

A new centrality

A new design for the Baggermuseum in
Sliedrecht

Introduction

Design brief

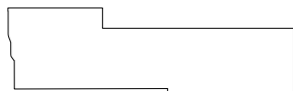
Research

Concept

Implementation

Development

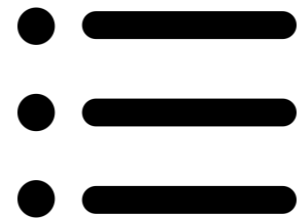
Conclusion



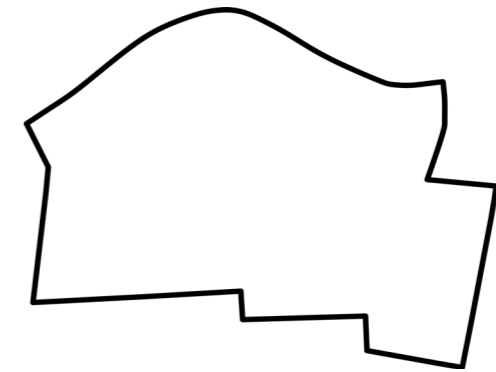
Who? What? Where?

Nationaal
Bagger
museum

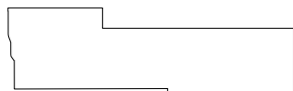
Client



Programme



Site

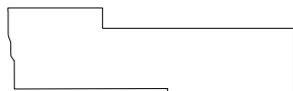


Who? What? Where?

3000
visitors



12000-15000
Visitors



Design brief
Partners



IHC



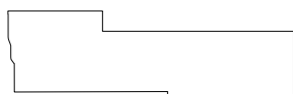
Van Oord



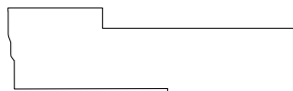
Boskalis



Rijkswaterstaat



Design brief
Brainstorm session



Brainstorm session

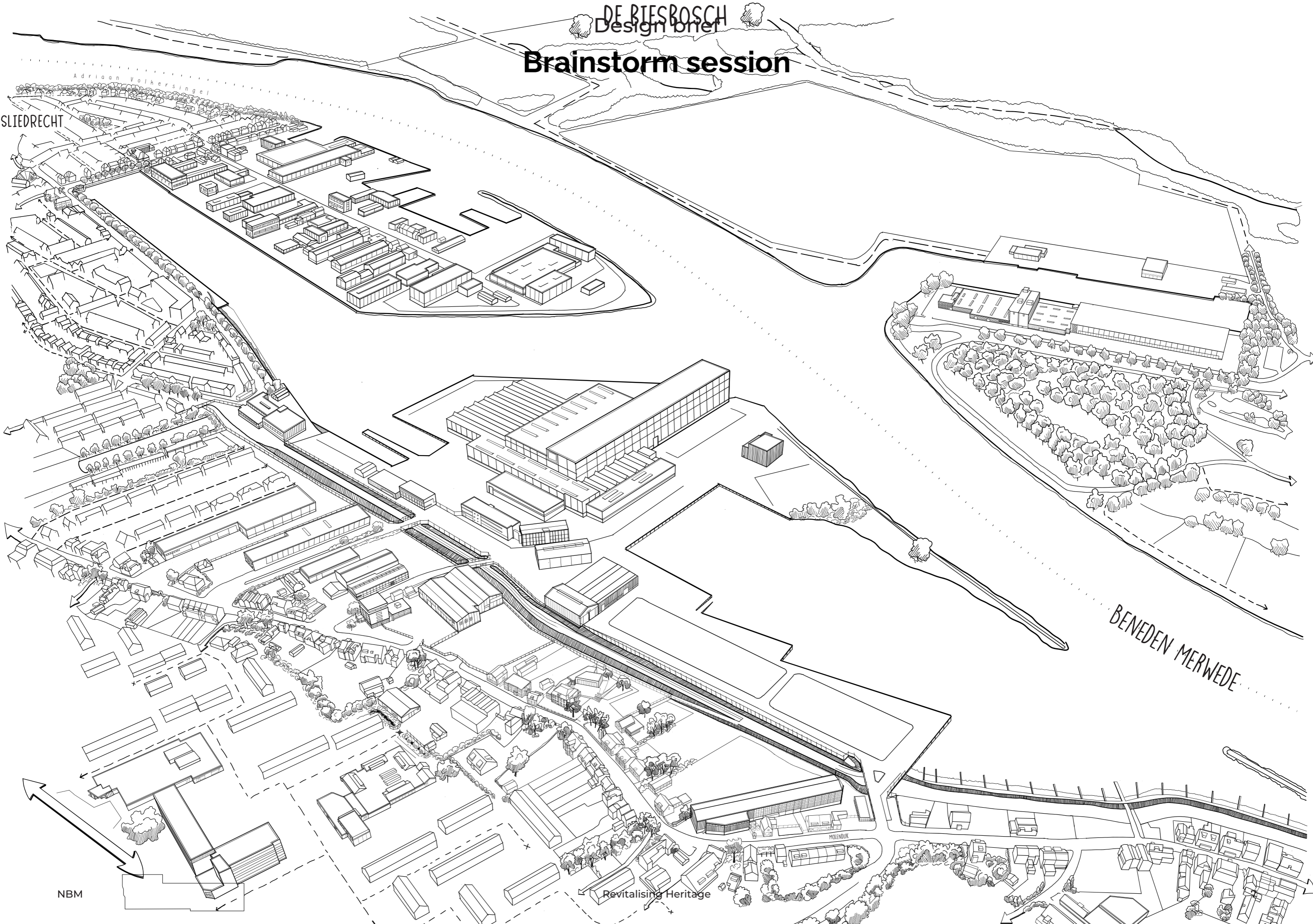
SLIEDRECHT

Adriaan Valkersingel

BENEDEN MERWEDE

NBM

Revitalising Heritage



Design brief
Target groups

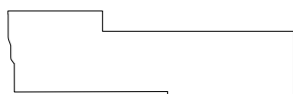
*High school students/ MBO'ers
(13-22 age)*



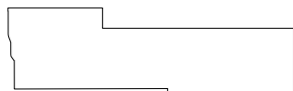
*Families with small children
(3-11 age)*



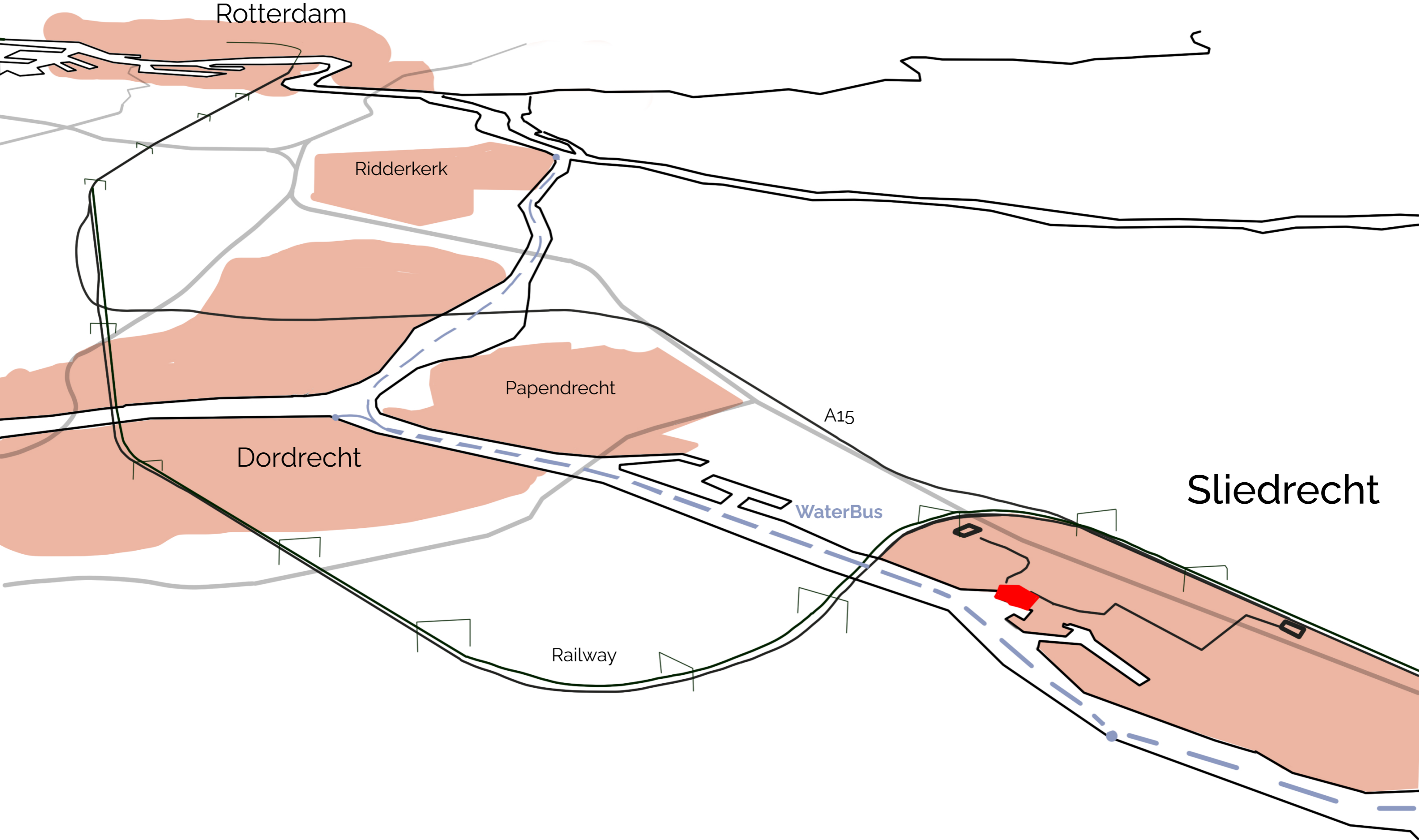
*Volunteers
(40-90 age)*



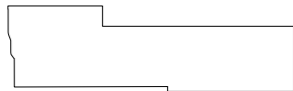
Design brief
Location area



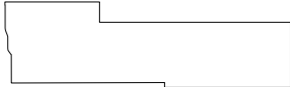
Design brief



Design brief

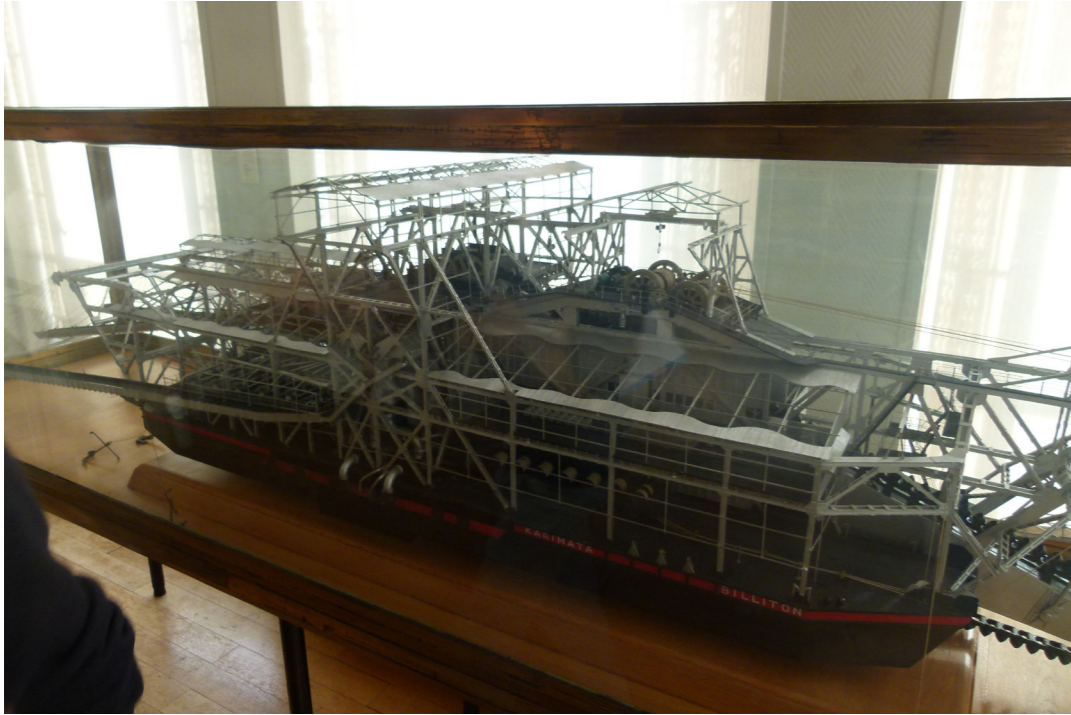


Site

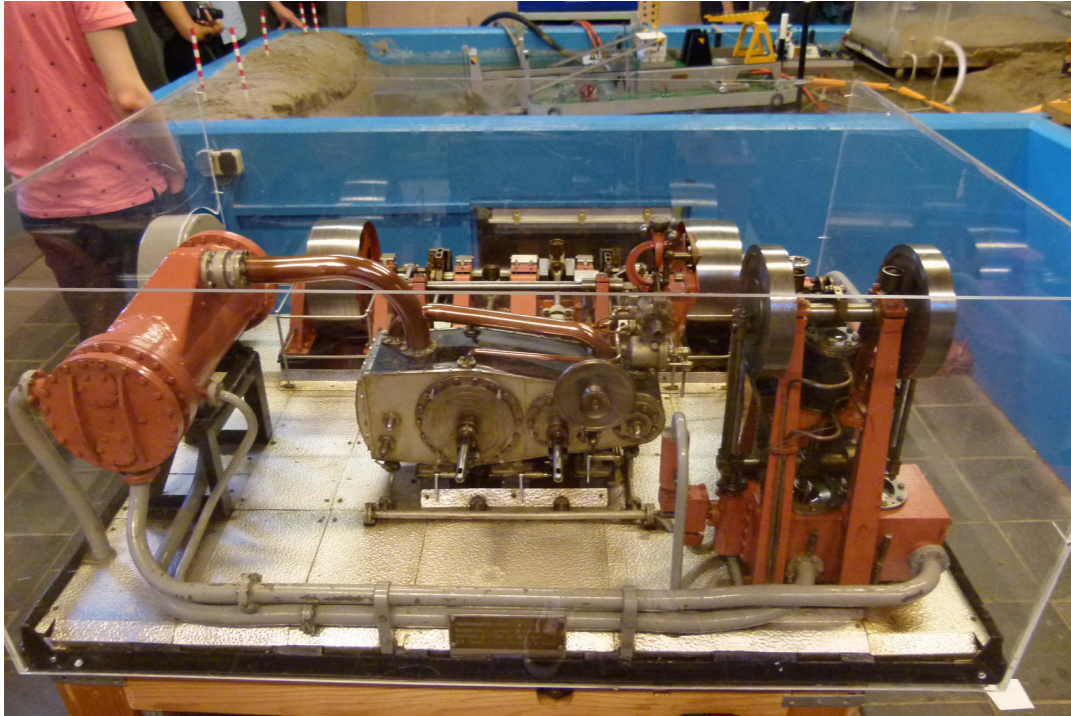


Program
BAGGERMUSEUM COLLECTION

Shipmodels



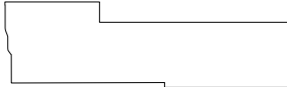
Dredging works scalemodels



Dredging Heritage

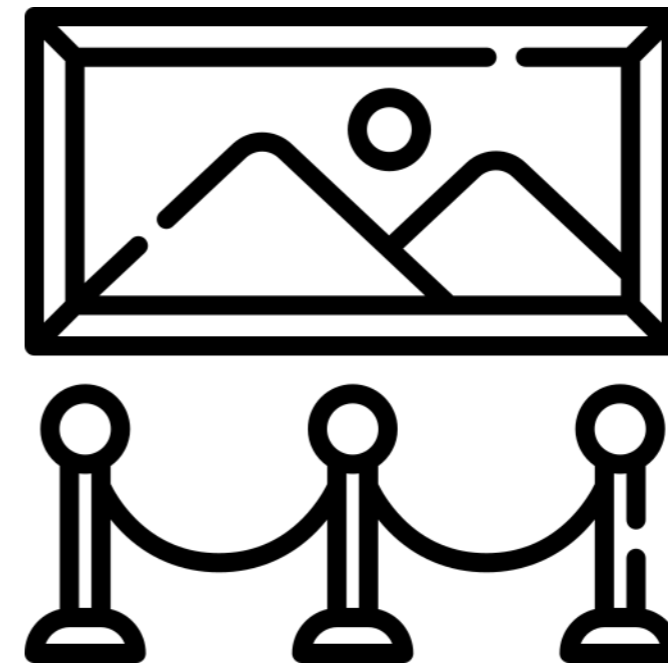
Dredging simulators)

Practical garden equipment

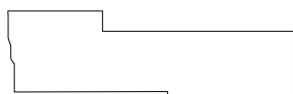


Program
Functions

- + Cafe / hangout space
- + Event space
- + Practical garden
- + Archive
- + Offices
- + Kitchen
- + Outside patio



Nationaal
Bagger
Museum



Introduction

Design brief

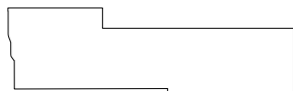
Research

Concept

Implementation

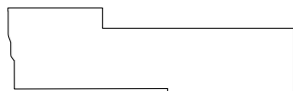
Development

Conclusion



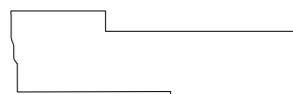
Personal fascination

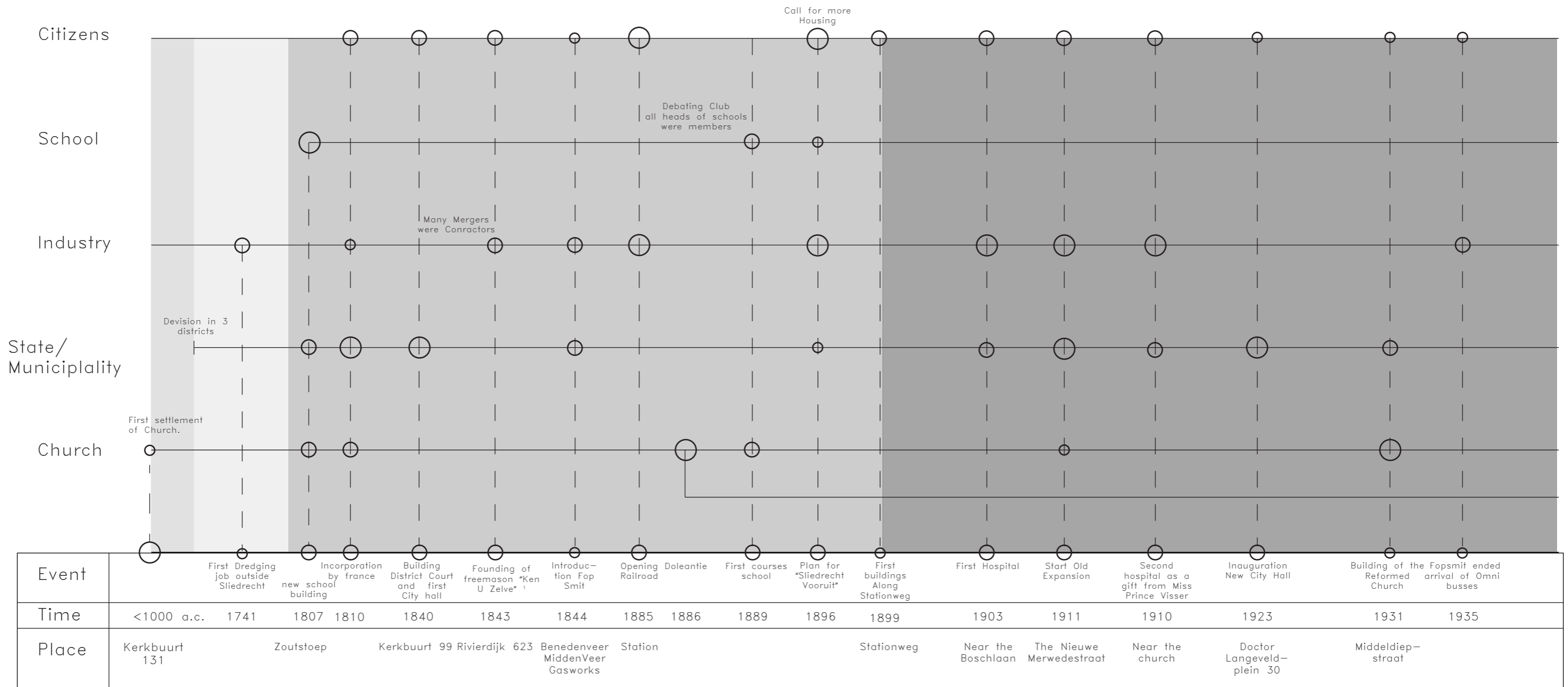
“Doe het zelf, doe het samen”
“Geen zand, geen vreten”



Research
Question

What are the characteristics of Sliedrecht that made it the
Dredging Capital of the World?





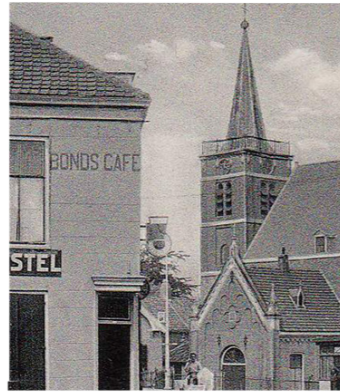
• ○ ○ ○ ○
Influence from small to big

NBM



Revitalising Heritage

Research



The Rechthuis (koffyhuis v. d. vliet served as first place for the city council, Kerkbuurt 141



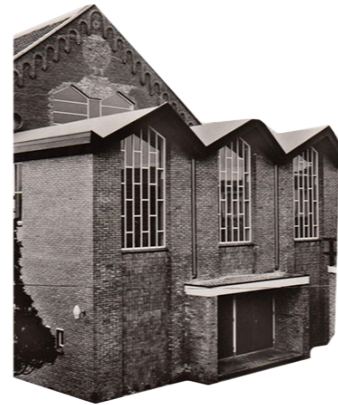
Dutch Reformed Great Church, Kerkbuurt 131



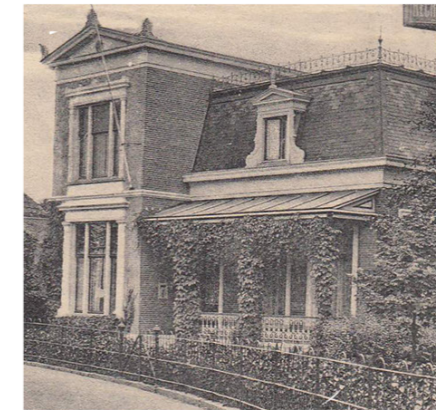
House family Prins, Rivierdijk 456 (One of the first dredging families)



District court(Left) Old Town hall(Right), Kerkbuurt 99



Christian Reformed Church Beth-El, Kerkbuurt 72



Residence of mayor of Sliedrecht (1884-1895) and known dredging families.



Town hall, Doctor langeveldplein 30 (Part of the Expansion)



Reformed church, Middeldiepstraat 6

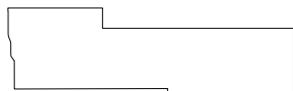


House of the family bos

Municipal buildings

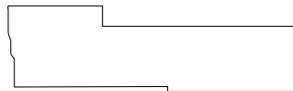
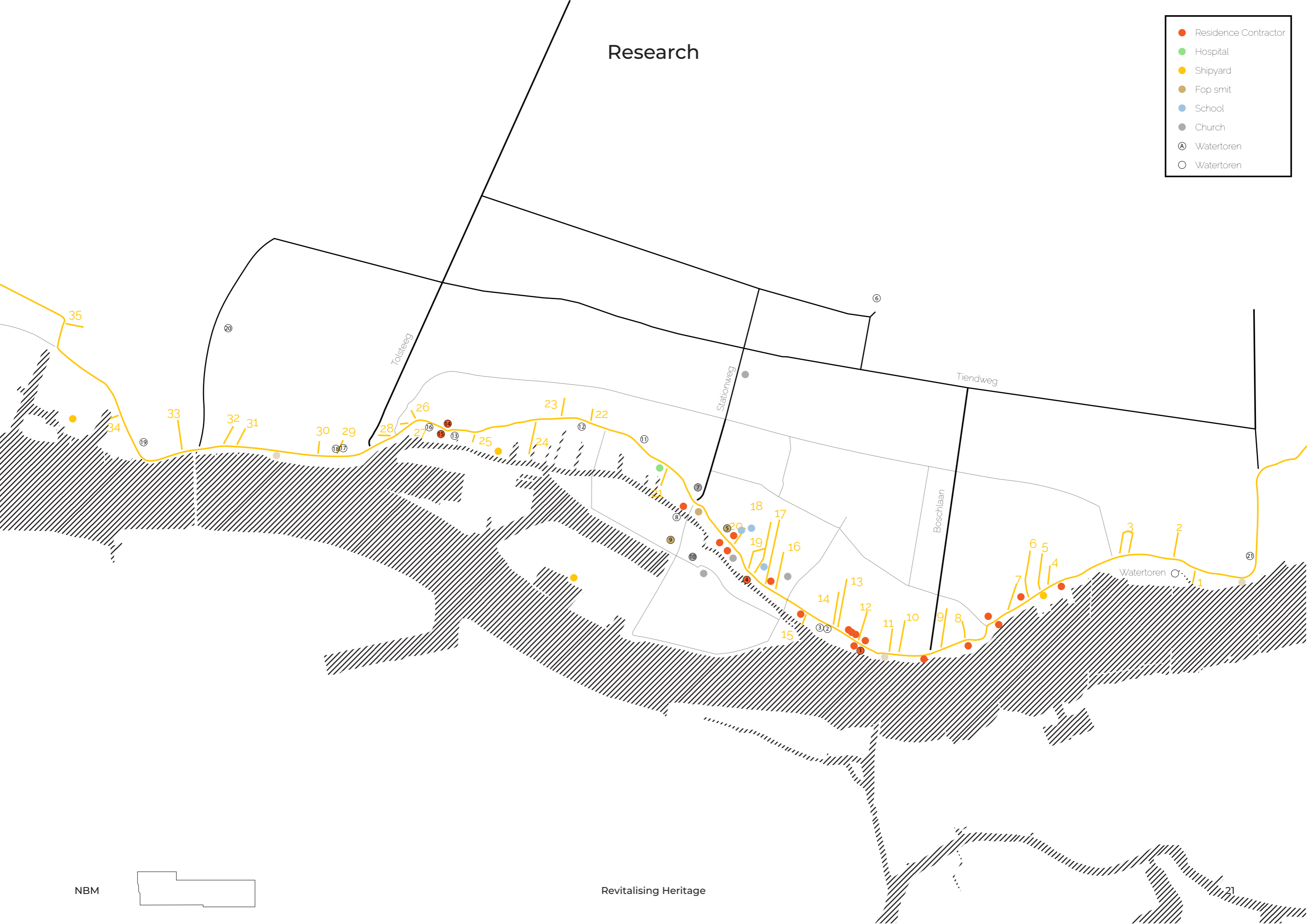
Church Buildings

Contractor buildings

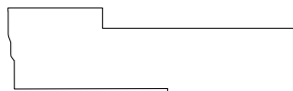
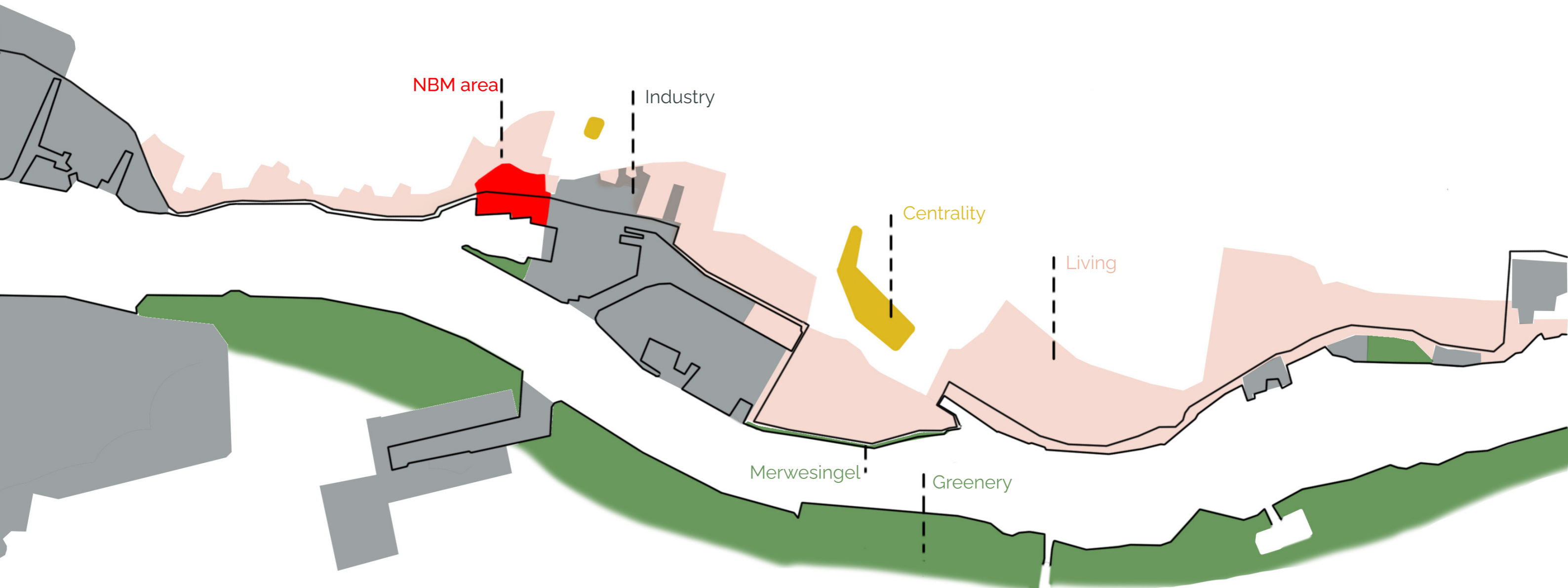


Research

- Residence Contractor
- Hospital
- Shipyard
- Fop smit
- School
- Church
- Ⓐ Watertoren
- Watertoren



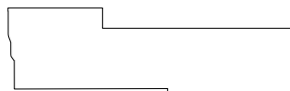
Research Location



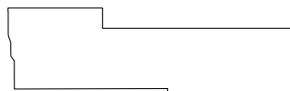
Research
Musea



*Museums connect the
present with the past and
work toward a shared future.*

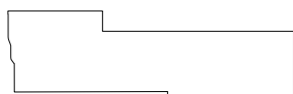


Research
Musea experience

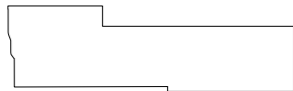
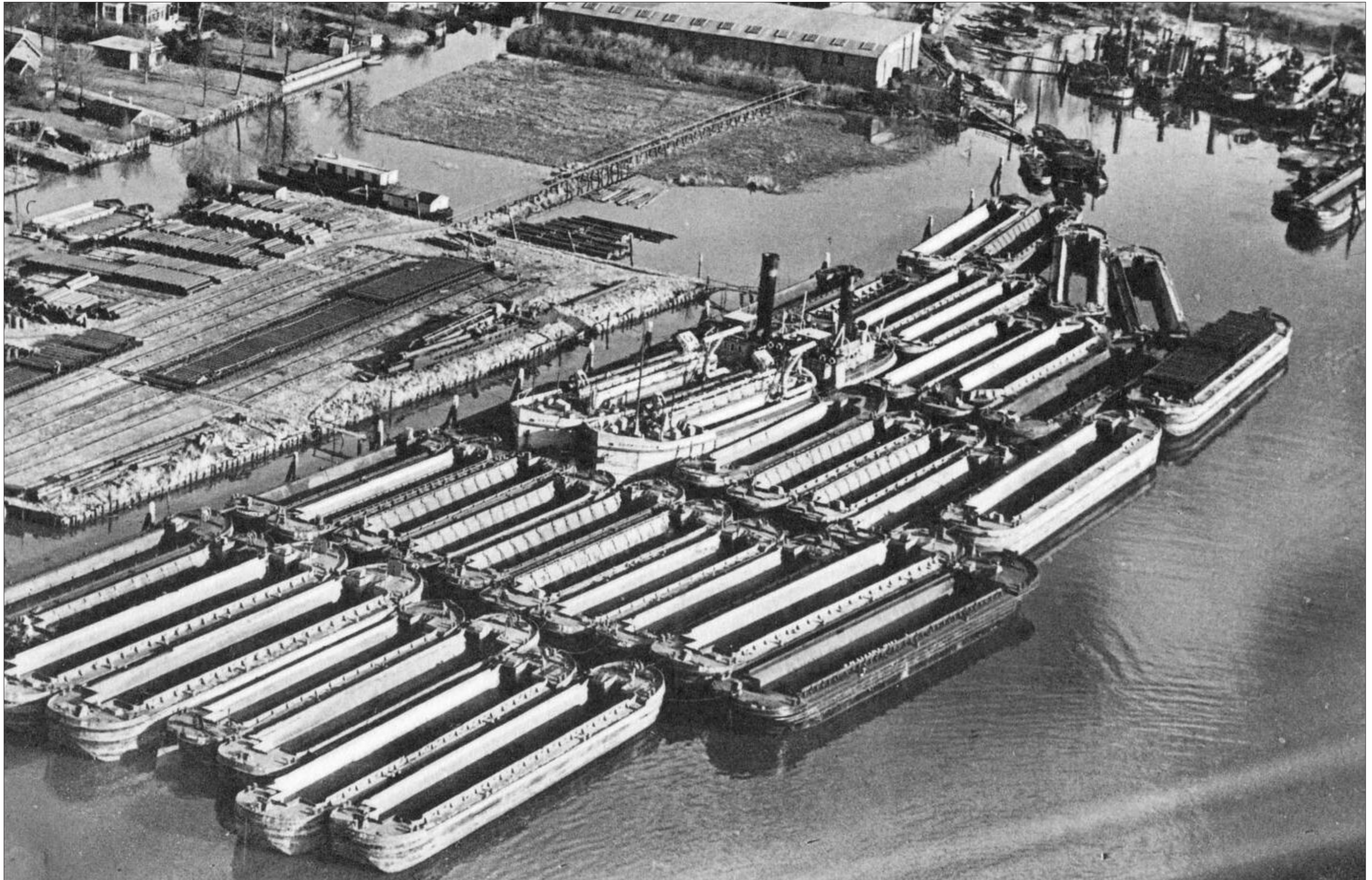


Value assessment

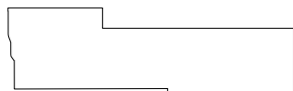
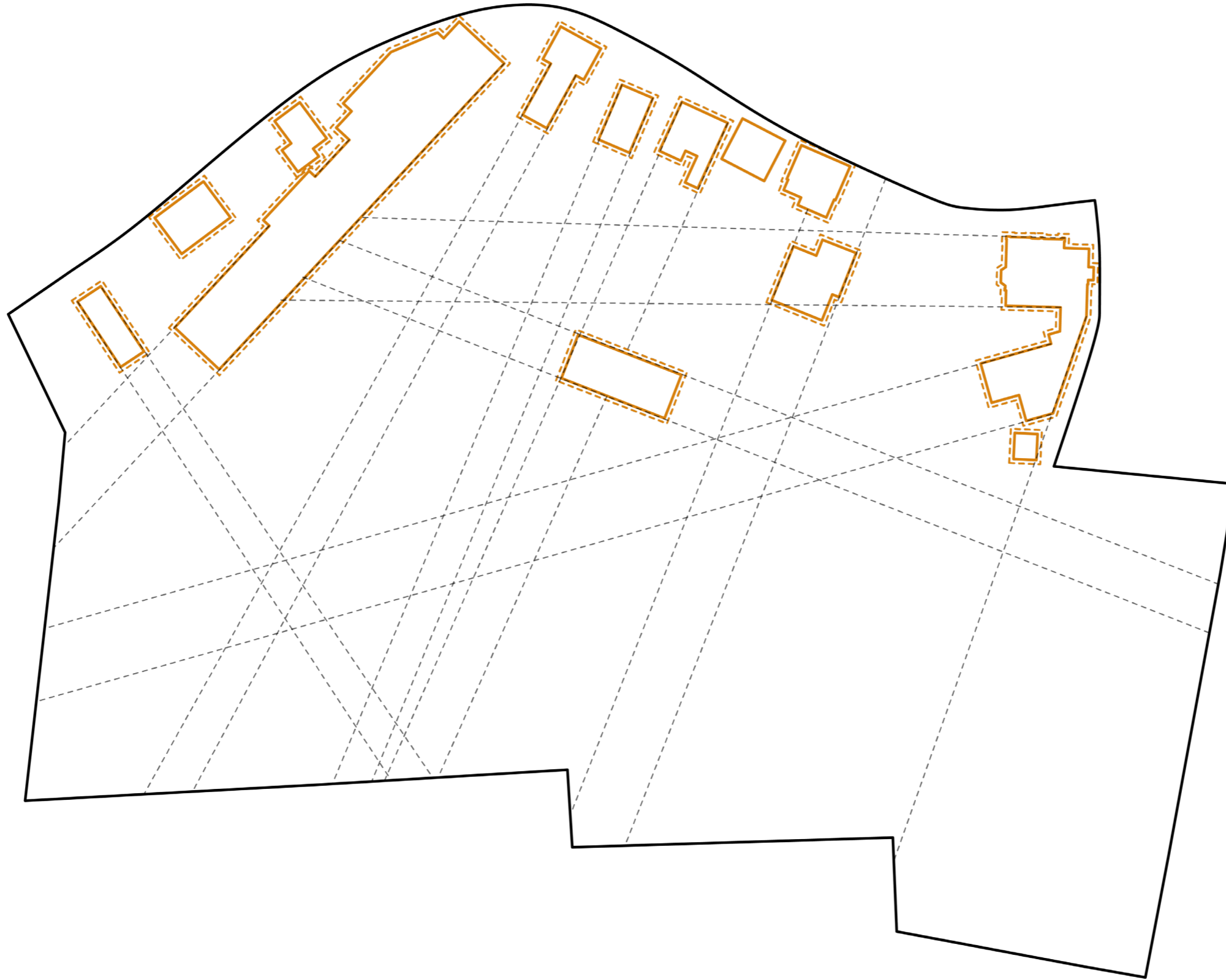
1. The collection tells a limited story
2. The accessibility has to be improved.
3. The assemblage is incoherent
4. International educational maritime hub.
5. Restoring the connection between the museum and the water
6. Connect both areas of the dike
7. 'Het Plaatje' is due to development



