

PARTICIPATORY CHURCHES

A Participatory Design Approach to the
Redesign of St. Dominicuskerk in Utrecht

Technical University Delft
Graduation Studio Revitalizing Heritage
Zero Waste Church

Johan Bouma 5447283
J.Bouma-1@student.tudelft.nl

03 July 2023

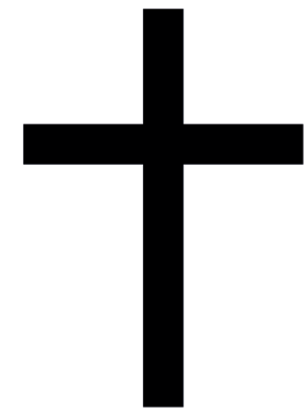




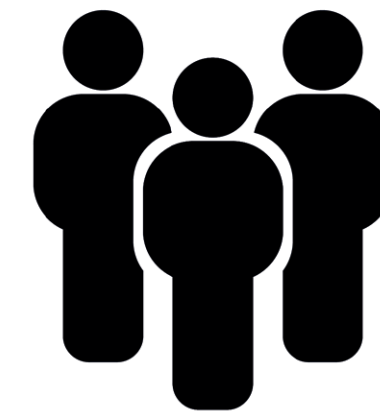


**Ecclesiastical
space**





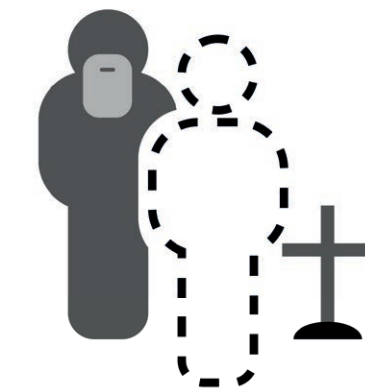
**Ecclesiastical
space**



**Religious
community
space**



**Ecclesiastical
space**



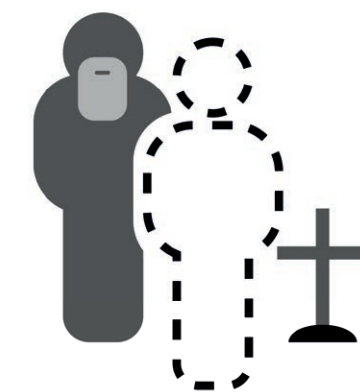
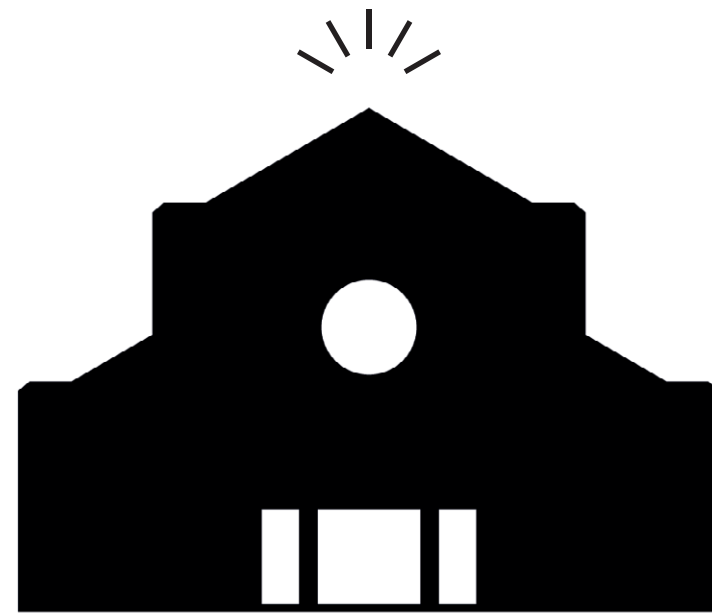
**Religious
community
space**

=

**Ageing &
in decline**



Ecclesiastical
space



**Religious
community
space**

=

**Ageing &
in decline**

**What to do with
these buildings?**



**What is the value of
these buildings?**

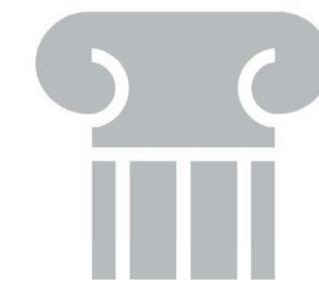
What to do with these buildings?



What is the value of these buildings?



Spiritual Value



Cultural Value

What to do with these buildings?



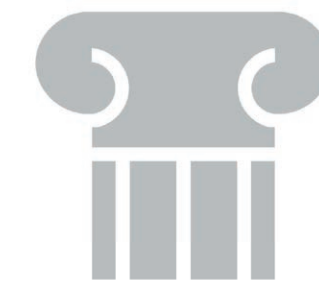
What is the value of these buildings?



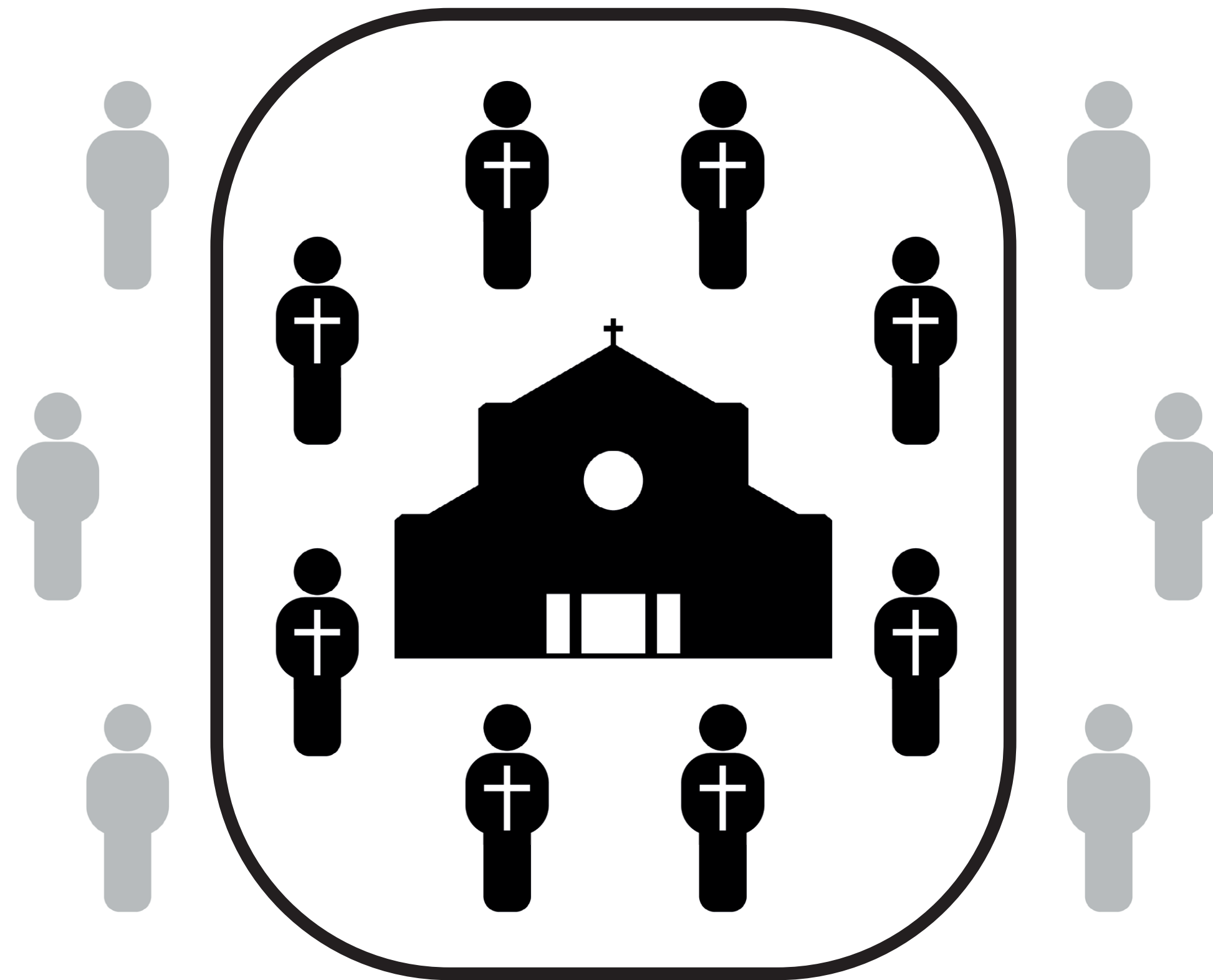
Spiritual Value



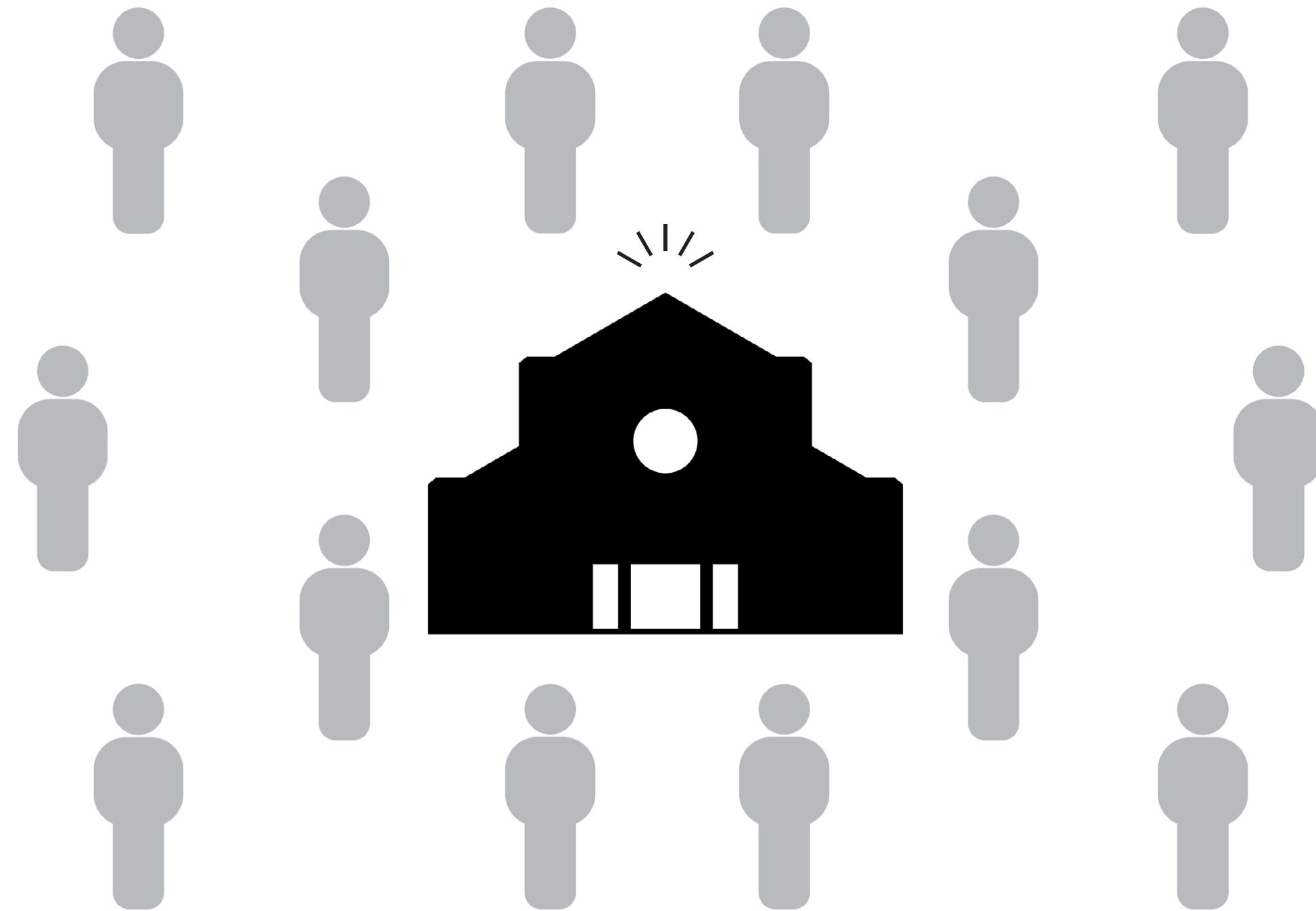
Social Value



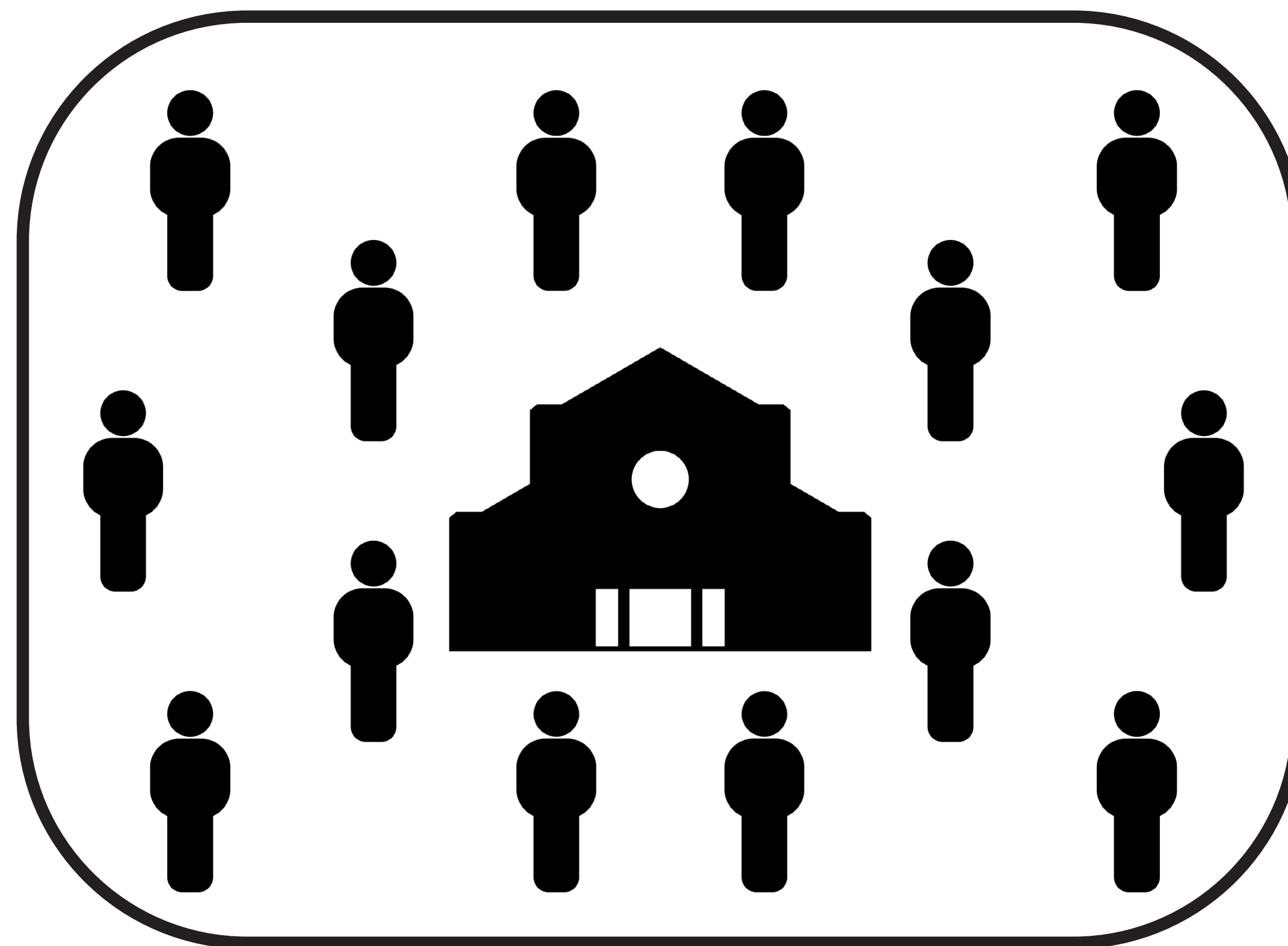
Cultural Value



Religious Social Binder

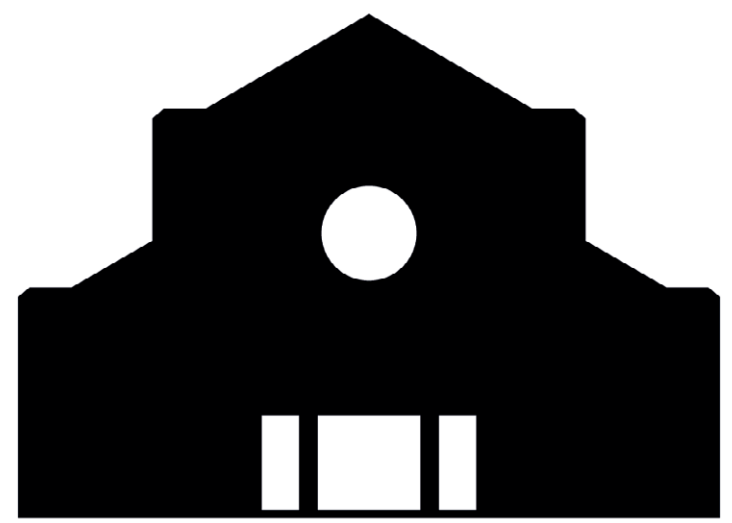


Loss Social Binder



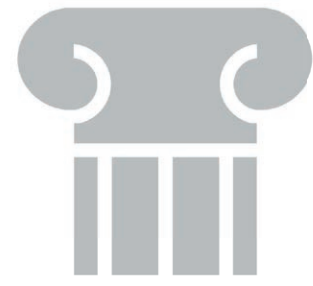
Neighbourhood Social Binder





House of ~~God~~

The People



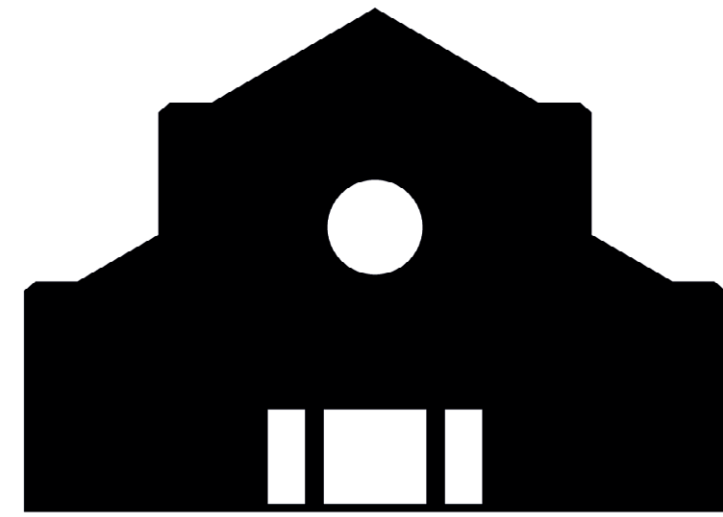
Historical



Artistical



Cultural



**House of ~~God~~
The People**



Social

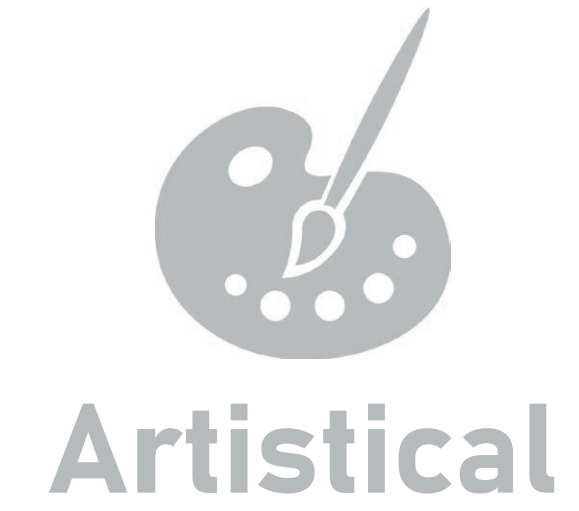


Economical



Emotional

Various Values

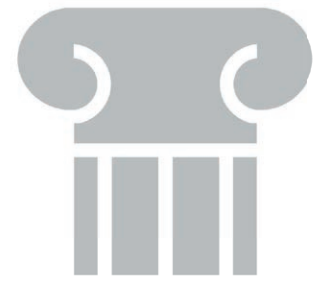


Conflict of Interests



Participation

1. Identify
Interests



Historical

2. Prevents
Conflicts



Cultural

3. Integration
User-needs



Economical

4. Local
Agency



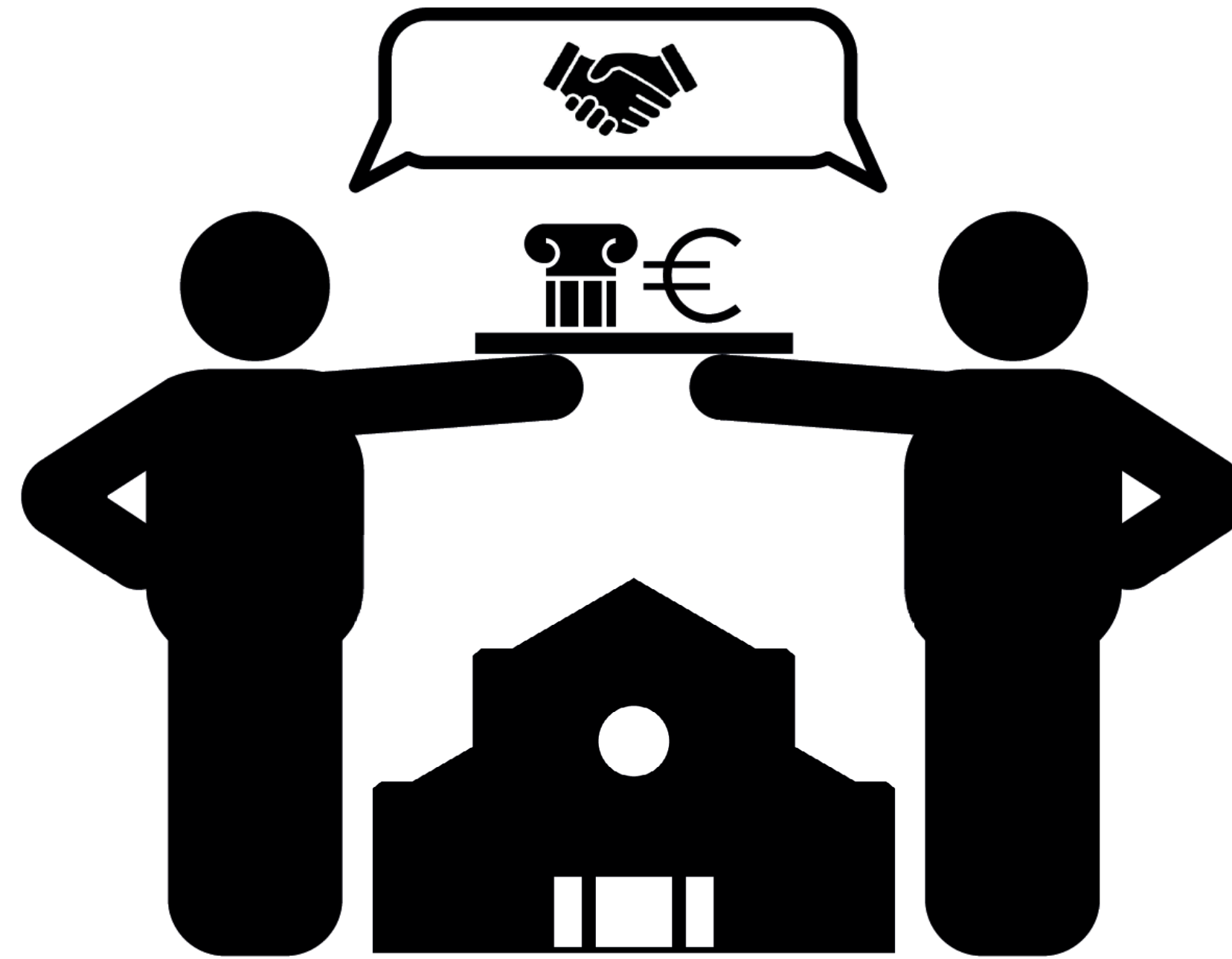
Artistical



Social



Emotional



~~House of God~~
by The People

Participation



How can **participation** assist in the preservation of
the **social function** of religious heritage?





How can participation assist in the preservation of
the social function of religious heritage?





How can participation assist in the preservation of the social function of religious heritage?



Participatory Workshop Goal:
Determine a functional program for a
community centre in the St. Dominicus Church



Stony Brook Children Centre



Boulder Creek Public Library



Houde Park Taipei



Portico Bernburg



St. Jan-Baptist church, Lille



Chapel of Vrouw Middelaes



St. Jozef church, Rijkevorsel



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St. Jan-Baptist church, Lille

Participatroy Churches | A Participatory Design Approach



Chapel of Vrouw Middelaes



St. Jozef church, Rijkevorsel

Orientation

Determine themes, goals, and topics

On-site interviews

On-site observations

Ind. / Col. brainstorming



Stony Brook Children Centre



Boulder Creek Public Library



Houde Park Taipei



Portico Bernburg



St. Jan-Baptist church, Lille
Participatory Churches | A Participatory Design Approach



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St. Jozef church, Rijkevorsel

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Determine themes, goals, and topics

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Identification

Identify conflicting and/or compatible interests

Cognitive mapping

Consensus design



Stony Brook Children Centre



Boulder Creek Public Library



Houde Park Taipei



Portico Bernburg



St. Jan-Baptist church, Lille
Participatory Churches | A Participatory Design Approach



Chapel of Vrouw Middelaes



St. Jozef church, Rijkevorsel

Orientation

Determine themes, goals, and topics

On-site interviews

On-site observations

Ind. / Col. brainstorming

Identification

Identify conflicting and/or compatible interests

Cognitive mapping

Consensus design

Evaluation

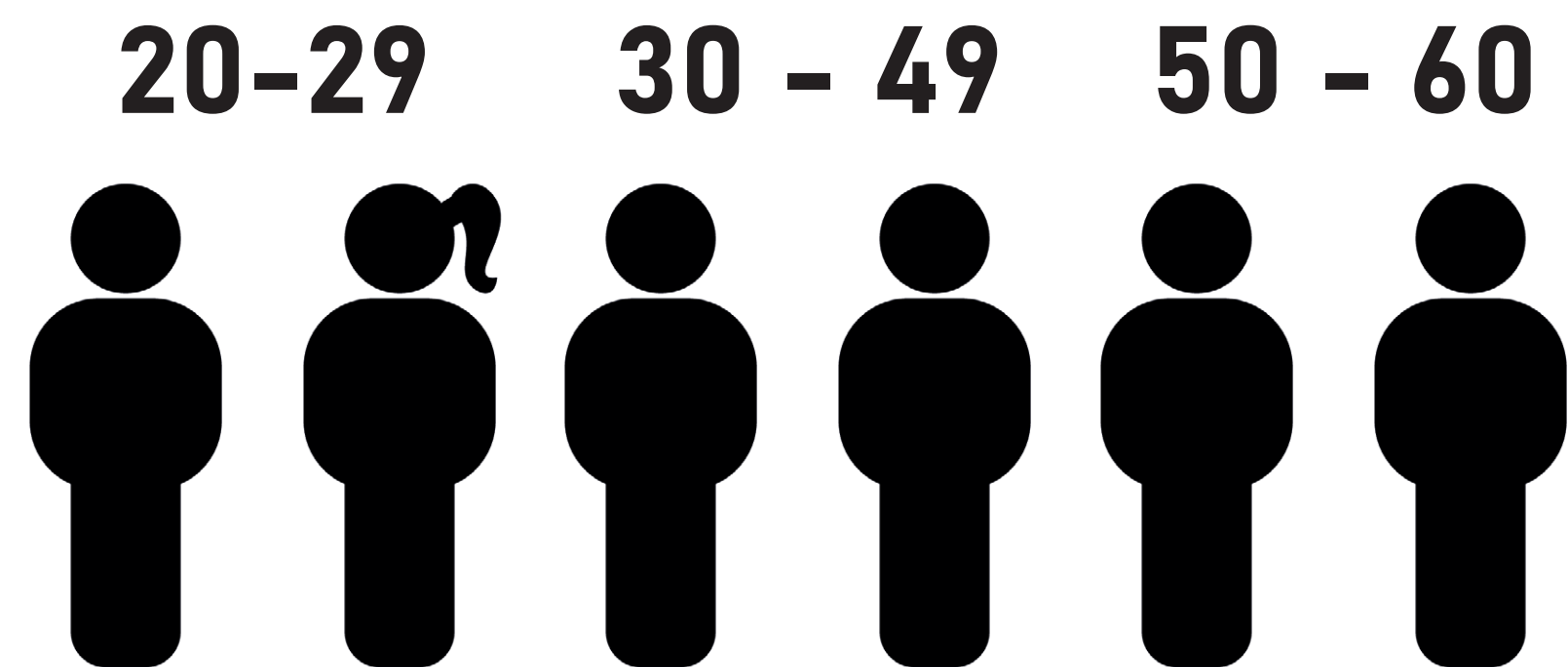
Evaluate results and recognise participant's agency

Virtual reality

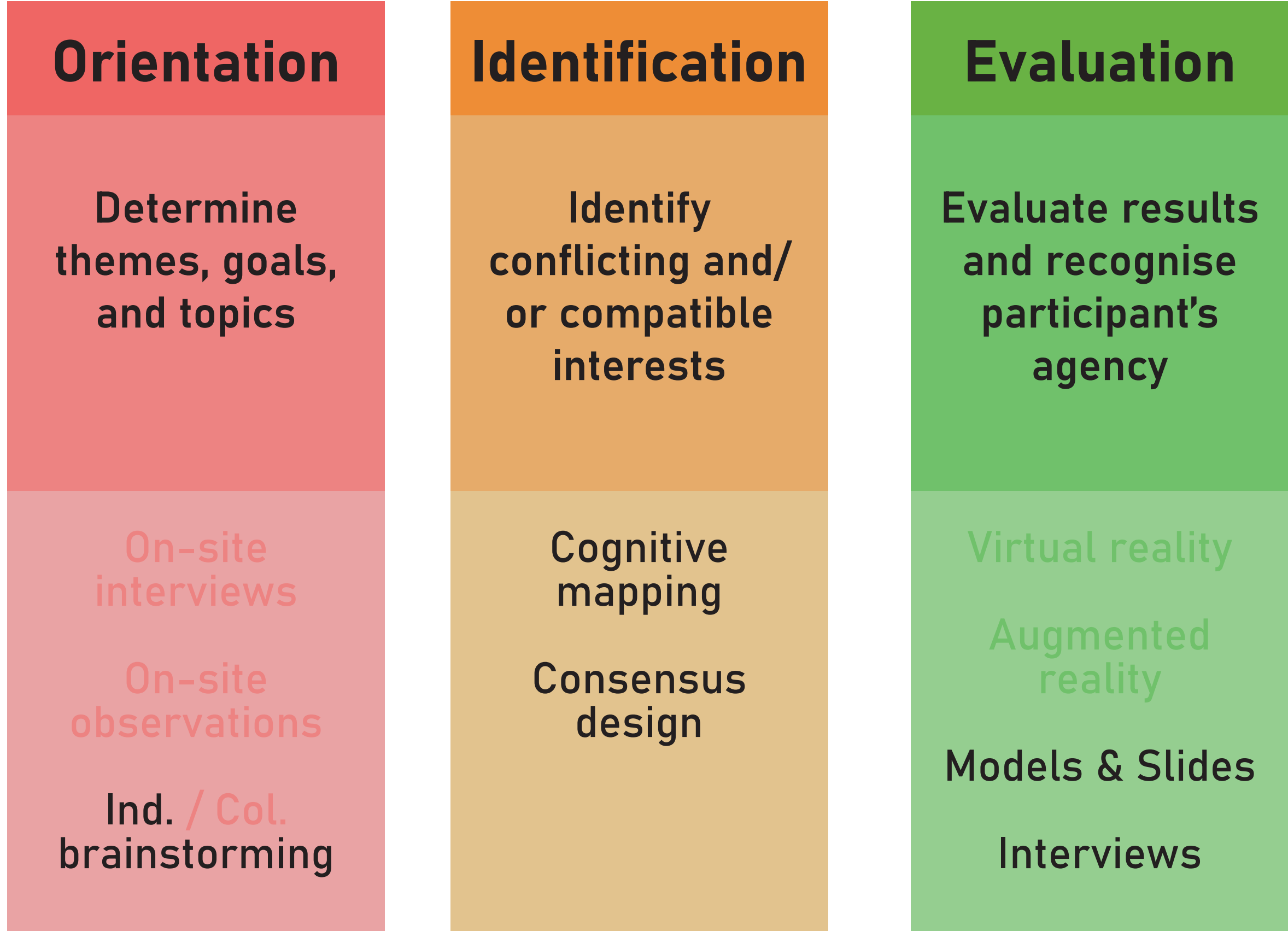
Augmented reality

Models & Slides

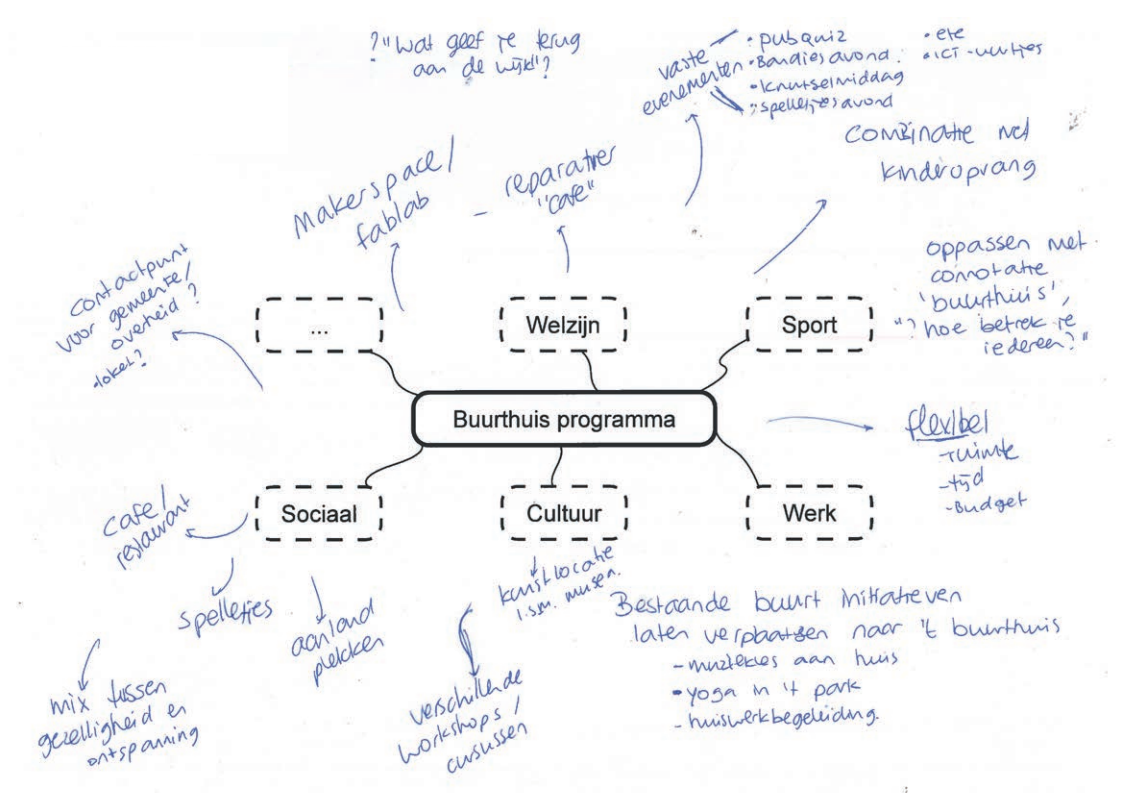
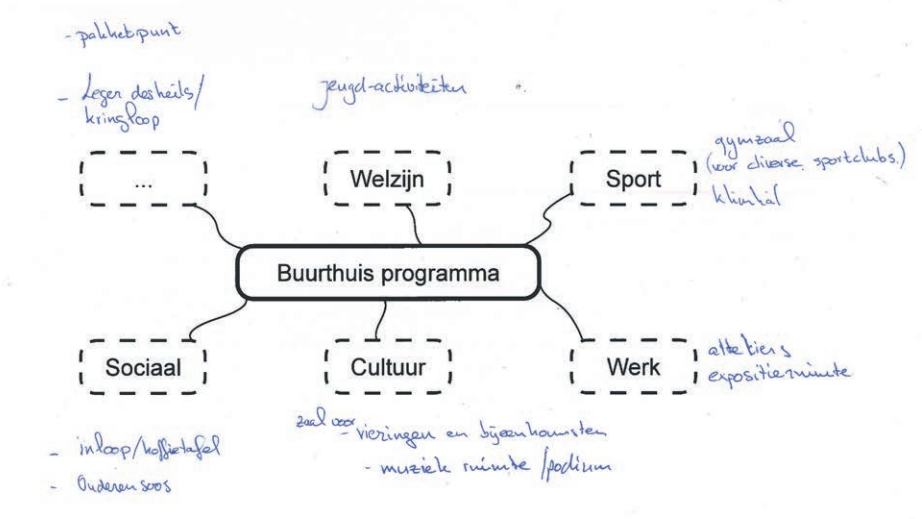
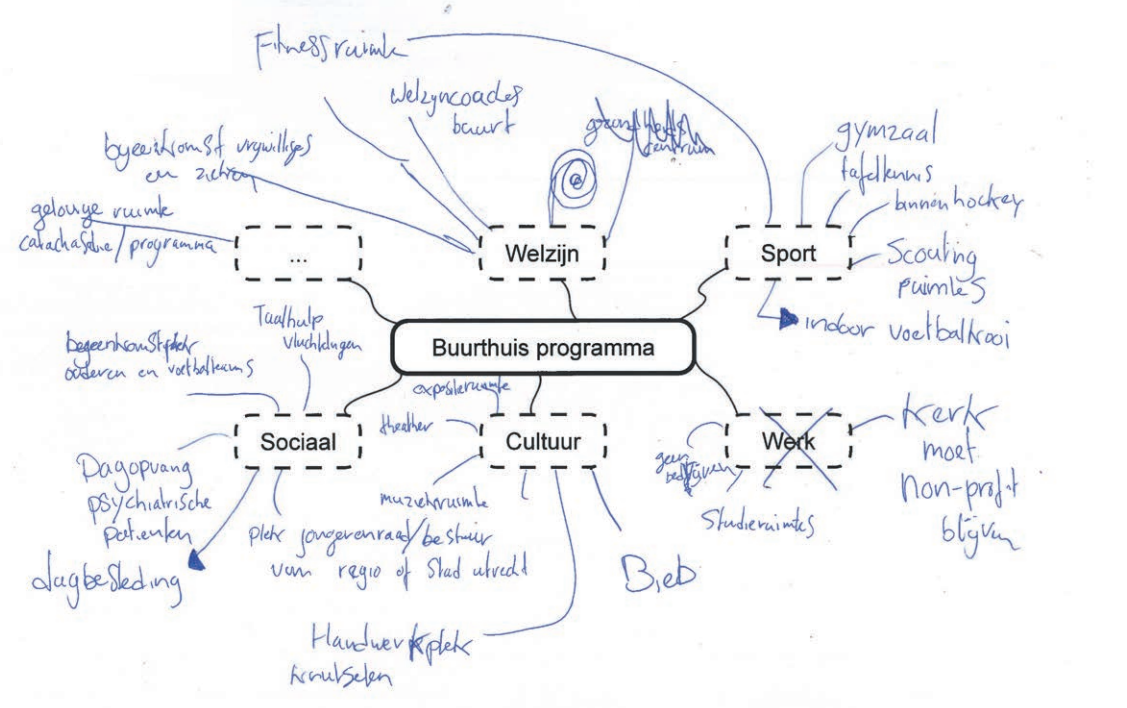
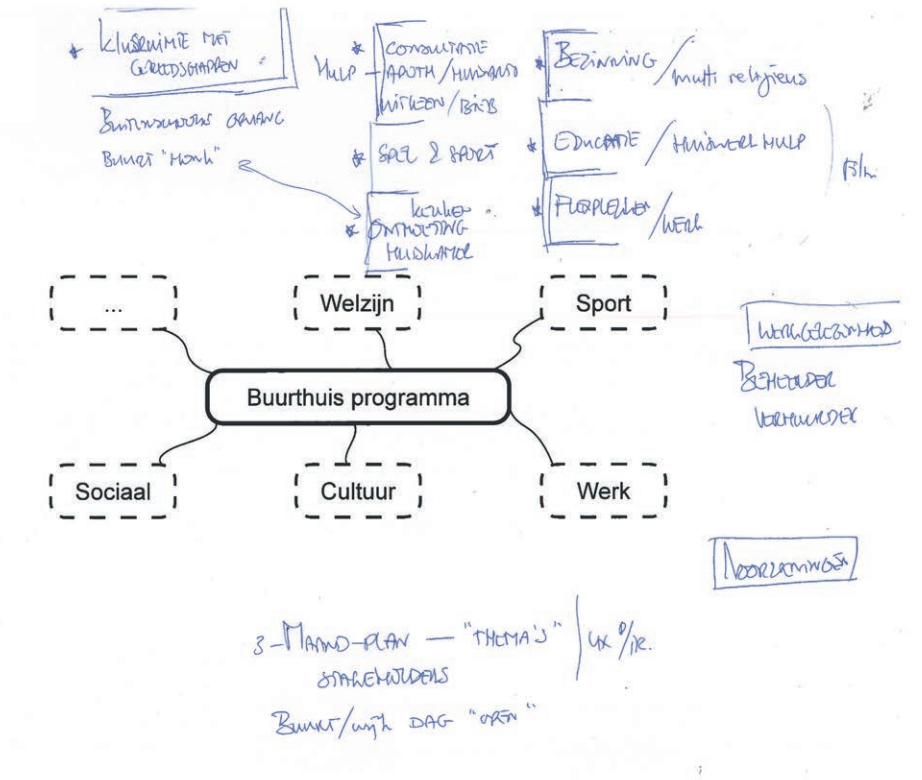
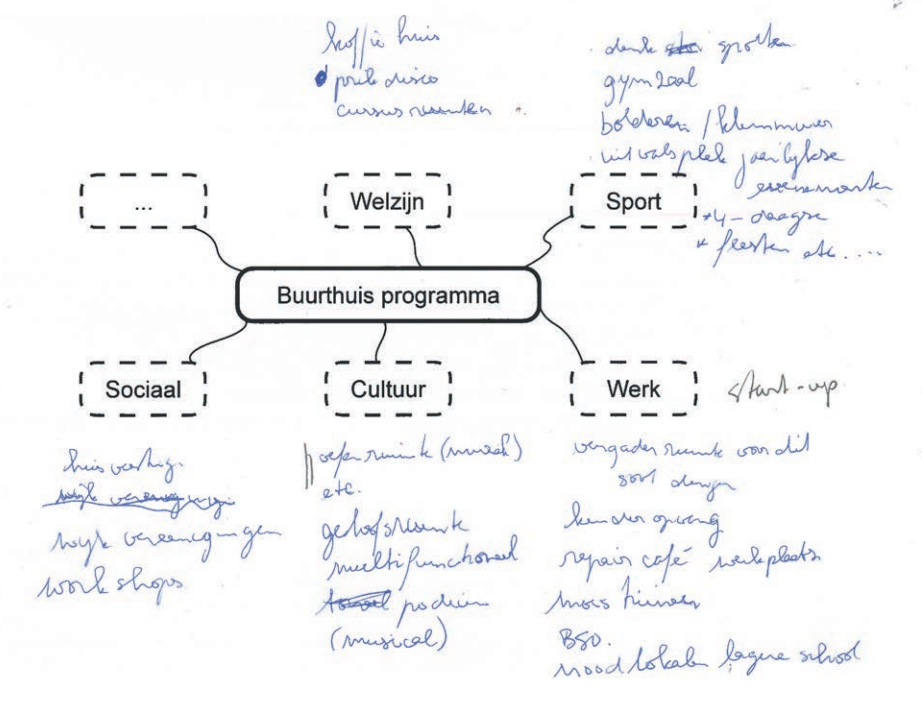
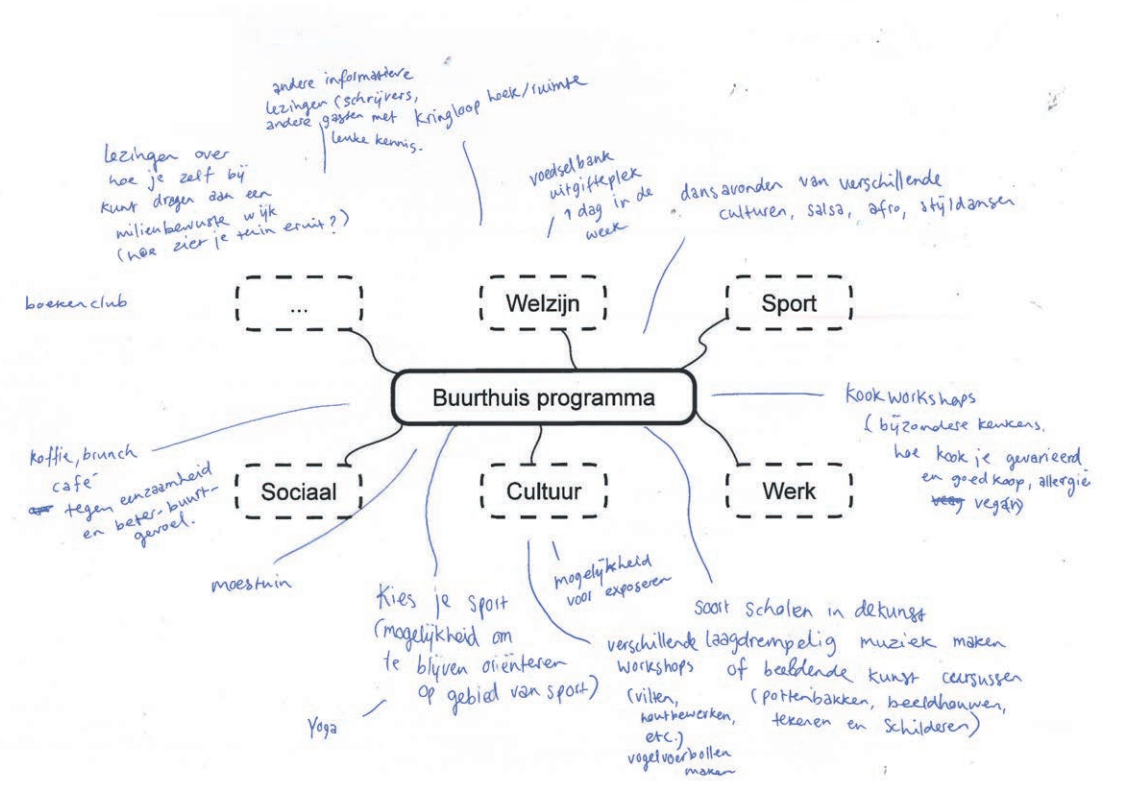
Interviews



