



S U S T A I N A B L E

PARLIAMENT FOR GERMANY | P5 2023.07.07

RAFAEL BAULER THEISS | COMPLEX PROJECTS









PARLIAMENT?





1872

UNIFICATION OF GERMANY



1884



POWER OF TERRITORY



1955

ECONOMICAL PLAN 50 IN 5 YEARS BRASILIA



1960

POWER OF PROGRESS



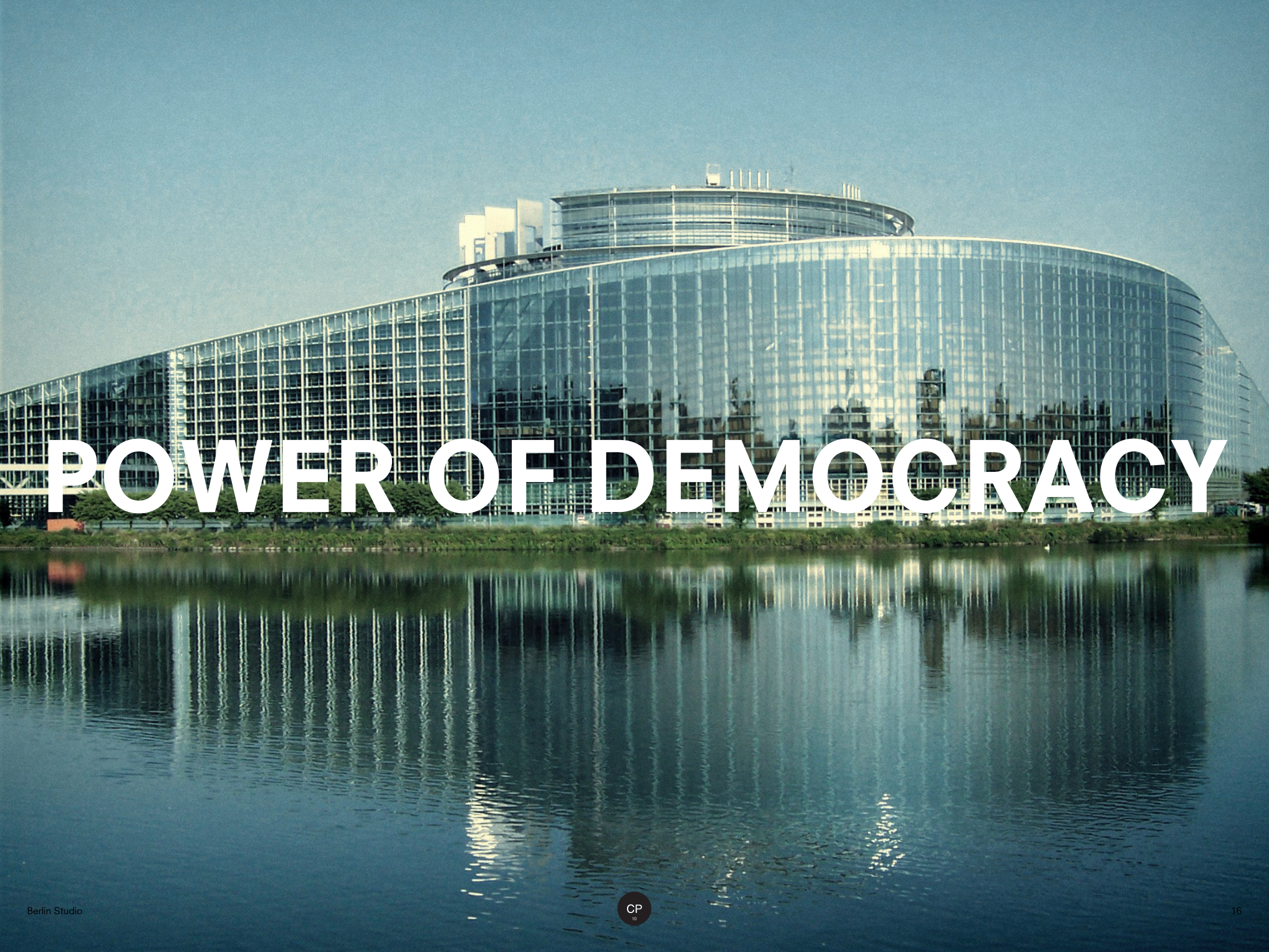


1992

MAASTRICHT TREATY EUROPEAN UNION

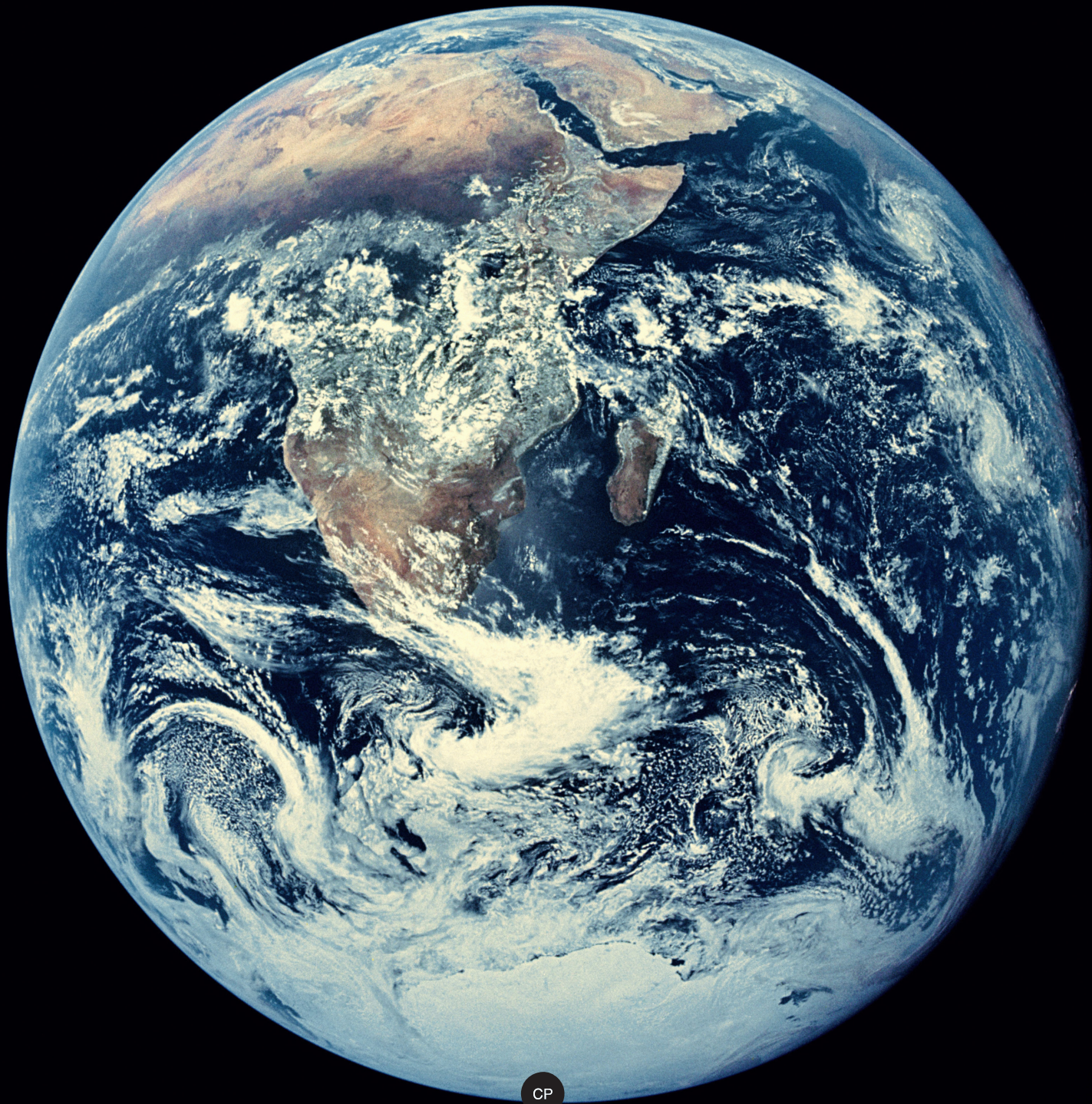


1999



POWER OF DEMOCRACY

WHAT'S NEXT?



GLOBAL AGREEMENTS



UN ASSEMBLY | 1989



UN RIO SUMMIT | 1992



UN KYOTO PROTOCOL | 1997



UN PARIS AGREEMENT | 2015



GERMAN AGREEMENT

BERLIN CLIMATE ACT | 2021

POWER OF SUSTAINABILITY?

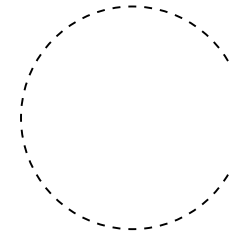
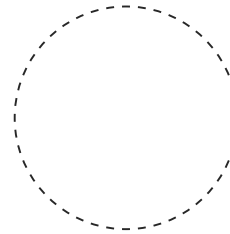
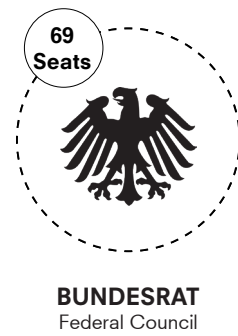
HOW DOES SUSTAINABILITY AFFECT THE ARCHITECTURE OF POWER?



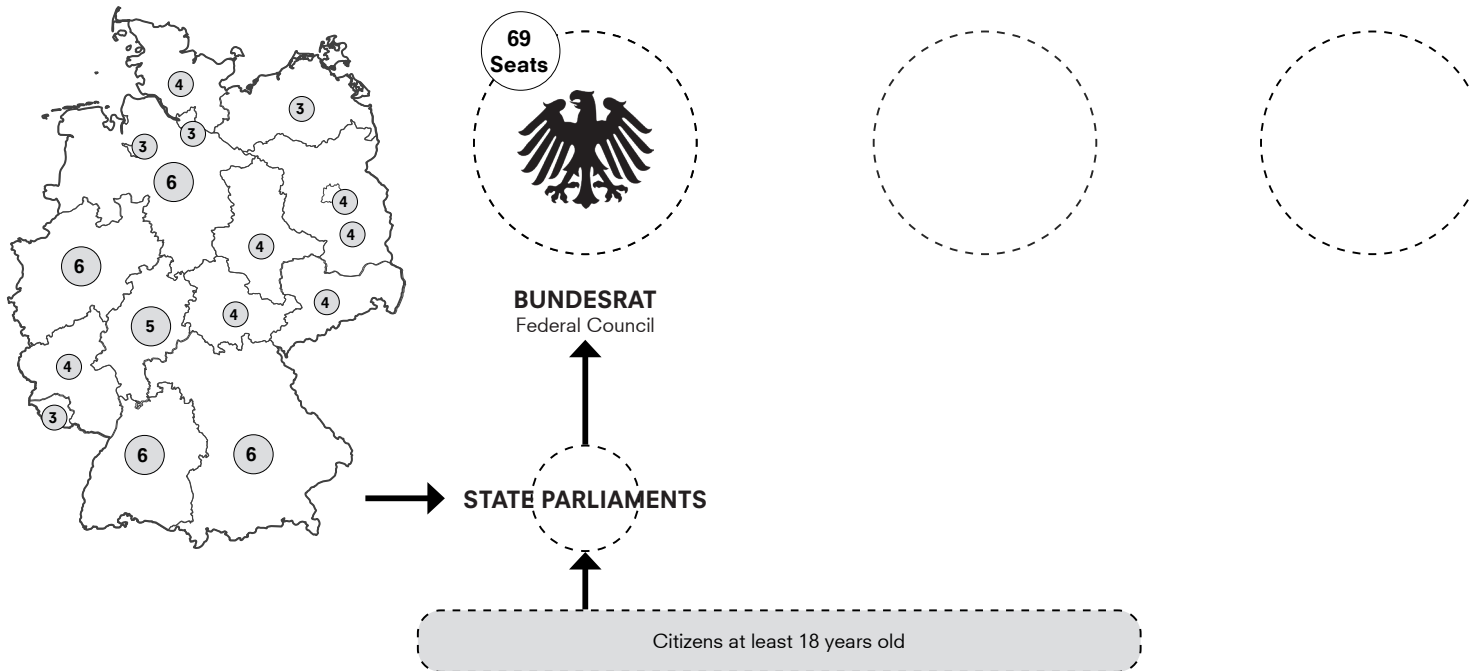
CLIENT

EXISTING BUNDES RAT BUILDING

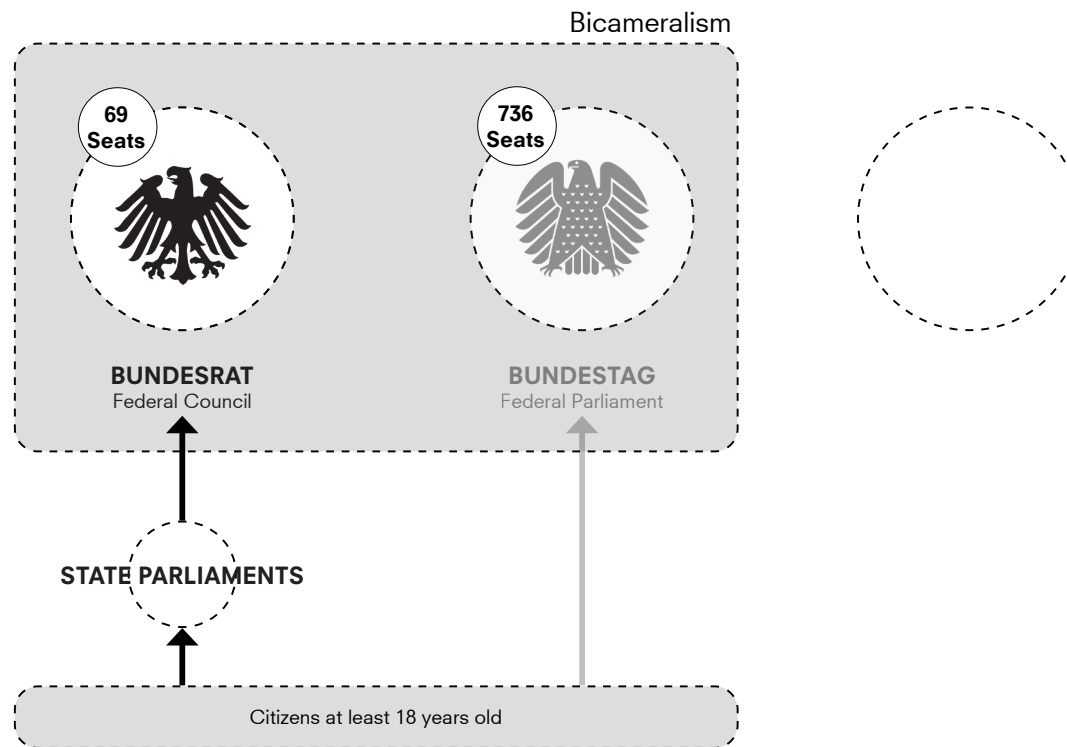
LAW MAKING ORGANIZATION



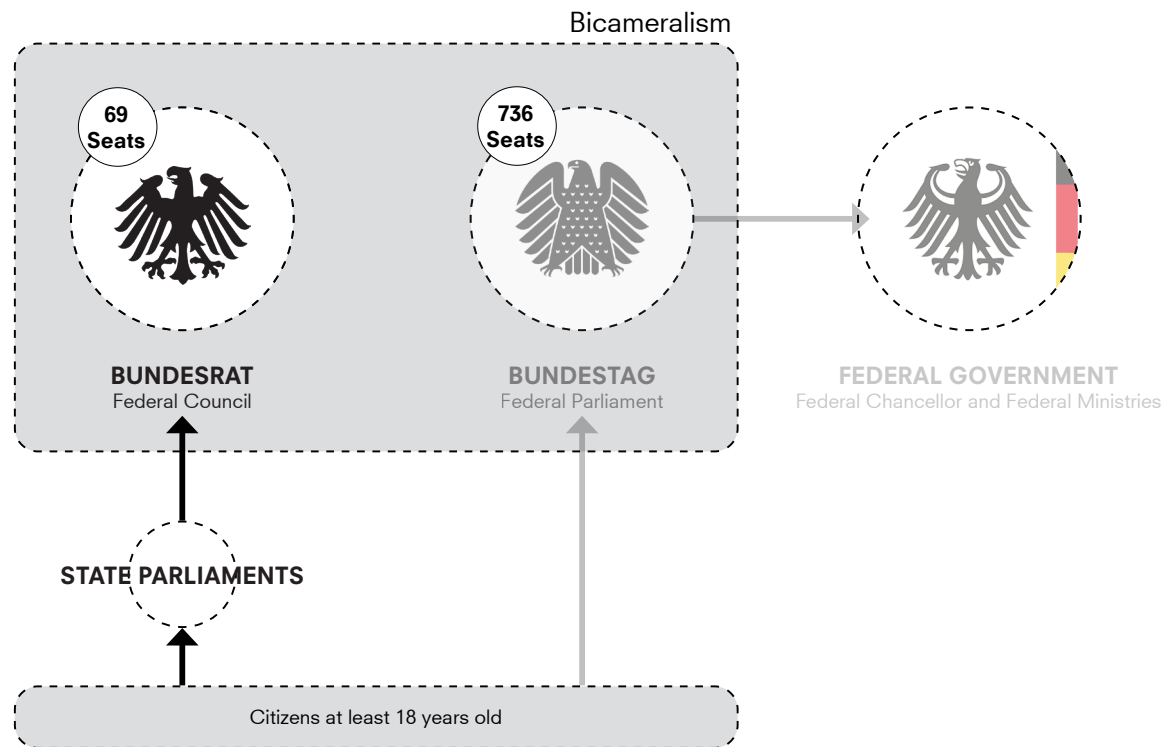
LAW MAKING ORGANIZATION



LAW MAKING ORGANIZATION



LAW MAKING ORGANIZATION

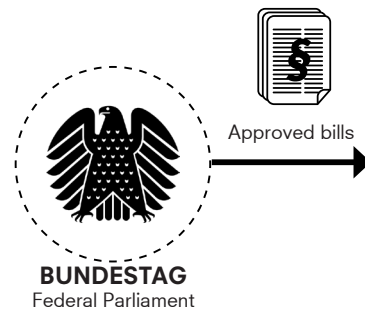


BICAMERALISM IN GERMANY

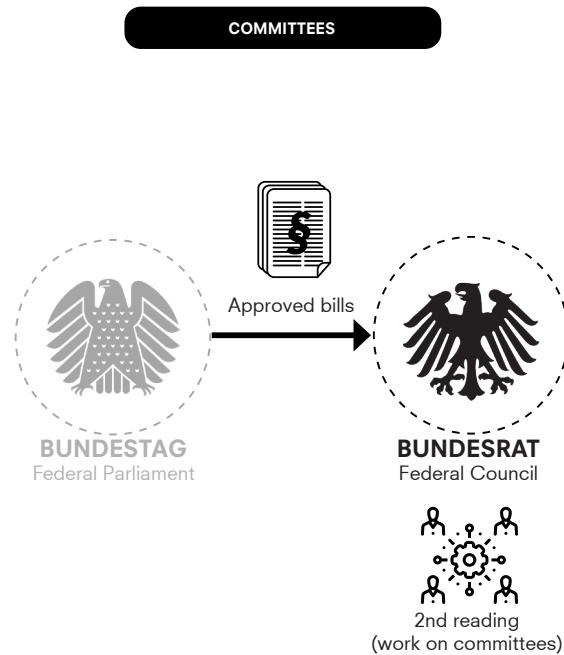
The European Union, the United States, and Germany are characterized by what political scientists call *strong bicameralism*. These systems feature two legislative bodies (houses or chambers) of relative equality of standing and lack of political congruence, owing to their dissimilar political composition. In all three systems, laws cannot be passed unless they are approved by both chambers in identical form. Strong bicameralism makes it necessary for them to accommodate the divergent interests of the members while making it necessary for them to accommodate the divergent interests of the members while negotiations between the chambers (inter-chamber negotiations) an integral part of legislative politics.



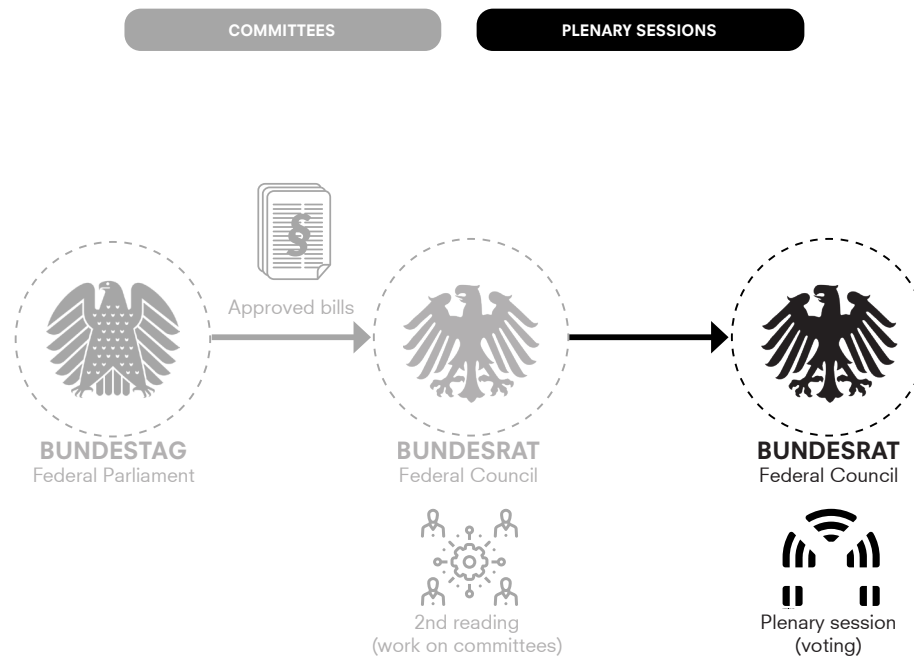
LAW MAKING PROCESS



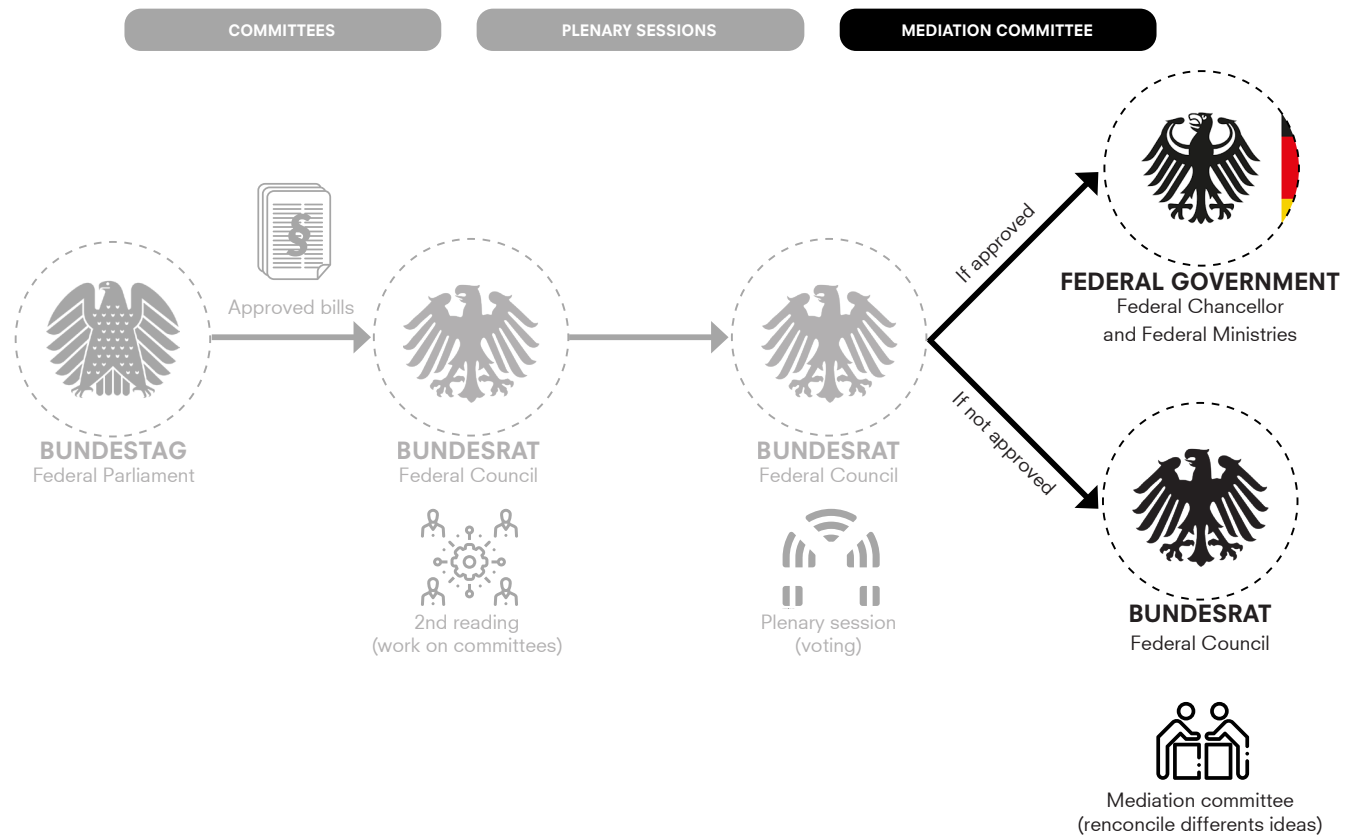
LAW MAKING PROCESS



LAW MAKING PROCESS



LAW MAKING PROCESS



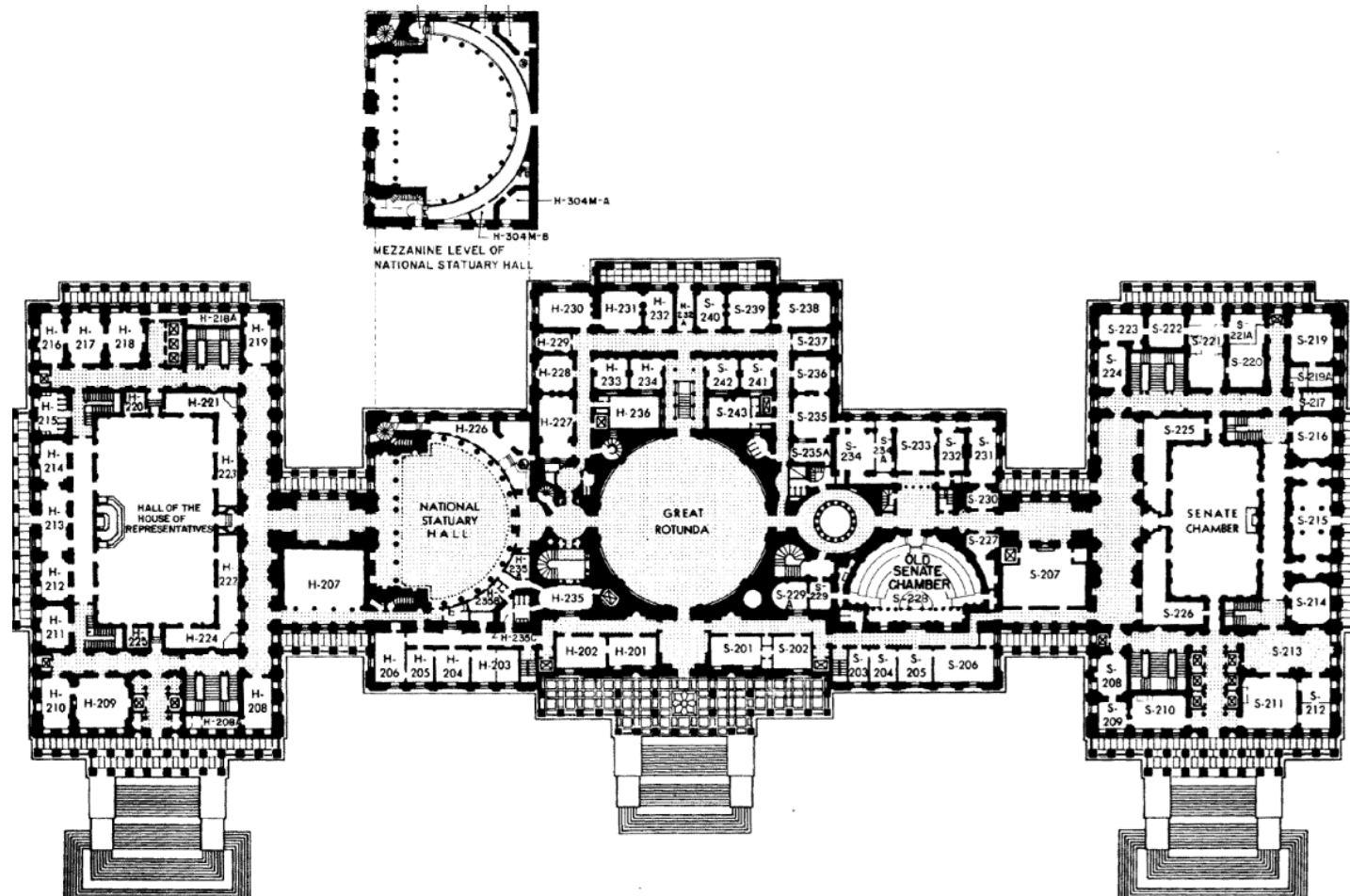
research

BICAMERALISM IN THE US

**UPPER
HOUSE**

**LOWER
HOUSE**

BICAMERALISM IN THE US



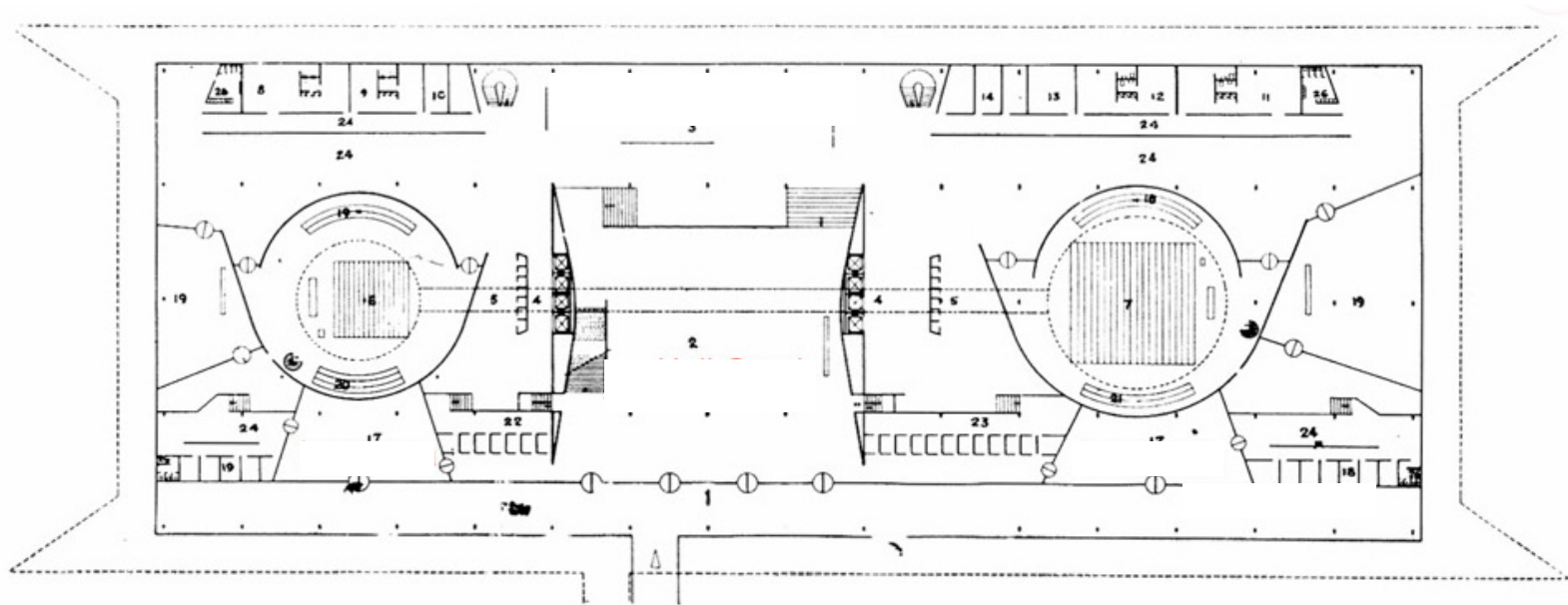
research

BICAMERALISM IN BRAZIL

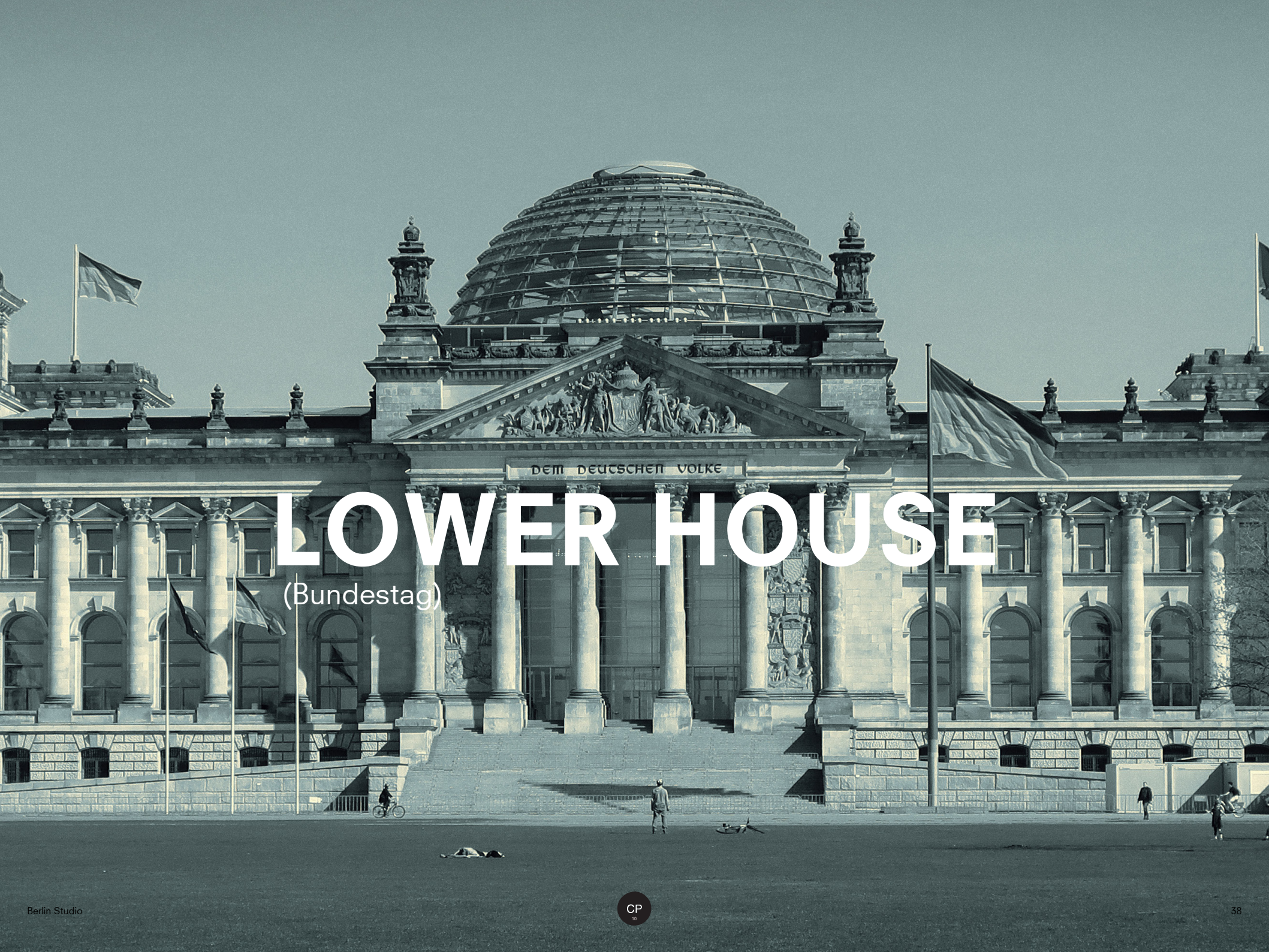
**UPPER
HOUSE**

**LOWER
HOUSE**

BICAMERALISM IN BRAZIL



IN GERMANY...



