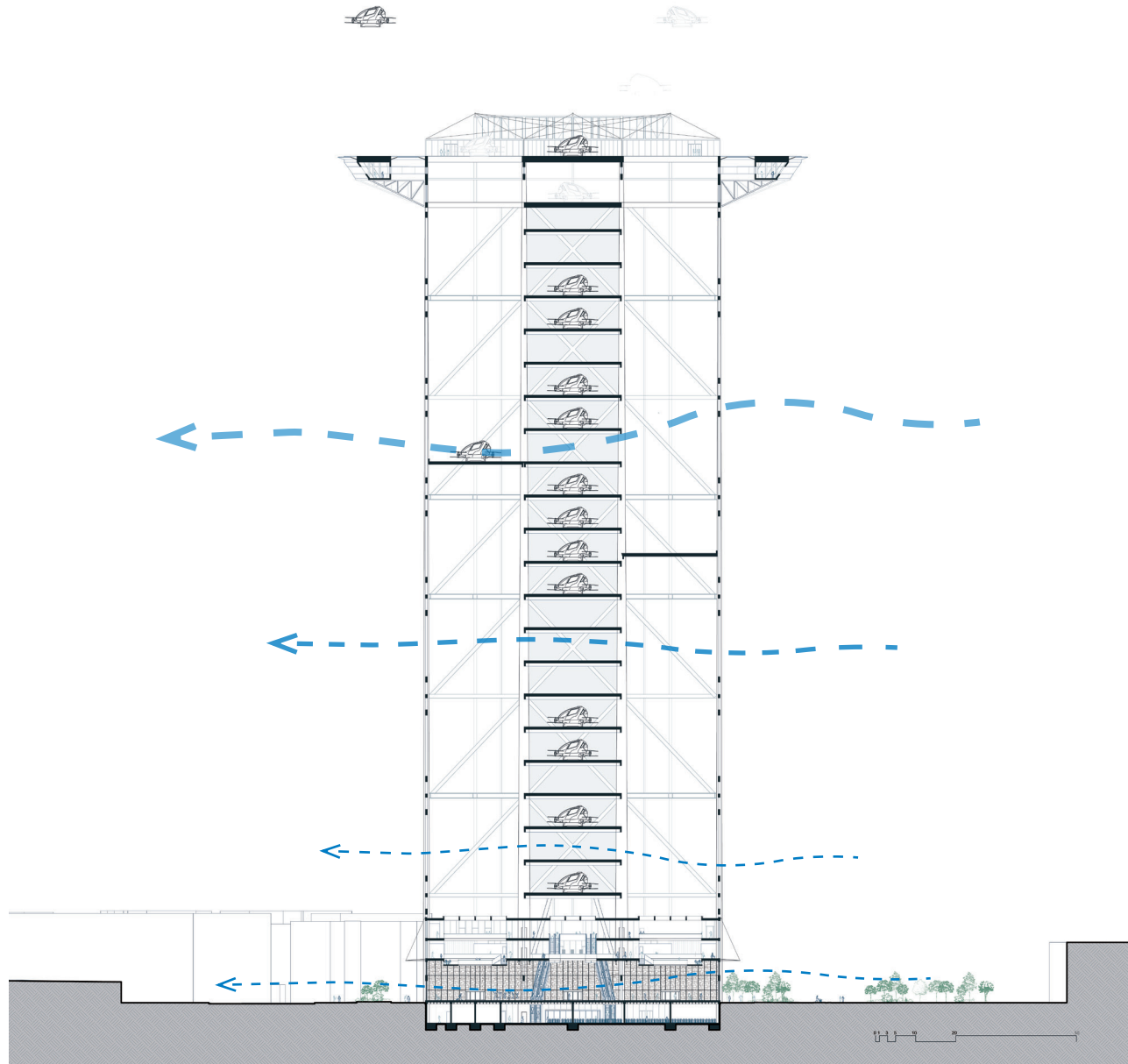
Materialisation

Detail

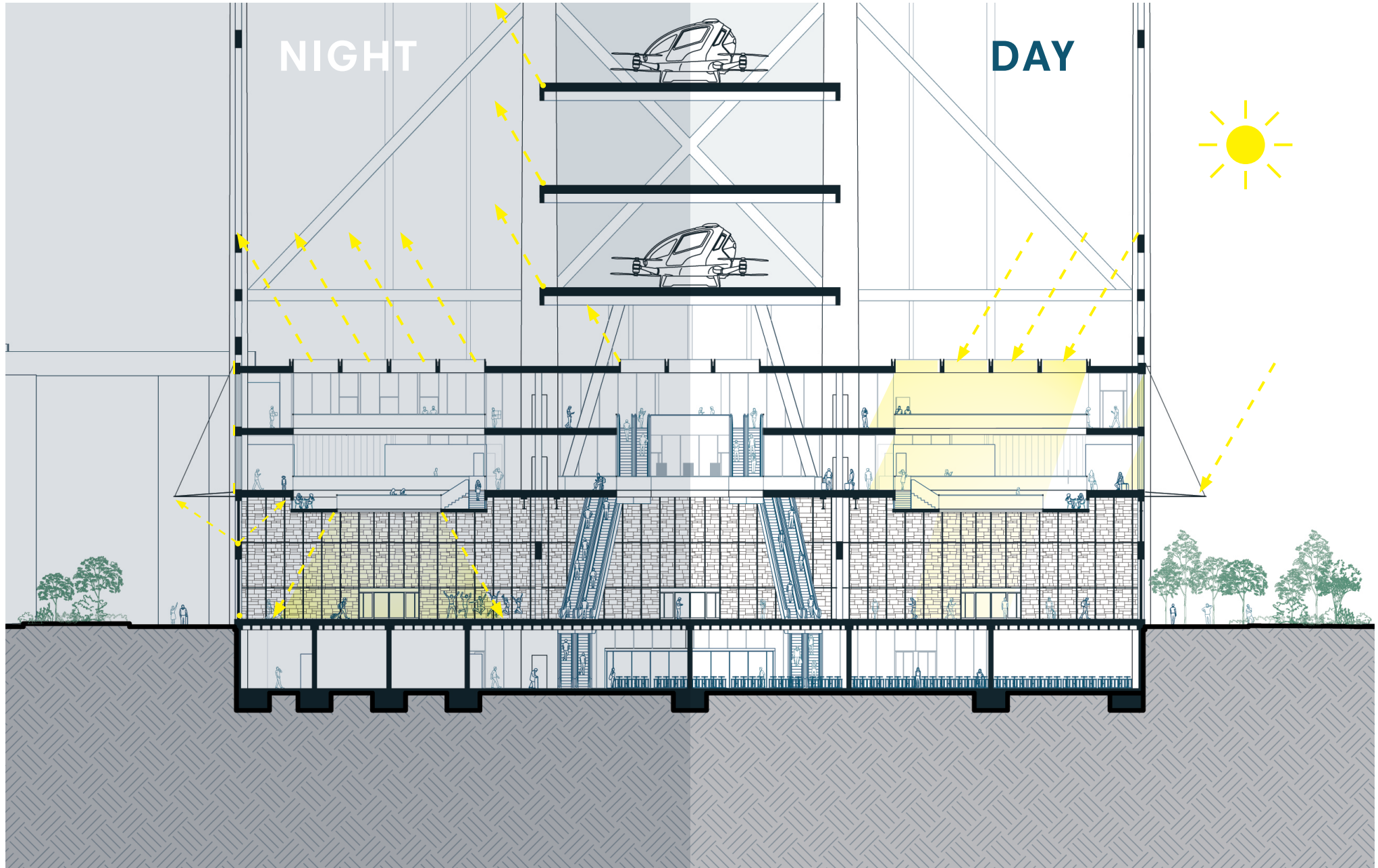
Climate PROFILE



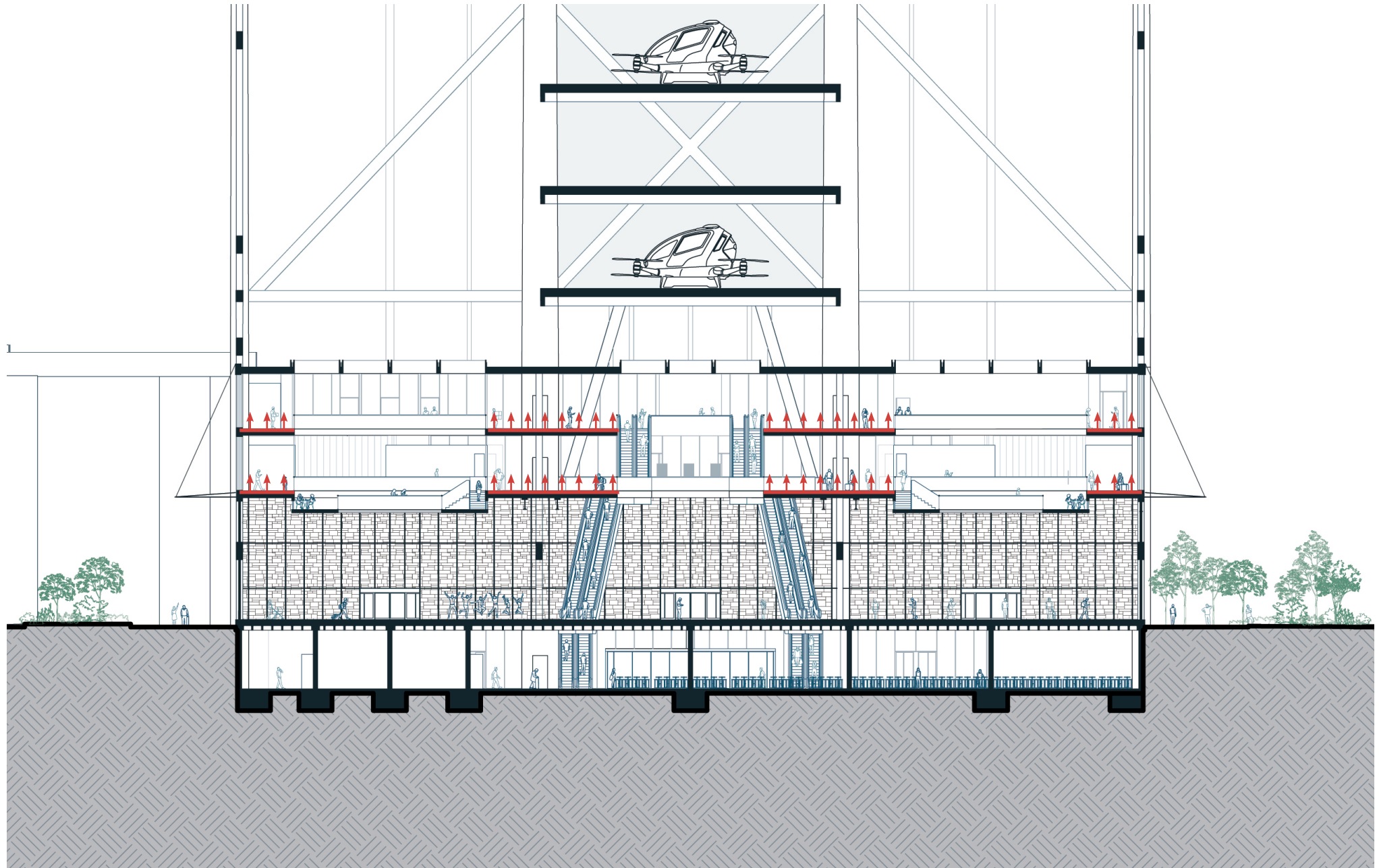
Climate **WIND**



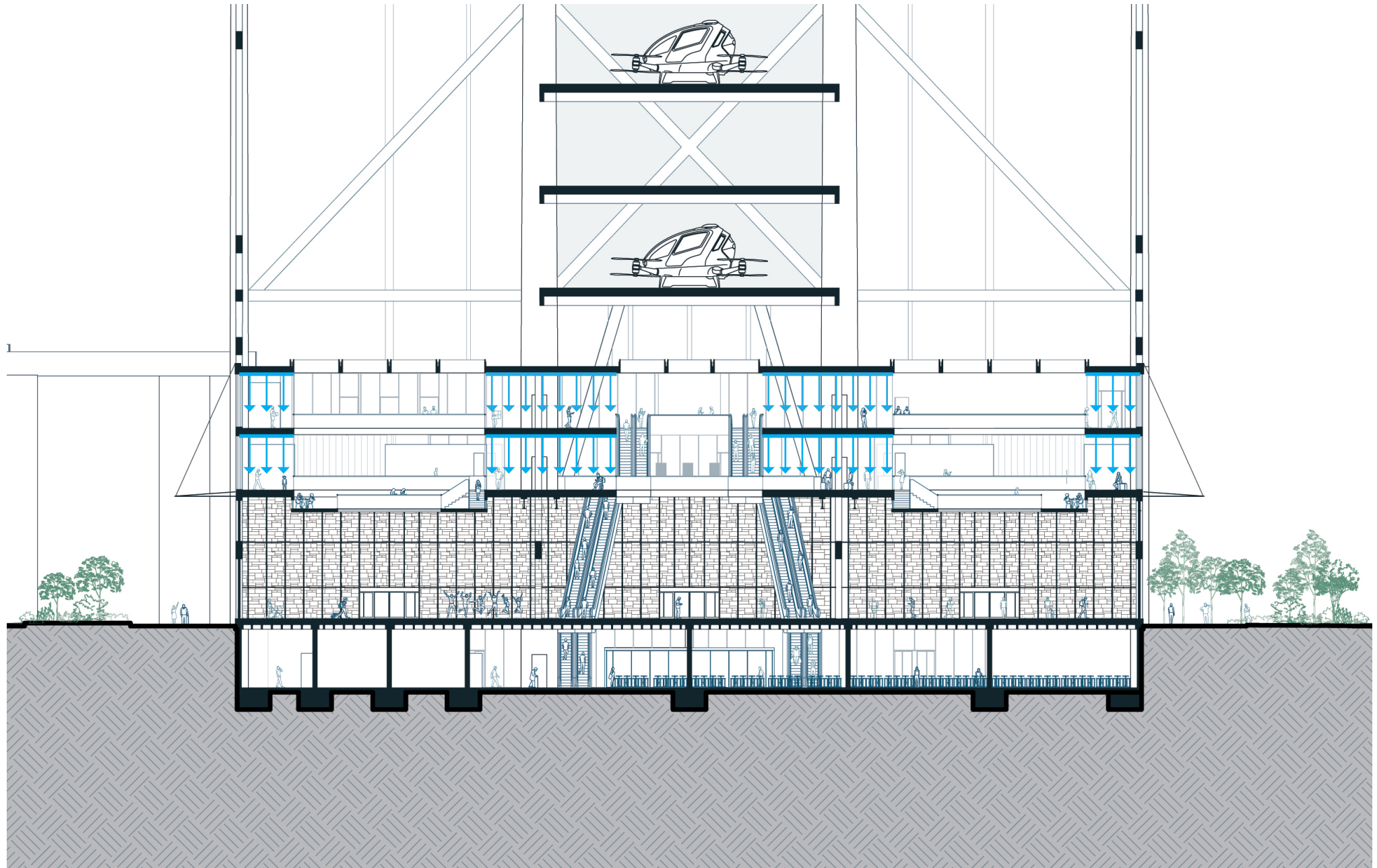
Climate LIGHT



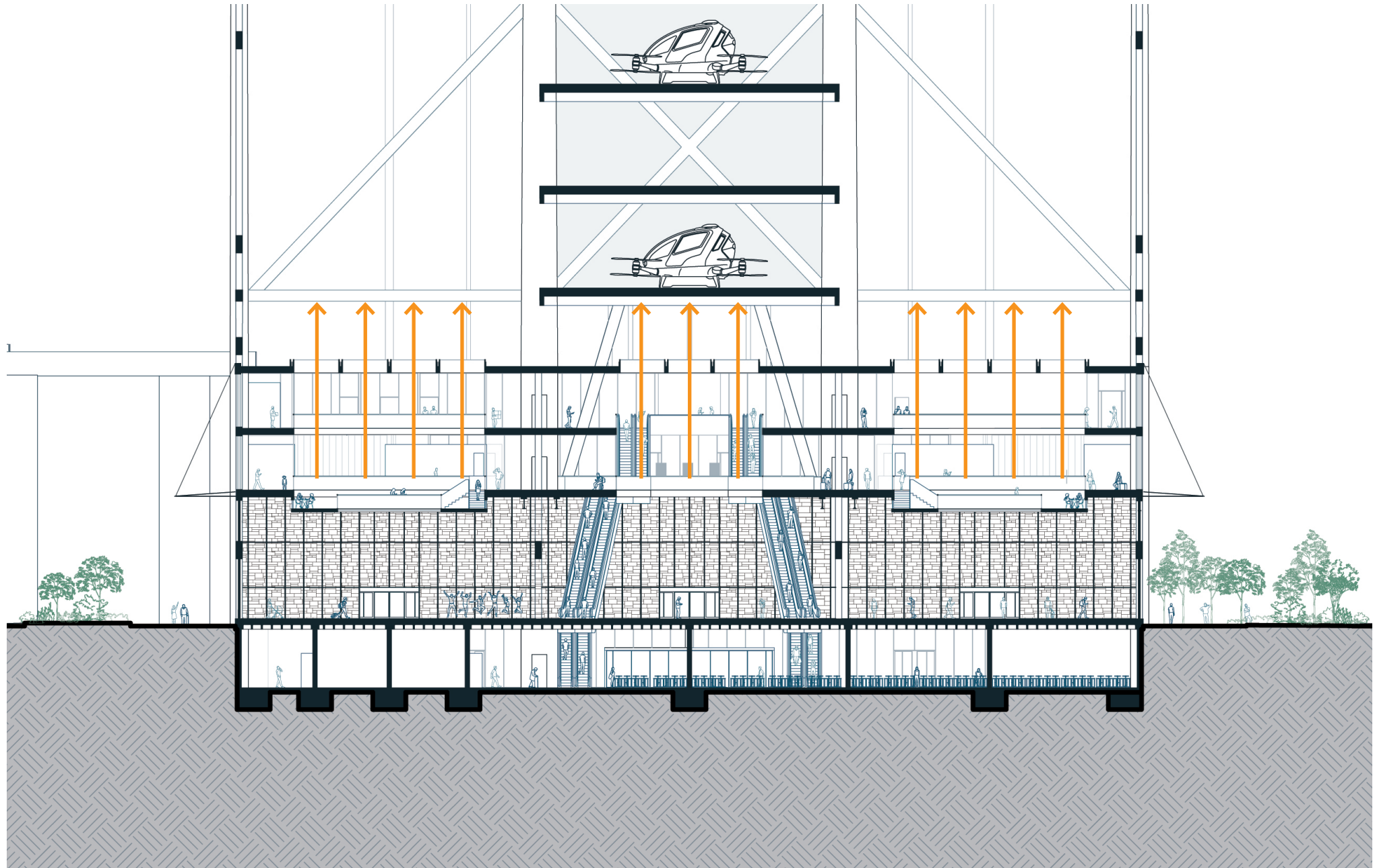
