

Serious gaming as a participatory tool in complex transformation of religious heritage

Felix Evenblij

Zero waste church
22| 06 | 2023

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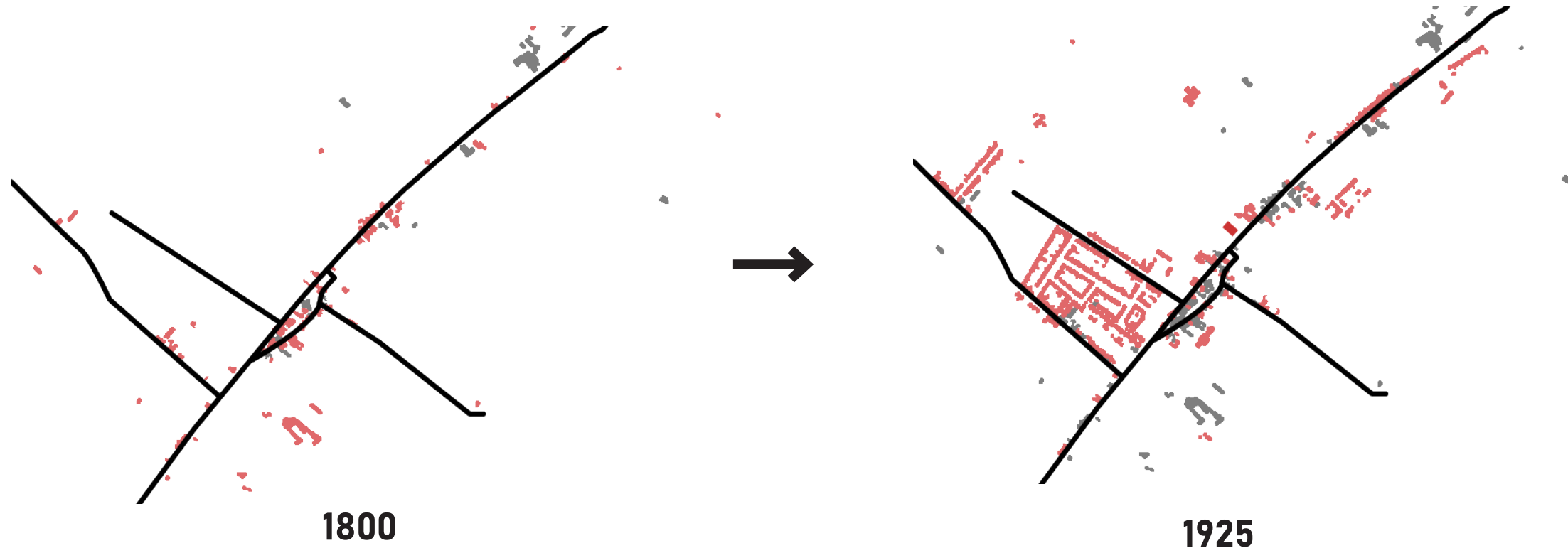
P5

Strandwal



SOIL VOORSCHOTEN

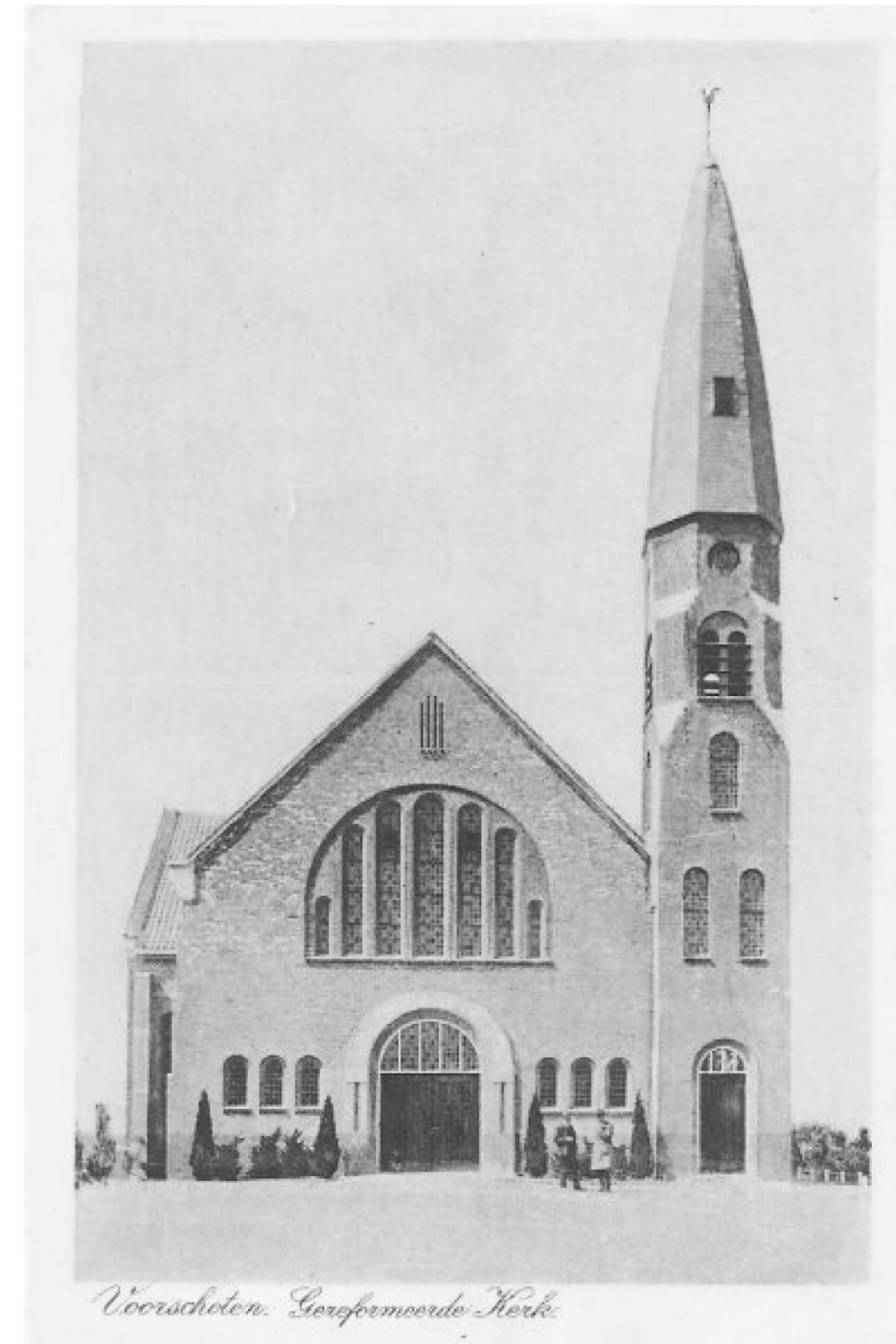
Development



1925



old church



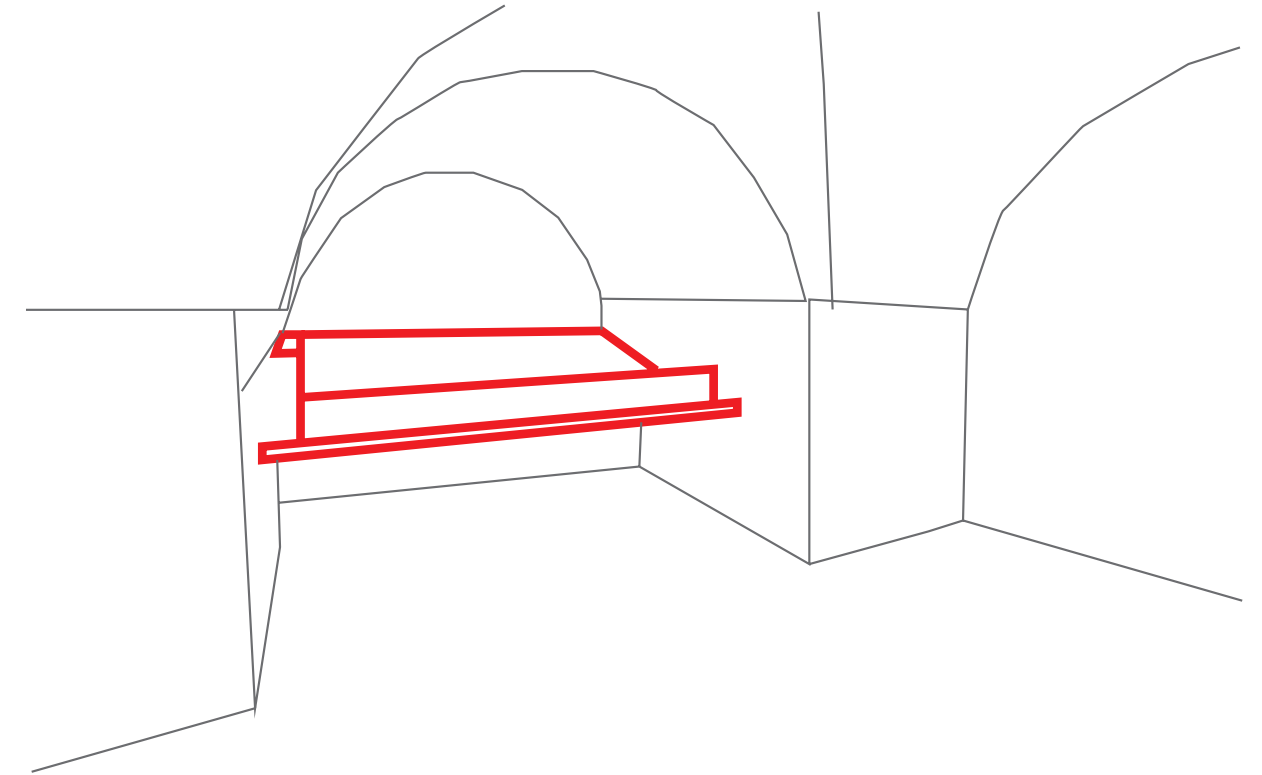
new church



1937

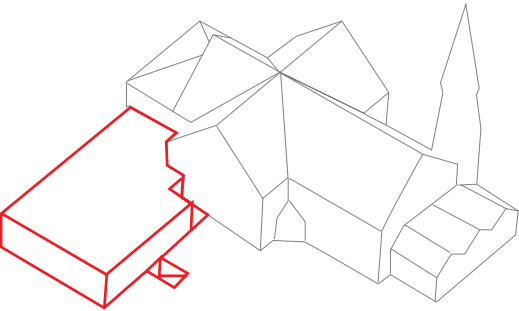


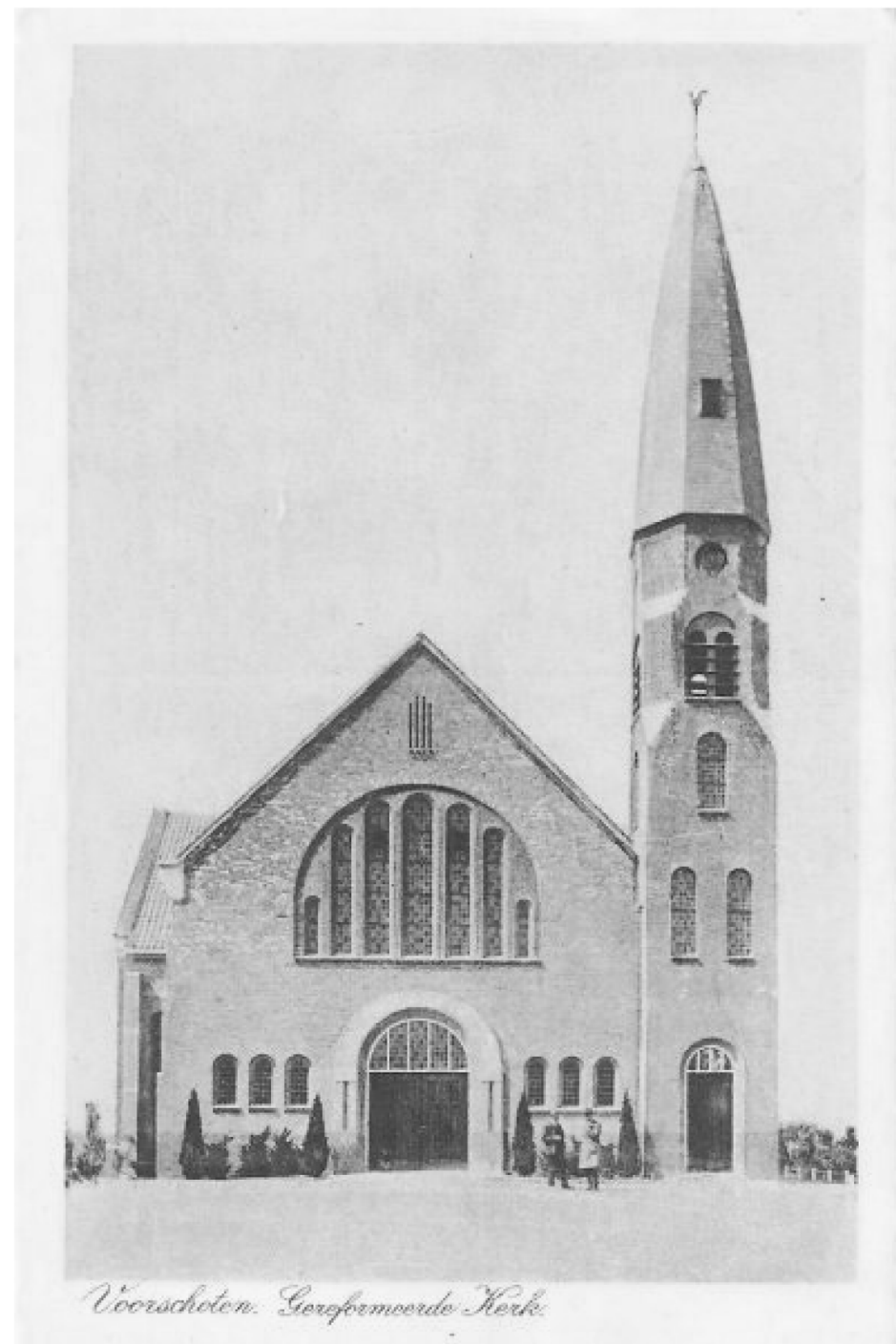
1950





1958





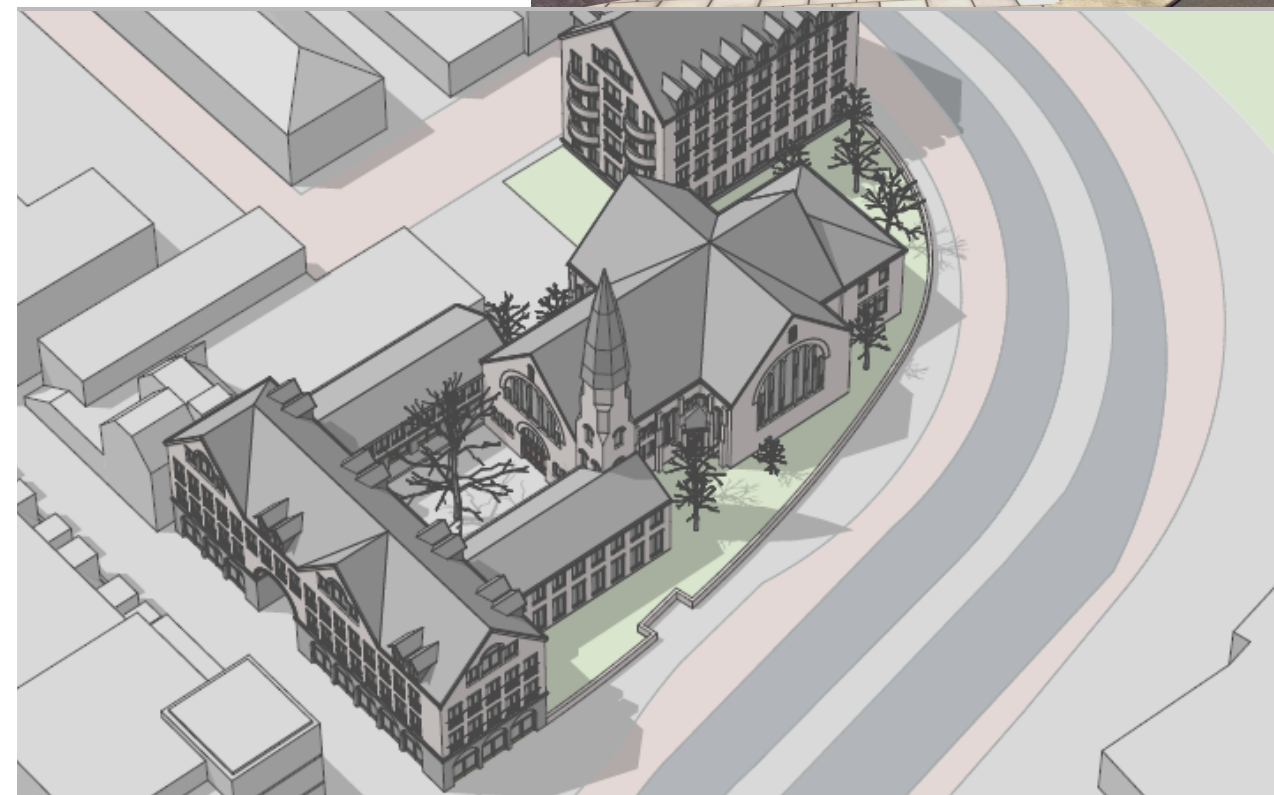
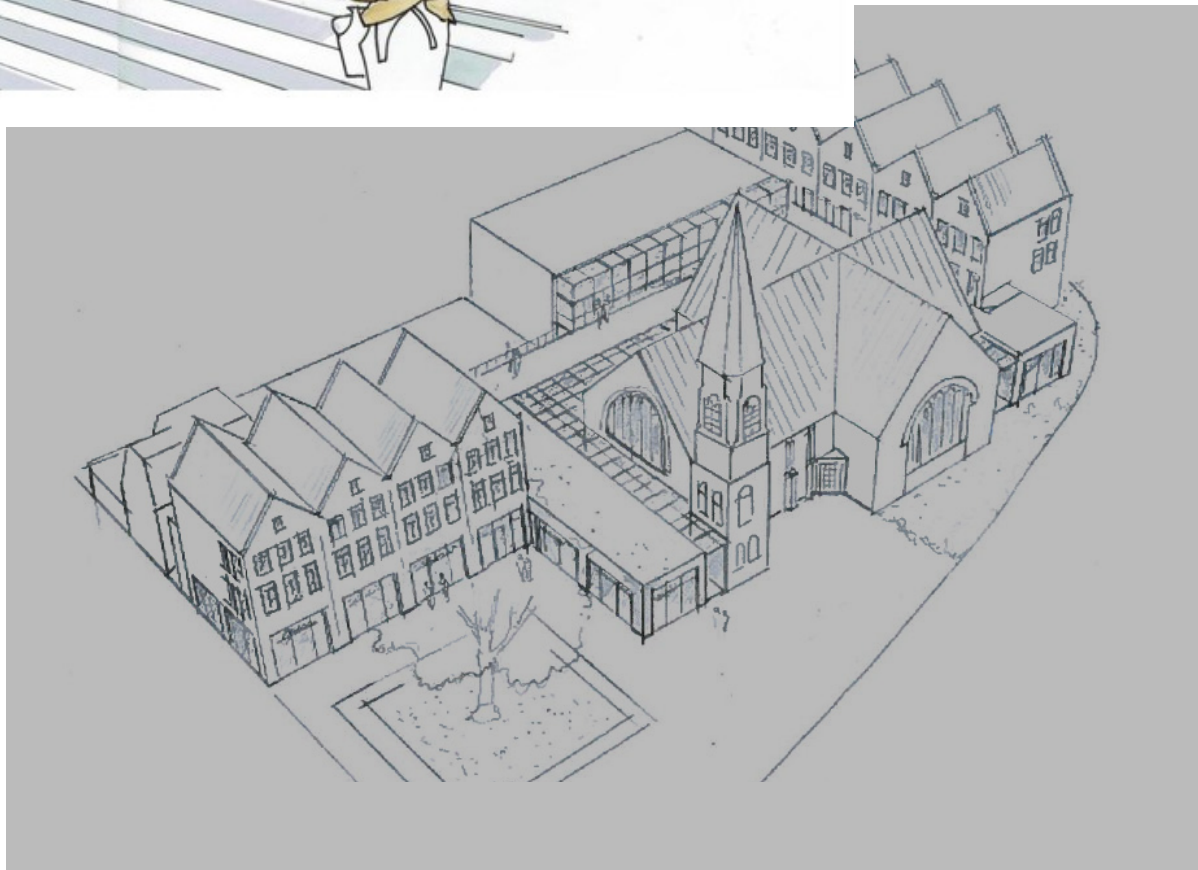
1958