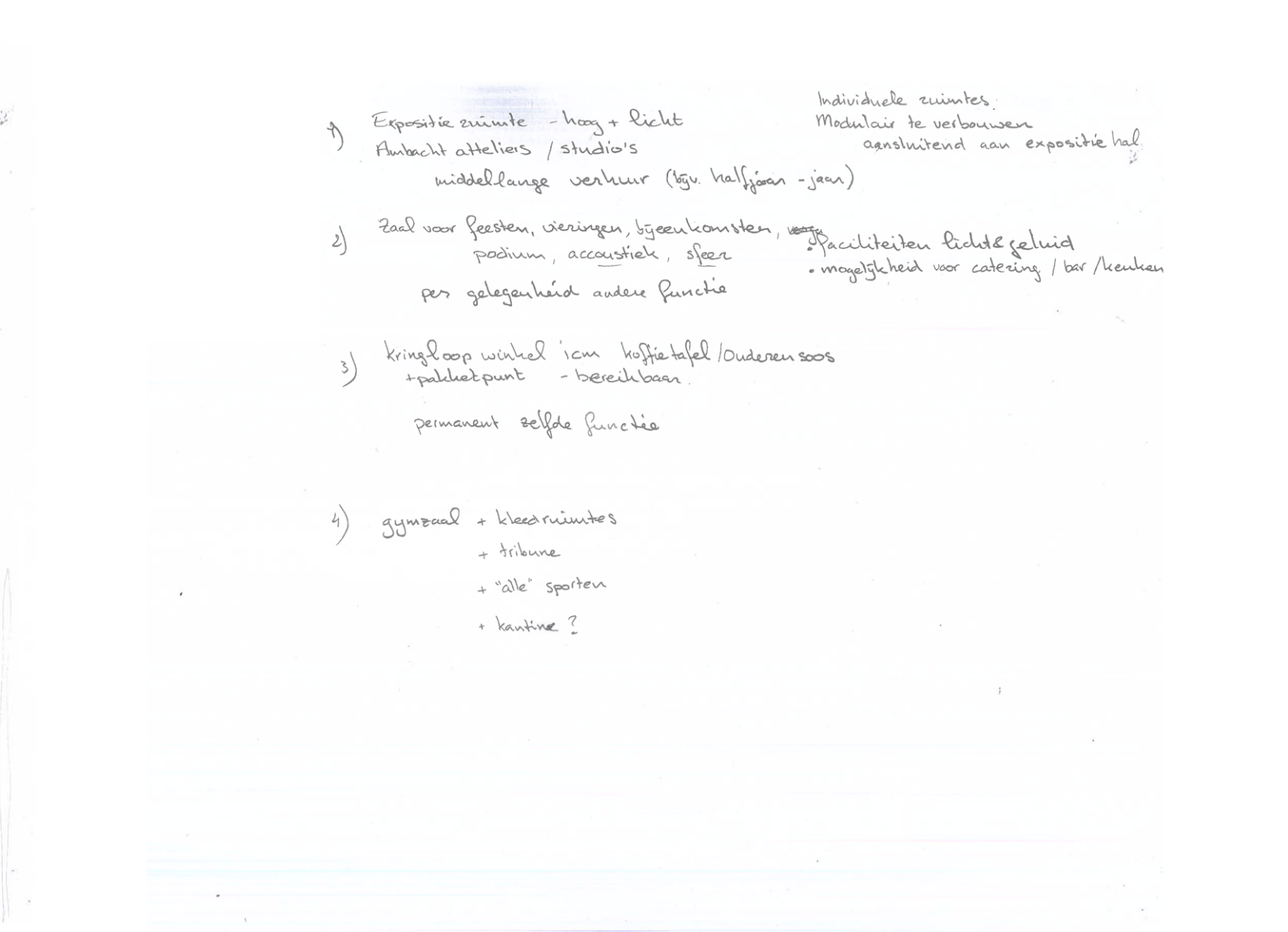
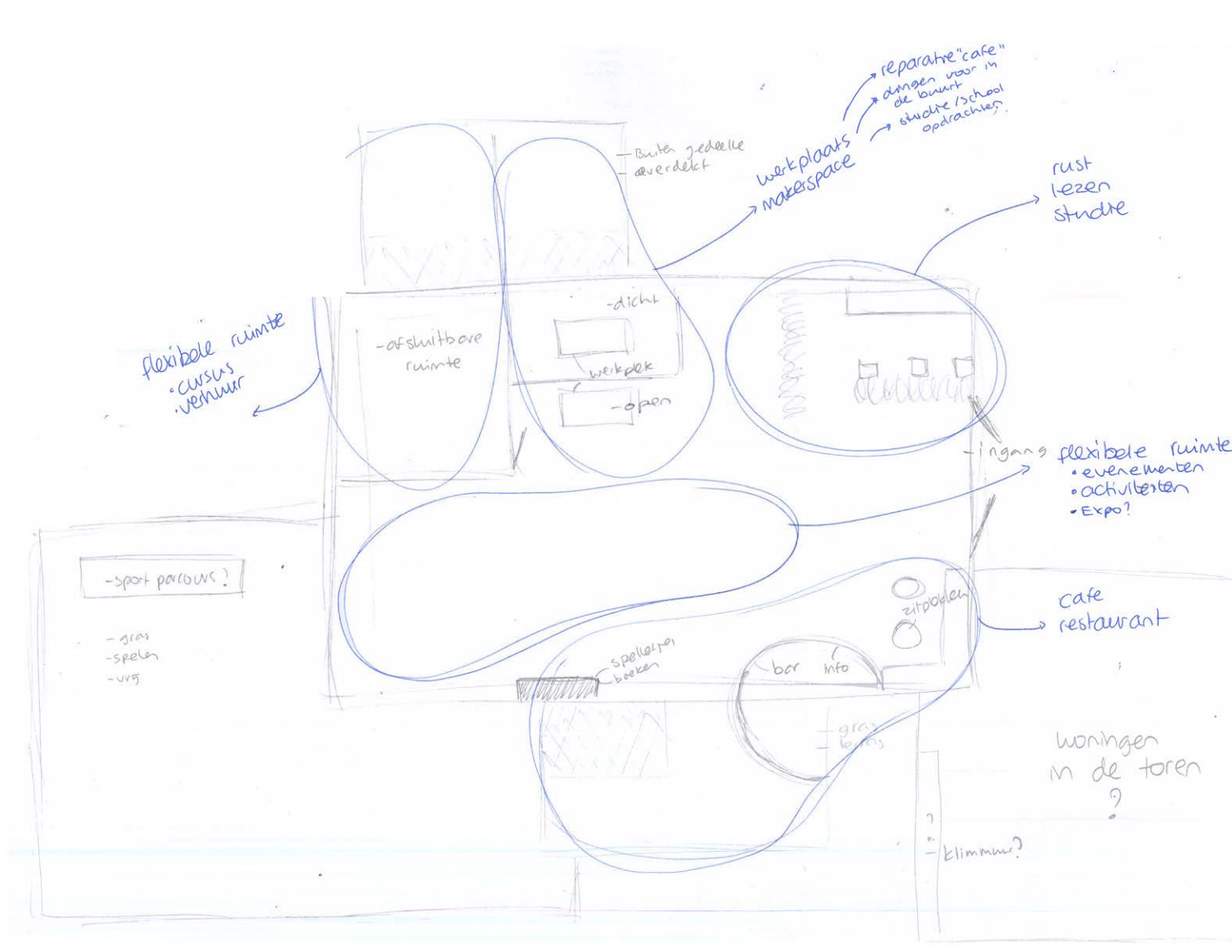
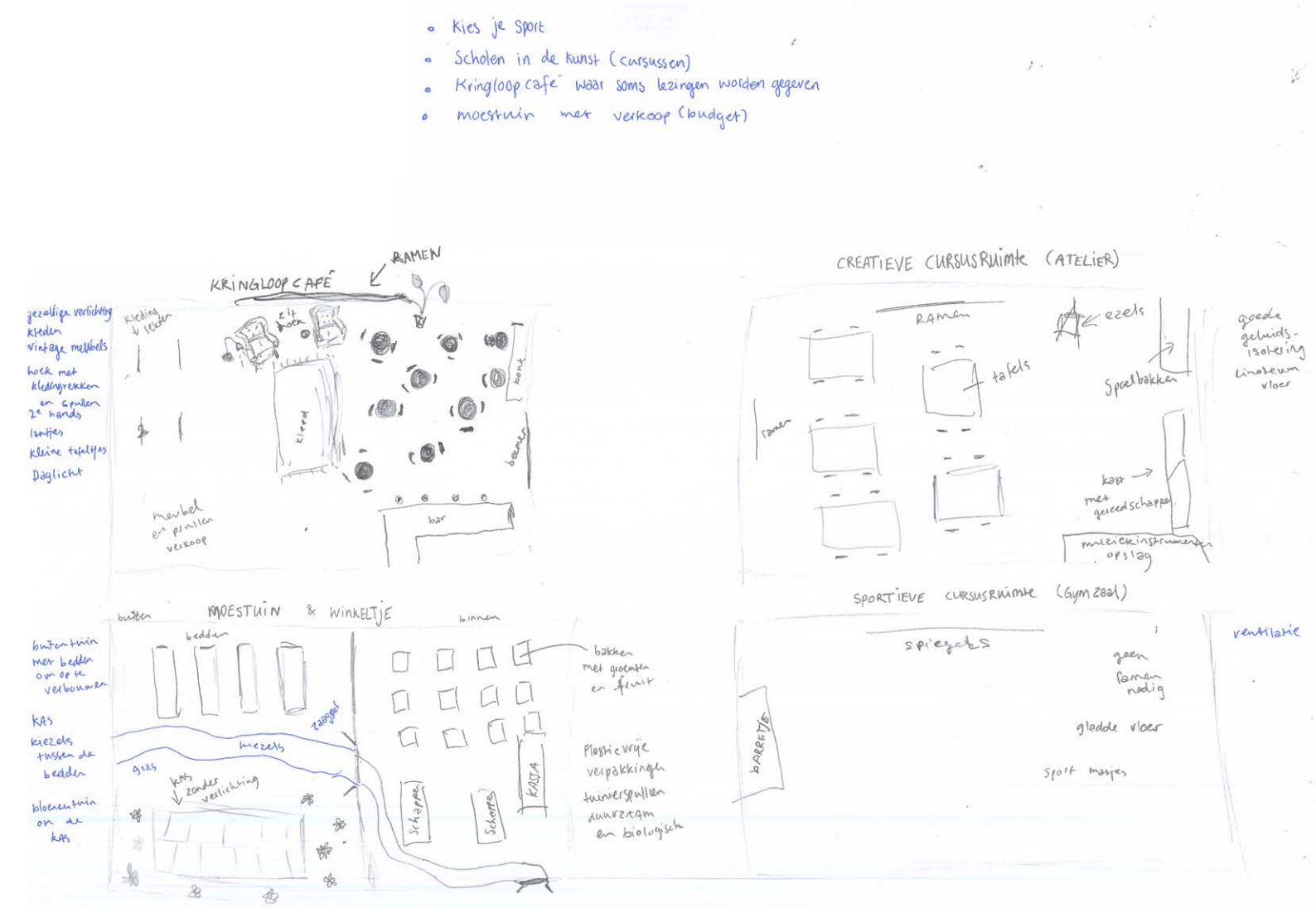
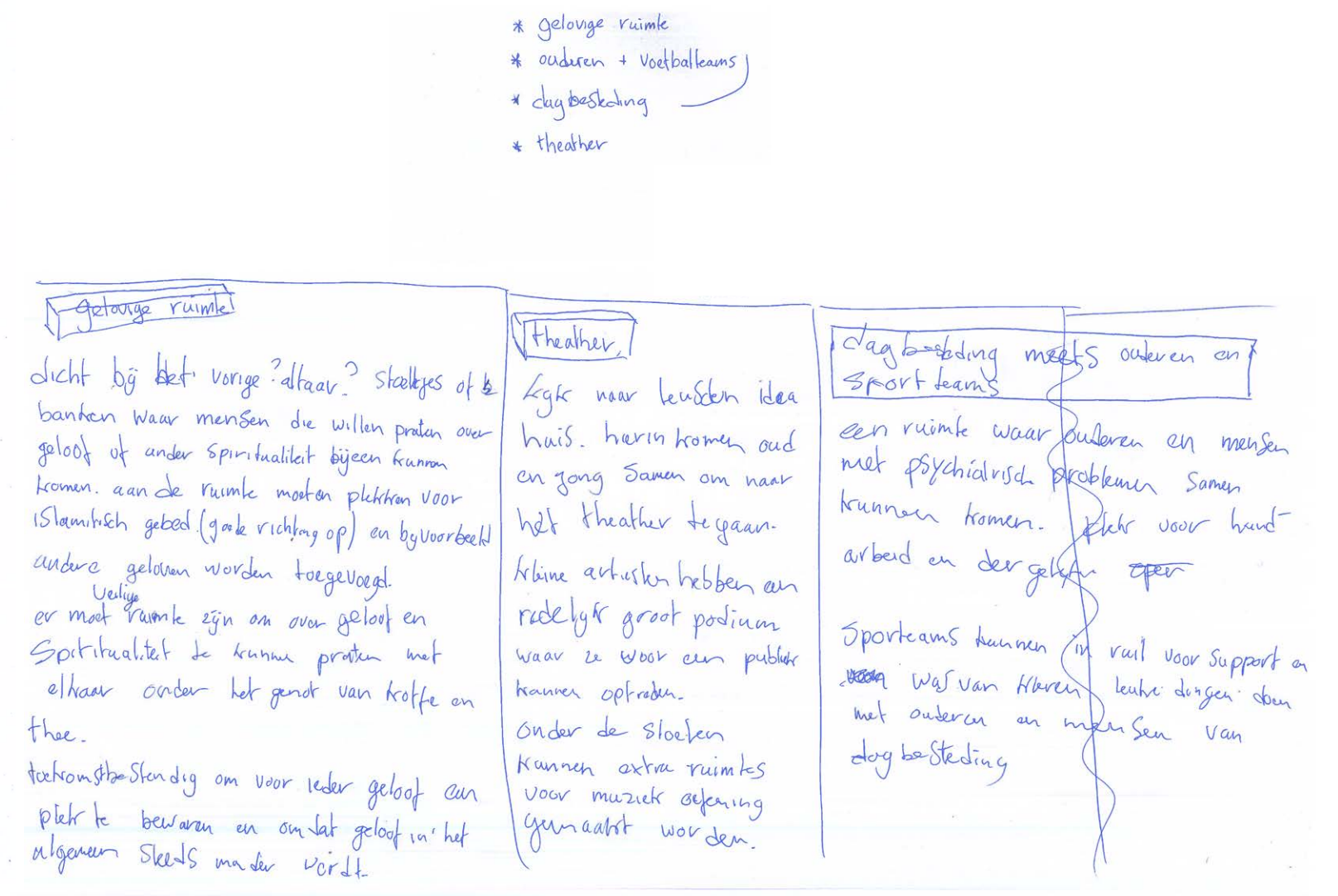
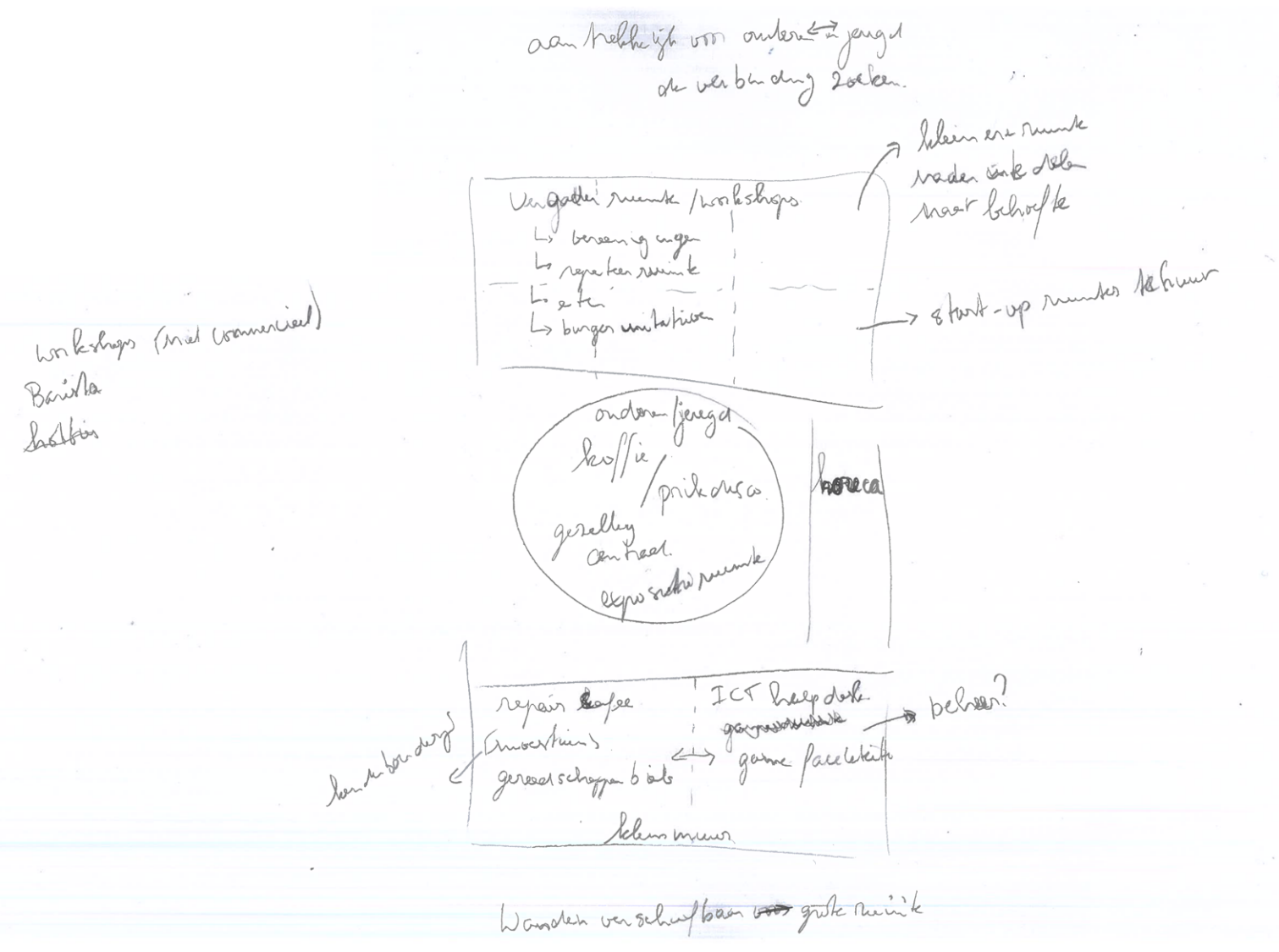
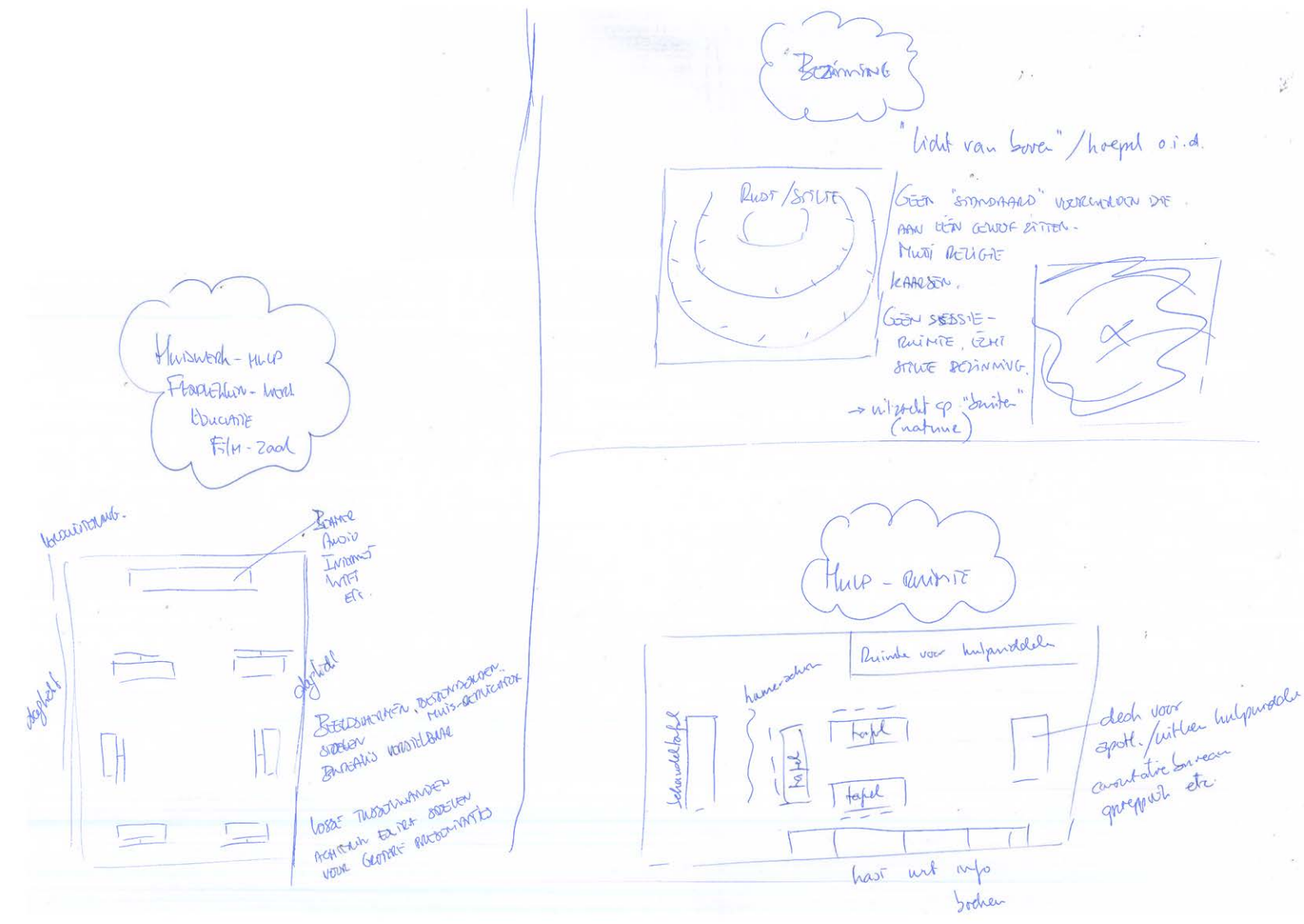
**Workshop
Participants**

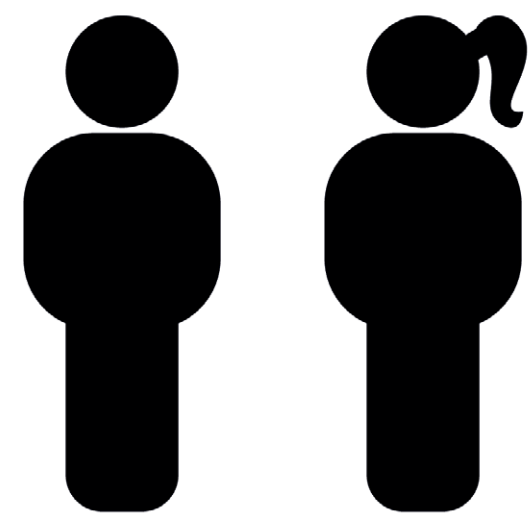


Individual Brainstorming



Age groups	Health				Culture				Sport				Work / study				Social				Climate										
	Consultant	Pharmacy	First Aid		Art classes	Exposition room	Theatre	Library	Sport hall	Climbing hall	Yoga room		Homework assistance	Study spaces	Work spaces	Meeting rooms	Makerspace	Repair cafe	ICT Helpdesk	Foodbank	Workshop rooms	Daycare	Cafe	Foodbank	Parcel point	Communal Kitchen	Community room	Religious space	Thrift store	Community gardens	
20-29					●	●	●				●			●			●				●				●	●	●	●	●	●	
30-49	●				●	●	●	●	●	●				●	●		●	●			●	●	●	●	●	●	●	●	●	●	
50-60	●	●		●	●	●	●		●	●			●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	
Σpoints	4	2	1	1	14	4	4	4	2	8	4	2	2	9	2	2	3	2	30	4	2	1	1	4	4	5	1	1	3	4	3
Max.	18	6	6	6	24	6	6	6	6	18	6	6	6	24	6	6	6	6	72	6	6	6	6	6	6	6	6	6	6	6	6
	22%				58%				44%				38%				42%				33%										

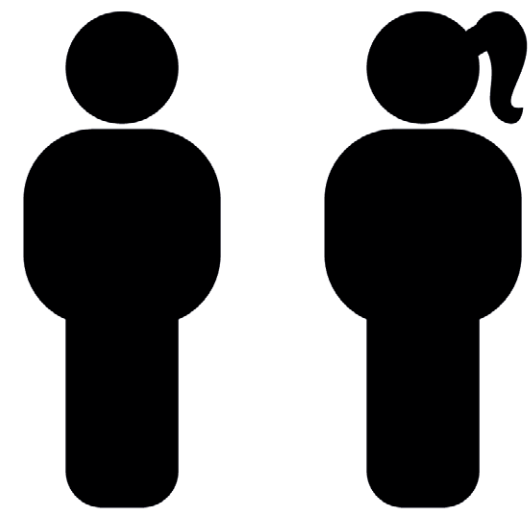




20-29

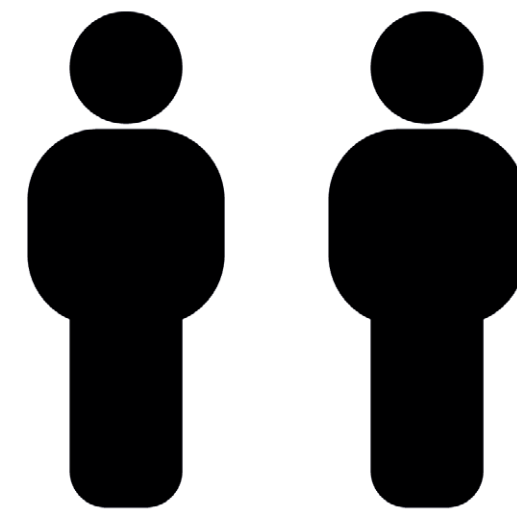
Social Programs And Self-sustainability





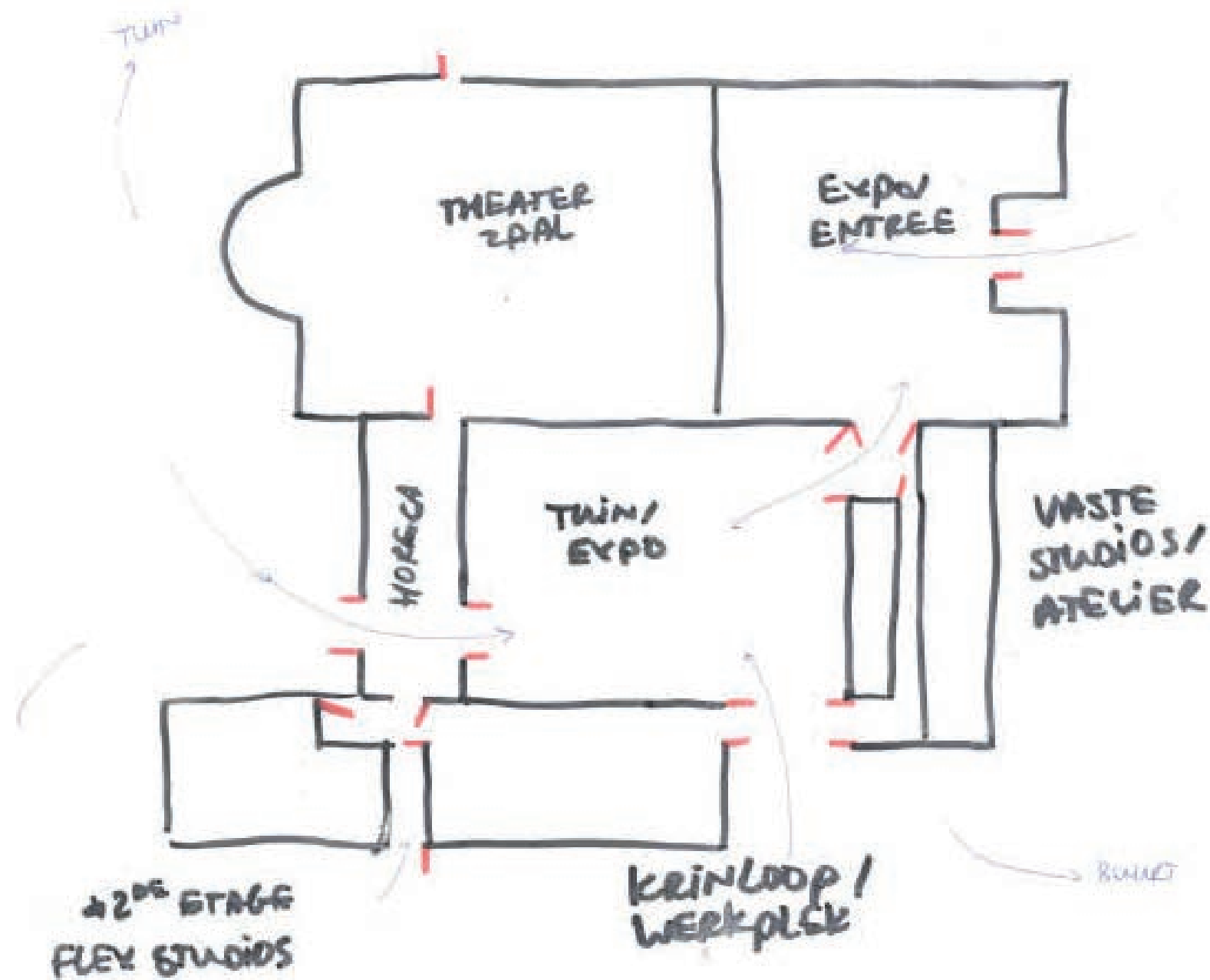
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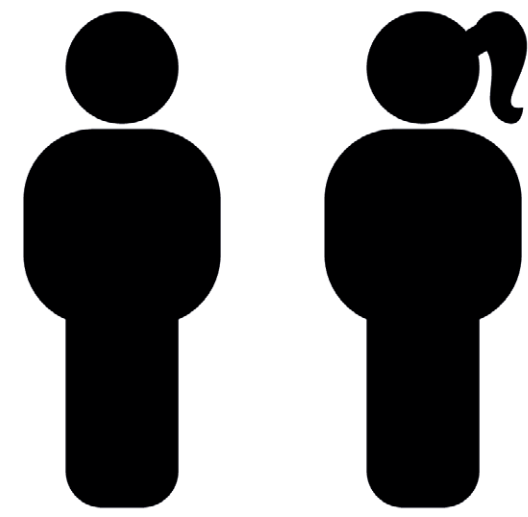
Social Programs And Self-sustainability



30 - 49

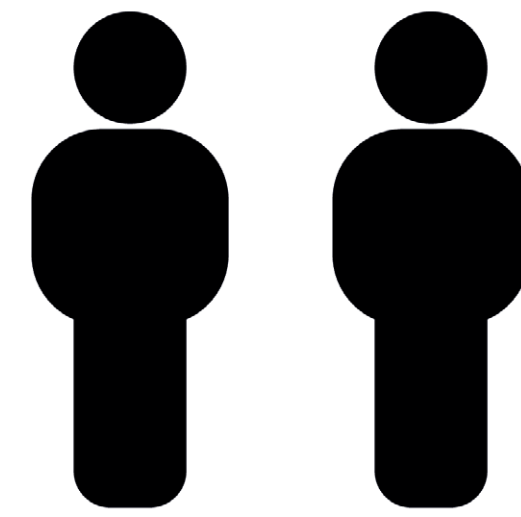
Economical Programs And Accessibility





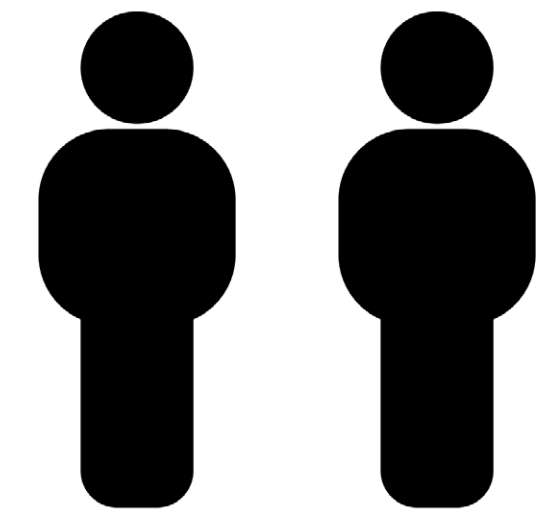
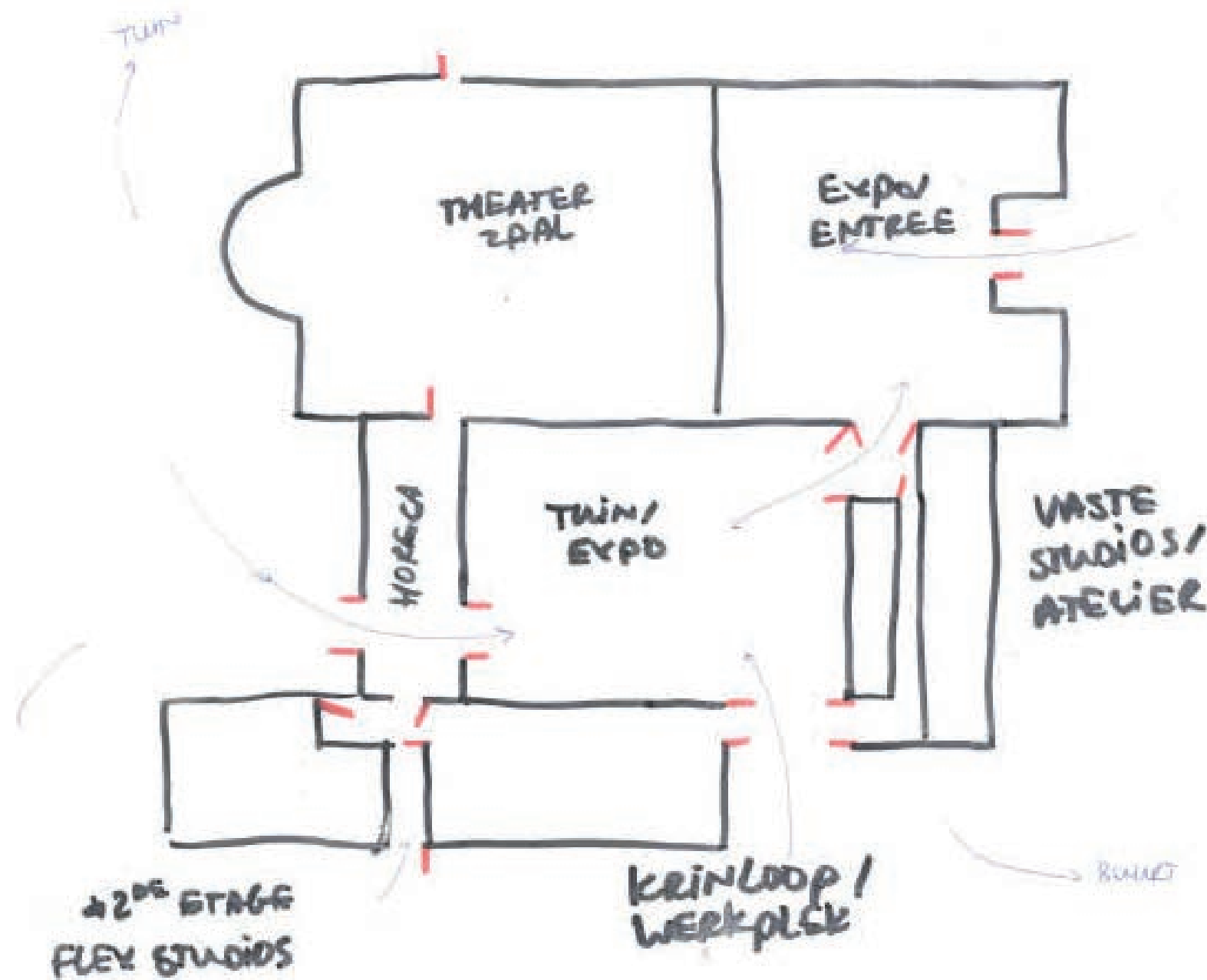
20-29

Social Programs And Self-sustainability



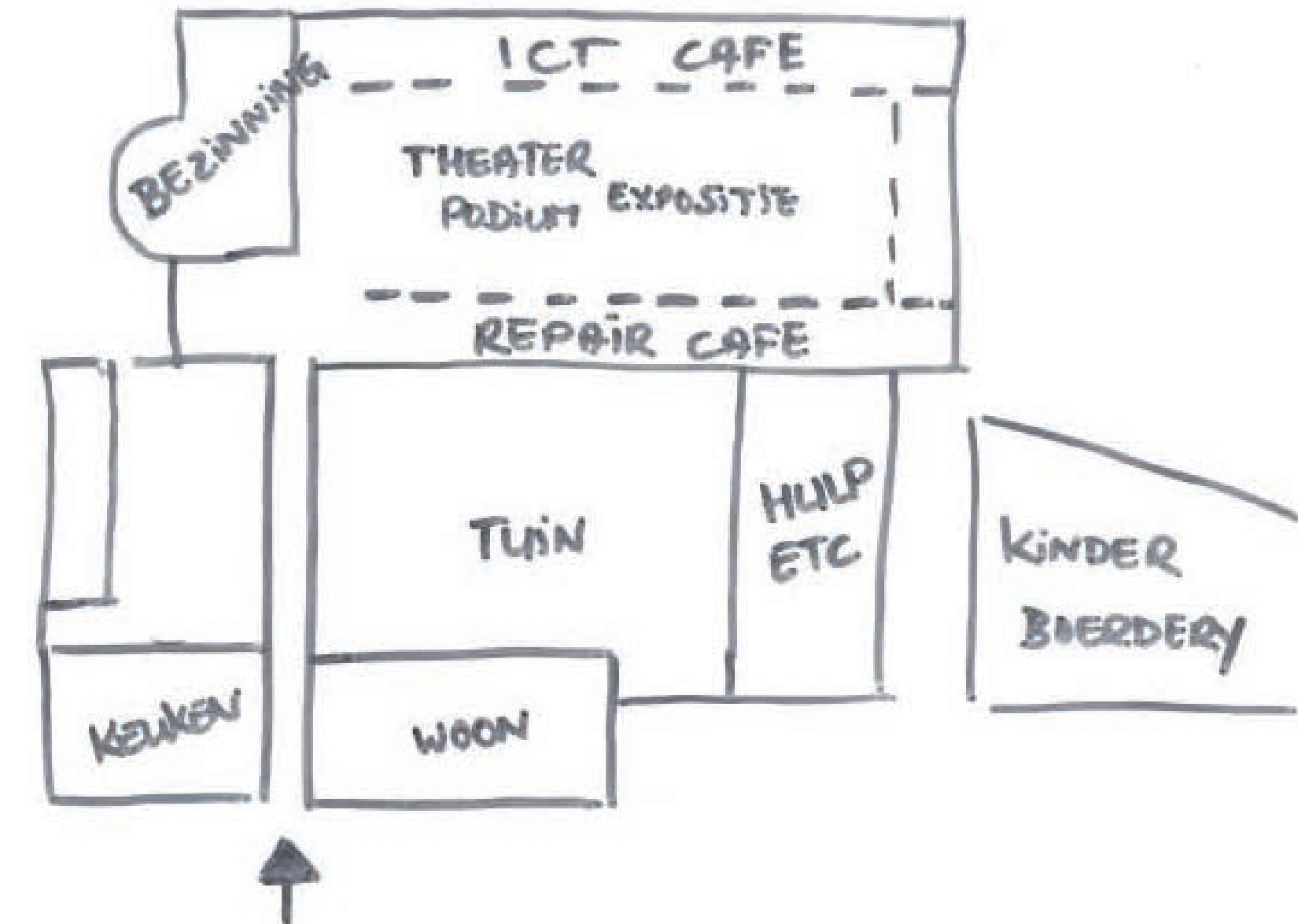
30 - 49

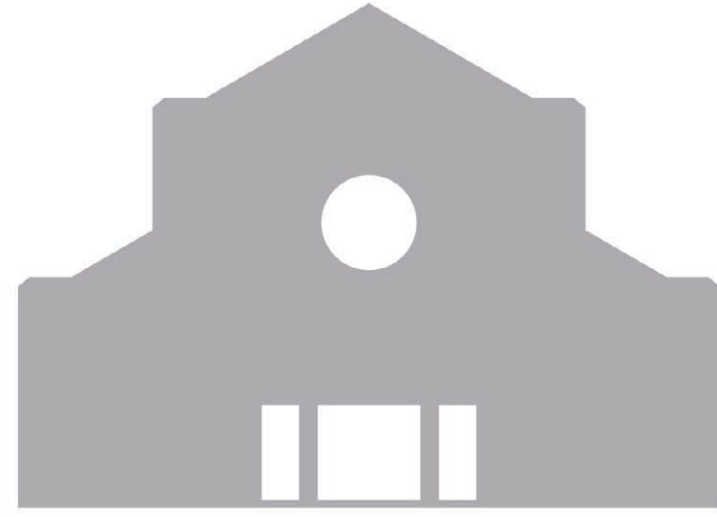
Economical Programs And Accessibility



50 - 60

Social Programs And Social Coherency





Community Centre

**Final
Programs**



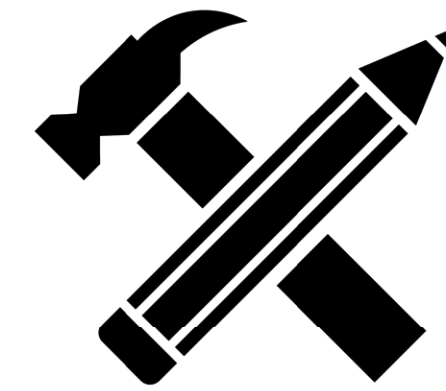
Café



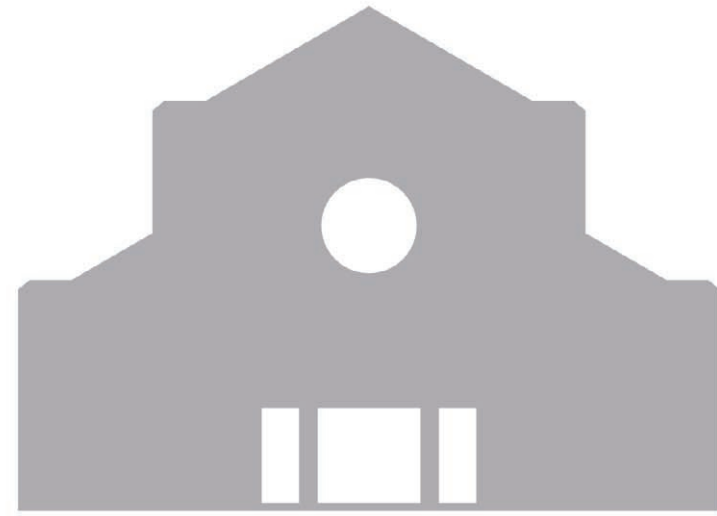
Workspace



Theatre



Maker space



Community Centre

Final Programs



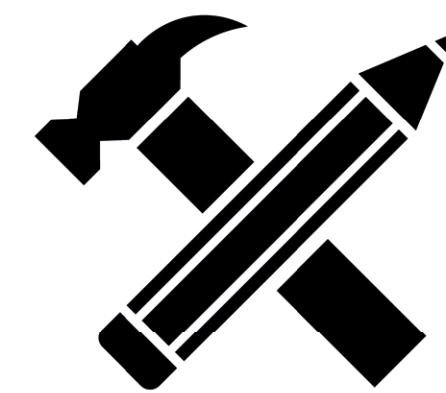
Café



Workspace



Theatre



Maker space

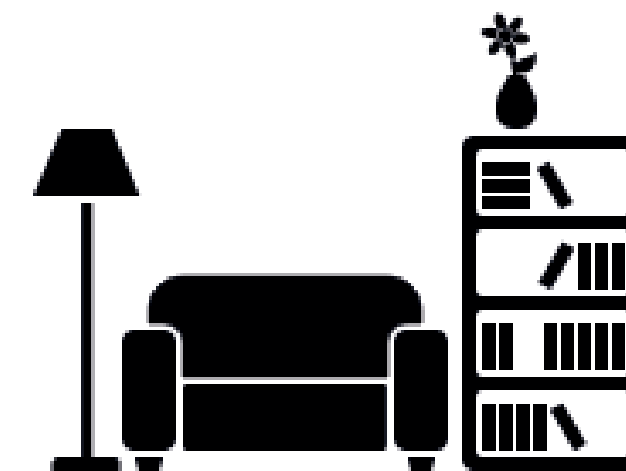
Design Goals



Sustainability



Accessibility



Neighbourhood
Livingroom

St. Dominicus Church

Utrecht, Oog in Al

Roman-Catholic

1951

Architect: Herman van Putten

Client: Dominican Order

Function: Monastery

Style: Early Bossche School

(Strong references to traditional
Romanesque church architecture)

1991

Departure of the Domician Order;
abolishment of the monastery. Monastery
building gifted to church.

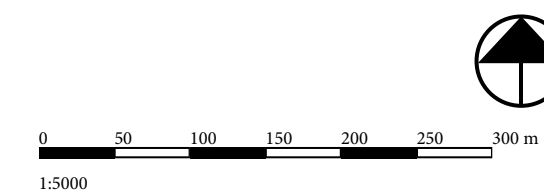
20..?

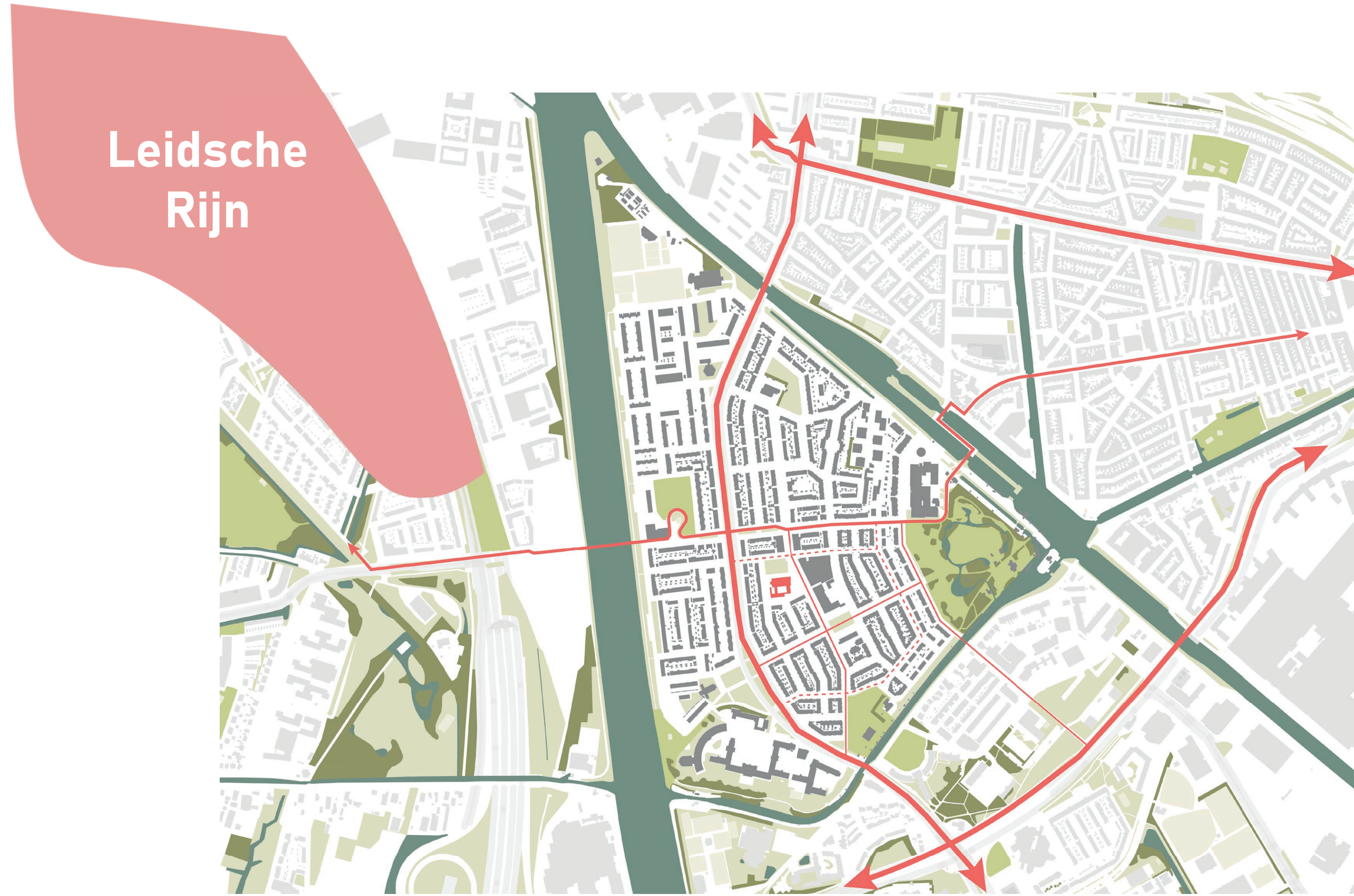
90% of Catholic churches are divested in
the Archbishop of Utrecht - approximately 2
Catholic churches will remain within the city
of Utrecht.