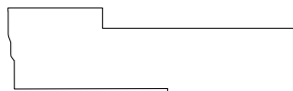
Research
Value assesment



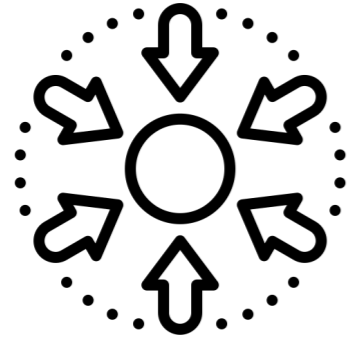
Research
Value assesment



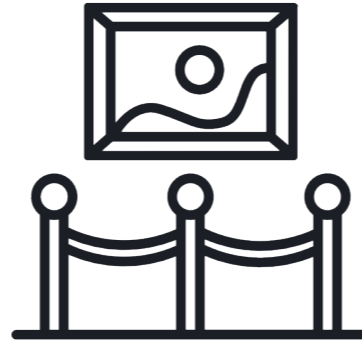
Research
Value assesment



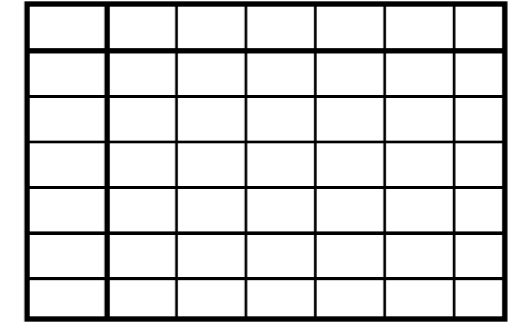
Research



Centrality



Other musea

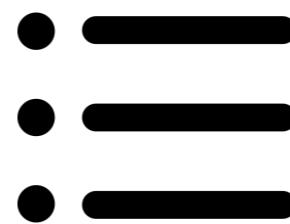


Value assement

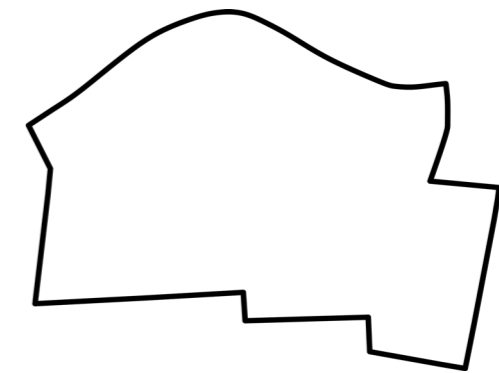
Design brief

Nationaal
Bagger
museum

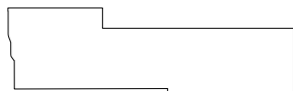
Client



Program



Site



Introduction

Design brief

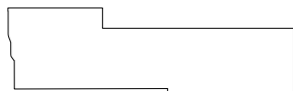
Research

Concept

Implementation

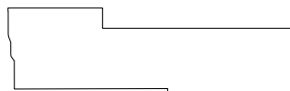
Development

Conclusion

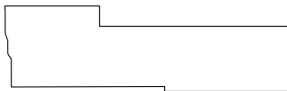
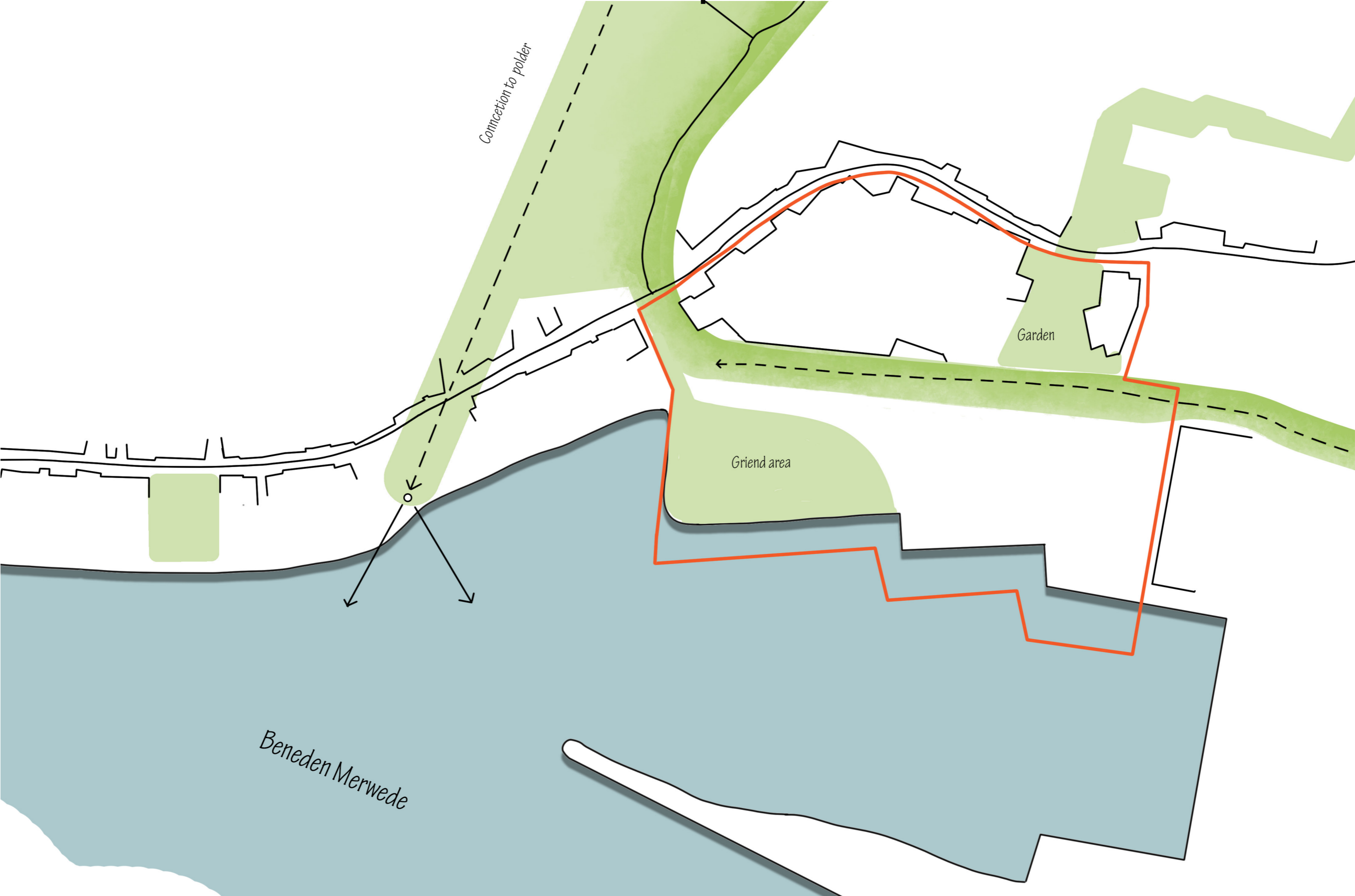


Concept

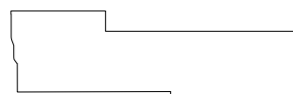
Public dike connecting to centre Sliedrecht



Concept Green space

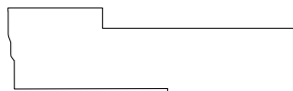


Concept

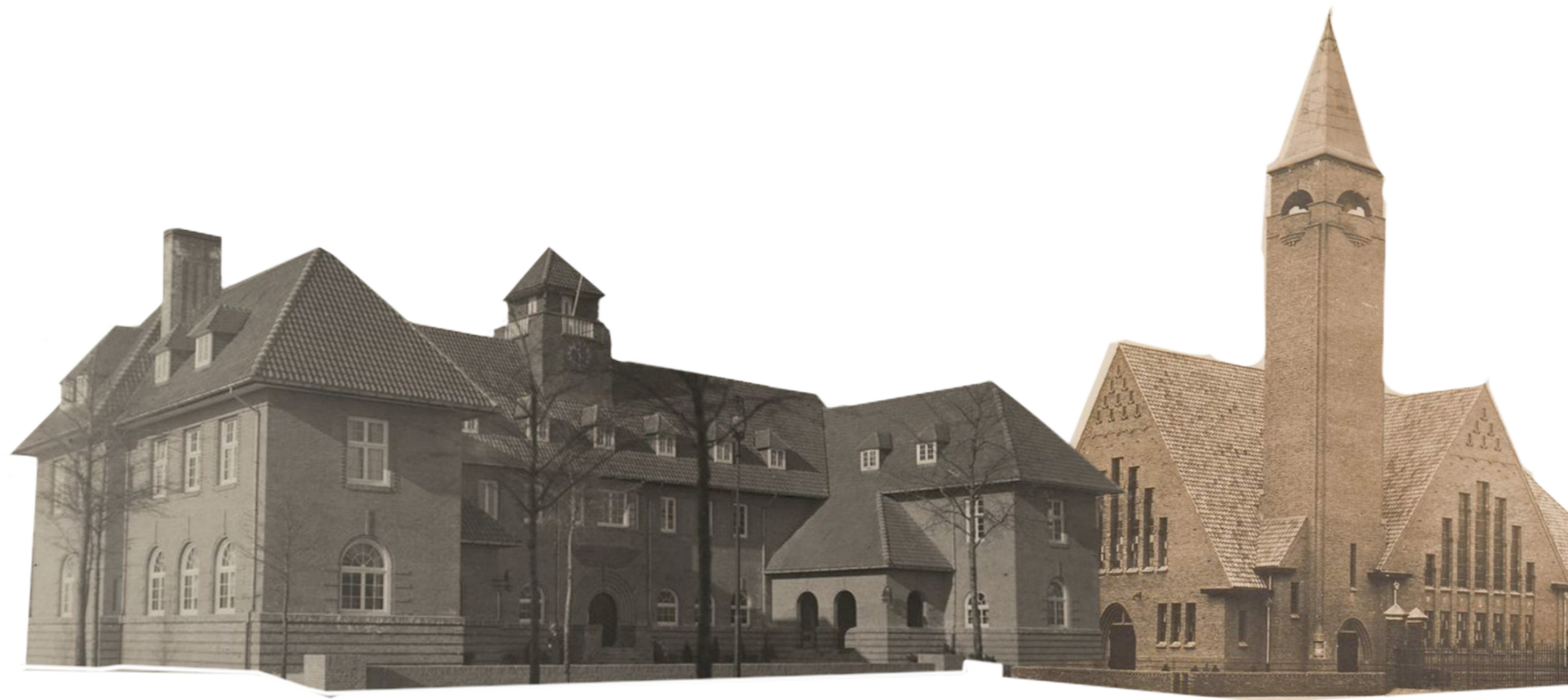


Concept
Premise

'People can deal with something new only when they can make a connection with something familiar.'



Concept
Surrounding Buildings



Town hall, Doctor
langeveldplein 30
(Part of the Expansion)

Municipal buildings

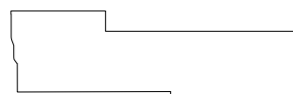
Reformed church,
Middeldiepstraat 6

Church Buildings



House of the family bos

**Contractor
buildings**



Concept
Agglomeration of Elements



Entrance (old Church)



Steel columns (Van Eijck shipyard)



Blauw reliëf (Nationaal Bagger museum)

New Dredging museum



Glass stained window
(Nationaal Baggermuseum)



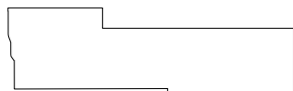
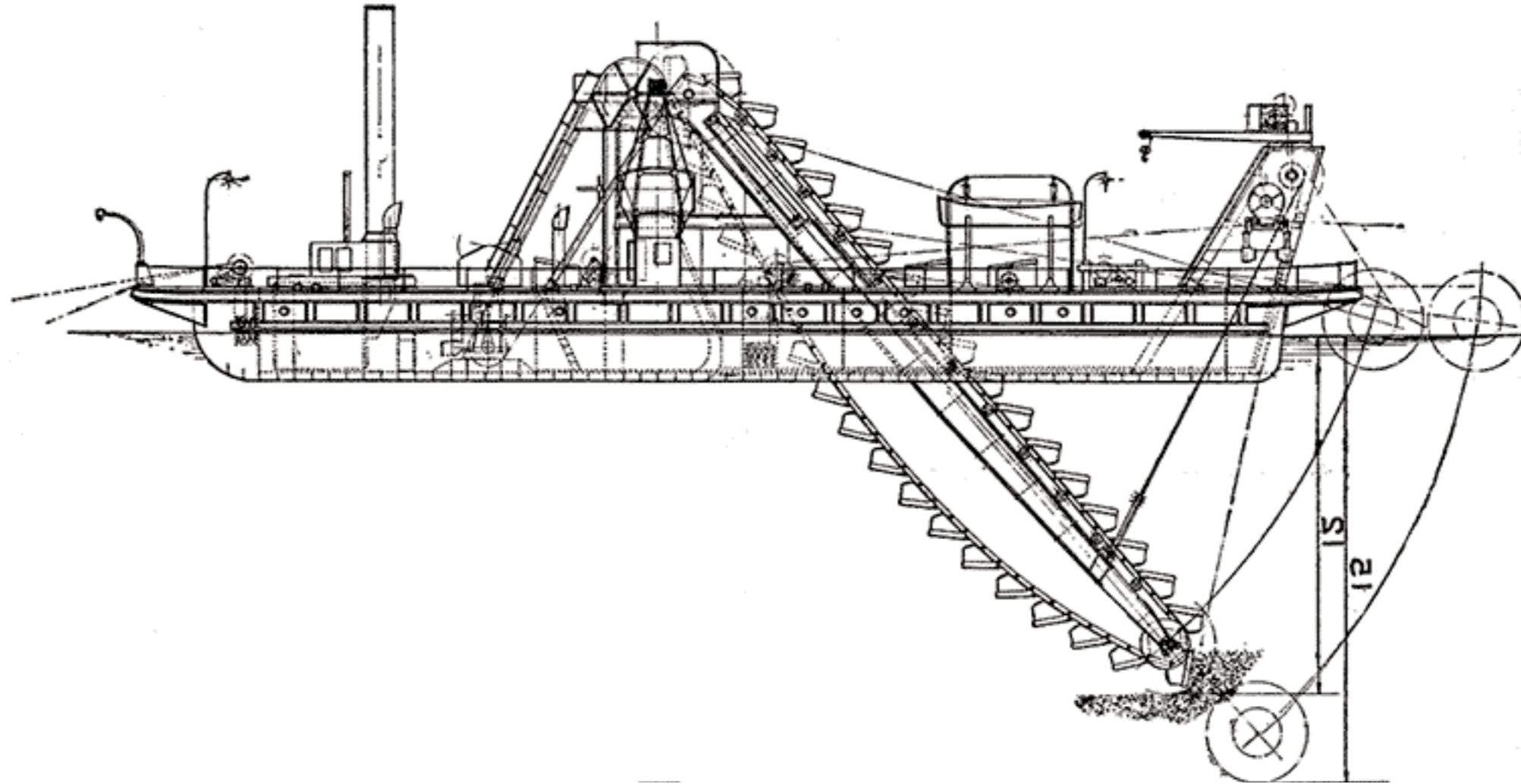
Town hall Layered overhang

NBM



Gridded structure Van Eijck hal

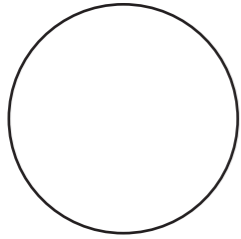
Concept Shape



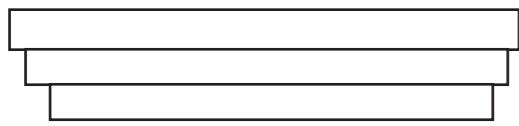
Concept
Overview concept

Shape

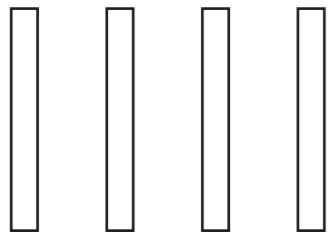
**Round
inviting
Streamlined**



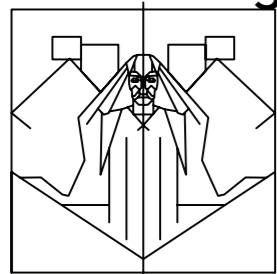
Layered



Grid



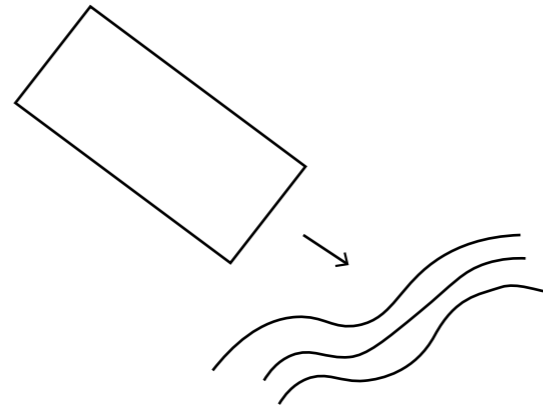
**Elements of
surrounding**



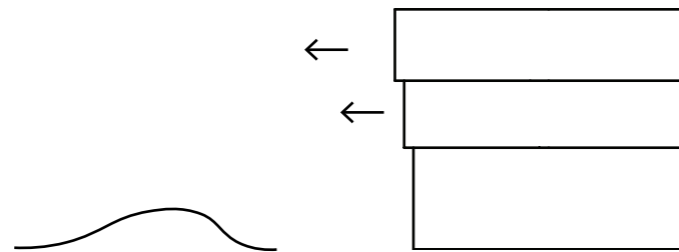
NBM

Site

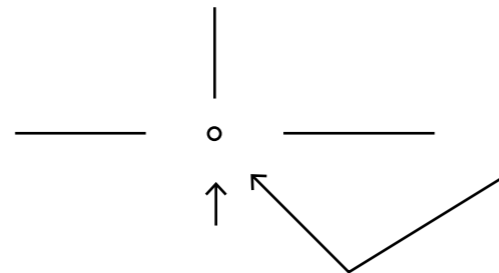
**Oriantation
towards water**



Connected to dyke



**Frontal approach
and Oblique approach**



**Integration of
nature**

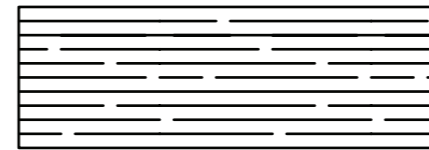


Material

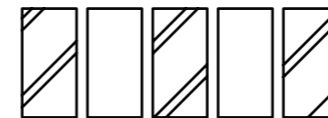
Concrete Cellar



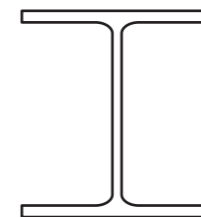
Wood flooring



Earthy cladding

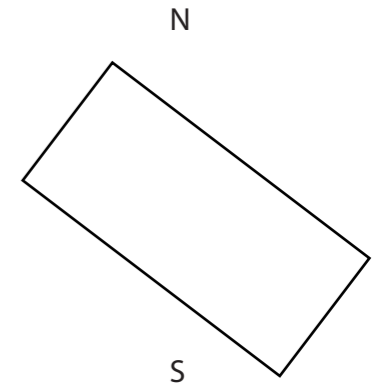


Steel structure

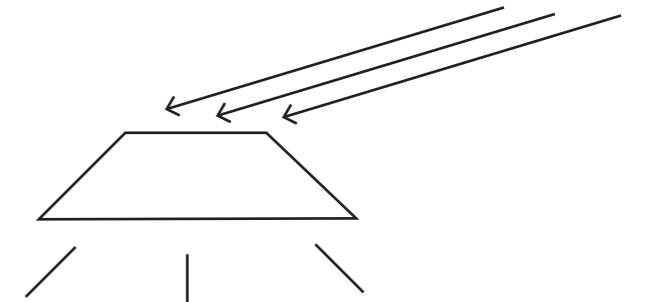


Light

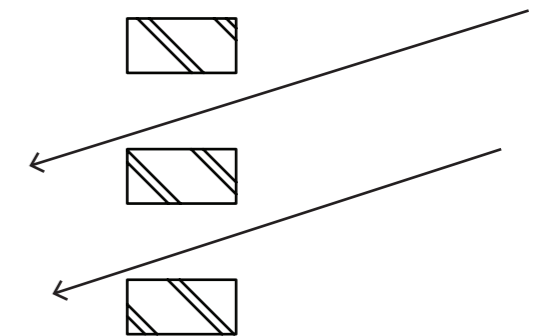
Orientation on sun



**Different uses of
daylight**



Preforated surface



Introduction

Design brief

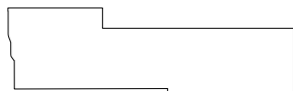
Research

Concept

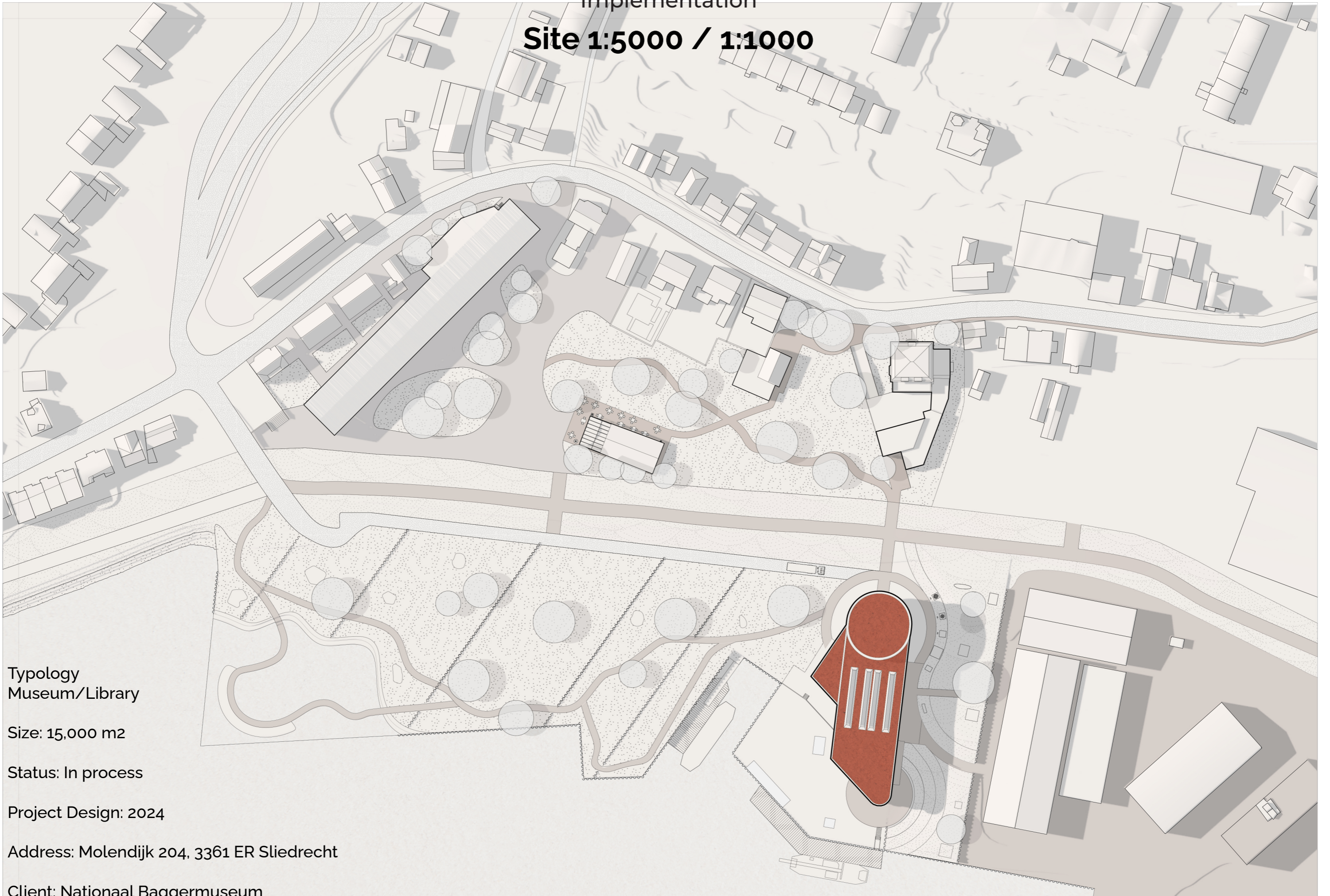
Implementation

Development

Conclusion



Implementation
Site 1:5000 / 1:1000



Typology
Museum/Library

Size: 15,000 m²

Status: In process

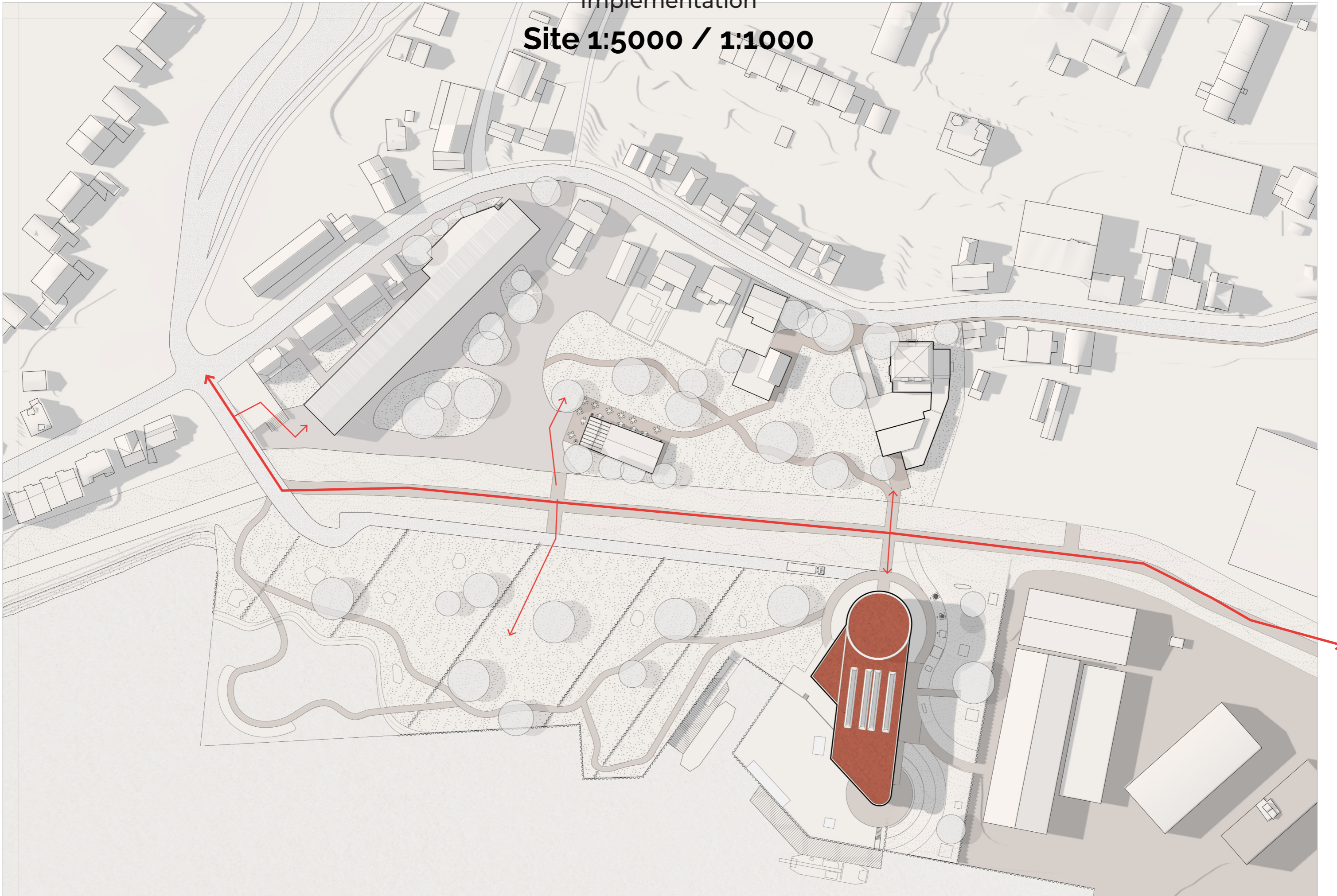
Project Design: 2024

Address: Molendijk 204, 3361 ER Sliedrecht

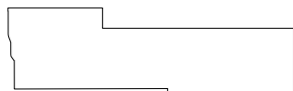
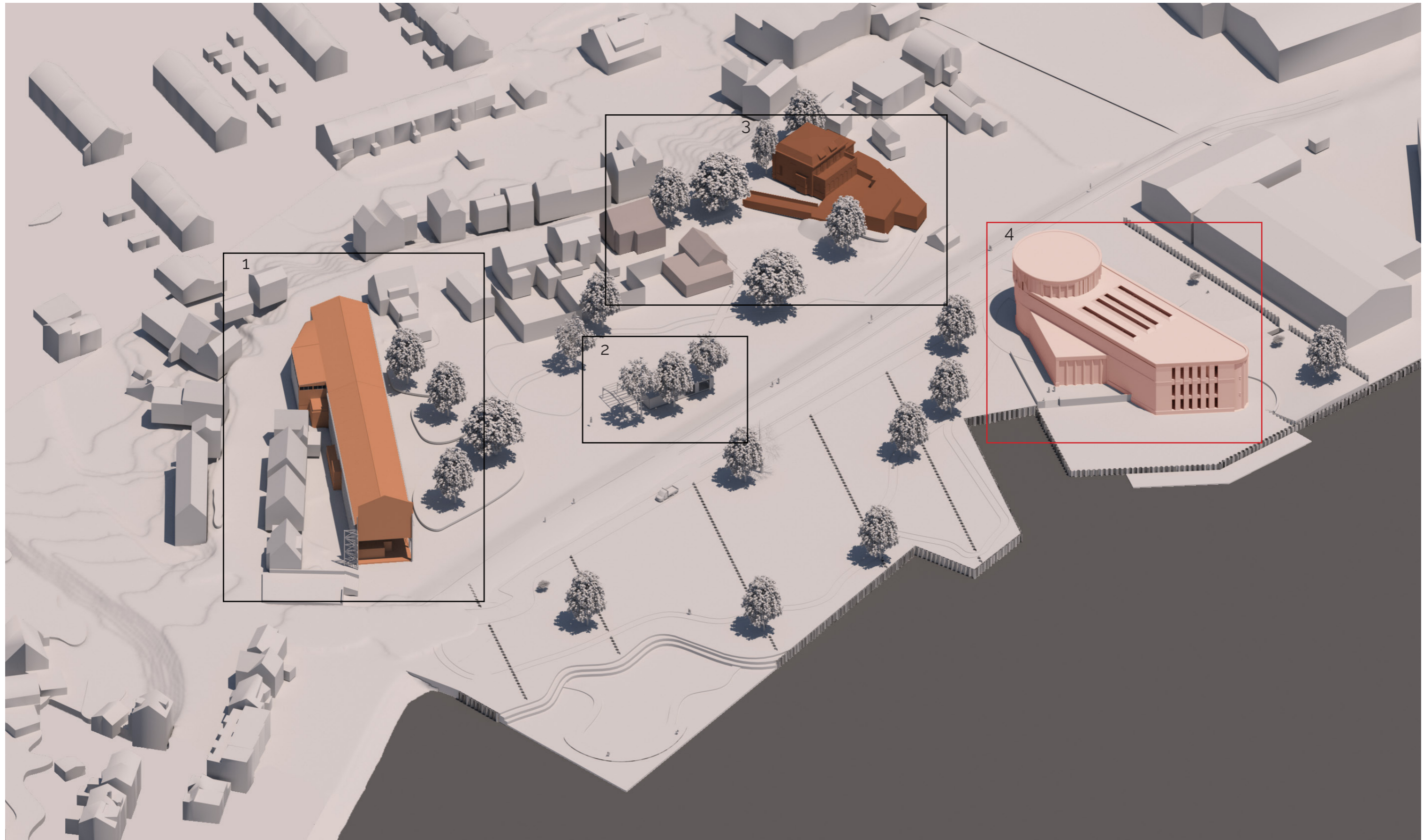
Client: Nationaal Baggermuseum