2013



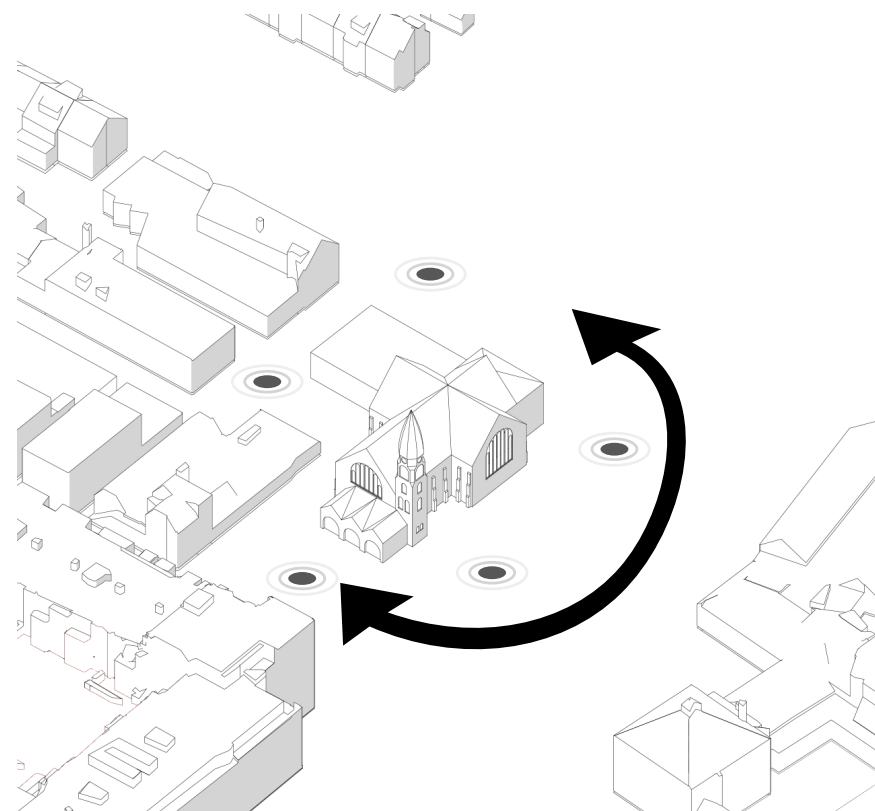


2013-2023



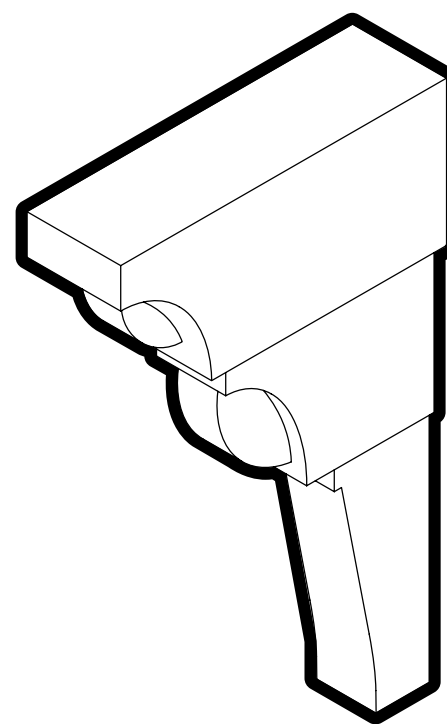


analysis of the church



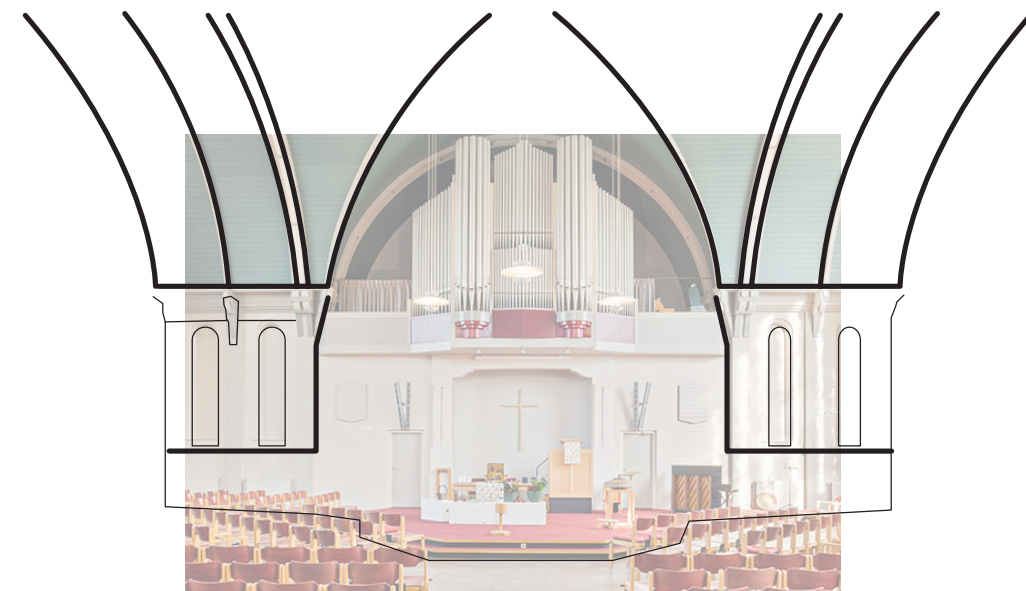
Morphology

+

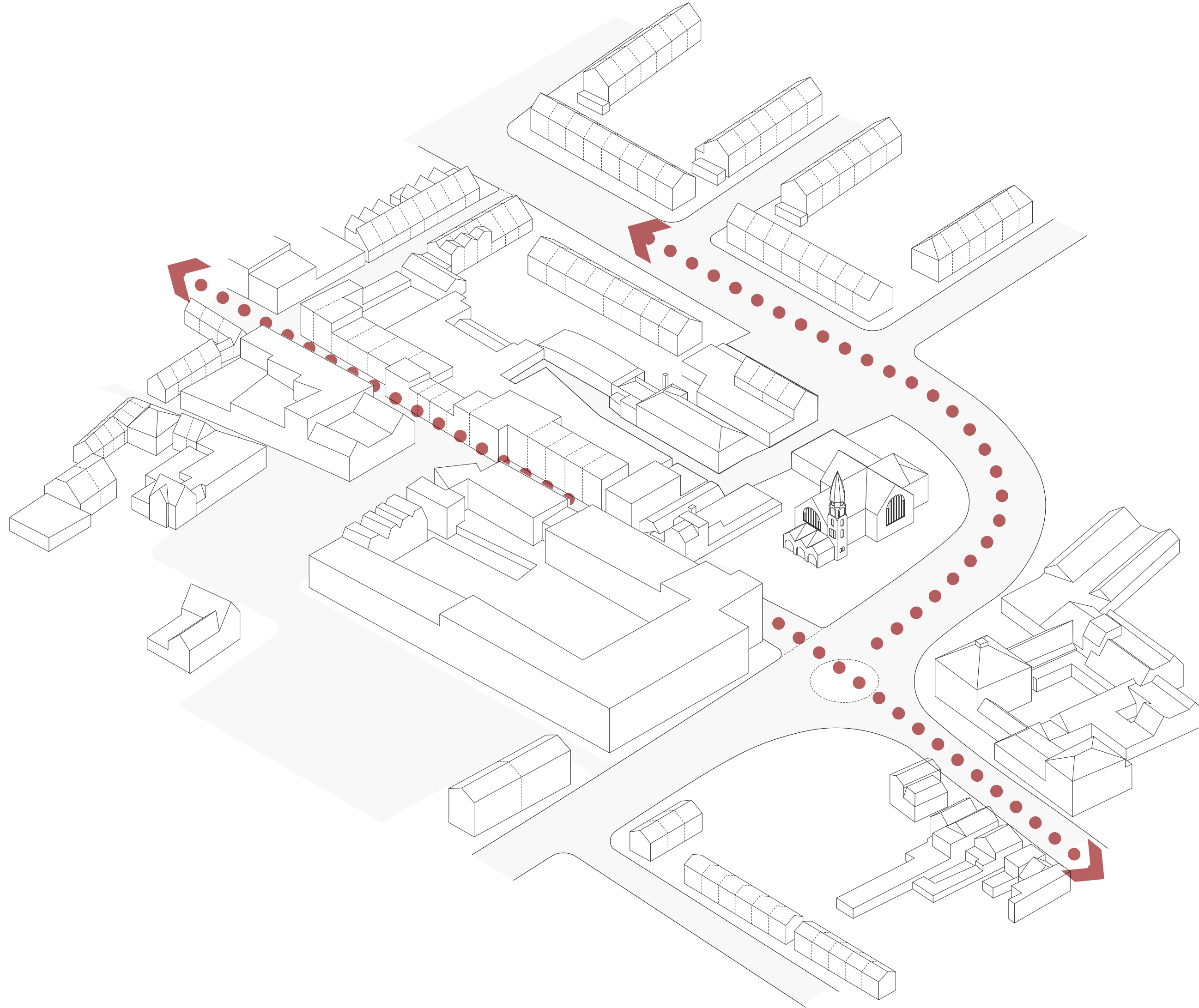


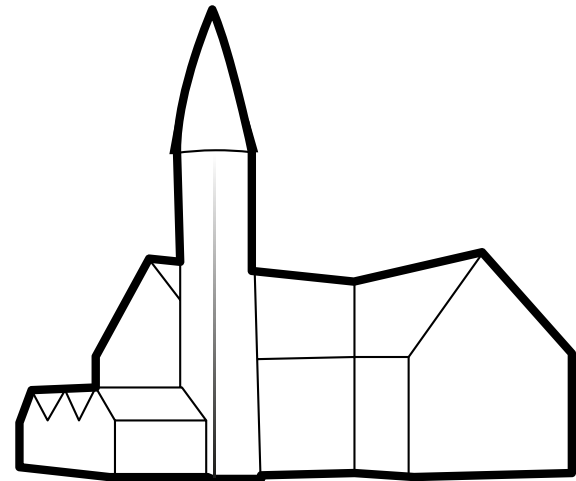
Detail

+



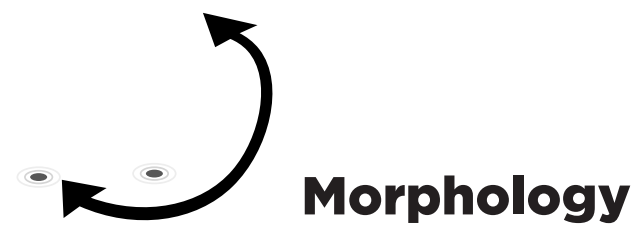
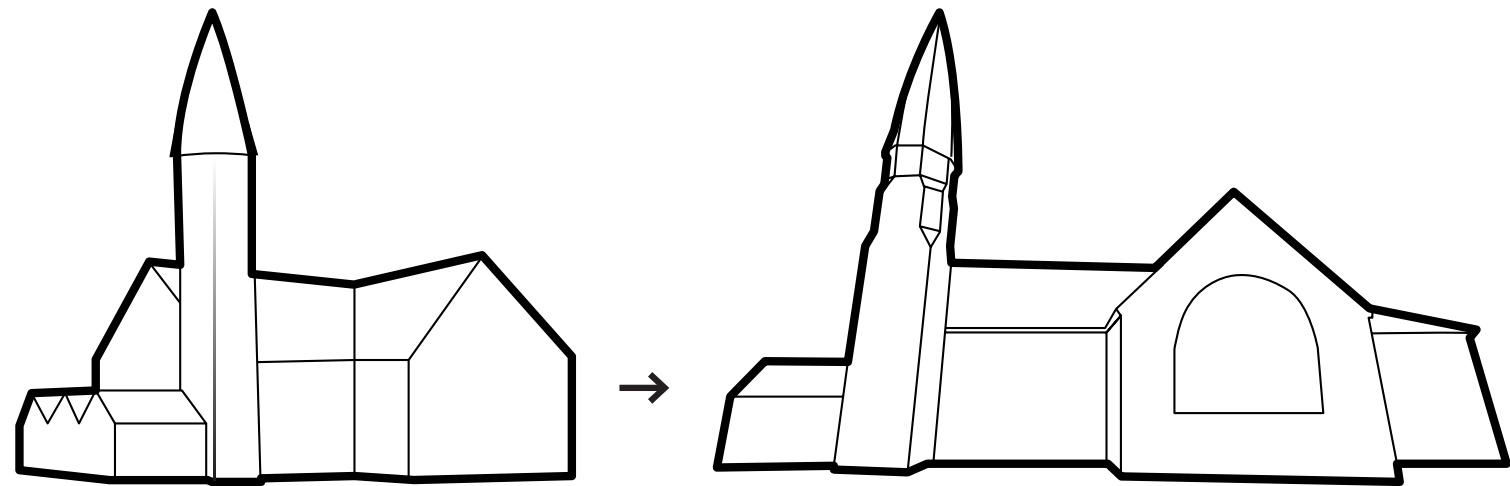
Interior

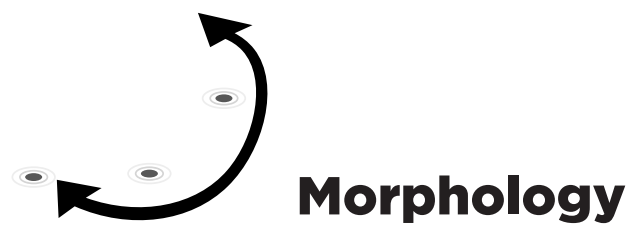
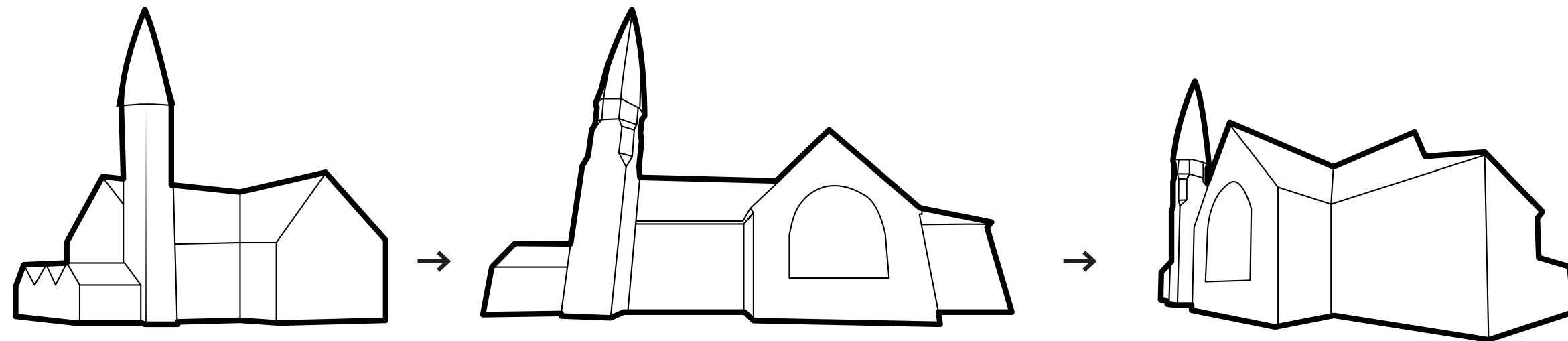


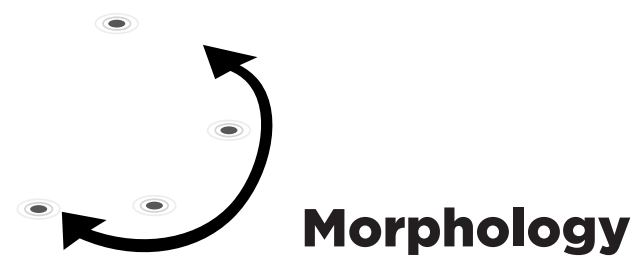
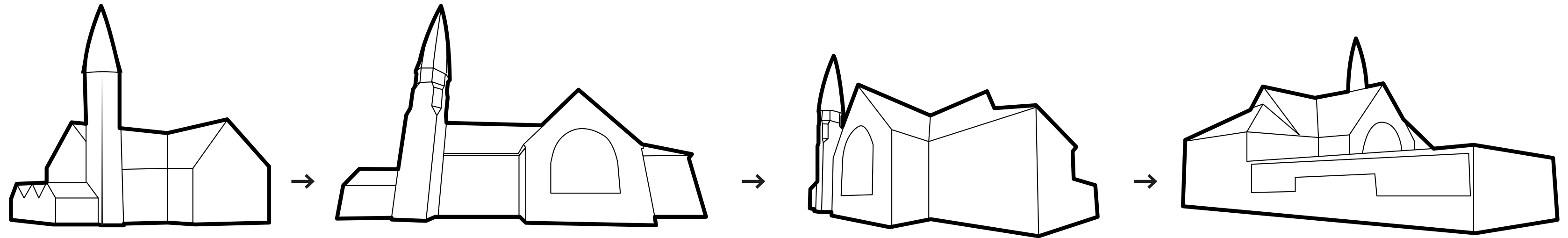