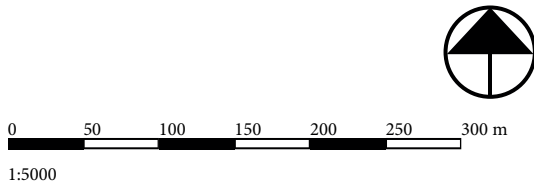


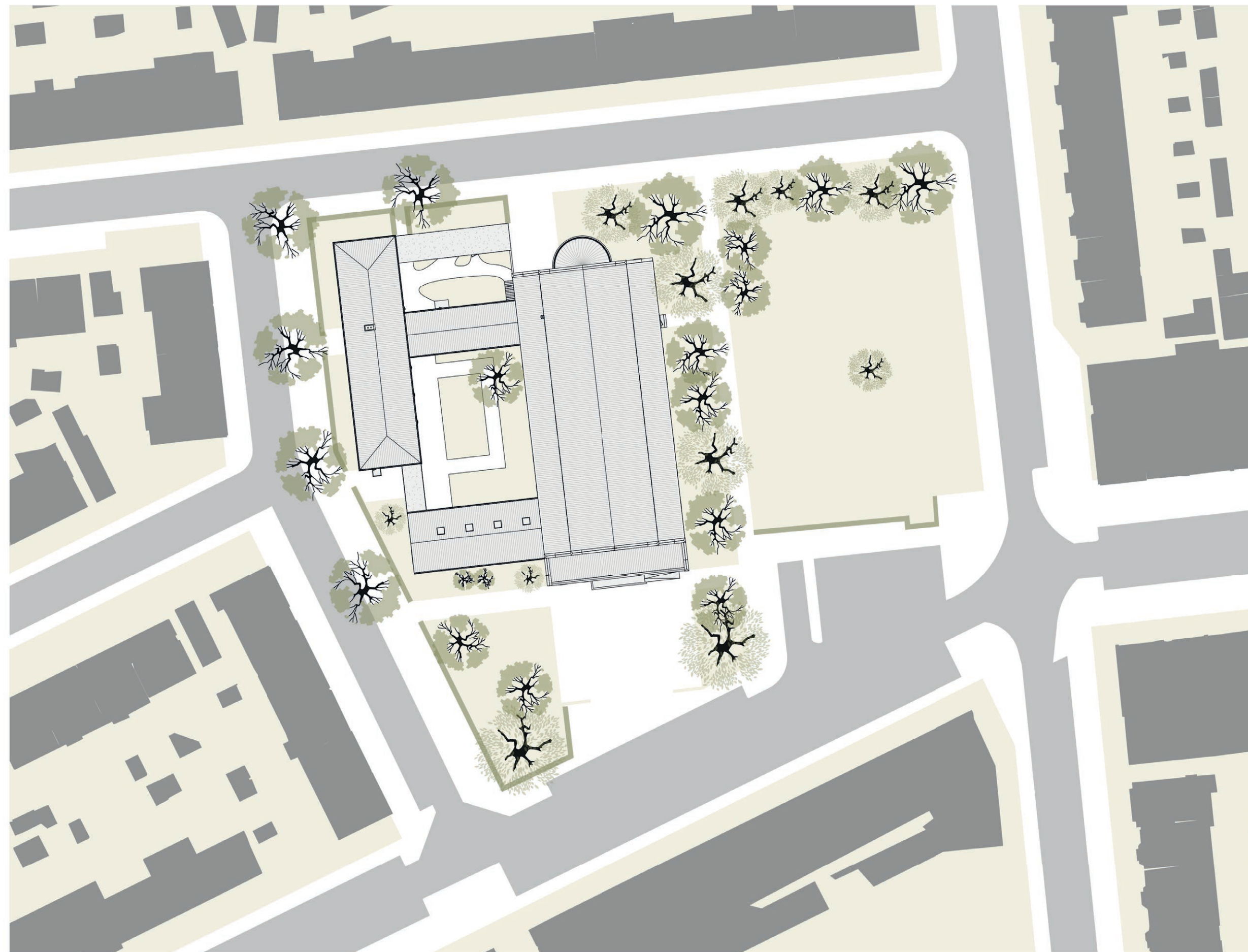
1:5000 Oog in Al



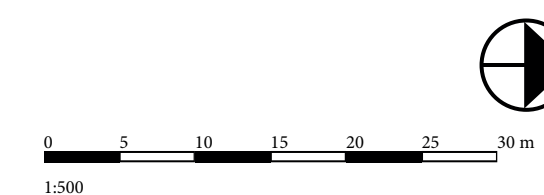


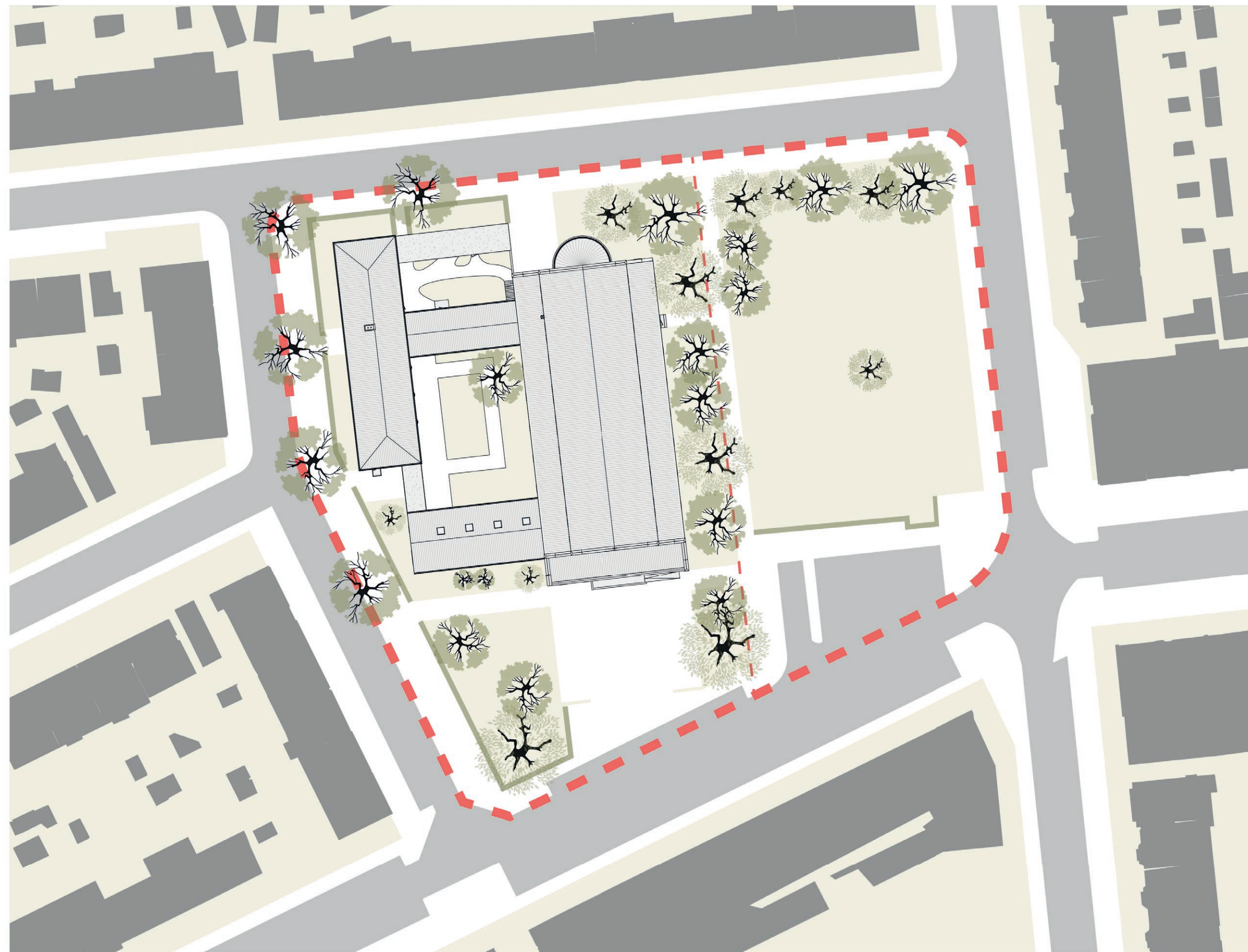
1:5000 Oog in Al



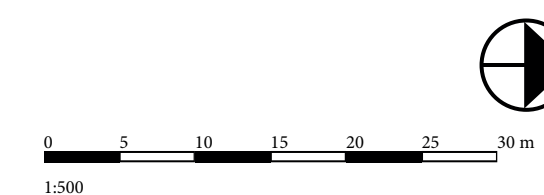


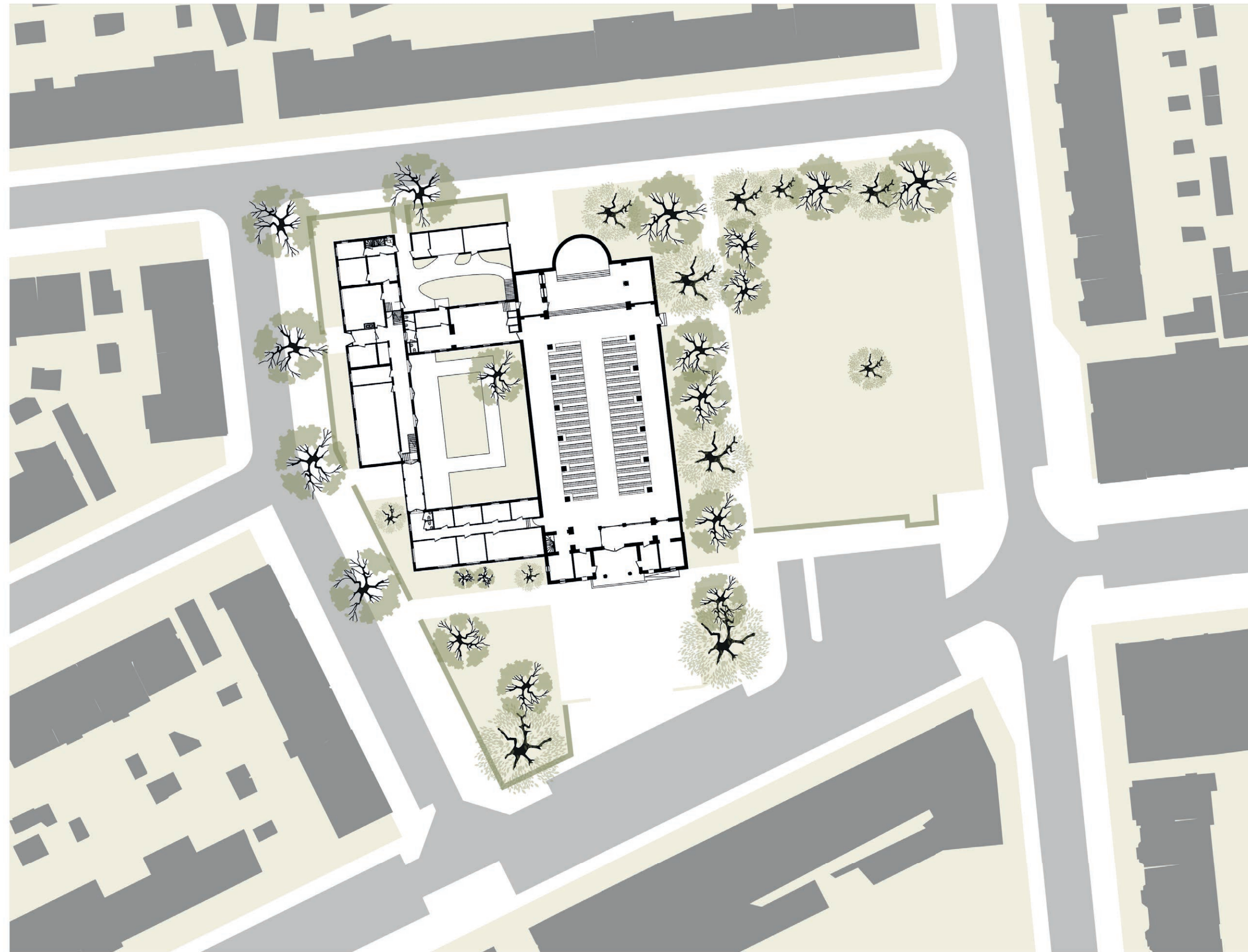
1:500 Existing Site



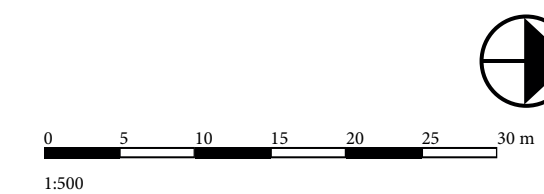


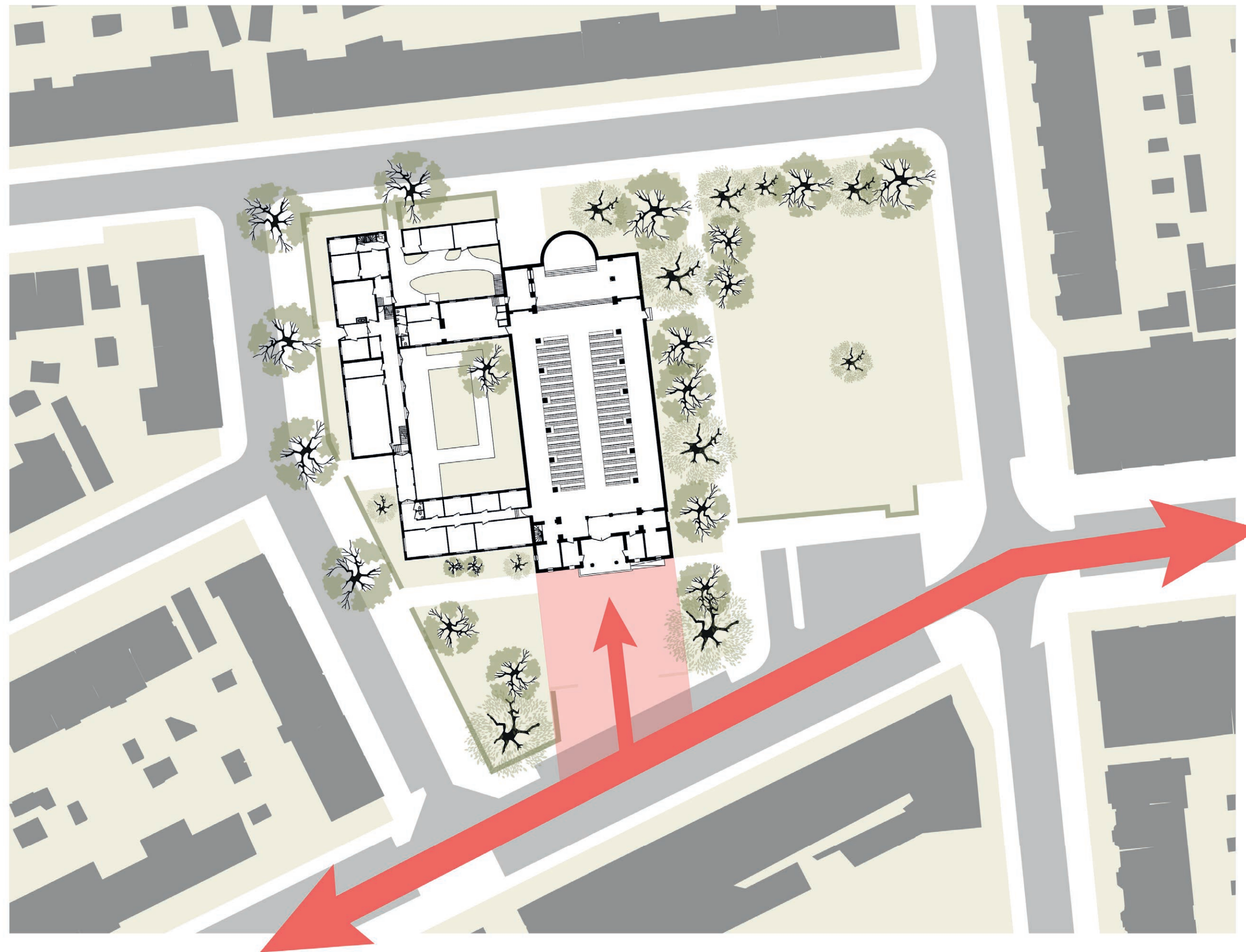
1:500 Existing Site



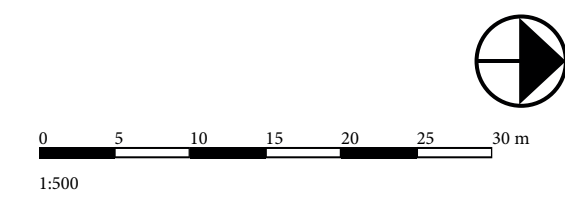


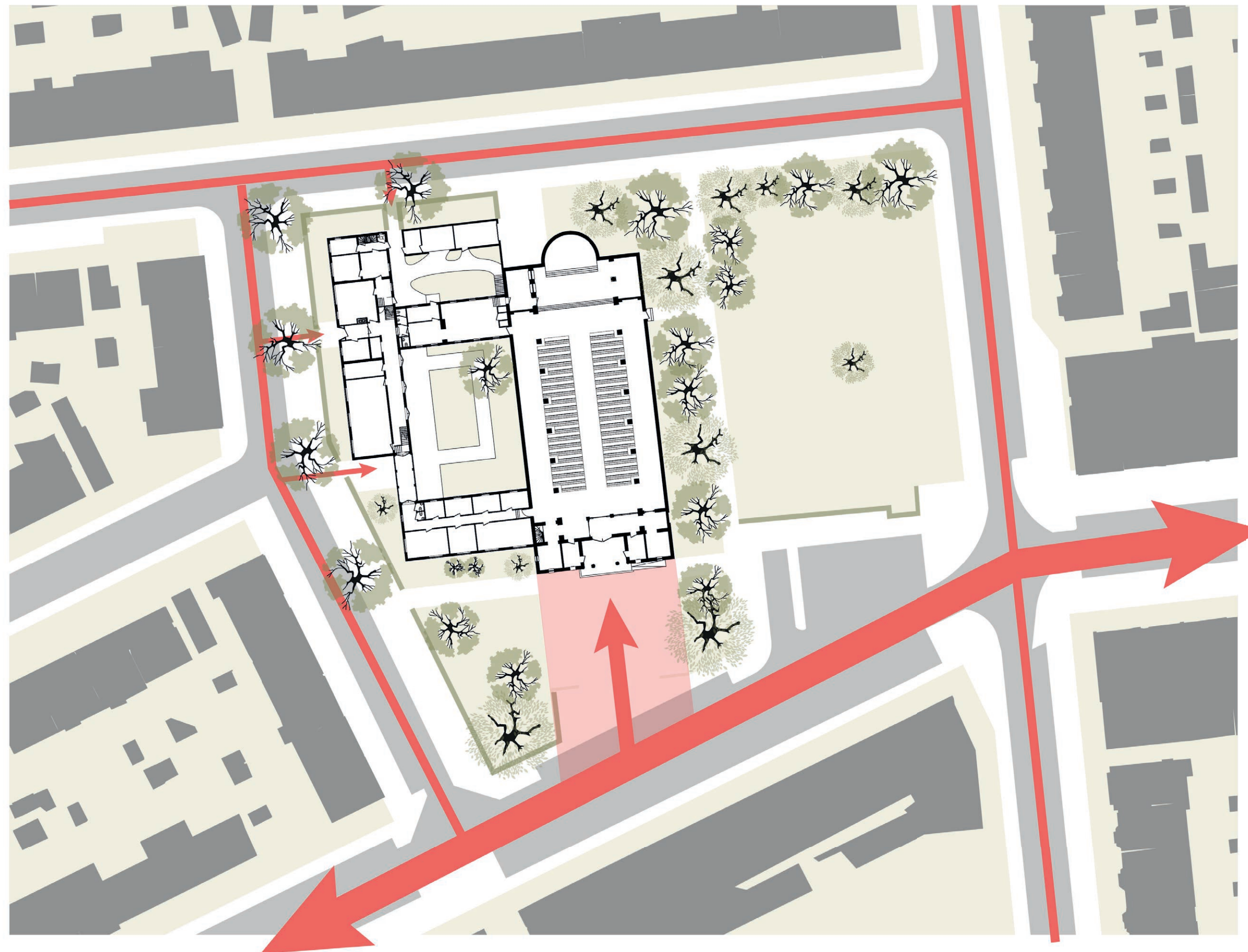
1:500 Existing Site



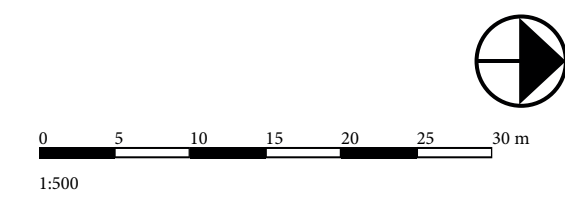


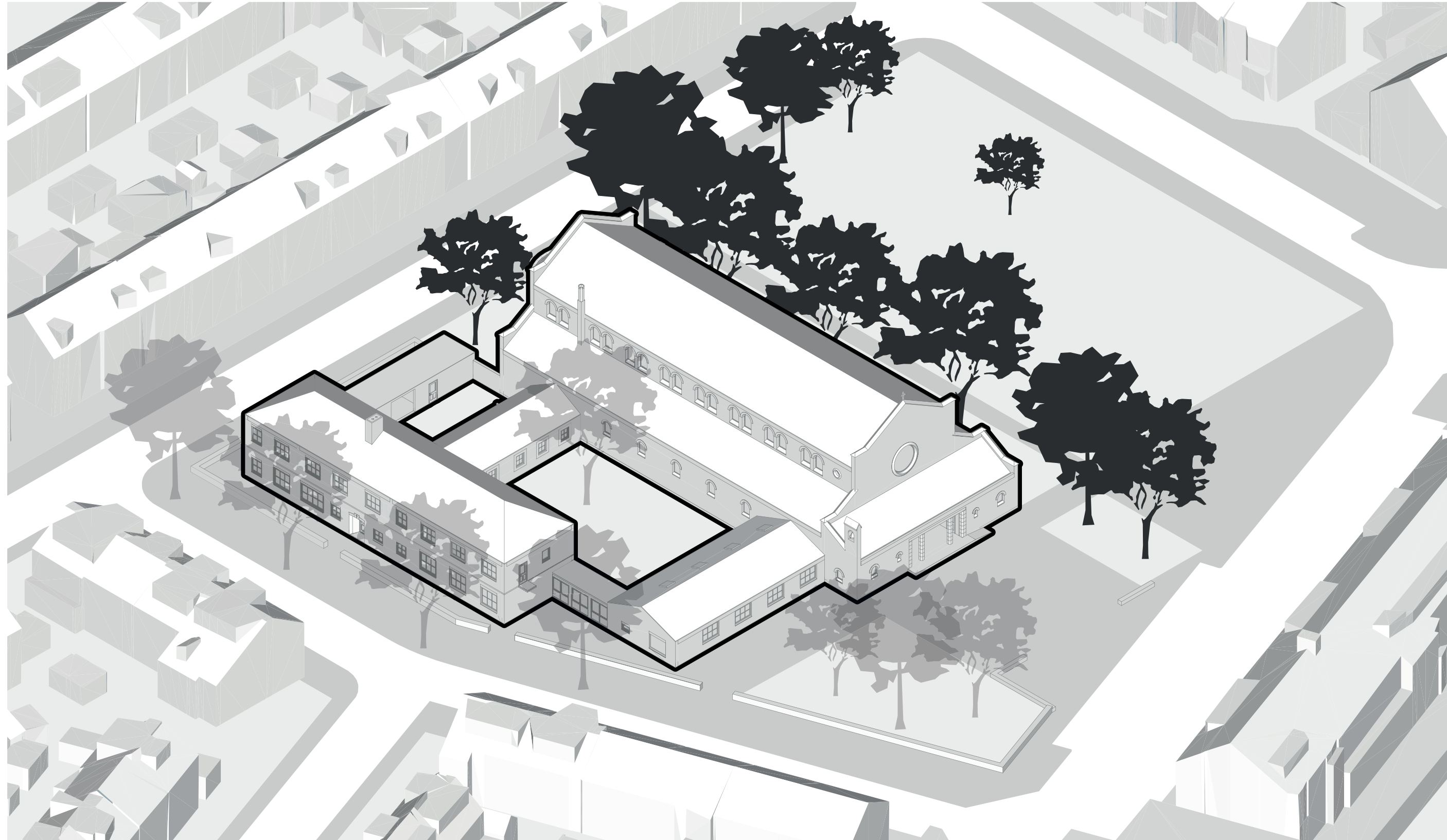
1:500 Existing Site



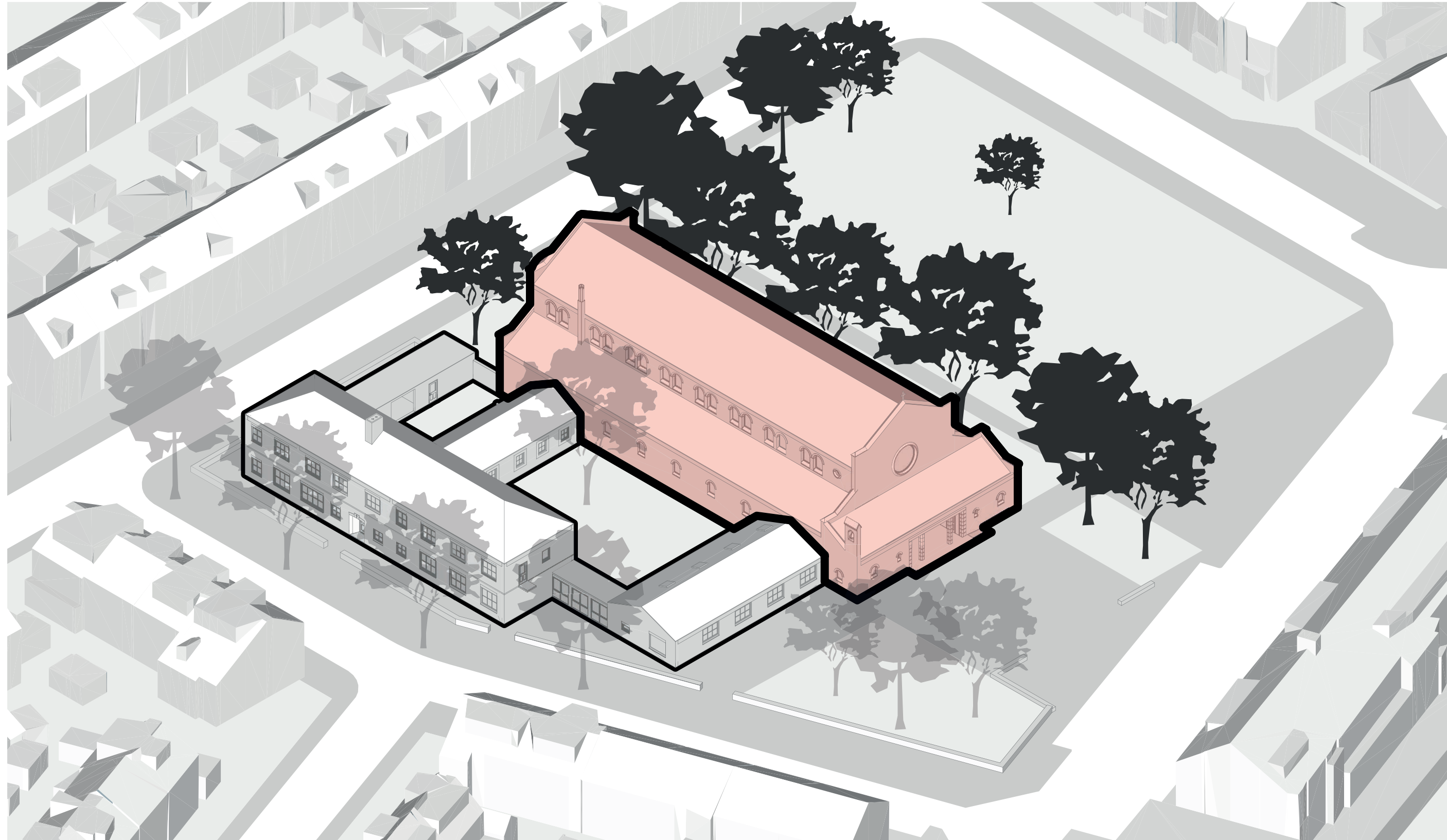


1:500 Existing Site

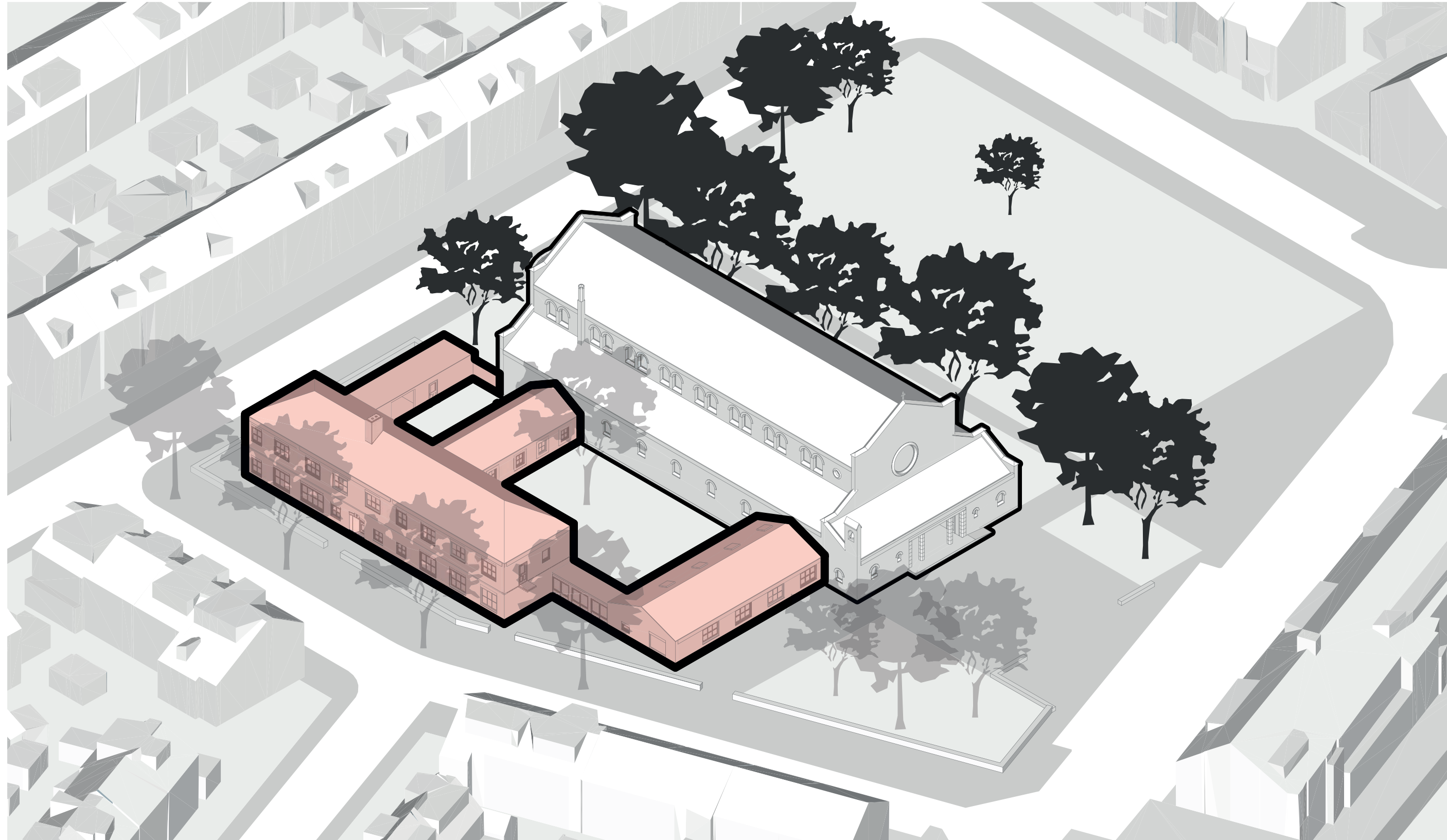




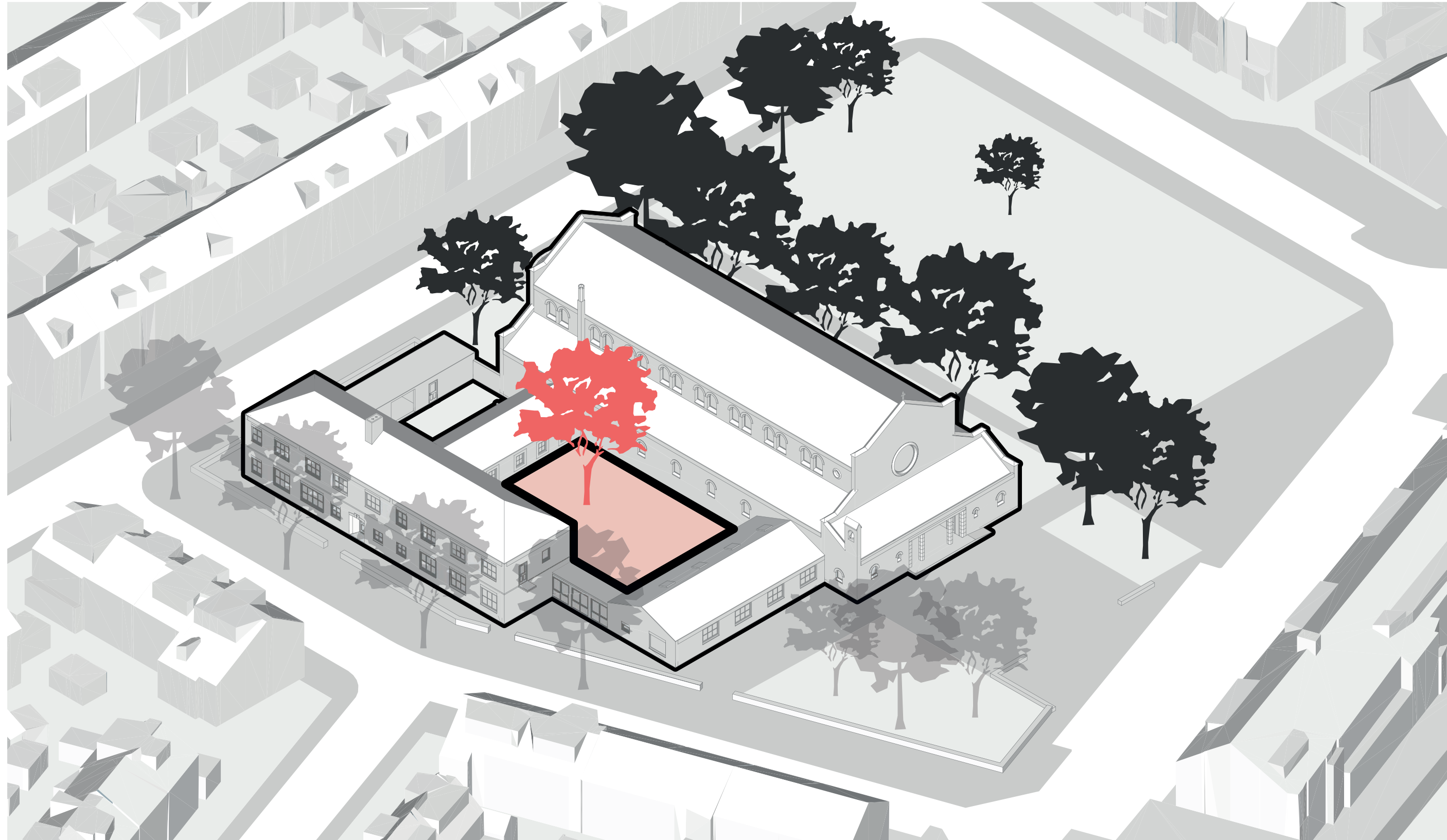
Two Identities



The Nave



The Monastery



The Courtyard

Monolithic

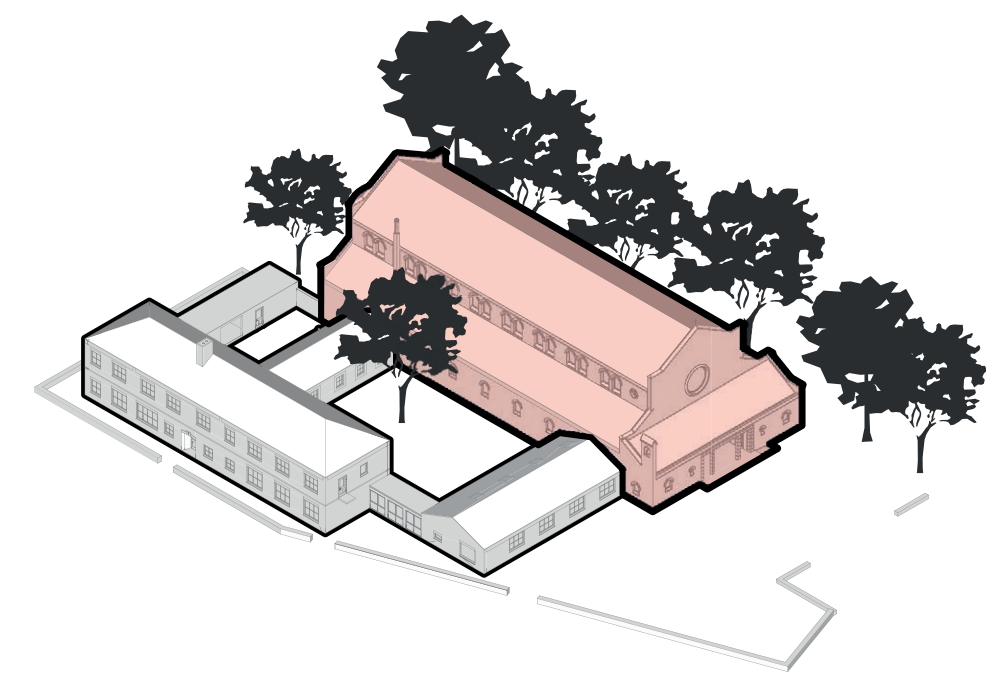
Hierarchical

Formal

Cloistered



The Nave



Monolithic

Hierarchical

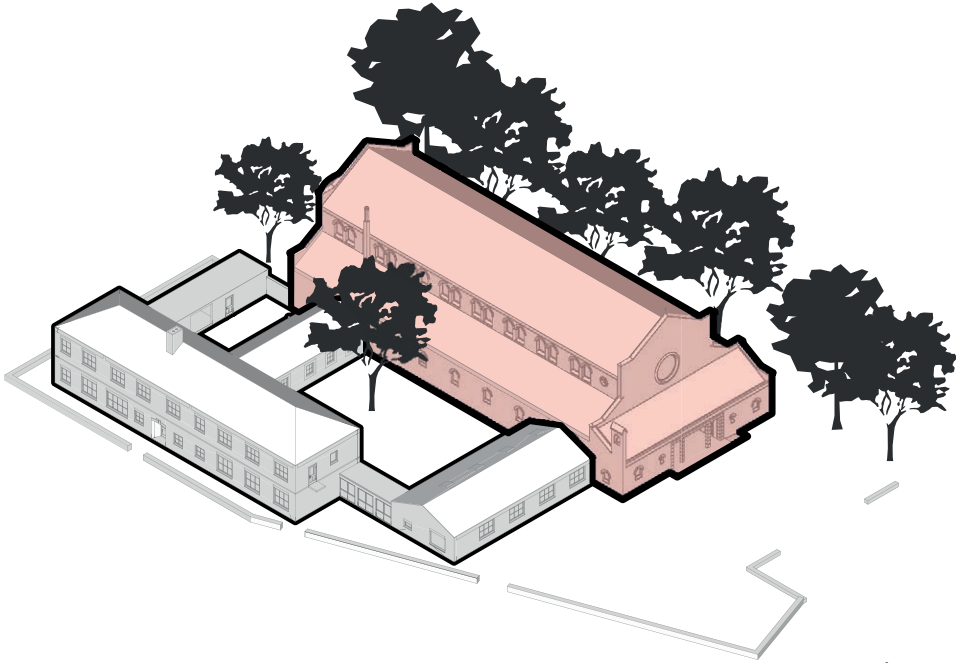
Formal

Cloistered

Imposing



The Nave



Polyarchical

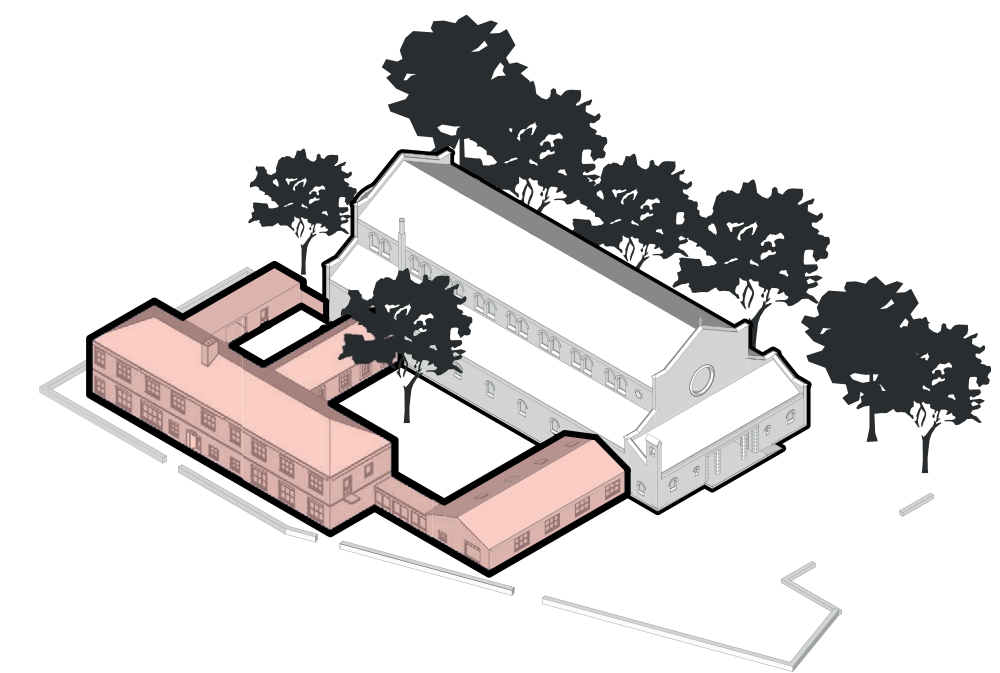
Domestic

Informal

Cloistered



The Monastery



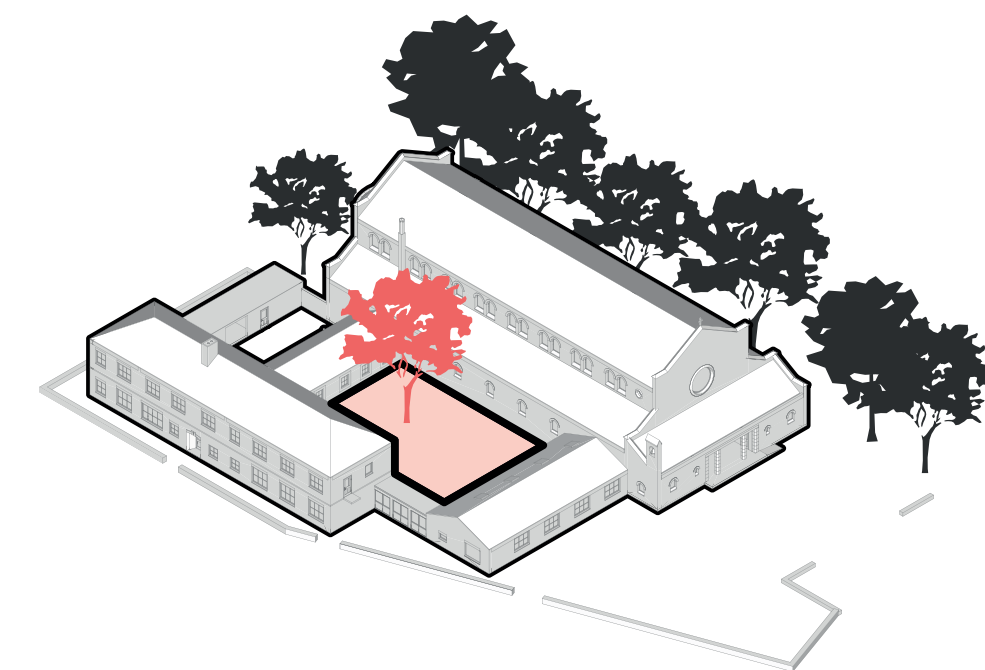
Charming Green Oase

Unreachable

Unused

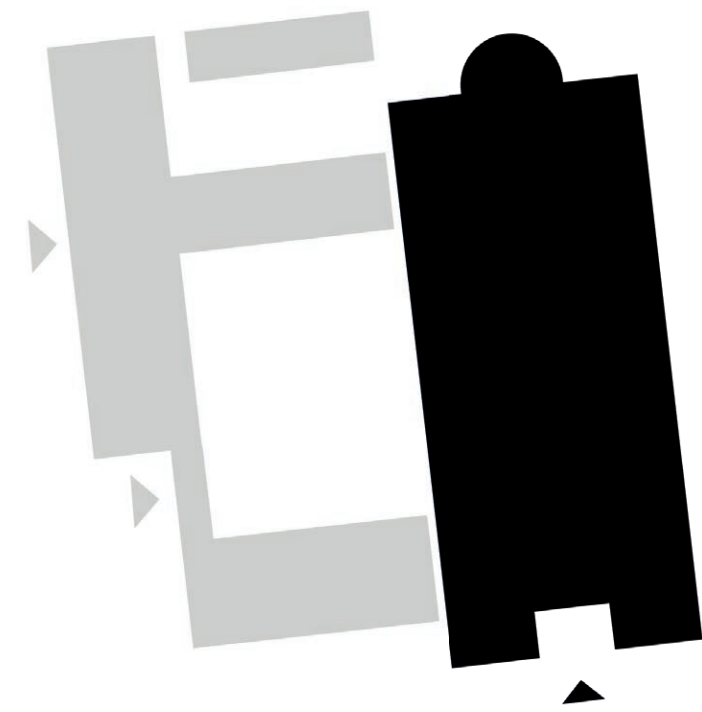


The Courtyard

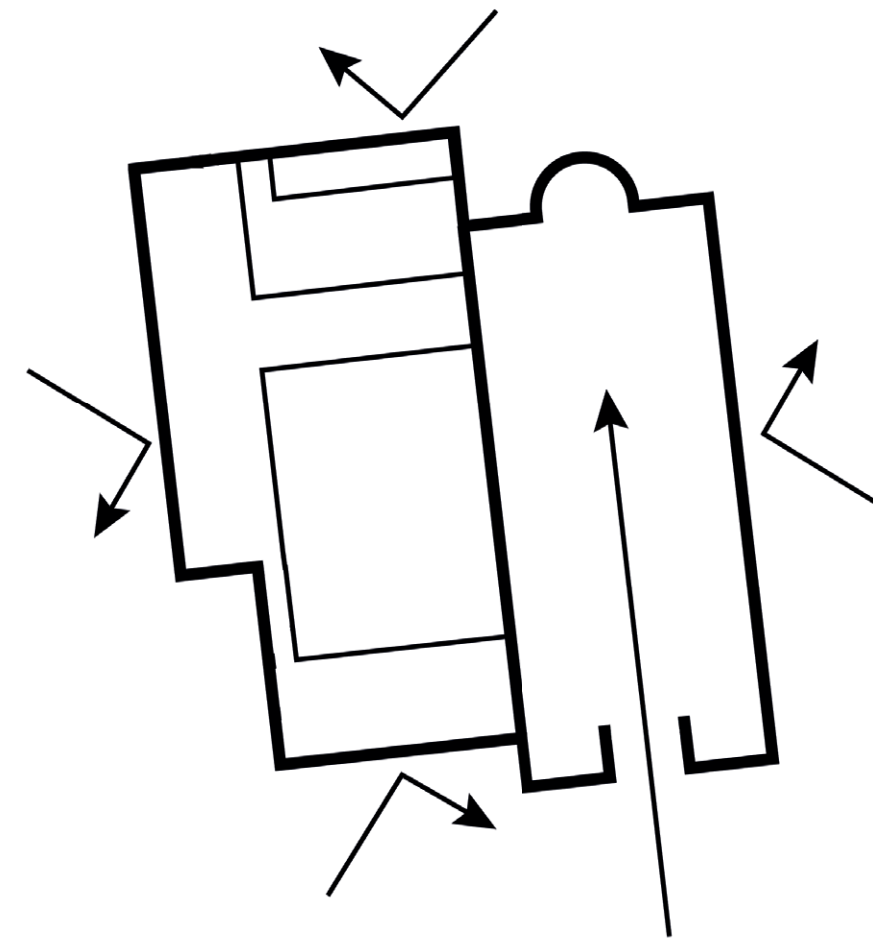


Characteristics

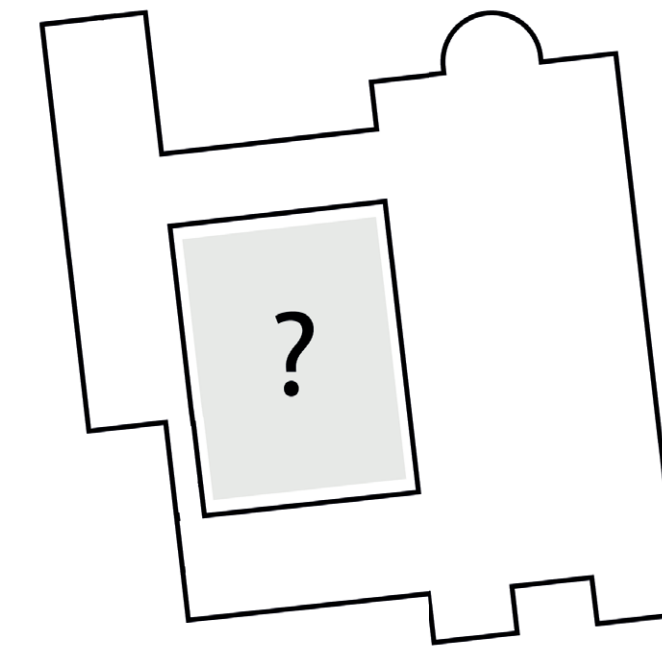
Existing church



Two Identities



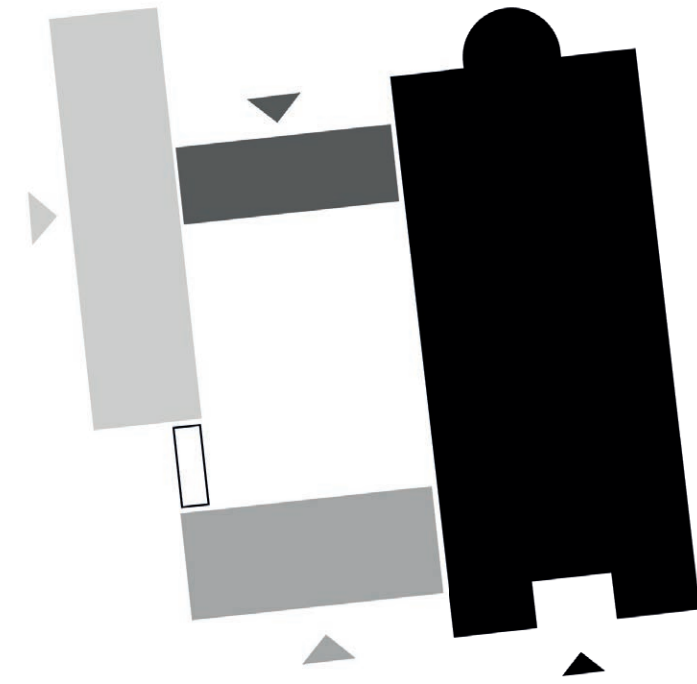
Cloistered



Unused Courtyard

Opportunities

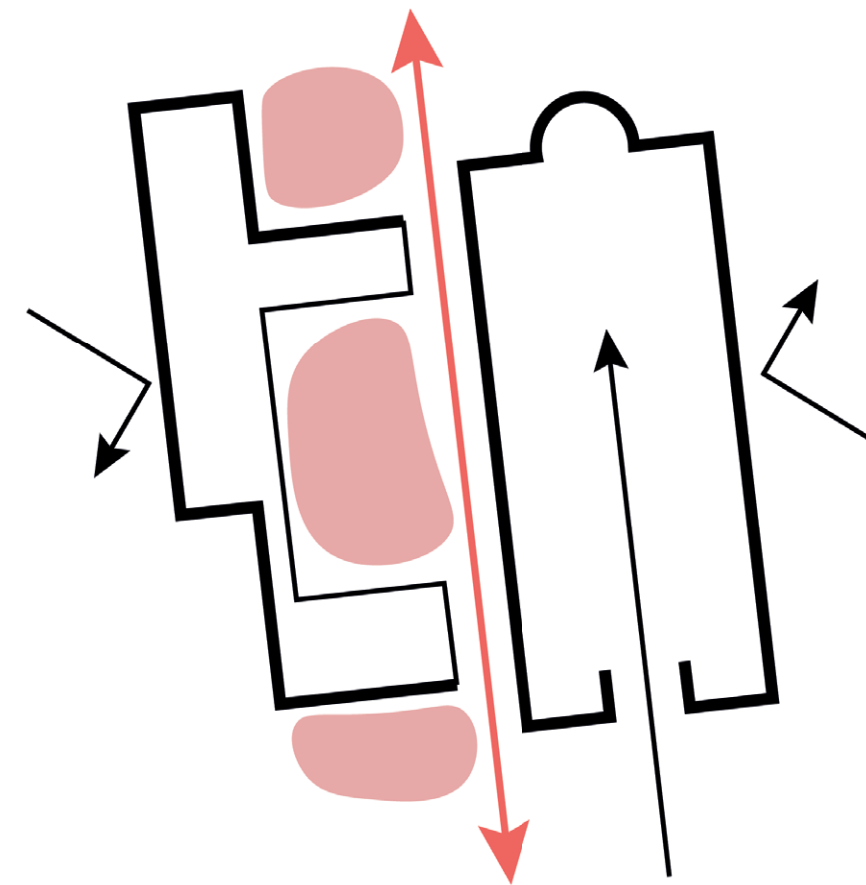