Climate HEATING



Climate COOLING



Climate VENTILATION



DEVELOPMENT

Structure

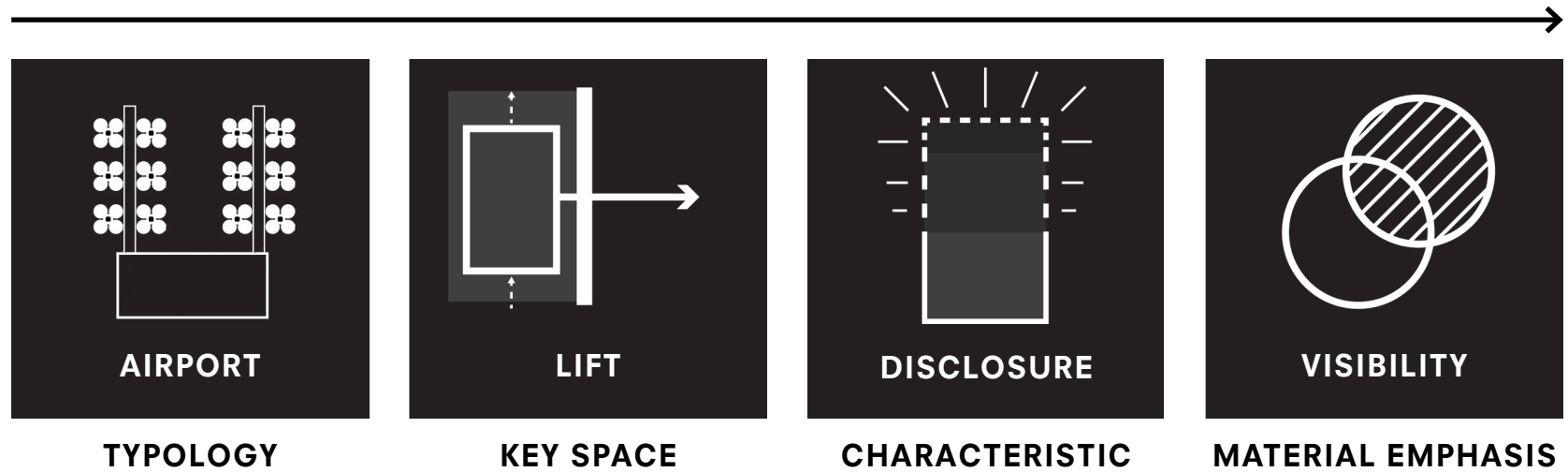
Climate

Materialisation

Detail

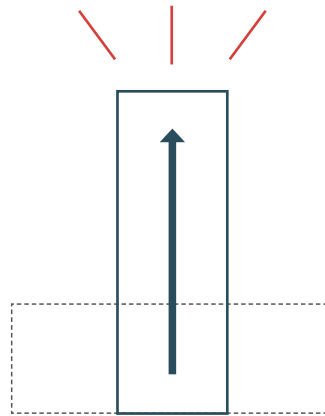
Materialisation

MATERIAL



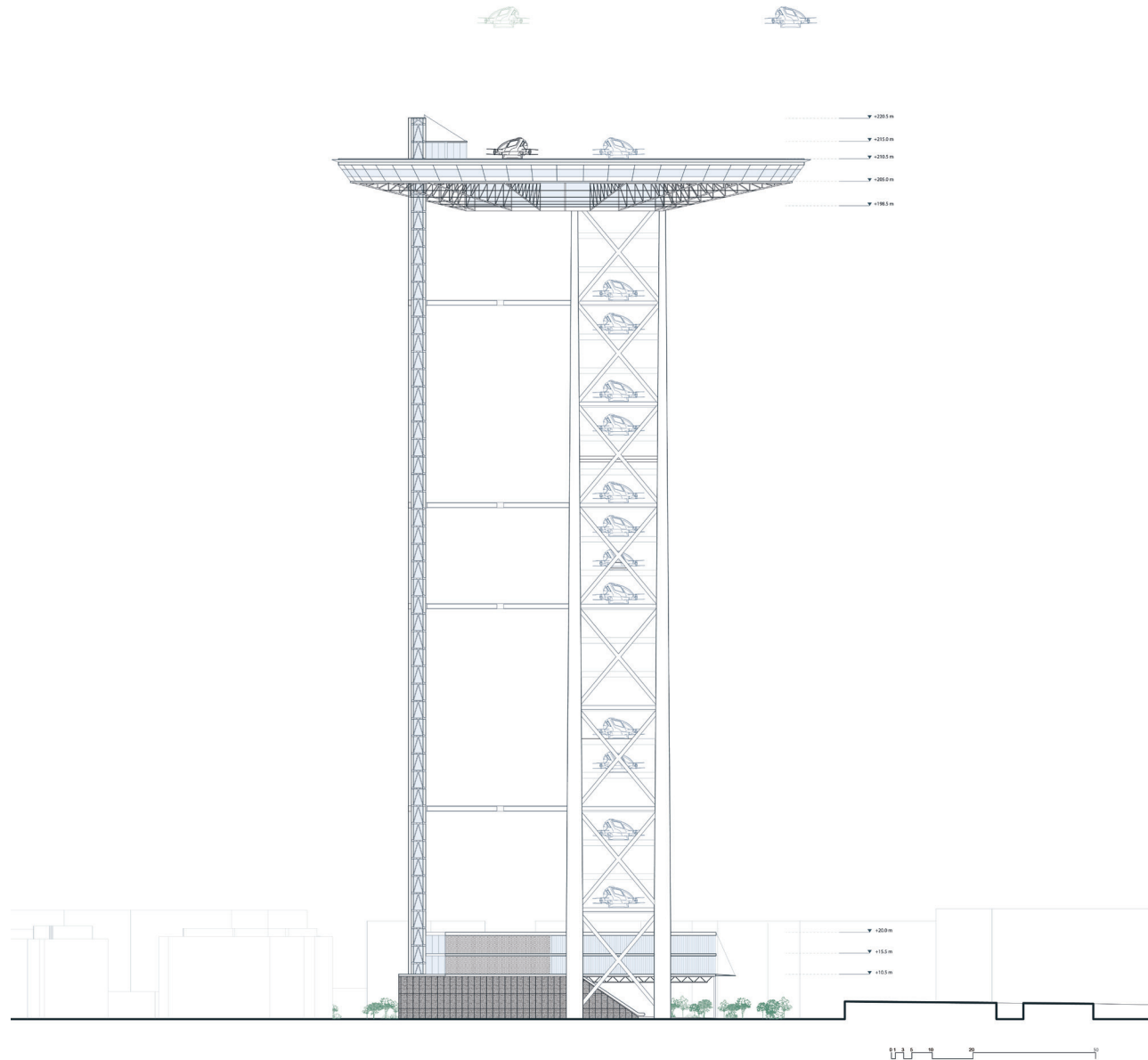
Materialisation