LOWER HOUSE

(Bundestag)



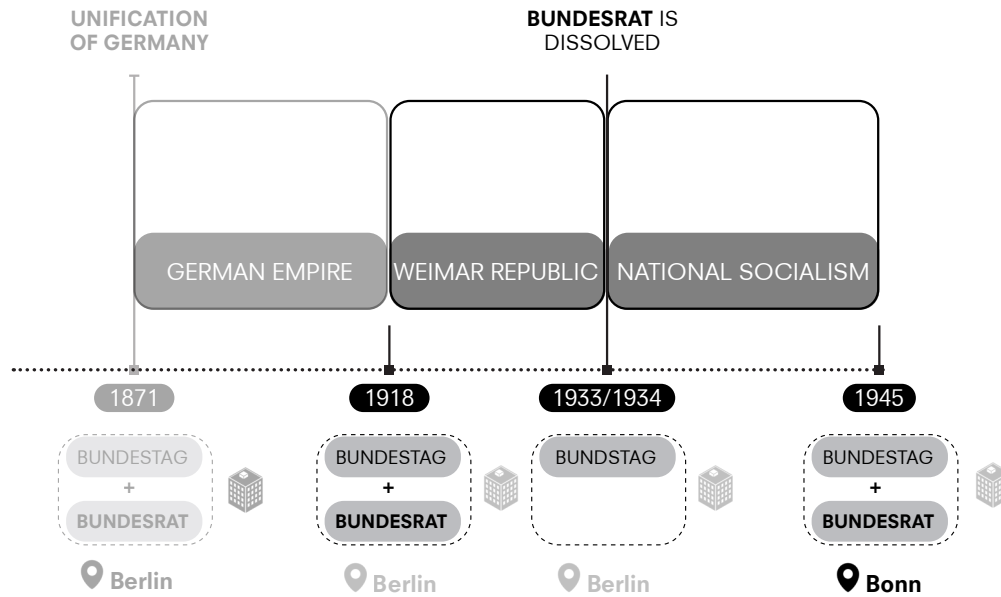
UPPER HOUSE

(Bundesrat)

BUNDESTAG / BUNDESRAT TIMELINE



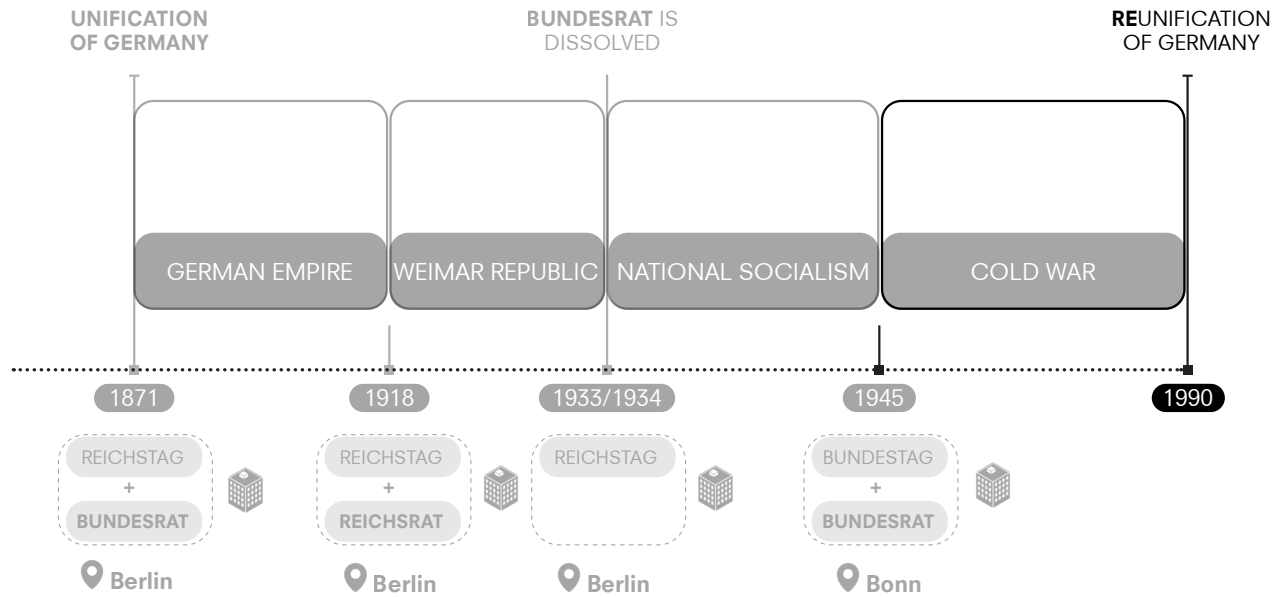
BUNDESTAG / BUNDESRAT TIMELINE





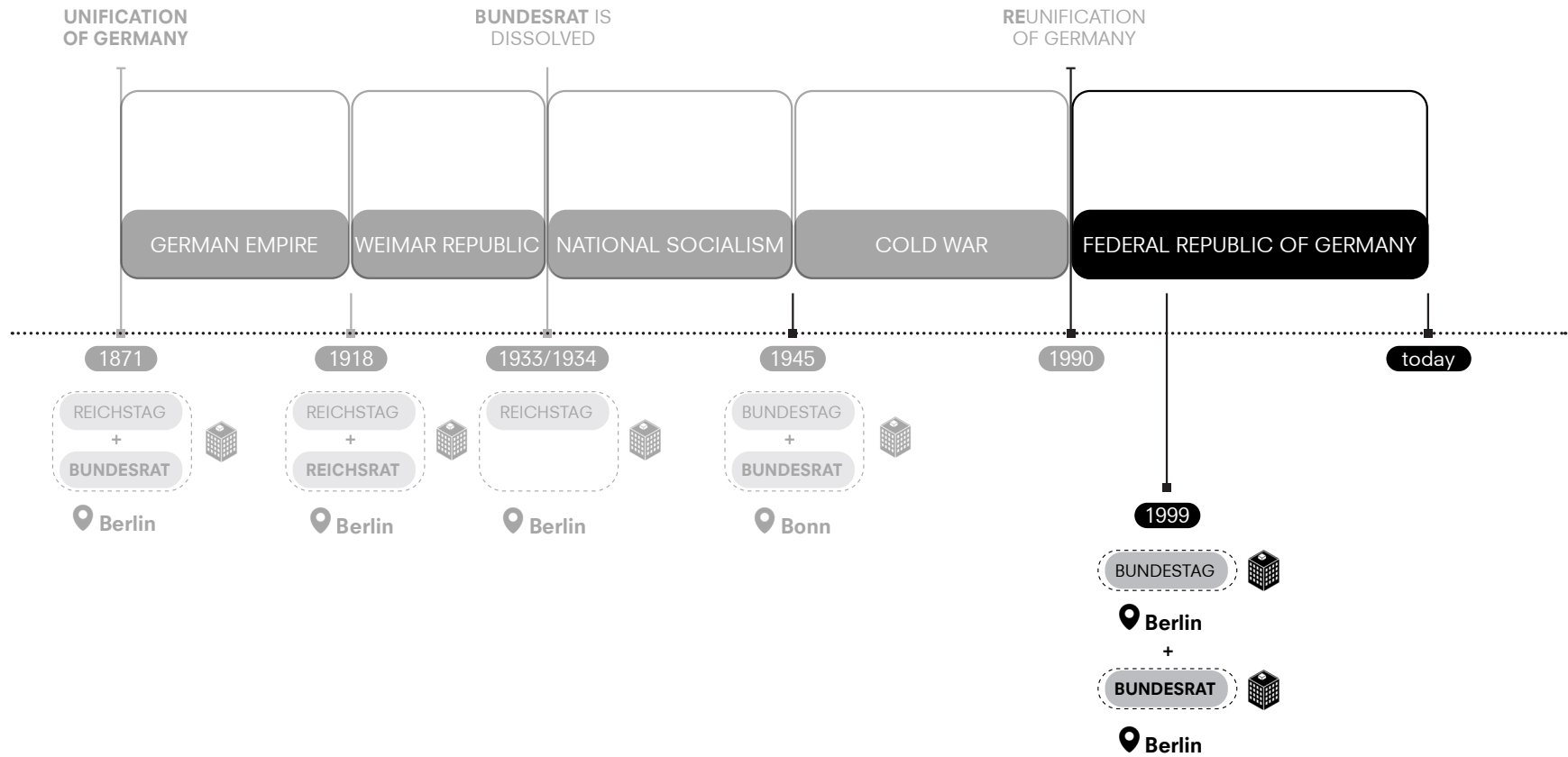


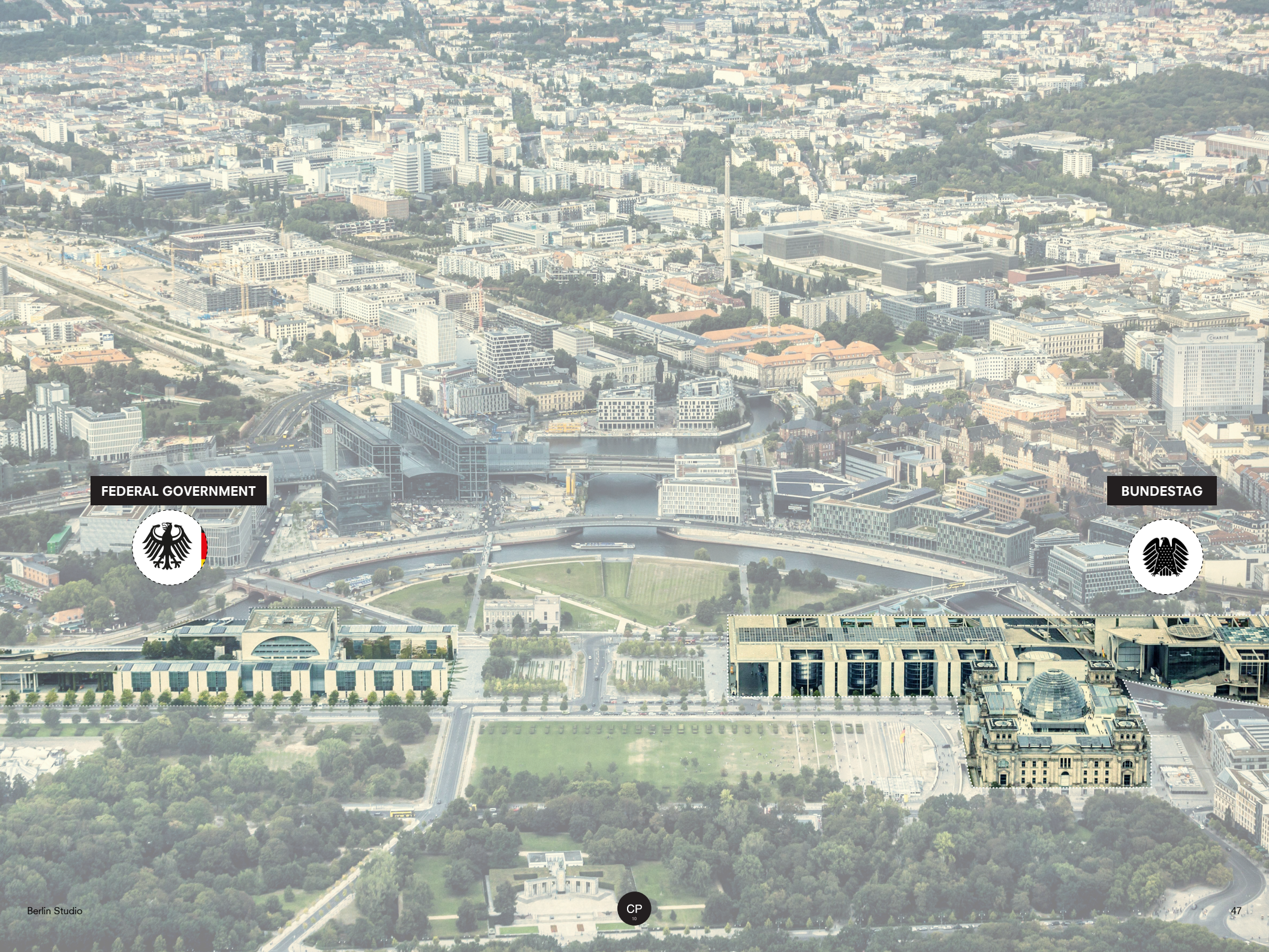
BUNDESTAG / BUNDESRAT TIMELINE





BUNDESTAG / BUNDESRAT TIMELINE





FEDERAL GOVERNMENT



BUNDESTAG



FED. GOV. AND BUNDESTAG



research

BUNDESRAT PRUSSIAN HOUSE OF LORDS



research

BUNDESRAT



research

BUNDES RAT WHAT IF?



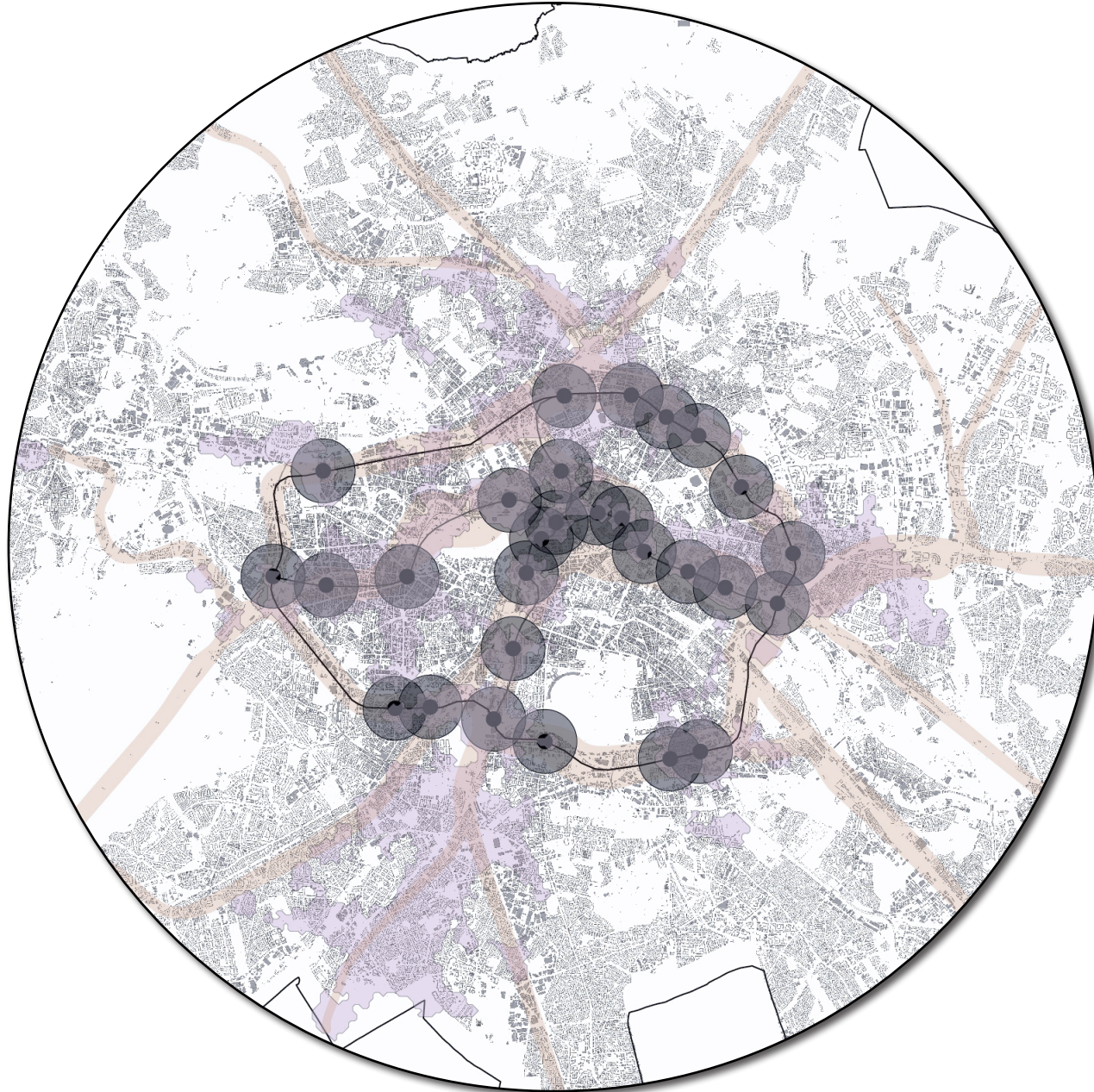
research

BICAMERALISM IN GERMANY WHAT IF?

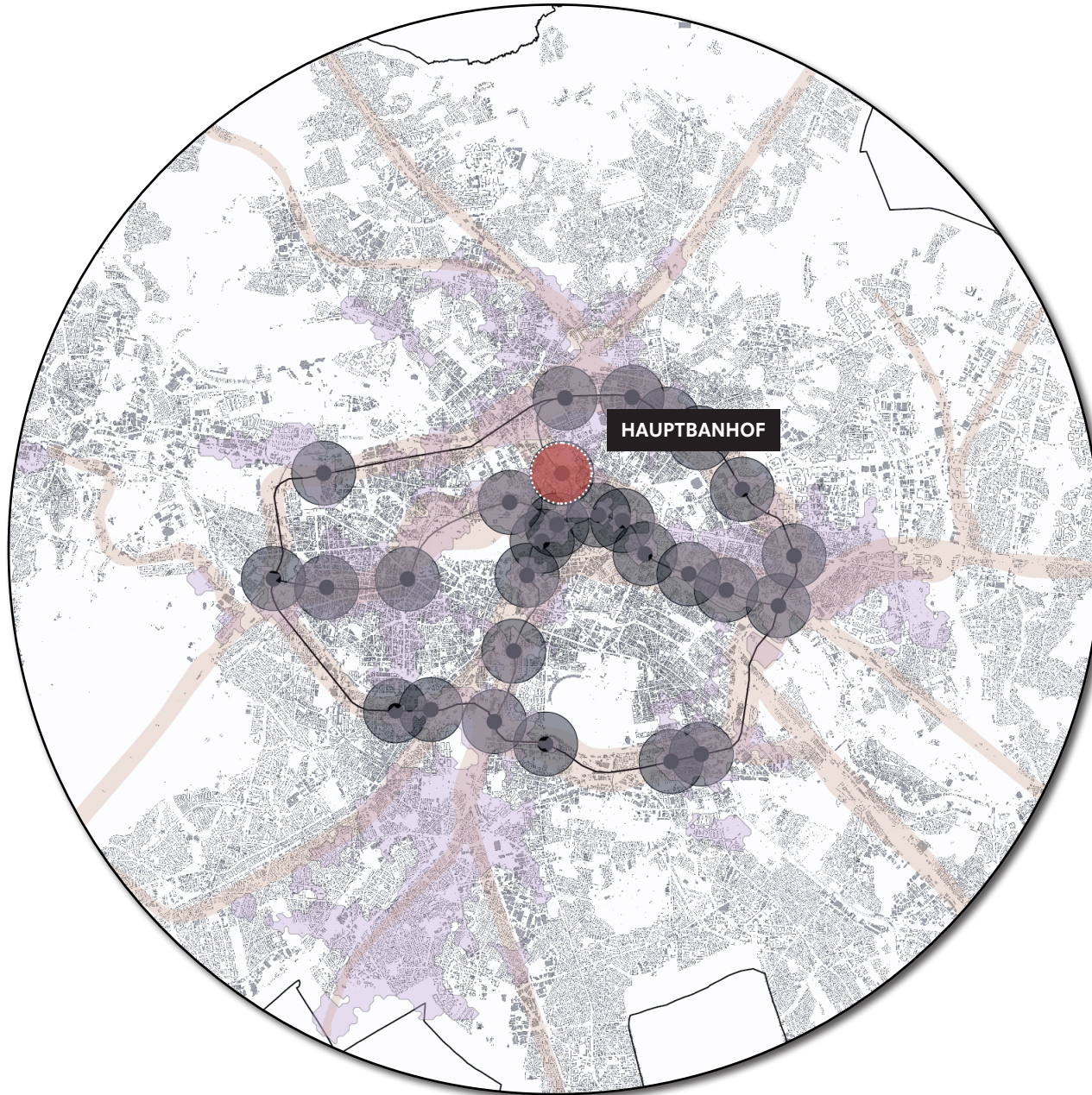


SITE

GROUP VISION MOBILITY



GROUP VISION MOBILITY



research
SITE

HAUPTBANHOF

CHANCELLERY

BUNDESTAG

research

SITE REQUIREMENTS

VISIBILITY FROM THE S-BAHN

research

SITE REQUIREMENTS



VISIBILITY FROM THE REICHSTAG

research

SITE REQUIREMENTS

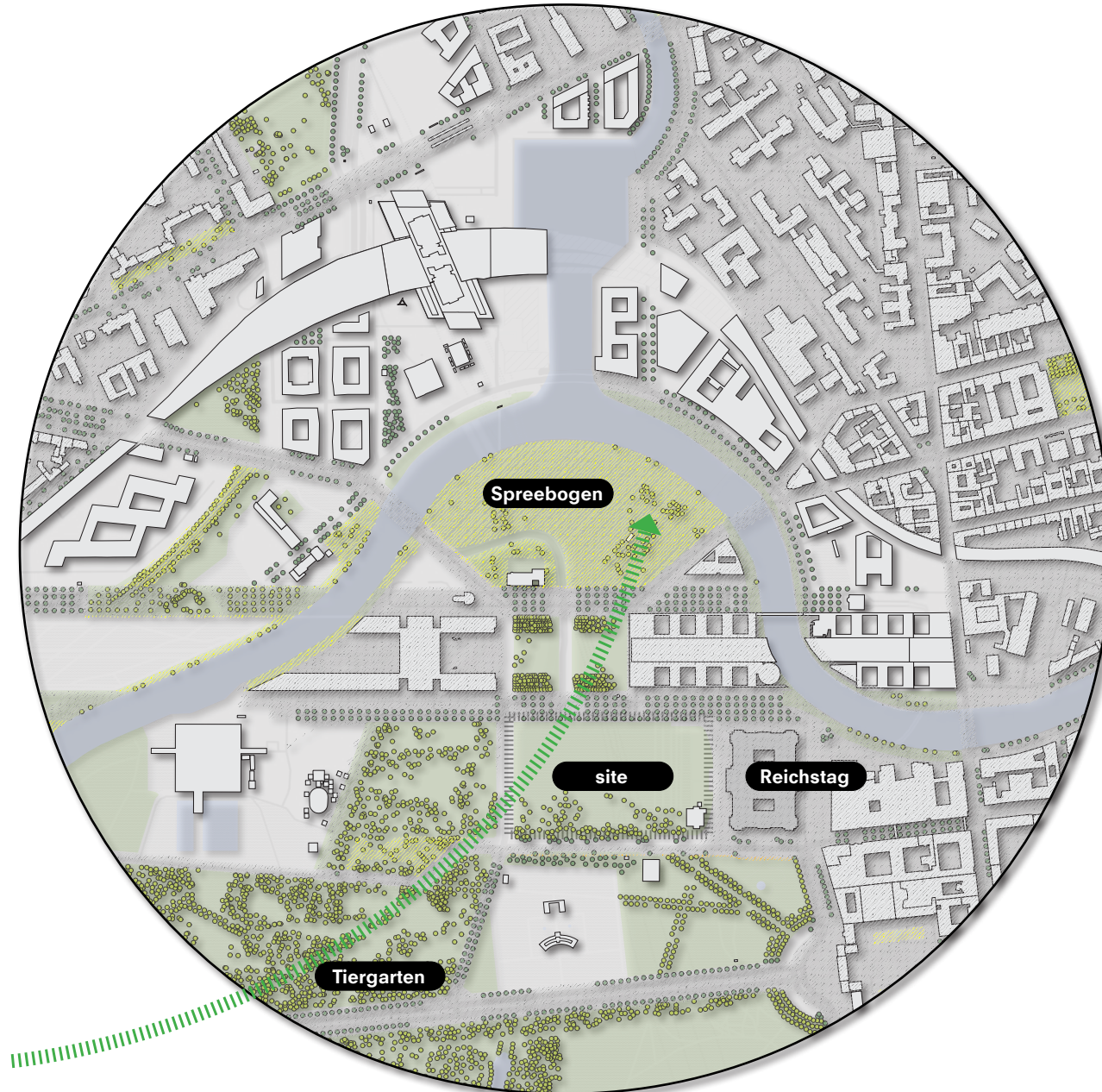
ACCESS TO THREE ROADS

research

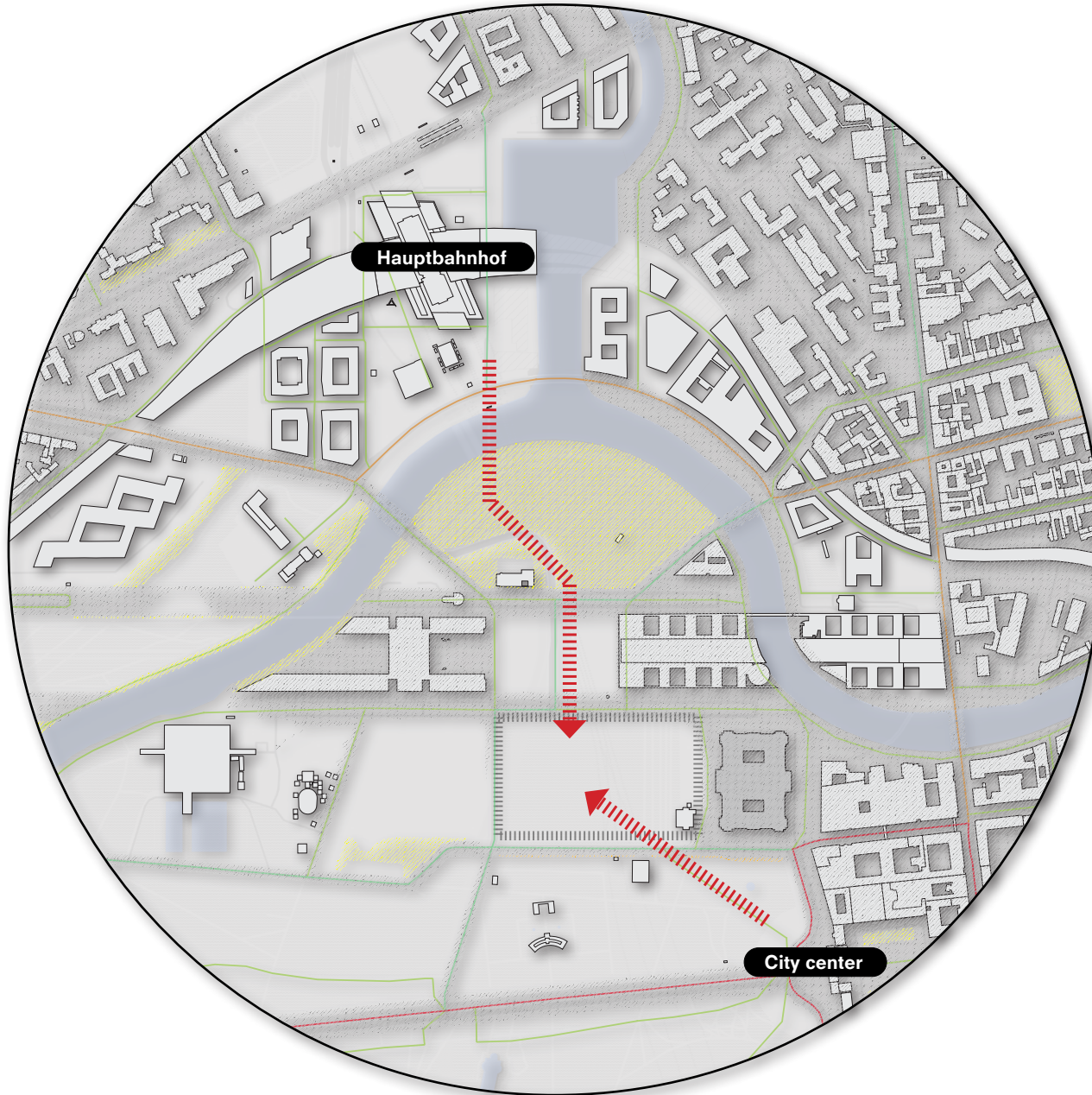
SITE REQUIREMENTS



SITE ANALYSIS GREEN LANDSCAPE



SITE ANALYSIS URBAN CONNECTIONS



SITE ANALYSIS UNDERGROUND INFRASTRUCTURE







PROGRAM

research

BENCHMARKING

1. SIZE/CAPACITY

M²



M²/



297m²/member

FULL PARLIAMENT

Agrarian

PALACIO DE LAS CORTES



42m²

US CAPITOL BUILDING



253m²

REICHSTAG



83m²

HOUSE OF REPRESENTATIVES



99m²

NATIONAL DIET BUILDING



75m²

Industrial

UNITED NATIONS HQ



359m²

CONGRESS OF BRAZIL



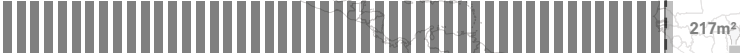
51m²

CHANDIGARH ASSEMBLY



94m²

BANGLADESH PARLIAMENT



217m²

KUWAIT ASSEMBLY



290m²

Information

REICHSTAG FOSTER



312m²

SCOTTISH PARLIAMENT



232m²

SENEDD PARLIAMENT



88m²

VALLETTA PARLIAMENT



88m²

BENIN ASSEMBLY



422m²



research CLUSTERS

Information



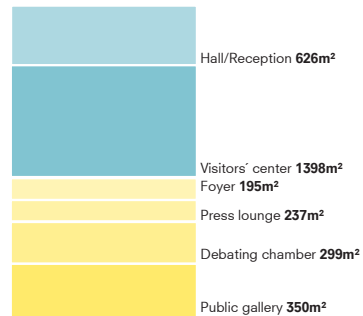
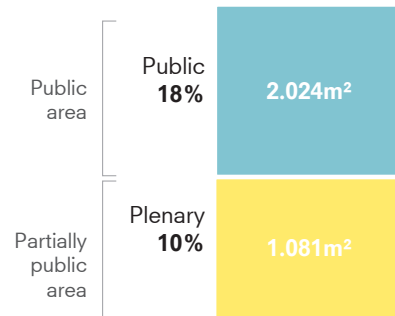
research

PROGRAM BAR

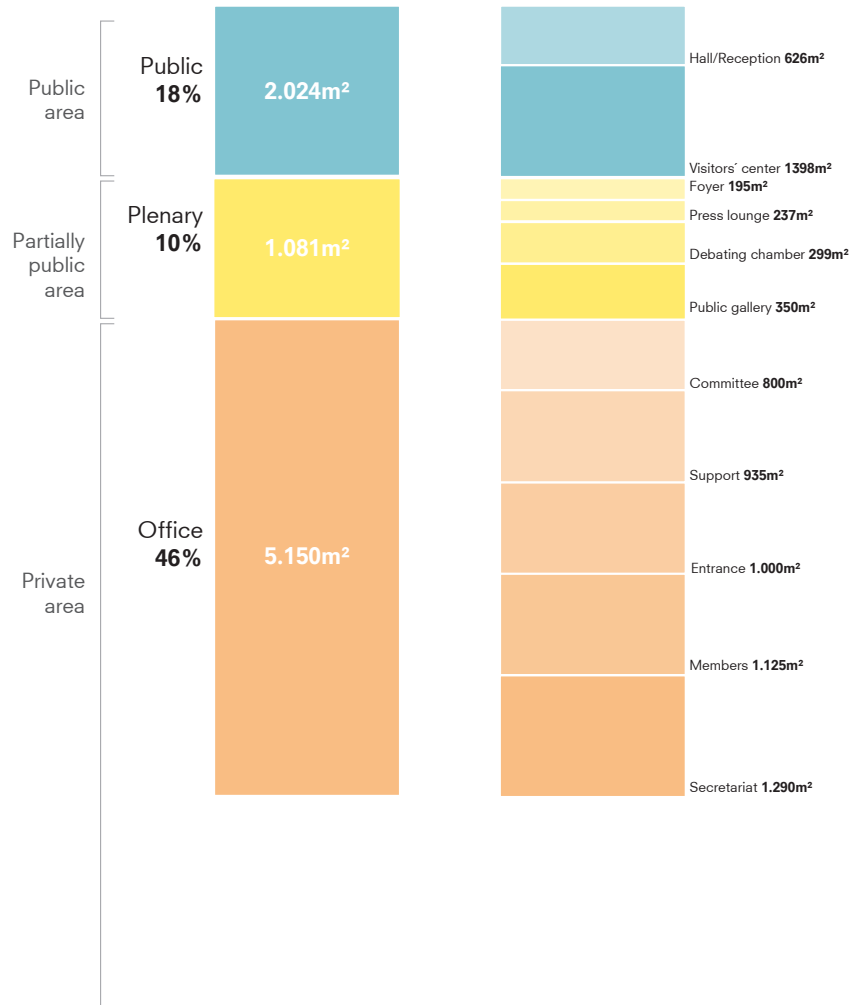


research

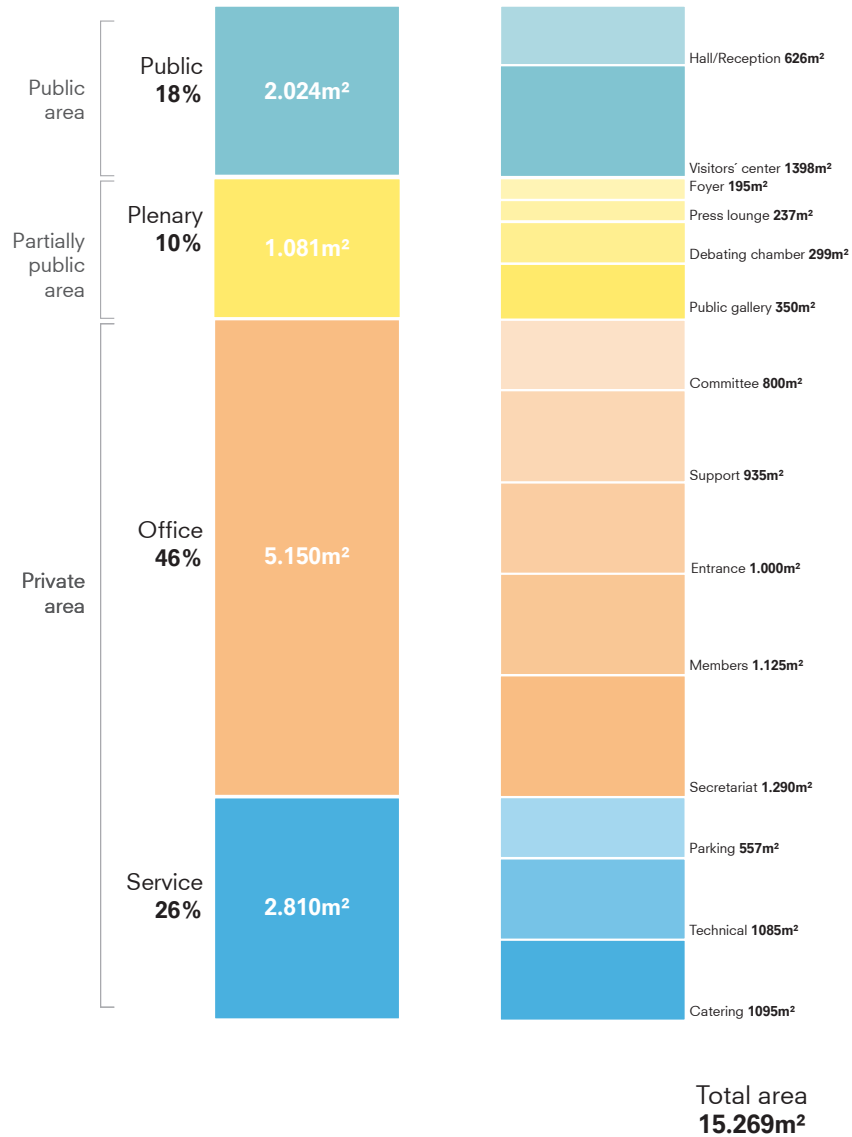
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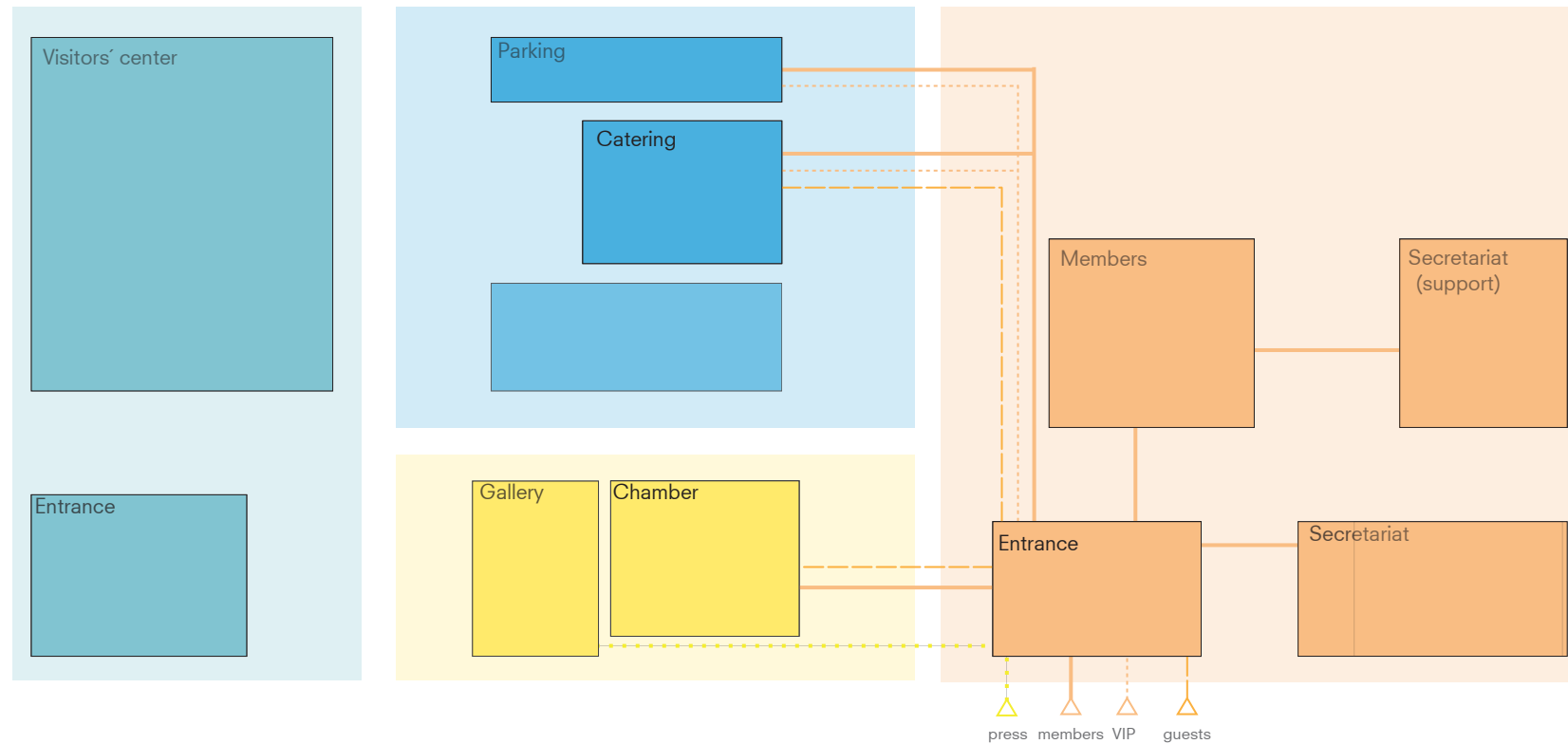
research PROGRAM BAR



research PROGRAM BAR

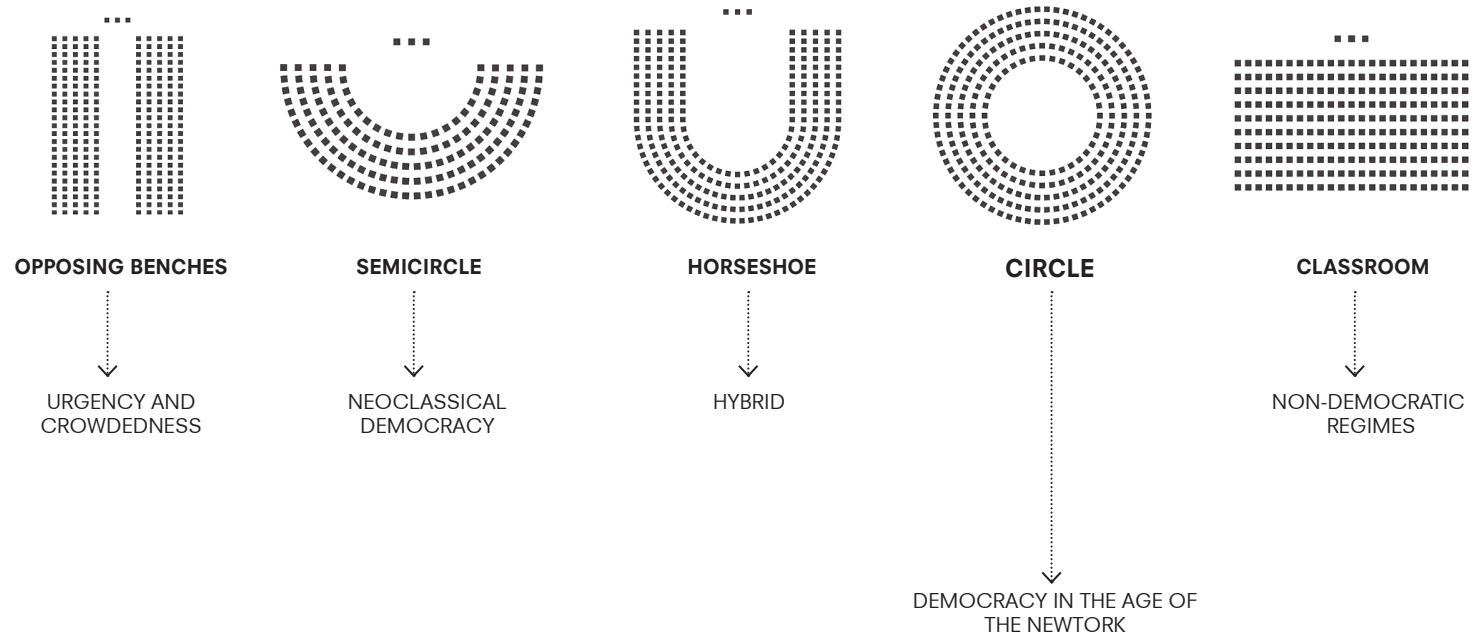


RELATION SCHEME COMPLEXITY OF USERS





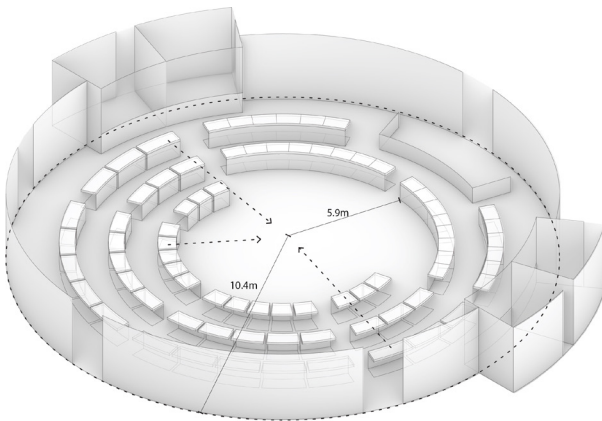
CHAMBER POLITICS OF SPACE



XML (2015)