Community Centre



Polylithical



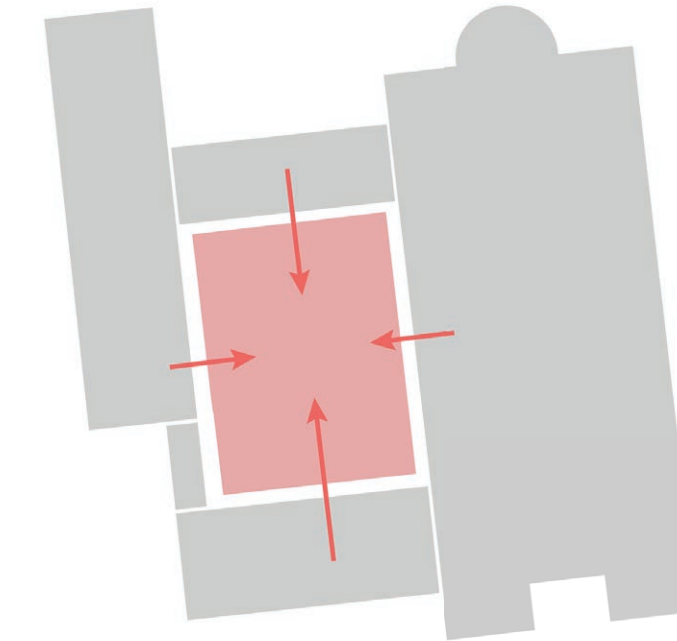
facilitates multiple functions



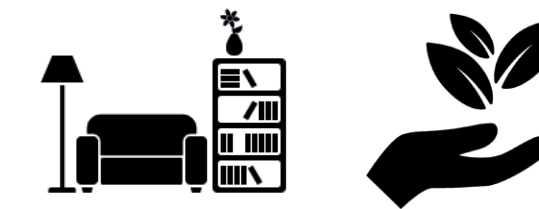
Cut Cloister



increases accessibility & splits formal / informal



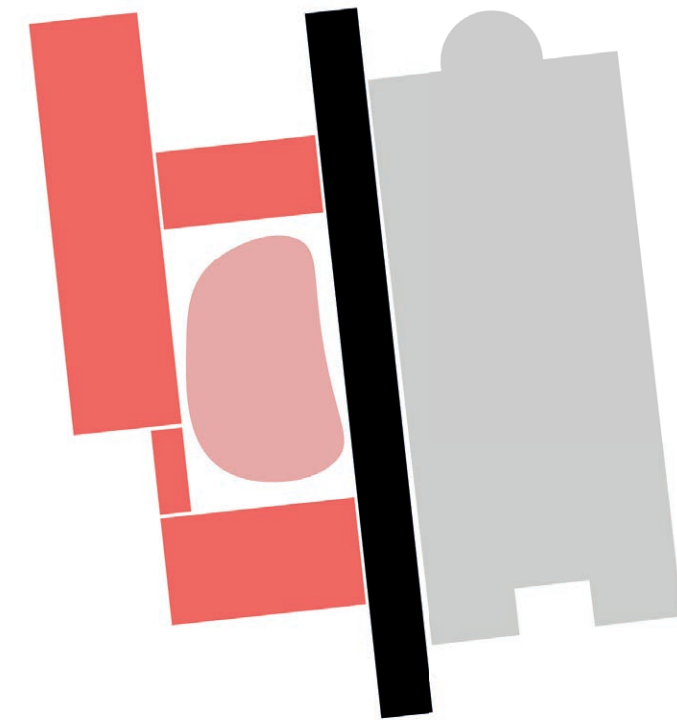
Social Green Garden



facilitates a meeting ground for residents

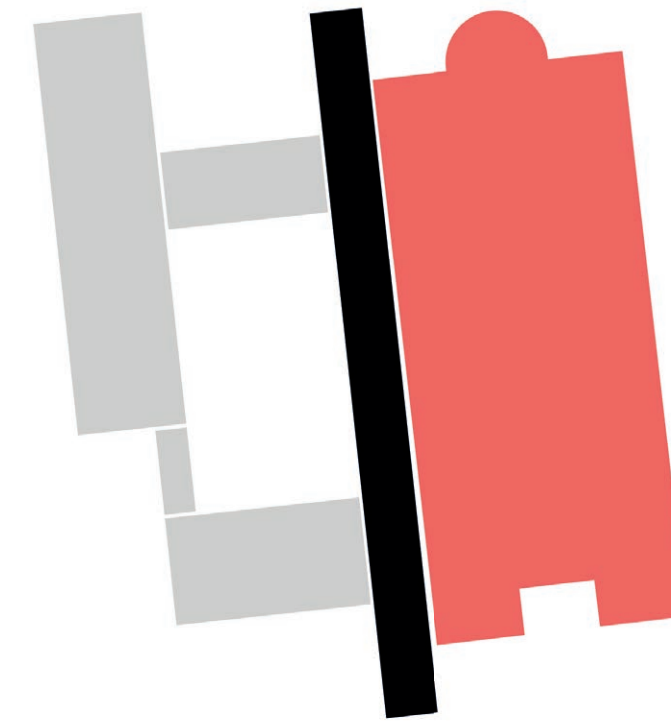
Starting Principles

Community Centre



Informal Livingroom

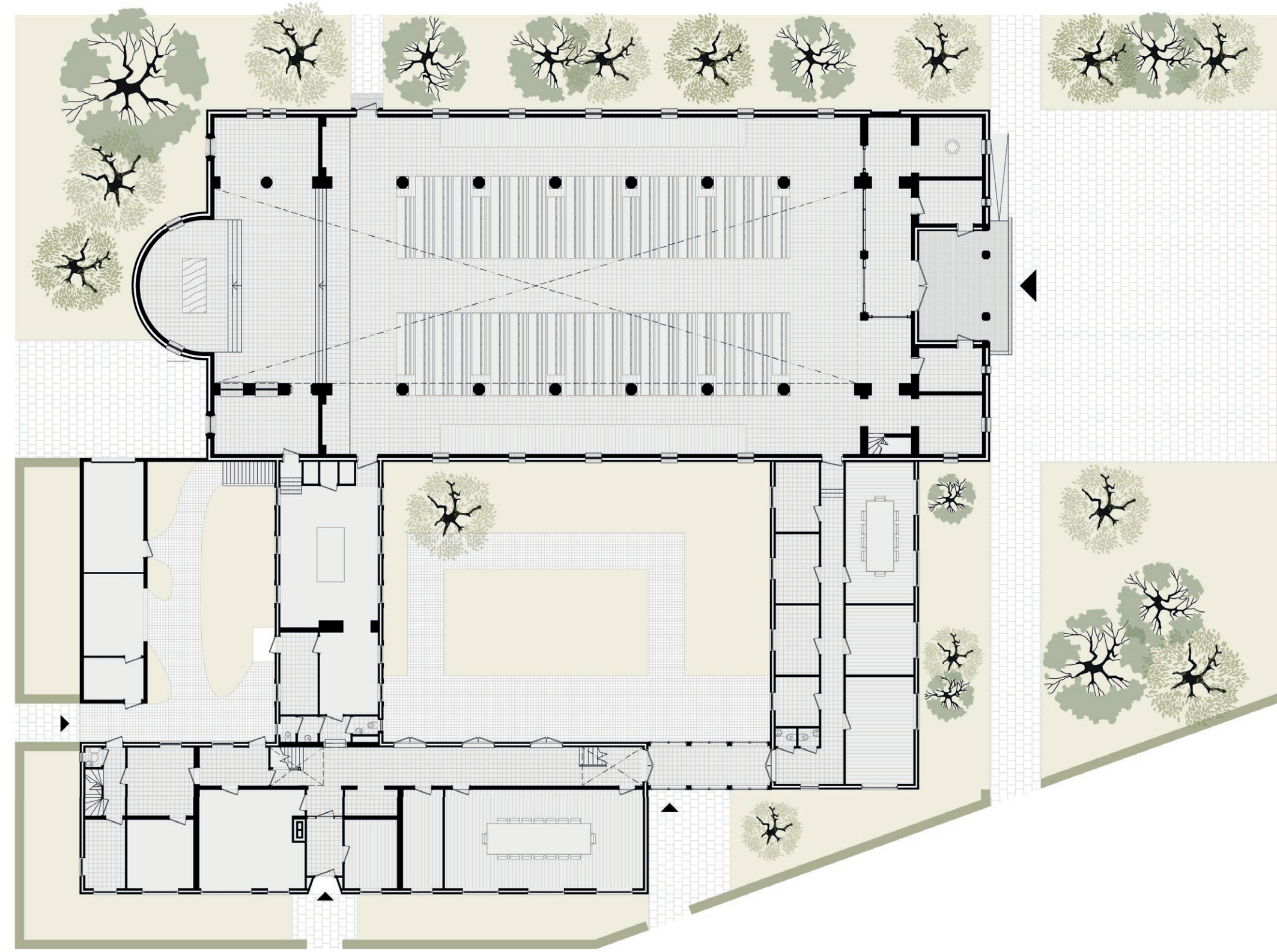
Low-threshold &
intimate



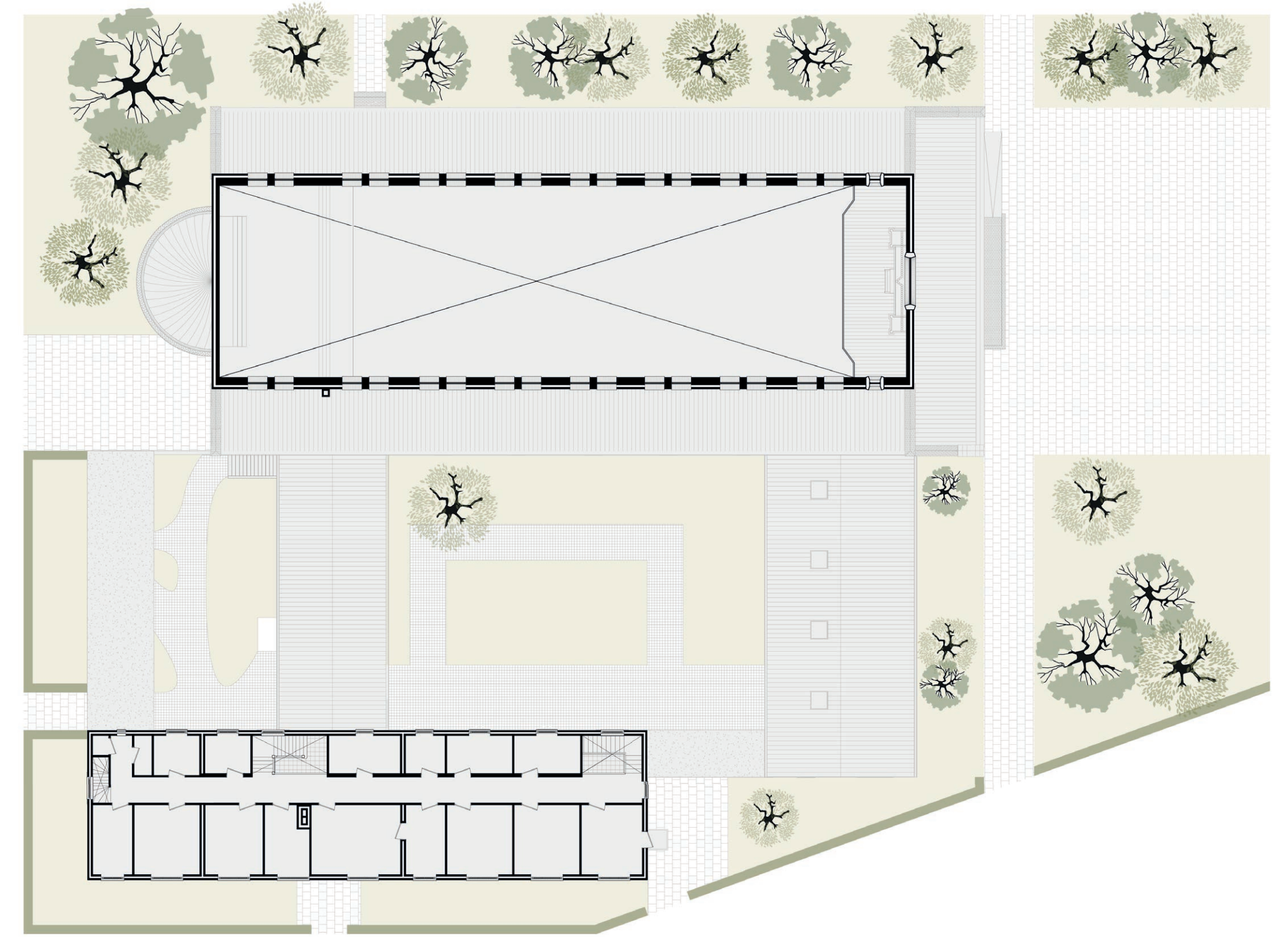
Formal Theatre

Esteemed &
intimate

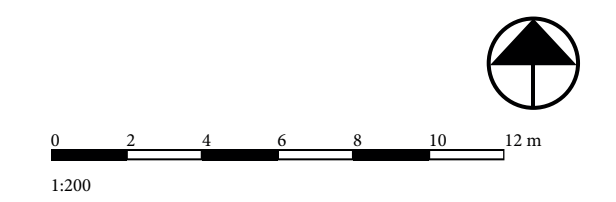
Existing Situation



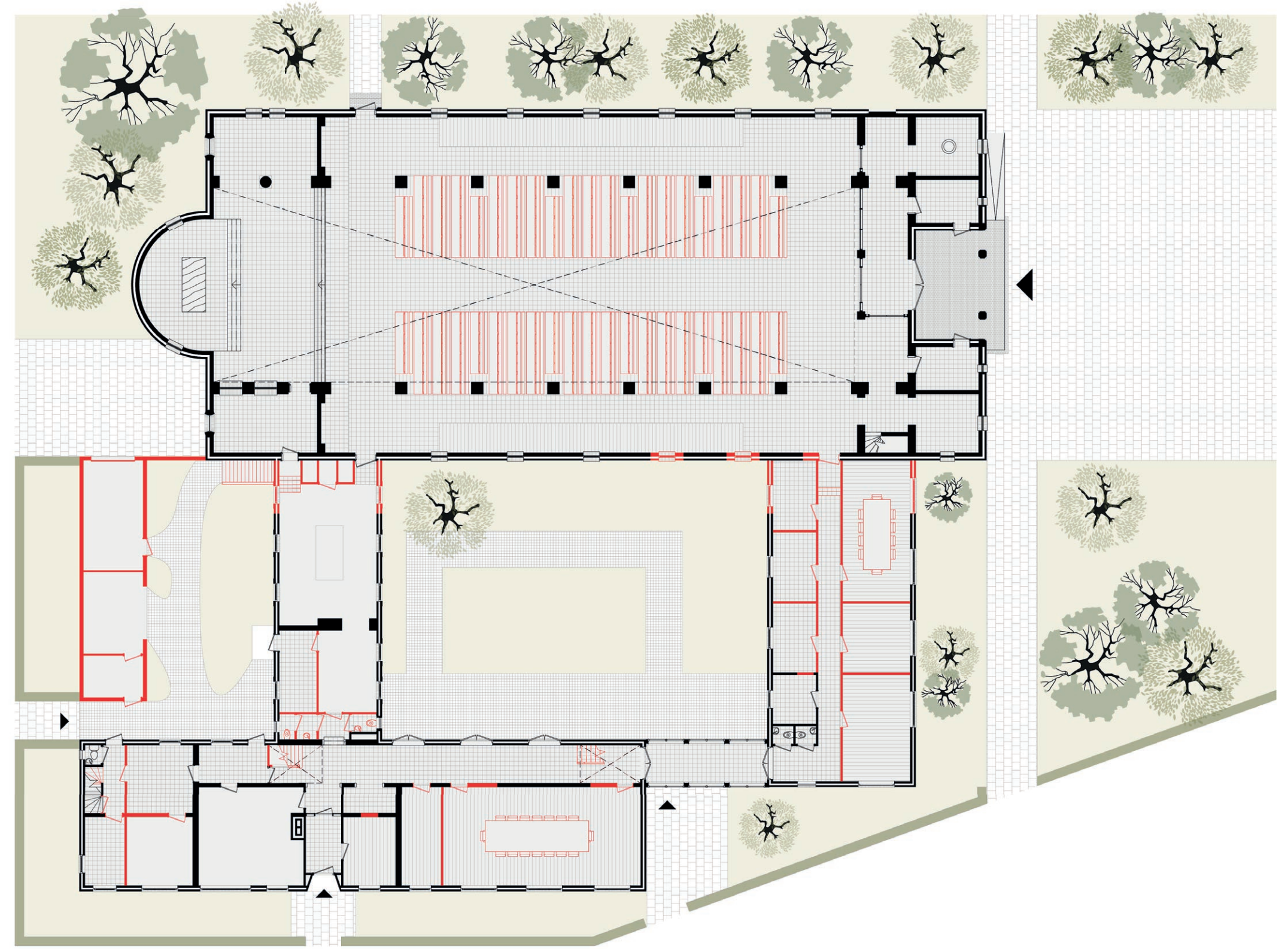
Ground Floor



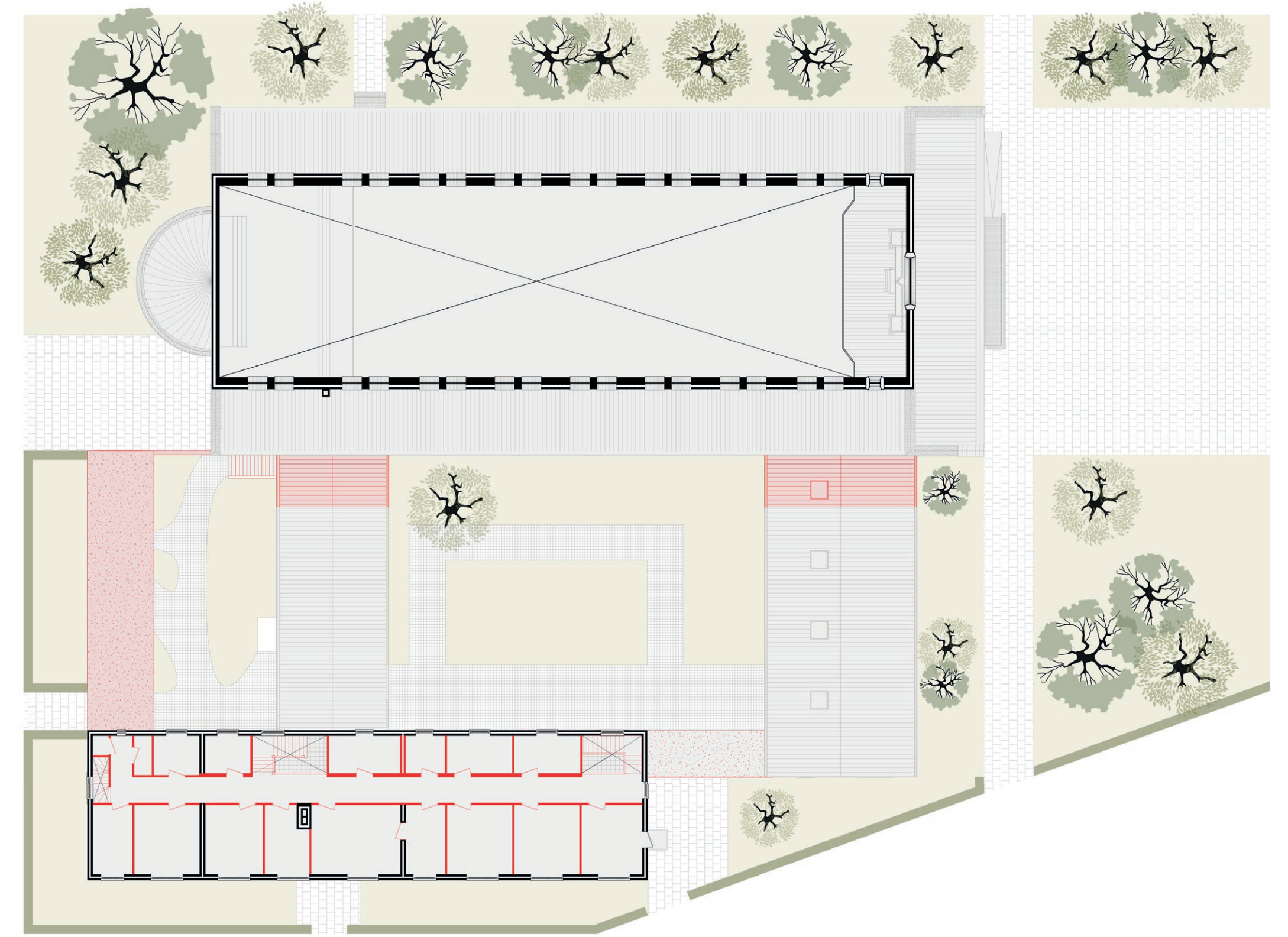
First Floor



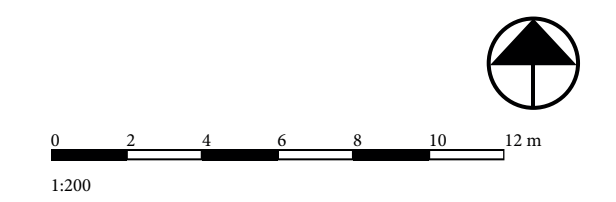
Removed



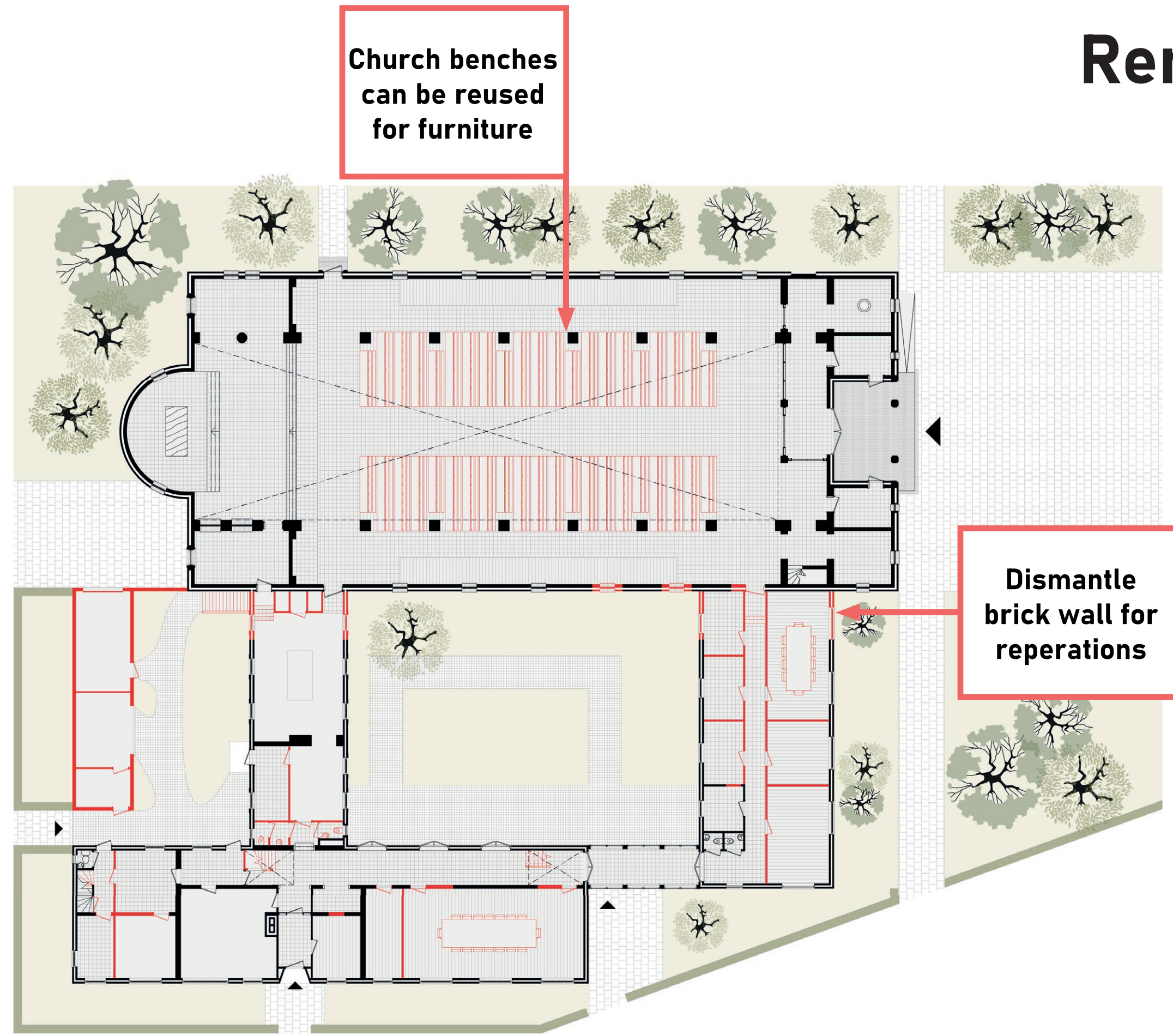
Ground Floor



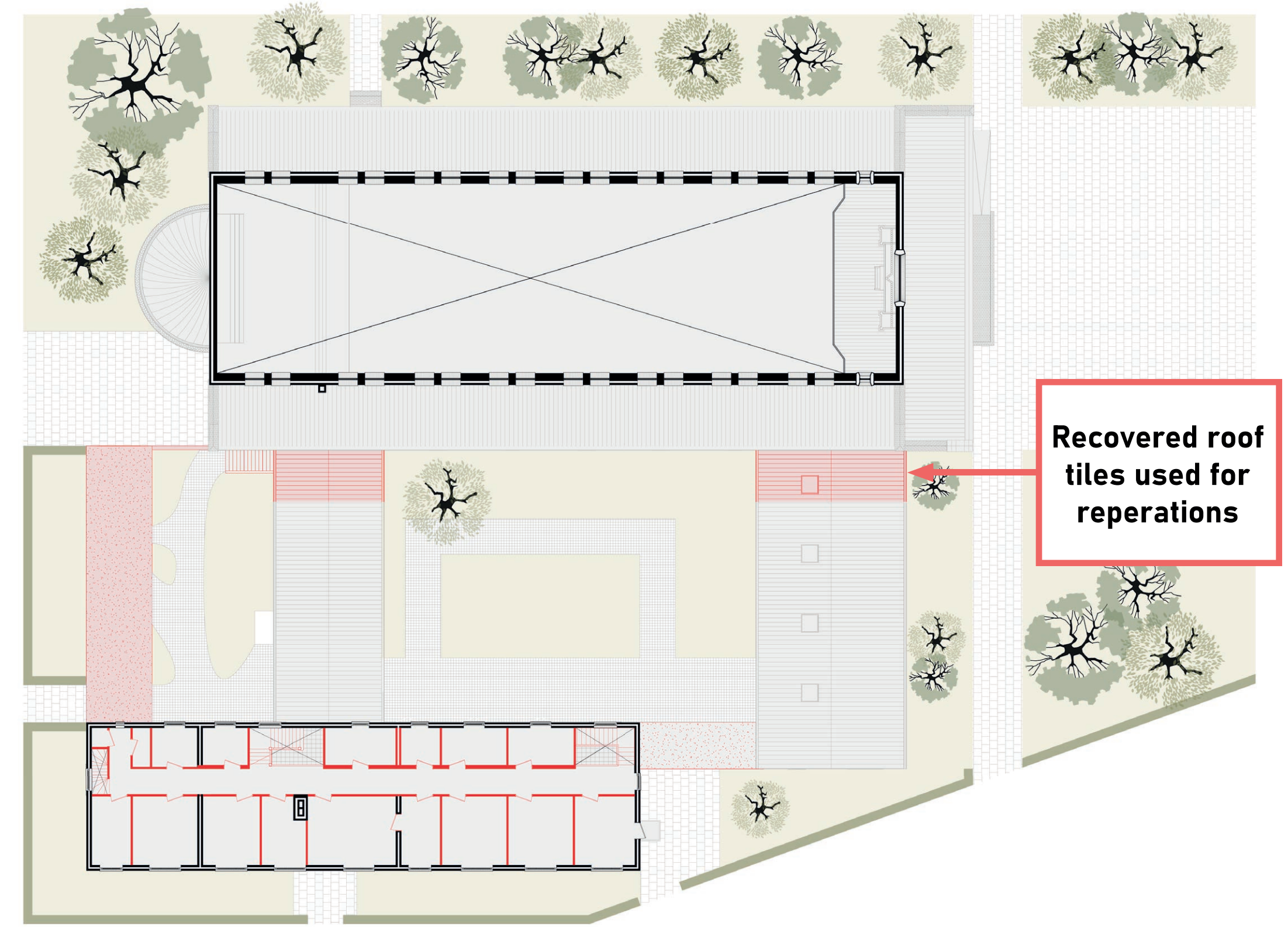
First Floor



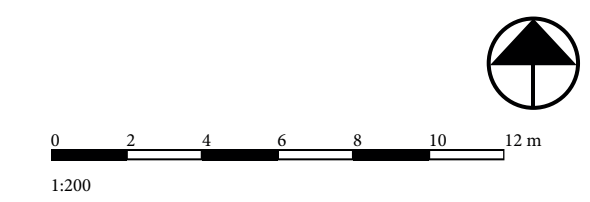
Removed



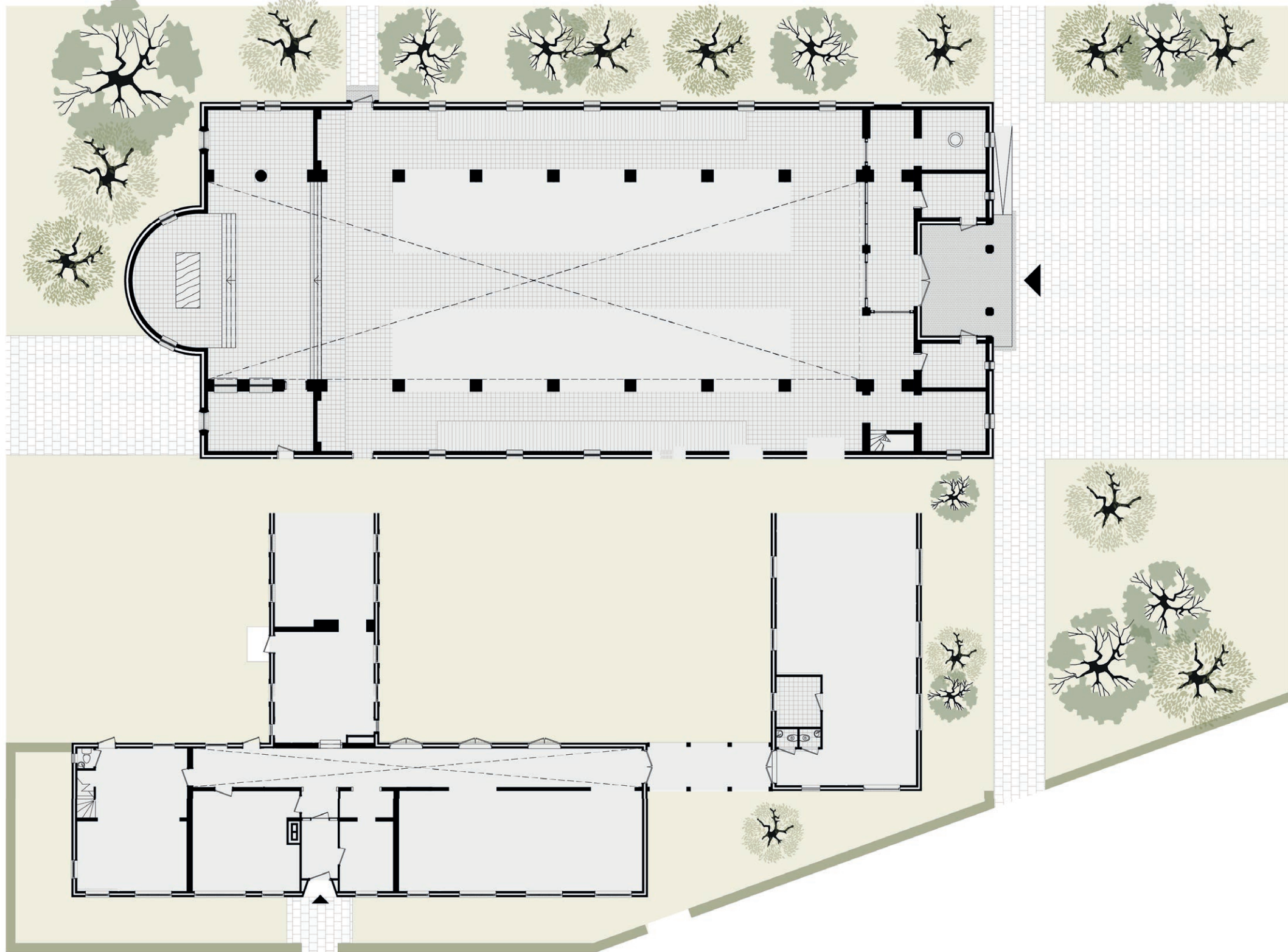
Ground Floor



First Floor



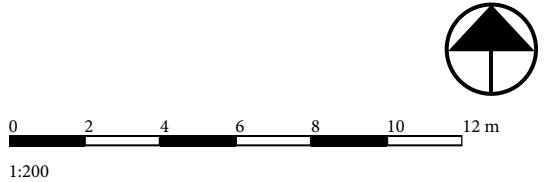
Open Flexible Spaces



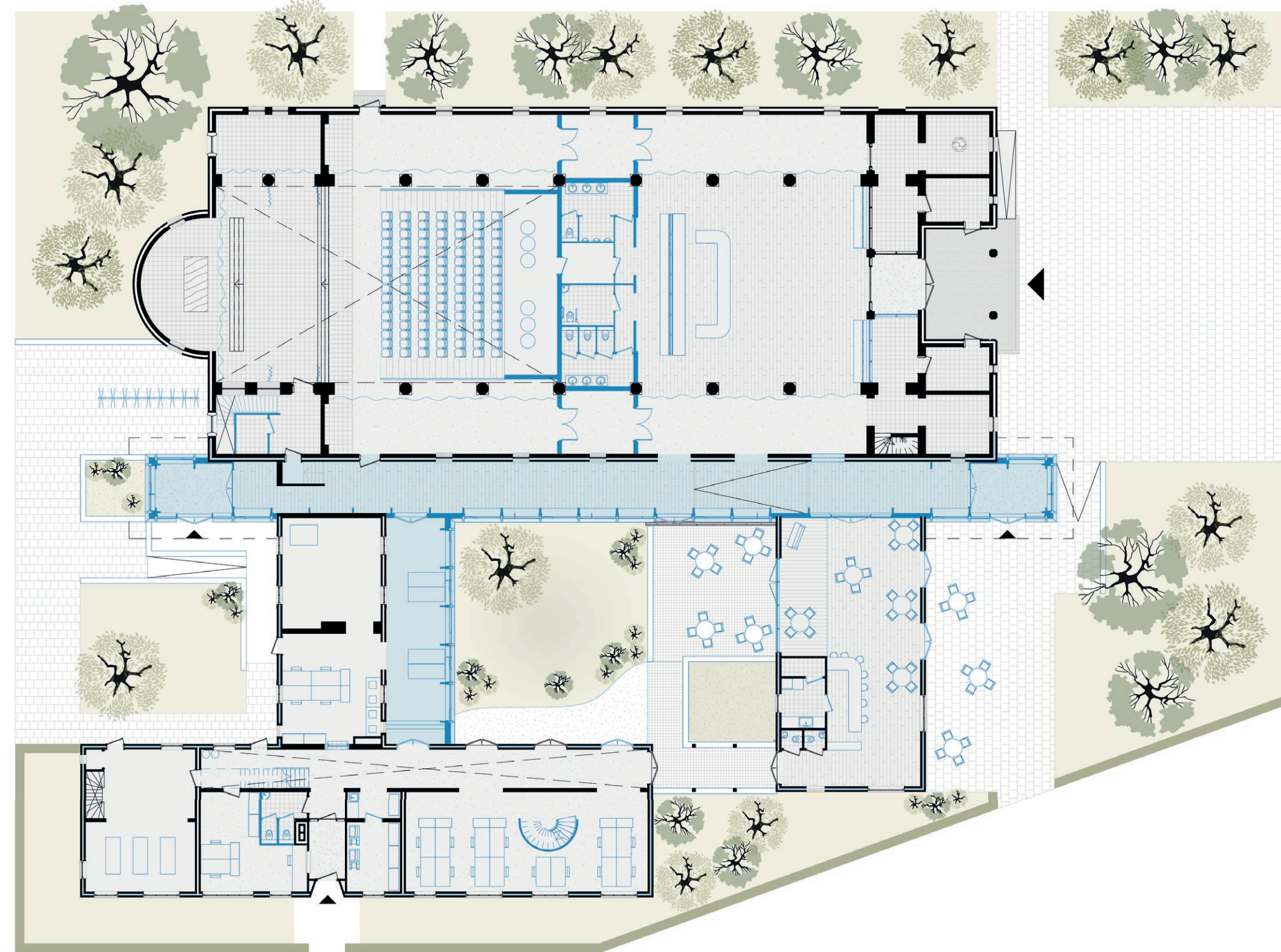
Ground Floor



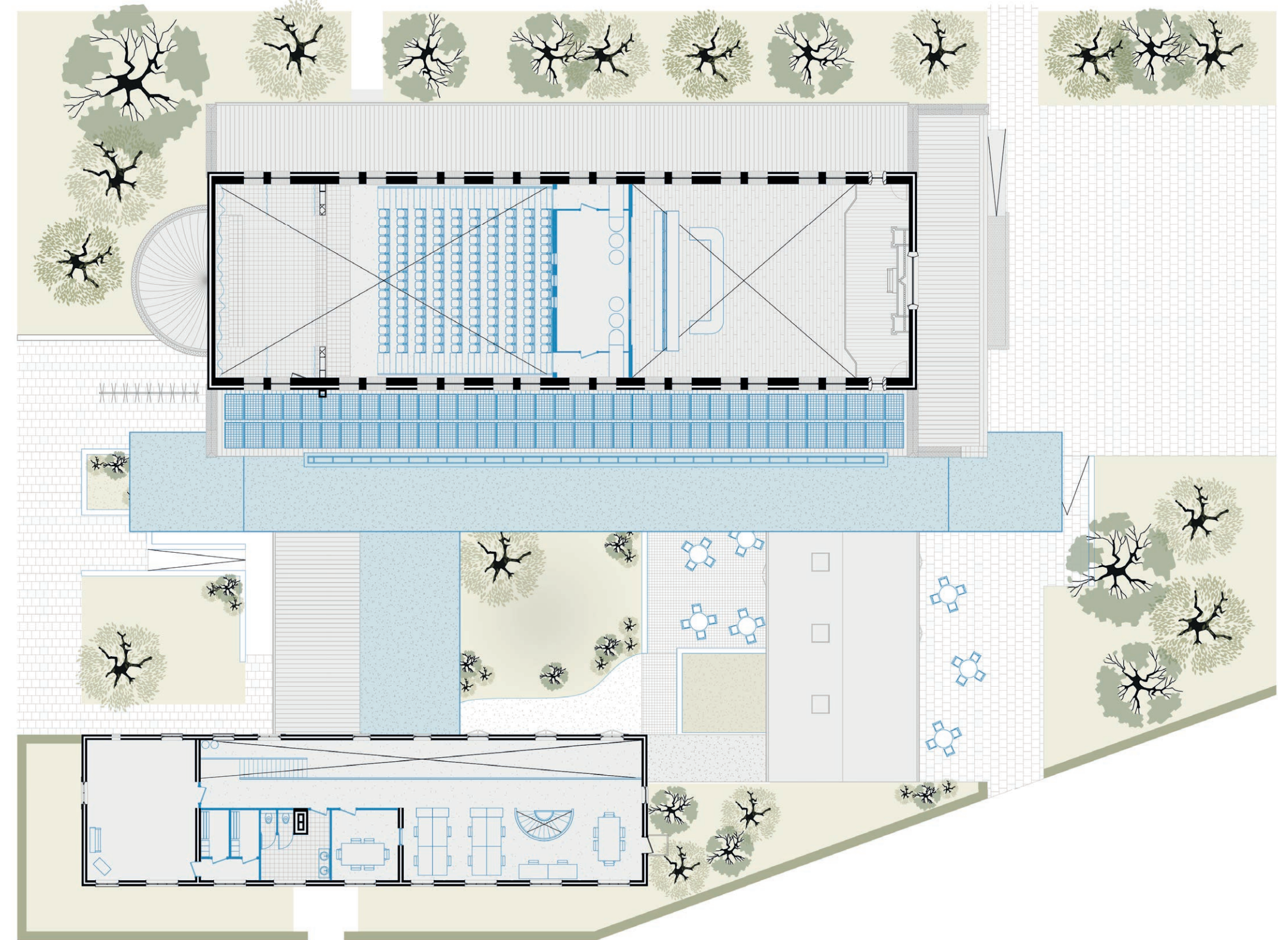
First Floor



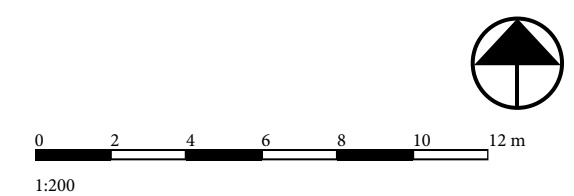
Additions



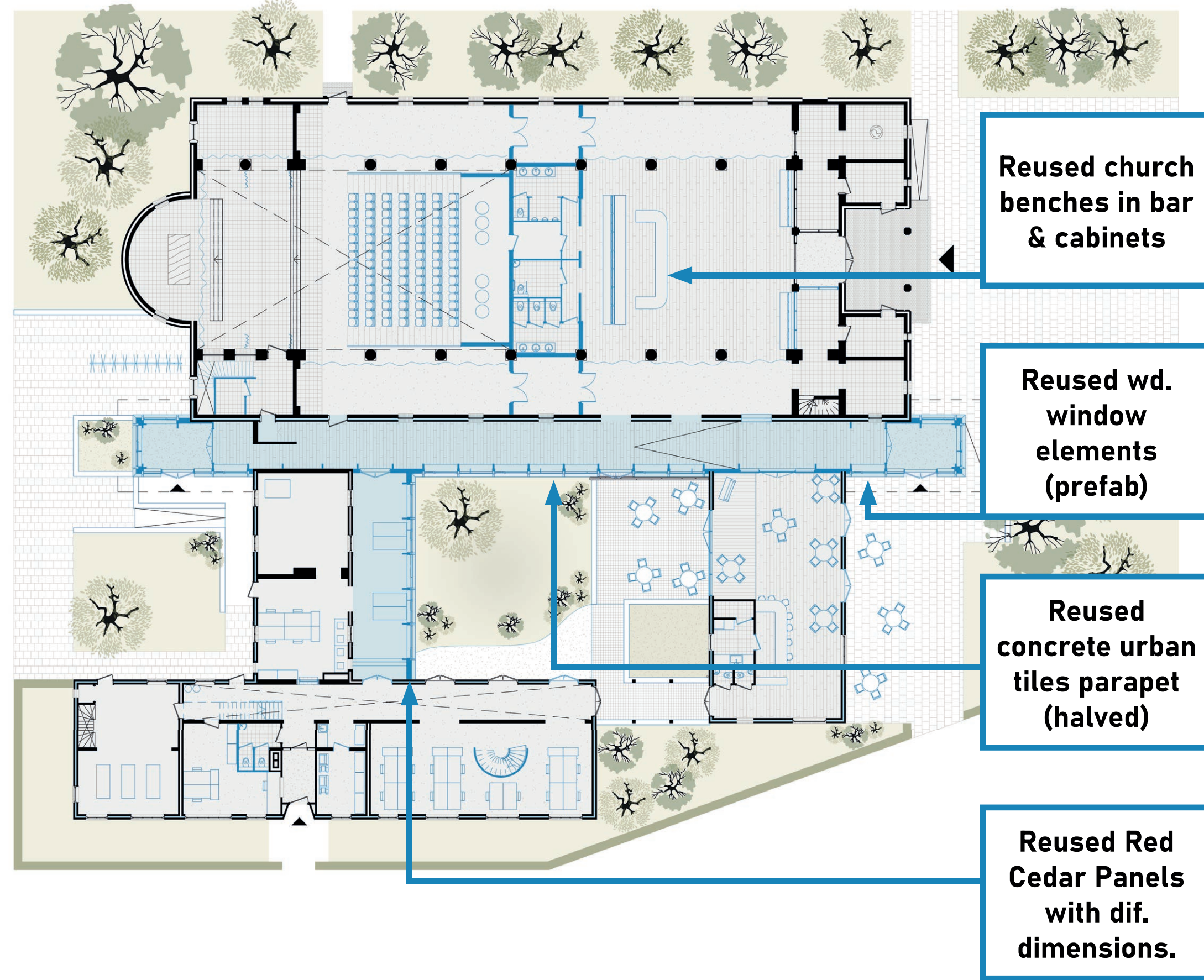
Ground Floor



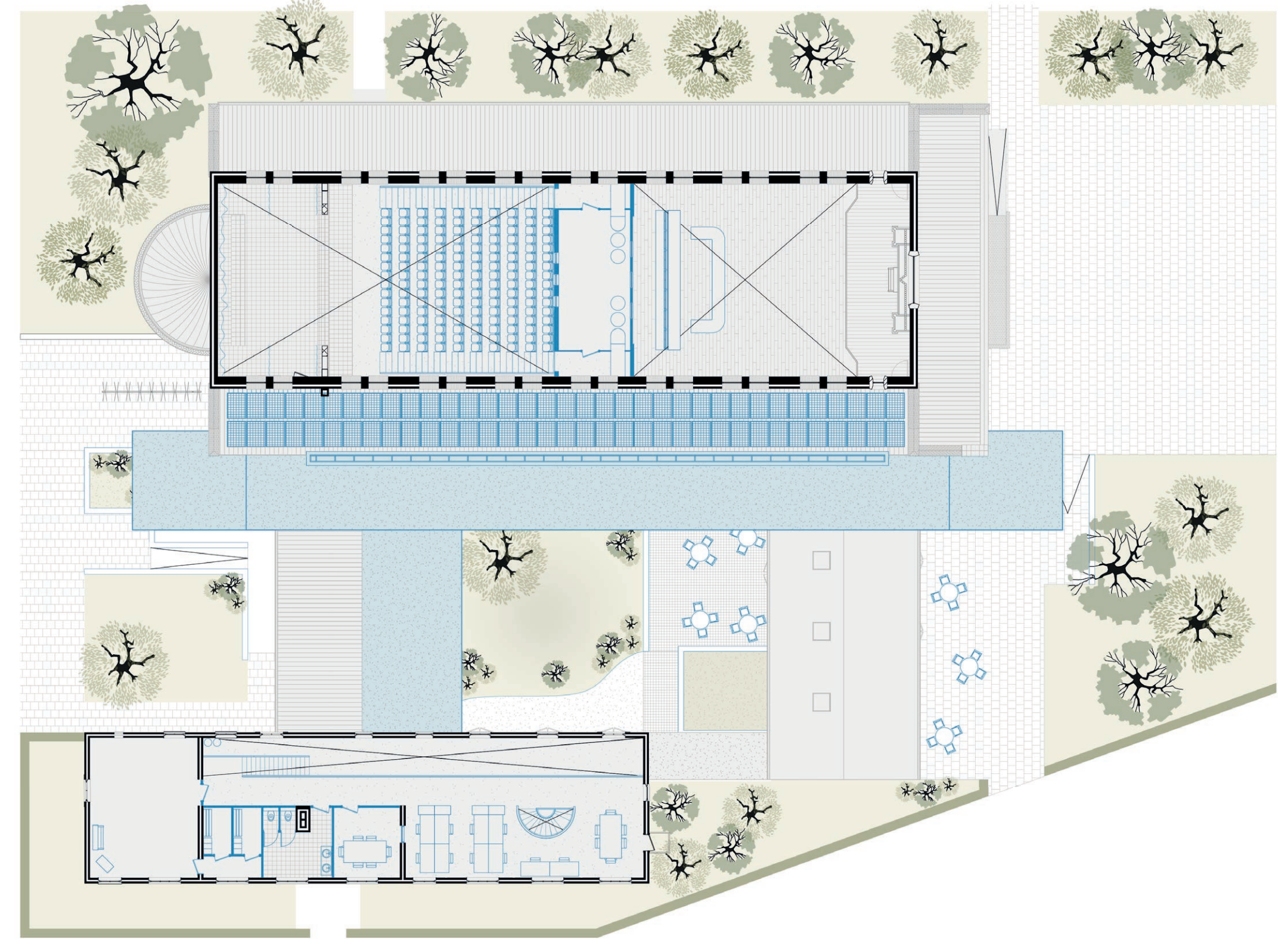
First Floor



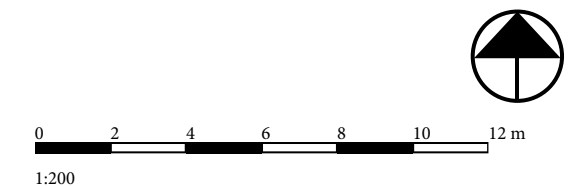
Additions



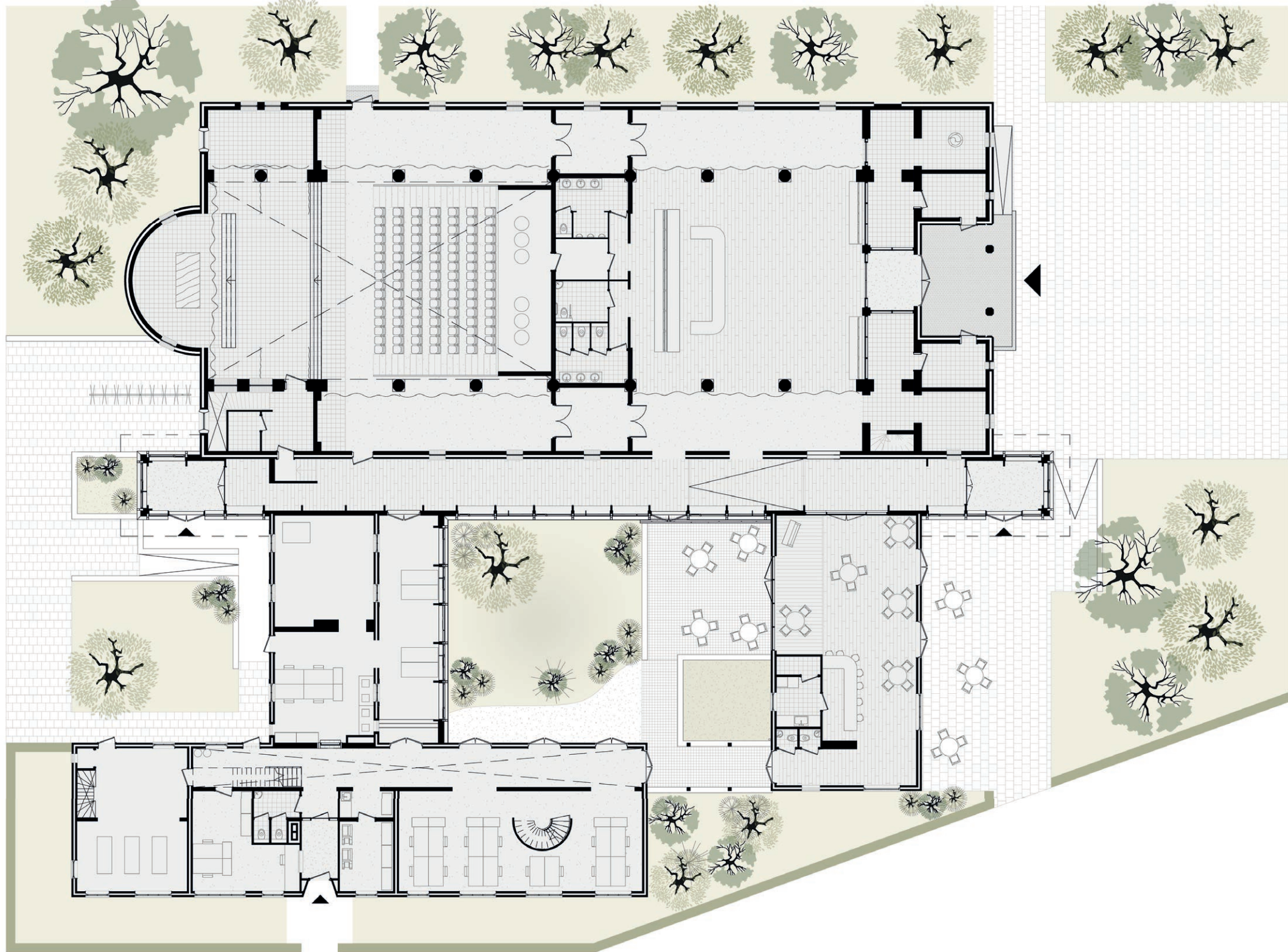
Ground Floor



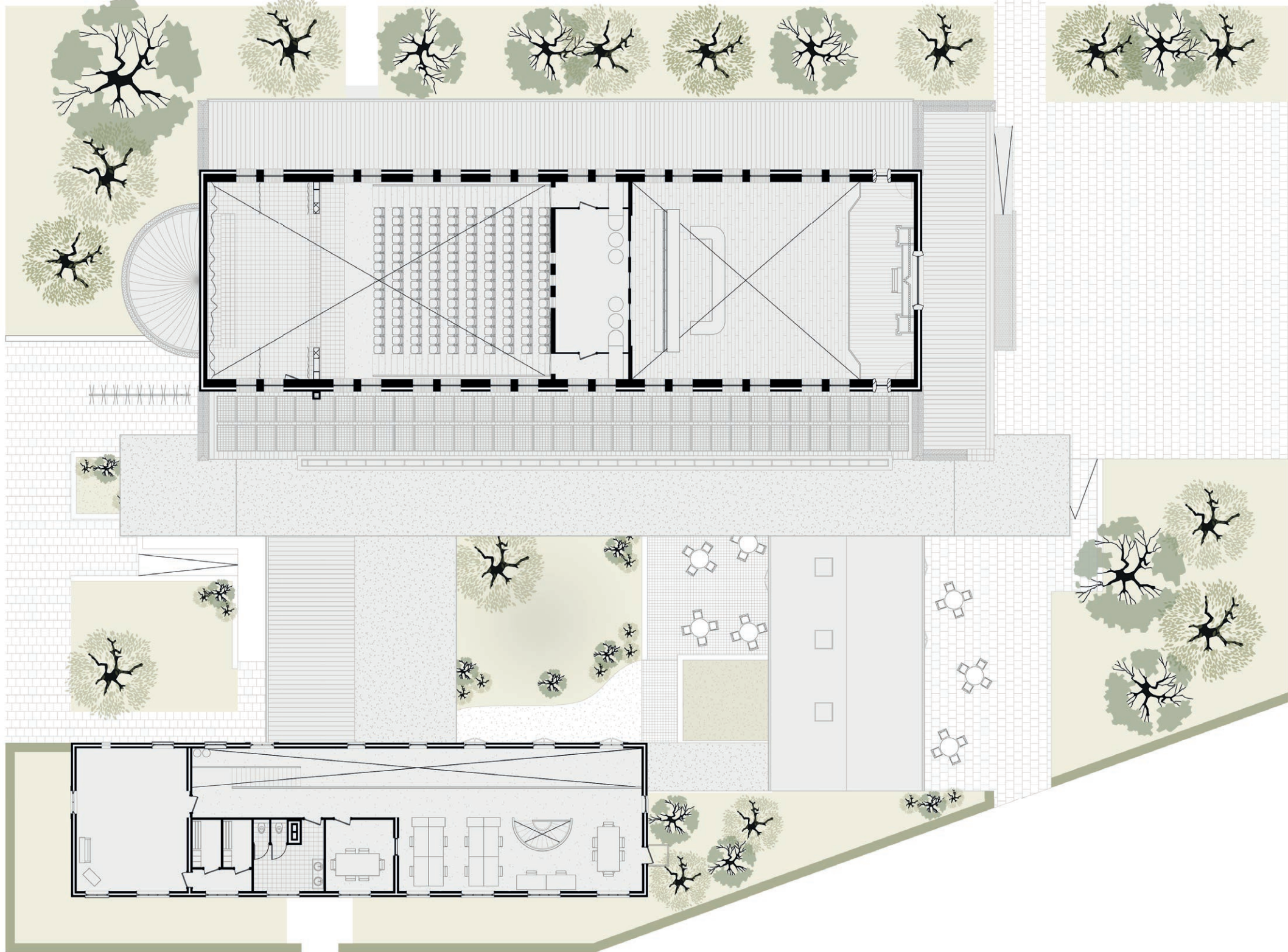