VERTICALITY



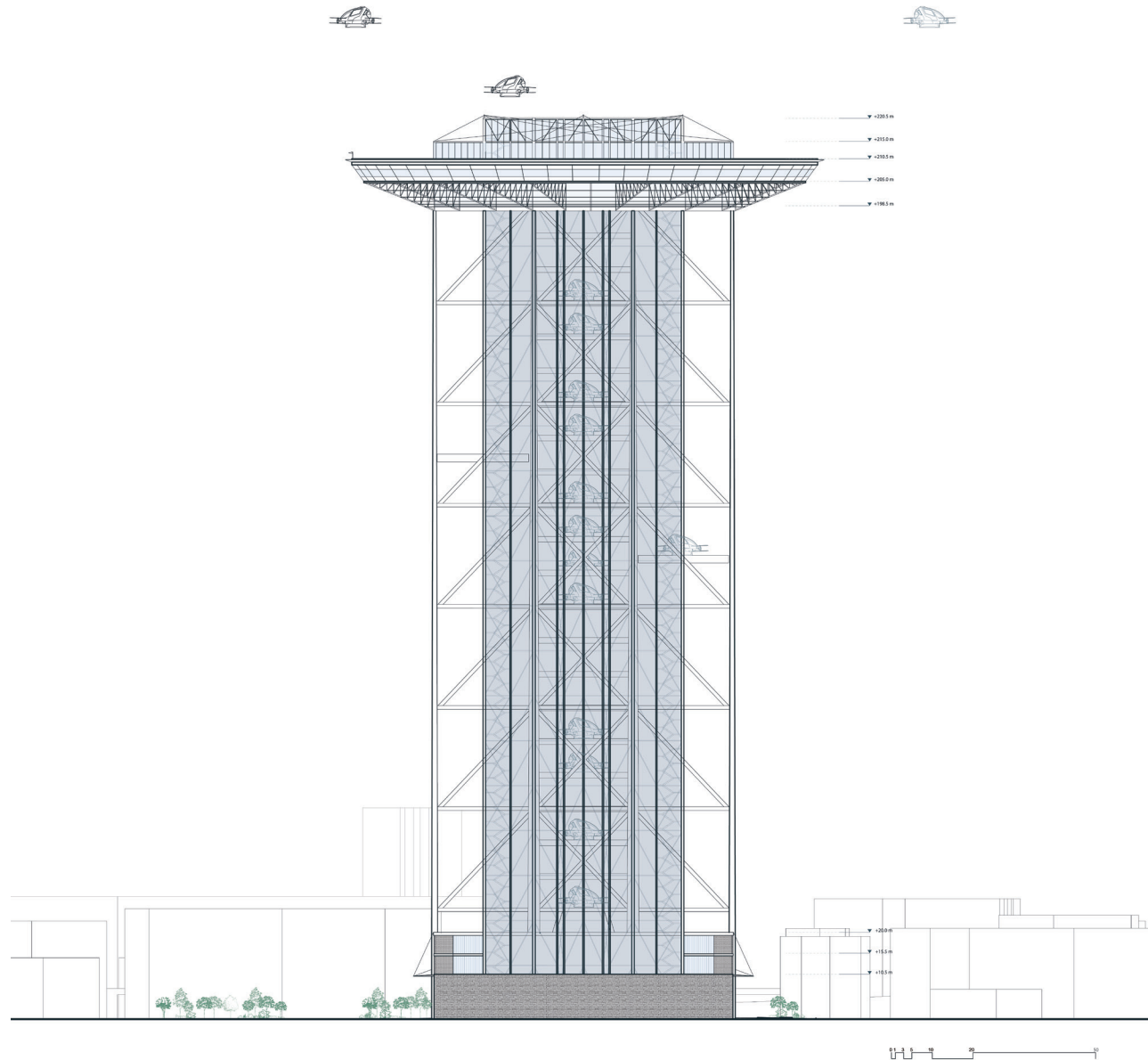
Materialisation

NE ELEVATION



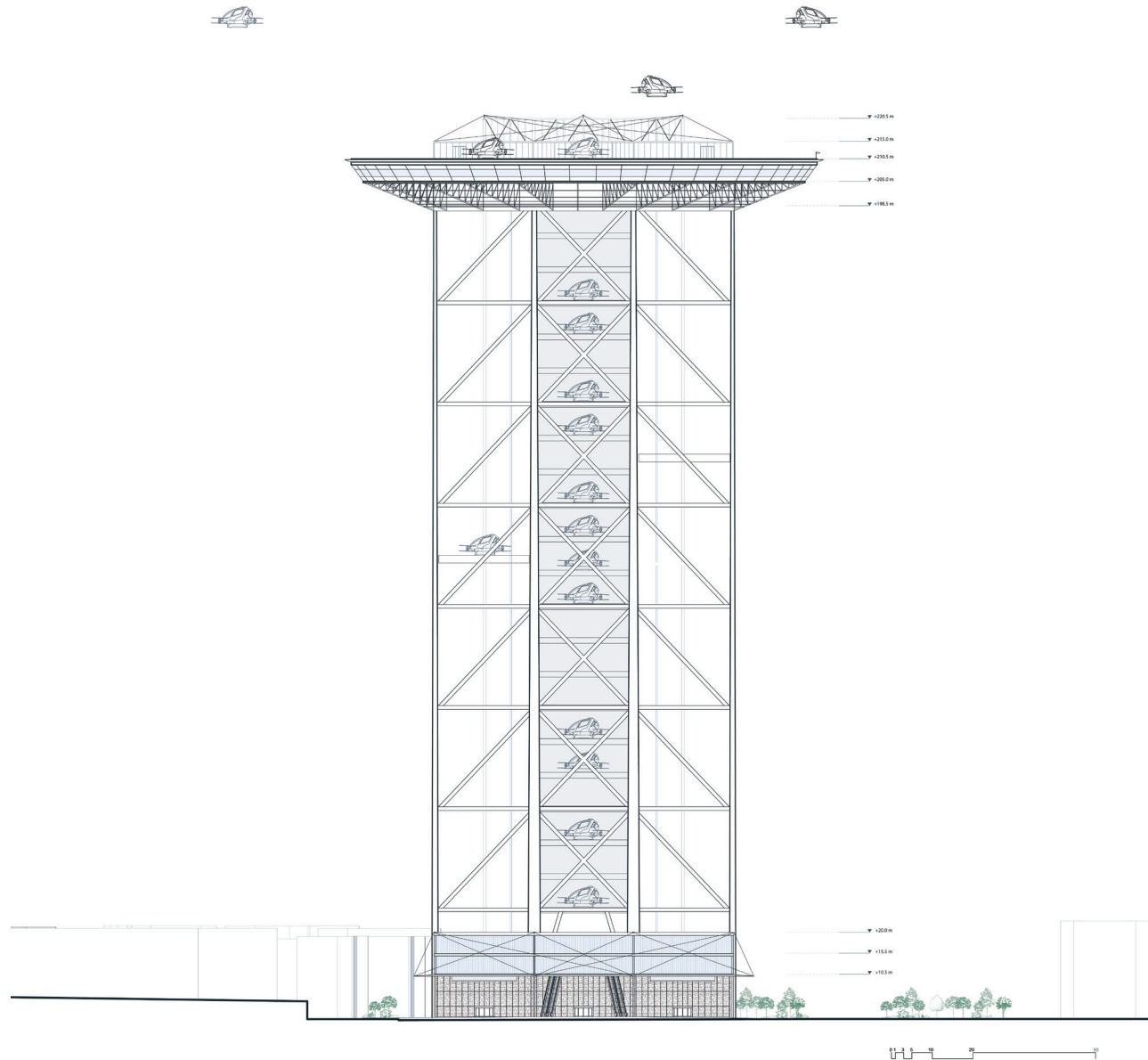
Materialisation

SE ELEVATION

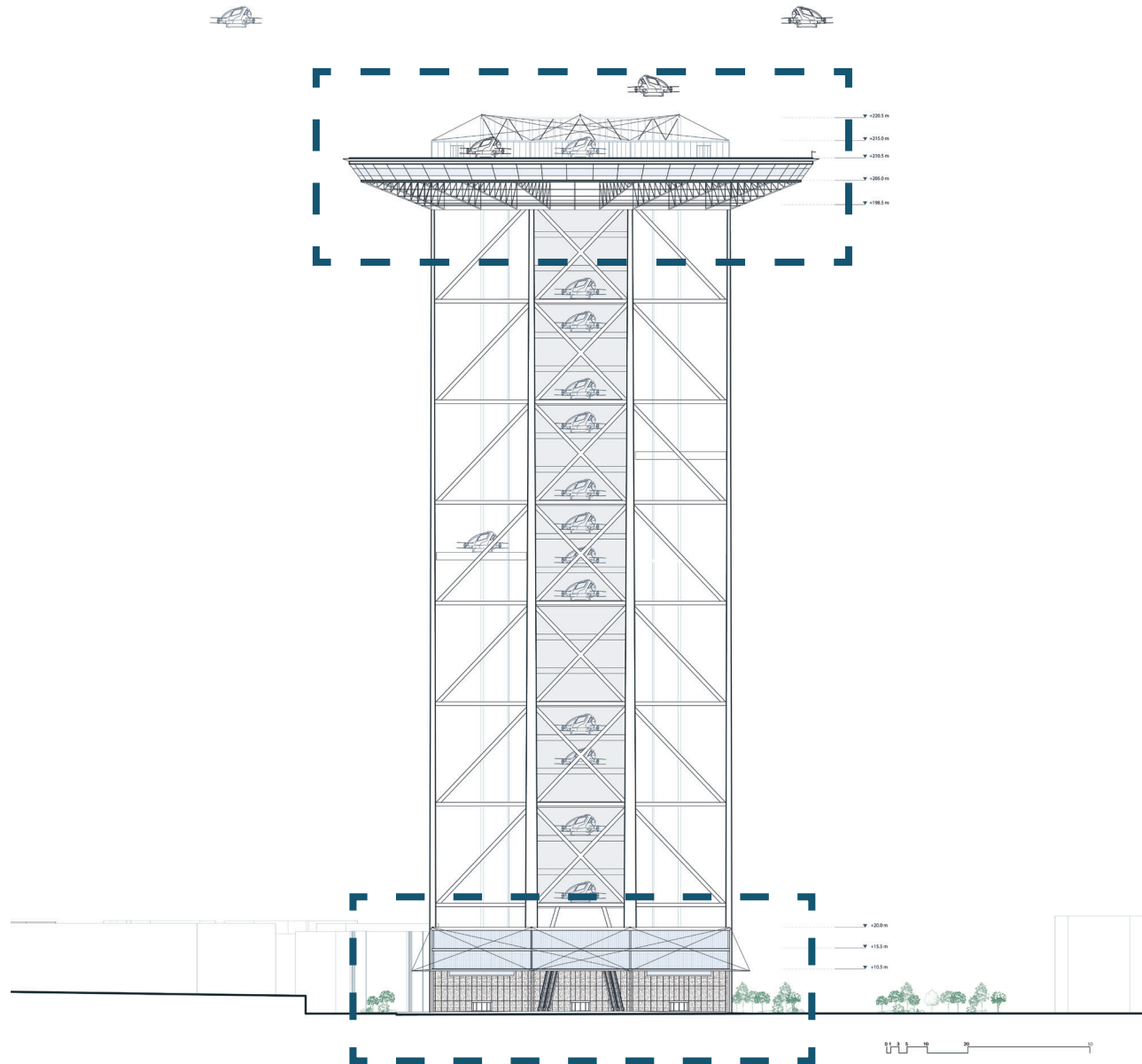


Materialisation

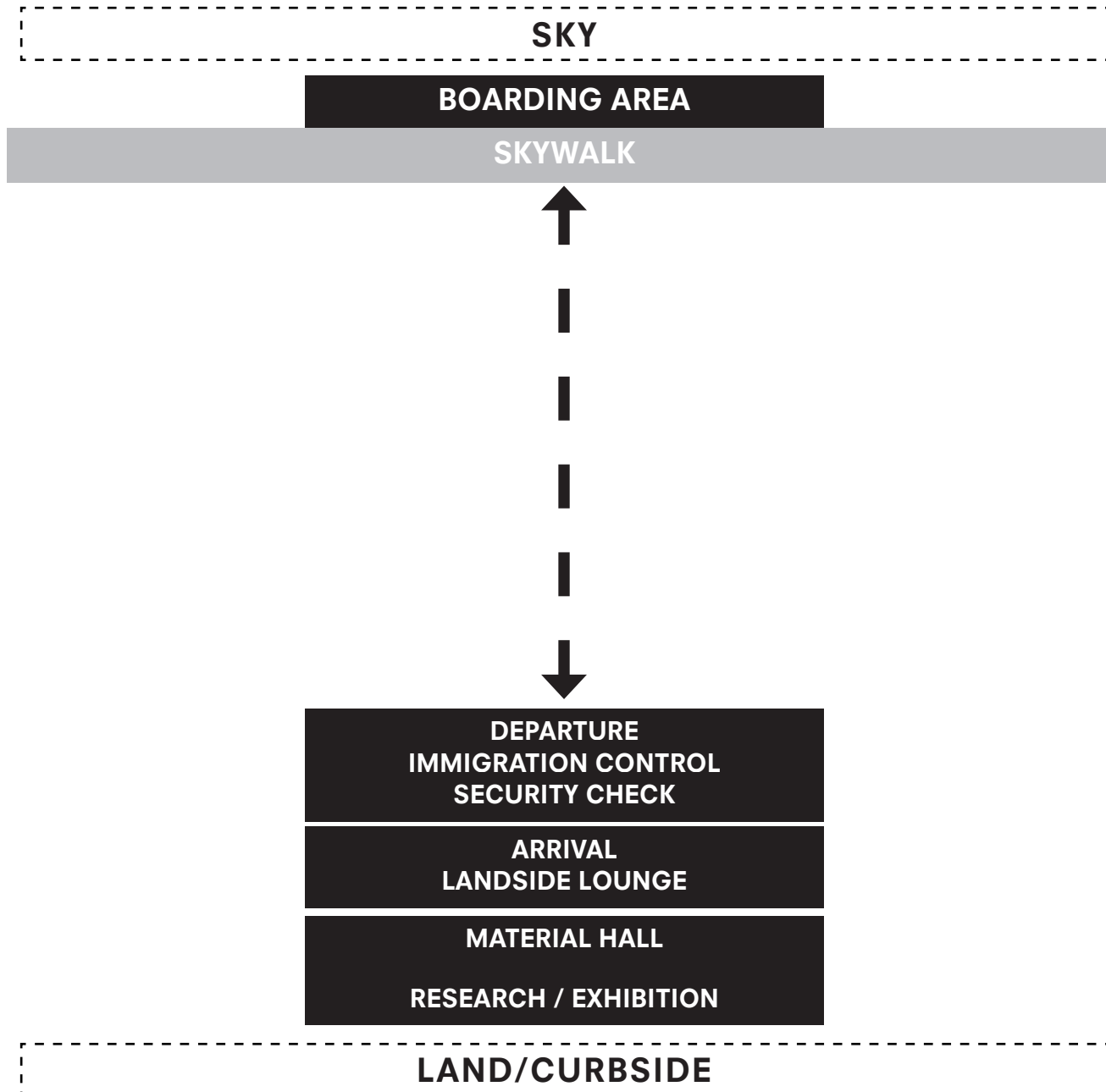
NW ELEVATION