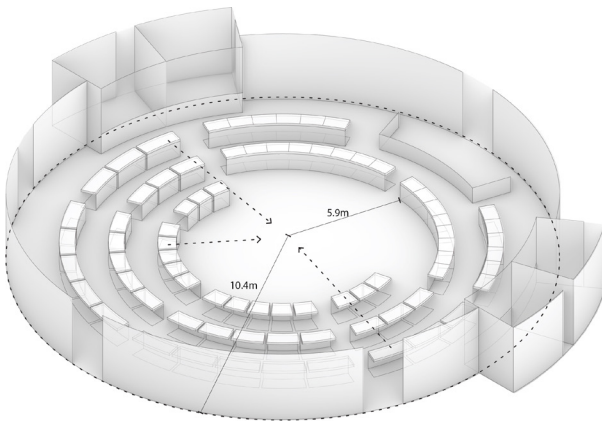
research

KEY SPACE CHAMBER

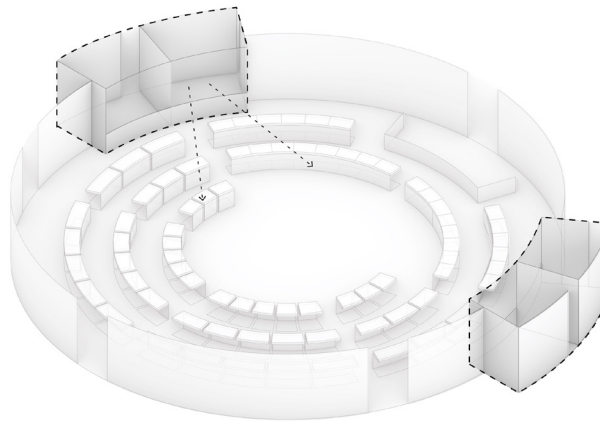


330M² 69 MEMBERS

KEY SPACE CHAMBER

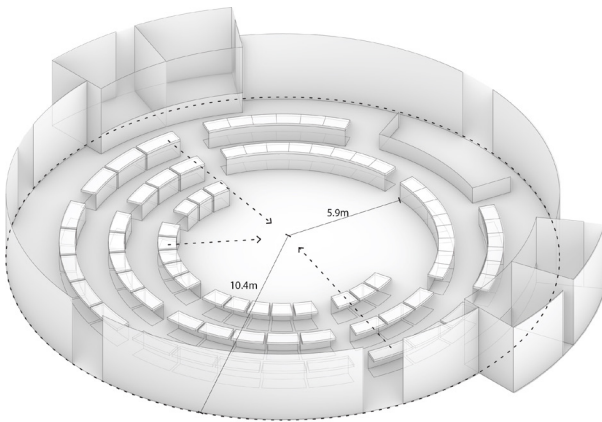


330M² 69 MEMBERS

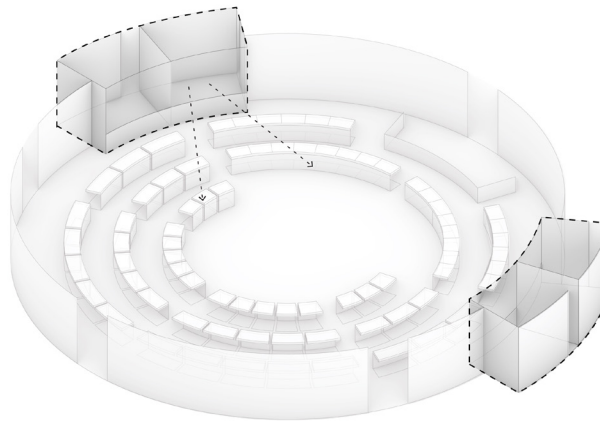


TWO INTERPRETING BOOTHS
FACING THE MEMBERS

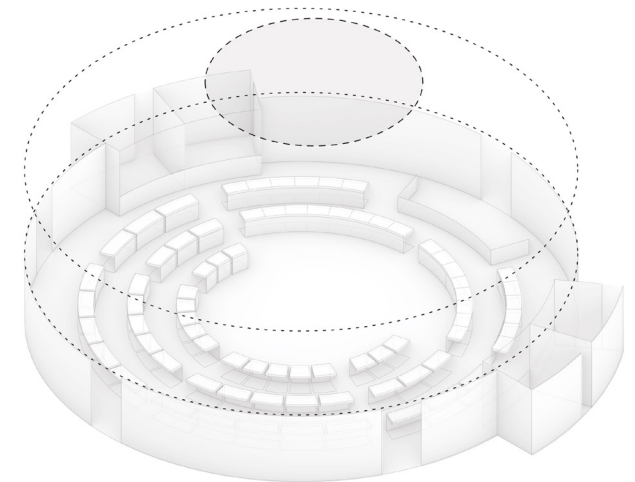
KEY SPACE CHAMBER



330M² 69 MEMBERS

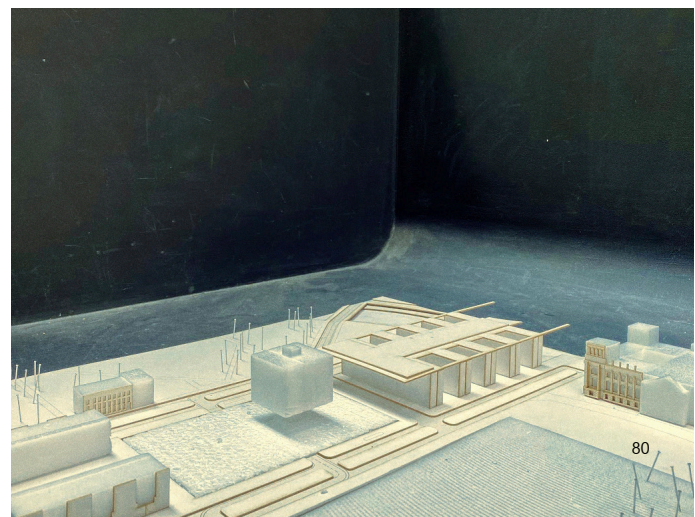
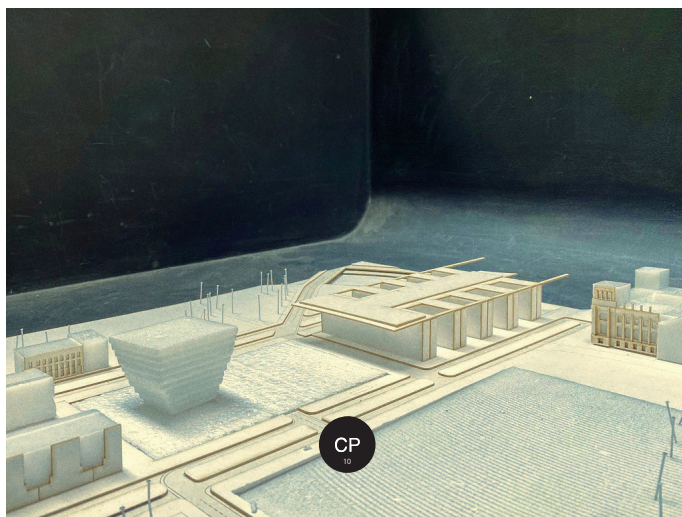
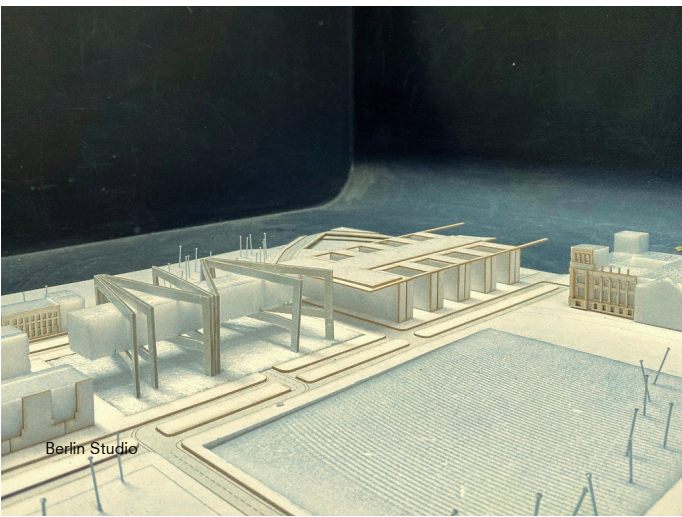
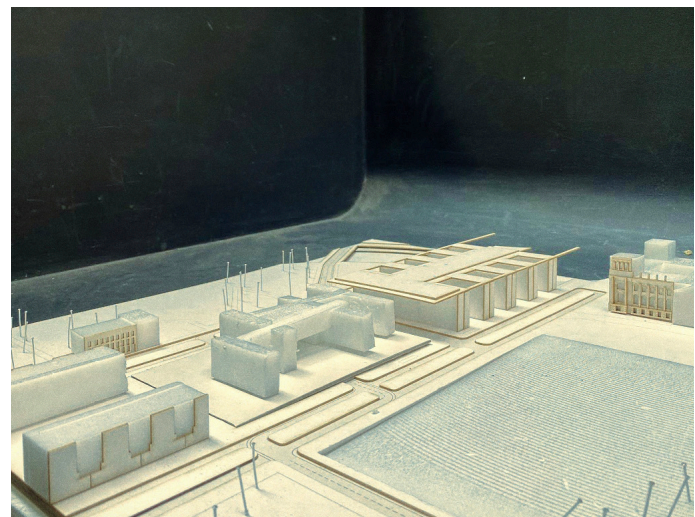
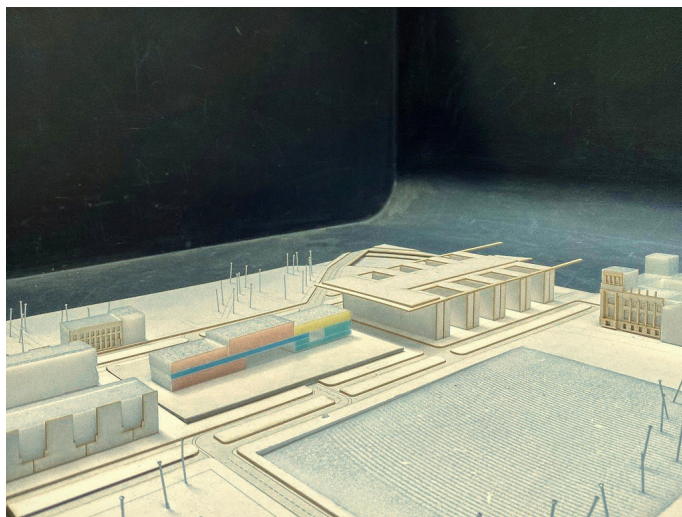
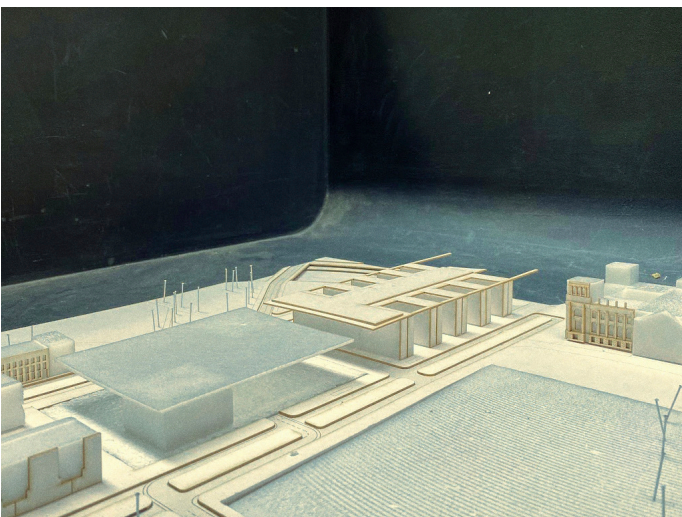
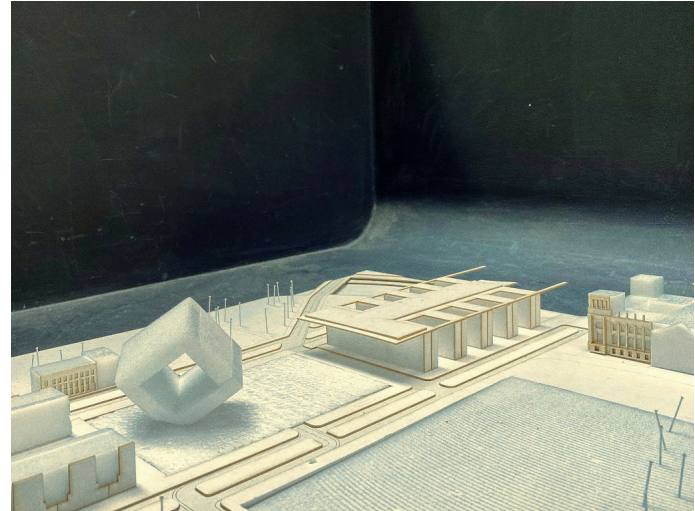
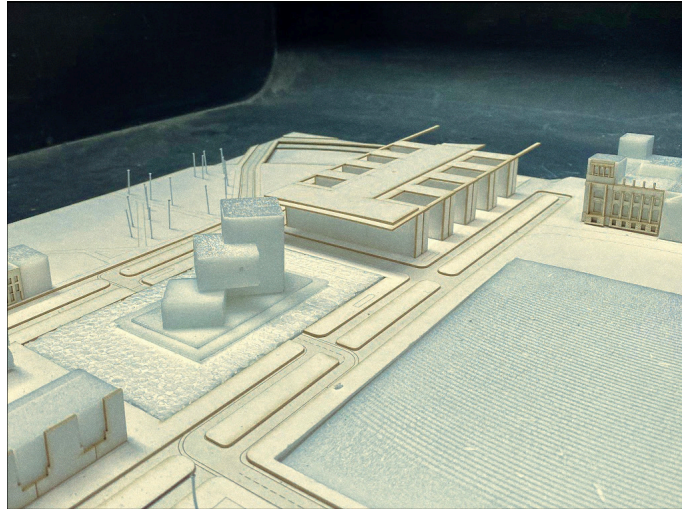
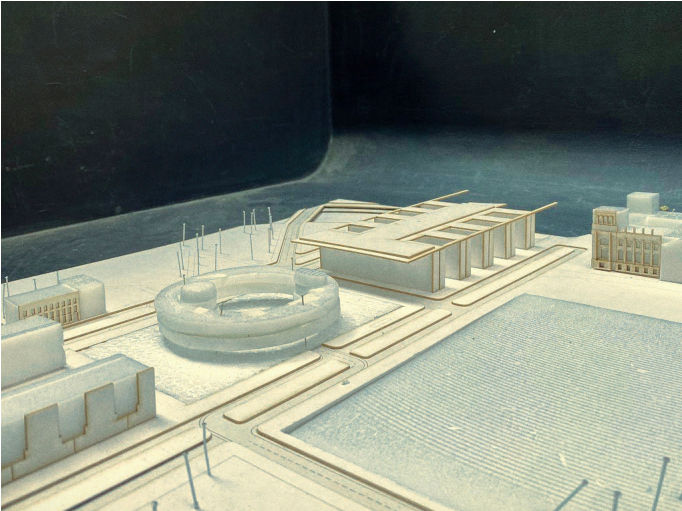


