

# **Same emotion, Different church**

P5 presentation - Levi Noah Steevensz

**“I estimate that about one church a week has closed in the past decade”**

- Director Alphons van der Voorn of church insurer Donatus



## The Grote- of Mariakerk

### **Grote of Mariakerk in Meppel sluit de deuren. Gebrek aan vrijwilligers én de hoge energieprijzen zorgen ervoor dat het College van Kerkrentmeesters dit besluit naar eigen zeggen móet nemen**

Eelco Kuiken • 10 oktober 2022, 16:22 • Meppel

Deel dit artikel



De Grote of Mariakerk in het hart van Meppel. Het oudste deel stamt uit 1432. Foto: Wilbert Bijzitter

## Meppel's and the Grote- of Mariakerk's urban growth



**1650**

The village of Meppel around 165 years before acquiring city rights



**1865**

The City of Meppel around 50 years after acquiring city rights



**1900**

The City of Meppel slowly starting to expand outside of the historic center



**1930**

The City of Meppel in between the 1st and 2nd world war



**1960**

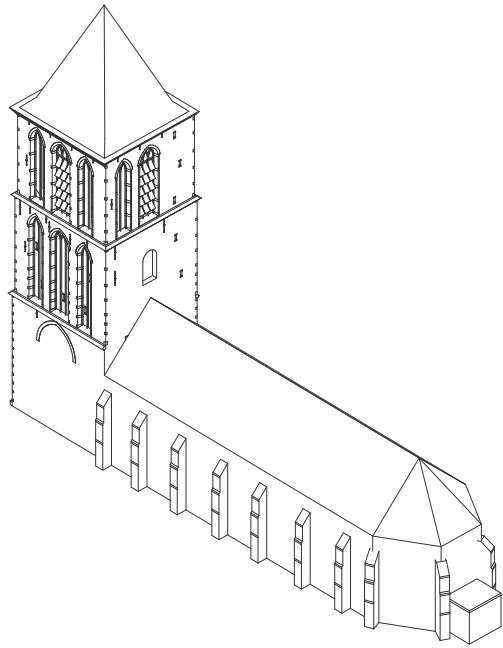
The City of Meppel after the 2nd world, starting the largely expand with multiple housing blocks and industry slowly starting to take shape



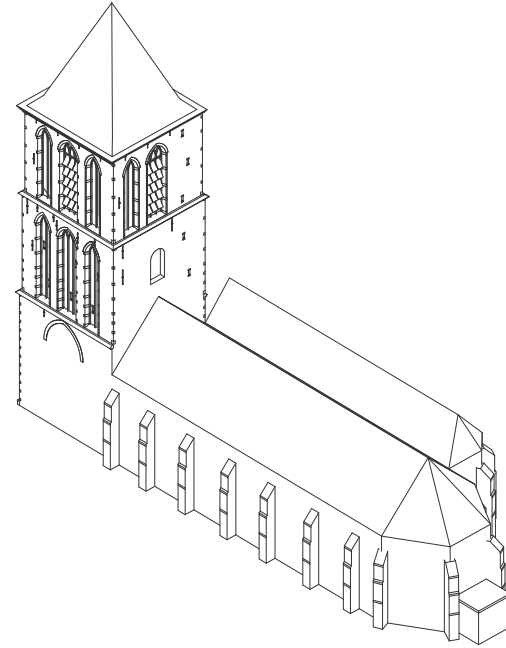
**1990**

The City of Meppel close to now, expansion now slowing down near the center and housing blocks now being build more outside the city (moving borders)

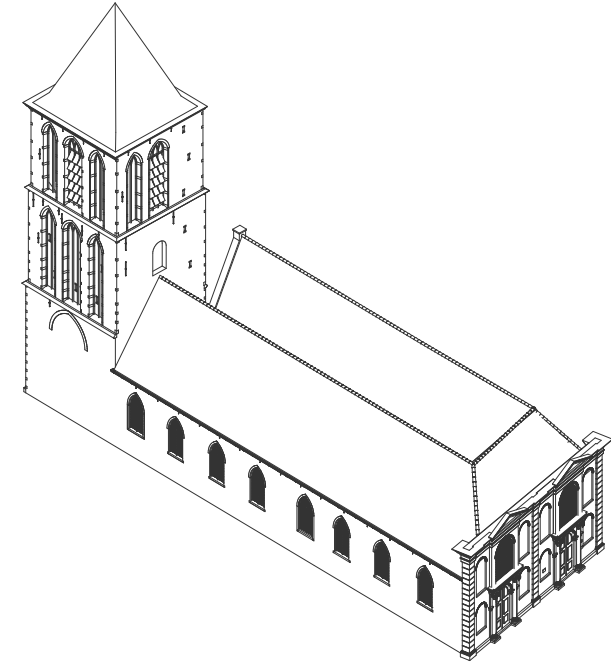
## The Grote- of Mariakerk's historical growth



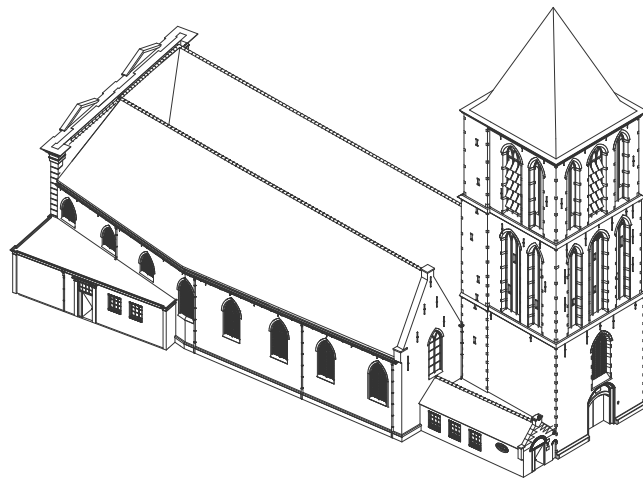
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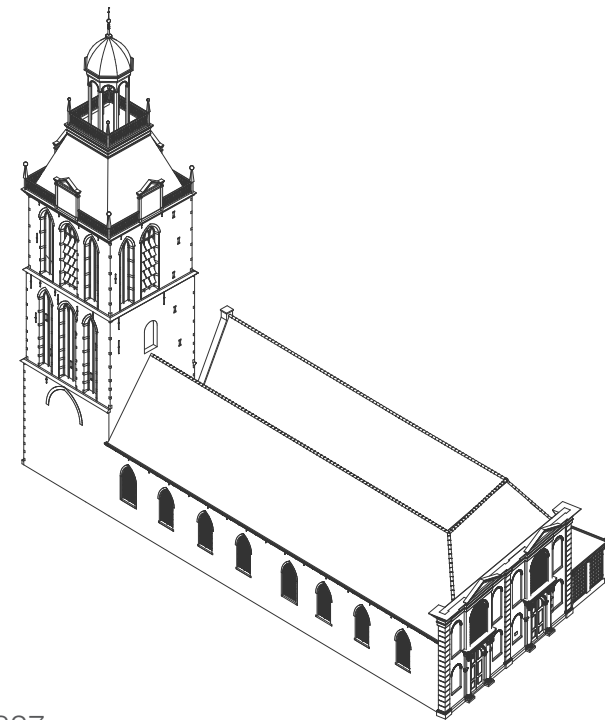
1540



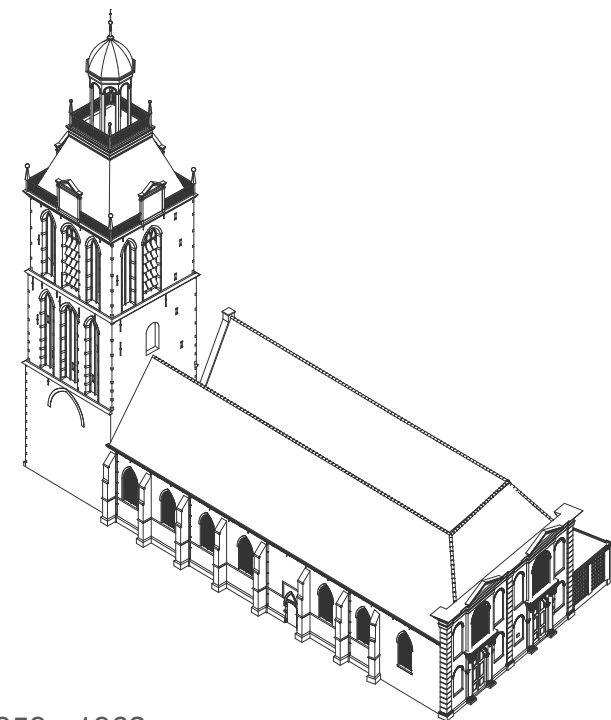
1780



1780 - 1790



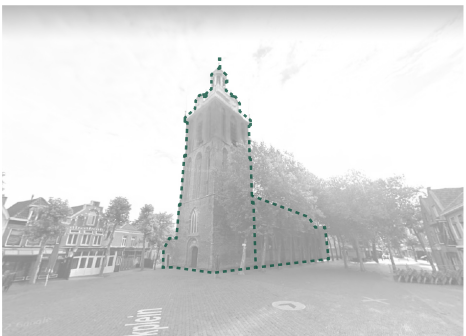
1827



1959 - 1963



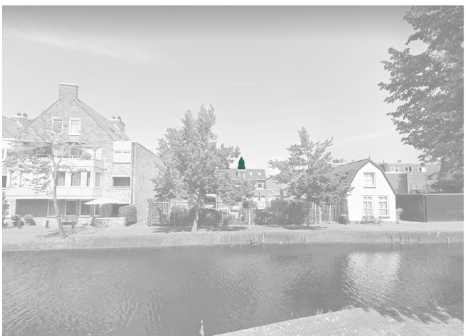
# The Grote- of Mariakerk as a landmark



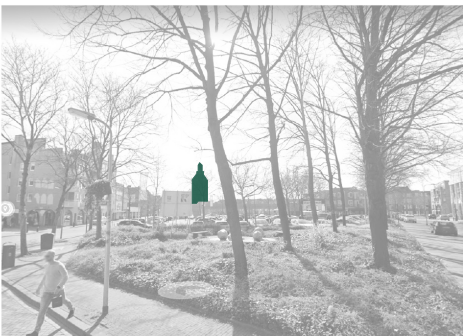
Sightline 1 - from Kerkplein (50,0 m)



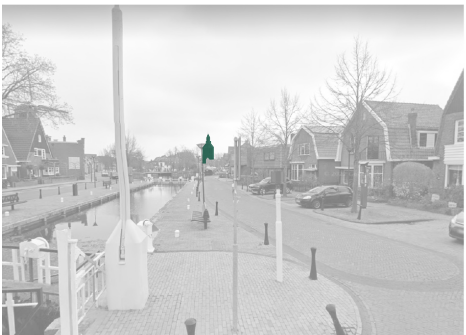
Sightline 2 - from Prinsplein (260,0 m)



Sightline 3 - from Galmanspand (270,0 m)



Sightline 4 - from Gemeente Meppel (300,0 m)



Sightline 5 - from Sluisgracht (500,0 m)



Sightline 6 - from Pelikaanstraat (850,0 m)



Sightline 7 - from Soembastraat (700,0m)



Sightline 8 - from Parallelweg (750,0 m)

**What hinders the  
repurposing of the  
Grote- of Mariakerk?**

Repurposing is a problem

Locals place restrictions on business dealings, through protest or by arguing for a listing on the monument list

(Het Bisdome van Haarlem et al., 2008) (Zomer, 2014)



## Difficulty finding a new use



De Grote of Mariakerk in Meppel  
© RTV Drenthe / Bastian van de Belt

**De plannen voor een bibliotheek in de Grote of Mariakerk in Meppel zijn van tafel. Over een andere invulling van het gebouw is onenigheid ontstaan tussen de Protestantse Gemeente en de Stichting Grote of Mariakerk. De stichting dreigt zichzelf op te heffen.**

Kerkdiensten worden al jaren niet meer gehouden in de monumentale kerk, om het gebouw een nieuwe invulling te geven werd de Stichting Grote of Mariakerk opgetuigd. Maar juist die stichting denkt er over na om er de brui aan te geven na een 'onverwachte wending'.

**“What is the limit of acceptable change to the sense of place for the local community, when transforming the form and function of the Grote- of Mariakerk in Meppel?”**



# **What is a Sense of Place?**

## Definition of a Sense of Place

Sense of Place can be defined as the emotional  
bond or attachment individuals or groups  
develop with locations or environments, ranging  
between positive and negative bonds

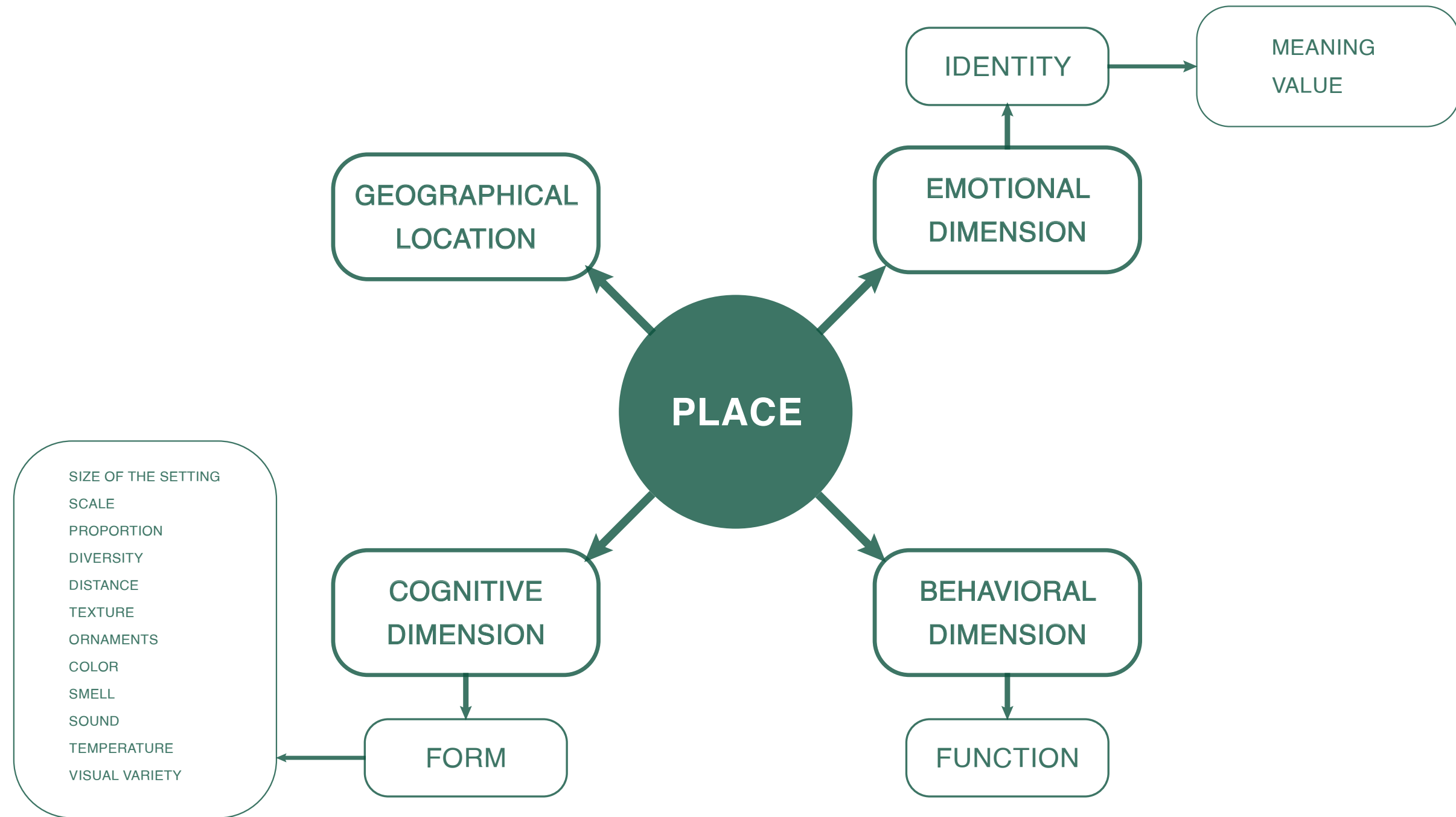
(Foote & Azaryahu, 2009)

## Forming a Sense of Place

Sense of Place is a phenomenon created from the  
interaction between people and places

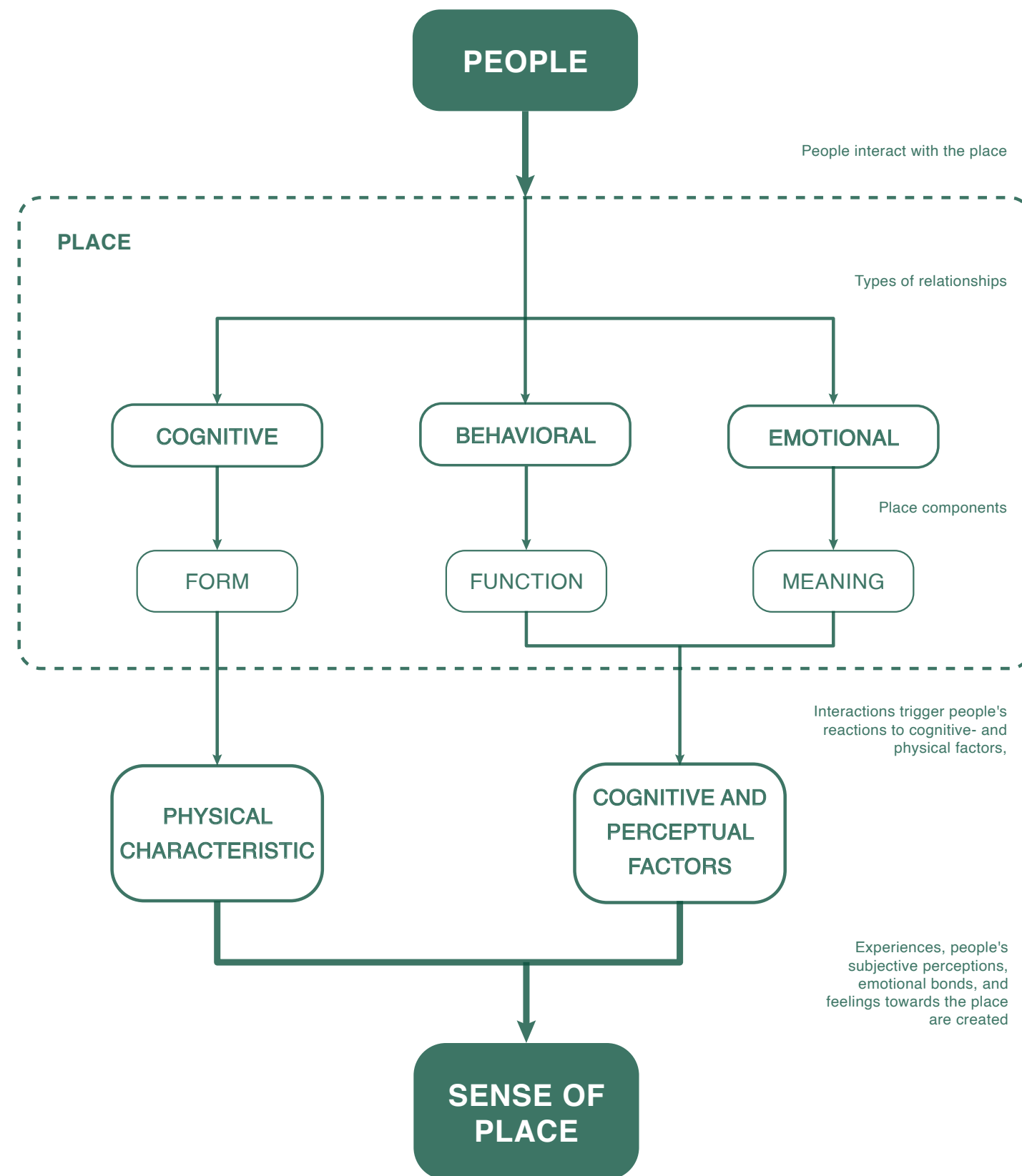
(Hashemnezhad et al., 2013)

## Sense of Place and Place

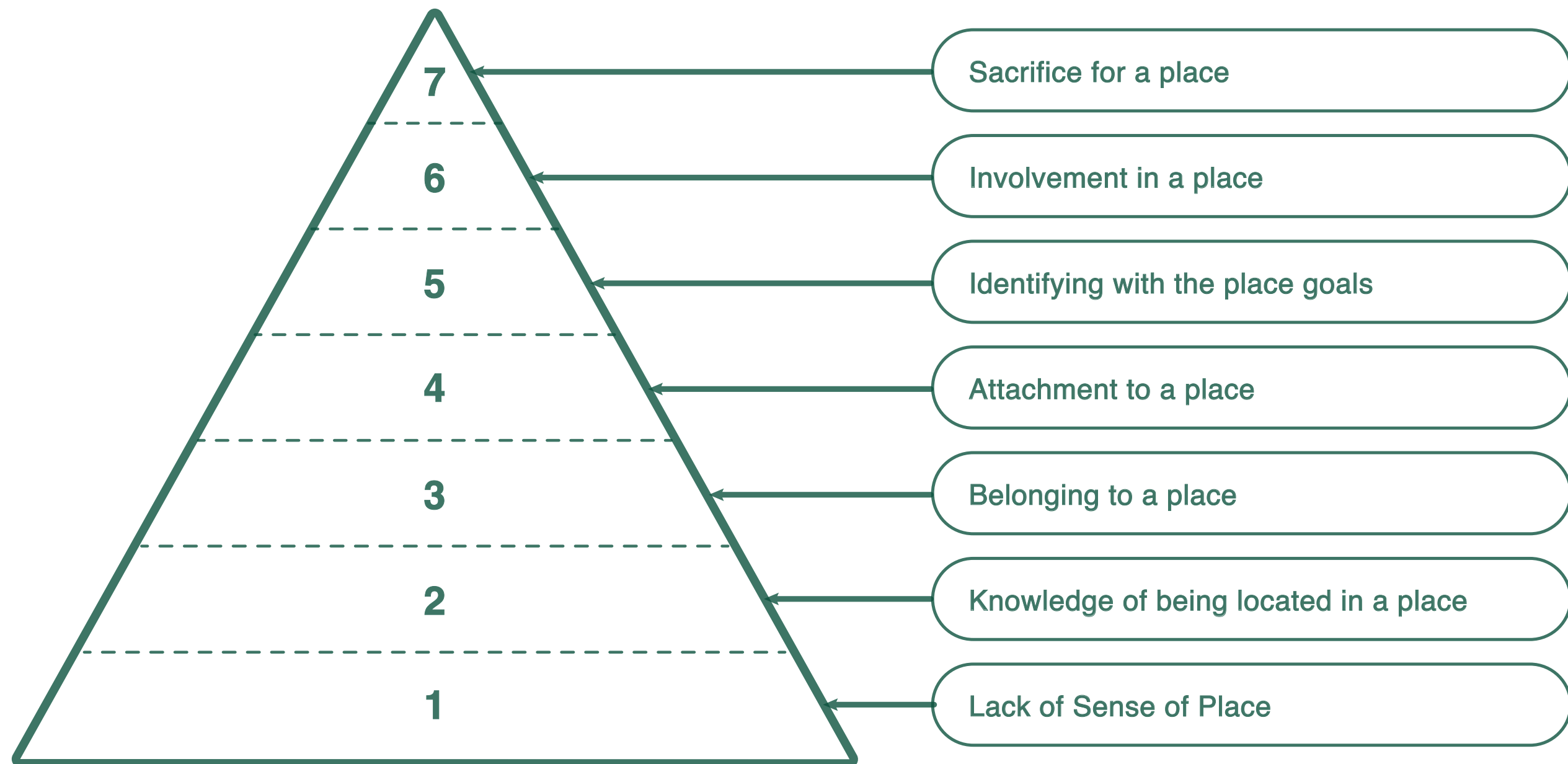


((own work) according to (JORGENSEN en STEDMAN, 2001);(Gieryn, 2000))

# Forming a Sense of Place



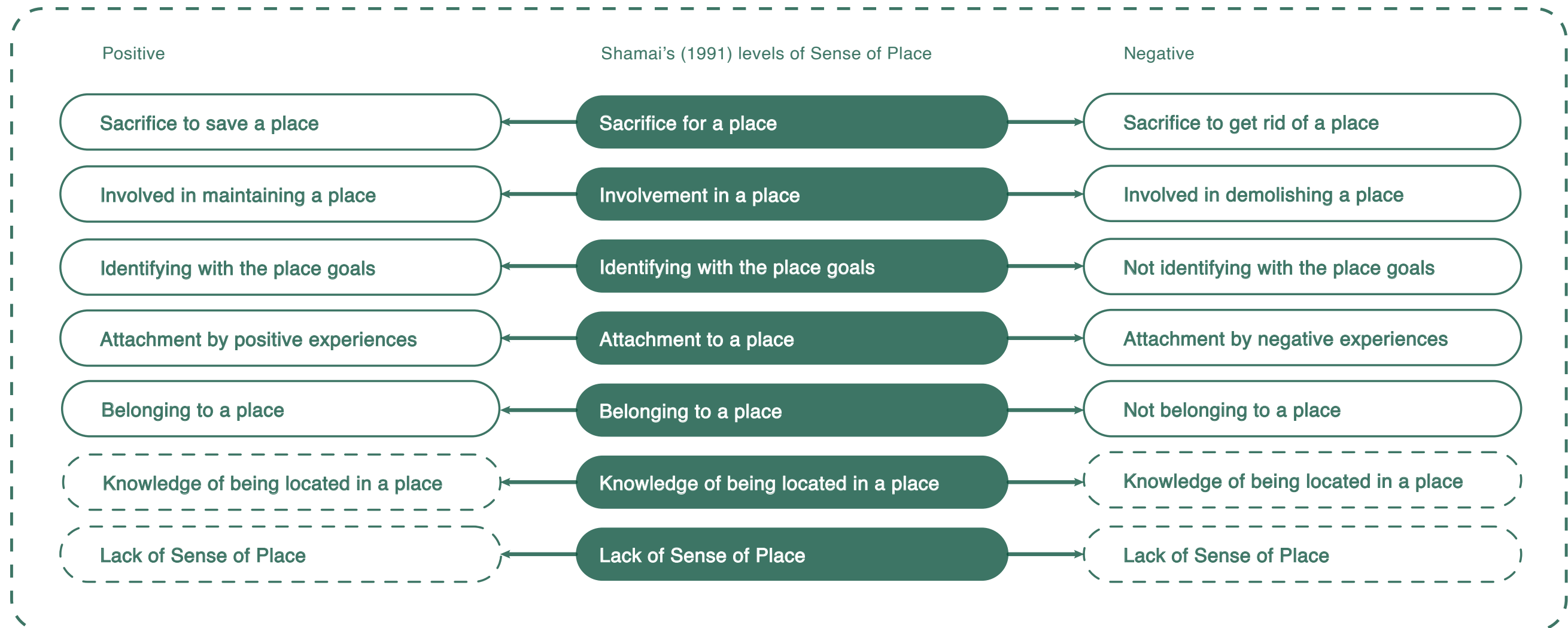
## Levels of Sense of Place



((own work) according to (Shamai, 1991))

# Levels of Sense of Place

## Positive and Negative Levels of Sense of Place

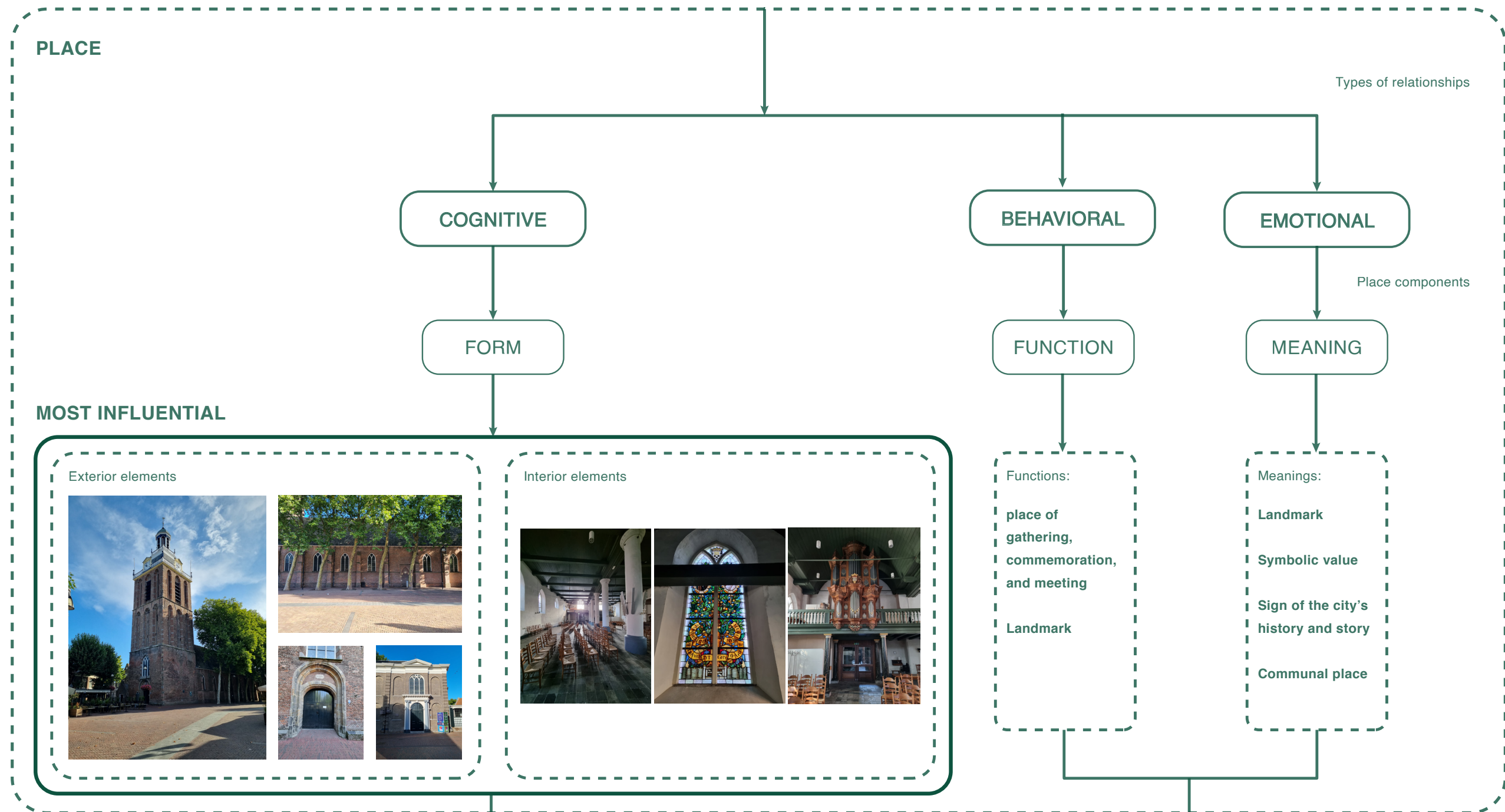


((own work) according to (Shamai, 1991))

**What is the local  
Sense of Place towards the  
Grote-of Mariakerk?**



# Local Sense of Place towards the Grote- of Mariakerk





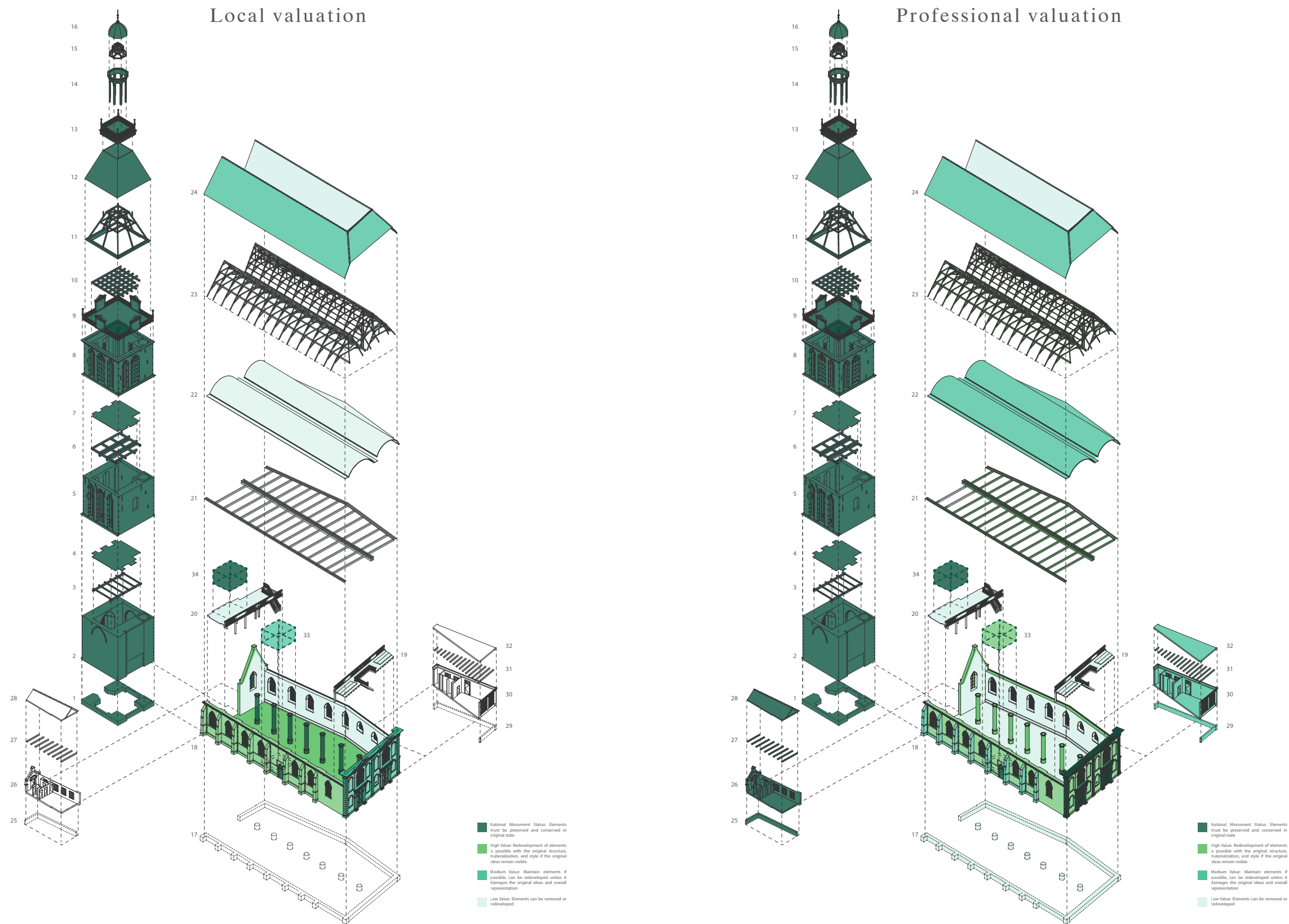
## Factors most influential factors towards forming a Sense of Place

### Exterior elements

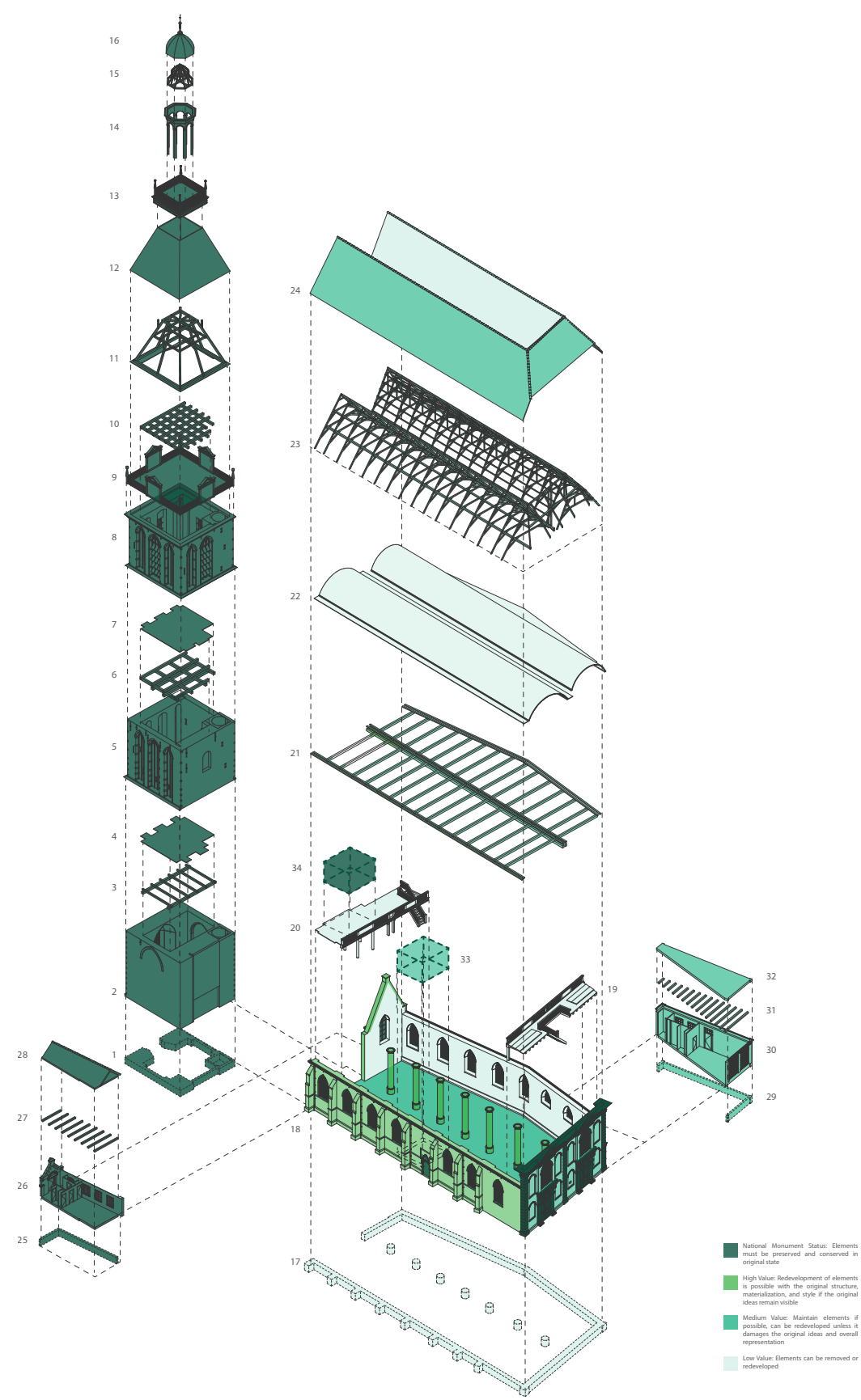




# Professional vs Local value assessment

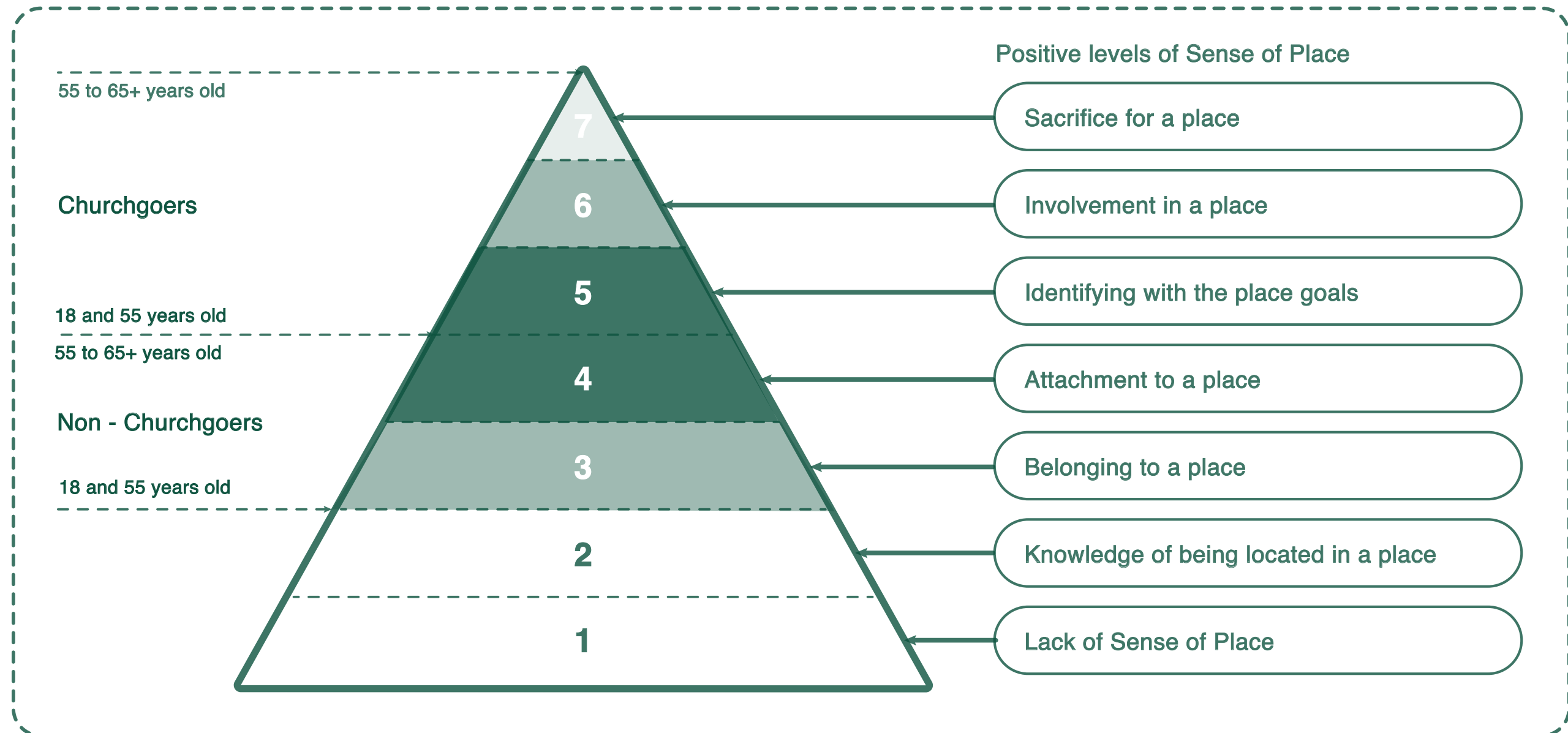


Sense of Place value assessment



## Local level of Sense of Place towards the Grote- of Mariakerk

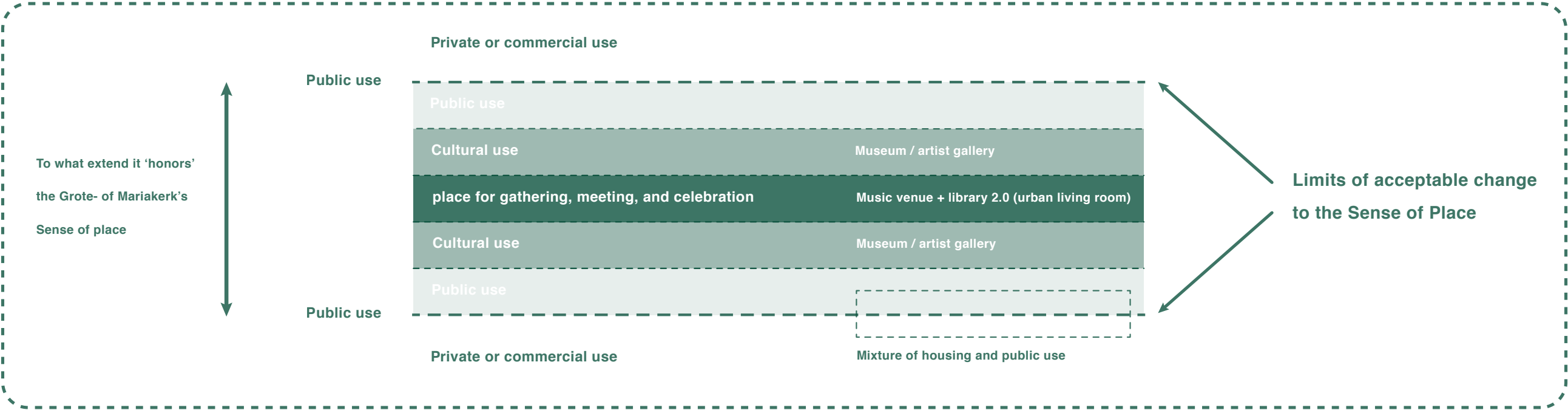
The participant's Sense of Place towards the Grote of Mariakerk



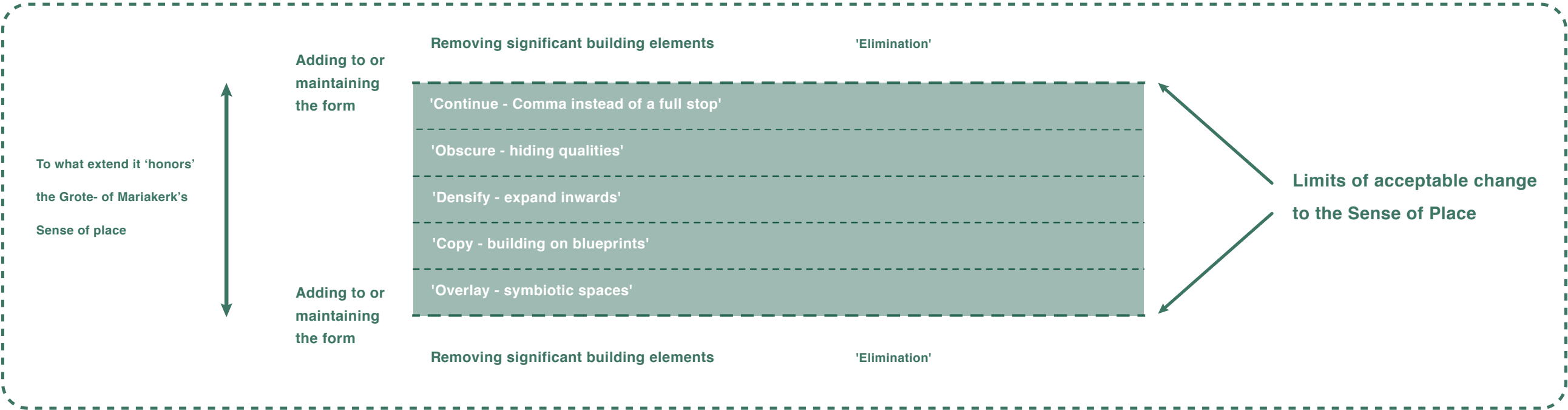
**How does transformation of  
the Grote- of Mariakerk affect  
to local Sense of Place?**

# Local level of Sense of Place towards the Grote- of Mariakerk

## LIMITS OF ACCEPTABLE CHANGE TO THE FUNCTION OF THE GROTE- OF MARIAKERK



## LIMITS OF ACCEPTABLE CHANGE TO THE FORM OF THE GROTE- OF MARIAKERK



**How did the local Sense of  
Place affect the repurposing of  
the Grote- of Mariakerk?**



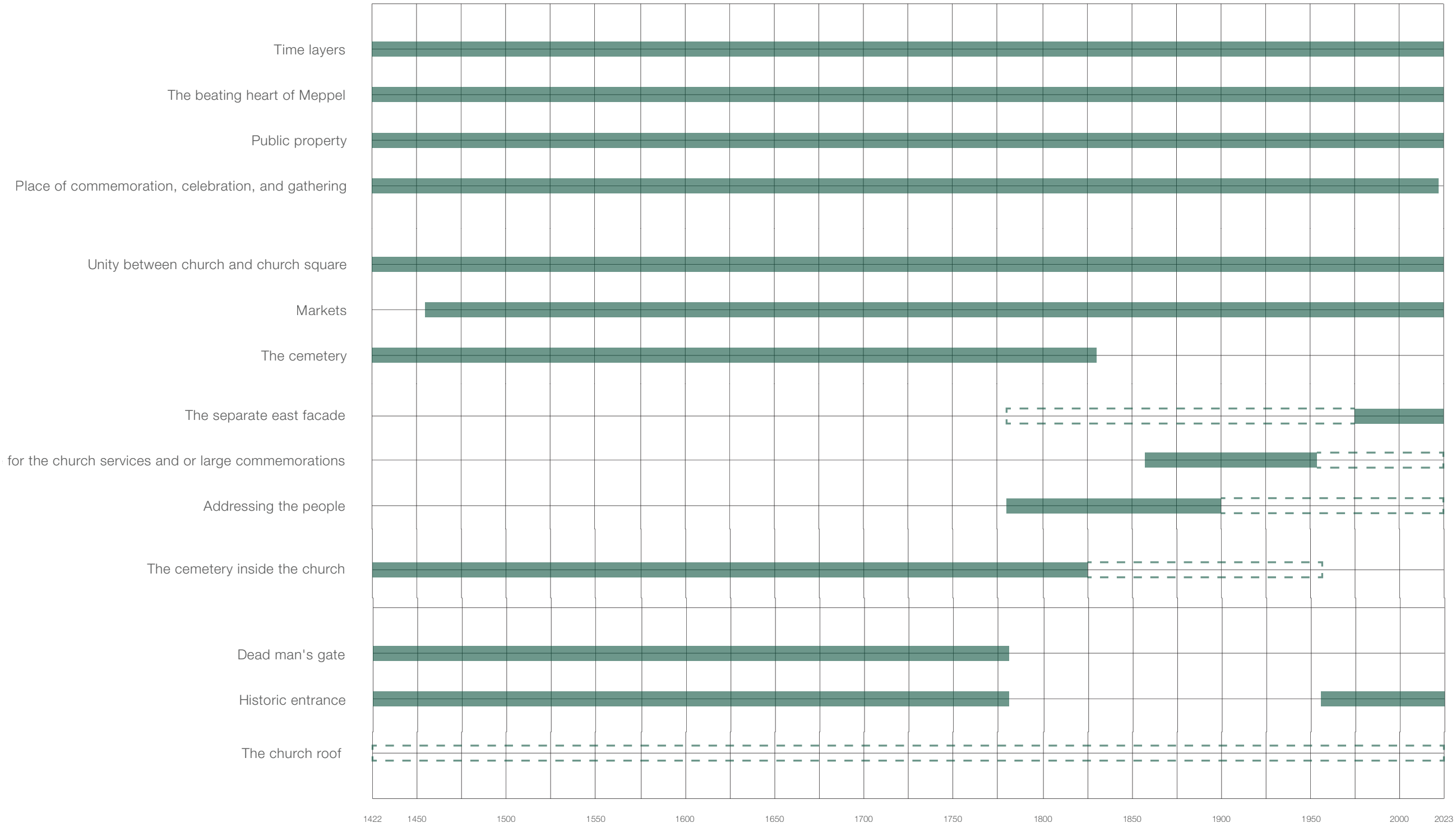
Local Sense of Place as a source of inspiration