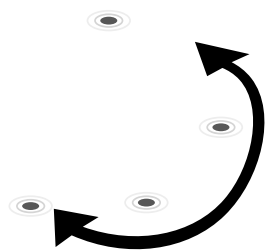
 **Morphology**



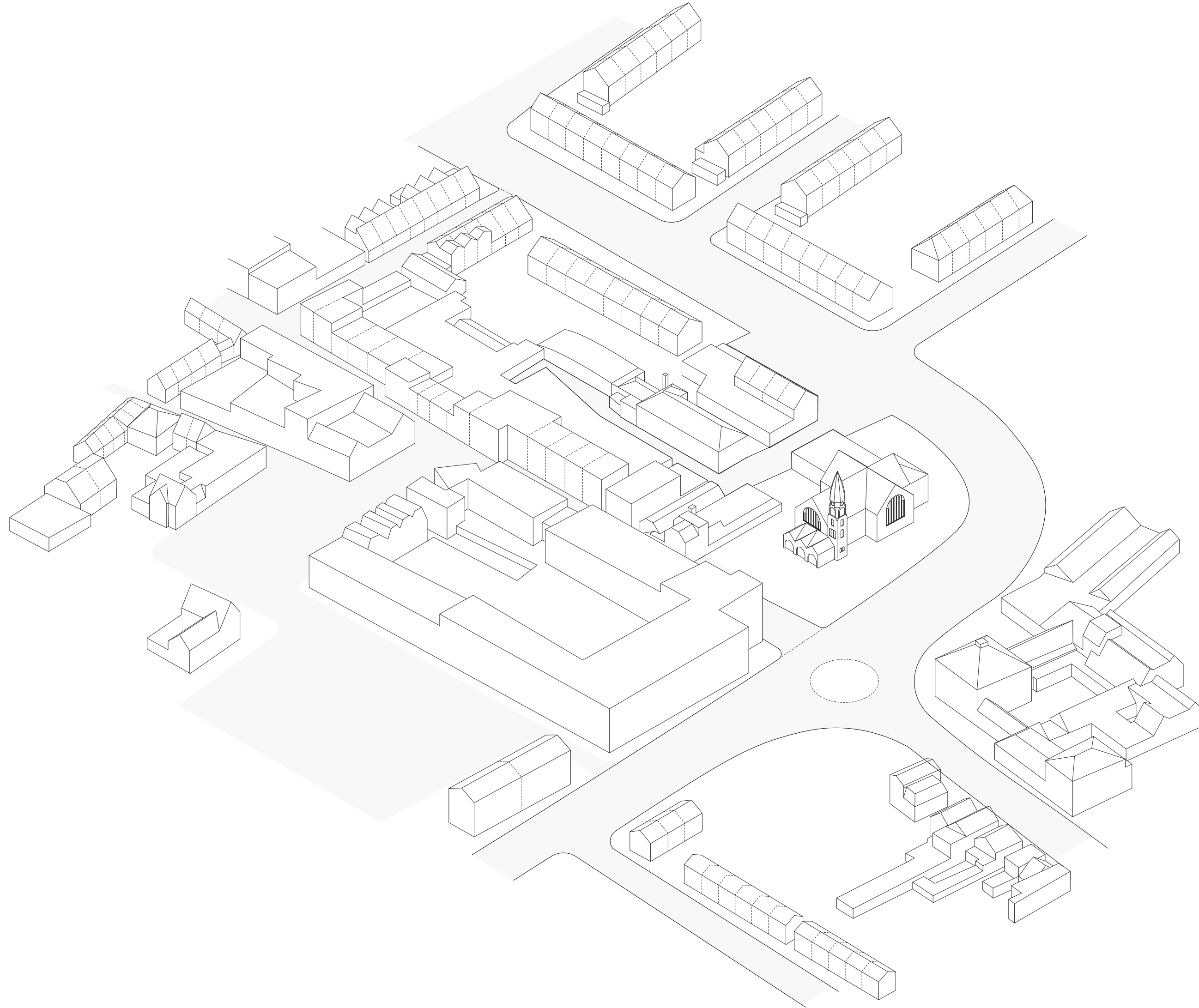


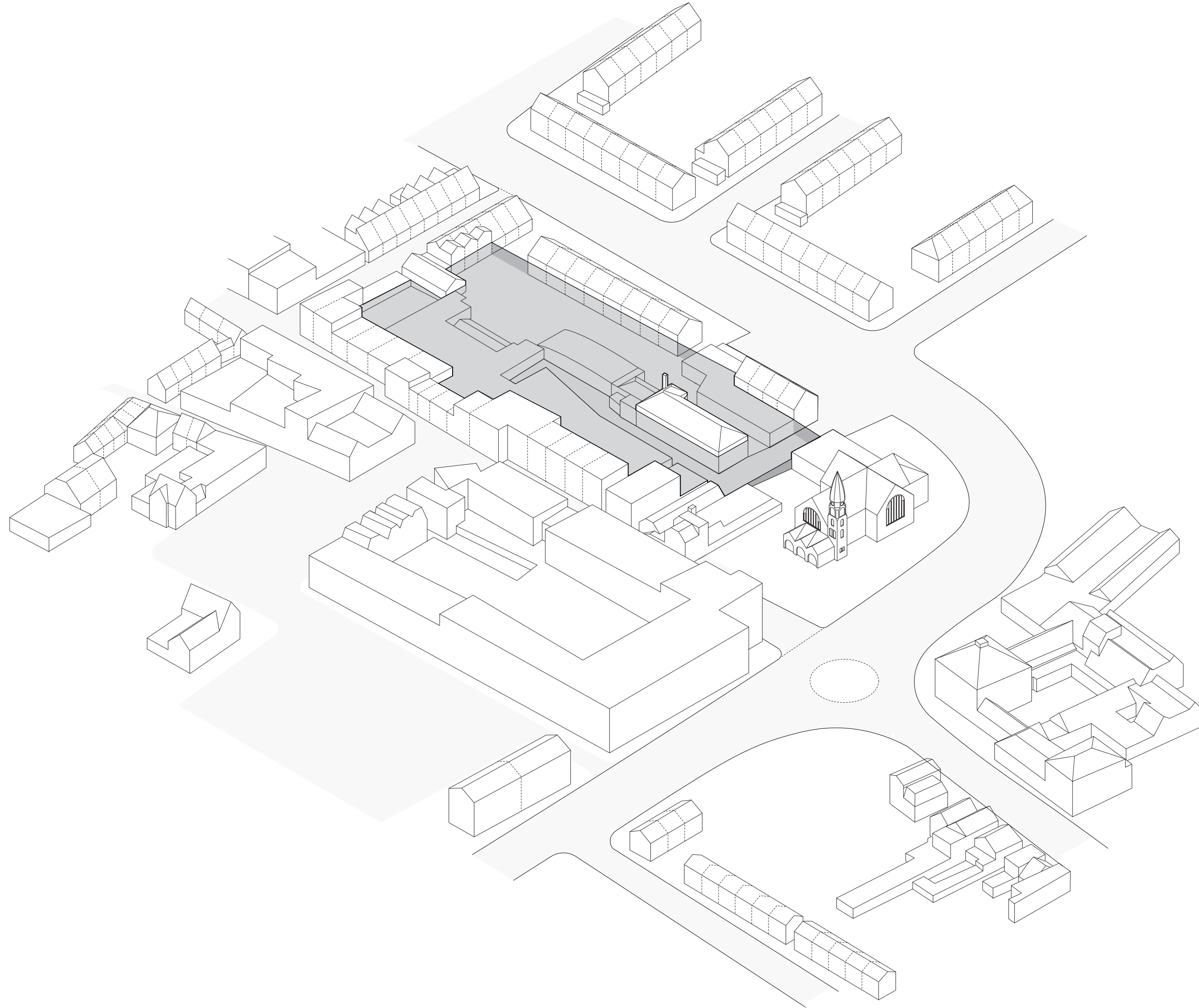






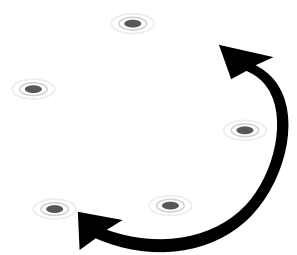
Morphology





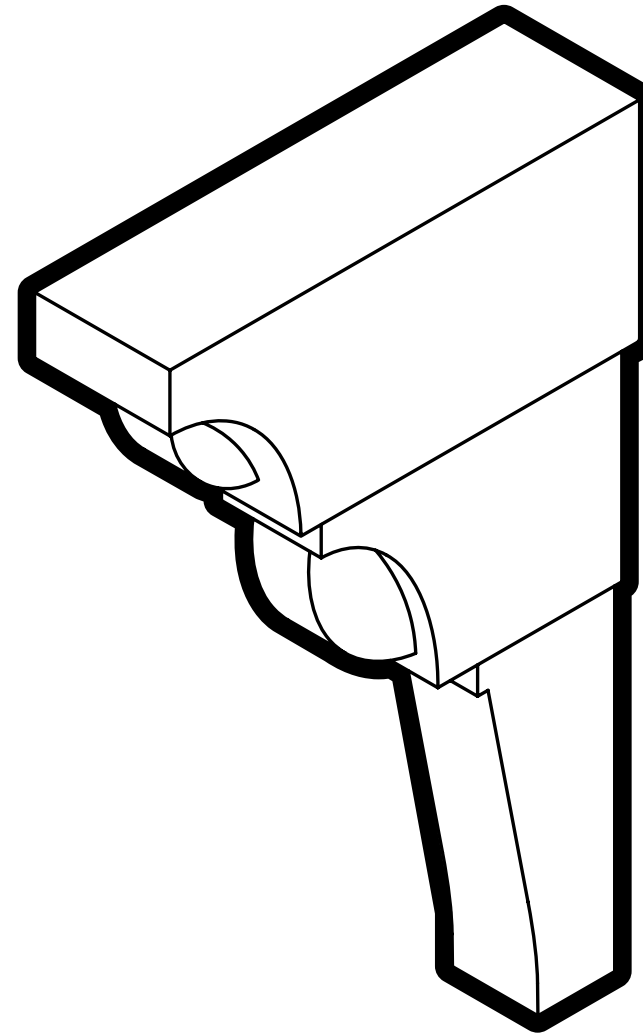


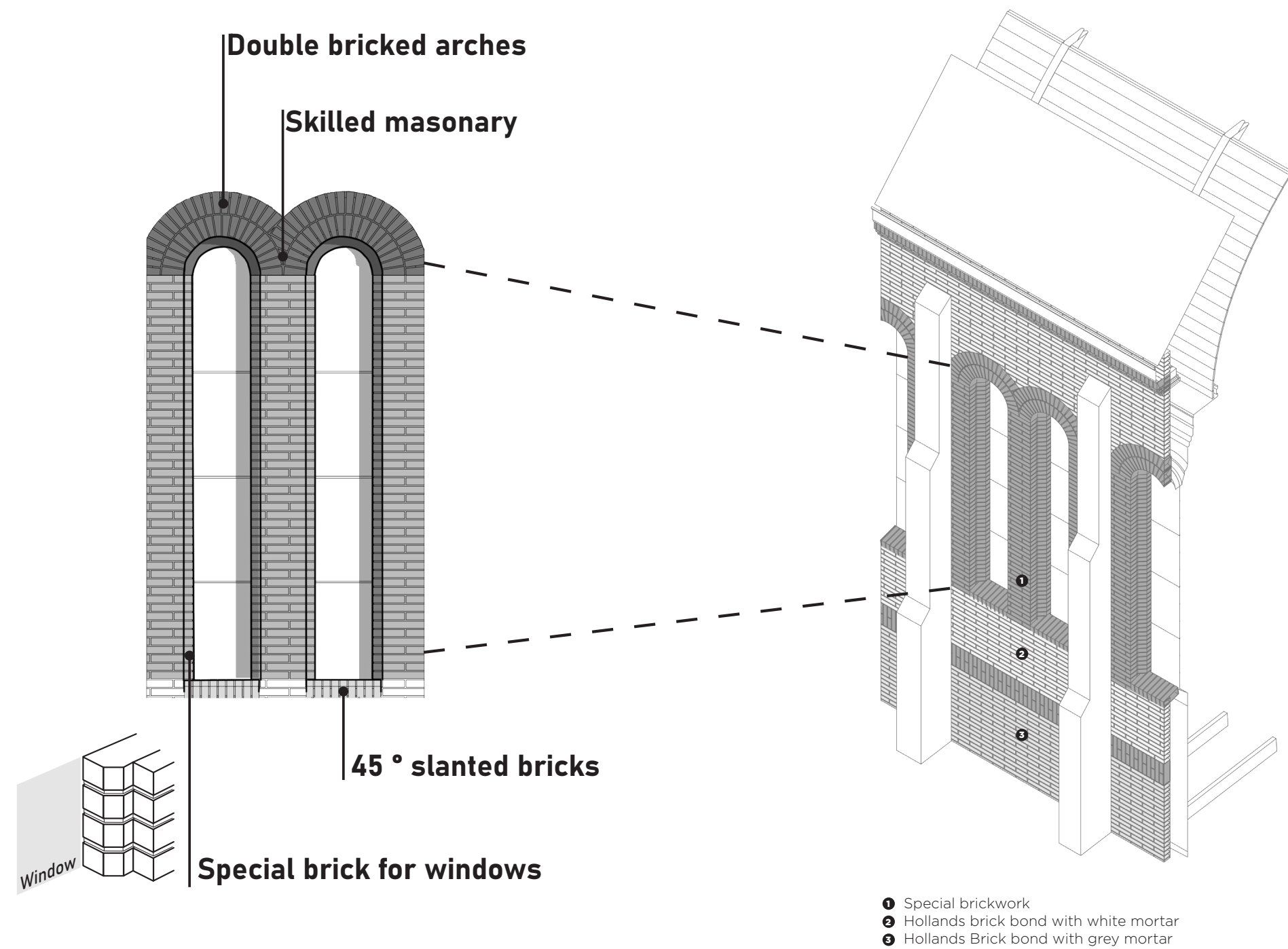
Overslagstraat

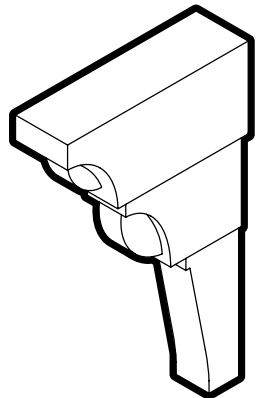


Morphology

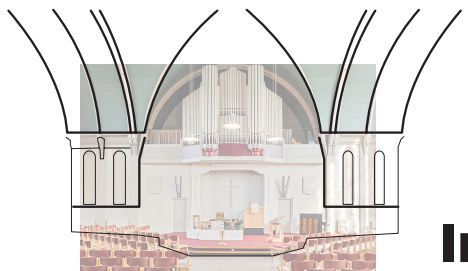
Detail



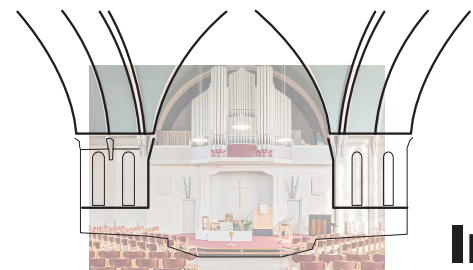




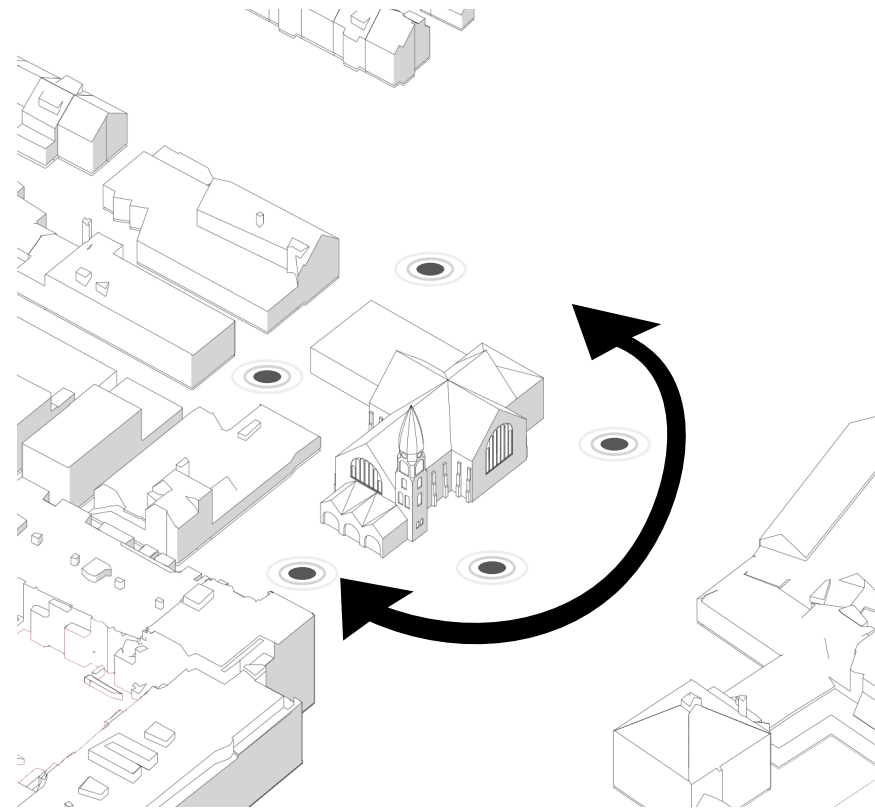
Detail



Interior

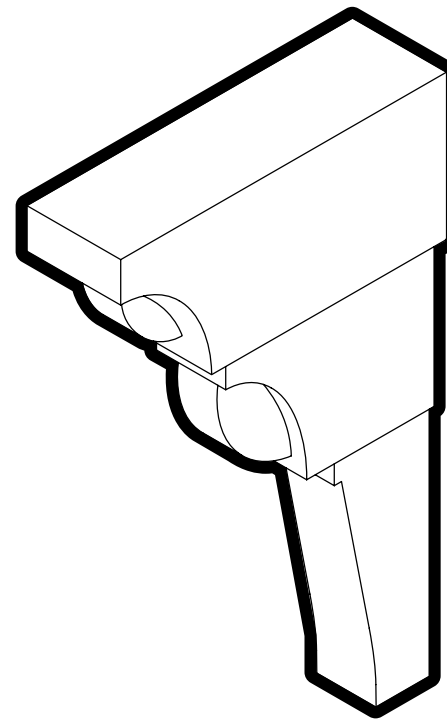


Interior



Morphology

+



Detail

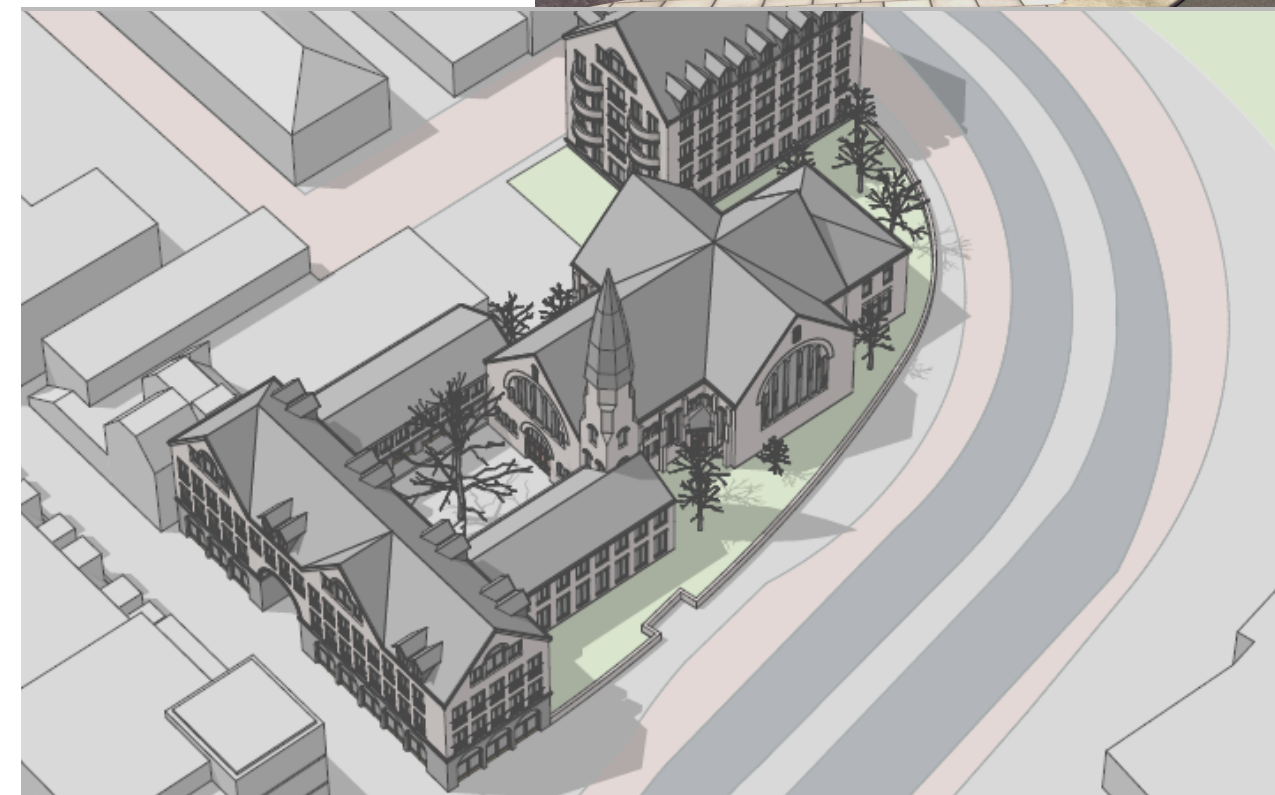
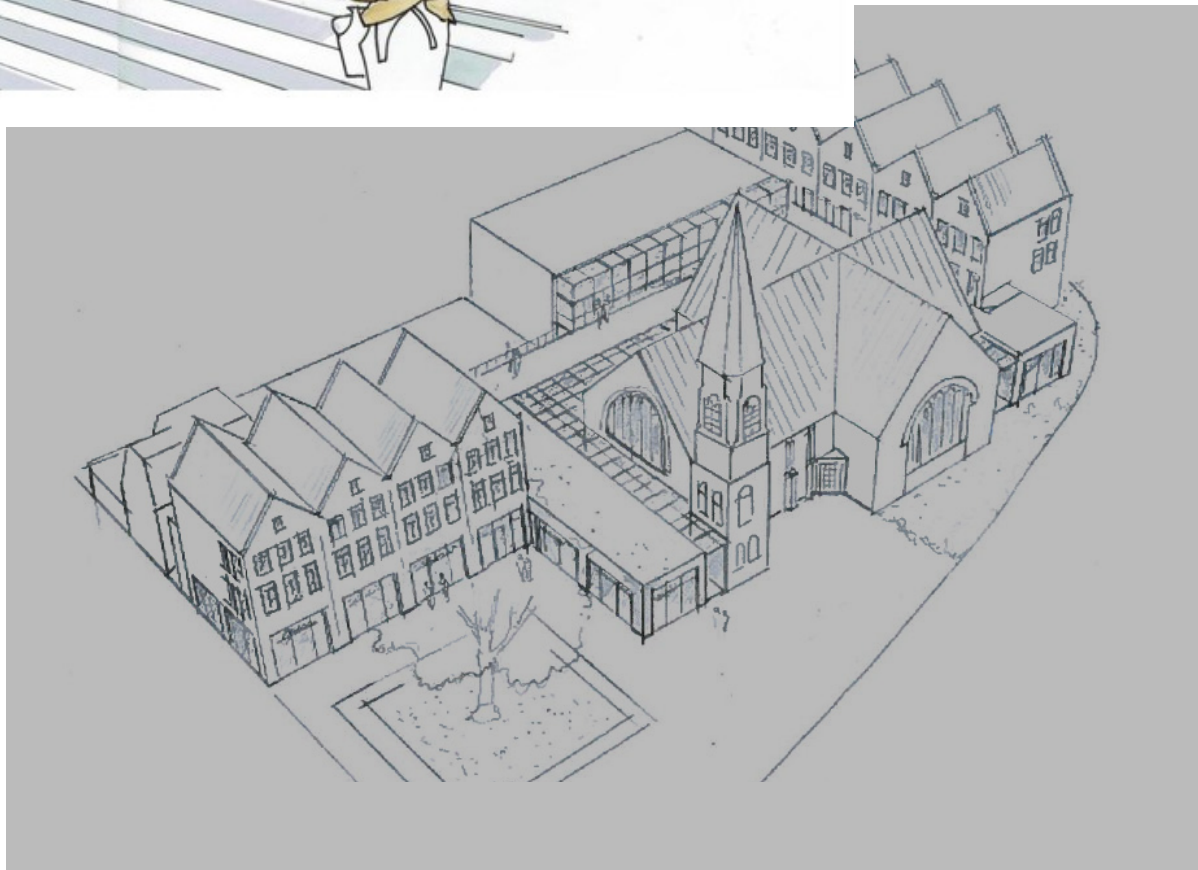
+



Interior



2013-2023



Re-embedding

Serious Game



Research question

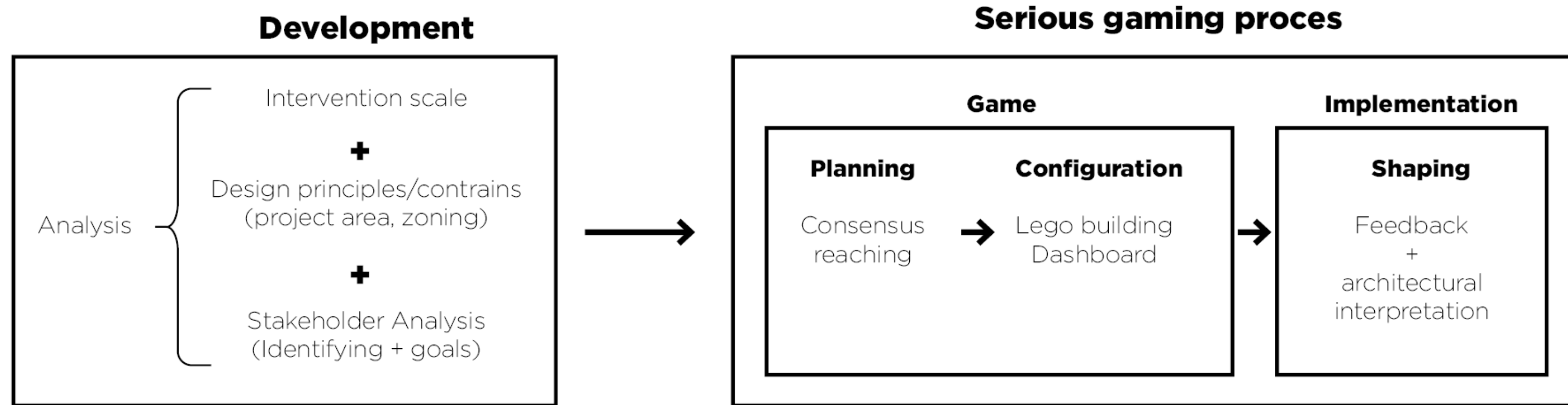
In what way can **serious gaming** contribute to a more **participatory** transformation of **religious heritage**?