NBM

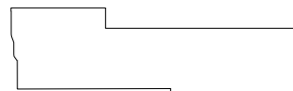
Implementation
Site 1:5000 / 1:1000



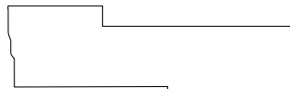
Implementation Innerdike



Implementation
Current situation Shipyard

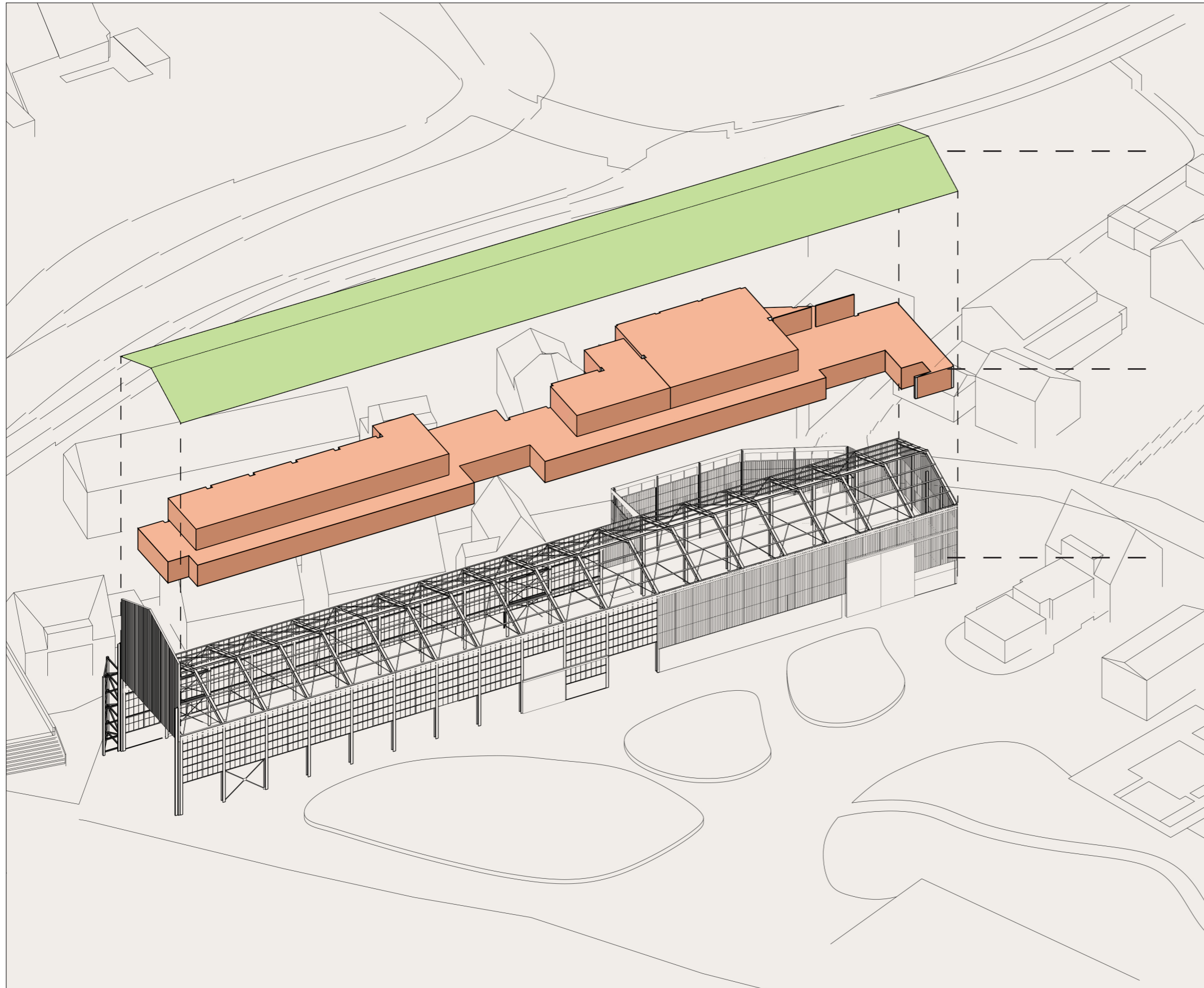


Implementation
Inside shipyard



Implementation

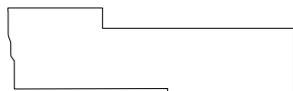
Redesign shipyard



Green roof

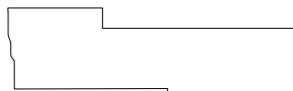
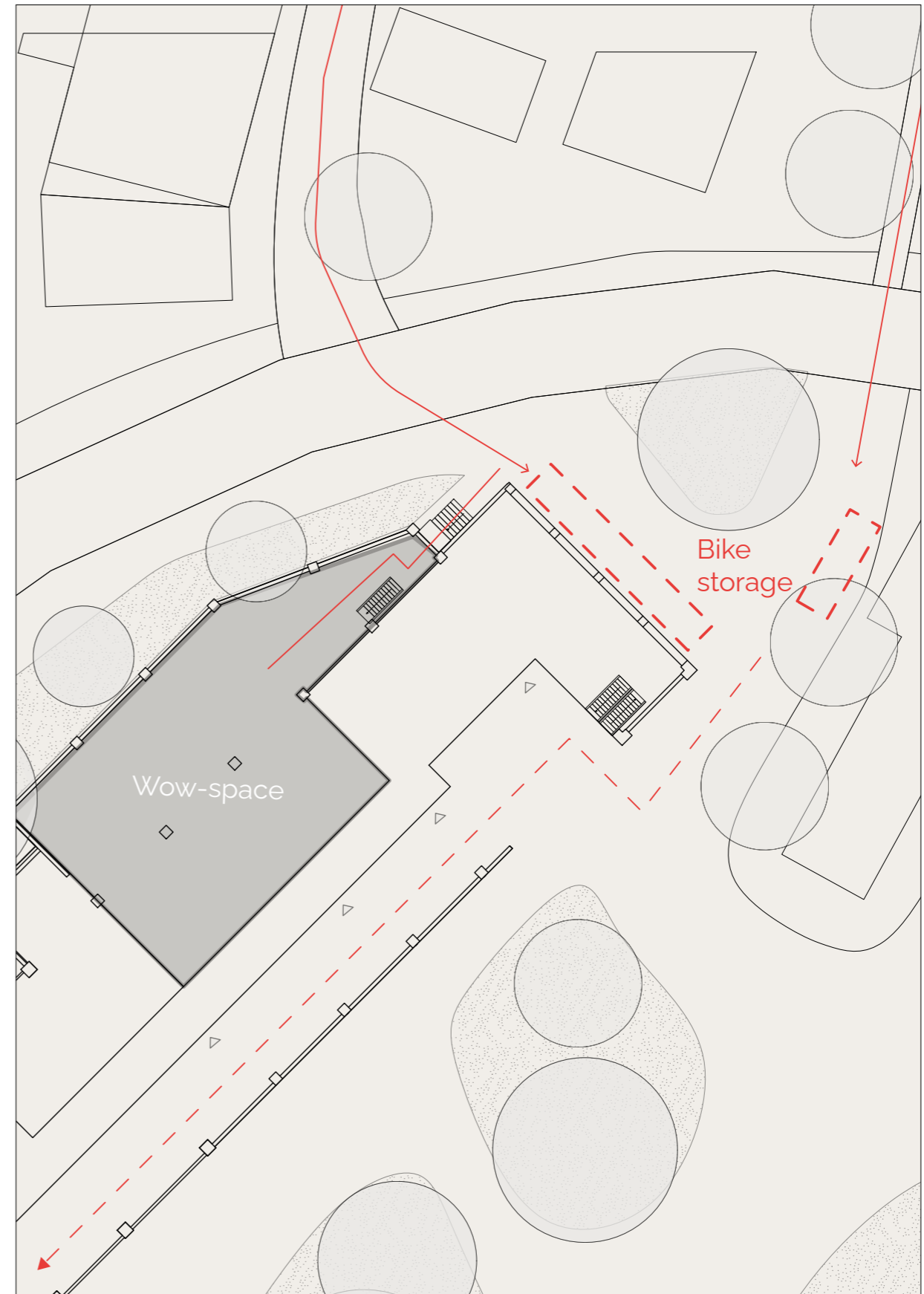
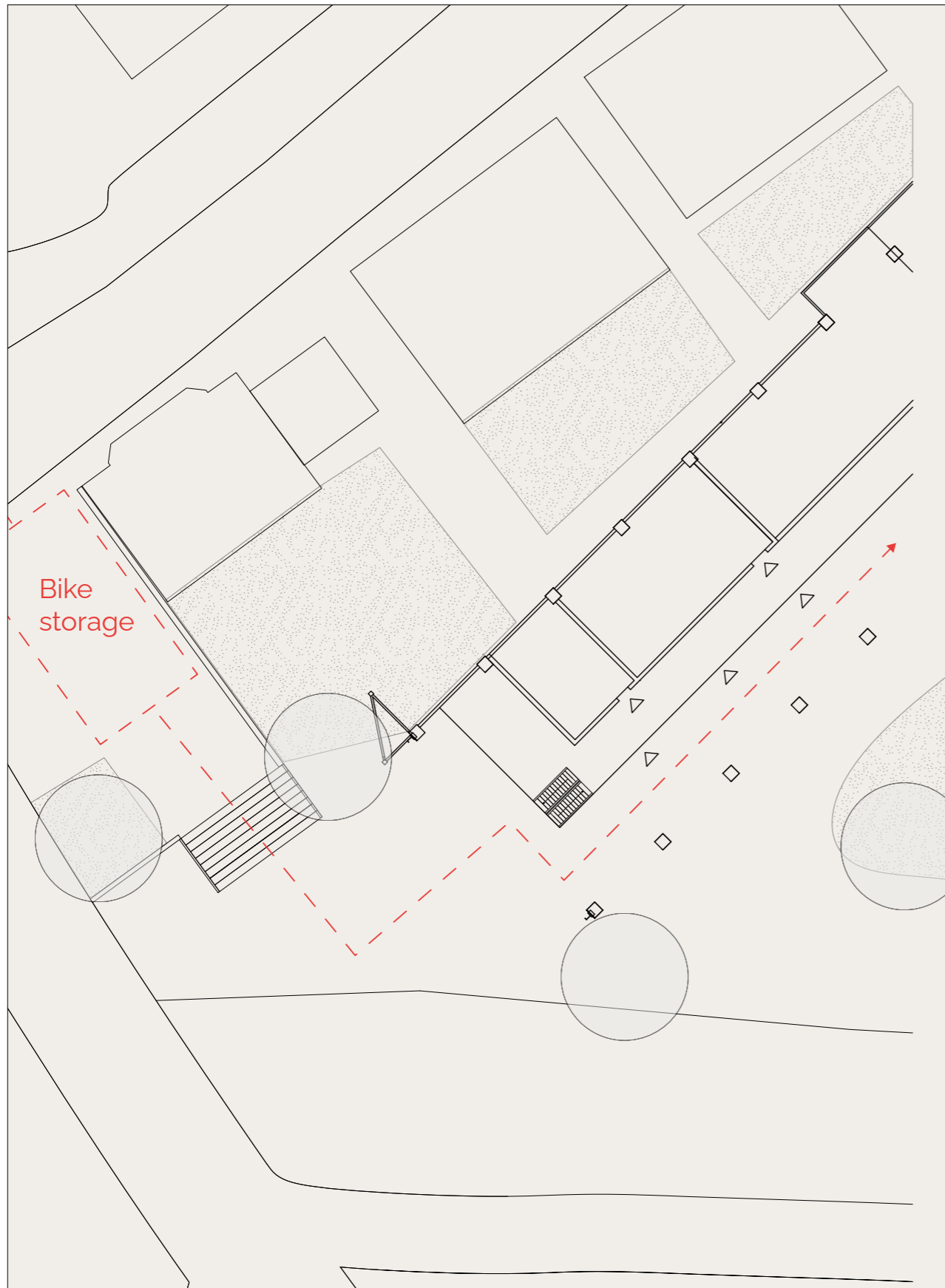
Box in Box inner street

New cladding of left over industrial material

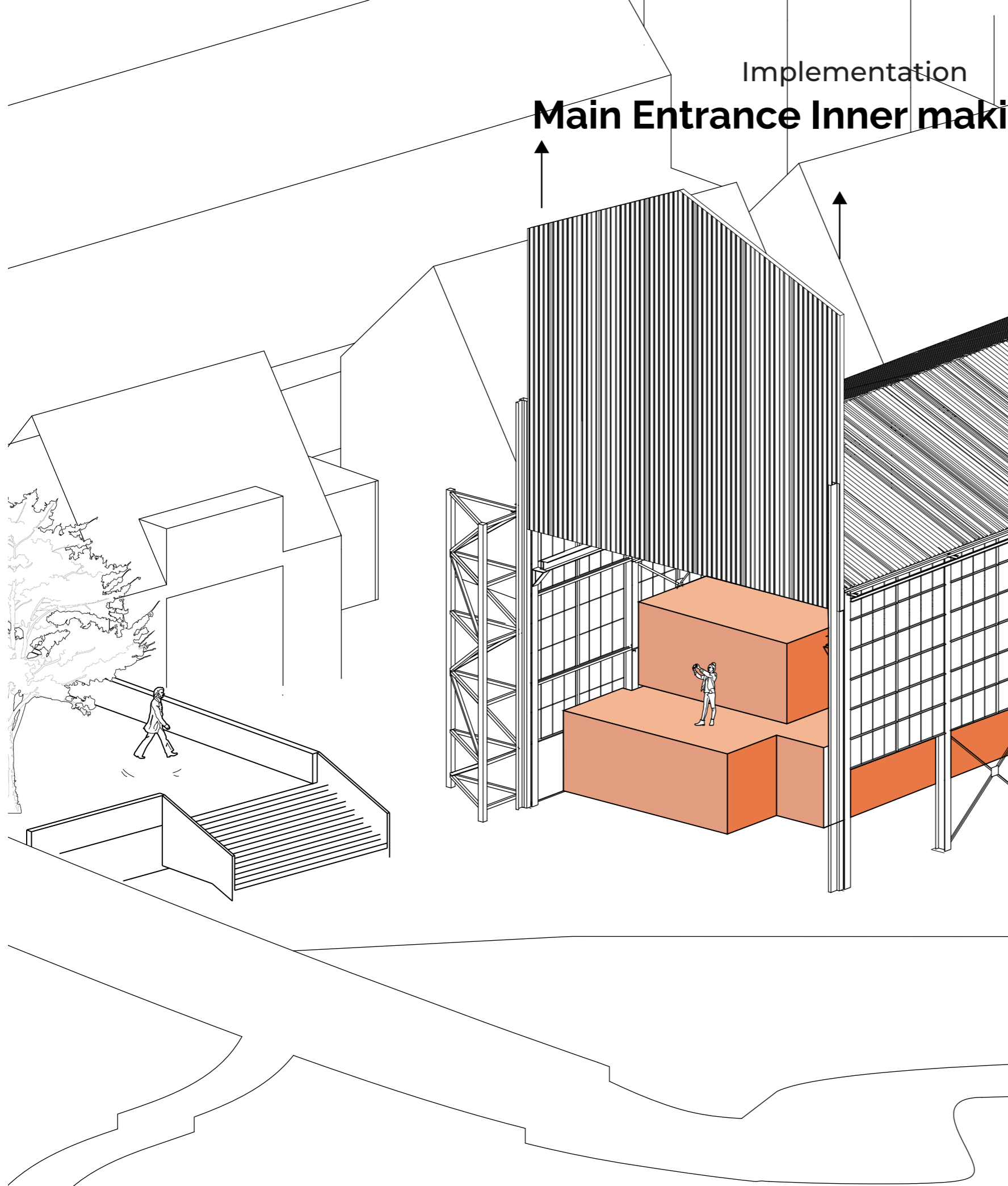


Implementation

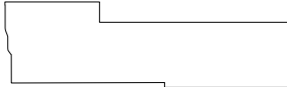
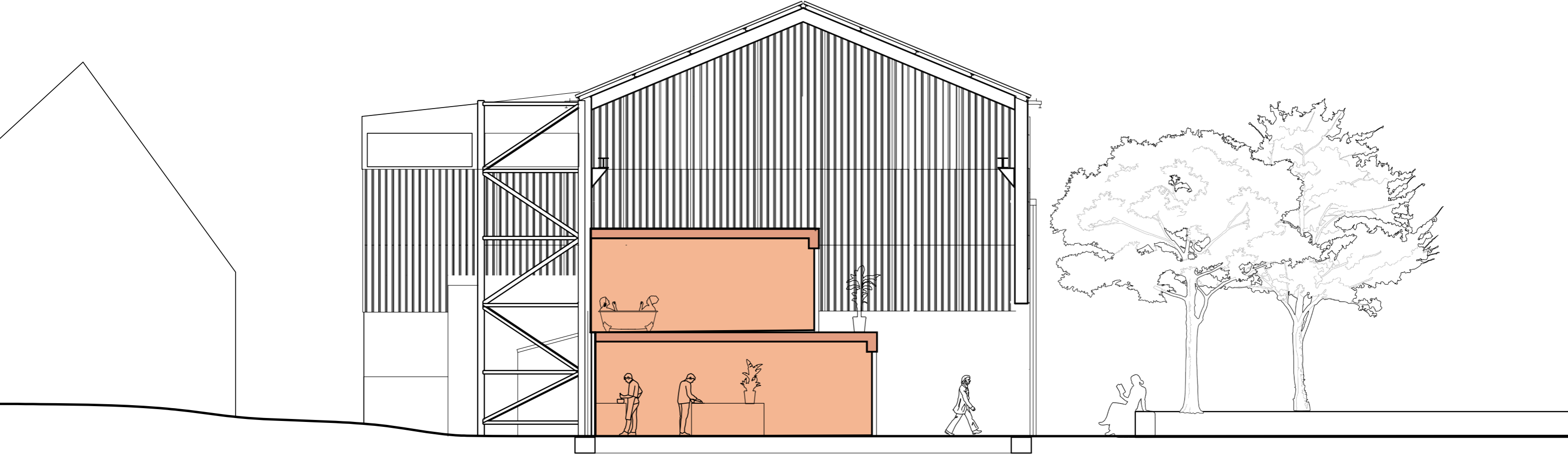
Redesign shipyard



Implementation
Main Entrance Inner making street

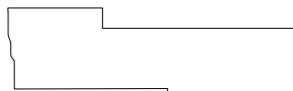
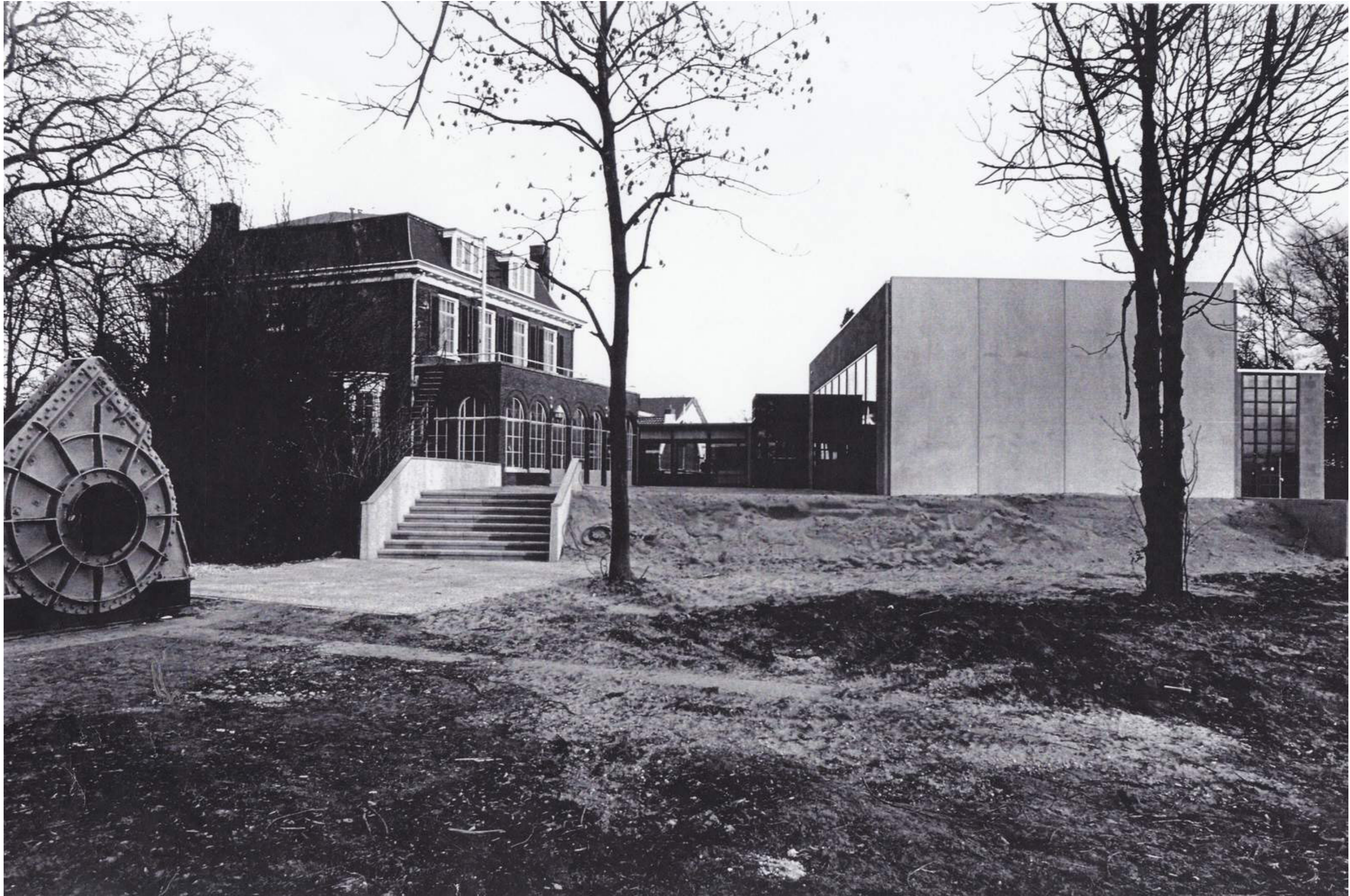


Implementation
Section Inner making street

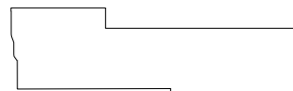


Implementation

Old museum garden before parking spots

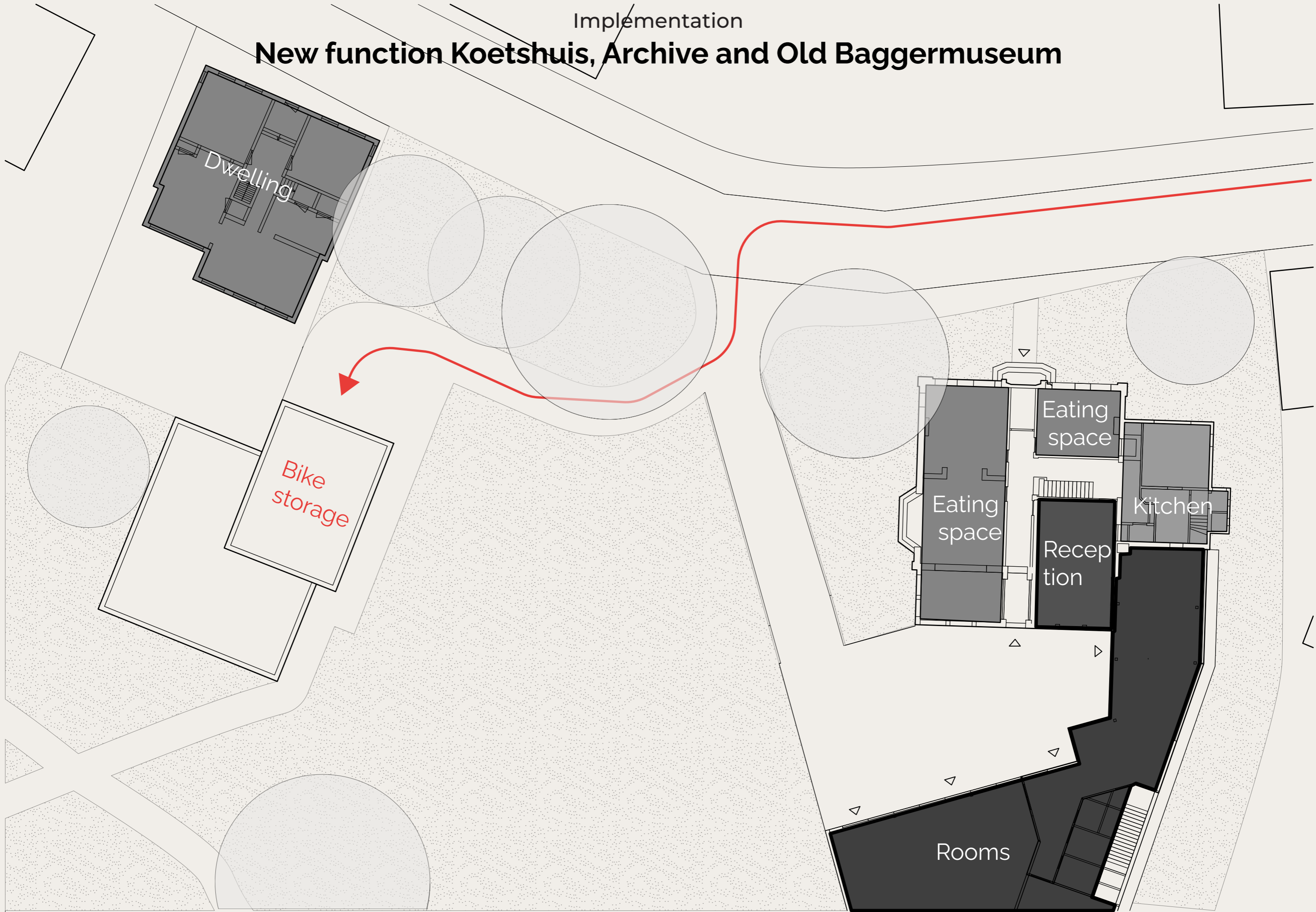


Implementation
Current situation Koetshuis

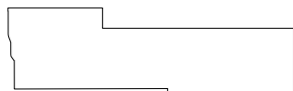


Implementation

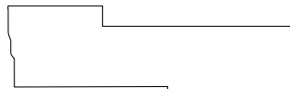
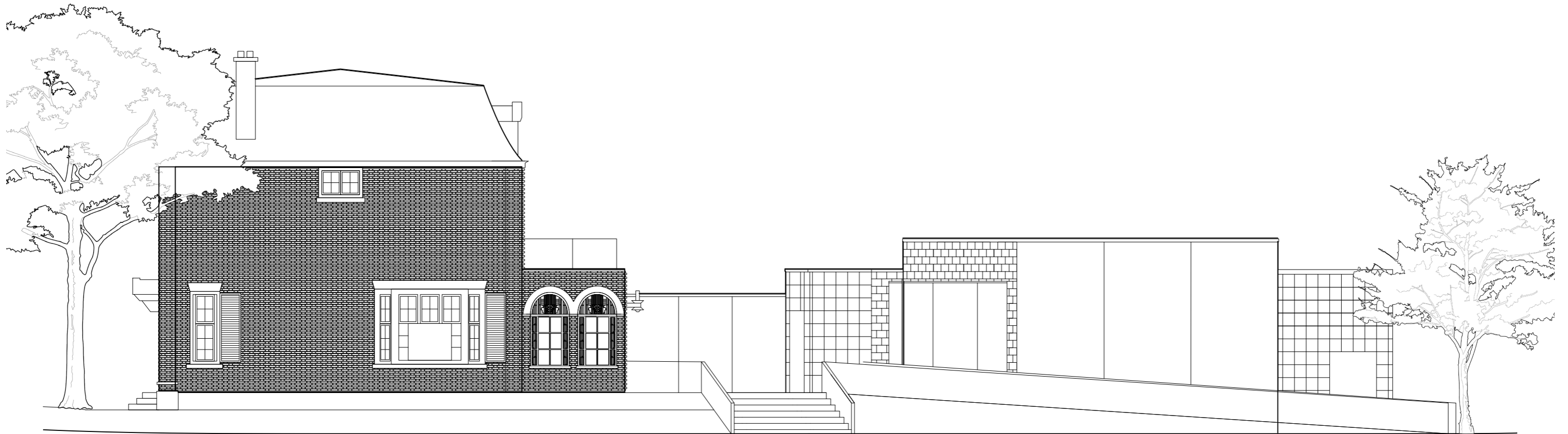
New function Koetshuis, Archive and Old Baggermuseum



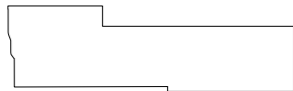
Implementation
Concrete Block facade



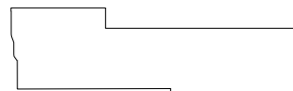
Implementation
Old situation extension



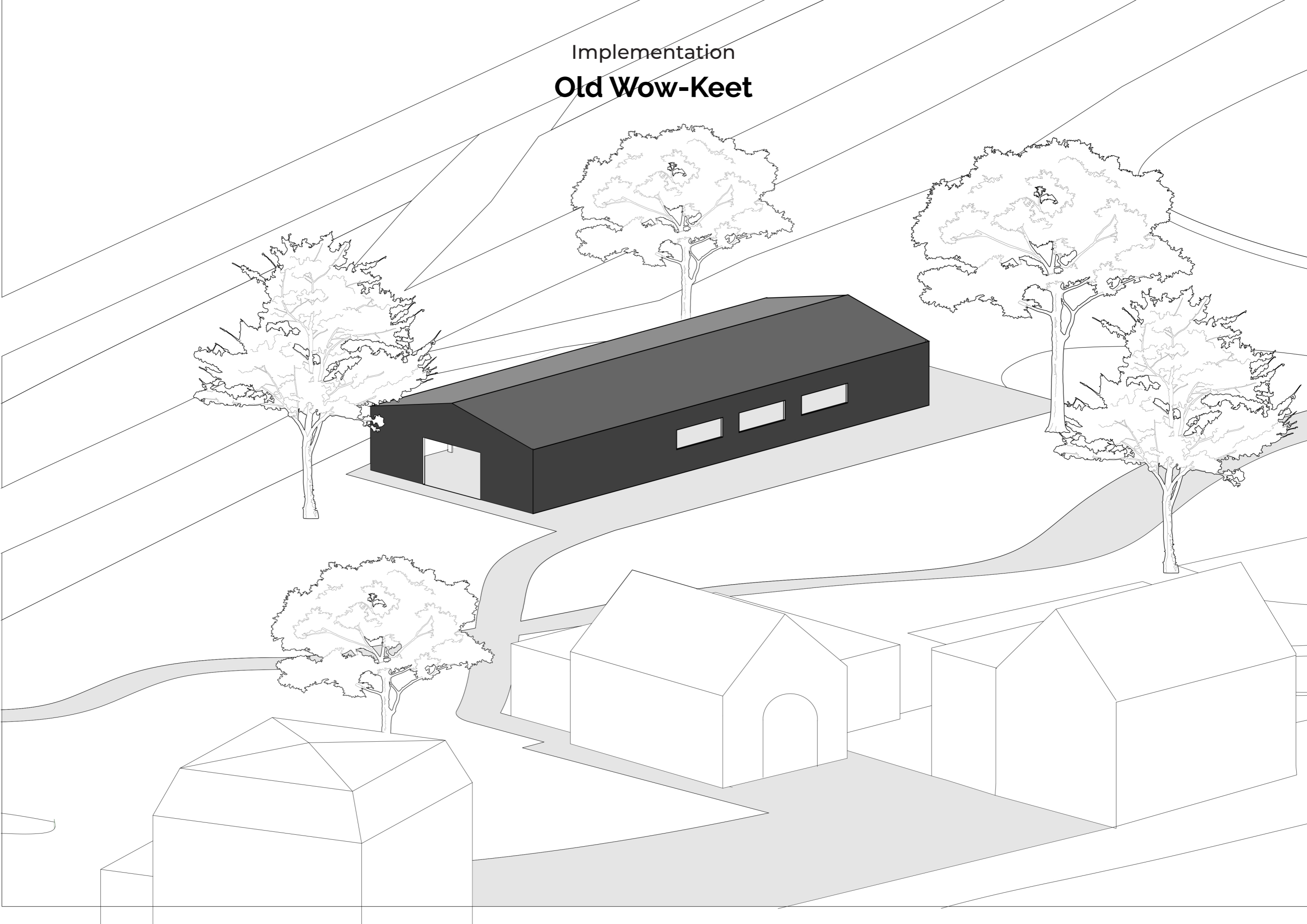
Implementation
Change facade of extension



Implementation
Visit Wow-Keet

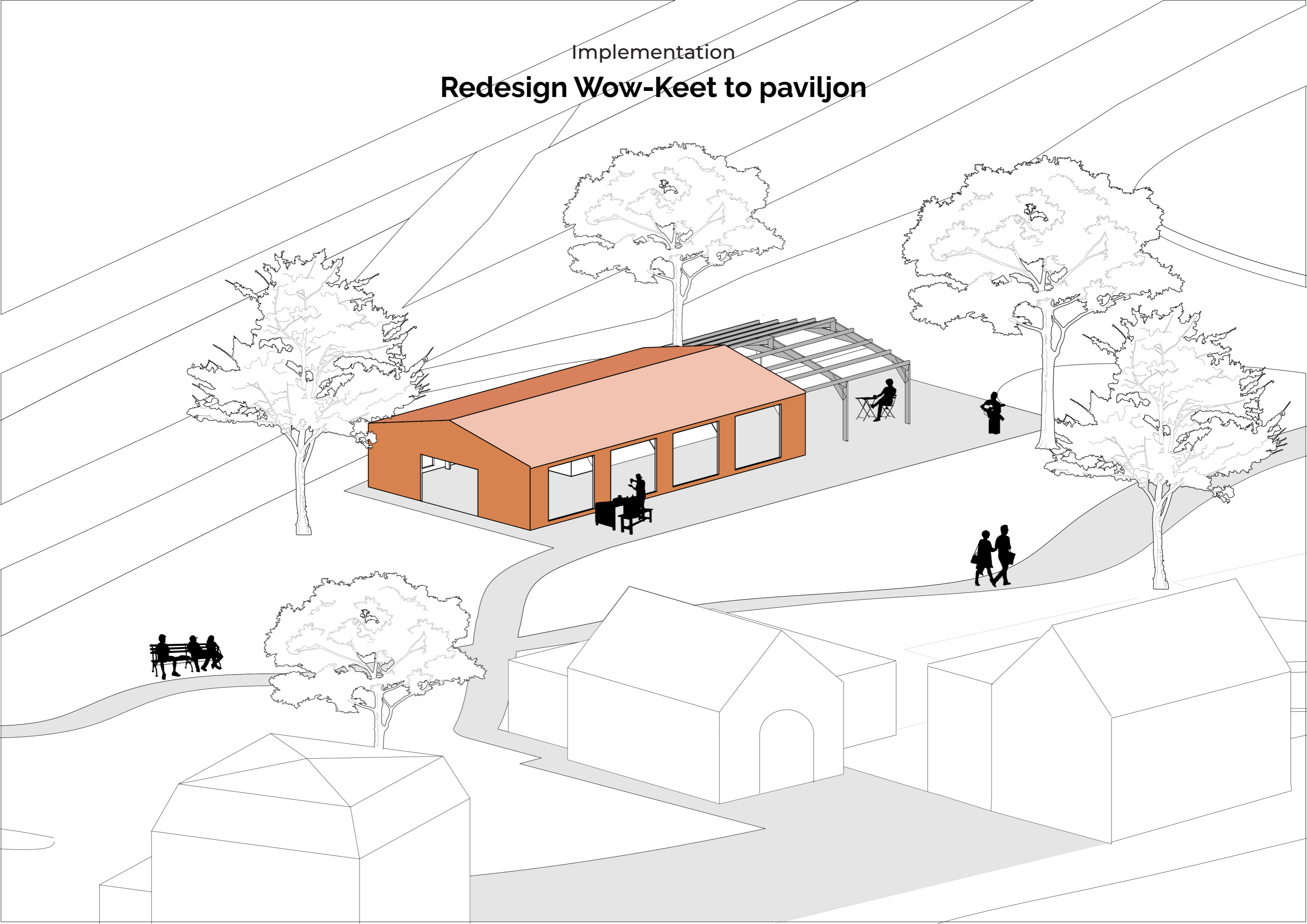


Implementation
Old Wow-Keet

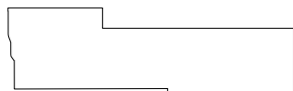
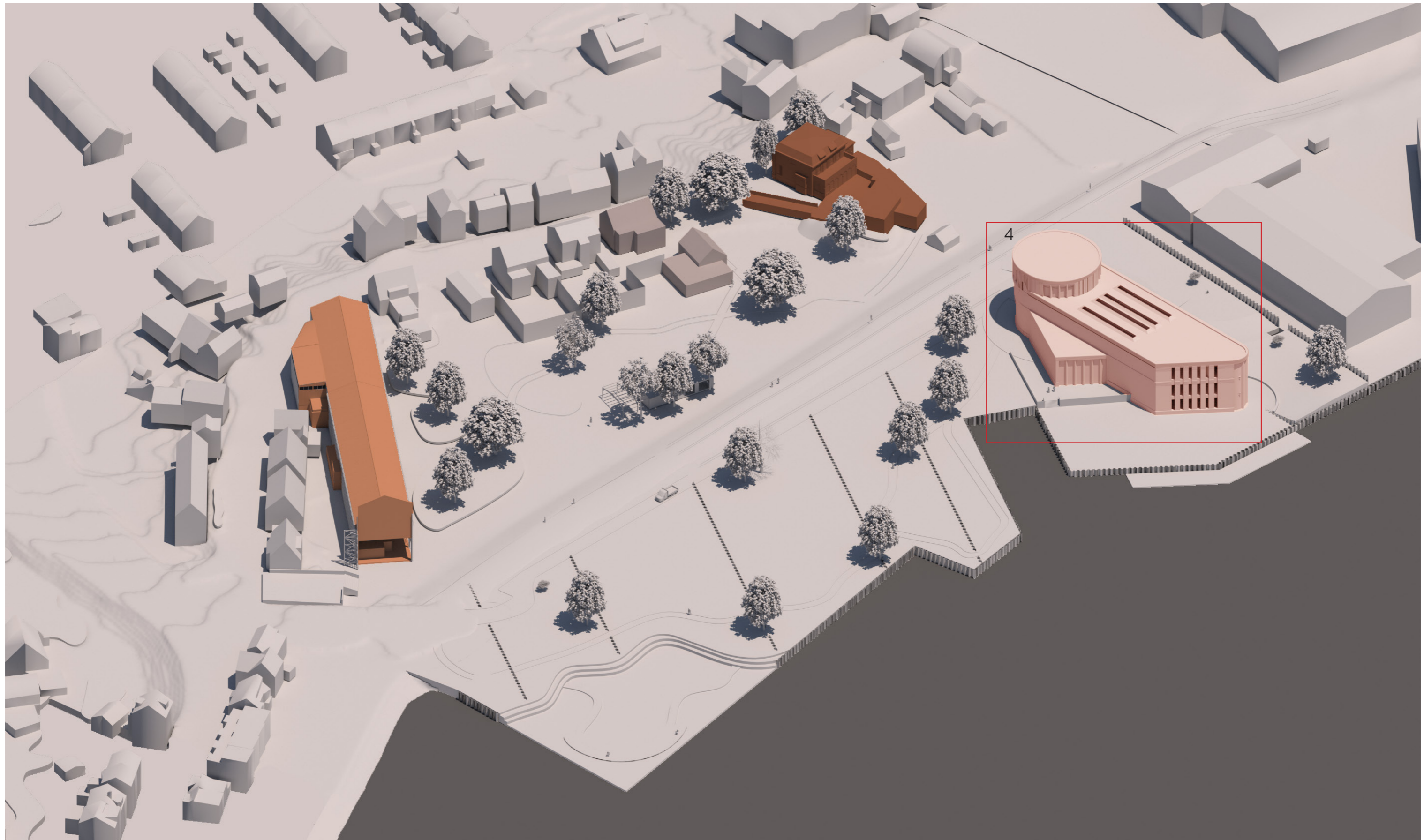


Implementation

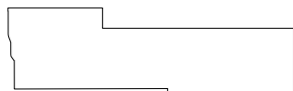
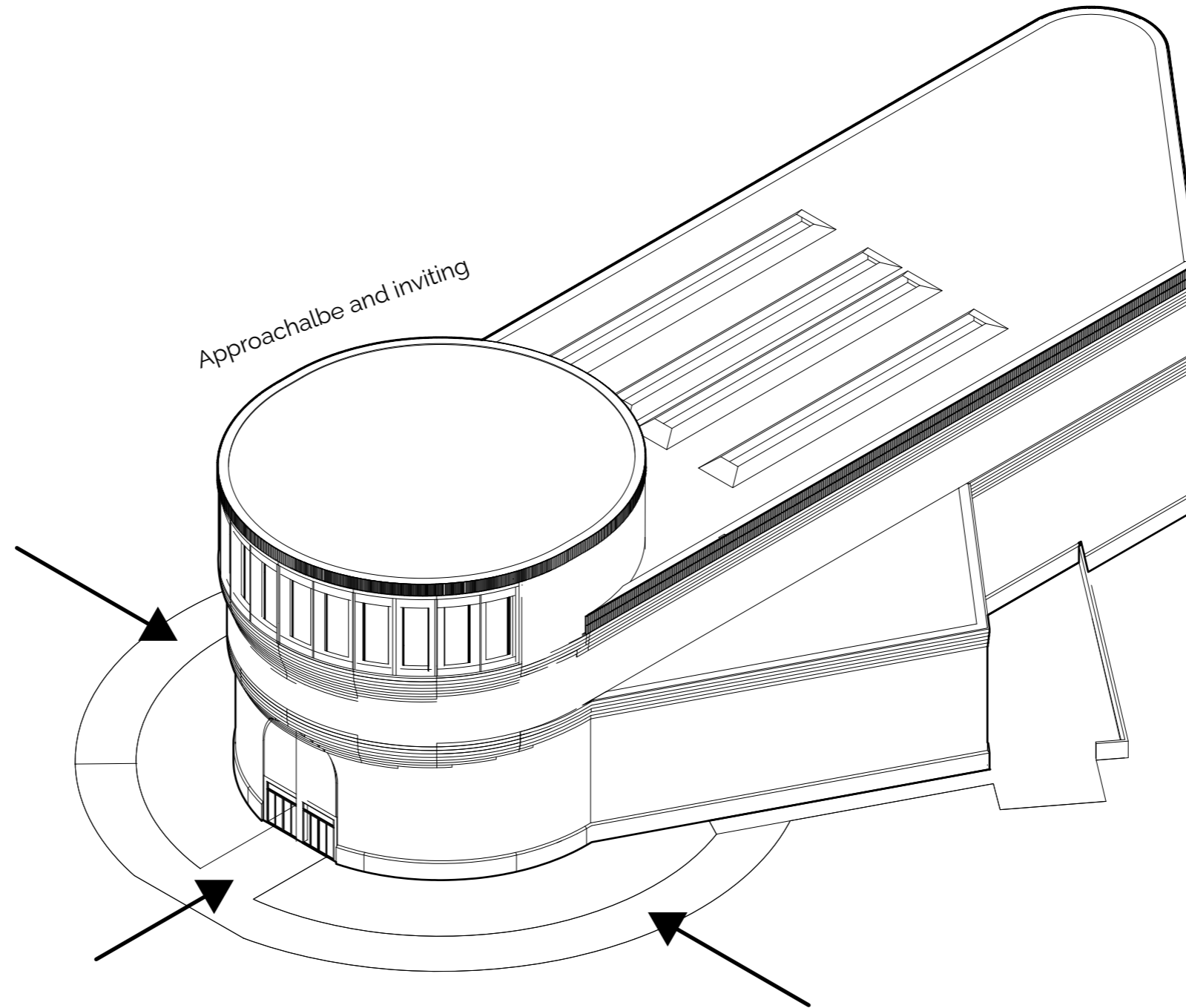
Redesign Wow-Keet to paviljon