“The Grote- of Mariakerk tells the story of Meppel and  
Meppel tells the story of the Grote- of Mariakerk”

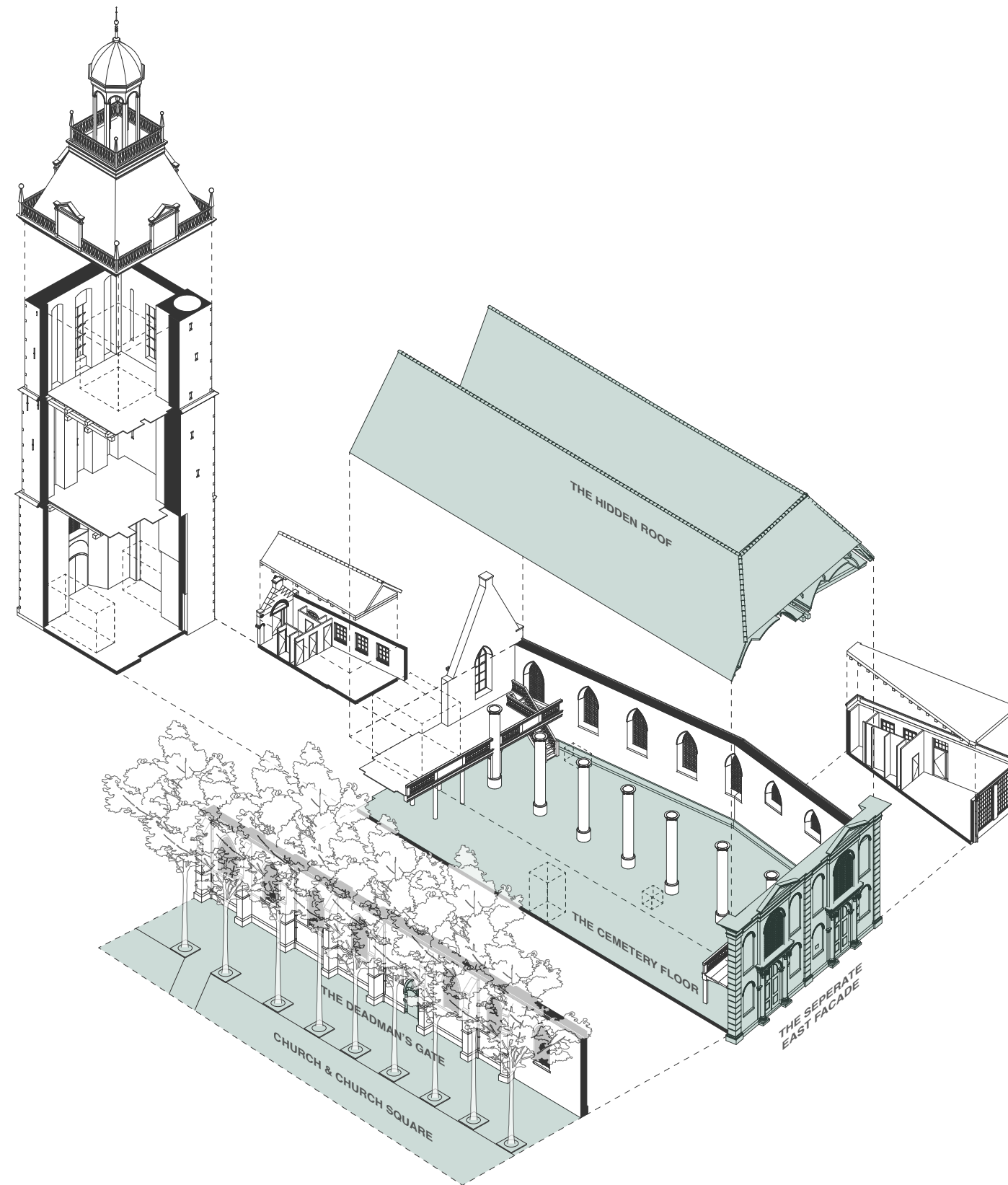
## Design concept

Telling the Story of the Grote- of Mariakerk, Meppel,  
and the public perception of the church through the  
church building's use and spatial experience