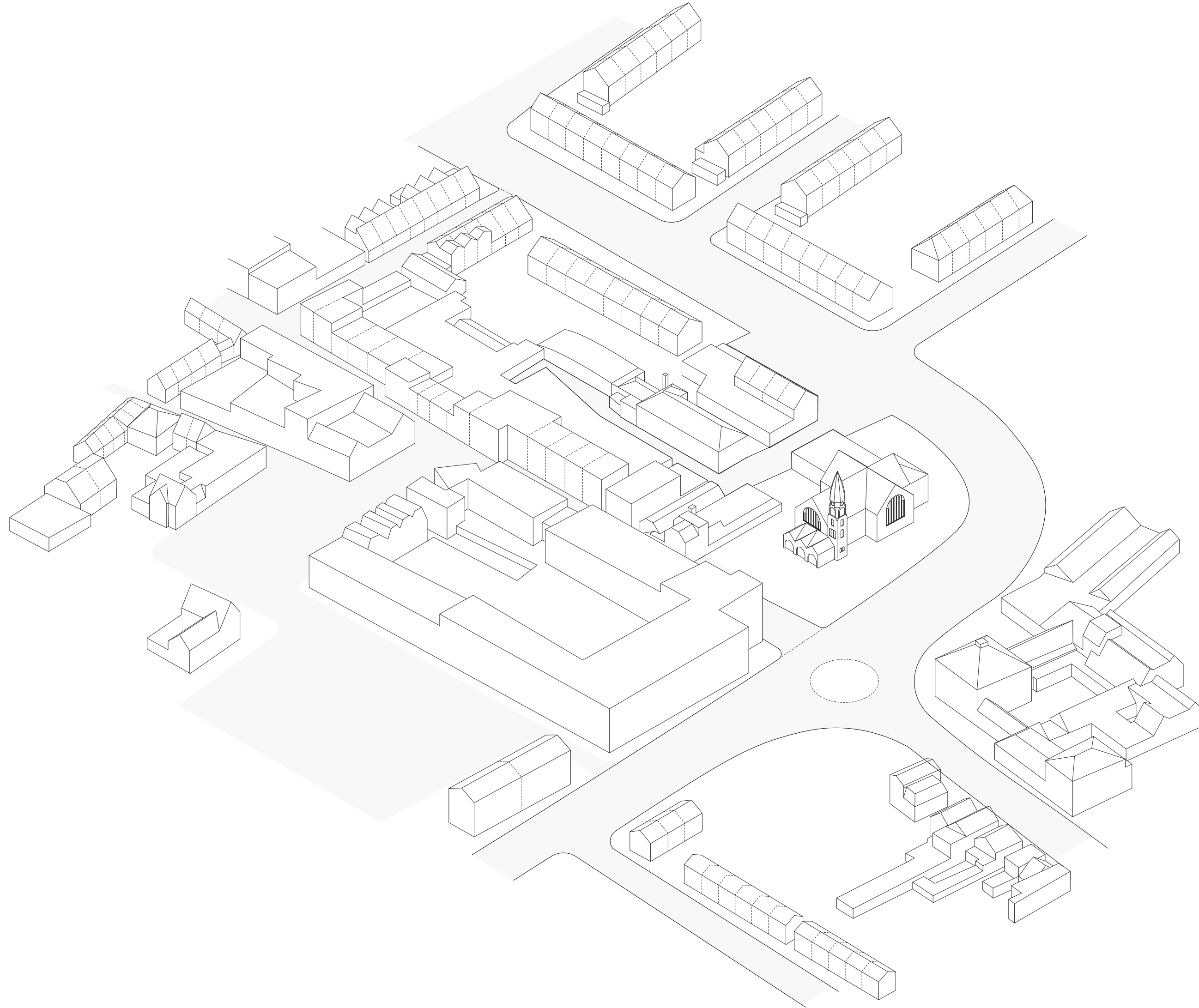
“Design as a Reflective Practice” (Schon, 1983)	“Design as Rational Problem Solving” (Simon, 1996)
Procedural Design	
Computational Design	
Creative Design	Generative Design
Parametric Design	Combinatorial Design
Continuous Variations	Discrete Variations
Inherently Analog	Inherently Digital
Feed-back Optimization	Feed-forward Optimization
Real Parameters (\mathbb{R}^3)	Integer Parameters (\mathbb{Z}^3)
Geometric Variation/Evolution	Topological Variation/Evolution
Integrated Products	Modular Products

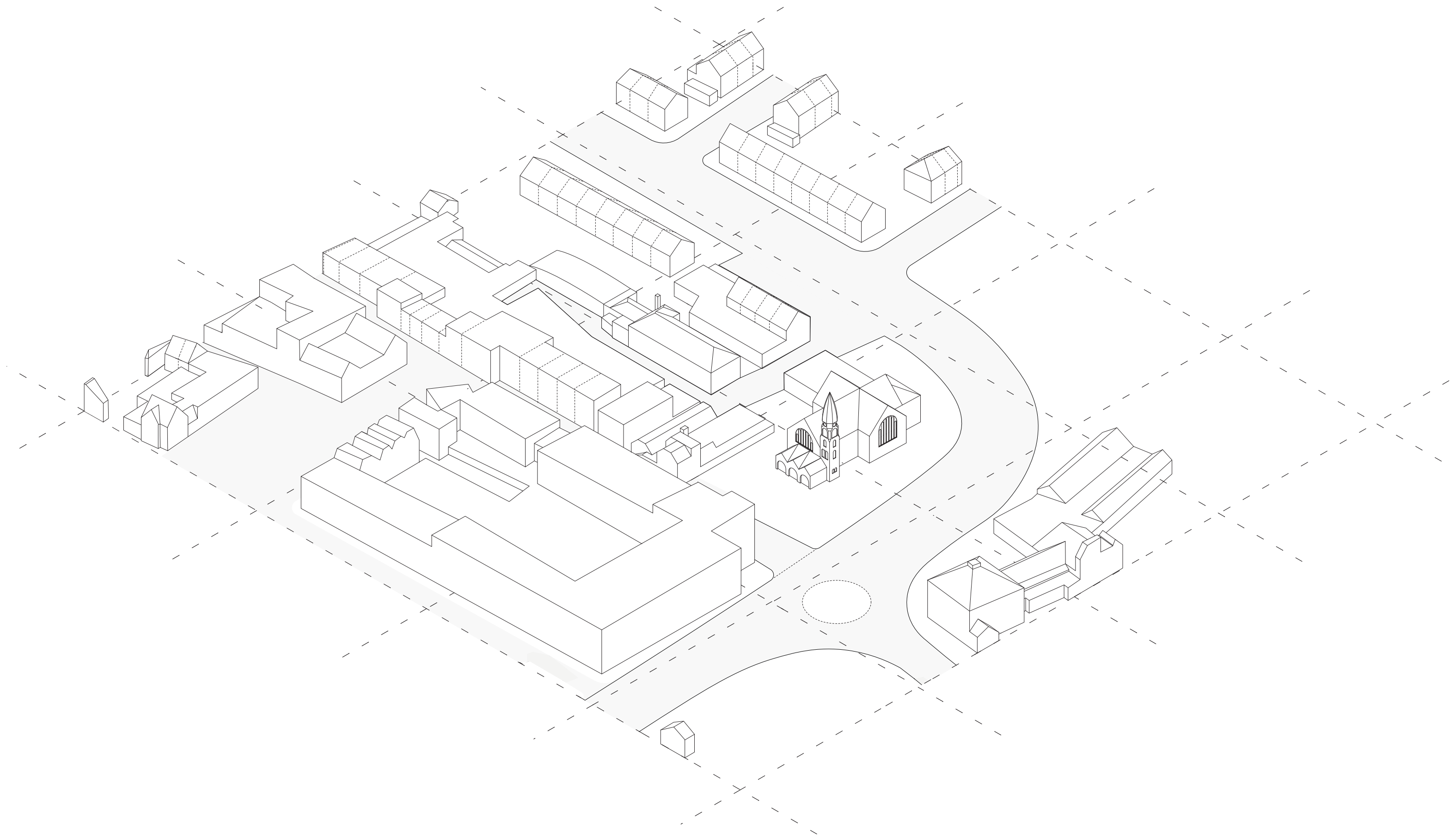
Planning

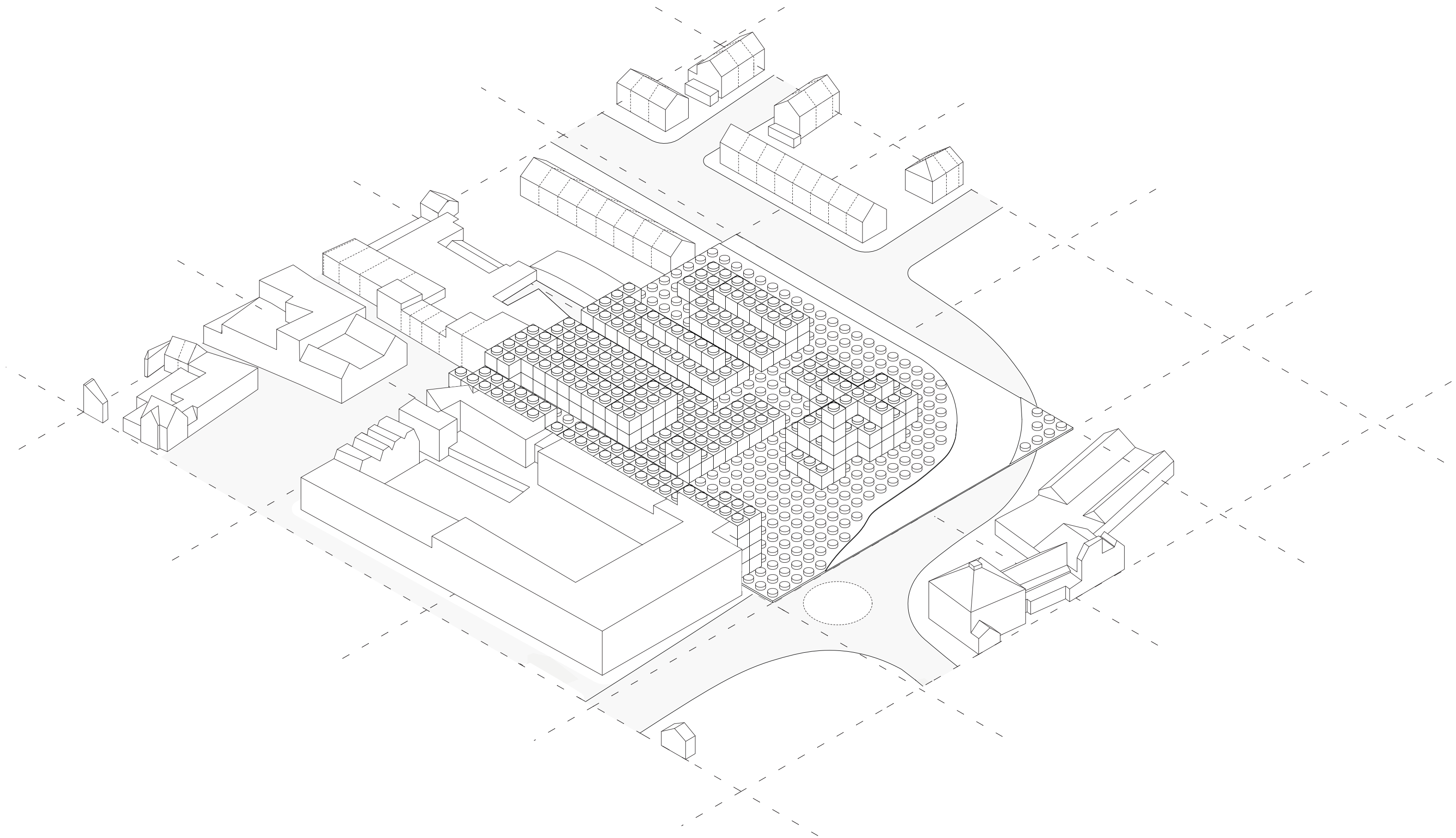
Configuration

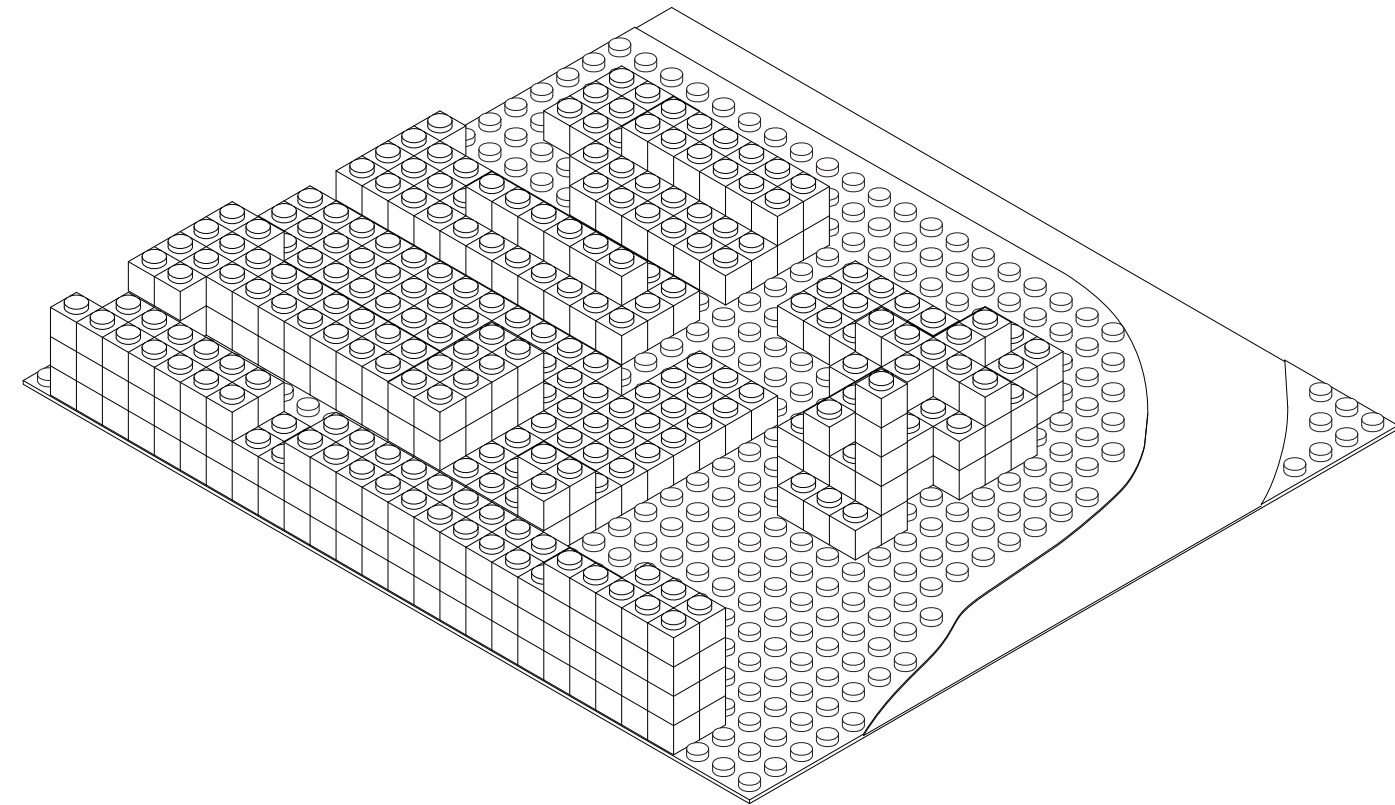
Shaping

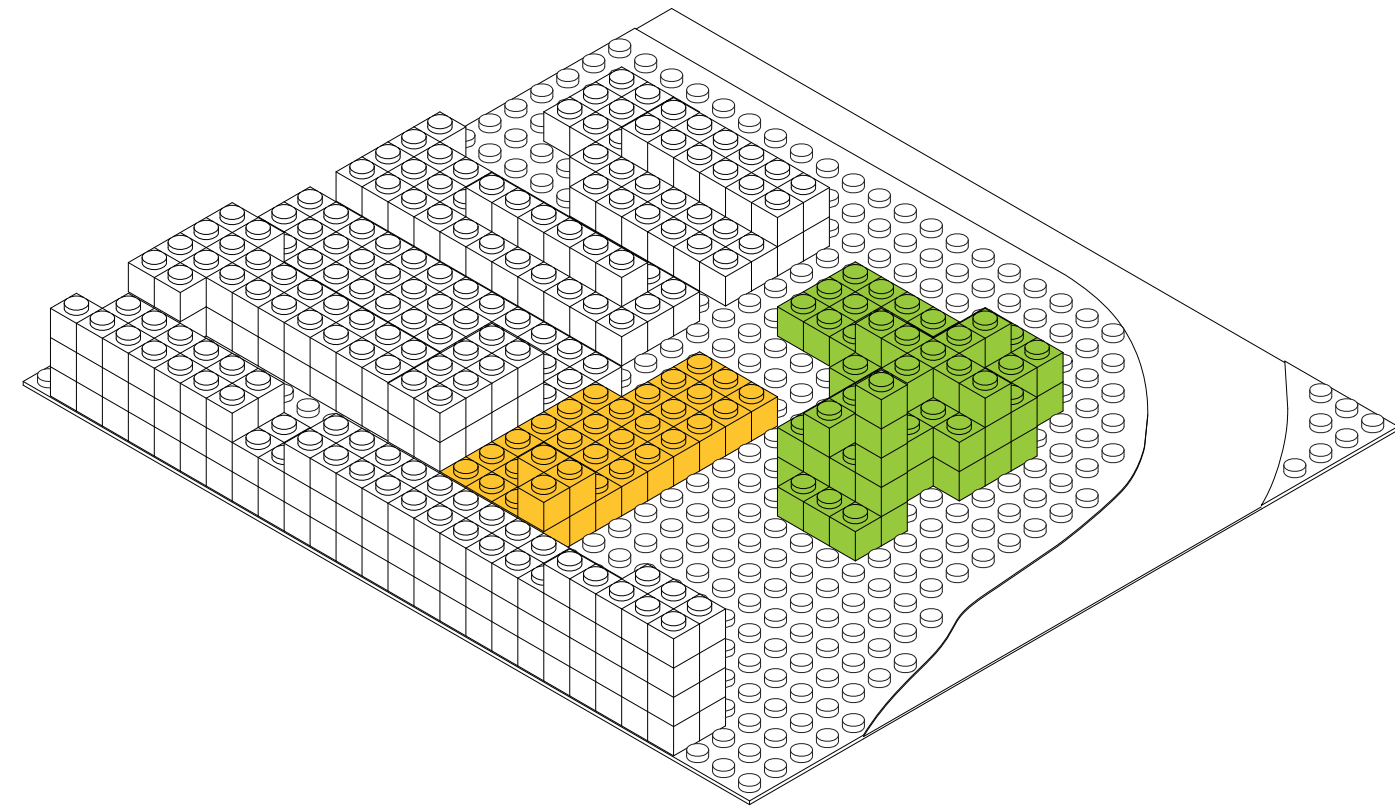




















Project Developer



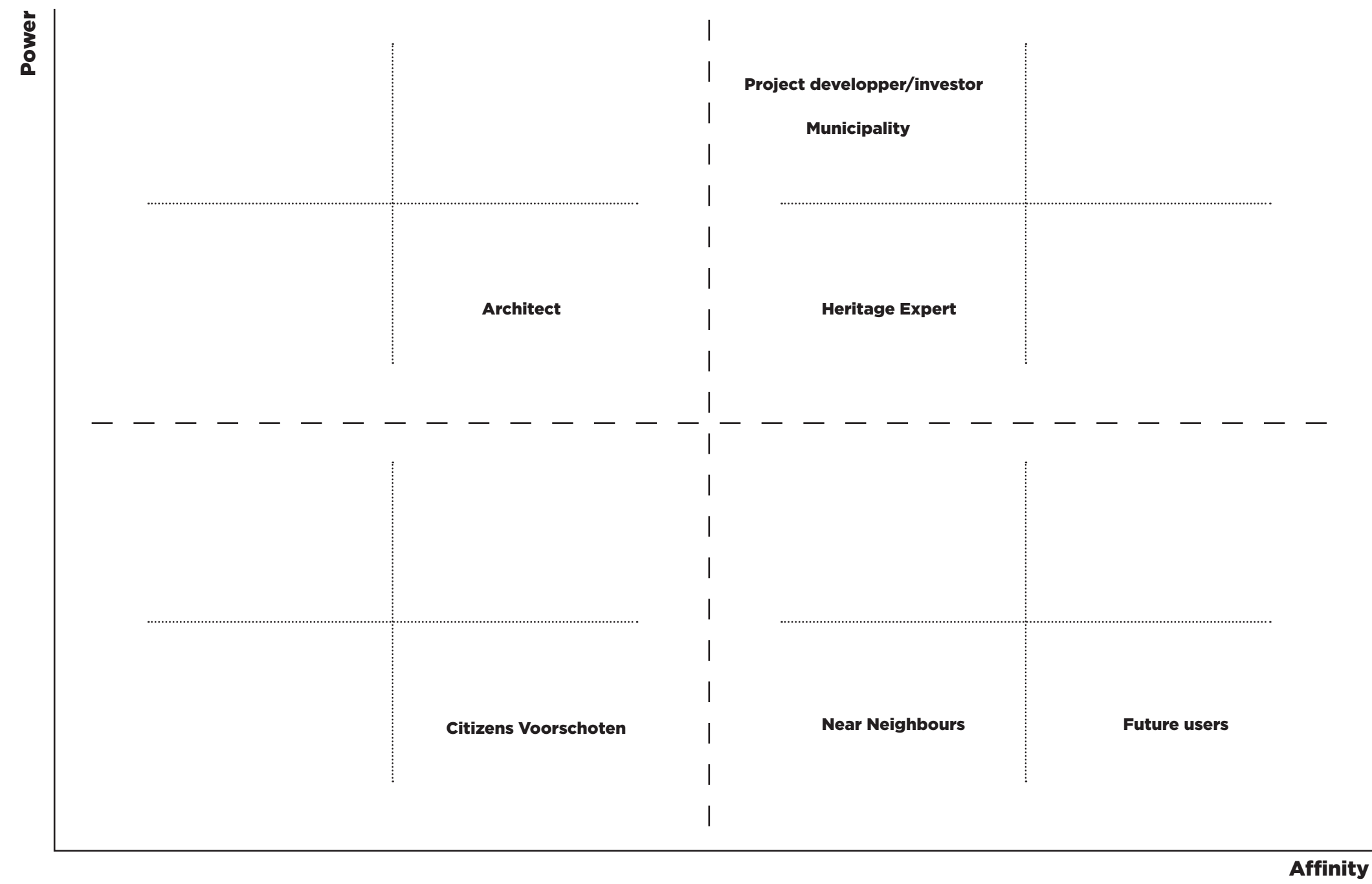
Project developer

Zone 1

	Residential, social housing	10%
	Residential	60%
	Commercial	10%
	Cultural	0%
	Public	0%
	Empty	20%