Implementation Outerdike

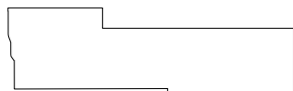
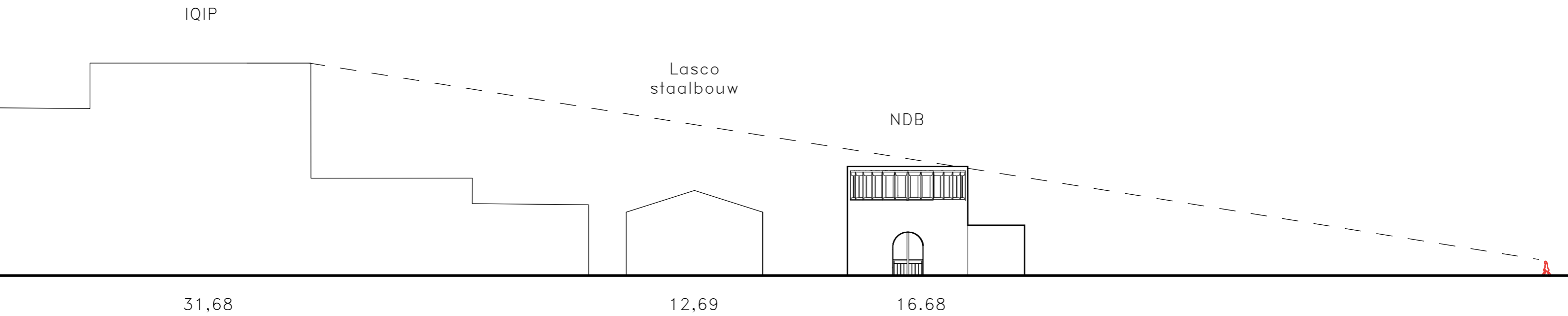


Implementation
Approachable and inviting

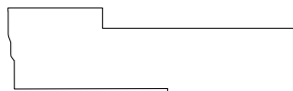
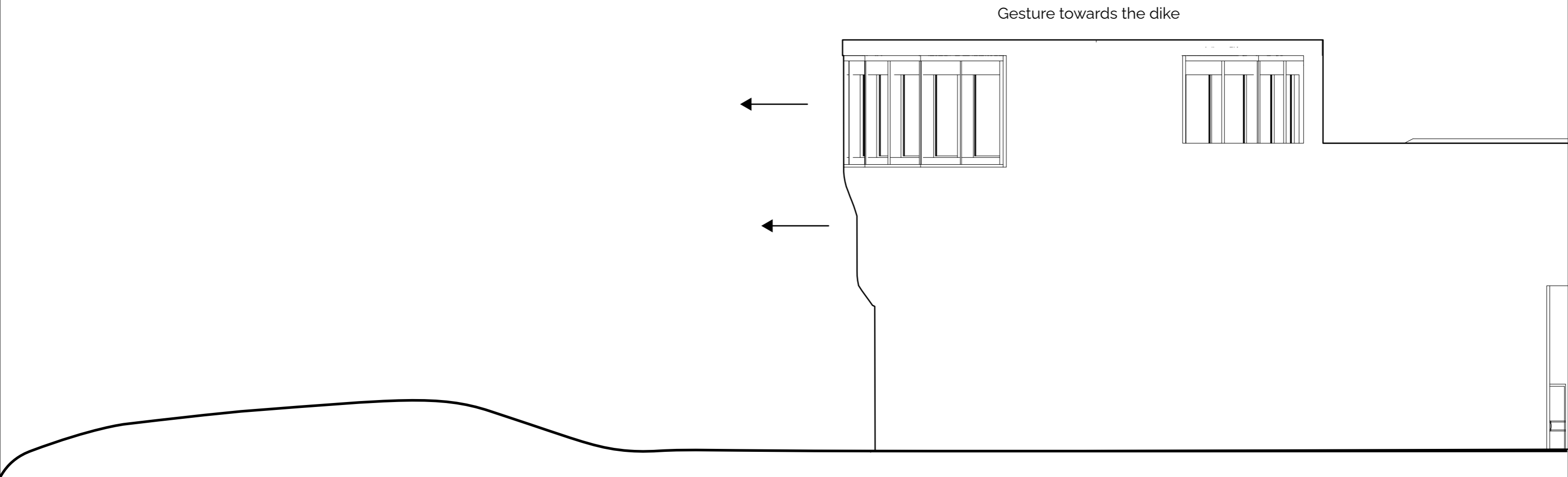


Implementation

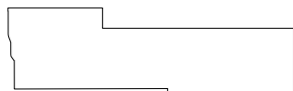
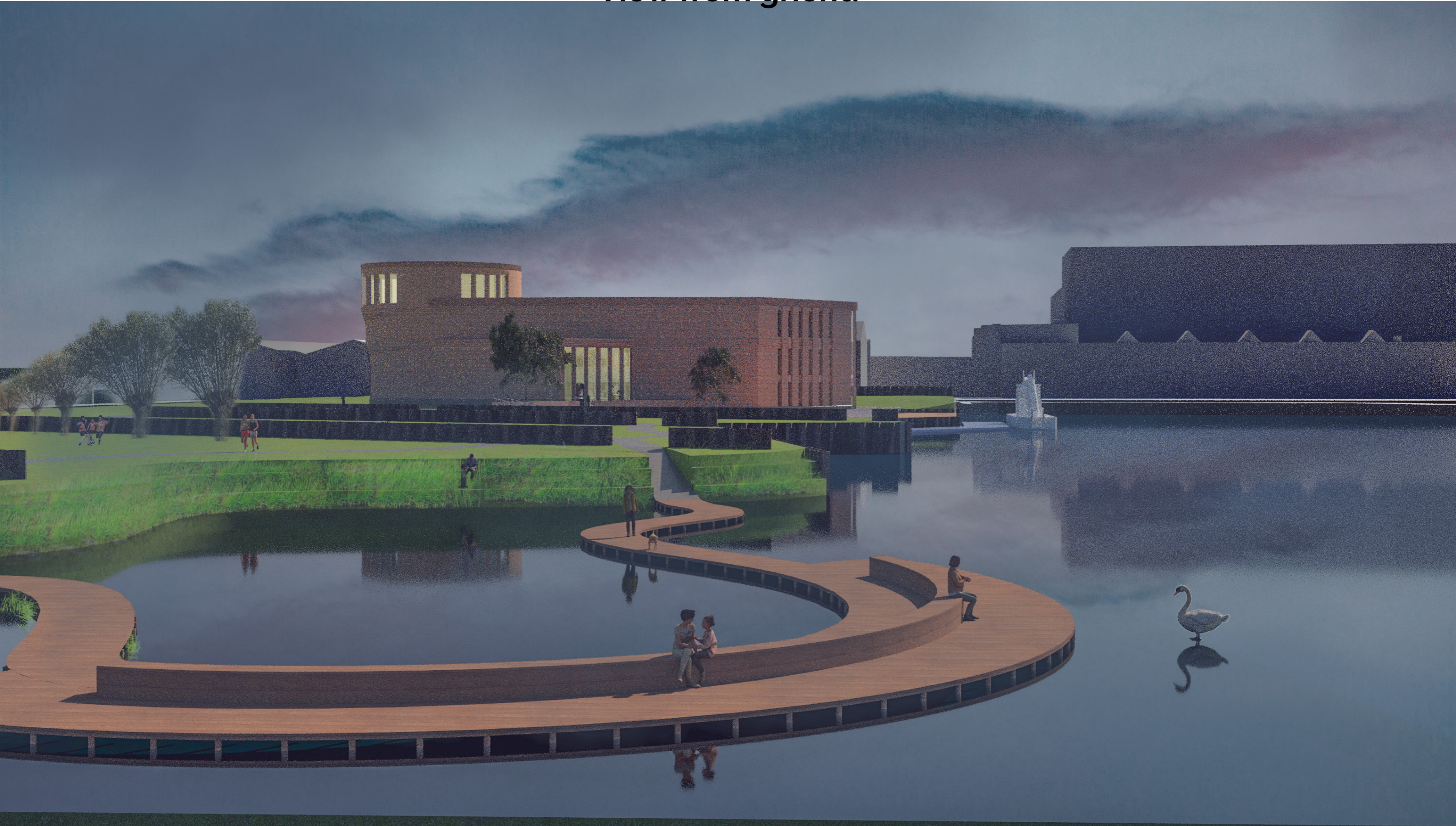
Height relationship to surrounding



Implementation
Gesture toward new dike

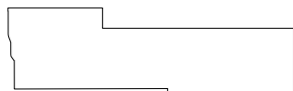
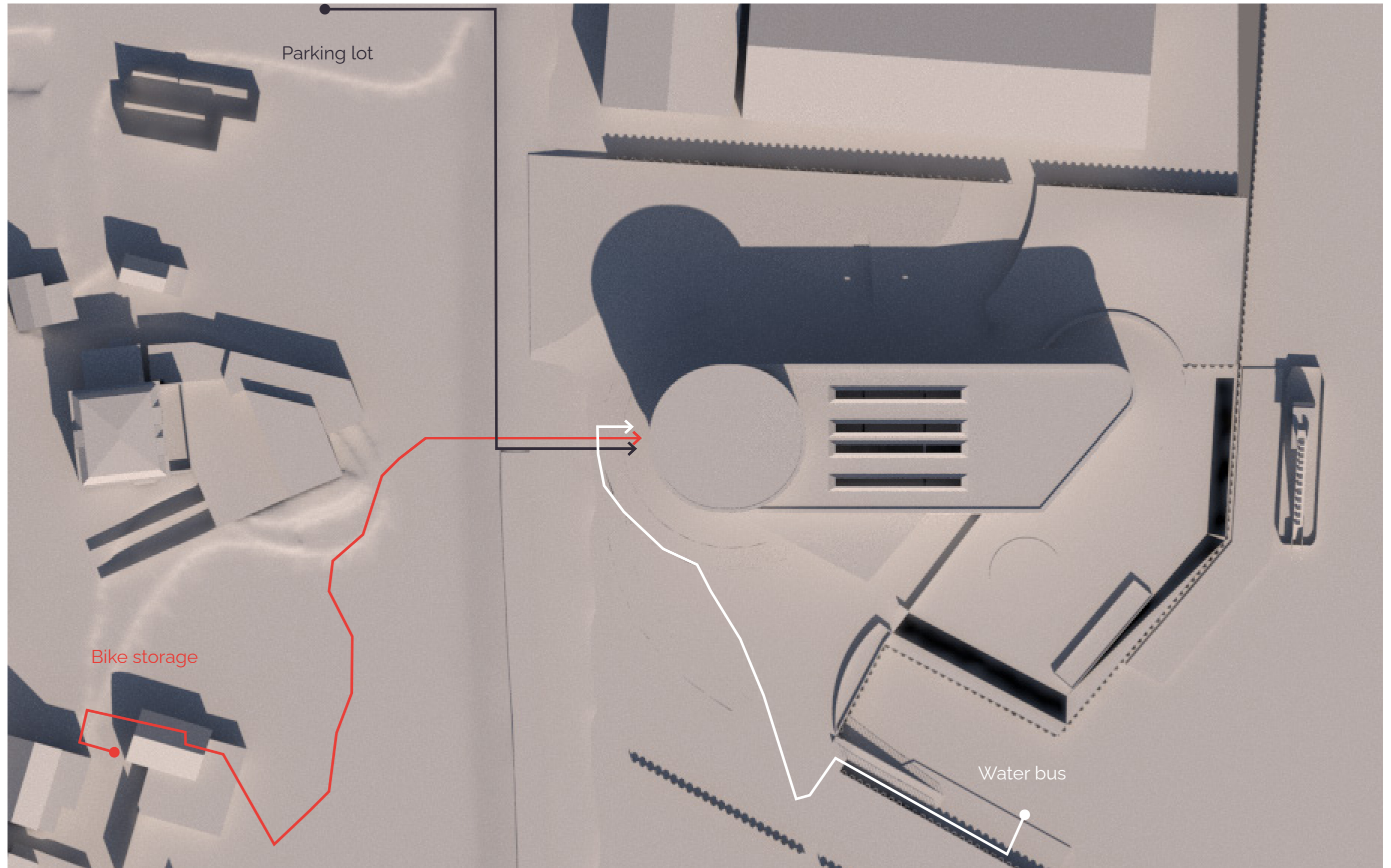


Implementation
View from griend

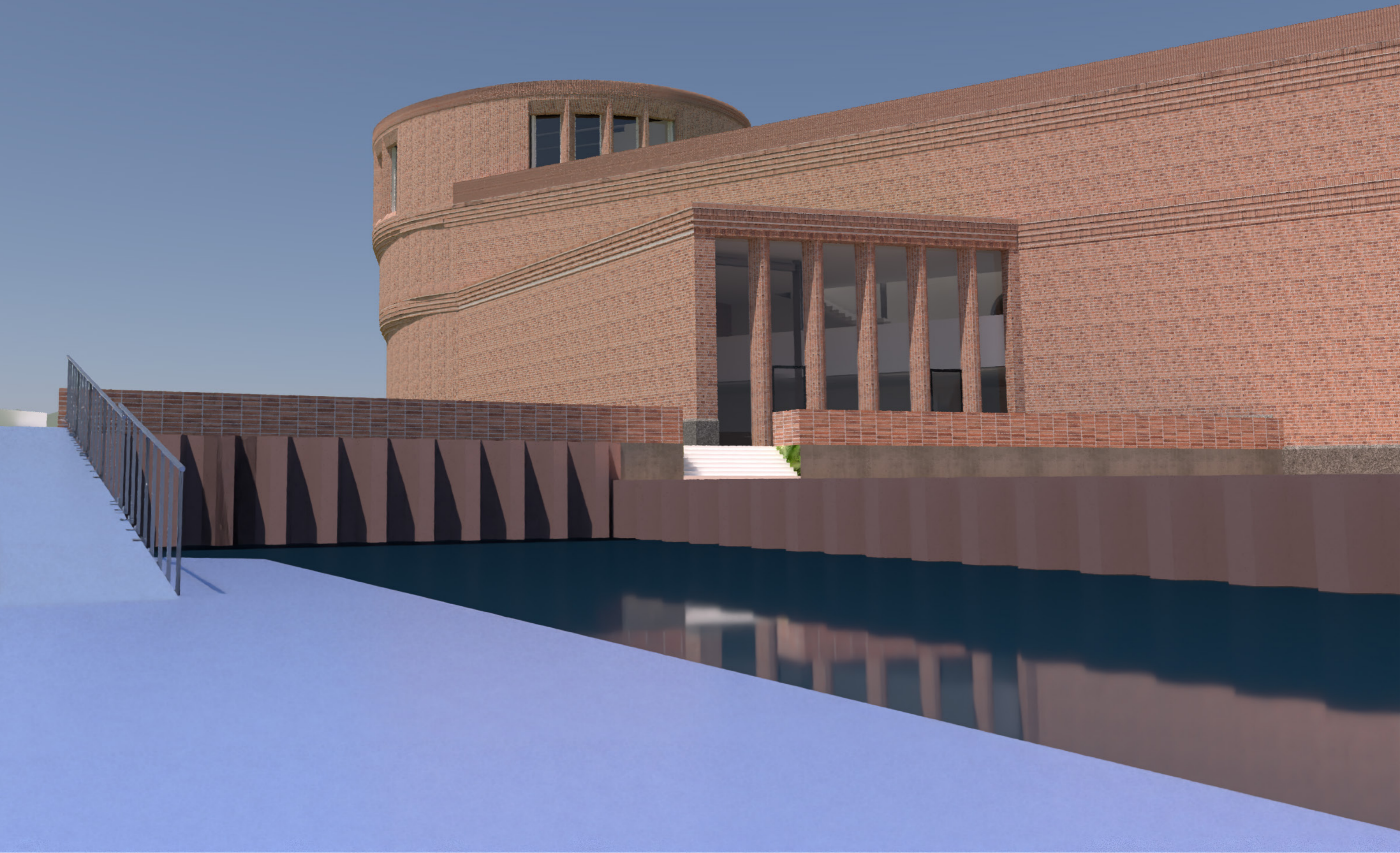


Implementation

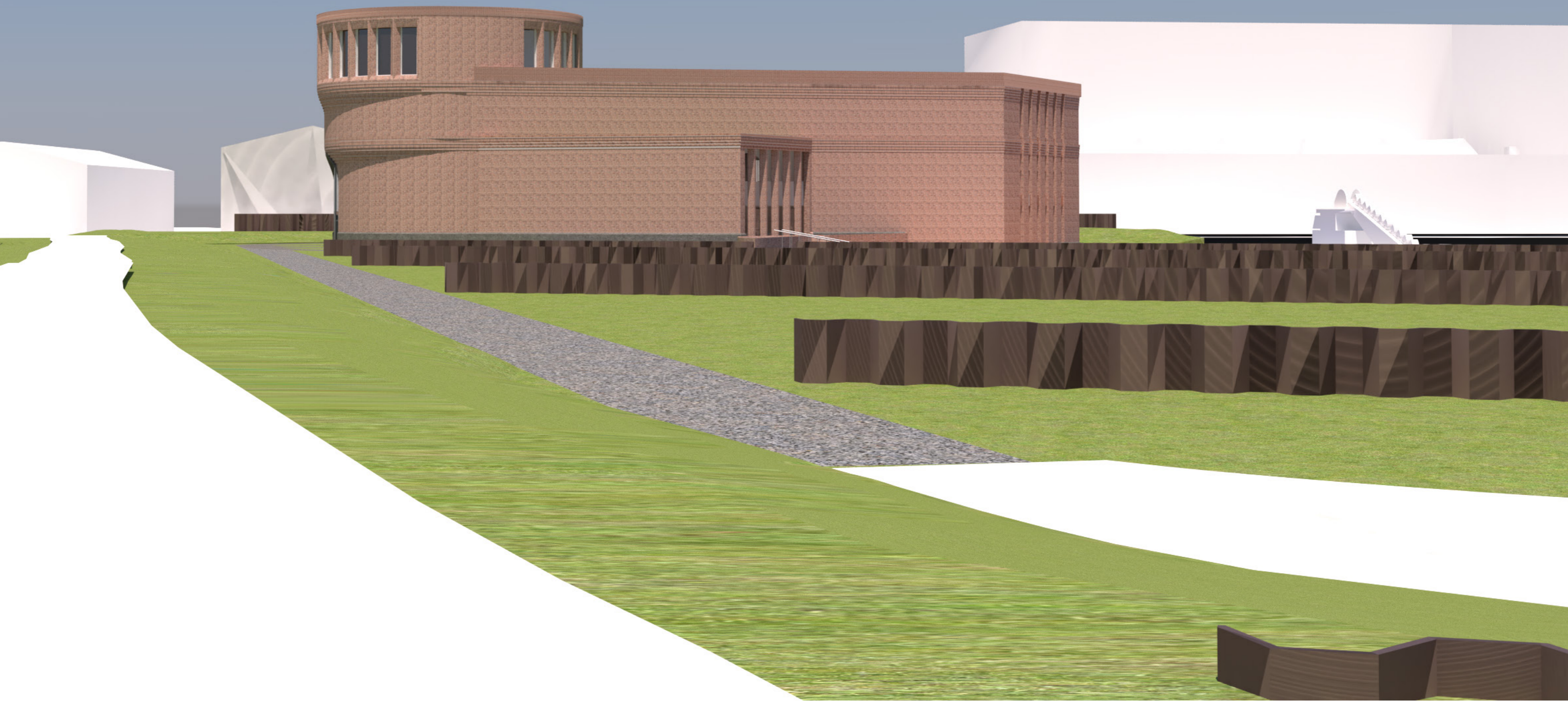
Modes of transport



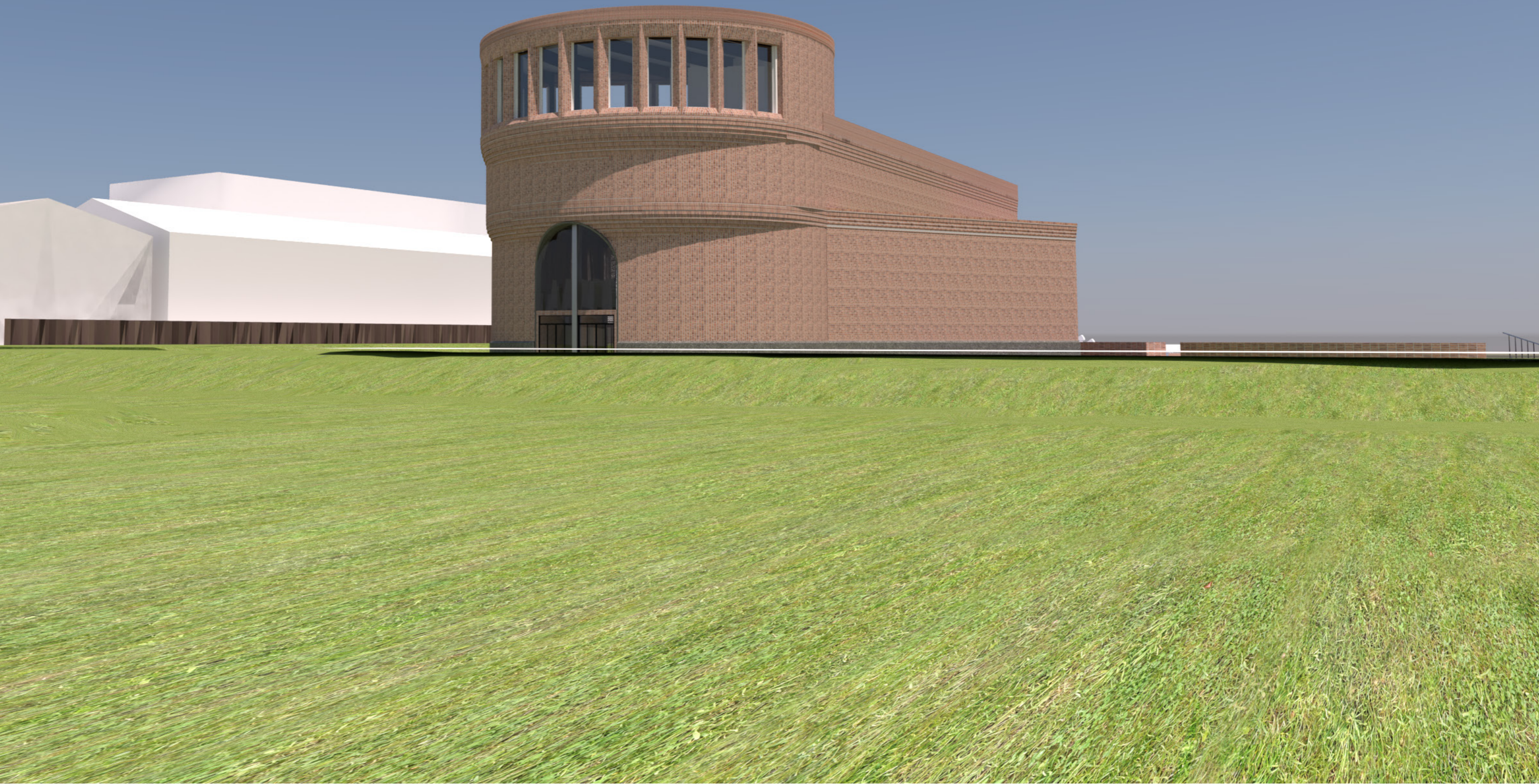
Implementation
Entrance from dike



Implementation
Entrance from dike



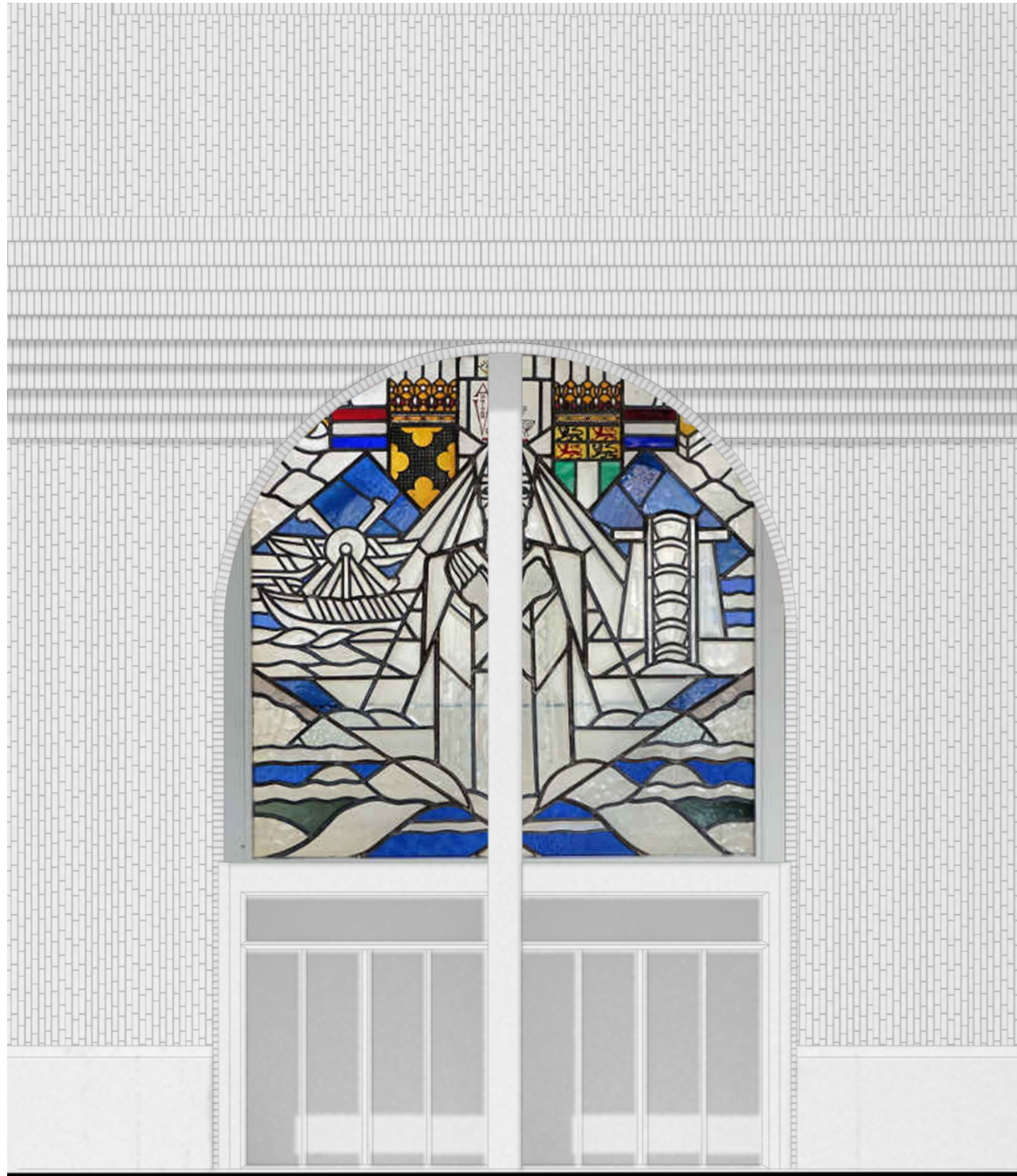
Implementation
Entrance from bike storage



Implementation
Entrance from Parking space



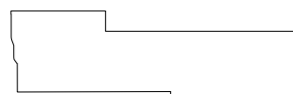
Implementation Traditional Entrance



Town hall
Sliedrecht

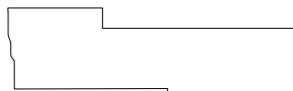
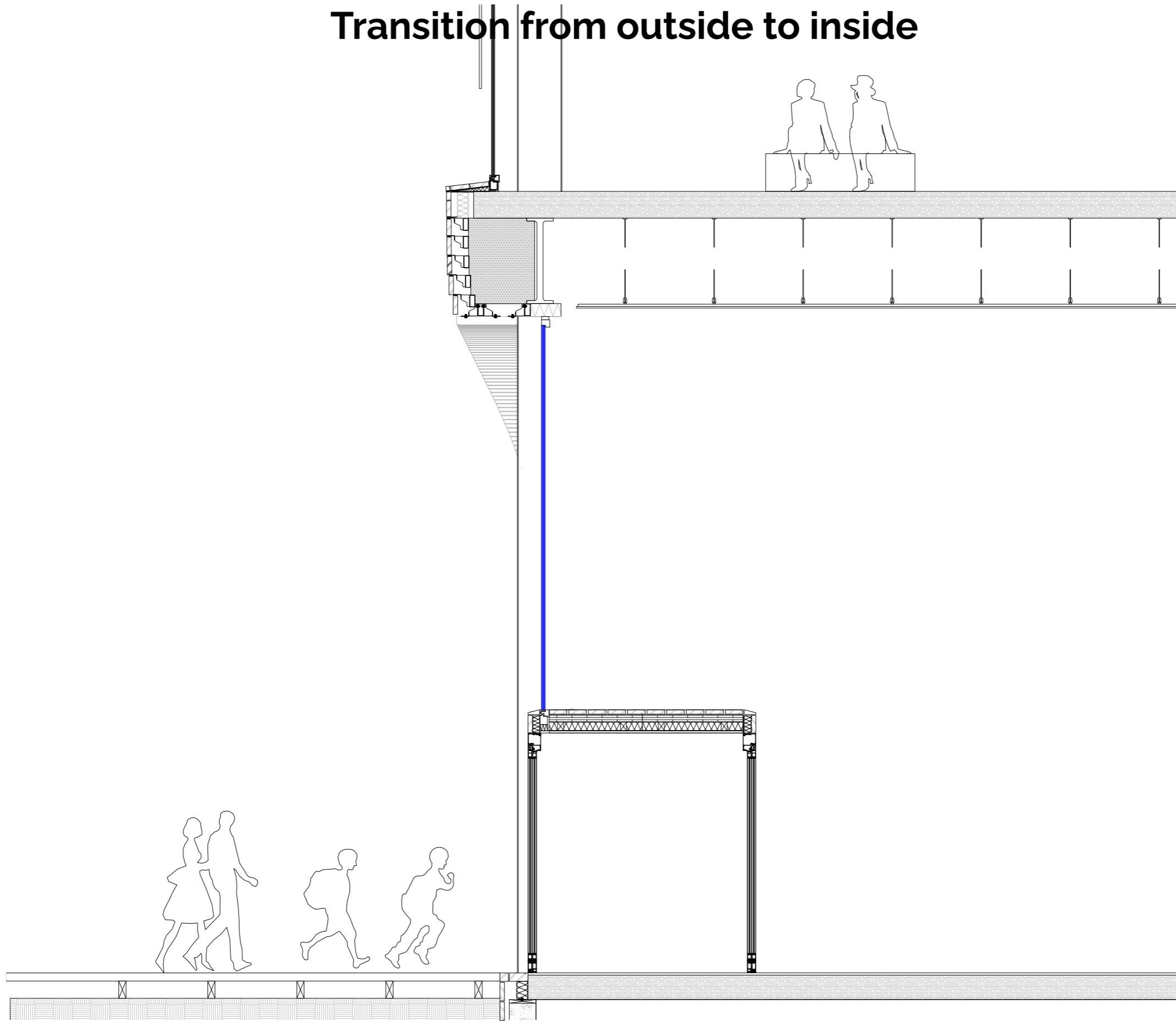


Old Dredging
Museum



Implementation

Transition from outside to inside

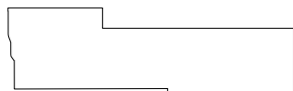
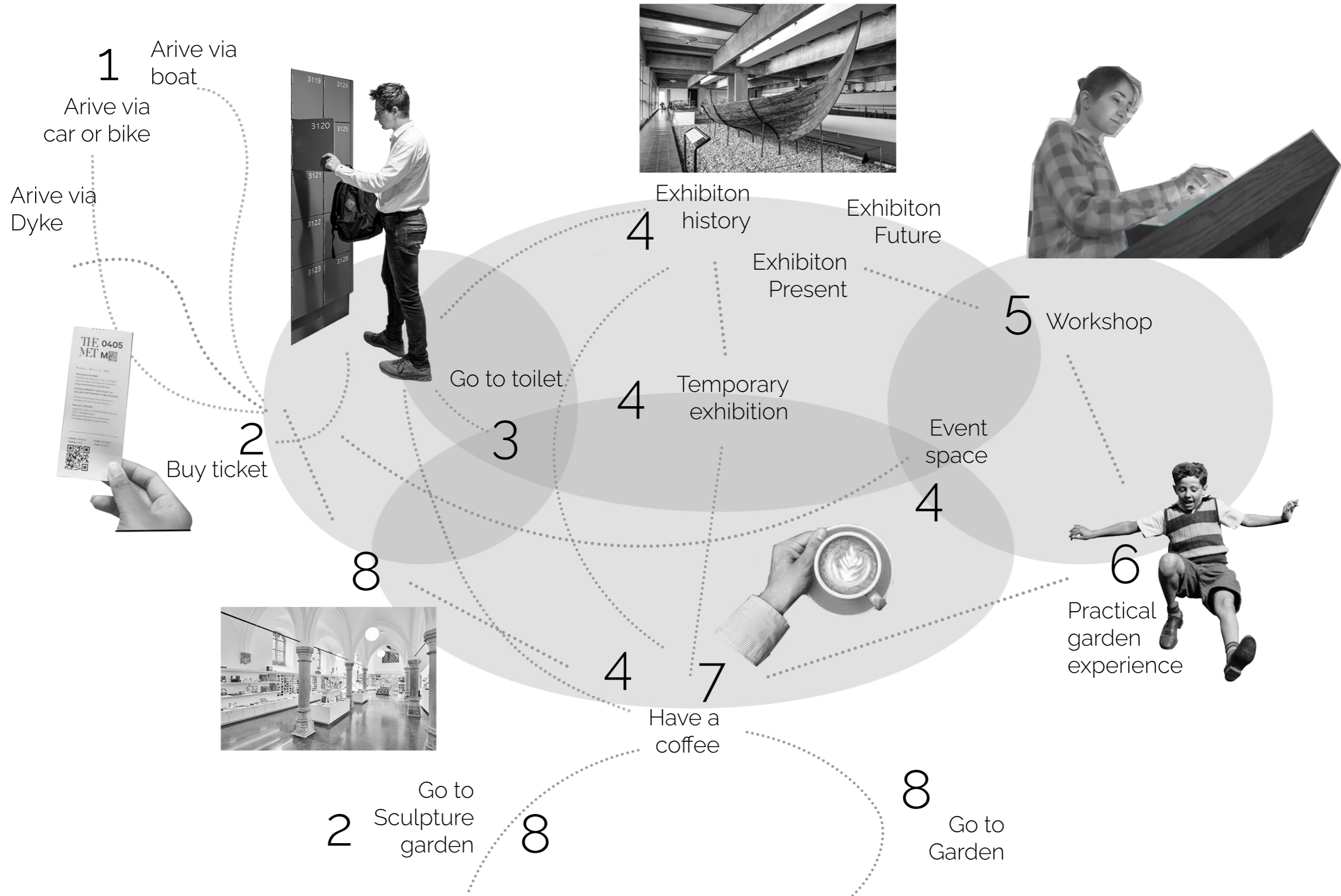