Materialisation FROM GROUND TO AIR

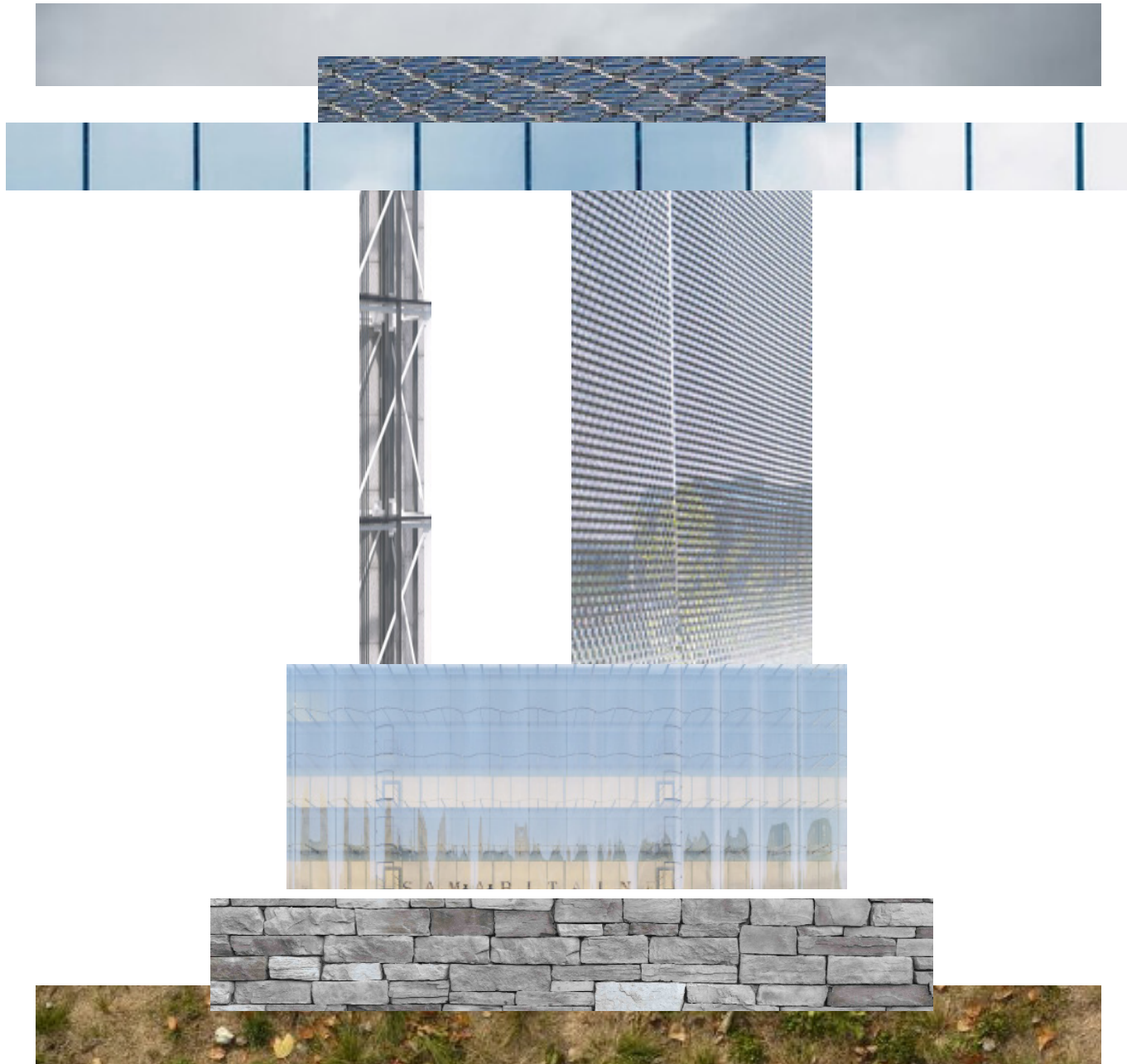


FROM GROUND TO AIR



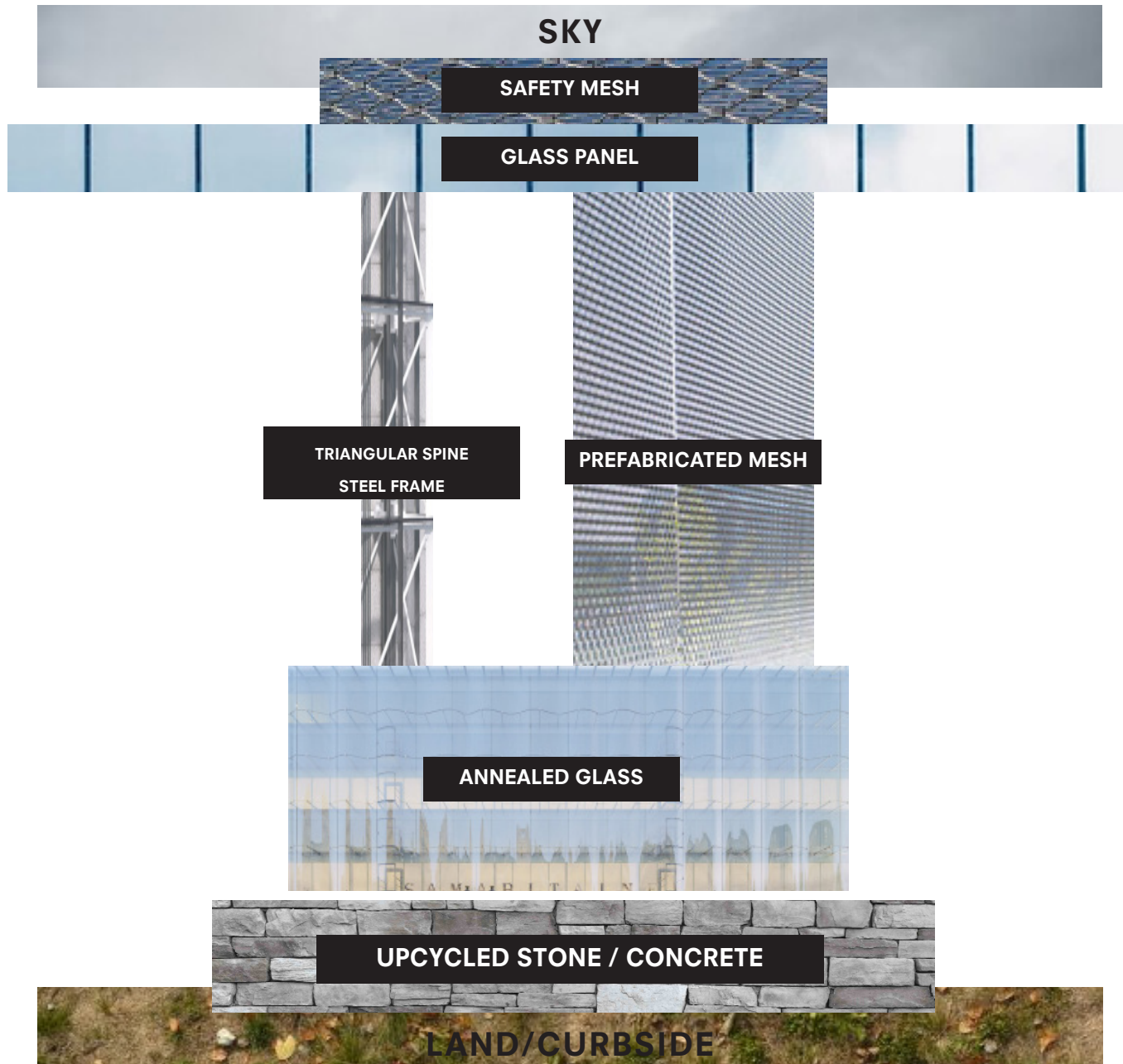
Materialisation

FROM GROUND TO AIR



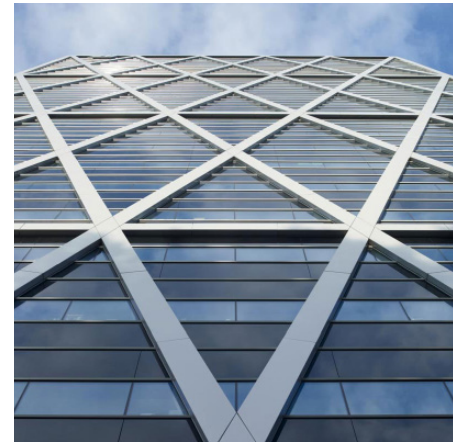
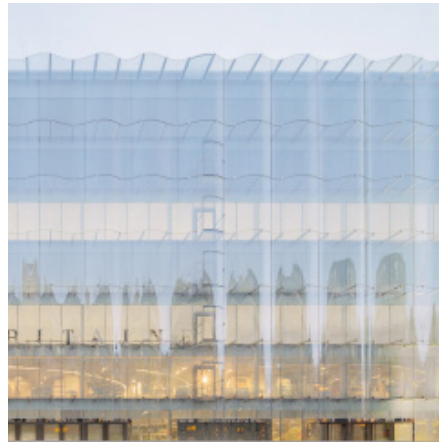
Materialisation