Goals. function

Power & Interest



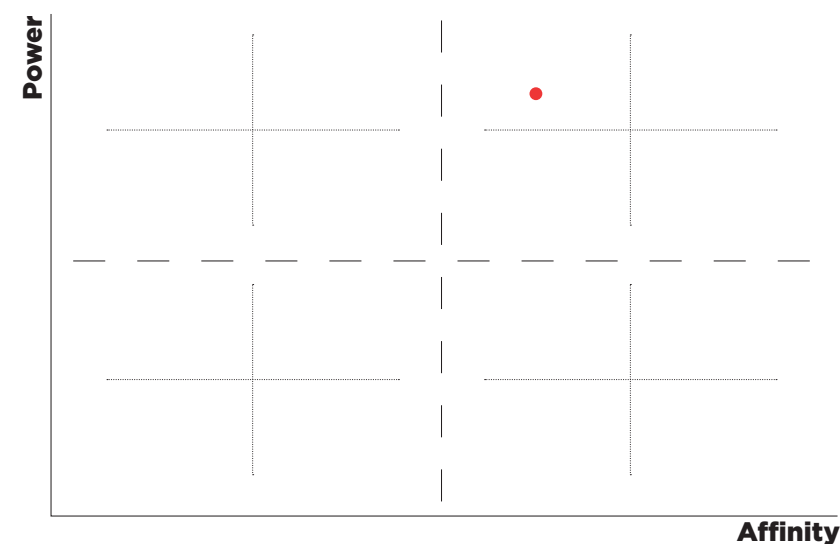


Project Developer

Introduction

What is at stake for you?

- I want **many apartments**
- **Few** of them **social housing**
- I **don't really care** about the church(i cant do a lot with it for it has a monumental status)
- The plan **must go on** i invested a lot!
- As less as possible commercial space(due to high vacancy)



Project developer Zone 1

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Project developer Zone 2

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Project developer Zone 3

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Project developer Zone 4

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Conflict

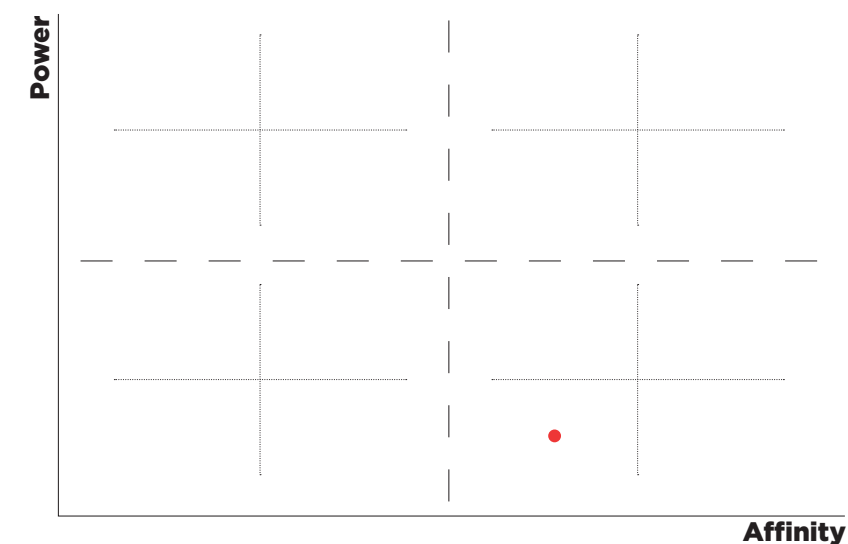


Neighbour

Introduction

What is at stake for you?

- The **square** must stay
- The **tree** is really nice and brings nature in to my house
- The **view on the park** is also really important
- Although i'm not a believer the church gives the square a **nice atmosphere**
- As it is **right now it is fine**, maybe a new Aldi would be nice.
- And **new shops** would also make Voorschoten more vibrant



Neighbour Zone 1

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Neighbour Zone 2

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

Goals.
function

Neighbour Zone 3

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

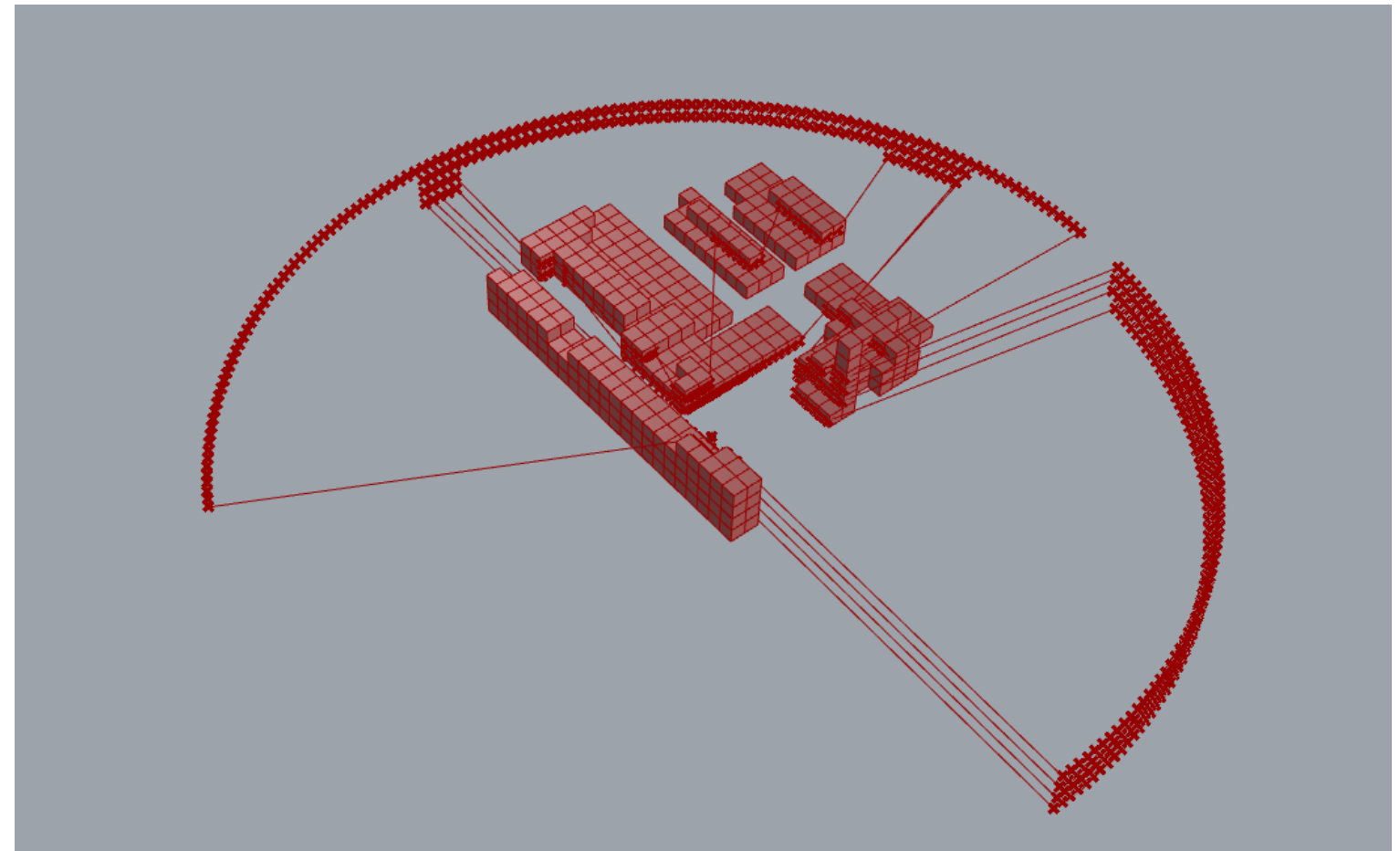
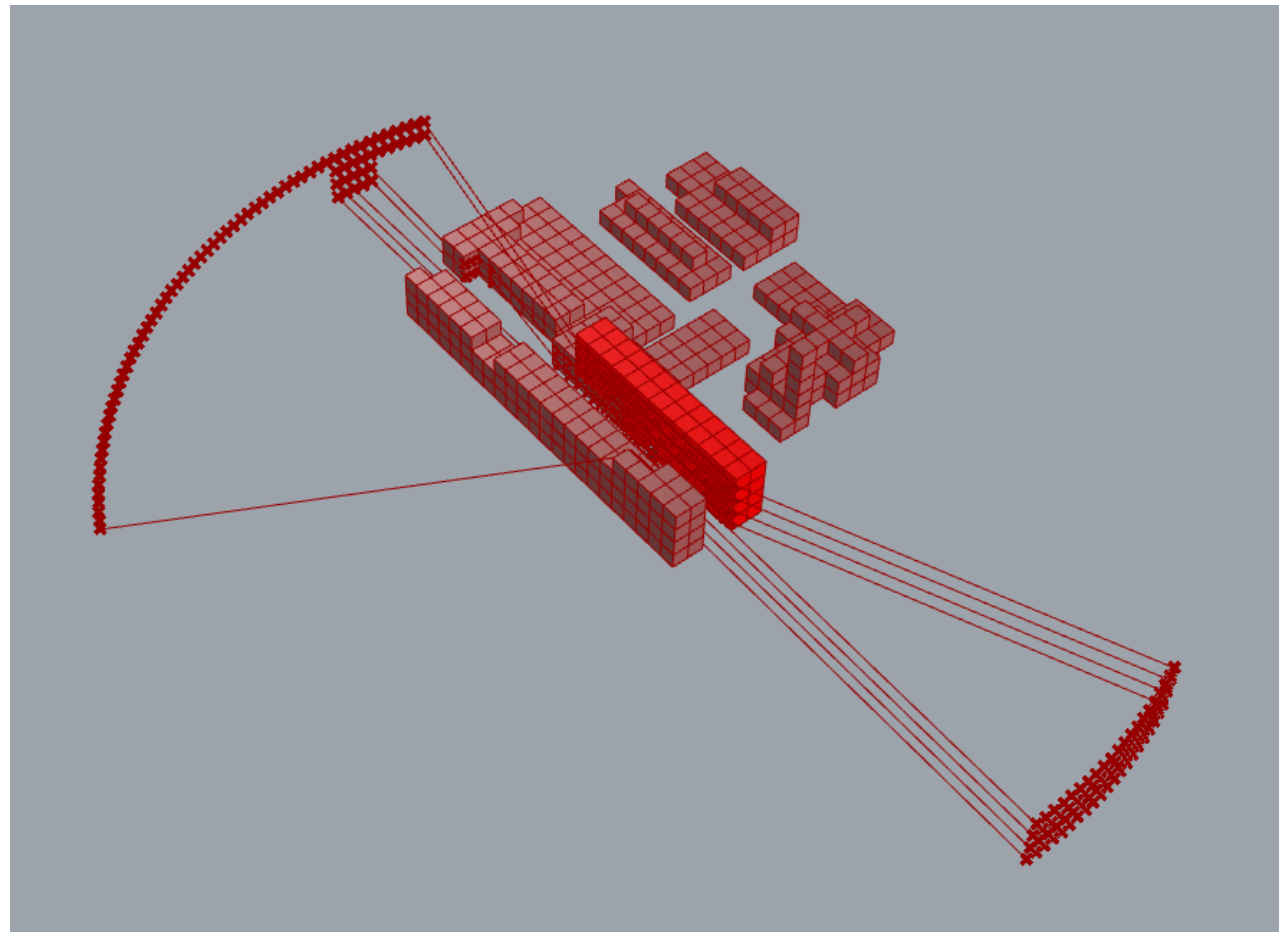
Goals.
function

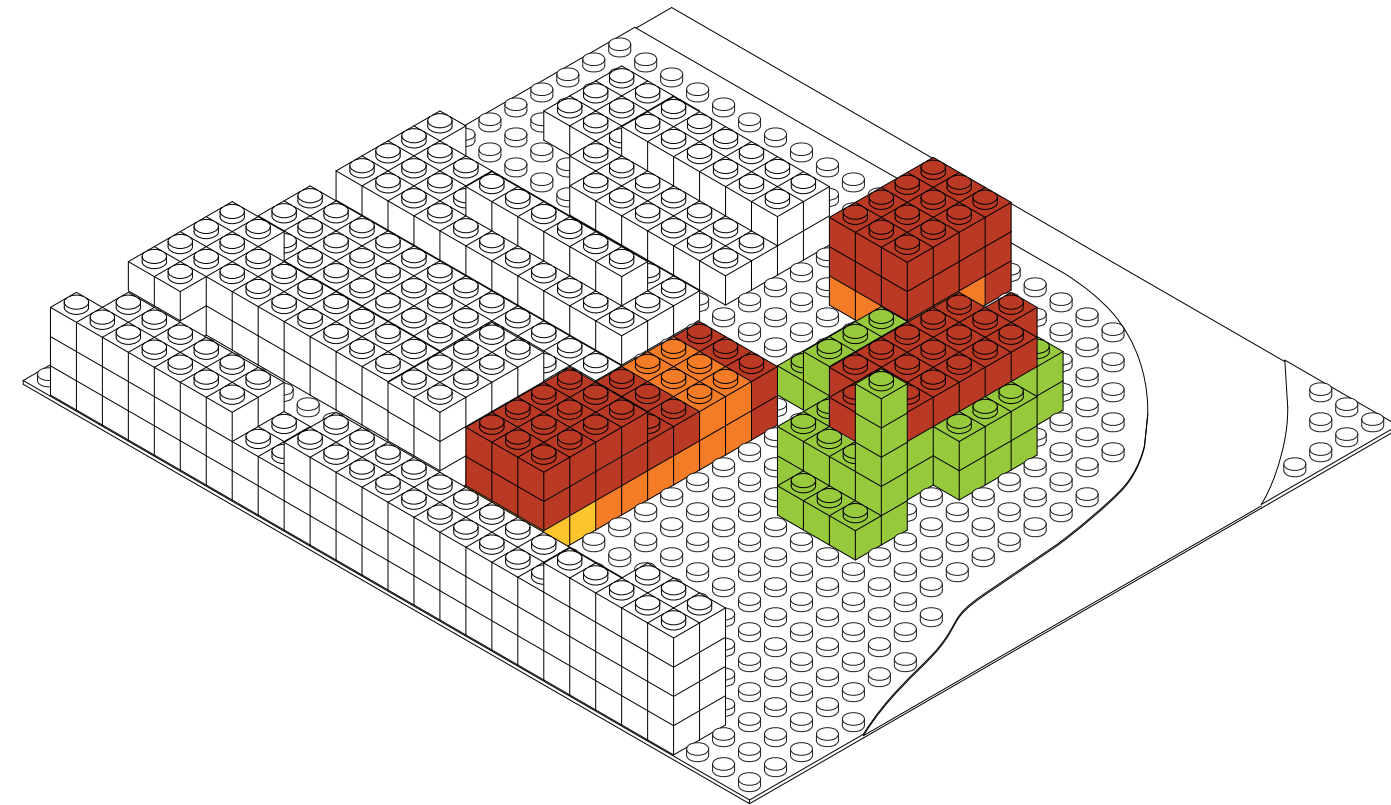
Neighbour Zone 4

Residential, social housing	10%
Residential	60%
Commercial	10%
Cultural	0%
Public	0%
Empty	20%