Implementation
Entrance

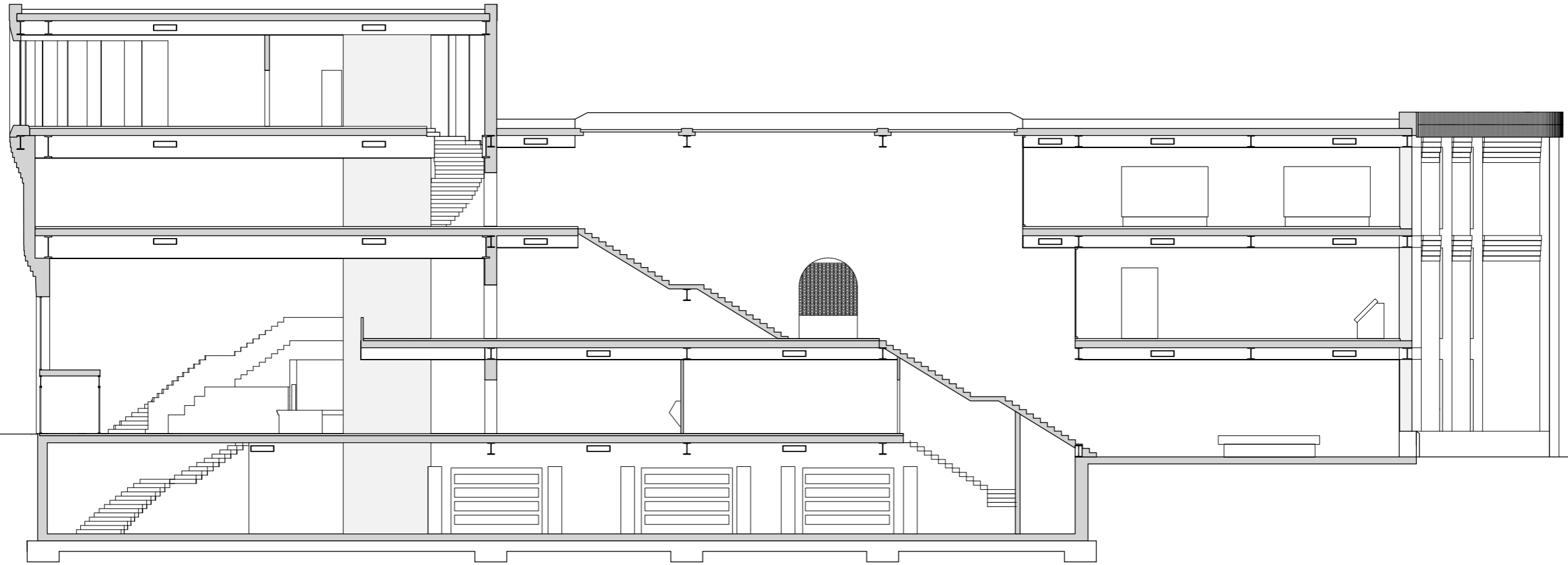


Implementation

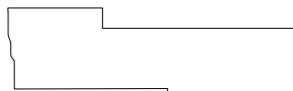
Show sequence pathway



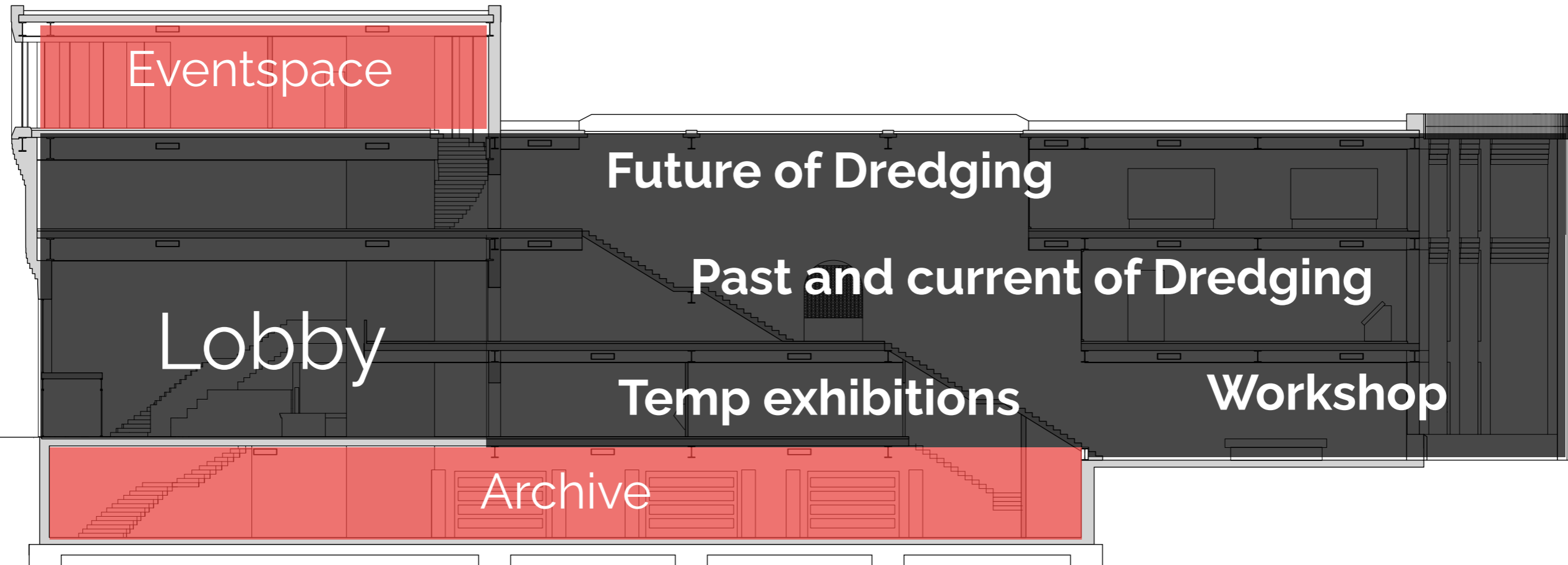
Implementation Main Layout



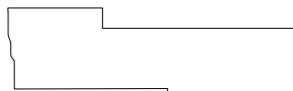
1:200 Front Section
A-A



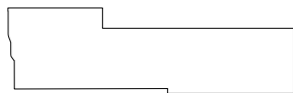
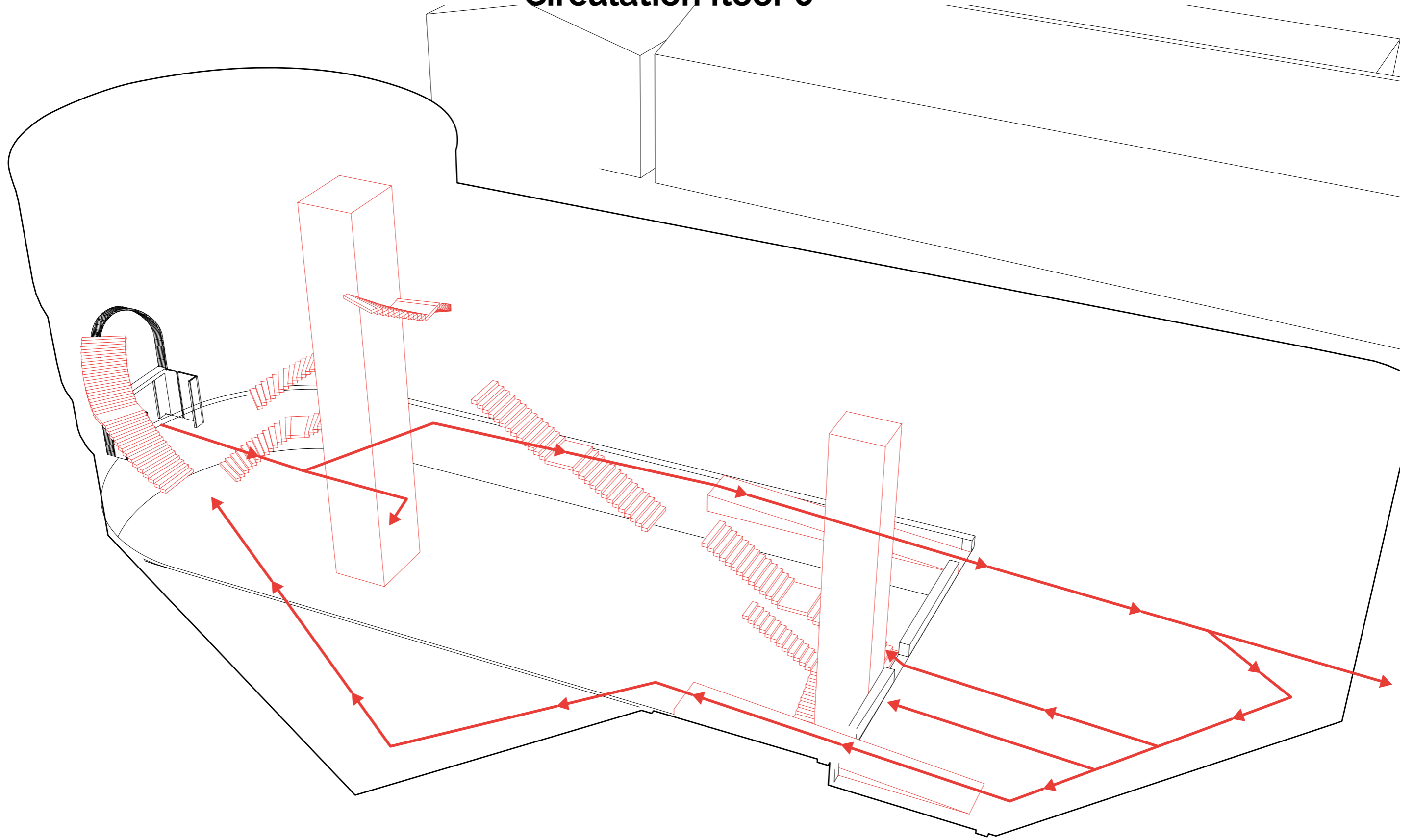
Implementation
Main Layout



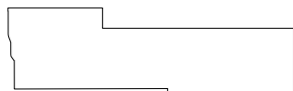
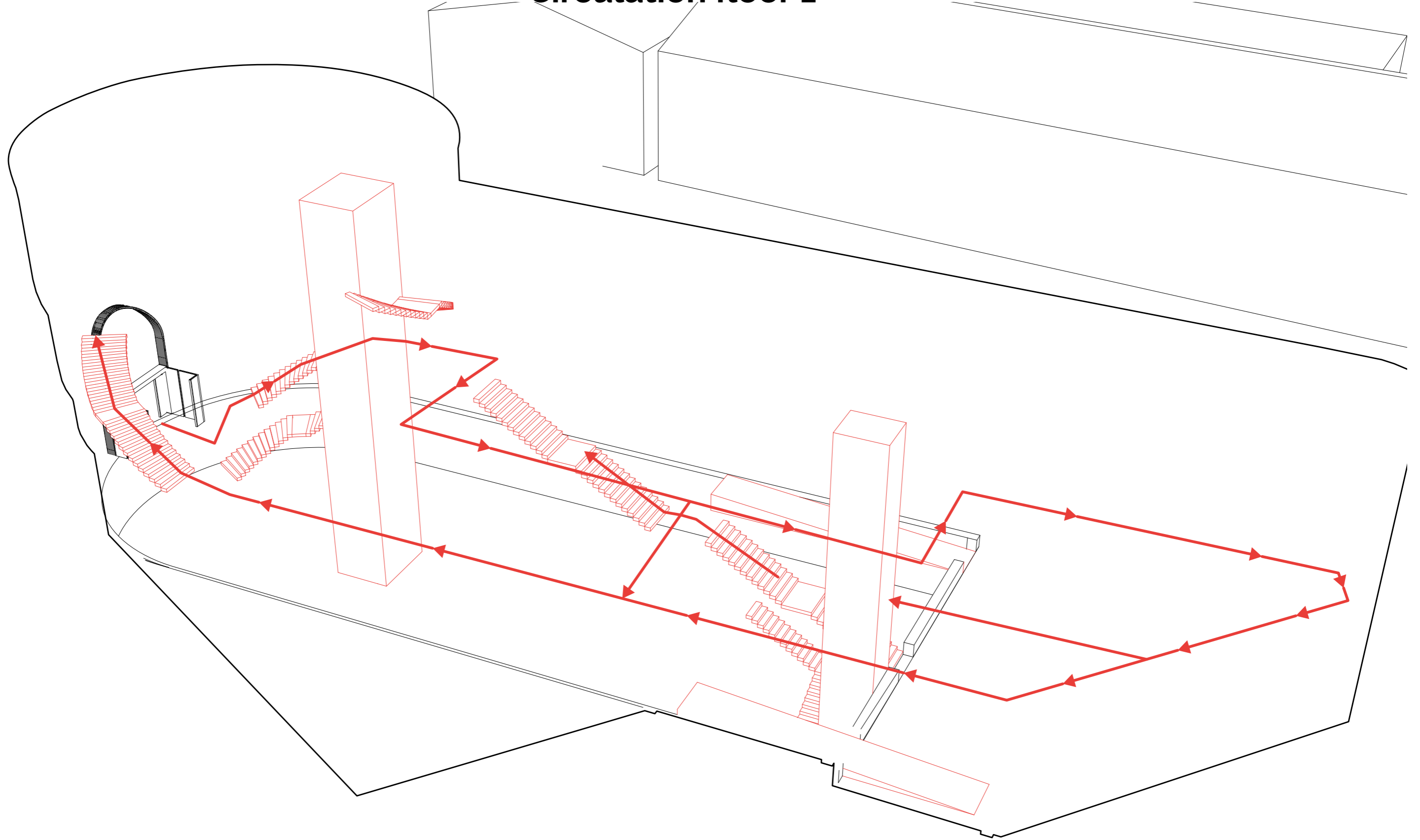
1:200 Front Section
A-A



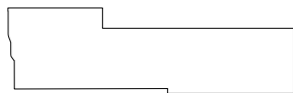
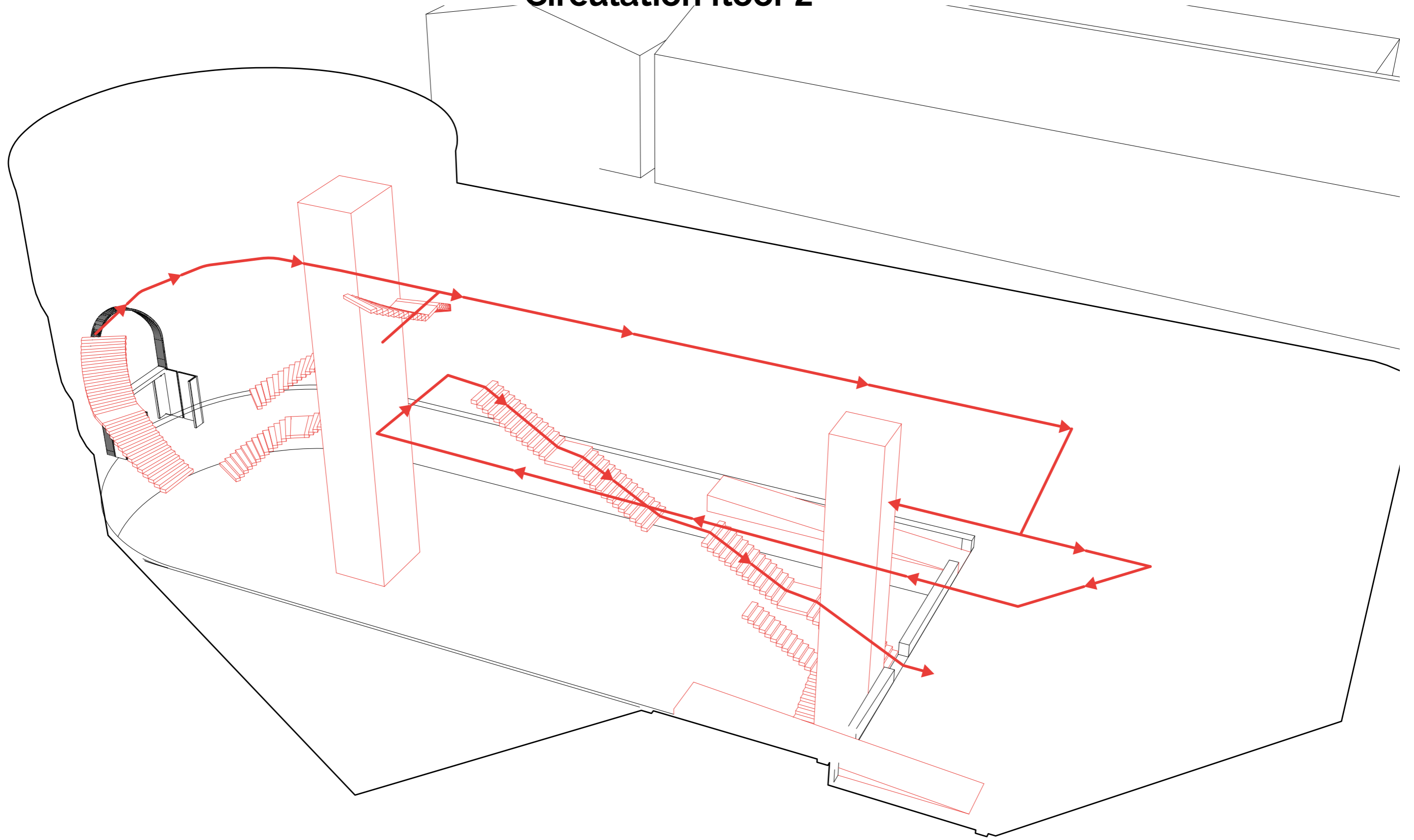
Implementation
Circulation floor 0



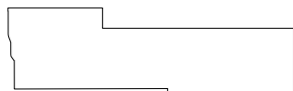
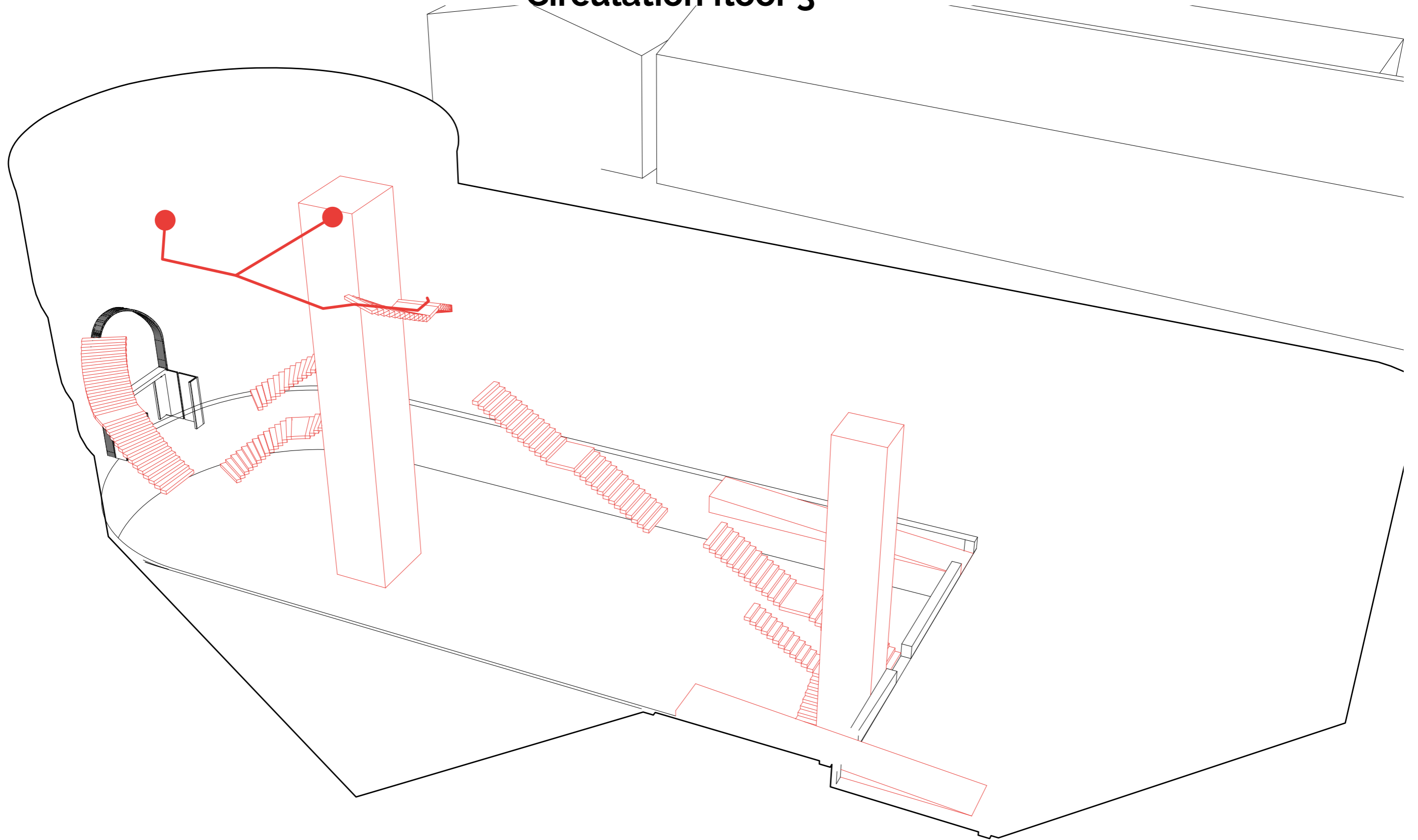
Implementation
Circulation floor 1



Implementation
Circulation floor 2



Implementation
Circulation floor 3



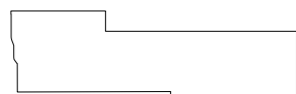
Implementation
Lobby desk



Implementation
Temporary exhibition hall

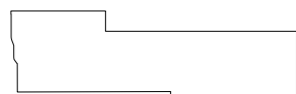


Implementation
Start of main exhibition

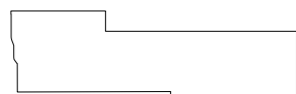


Implementation

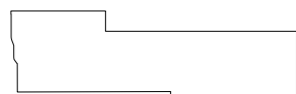
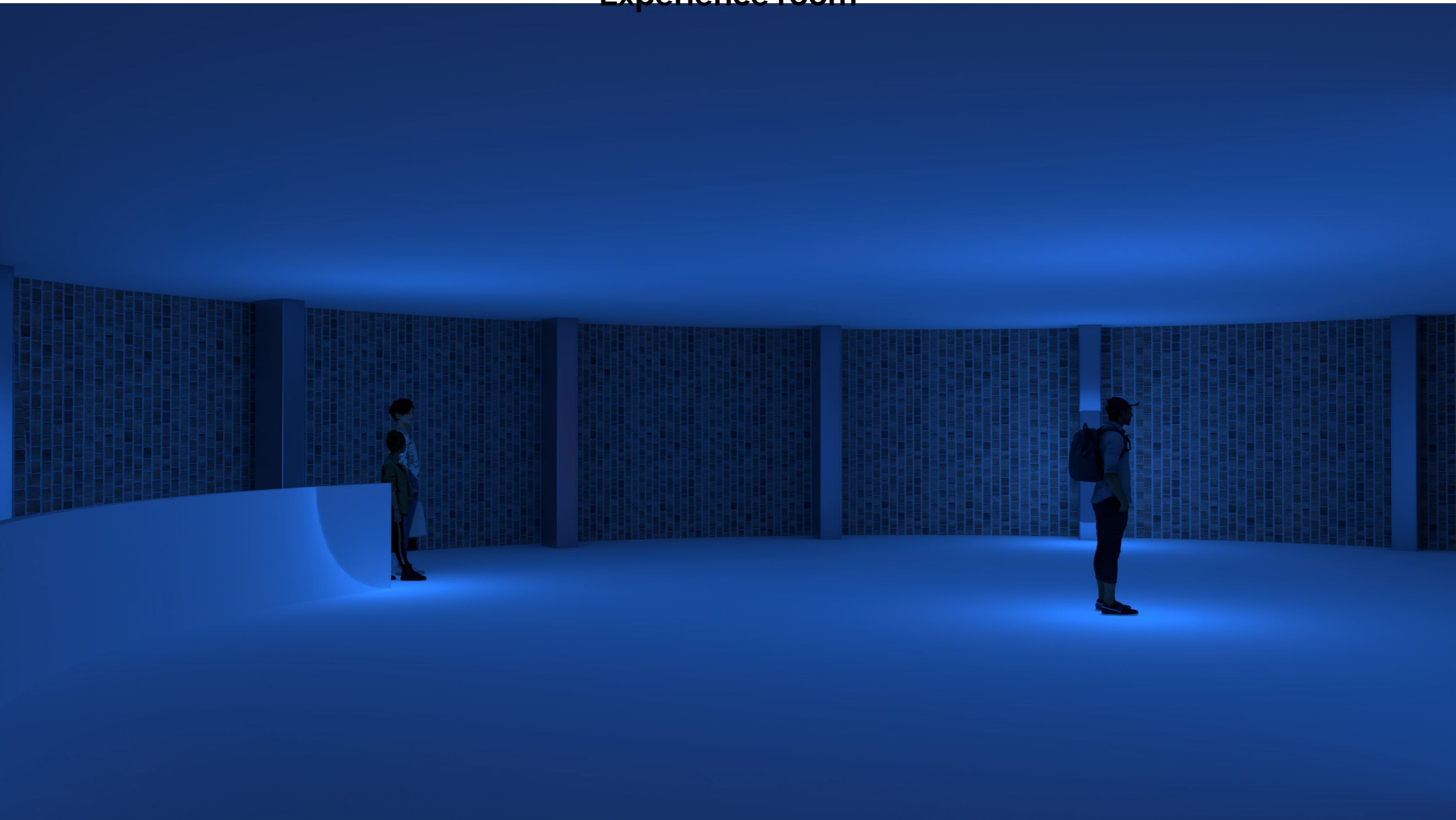
Room 1



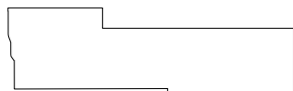
Implementation
Room 2



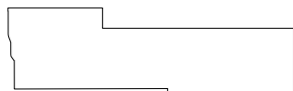
Implementation
Experience room



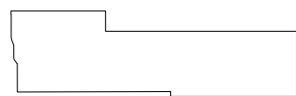
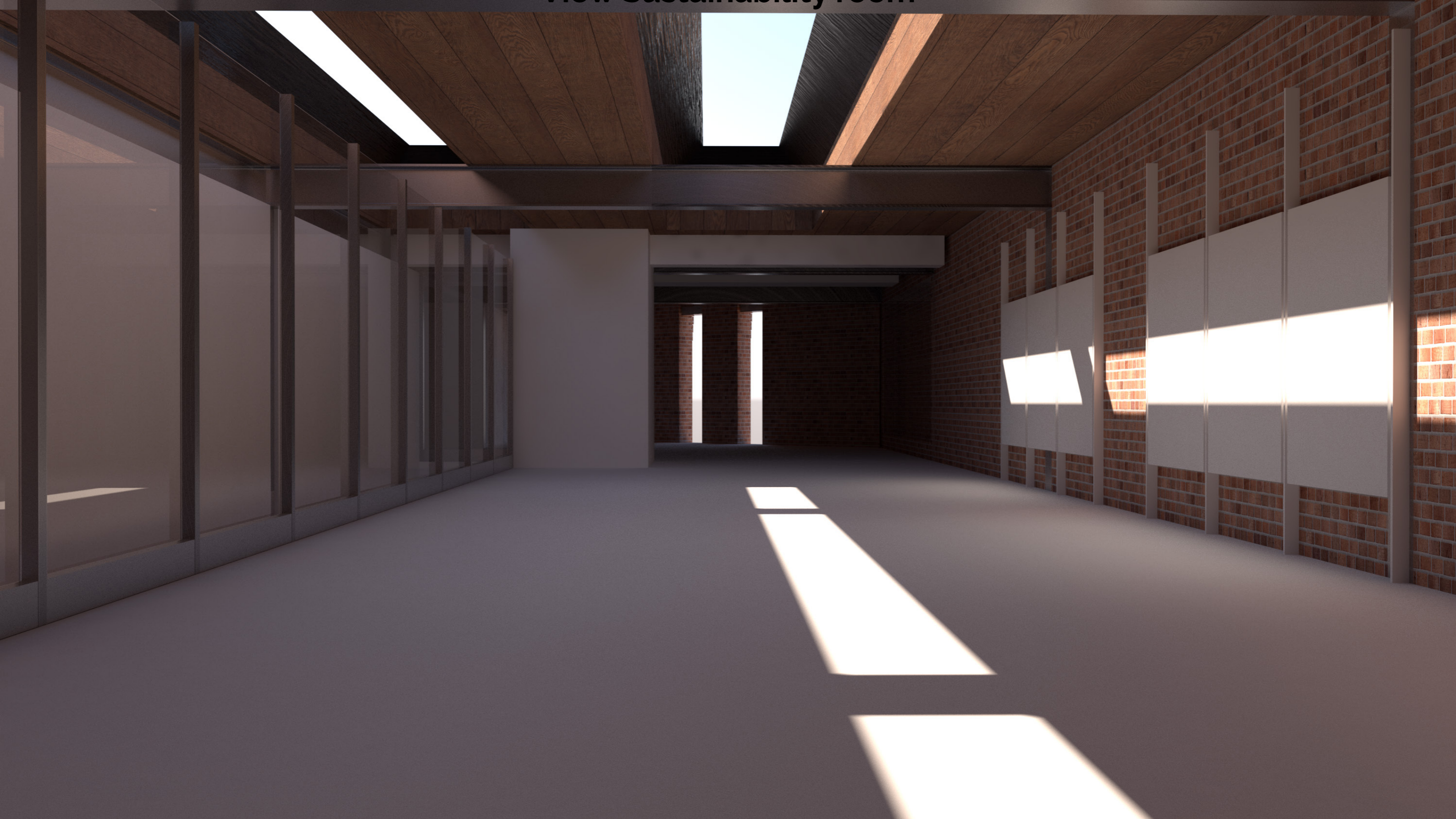
Interactive equipment room



Implementation
Library

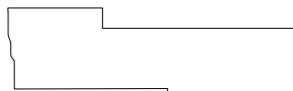
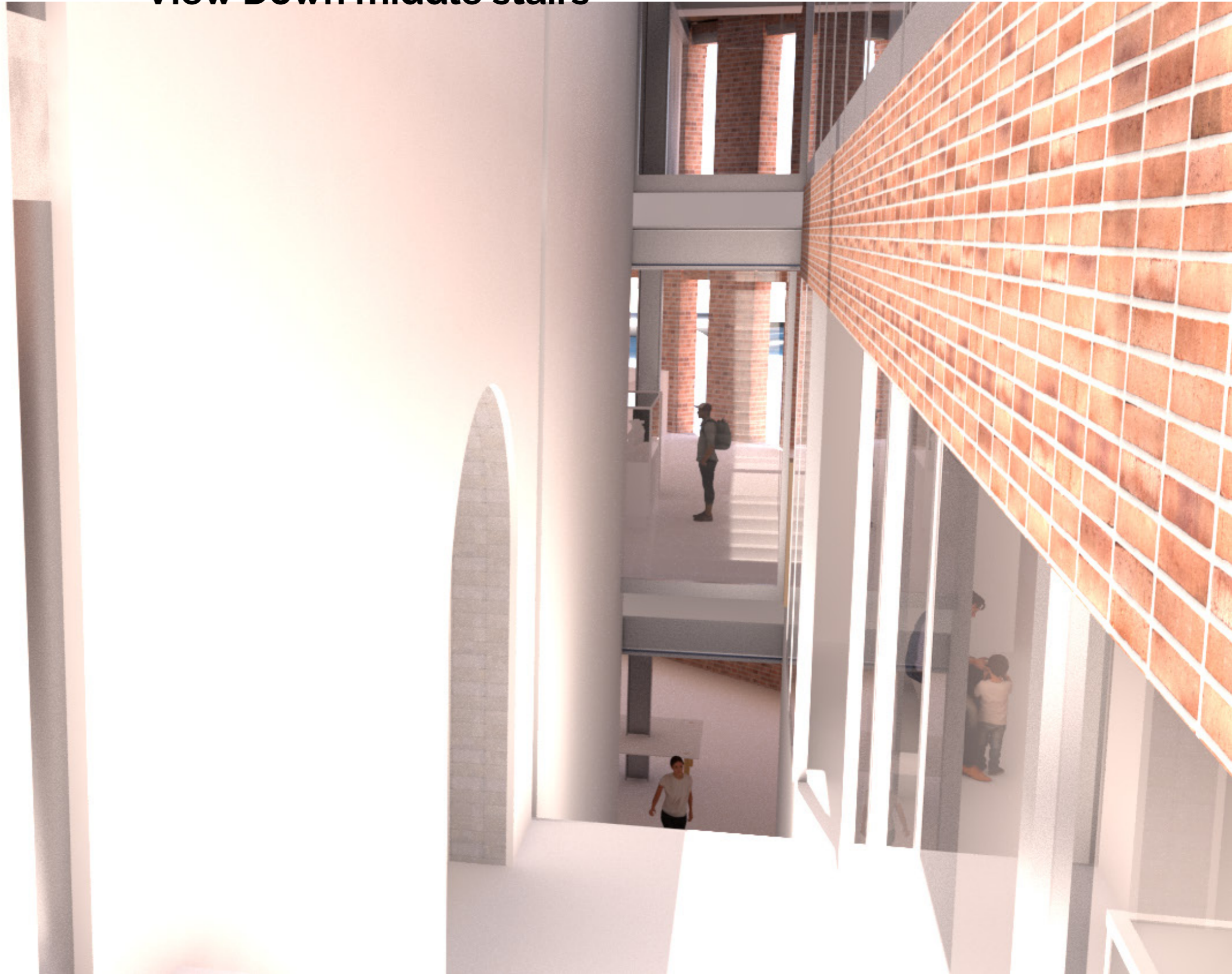


Implementation
View Sustainability room



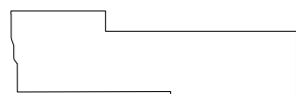
Implementation

View Down middle stairs

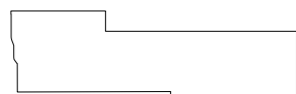


Implementation

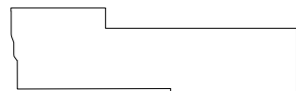
View Up middle stairs



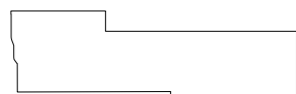
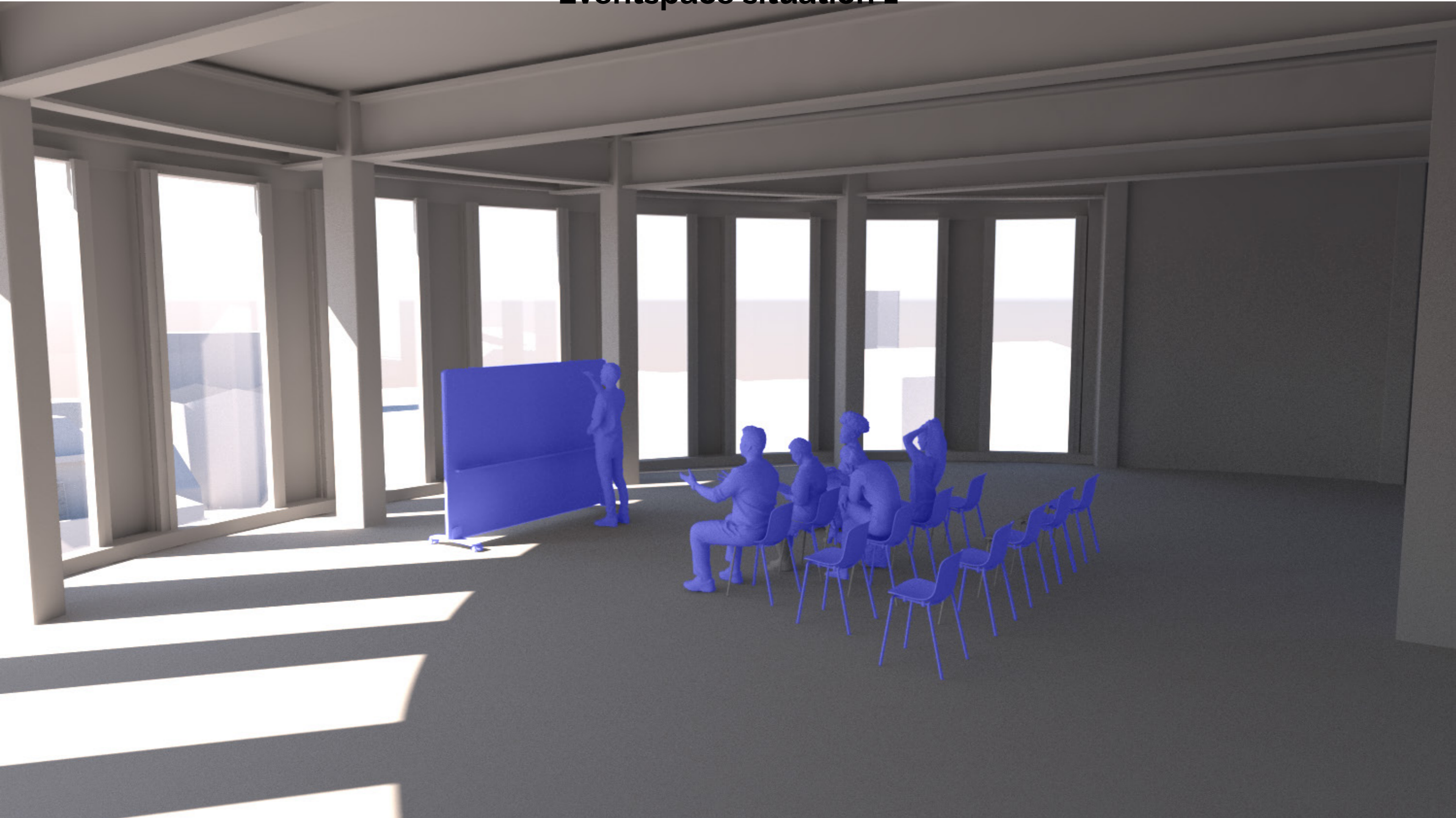
Implementation
Workshop exhibiton space



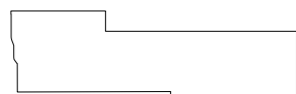
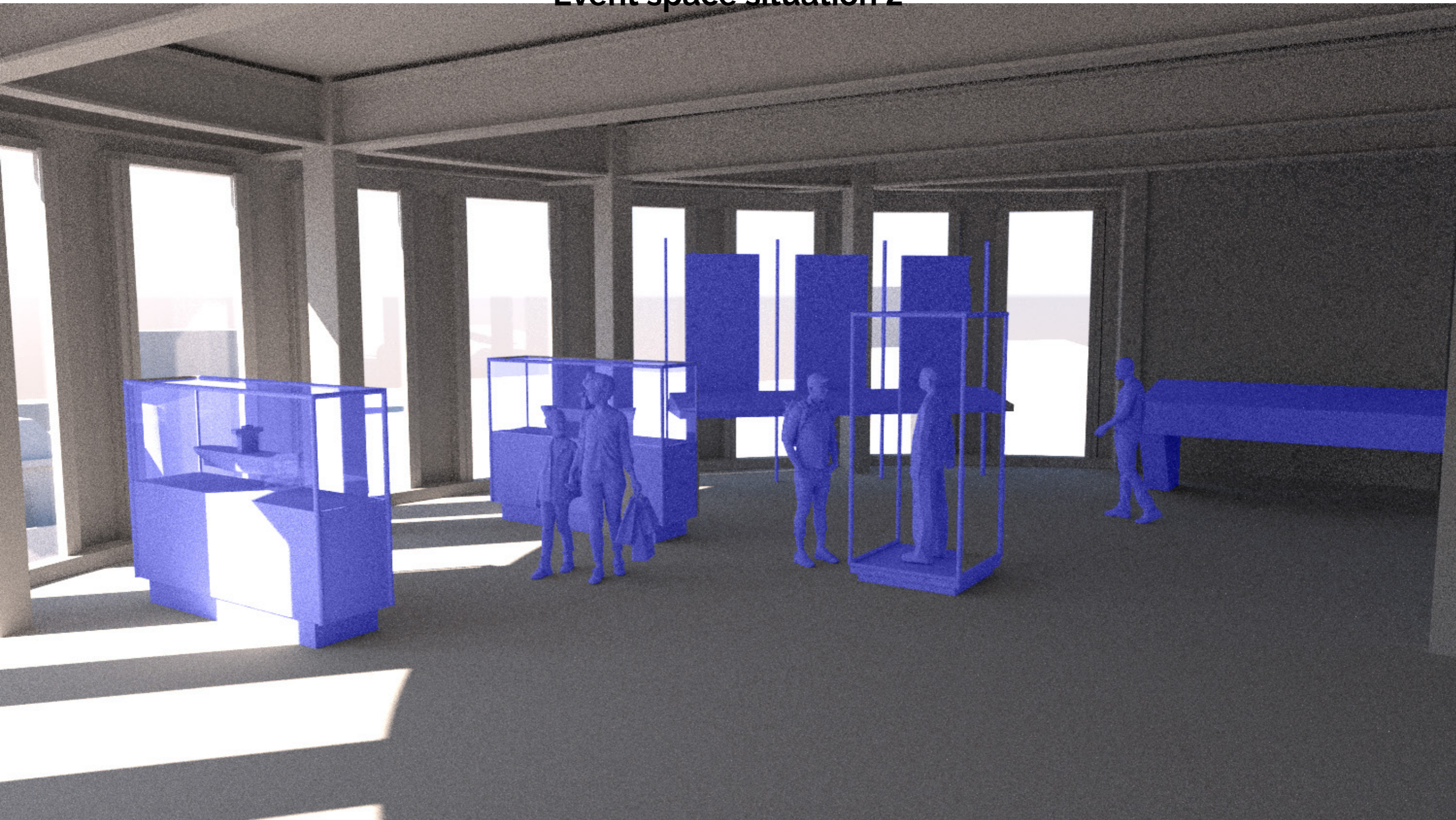
Implementation
Practical garden