TWO INTERPRETING BOOTHS
FACING THE MEMBERS



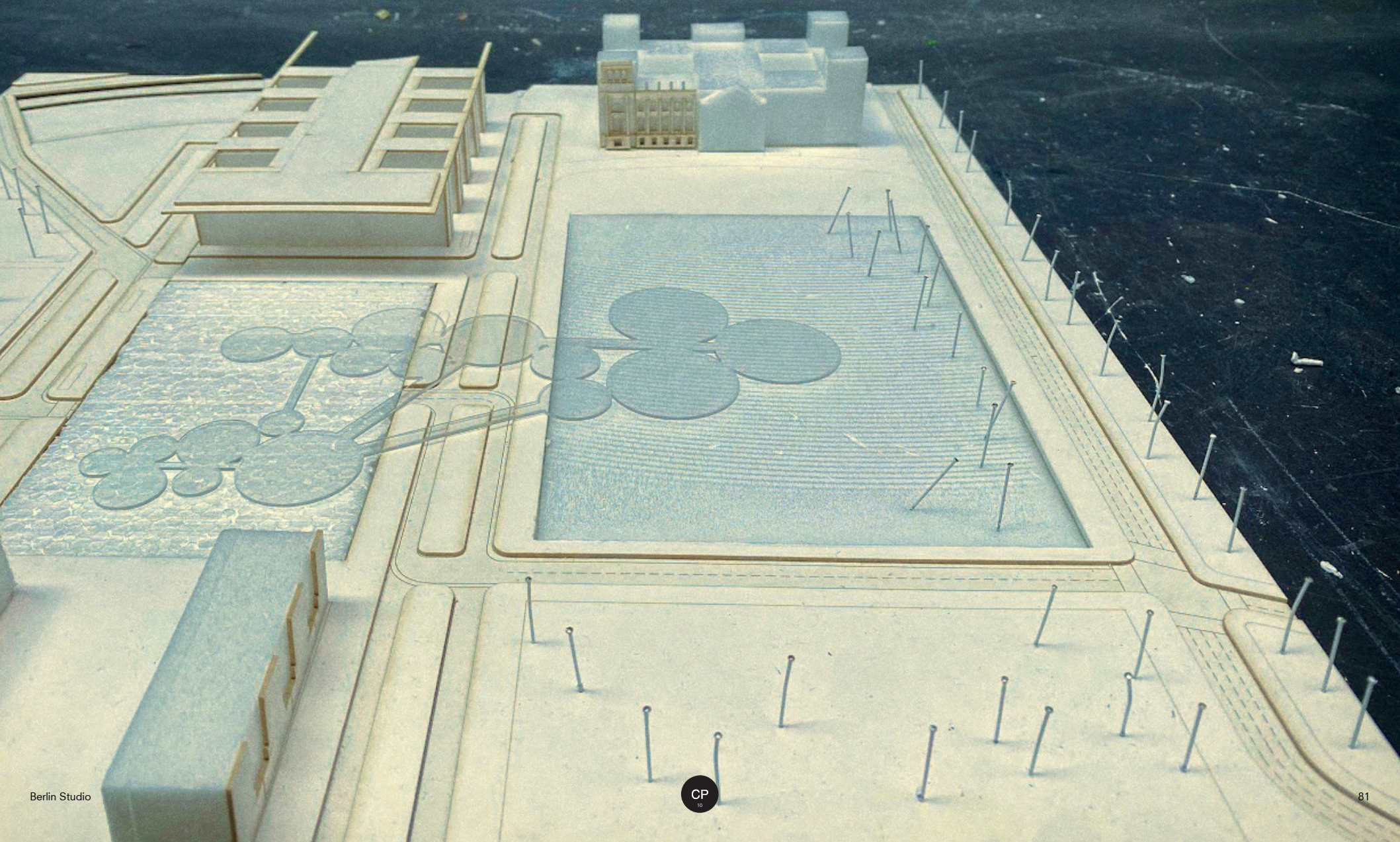
VISIBILITY FROM GALLERY AND
TOP OPENING FOR DAY LIGHT

DESIGN



design

LINEAR UNDERGROUND



design

COMPACT PARTIALLY UNDERGROUND



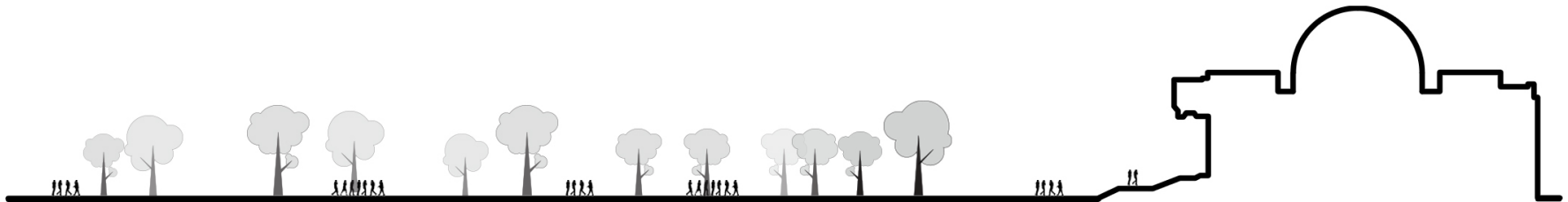
design

FLAT SQUARE PARTIALLY UNDERGROUND



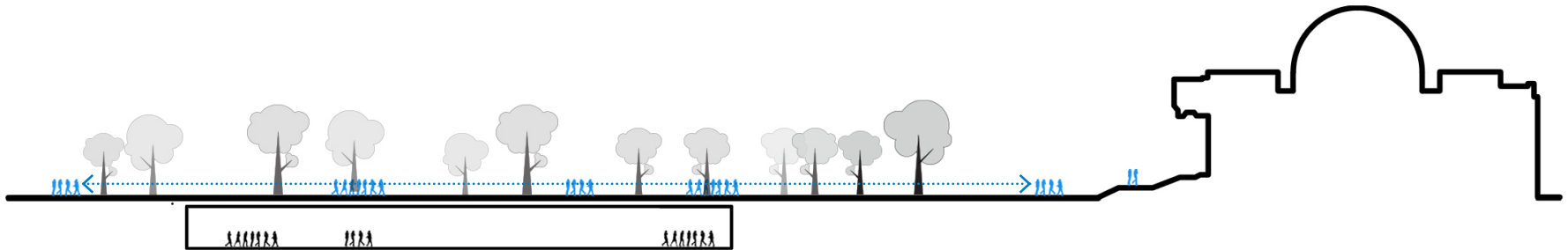
design

CONCEPT SEQUENCE



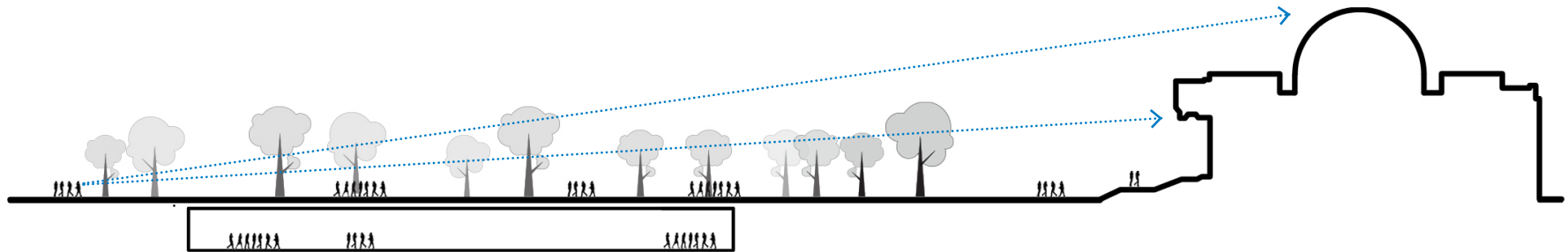
design

#1 PUBLIC REALM

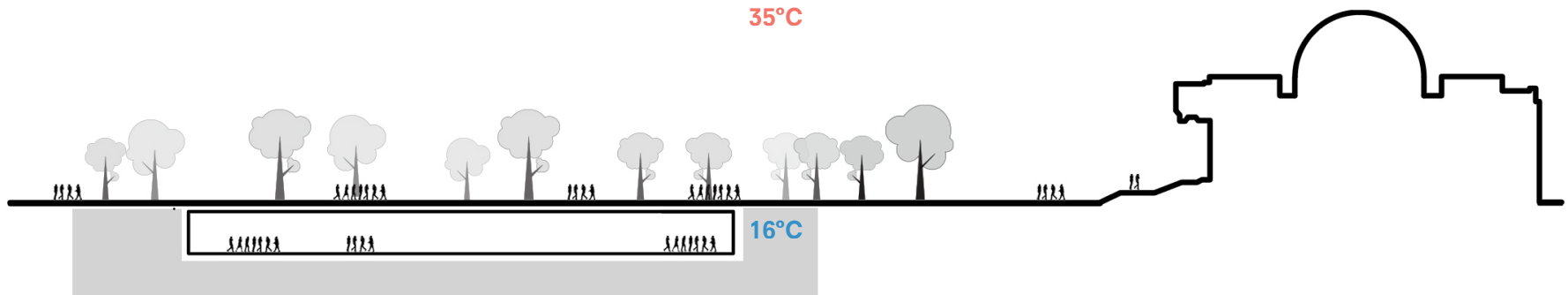


design

#2 LANDSCAPE

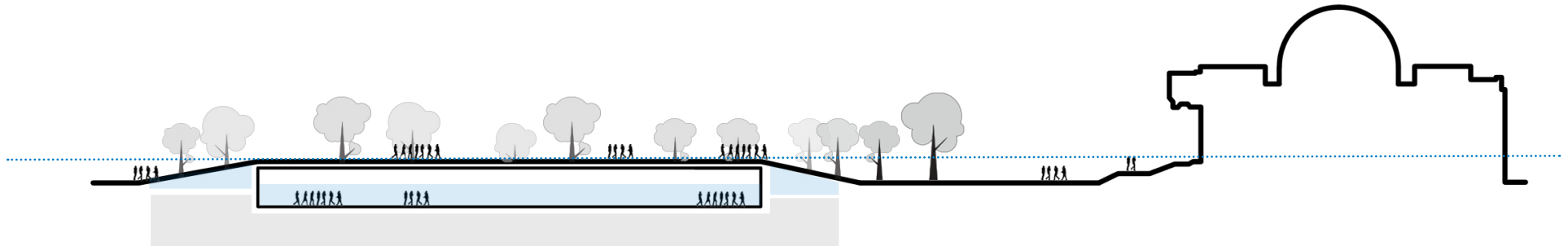


#3 THERMAL PERFORMANCE



design

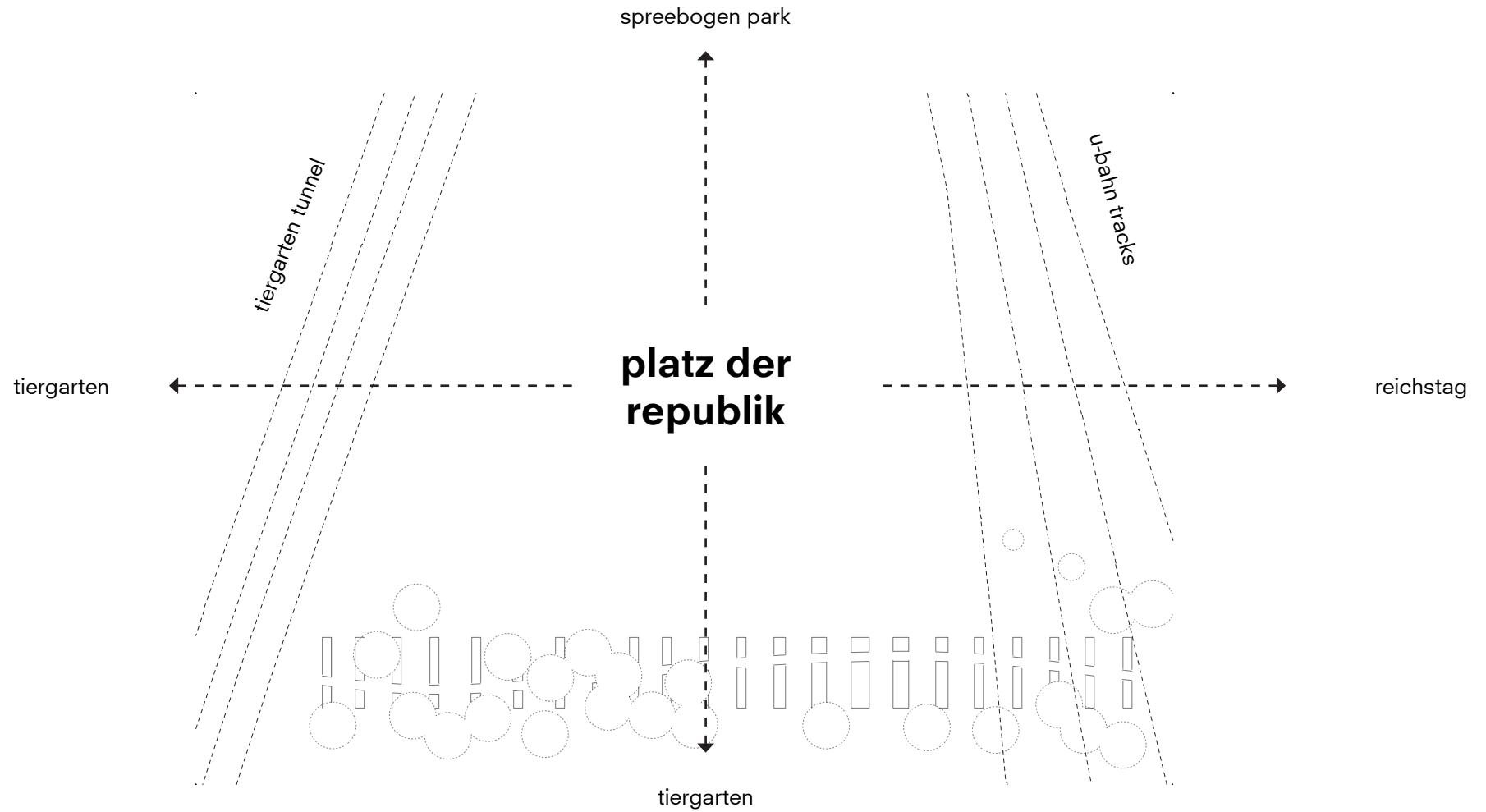
#4 SOIL ADJUSTMENT





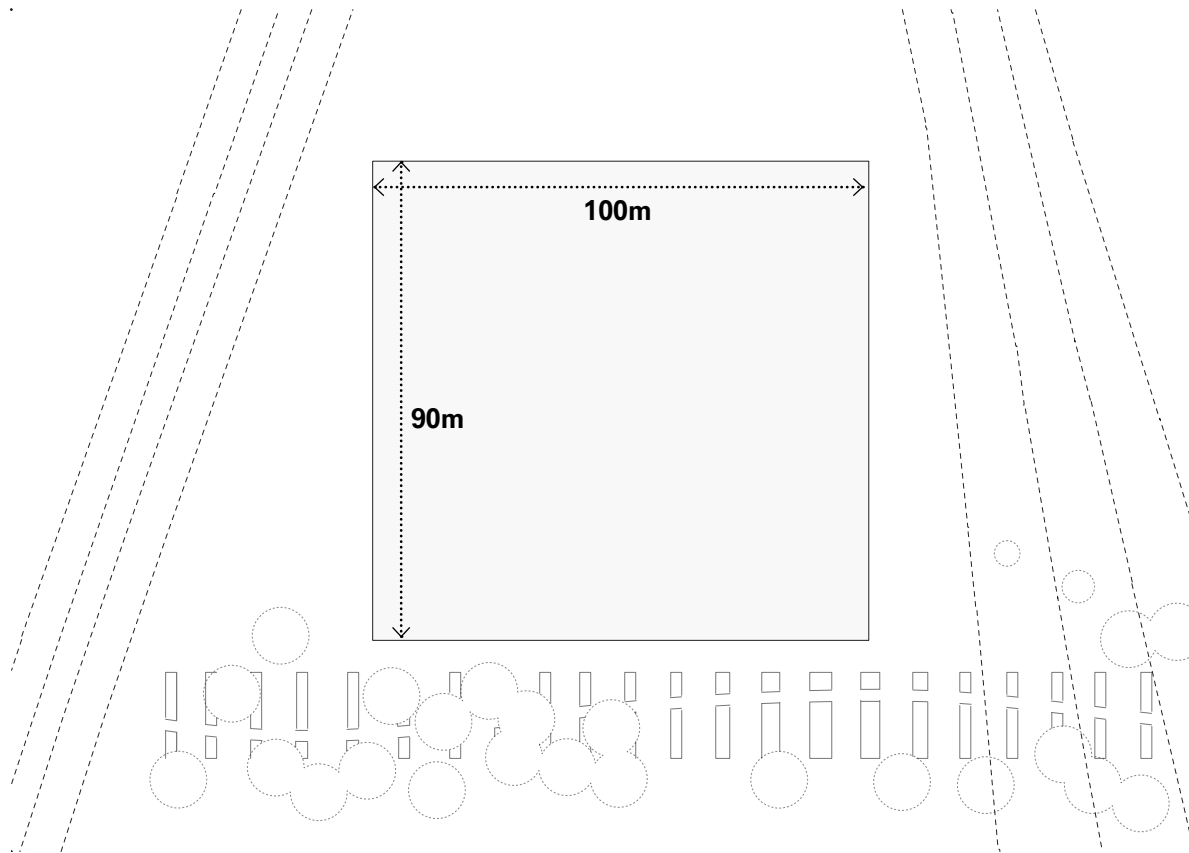
design

CONSTRAINTS



design

FOOTPRINT

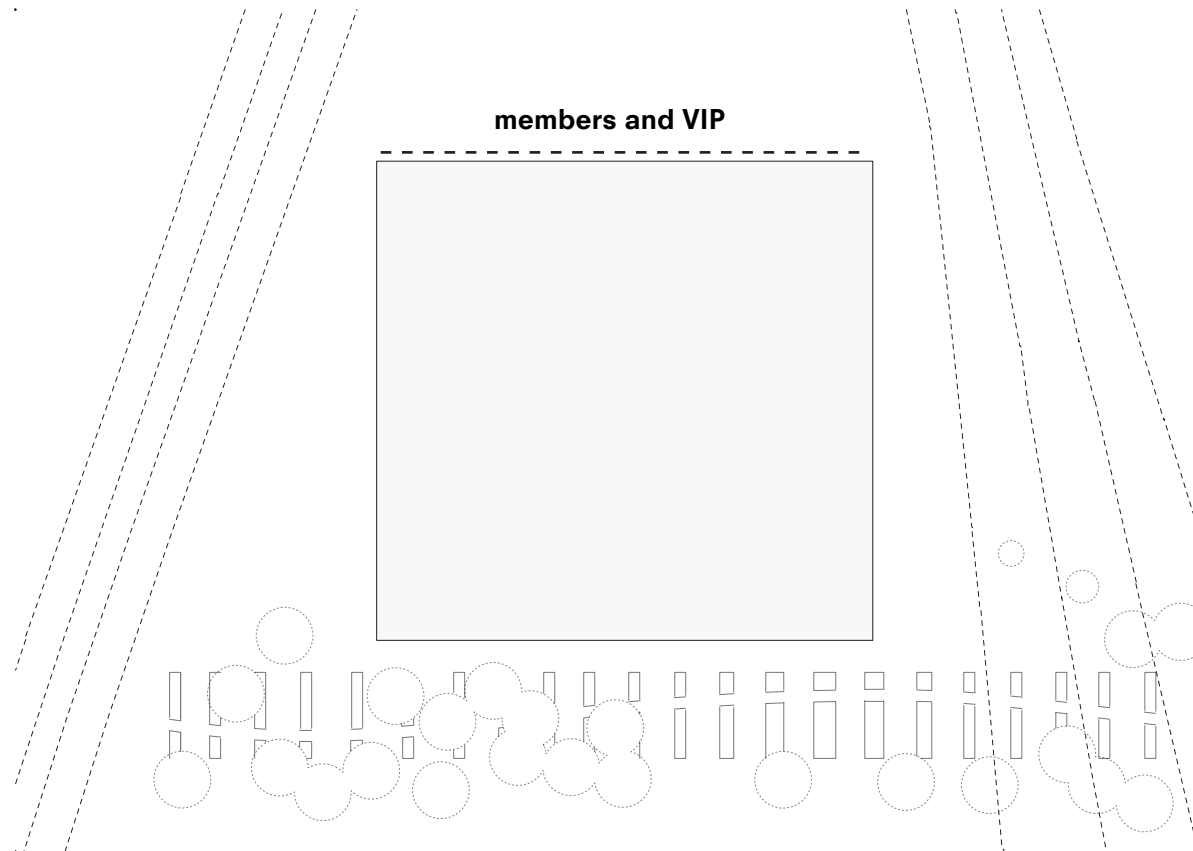


design ENTRANCES

Chancellery ■

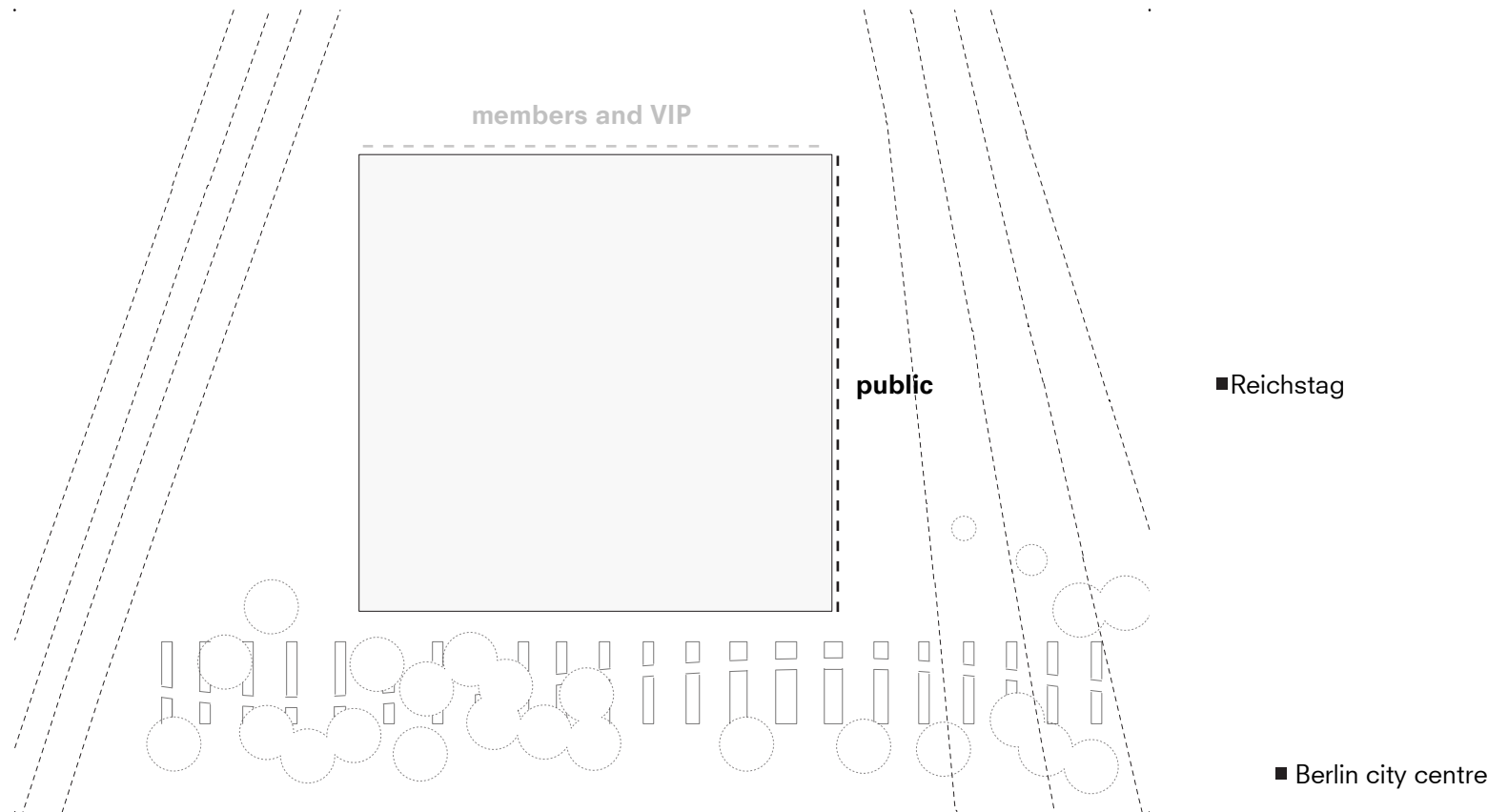
■ U-Bahn station

■ Bundestag VIP entrance



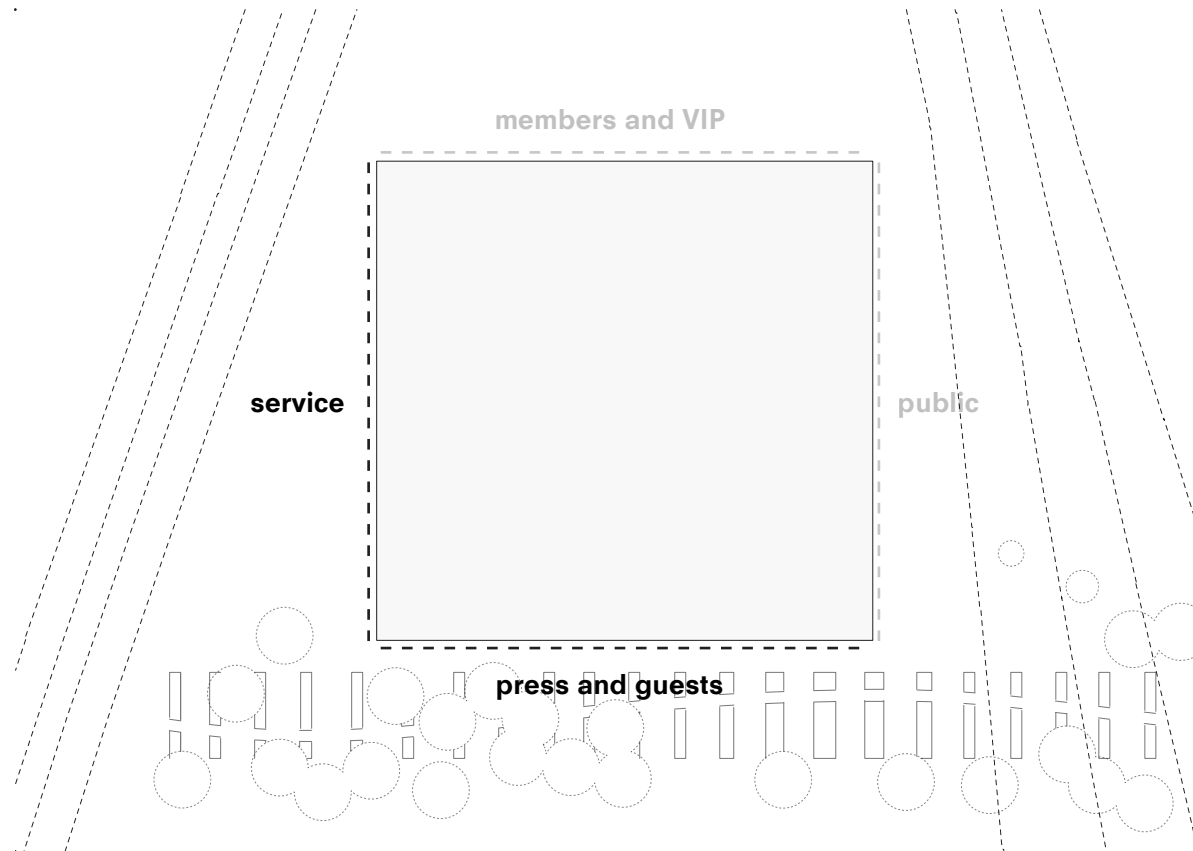
design

ENTRANCES

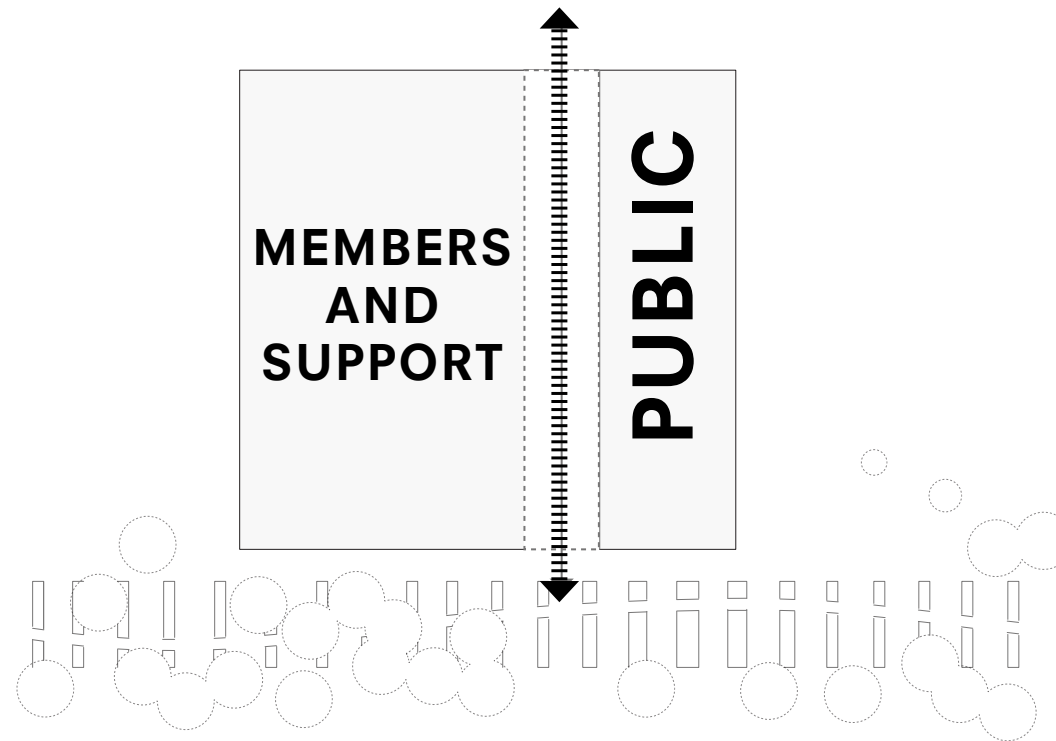


design

ENTRANCES

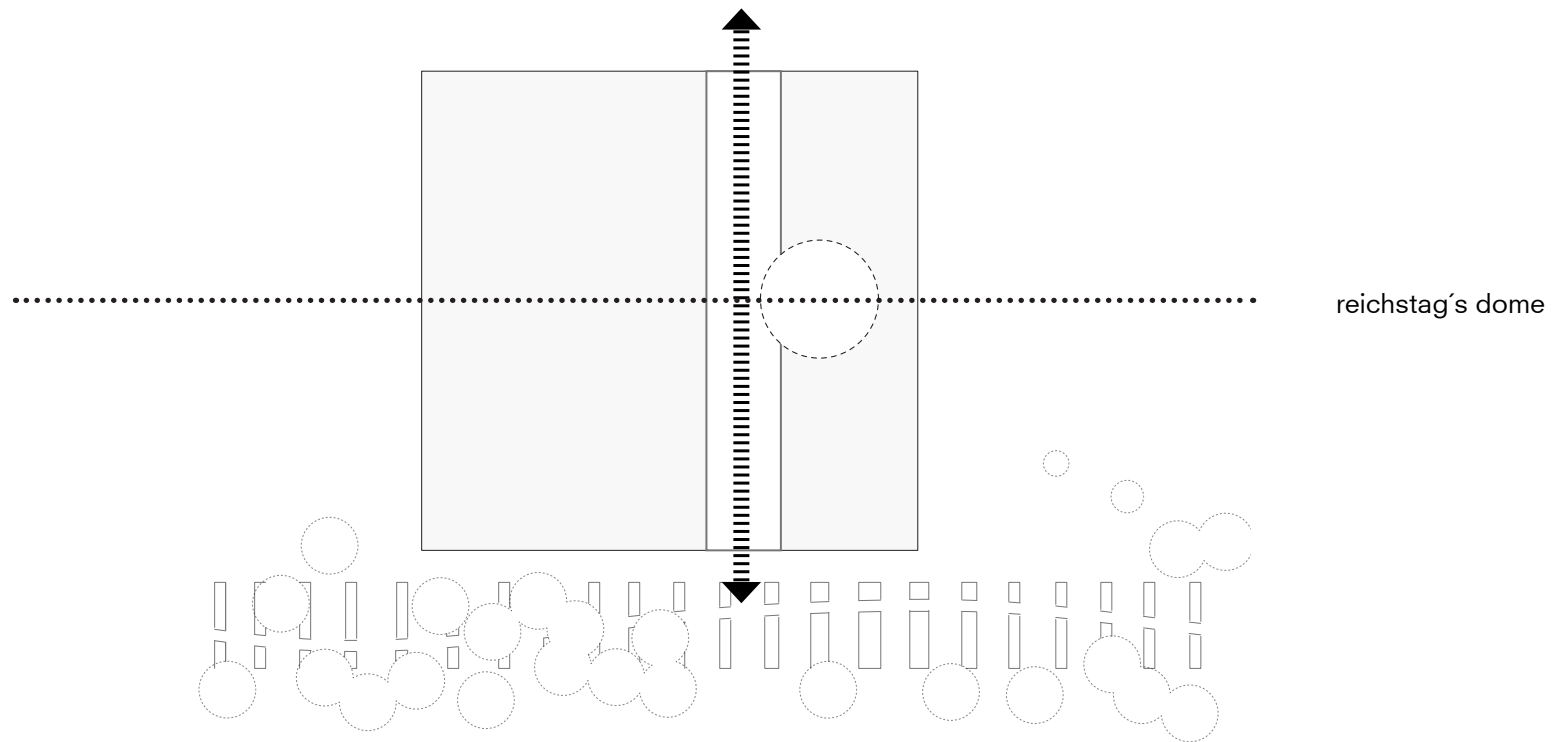


BASIC PROGRAM DIVISON



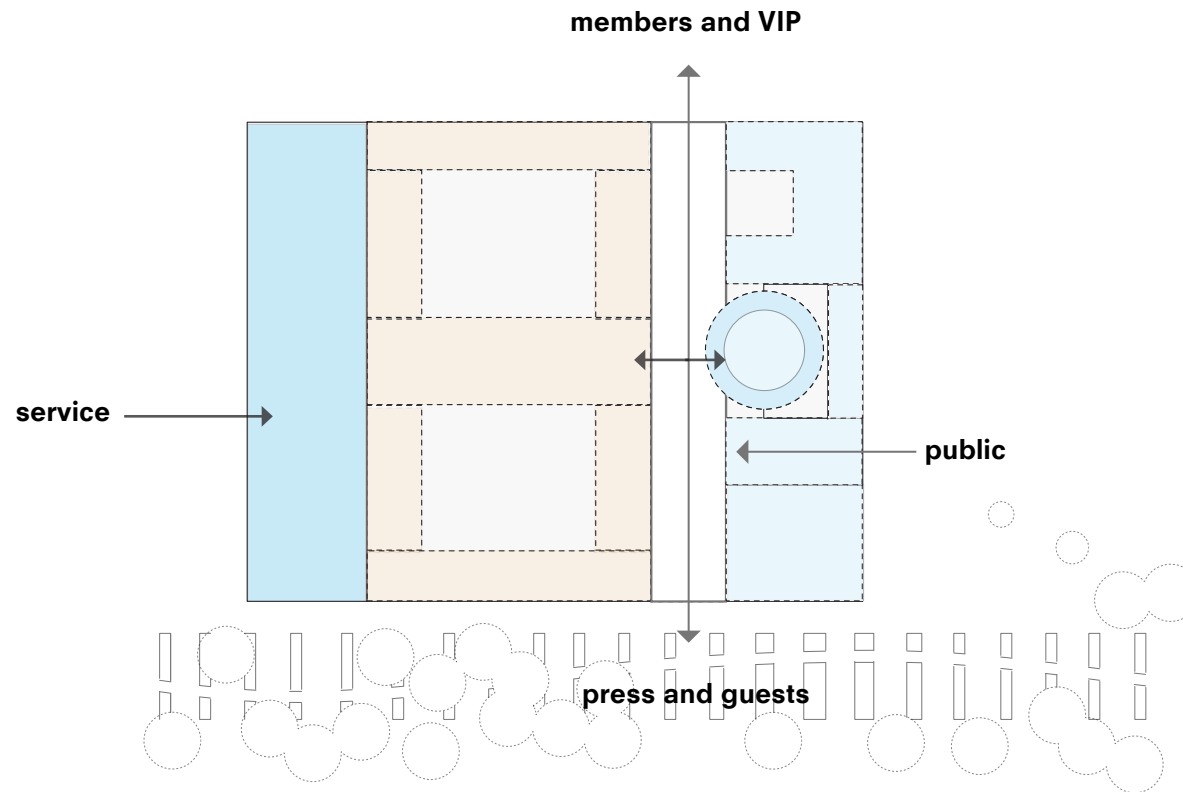
design

CHAMBER



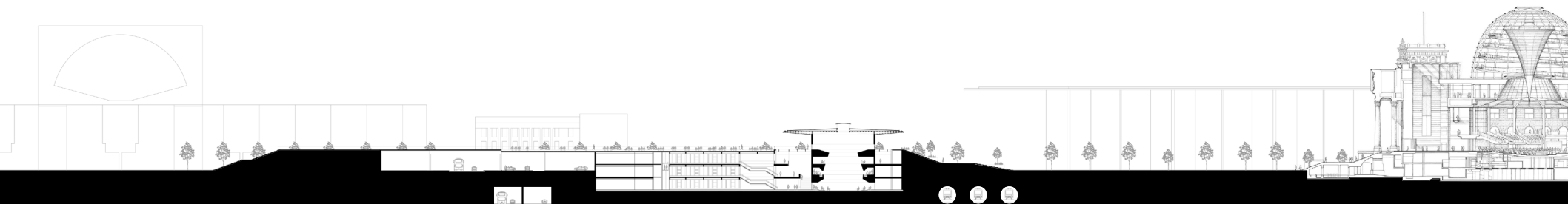
design

PROGRAM SCHEME



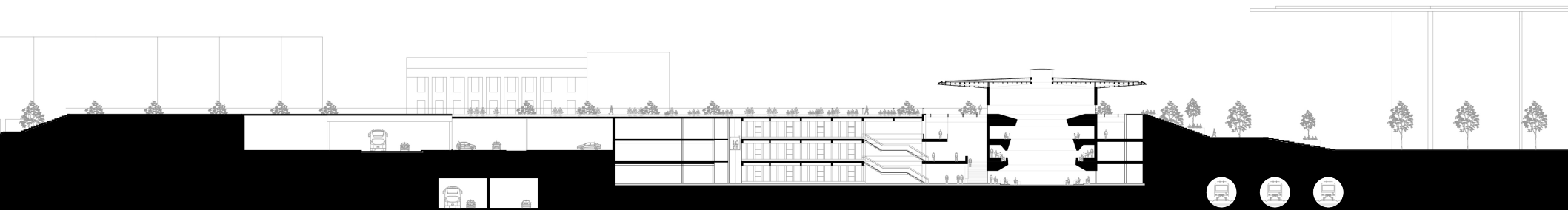
design

LONGITUDINAL SECTION CONTEXT INTEGRATION



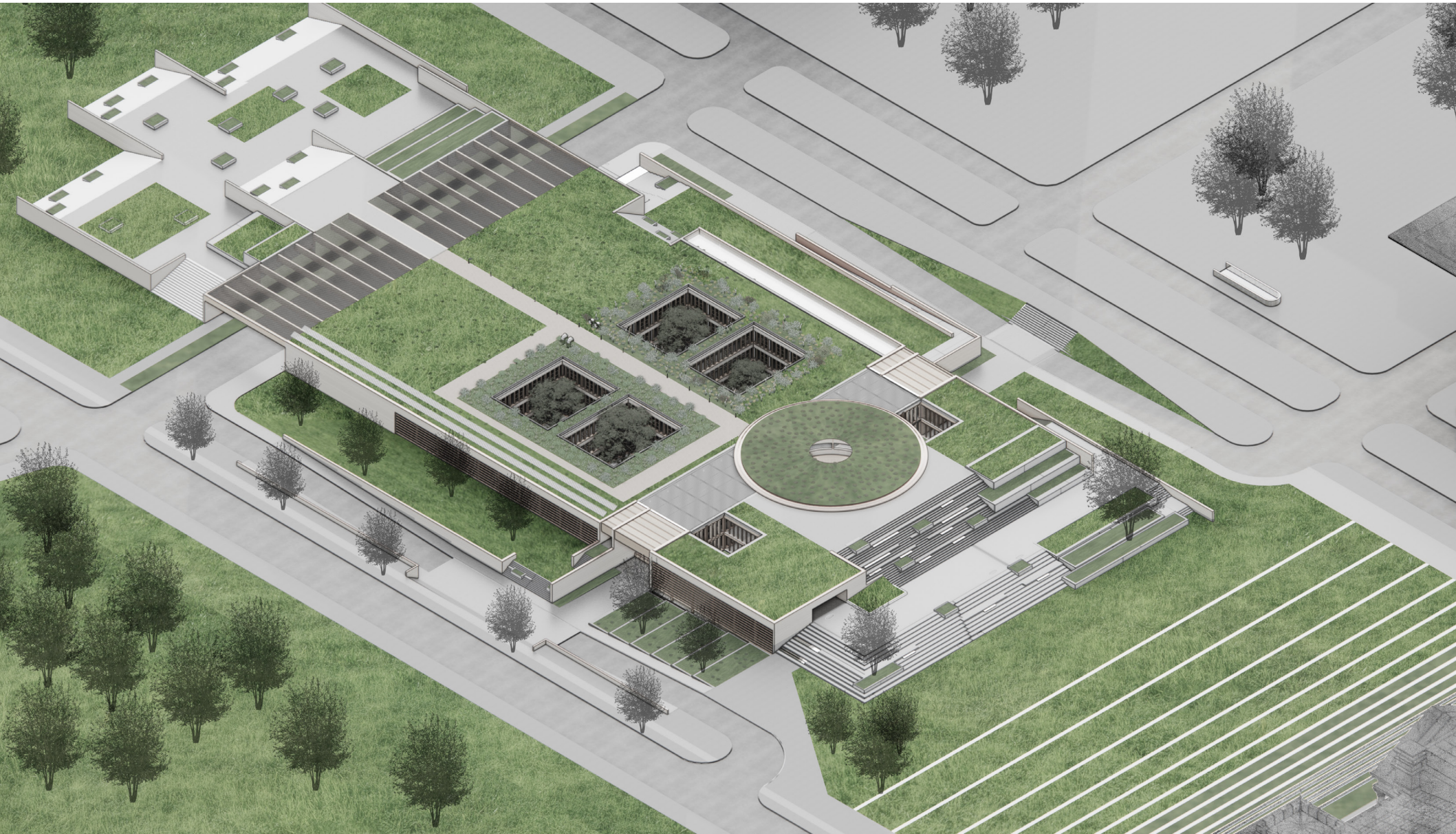
design

LONGITUDINAL SECTION DESIGN OVERVIEW



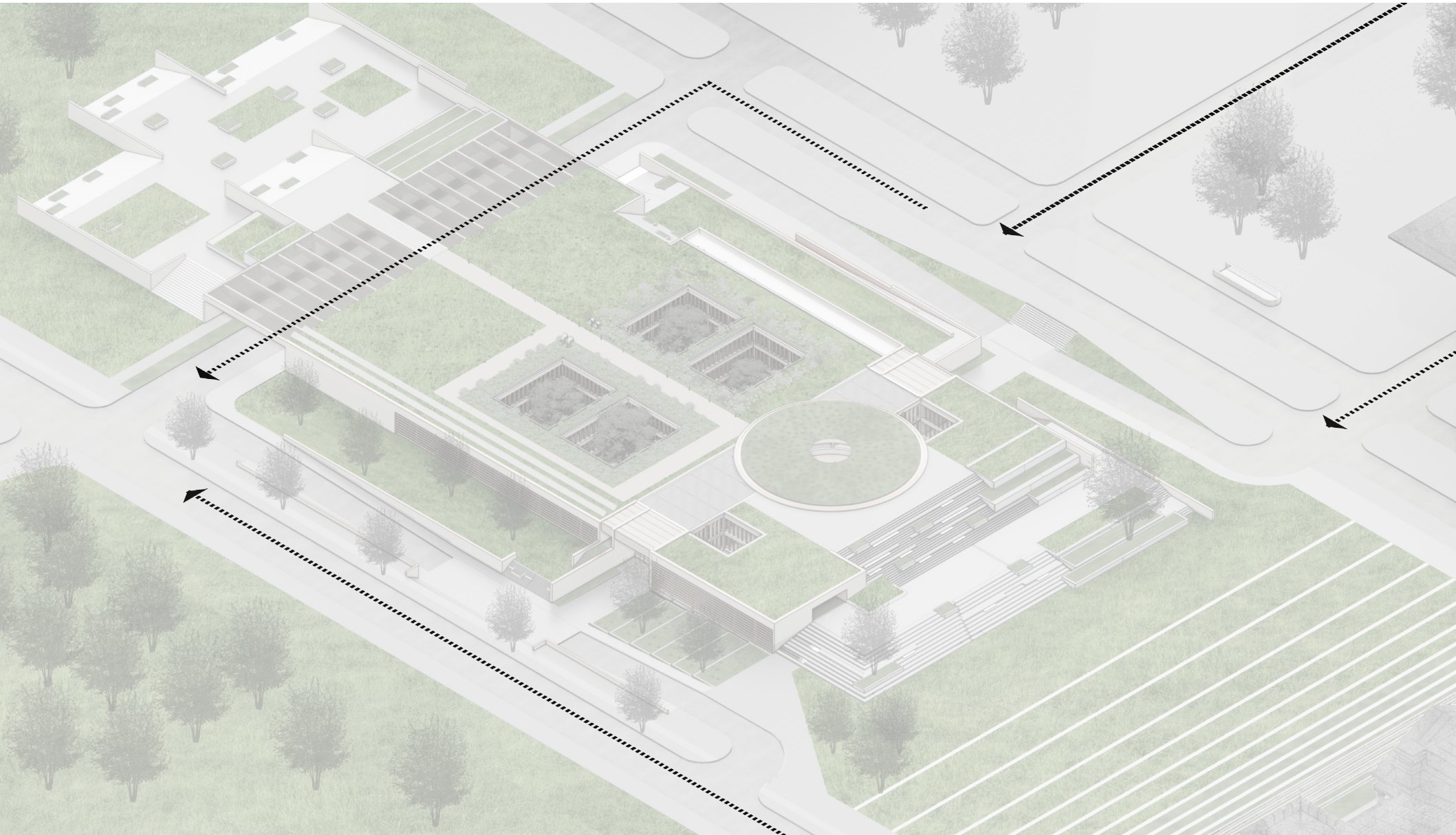
design

IMPLEMENTATION LANDSCAPE



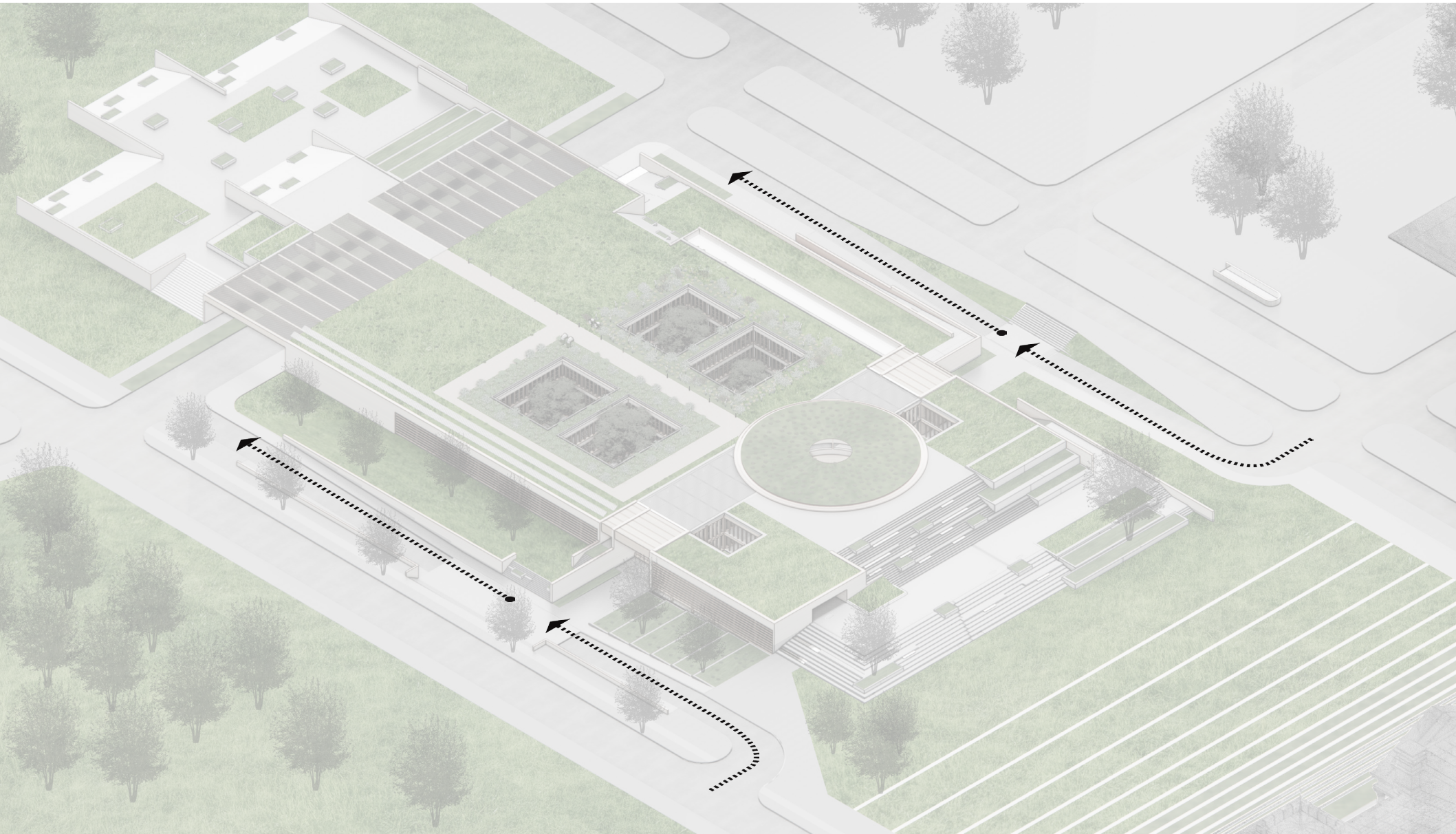
design

IMPLEMENTATION ROADS



design

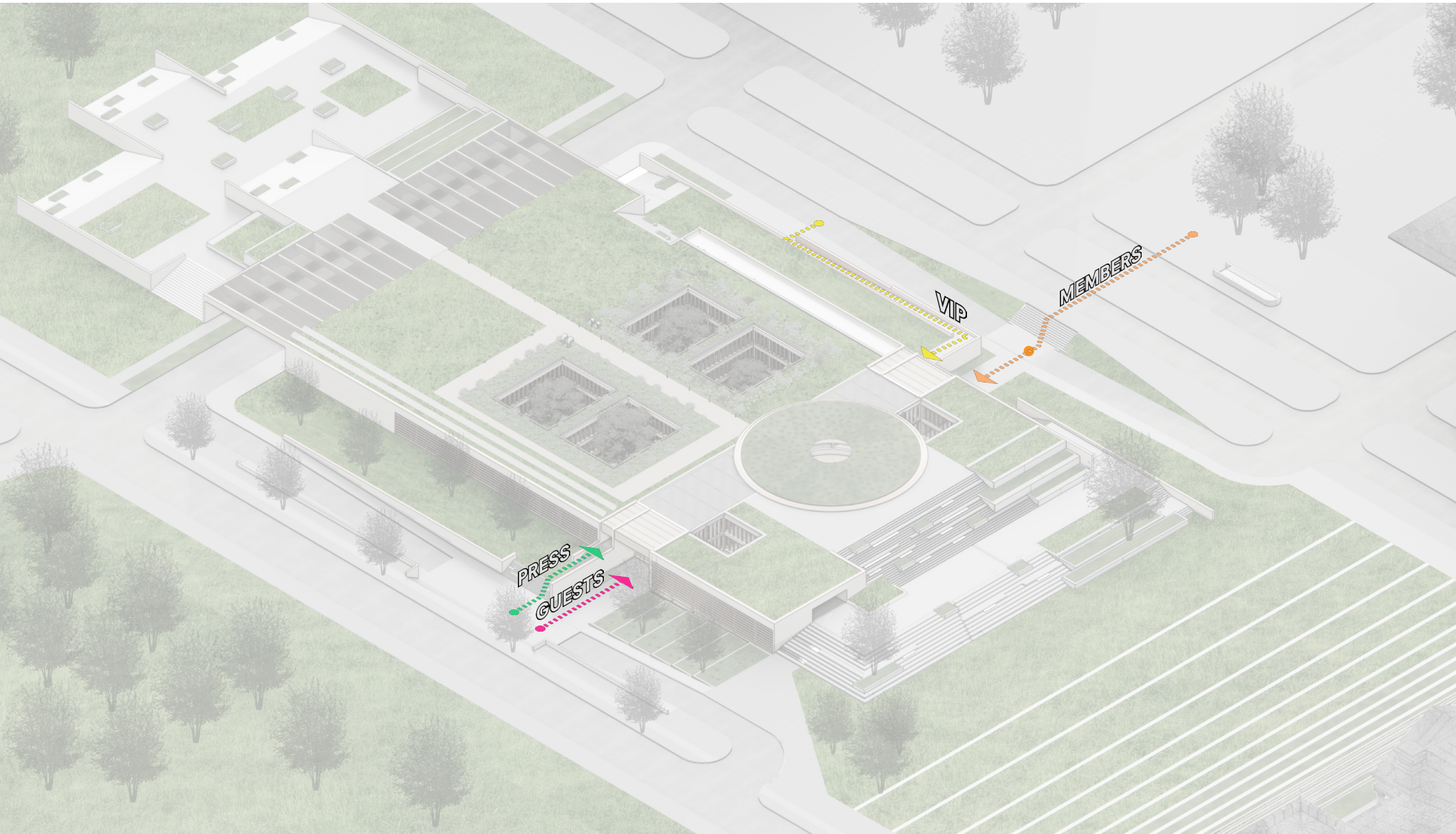