FROM GROUND TO AIR



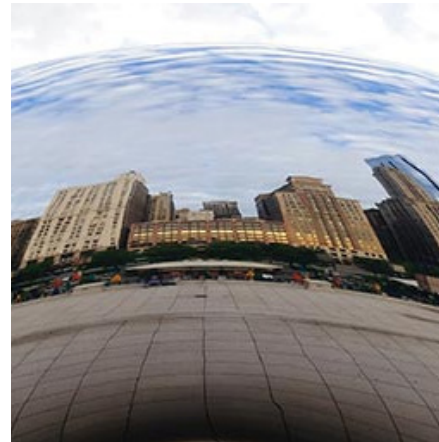
Materialisation

PLINTH FACADE



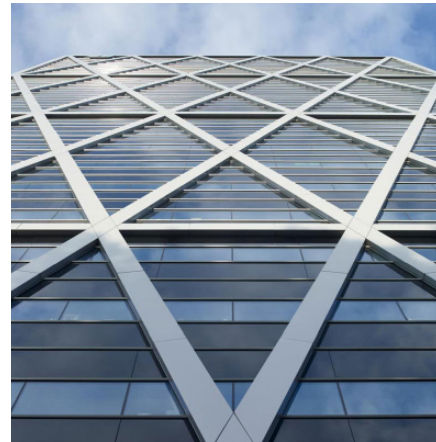
Materialisation

CROWN FACADE



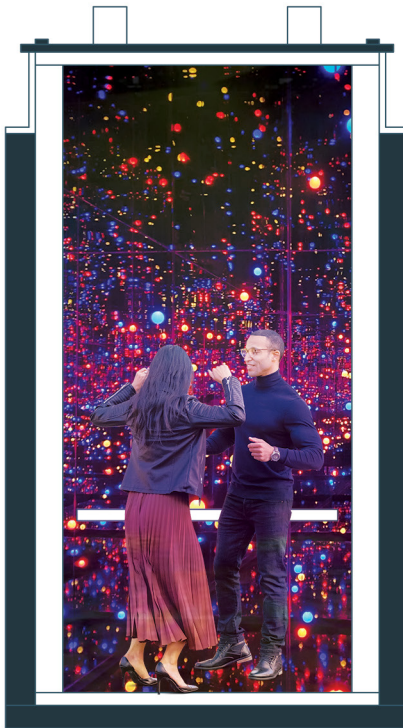
Materialisation

EVTOL'S LIFT FACADE



Materialisation

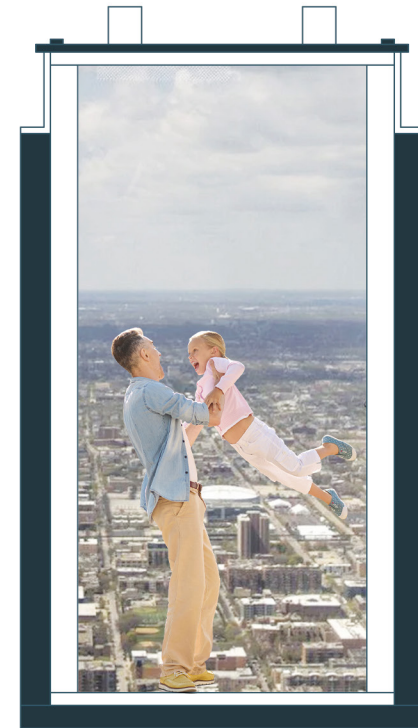
PASSENGERS'LIFT DESIGN



Departure



Arrival



Visitor

DEVELOPMENT

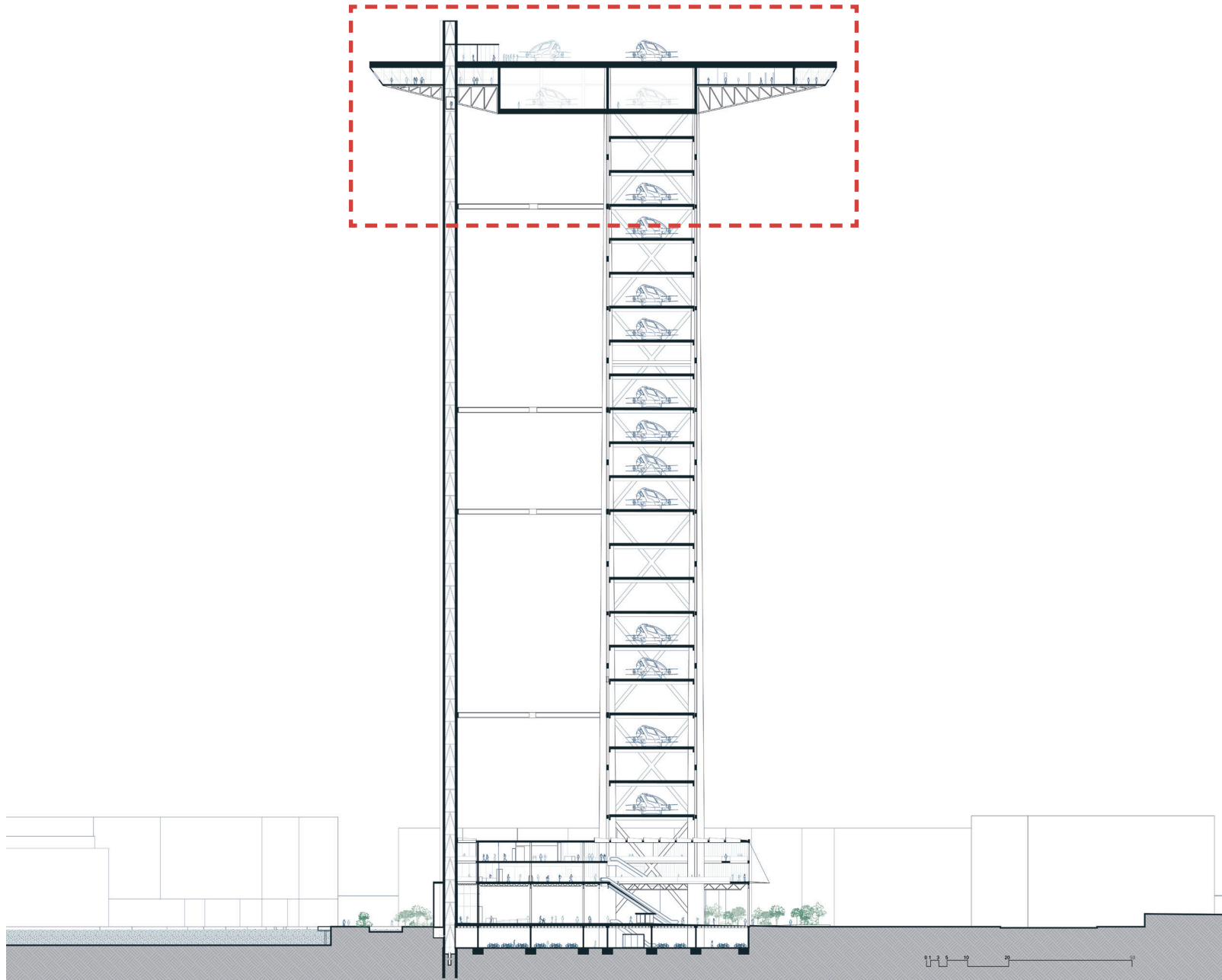
Structure

Climate

Materialisation

Detail

Detail CROWN



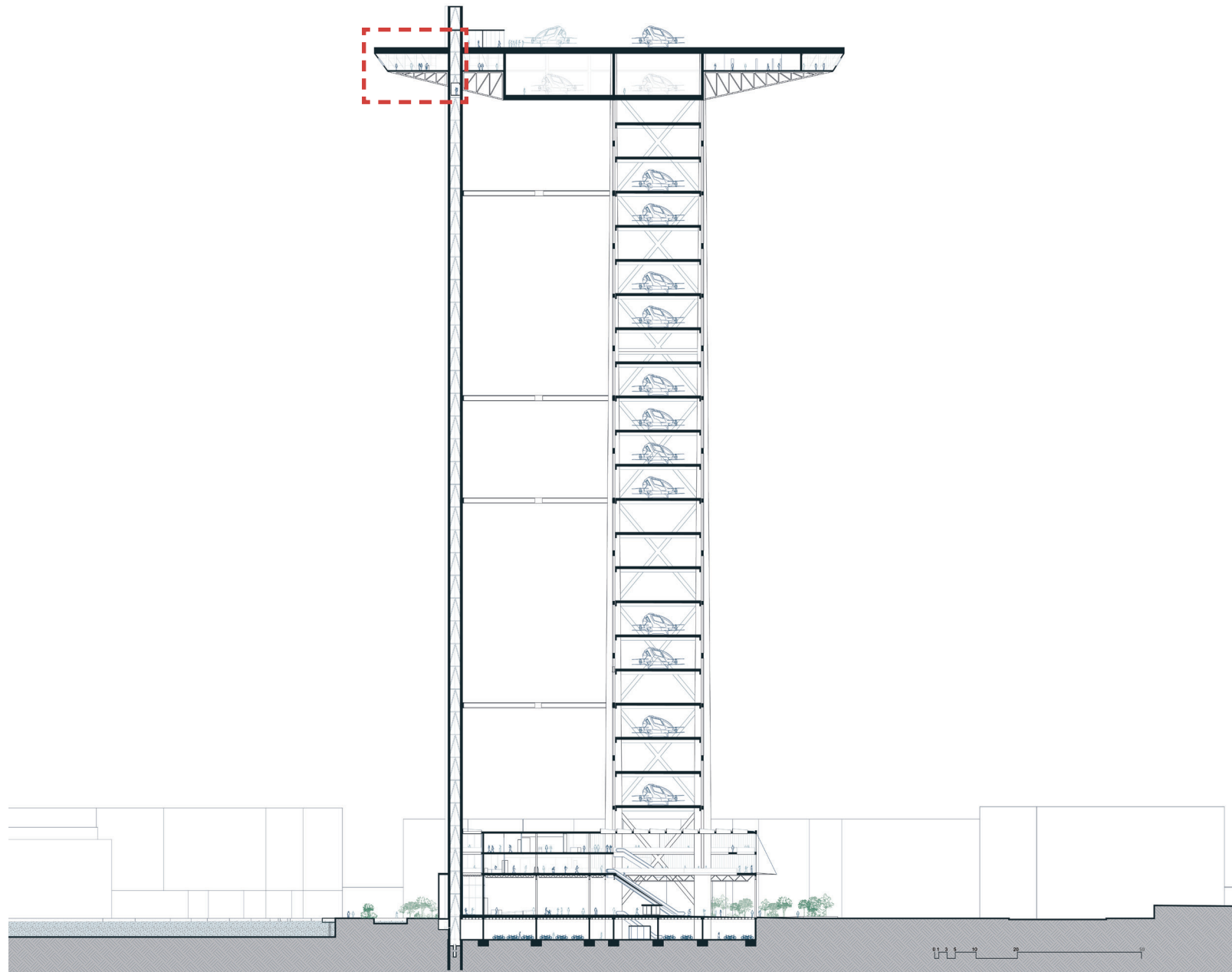
Detail

SECTIONAL MODEL



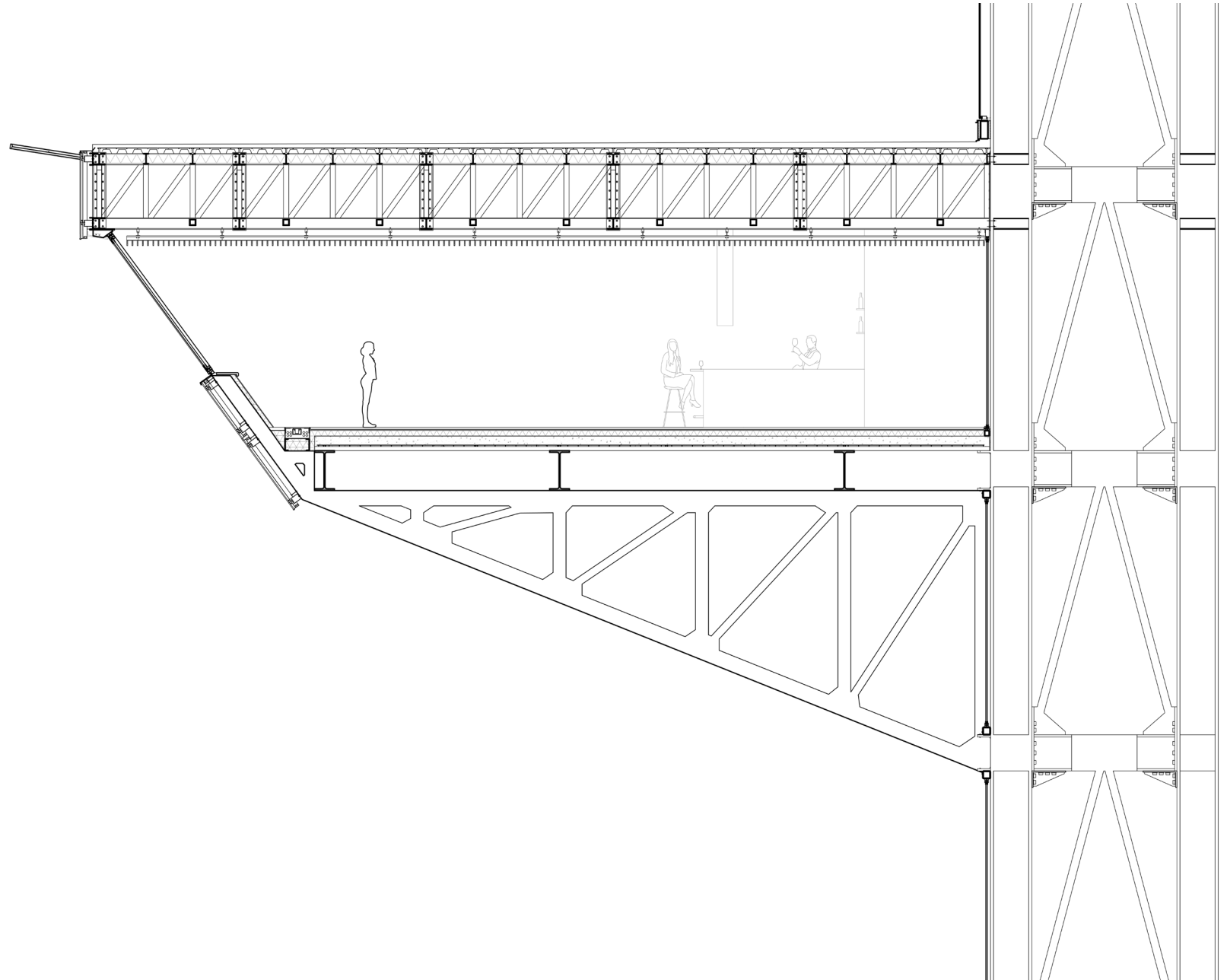
Detail

INTERIOR FRAGMENT



Detail

INTERIOR FRAGMENT



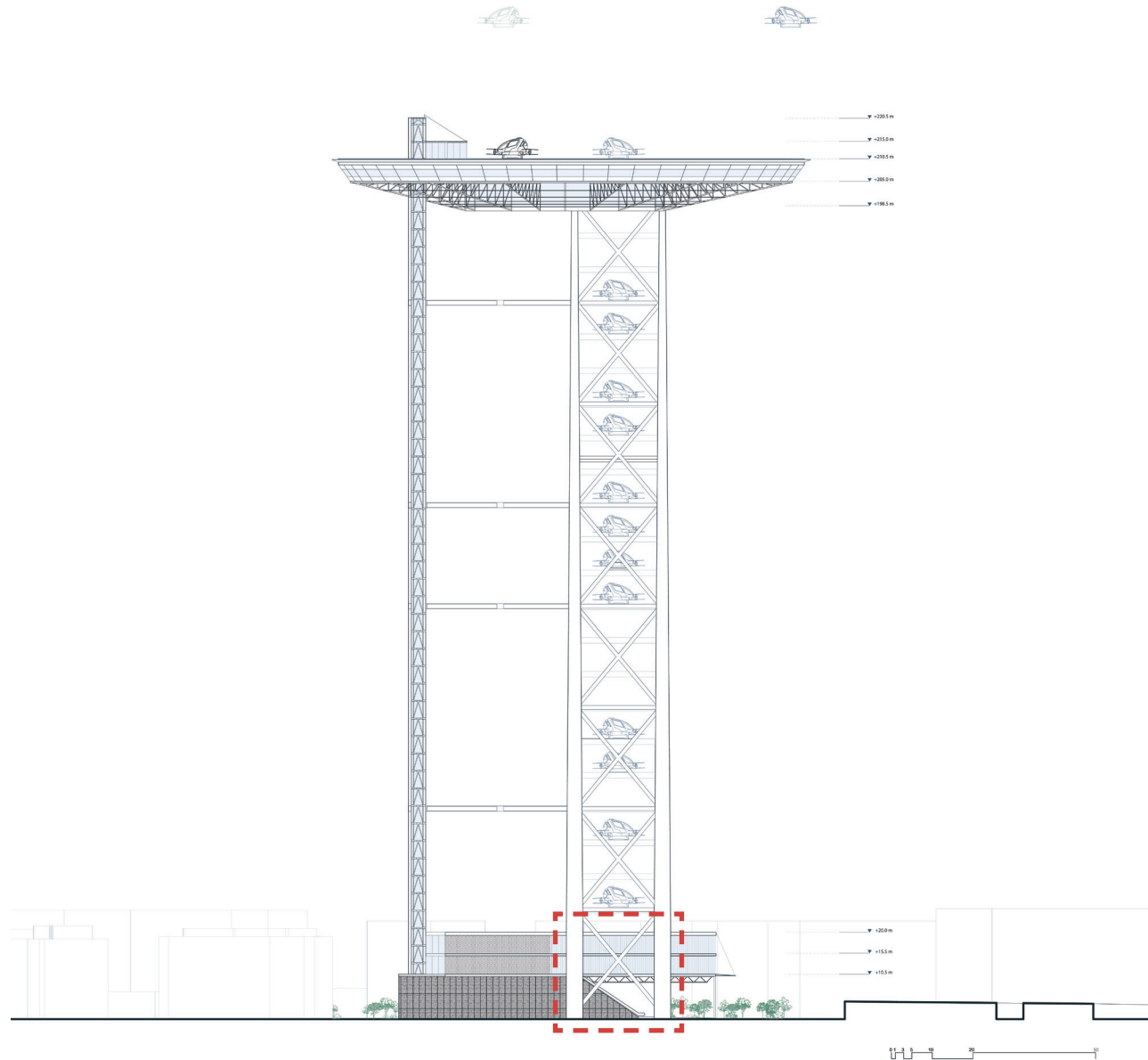
Detail

INTERIOR FRAGMENT

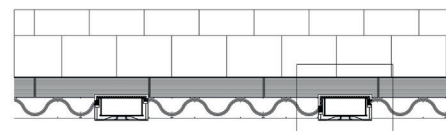
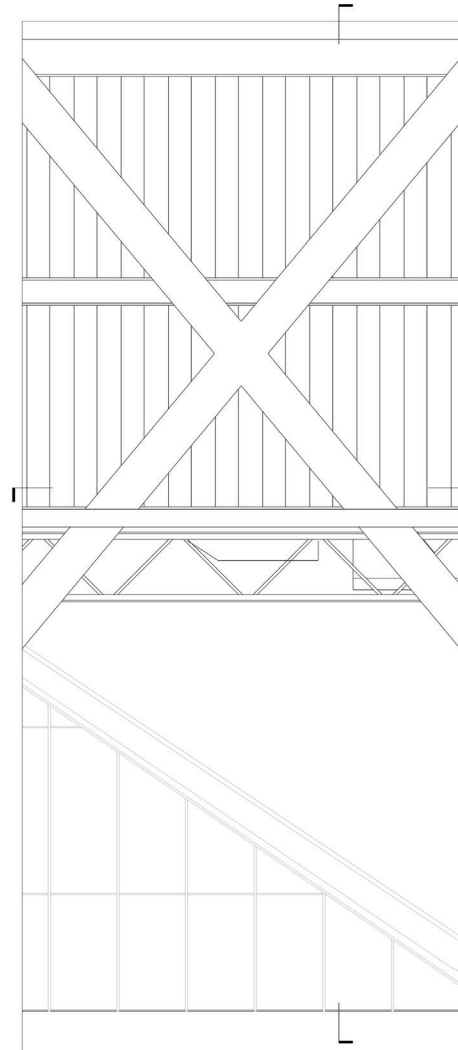