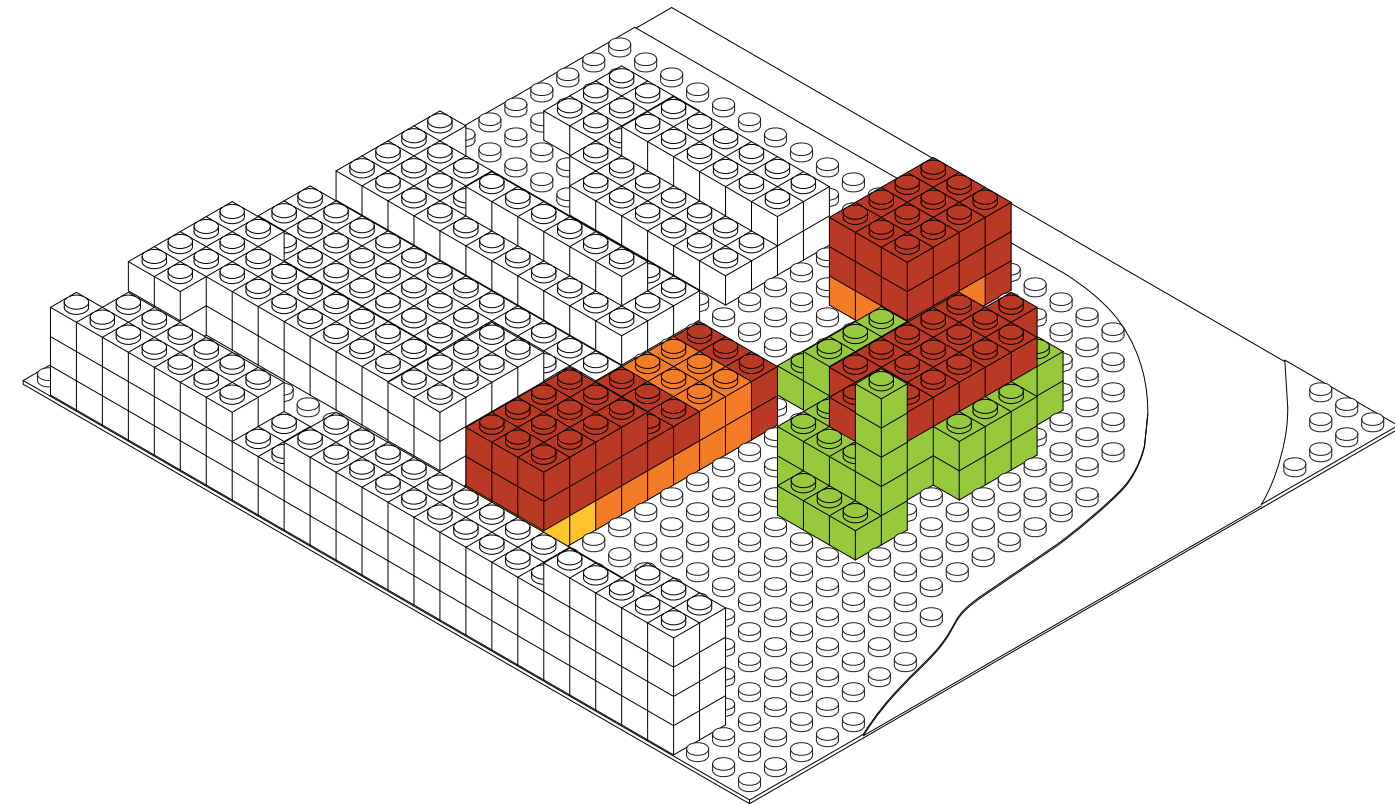
Goals.
function

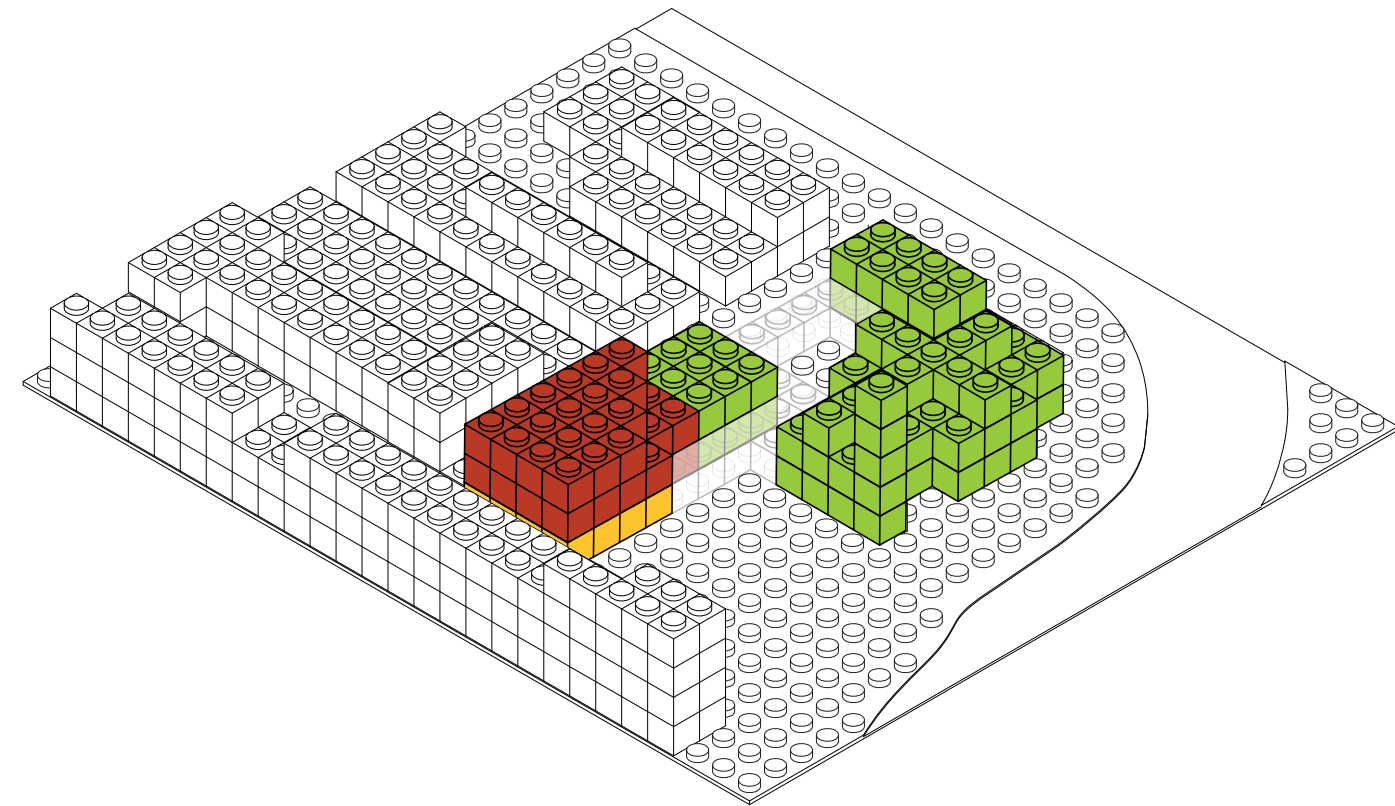


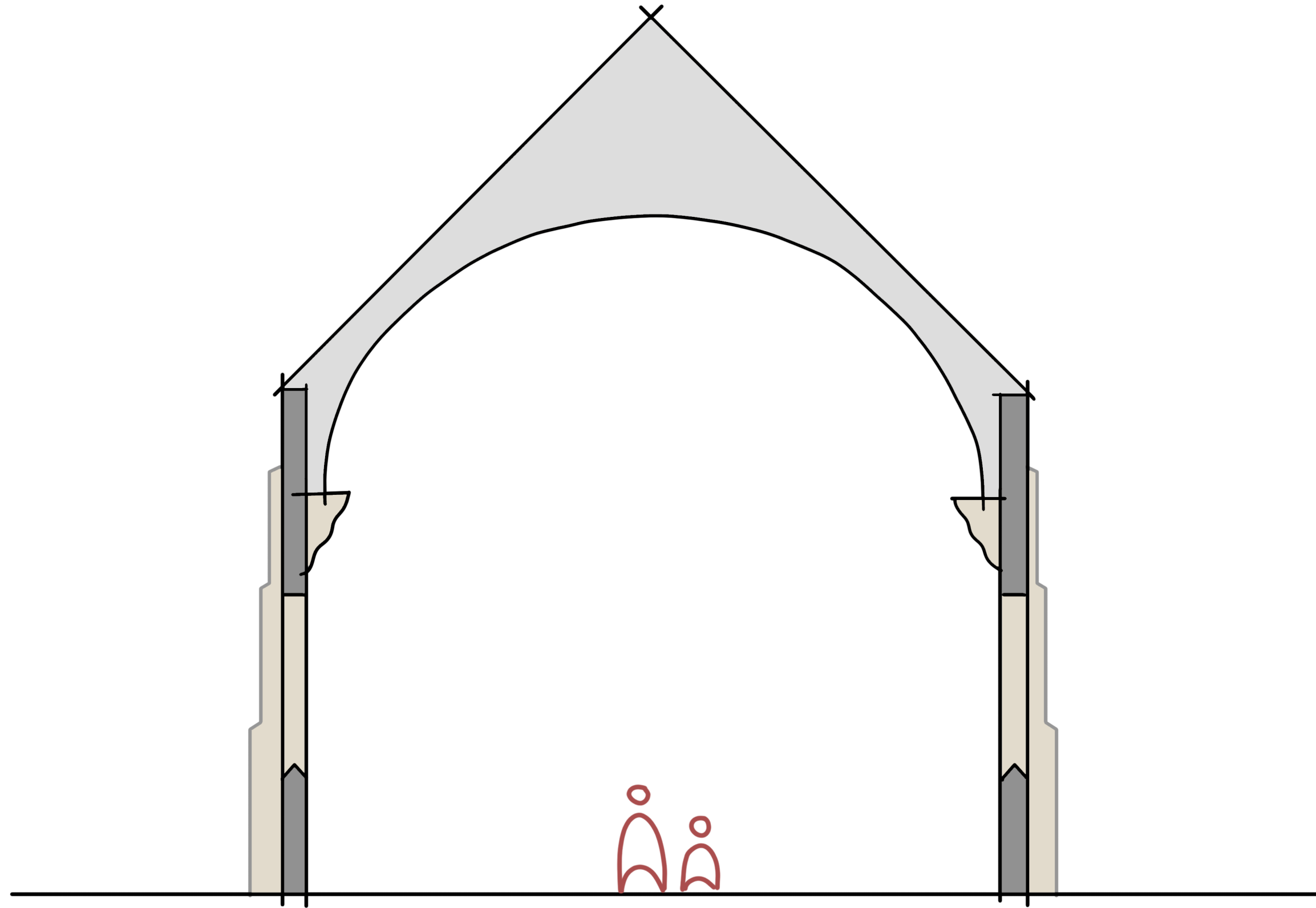


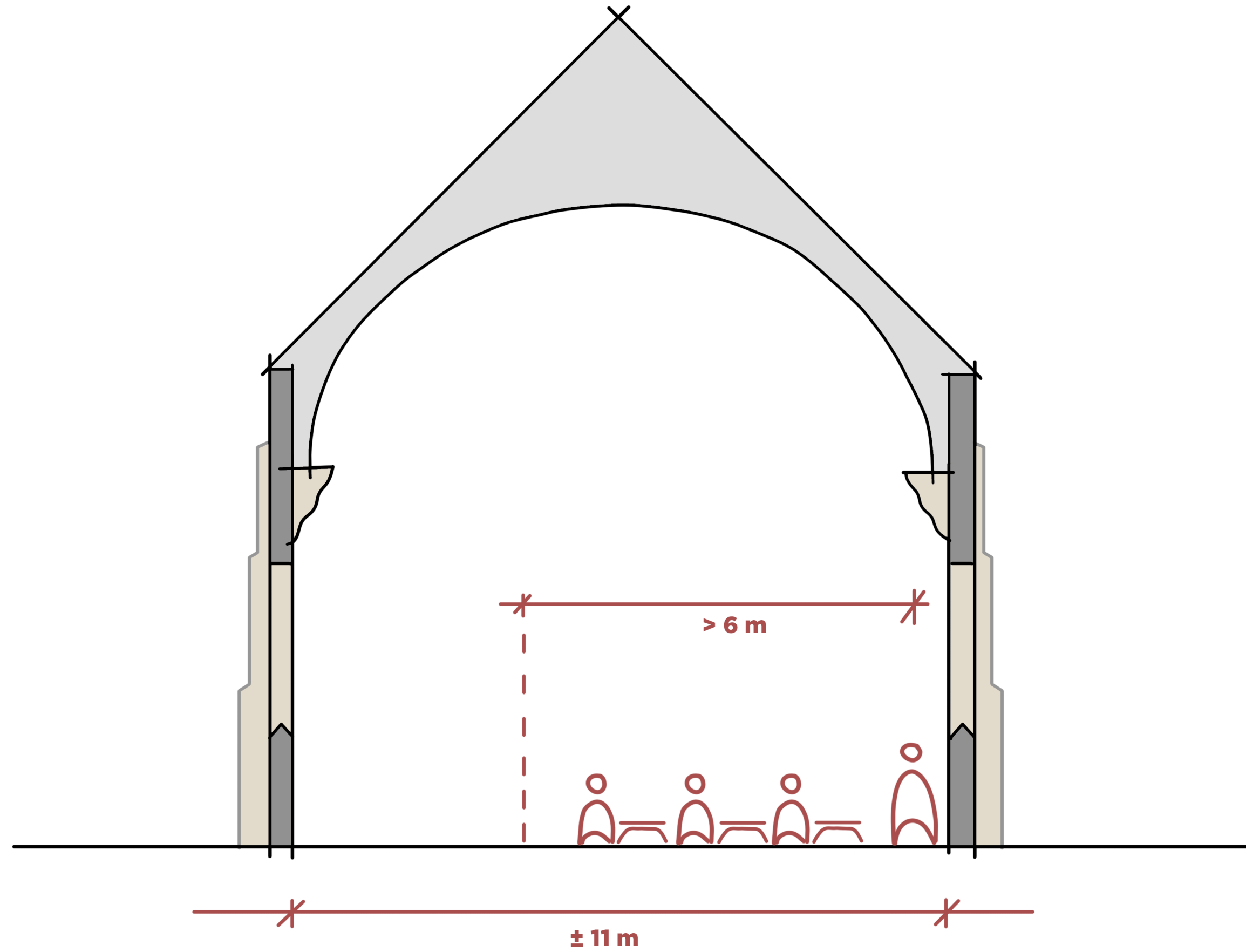


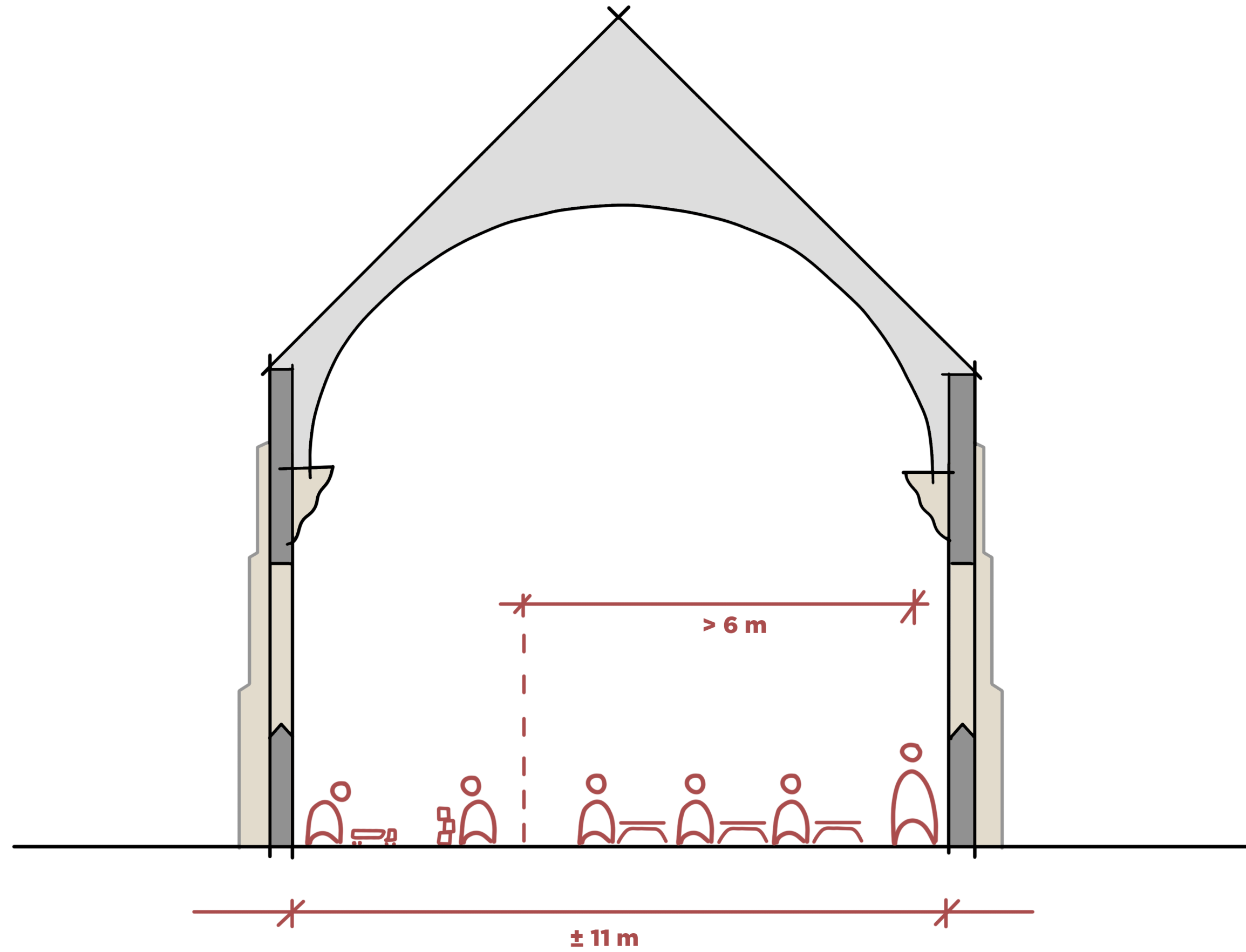
Implementation

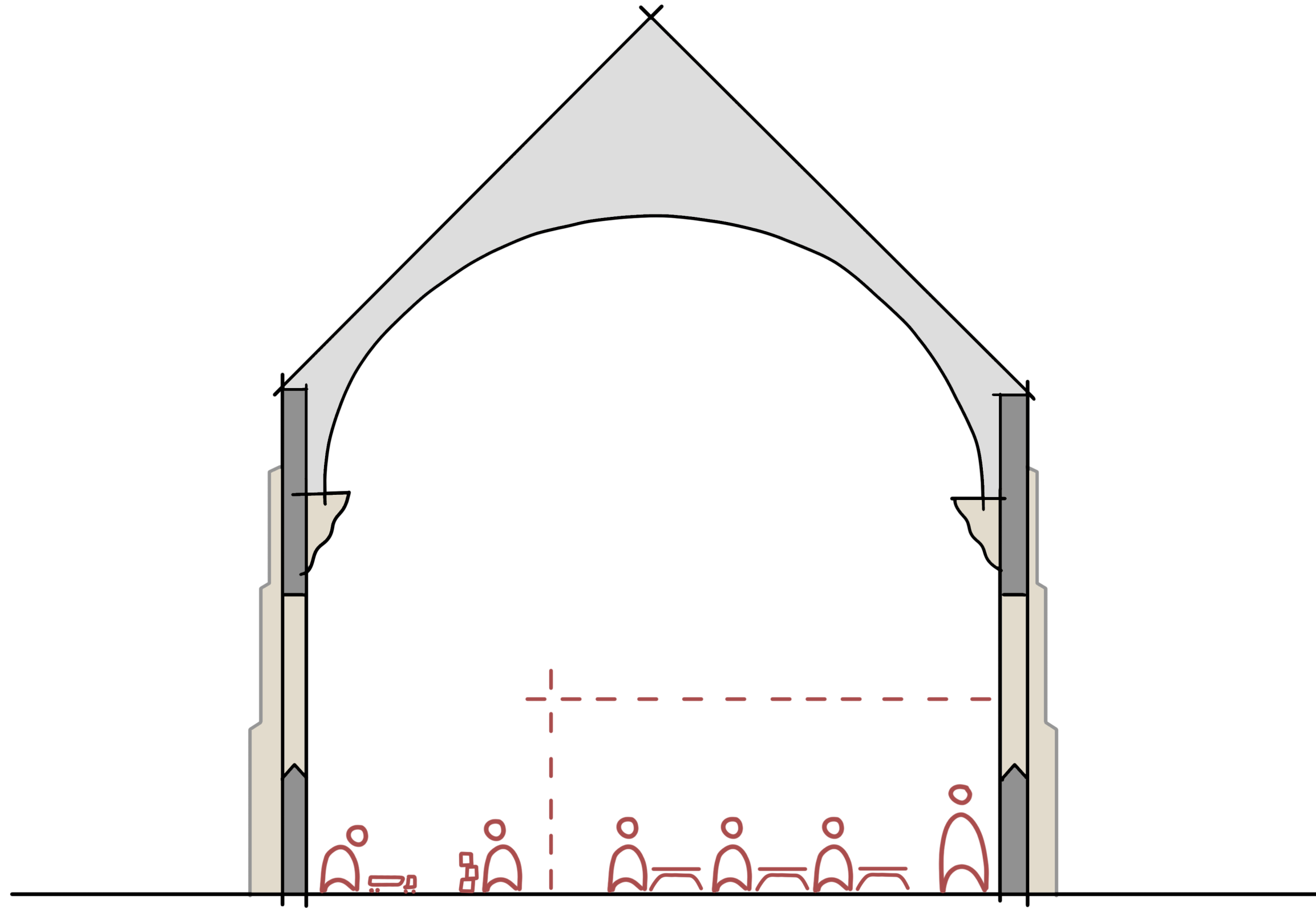


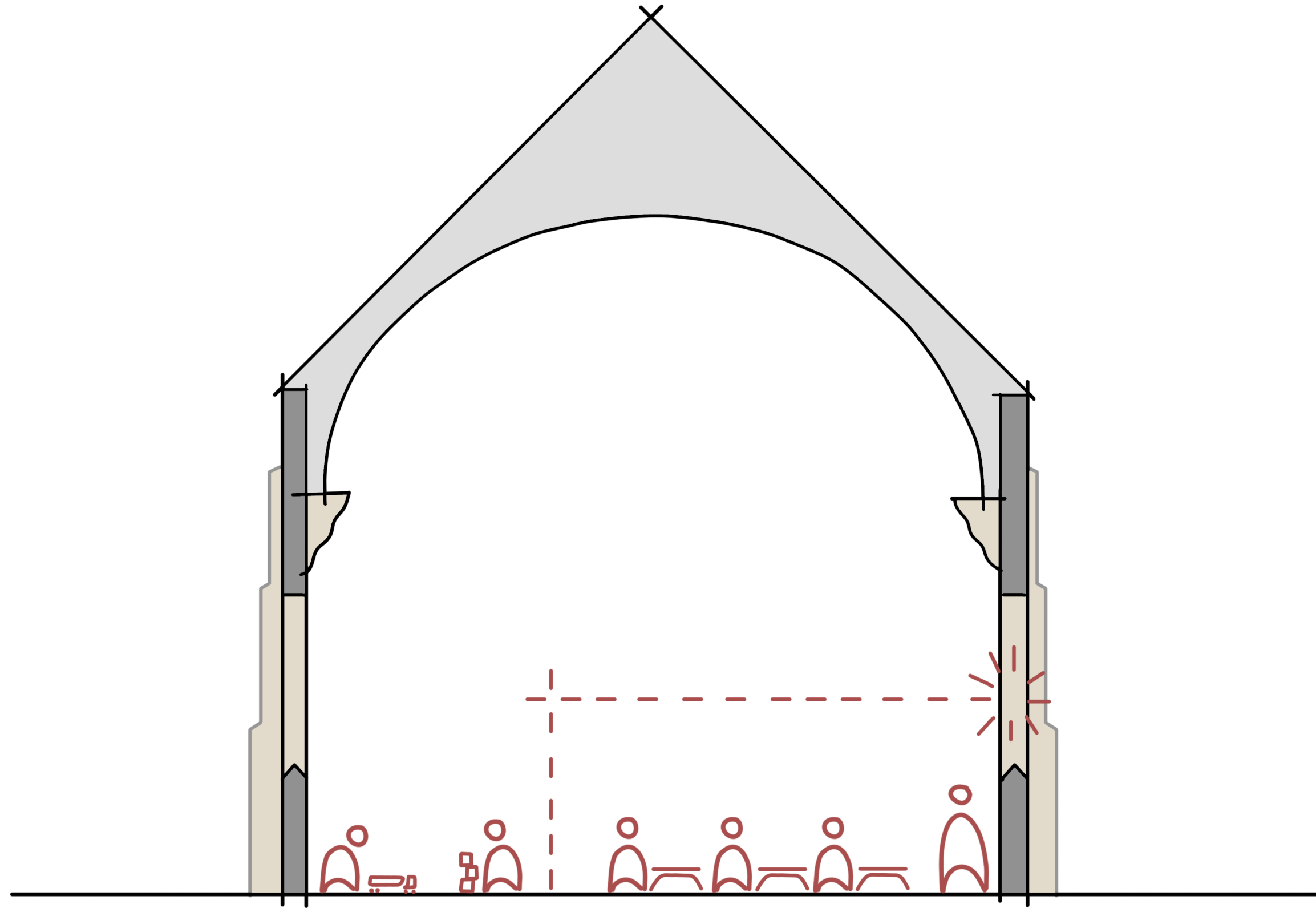