Implementation
Eventspace situation 1

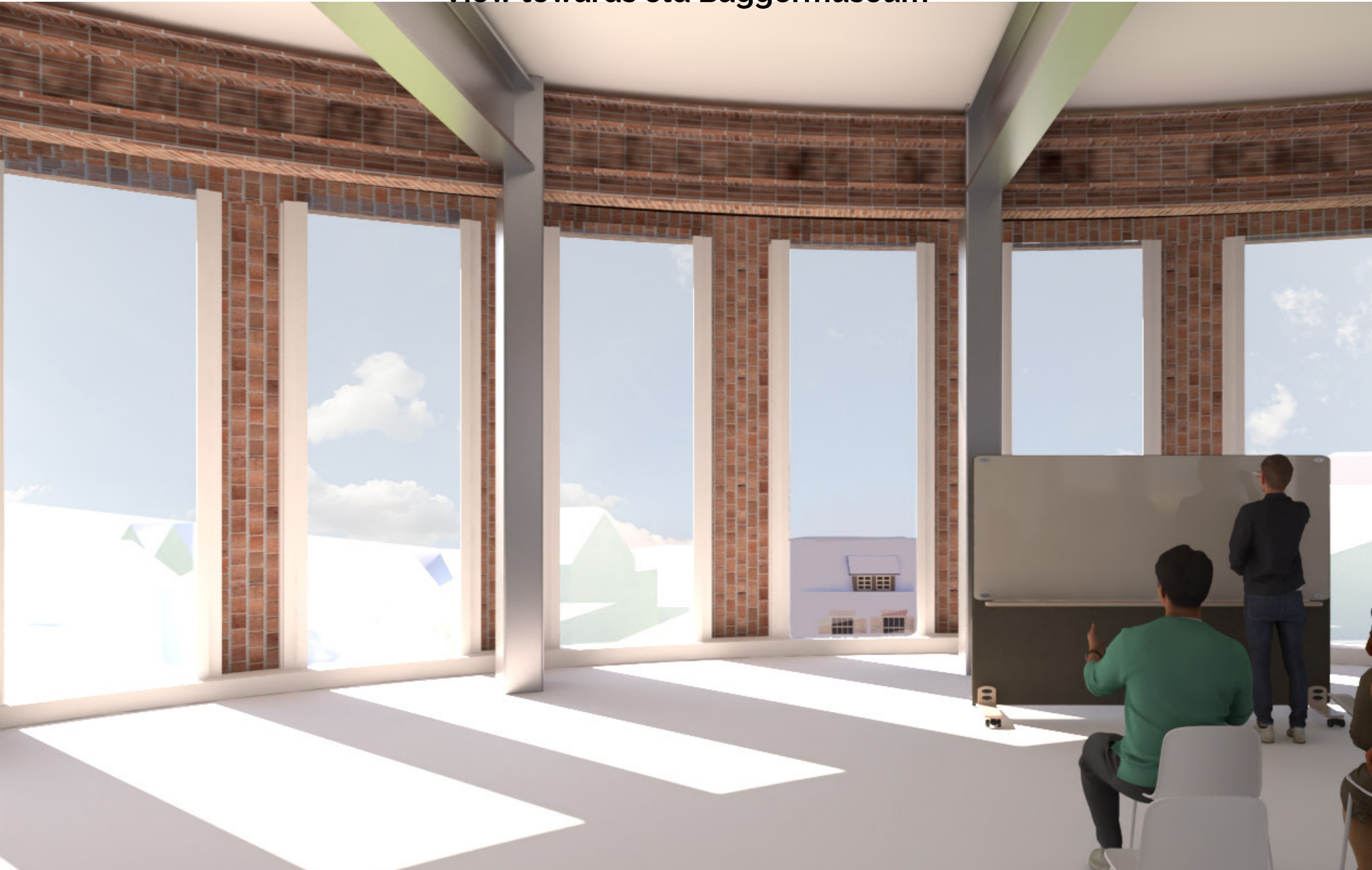


Implementation
Event space situation 2

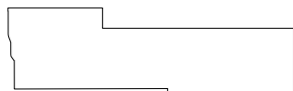


Implementation

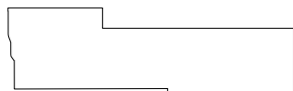
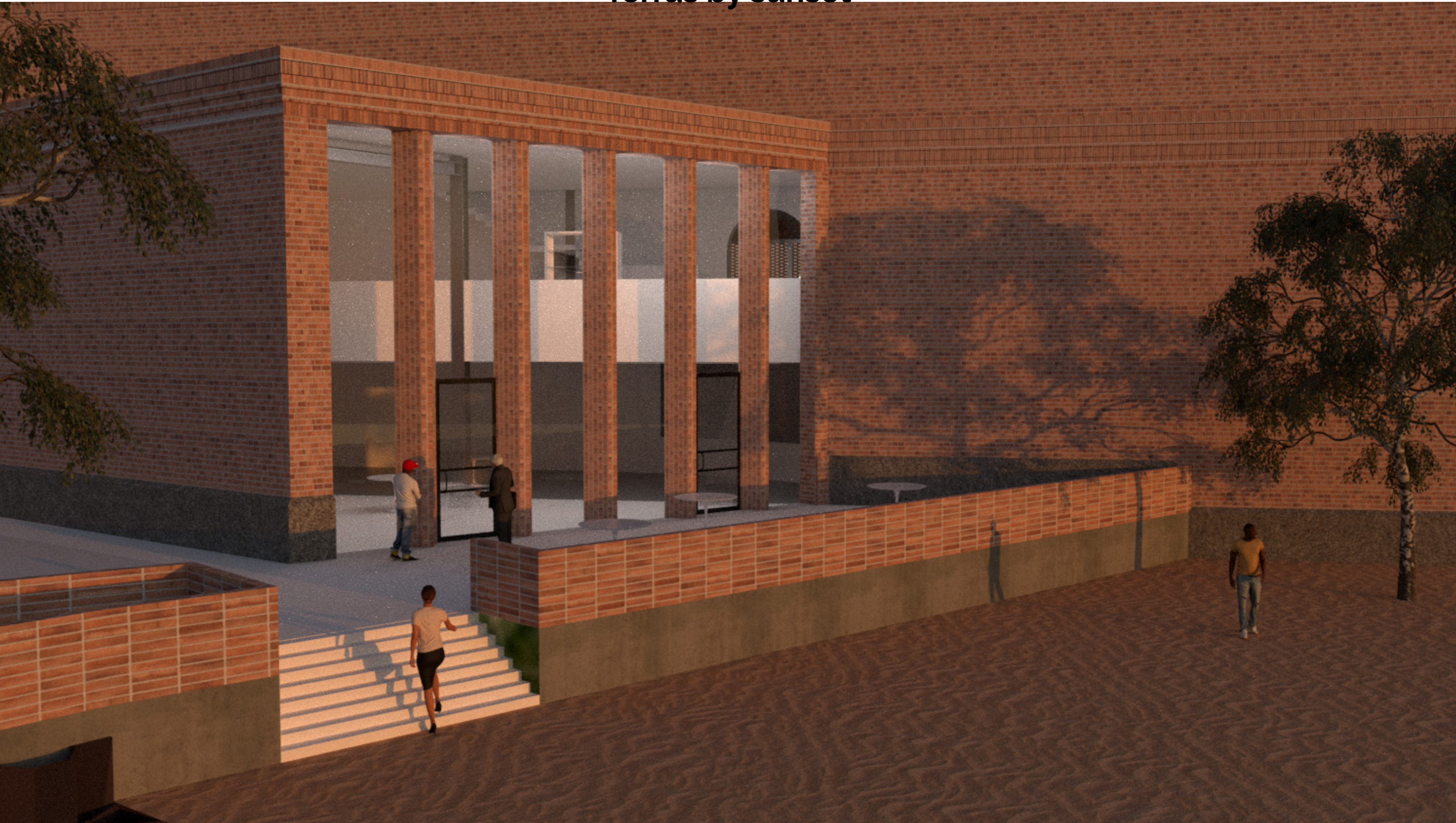
View towards old Baggermuseum



Implementation Restaurant

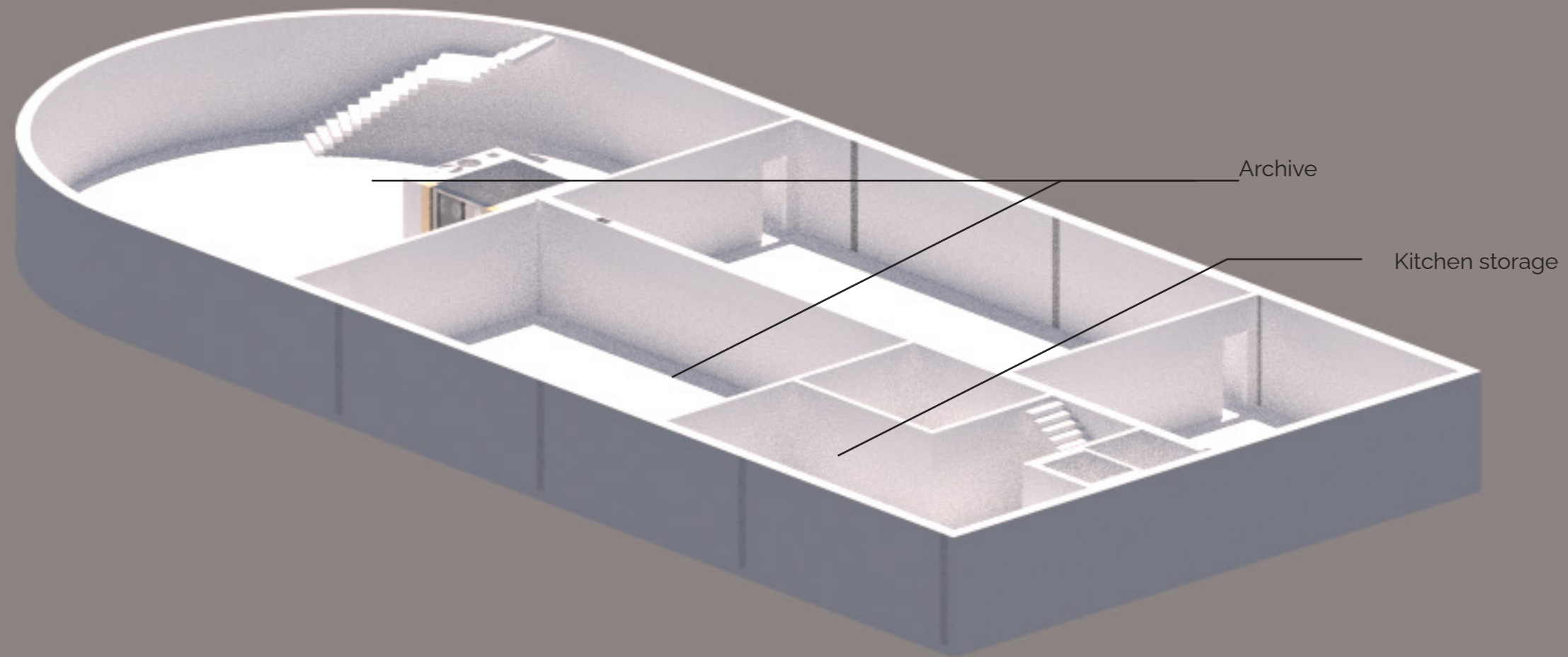


Implementation
Terras by sunset



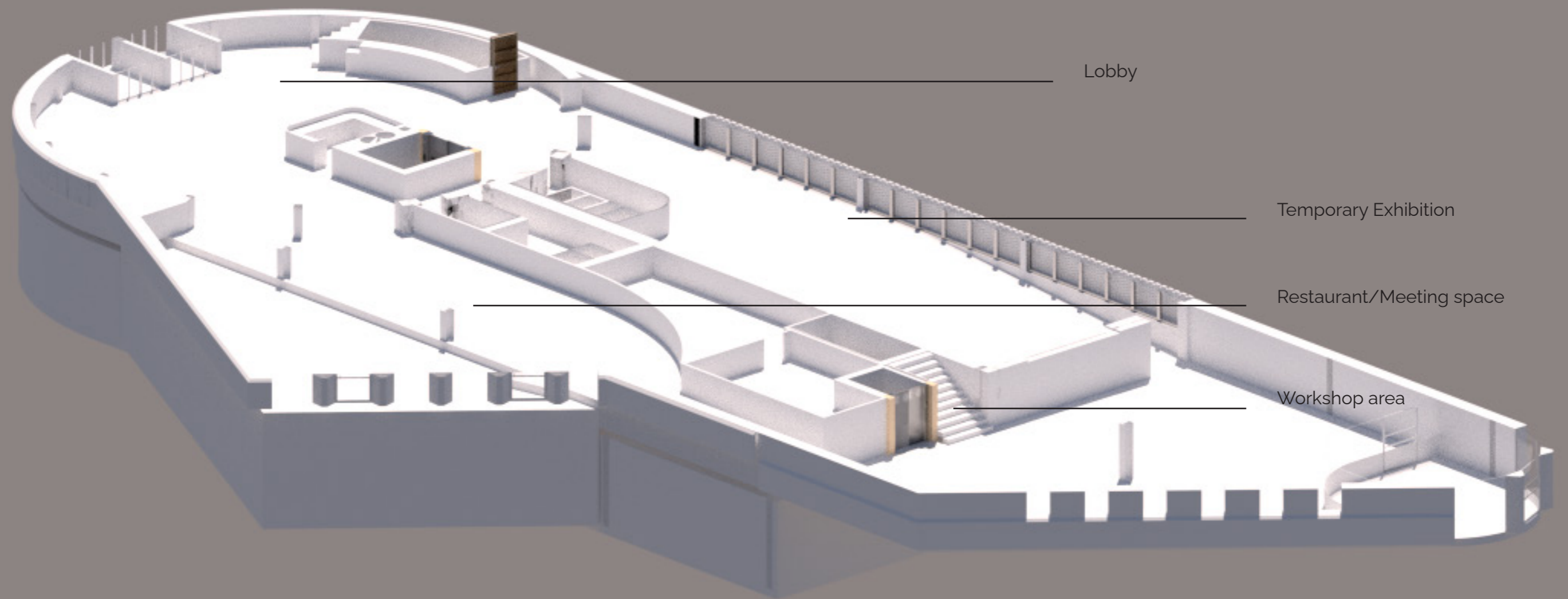
Implementation

Axo -1



Implementation

Axo 0



Lobby

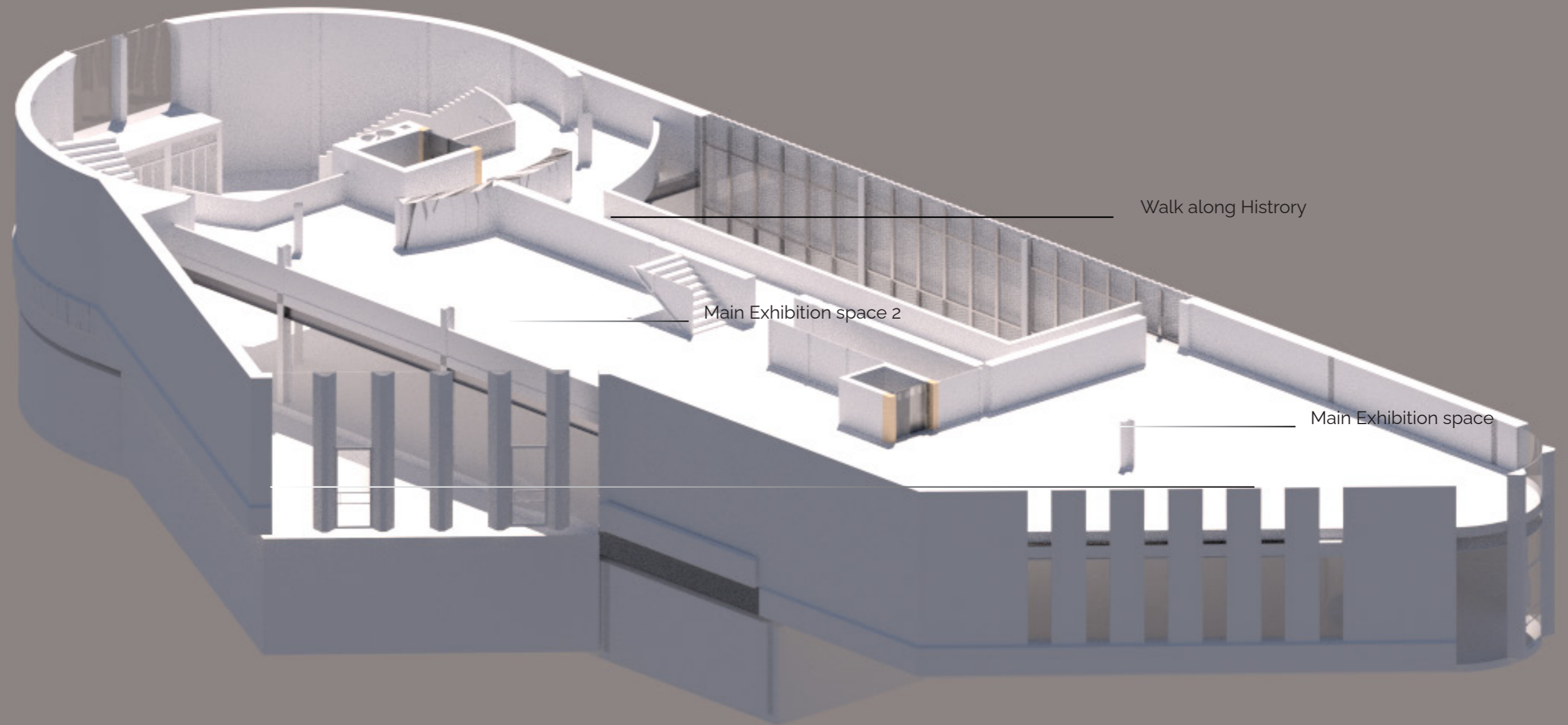
Temporary Exhibition

Restaurant/Meeting space

Workshop area

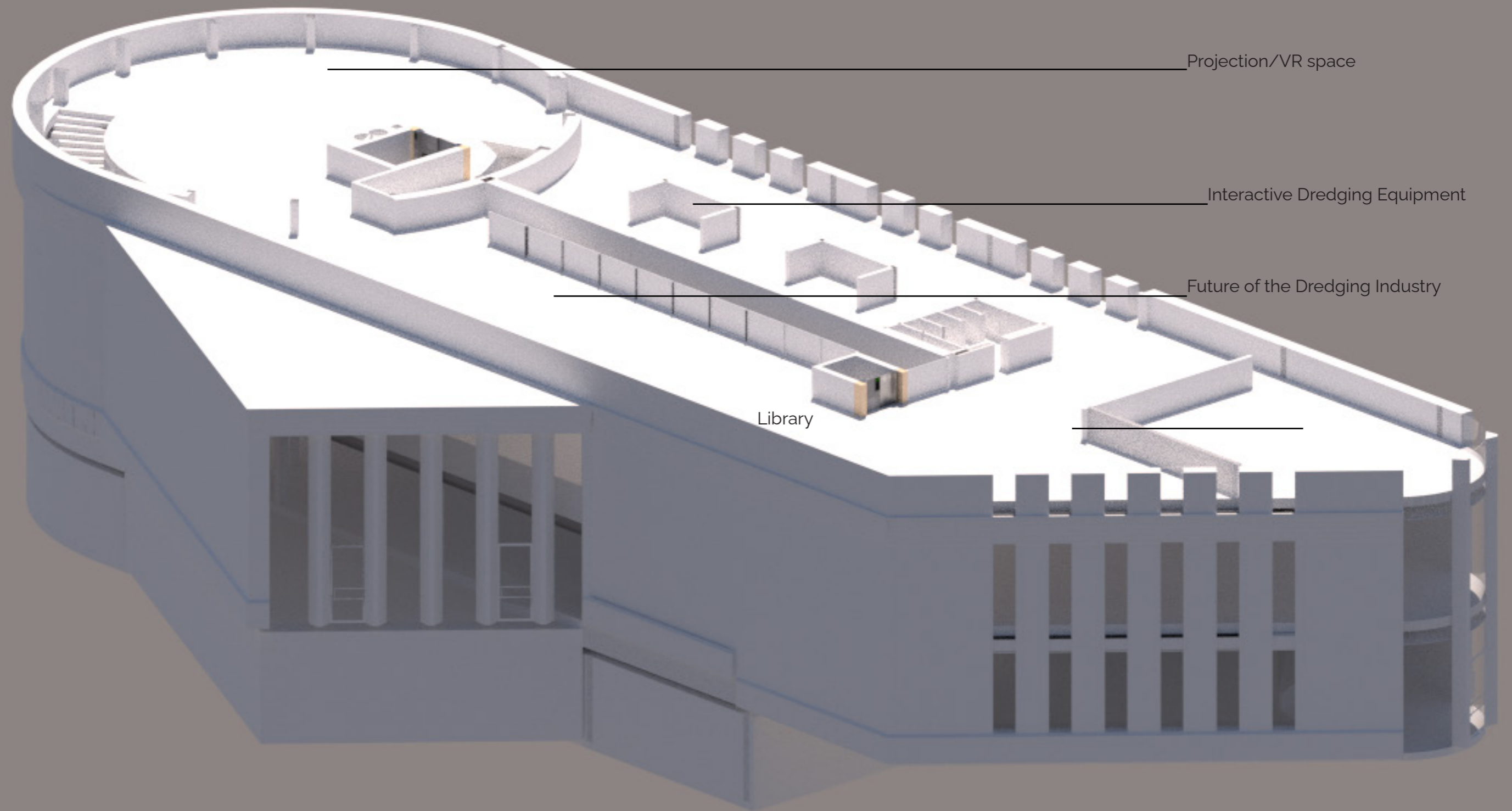
Implementation

Axo 1



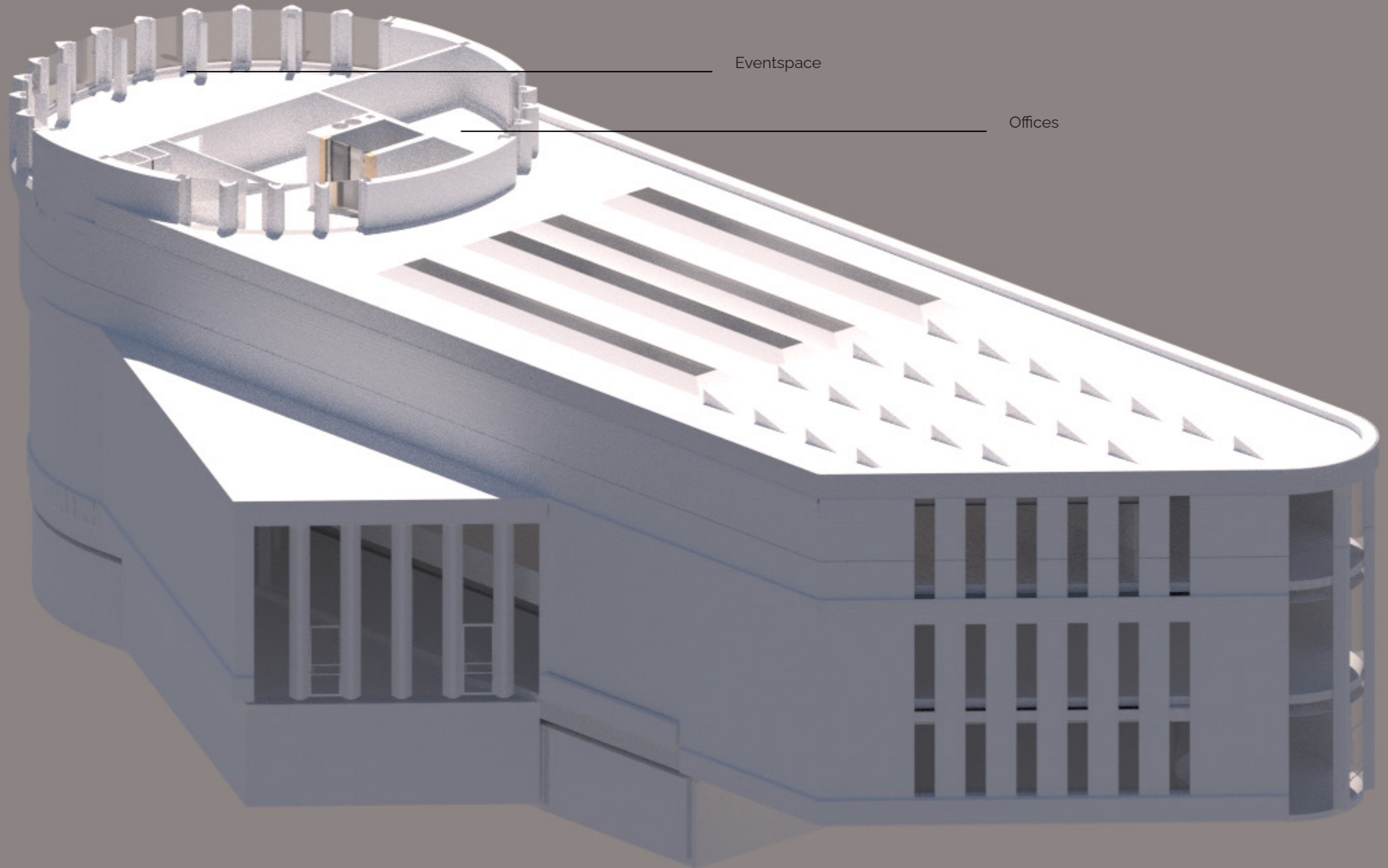
Implementation

Axo 2



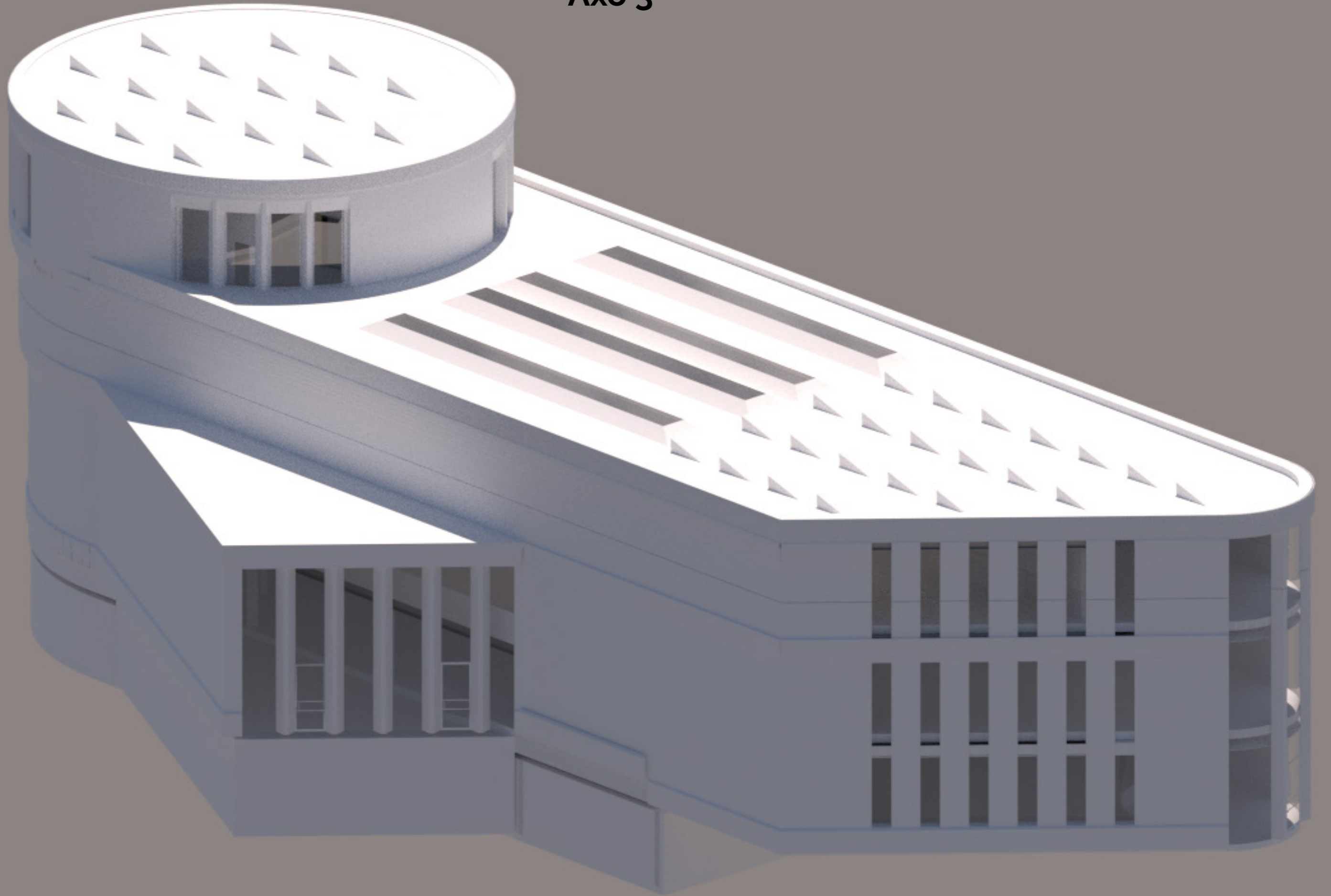
Implementation

Axo 2



Implementation

Axo 3



Introduction

Design brief

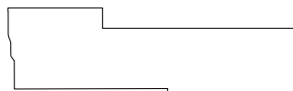
Research

Concept

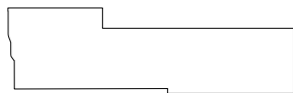
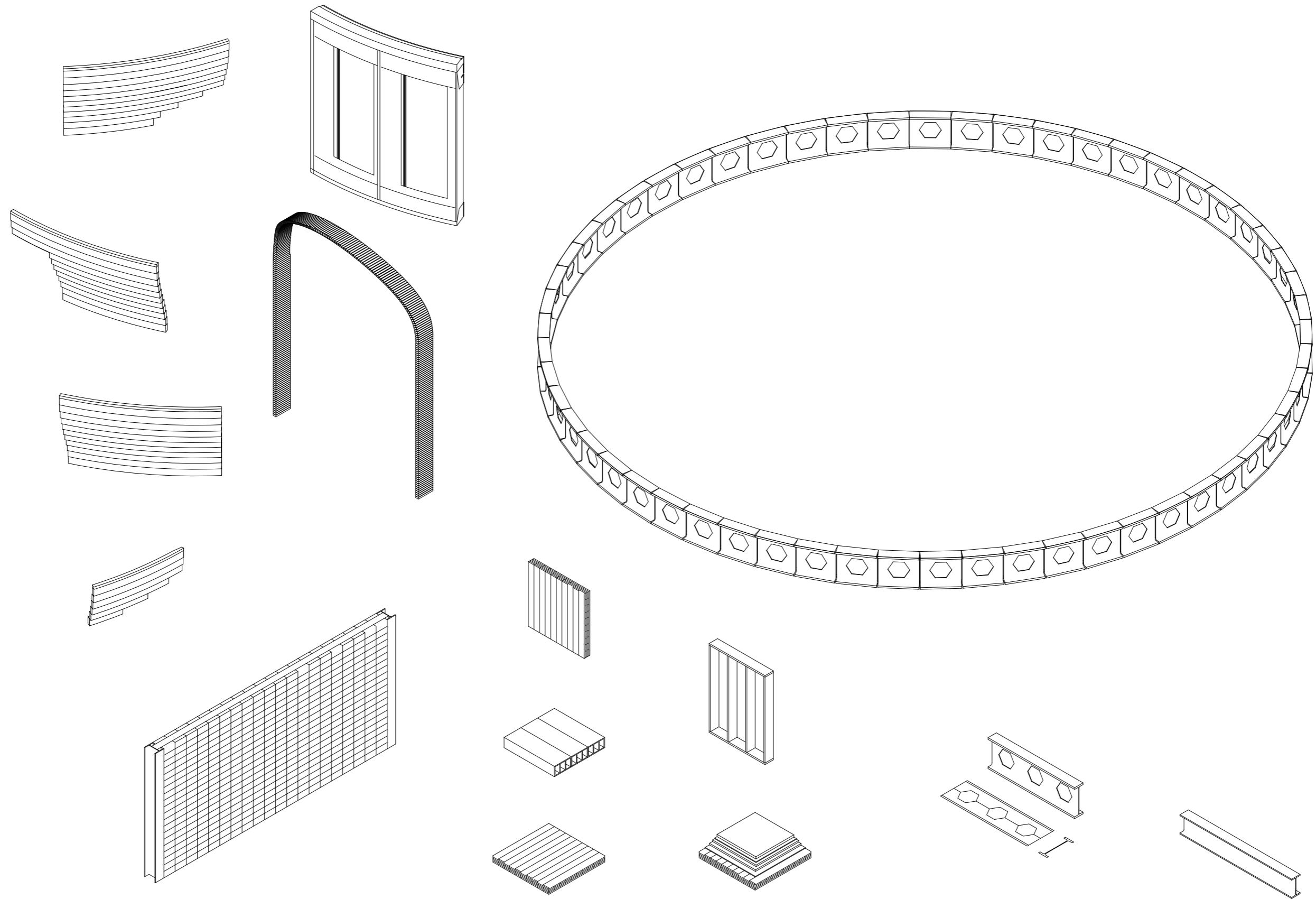
Implementation

Development

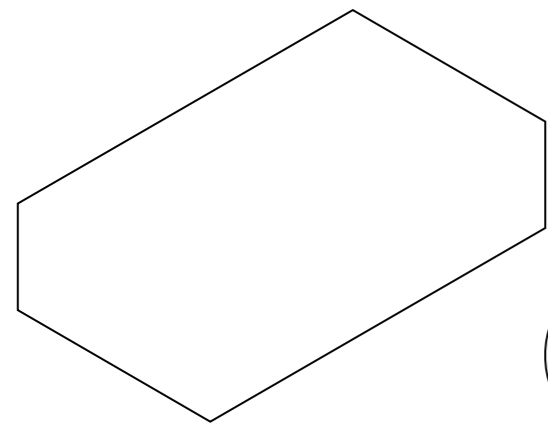
Conclusion



Development
Collection of Material

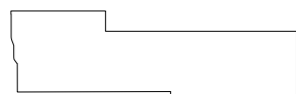
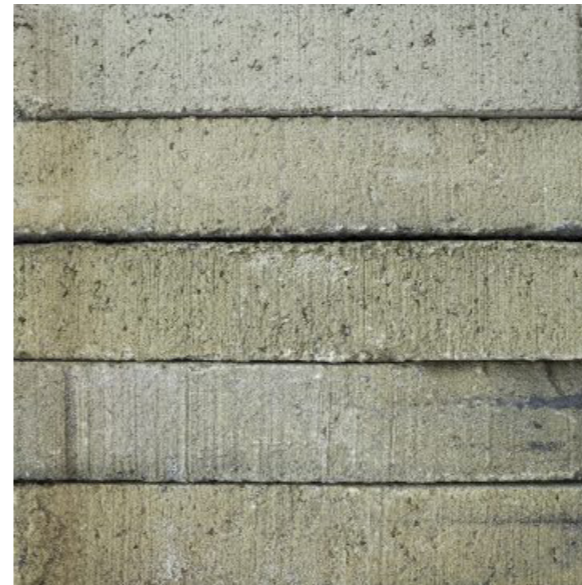