Detail

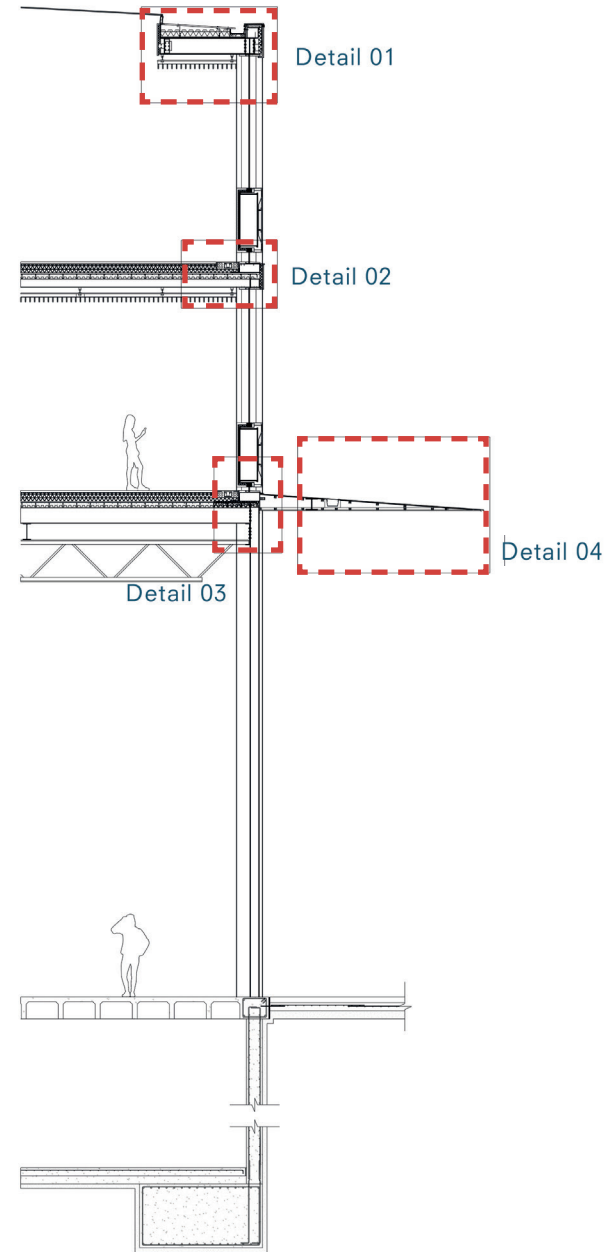
FACADE FRAGMENT



1 : 50 NORTH-EAST FACADE



Detail 05



Detail 01

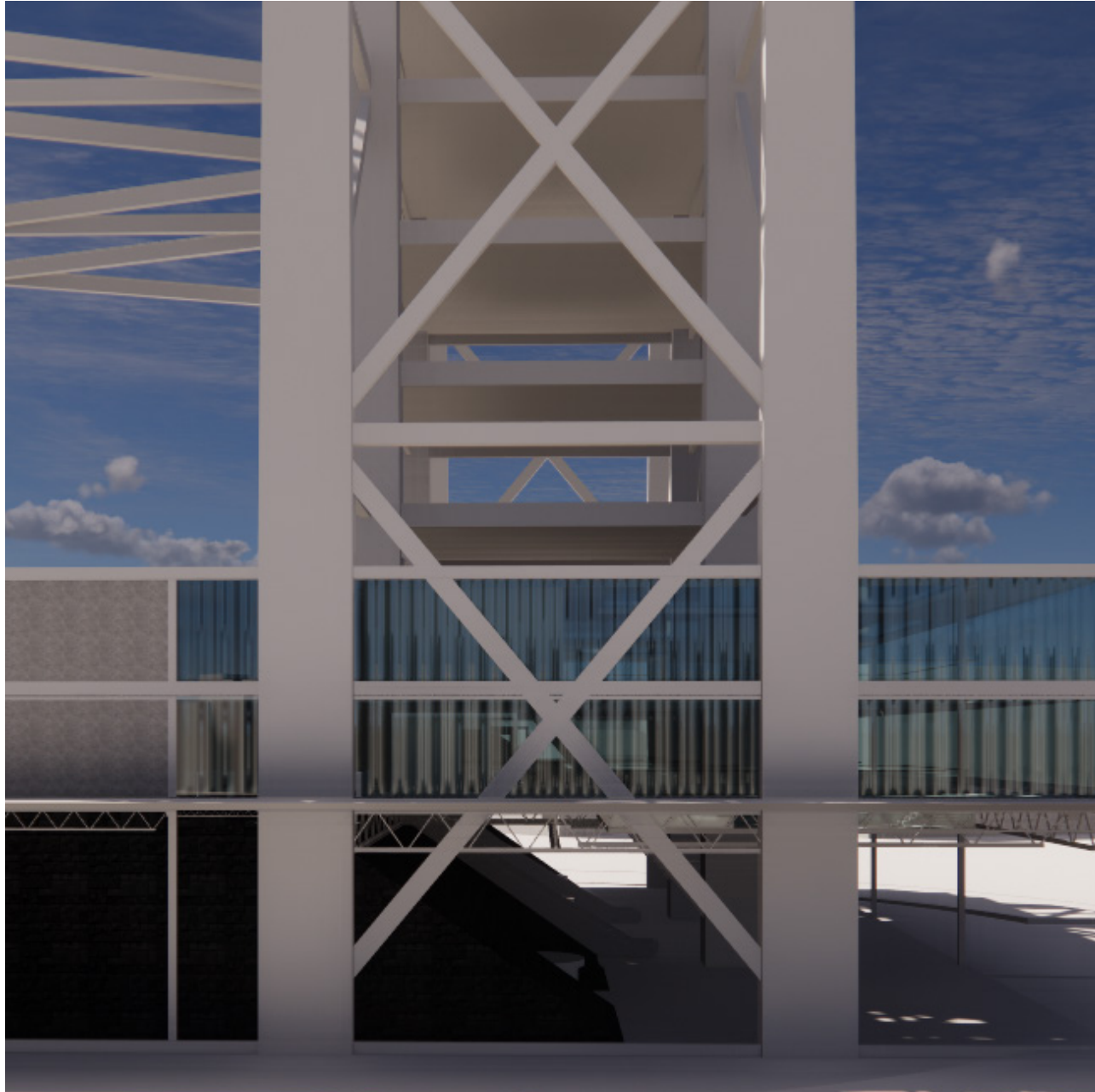
Detail 02

Detail 03

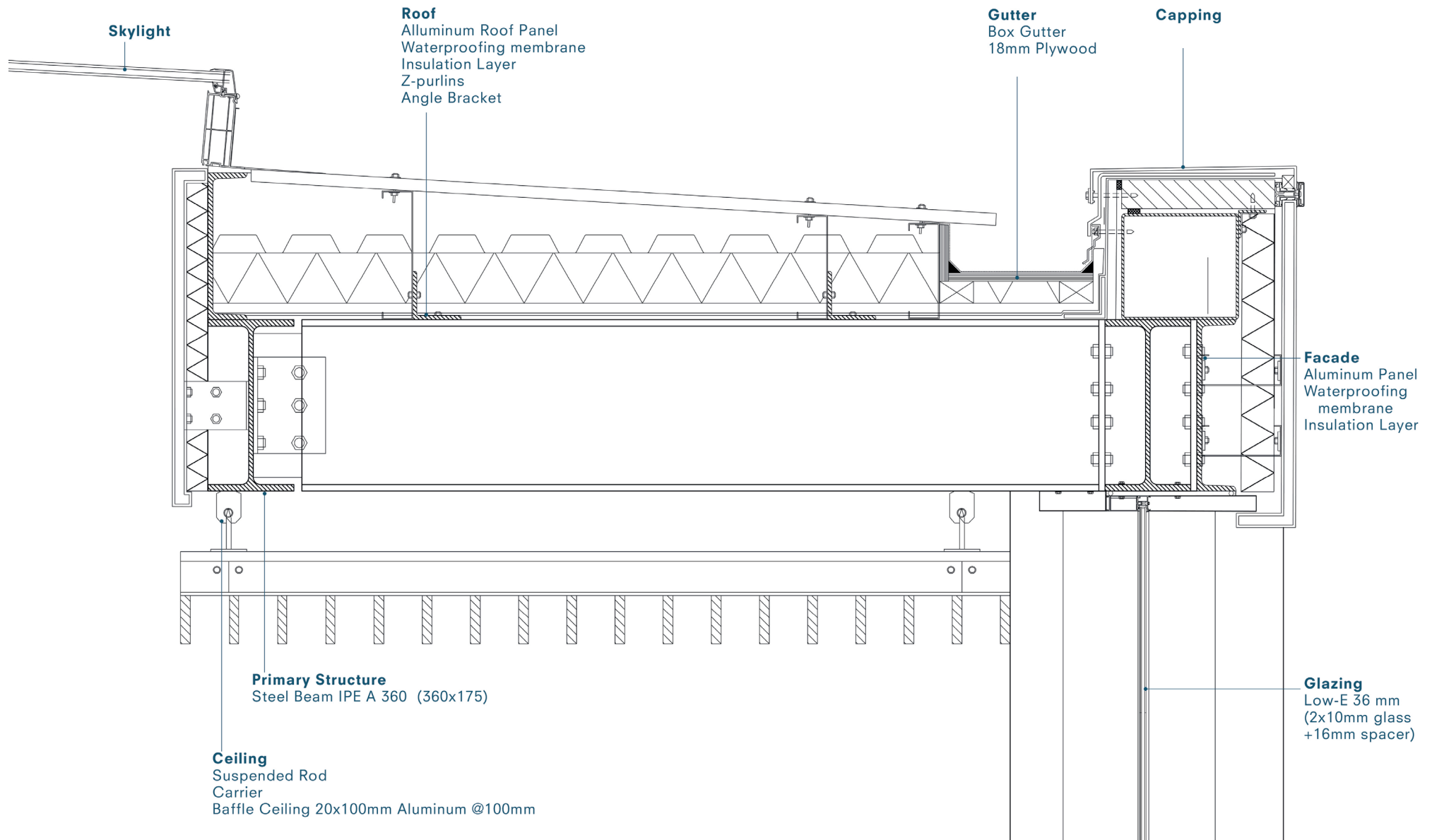
Detail 04

Detail

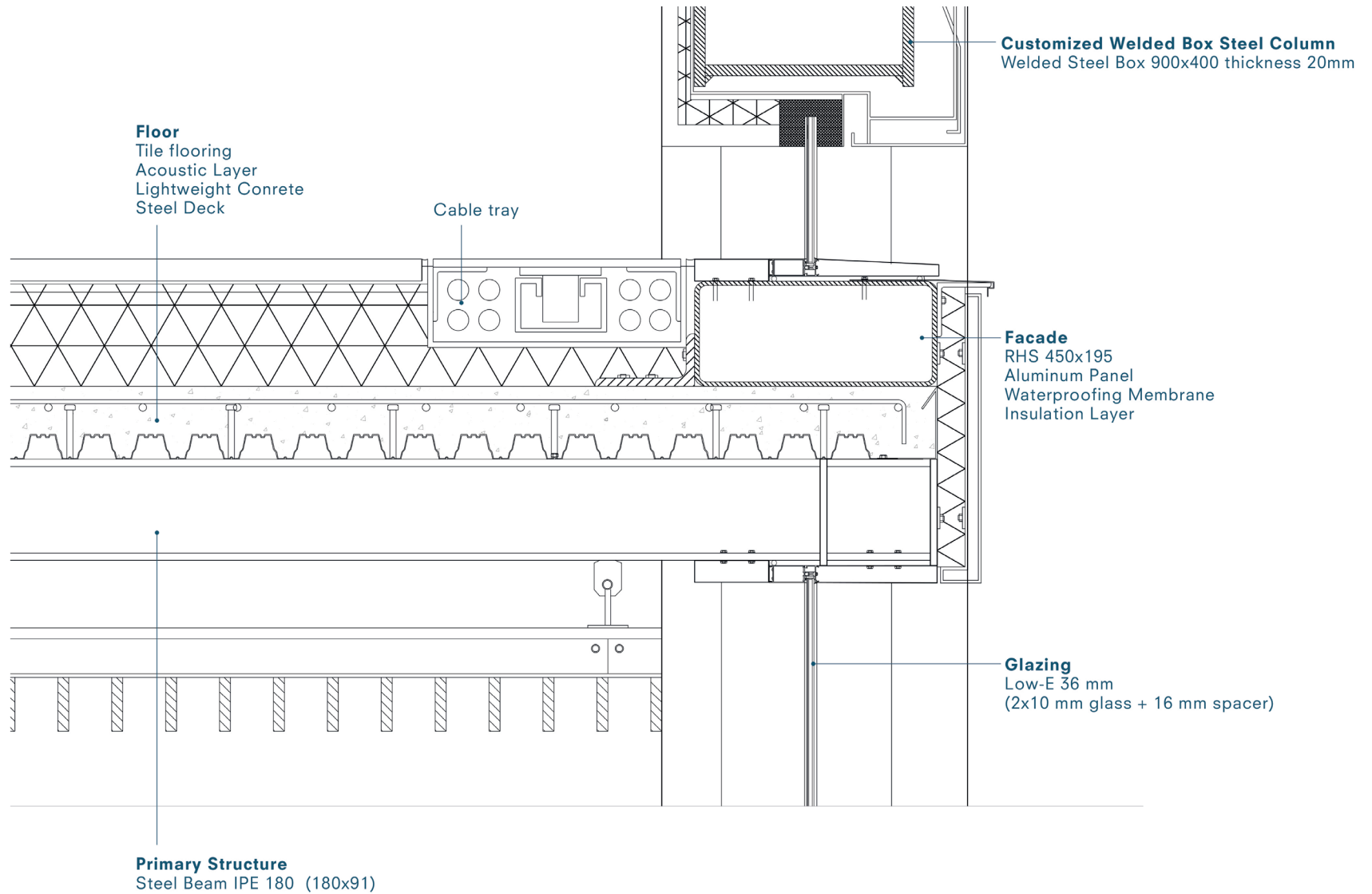
NORTH-EAST FACADE



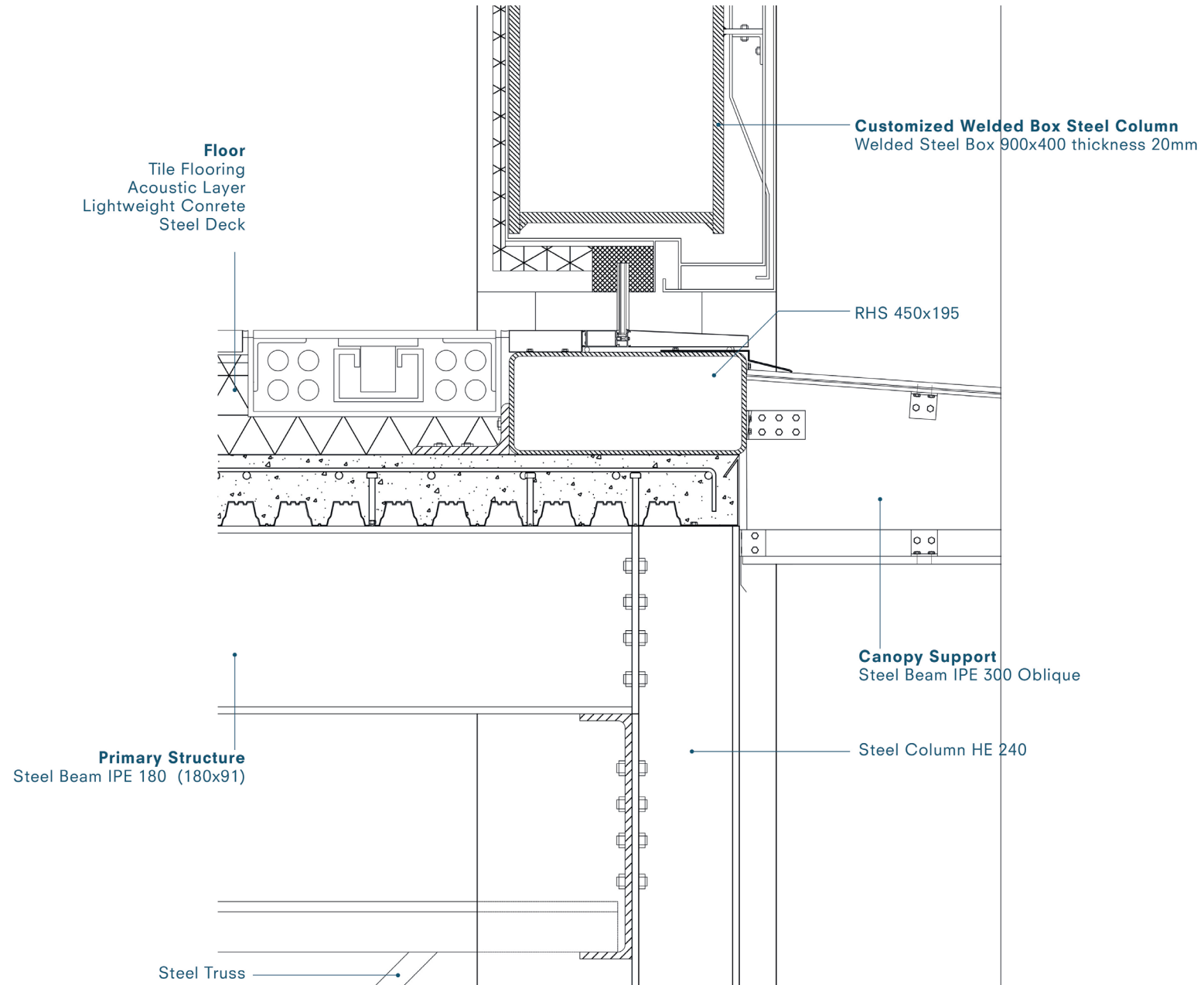
1:5 DETAIL 01 - SKYLIGHT + ROOF



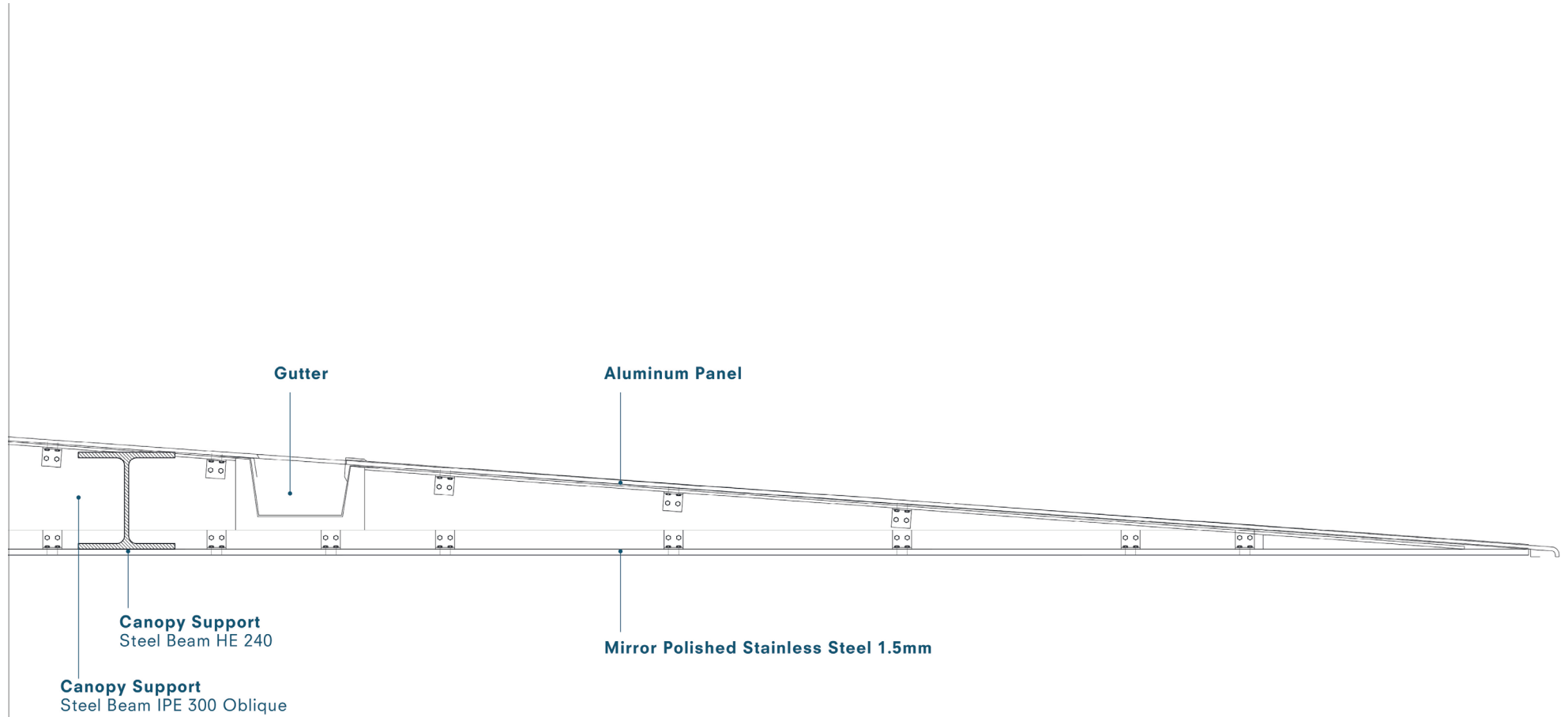
1:5 DETAIL 02 - SECOND FLOOR



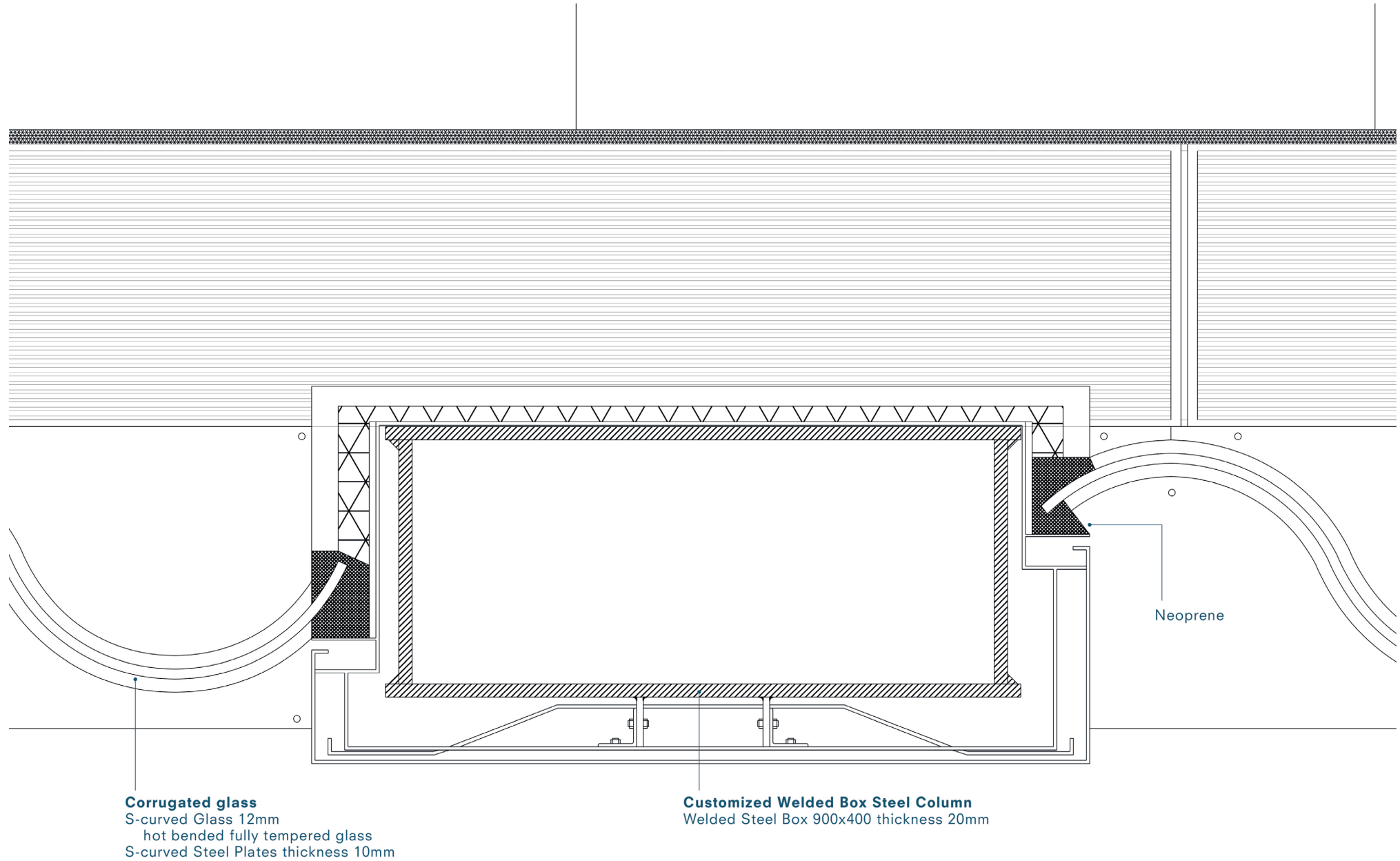
1:5 DETAIL 03 - FIRST FLOOR



1:5 DETAIL 04 - OUTTER CEILING



1:5 DETAIL 05 - CROSS BRACING



INTRODUCTION

RESEARCH

DESIGN BRIEF

CONCEPT

IMPLEMENTATION

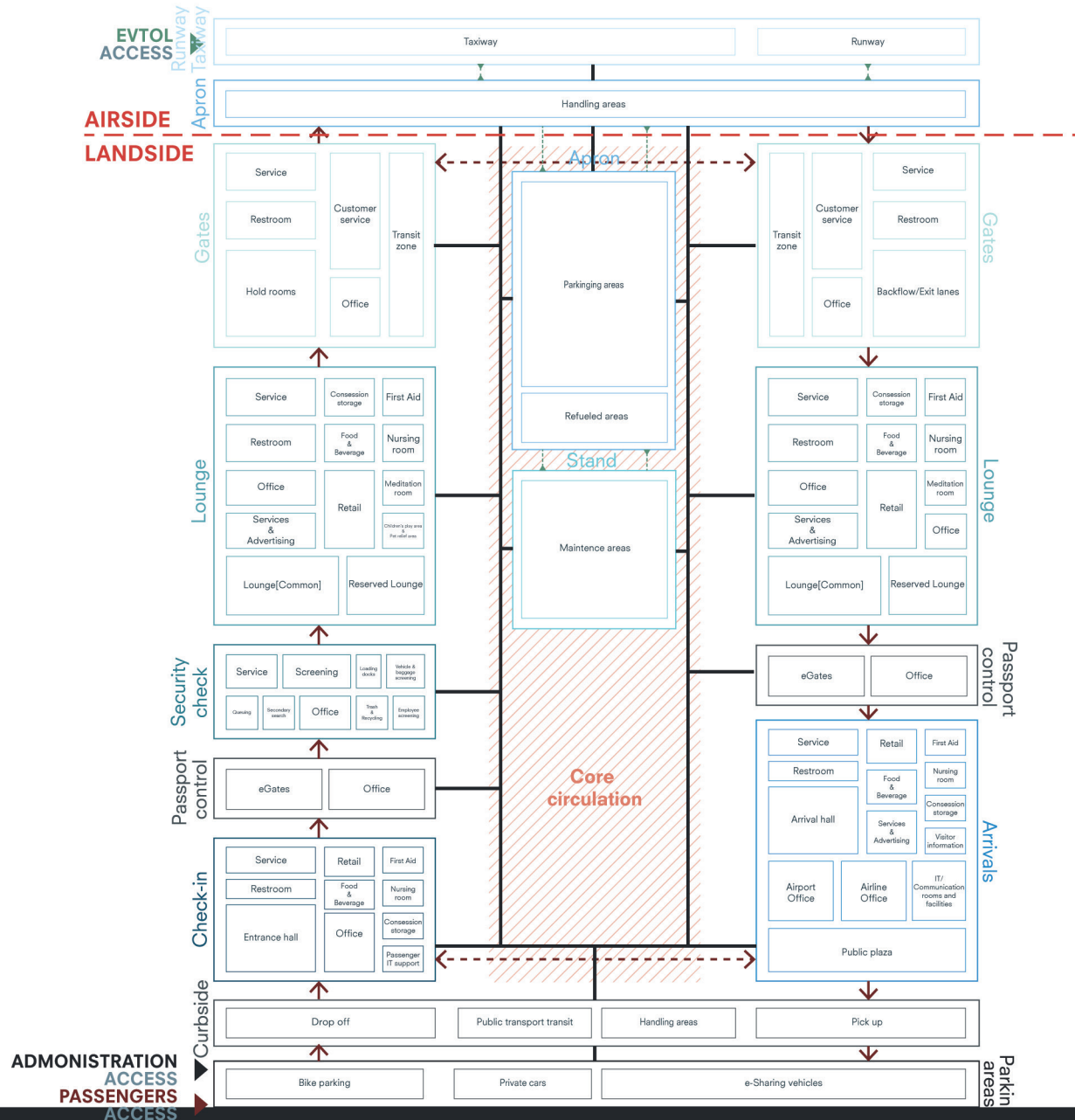
DEVELOPMENT

CONCLUSION

RESEARCH QUESTION

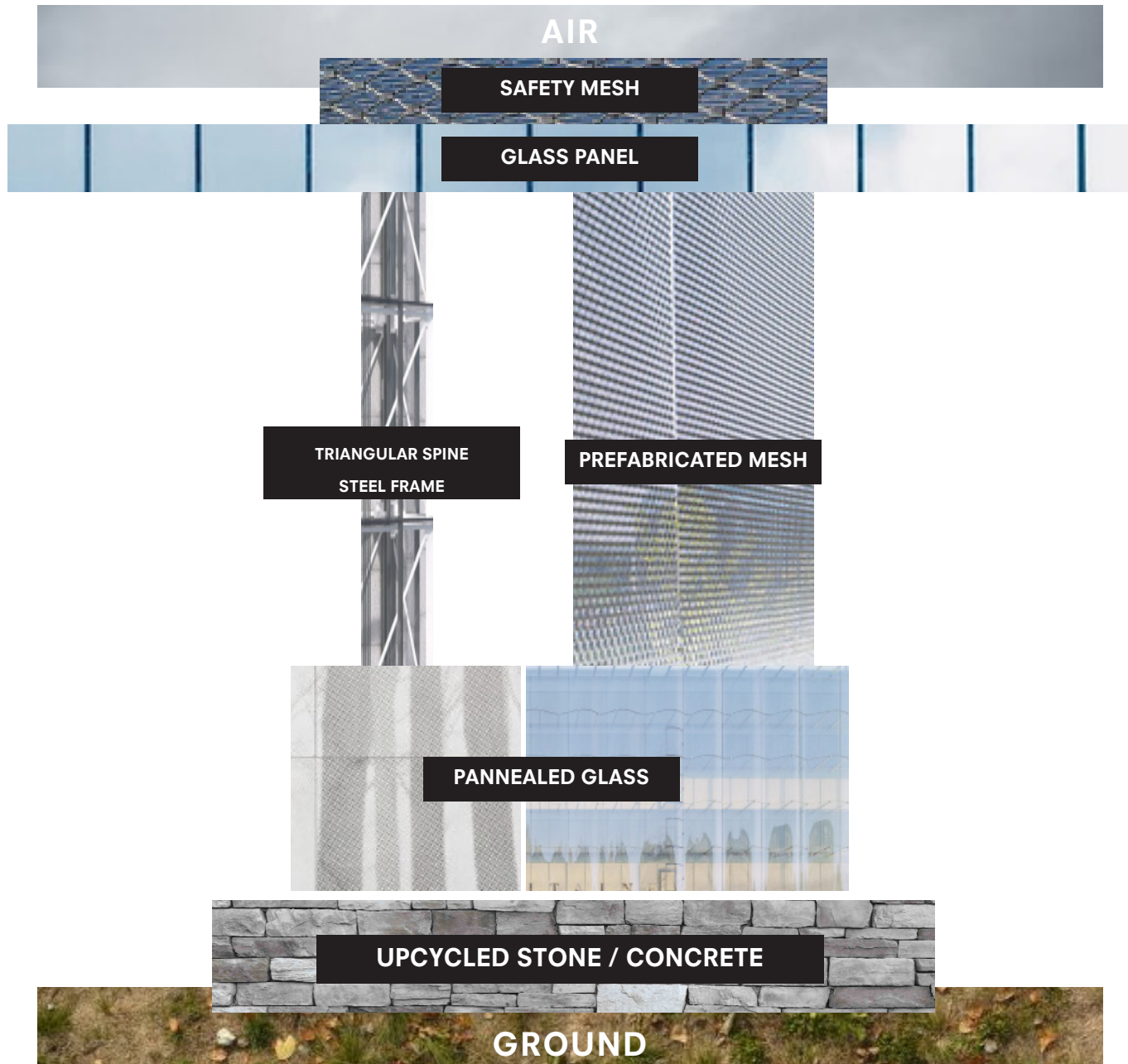
How can we establish an innovative aviation infrastructure into a city centre?

Conclusion PROGRAMME