IMPLEMENTATION CAR ACCESS





South façade - car access

IMPLEMENTATION ENTRANCES





Entrance north façade

design

RAMMED EARTH

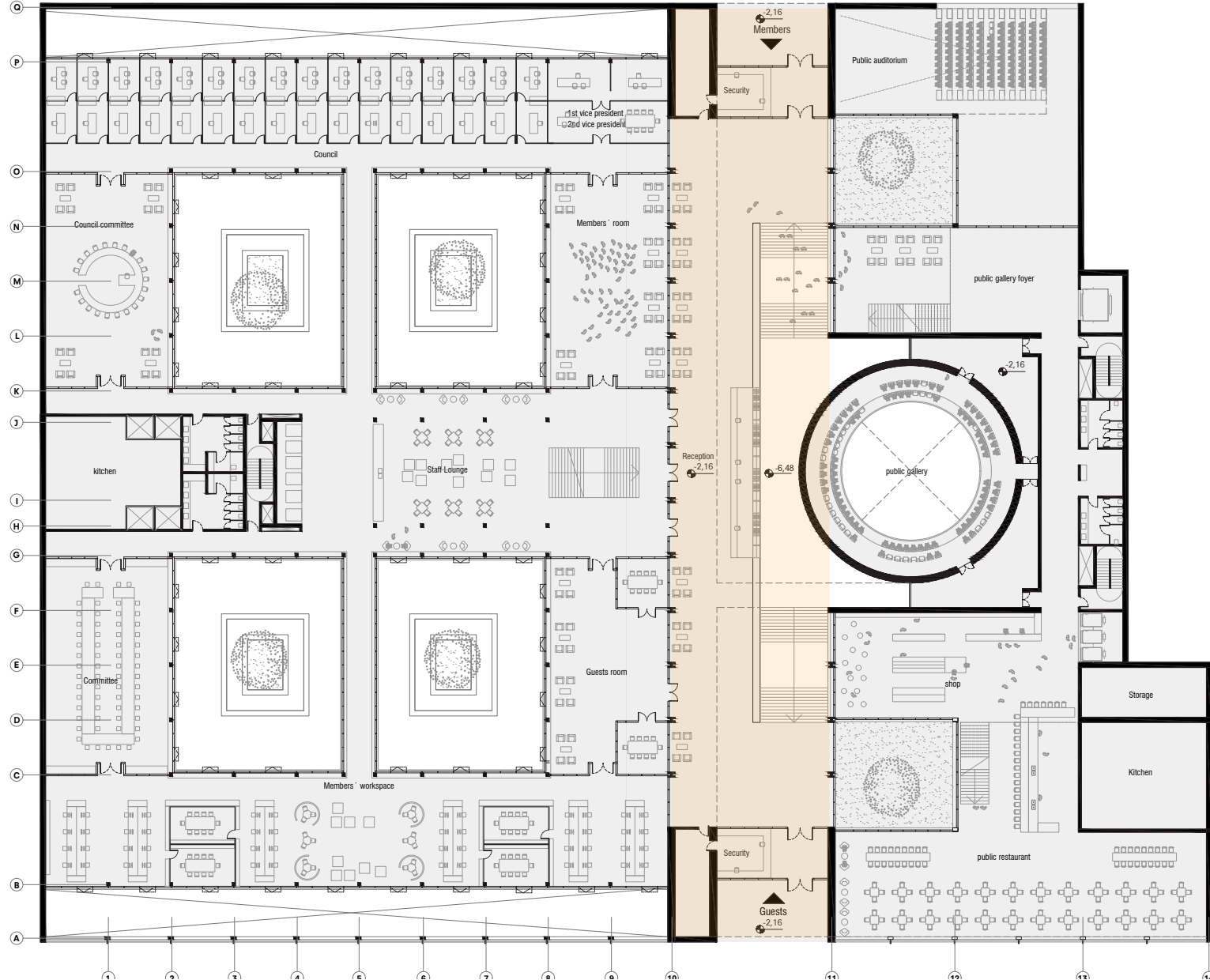


design

RAMMED EARTH

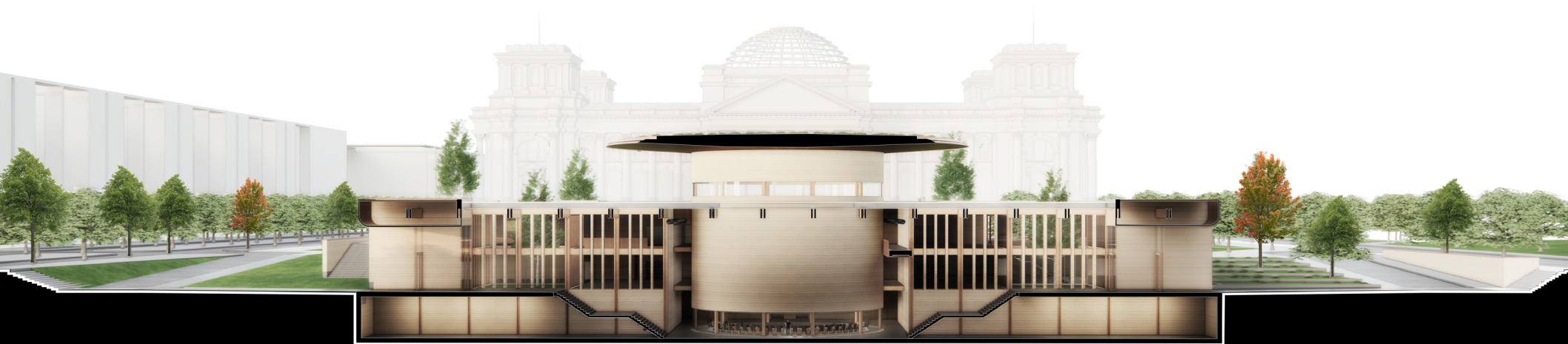


design ENTRANCE HALL



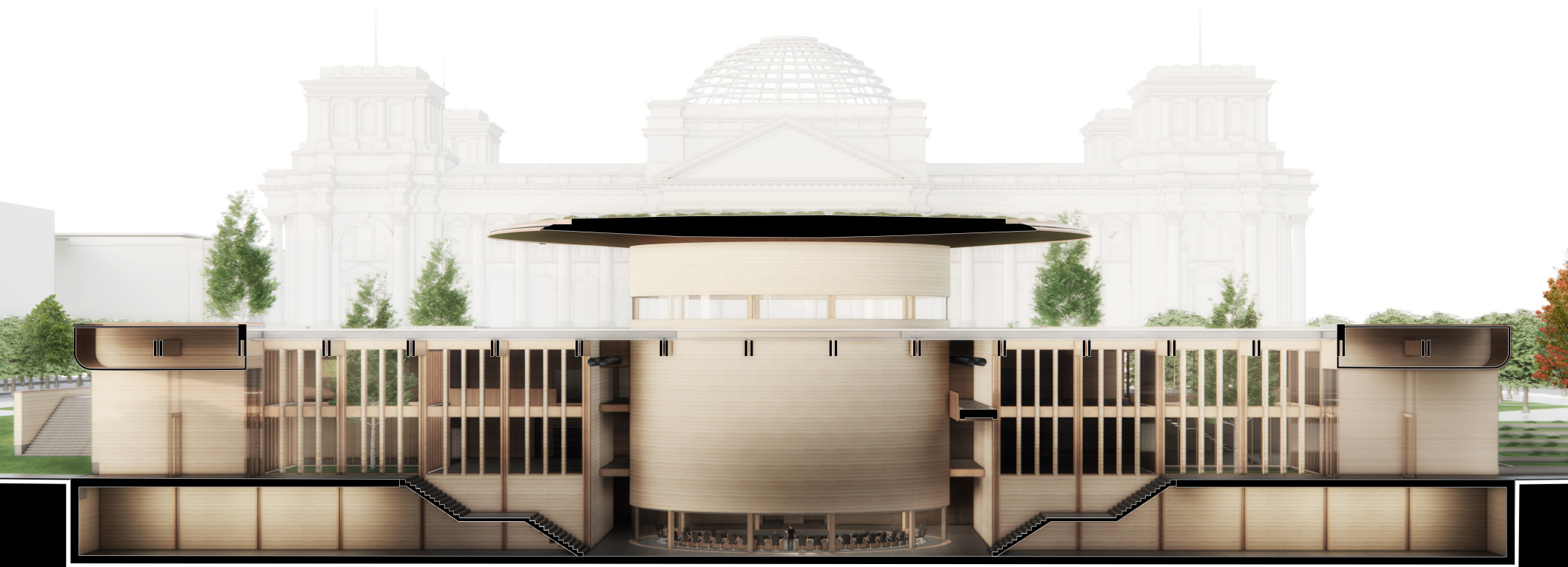
design

ENTRANCE HALL CITY RELATION



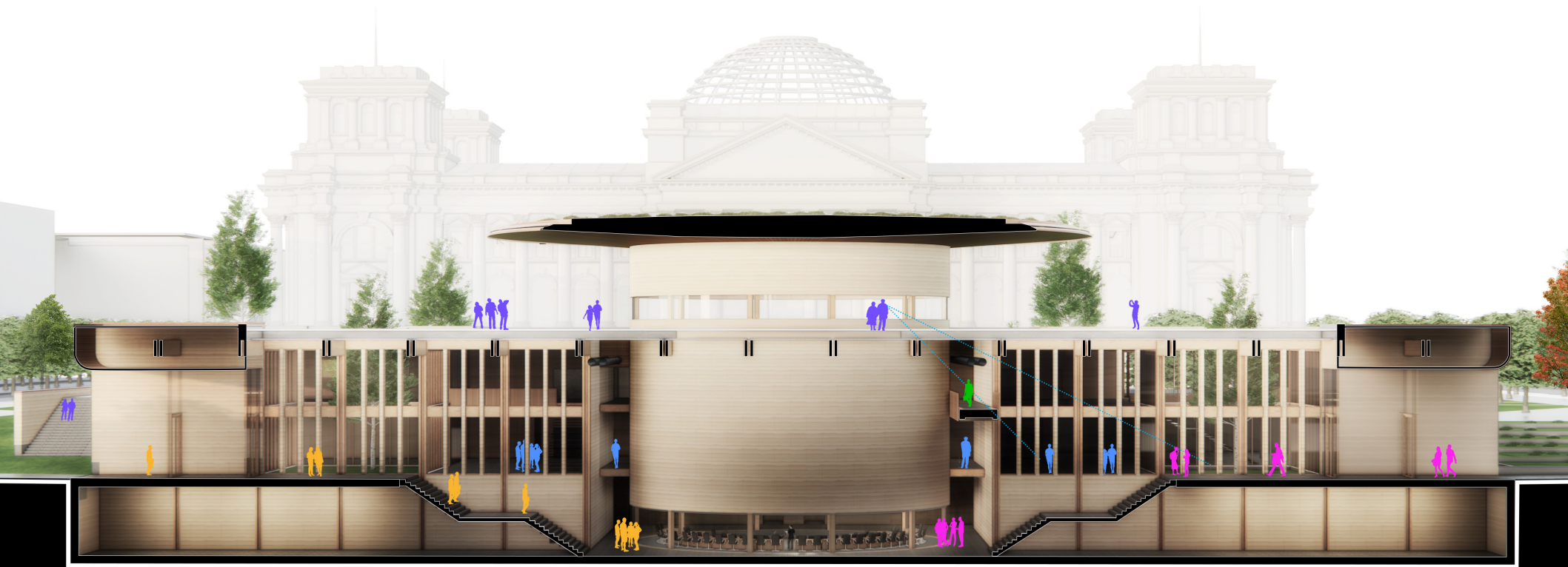
design

ENTRANCE HALL EXPERIENCE



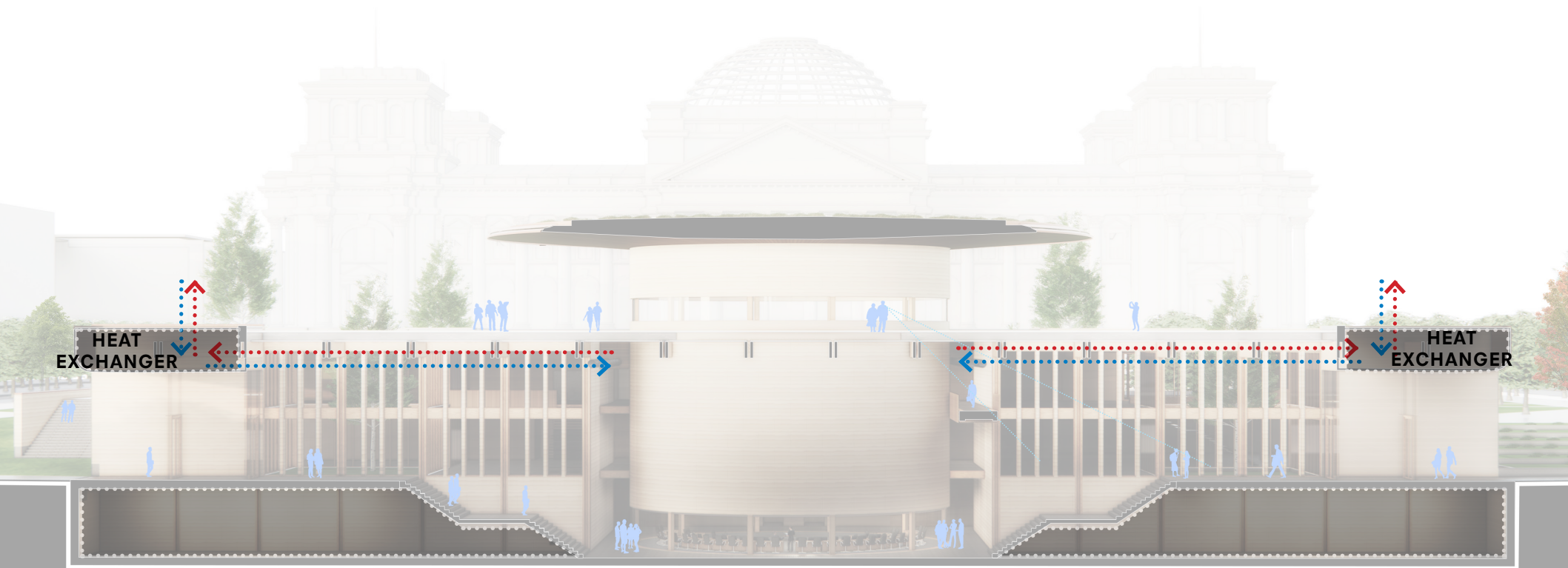
design

ENTRANCE HALL INTERACTION



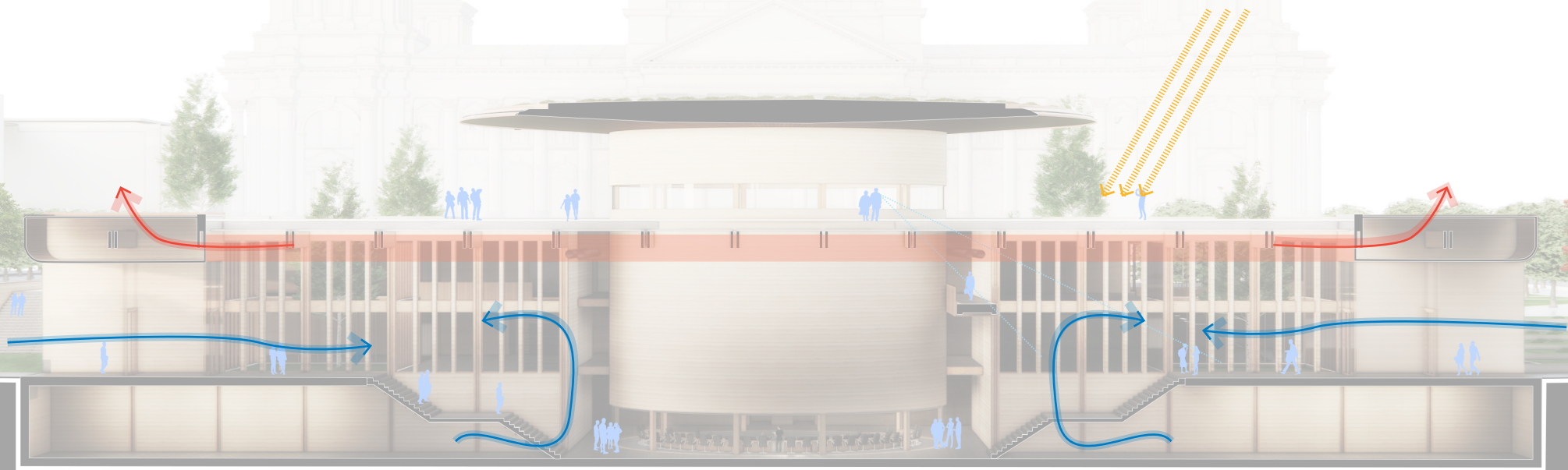
design

TECHNICAL SPACES



design

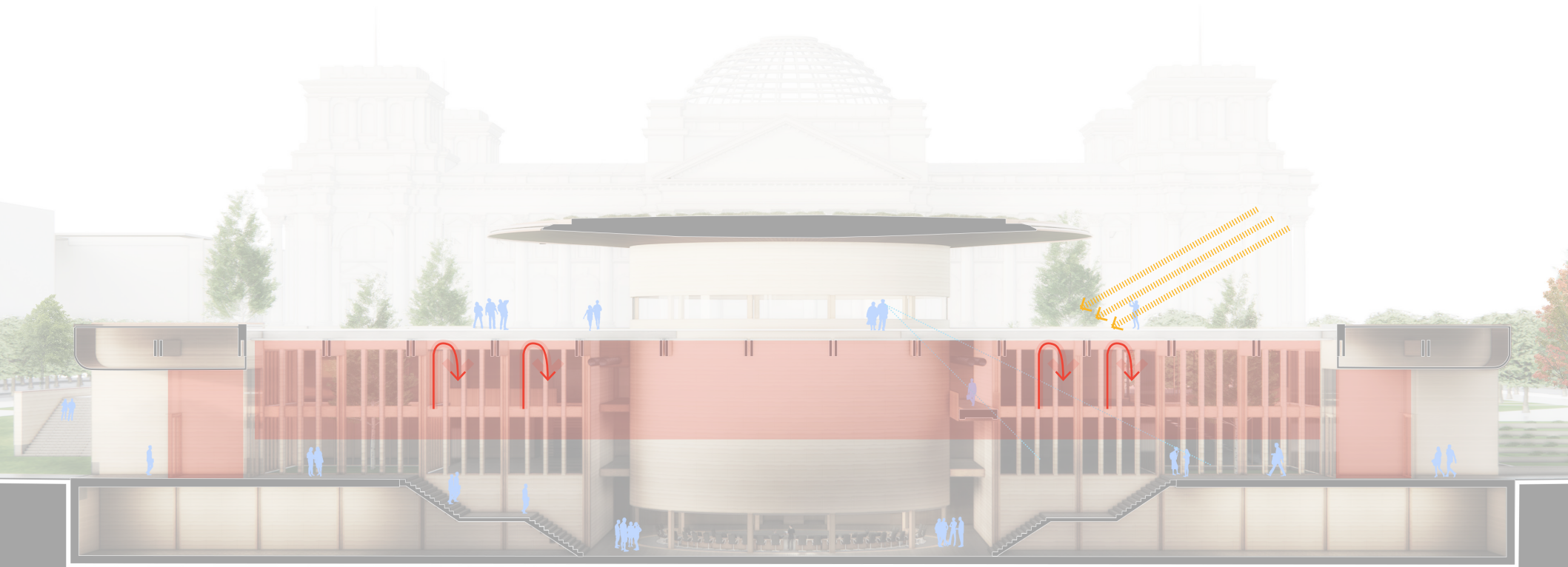
CLIMATE CONCEPT SUMMER



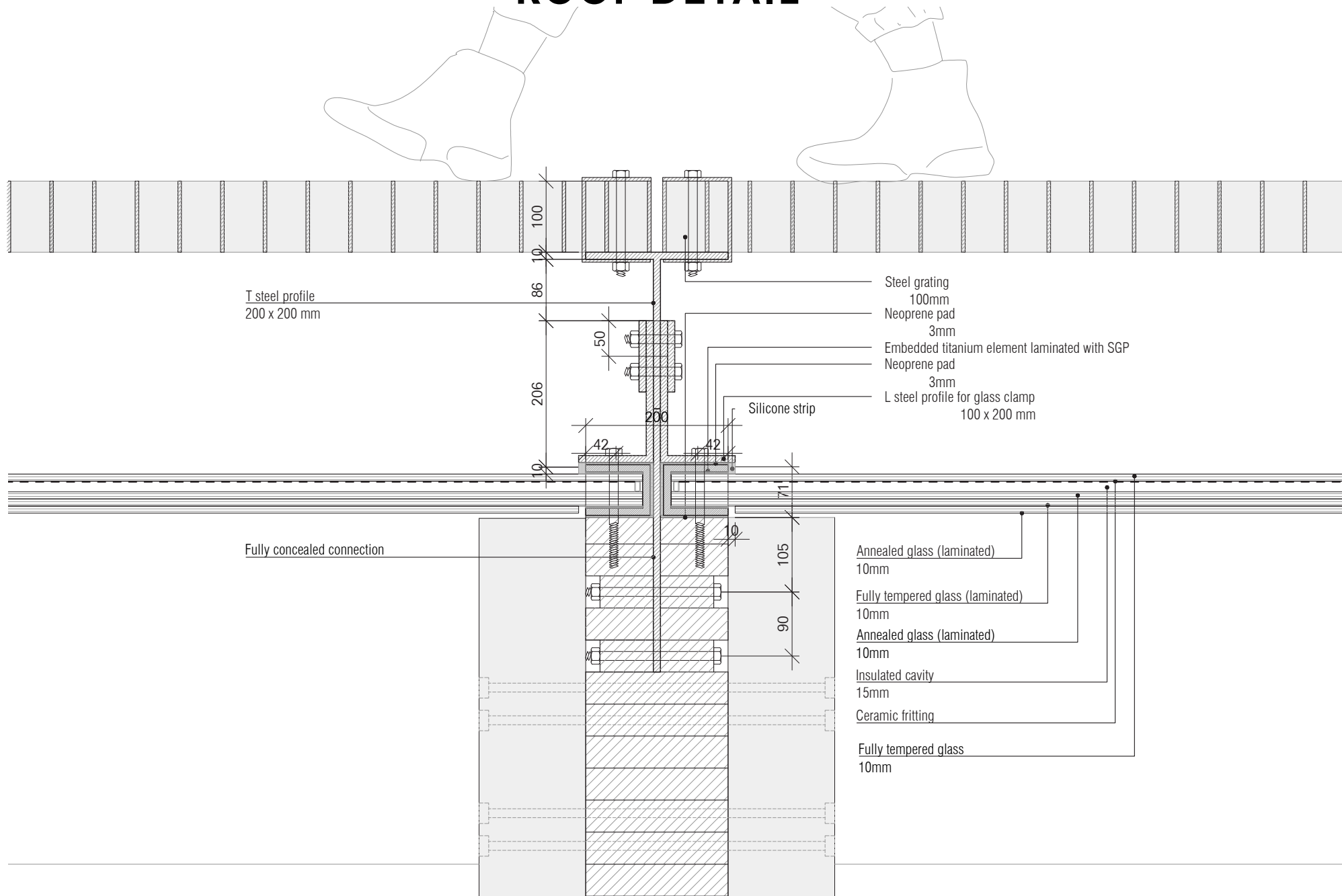
CROSS AND STACK VENTILATION

design

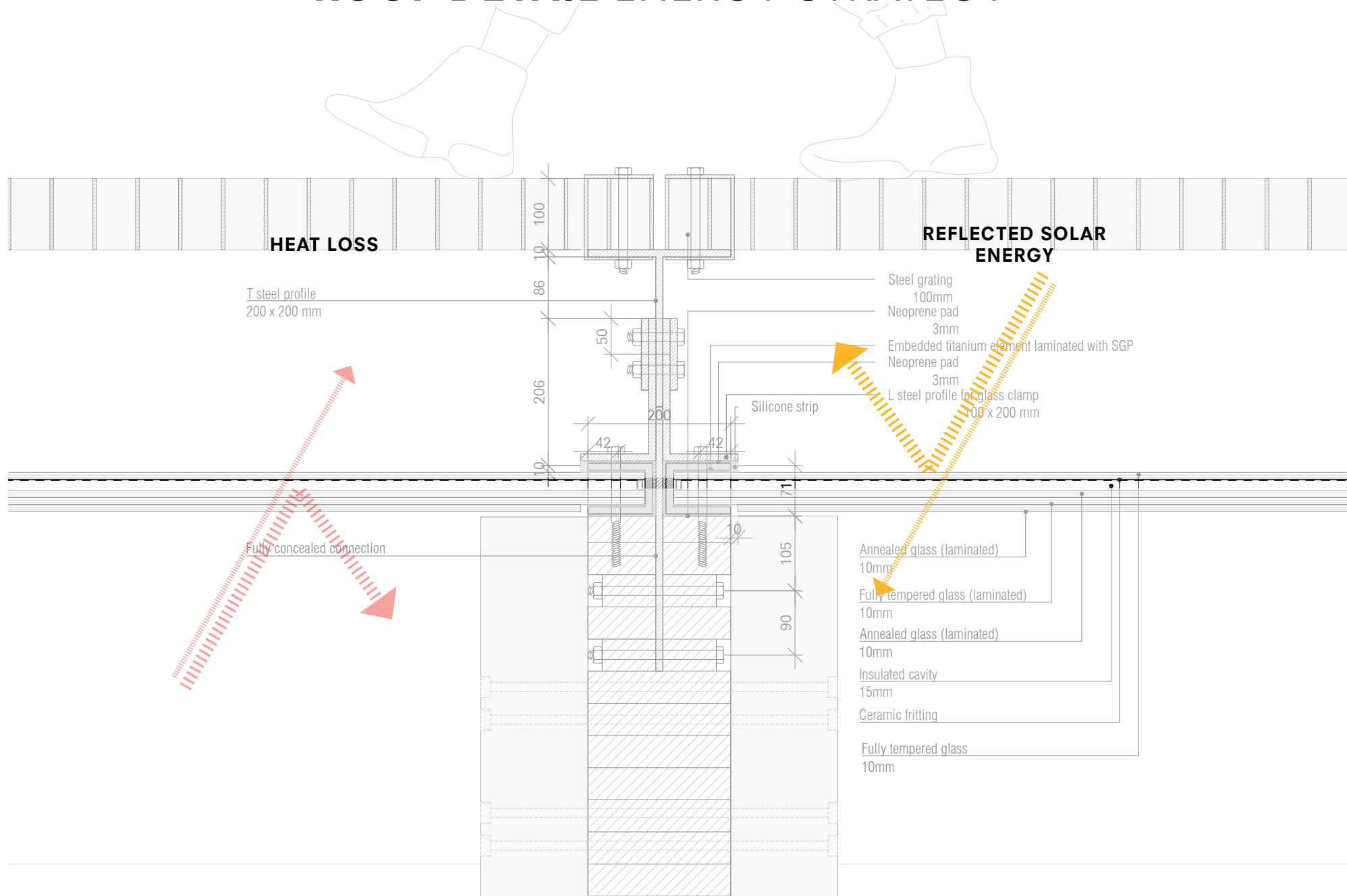
CLIMATE CONCEPT WINTER



design ROOF DETAIL

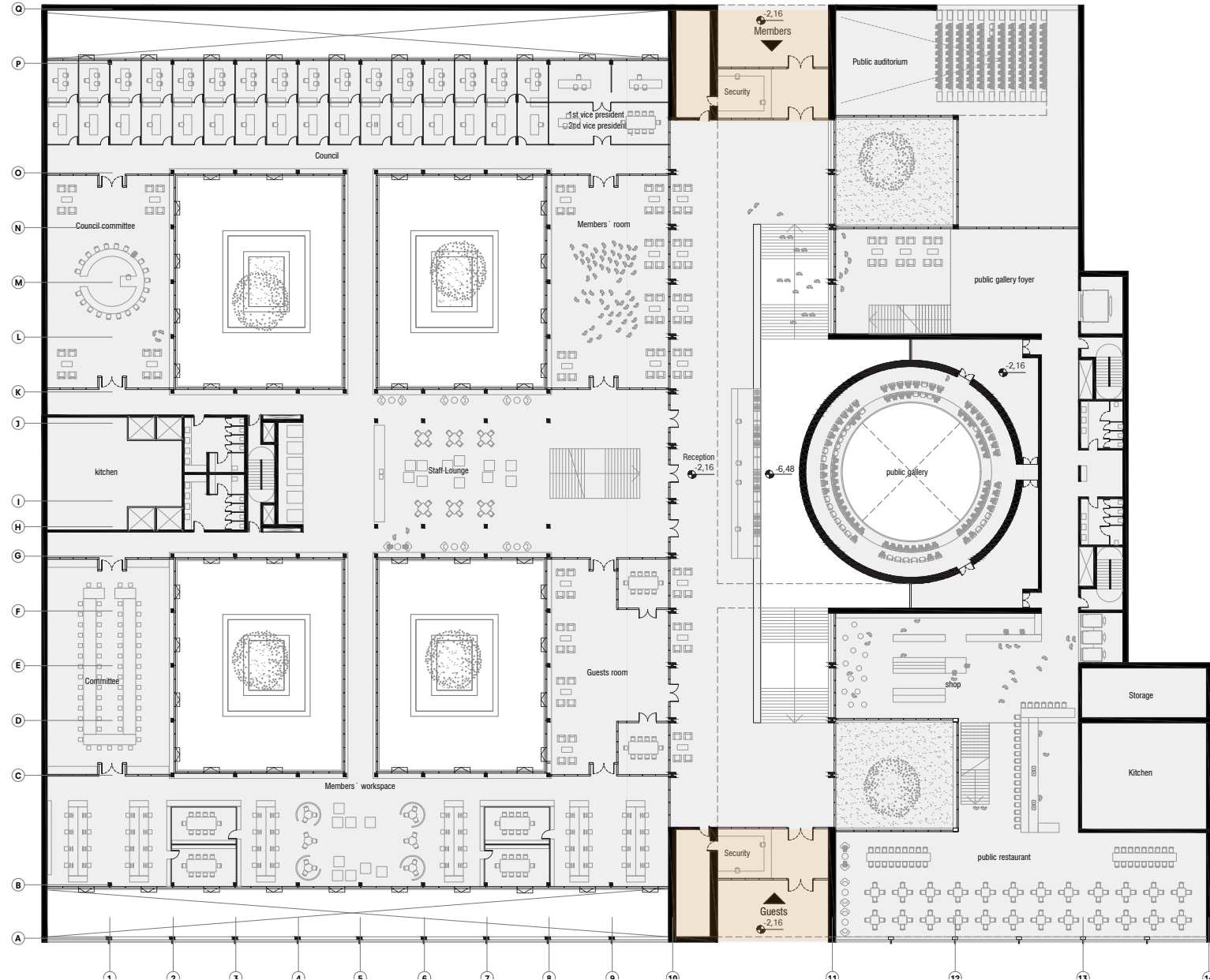


design ROOF DETAIL ENERGY STRATEGY



design

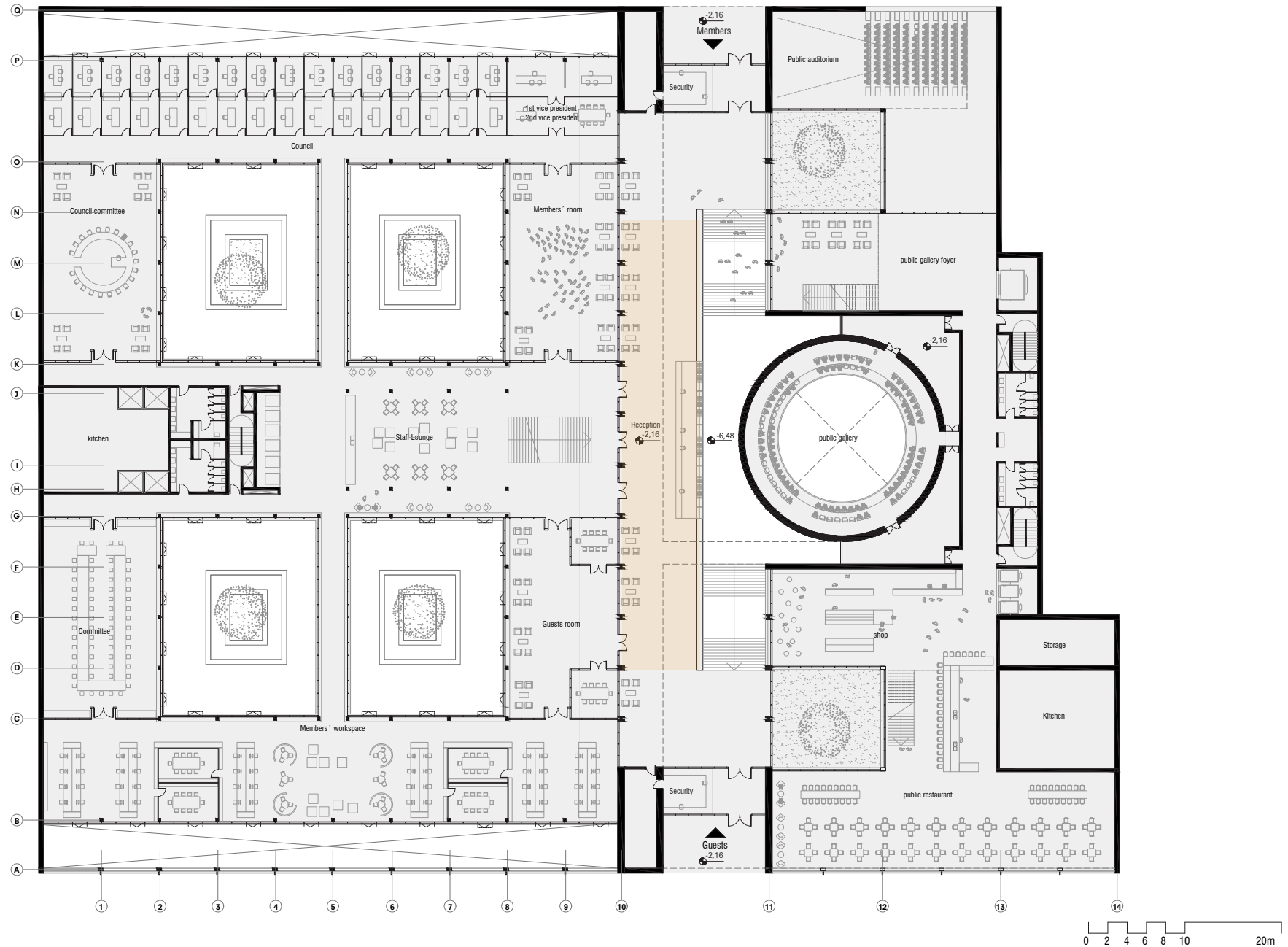
ENTRANCE HALL SECURITY





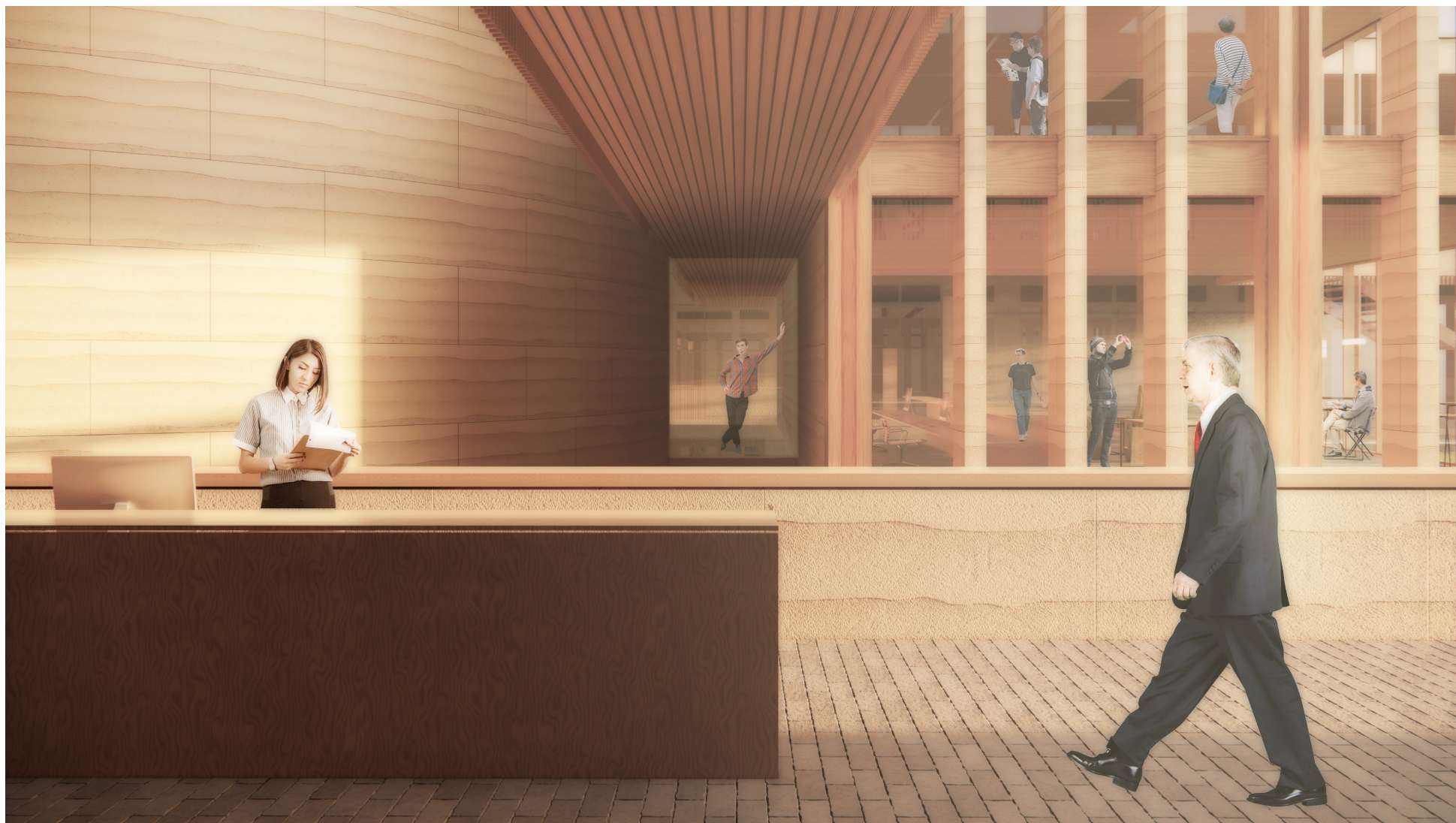
Entrance south façade

design ENTRANCE HALL RECEPTION



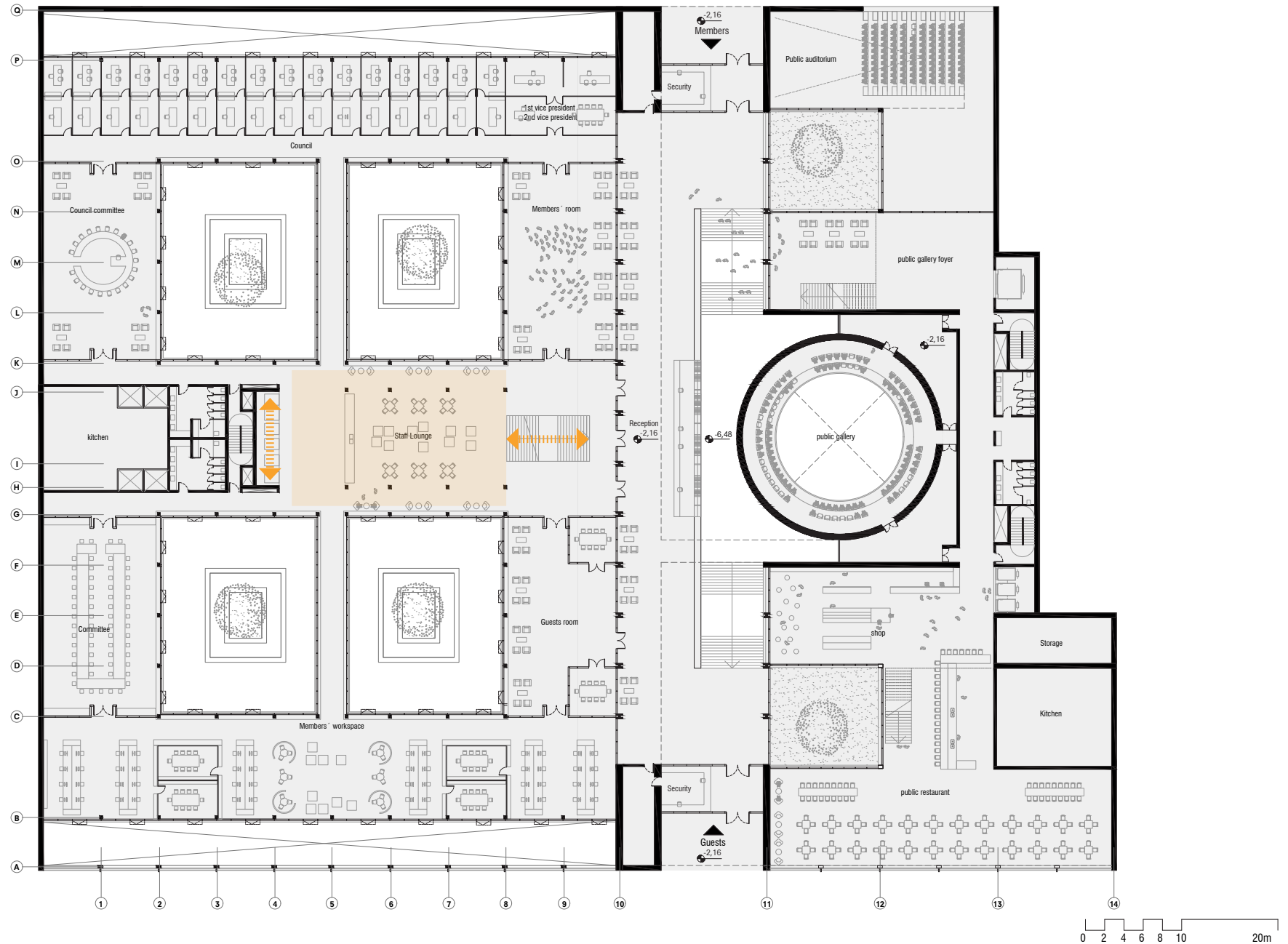


Entrance hall



Entrance hall - reception

design CENTRAL WING

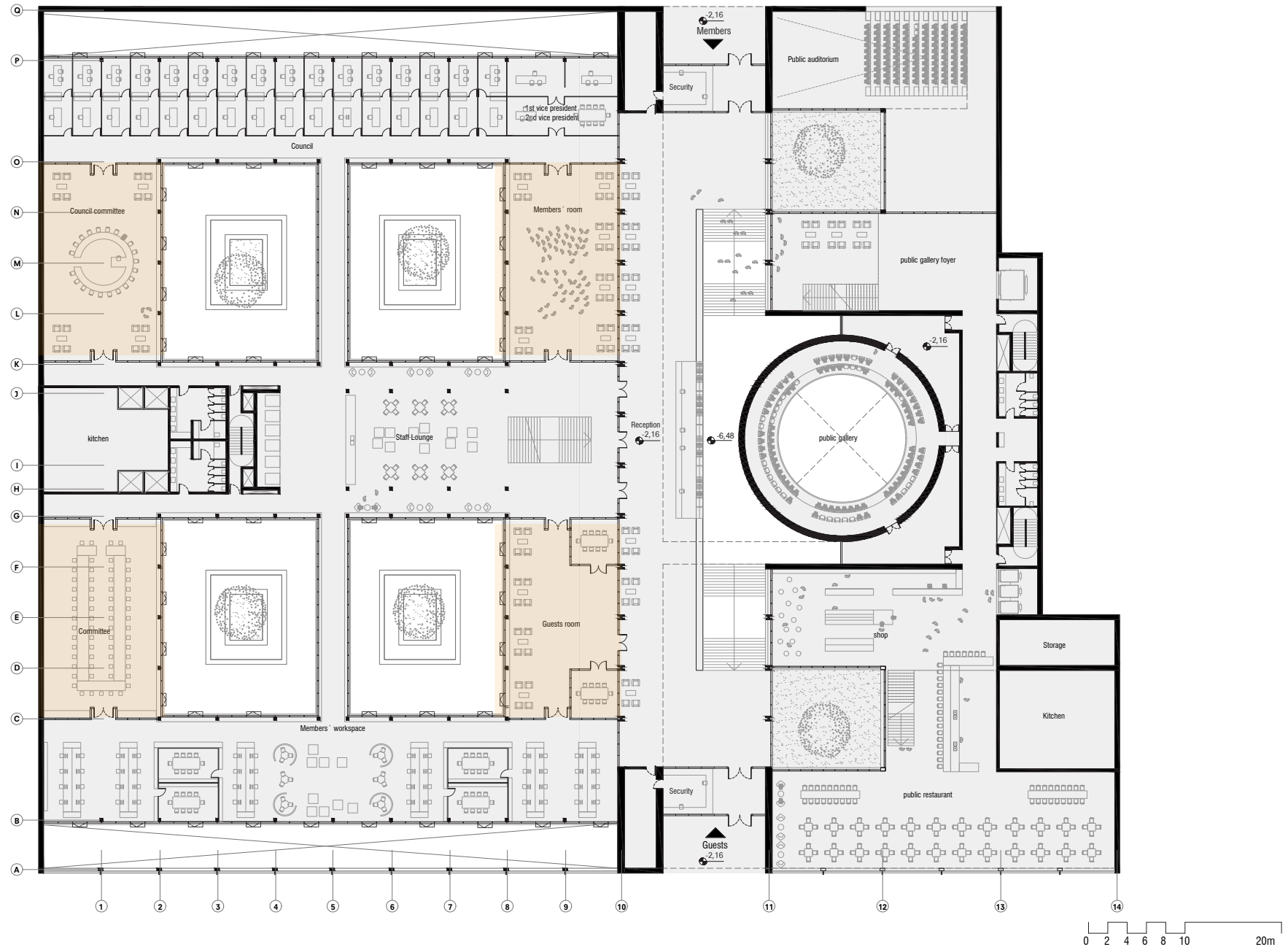




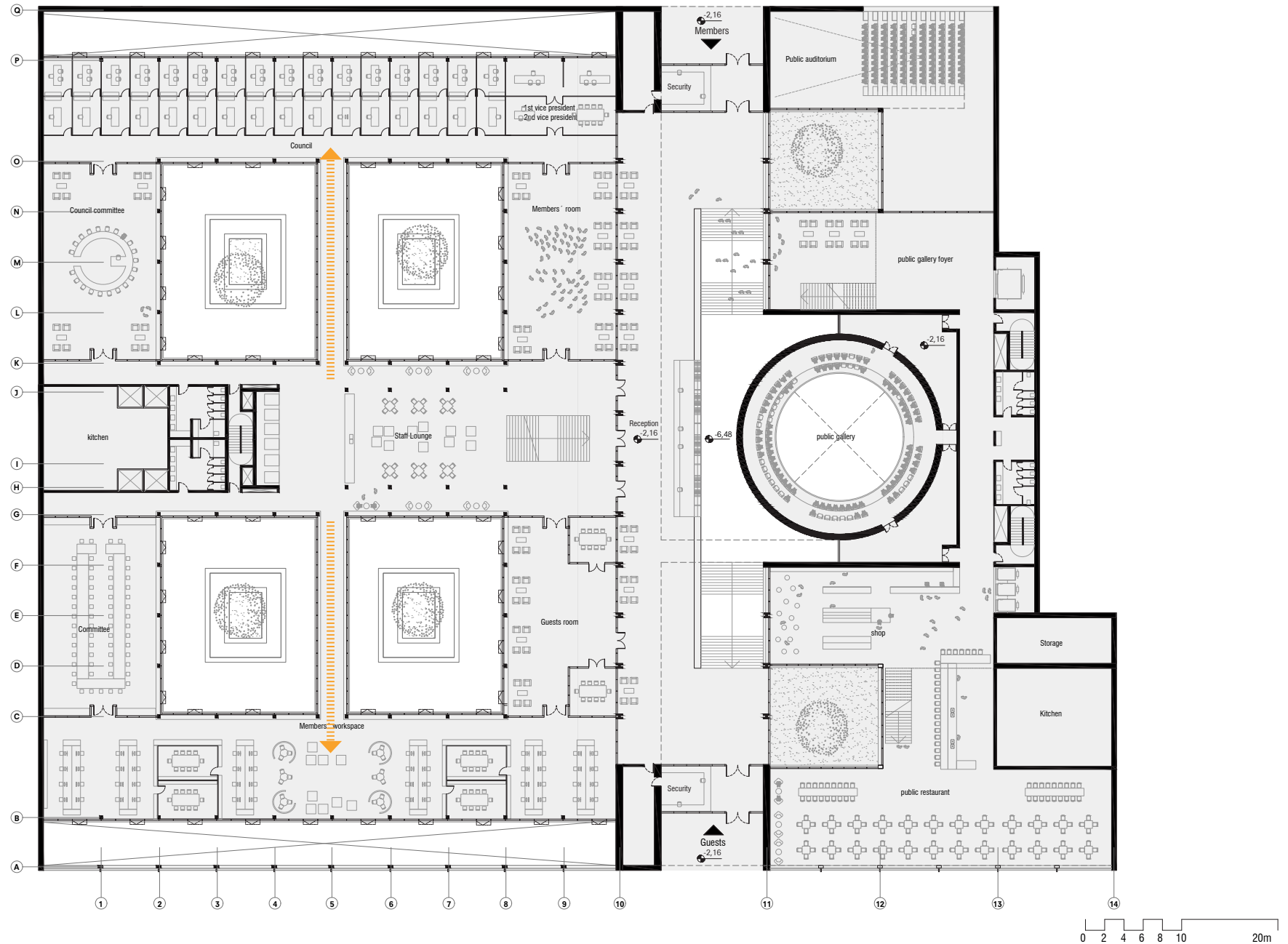
Central wing - staff lounge

design

SUPPORT COMMITTEES AND LOUNGES



design OFFICE WINGS

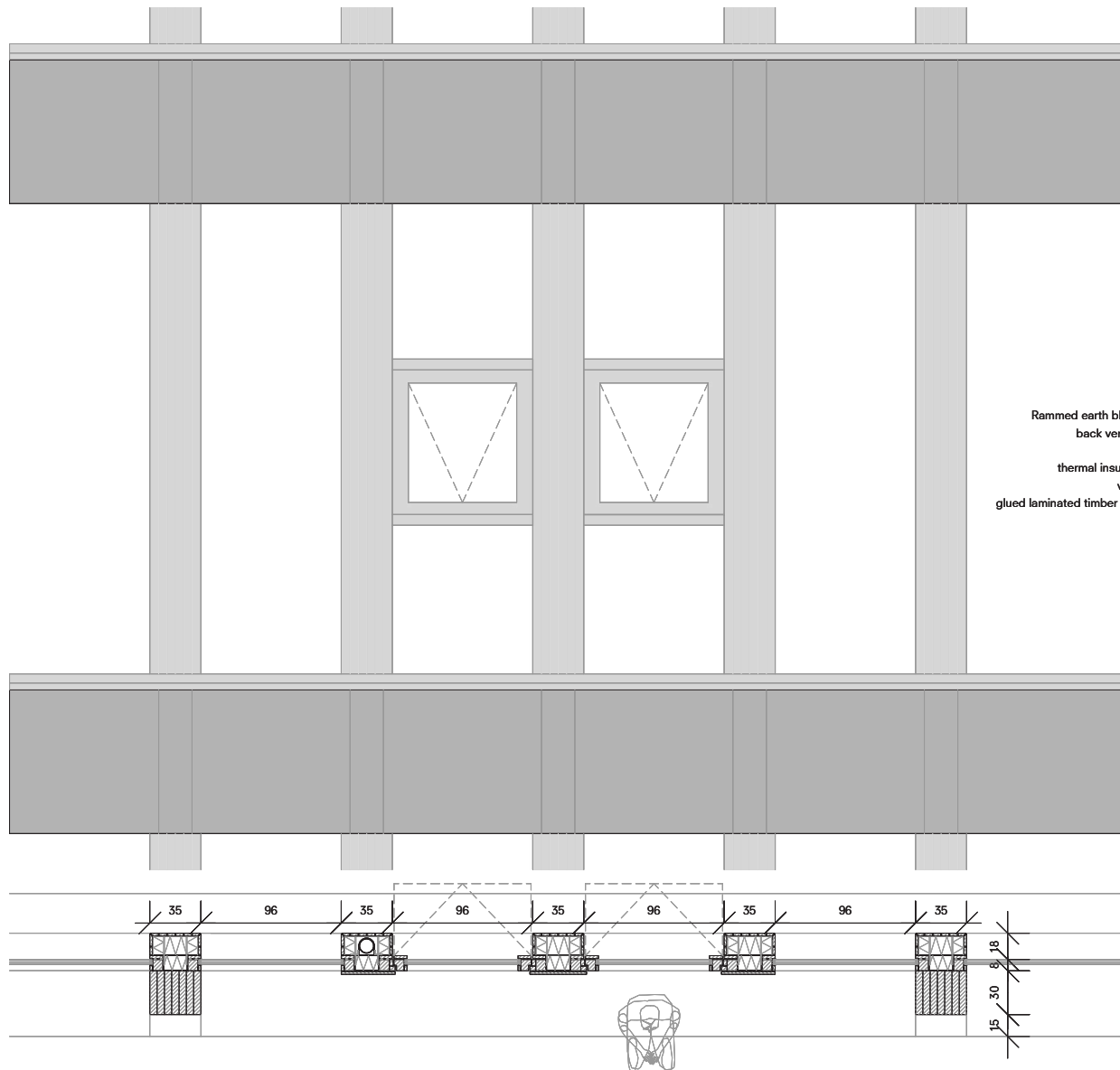




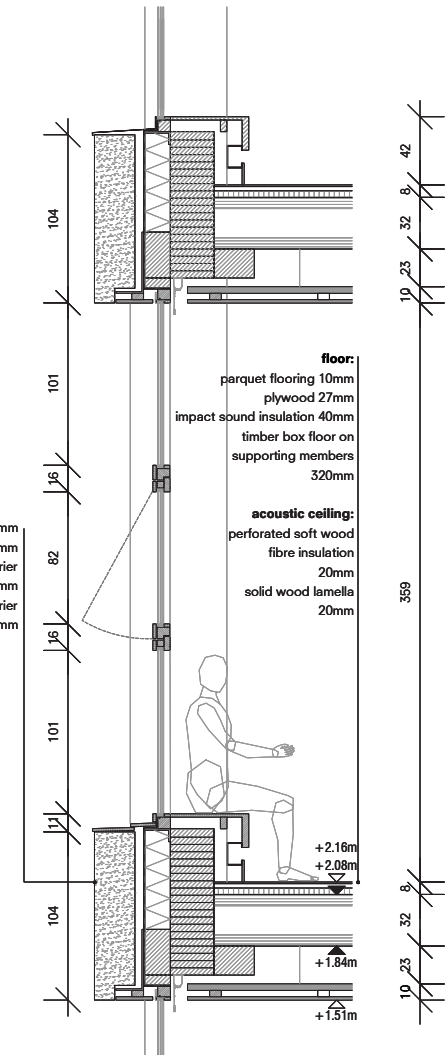
Courtyard

design

FAÇADE FRAGMENT



Rammed earth block 250mm
back ventilaton 60mm
wind barrier
thermal insulation 160mm
vapour barrier
glued laminated timber beam 240mm