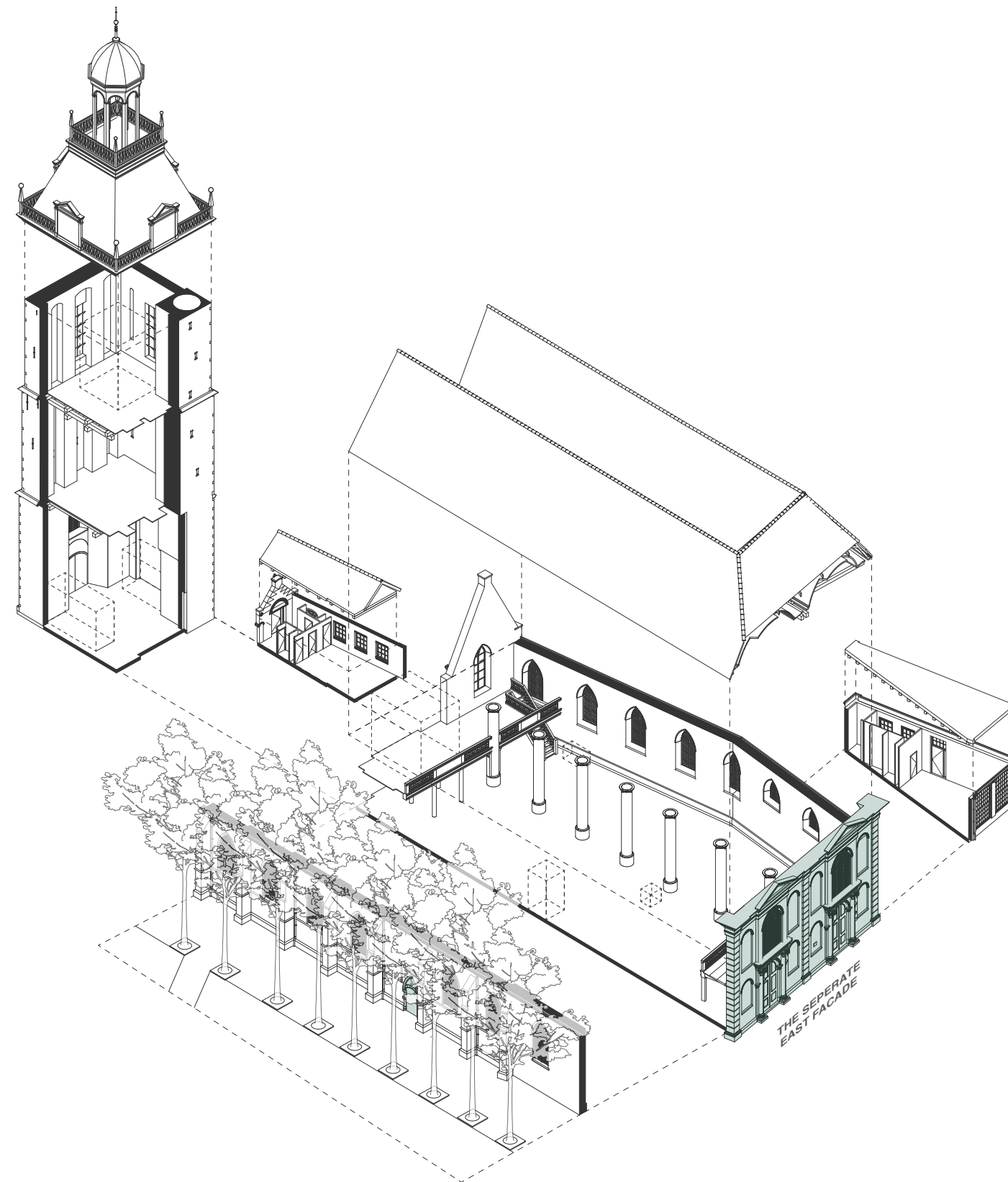
# Timeline of the Grote- of Mariakerk



## Main interventions

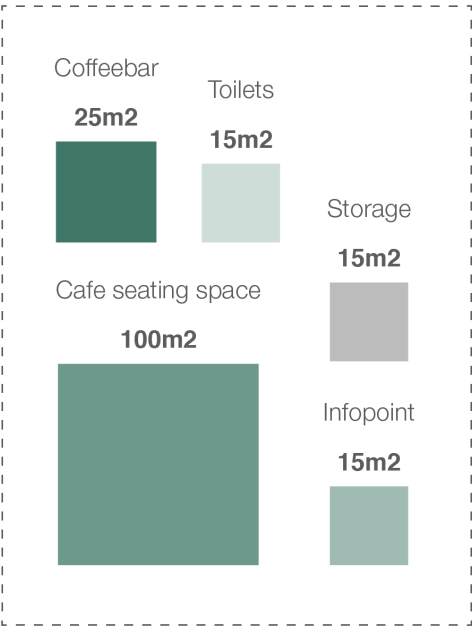


## The seperate east facade

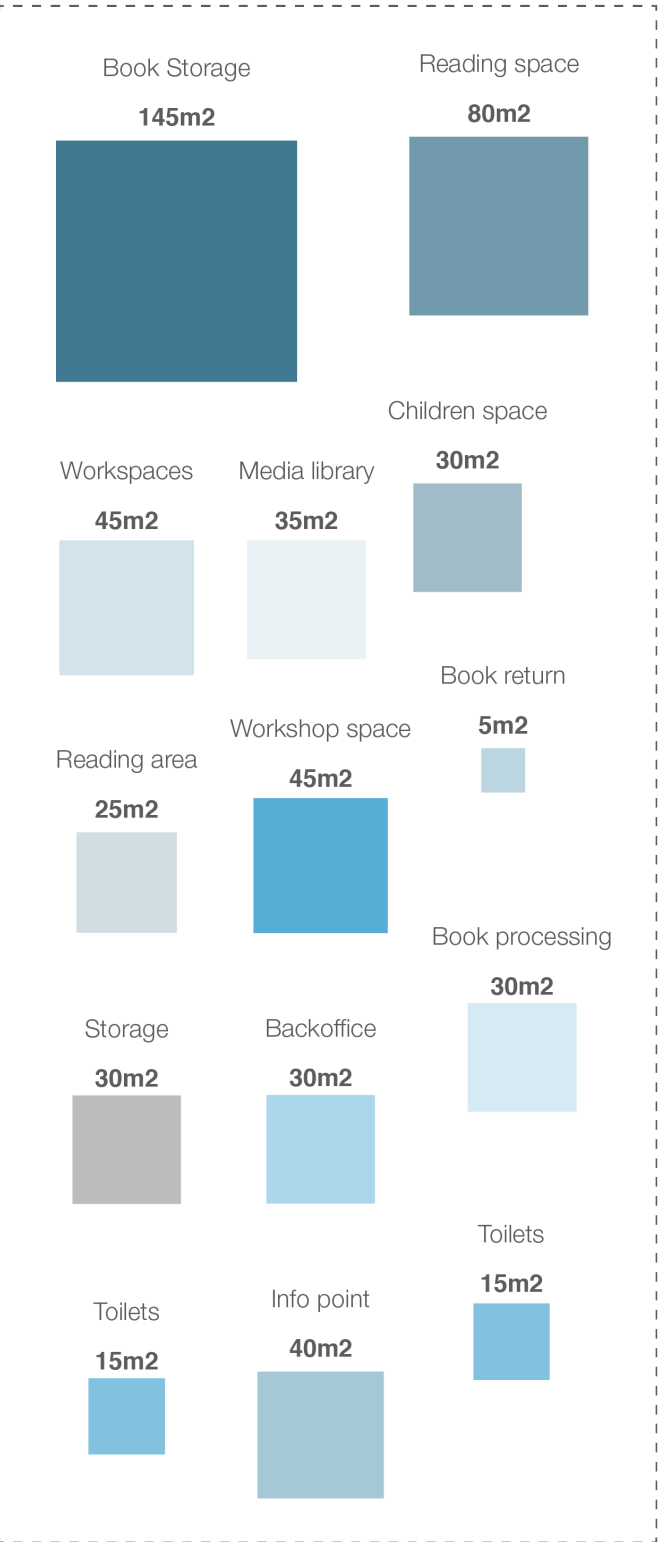


# New program

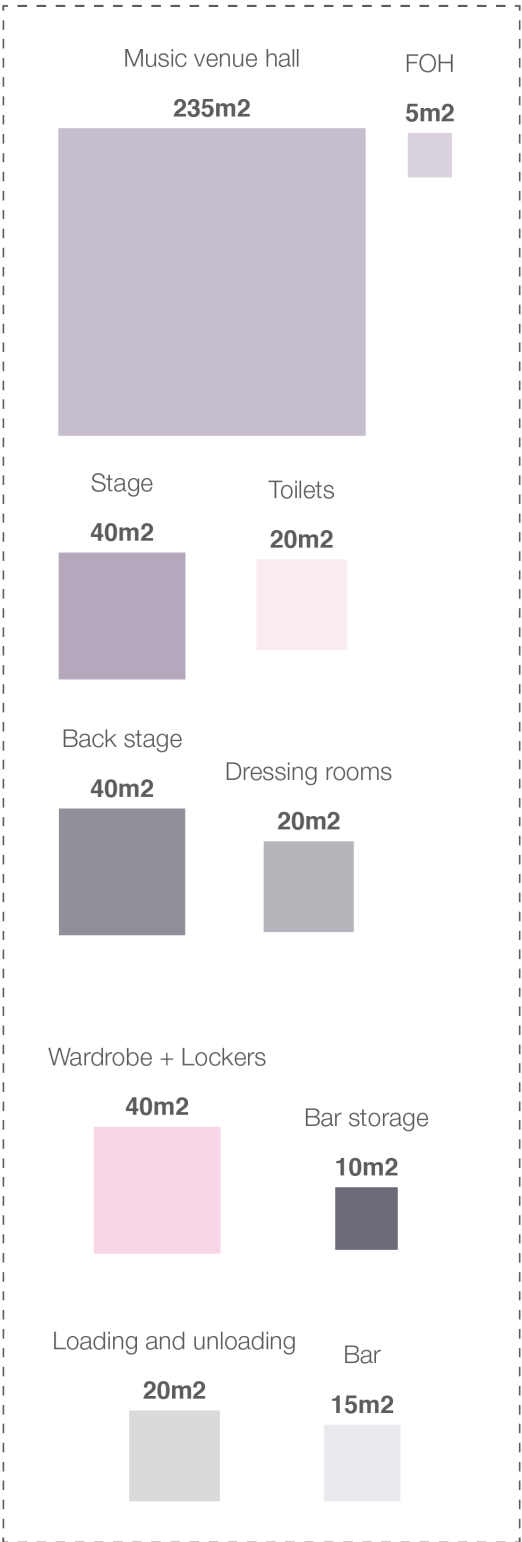
Public Foyer + Cafe



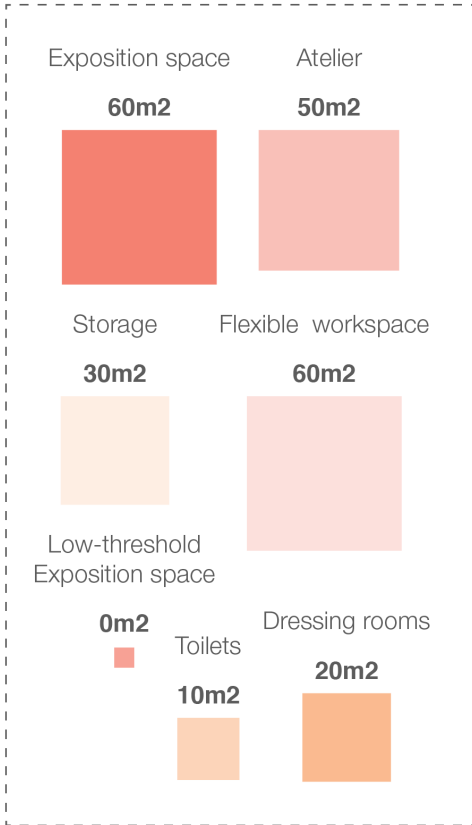
Library



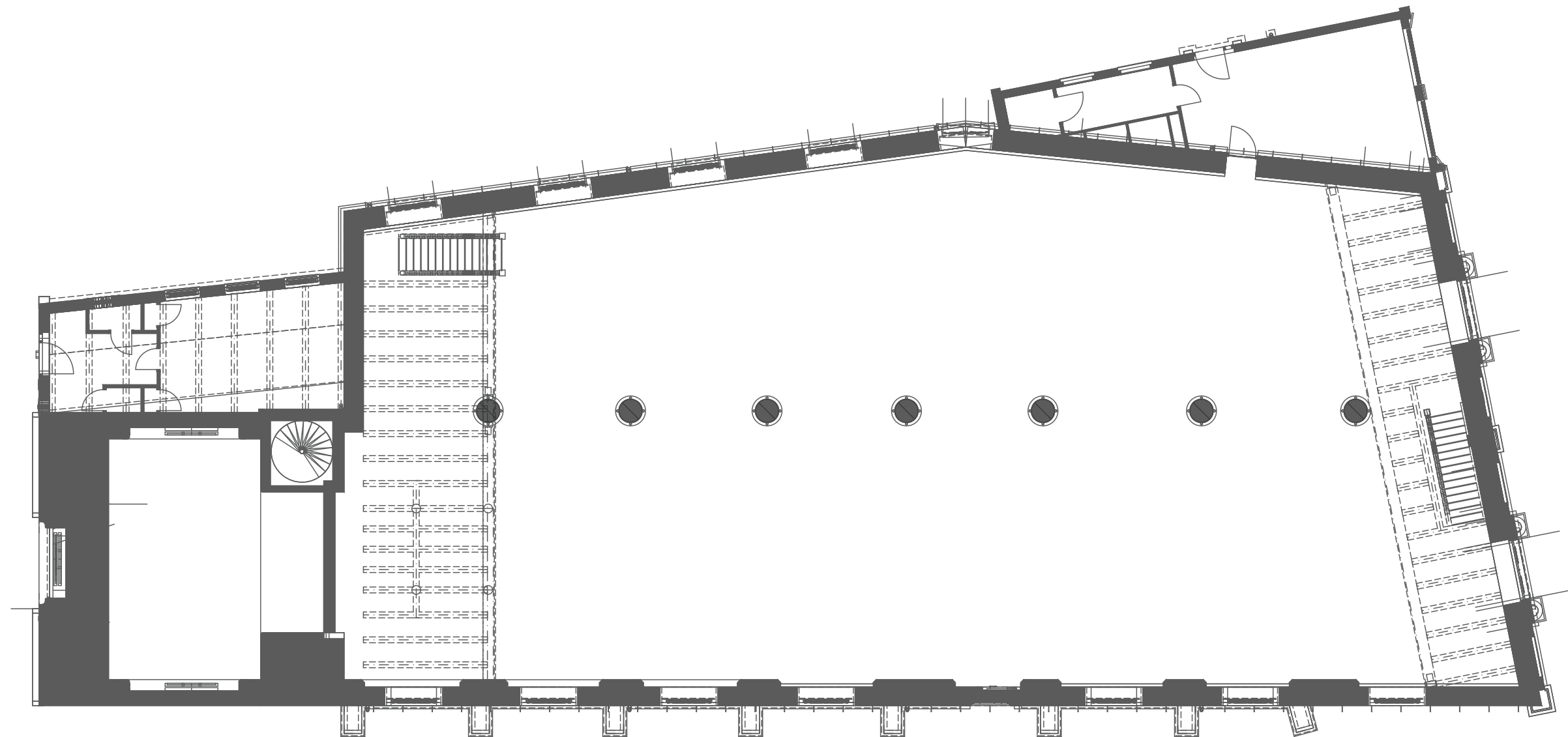
Music venue



Artist gallery / workspaces



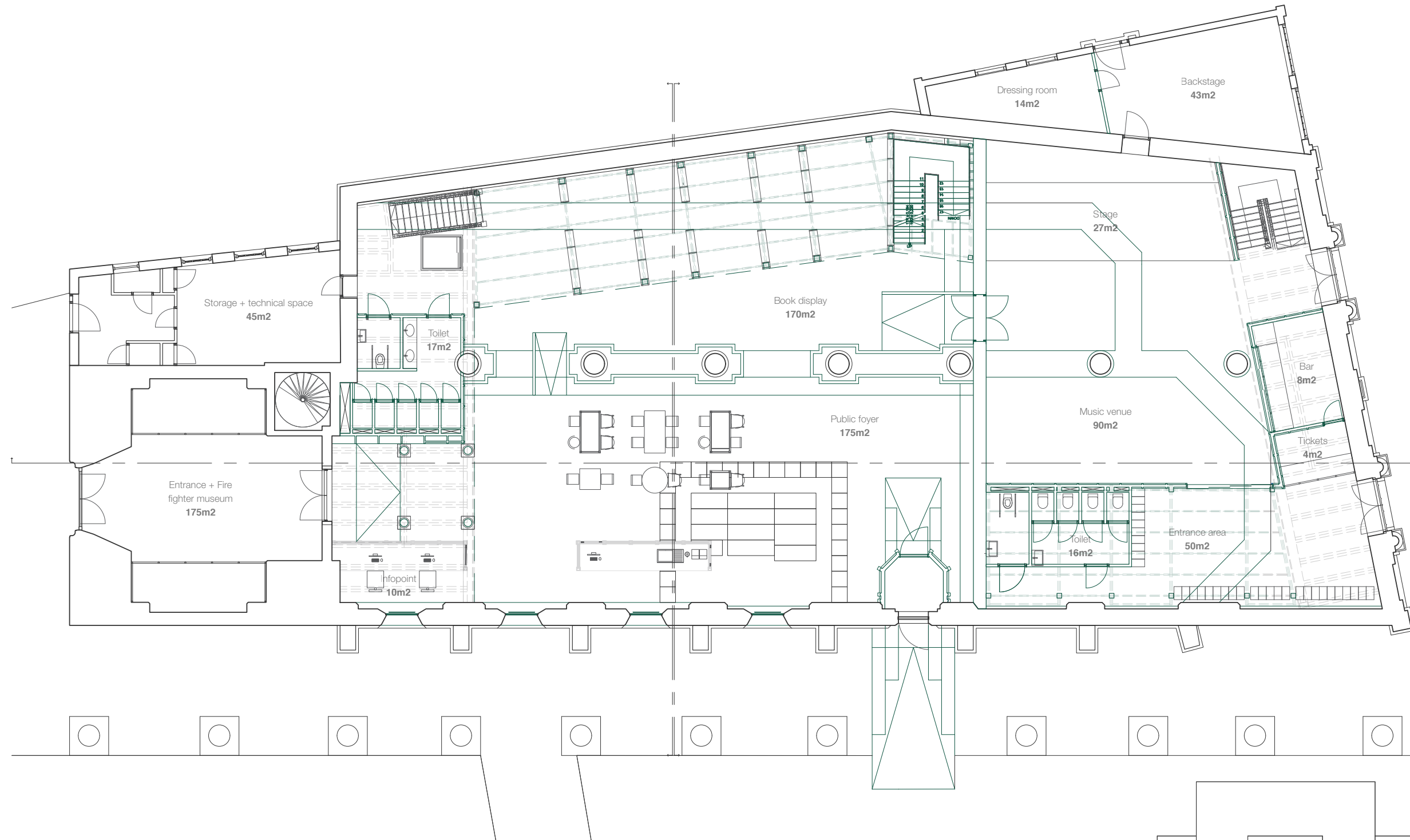
## Existing ground floor



Ground floor

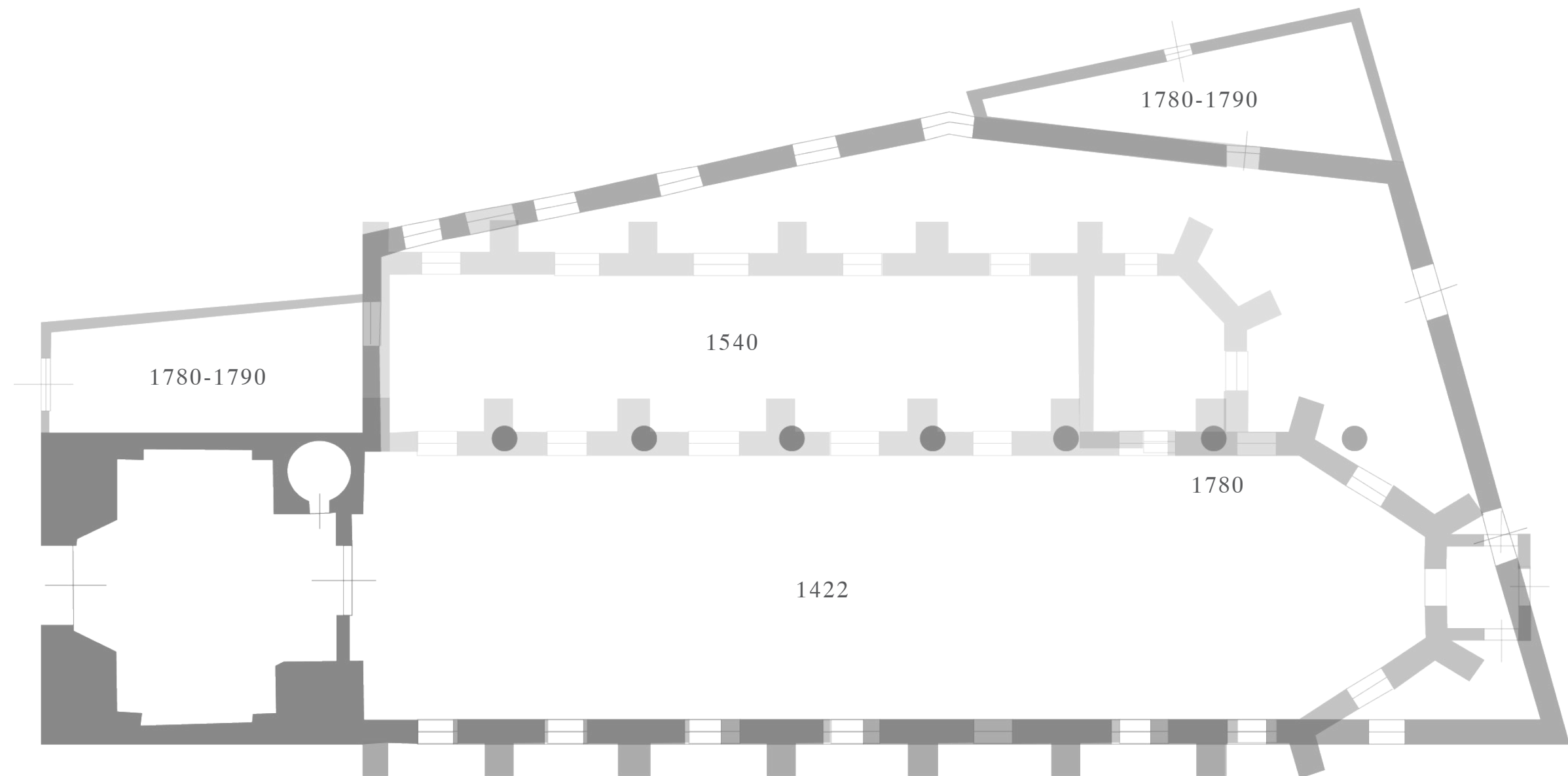
0 5 10

## New ground floor

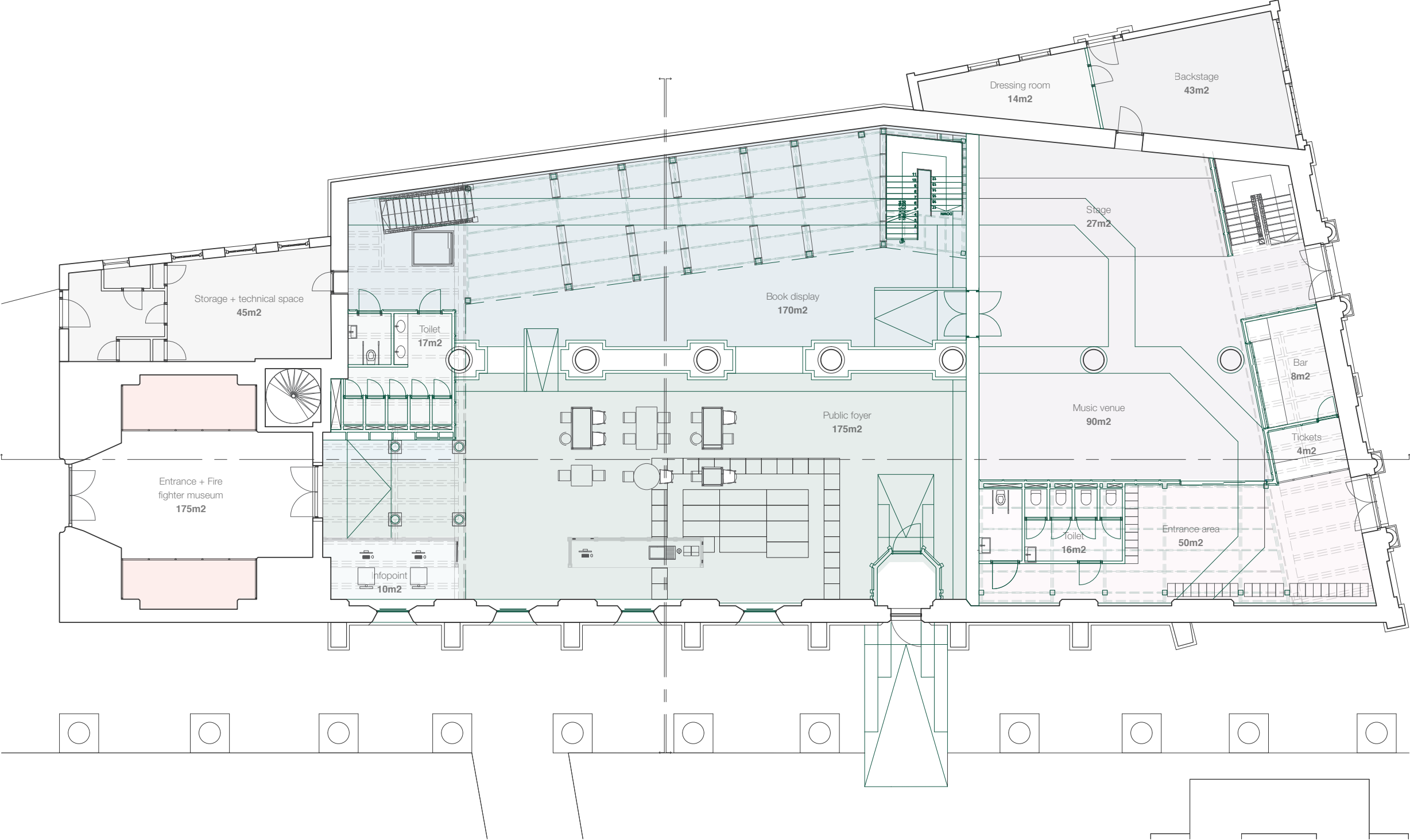




## Timelayers of the Grote of Mariakerk

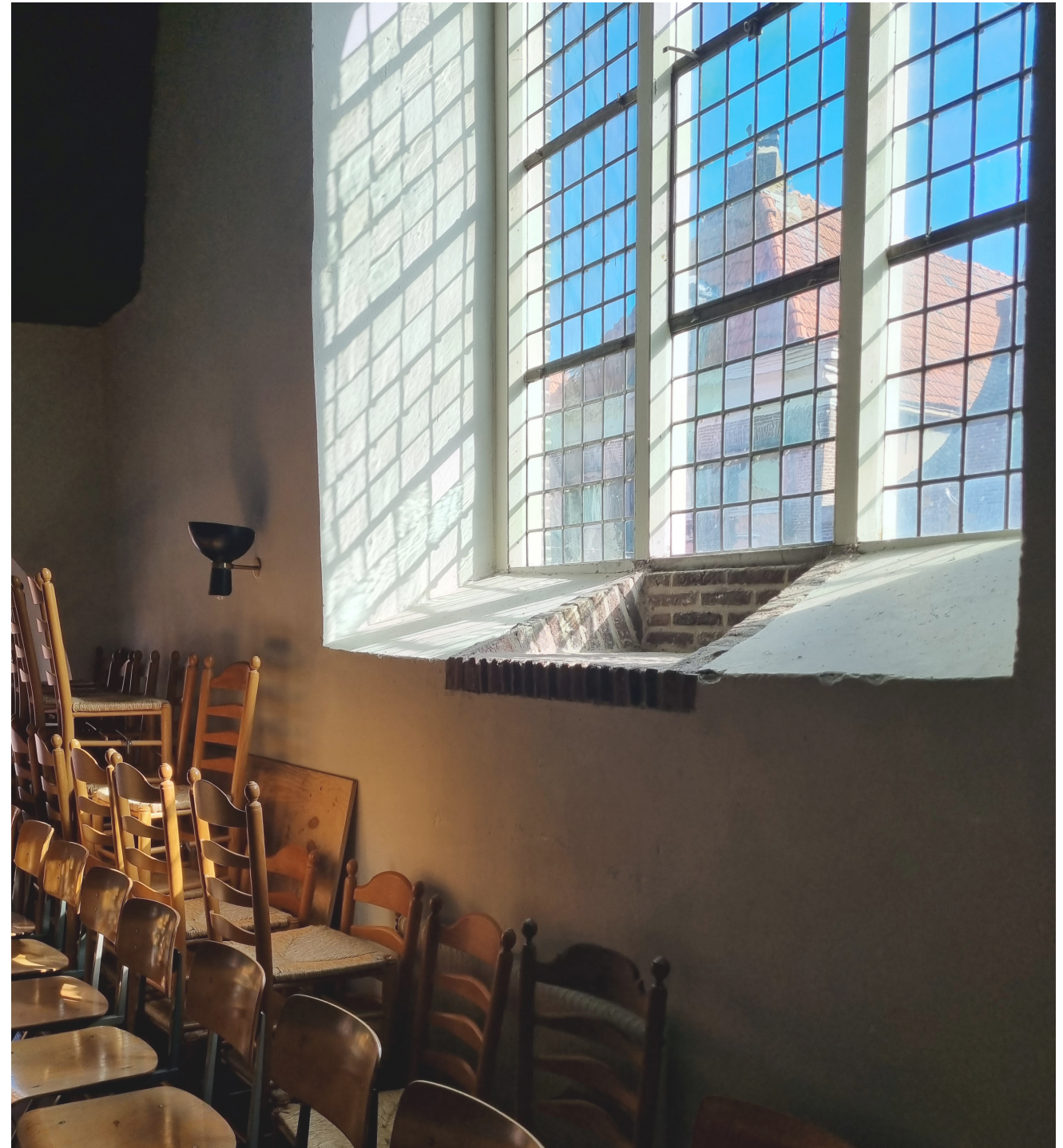


New ground floor



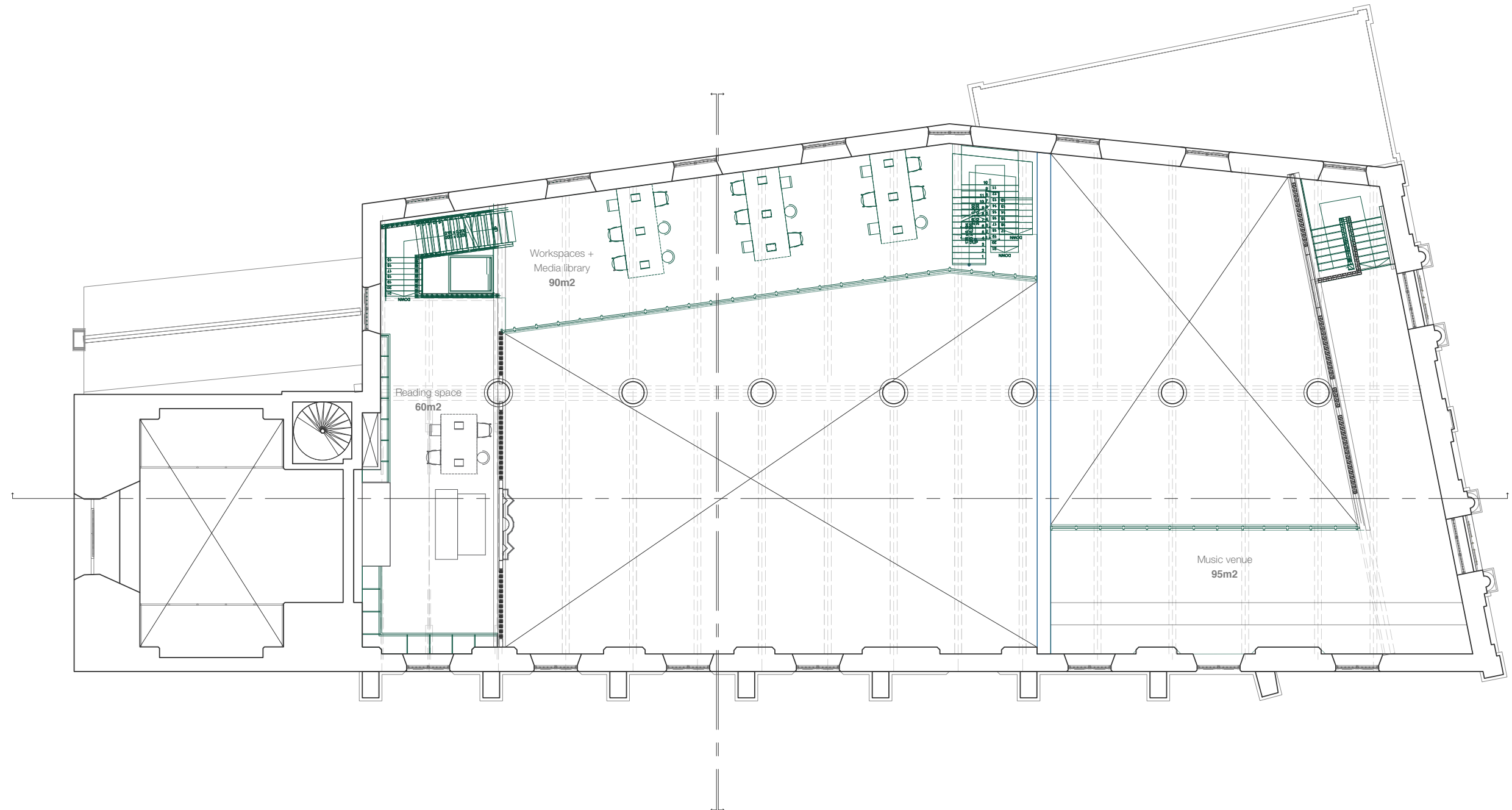


## The townspeaker

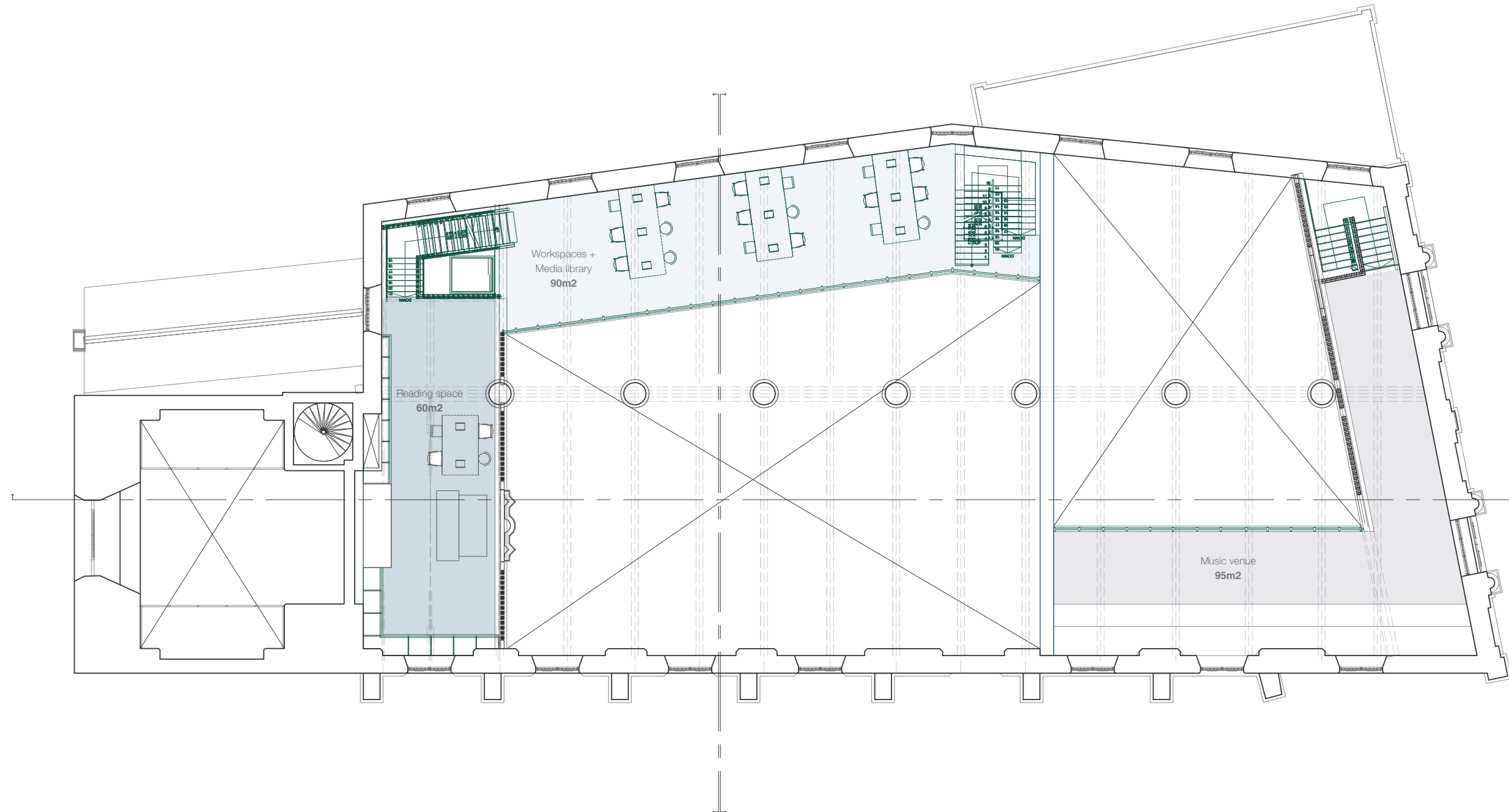




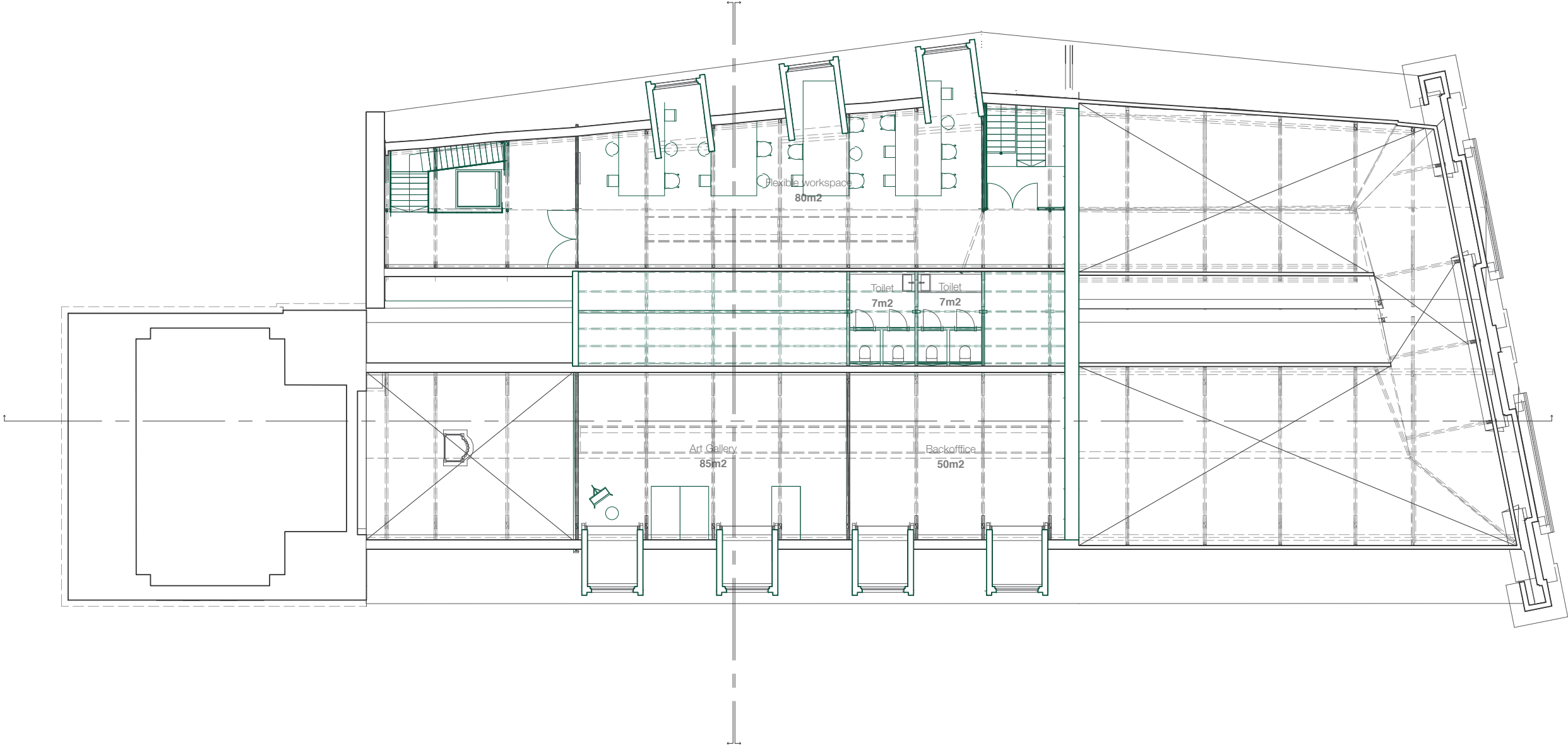
## New first floor



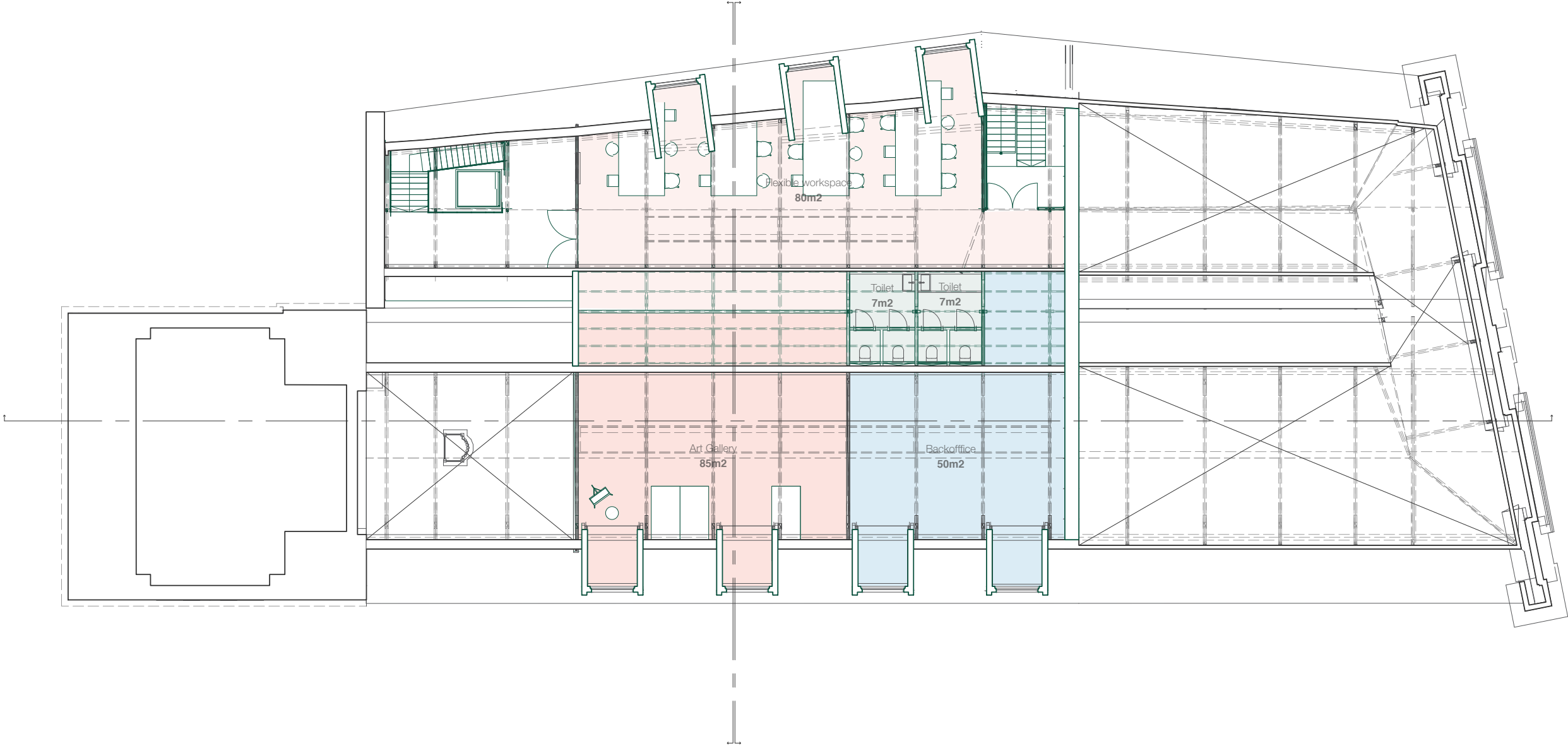
## New first floor



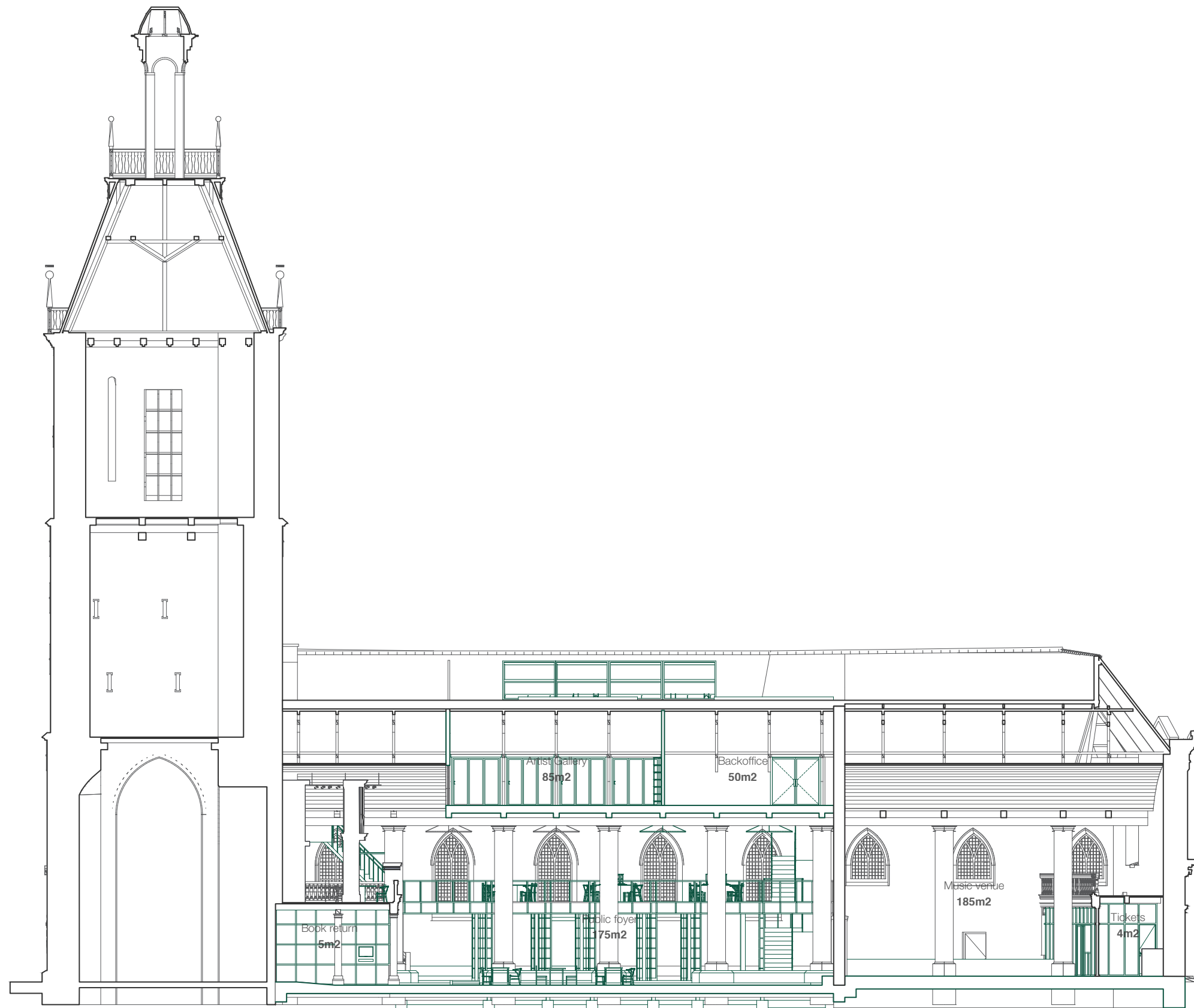
New second floor



New second floor



## Longitudinal section

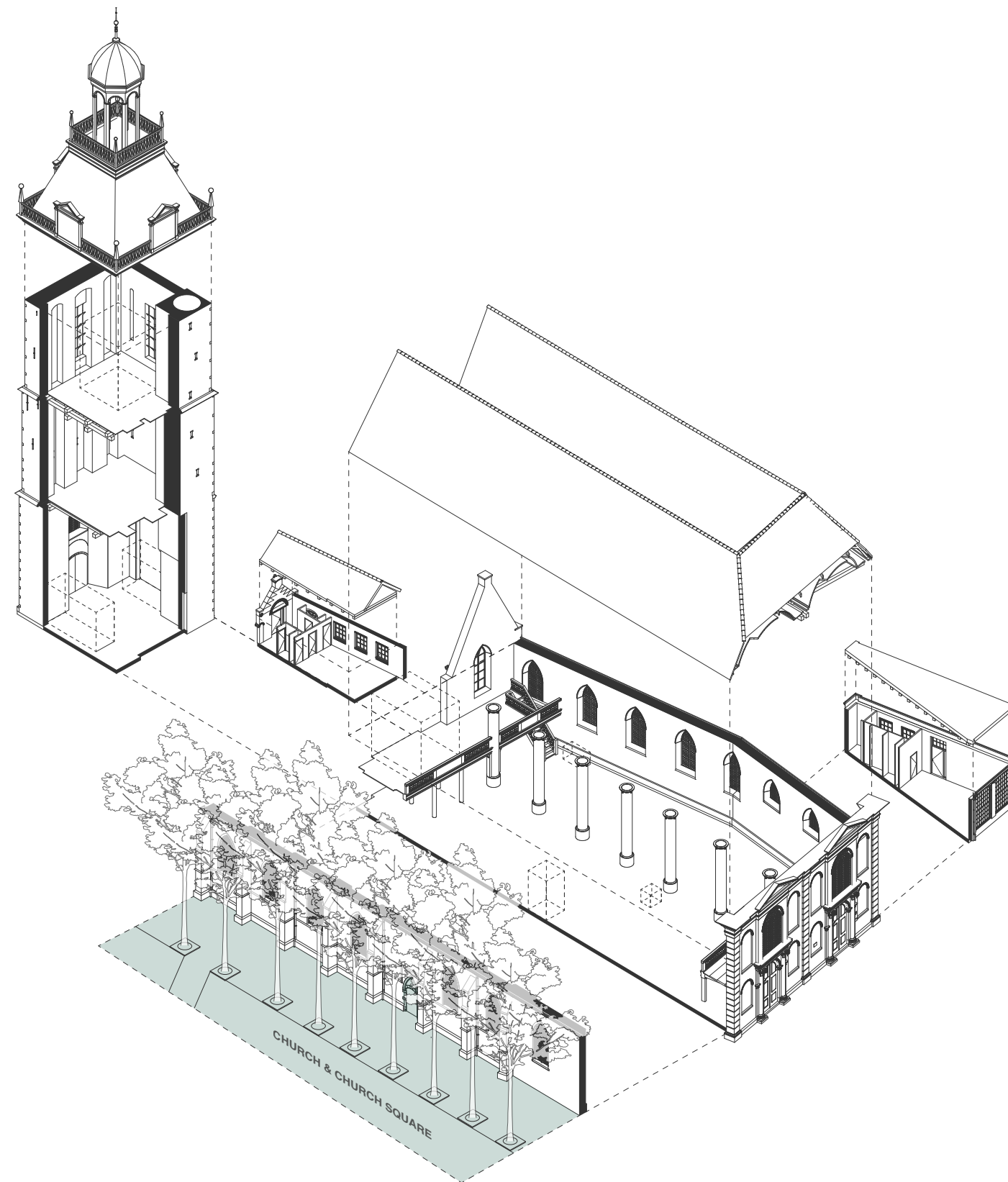




## Longitudinal section



## The church and the church square



# Historic timeline of the Grote- of Mariakerk and Kerkplein



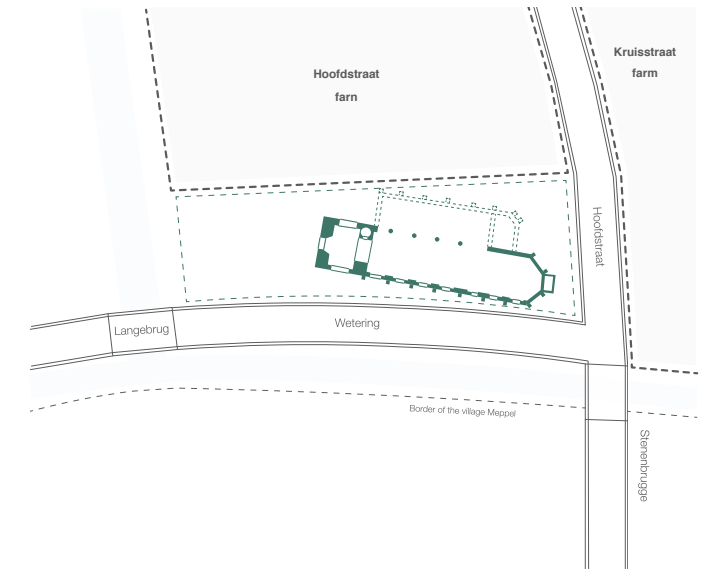
**< 1400**

Originally there was a chapel and cemetery located on the location of the current the Grote- of Mariakerk, however its appearance is unknown



**1422**

In 1422 the original Grote- of Mariakerk was named a parish church (built)



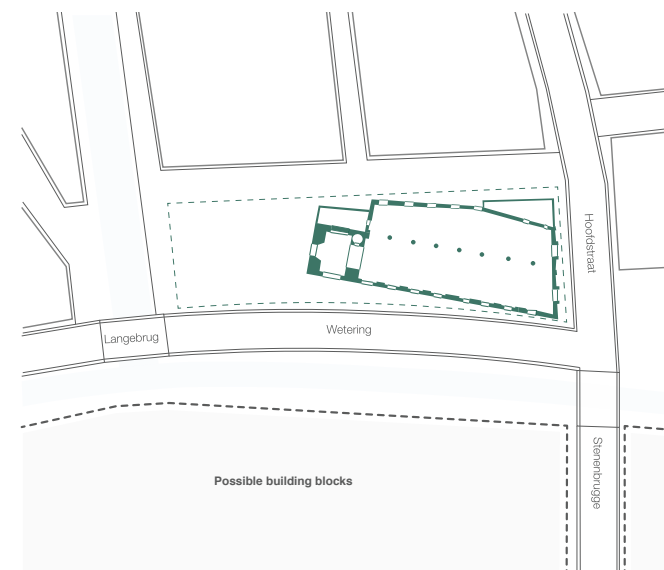
**1540**

The church was rebuilt/enlarged for the first time with the addition of a new north beech to accommodate more people



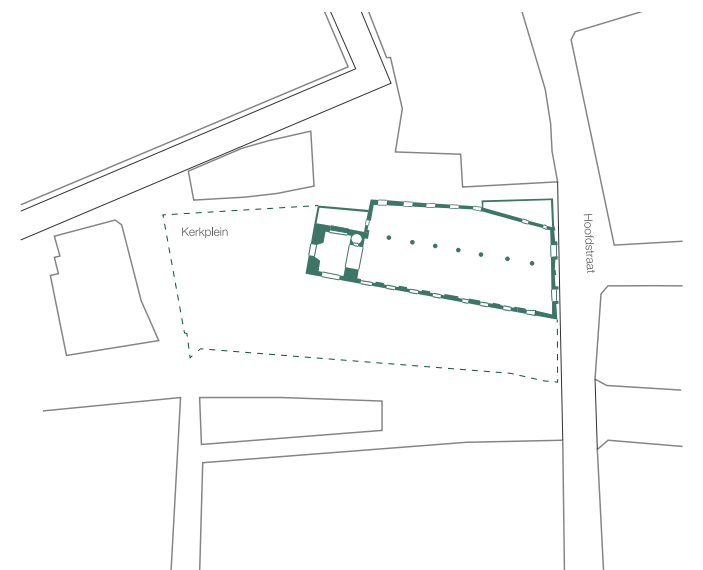
**1780**

The church was enlarged a second time by extending east facade with a new classic facade to accommodate even more people, and the North beach was enlarged with the additional new facade and nod we see today



**1780 - 1790**

To accomodate priest and the local trade a vicar's room and a trade house were built as small outbuildings



**1955**

Finally, the church square gained more ground as the canals originally used for the supply of local goods were dried out