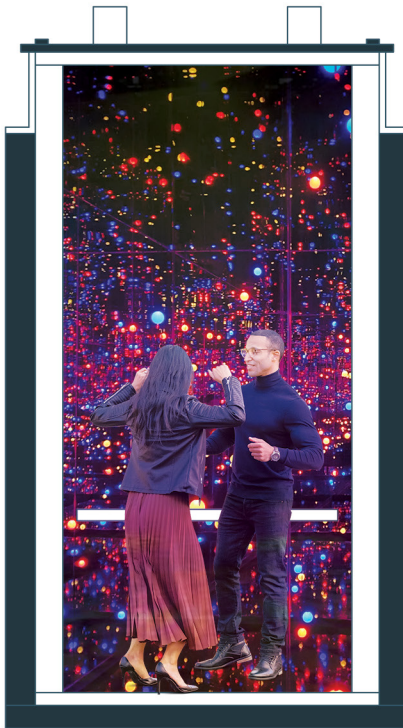
Conclusion

MATERIAL



Conclusion

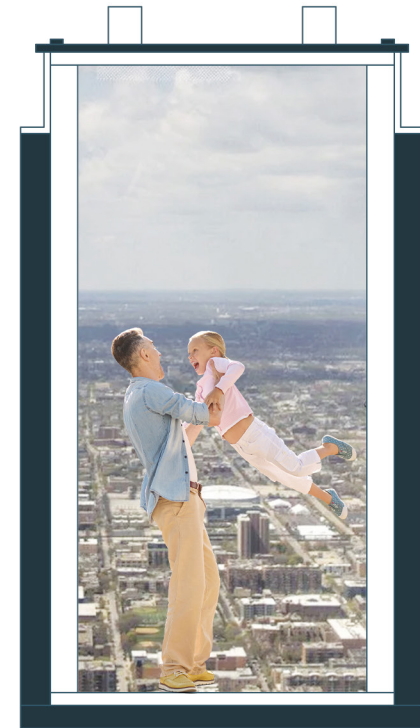
LIFT DESIGN



Departure



Arrival



Visitor

Conclusion

MEZZANINE LEVEL



GATE/LIFTS' CORRIDOR



Conclusion
GROUND

SKY HUB
BERLIN
VERTIPORT



Conclusion

AIR



Thank you.

KEY SPACES

Check-in

Service	219 m ²
Restroom	180 m ²
Entrance hall	450 m ²
Meditation room	12 m ²
First Aid	15 m ²
Retail	81 m ²
Food & Beverage	138 m ²
Consession storage	18 m ²
Passenger Technology support	18 m ²
Airport administration	110 m ²
Airline administration	219 m ²

Passport control

eGATEs	50 m ²
Airport administration	50 m ²

Security check

Service	128 m ²
Queuing	40 m ²
Screening	297 m ²
Secondary search	47 m ²
Airport administration	100 m ²
Loading docks	30 m ²
Trash & Recycling	84 m ²
Employee screening	50 m ²
Vehicle & baggage screening	78 m ²

Lounge

Service	748 m ²
Restroom [x2]	360 m ²
Meditation room [x2]	24 m ²
First Aid [x2]	30 m ²
Nursing room [x2]	30 m ²
Lounge [Common]	1000 m ²
Reserved lounge	695 m ²
Children's play areas	50 m ²
Pet relief areas	25 m ²
Retail	277 m ²
Food & Beverage	471 m ²
Consession storage	62 m ²
Services & Advertising	250 m ²
Airport administration	187 m ²
Airline administration	748 m ²

Gates

Service [x2]	578 m ²
Restroom [x2]	360 m ²
Hold rooms [Departure]	688 m ²
Transit zone	500 m ²
Backflow/Exit lanes	188 m ²
Administration [x2]	964 m ²
Airline customer service [x2]	400 m ²
Port authority spaces	178 m ²

Arrivals

Service	393 m ²
Restroom	180 m ²
Public plaza	550 m ²
Visitor information	20 m ²
First Aid	15 m ²
Arrival hall	413 m ²
Retail	146 m ²
Food & Beverage	247 m ²
Consession storage	35 m ²
Services & Advertising	30 m ²
Airport administration	196 m ²
Airline administration	250 m ²
IT/Communication rooms and facilities	143 m ²