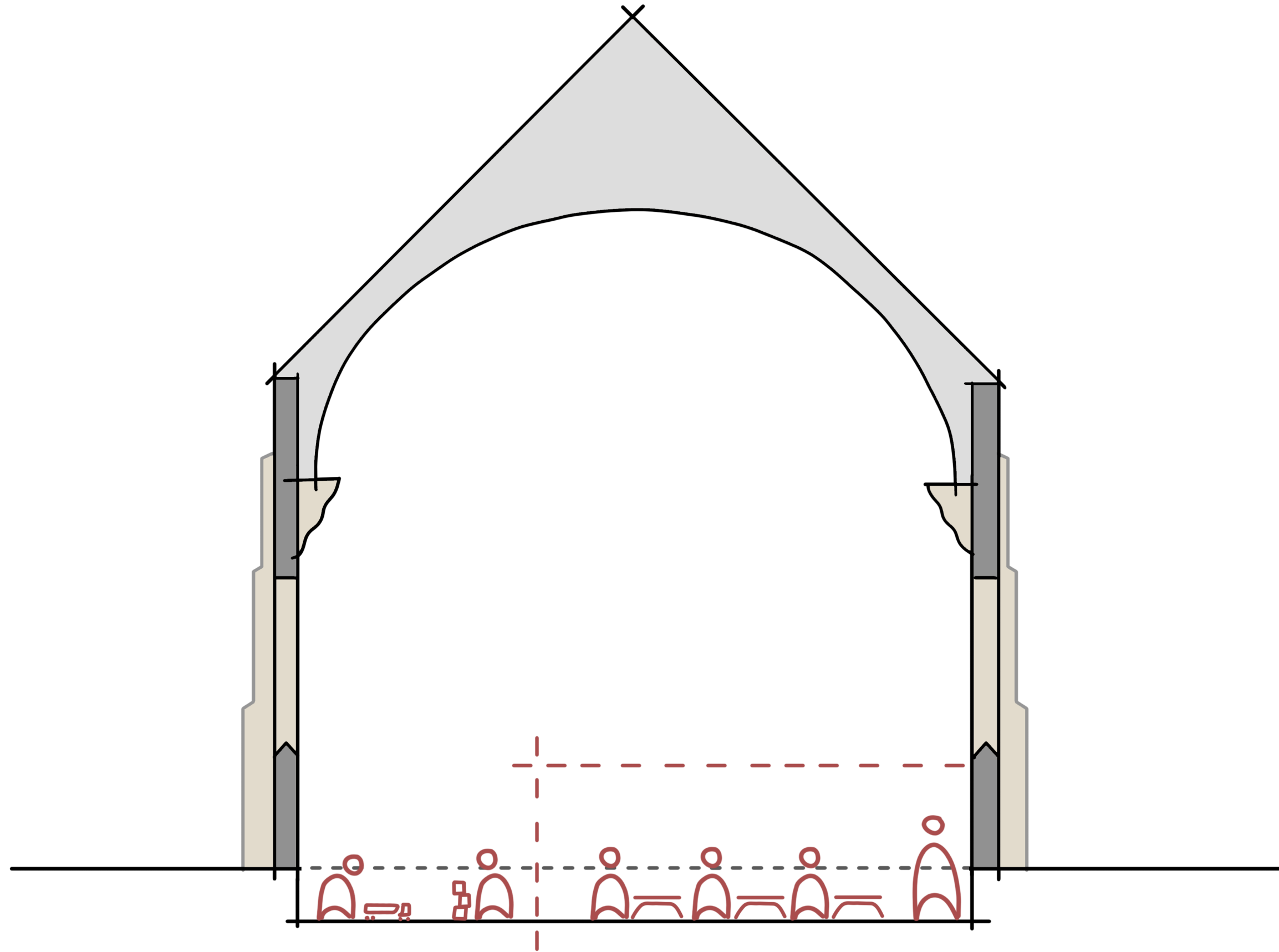


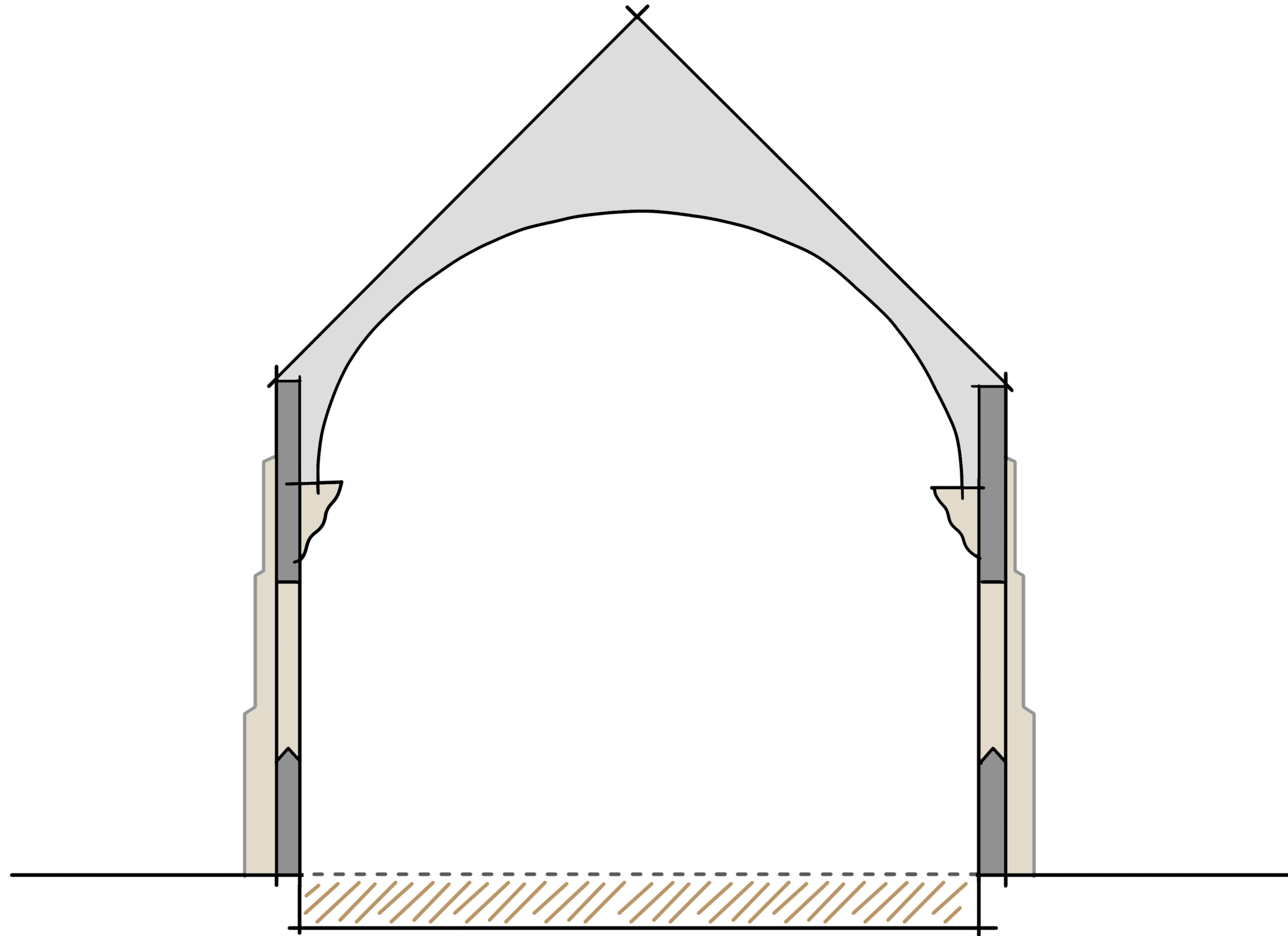


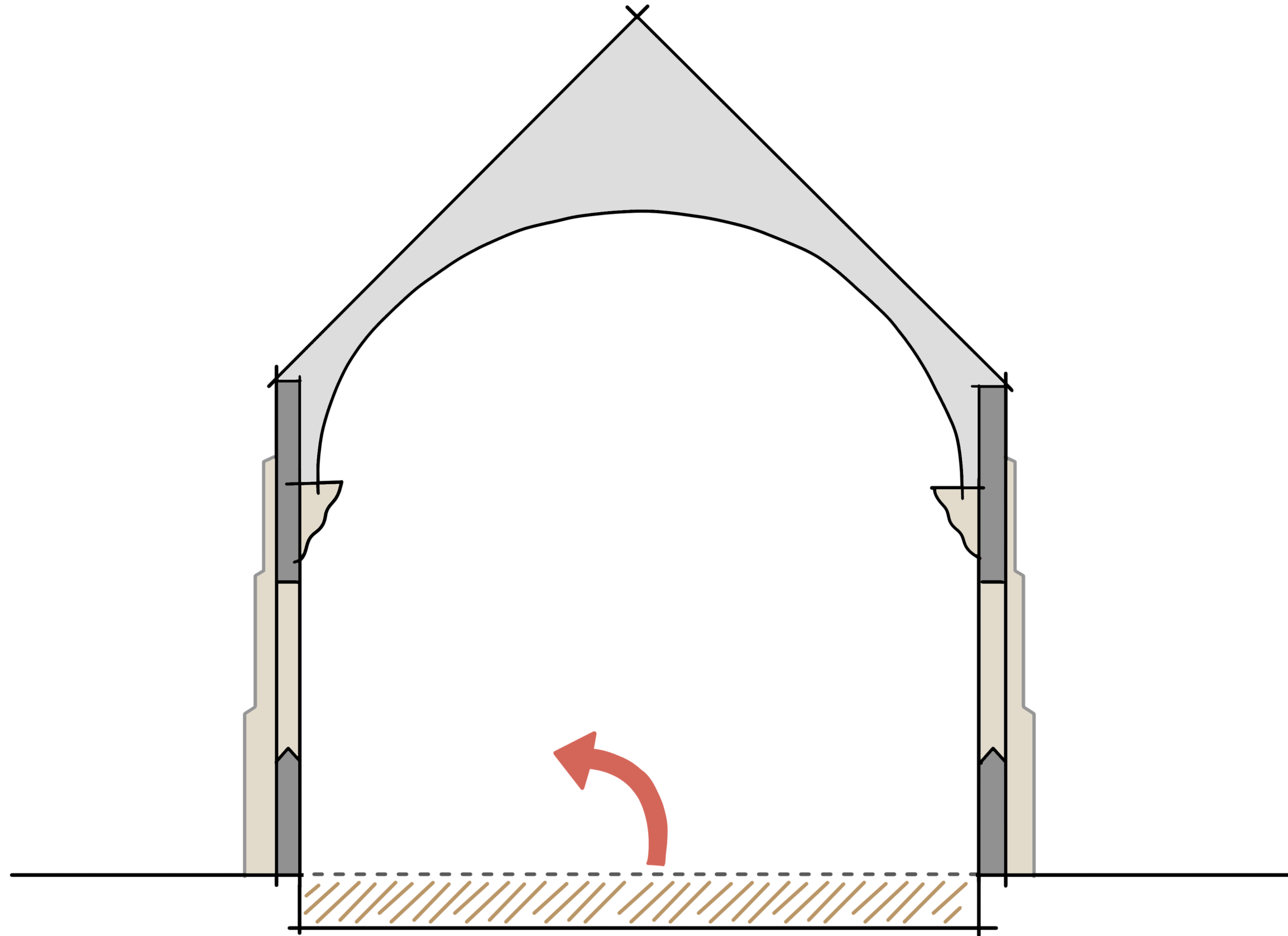


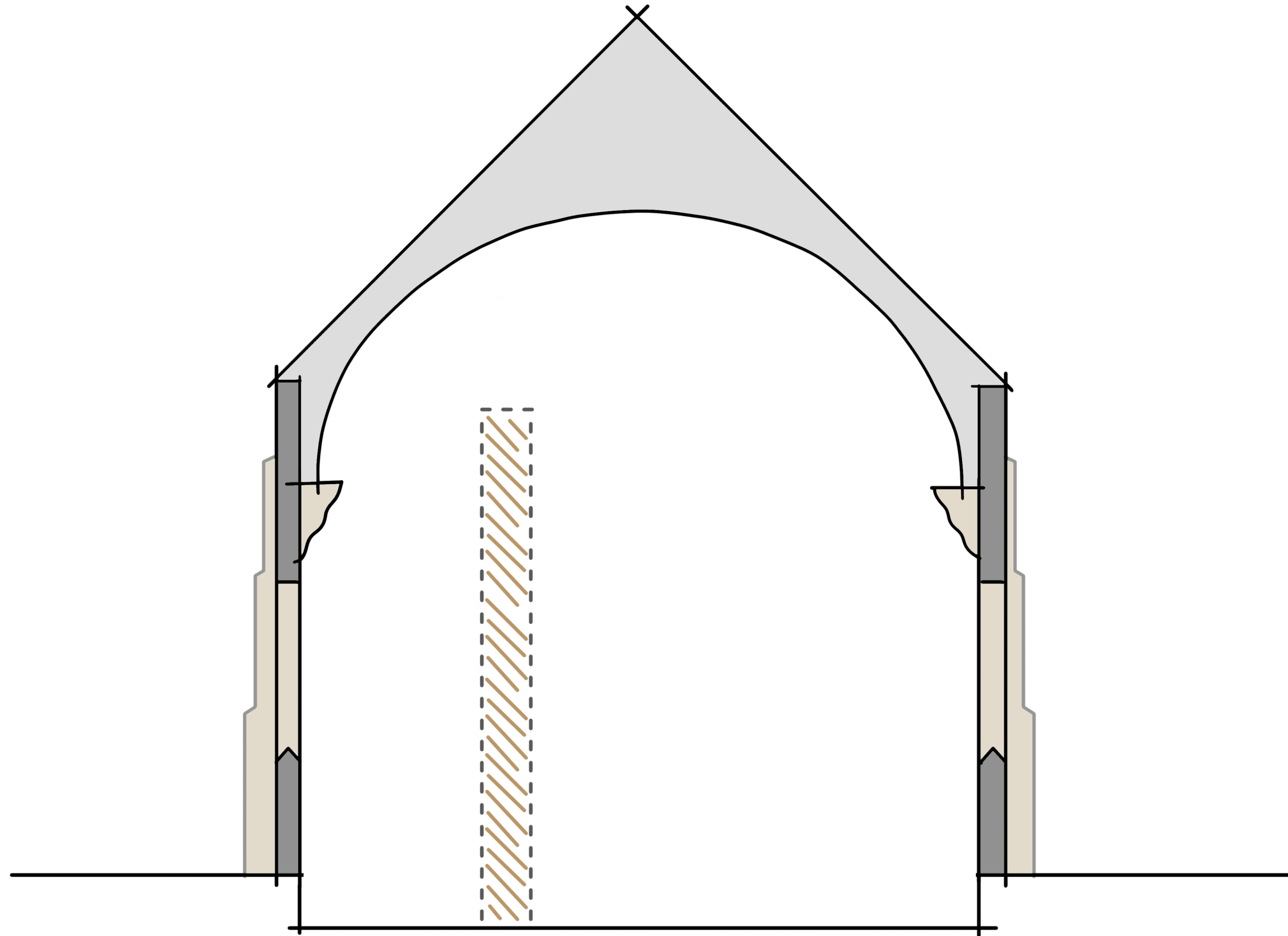


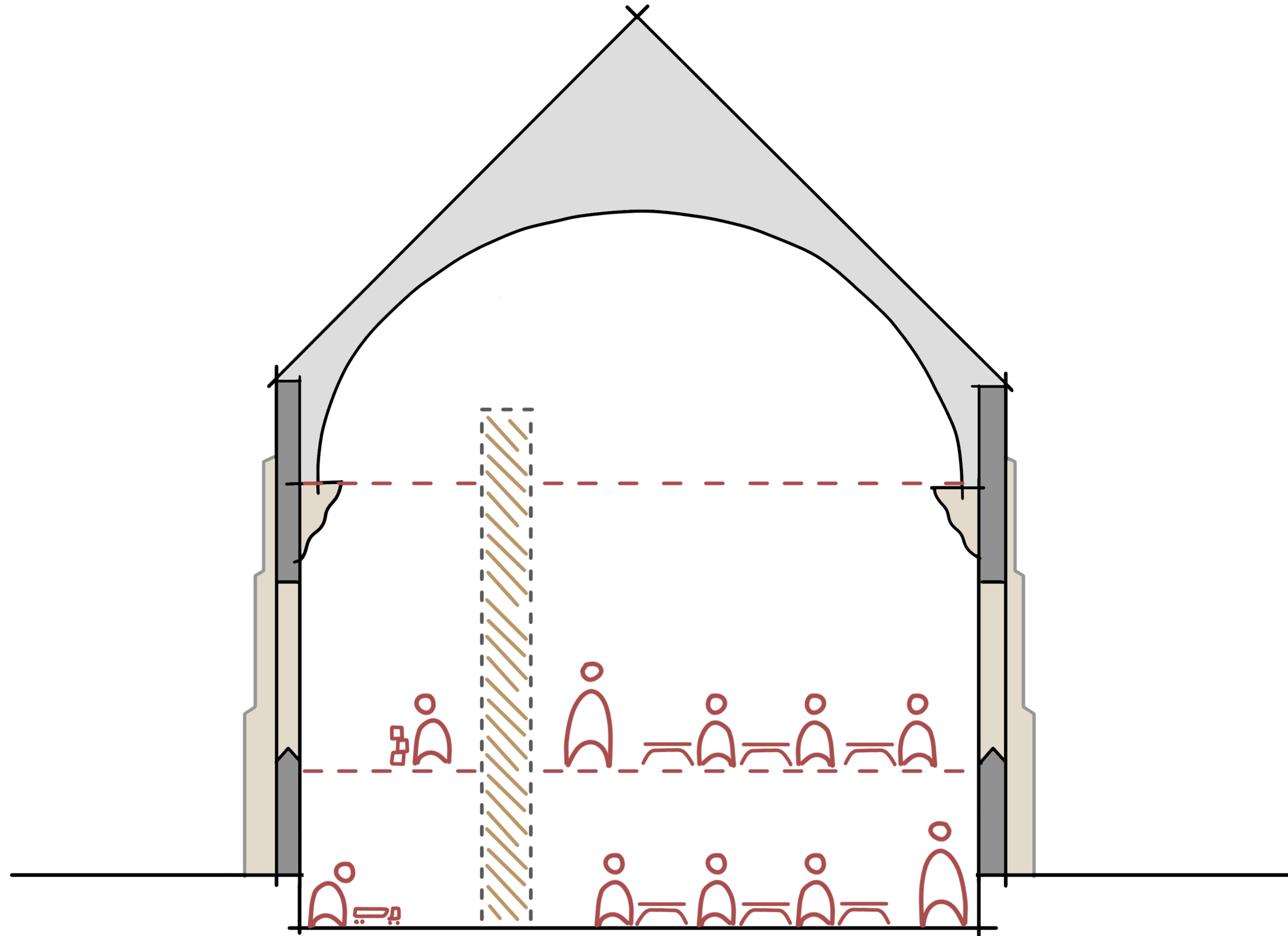


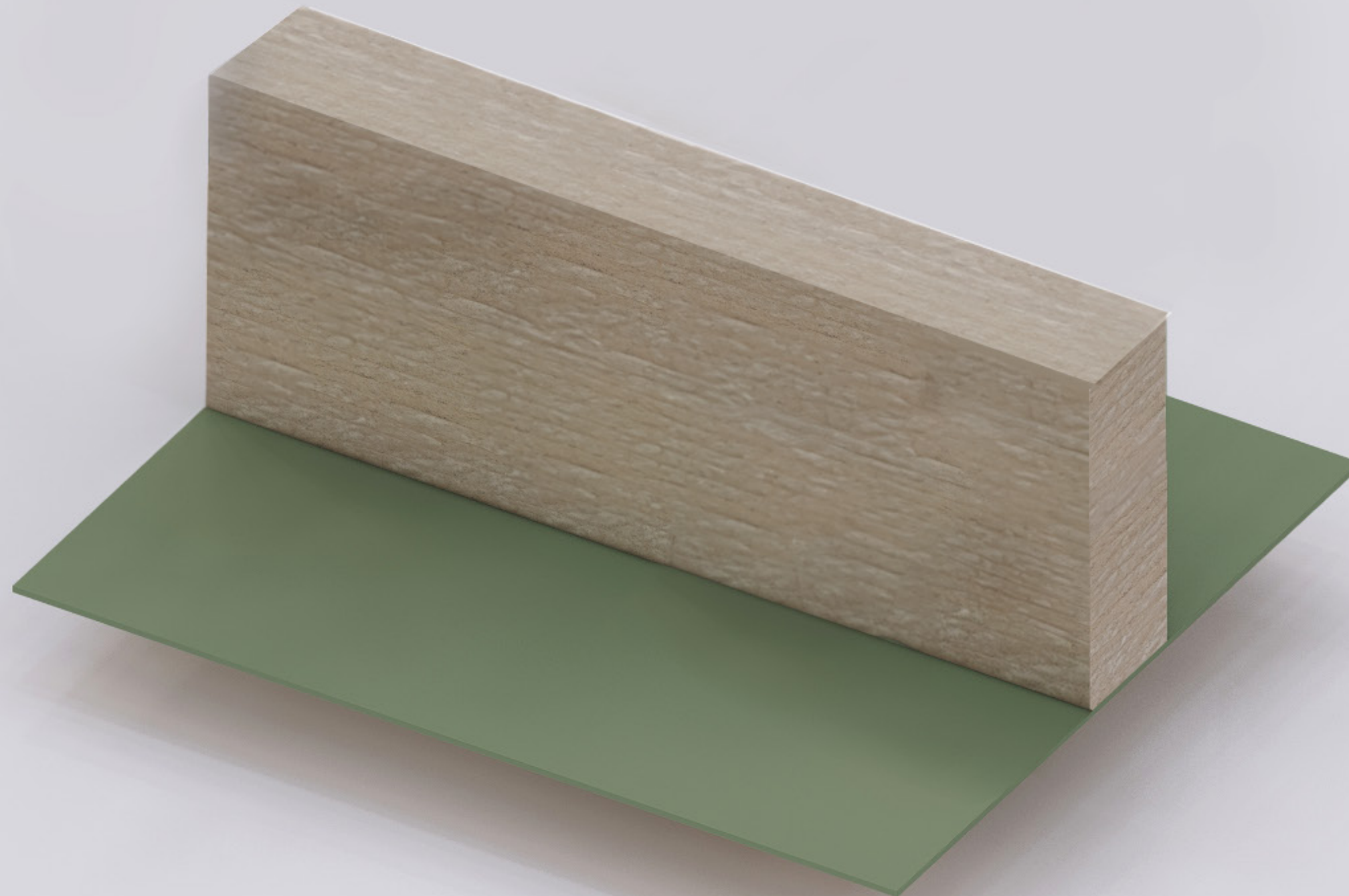












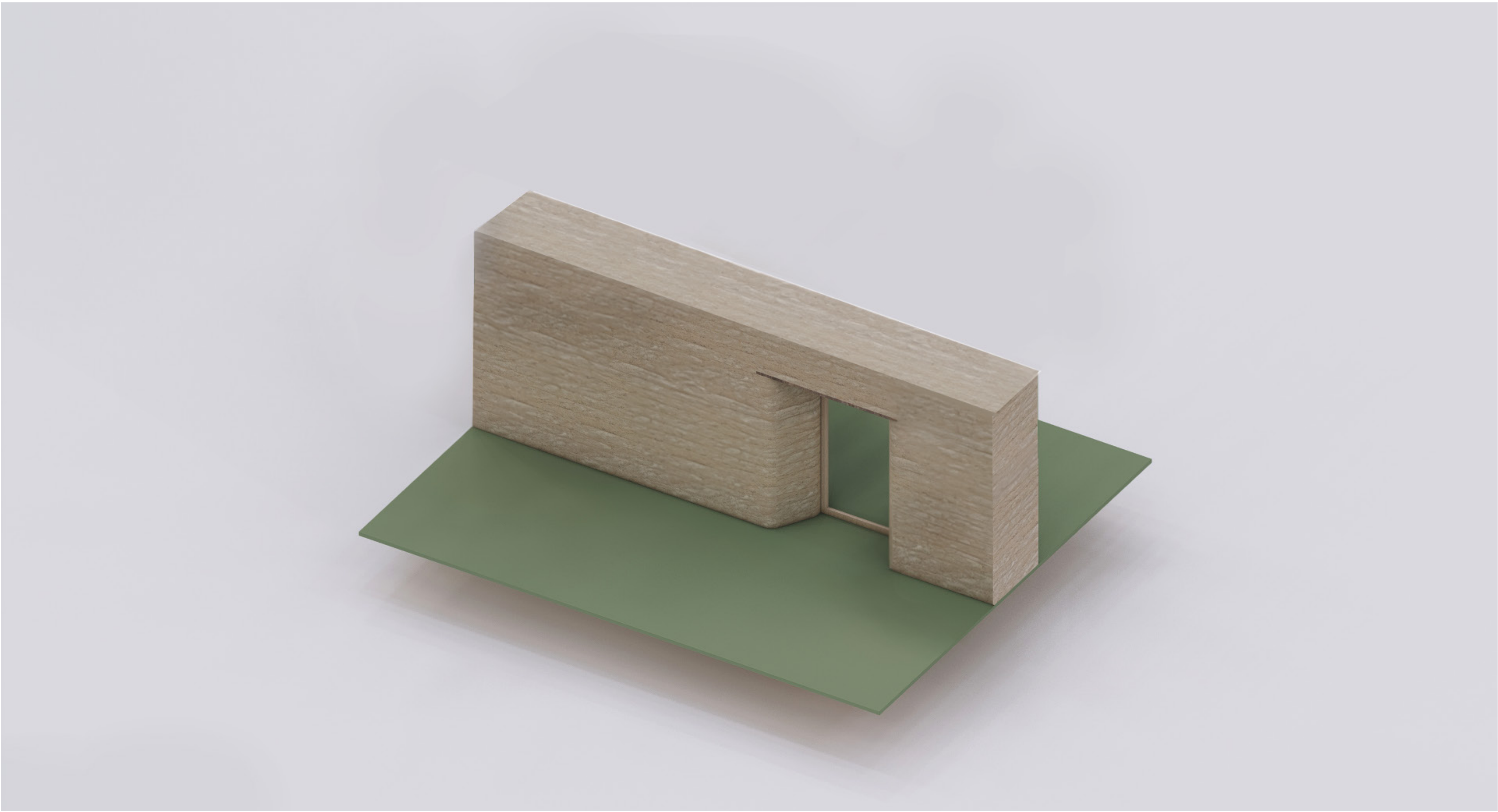
Excavation