## Grote- of Mariakerk and the Kerkplein



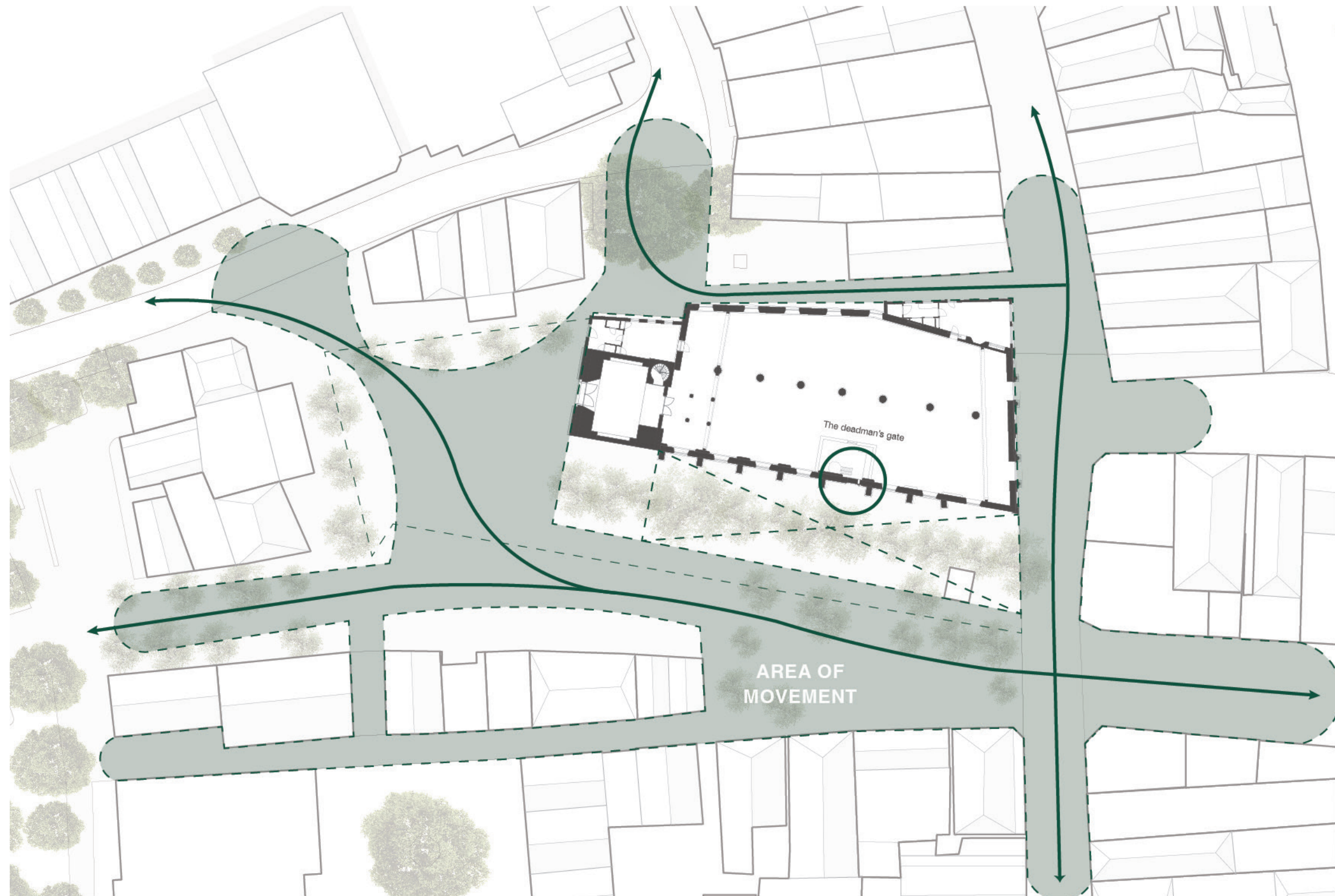


## The church and the church square





Functional connection between church and church square is lost



Existing south facade

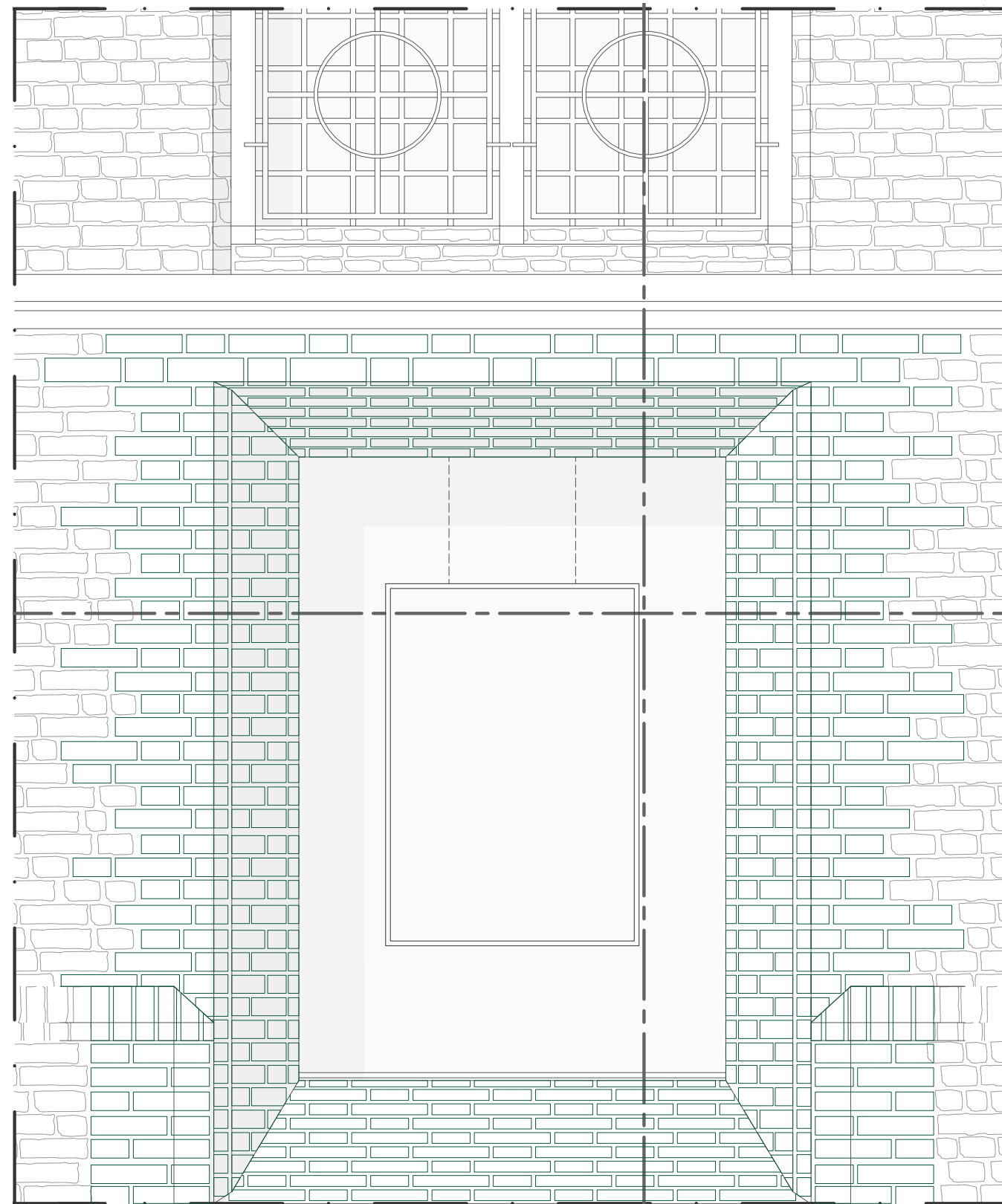




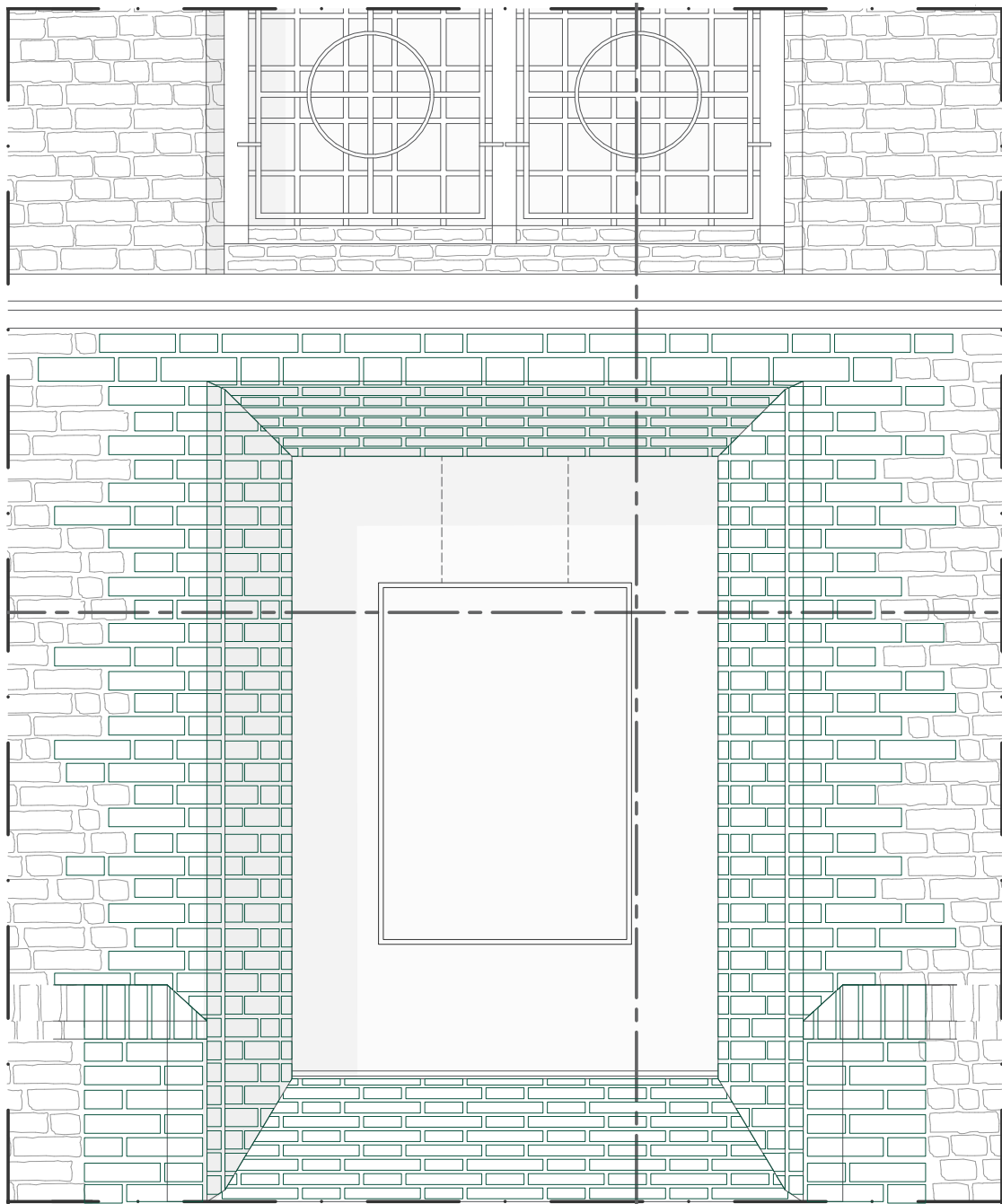
## New south facade



## Ground floor facade openings



New openings referencing the old



New facade openings



Original window openings before 1962 renovation

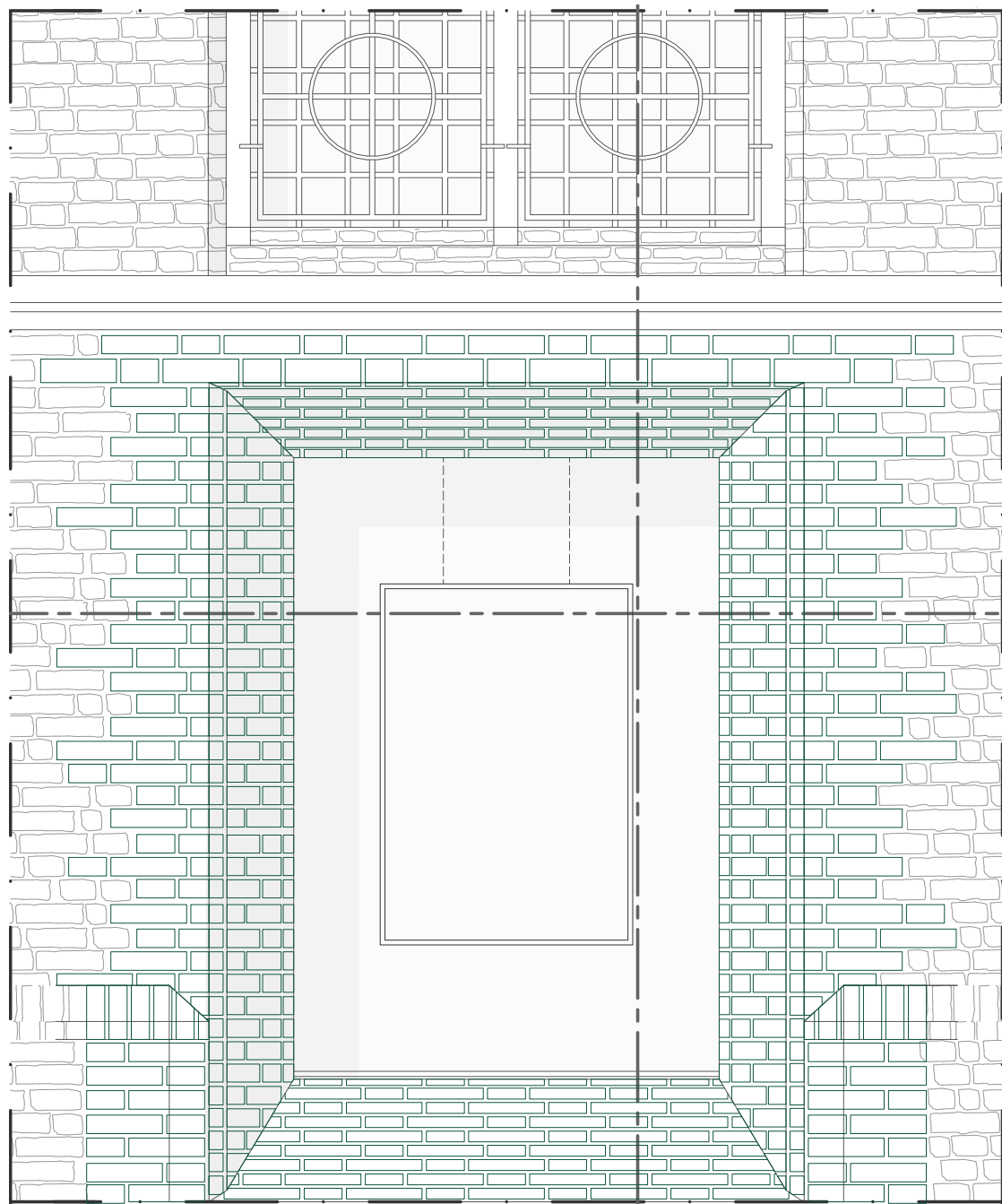


## Marks of time

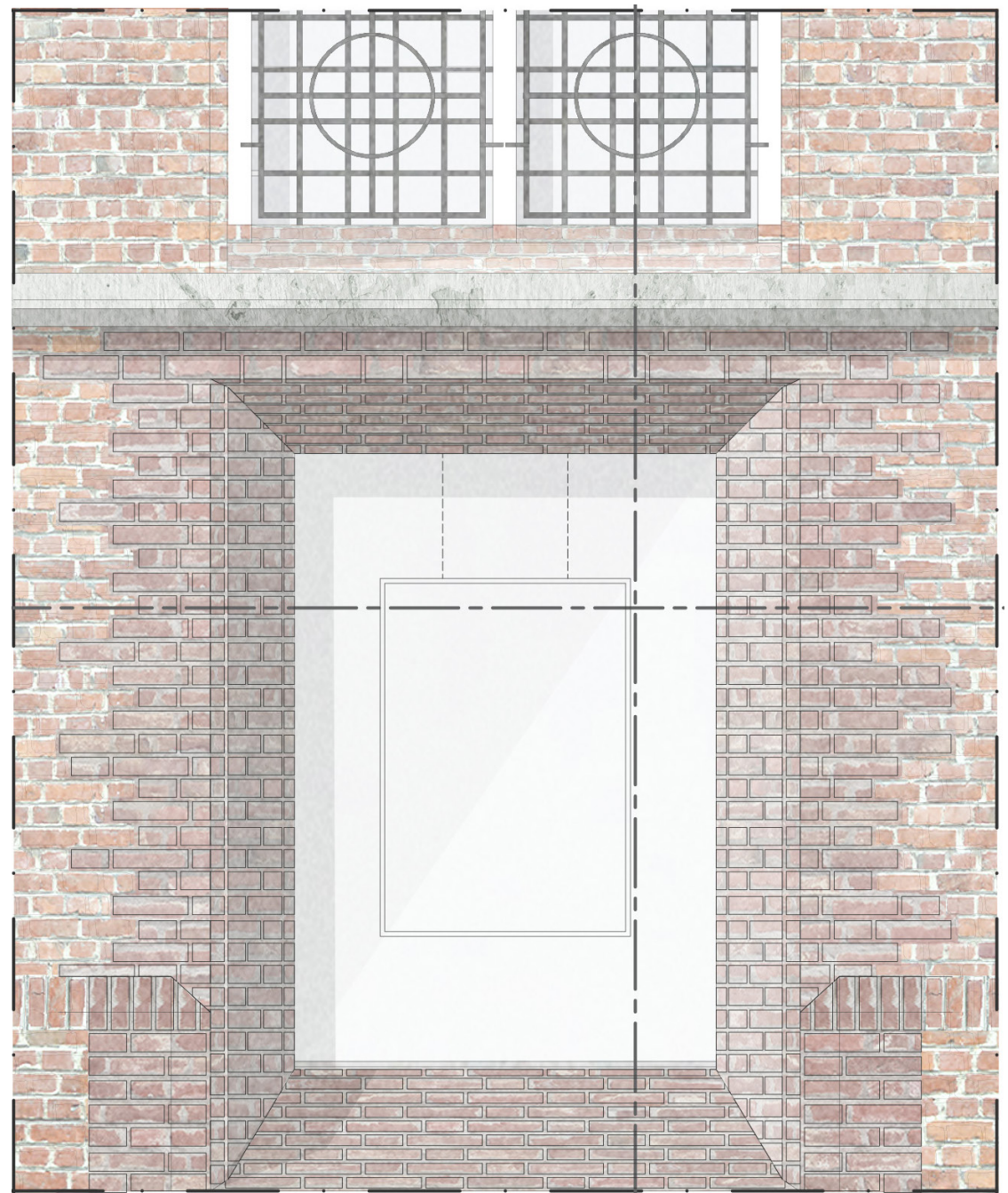




## New openings adding to the marks of time



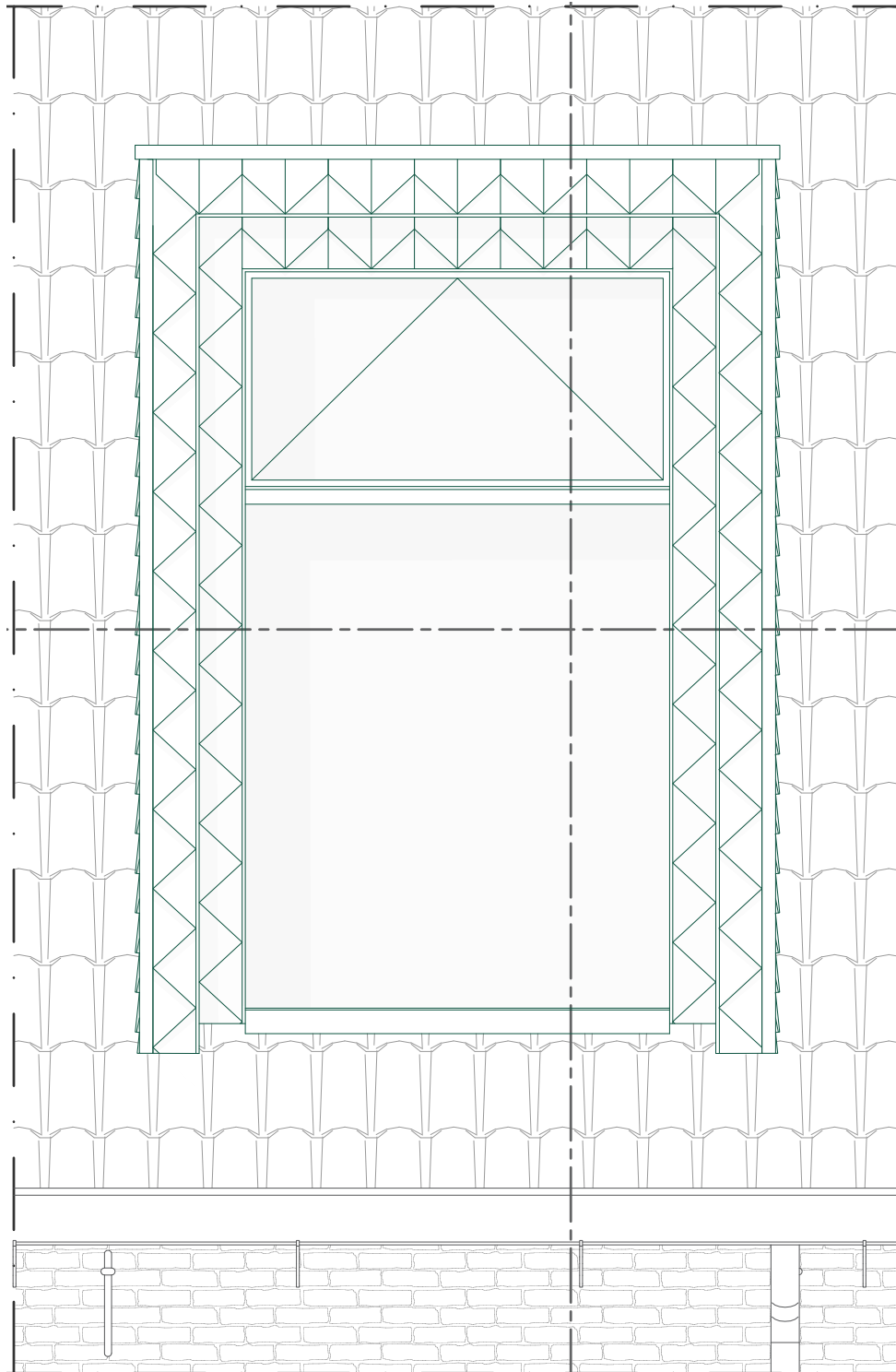
Introducing a new masonry bond



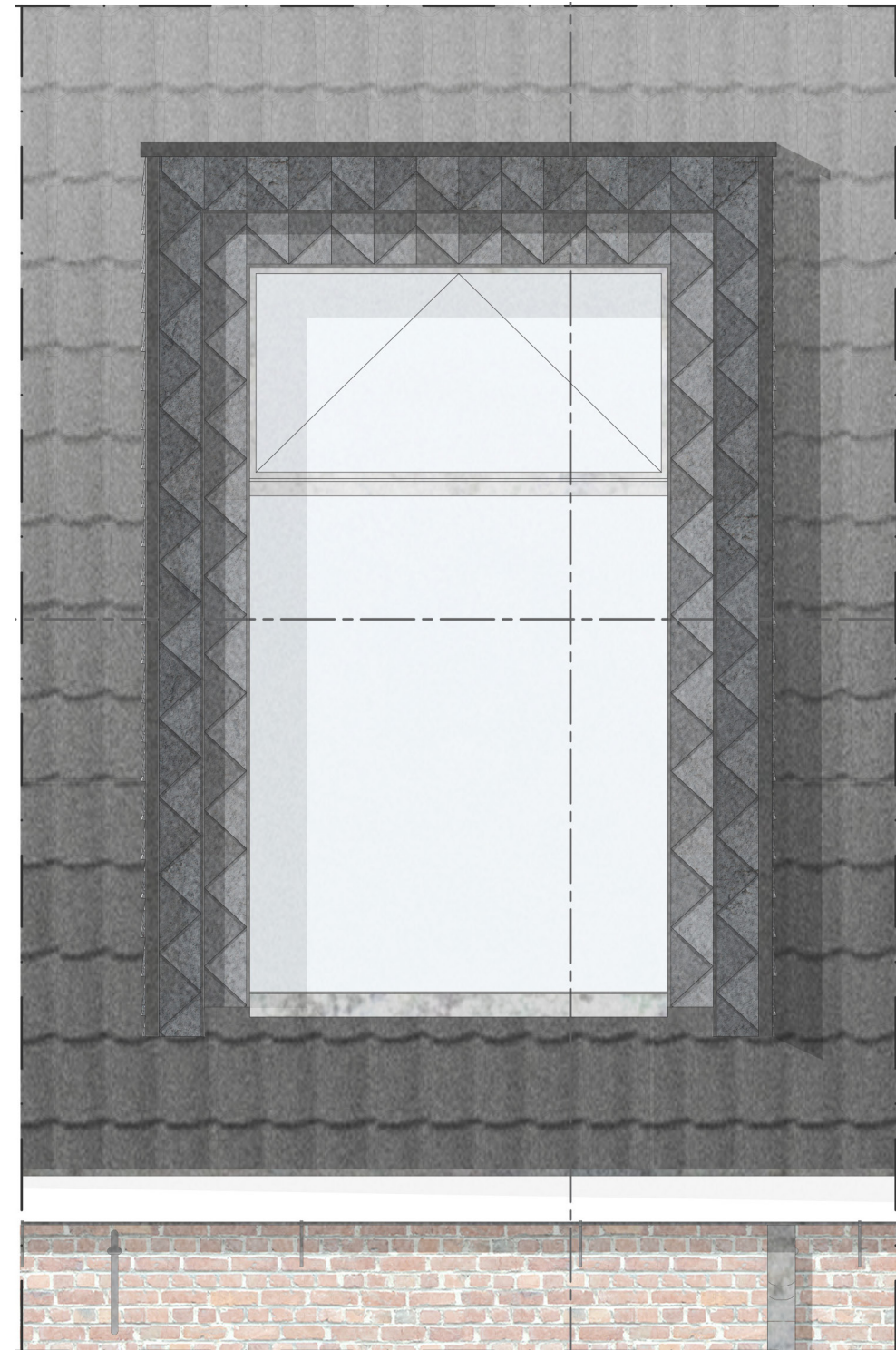
Introducing a new stone



## New openings adding to the marks of time



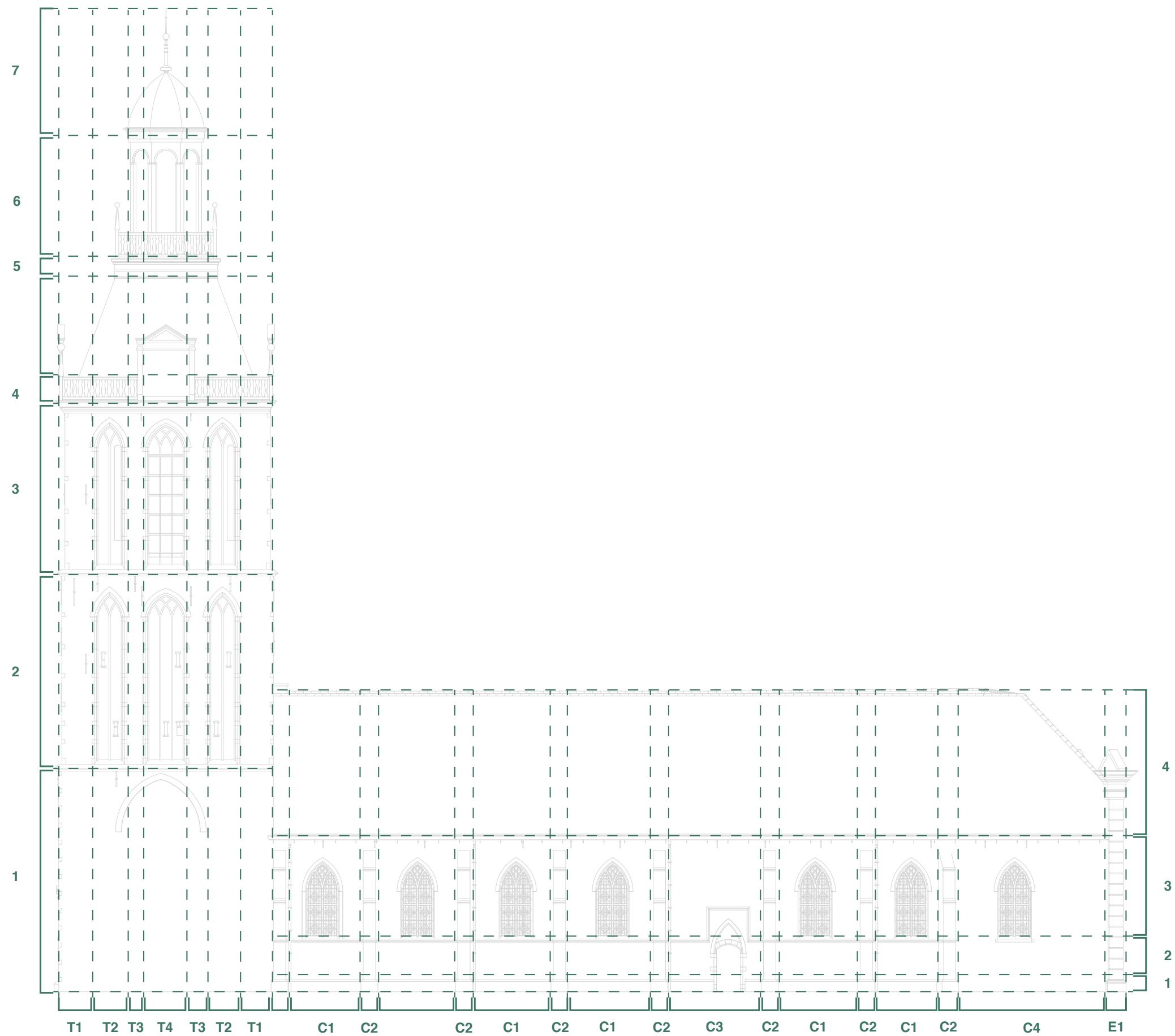
Introducing a new roof covering



Introducing a texture



## Adding new rythm and style while honouring the existing



Adding new rythm and style while honouring the existing



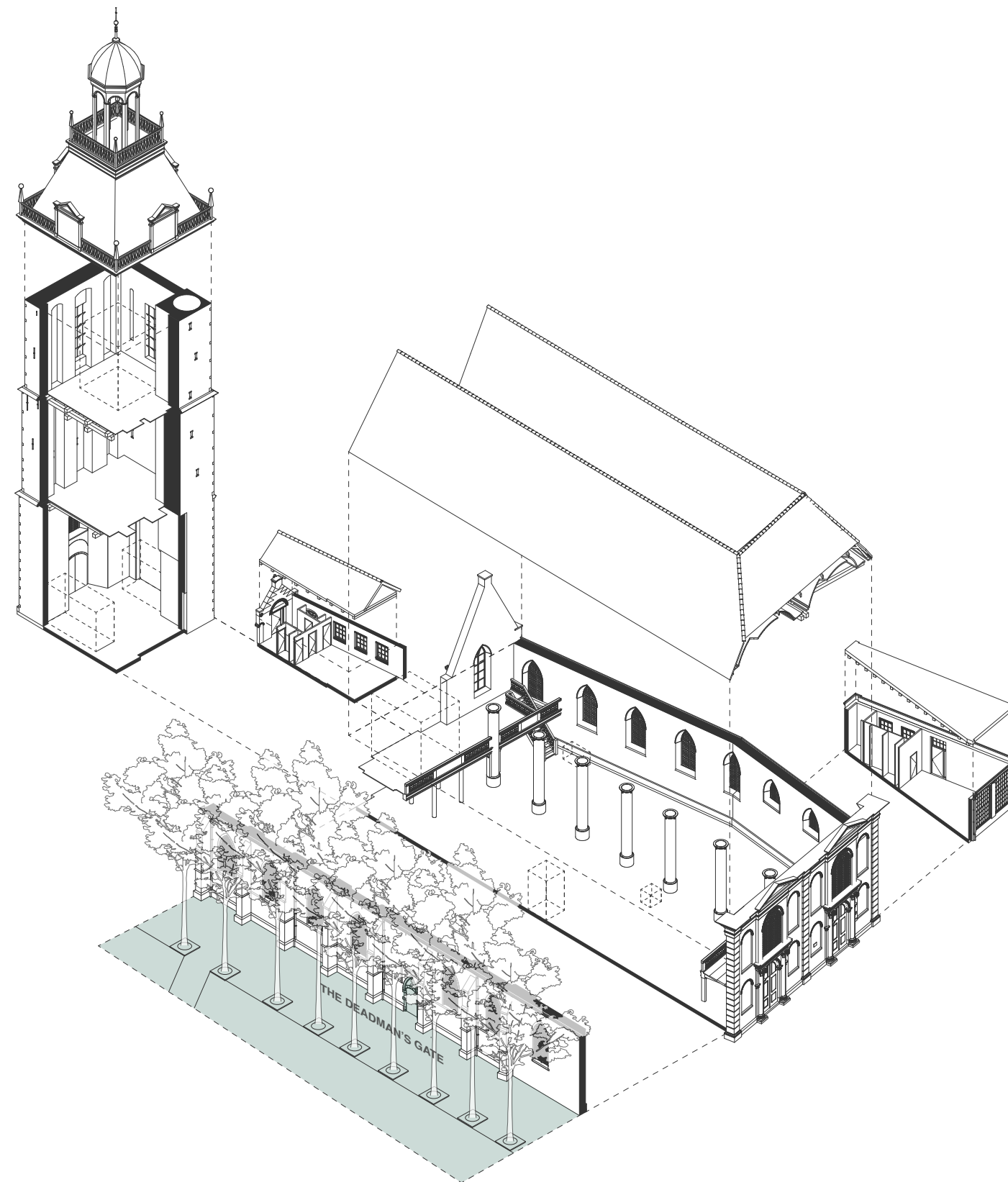


## Reshaping the connection between the church and churchsquare





## The deadman's gate





## The deadman's gate



Current outside view

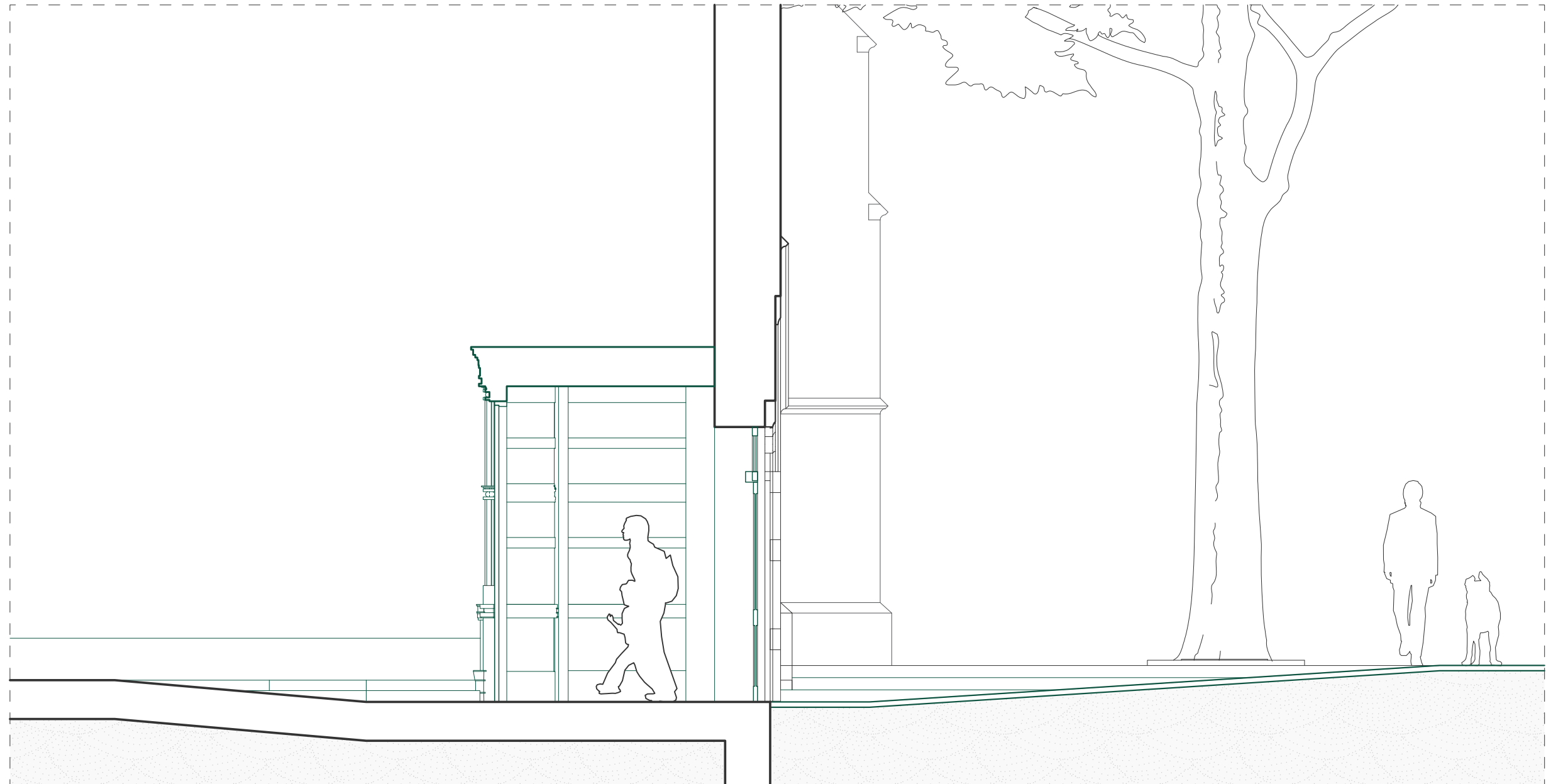


Current inside view



## Reshaping the narrative of the entrance

Deadman's gate entrance situation - section



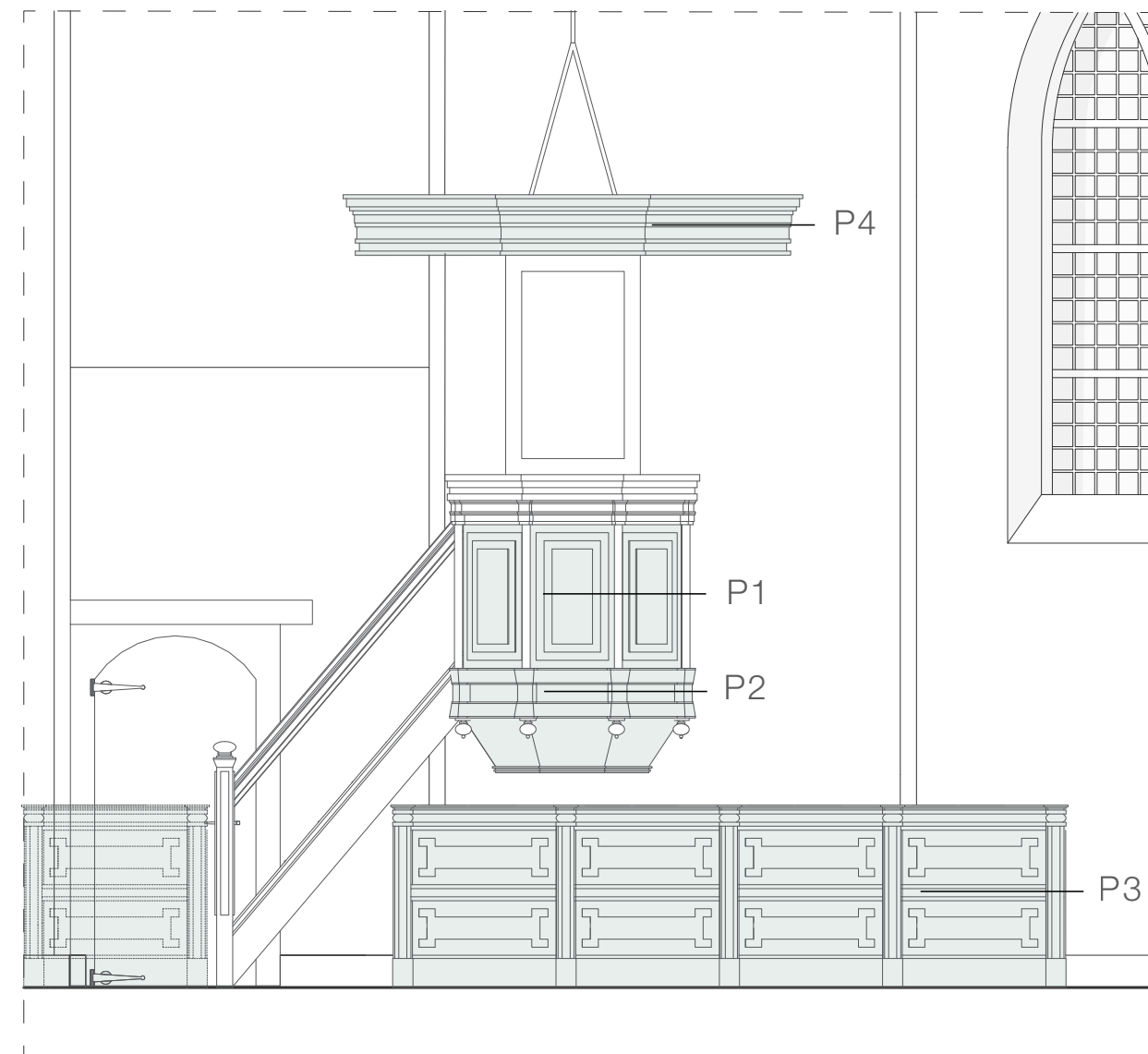


## Reshaping the narrative of the entrance

The preachers chair

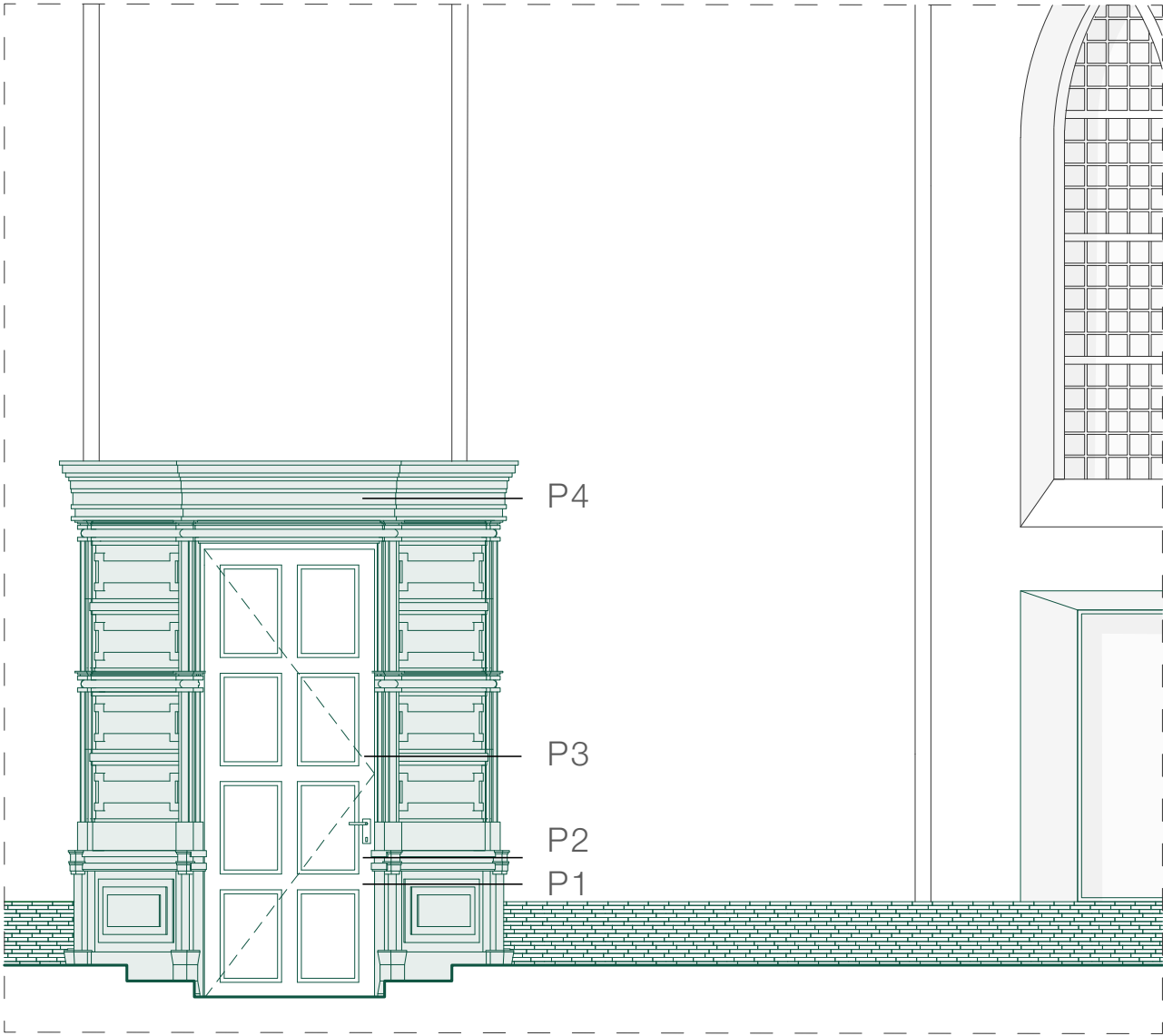


Existing situation - pastor's chair

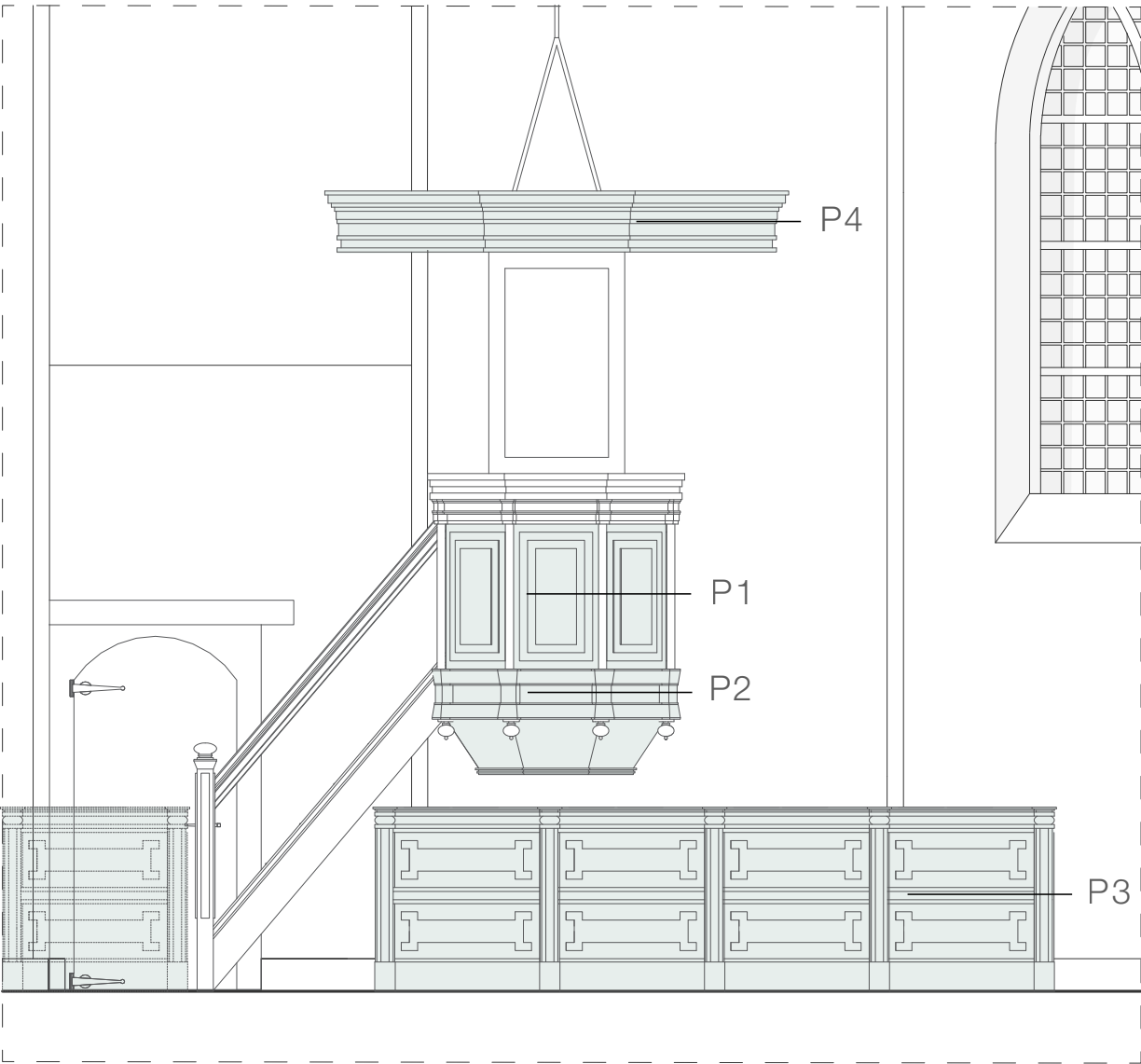


# Reshaping the narrative of the entrance

New situation - deadman's gate interior entrance

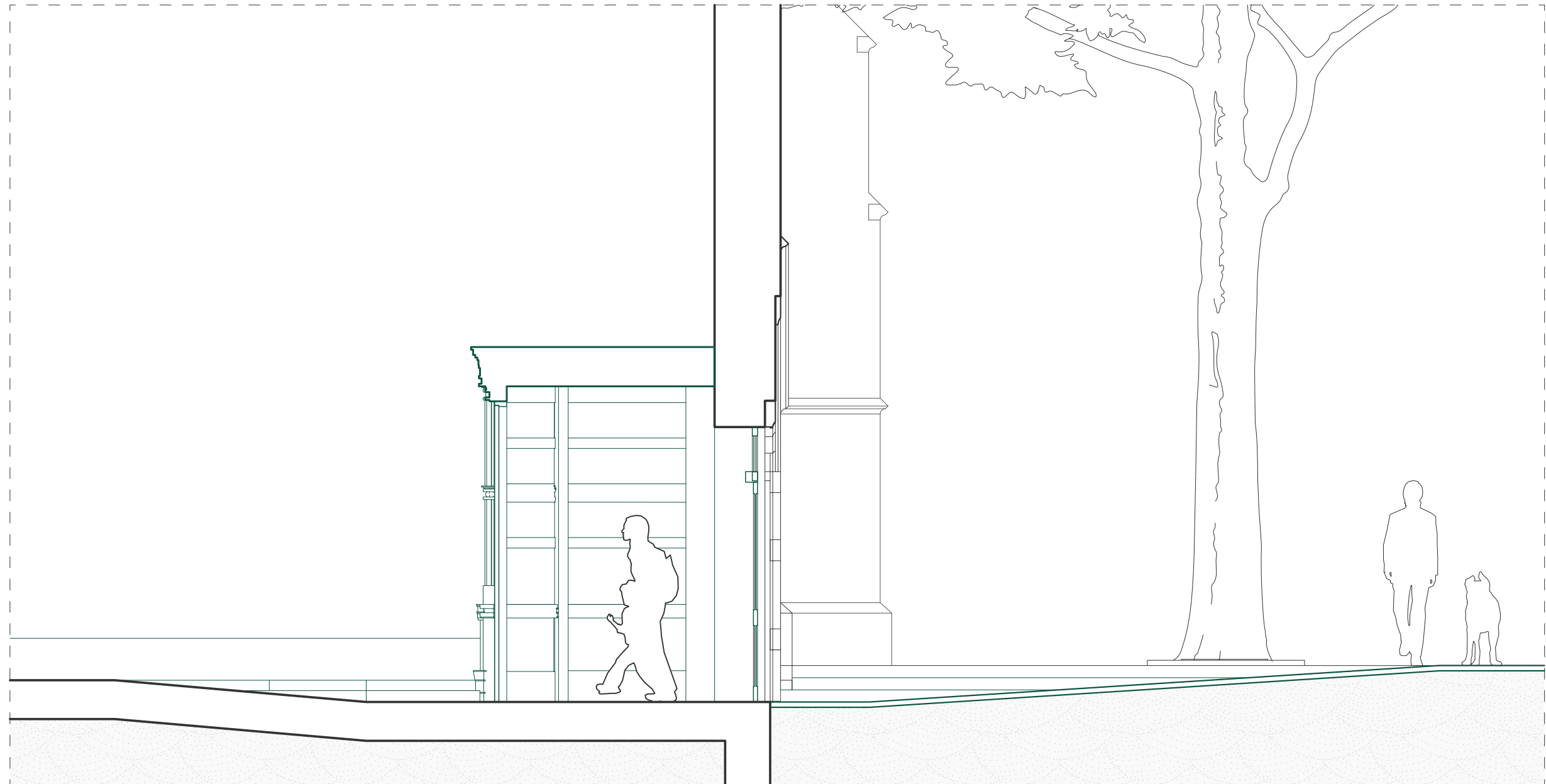


Existing situation - pastor's chair

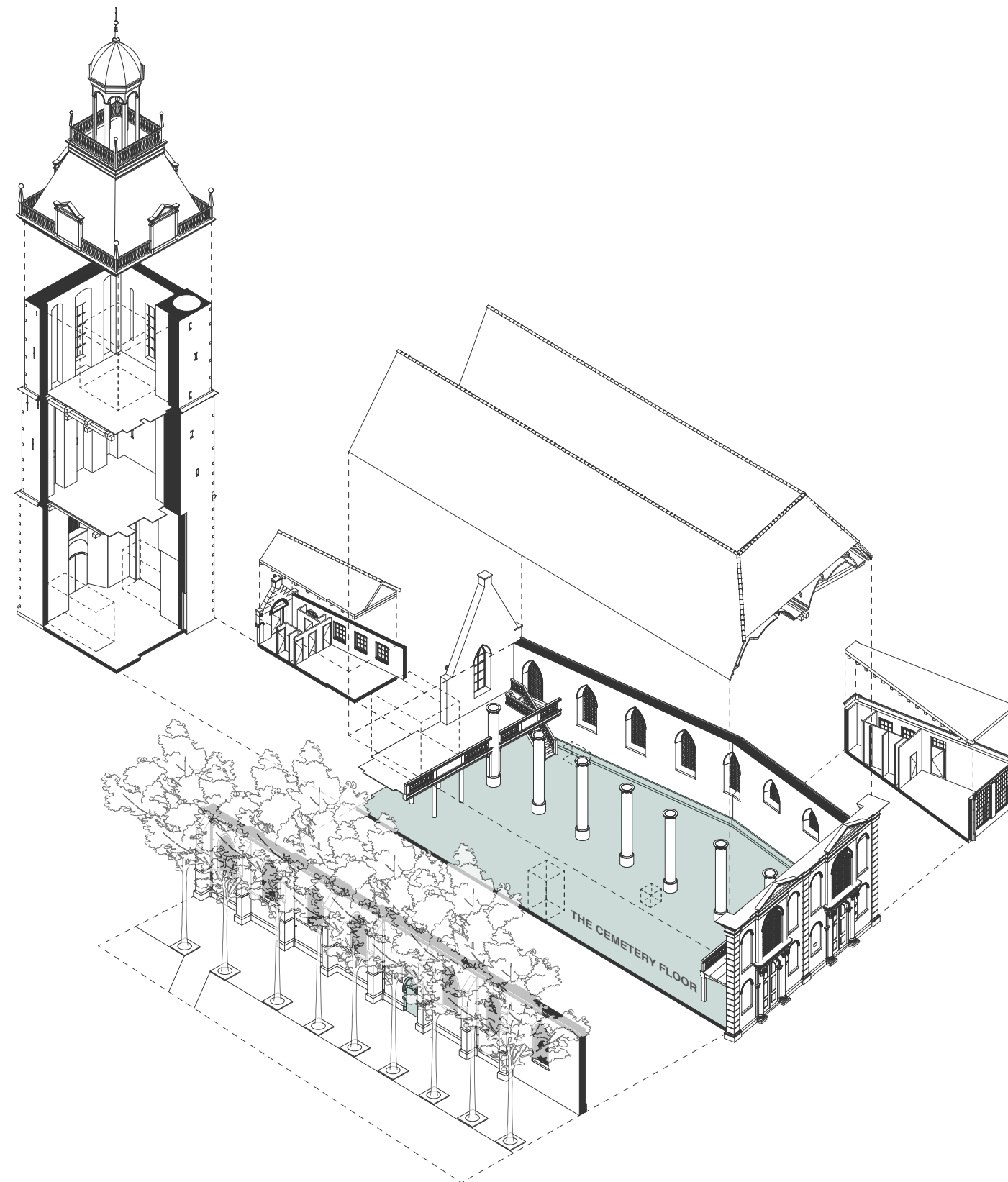


## Reshaping the narrative of the entrance

Deadman's gate entrance situation - section



## The cemetery floor





## Marks of the cemetary floor

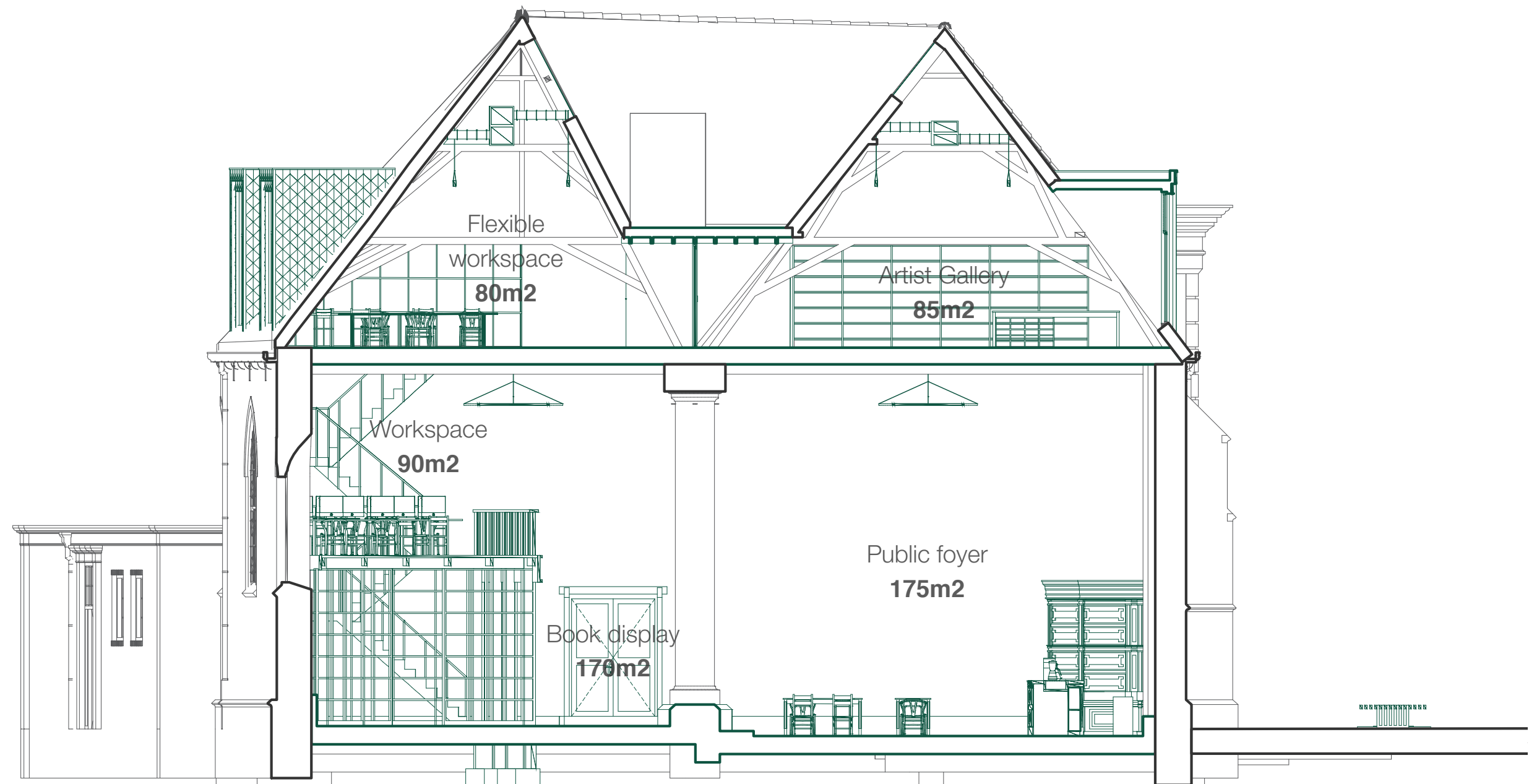


Gravestones still present within the church



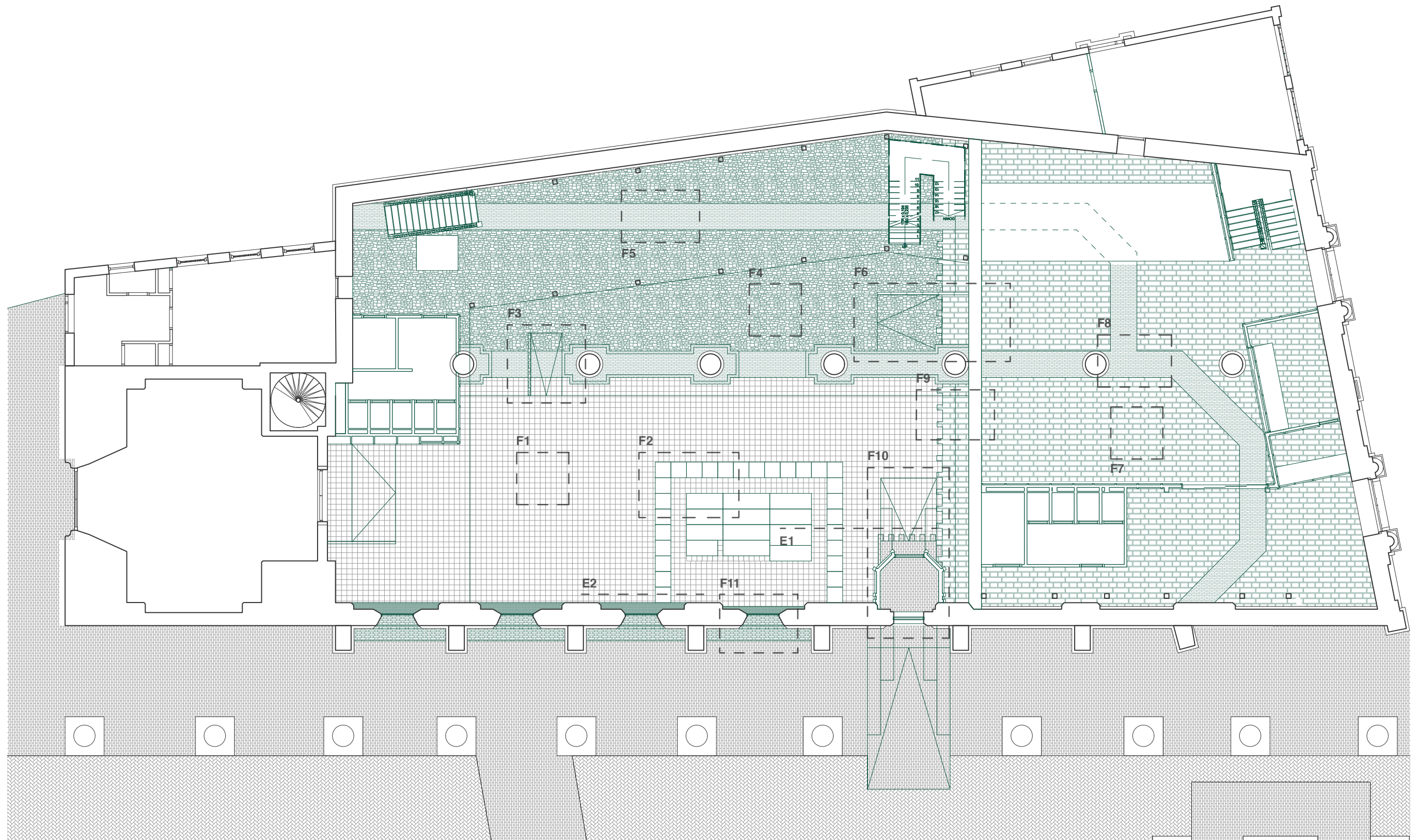
Lines marking the original height of the floor

## Referencing the height differences in the floor



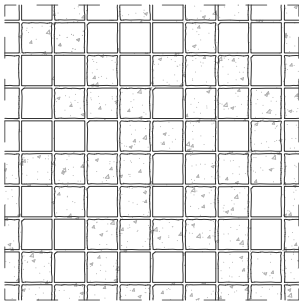


## Referencing the cemetary history and layering of time

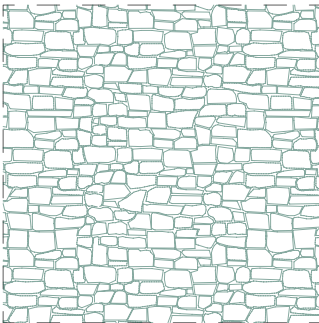


Referencing the cemetary history and layering of time

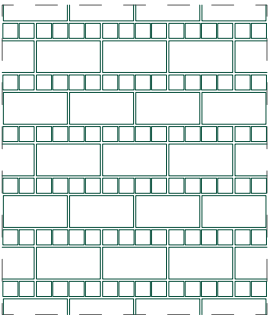
F1



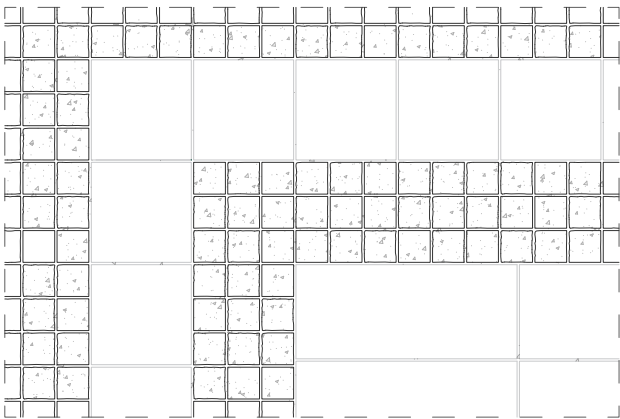
F4



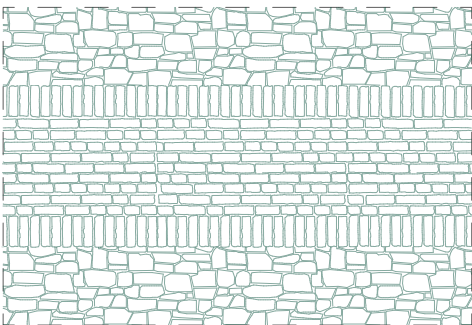
F7



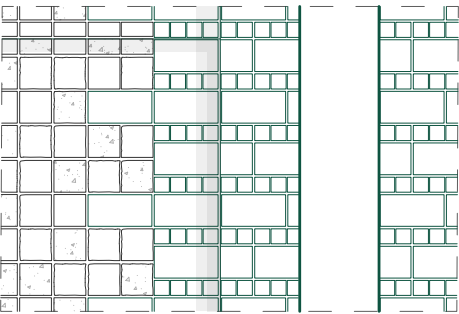
F2



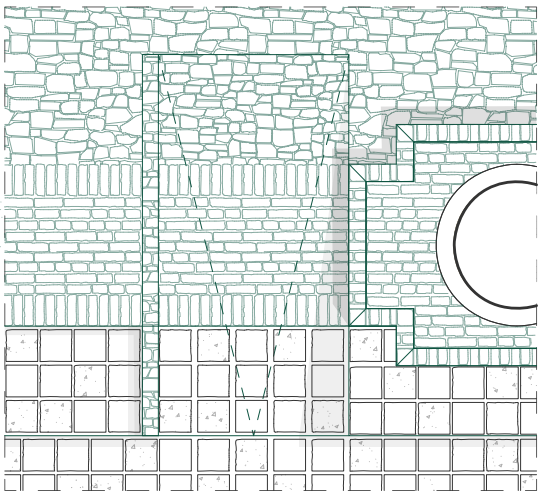
F5



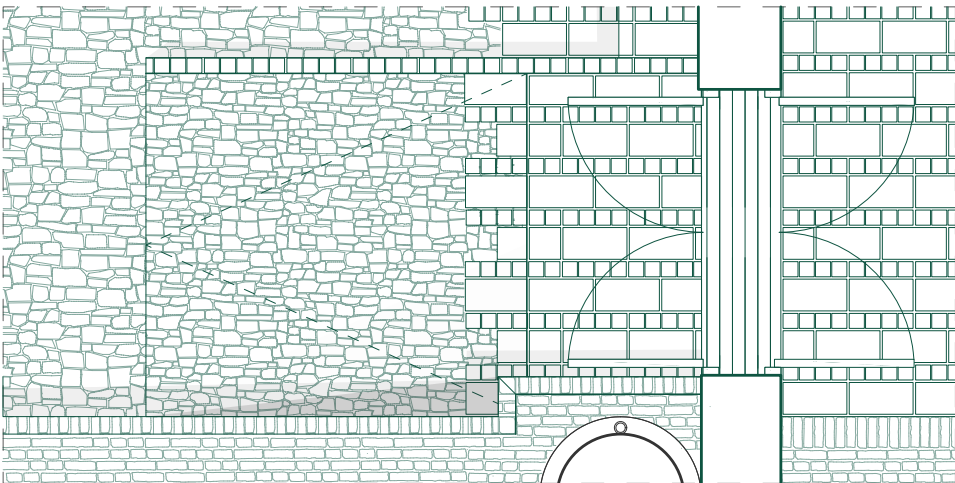
F8



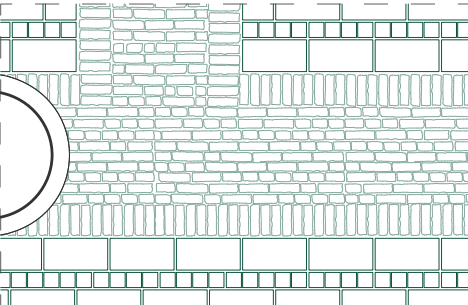
F3



F6



F9



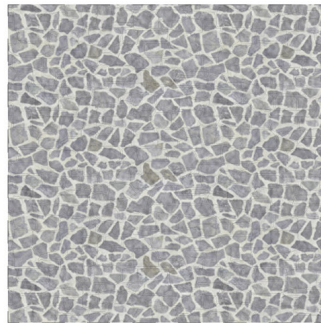


## Creating a texture landscape that shows the marks of time

F1



F4



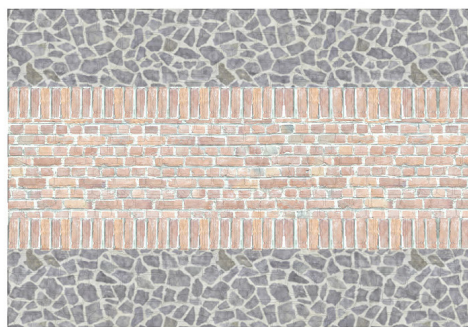
F7



F2



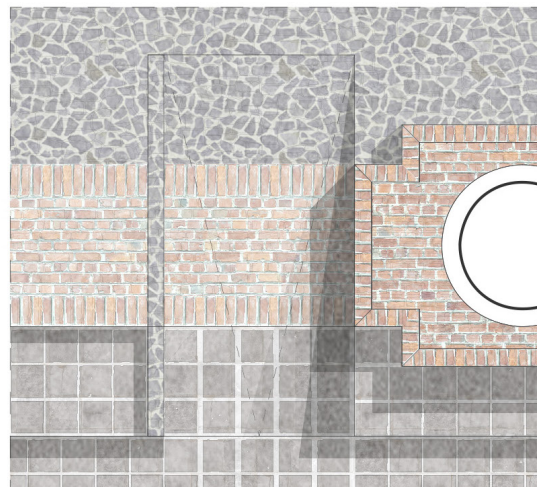
F5



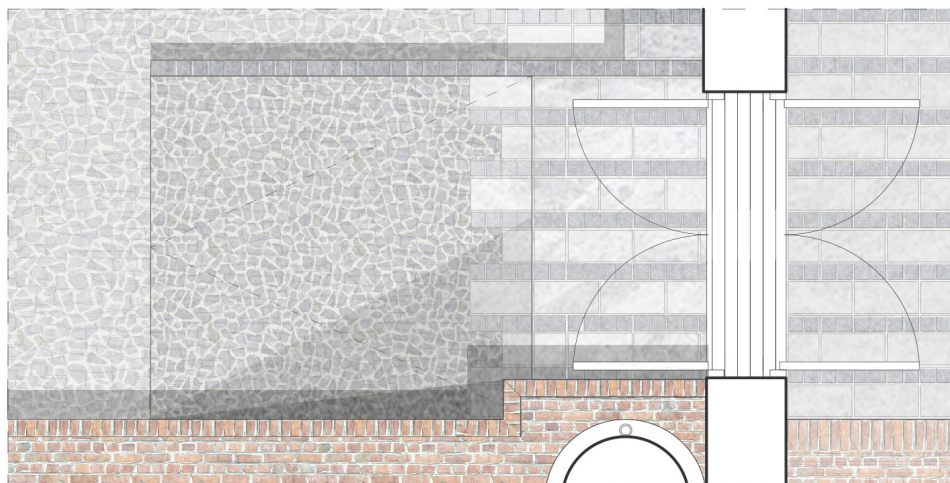
F8



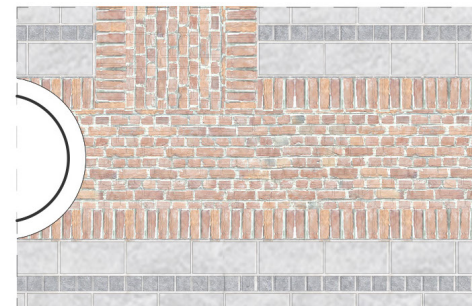
F3



F6

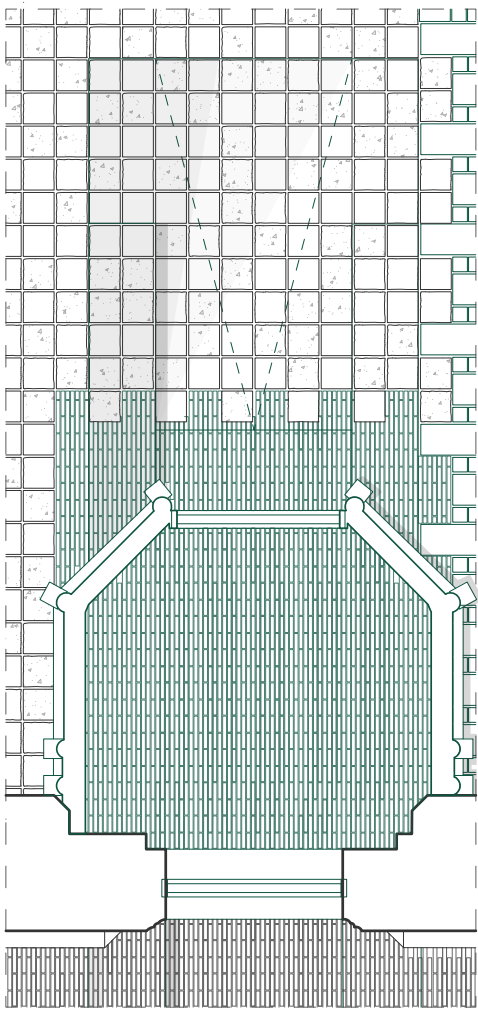


F9

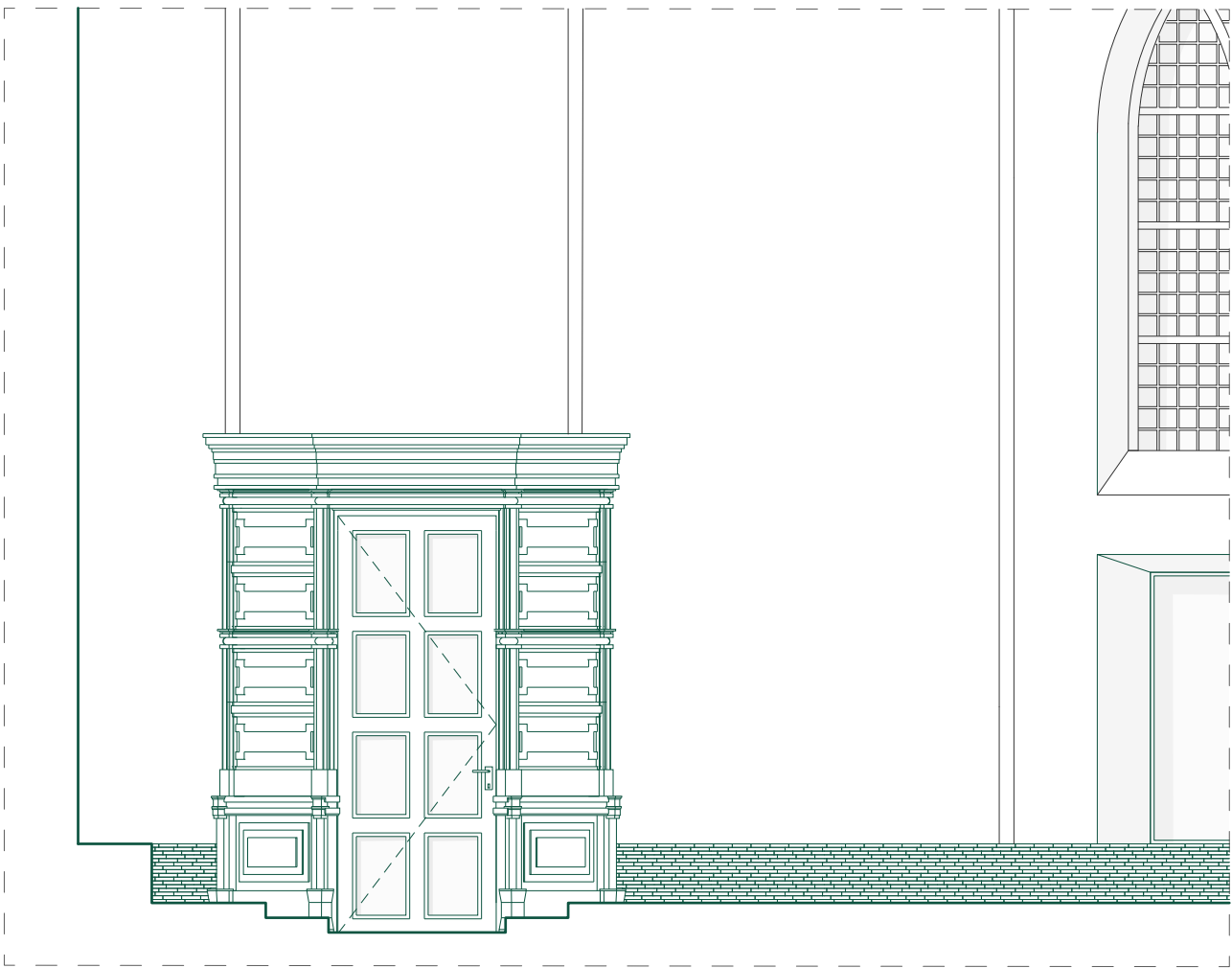


Referencing the cemetary history and layering of time

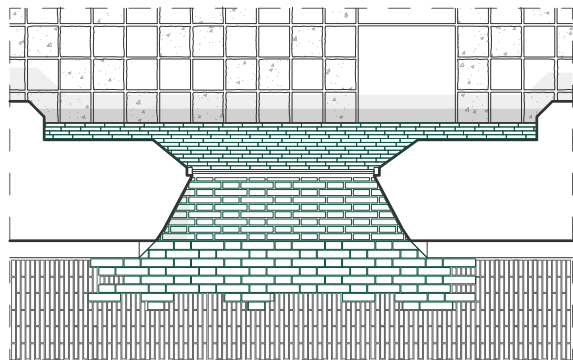
F10



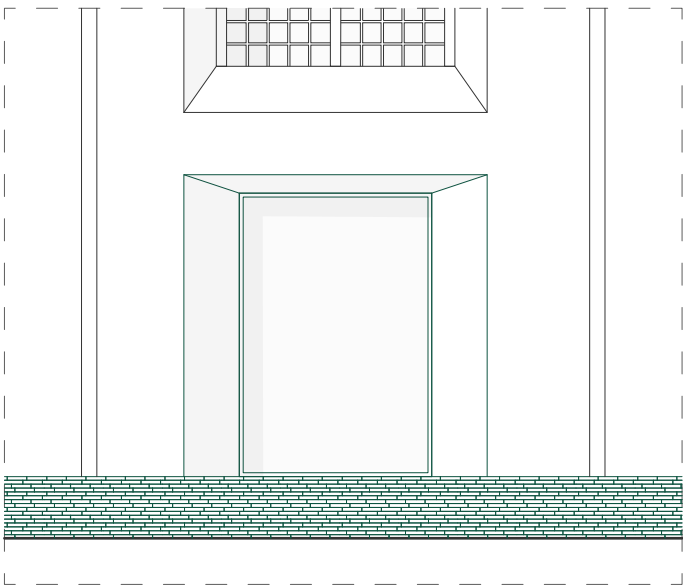
E1



F11



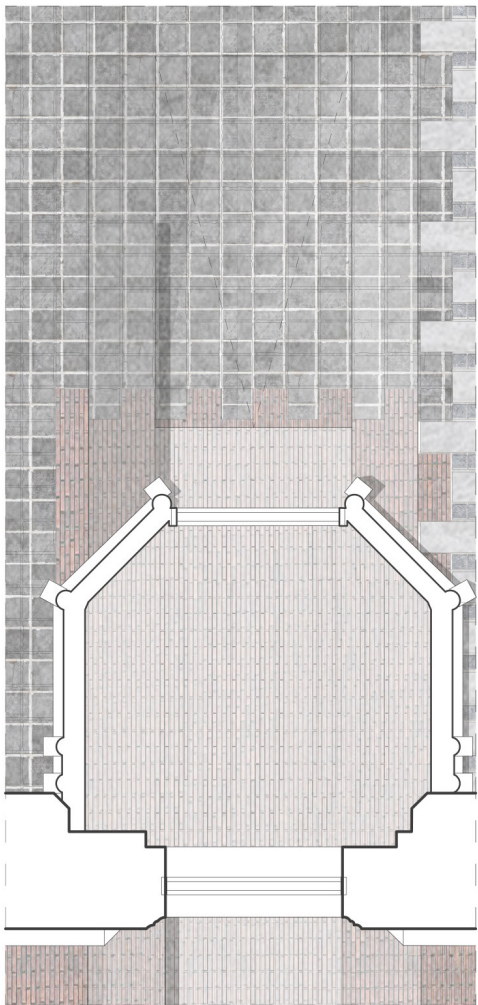
E2



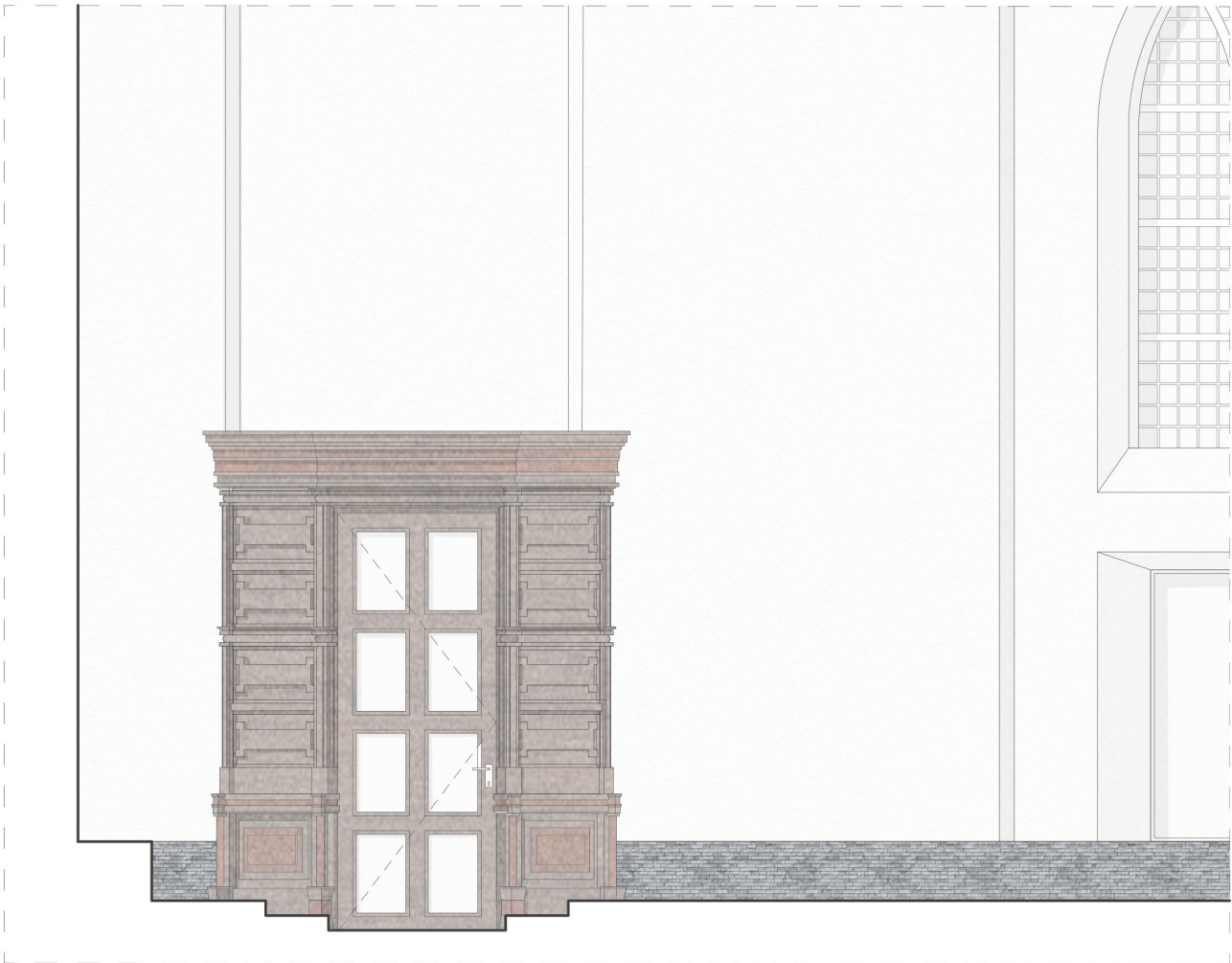


Creating a texture landscape that shows the marks of time

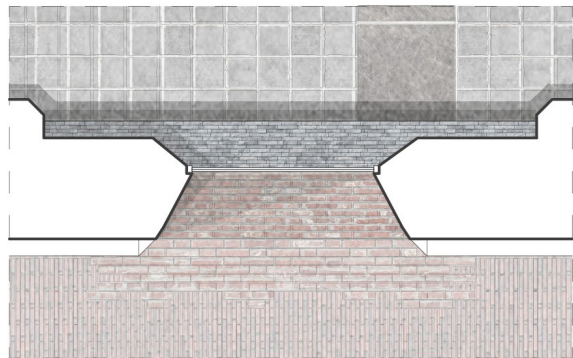
F10



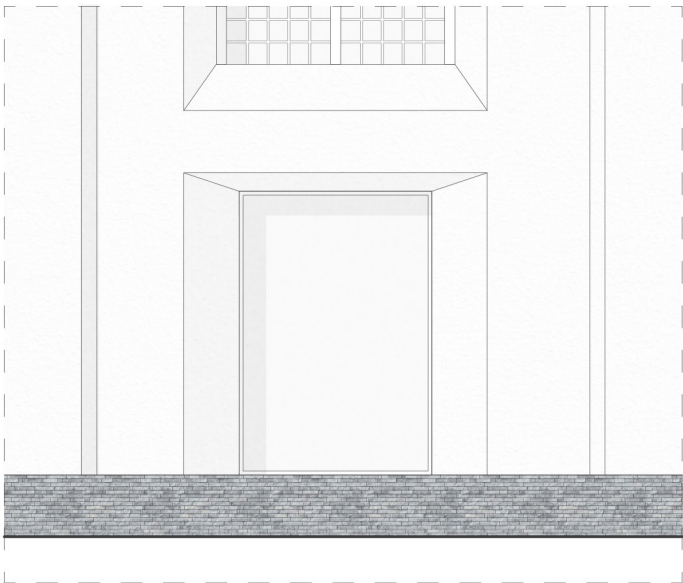
E1



F11



E2





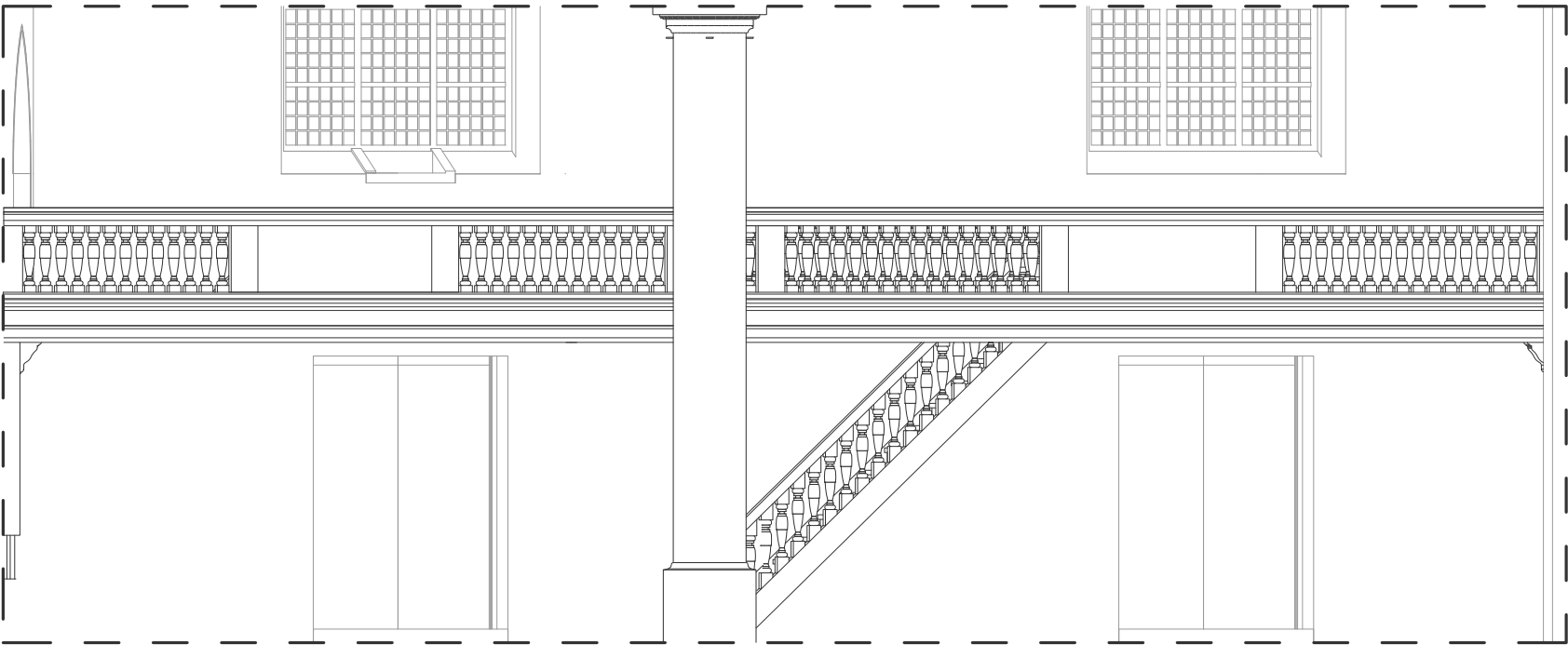
Creating a contemporary translation of the existing