First Floor



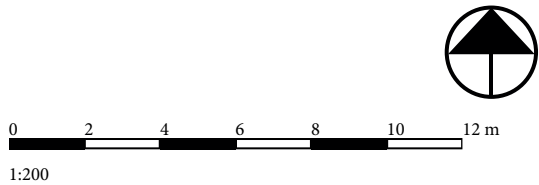
New Situation

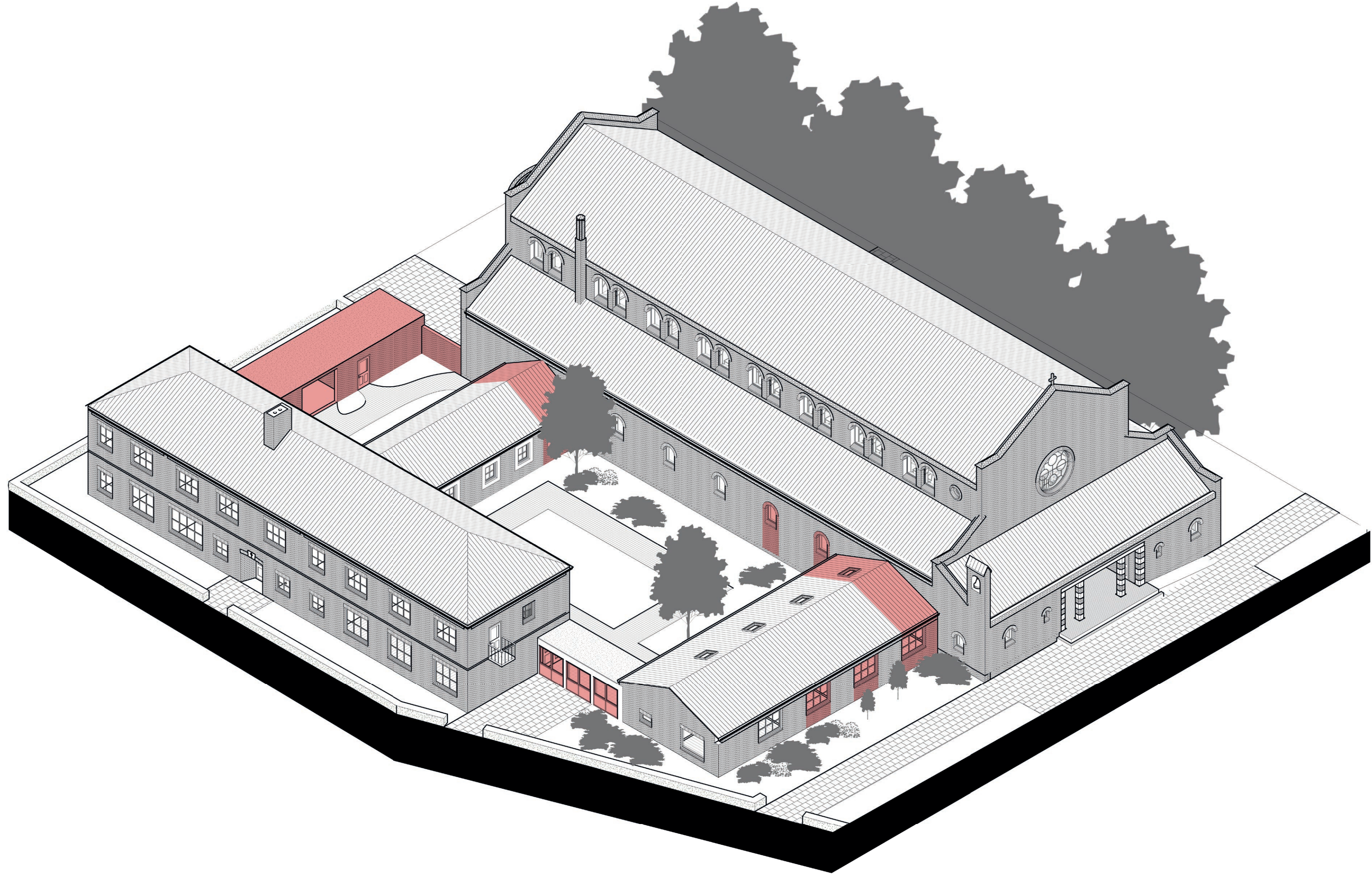


Ground Floor

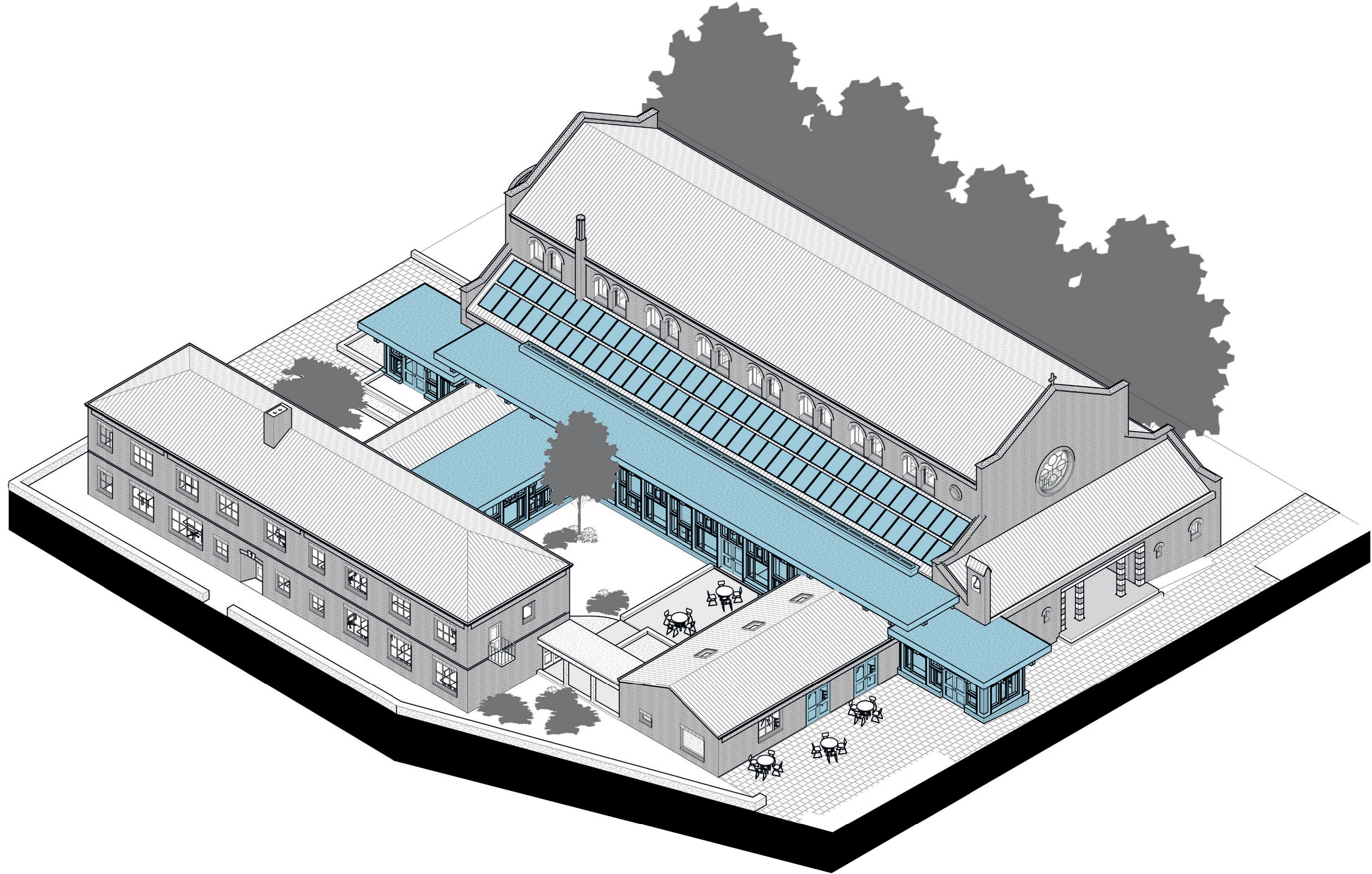


First Floor

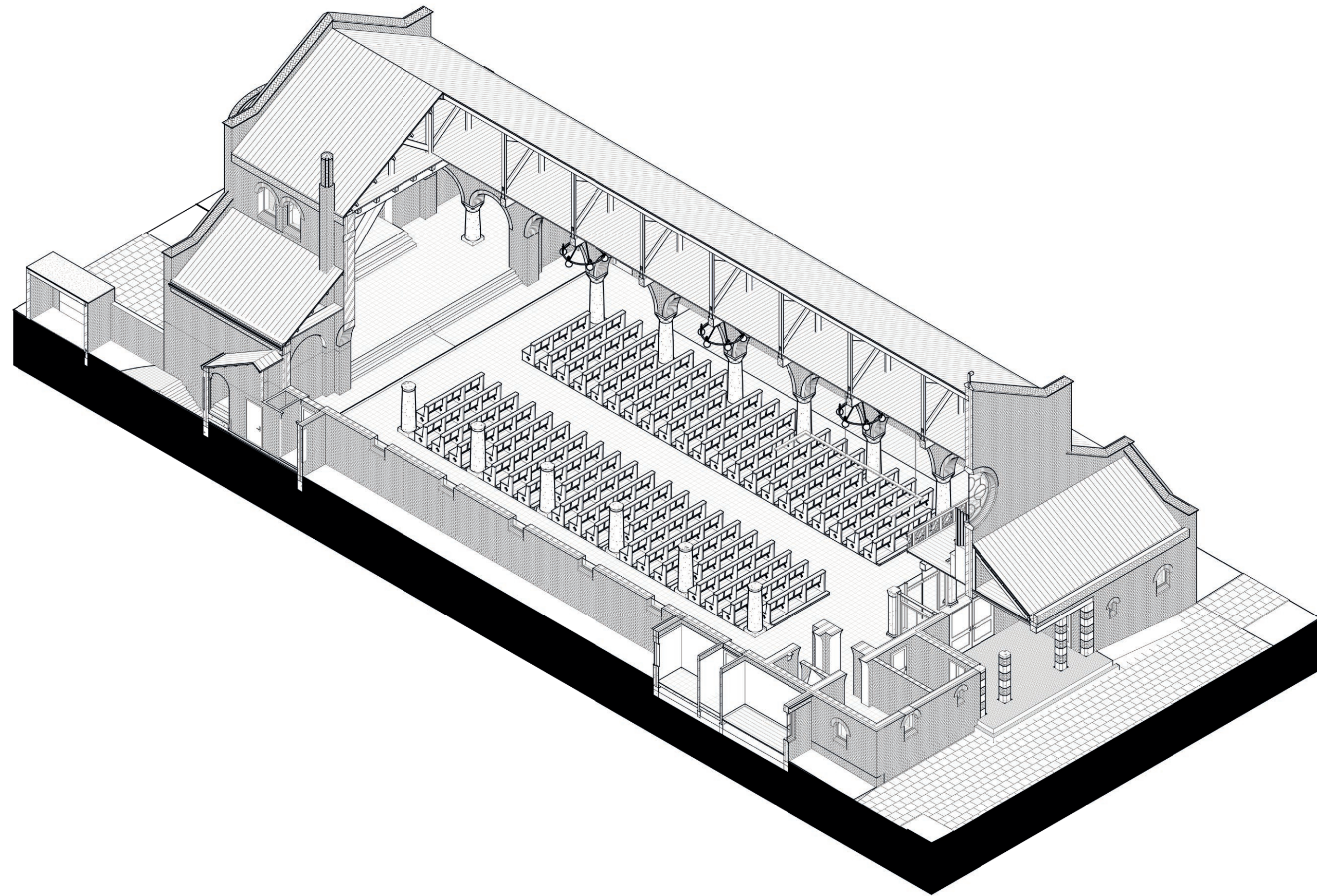




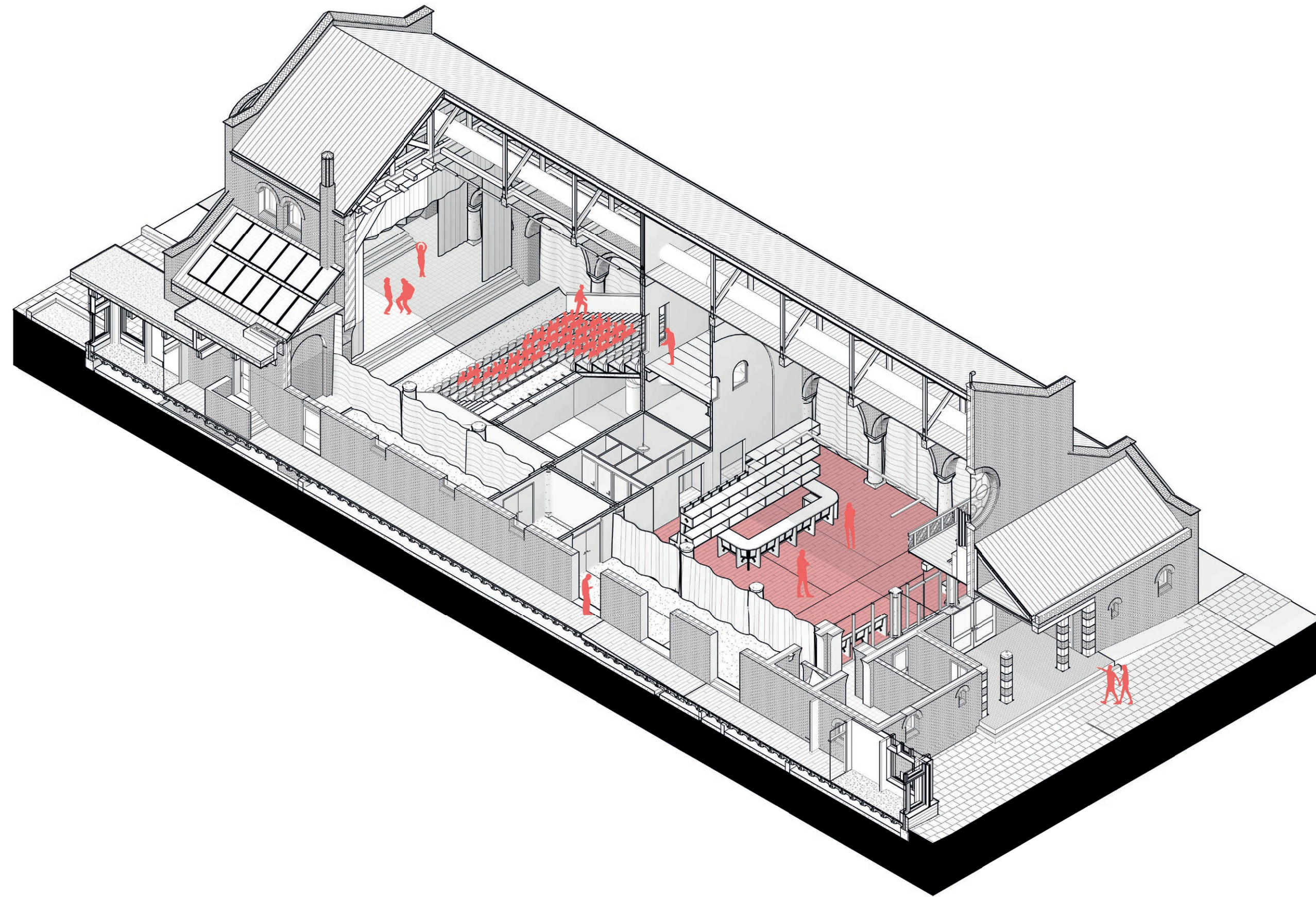
Axo Existing
Before



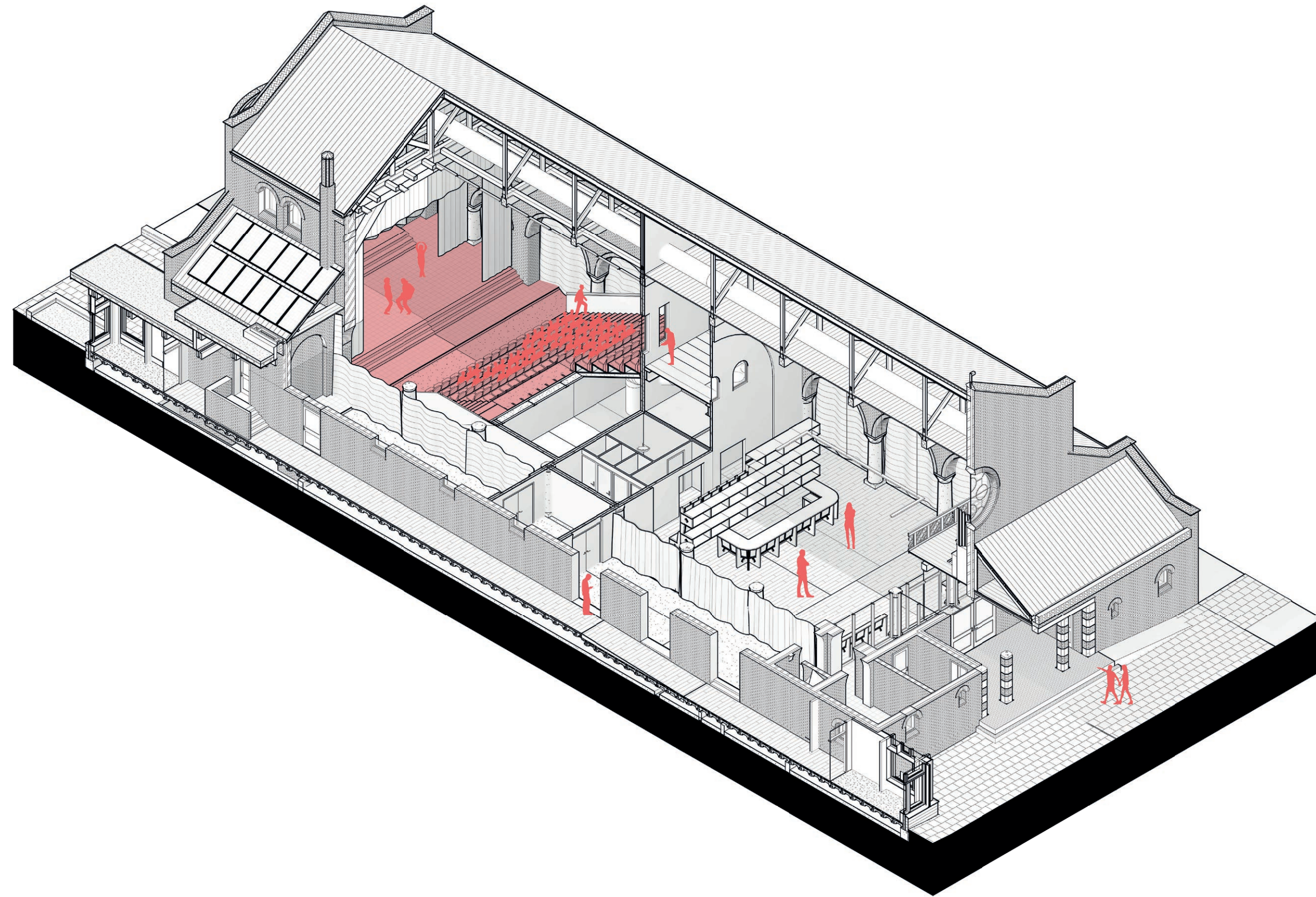
Axo New After



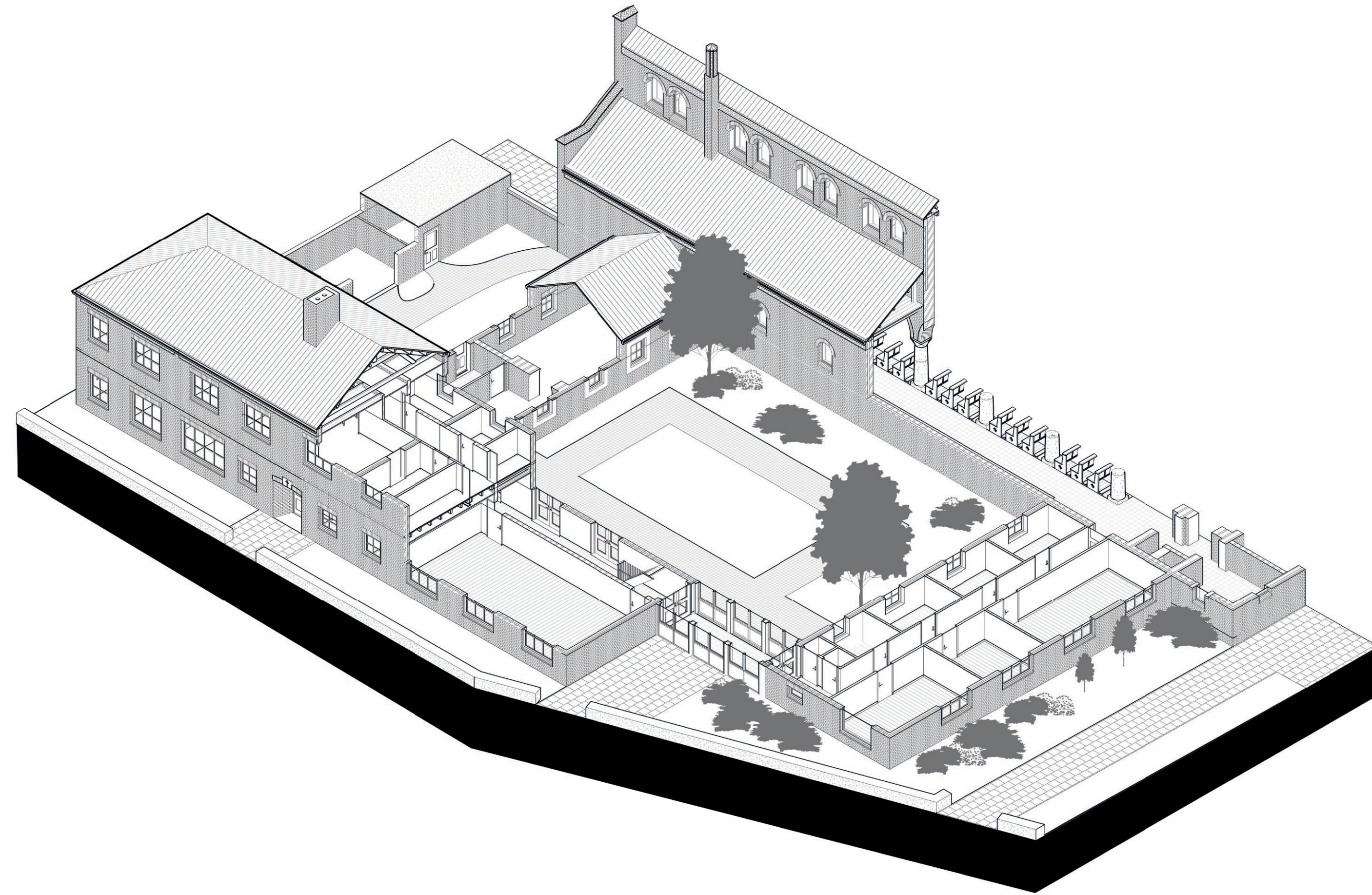
Existing Nave



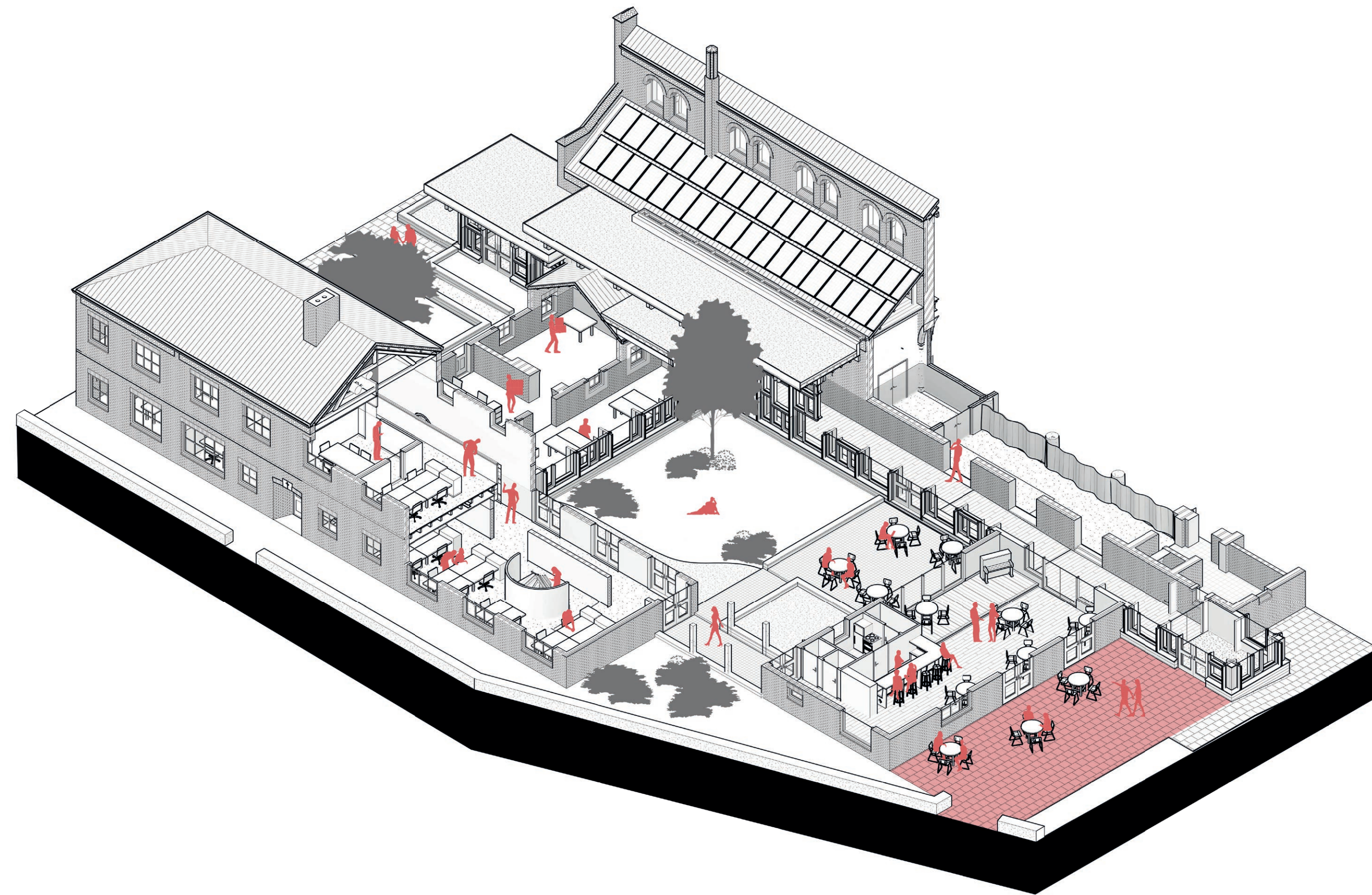
Theatre Foyer



Theatre Theatre Hall

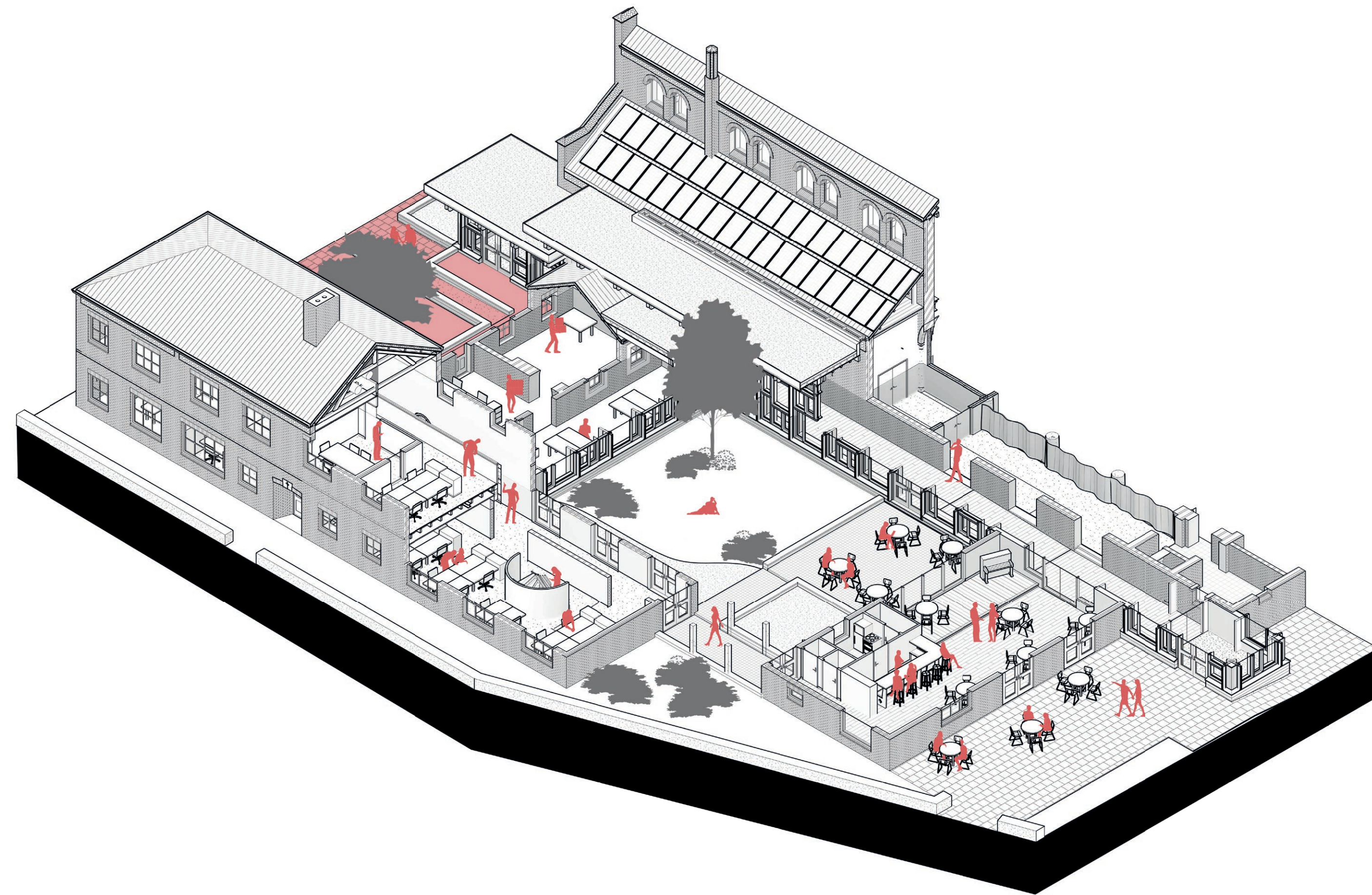


Existing Monastery



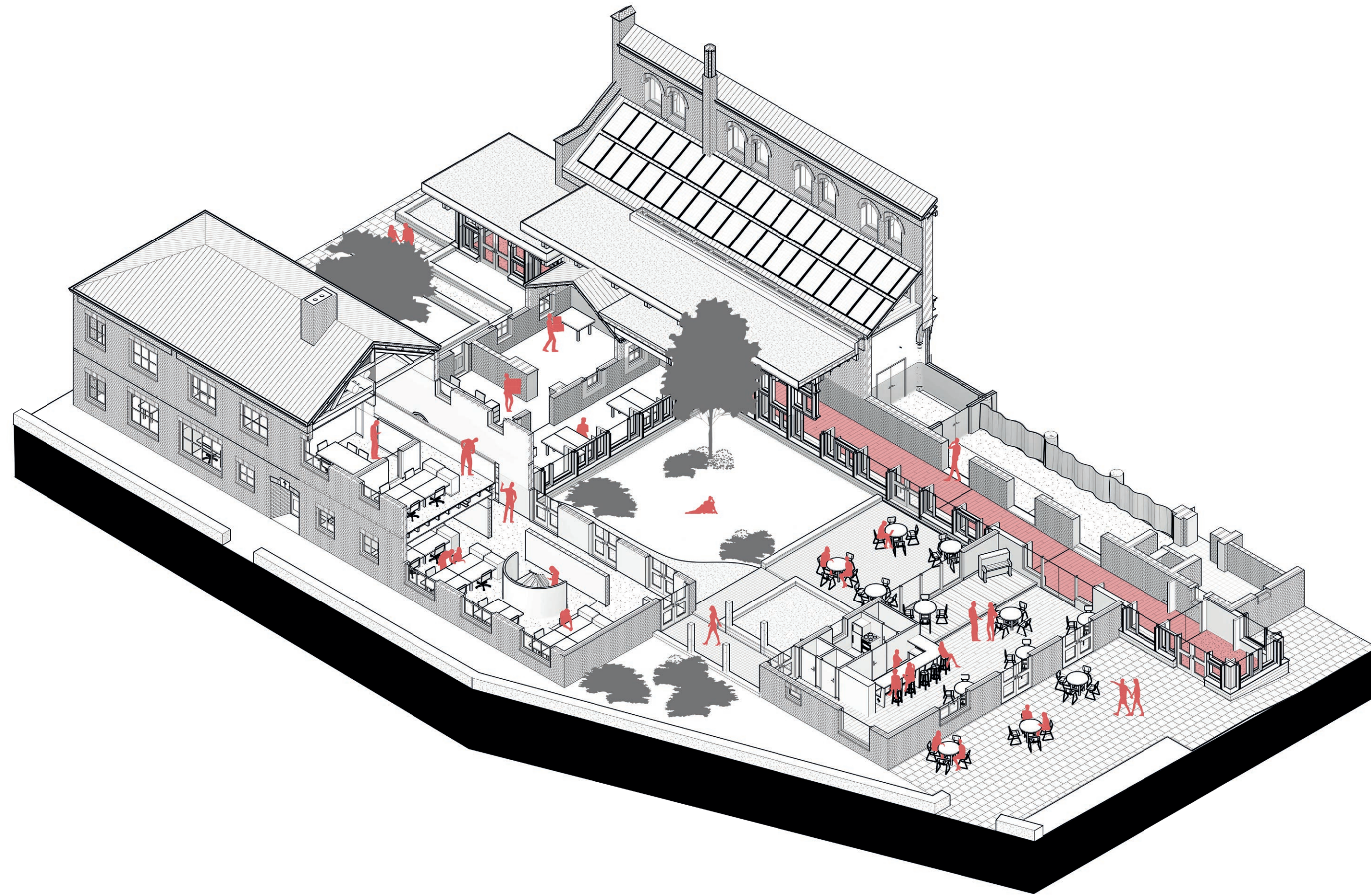
East Approach East Entrance



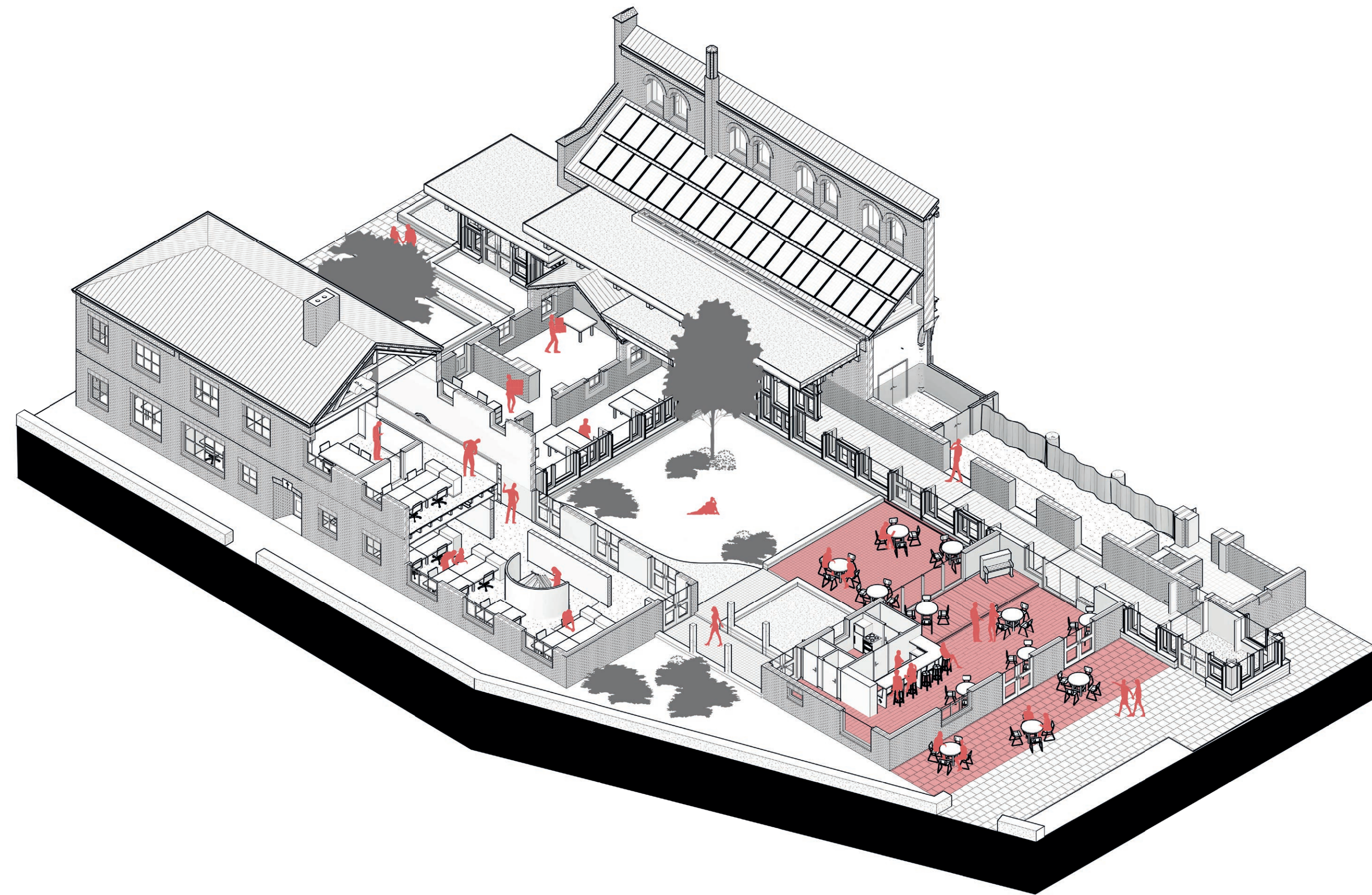


West Approach West Entrance



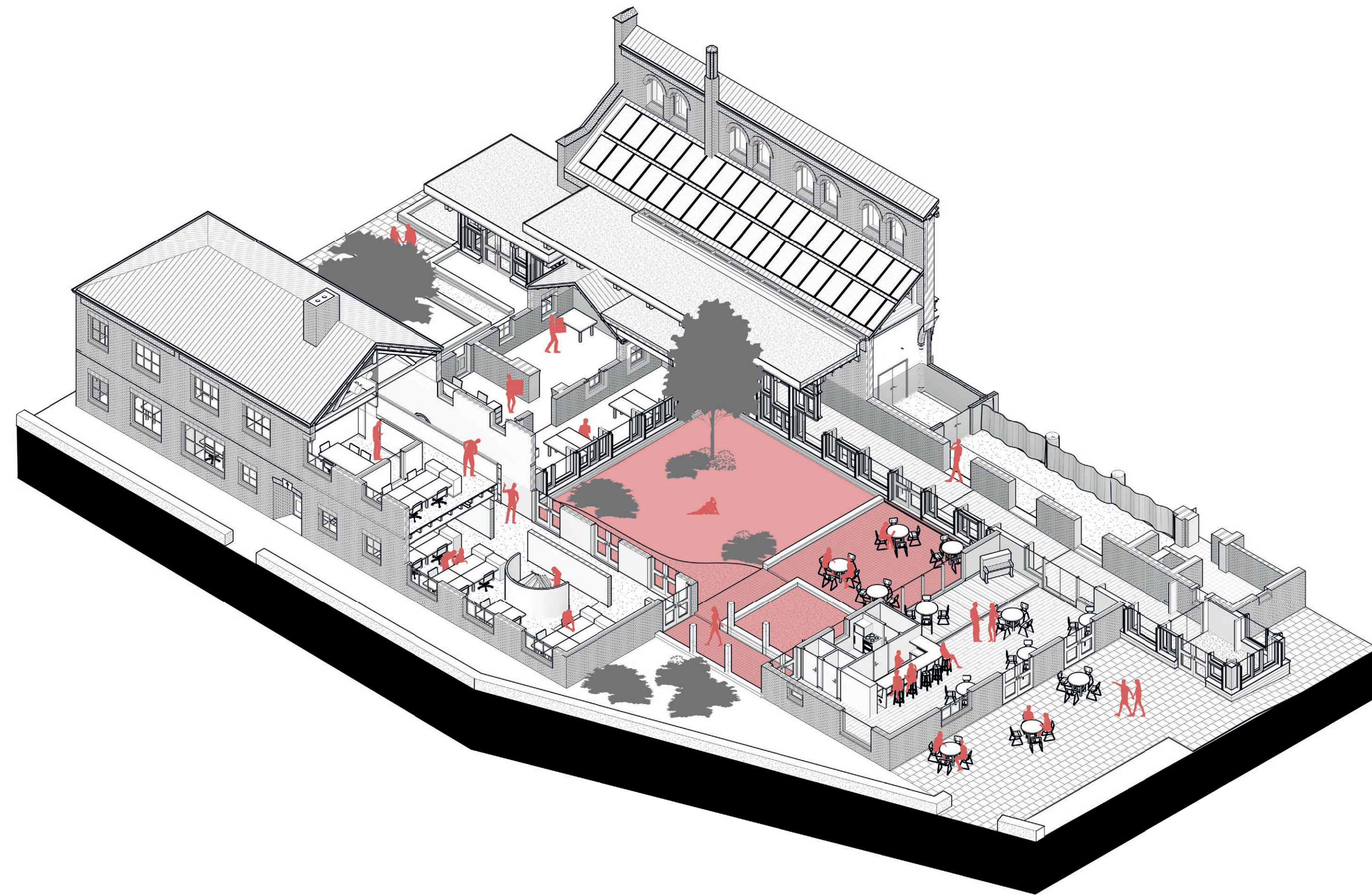


The 'Cut' Passage



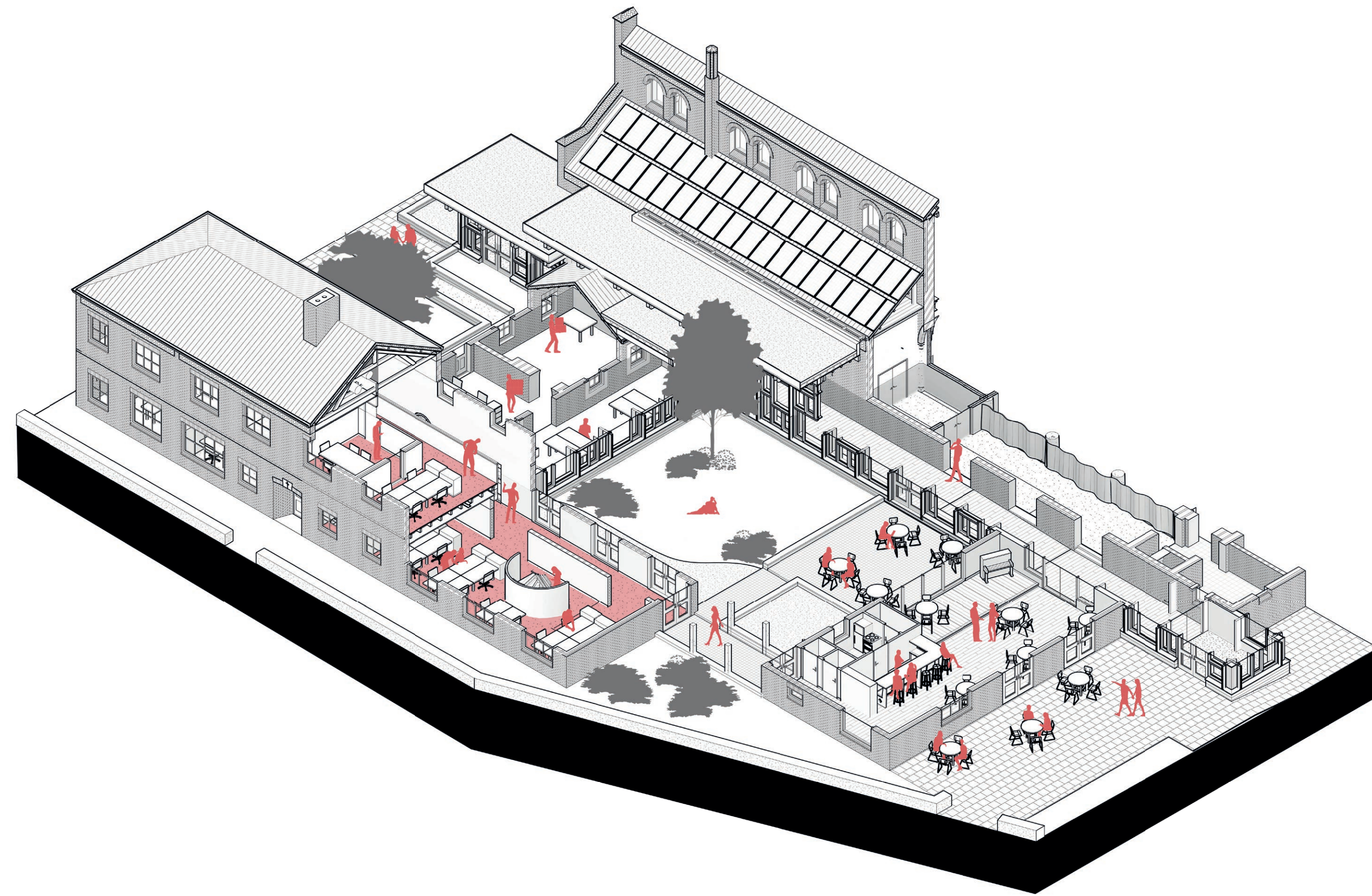
Community Centre Café



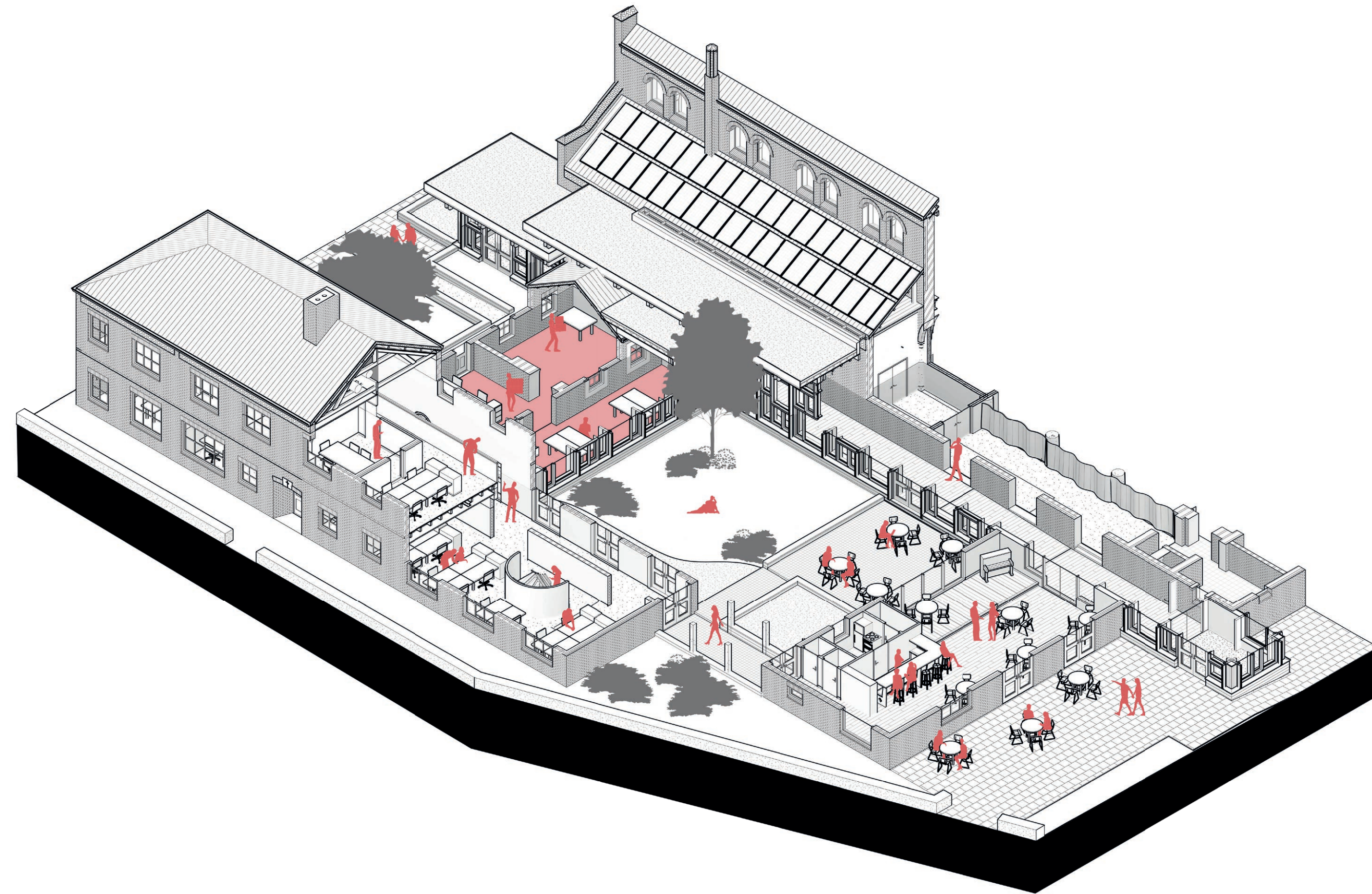


Community Centre Social Garden

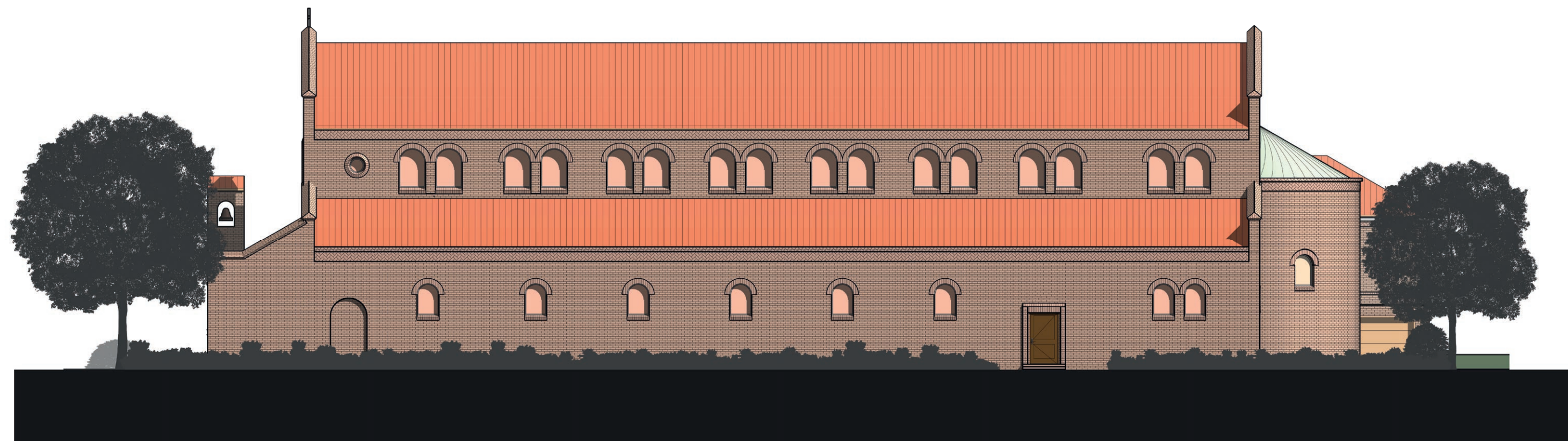
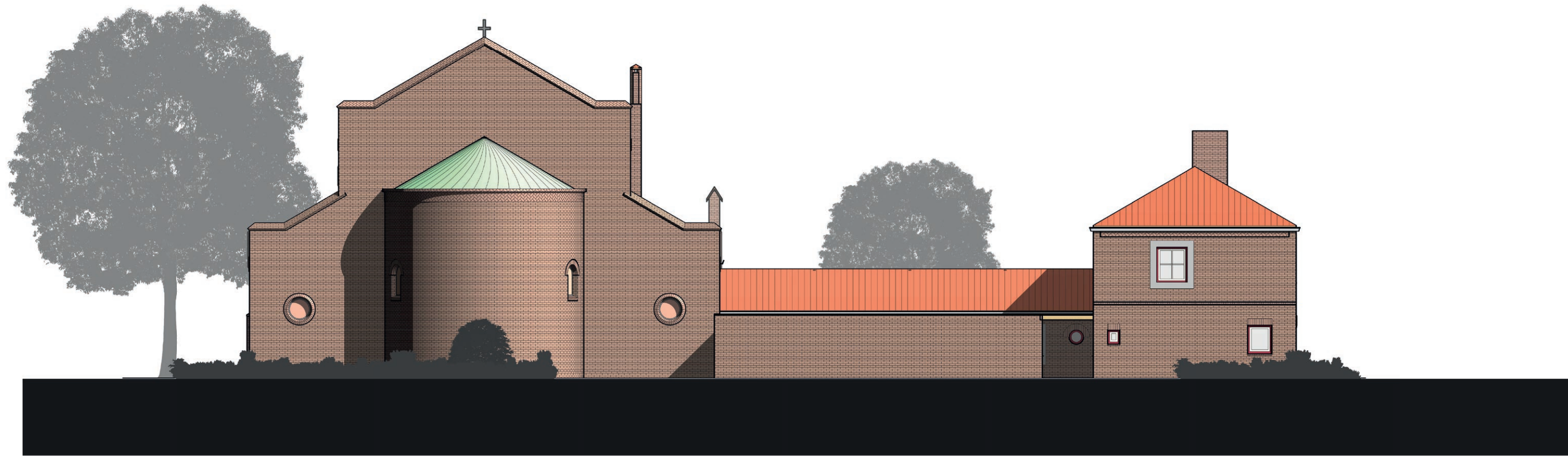




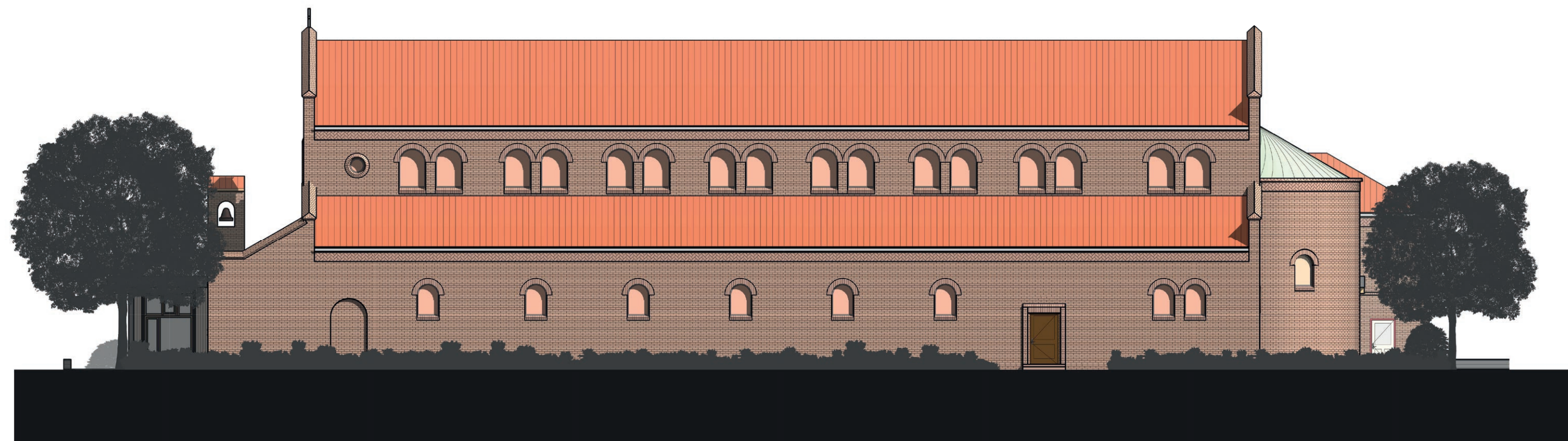
Community Centre Flexible Workspaces



Community Centre Arts & Craft Atelier



West / North Facades Existing

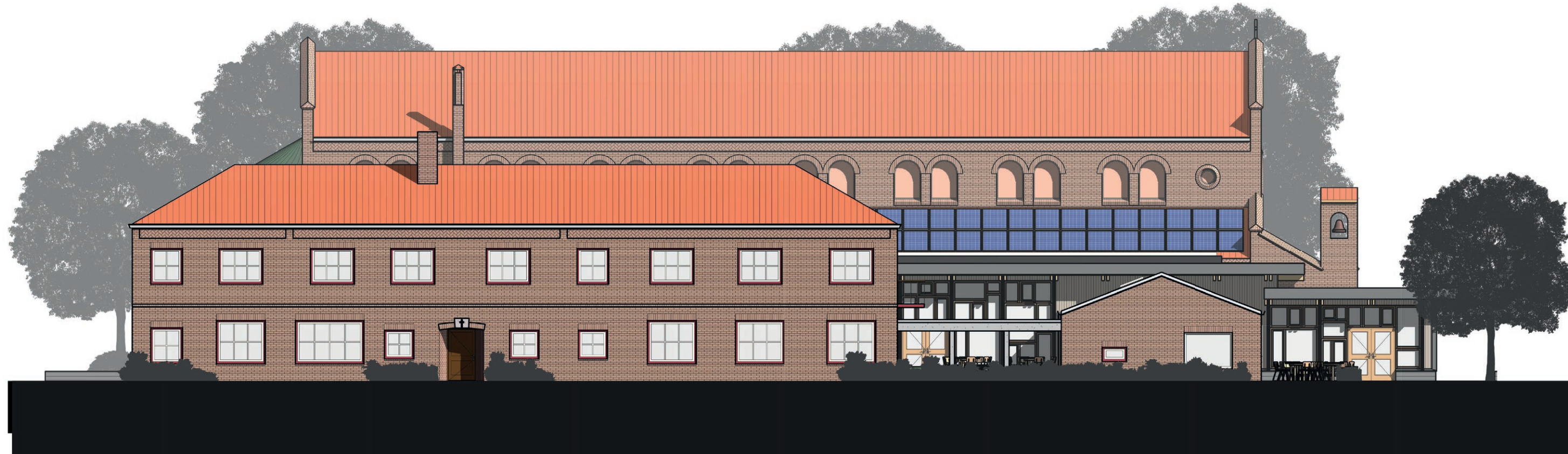


West / North Facades

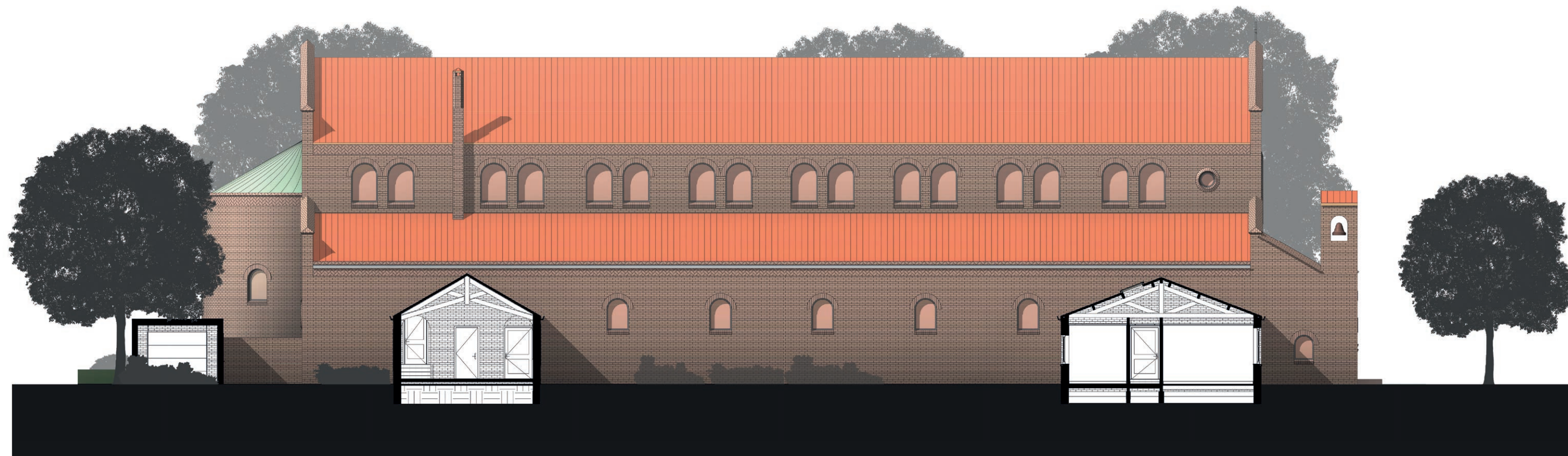
New



East / South Facades
Existing



East / South Facades New

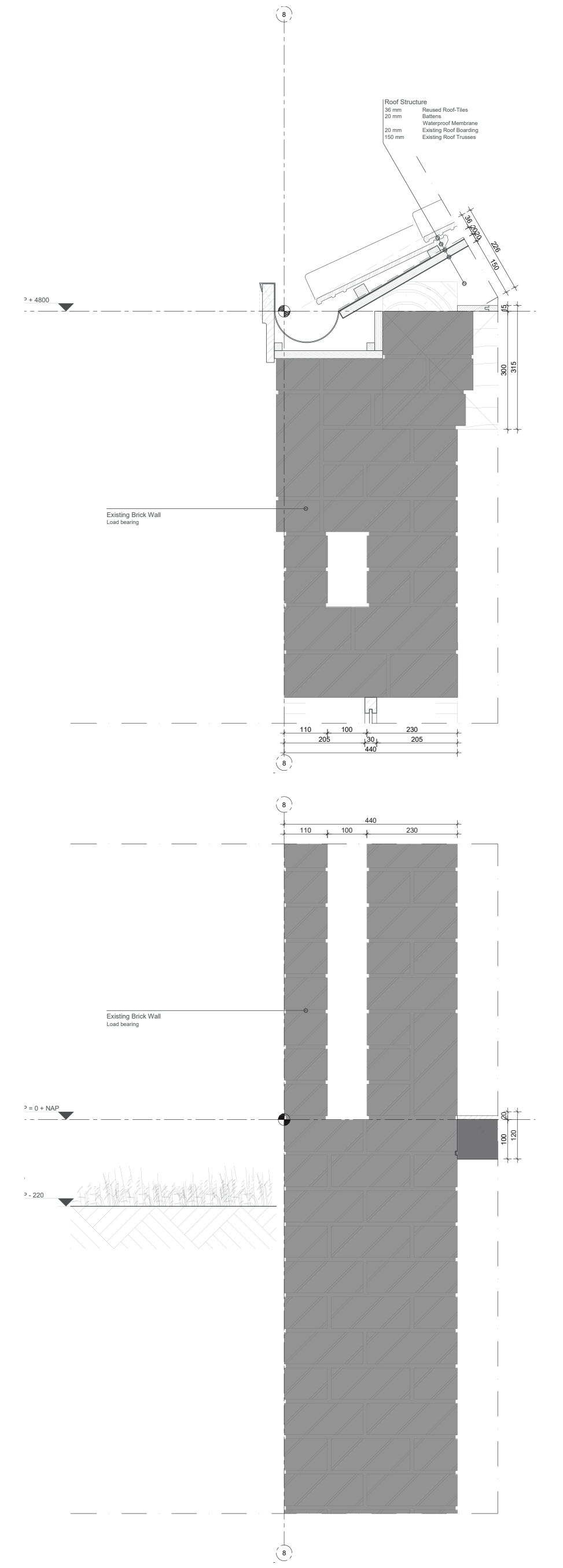
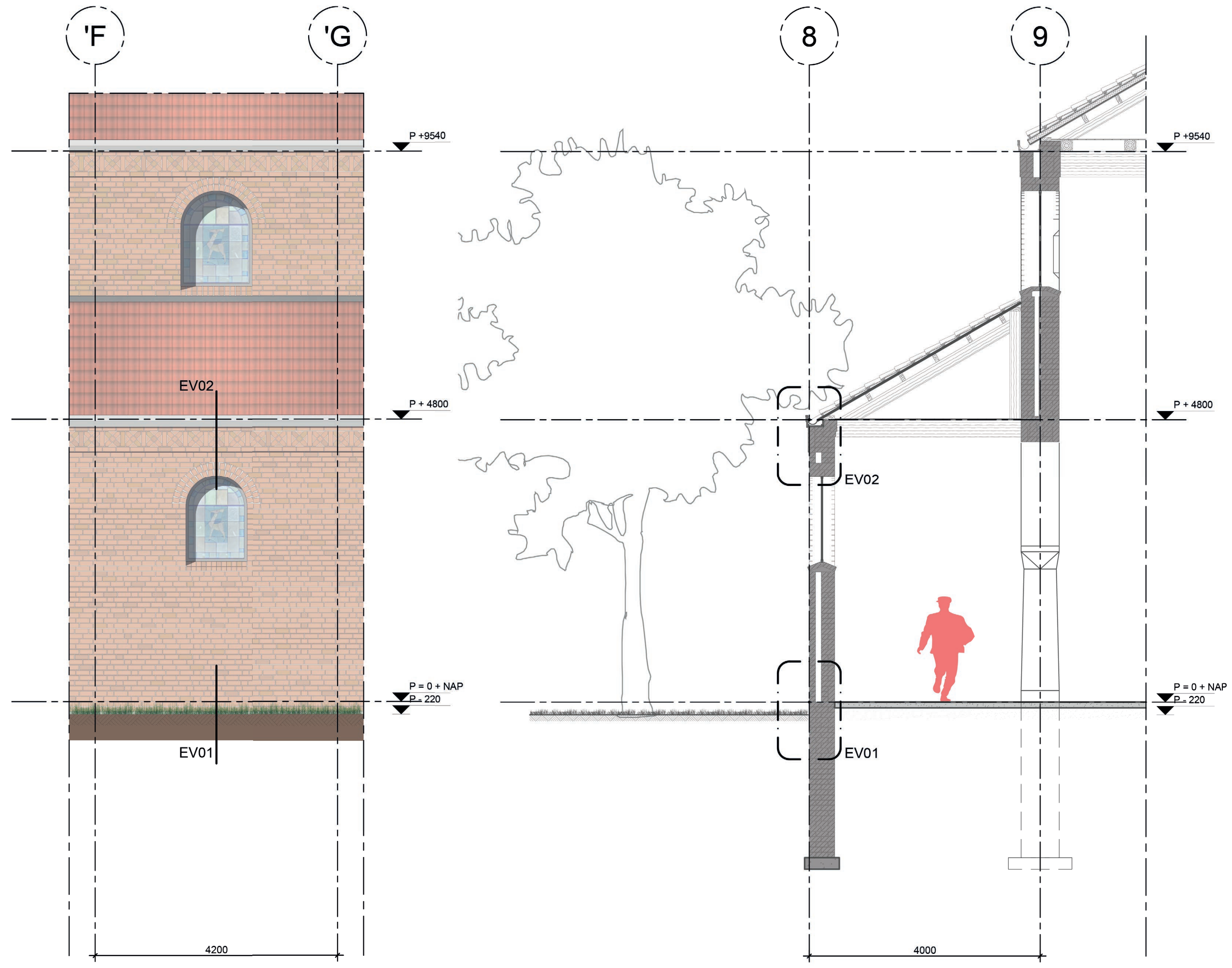


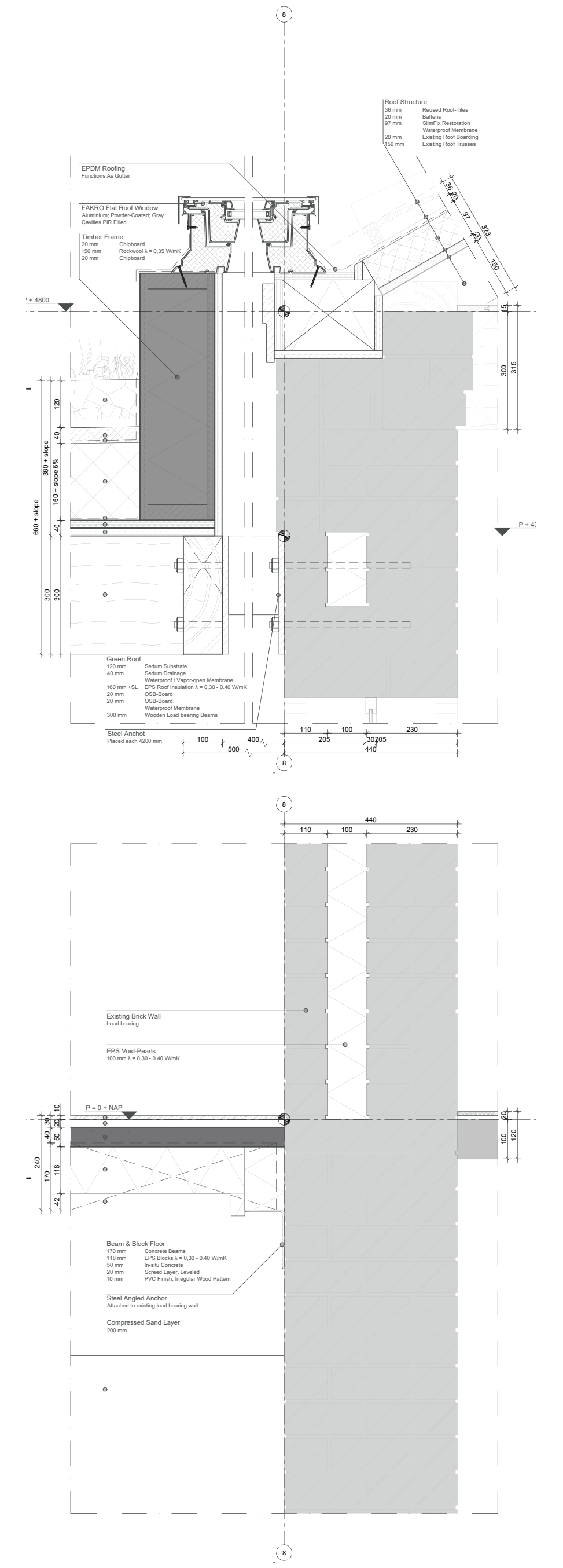
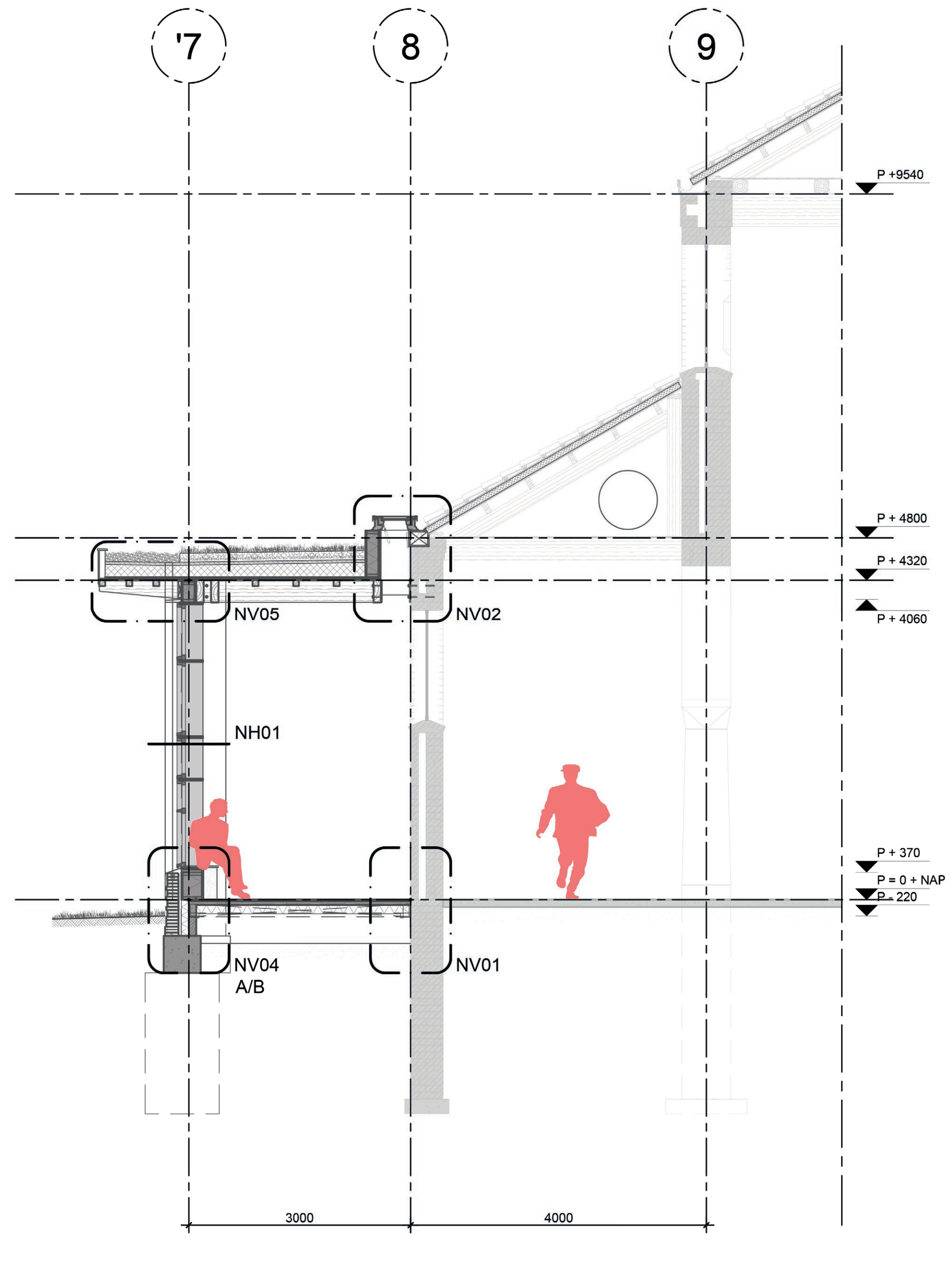
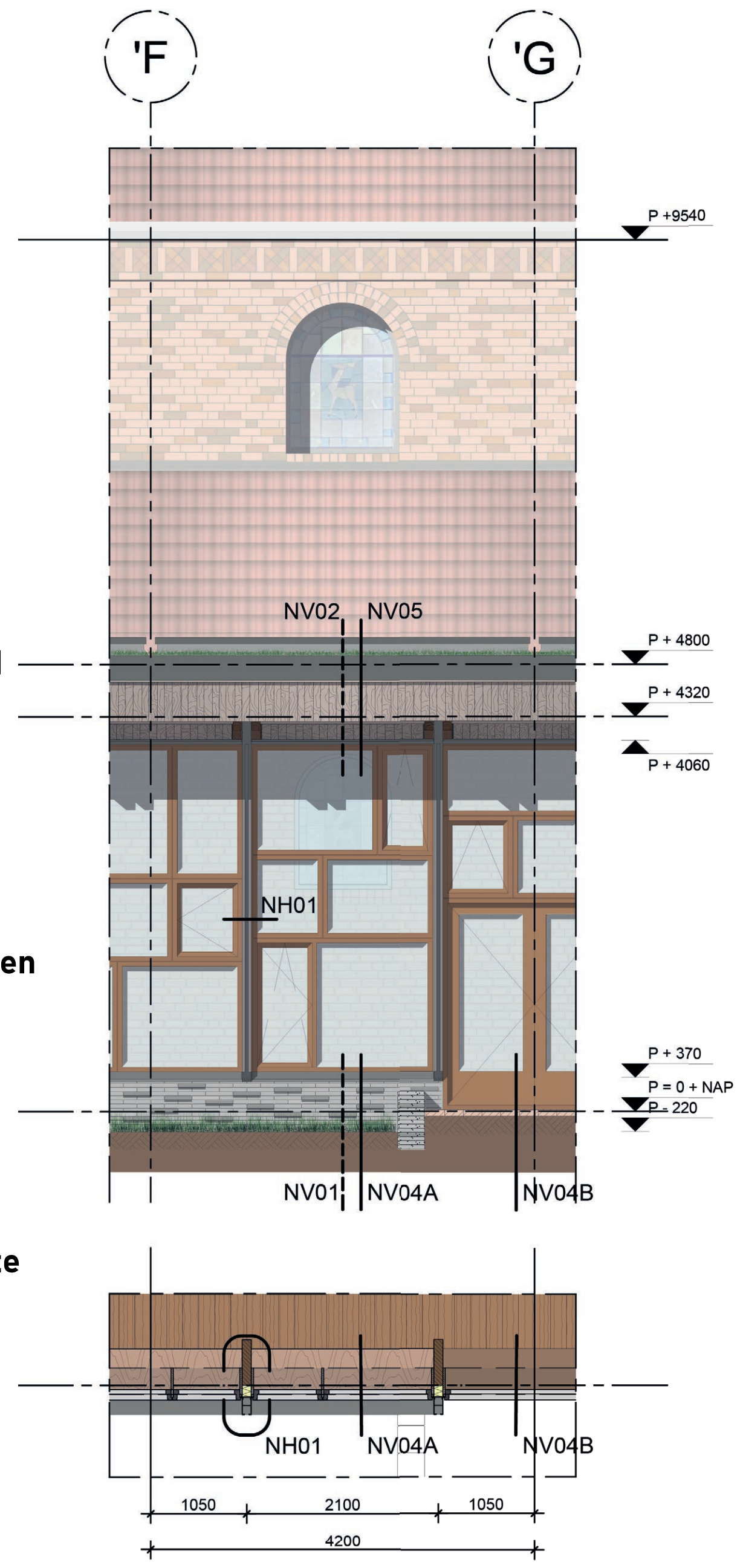
Internal Facades Existing