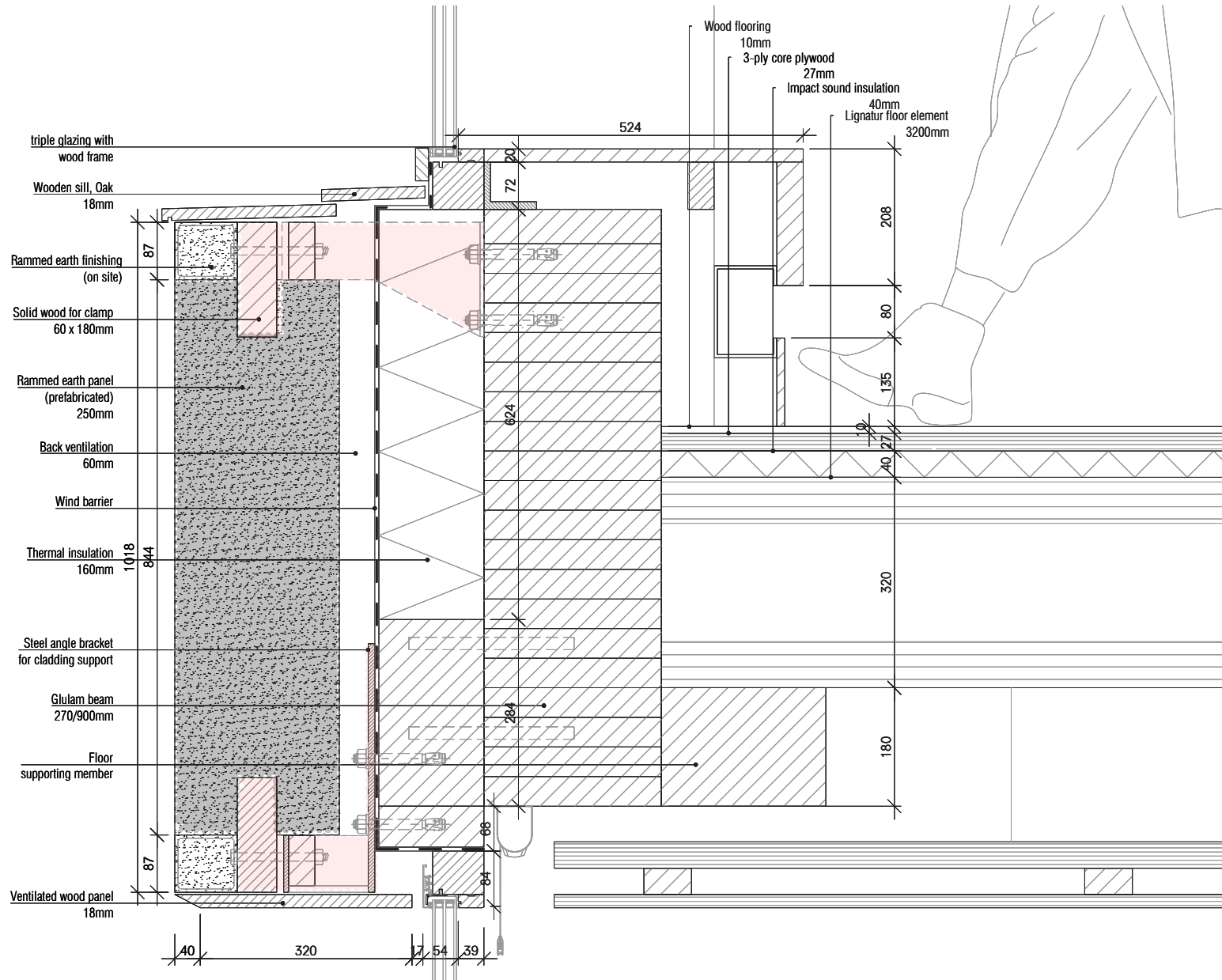
floor:
parquet flooring 10mm
plywood 27mm
impact sound insulation 40mm
timber box floor on
supporting members
320mm

acoustic ceiling:
perforated soft wood
fibre insulation
20mm
solid wood lamella
20mm