# Creating a contemporary translation of the existing

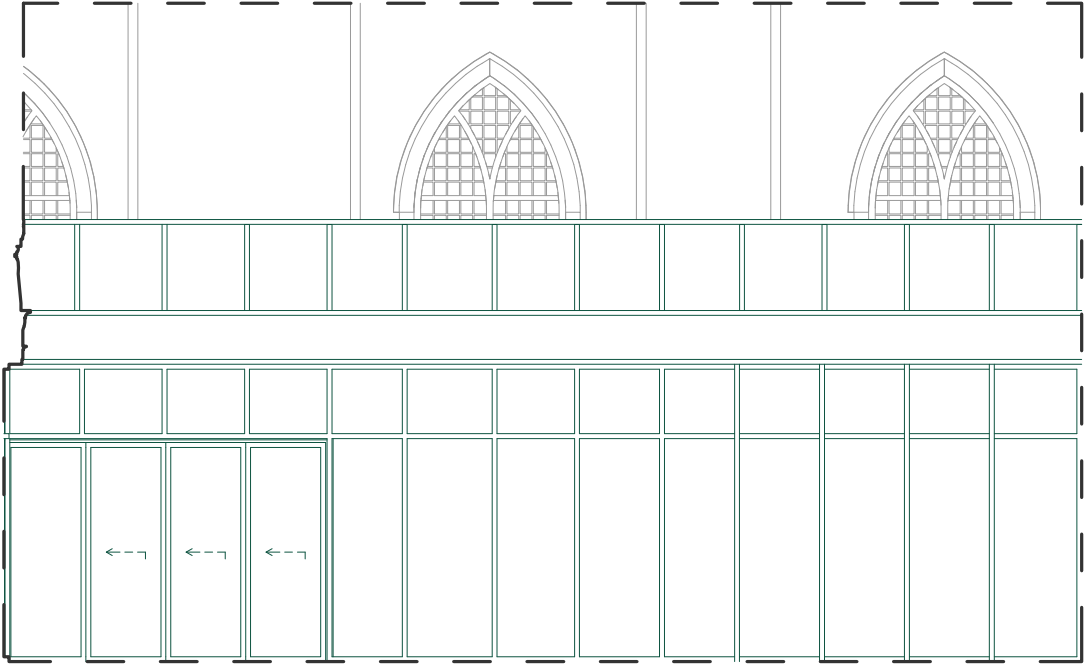
Existing gallery situation - east facade



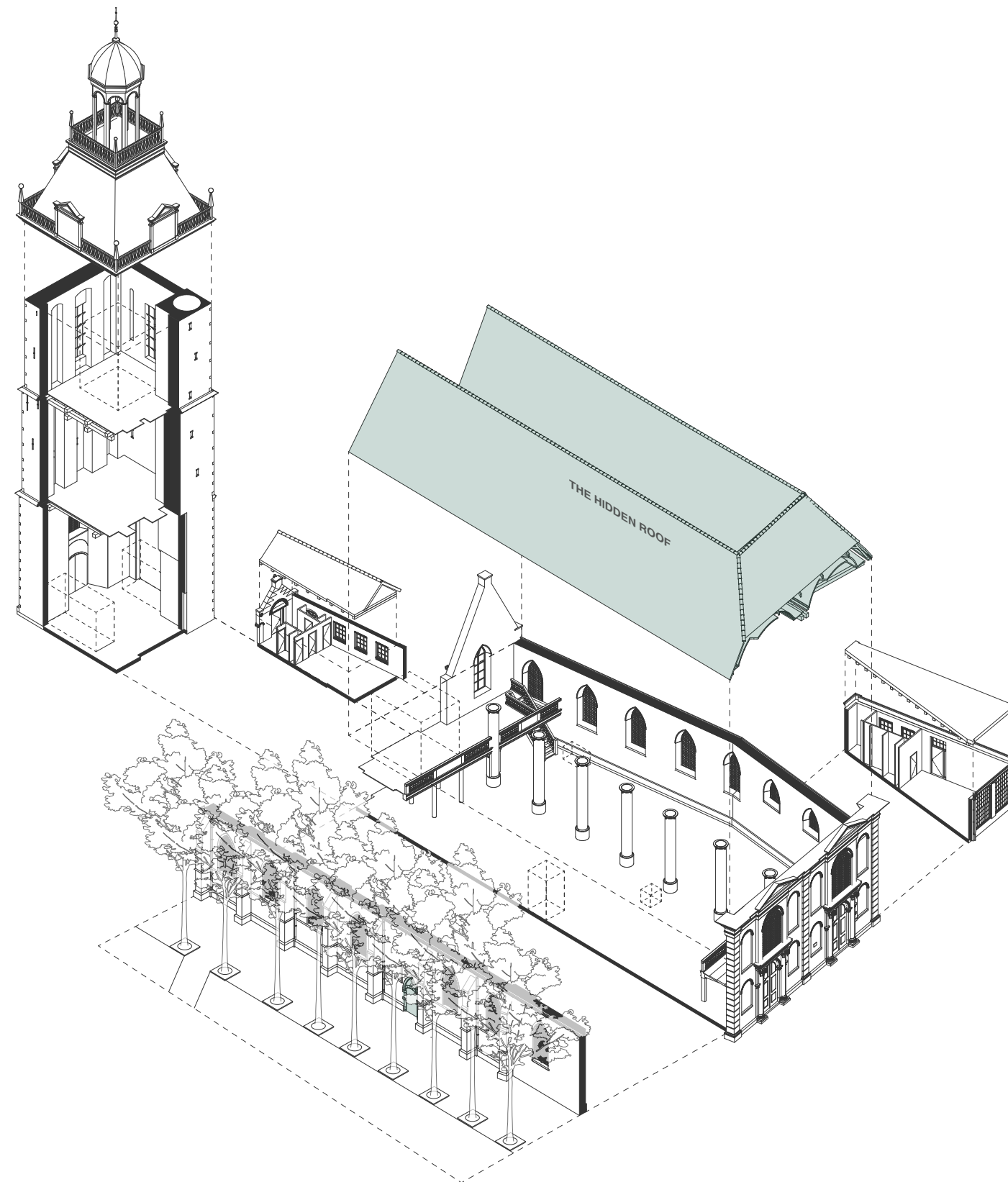
New gallery situation - east facade



+ South facade extension



## The hidden roof



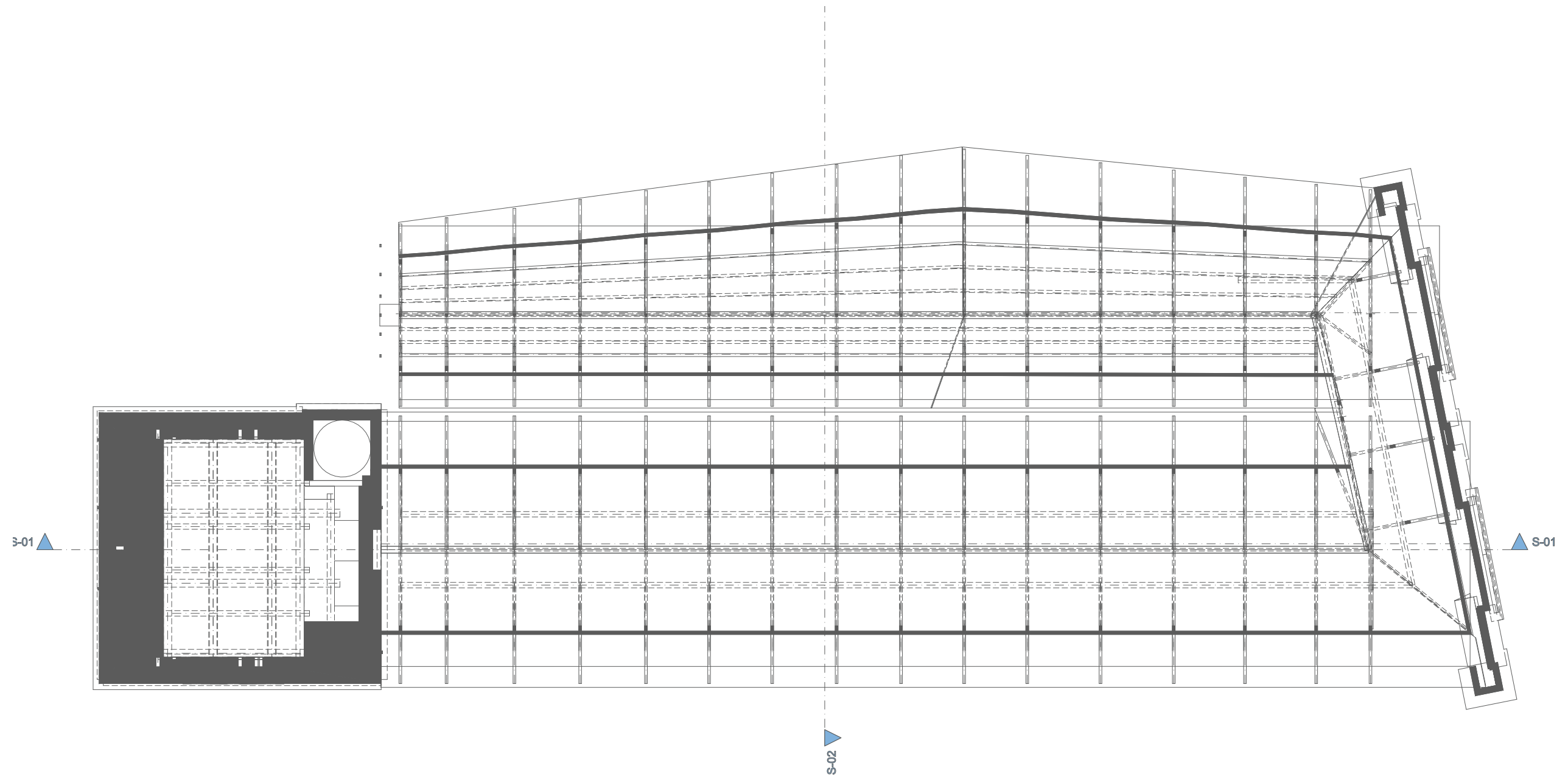


The roof hidden behind a curved ceiling



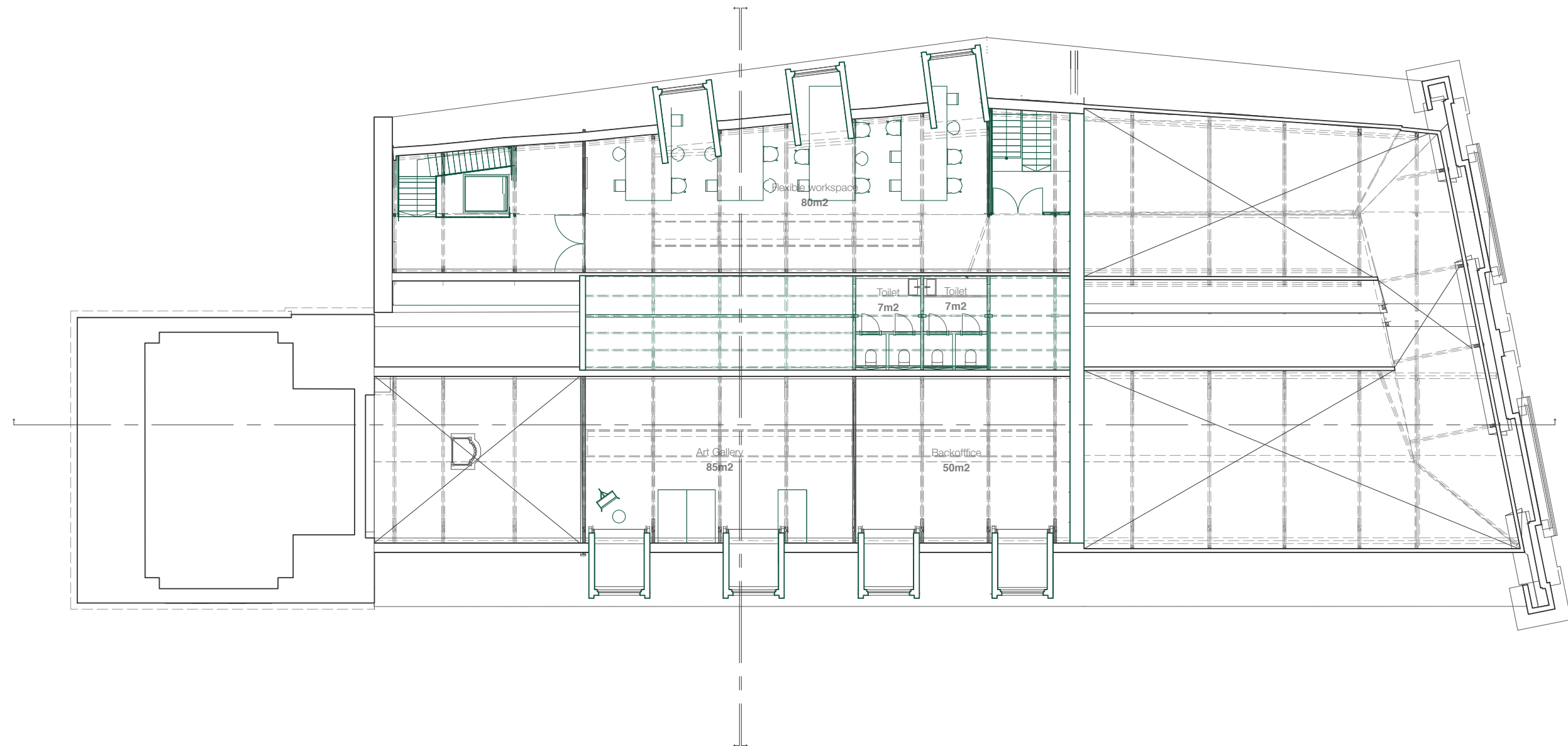


## The existing roof level



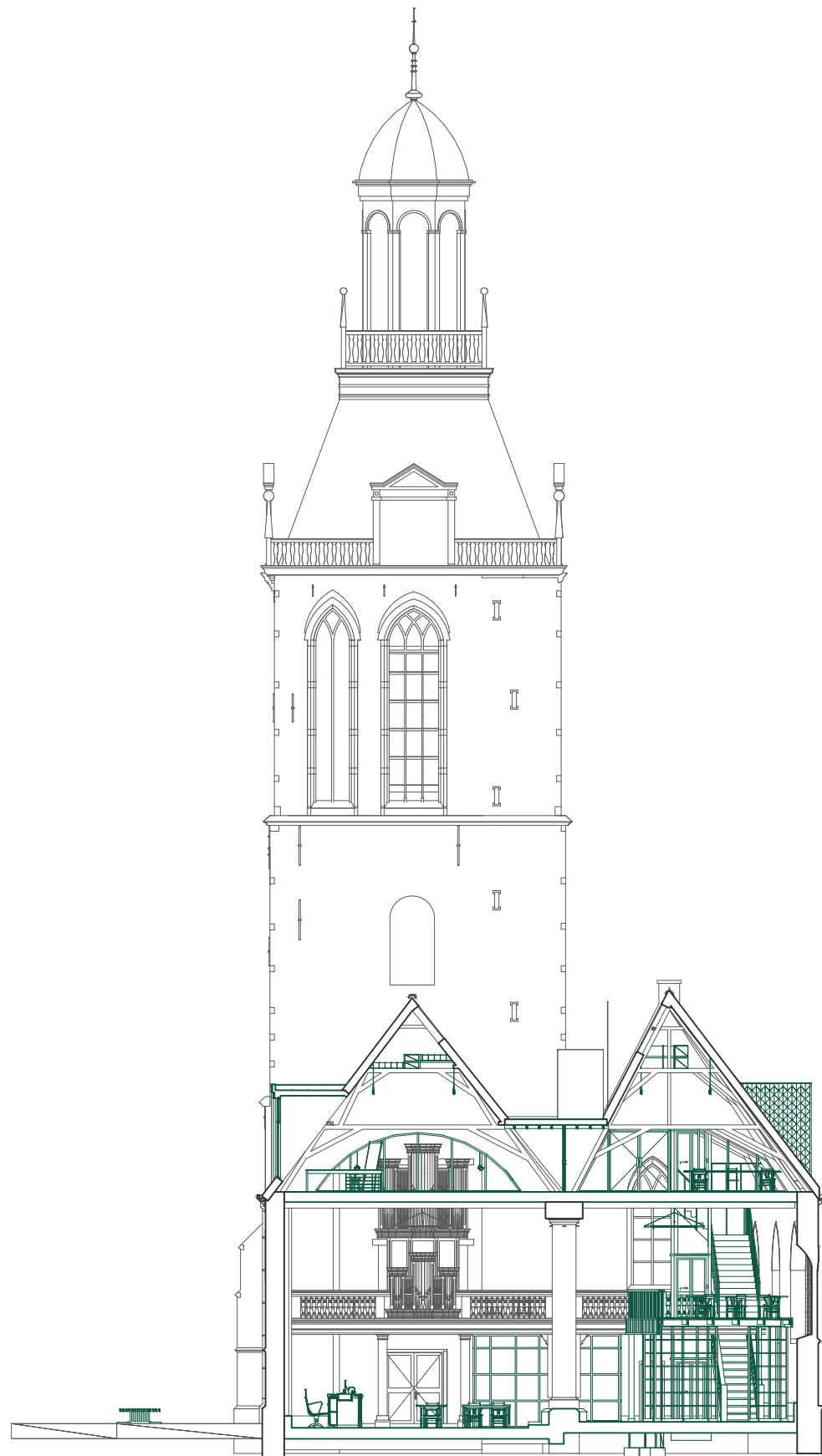
Church hall roof level

## Introducing the roof as a functional part of the building





## Longitudinal section





Introducing the roof as a functional part of the building





Introducing the roof as a functional part of the building

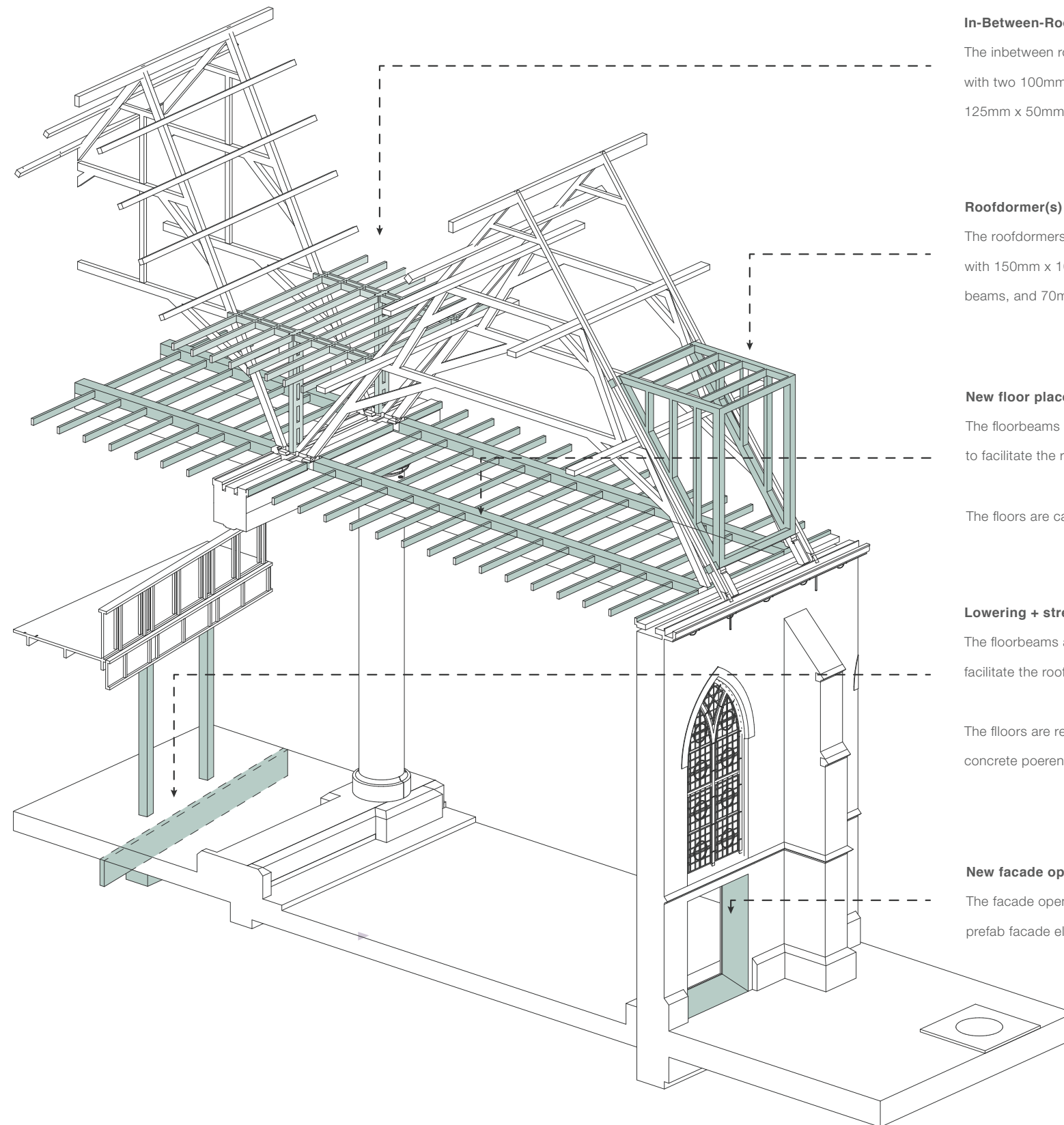


TELUMION



**How is it all build?**

# Main structural changes



## **In-Between-Roof placement:**

The inbetween roof is placed on the brick columns with two 100mm x 100mm wooden columns, with 125mm x 50mm beams to carry the roof

## **Roofdormer(s) placement:**

The roofdormers are placed on the existing rafters with 150mm x 100mm beams, 100mm x 70mm beams, and 70mm x 150mm columns

## **New floor placement:**

The floorbeams are raised with 200x 250mm beams to facilitate the roof level (beamspan of 900mm)

The floors are carried by 125mm x 50mm beams

## **Lowering + strengthening the existing floor:**

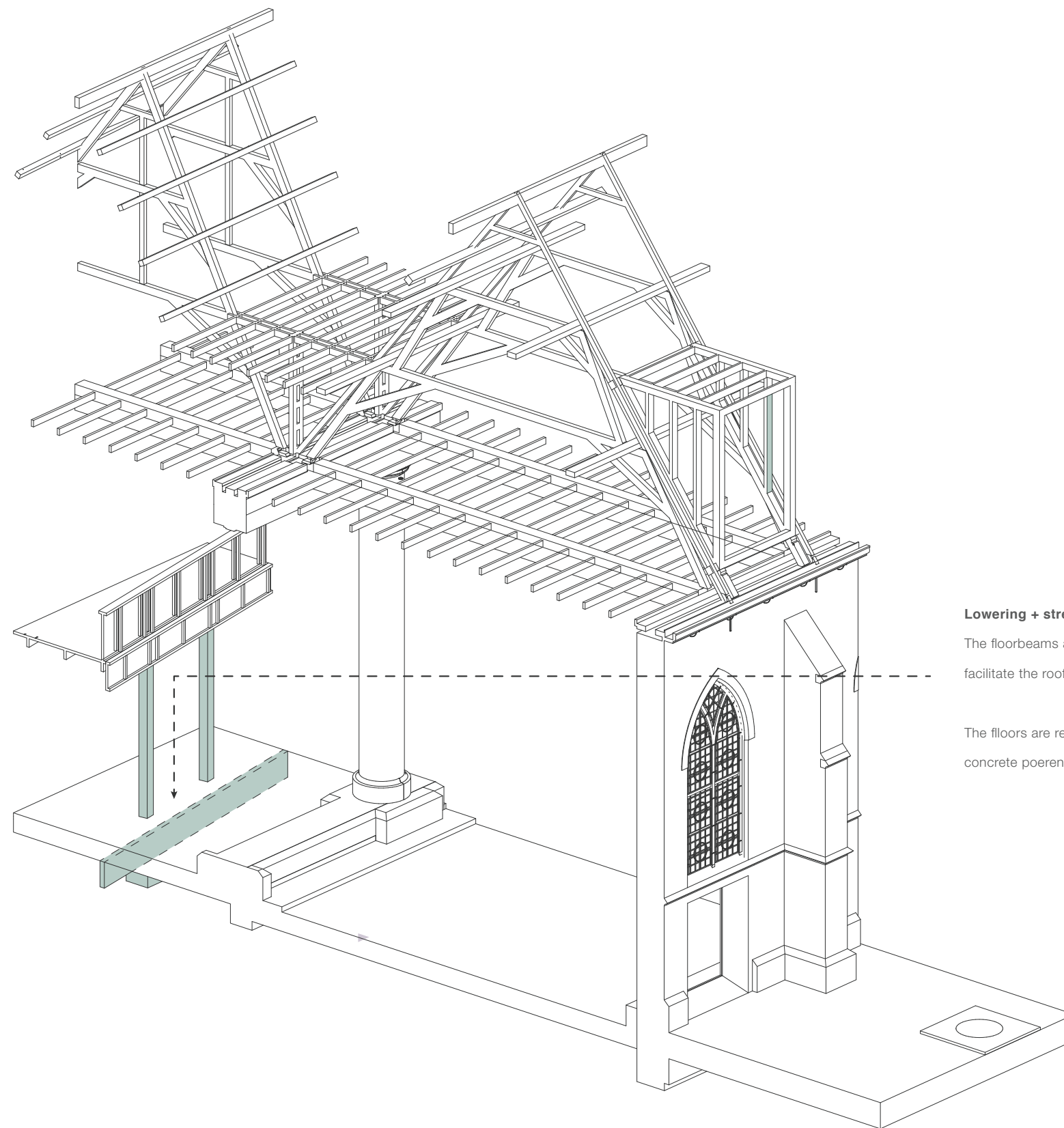
The floorbeams are raised with 200x 250mm beams to facilitate the roof level (beamspan of 900mm)

The floors are reinforced with prefab concrete beams and concrete poeren underneath the gallery columns

## **New facade openings:**

The facade openings are placed by use of a prefab facade element

## Lowering and strengthening the floor



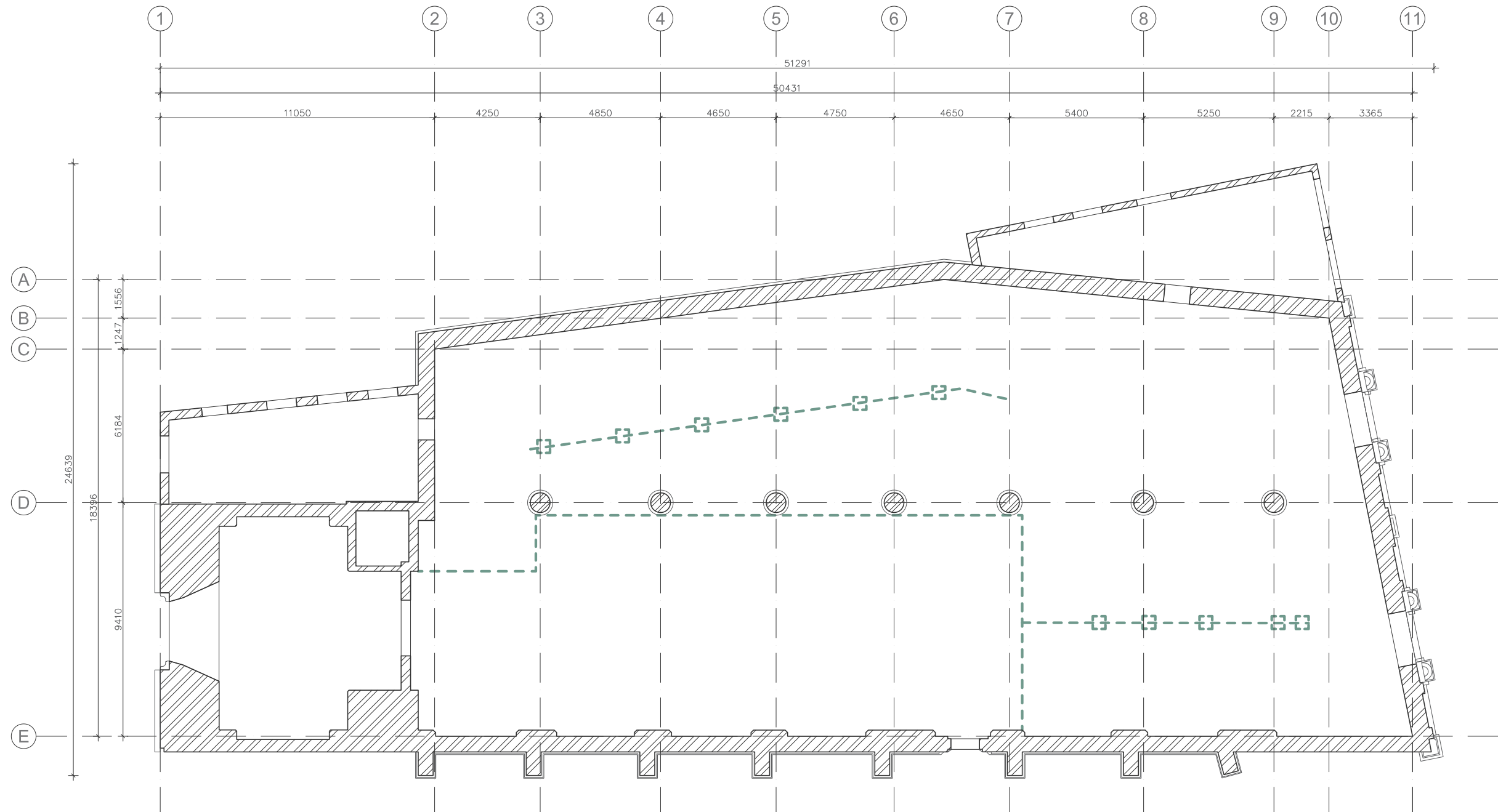
### Lowering + strengthening the existing floor:

The floorbeams are raised with 200x 250mm beams to facilitate the roof level (beamspan of 900mm)

The floors are reinforced with prefab concrete beams and concrete poeren underneath the gallery columns



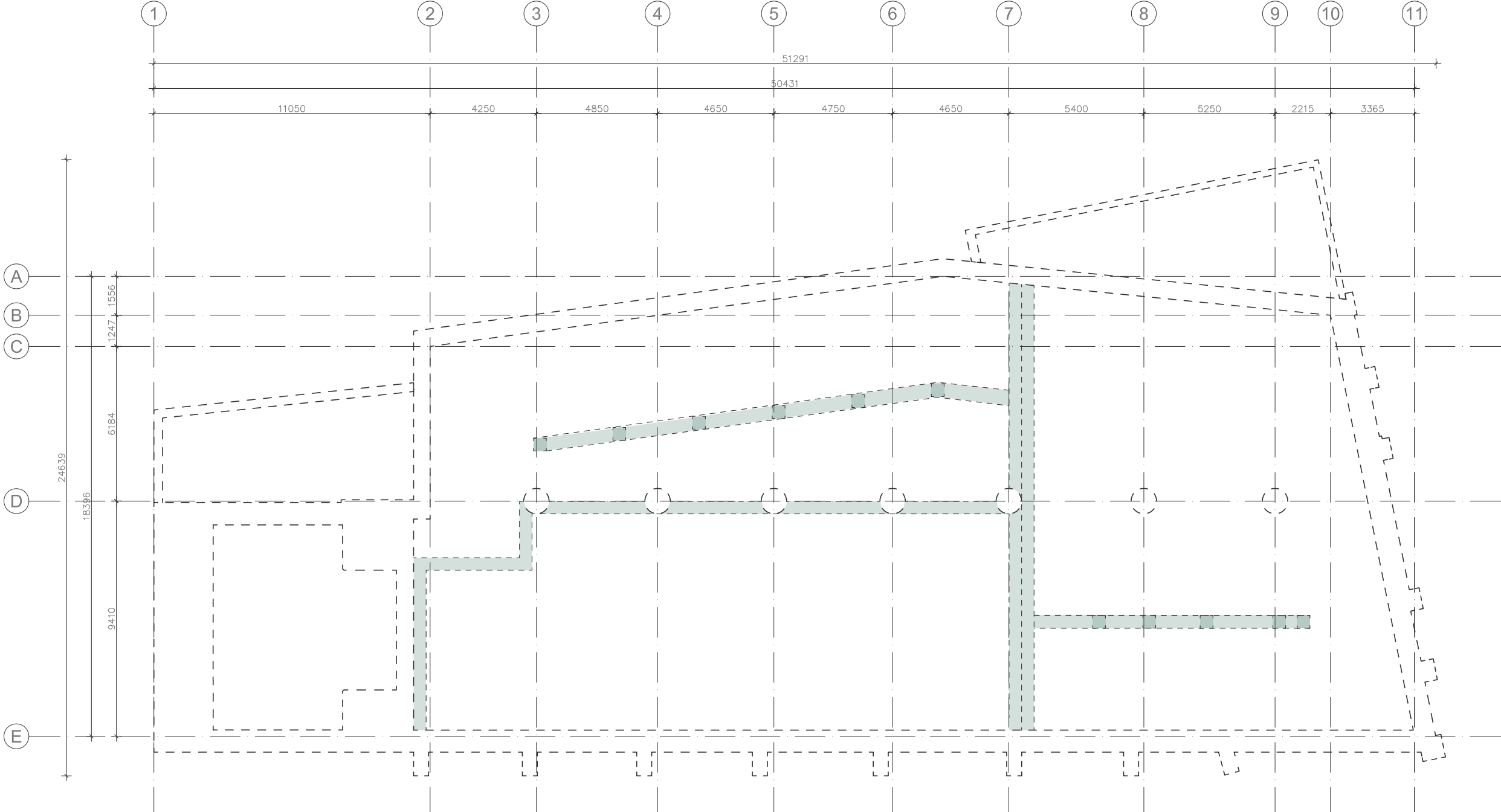
# Lowering and strengthening the floor



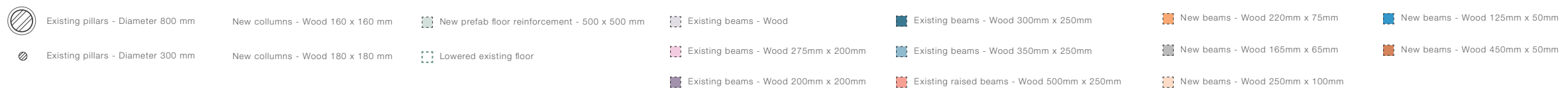
Construction plan Ground floor - 1:150

	Existing pillars - Diameter 800 mm		New columns - Wood 160 x 160 mm		New prefab floor reinforcement - 500 x 500 mm		Existing beams - Wood		Existing beams - Wood 300mm x 250mm		New beams - Wood 220mm x 75mm		New beams - Wood 125mm x 50mm
	Existing pillars - Diameter 300 mm		New columns - Wood 180 x 180 mm		Lowered existing floor		Existing beams - Wood 275mm x 200mm		Existing beams - Wood 350mm x 250mm		New beams - Wood 165mm x 65mm		New beams - Wood 450mm x 50mm
			Existing beams - Wood 200mm x 200mm		Existing raised beams - Wood 500mm x 250mm		New beams - Wood 250mm x 100mm						

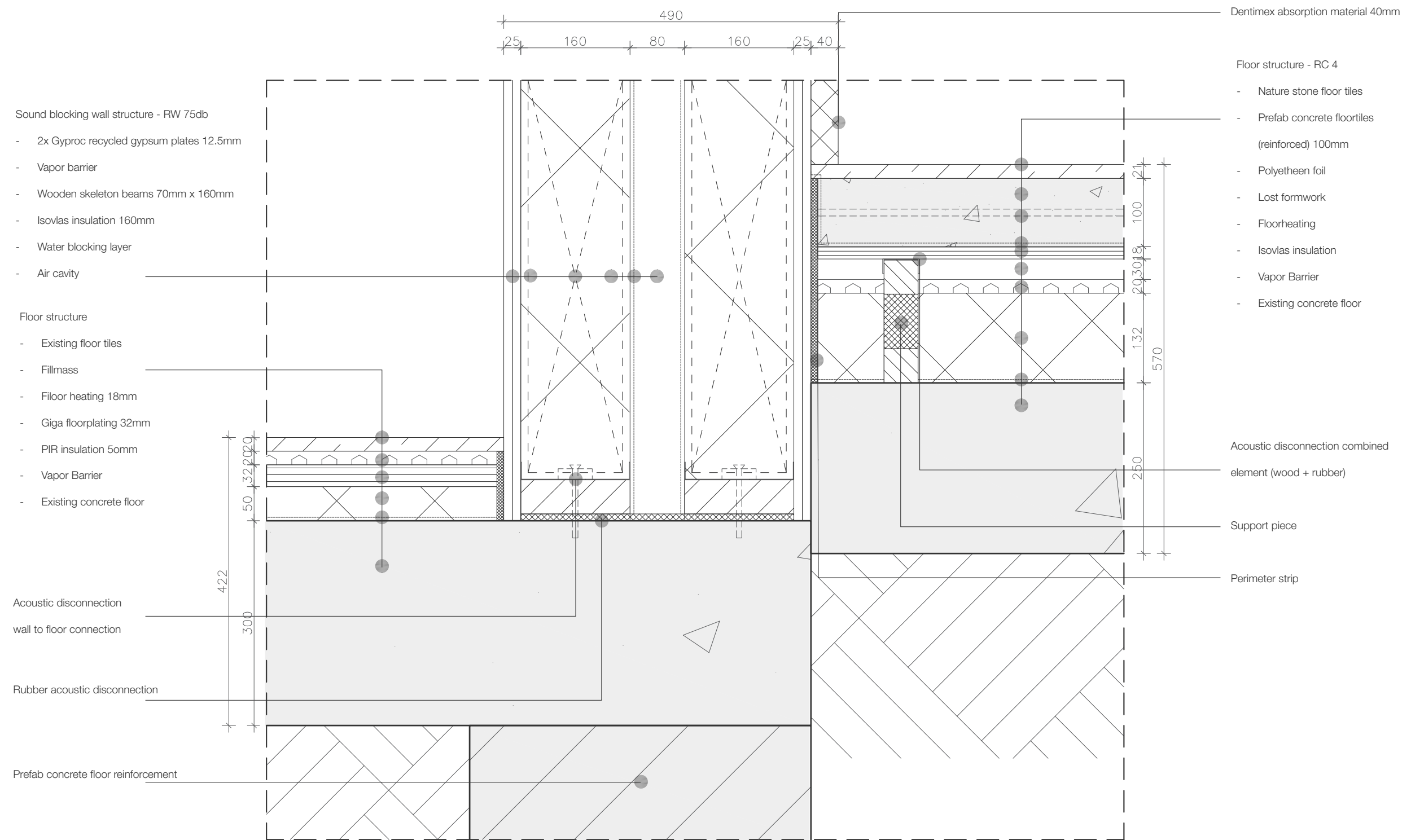
## Lowering and strengthening the floor



**Construction plan Foundation - 1:150**

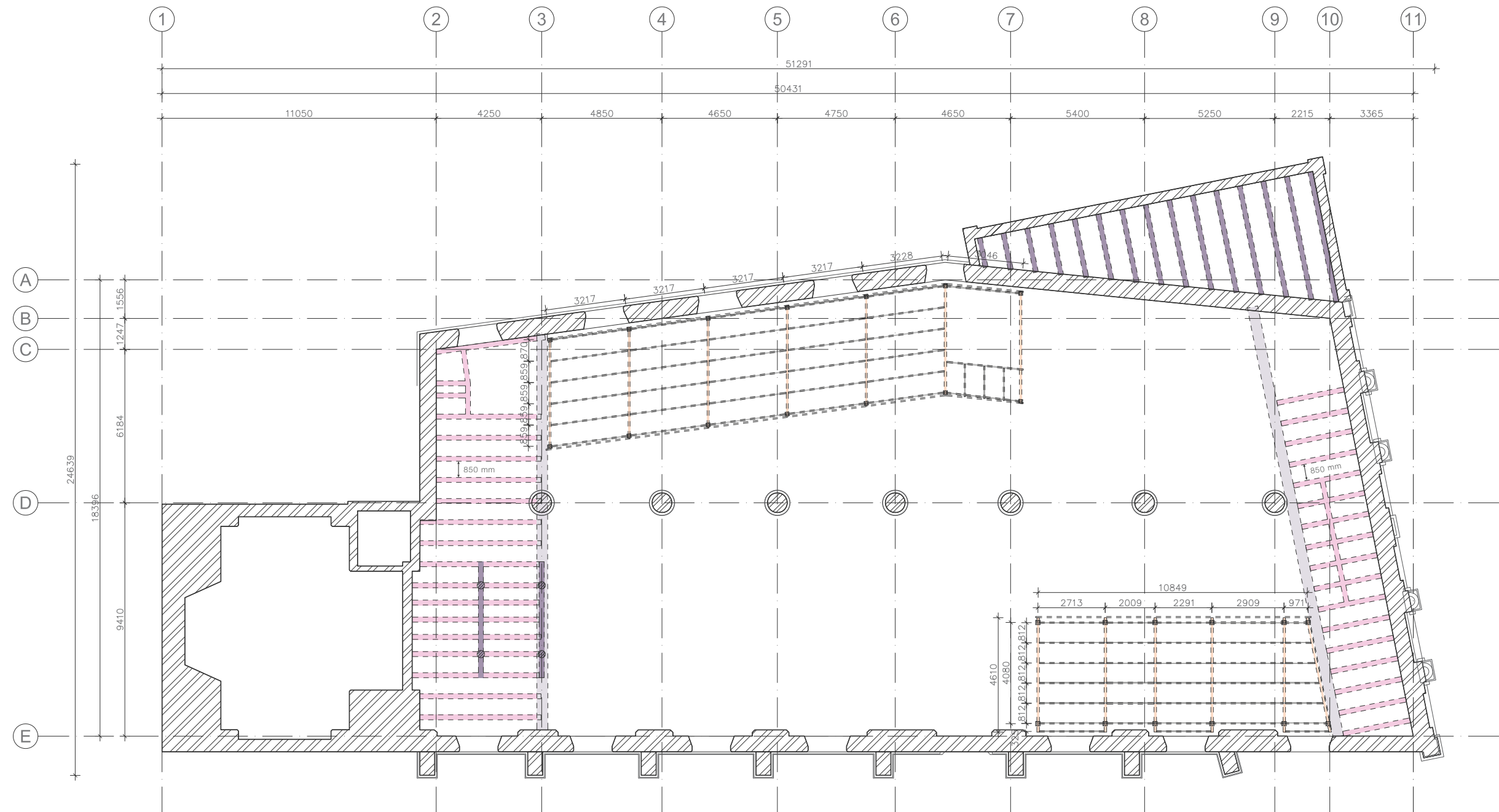


# Lowering and strengthening the floor





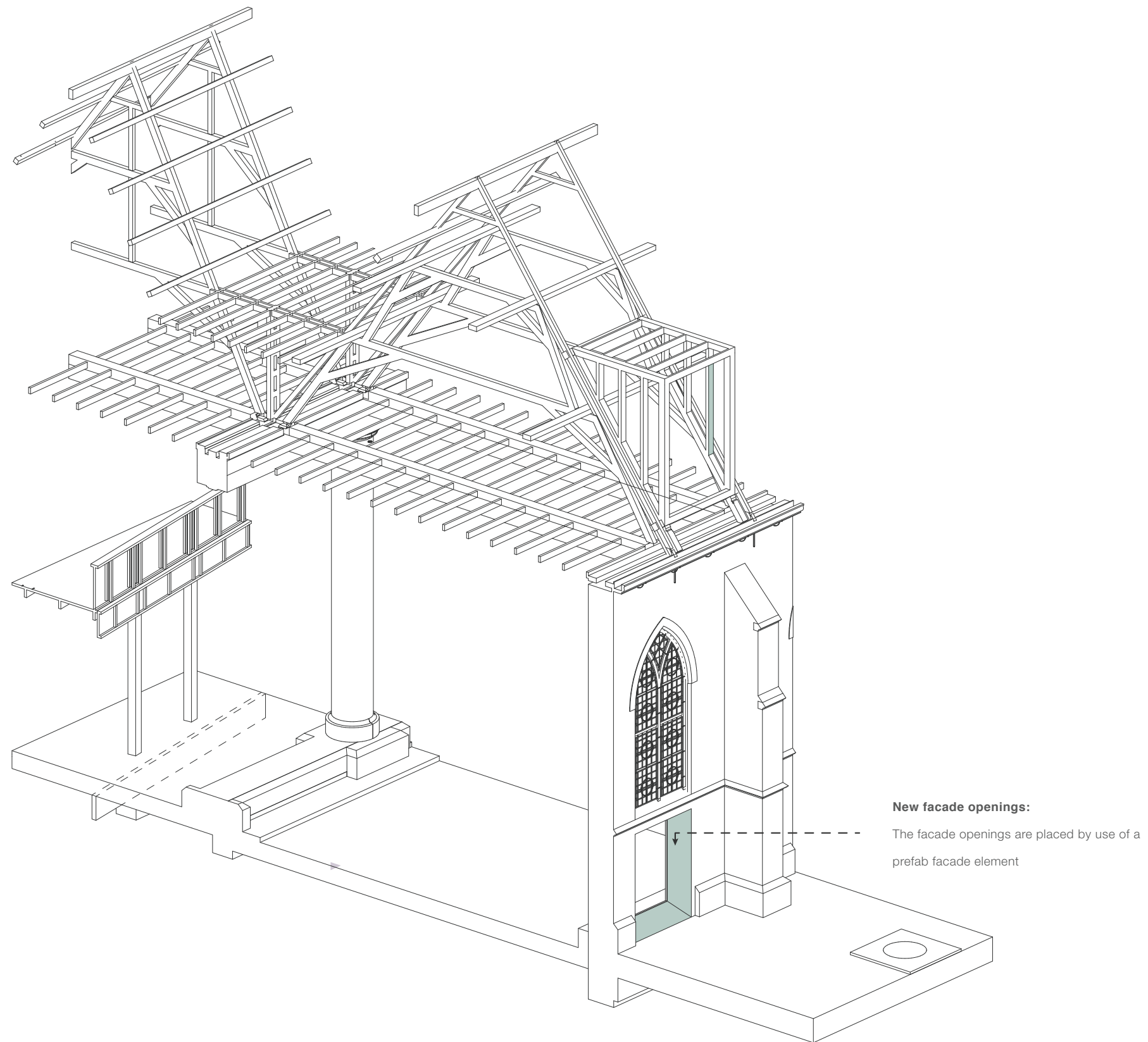
# Lowering and strengthening the floor



Construction plan First floor - 1:150

	Existing pillars - Diameter 800 mm		New columns - Wood 160 x 160 mm		New prefab floor reinforcement - 500 x 500 mm		Existing beams - Wood		Existing beams - Wood 300mm x 250mm		New beams - Wood 220mm x 75mm		New beams - Wood 125mm x 50mm
	Existing pillars - Diameter 300 mm		New columns - Wood 180 x 180 mm		Lowered existing floor		Existing beams - Wood 275mm x 200mm		Existing beams - Wood 350mm x 250mm		New beams - Wood 165mm x 65mm		New beams - Wood 450mm x 50mm
							Existing beams - Wood 200mm x 200mm		Existing raised beams - Wood 500mm x 250mm		New beams - Wood 250mm x 100mm		

## Placing the new openings



# Placing the new openings

## Window structure:

- Vacuum glas 13mm
- Existing window

- Ventilate the existing glass

## Facade structure: RC - 3,5

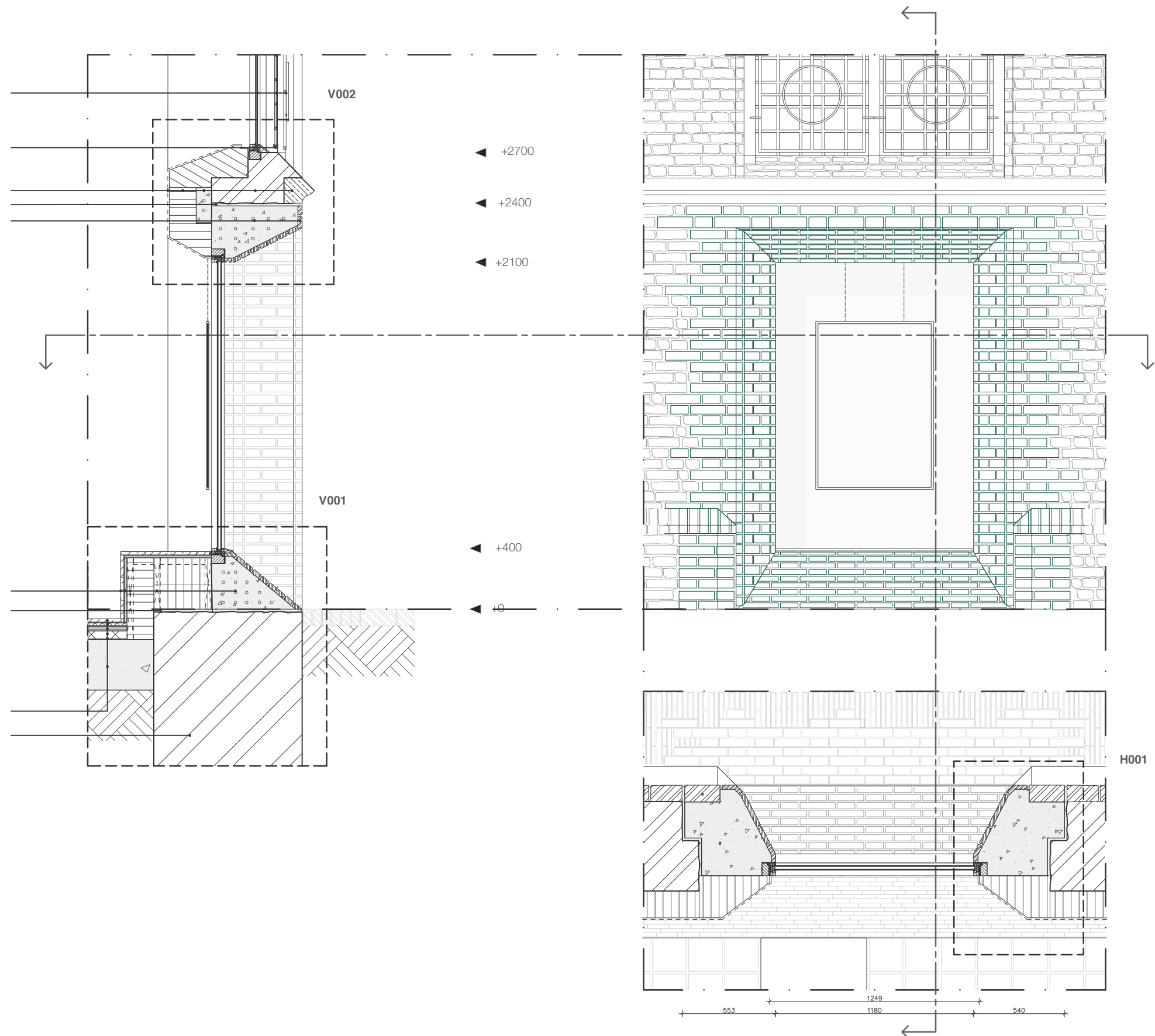
- Stucco 9mm
- Hempcrete insulation 160mm
- Isohemp lintel 90mm x 100mm
- Existing brick
- Nature stone ornament
- Prefab concrete facade element
- Cast-in brick