Internal Facades

New





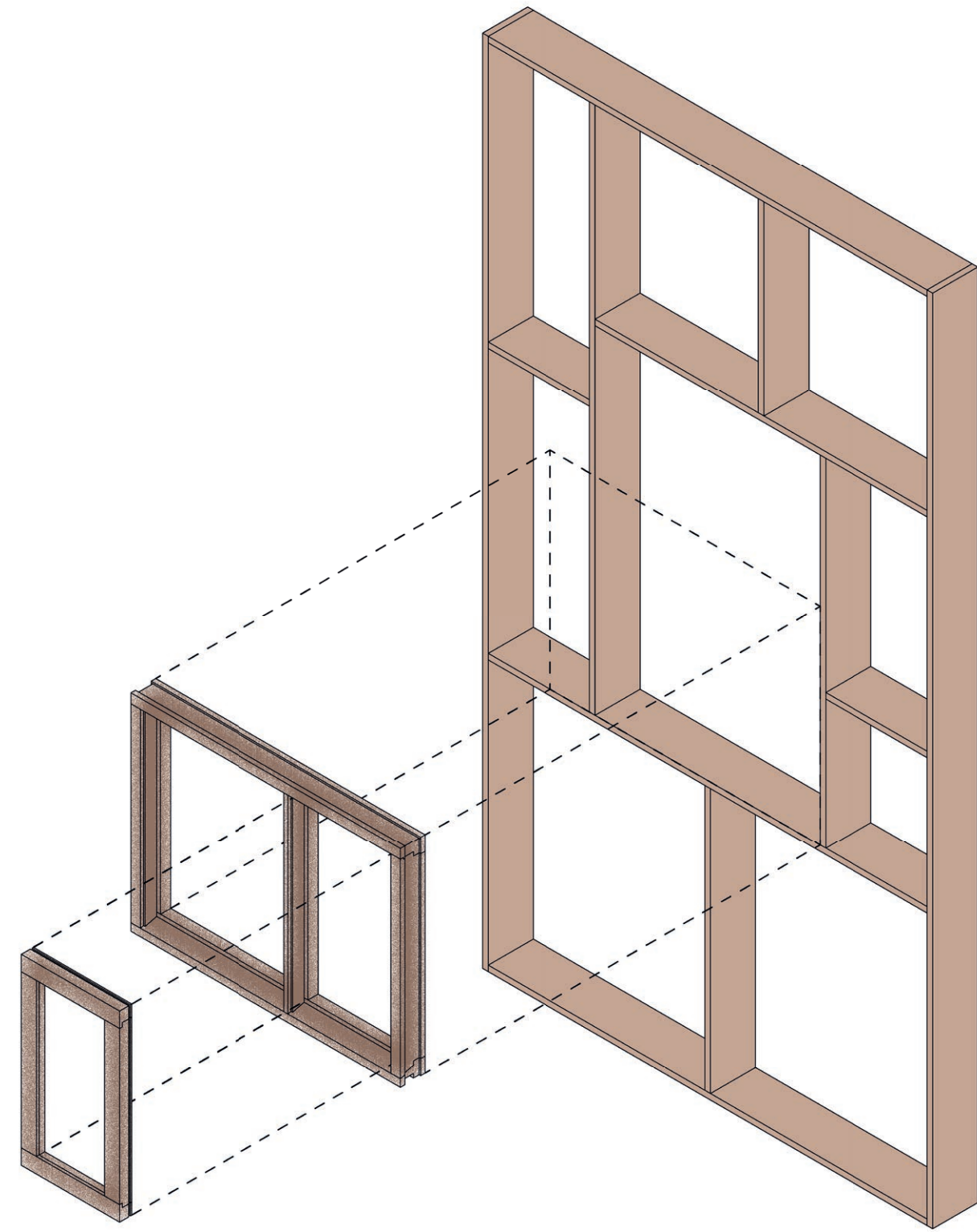
Reclaimed red cedar panels



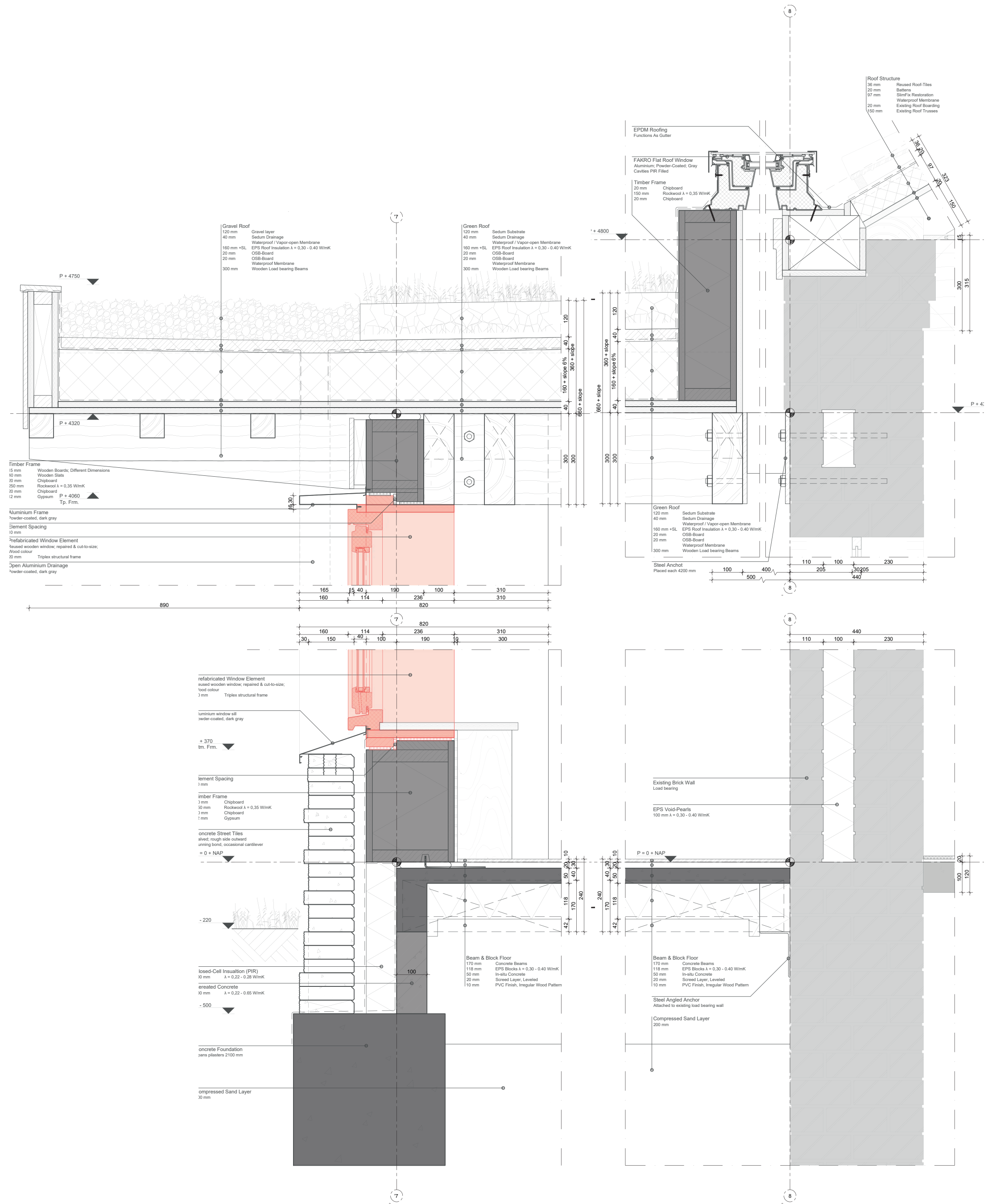
Reclaimed wooden window

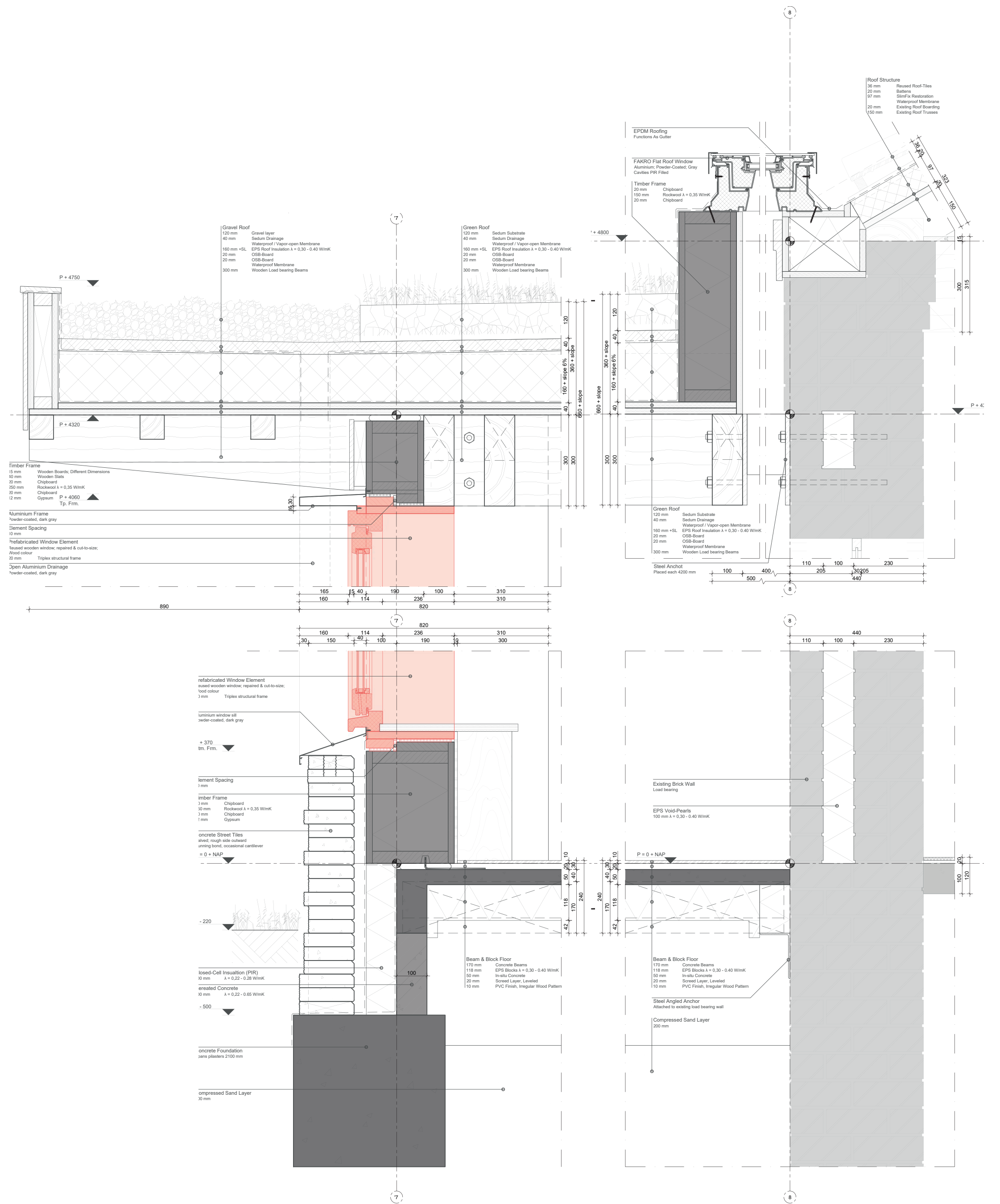
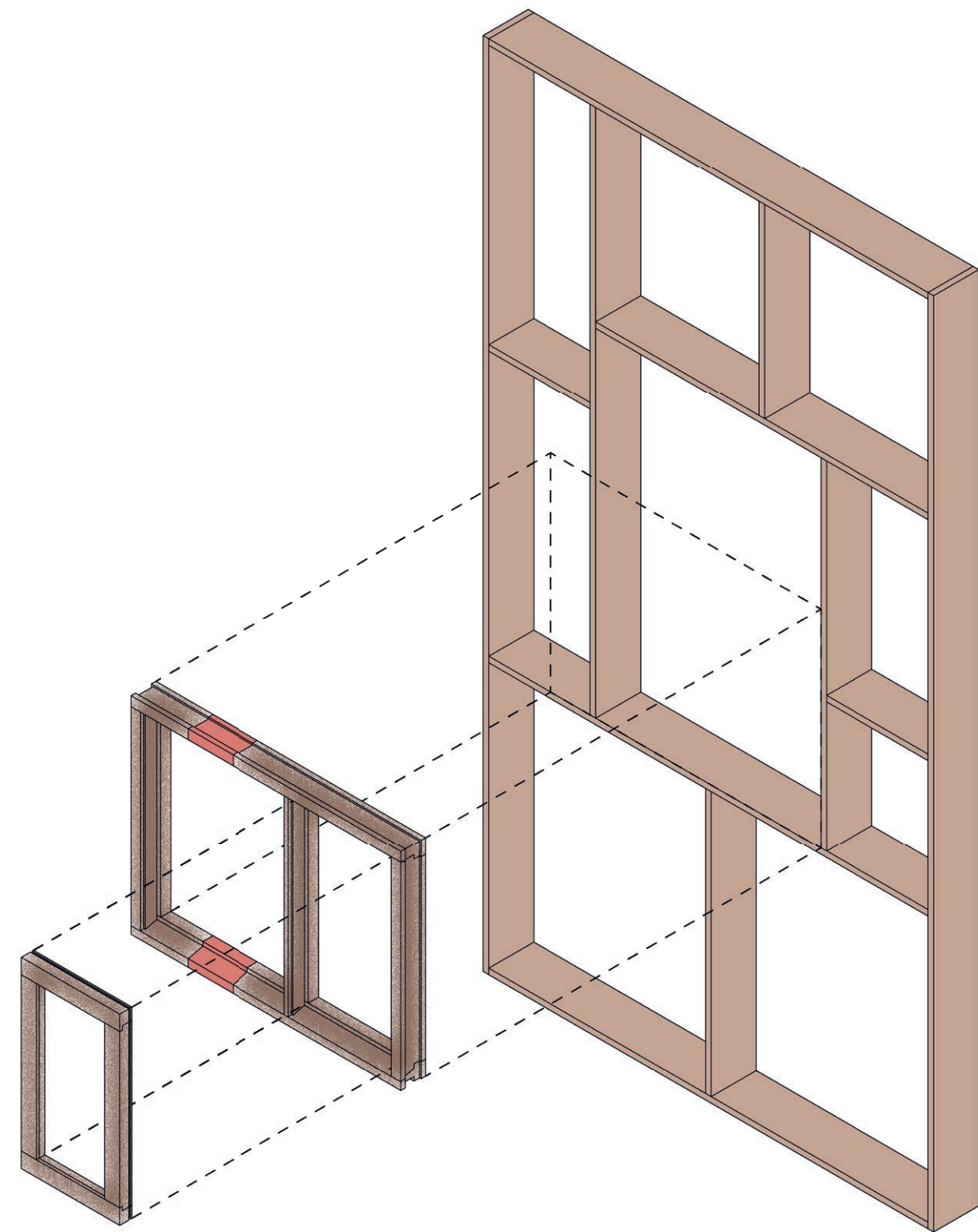


Reused concrete tiles

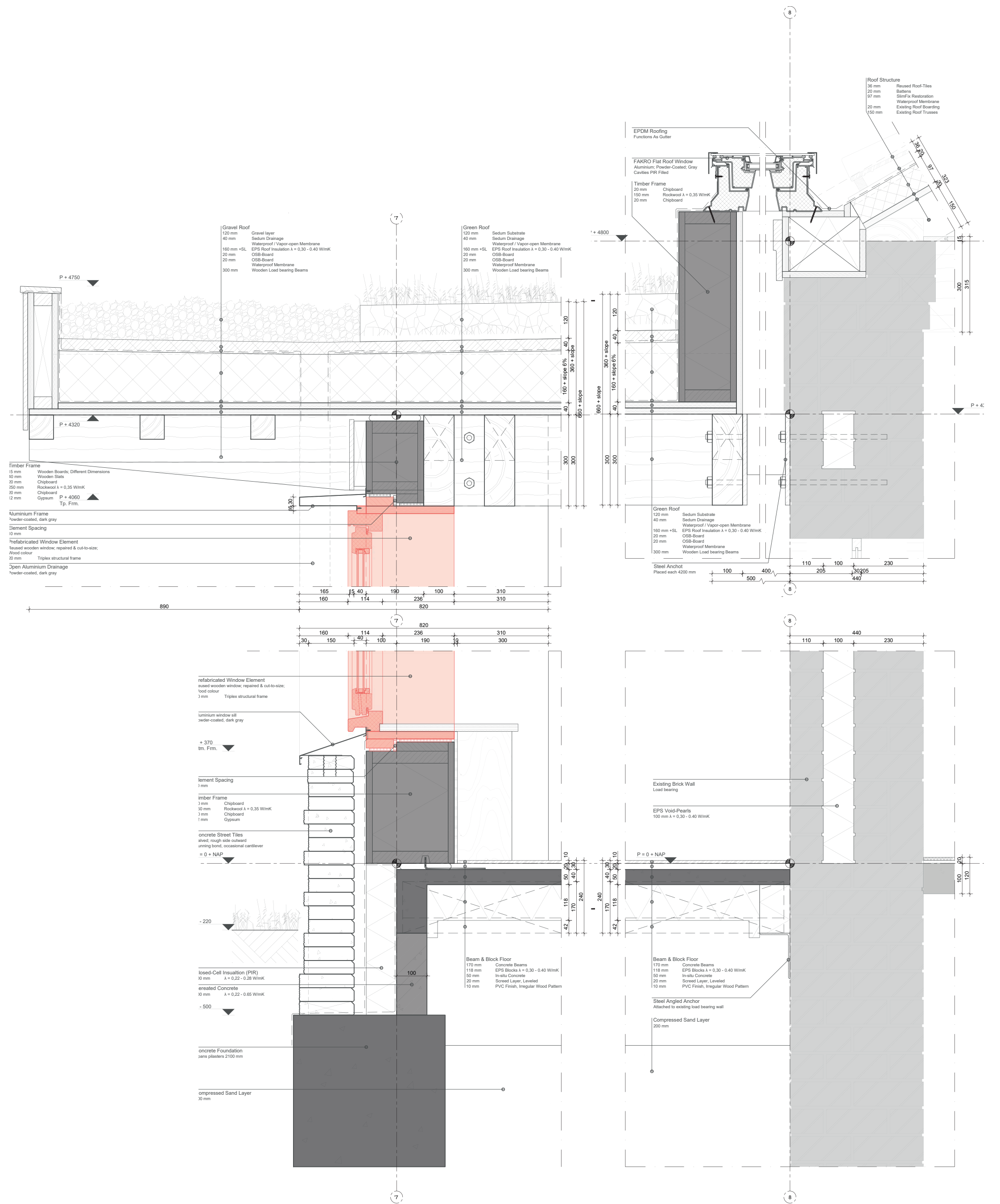
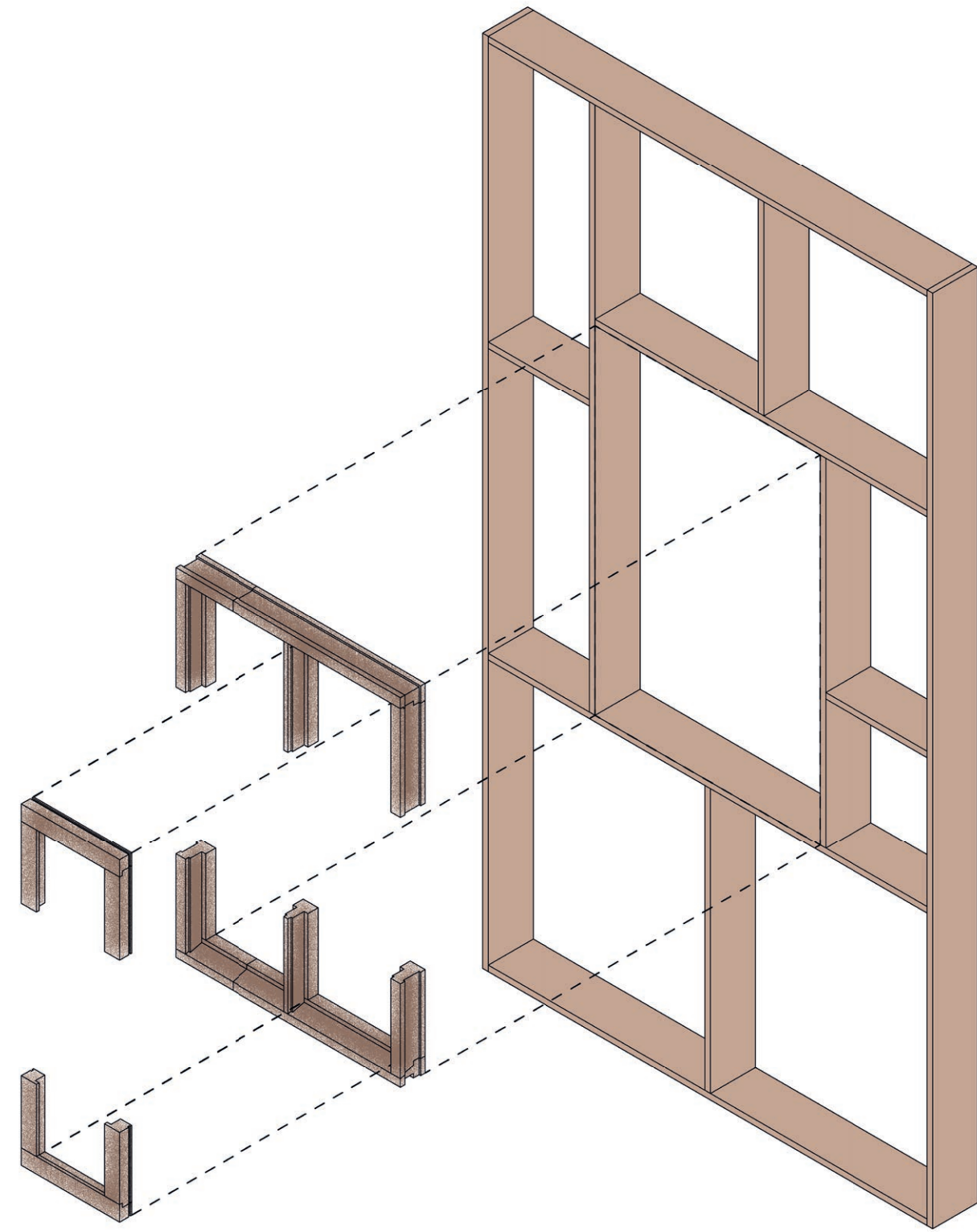


00 Reused Window

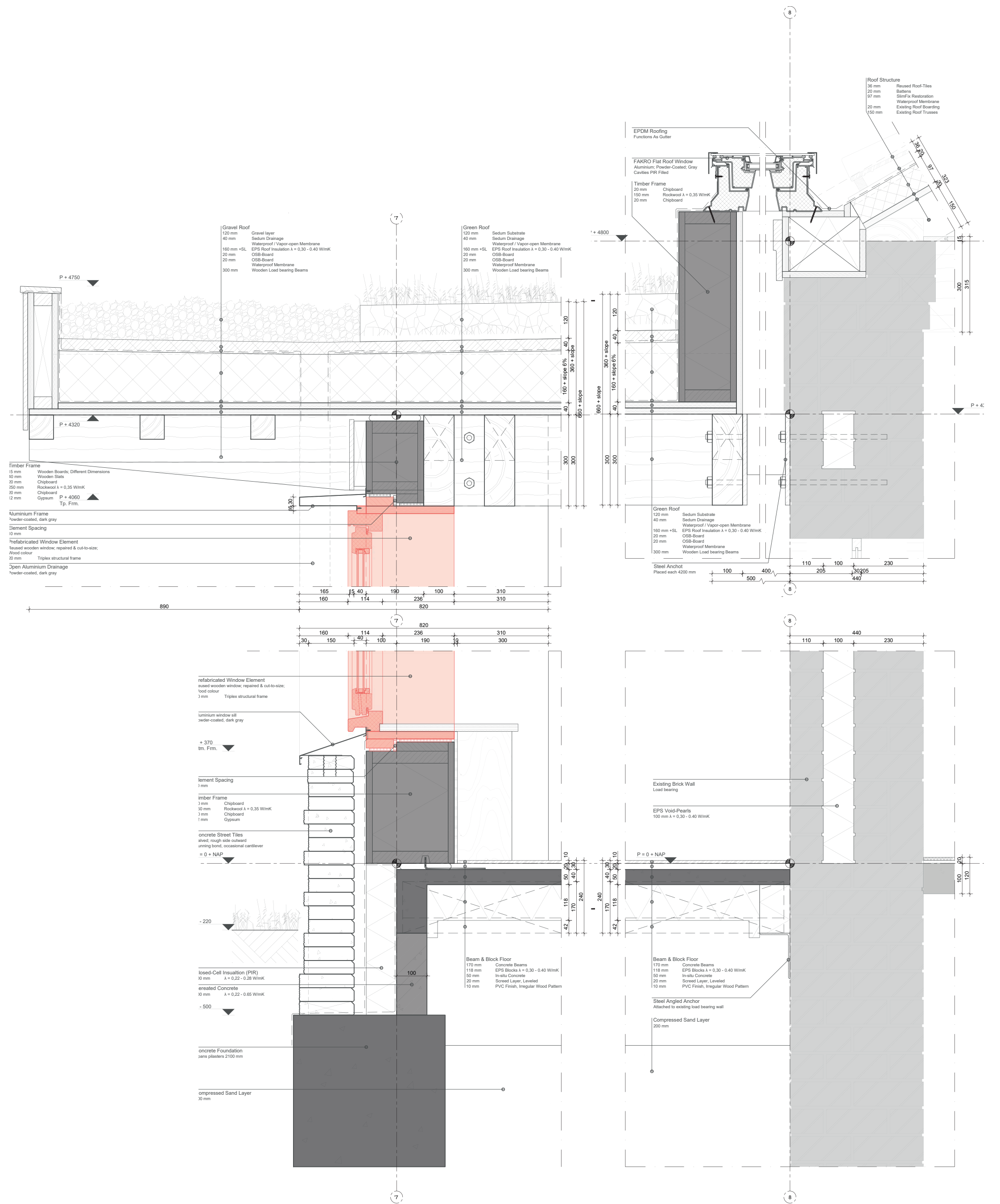
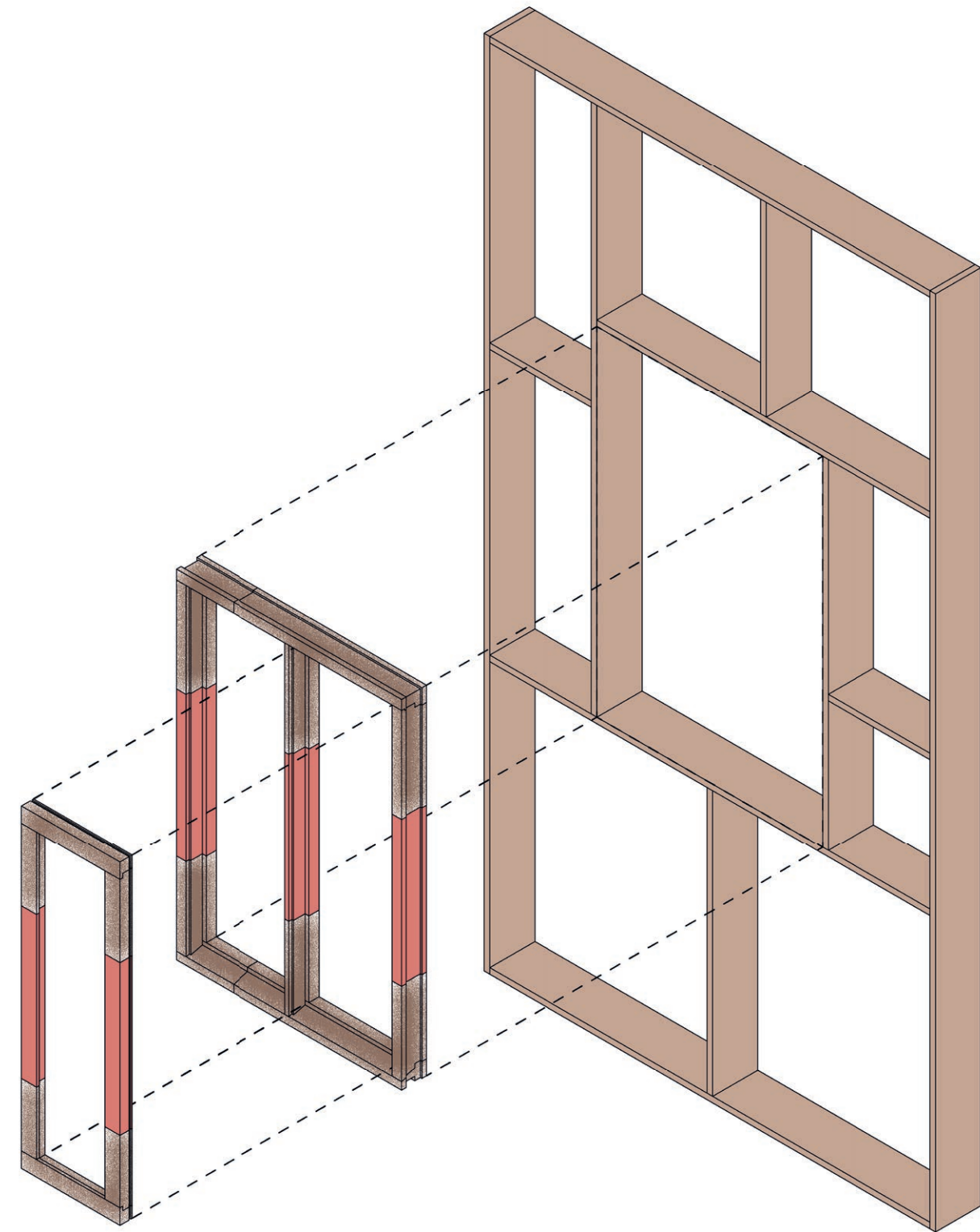