0 2 .4 .8 1 2m

design

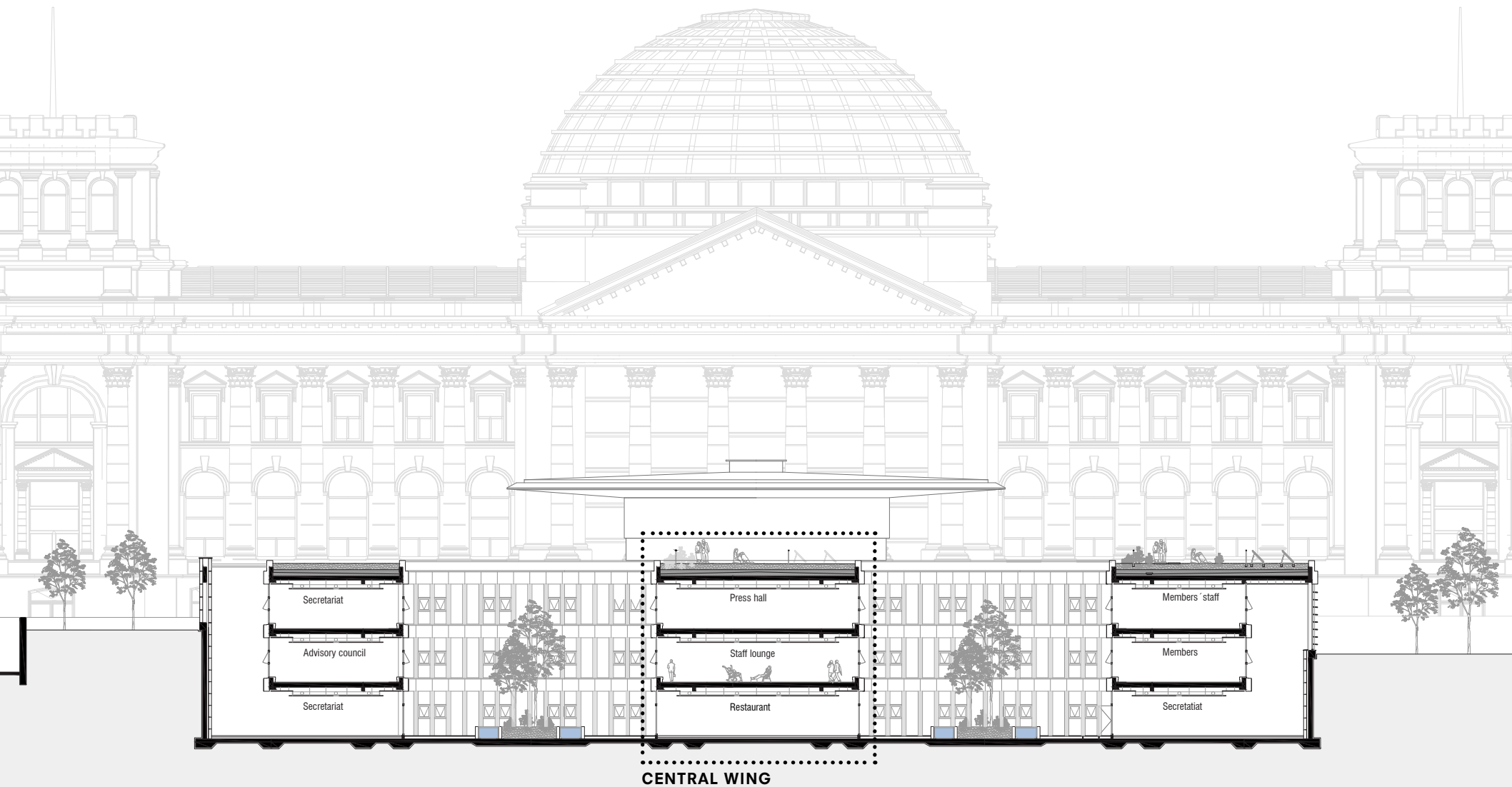
FLOOR-WALL CONNECTION





design

CROSS SECTION



Cross section A 1:200

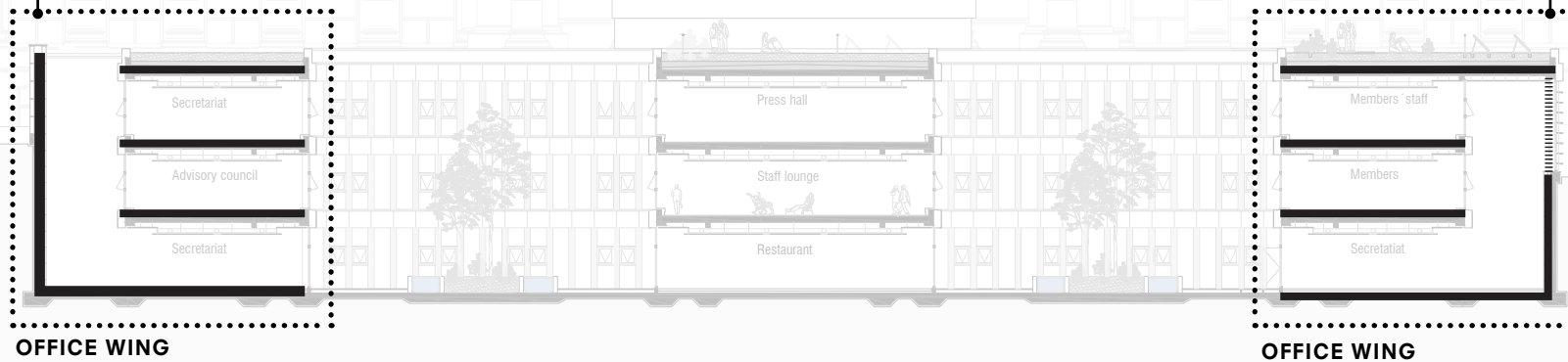
CROSS SECTION RESPONSIVE FAÇADE

NORTH FAÇADE

CLOSED FAÇADE WITH RAMMED EARTH BLOCKS (NON LOAD BEARING). OPENING ON TOP FOR DAYLIGHT

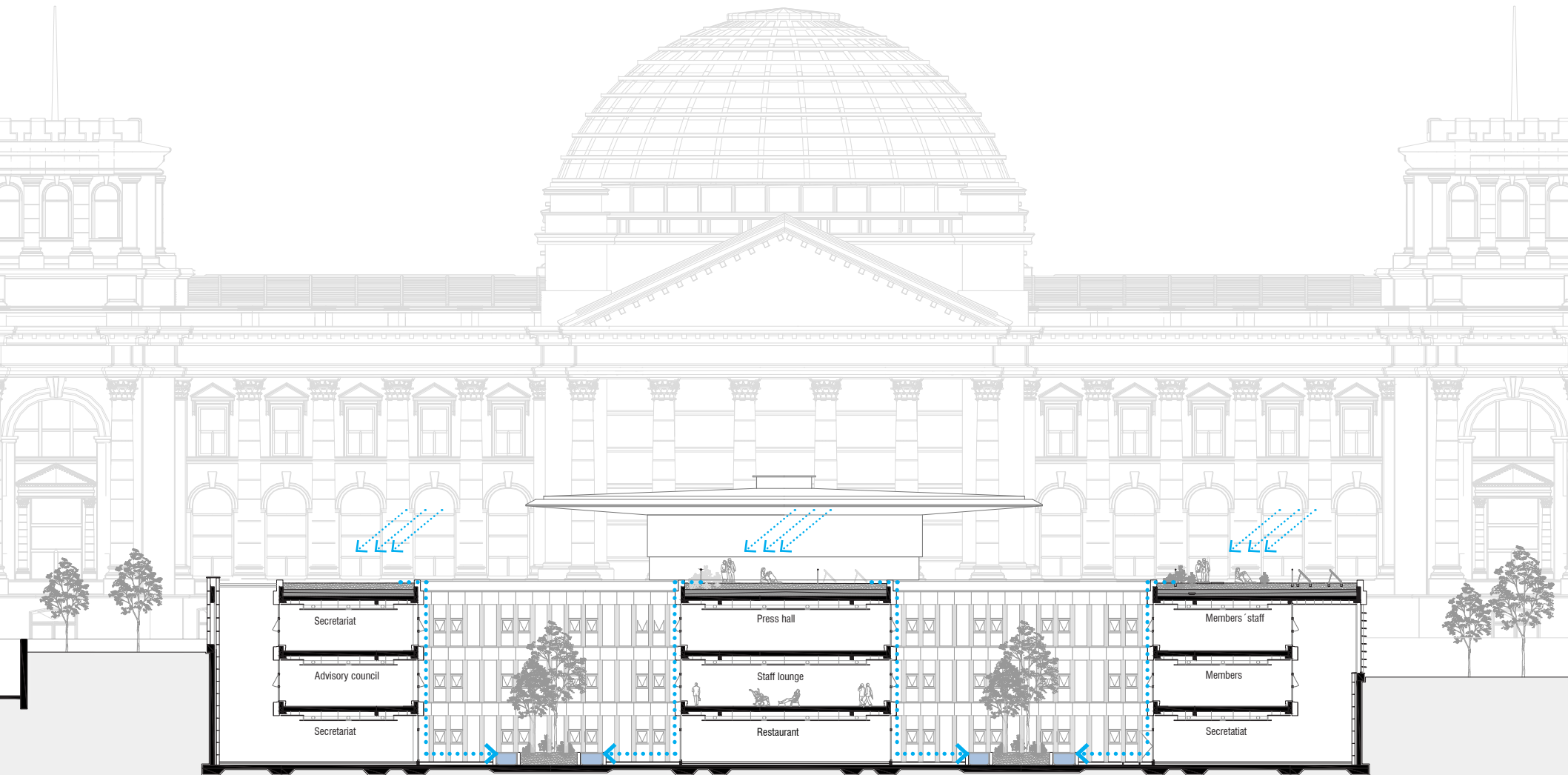
SOUTH FAÇADE

TRANSPARENT; FAÇADE WITH HORIZONTAL FINNS



Cross section A 1:200

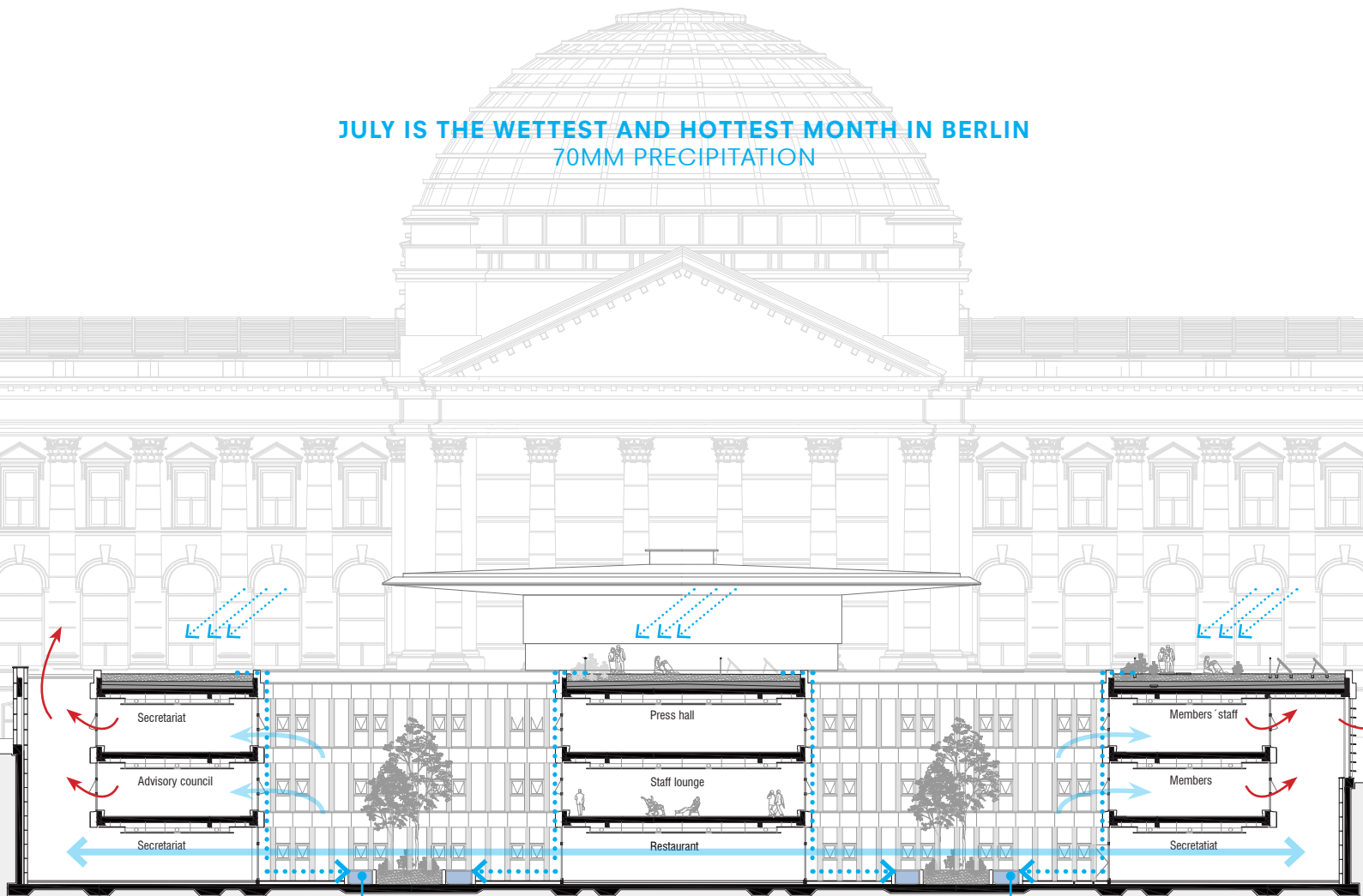
CROSS SECTION RAIN WATER STORAGE



Cross section A 1:200

CROSS SECTION NATURAL VENTILATION

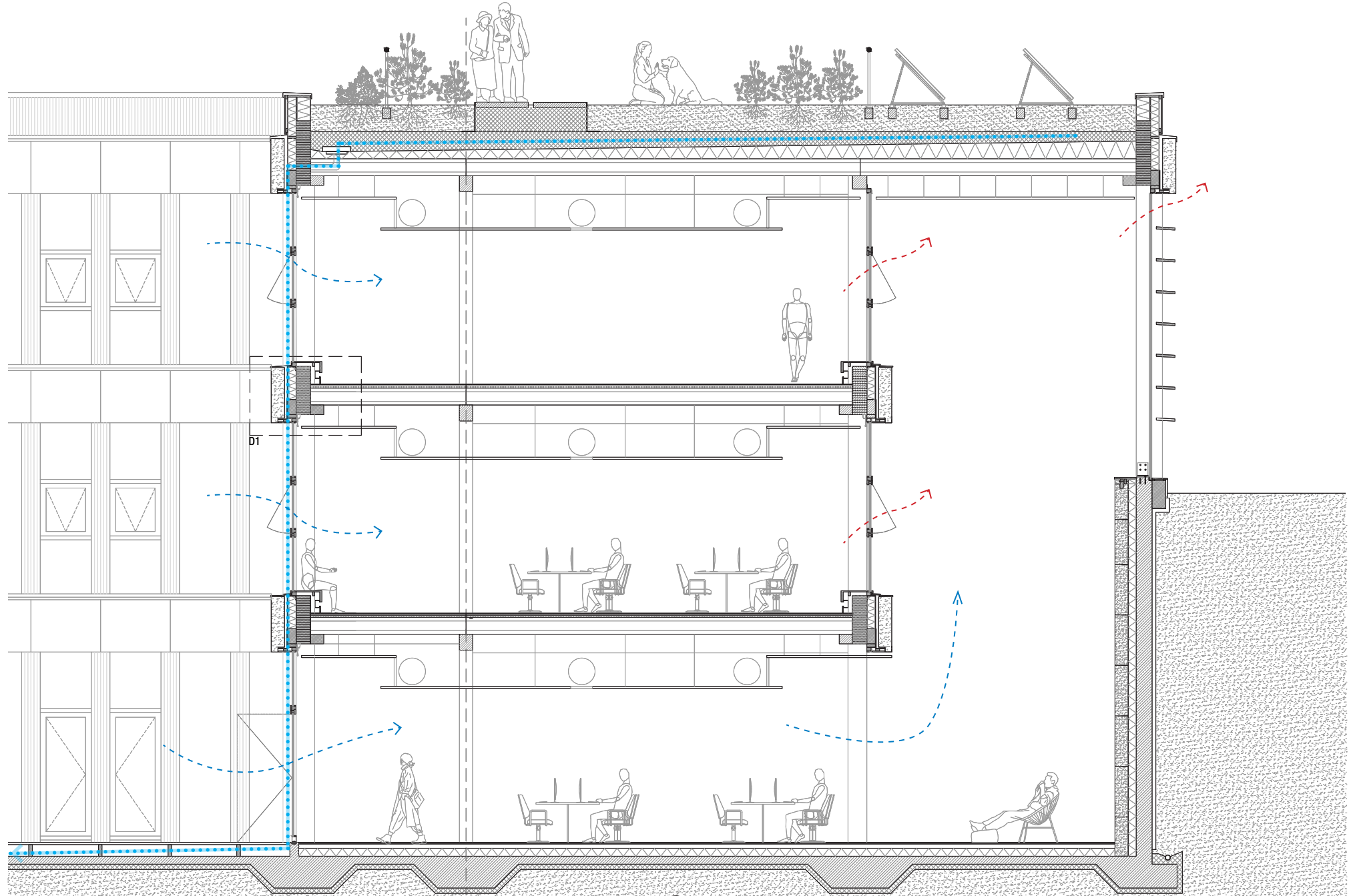
JULY IS THE WETTEST AND HOTTEST MONTH IN BERLIN
70MM PRECIPITATION



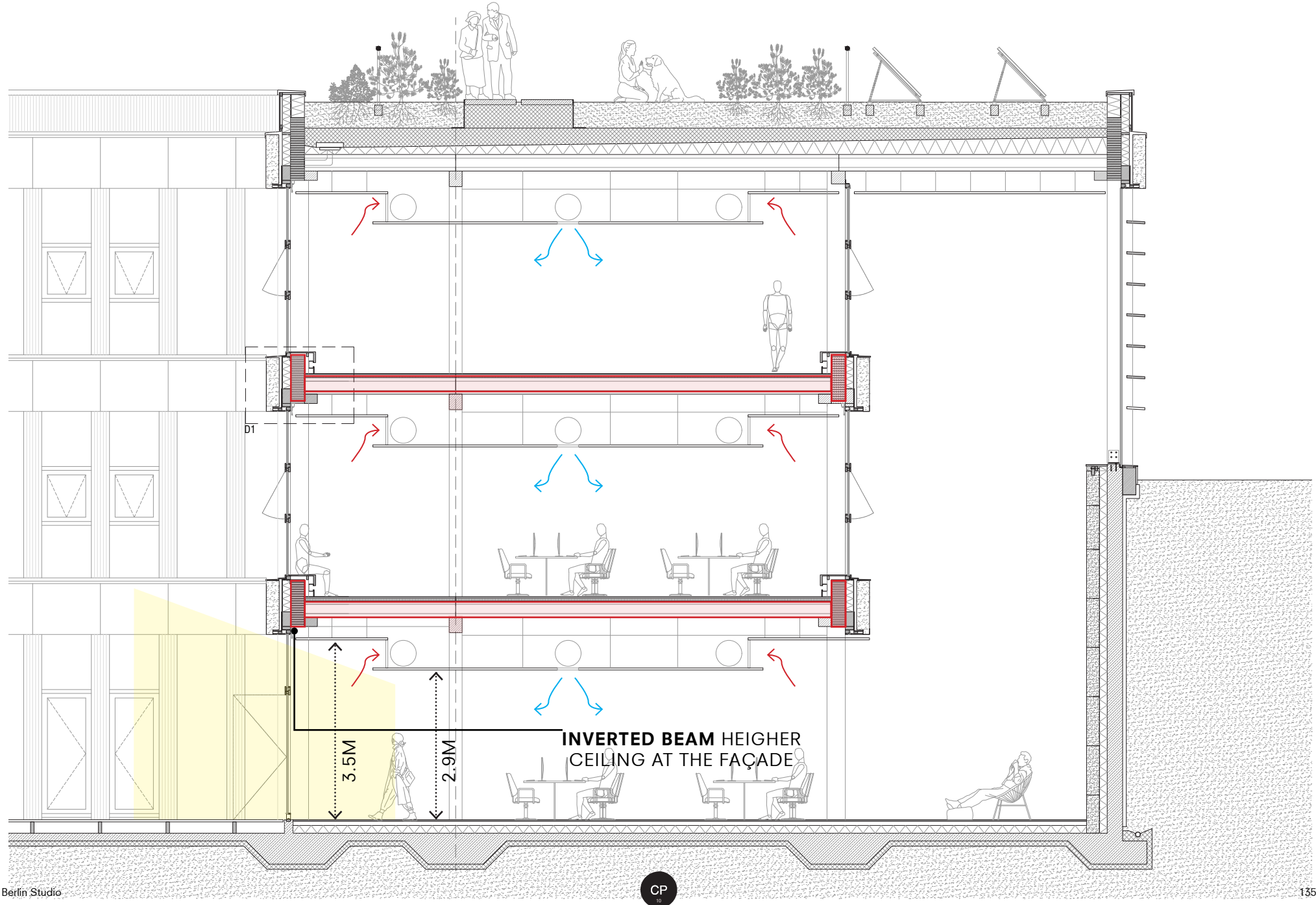
RAIN WATER USED AS LANDSCAPE
FEATURE COOLING THE AIR

Cross section A 1:200

WATER DRAINAGE AND NATURAL VENTILATION

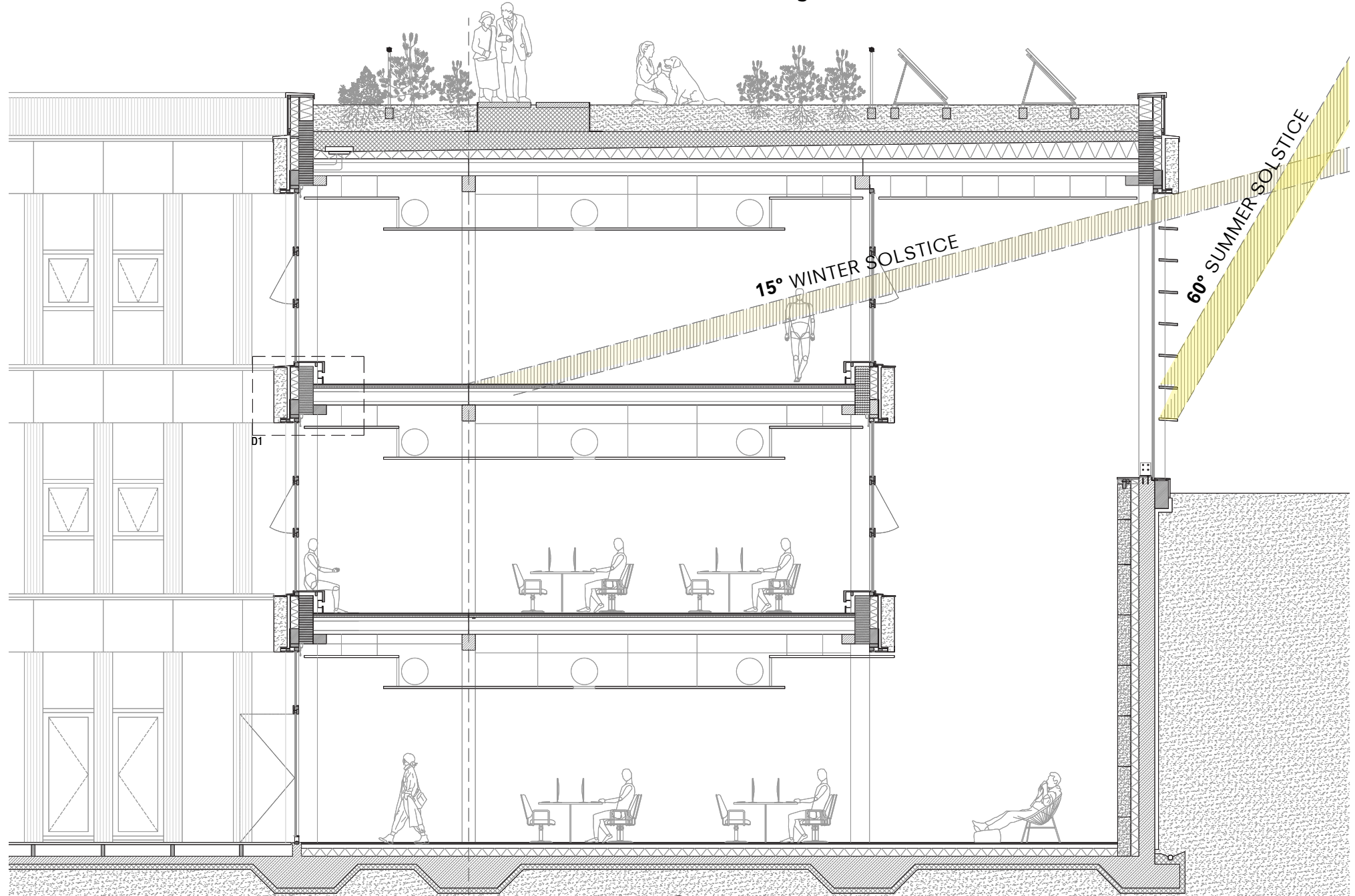


STRUCTURE AND MECHANICAL VENTILATION



design

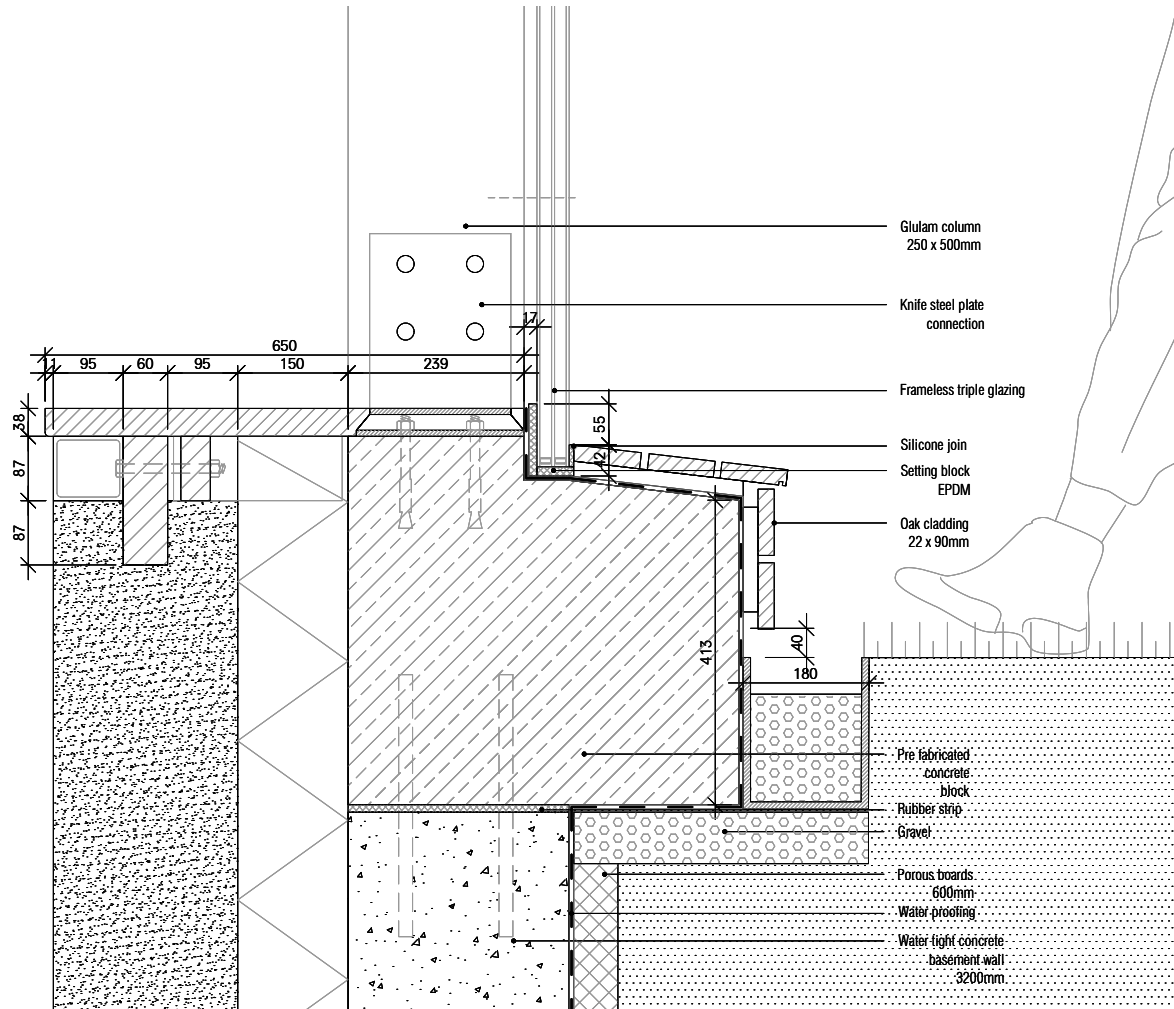
RESPONSIVE FAÇADE





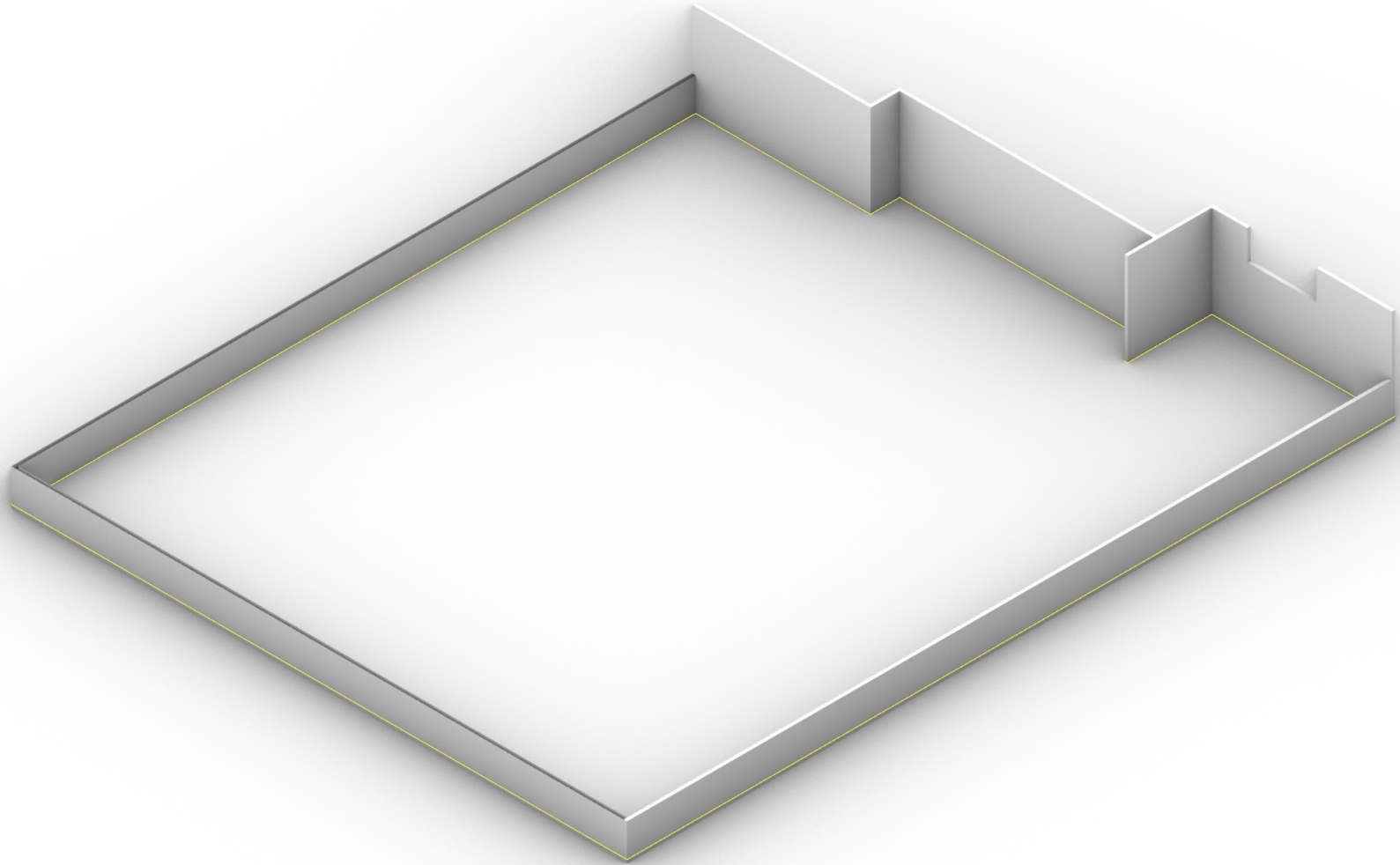
design

PLINTH DETAIL SOUTH FAÇADE



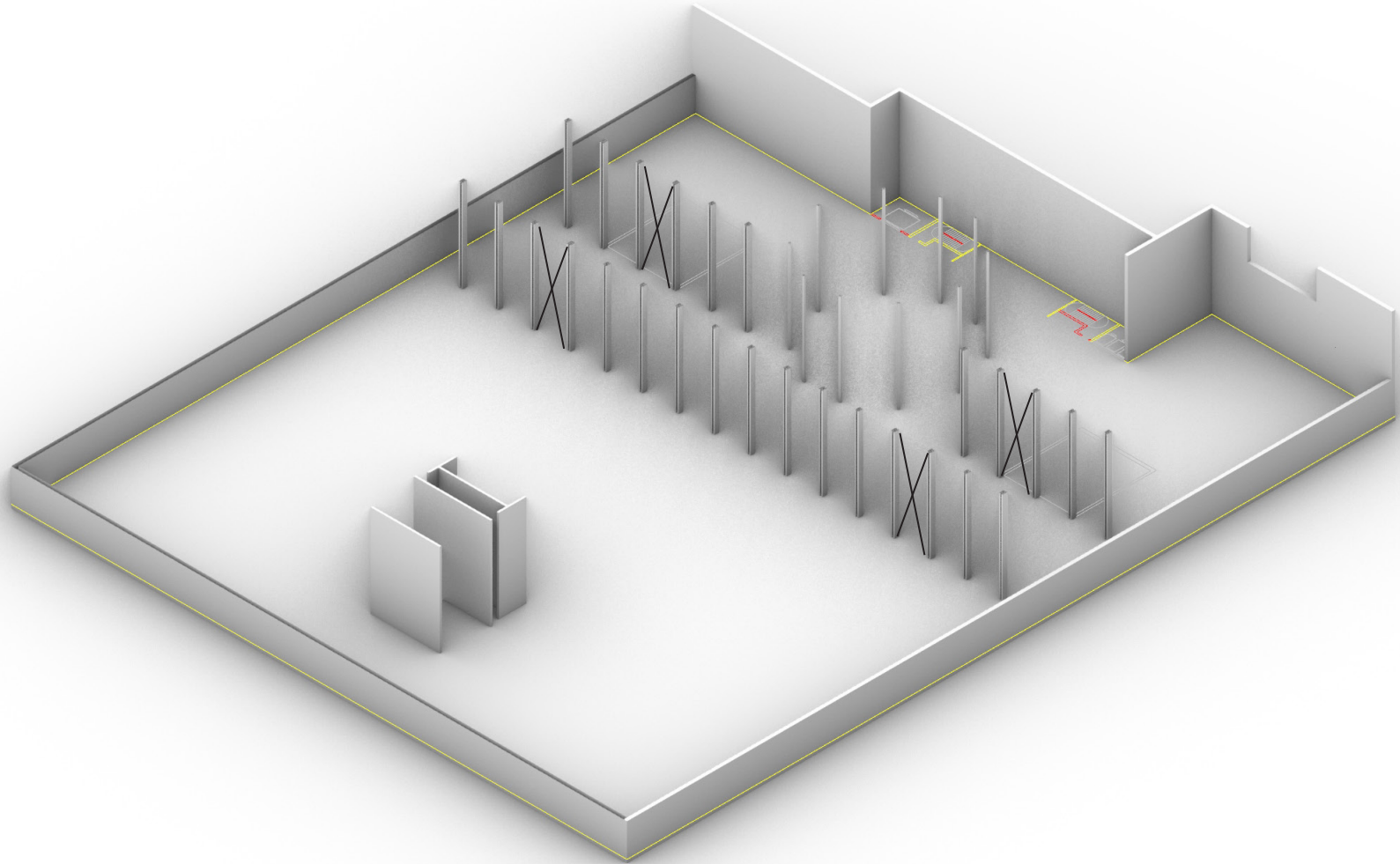
design

STRUCTURE WATER TIGHT CONCRETE BASEMENT



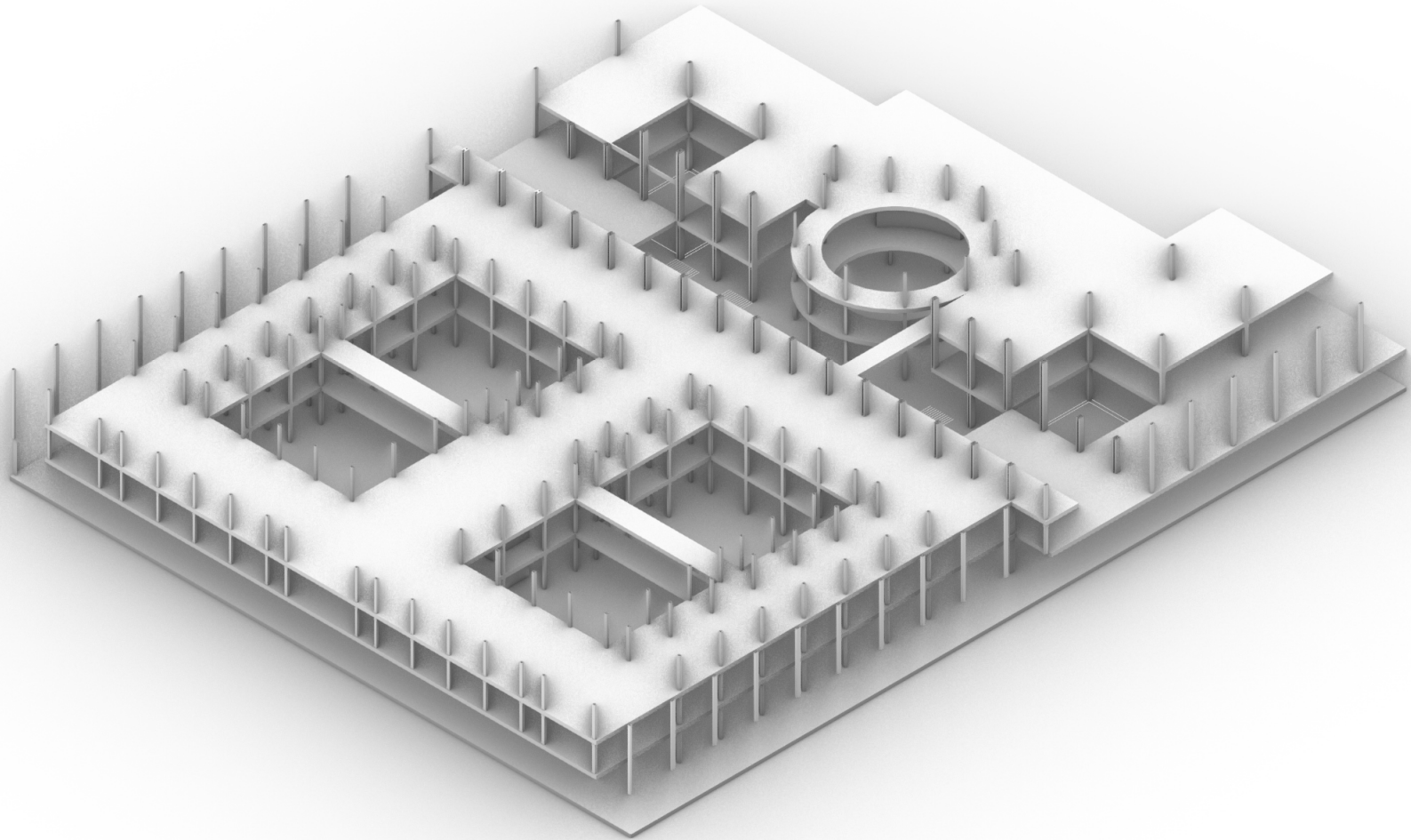
design

STRUCTURE LATERAL STABILITY

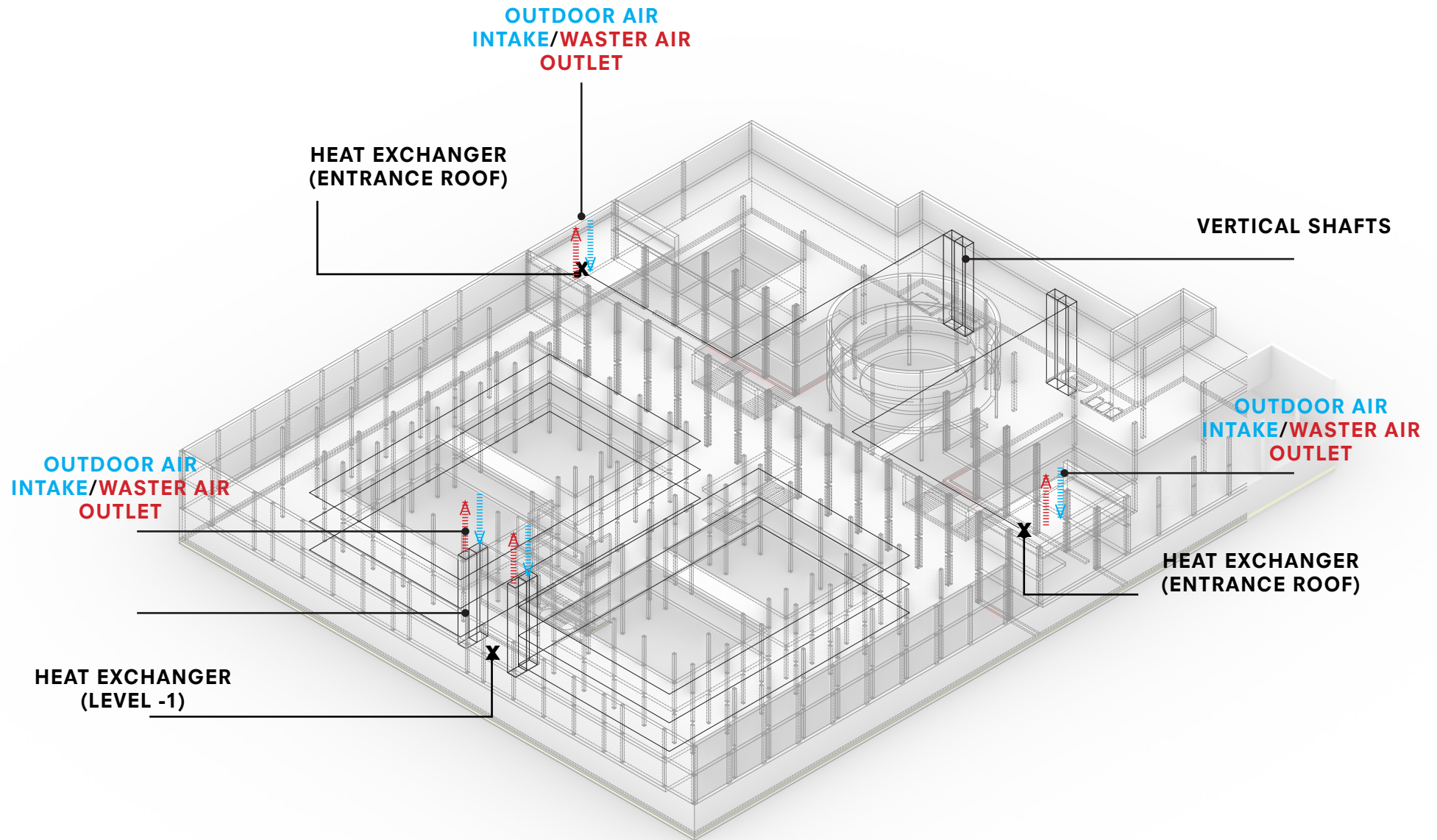


design

STRUCTURE GLULAM COLUMN AND LIGNATUR SLABS



MECHANICAL VENTILATION

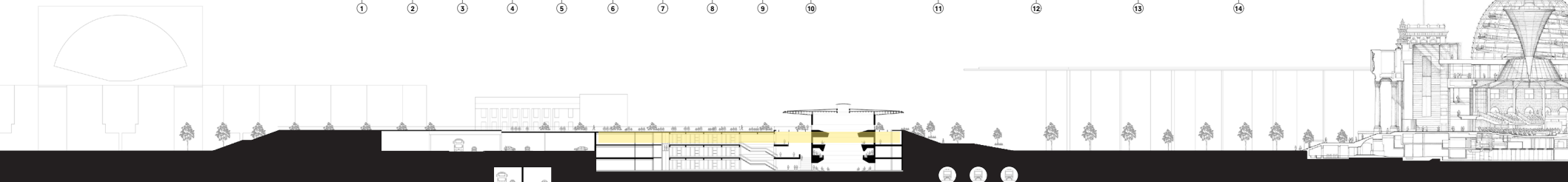
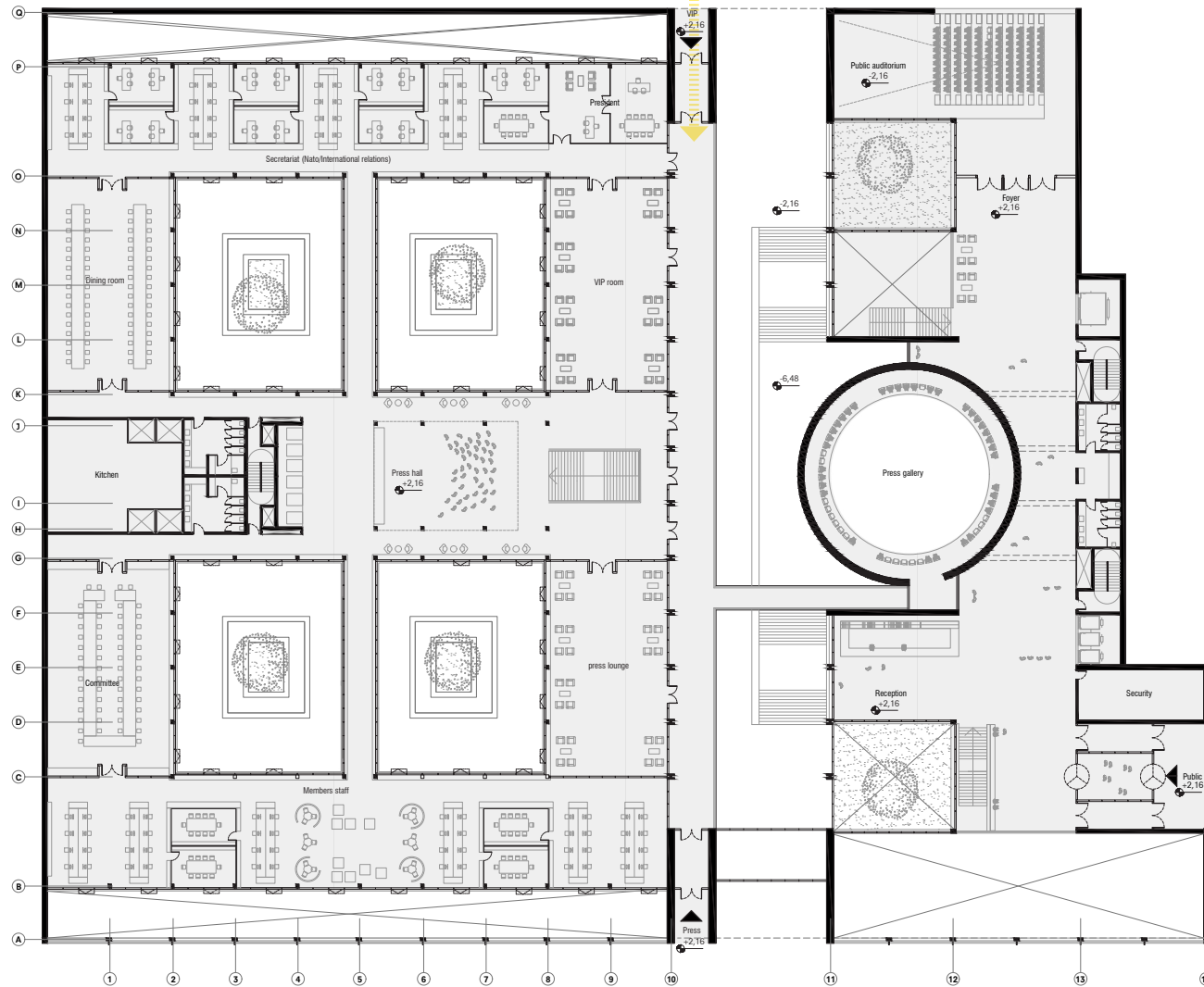


ACTIVITIES

PROTOCOL

1ST

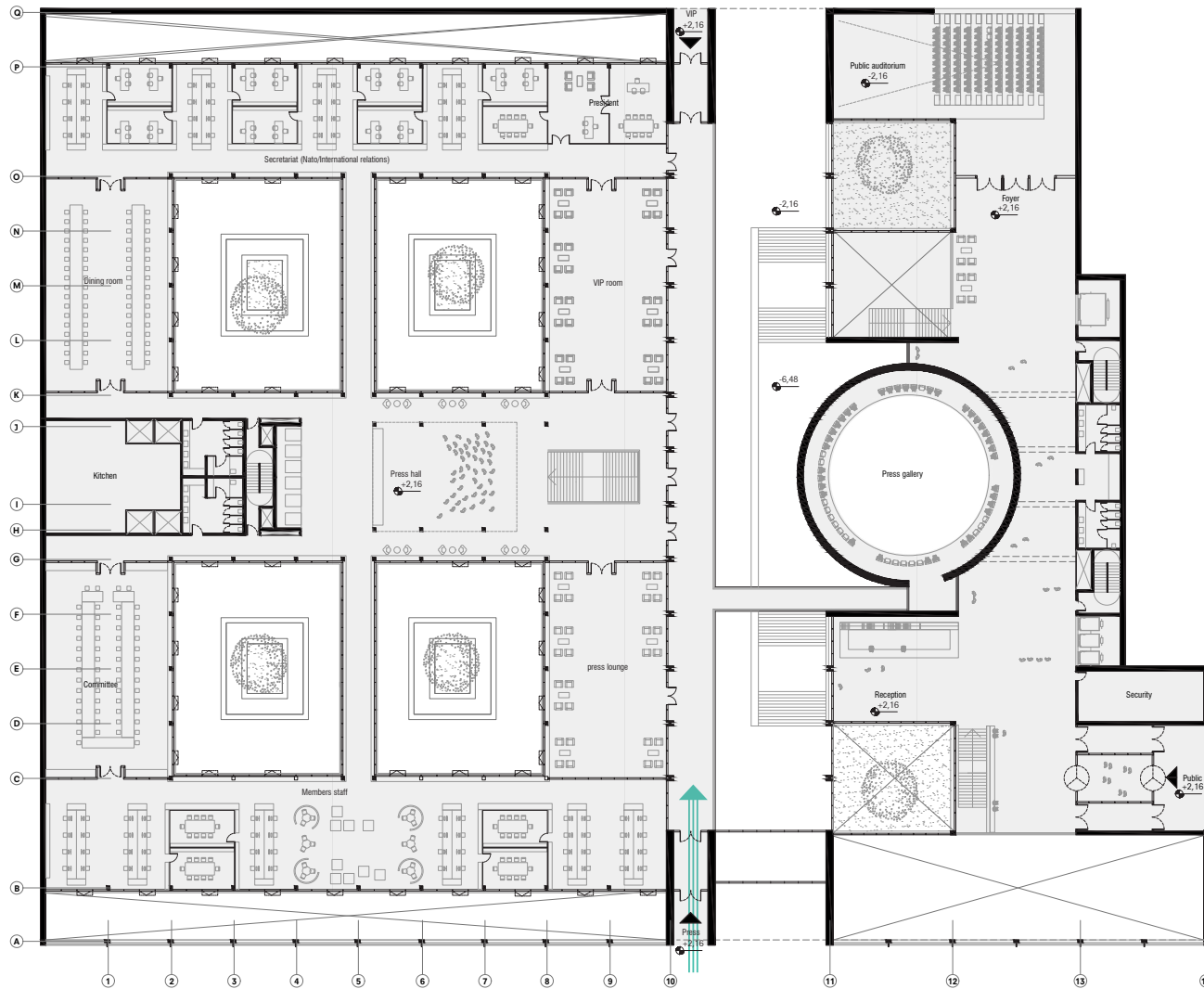
design PROTOCOL VIP ACCESS





North façade - VIP access

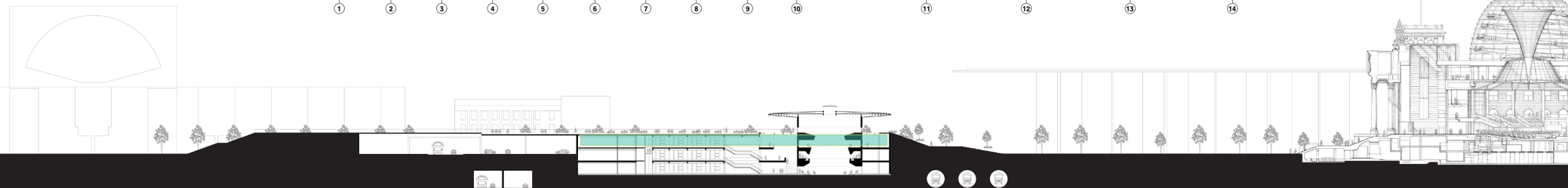
design PROTOCOL PRESS ACCESS





South façade - press access

design PROTOCOL LOUNGE AND PRESS HALL



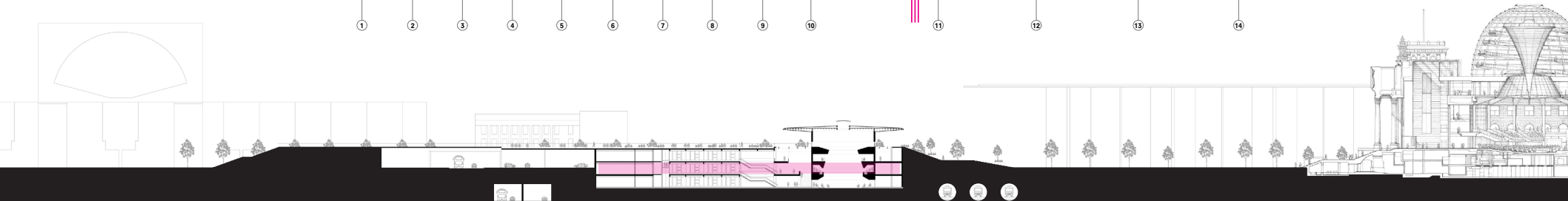
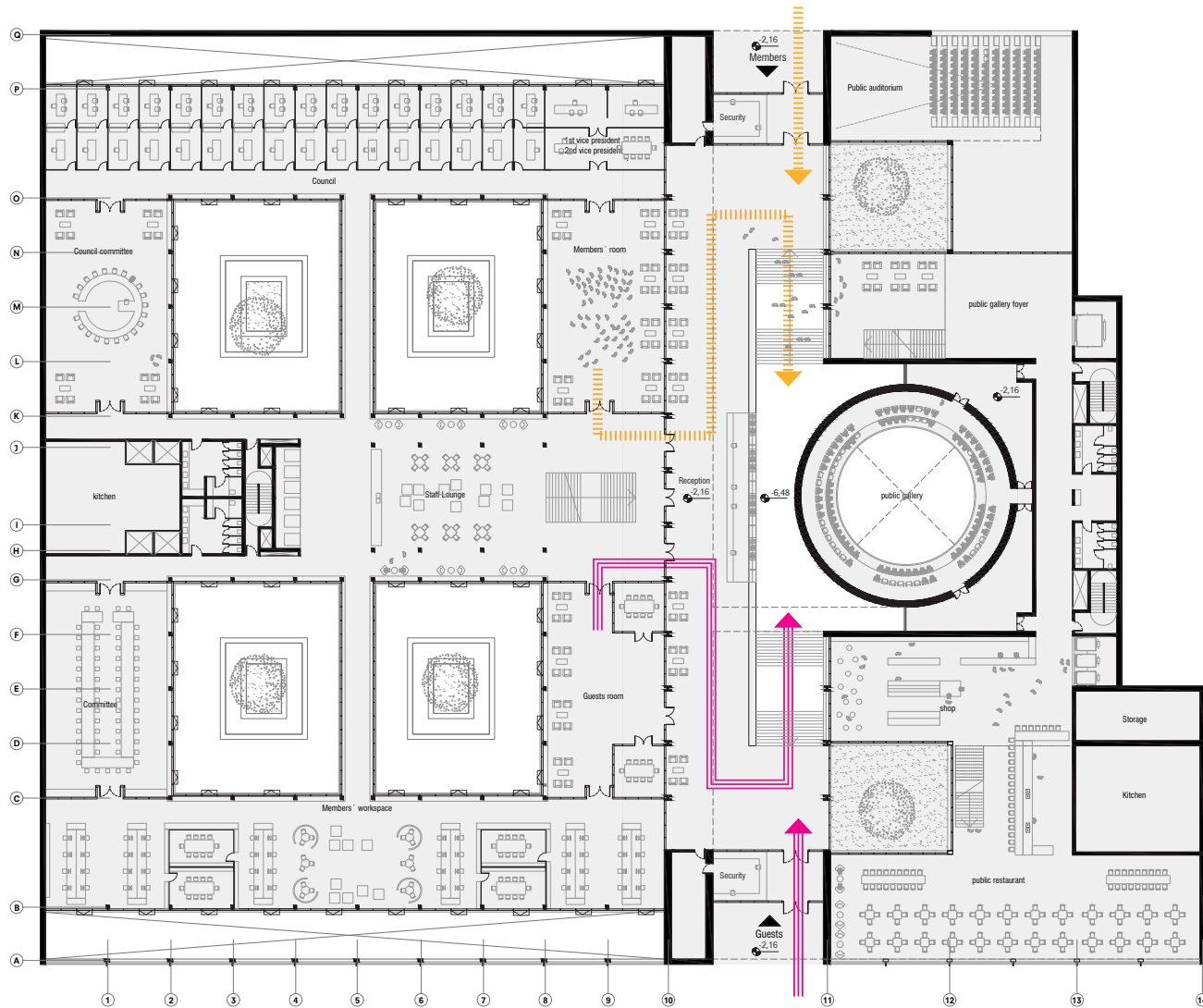


Central wing - press hall

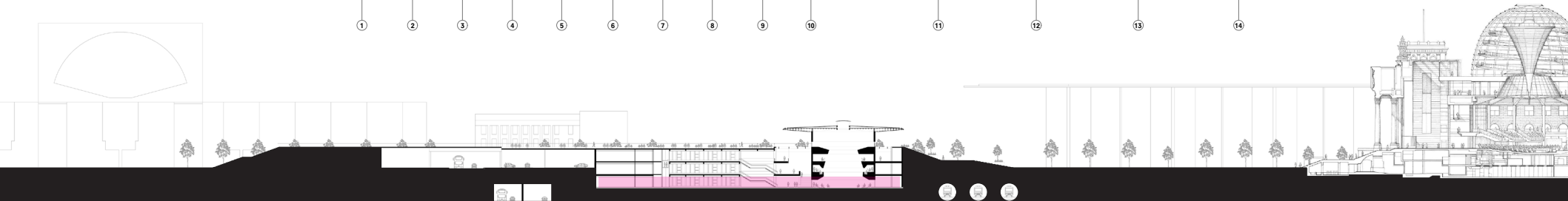
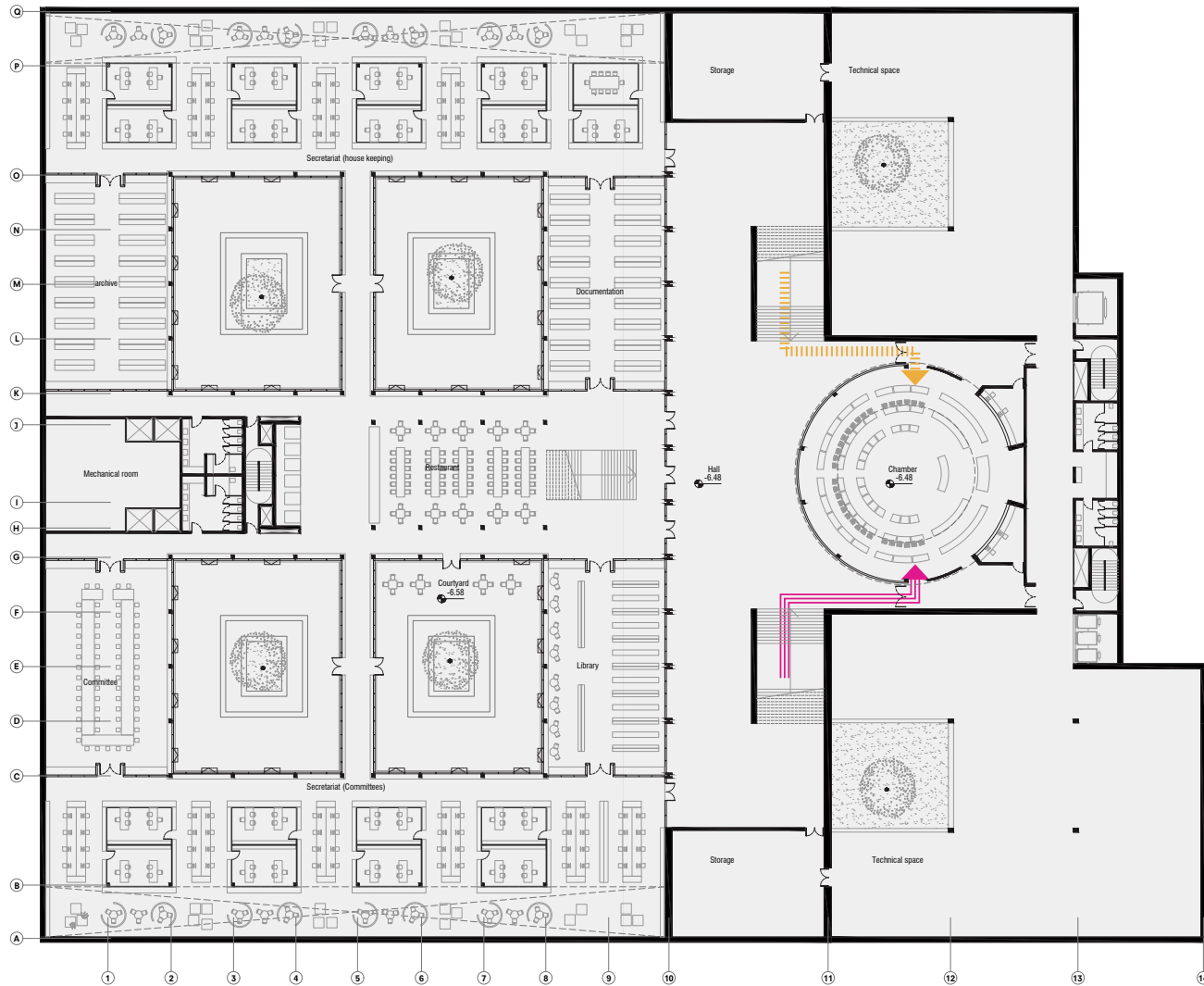
PLENARY SESSION

2ND

PLENARY SESSION GROUND FLOOR

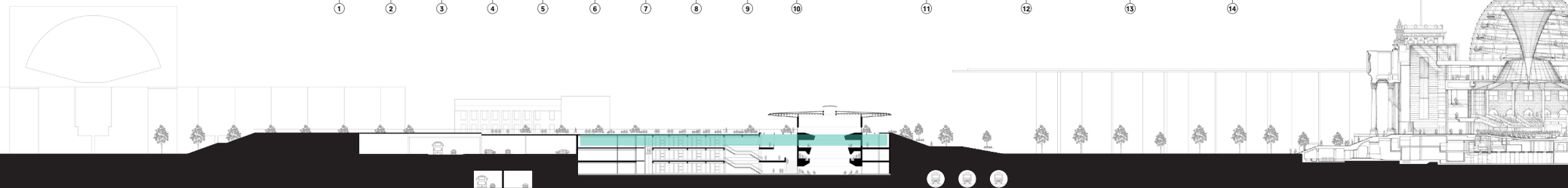
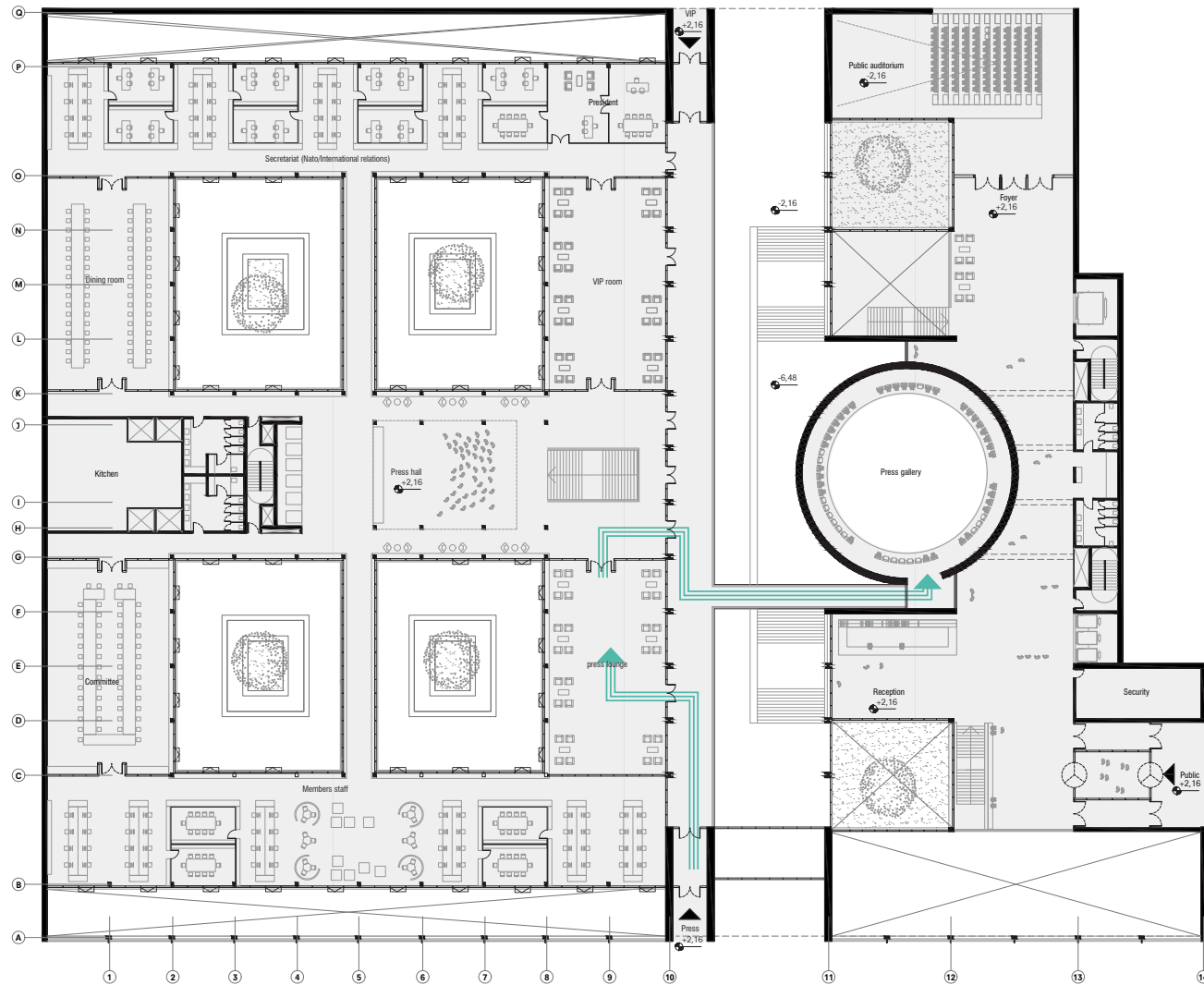