## Facade structure: RC - 3

- Stone slabs cladding
- Gypsum plates 18mm
- Supporting wooden structure
- Hempcrete 160mm
- Prefab concrete facade element
- Specie connection

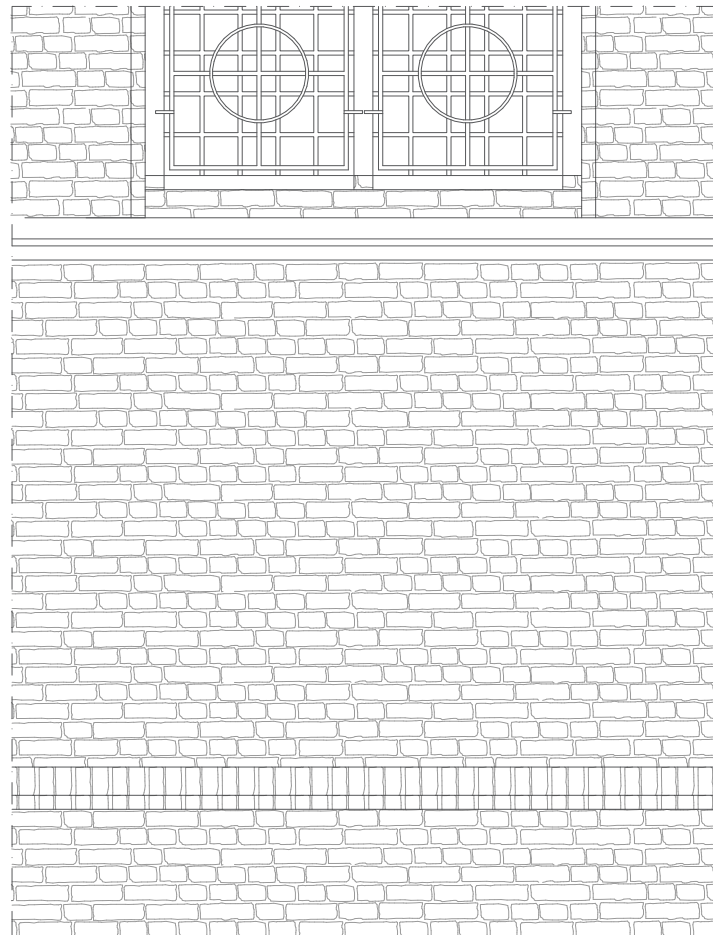
## Floor structure: RC - 3

- Existing nature stone tiles
- Floor fill
- Floor heating 18mm
- PIR insulation 50mm
- Existing floor
- Existing foundation

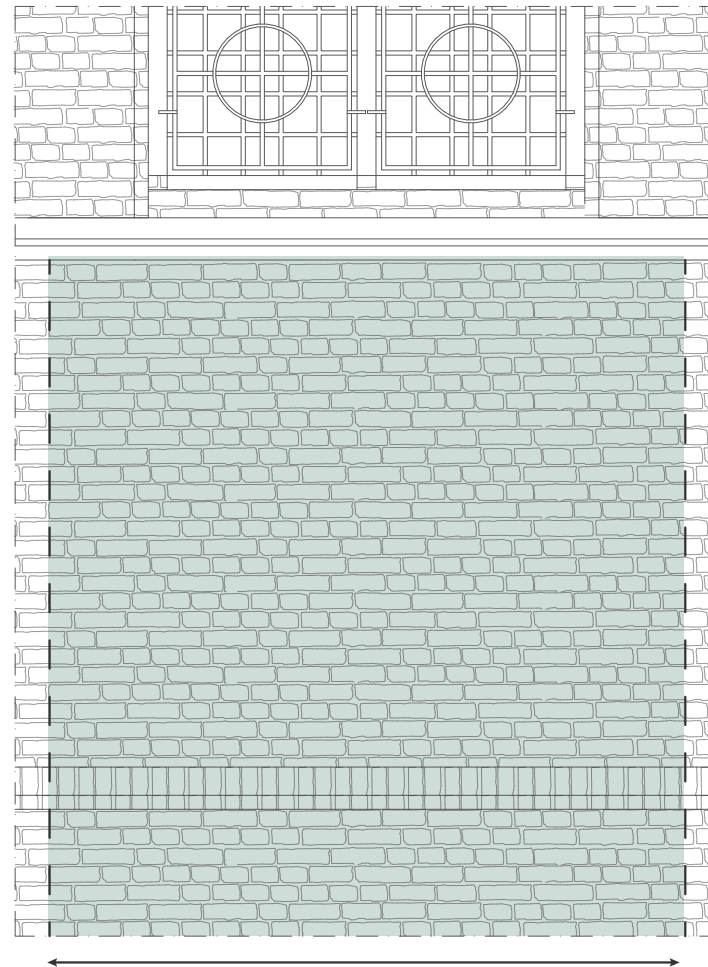




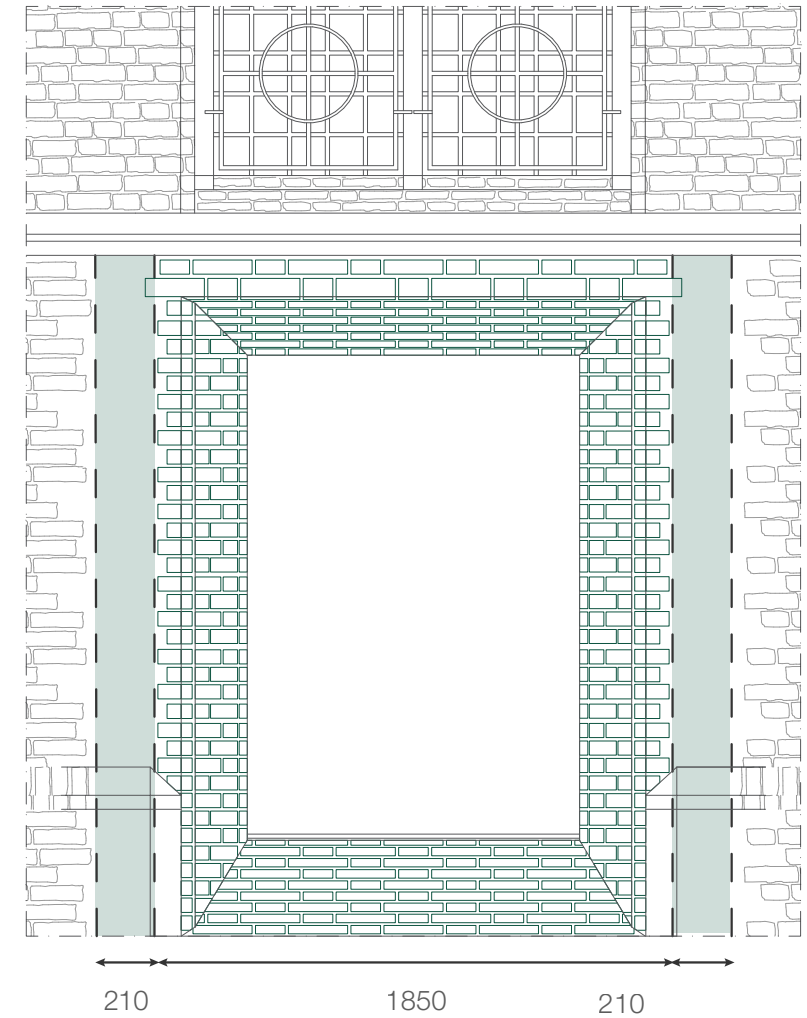
## Placing the new openings



The existing facade

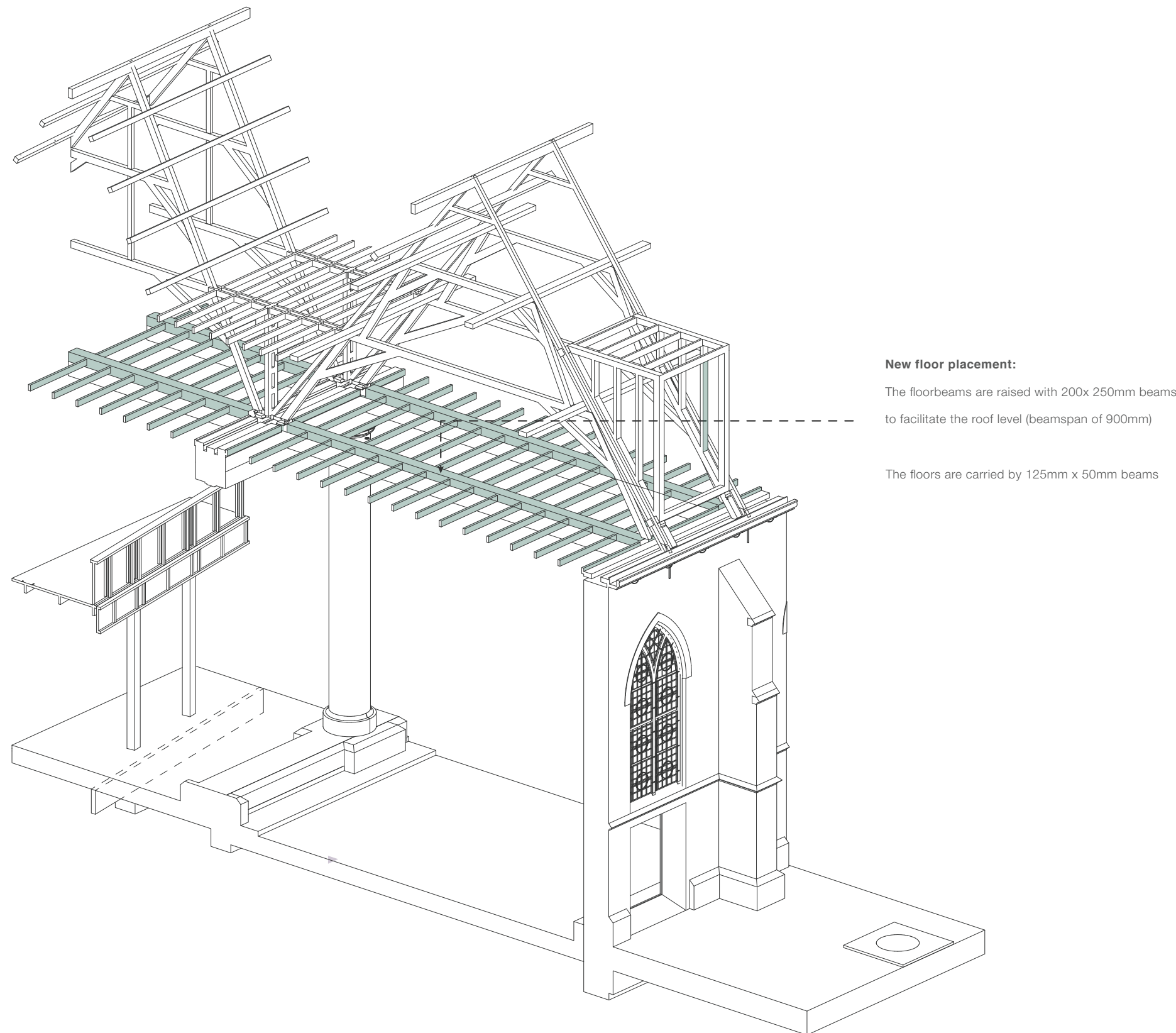


Remove the assigned brick to place the prefab concrete facade element for the new openings

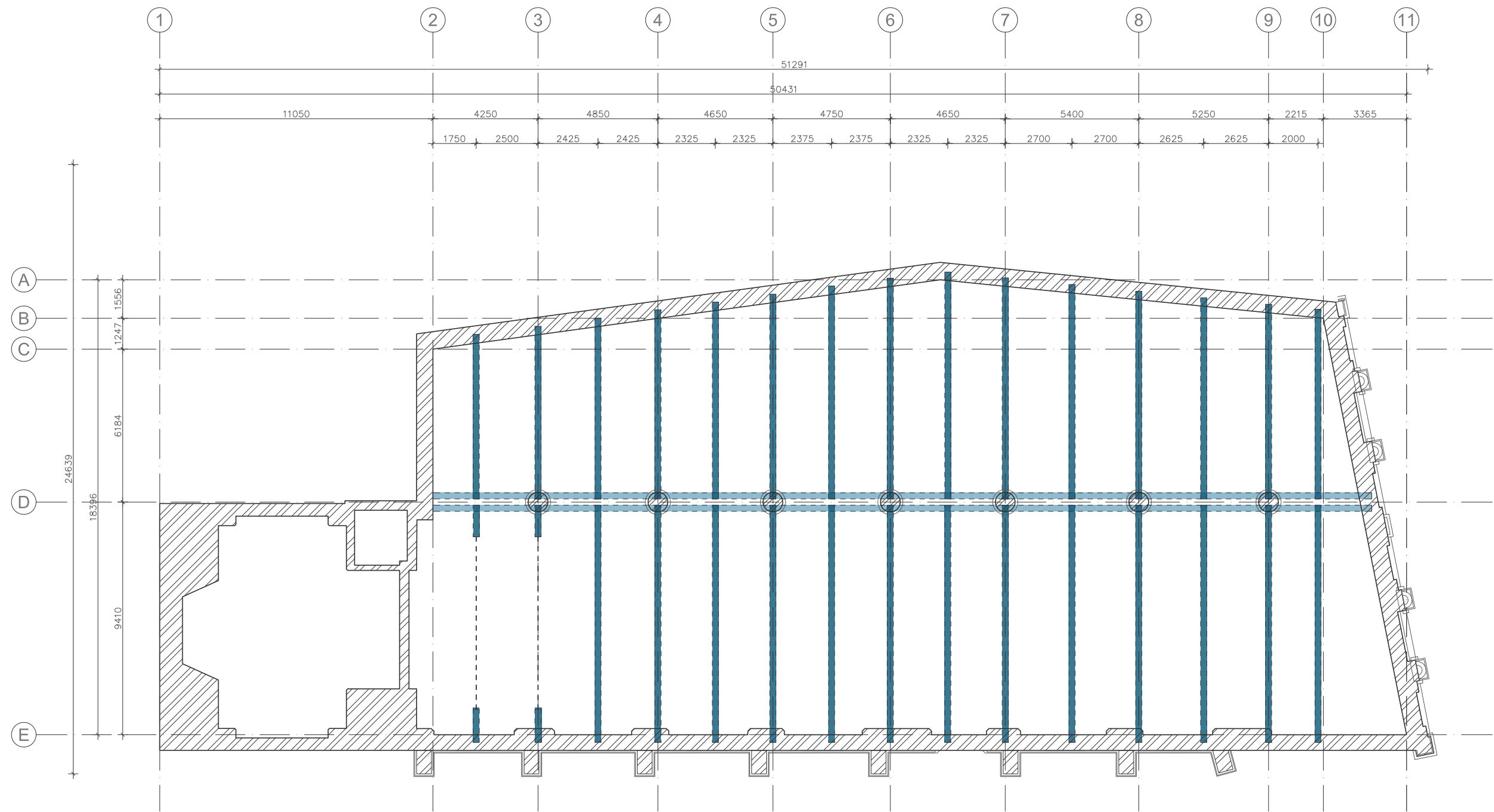


Within the prefab concrete facade element one row of cast in brick is left open on both sides. As a result, a more organic healing between the existing and new brick can be created

## Transforming the roof into a new floor



# Transforming the roof into a new floor

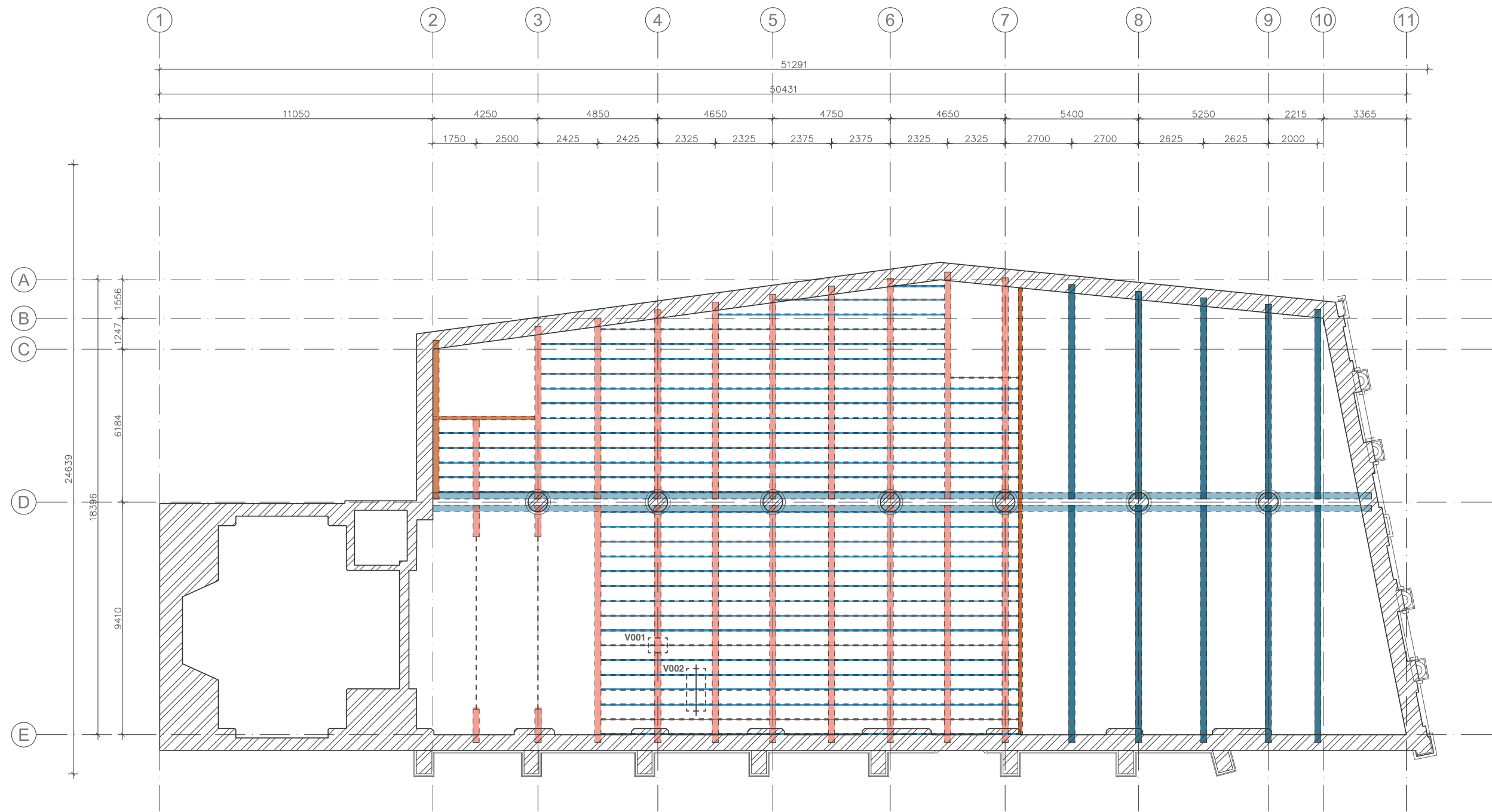


Construction plan Second floor - 1:150

	New collumns - Wood 160 x 160 mm					
	New collumns - Wood 180 x 180 mm					



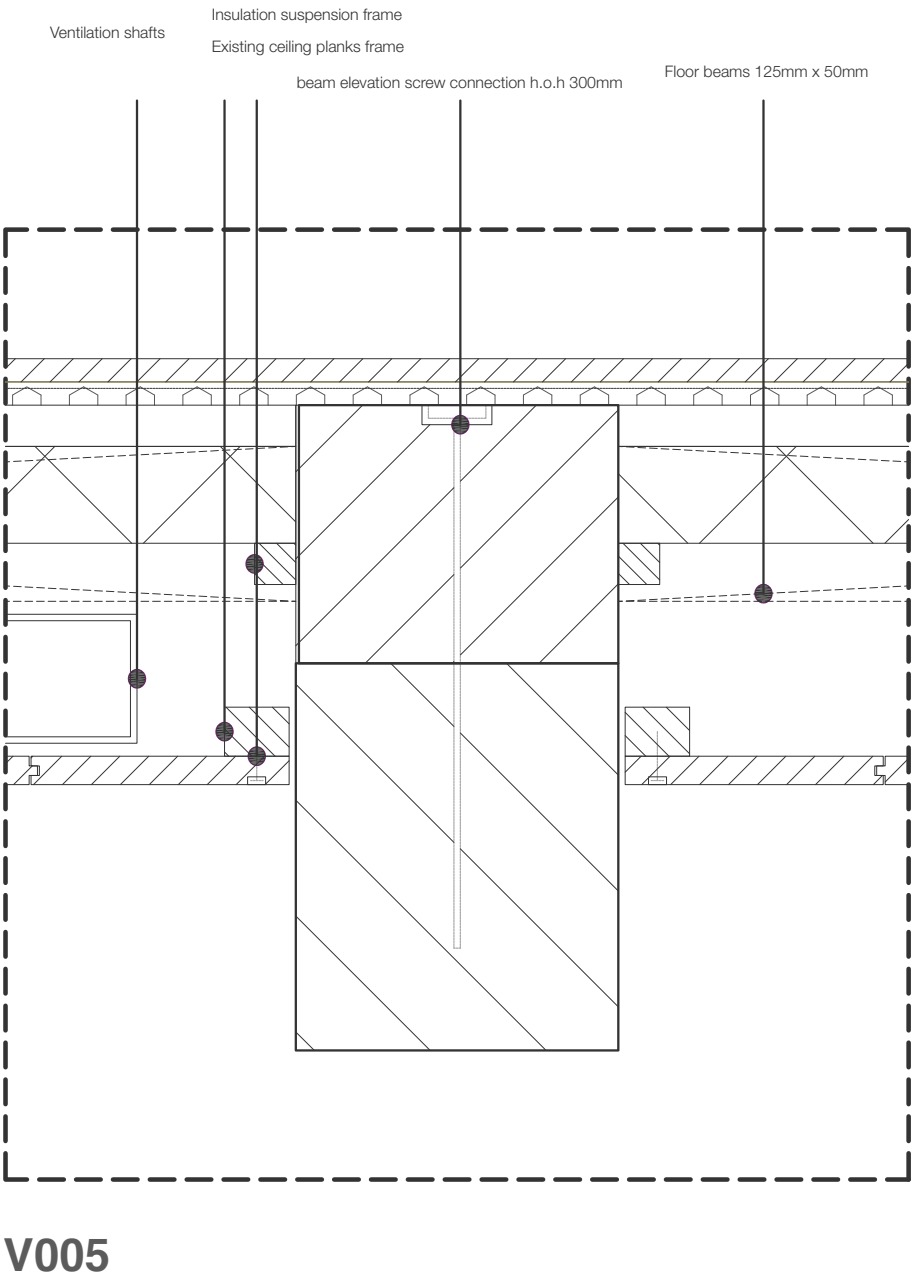
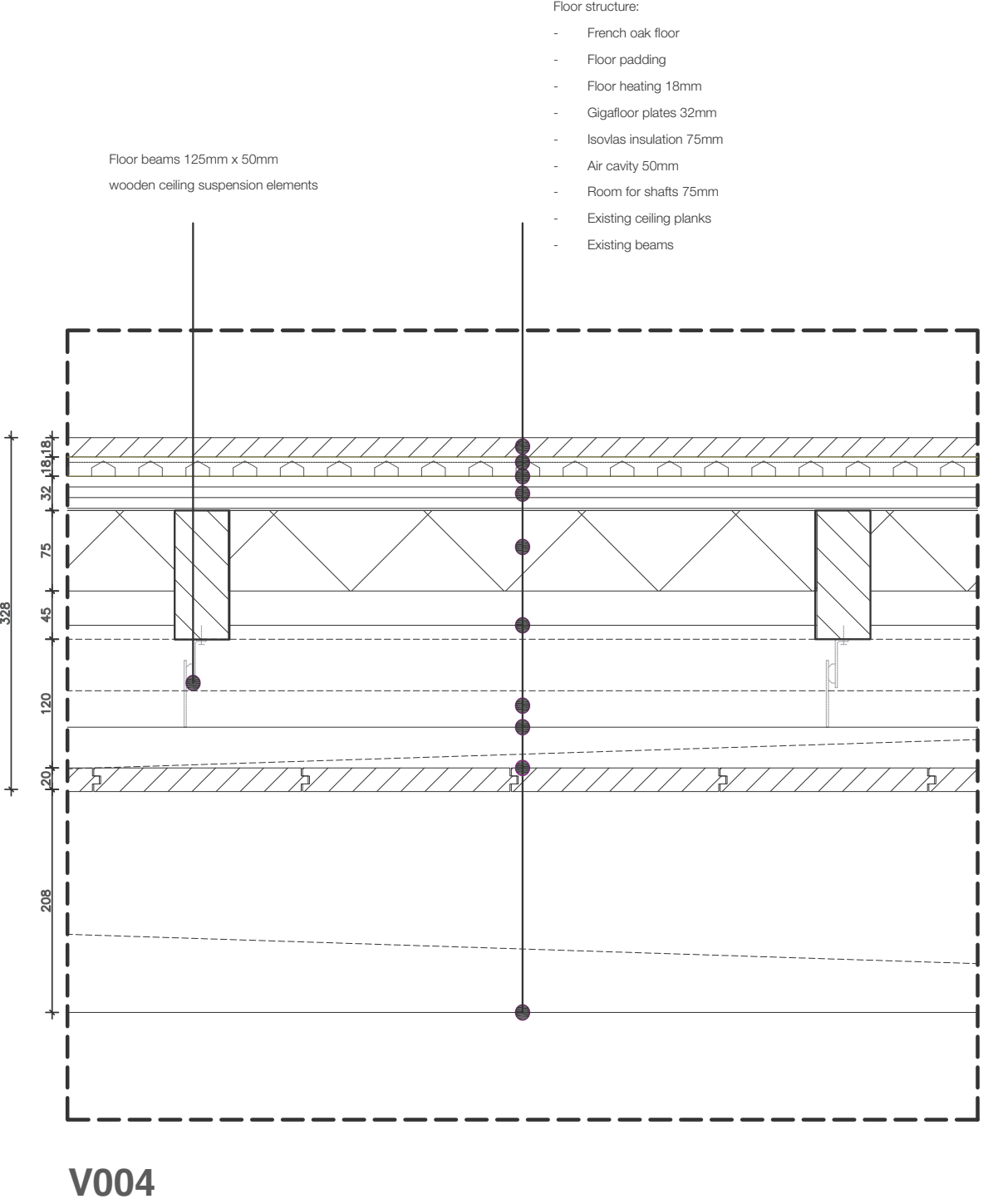
# Transforming the roof into a new floor



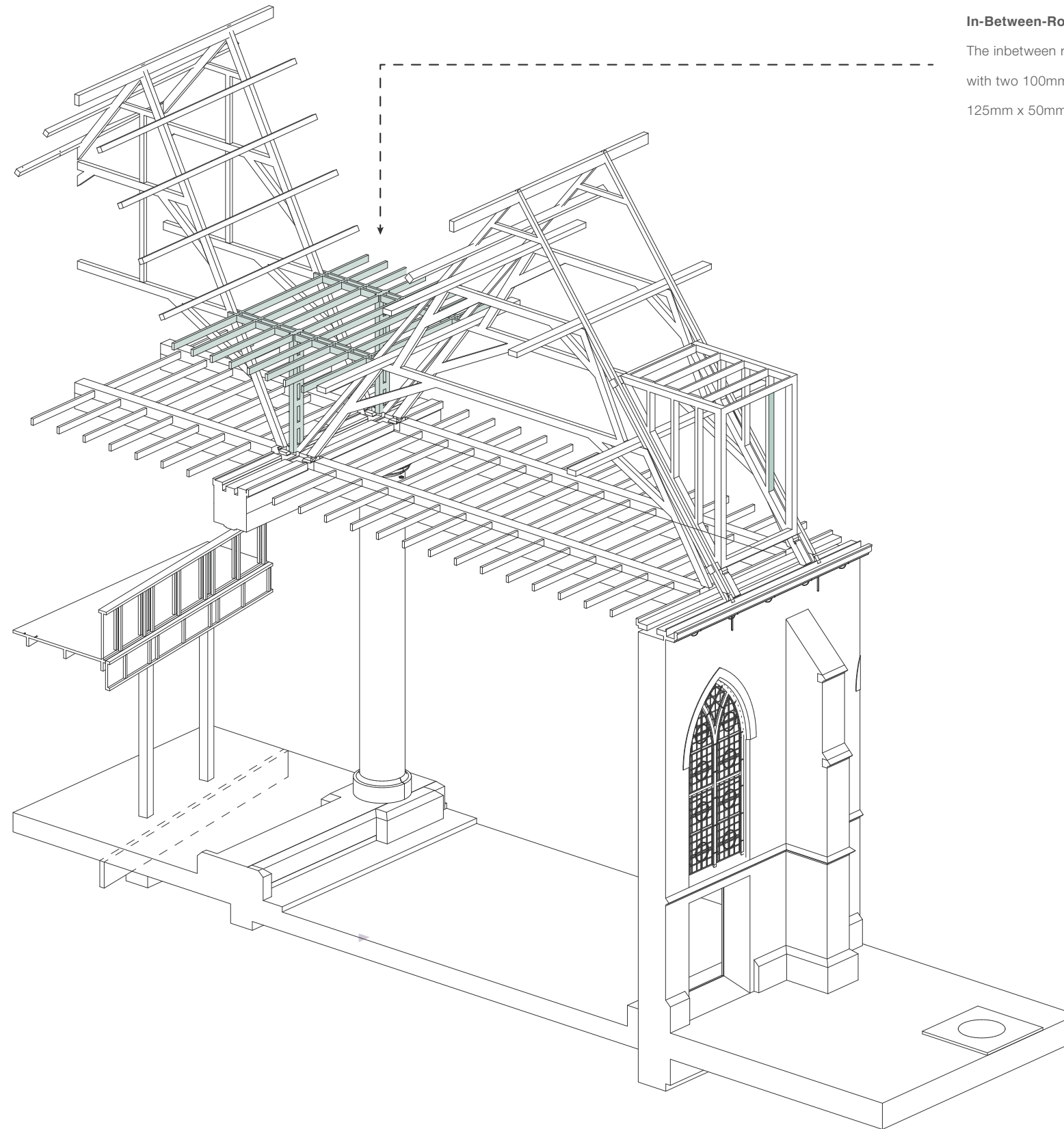
Construction plan Second floor - 1:150

	Existing pillars - Diameter 800 mm		New collumns - Wood 160 x 160 mm		New prefab floor reinforcement - 500 x 500 mm		Existing beams - Wood		Existing beams - Wood 300mm x 250mm		New beams - Wood 220mm x 75mm		New beams - Wood 125mm x 50mm
	Existing pillars - Diameter 300 mm		New collumns - Wood 180 x 180 mm		Lowered existing floor		Existing beams - Wood 275mm x 200mm		Existing beams - Wood 350mm x 250mm		New beams - Wood 165mm x 65mm		New beams - Wood 450mm x 50mm
							Existing beams - Wood 200mm x 200mm		Existing raised beams - Wood 500mm x 250mm		New beams - Wood 250mm x 100mm		

# Transforming the roof into a new floor



## Adding a new in-between-roof

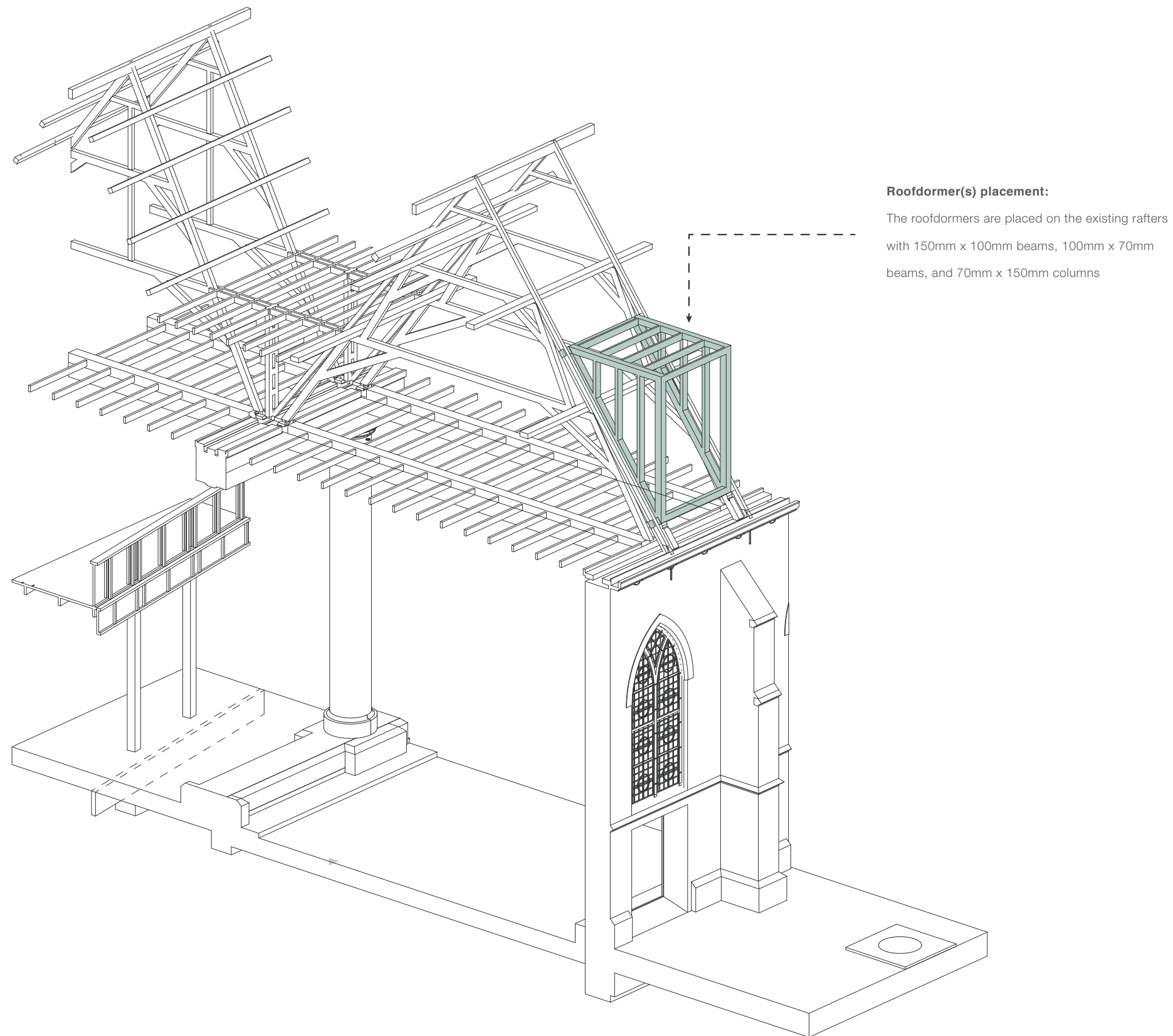


### **In-Between-Roof placement:**

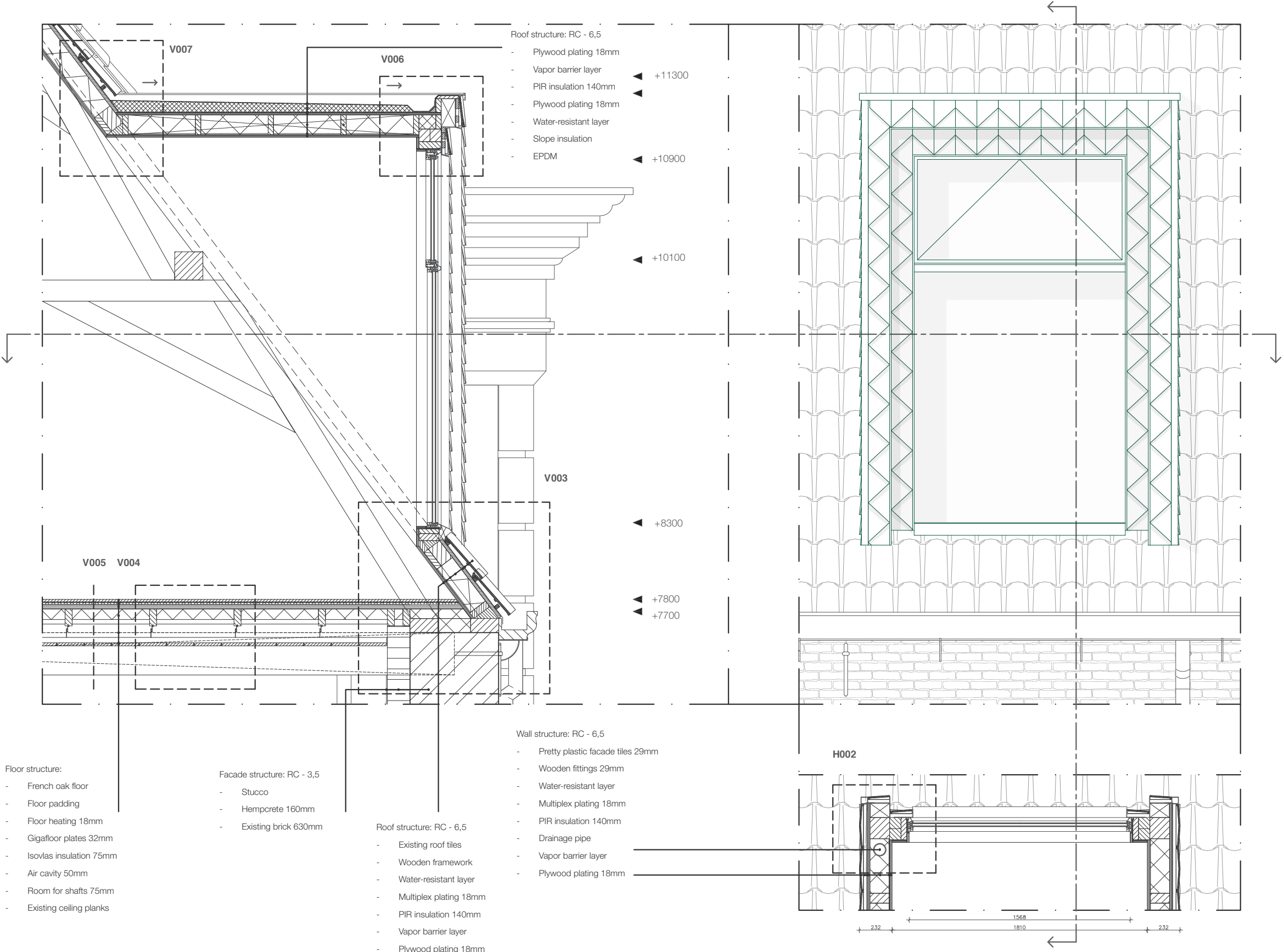
The inbetween roof is placed on the brick columns with two 100mm x 100mm wooden columns, with 125mm x 50mm beams to carry the roof



## Adding the dormers



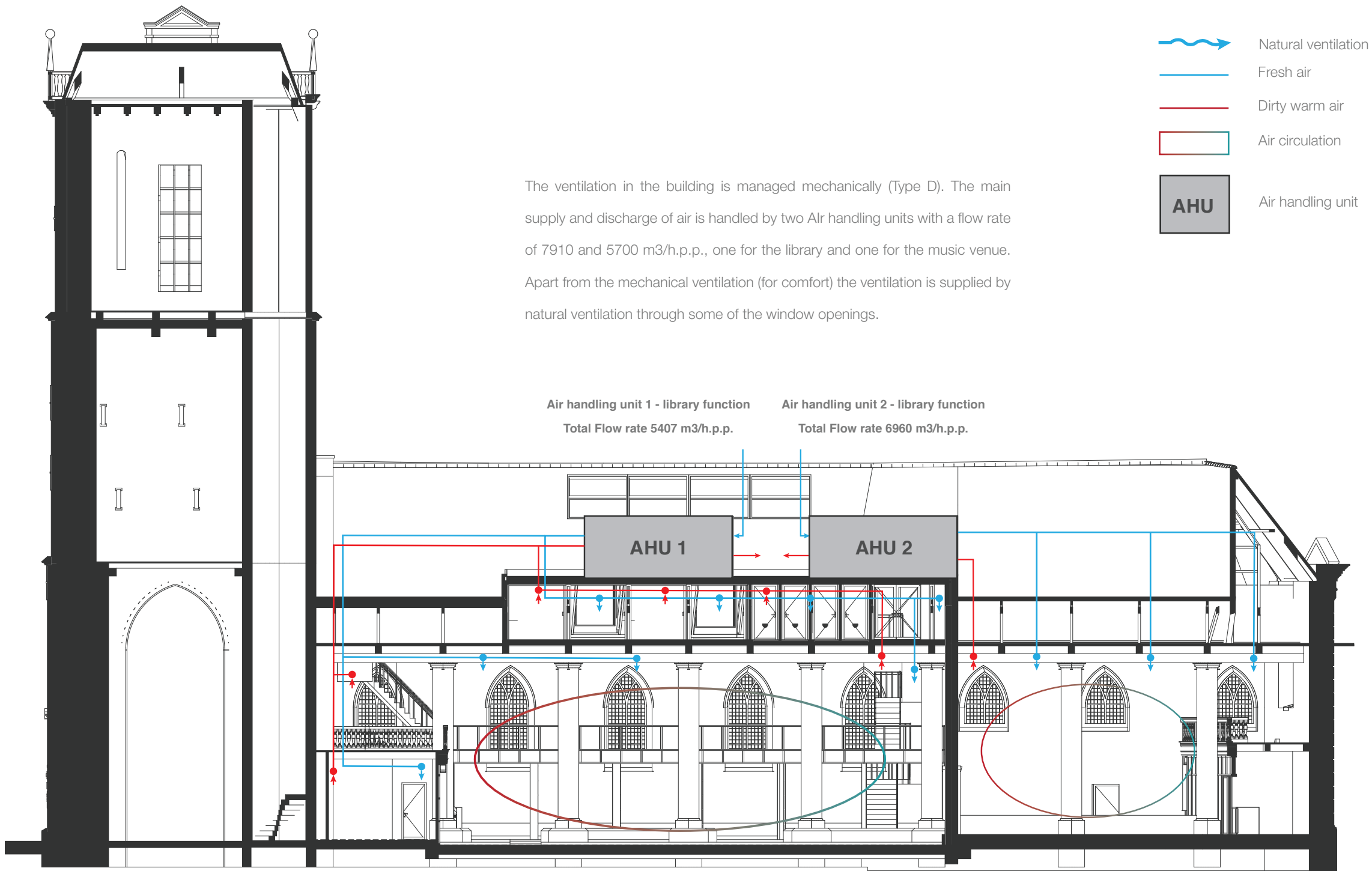
# Adding the dormers



**How is the interior  
climate facilitated?**

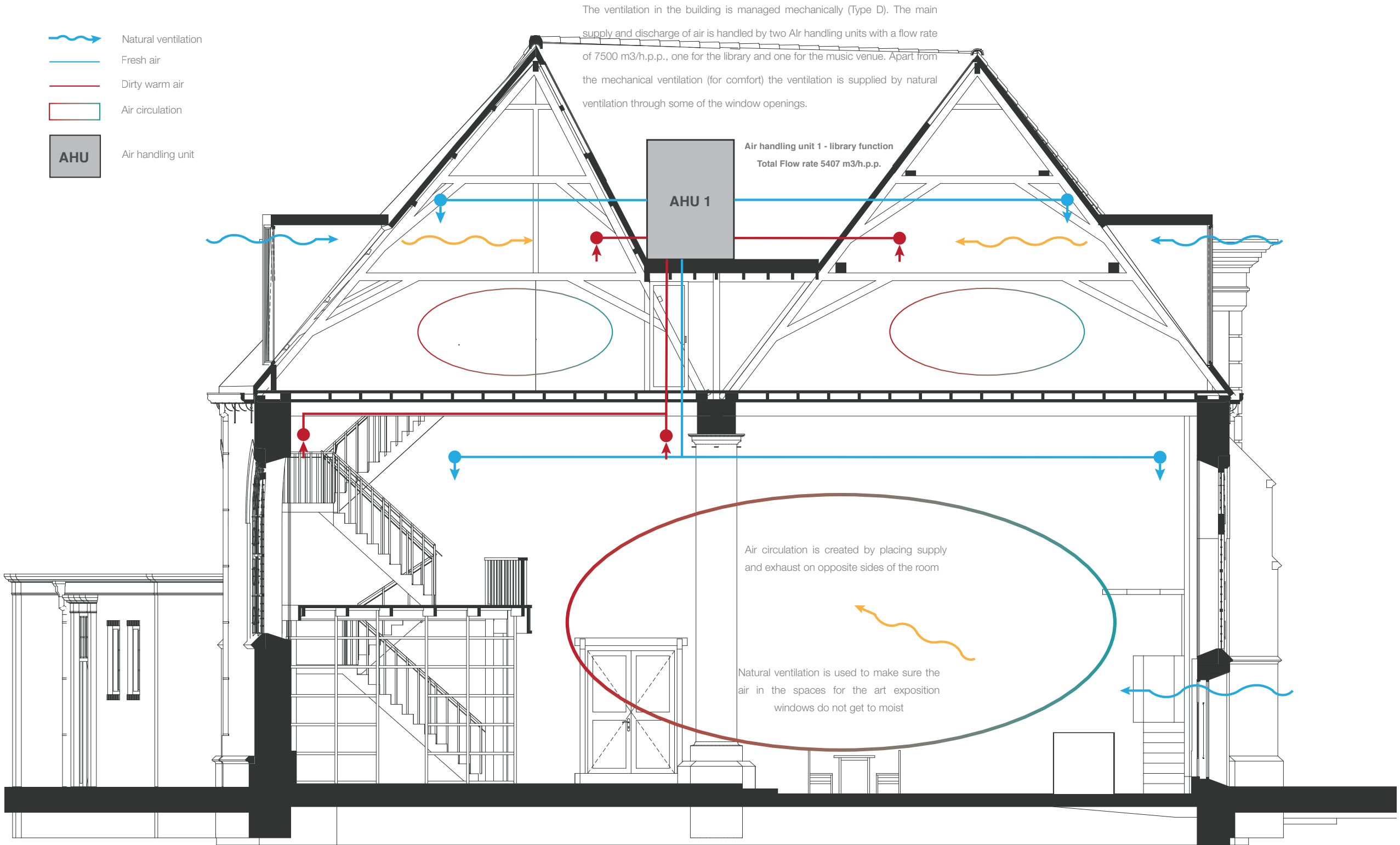


# Ventilation plan

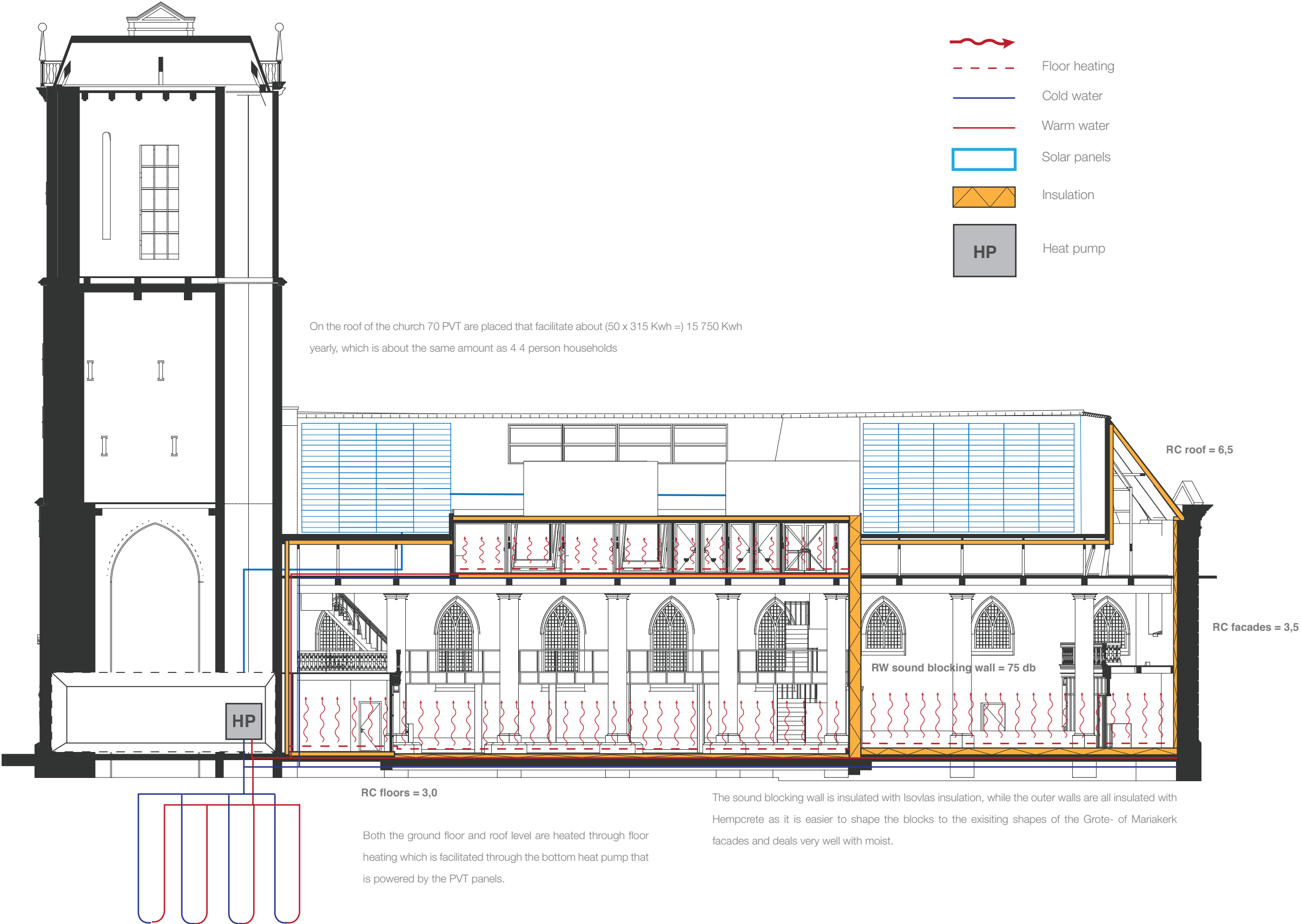


Air circulation is created by placing supply and exhaust on opposite sides of the room