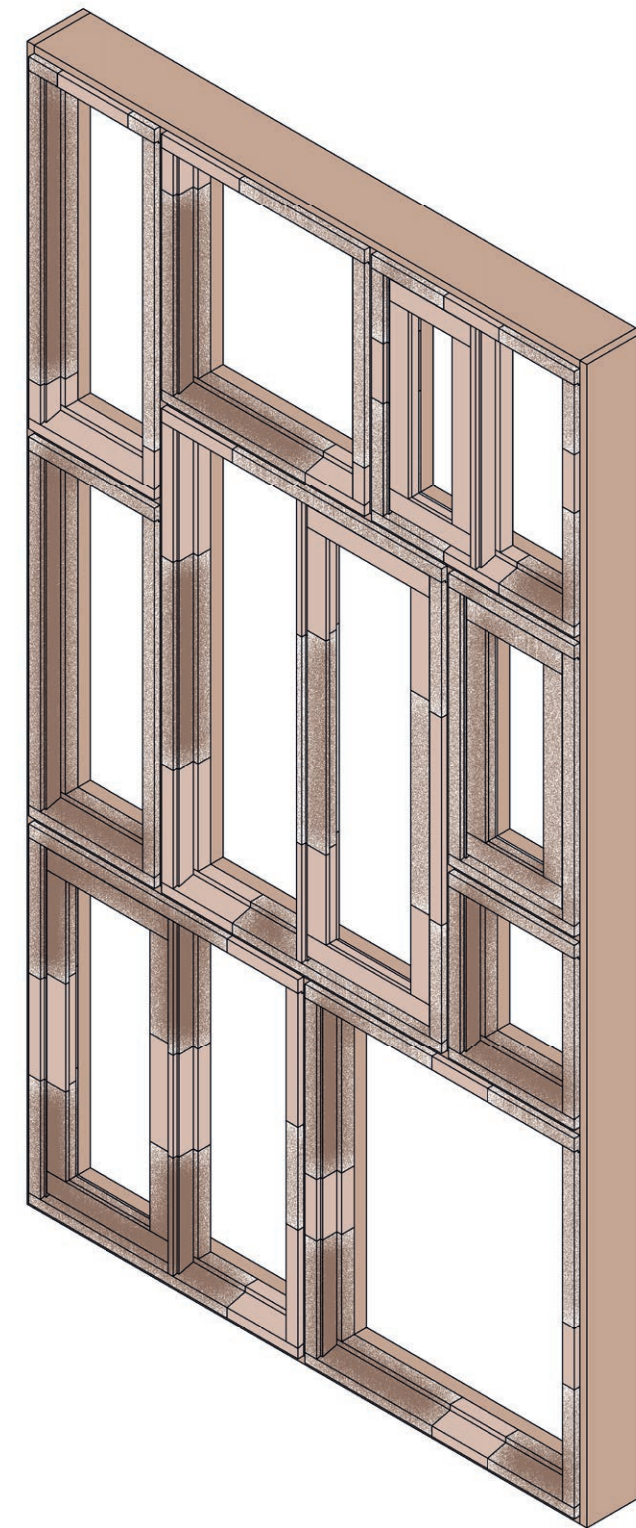
01 Remove excess dimensions



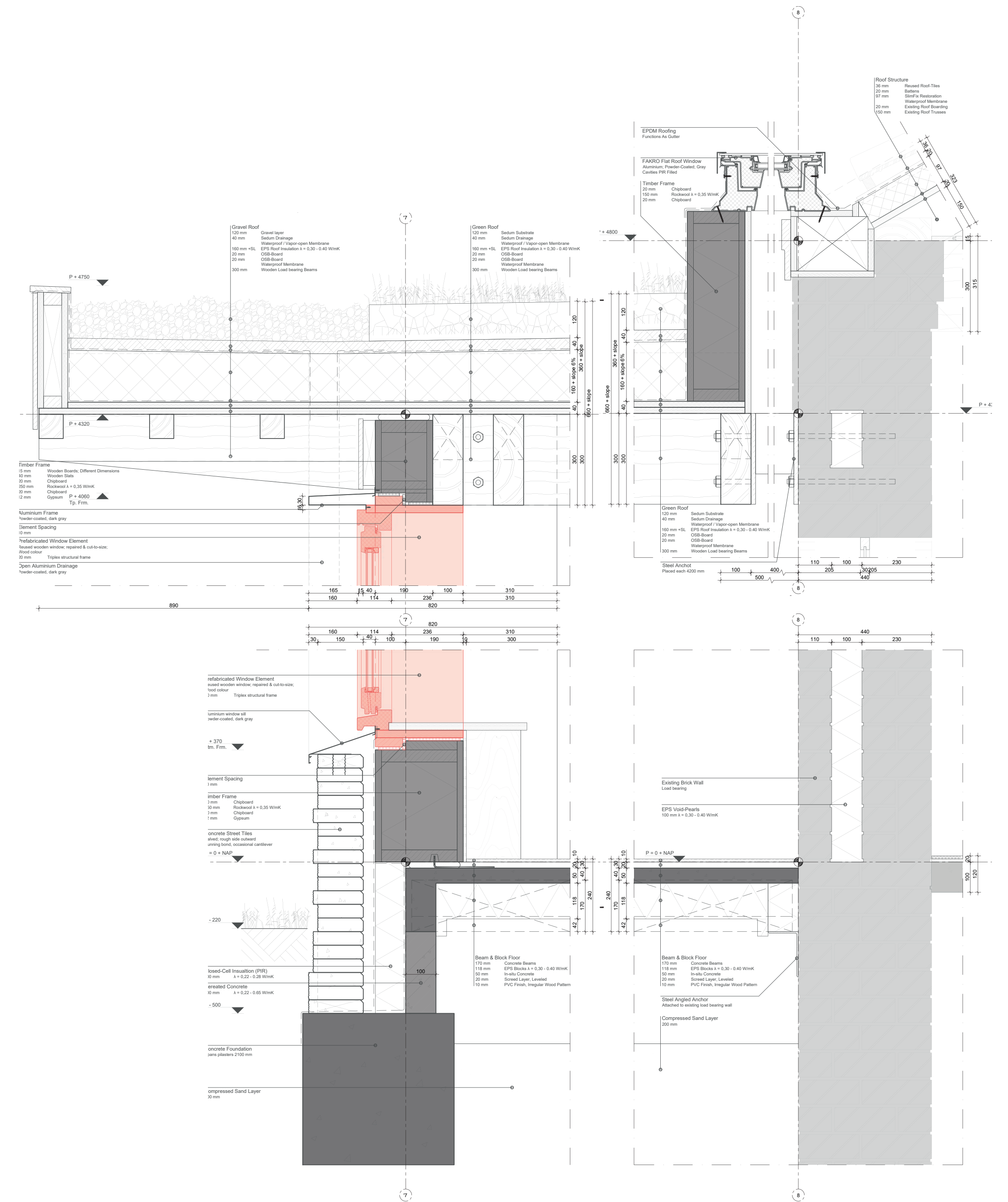
03 Spacing for extention

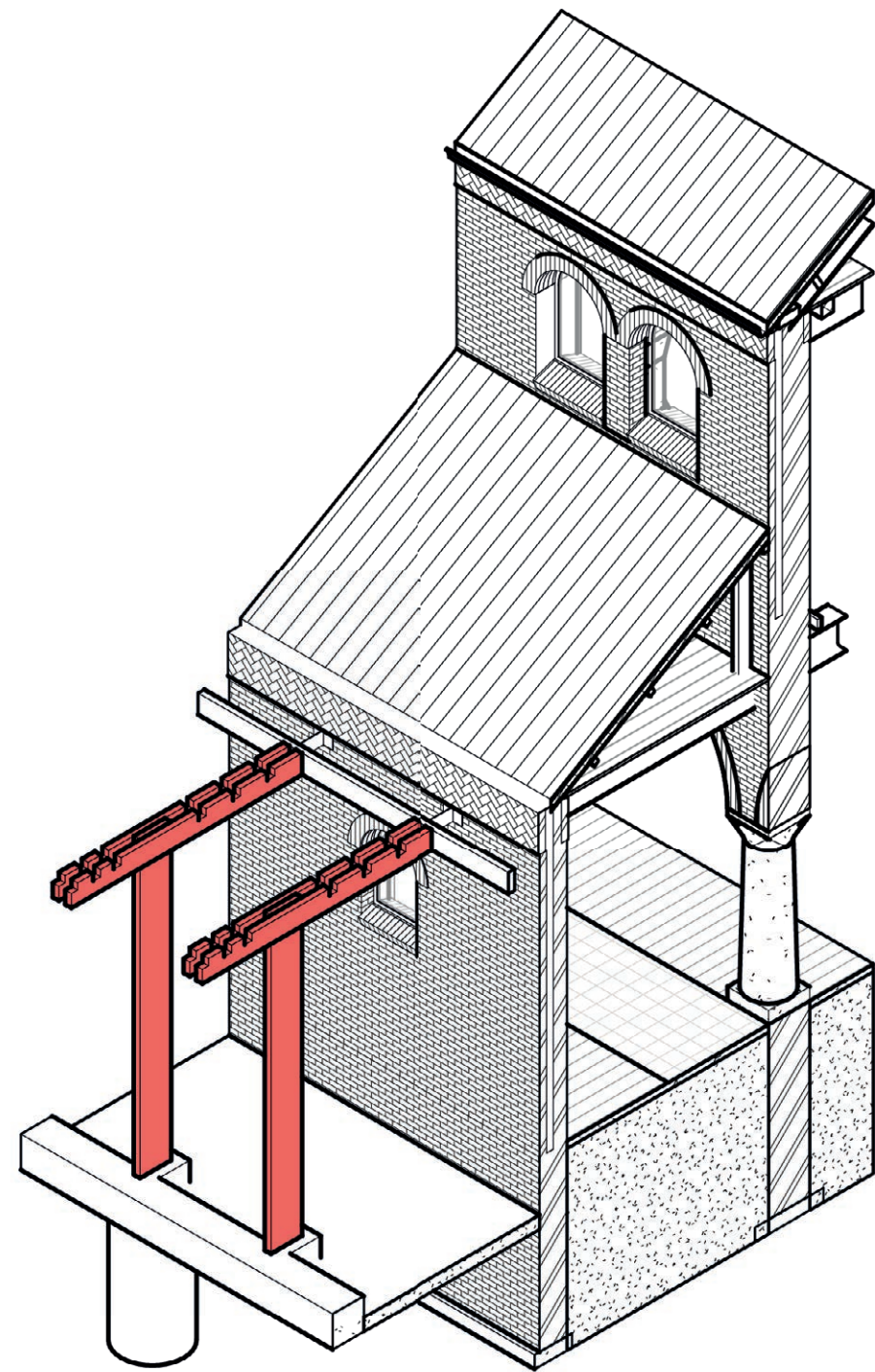


04 Addition extension

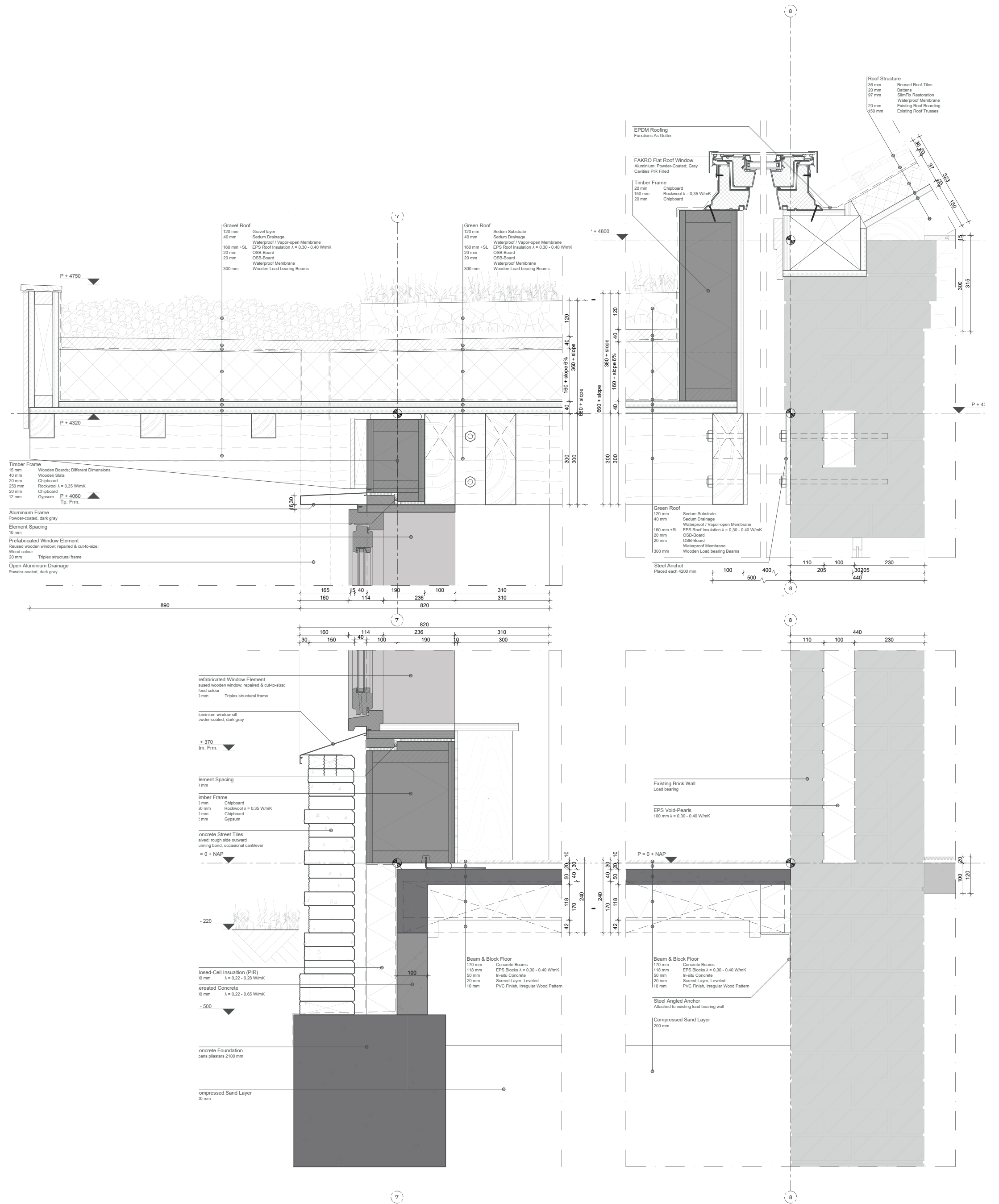


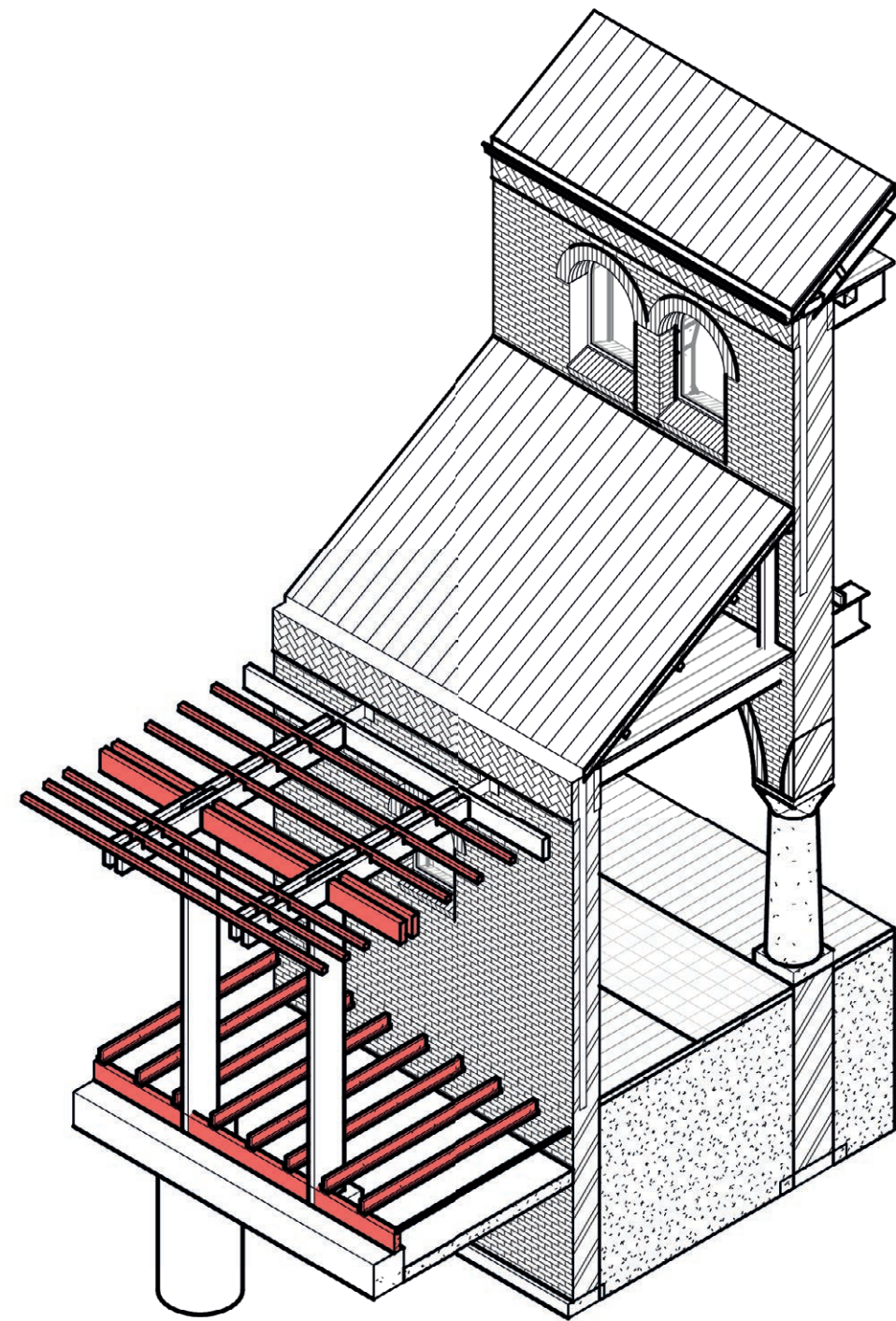
06 Timberframe Elements



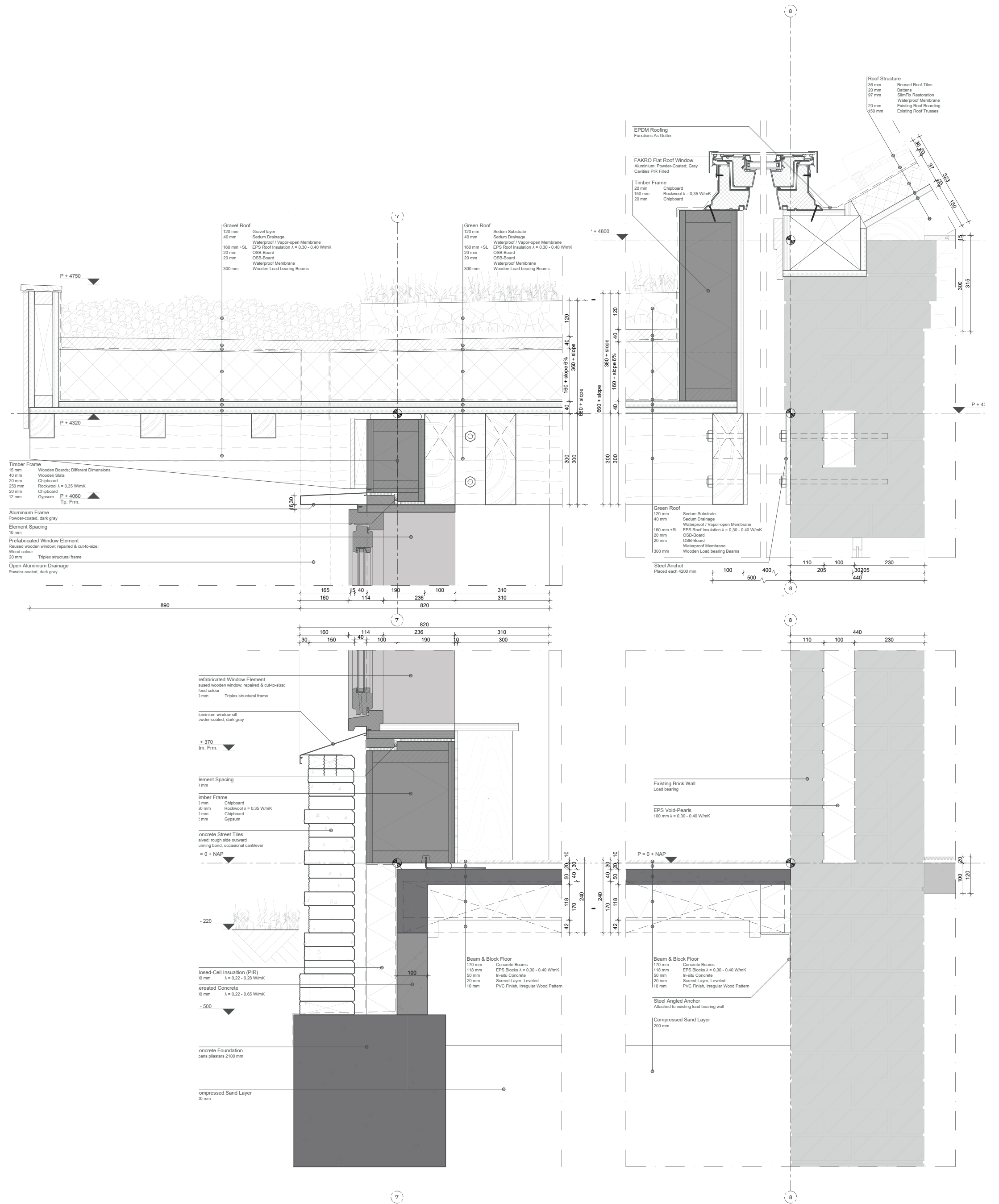


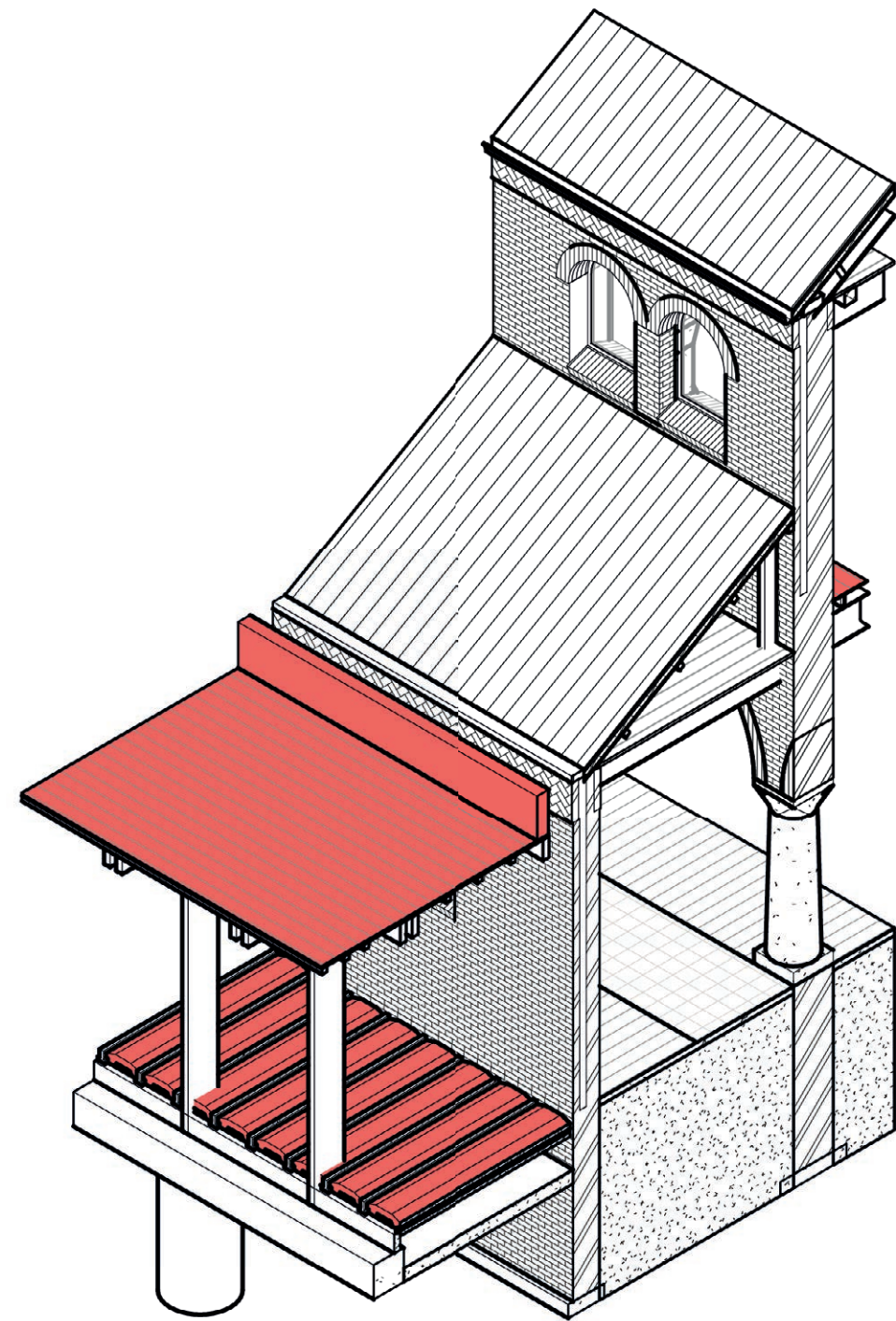
02 Beams & Columns



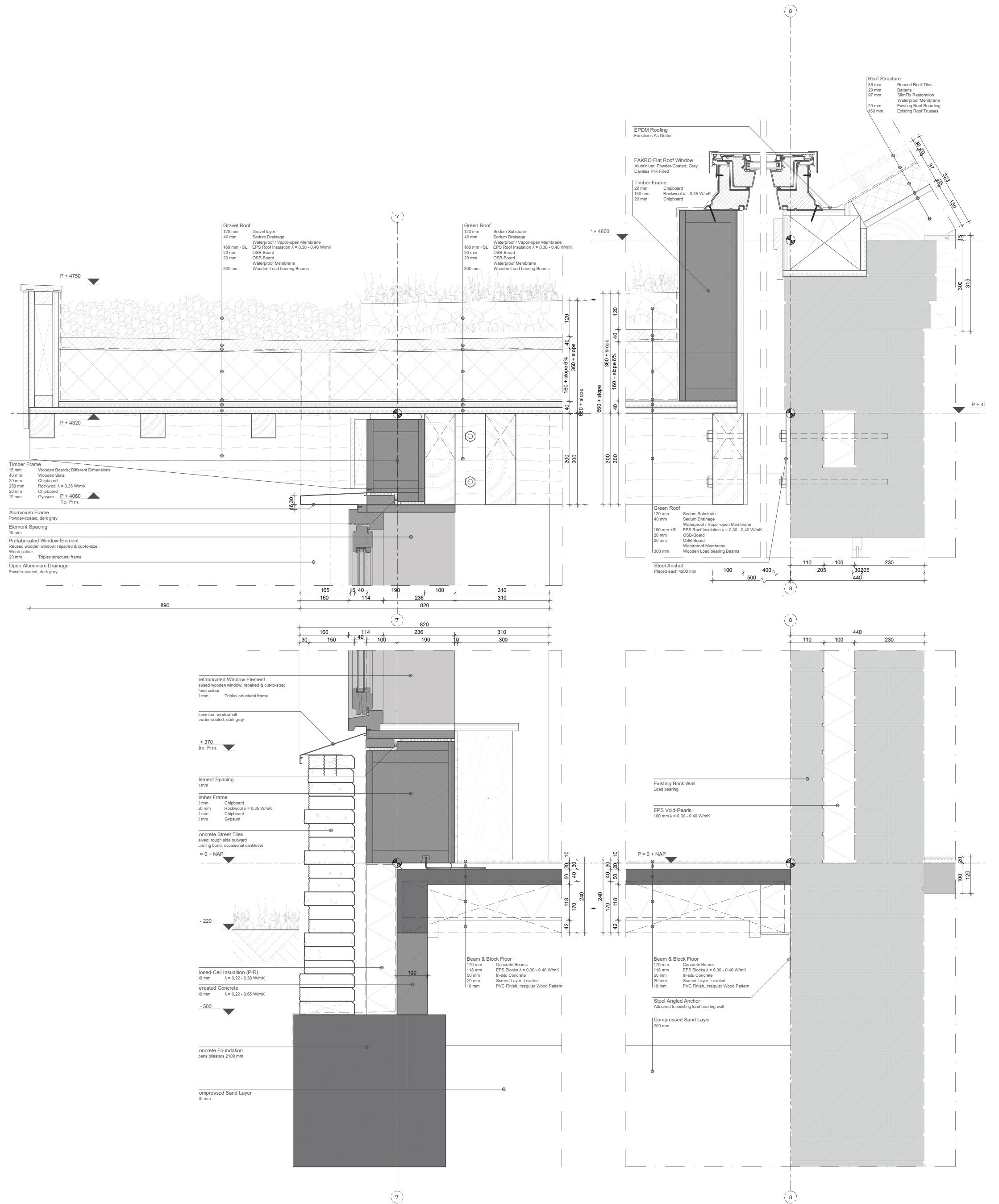


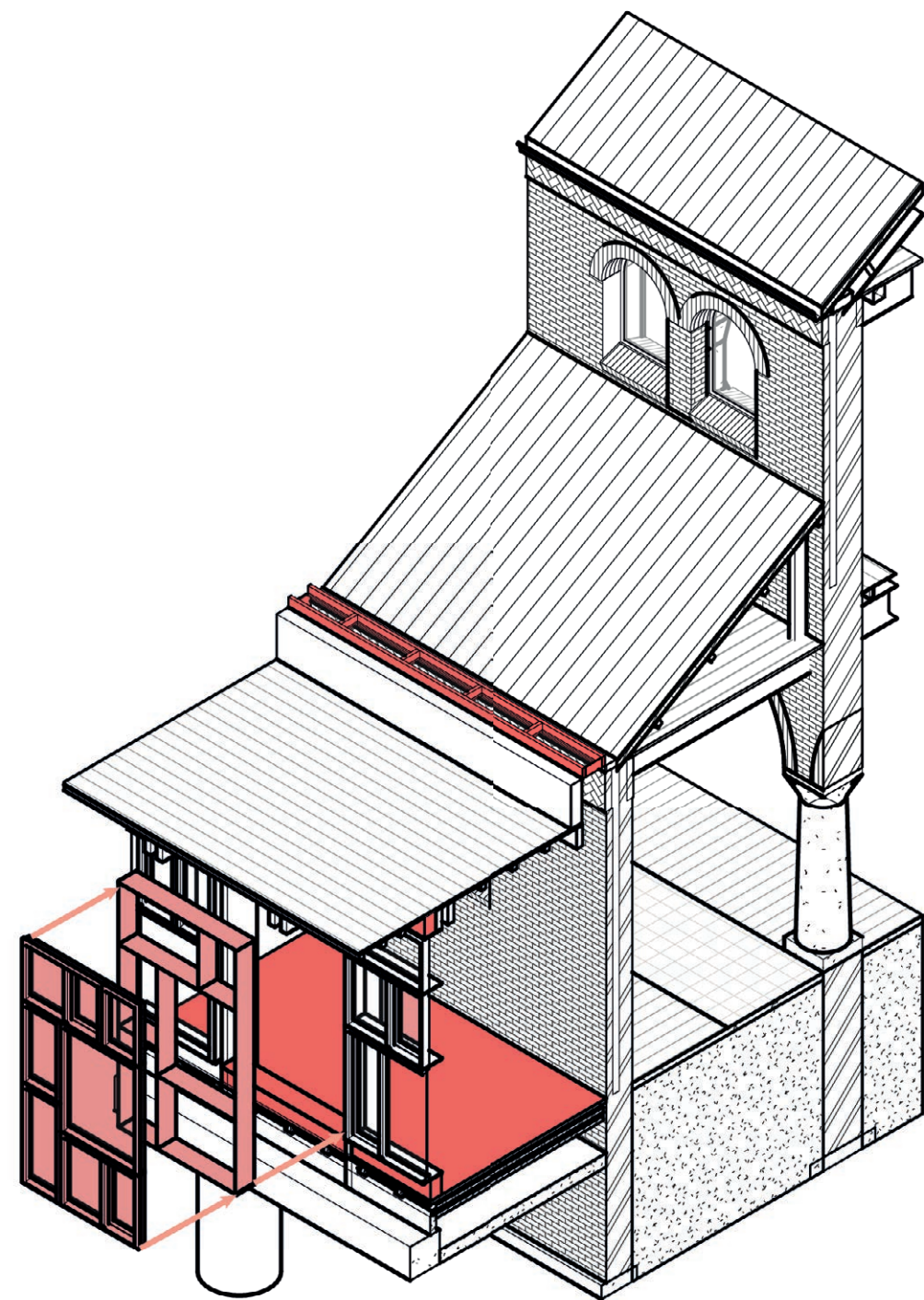
03 Perp. Beams





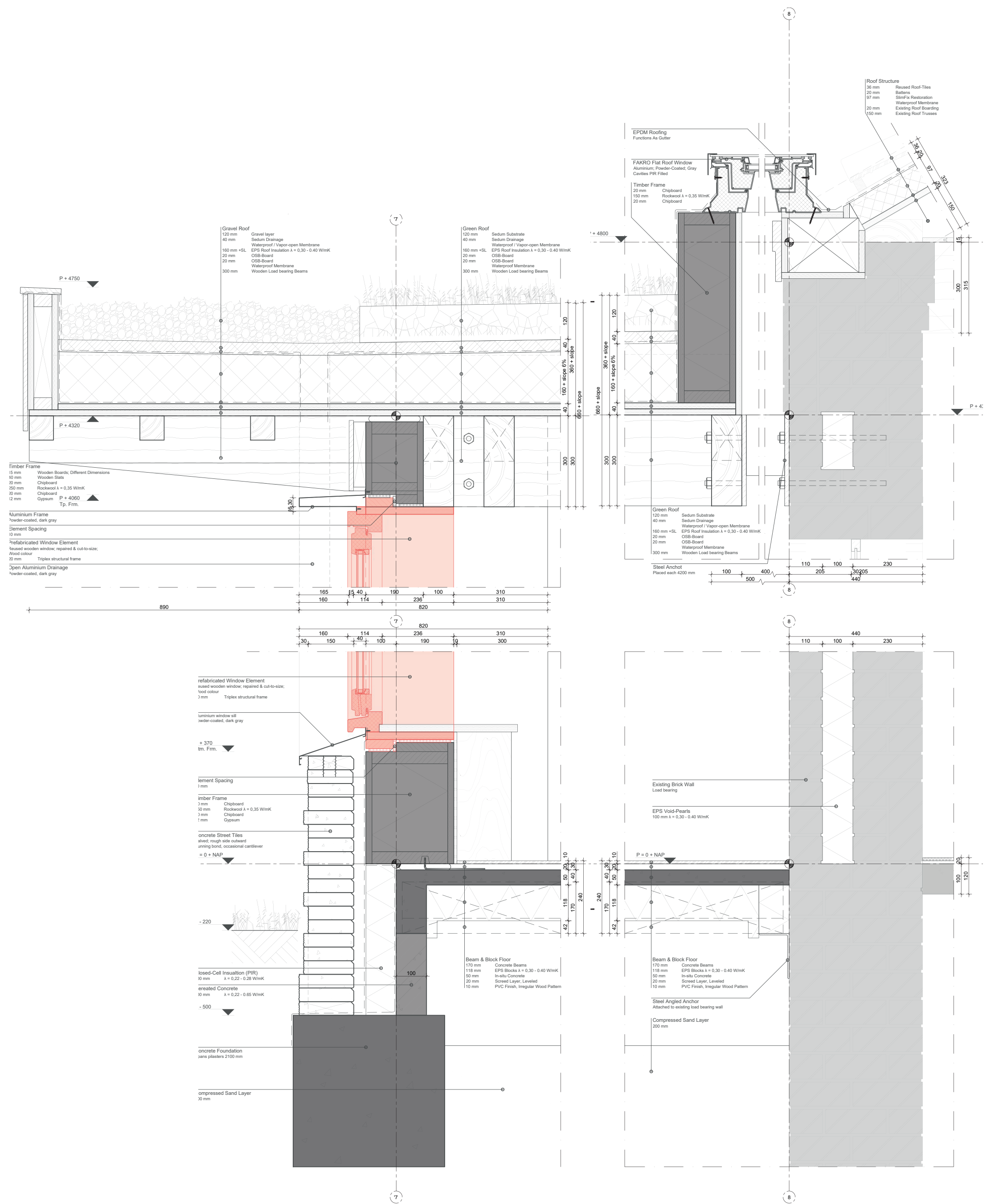
04 Flooring

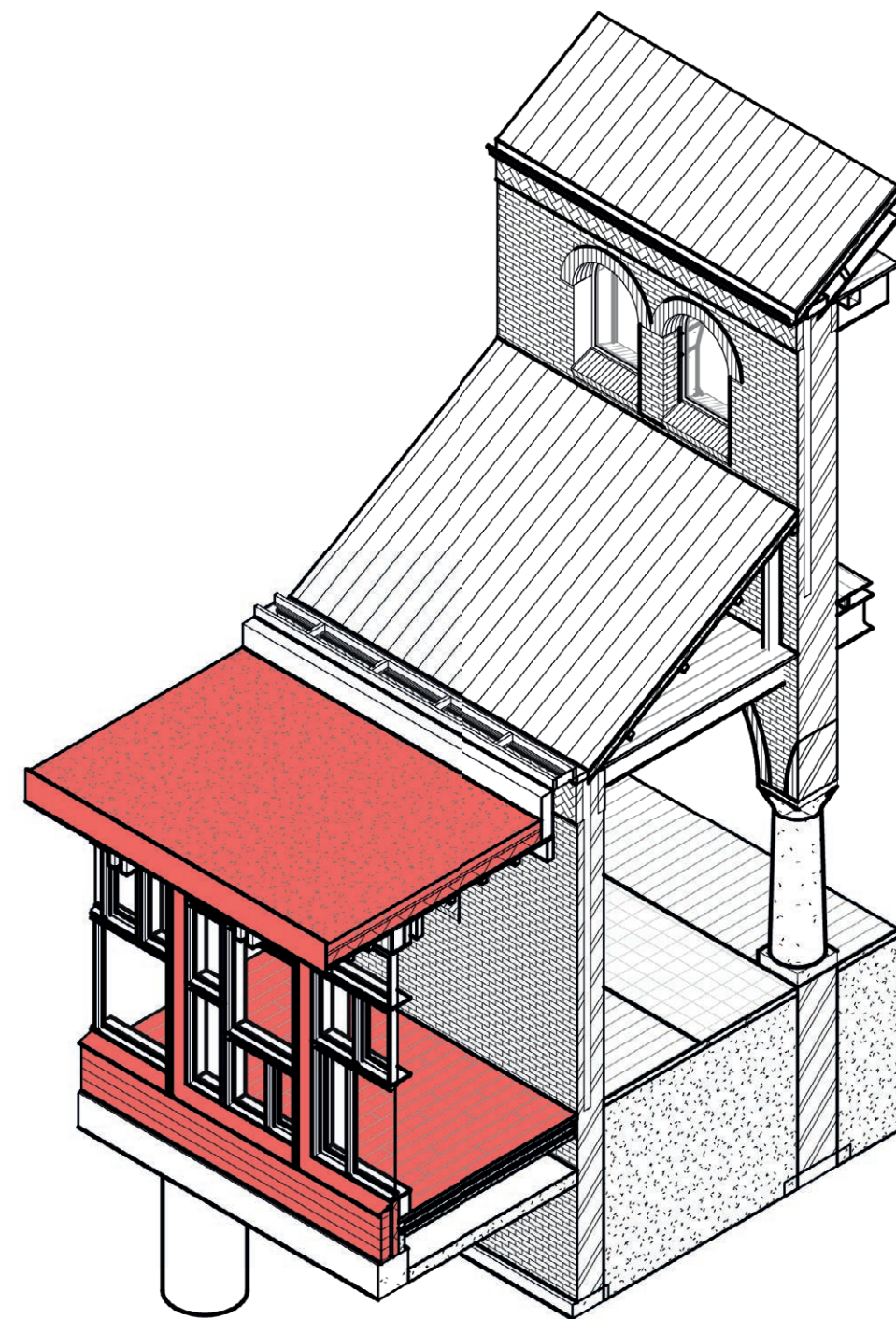




Reclaimed wooden window

05 Timber Elements





06 Finish



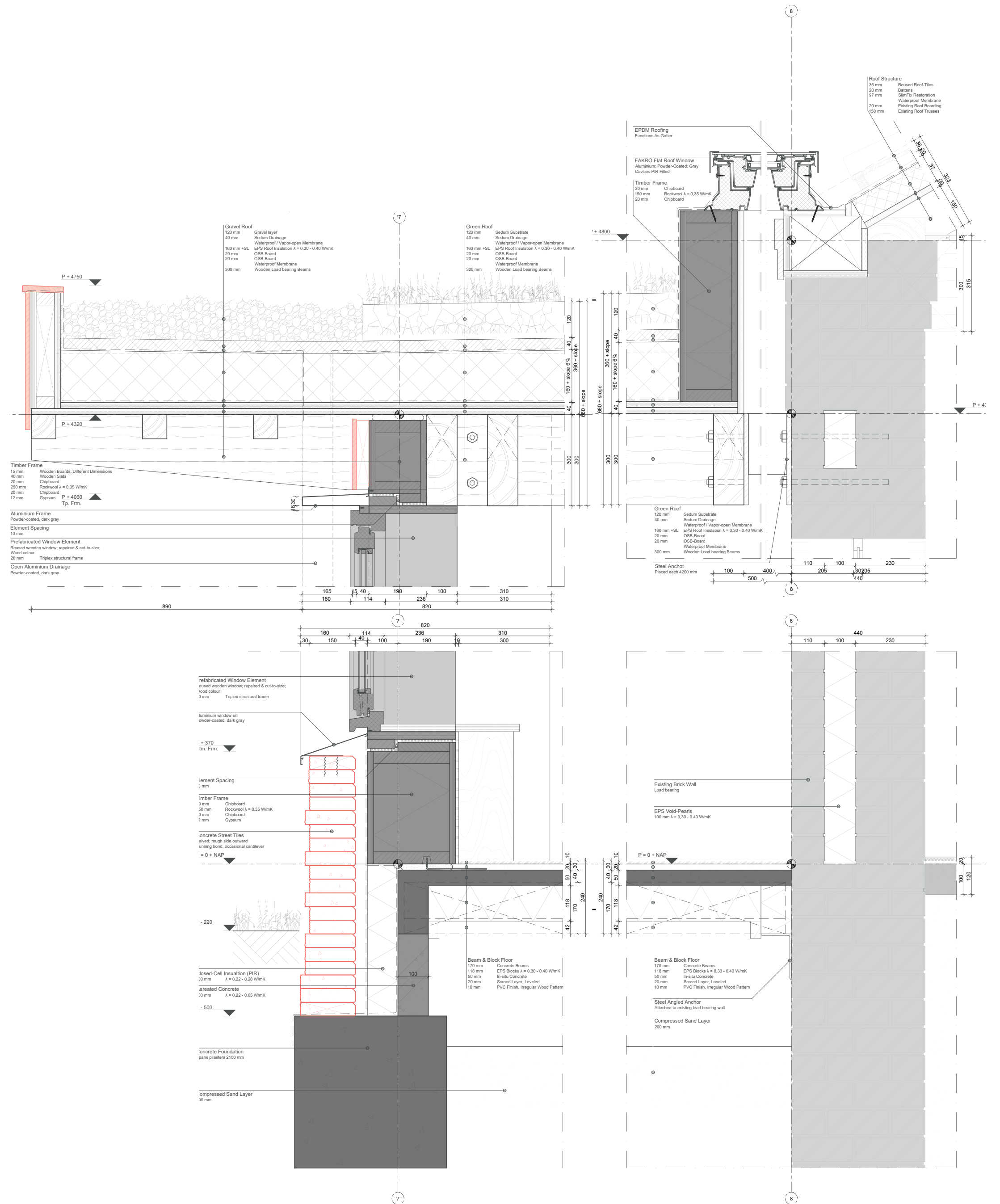
Reclaimed red cedar panels

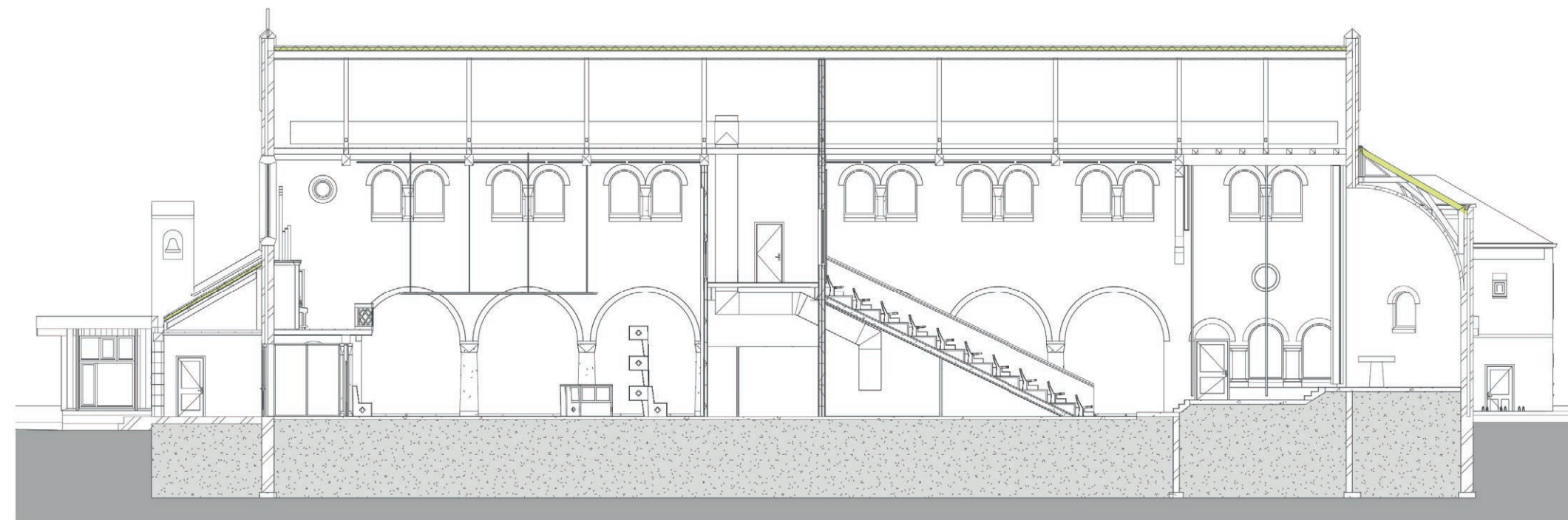
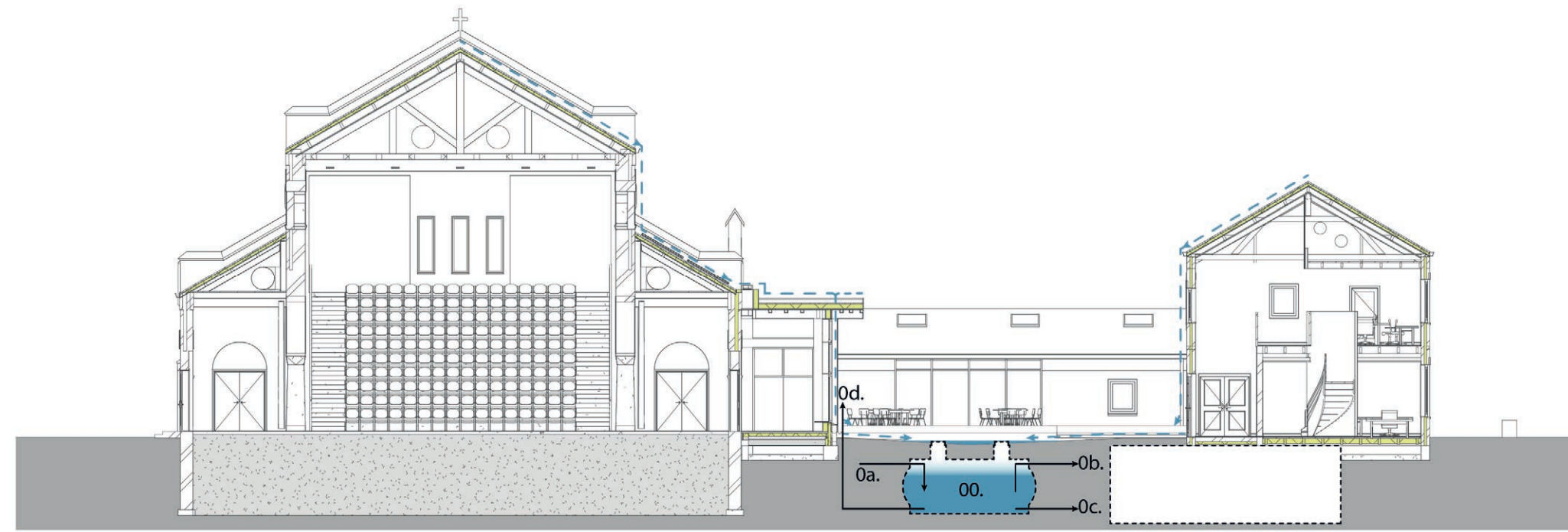


Reclaimed wooden window



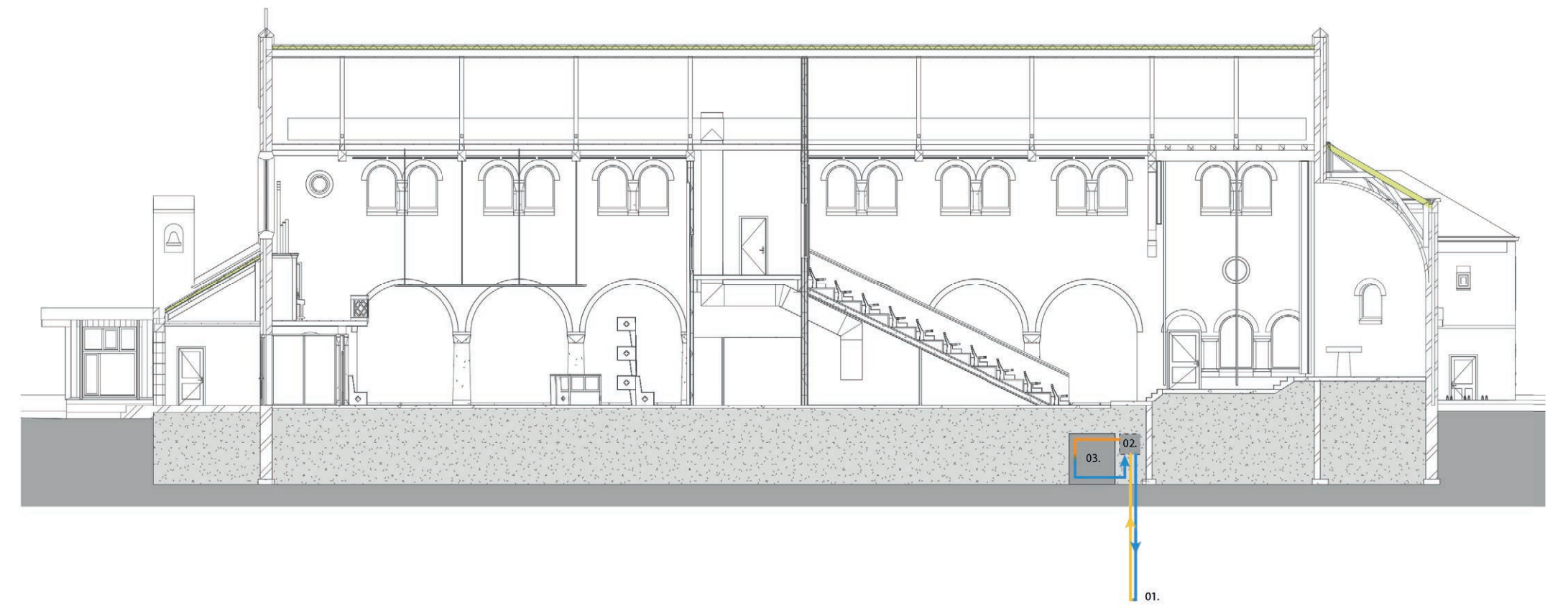
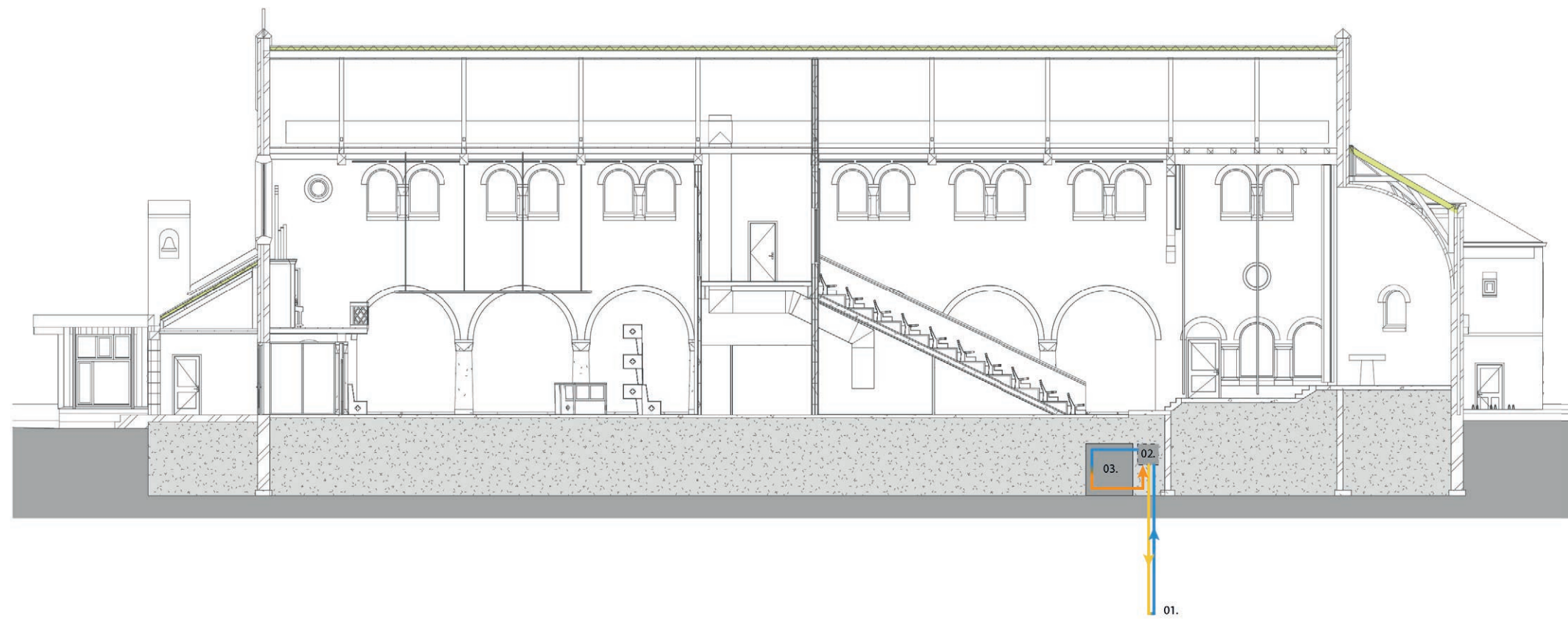
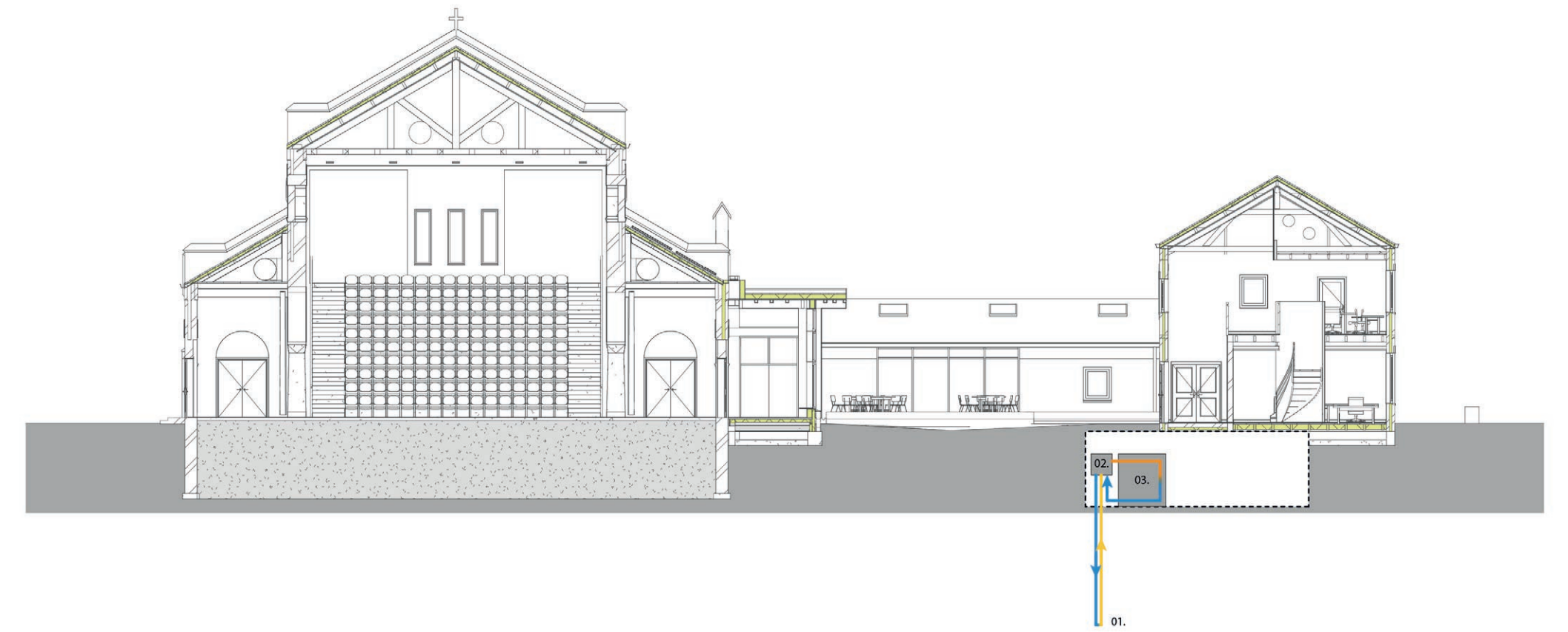
Reused concrete tiles





Water Collection

- 00 Submerged Water Tank**
- a. Water Inflow**
- b. Water Overflow**
- c. Toilet Water**
- b. Plant Irrigation**

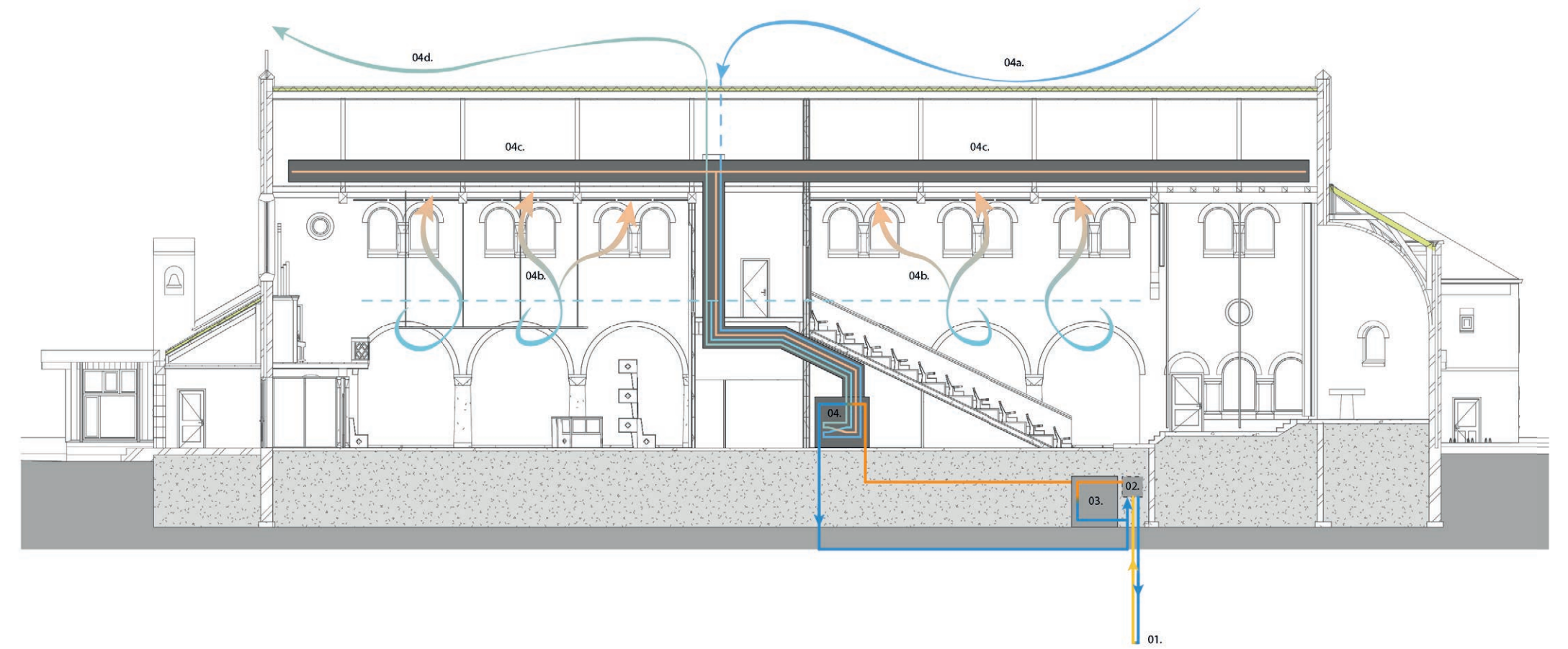
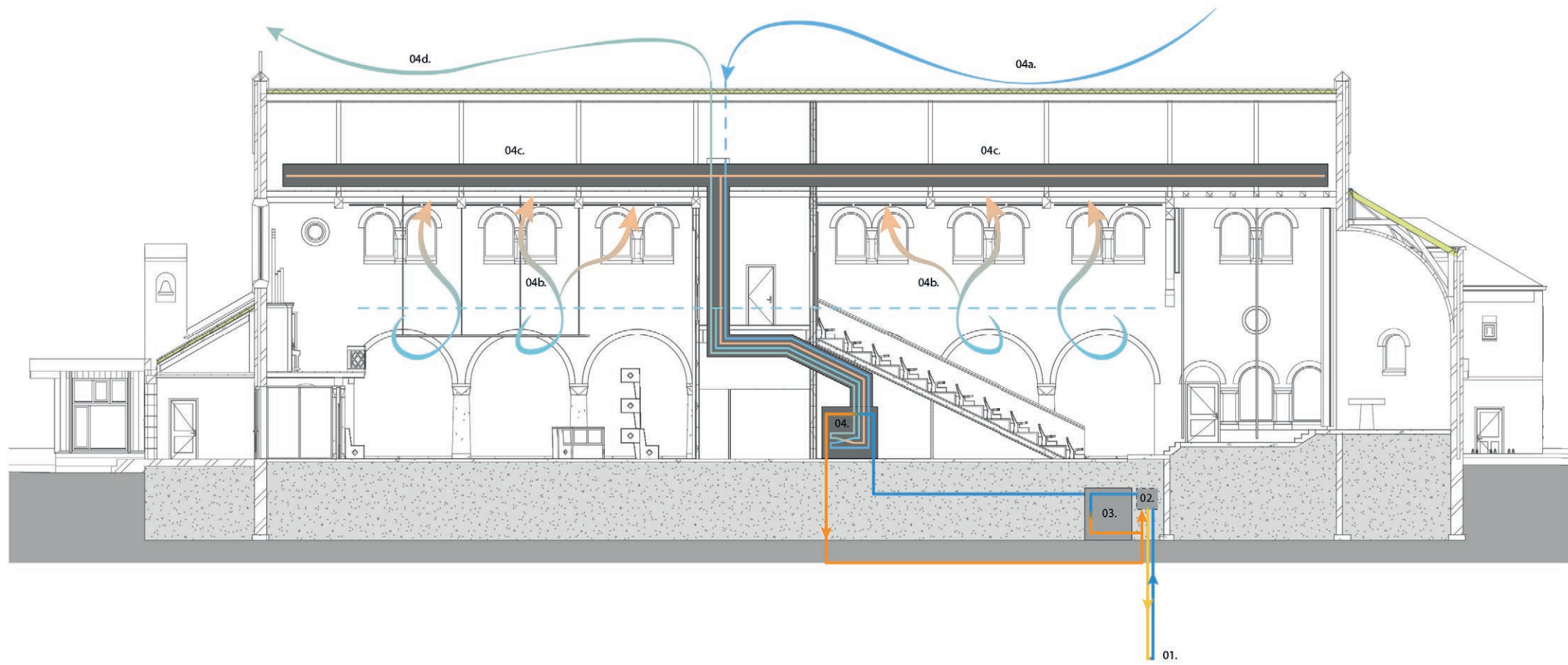
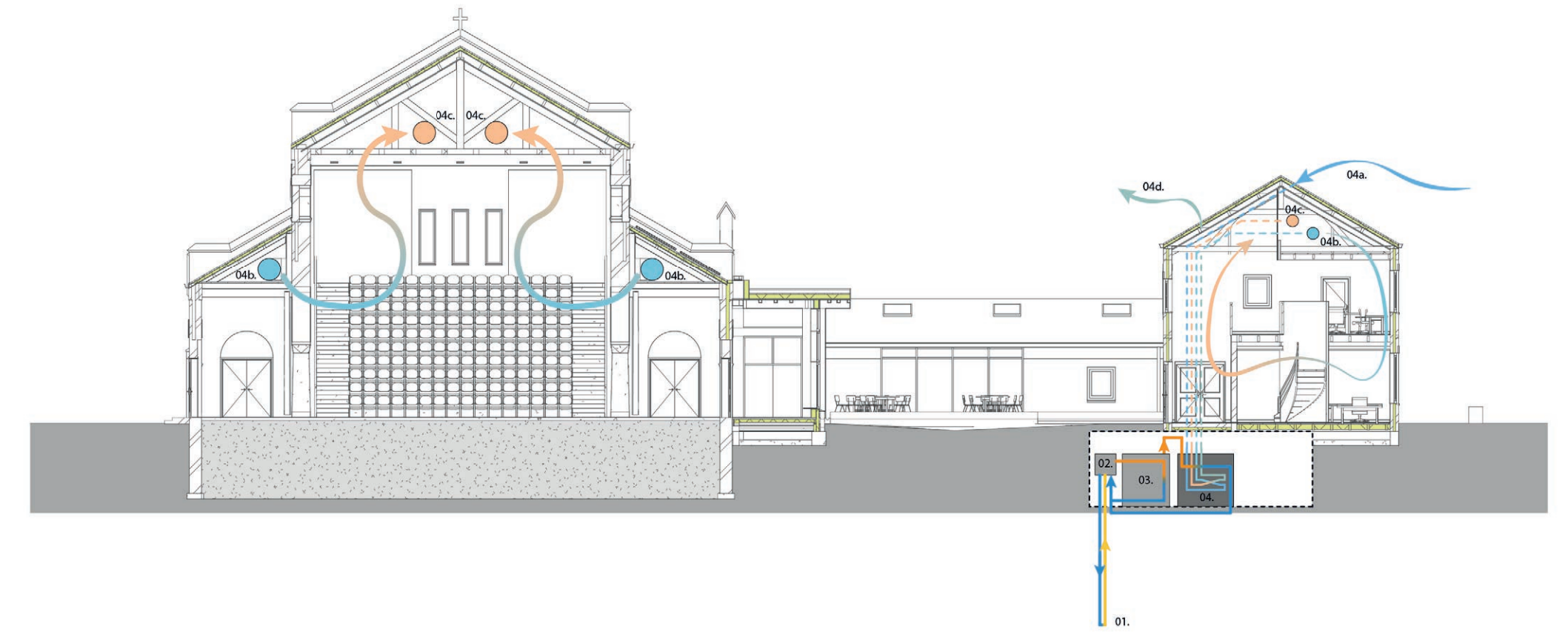
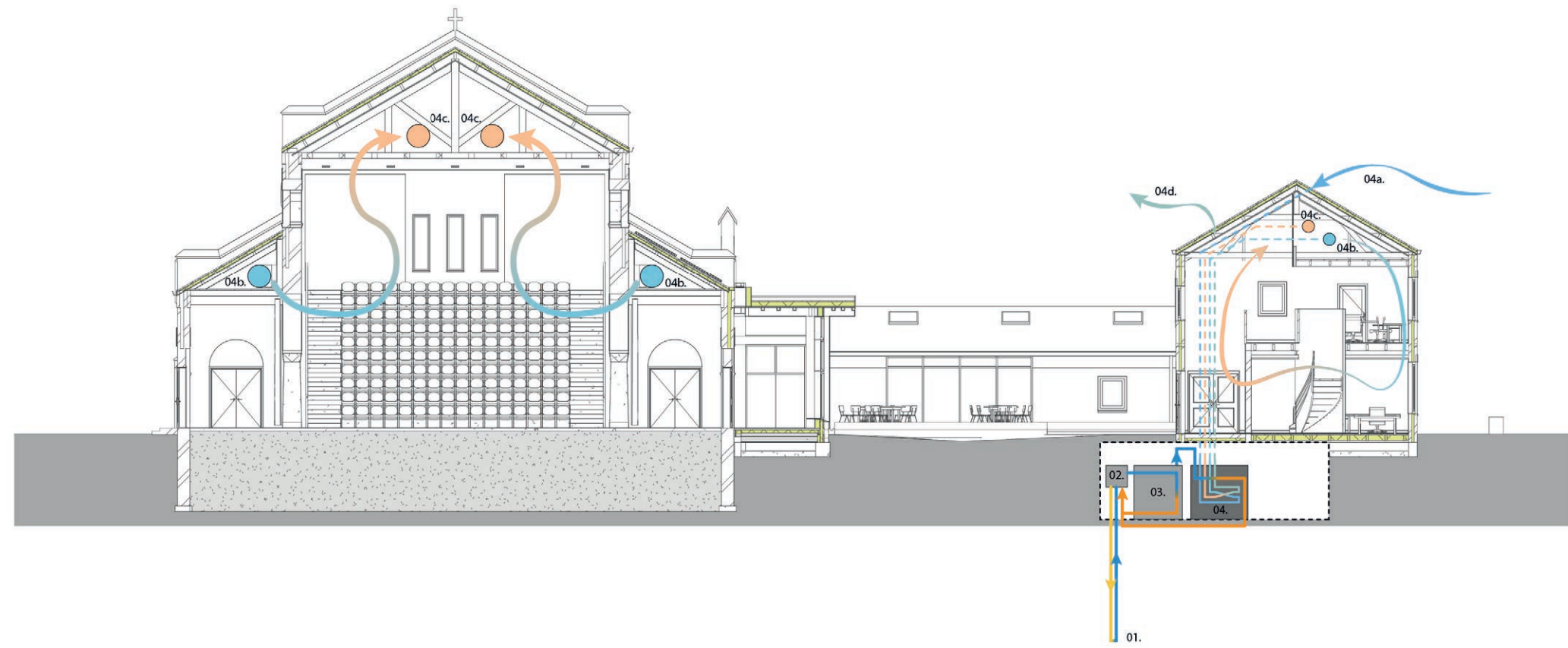


Summer

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank

Winter

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank

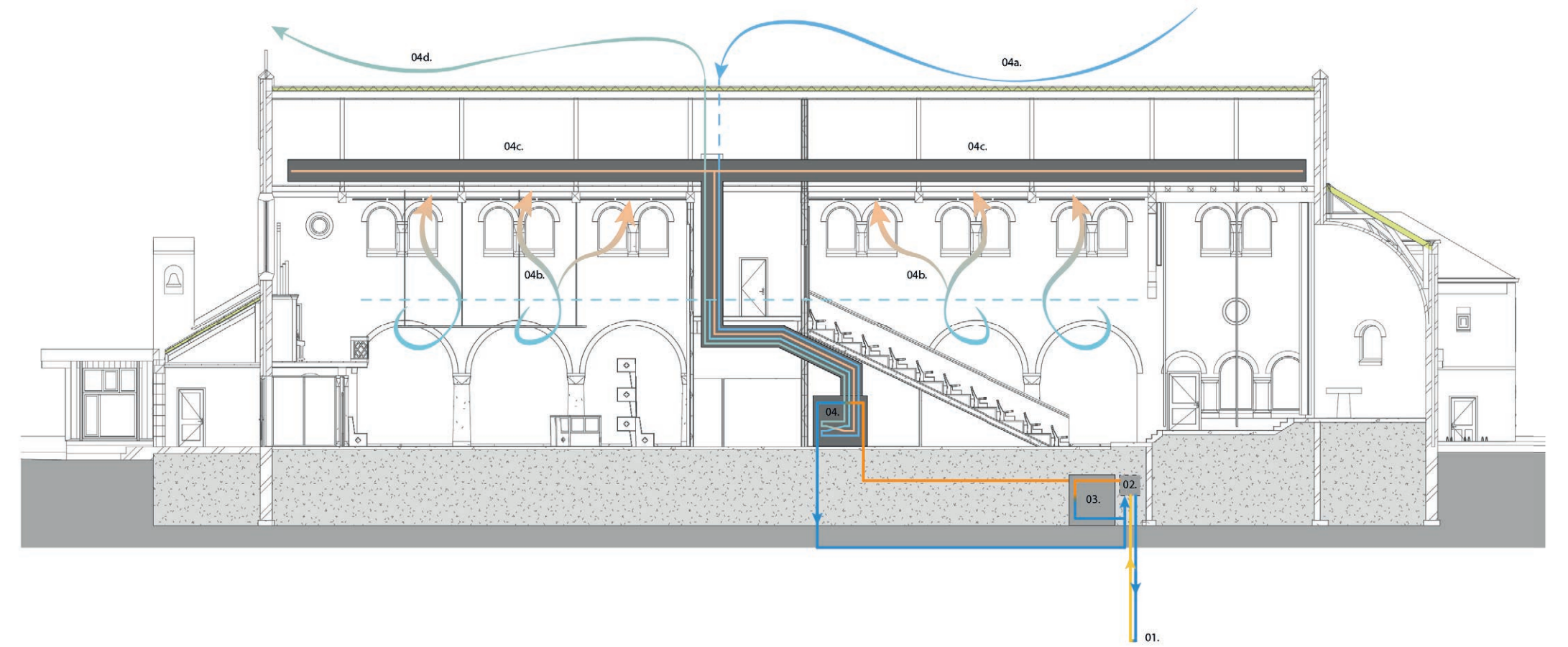
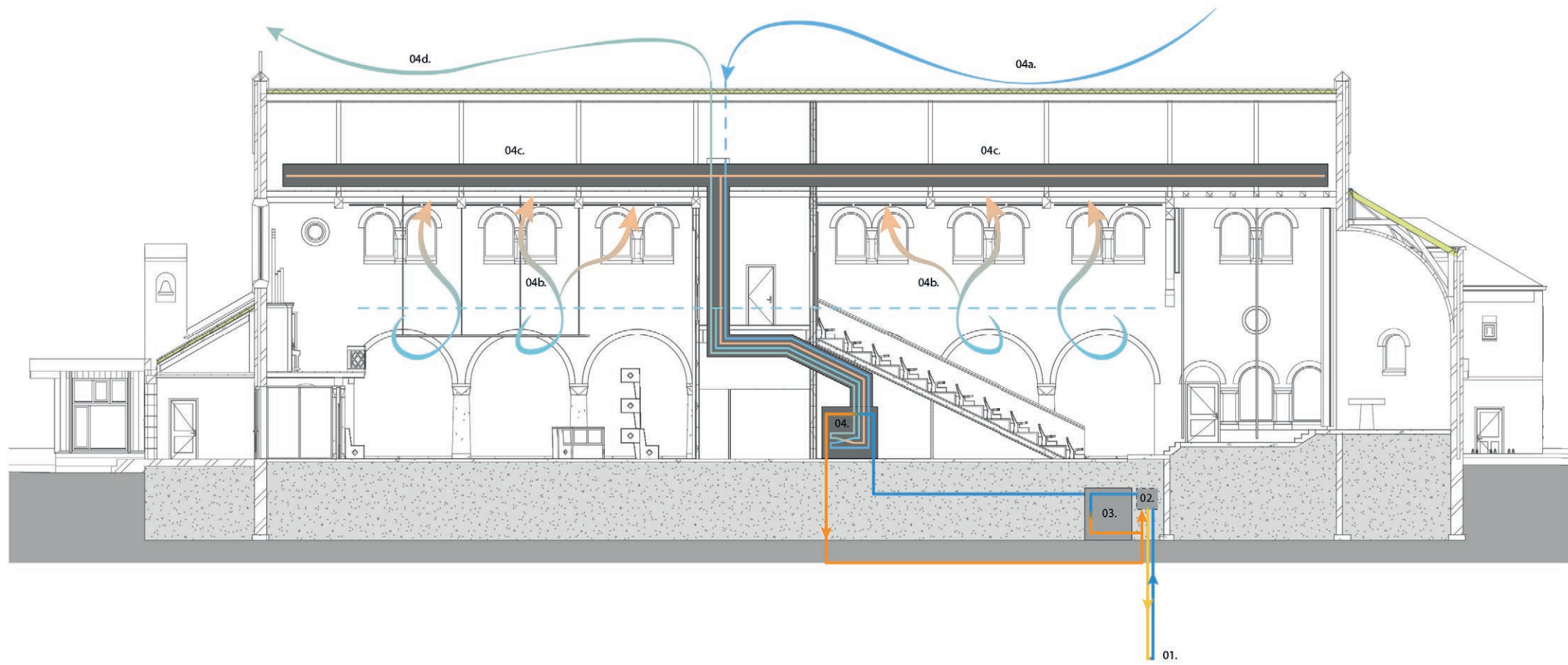
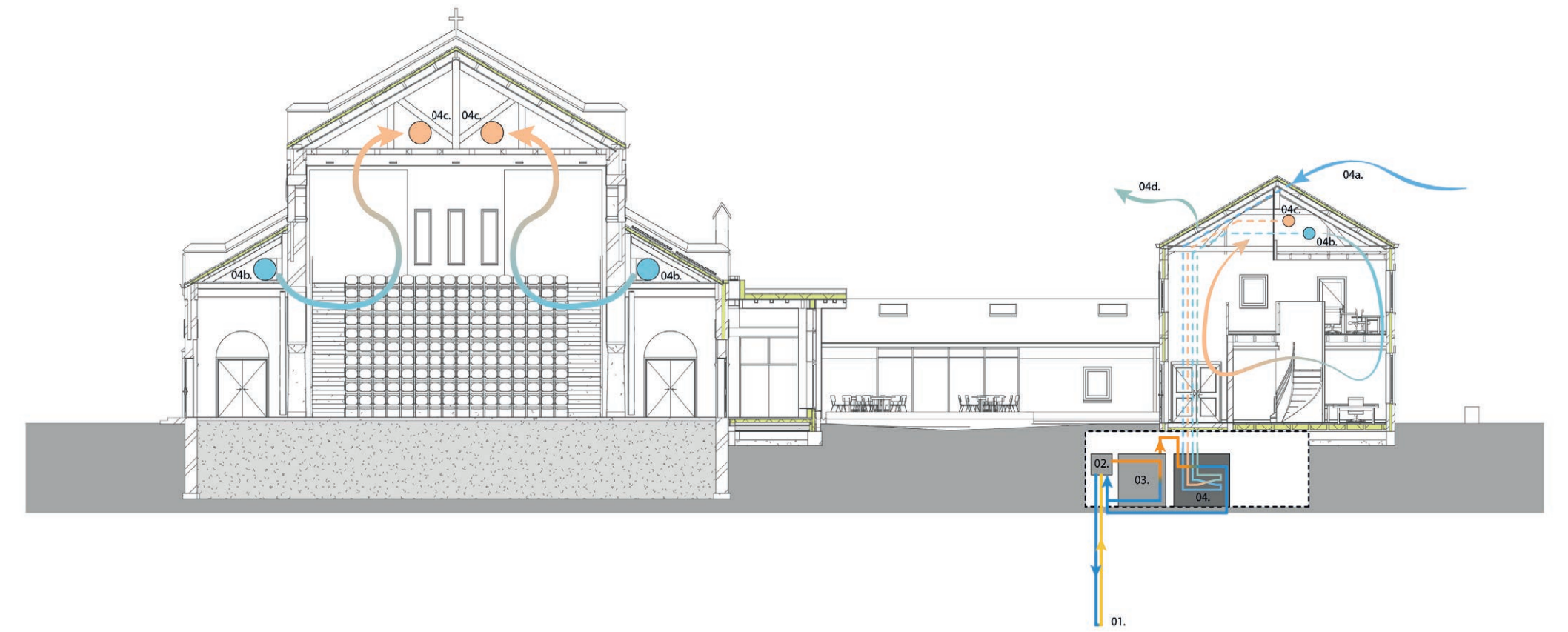
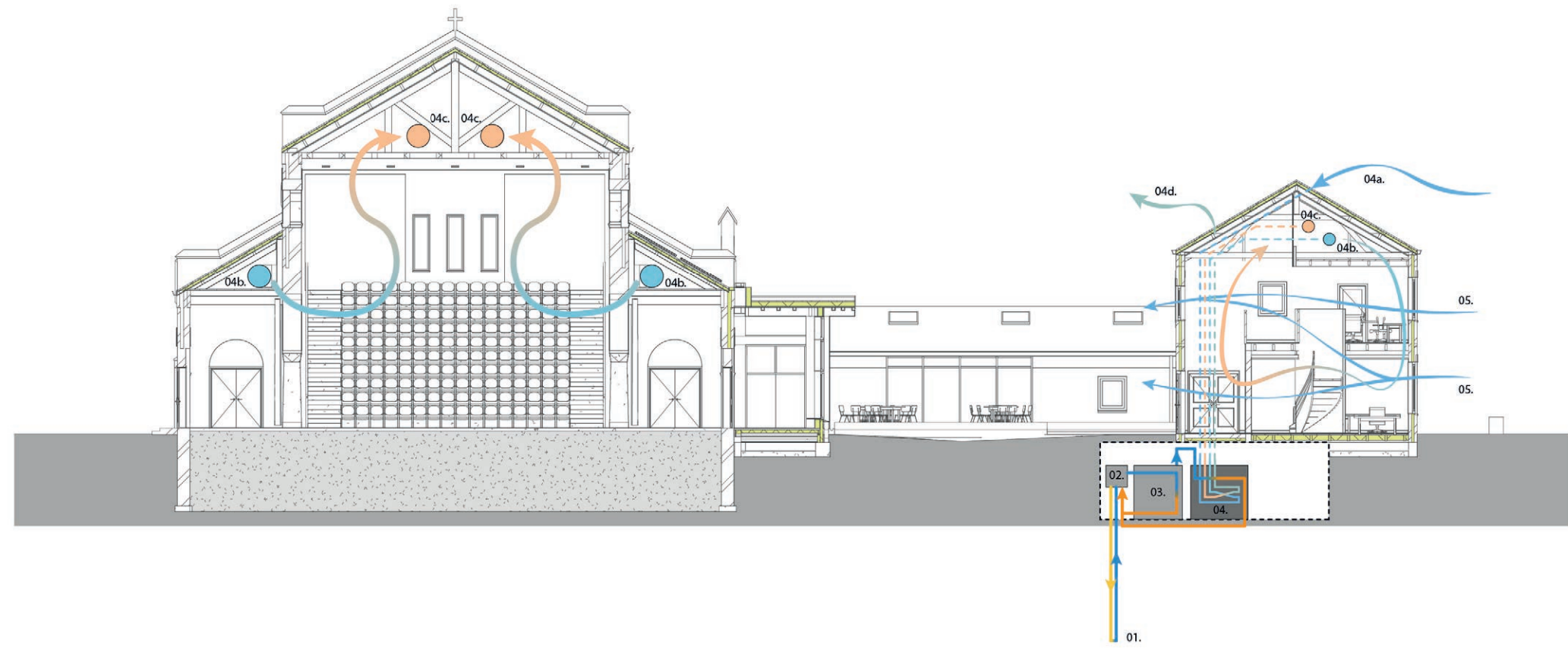


Summer

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)

Winter

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)