PLENARY SESSION LEVEL -1



design

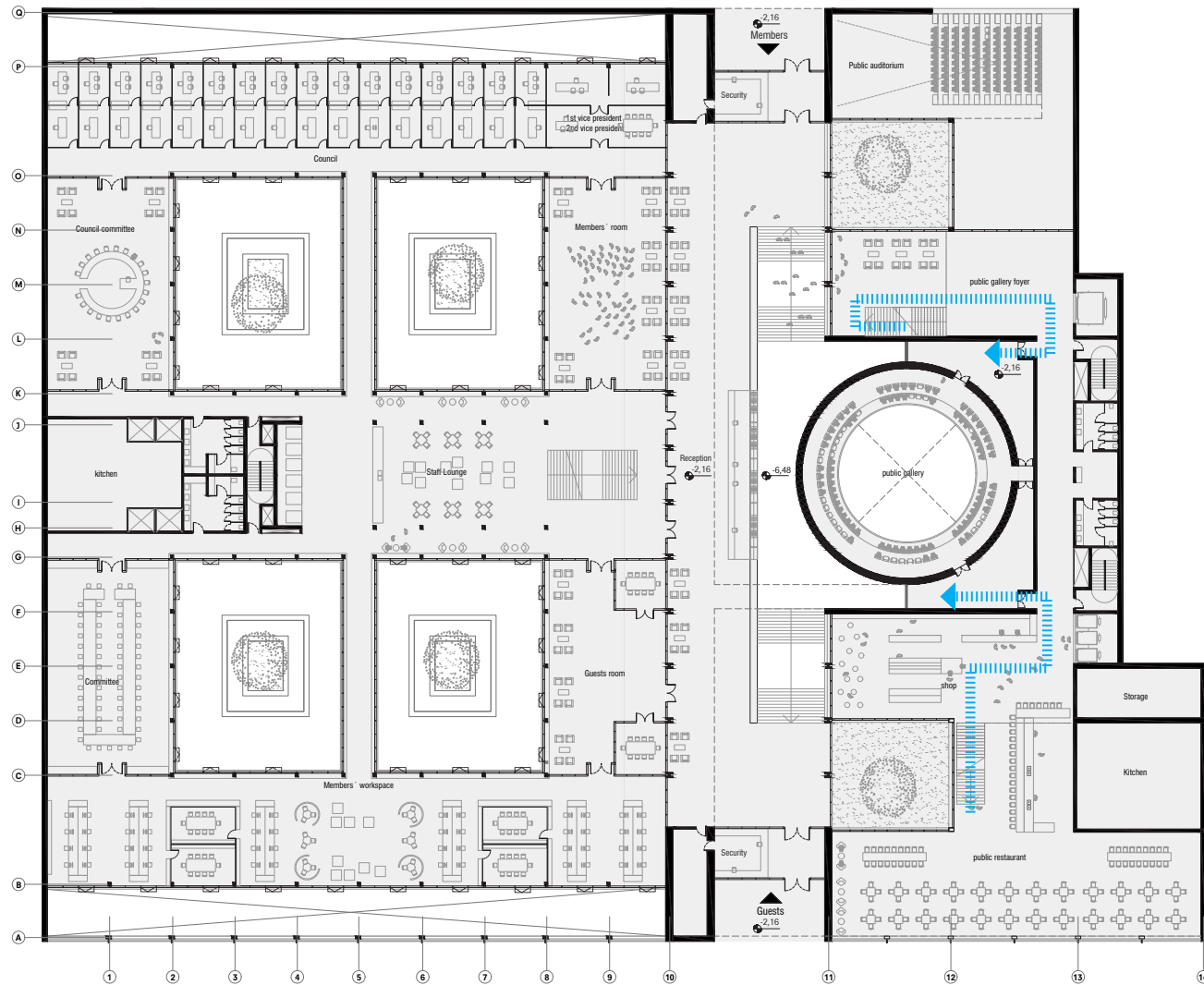
PLENARY SESSION LEVEL +1





Entrance hall

design PLENARY SESSION PUBLIC



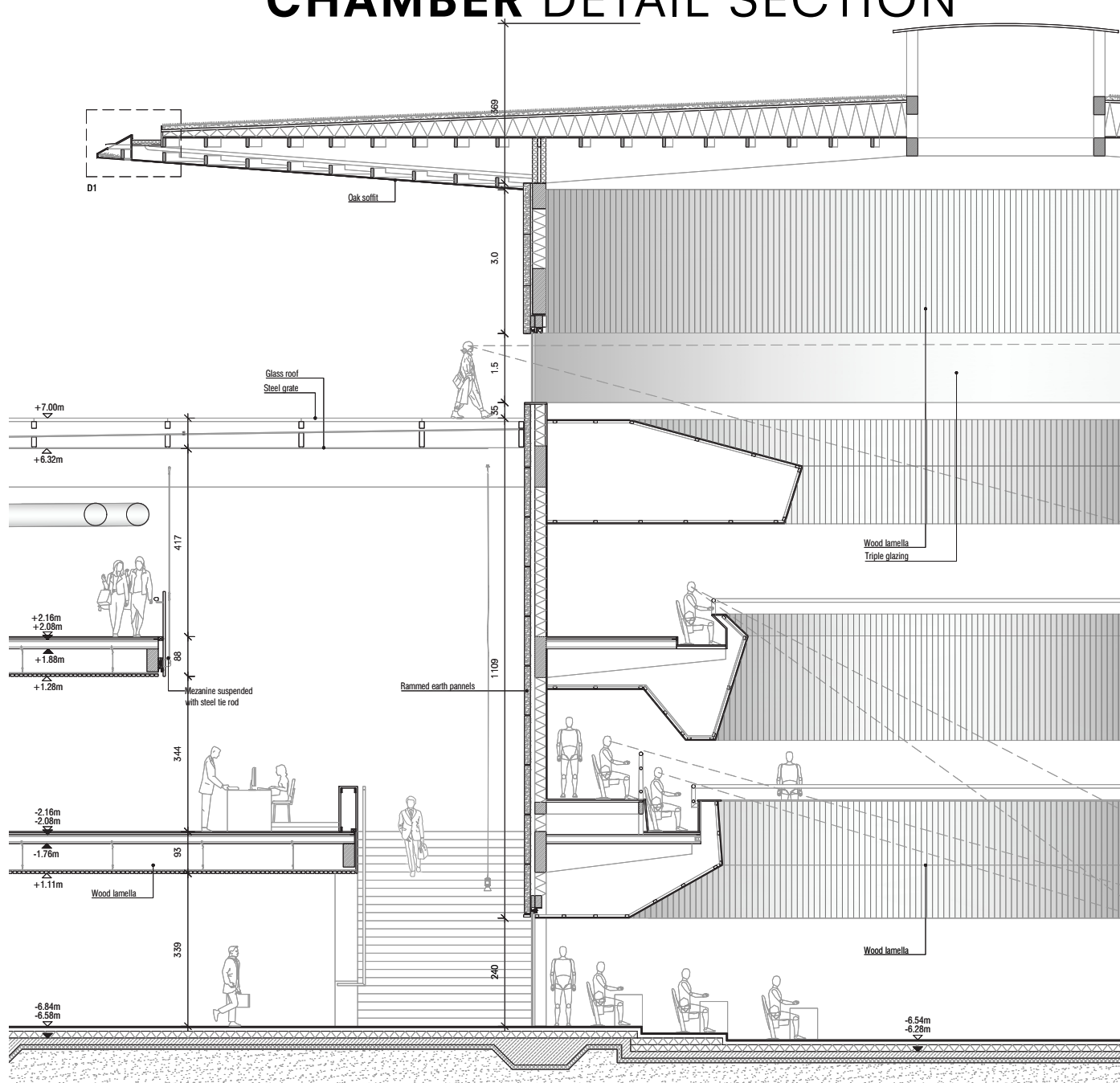


Access to public gallery



Debating chamber

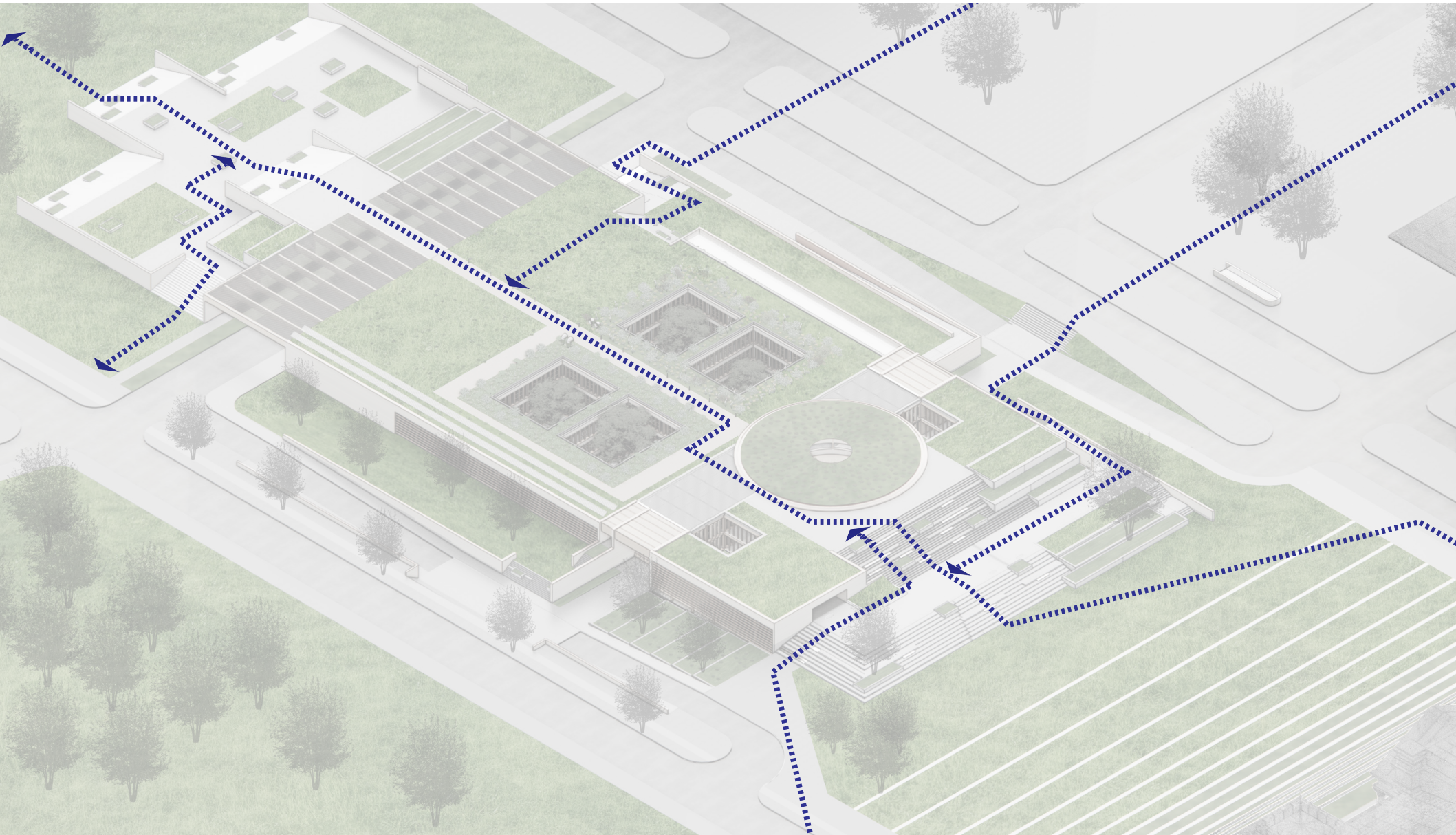
design CHAMBER DETAIL SECTION



PUBLIC

3RD

IMPLEMENTATION PUBLIC FLOW

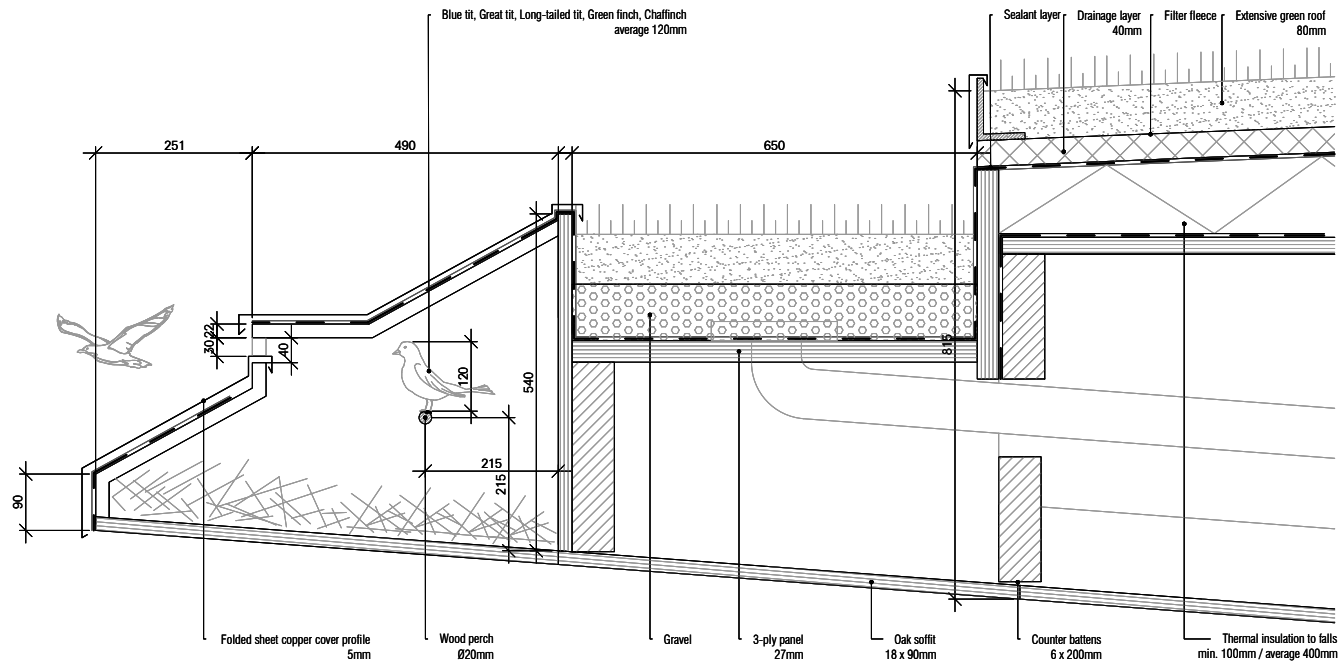




Roof top - towards the Reichstag

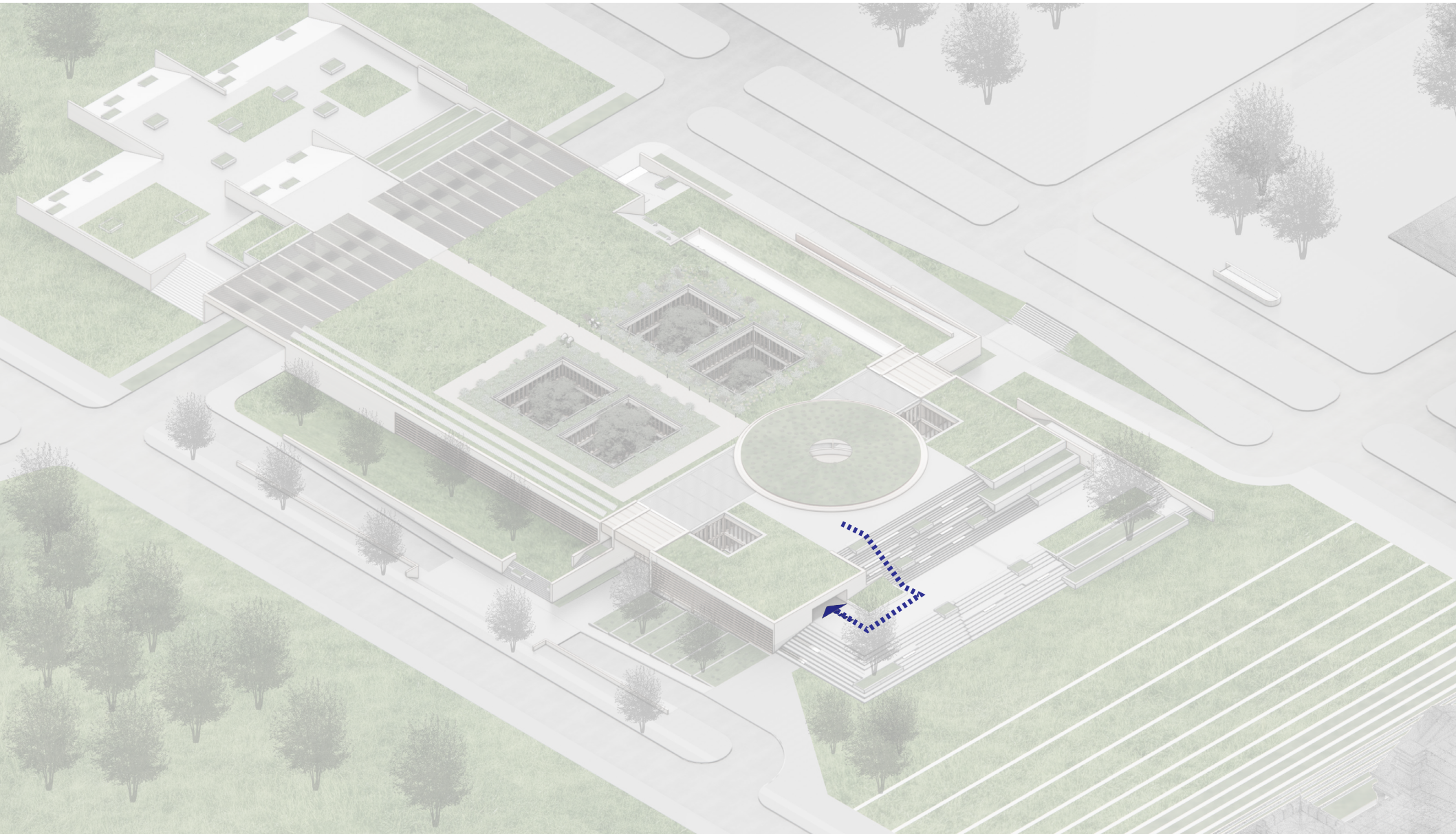
implementation

CHAMBER ROOF EDGE



design

PUBLIC ENTRANCE



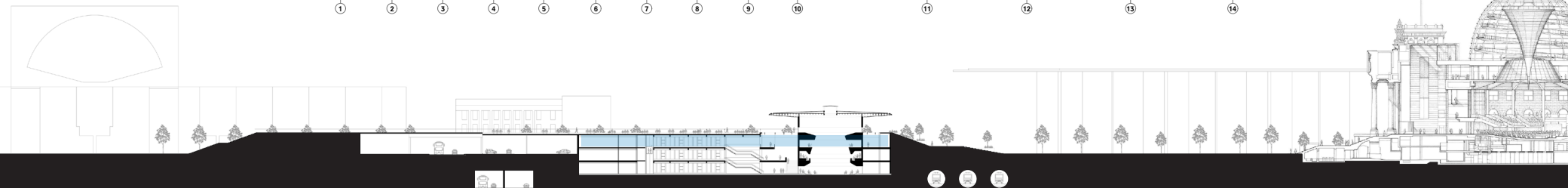
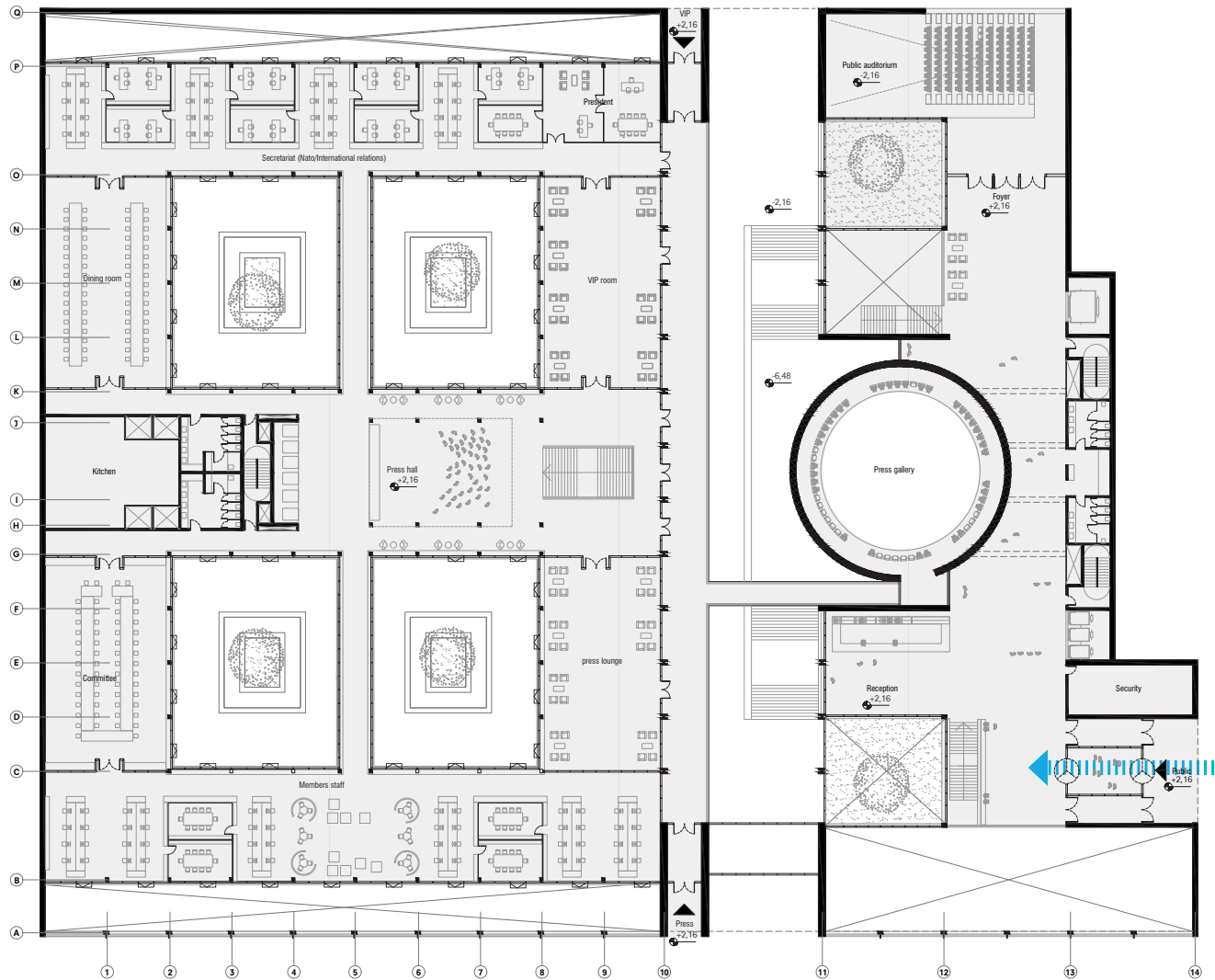


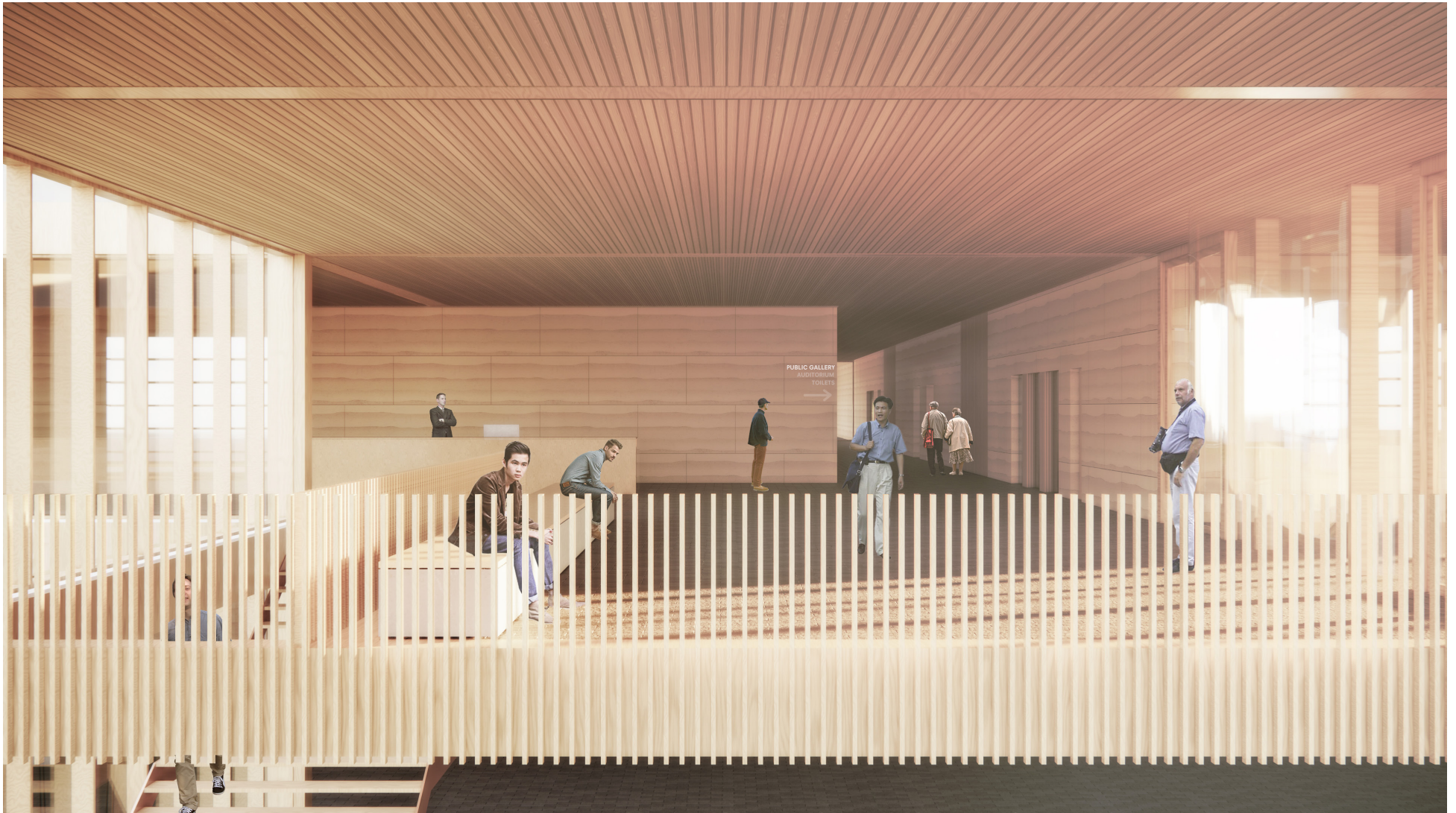
Urban staircase facing the Reichstag



View from Reichstag - Public entrance

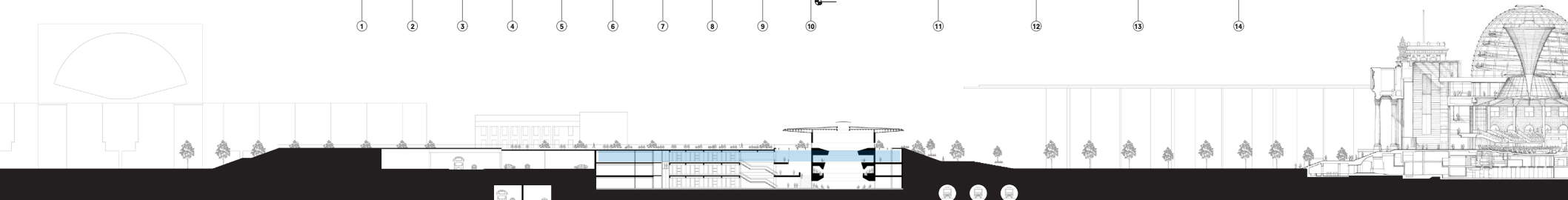
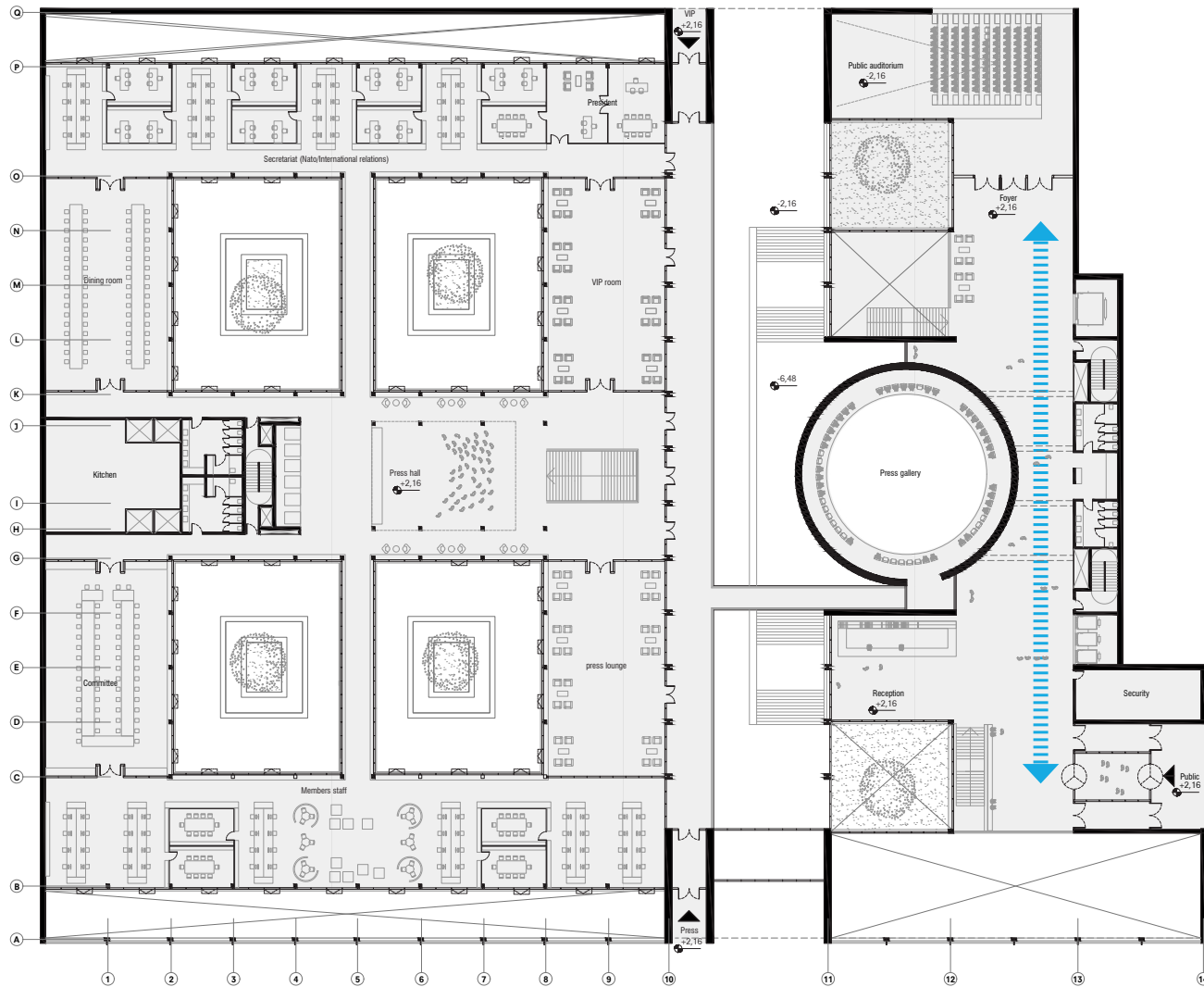
design PUBLIC ENTRANCE





Public entrance

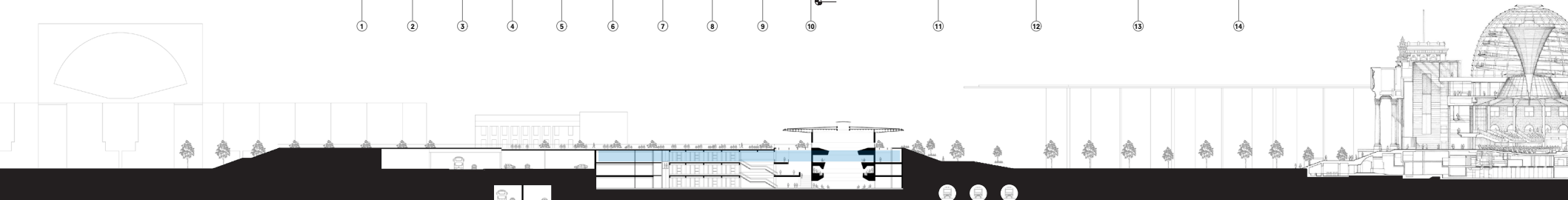
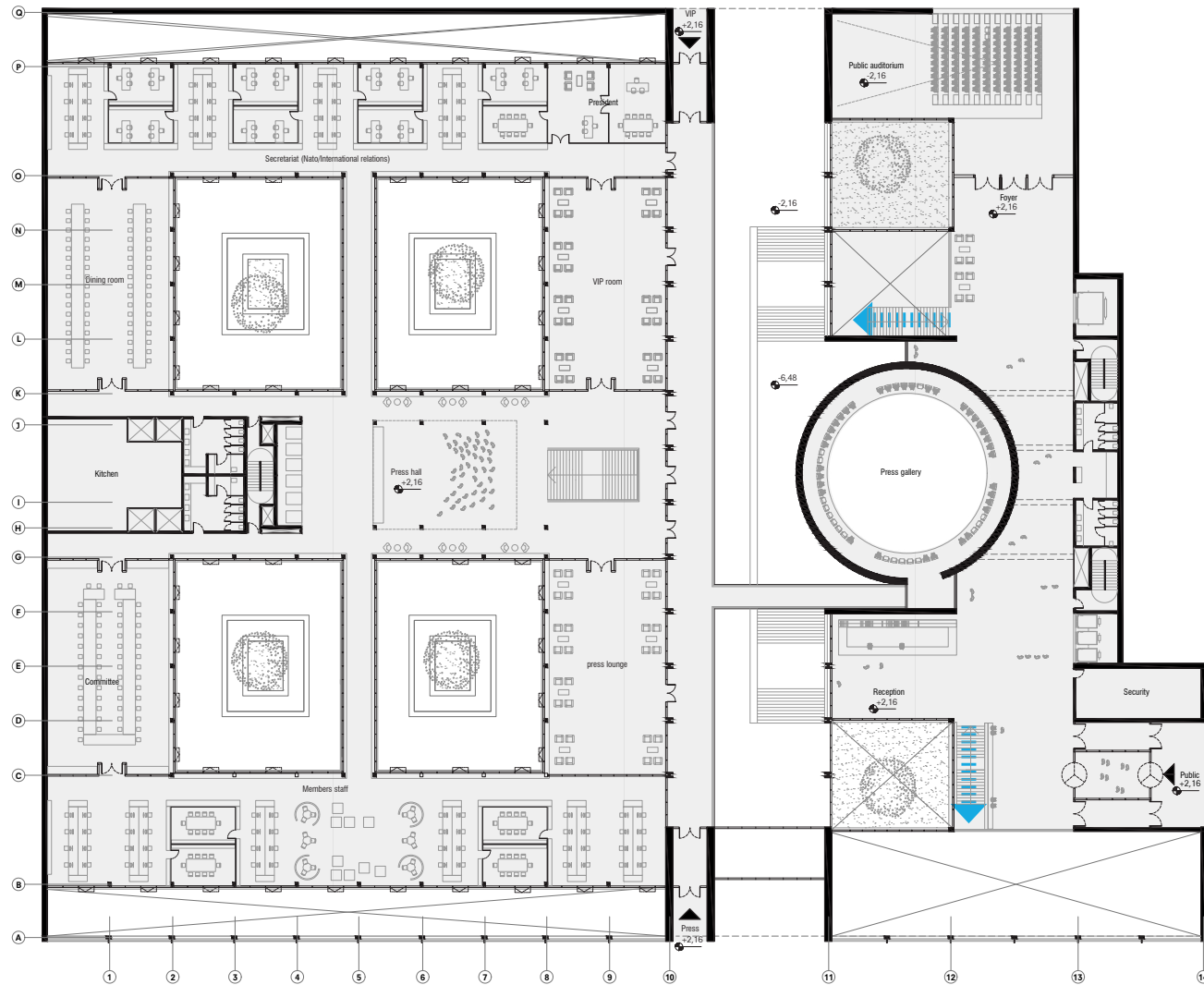
design PUBLIC SPACES



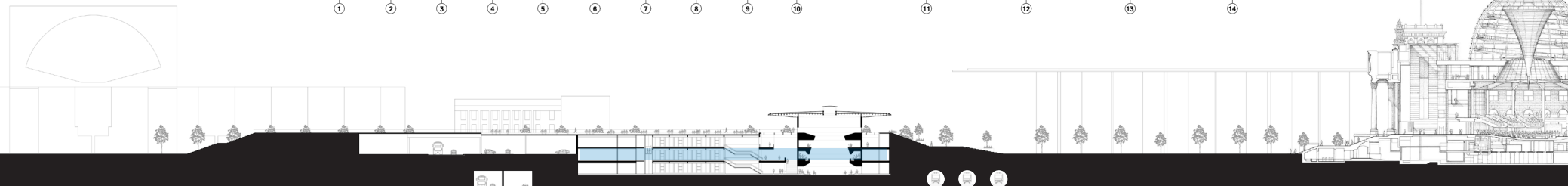
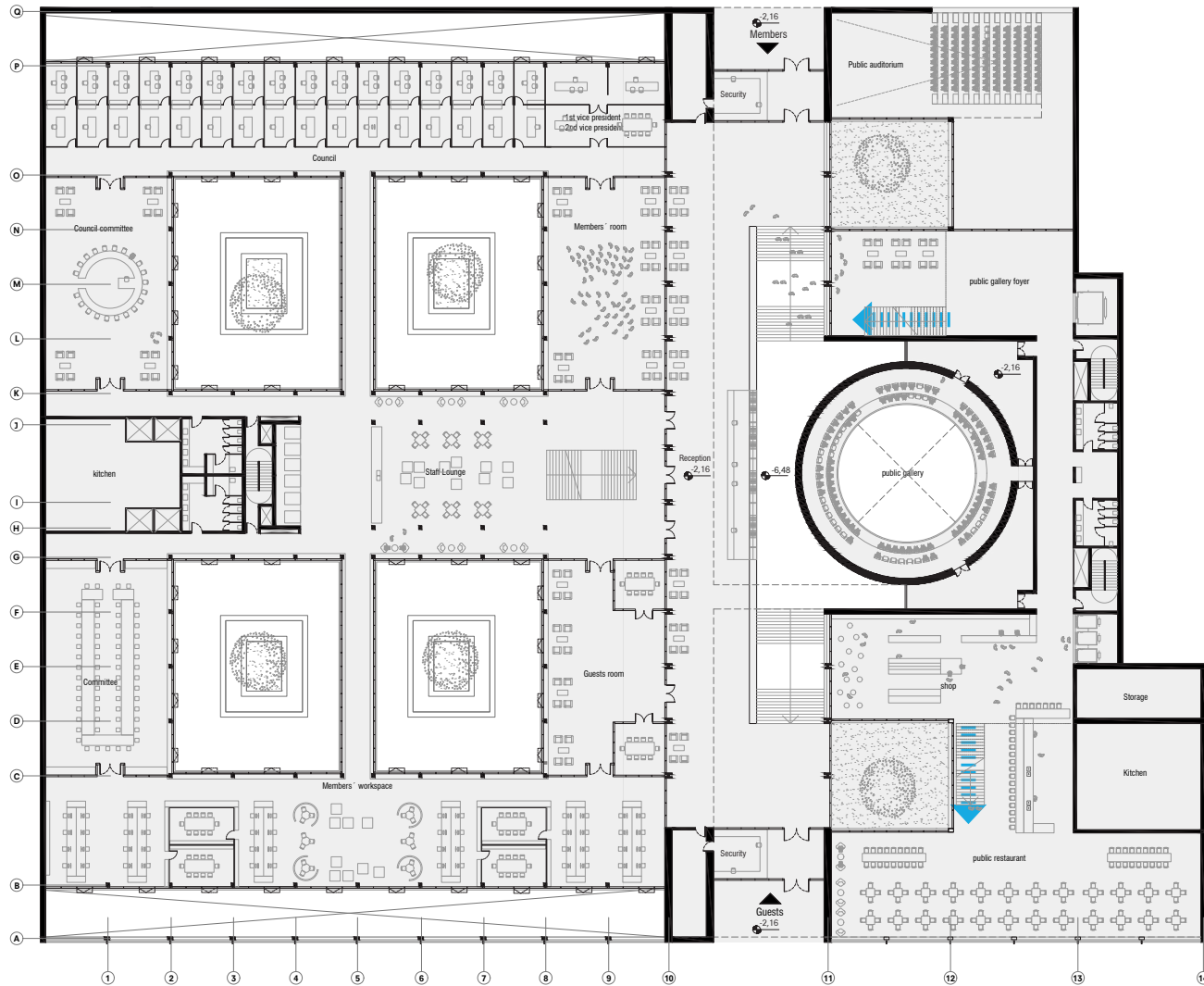


Public auditorium

implementation PUBLIC PROGRAM



PUBLIC PROGRAM GROUND FLOOR





Public area - view to the entrance hall

REFLECTION...

How does **sustainability** affect the architecture of **power**?



Urban implementation as a political message





rationality and materials as a political message

thank you