# Ventilation plan

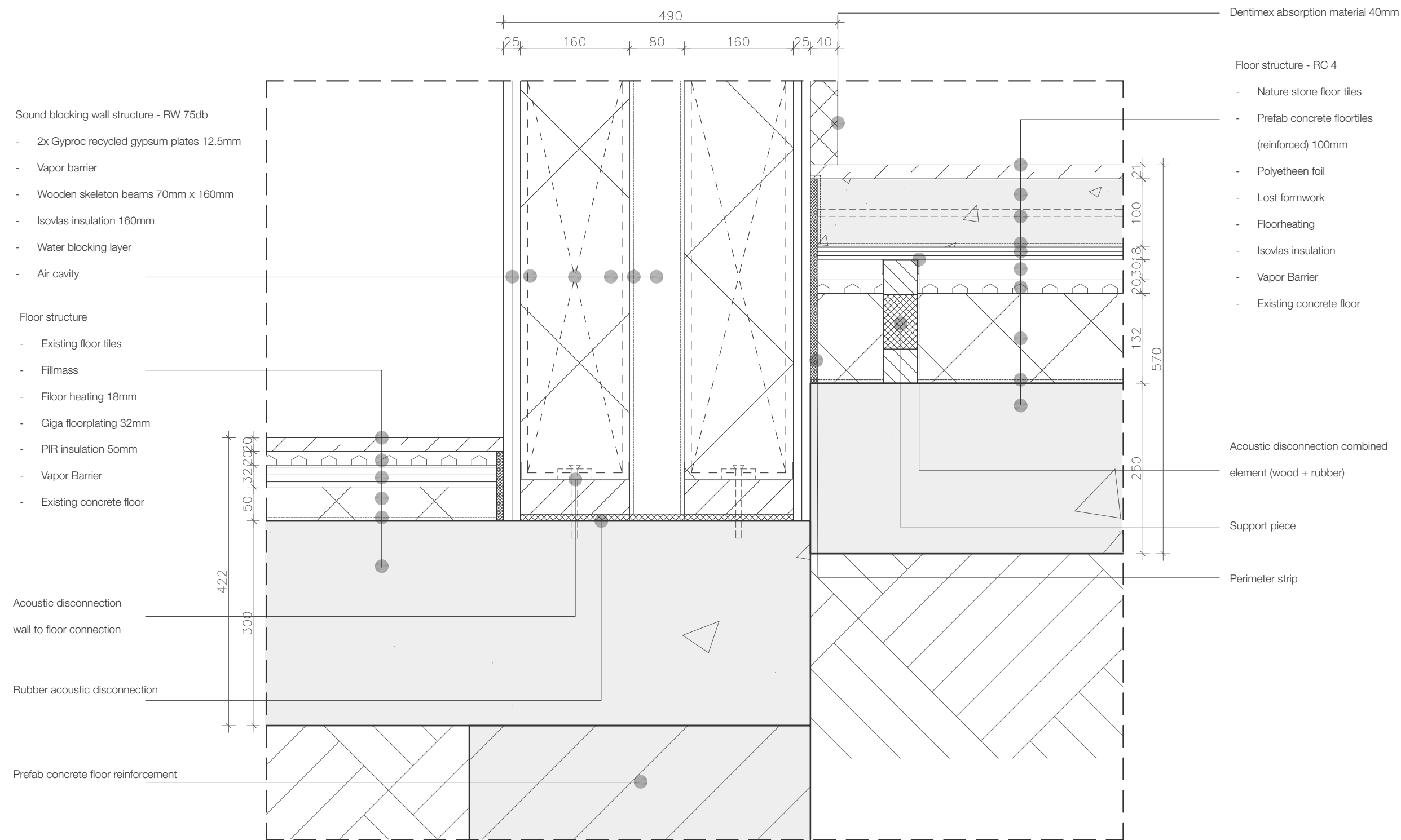


Heating plan

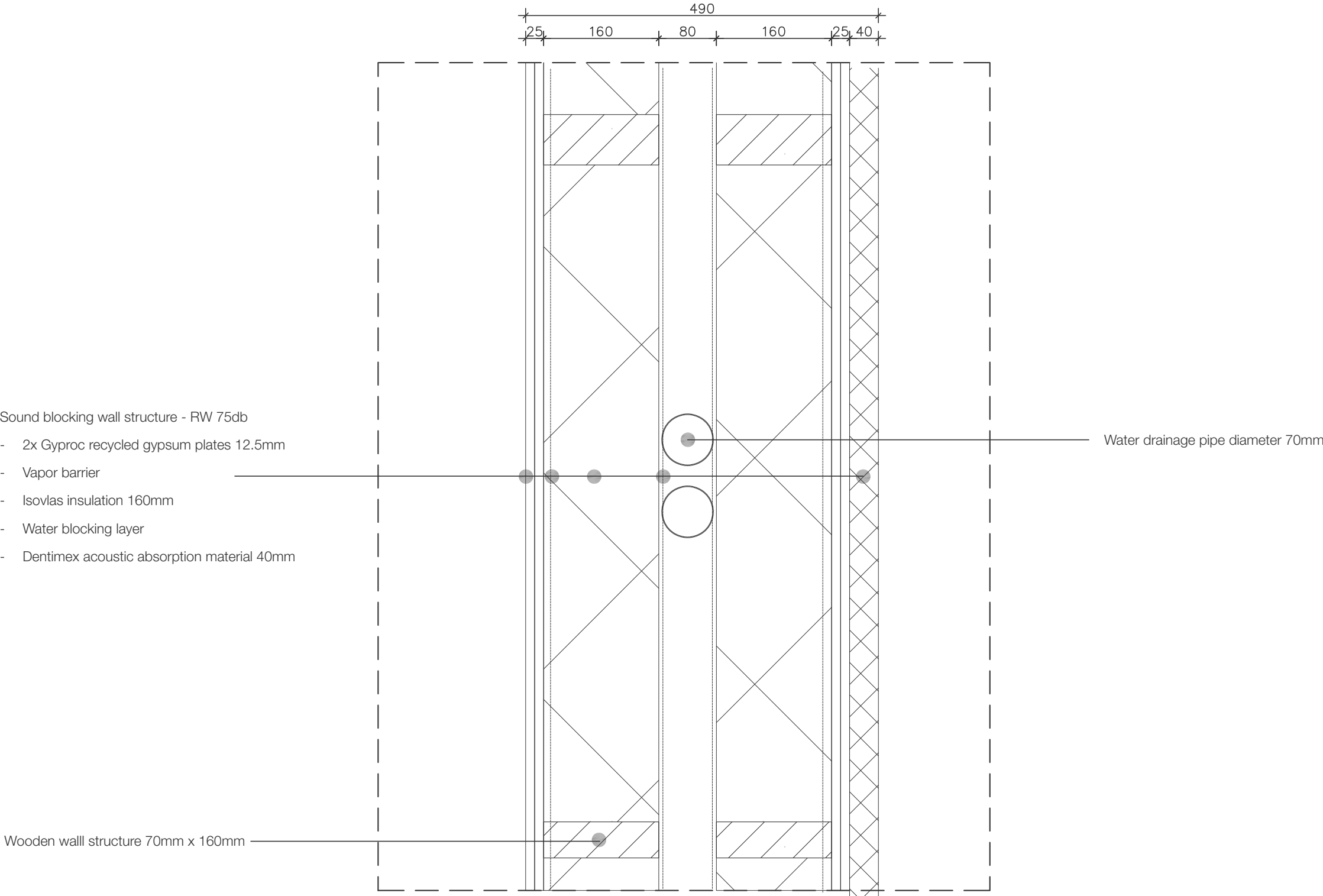




# Sound blocking



# Sound blocking

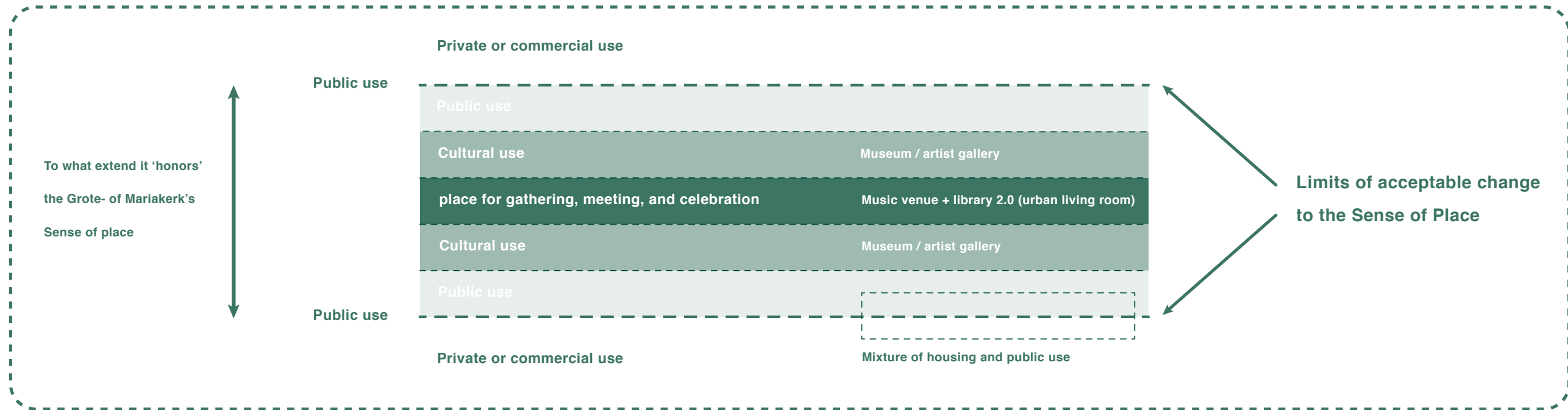


**Does the repurposing plan  
honour, maintain, and stay within  
the limits of acceptable change of  
the local Sense of Place towards  
the Grote- of Mariakerk ?**

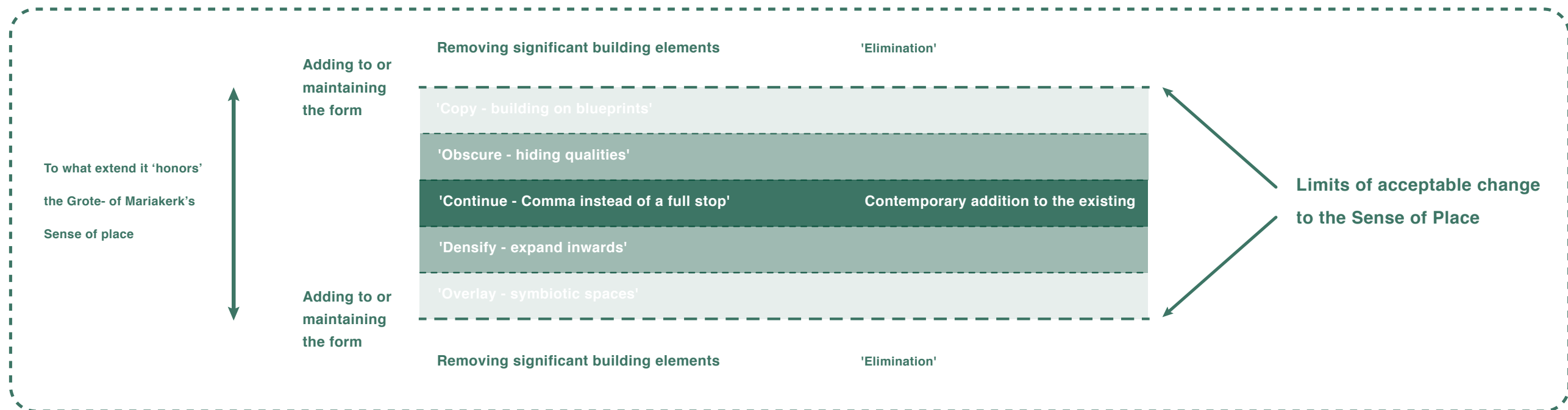


# Maintaining the local Sense of Place

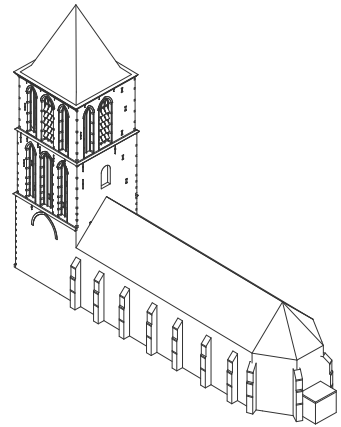
## LIMITS OF ACCEPTABLE CHANGE TO THE FUNCTION OF THE GROTE- OF MARIAKERK



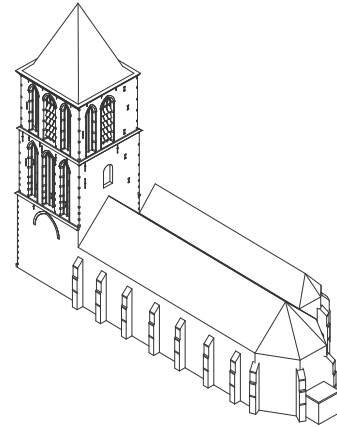
## LIMITS OF ACCEPTABLE CHANGE TO THE FORM OF THE GROTE- OF MARIAKERK



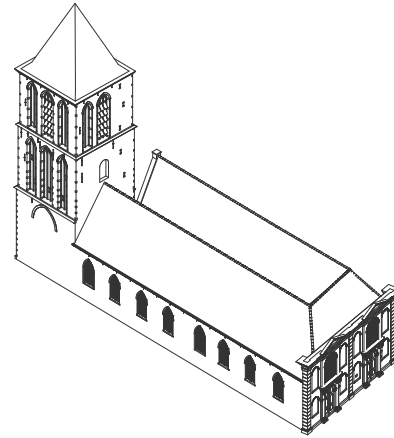
## Adding a new timestamp



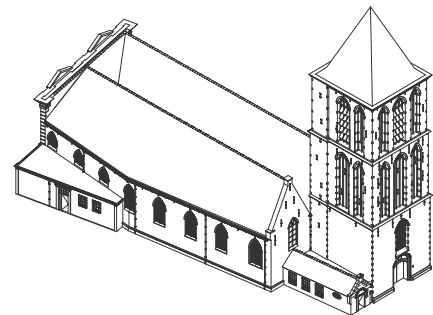
1422



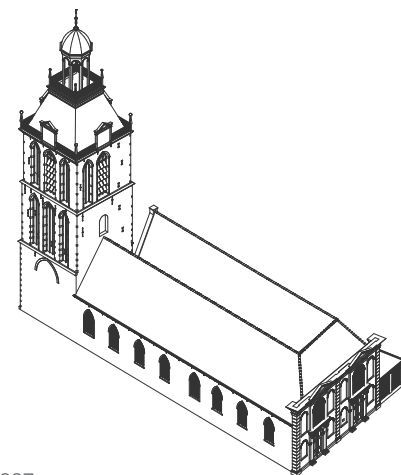
1540



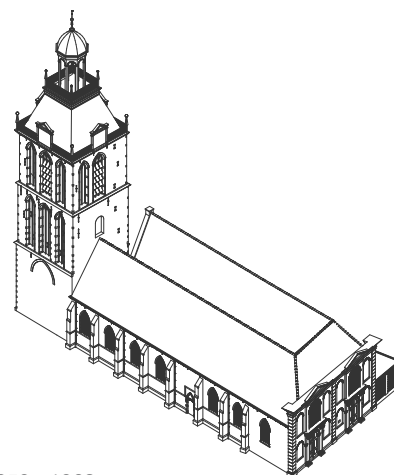
1780



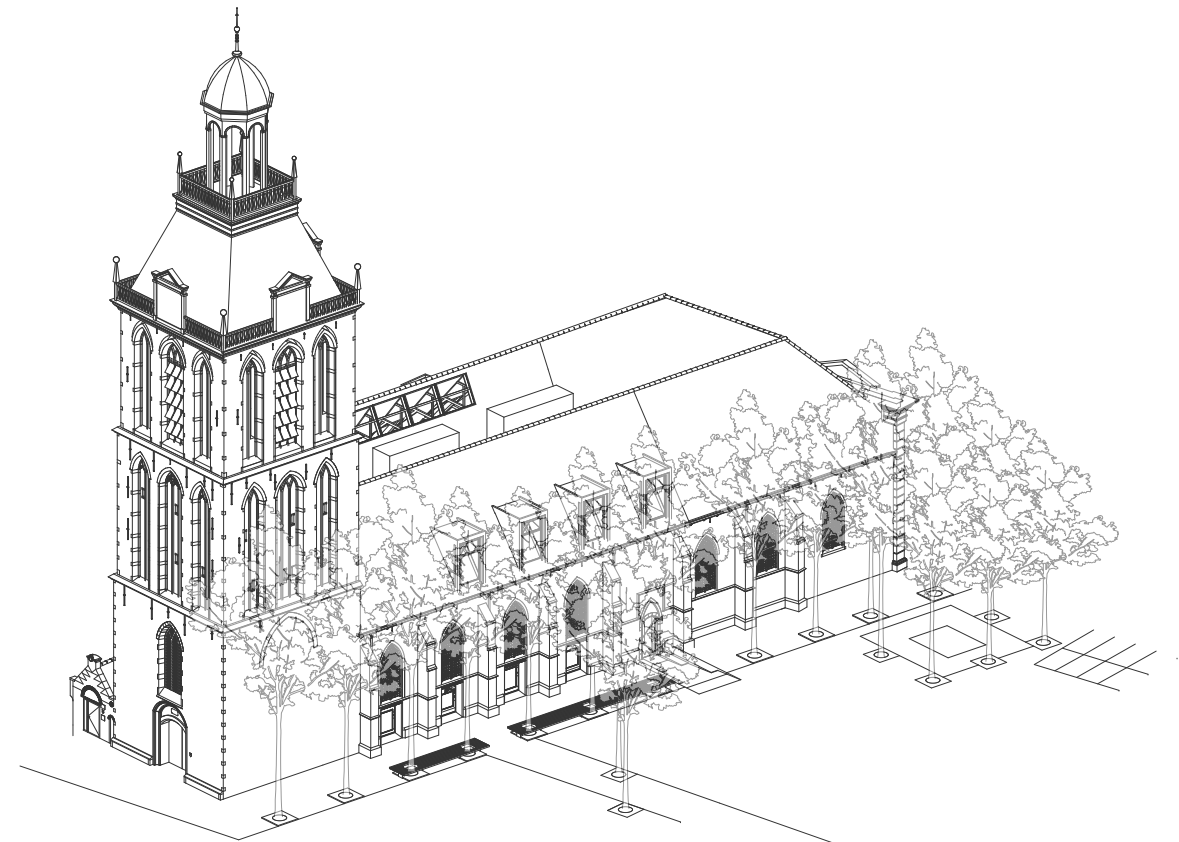
1780 - 1790



1827



1959 - 1963

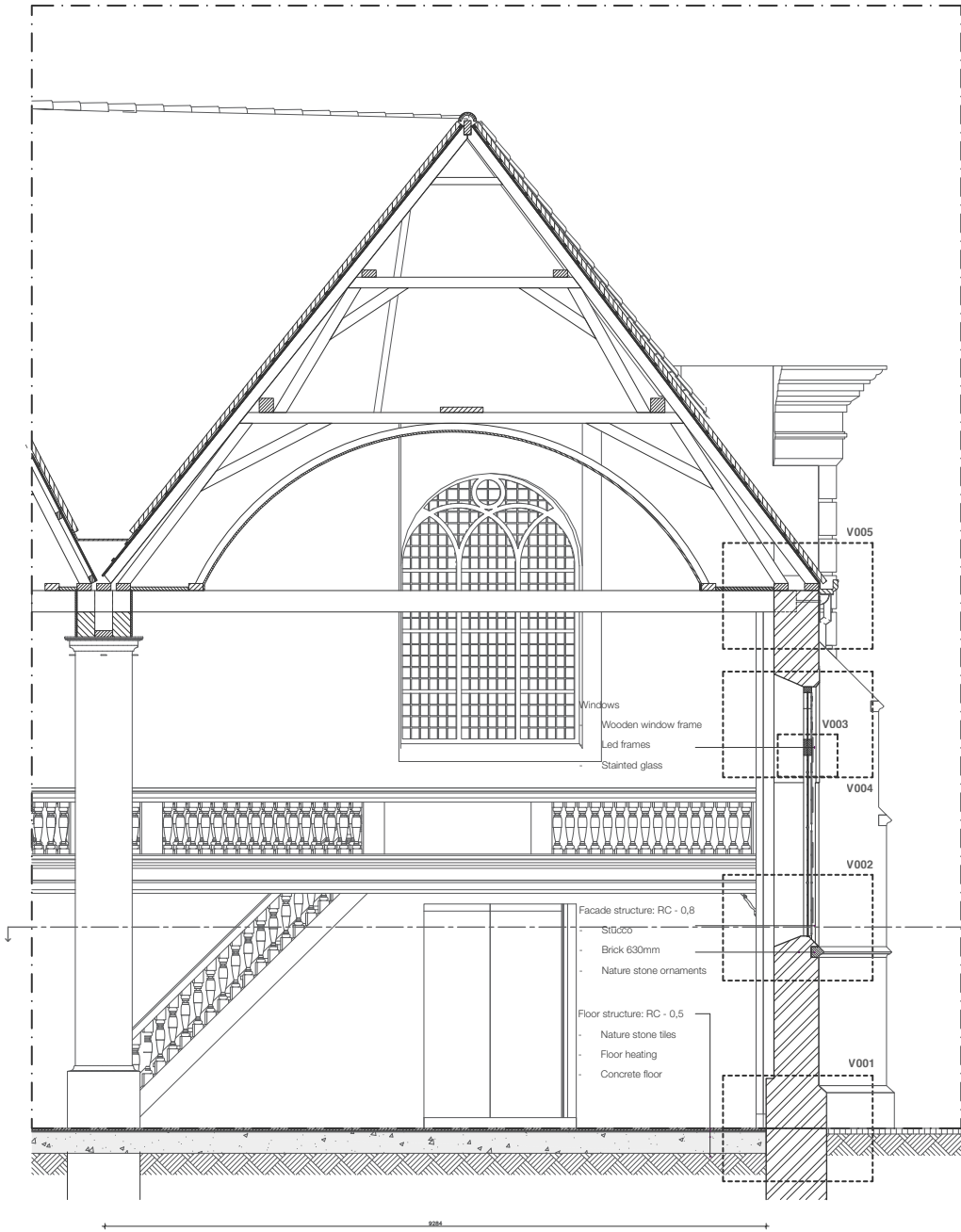


2023 - x

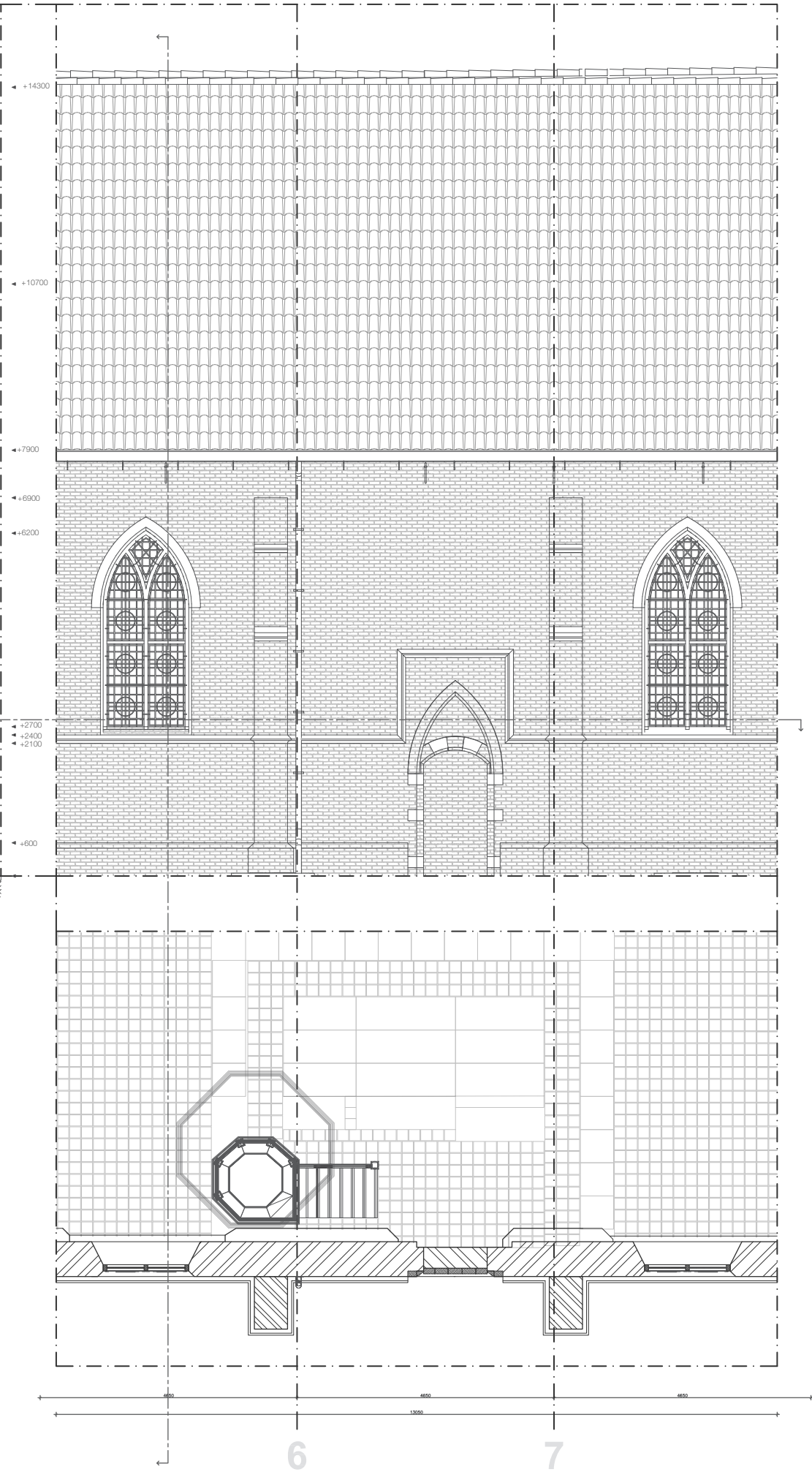
**Extra set of drawings**



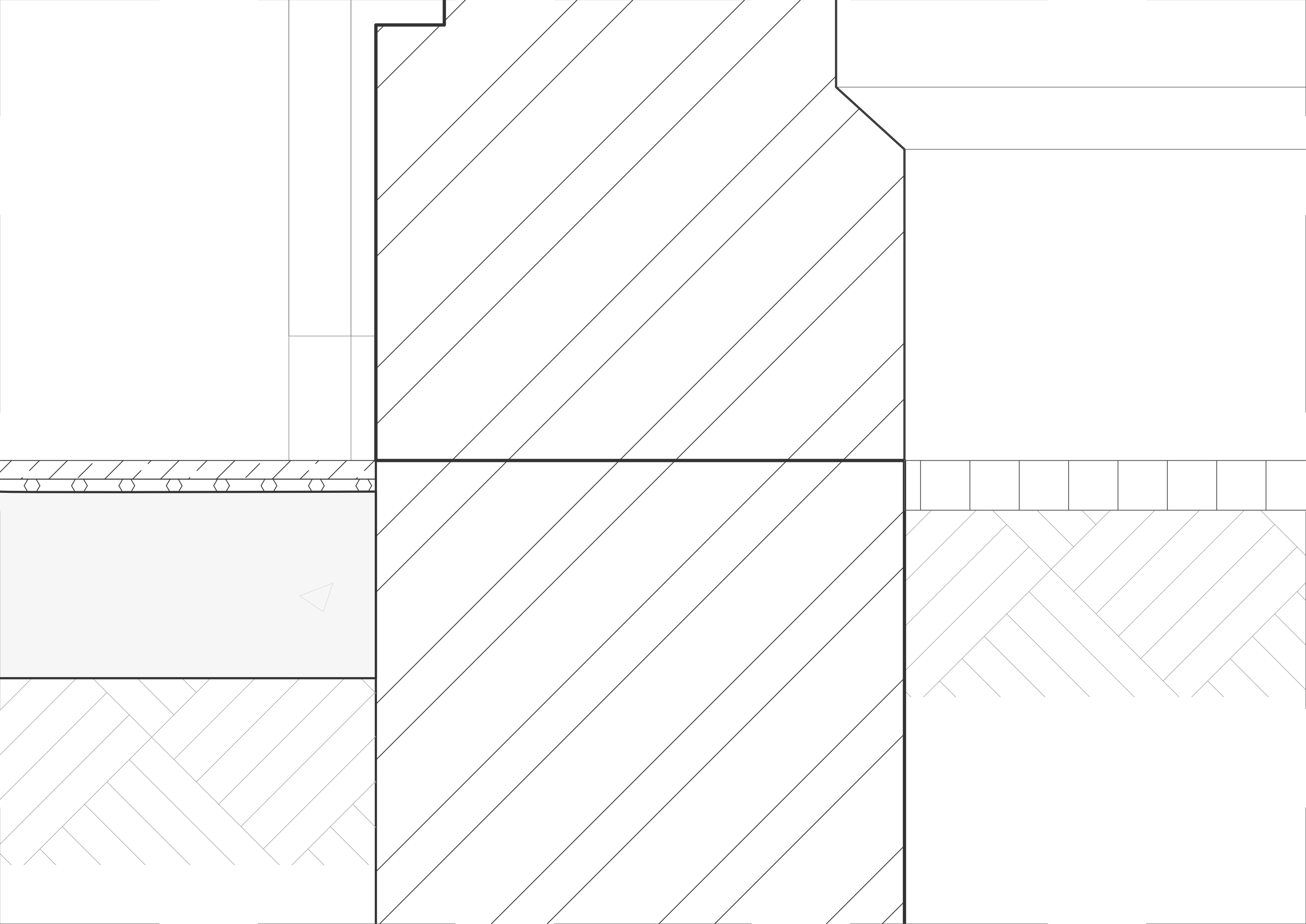
Existing fragment section - 1:50

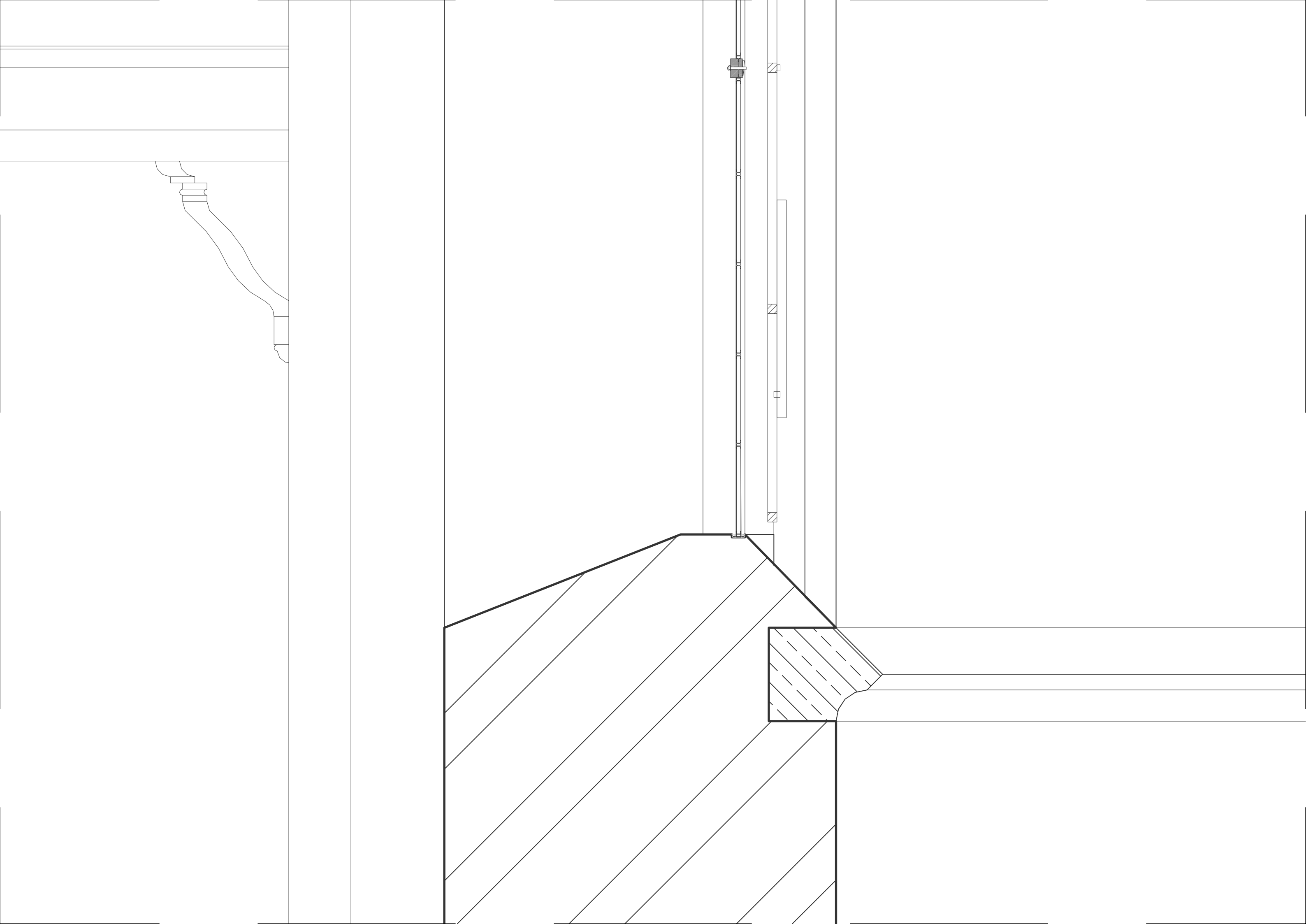


Existing fragment elevation - 1:50

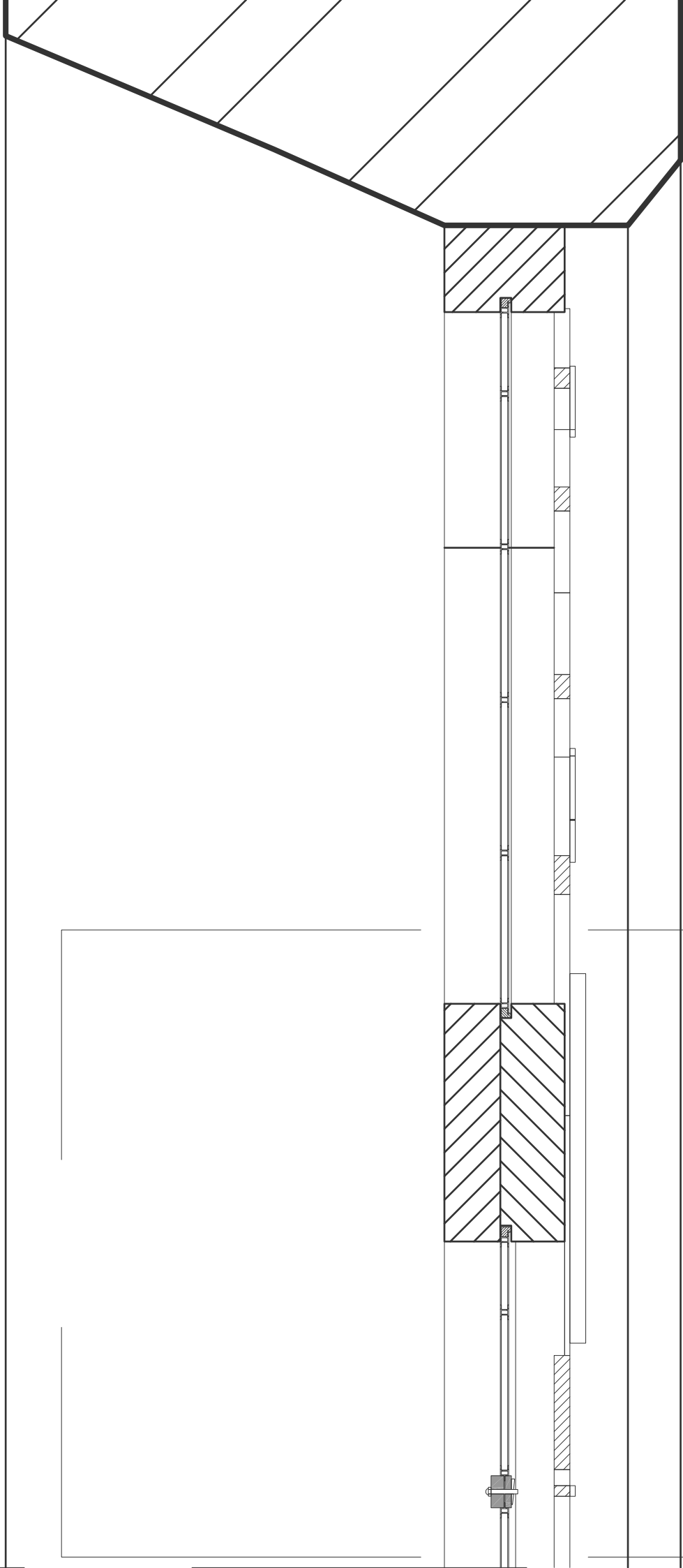


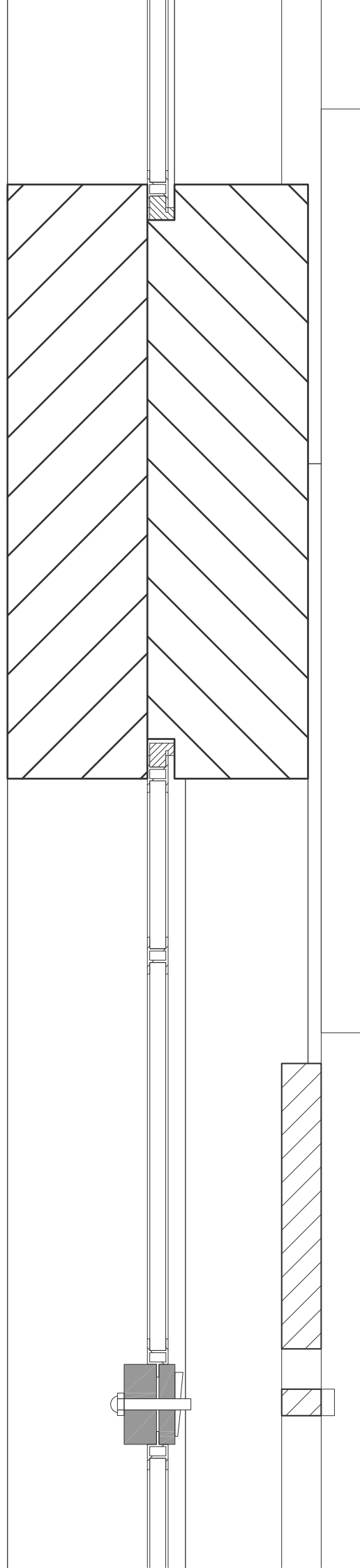
Existing fragment section - 1:50



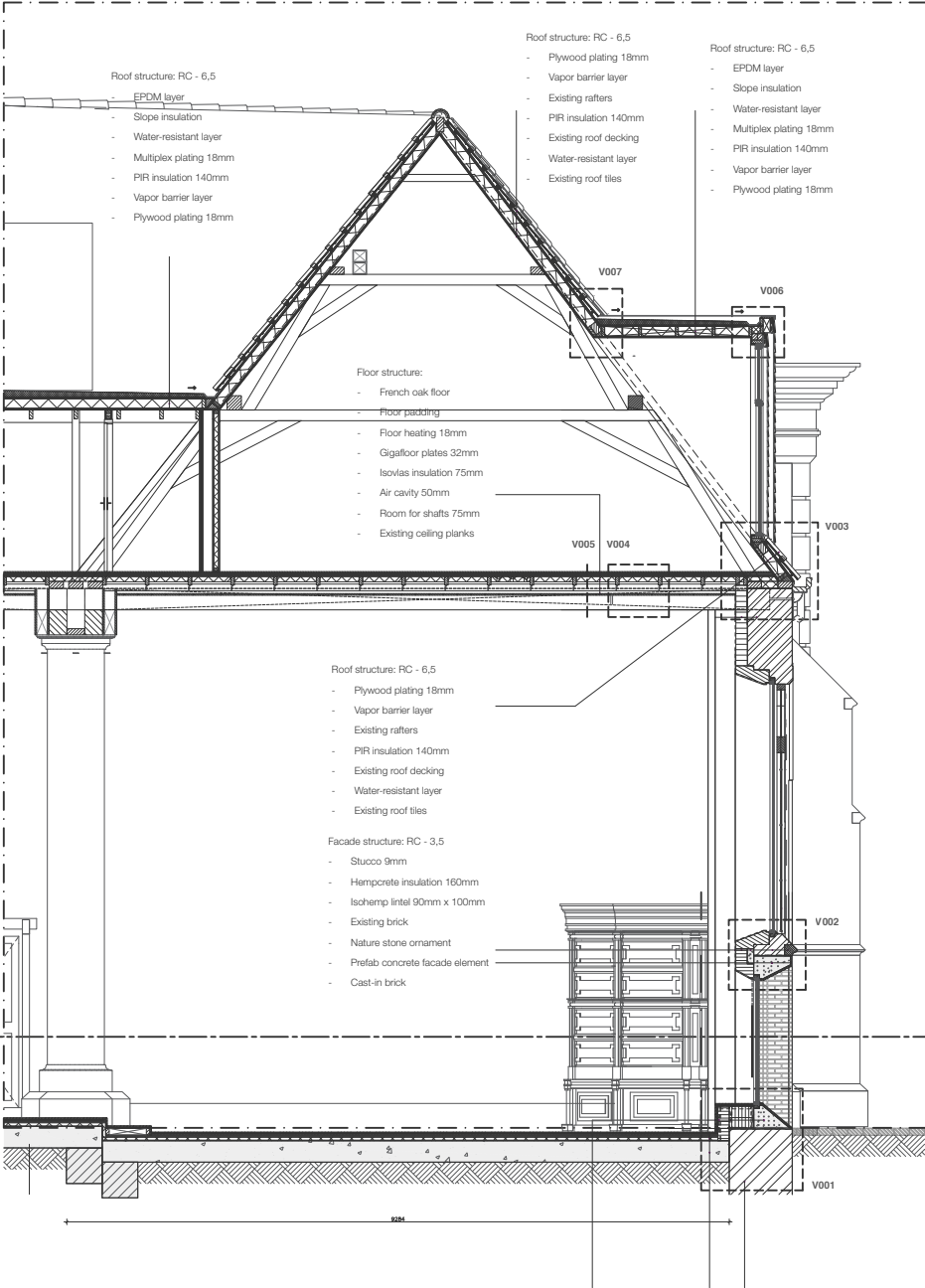




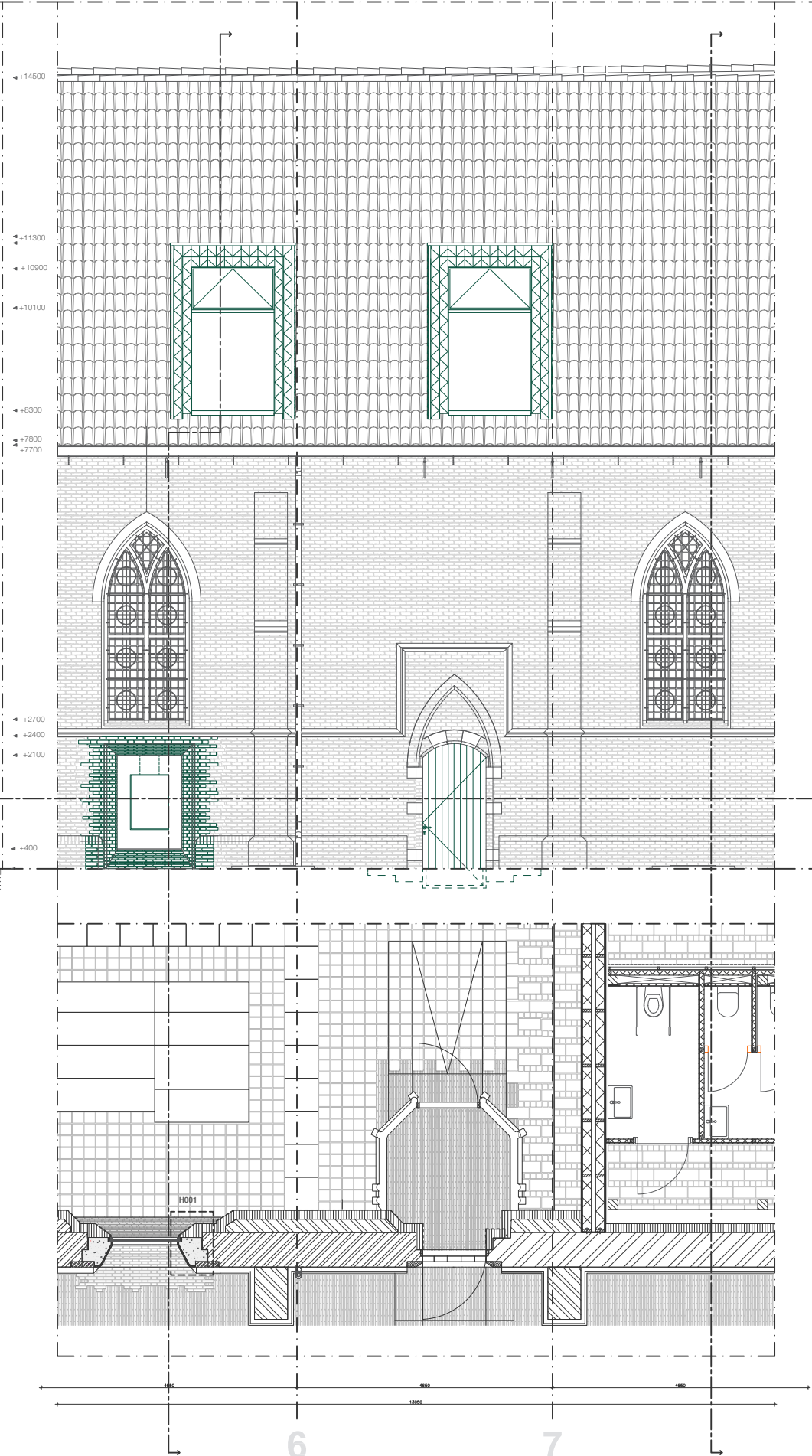




1:50 - Library / Public foyer fragment section

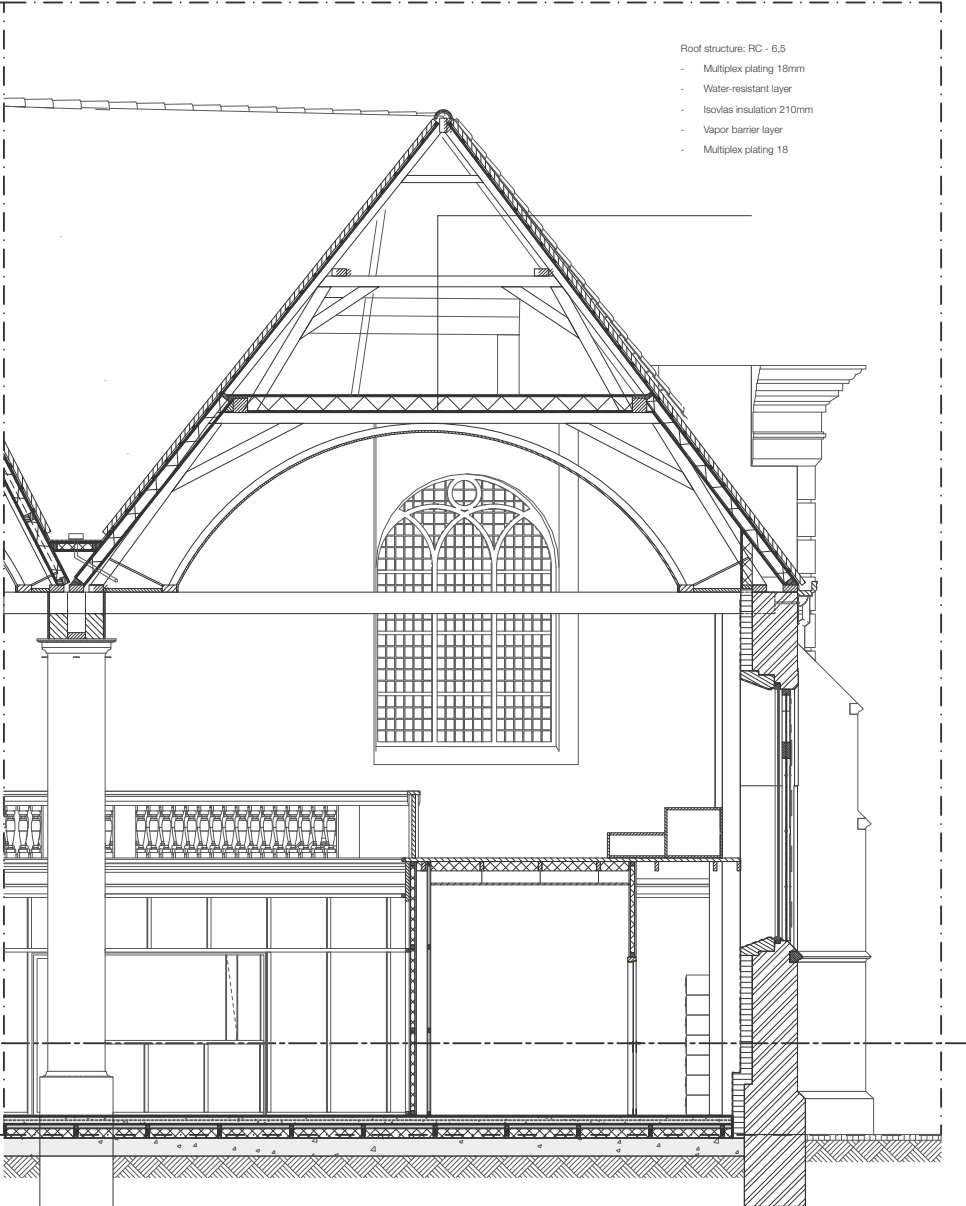


Elevation



1:50 - Floorplan fragment section

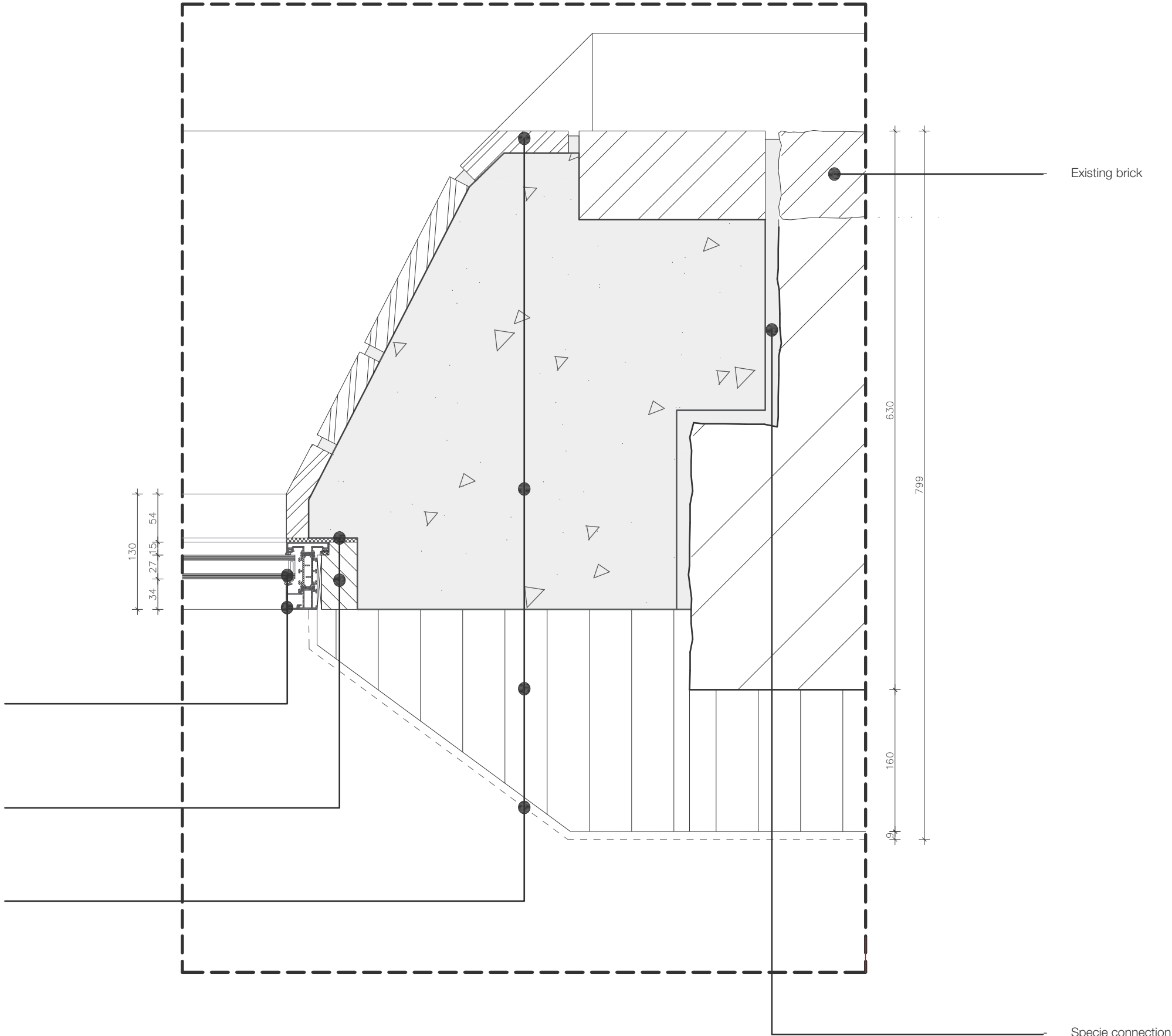
1:50 - Music venue fragment section





H001

- Reynears SI38 alluminium frame
  - Double glazing
  - Adjustement block
  - Fill-up
- Facade structure: RC - 3
- Stucco 9mm
  - Hempcrete 160mm
  - Prefab facade element
  - Cast-in brick