Development
Choice material



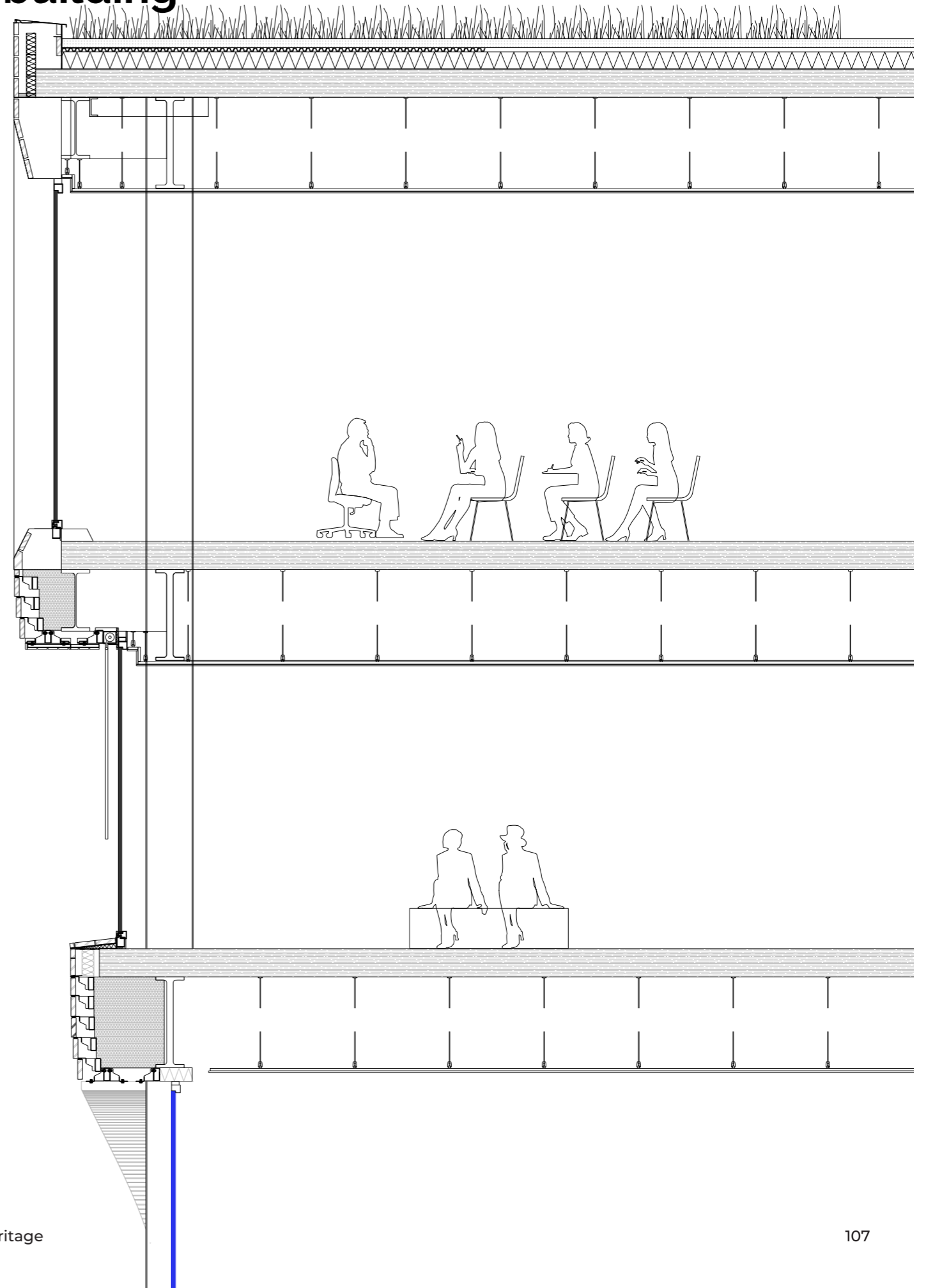
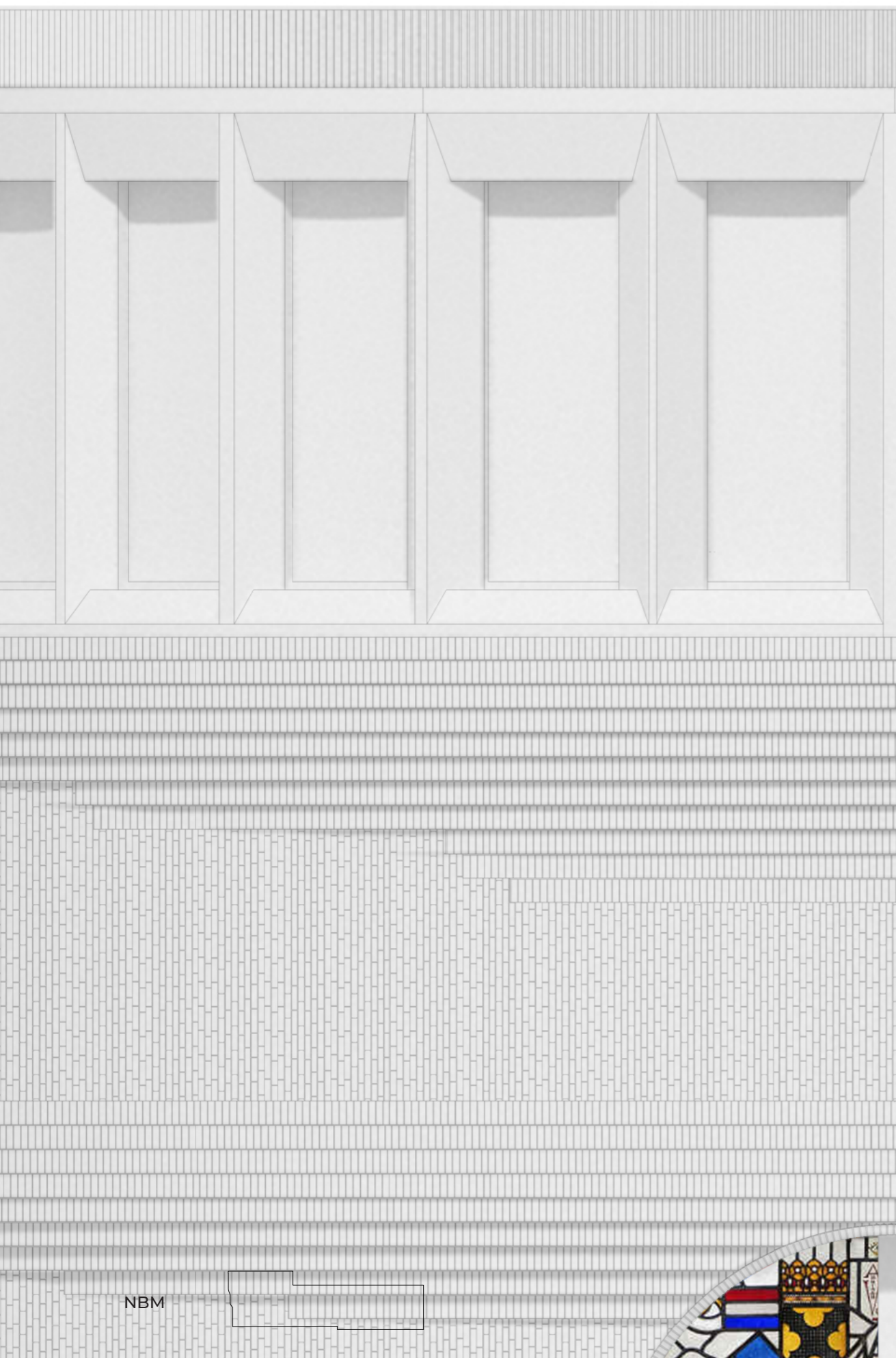
CYCLING

WasteBased-
Bricks®
2G2W Waal for-
maat (210x100x50
mm)

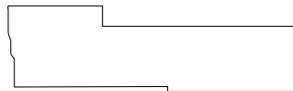
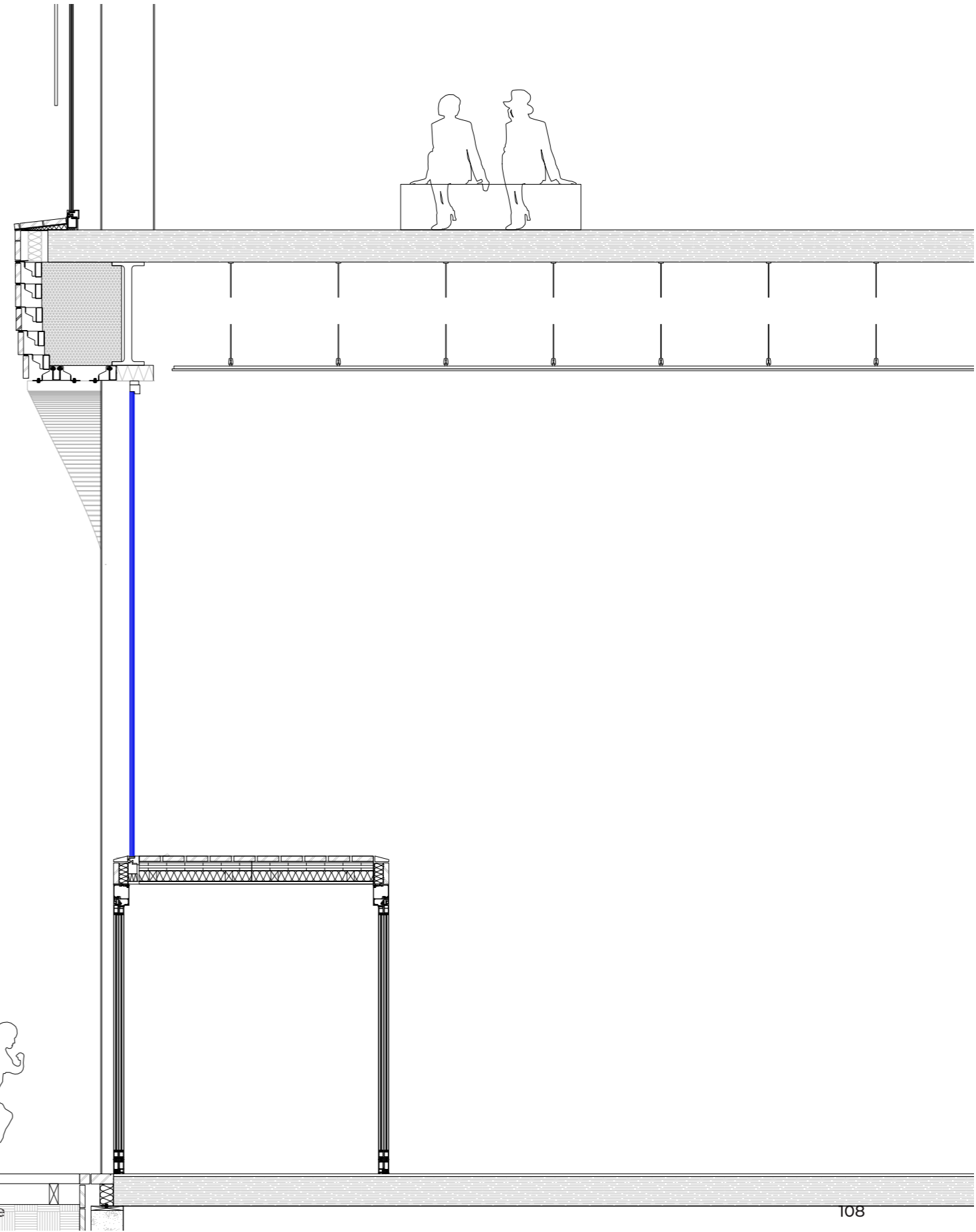
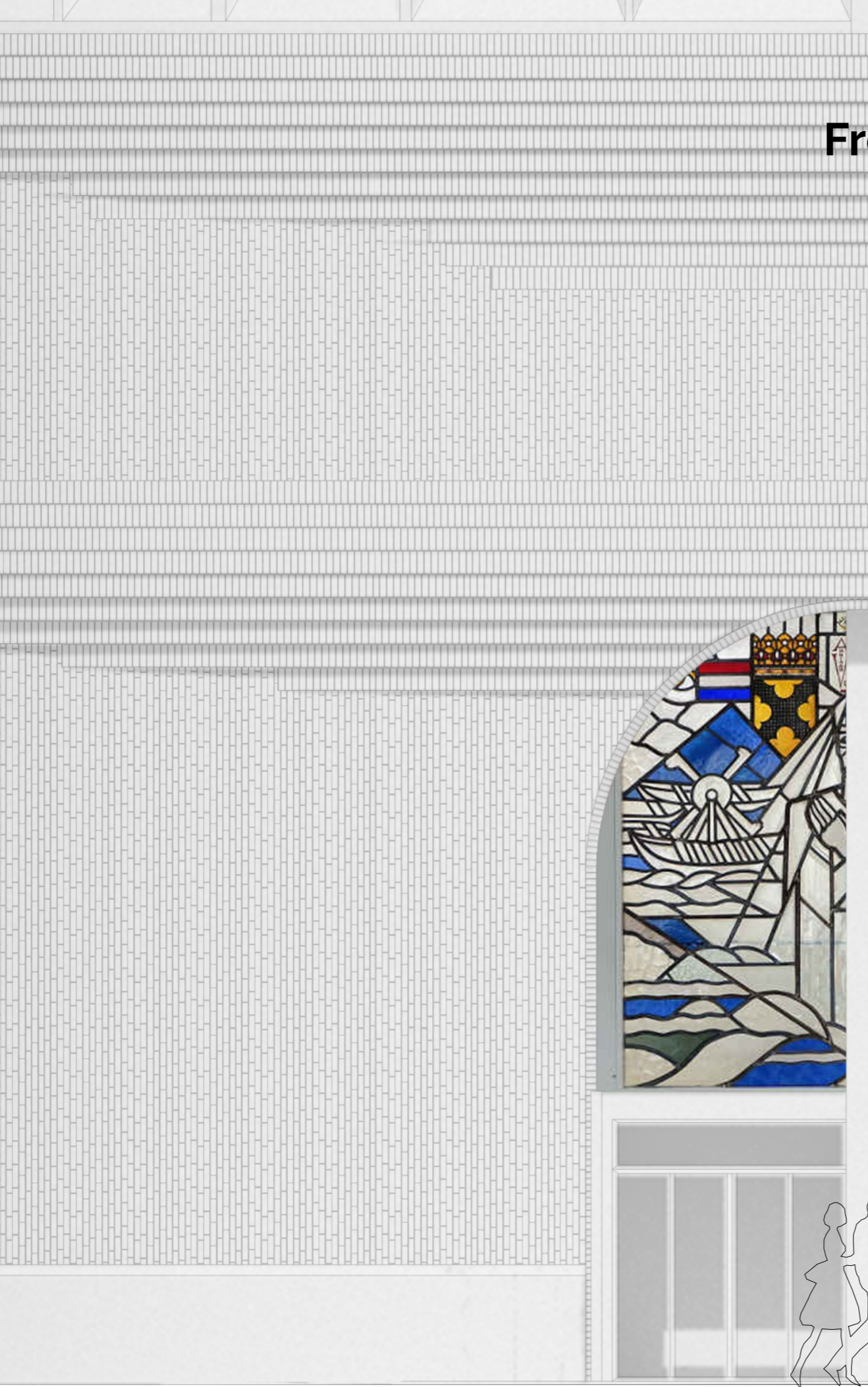


Development

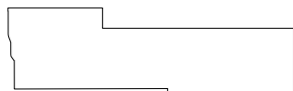
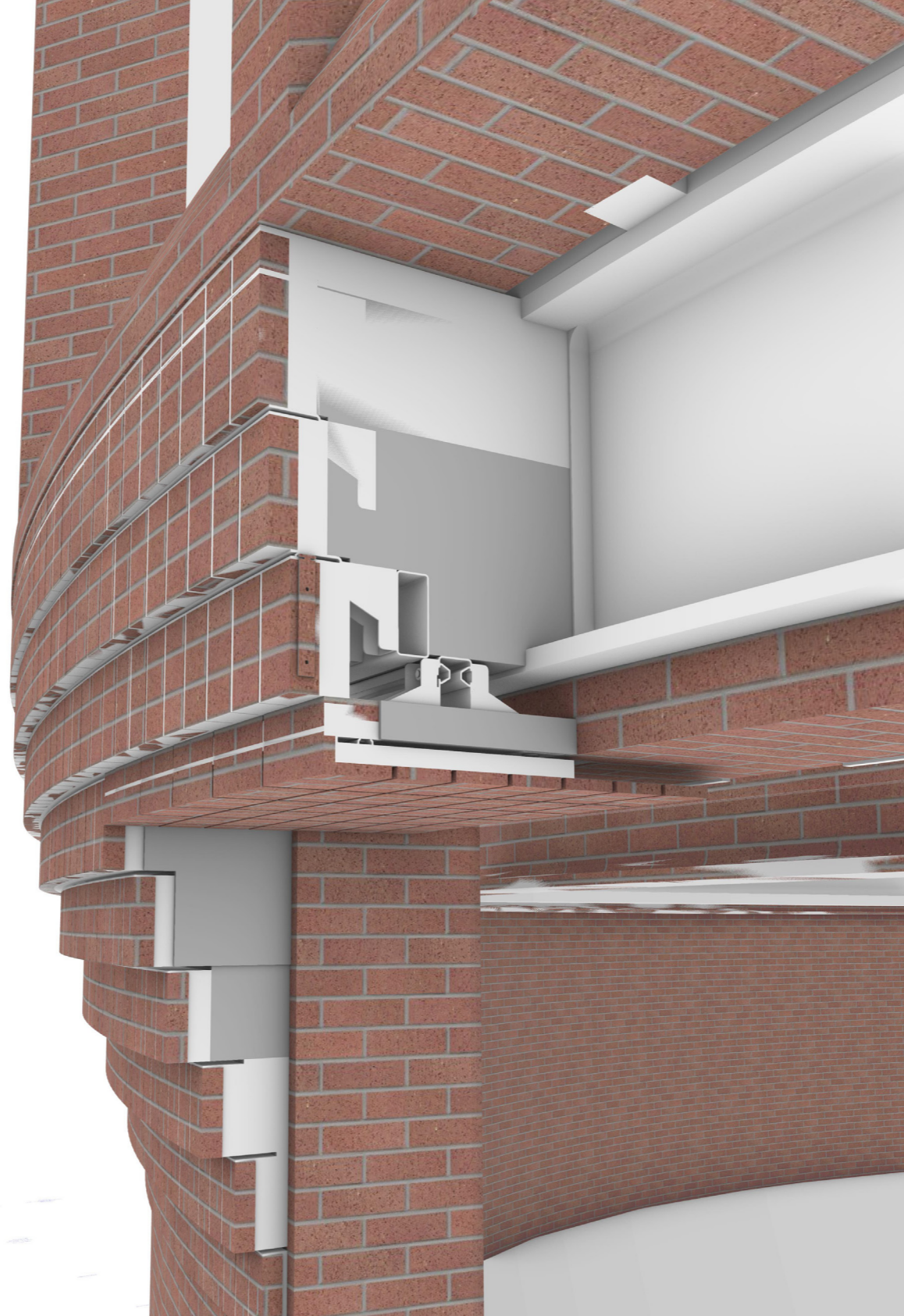
Front of the building



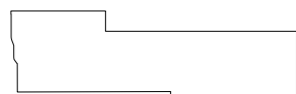
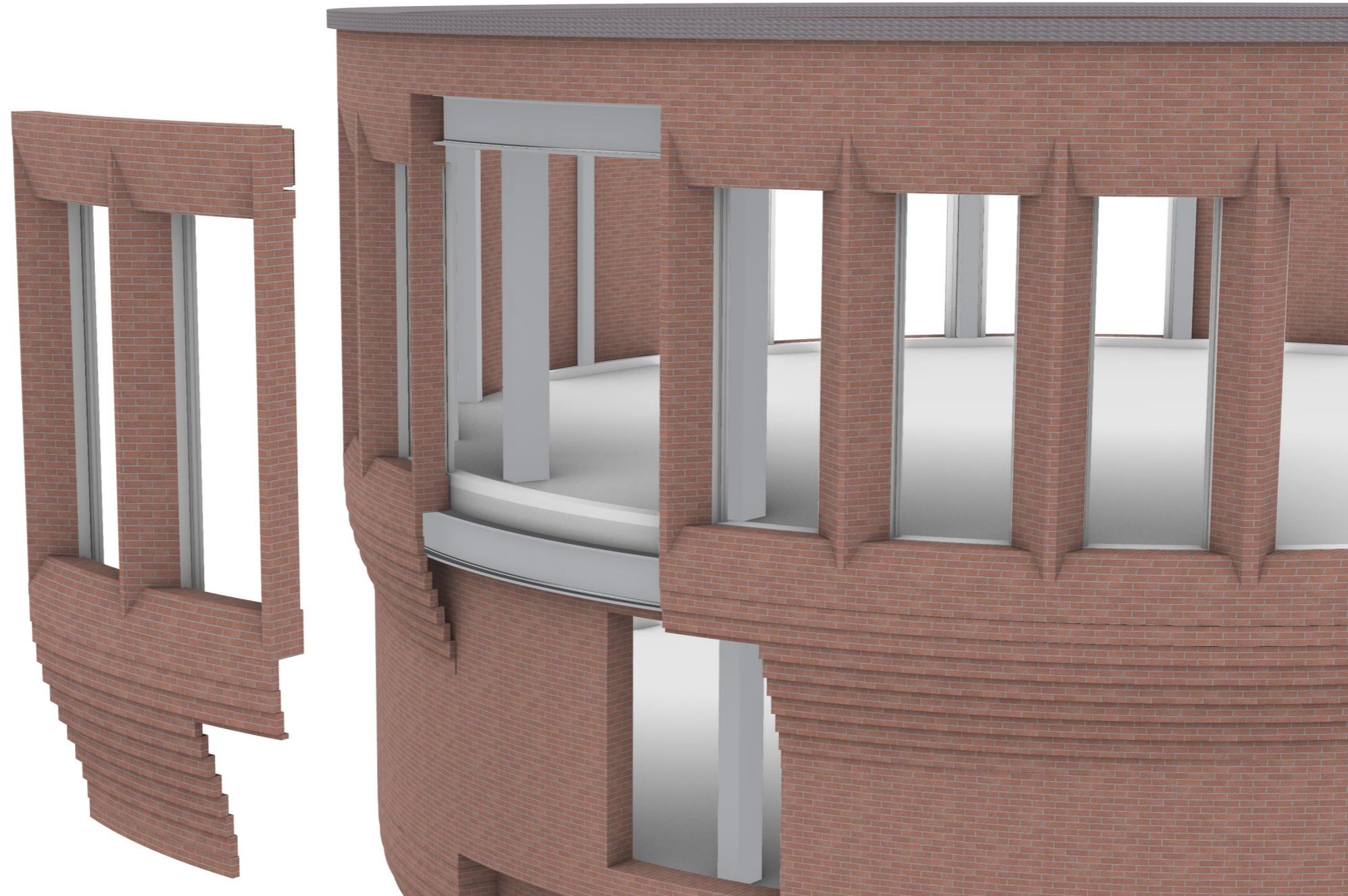
Development
Front of the building



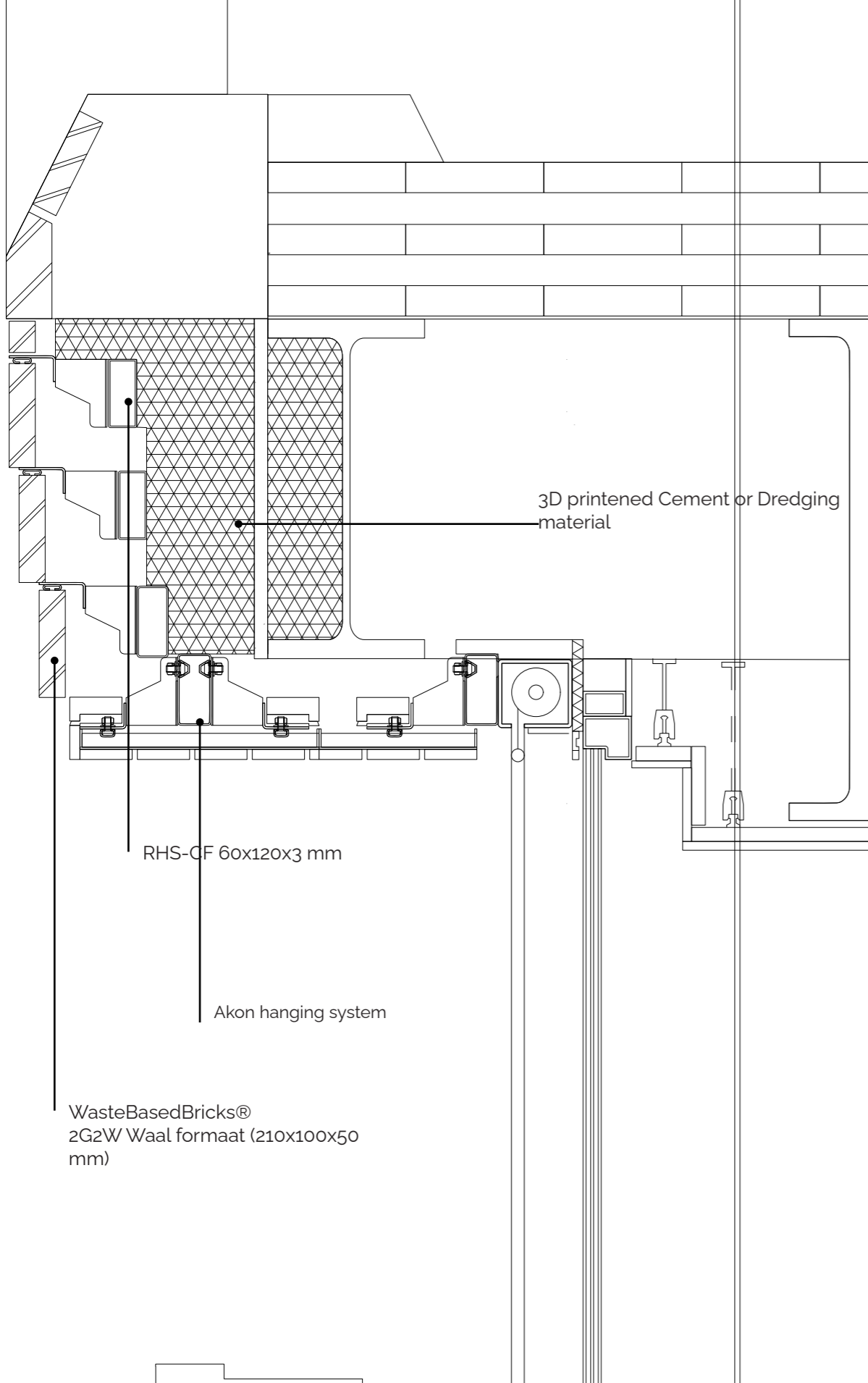
Development
Connection



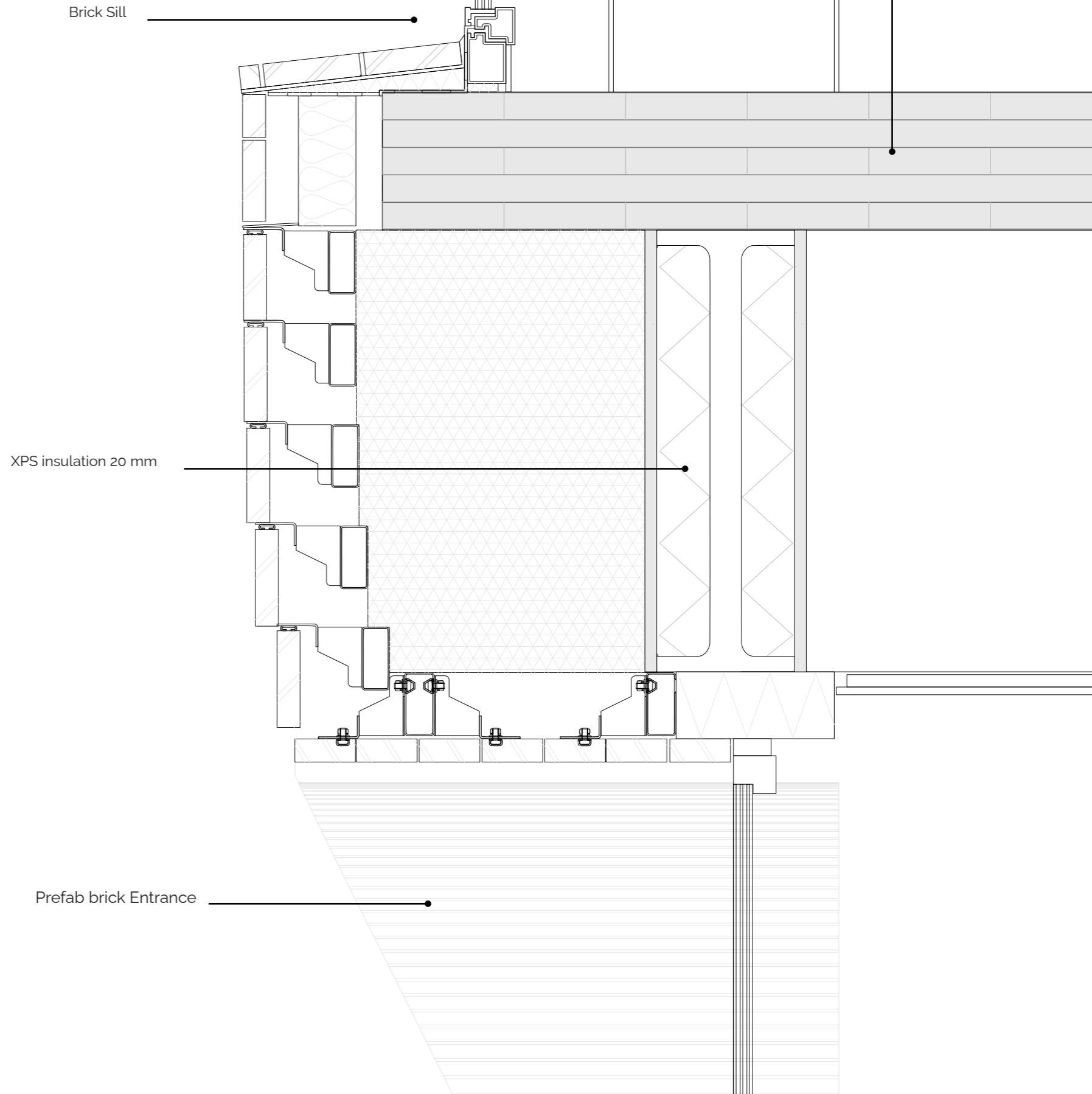
Development
Exploded view



Development Details front



NBM



Revitalising Heritage

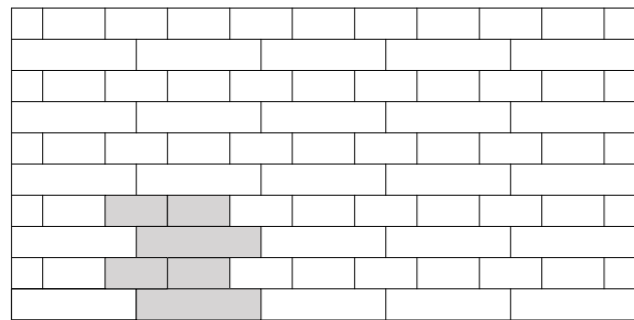
Development Brick patterns

Kruis steen verband

Baggermuseum
Molendijk 204

Molendijk 181

Old Church

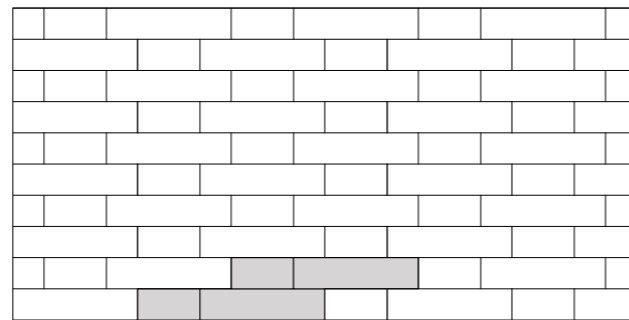


Vlaams verband

Reformed Church

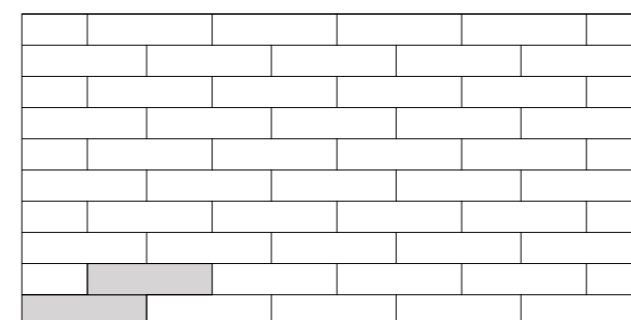
Volker Residence
Single

Expansion Dredging
museum



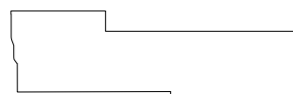
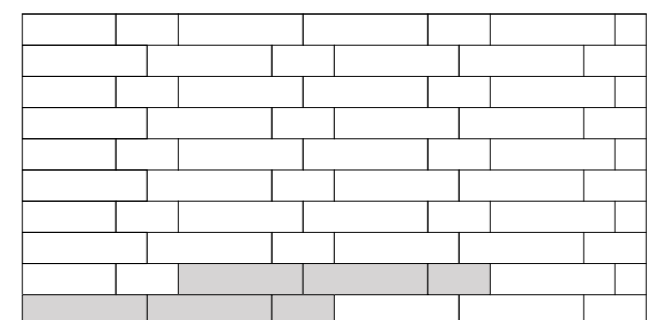
Halfsteen verband

Van Eijck shipyard

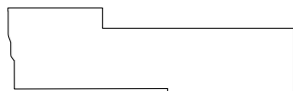
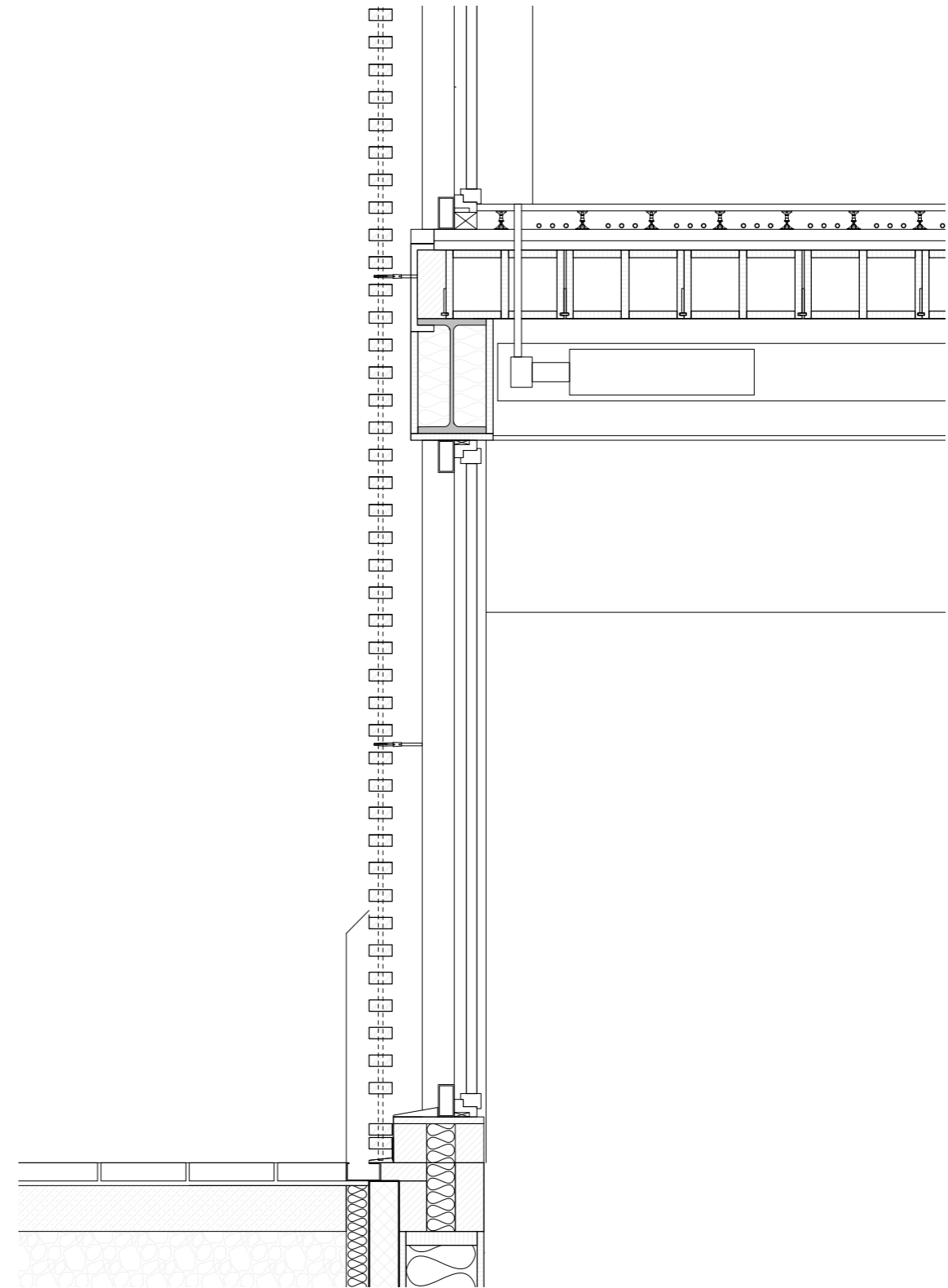
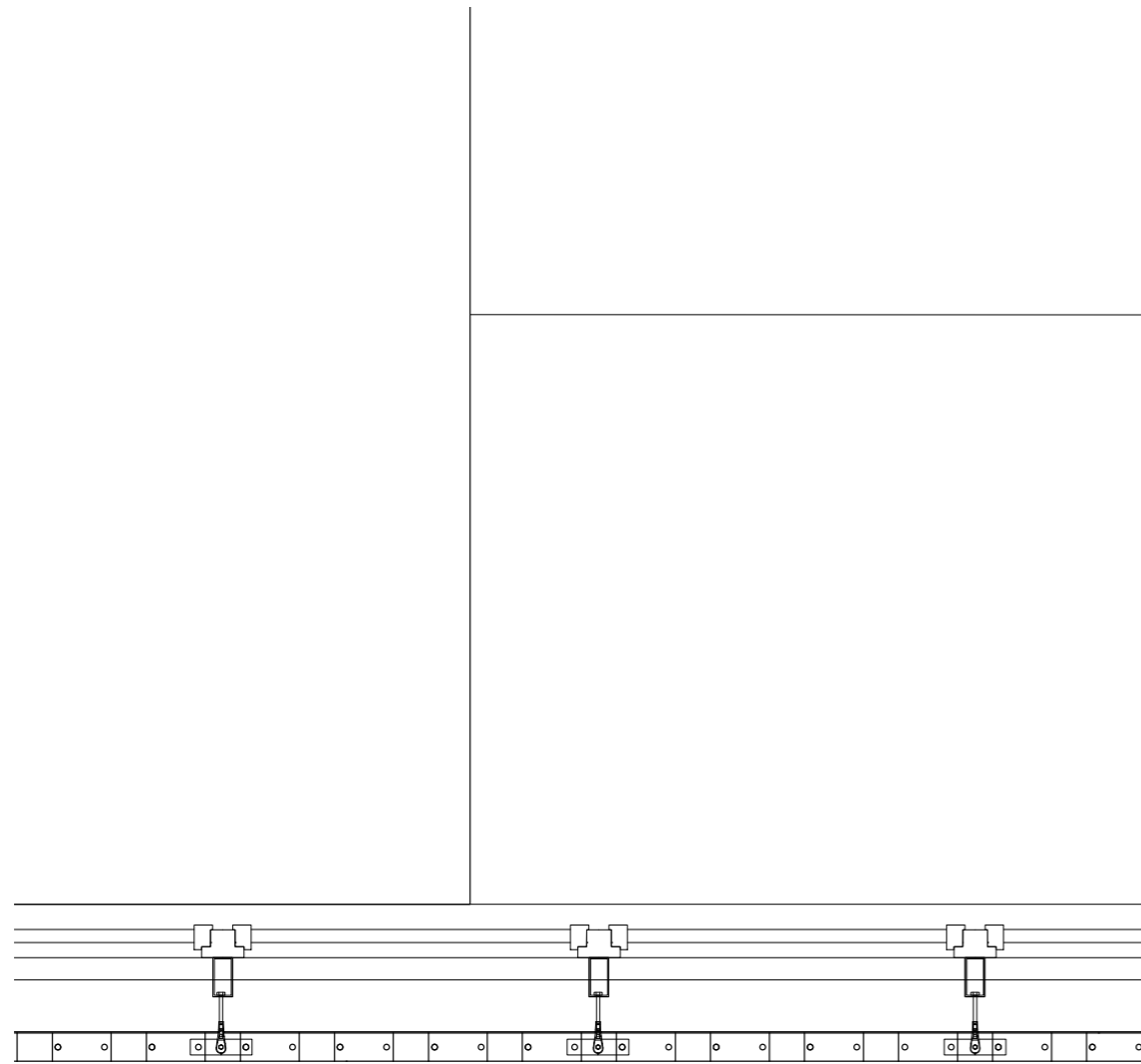