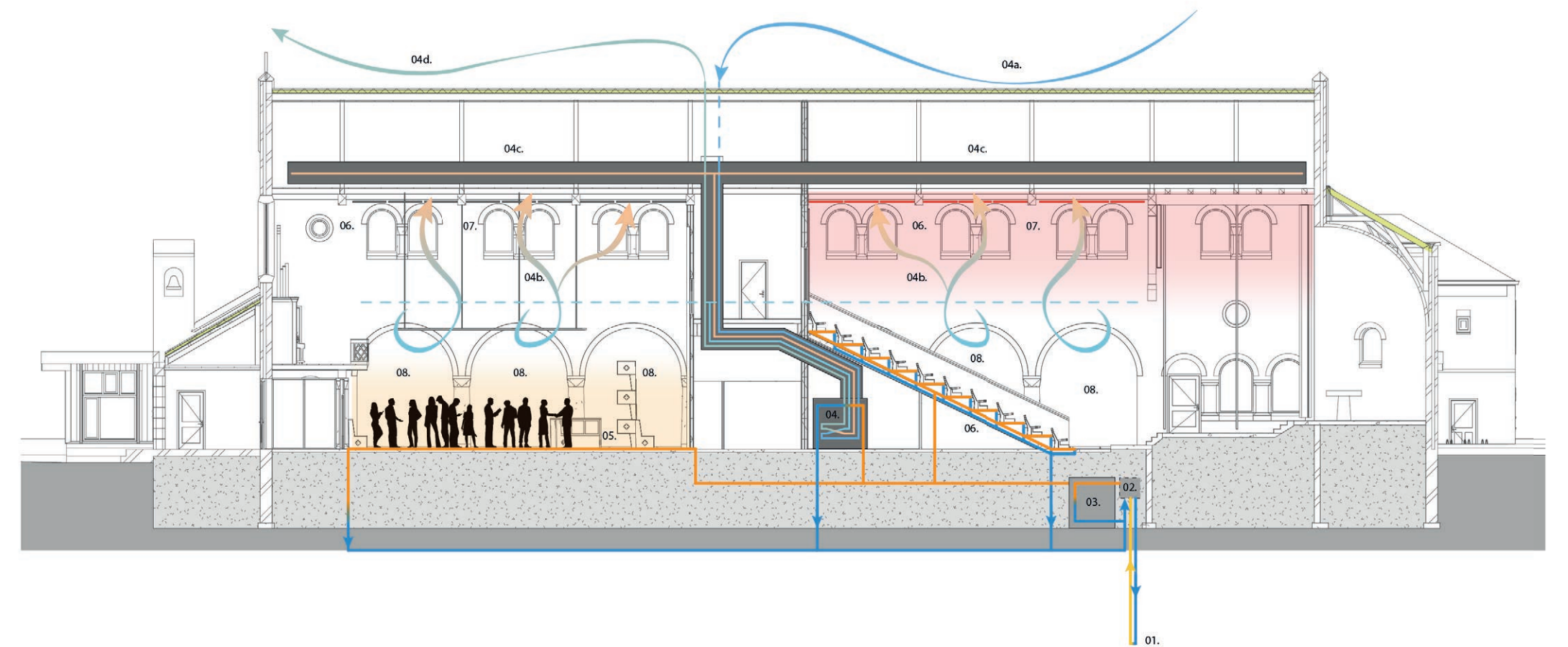
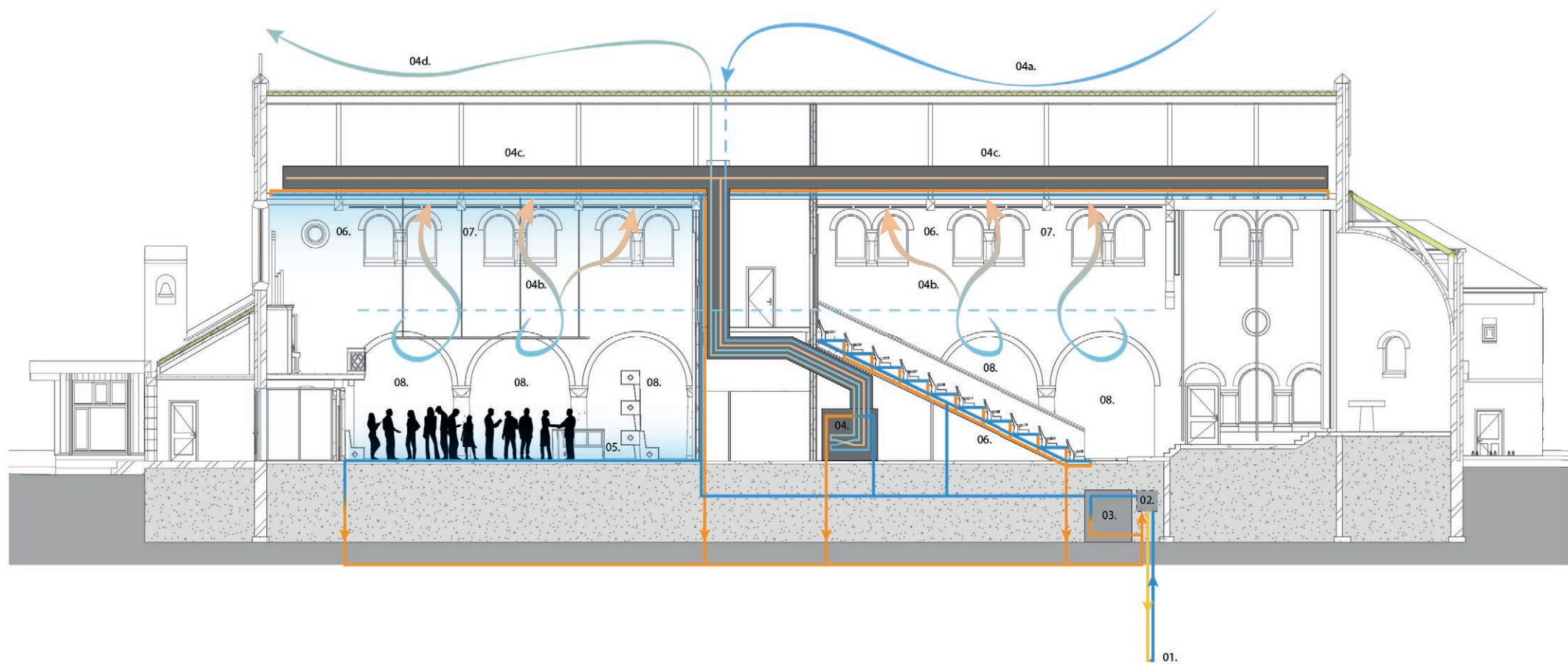
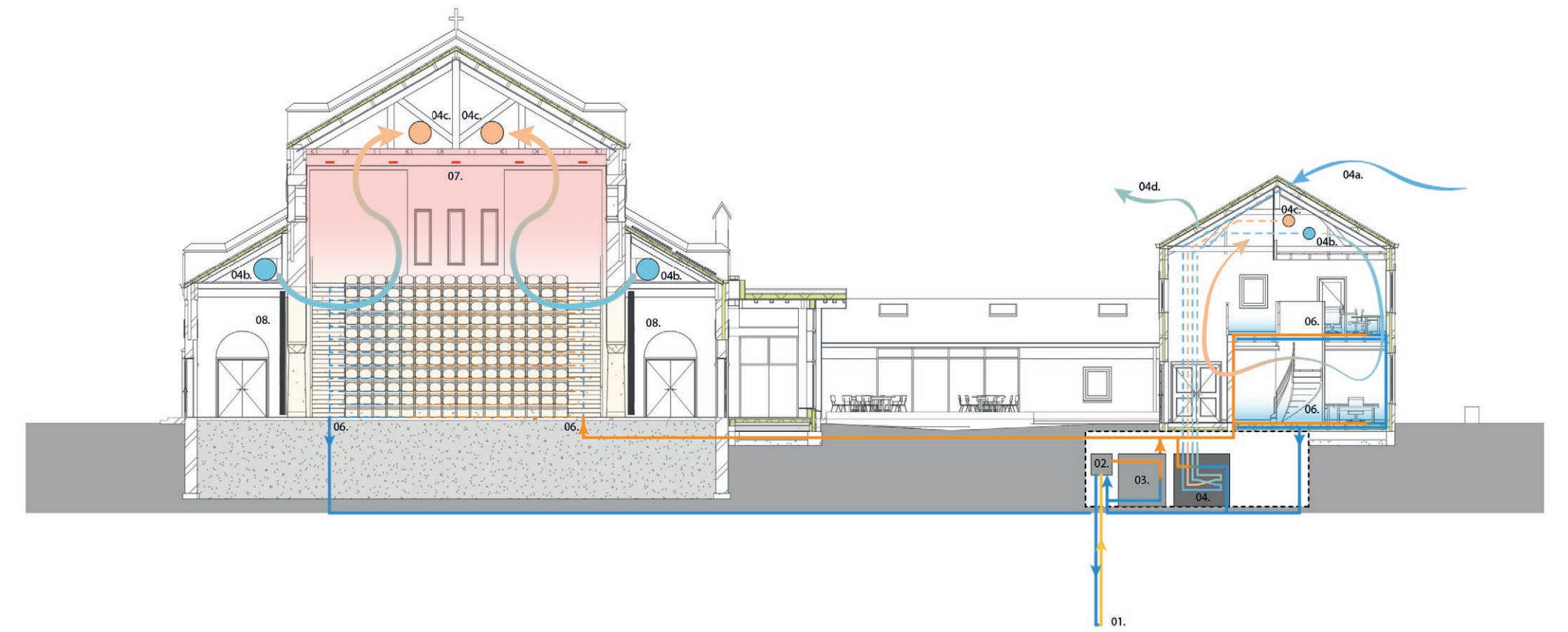
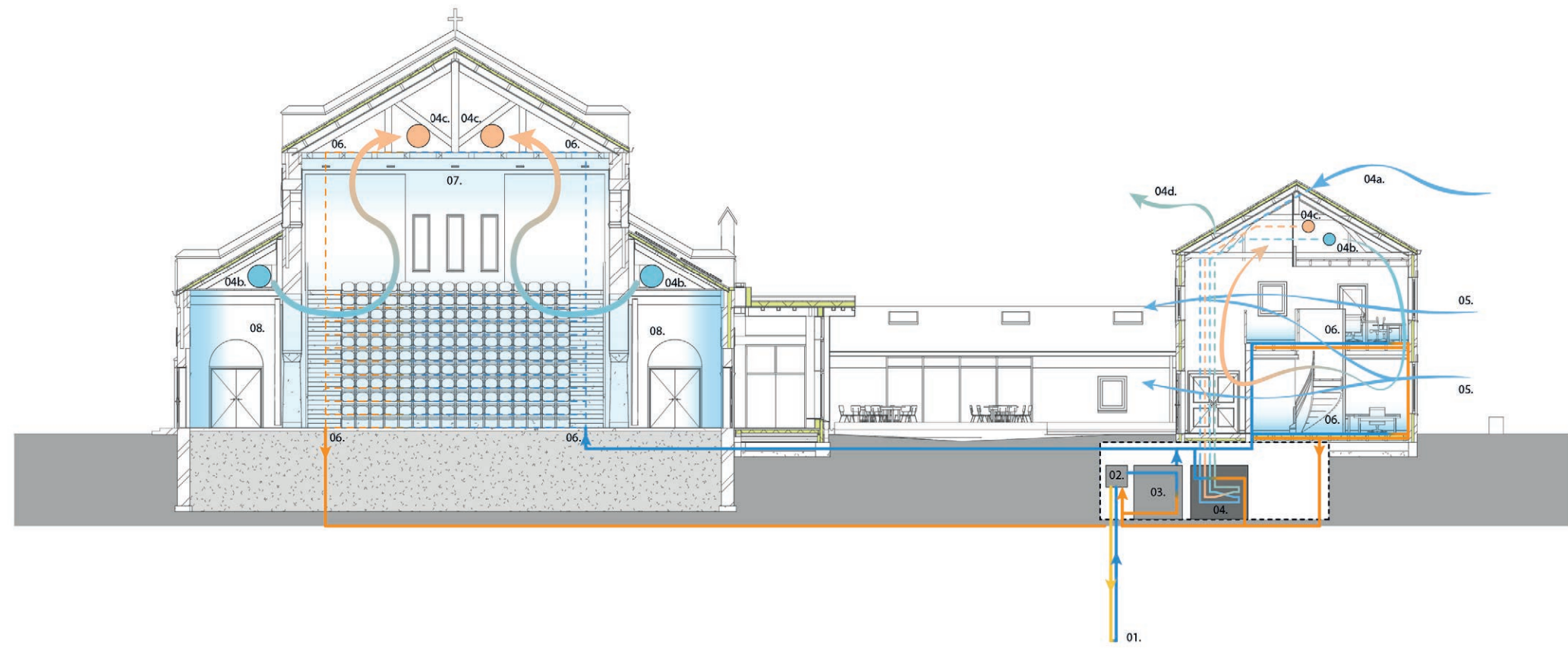


Summer

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)

Winter

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)

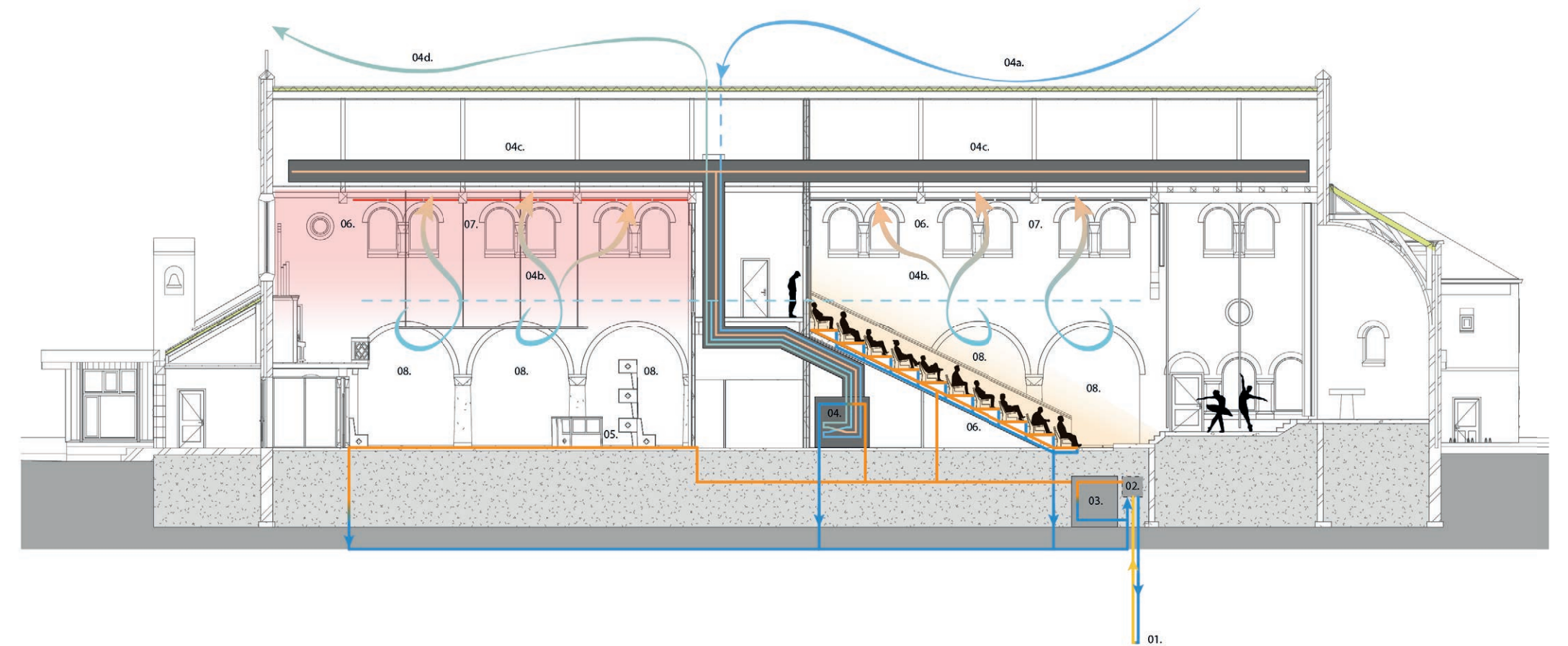
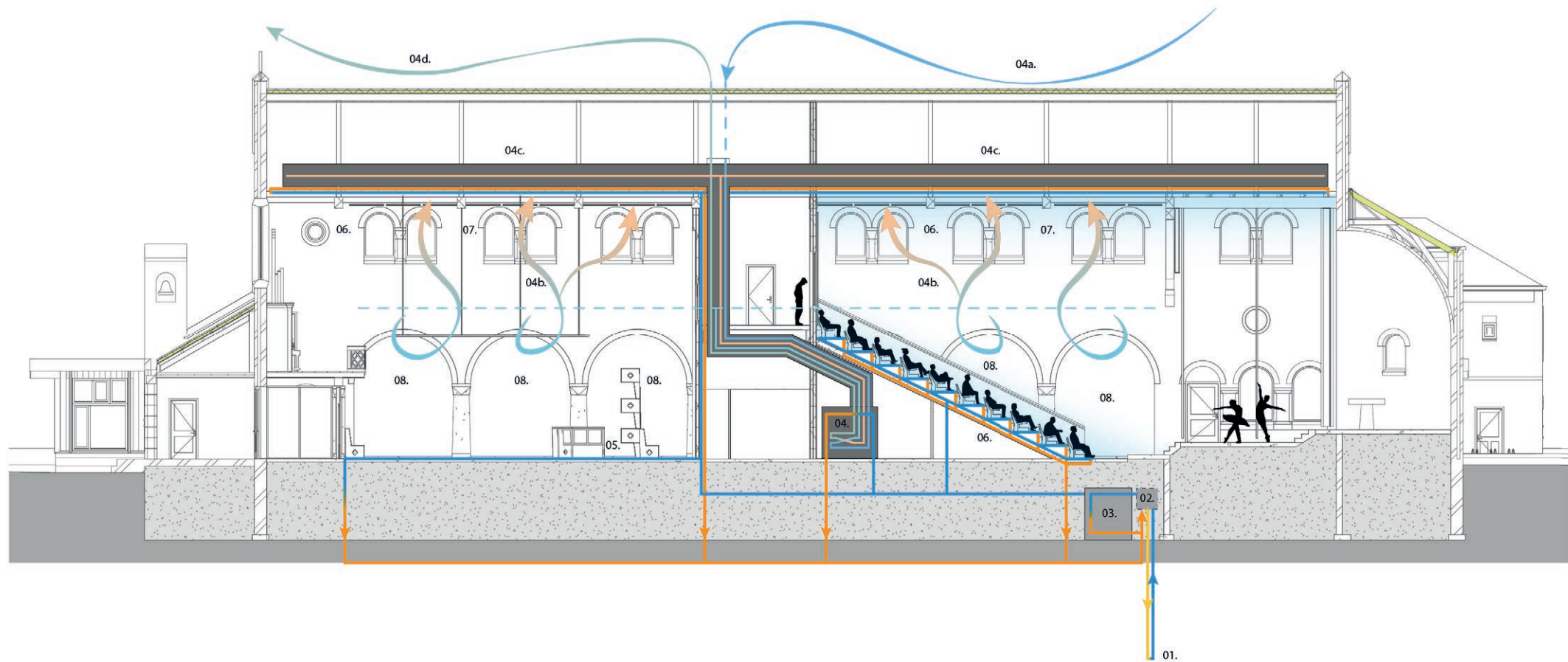
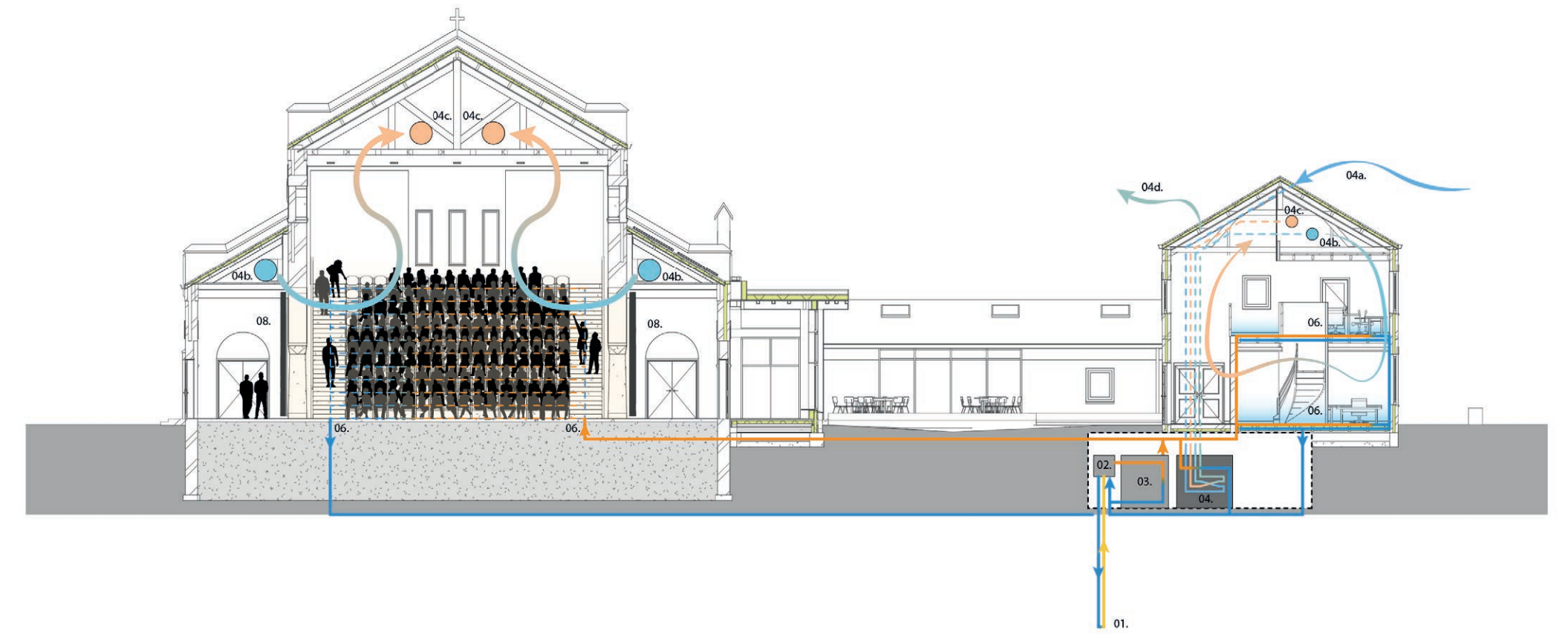
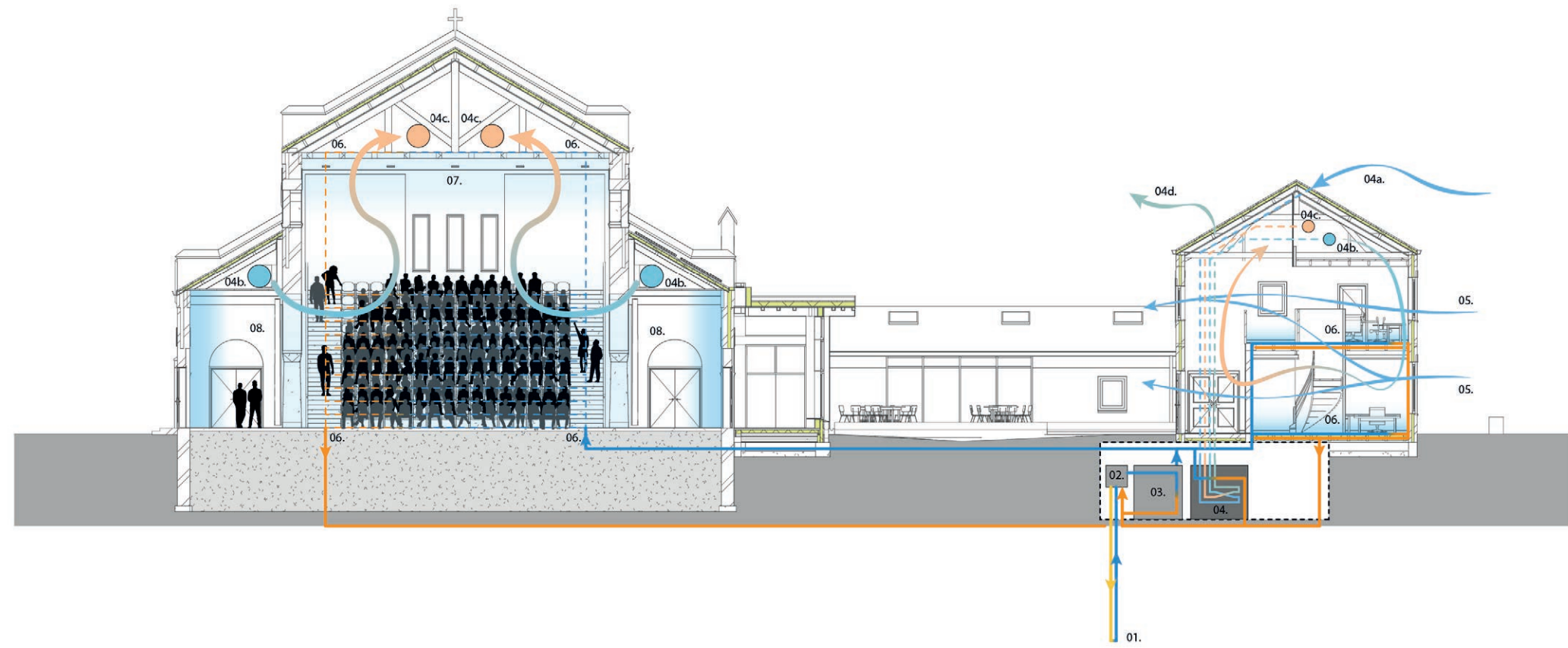


Summer

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)
- 06 Floor/Ceiling Cooling
- 06 Infrared Panel (OFF)
- 07 Curtains (Opened)

Winter

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)
- 06 Floor/Ceiling Heating
- 06 Infrared Panel (ON)
- 07 Curtains (CLOSED)

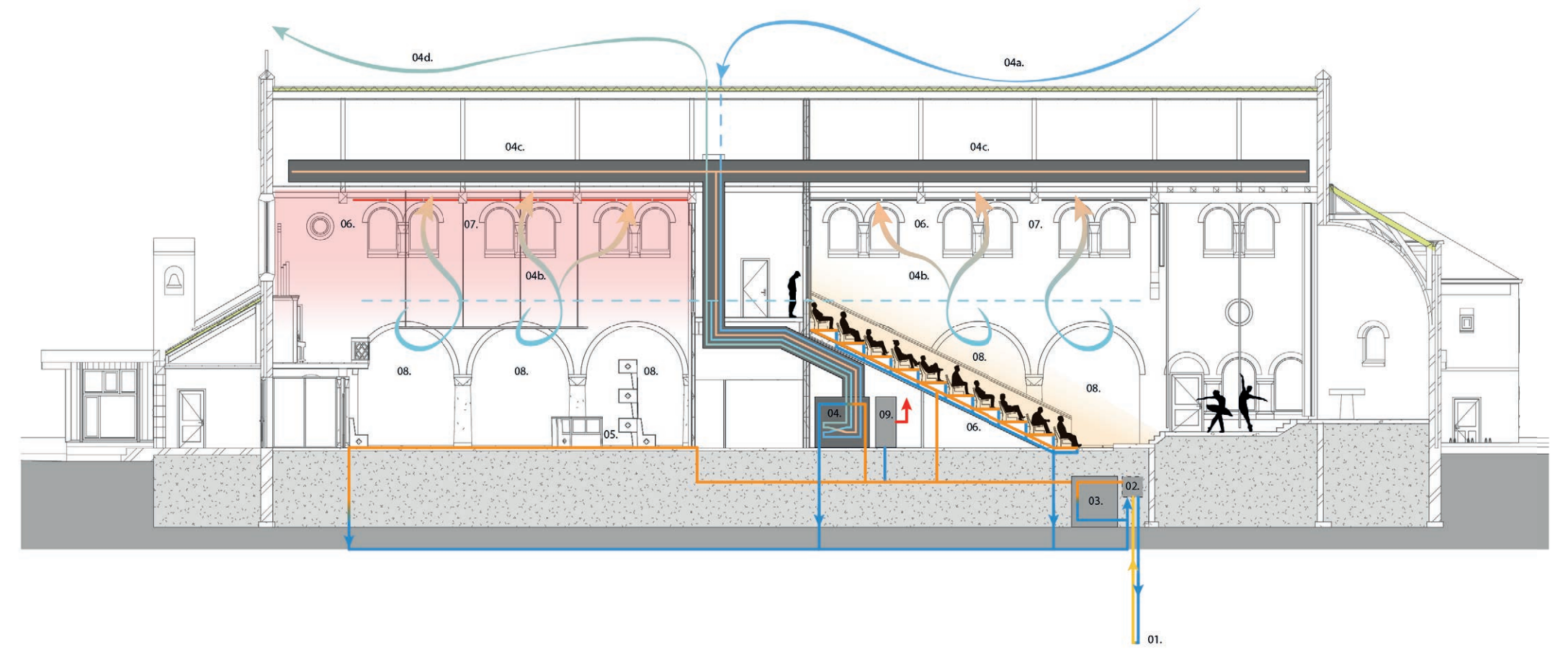
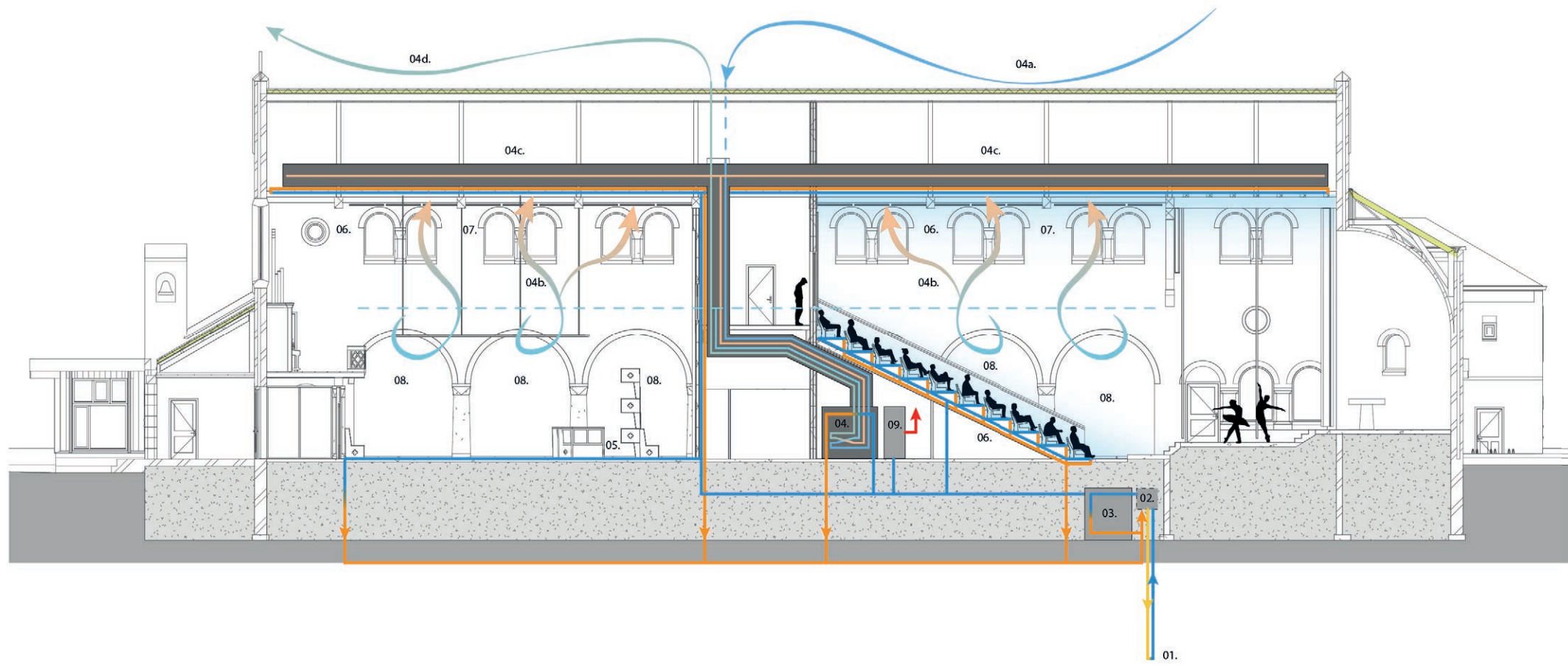
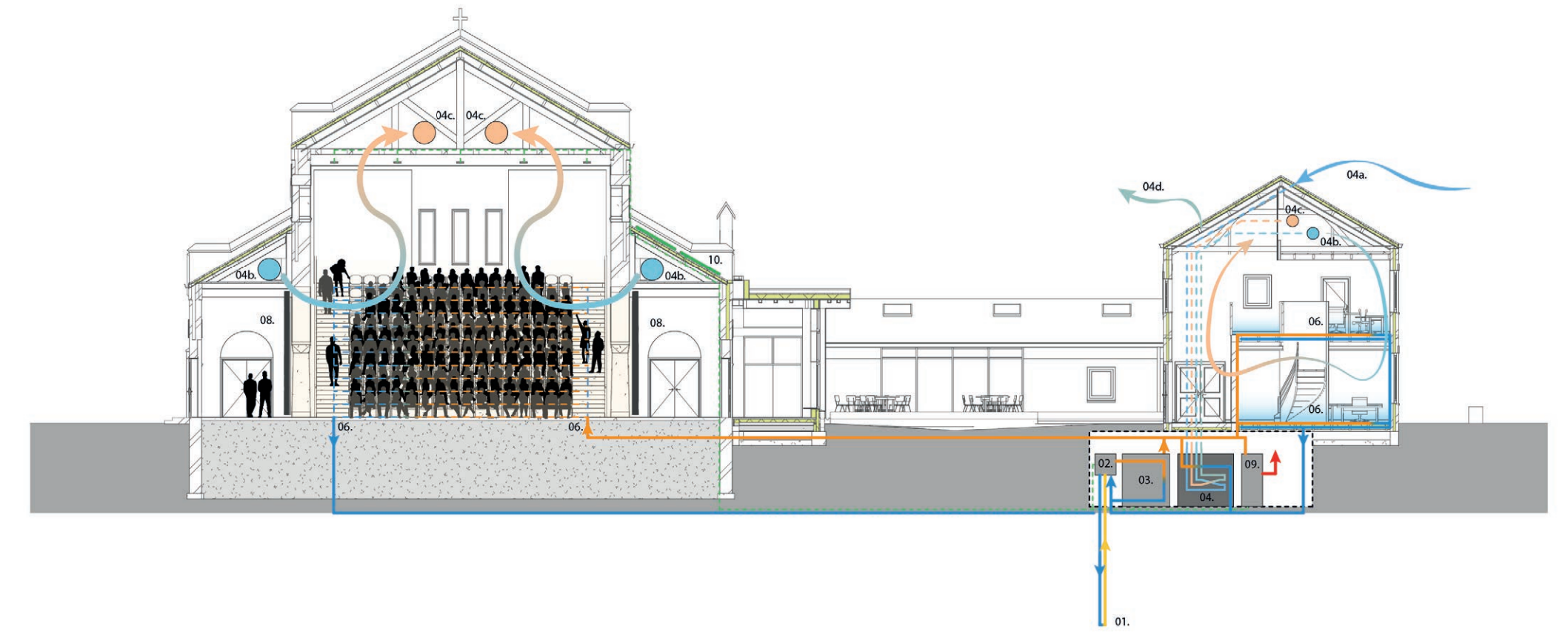
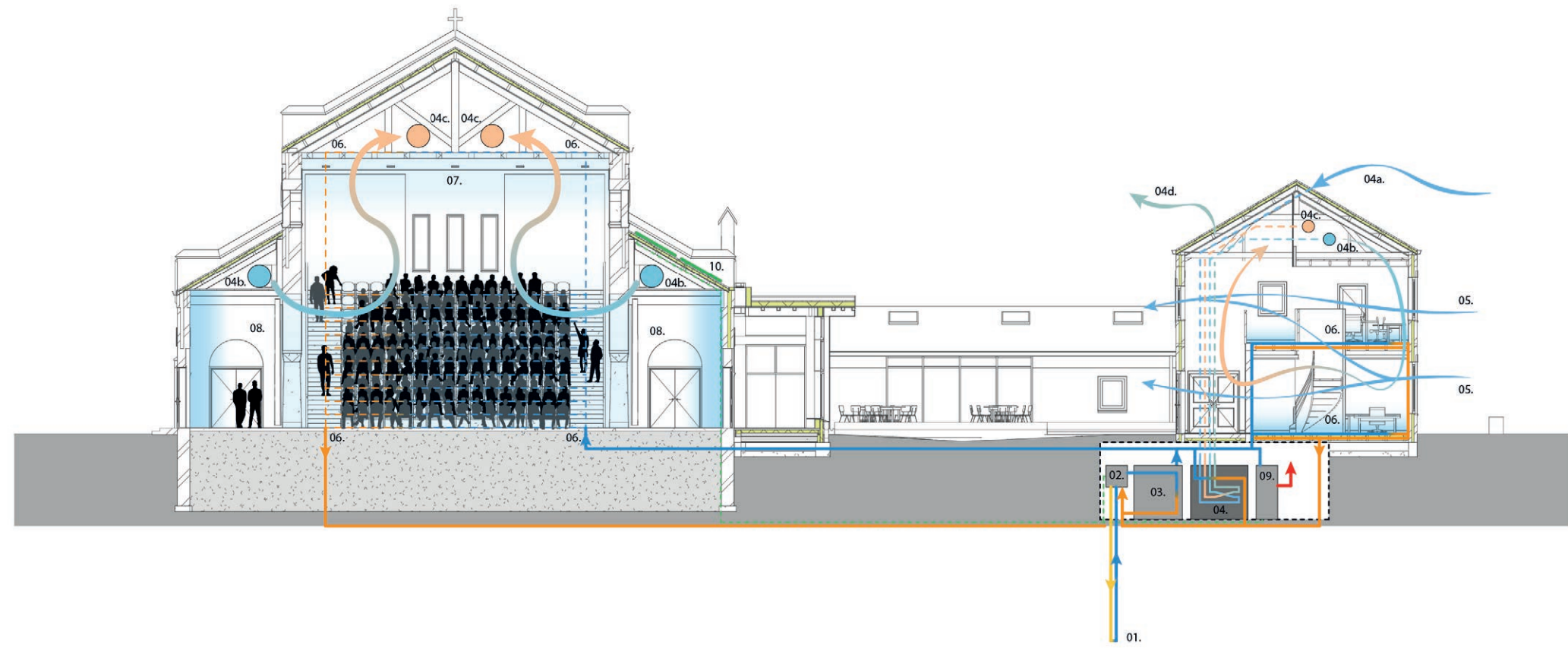


Summer

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)
- 06 Floor/Ceiling Cooling
- 06 Infrared Panel (OFF)
- 07 Curtains (Opened)

Winter

- 01 Thermal Storage (10~12 °C)
- 02 Heat Pump
- 03 Buffer Tank
- 04 Mech. Ventilation (Type D)
- 05 Nat. Ventilation (Type C)
- 06 Floor/Ceiling Heating
- 06 Infrared Panel (ON)
- 07 Curtains (CLOSED)



Summer

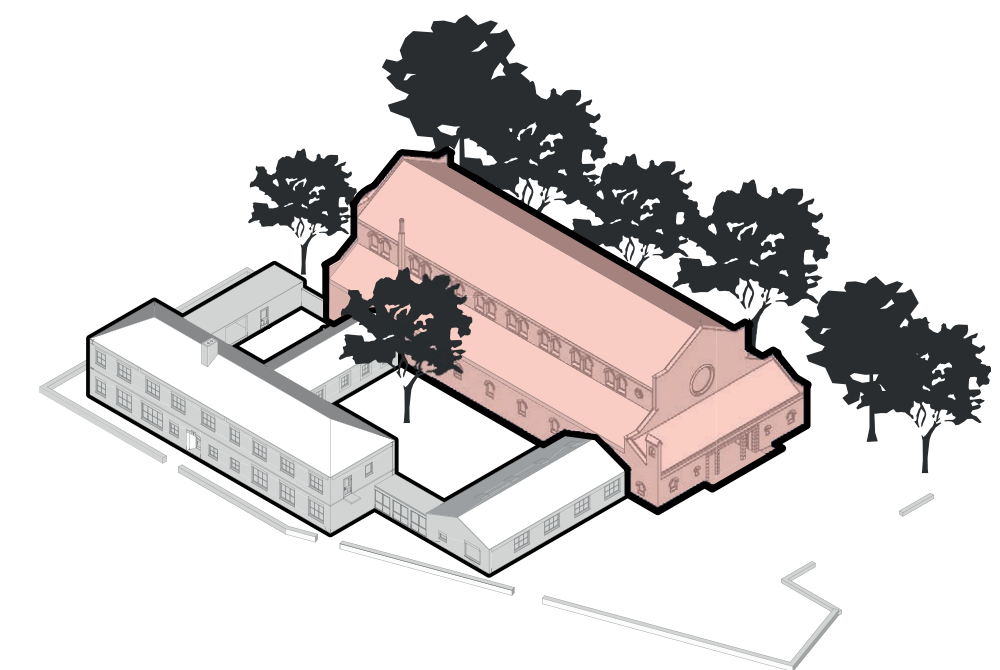
- | | | |
|-------------------------------|------------------------------|--------------------|
| 01 Thermal Storage (10~12 °C) | 05 Nat. Ventilation (Type C) | 09 Electric Boiler |
| 02 Heat Pump | 06 Floor/Ceiling Cooling | 10 PV Panels |
| 03 Buffer Tank | 06 Infrared Panel (OFF) | |
| 04 Mech. Ventilation (Type D) | 07 Curtains (Opened) | |

Winter

- | | | |
|-------------------------------|------------------------------|--------------------|
| 01 Thermal Storage (10~12 °C) | 05 Nat. Ventilation (Type C) | 09 Electric Boiler |
| 02 Heat Pump | 06 Floor/Ceiling Heating | 10 PV Panels |
| 03 Buffer Tank | 06 Infrared Panel (ON) | |
| 04 Mech. Ventilation (Type D) | 07 Curtains (CLOSED) | |



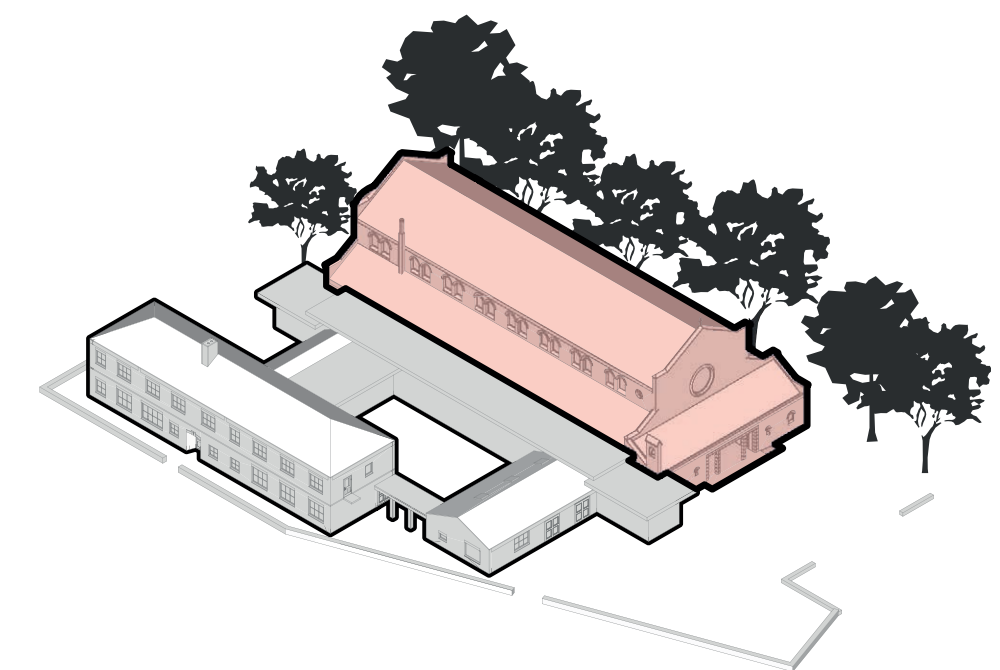
Nave Entrance
Existing

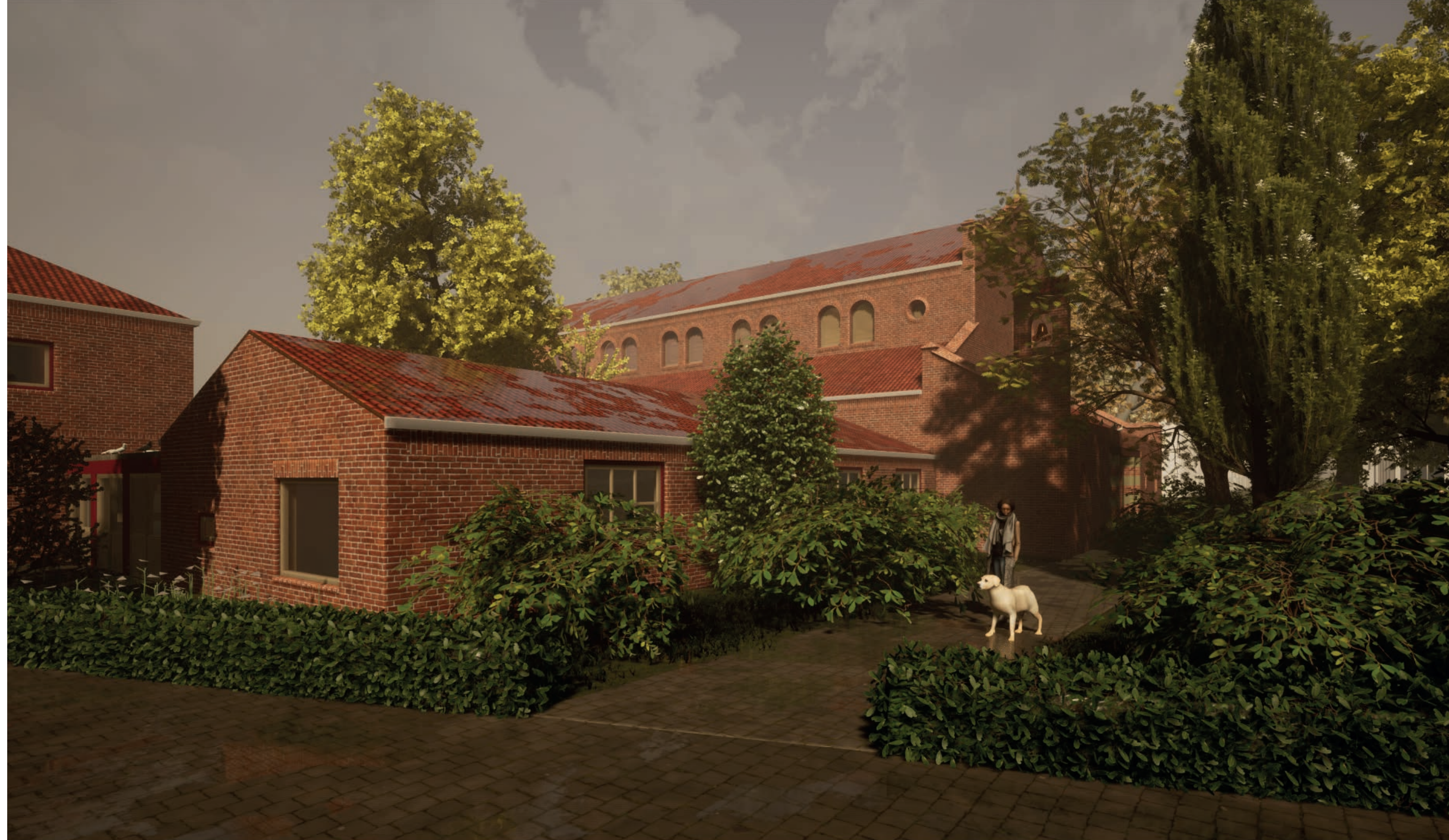




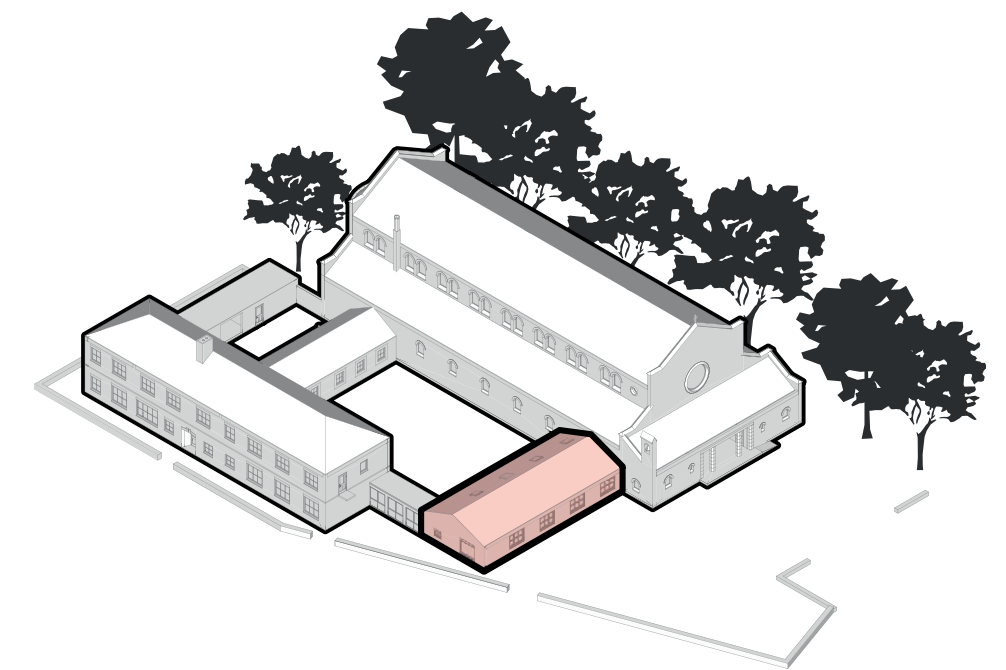
Nave Entrance

New





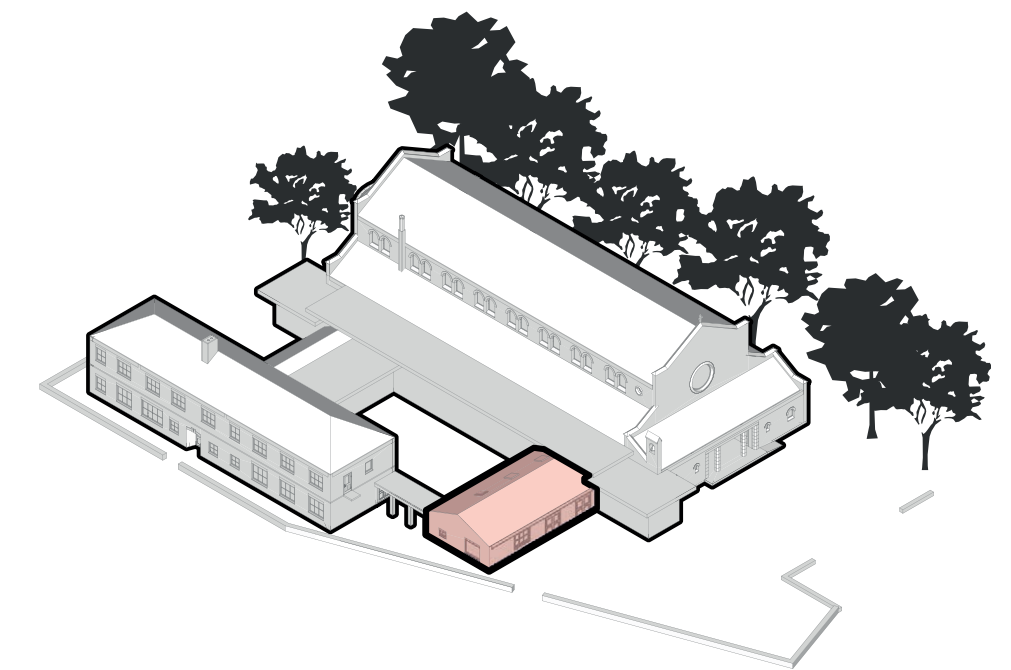
Front Entrance
Existing





Front Entrance

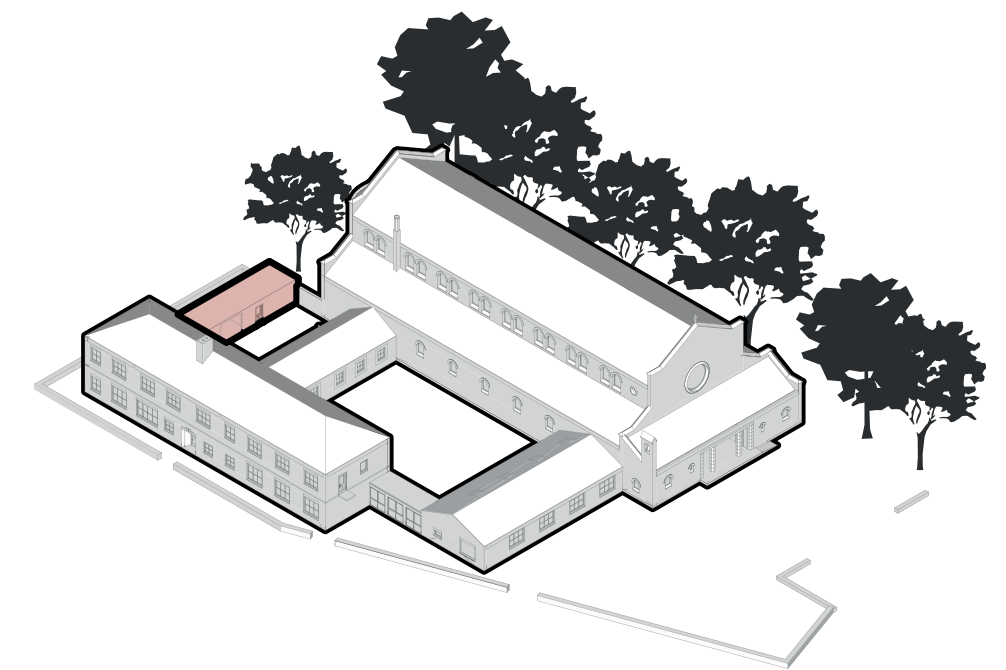
New





Back Entrance

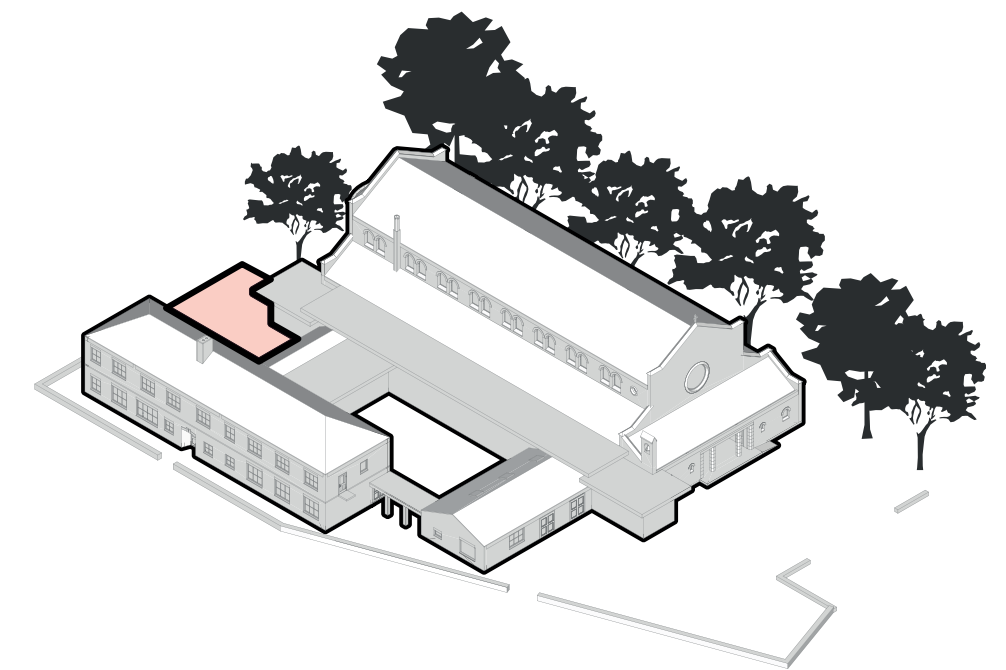
Existing





Back Entrance

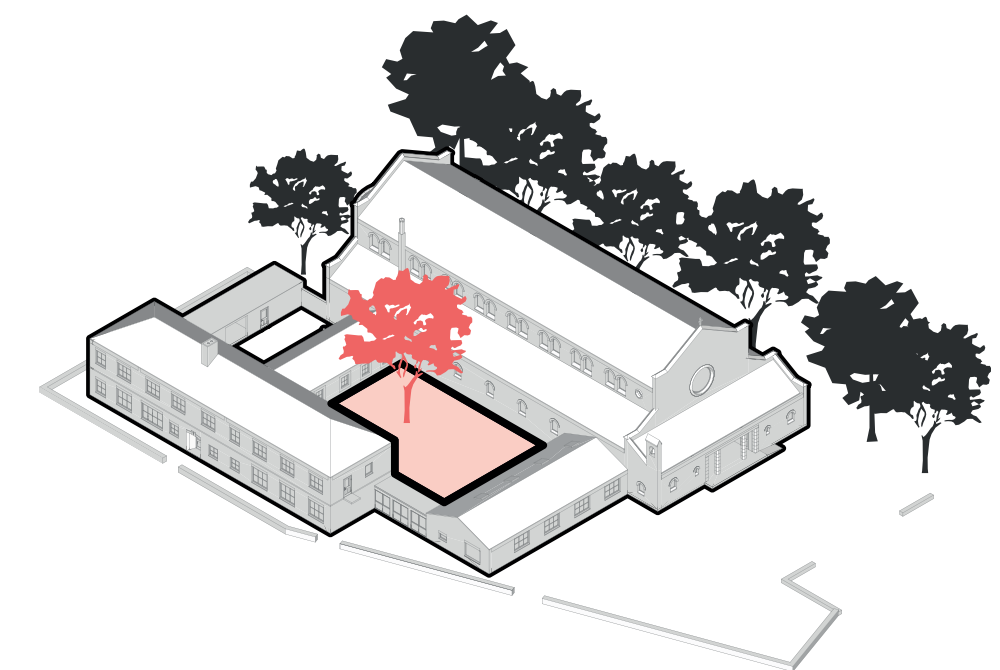
New





The Courtyard

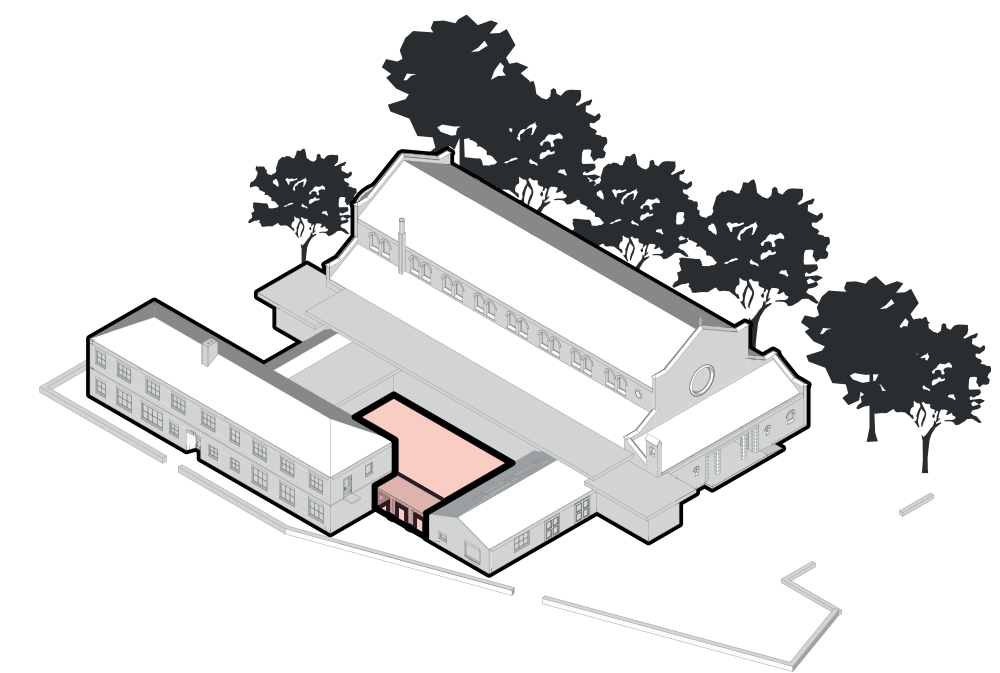
Existing





The Courtyard

New



“

It is also a part of **mine**

”

Particiapnt (50-60)

The involvement of locals allows for the better integration of **user needs** and incites a **sense of ownership**.

A sense of ownership could assist in the **prolongment of the buildings' functionality** and **preservation of the social function**.

Thank You