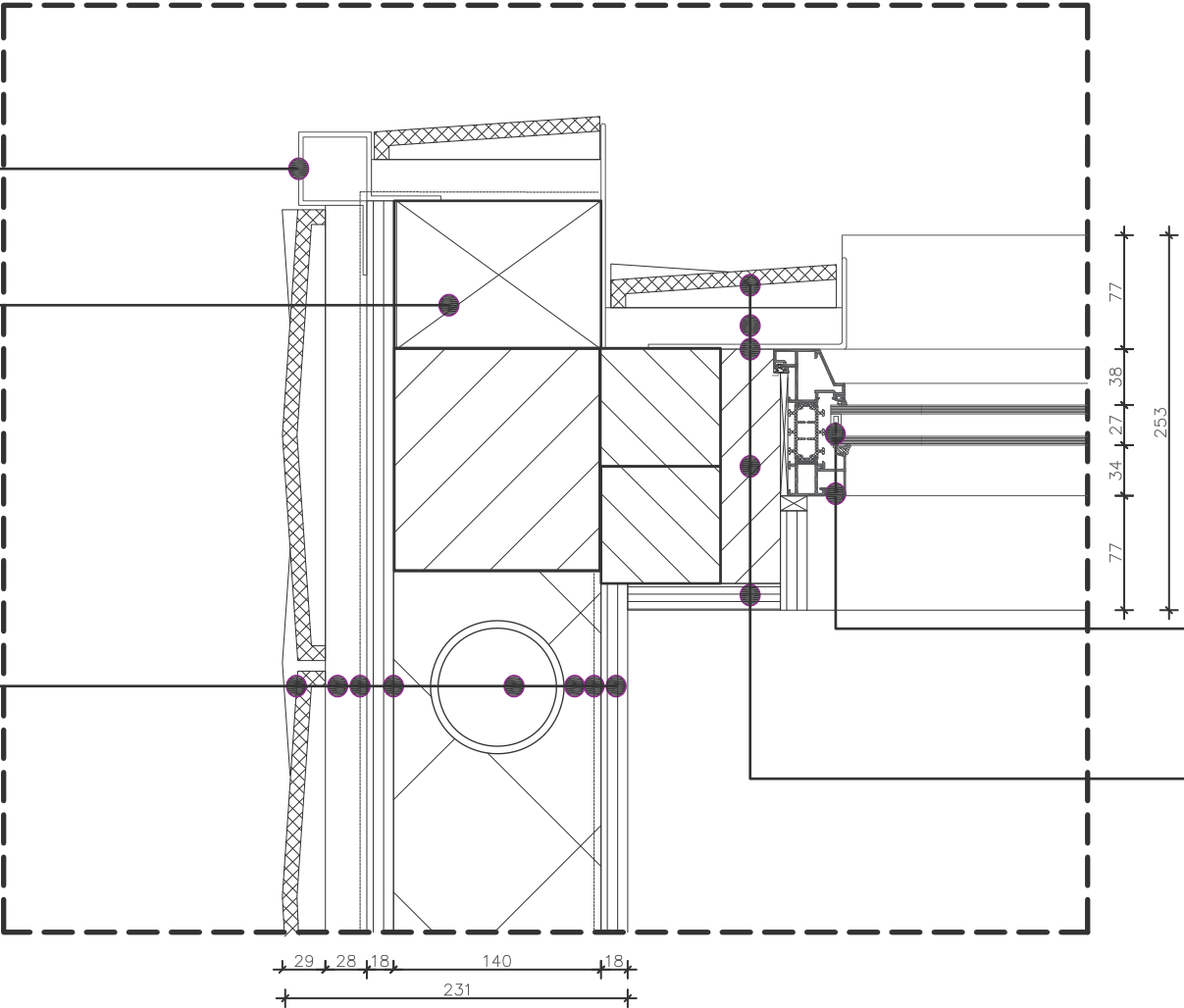


H002

Aluminium corner element

Wooden bobbin

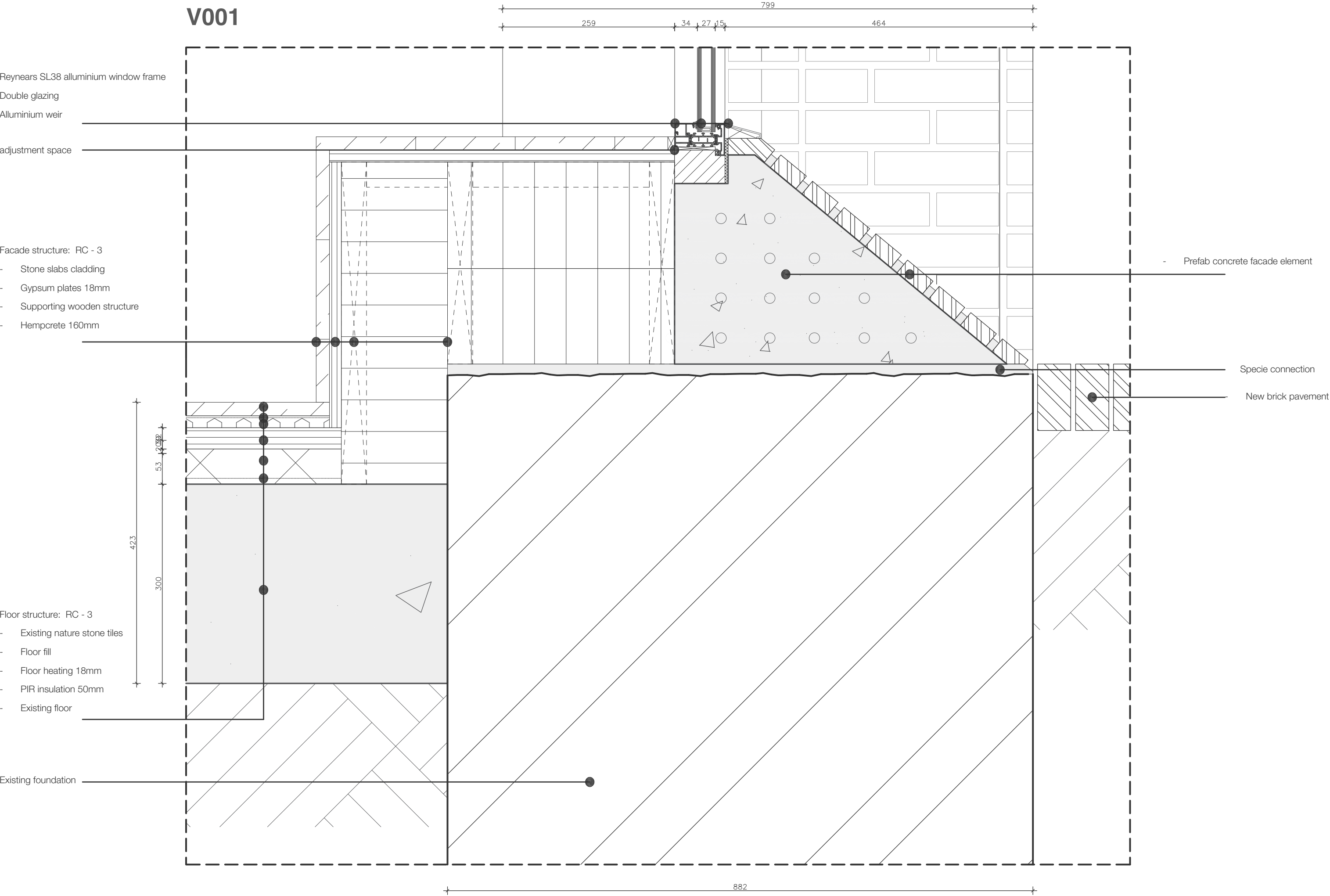
- Wall structure: RC - 6,5
- Pretty plastic facade tiles 29mm
  - Wooden fittings 29mm
  - Water-resistant layer
  - Multiplex plating 18mm
  - PIR insulation 140mm
  - Drainage pipe
  - Vapor barrier layer
  - Plywood plating 18mm



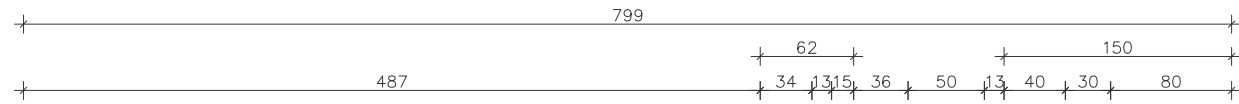
Reynears SL38 aluminium window frame  
Double glazing

- Wall structure:
- Pretty plastic facade tiles 29mm
  - Wooden fittings 29mm
  - Water-resistant layer
  - Multiplex plating 18mm
  - Wooden adjustment block
  - Plywood plating 18mm

V001







V002

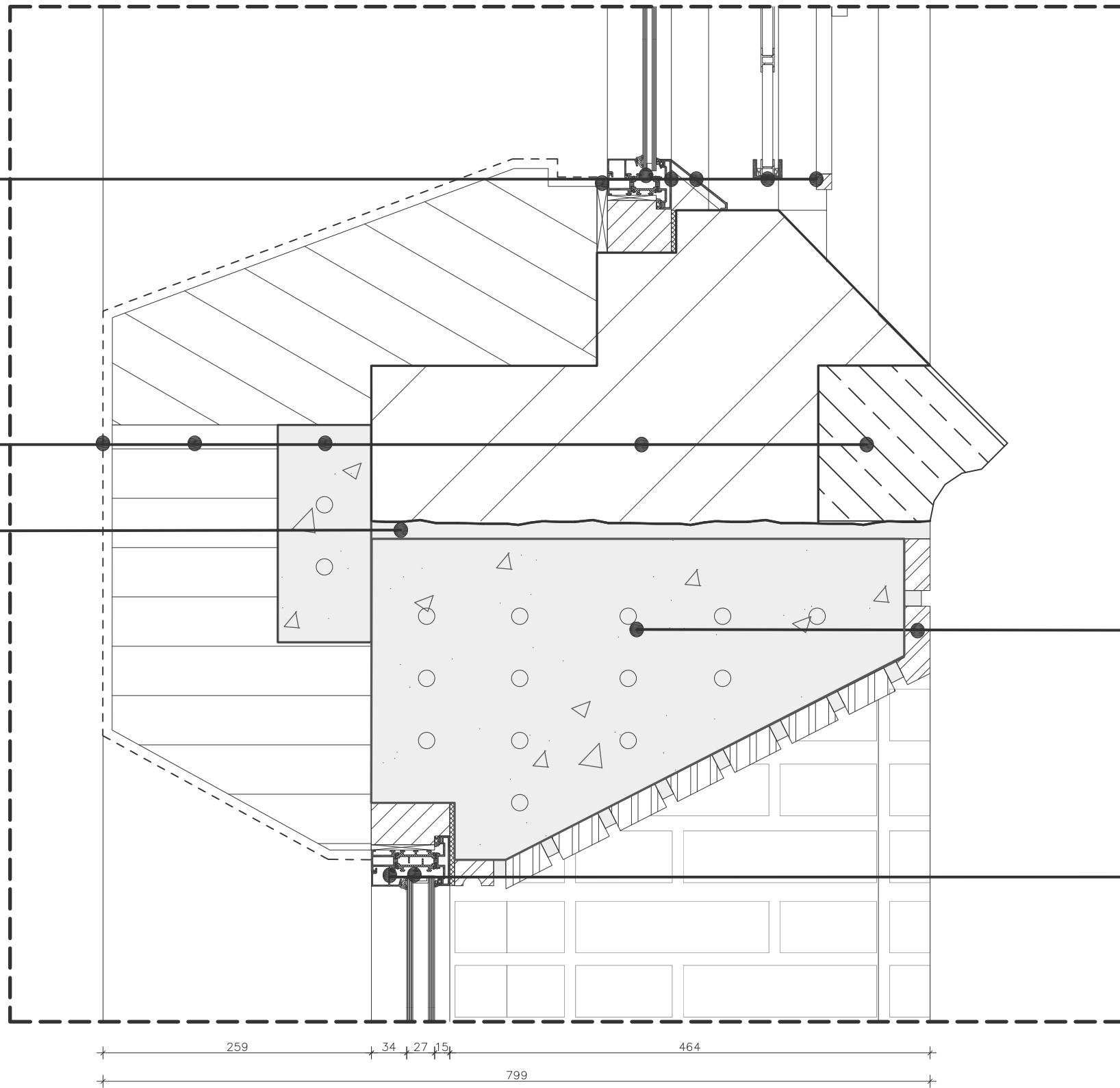
Window structure

- Adjustment space
- Reynears SL38 Alluminium window frame
- Vacuum glazing 13mm
- Water weir
- Ventilated existing stained glas
- Iron framing

Facade structure: RC - 3

- Stucco 9mm
- Hempcrete 160mm
- Isohemp lintel 90mm x 100mm
- Existing brick
- Naturestone ornament

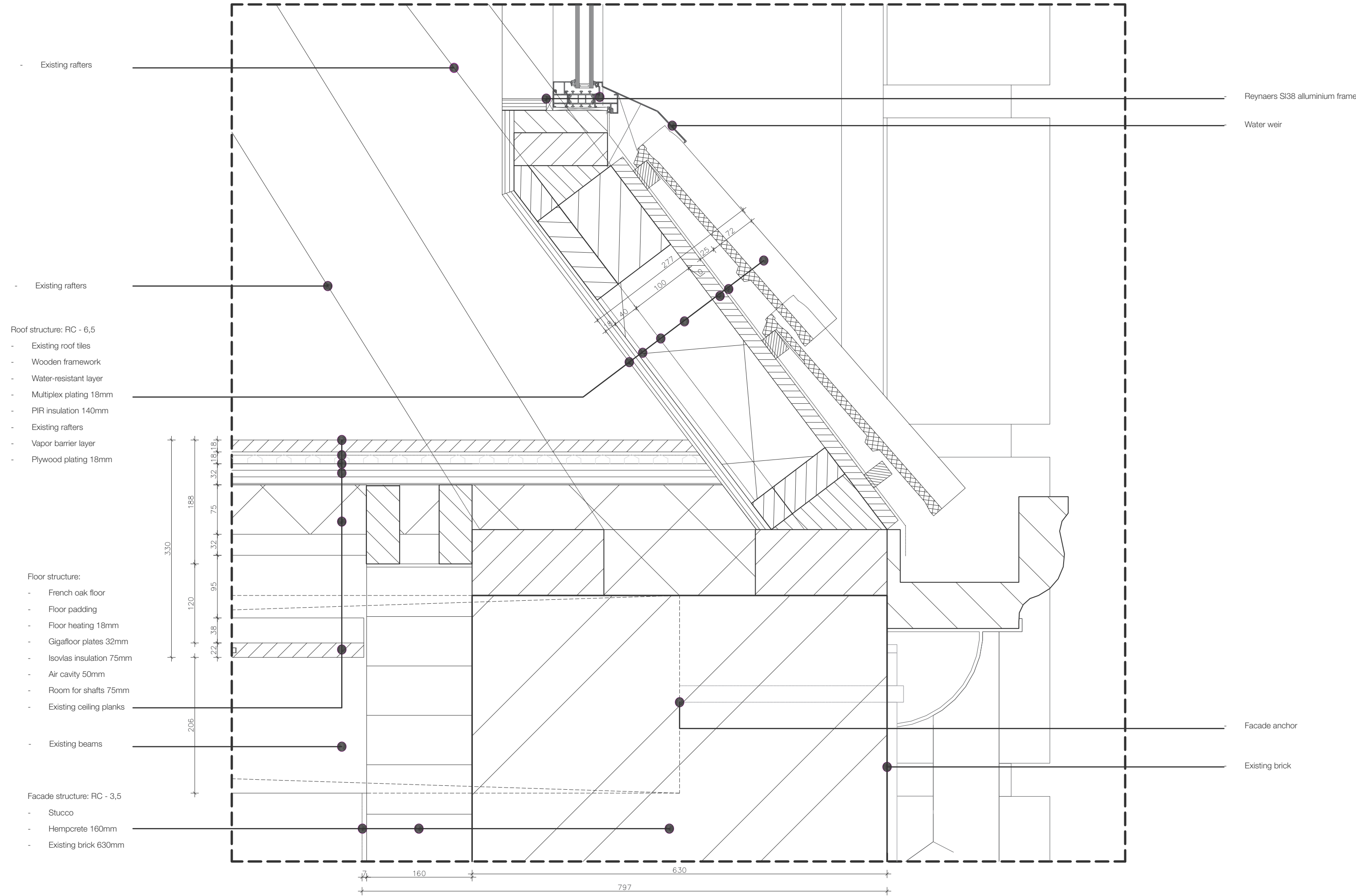
- Specie connection



Prefab concrete facade element

Reynears SL38 alluminium window frame  
Double glazing

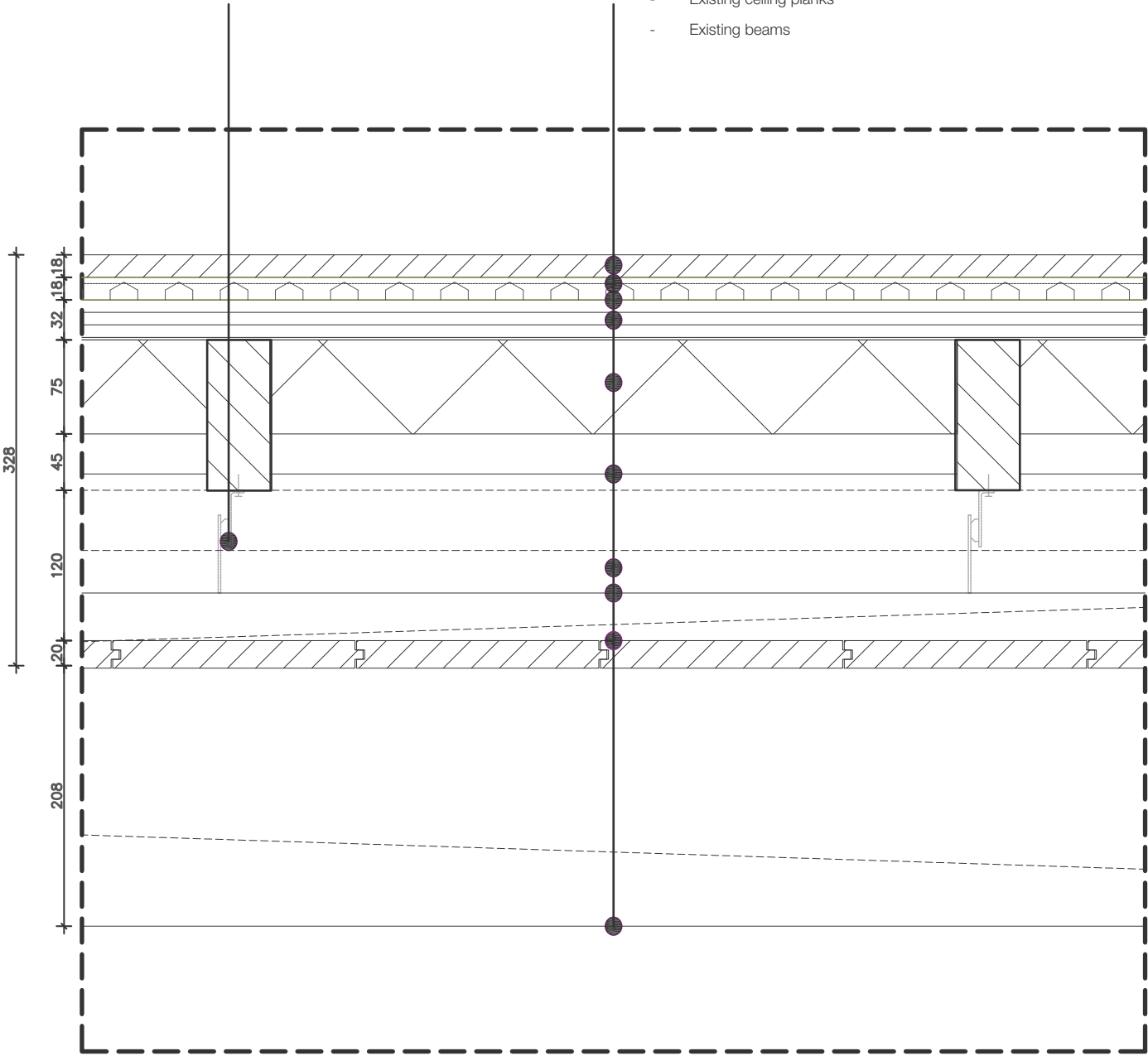
V003



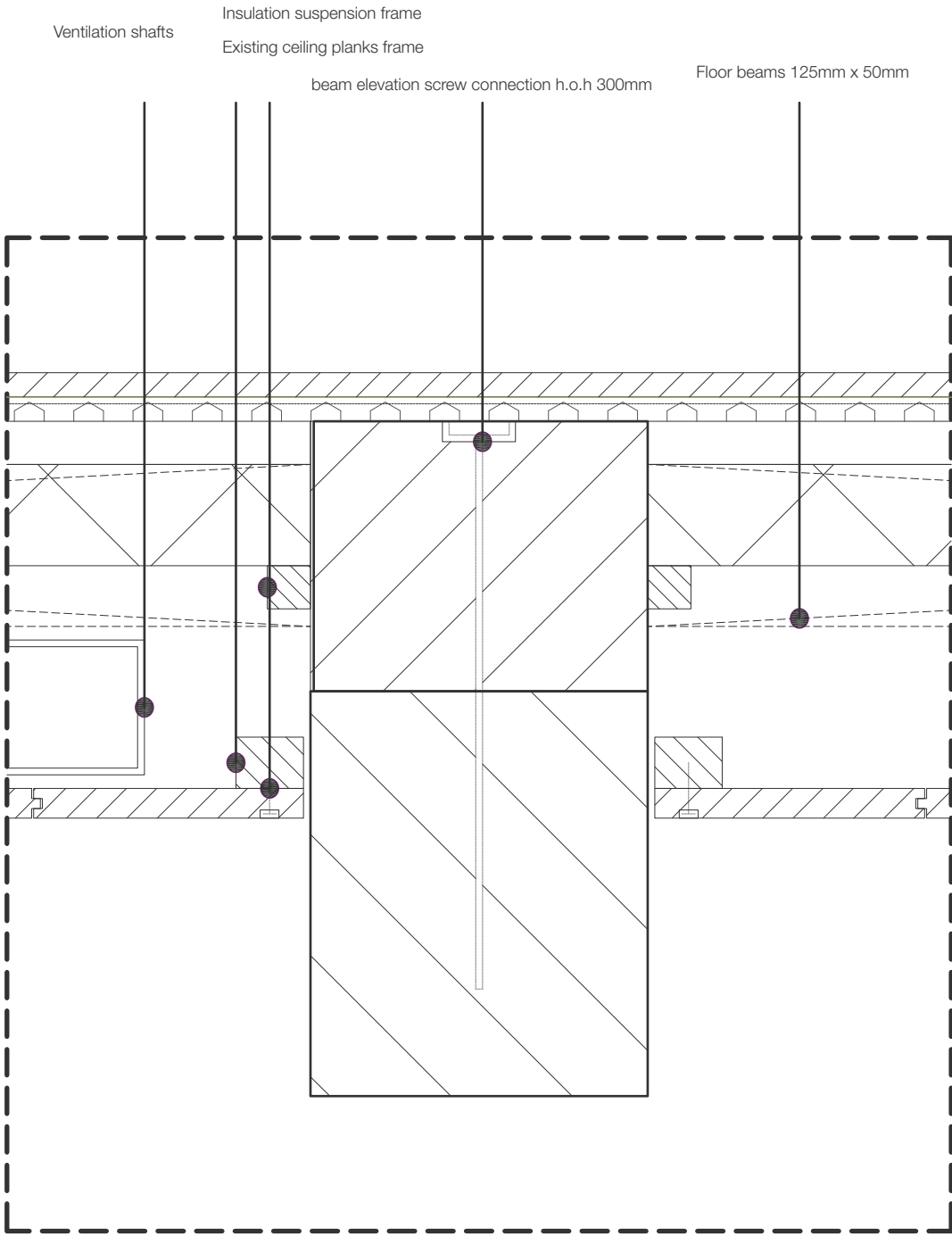
Floor structure:

- French oak floor
- Floor padding
- Floor heating 18mm
- Gigafloor plates 32mm
- Isovlas insulation 75mm
- Air cavity 50mm
- Room for shafts 75mm
- Existing ceiling planks
- Existing beams

Floor beams 125mm x 50mm  
wooden ceiling suspension elements



V004

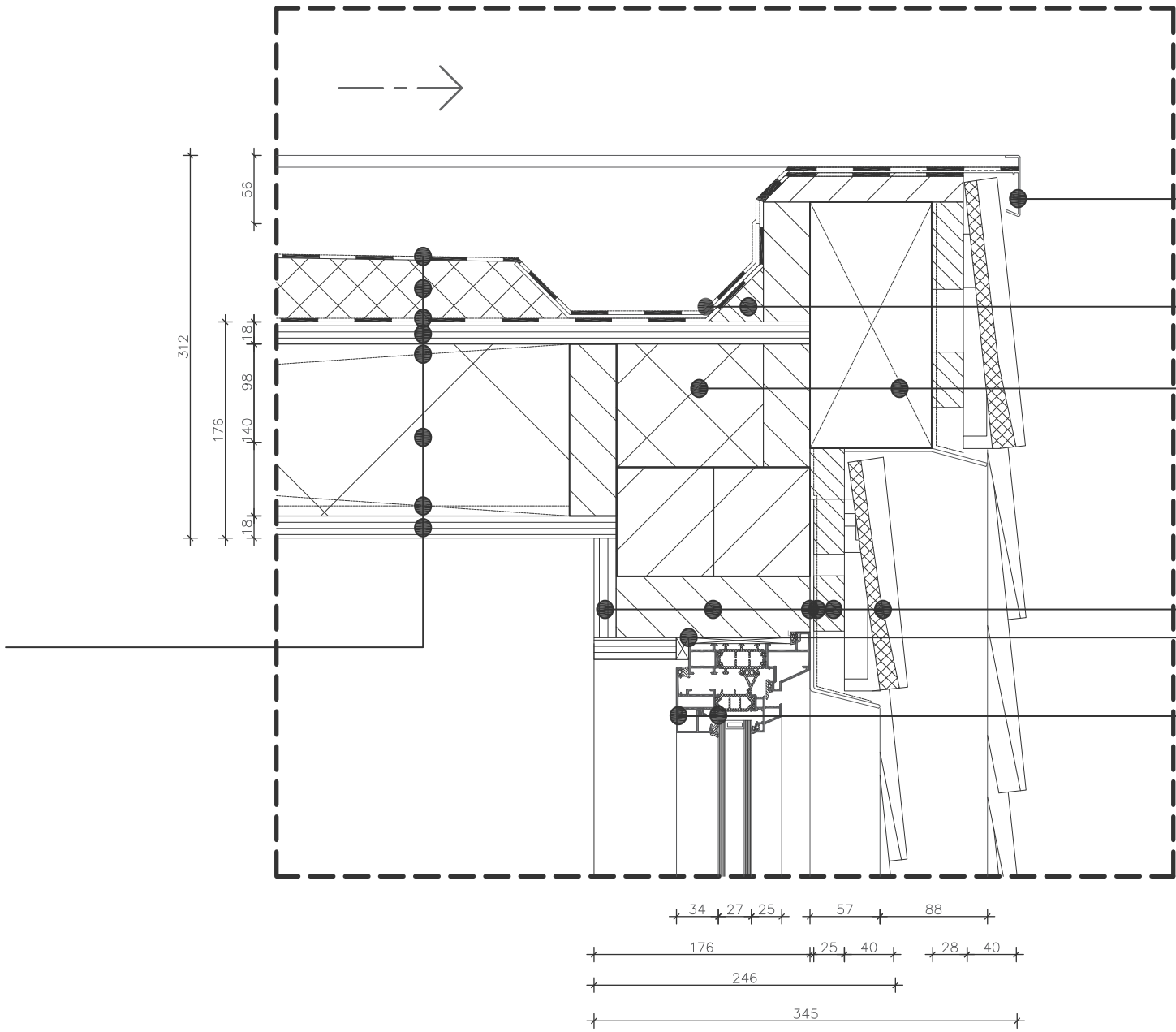


V005



V006

- Roof structure: RC - 6,5
- Plywood plating 18mm
  - Vapor barrier layer
  - PIR insulation 140mm
  - Plywood plating 18mm
  - Water-resistant layer
  - Slope insulation
  - EPDM



Roof trim

Ditch

Adjustment block

Fill-up insulation

Wooden bobbin

Wall structure: RC - 6,5

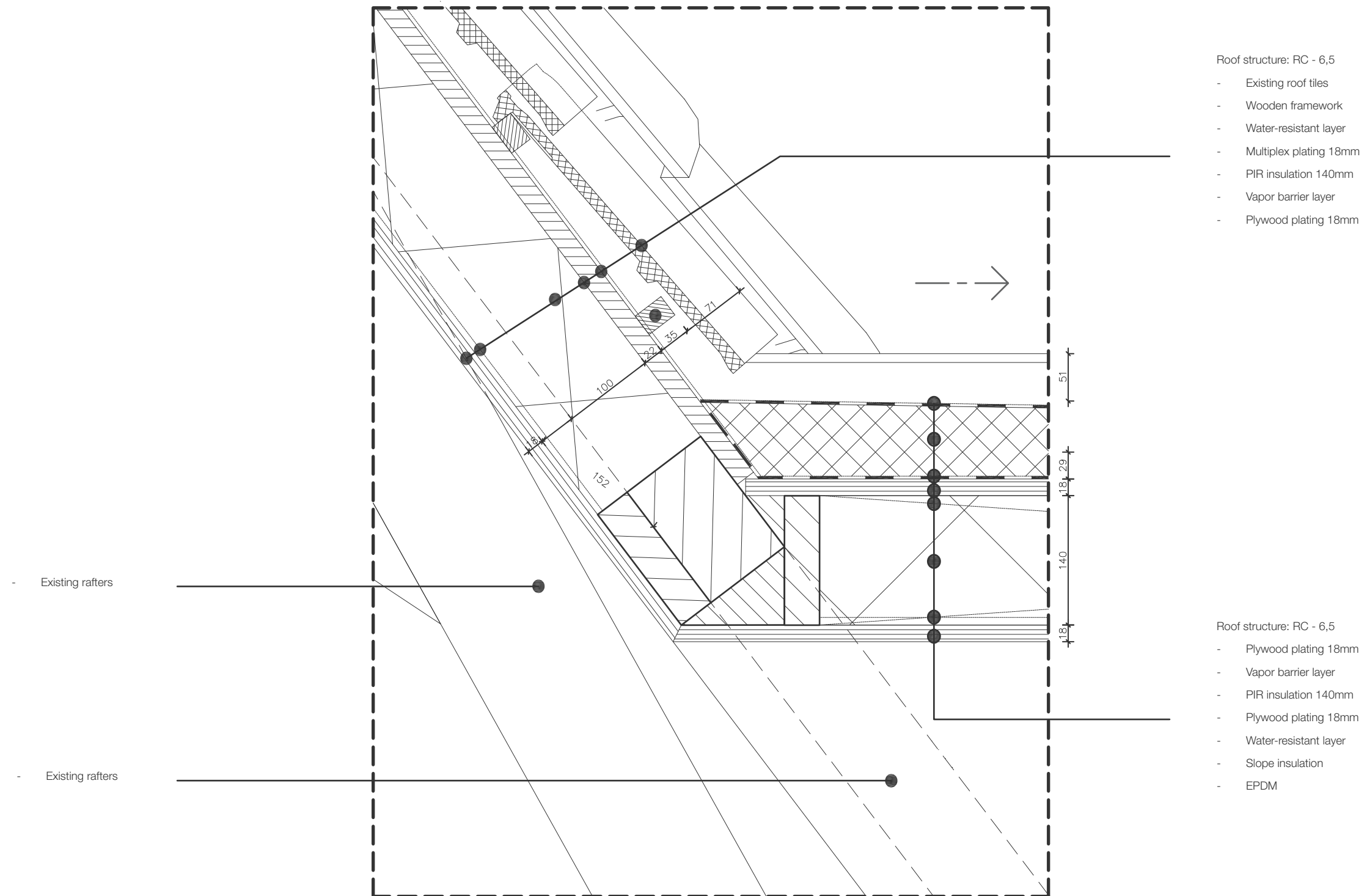
- Pretty plastic facade tiles 29mm
- Wooden fittings 29mm
- Water-resistant layer
- Multiplex plating 18mm
- Wooden adjustment block
- Plywood plating 18mm

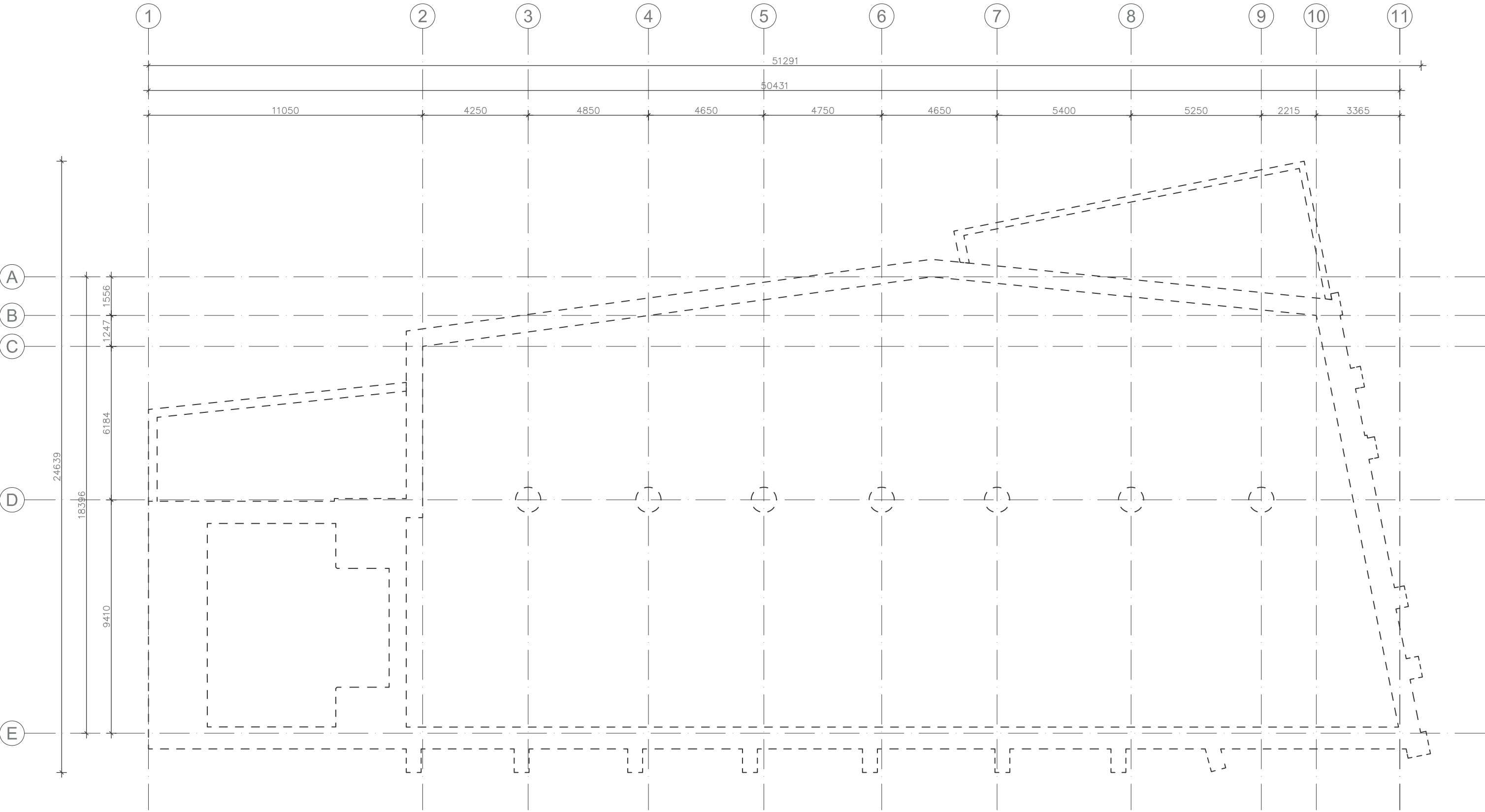
Adjustment space

Reynears SL38 aluminium window frame


















Double glazing

V007

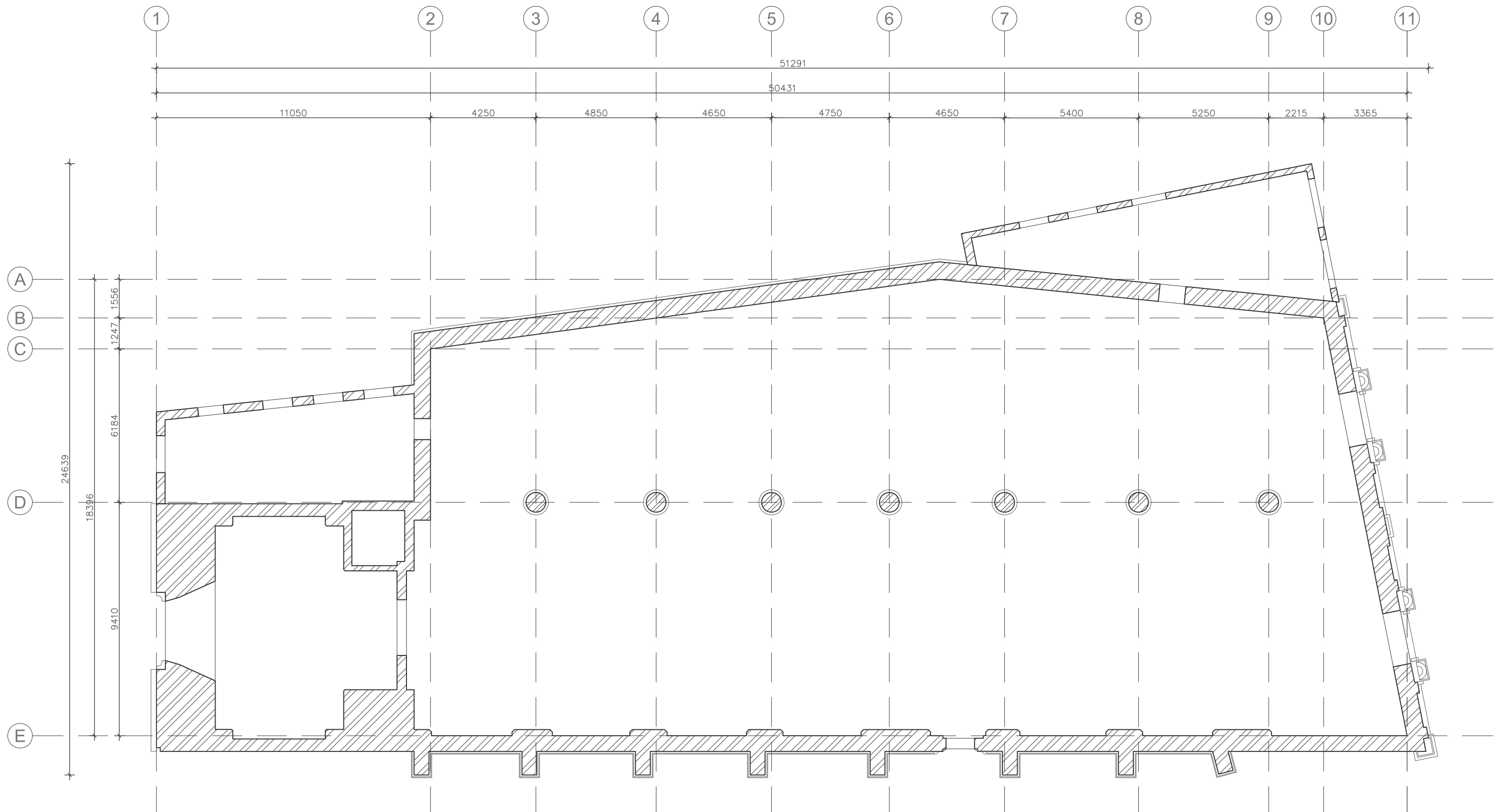














Construction plan Foundation - 1:150

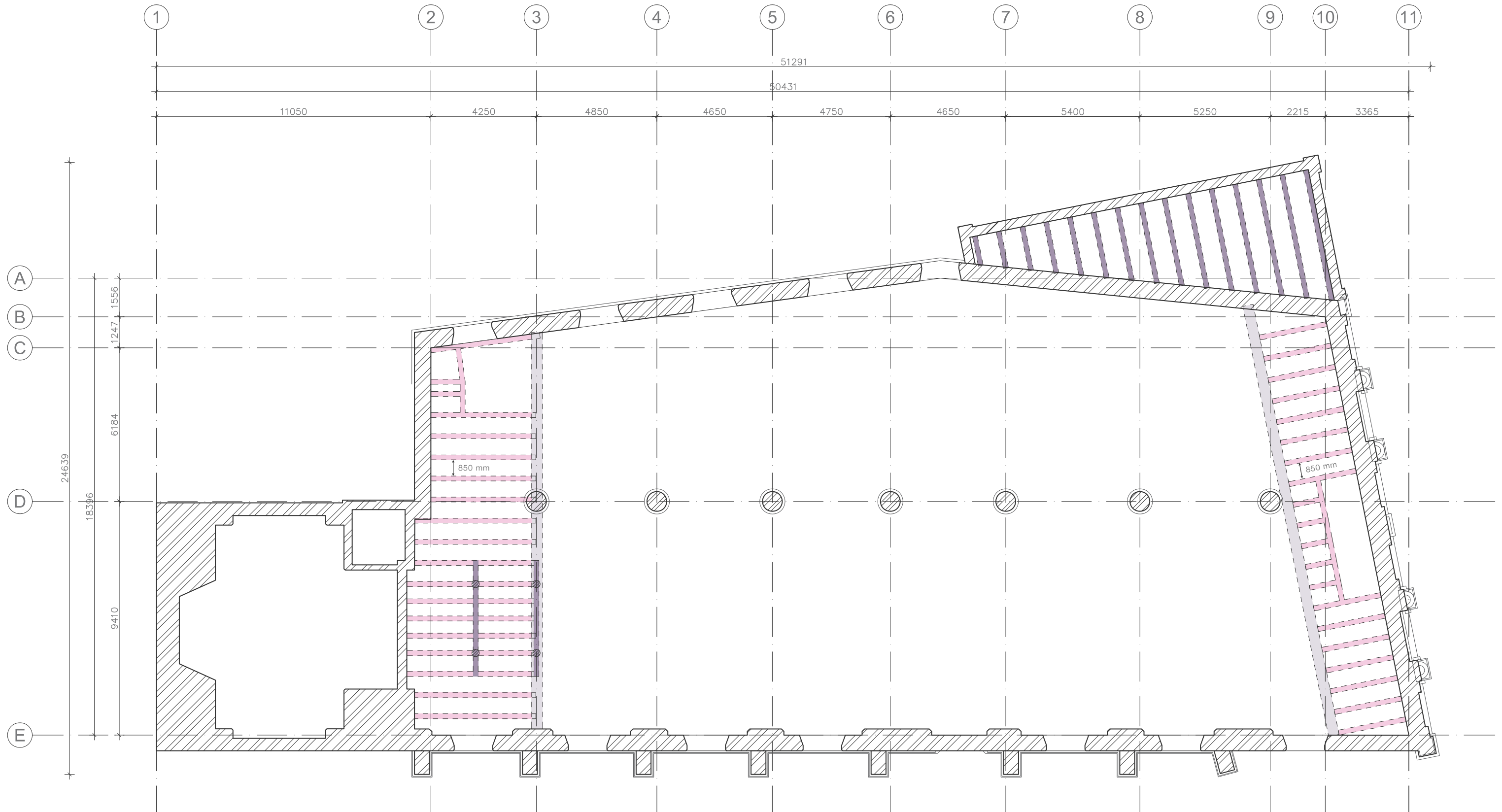
- |  |                                    |   |                                  |   |   |   |                                     |   |  |   |                                |   |                               |
|--|------------------------------------|---|----------------------------------|---|---|---|-------------------------------------|---|--|---|--------------------------------|---|-------------------------------|
|  | Existing pillars - Diameter 800 mm |  | New collumns - Wood 160 x 160 mm |  | New prefab floor reinforcement - 500 x 500 mm |  | Existing beams - Wood               |  | Existing beams - Wood 300mm x 250mm        |  | New beams - Wood 220mm x 75mm  |  | New beams - Wood 125mm x 50mm |
|  | Existing pillars - Diameter 300 mm |  | New collumns - Wood 180 x 180 mm |  | Lowered existing floor                        |  | Existing beams - Wood 275mm x 200mm |  | Existing beams - Wood 350mm x 250mm        |  | New beams - Wood 165mm x 65mm  |  | New beams - Wood 450mm x 50mm |
|  |                                    |   |                                  |   |   |  | Existing beams - Wood 200mm x 200mm |  | Existing raised beams - Wood 500mm x 250mm |  | New beams - Wood 250mm x 100mm |   |                               |






















Construction plan Ground floor - 1:150

 Existing pillars - Diameter 800 mm	New collumns - Wood 160 x 160 mm	 New prefab floor reinforcement - 500 x 500 mm	 Existing beams - Wood	 Existing beams - Wood 300mm x 250mm	 New beams - Wood 220mm x 75mm	 New beams - Wood 125mm x 50mm
 Existing pillars - Diameter 300 mm	New collumns - Wood 180 x 180 mm	 Lowered existing floor	 Existing beams - Wood 275mm x 200mm	 Existing beams - Wood 350mm x 250mm	 New beams - Wood 165mm x 65mm	 New beams - Wood 450mm x 50mm
			 Existing beams - Wood 200mm x 200mm	 Existing raised beams - Wood 500mm x 250mm	 New beams - Wood 250mm x 100mm	



Construction plan First floor - 1:150

- |   |  |   |   |  |  |   |
|---|--|---|---|--|--|---|
|  Existing pillars - Diameter 800 mm |  New collumns - Wood 160 x 160 mm |  New prefab floor reinforcement - 500 x 500 mm |  Existing beams - Wood               |  Existing beams - Wood 300mm x 250mm        |  New beams - Wood 220mm x 75mm  |  New beams - Wood 125mm x 50mm |
|  Existing pillars - Diameter 300 mm |  New collumns - Wood 180 x 180 mm |  Lowered existing floor                        |  Existing beams - Wood 275mm x 200mm |  Existing beams - Wood 350mm x 250mm        |  New beams - Wood 165mm x 65mm  |  New beams - Wood 450mm x 50mm |
|   |  |   |  Existing beams - Wood 200mm x 200mm |  Existing raised beams - Wood 500mm x 250mm |  New beams - Wood 250mm x 100mm |   |