Noors ketting verband

Archive
Molendijk 208



Top section Preforated wall construction



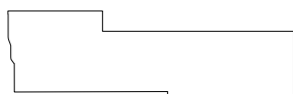
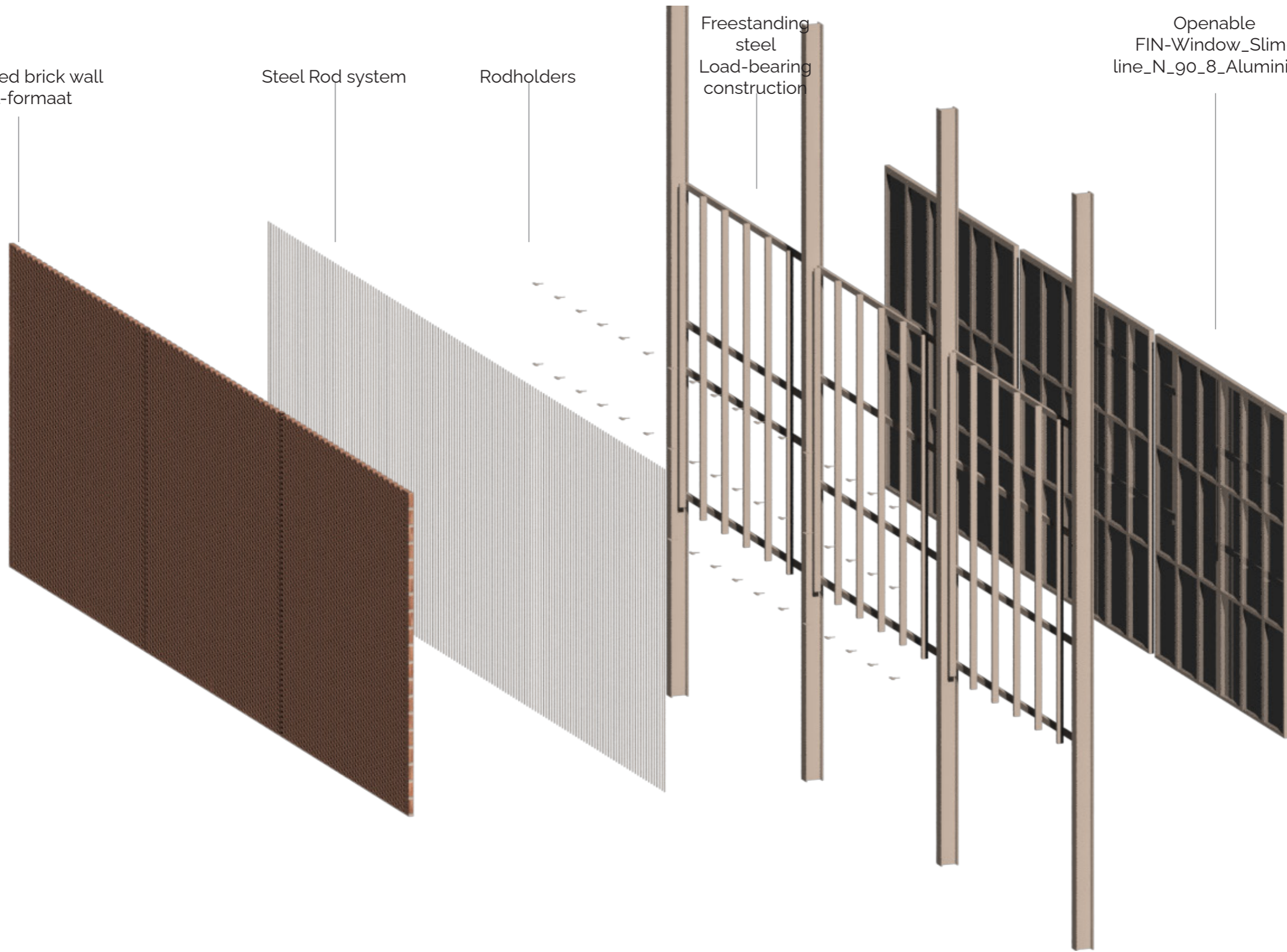
Preforated brick wall
Wall-formaat

Steel Rod system

Rodholders

Freestanding
steel
Load-bearing
construction

Openable
FIN-Window_Slim-
line_N_90_8_Aluminium



Development
Nature bricks



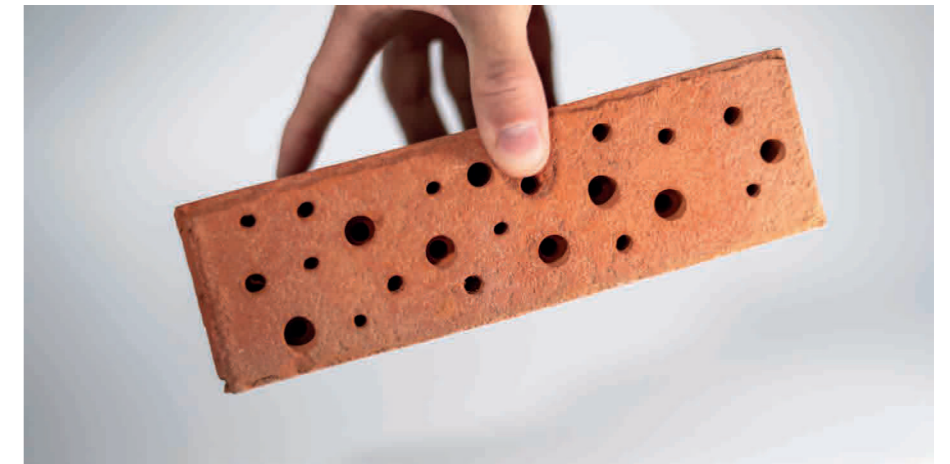
Batbox



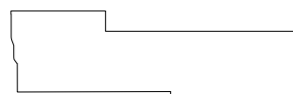
Sparrow box



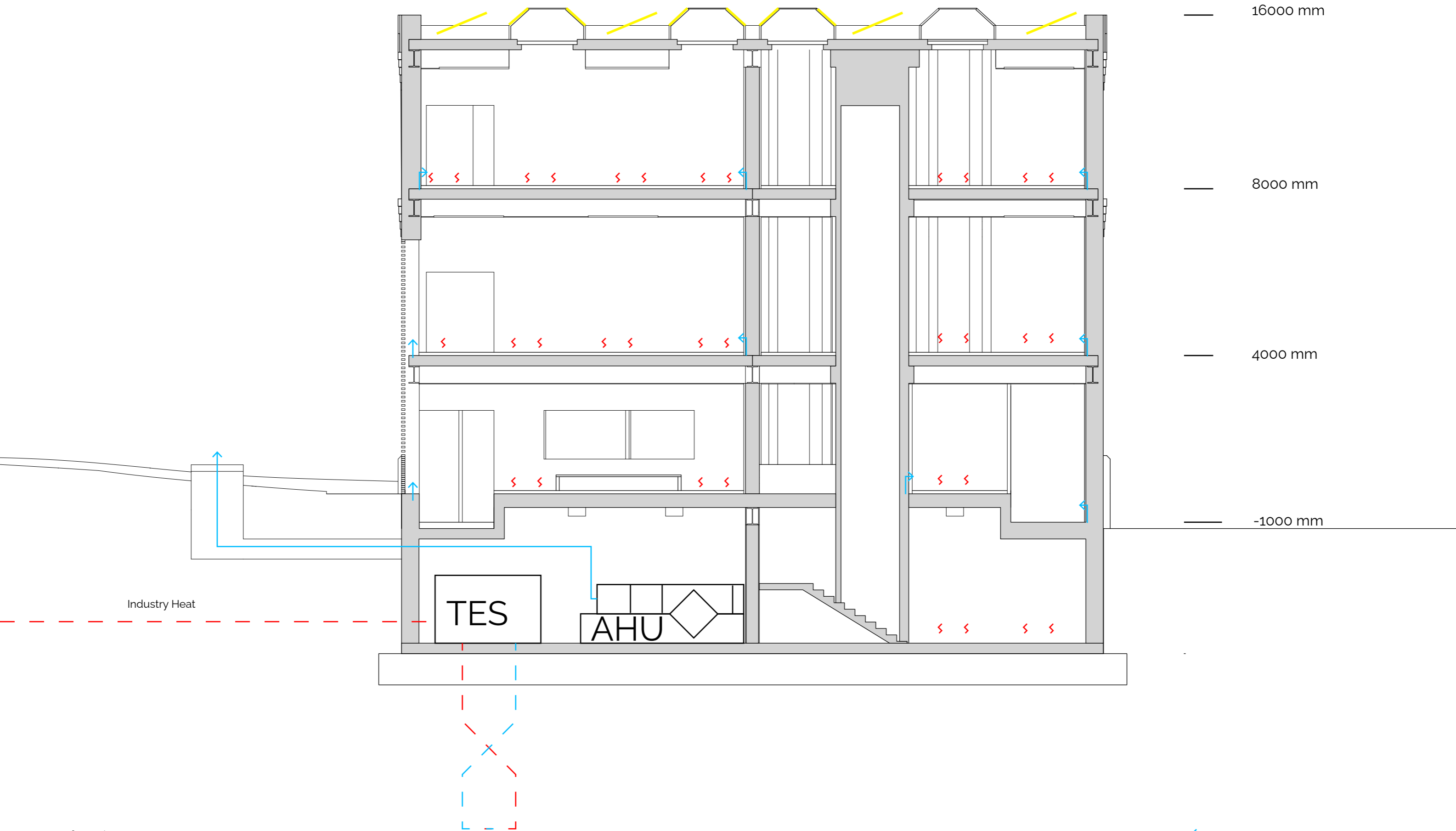
Starling box



Bee brick

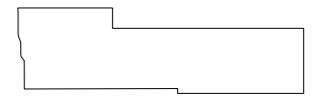


Development Climatise big rooms



1:100 Left Section
B-B

NBM



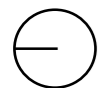
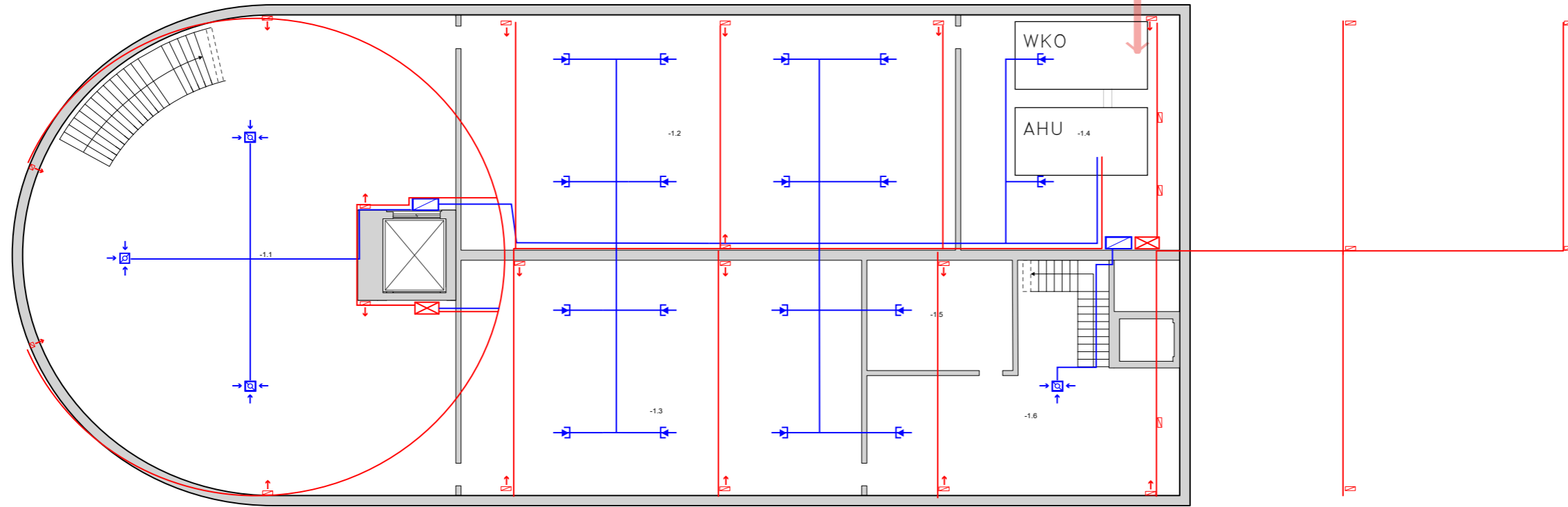
Revitalising Heritage

- ↘ Floor Heating
- ↘ Solar panels
- ↙ Air input through joints in the floor and wall

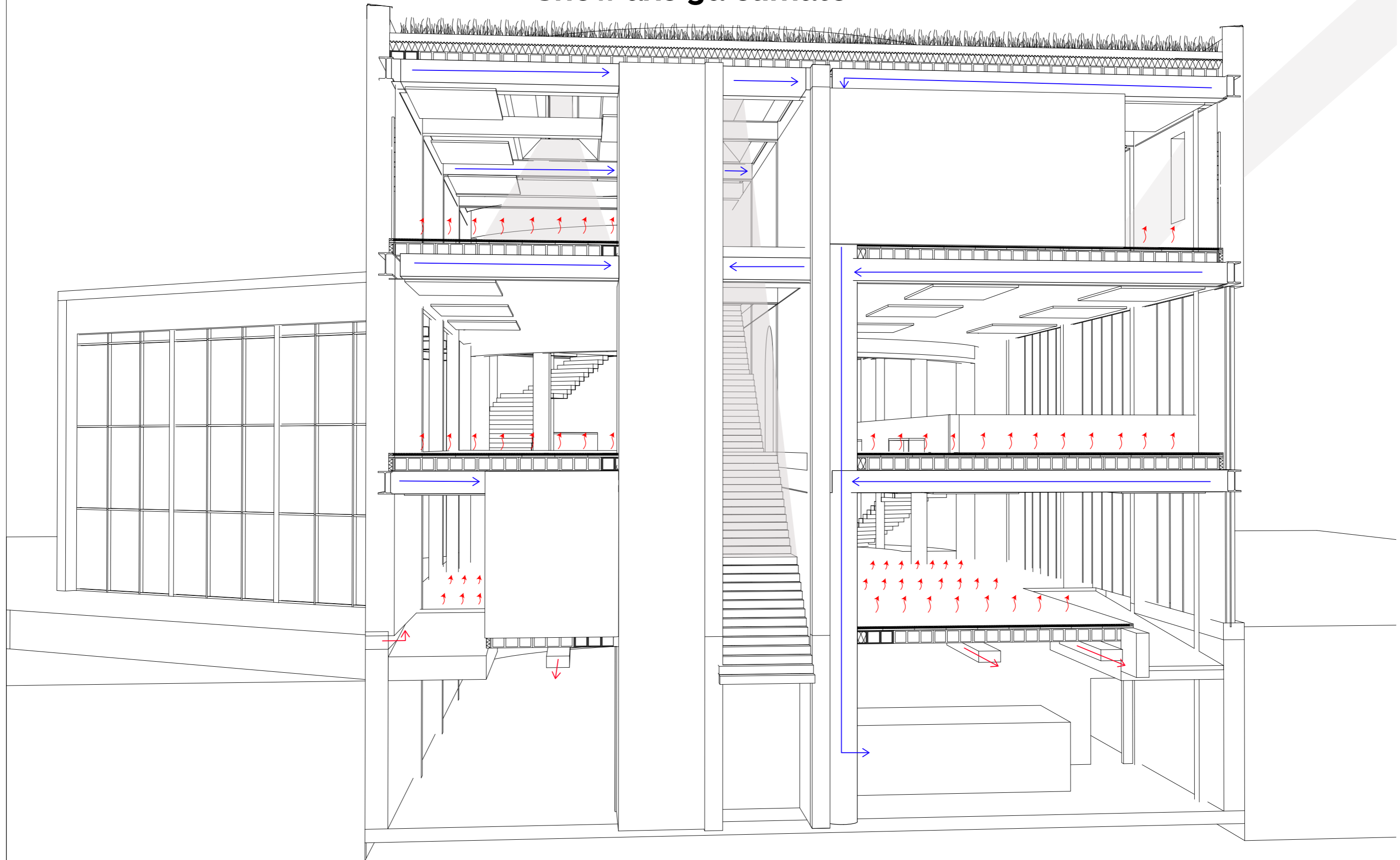
Development

Plans 1:200/1:100 Mechanical room

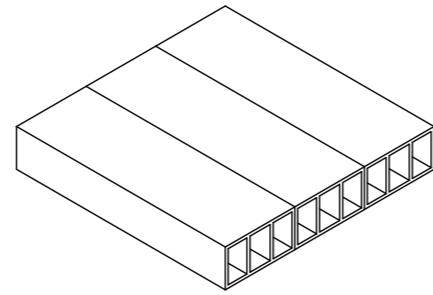
Industry heat



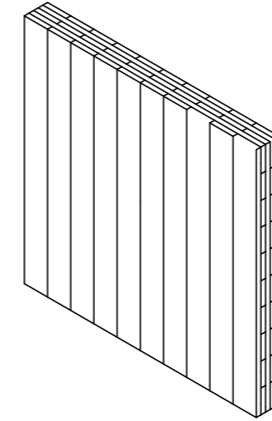
Development
Show axo 3d climate



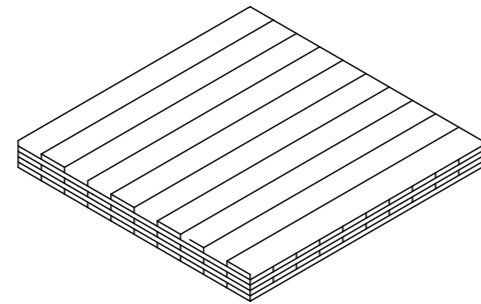
Elements of Load bearing construction



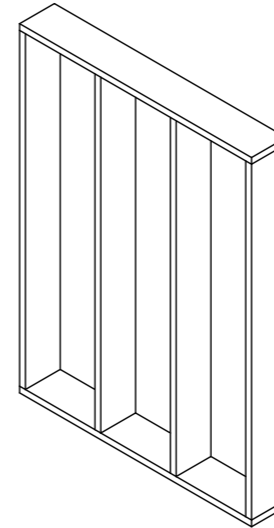
Lignatur Floor
Height: 320 mm
span: 8400 mm



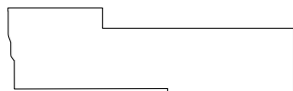
CLT Panel
8400 mm



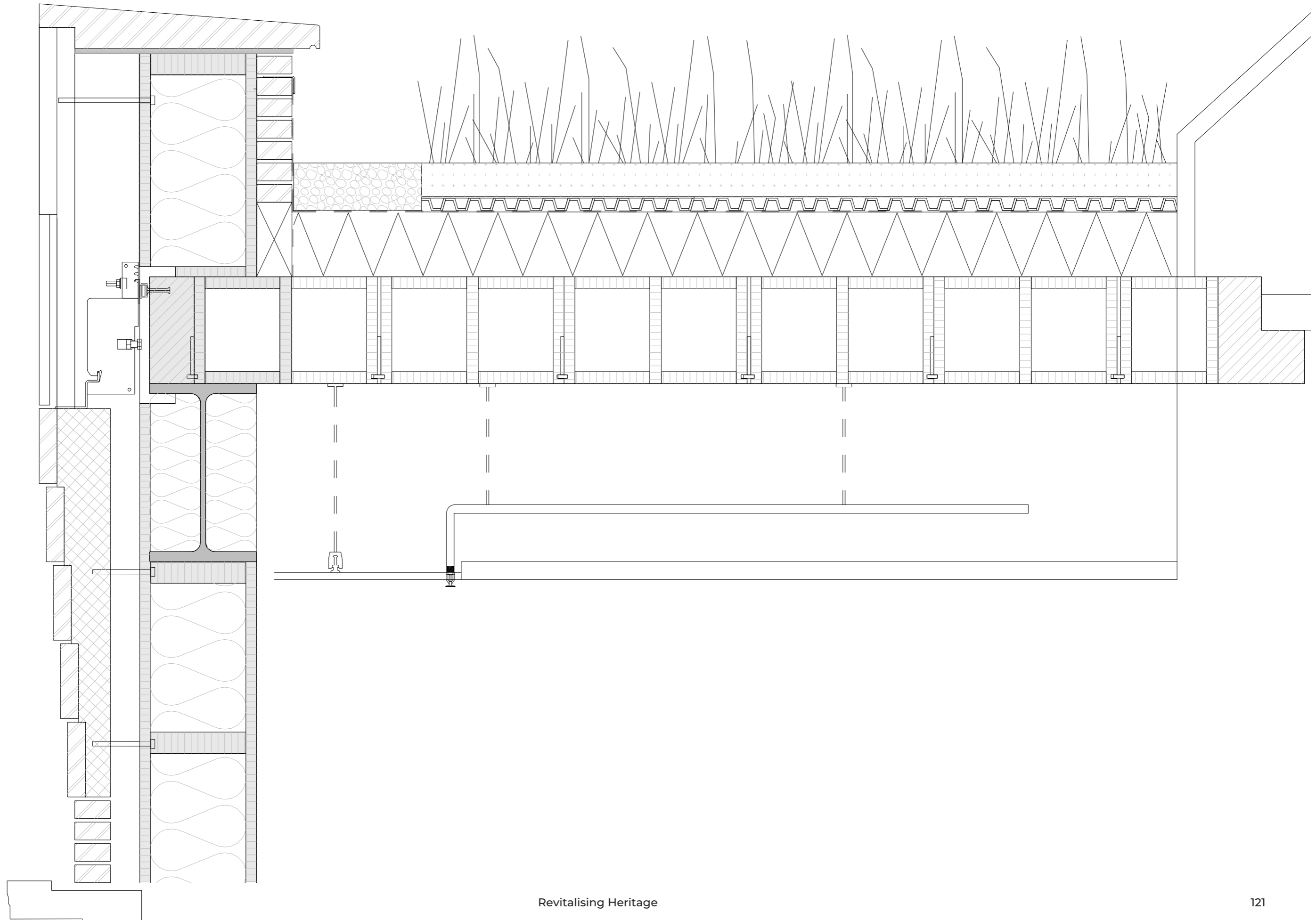
CLT Slap
Height: 300 mm
span: 3600 mm



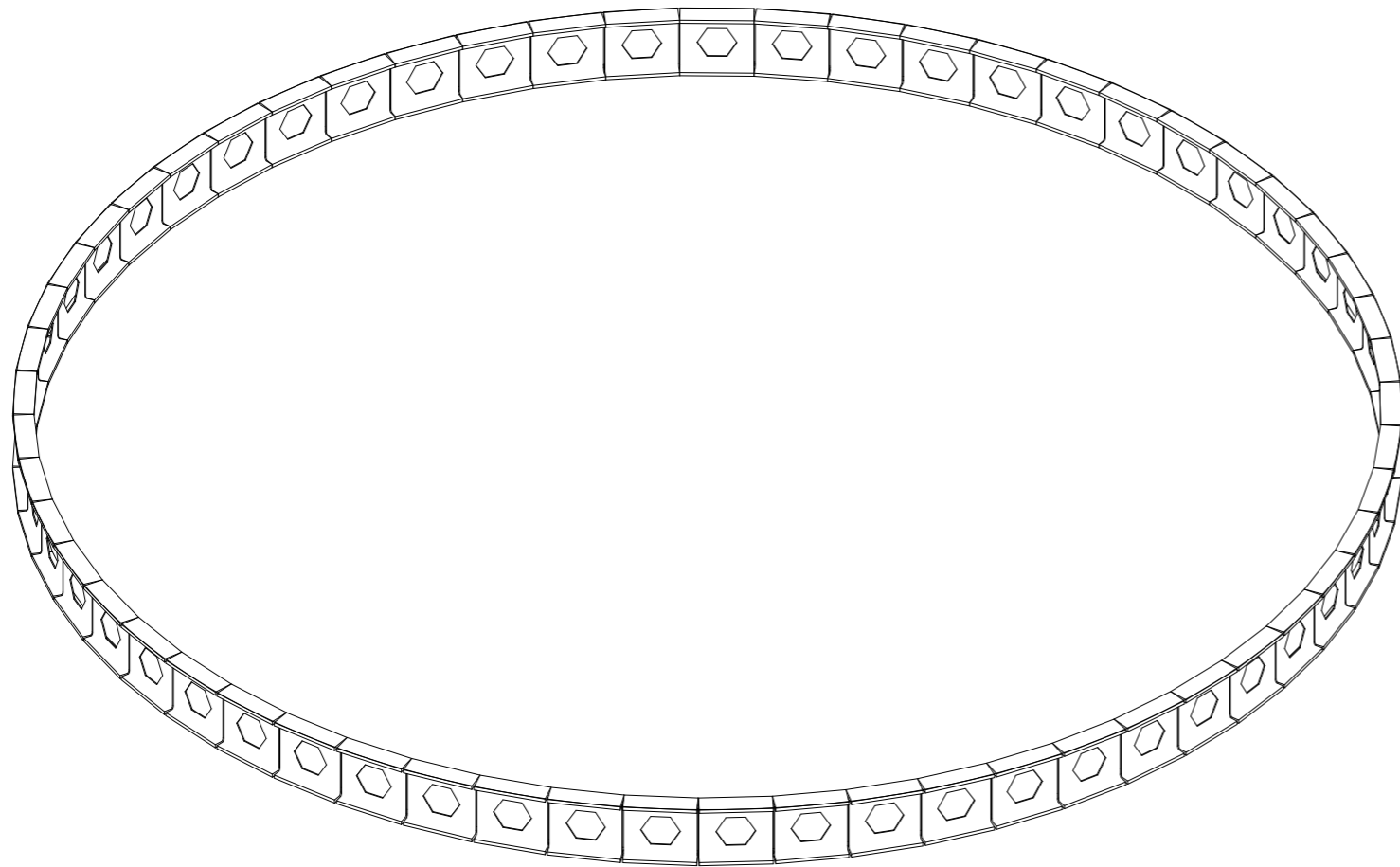
Wooden timber frame
Curved Disks
External wall 500 mm



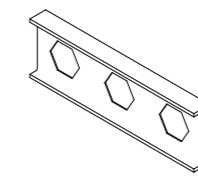
Development Details



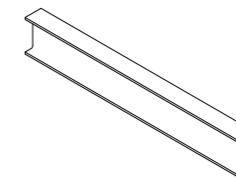
Elements of Load bearing construction



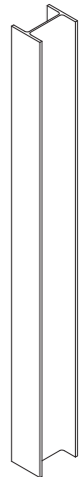
Curved
Castellated beam
Height: 960 mm



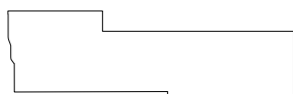
Castellated beam
Height: 960 mm



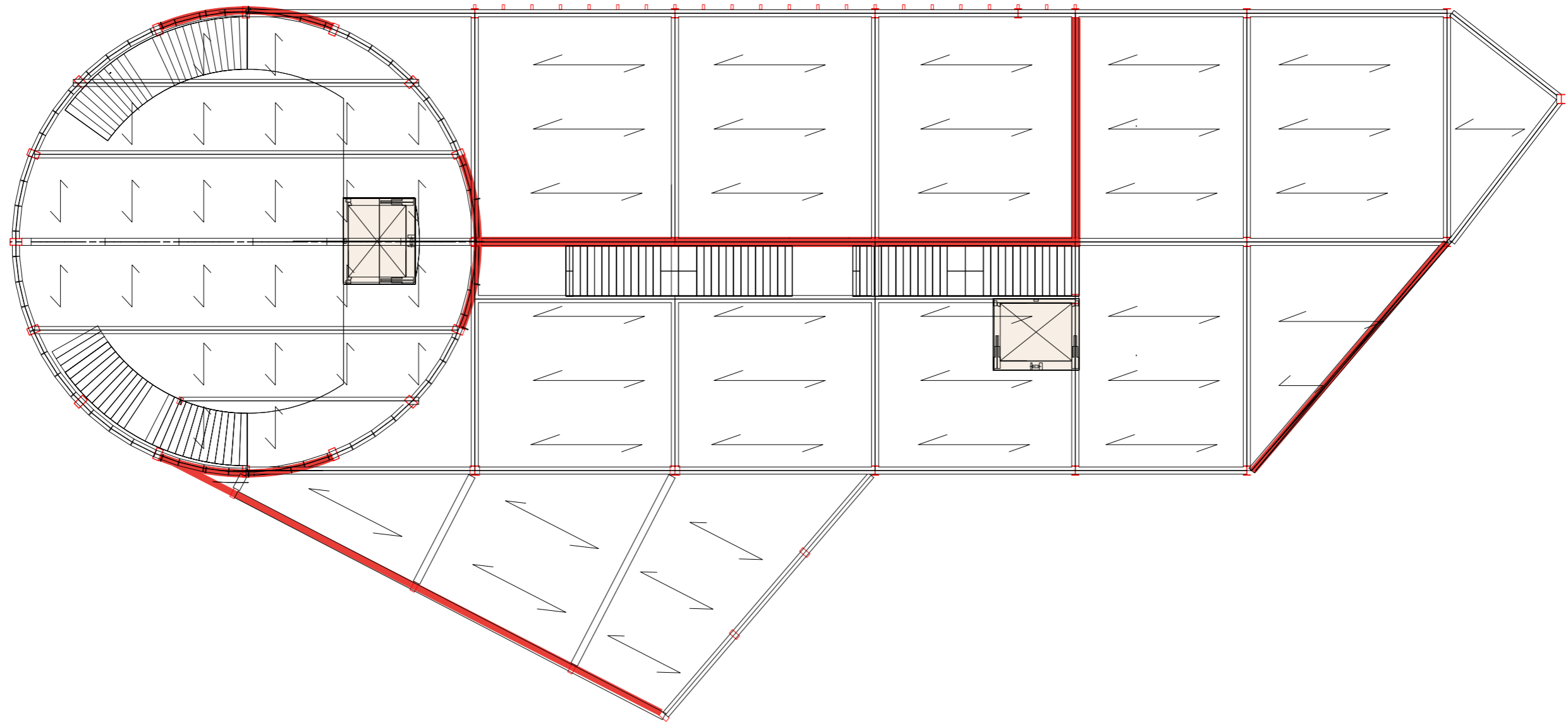
IPE profile:
600
420



IPE profile Column:
400

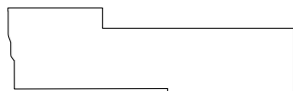


Development
LB plan Floor 1



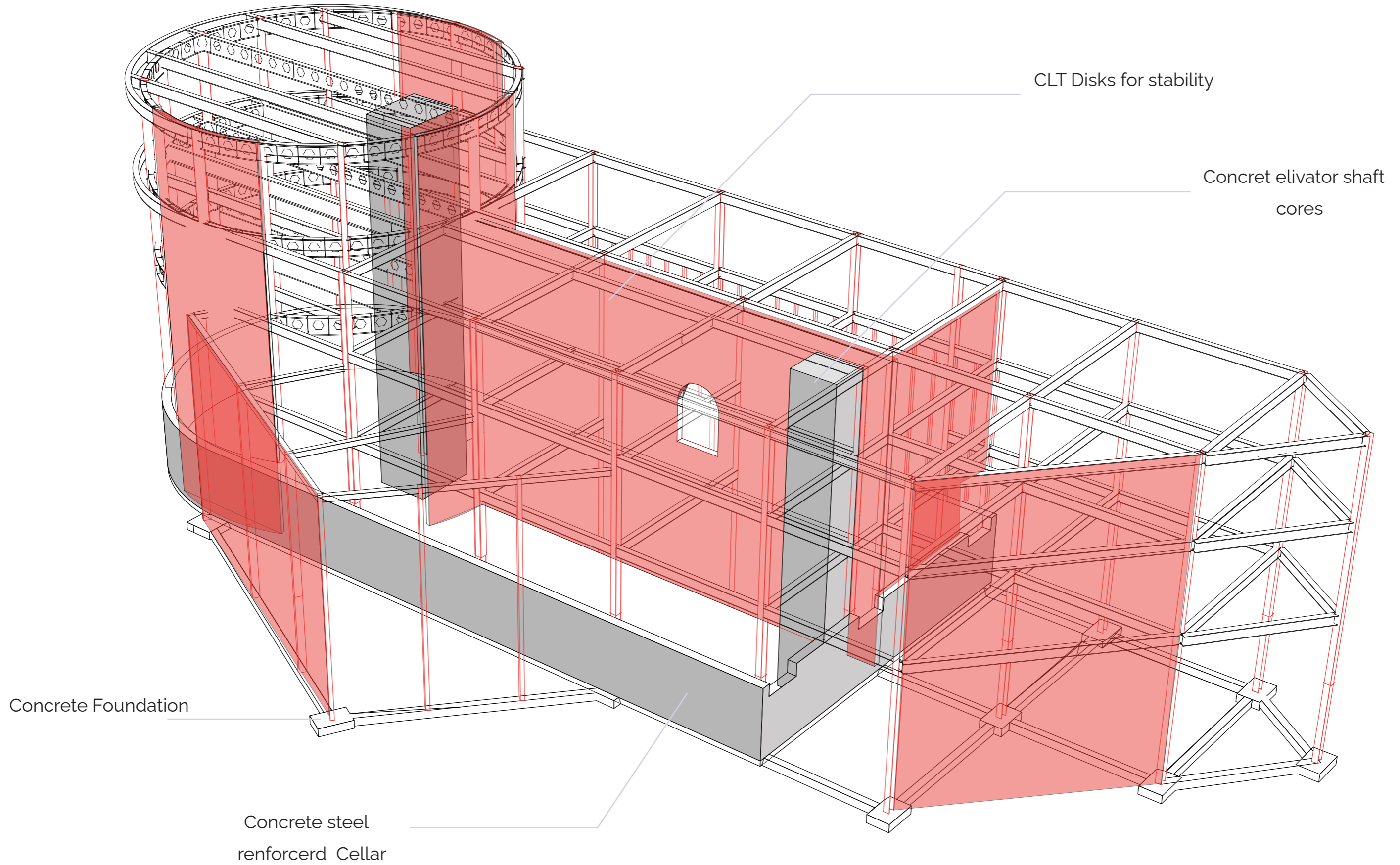
1:200

Grid structure of 1200 mm



Development

Building construction axo



Introduction

Research

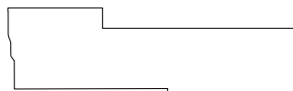
Design brief

Concept

Implementation

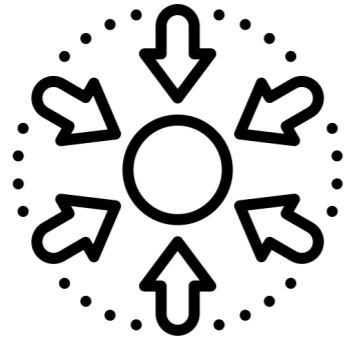
Development

Conclusion



Conclusion
Overview themes

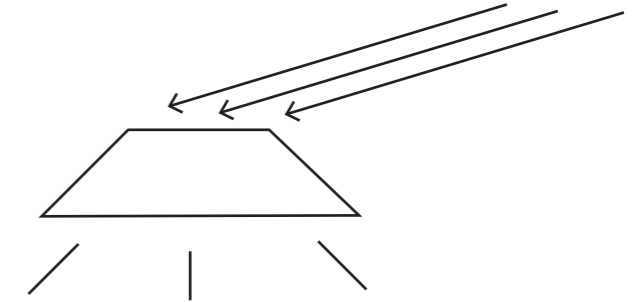
Research
Centrality



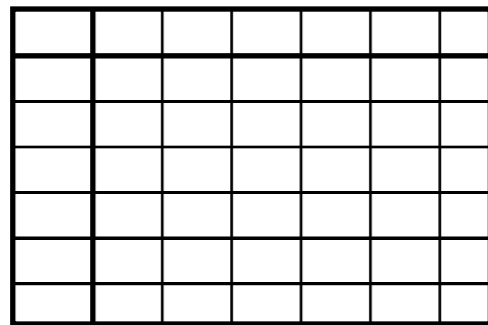
Design brief
Client

**Nationaal
Bagger
museum**

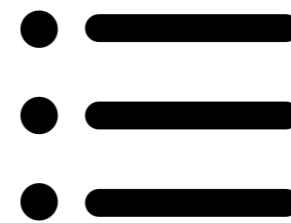
Design driver
Light



Value assement



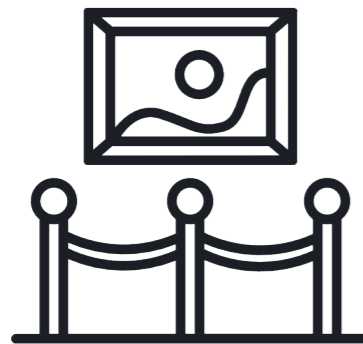
Program



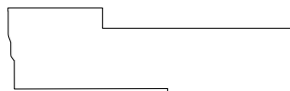
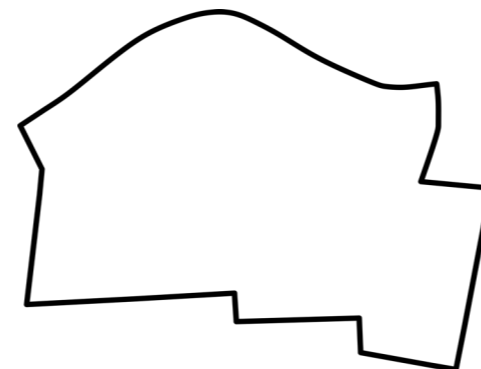
Authenticity



Musea experience



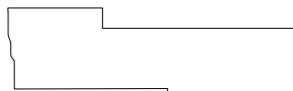
Site



Conclusion

Goal

- + Monumental Building
- + Integrated in surrounding
- + Mirroring compositional elements
 - + Add new functionality
 - + Create a new centrality



Thank You!