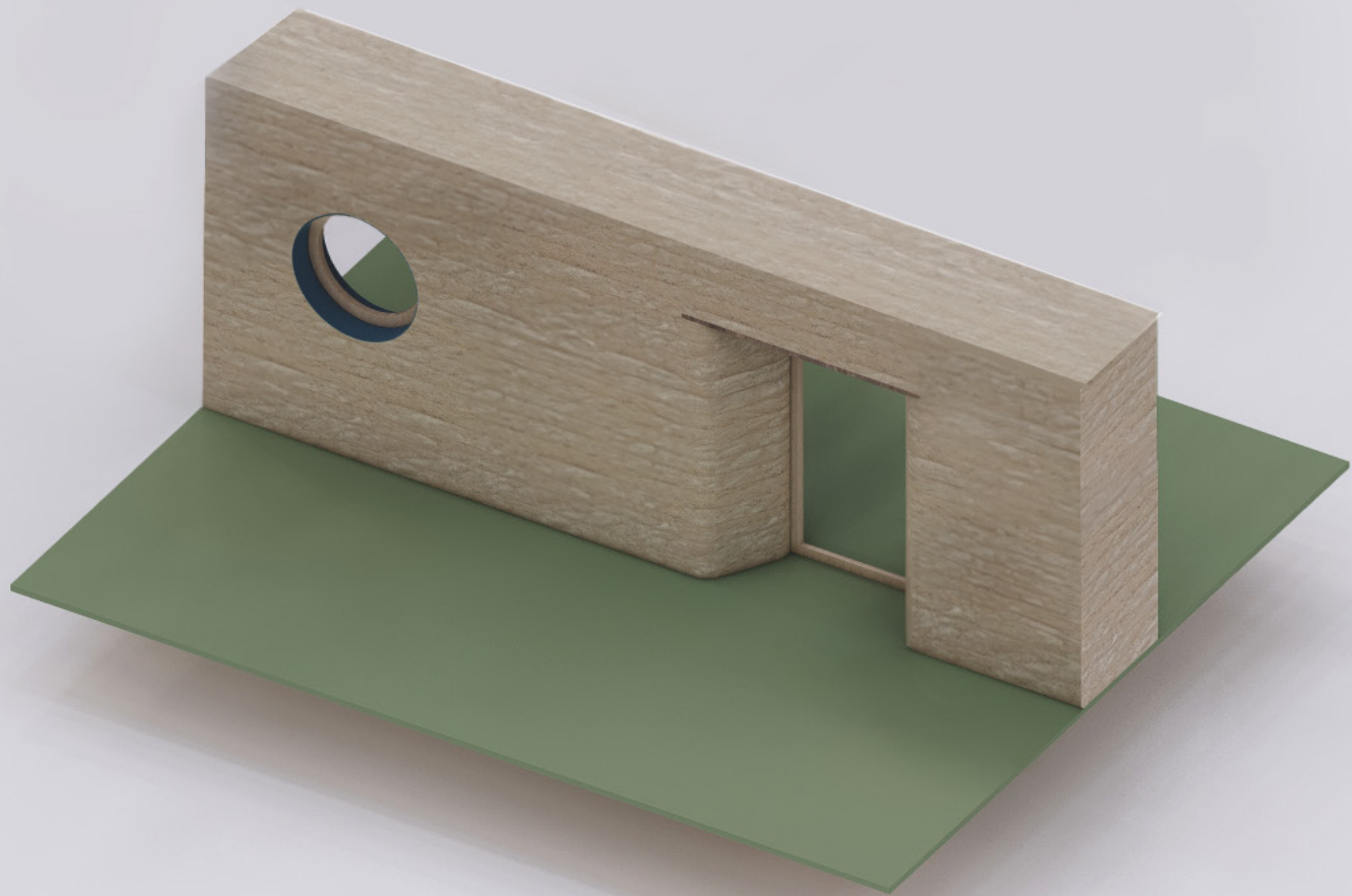
+ 430 m³ church
+ 165 m³ square
+ 220 m³ new addition
- 250 m³ demolition old basement

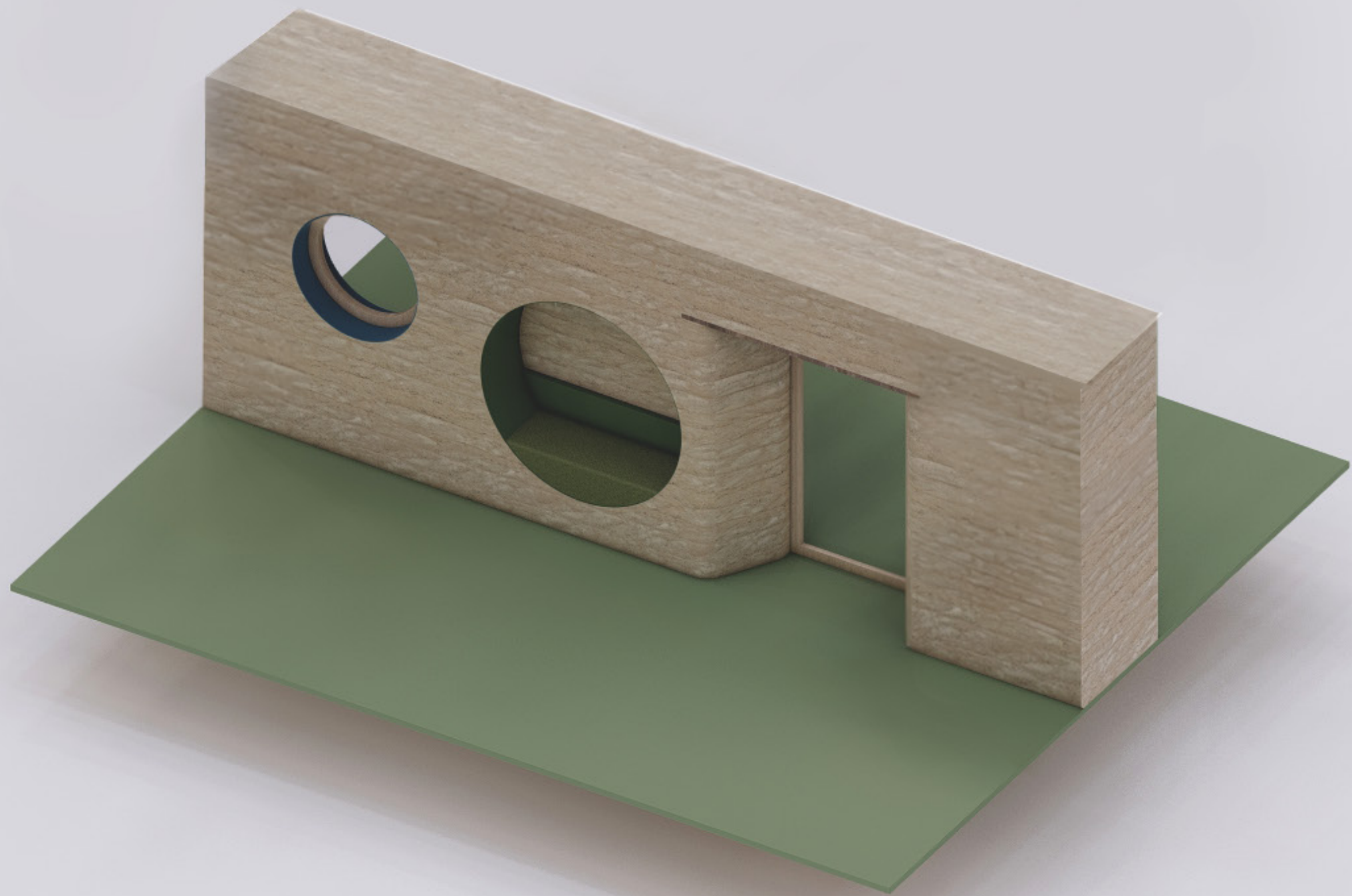
+ 565 m³ sand

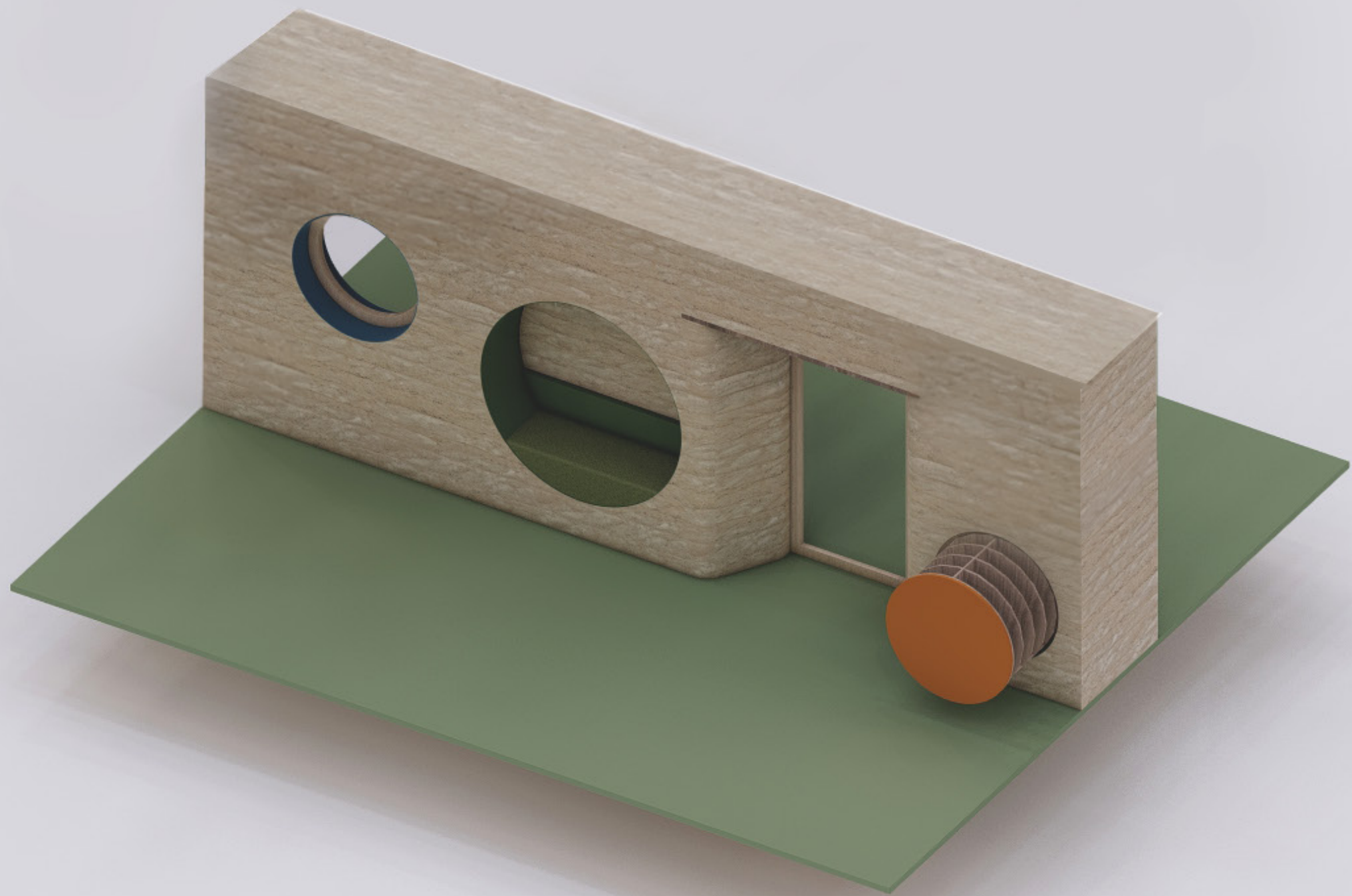
Needed m³

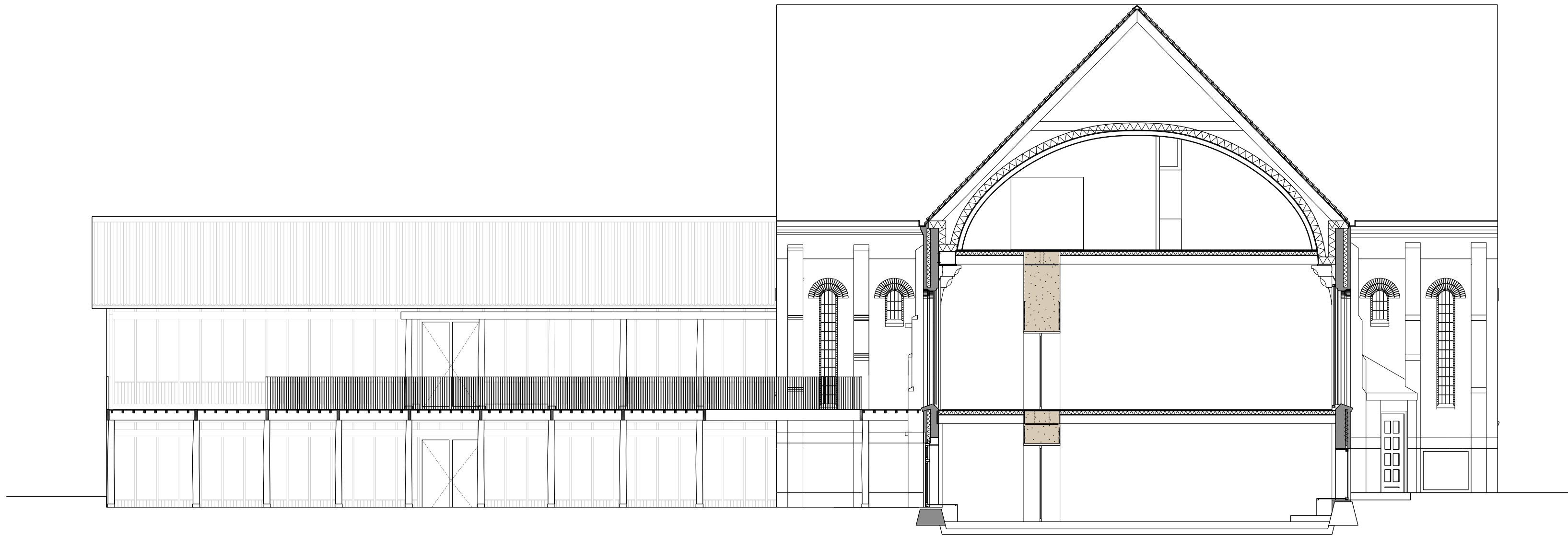
= 650 m³
rammed earth 60% à 70% sand
= 450 m³

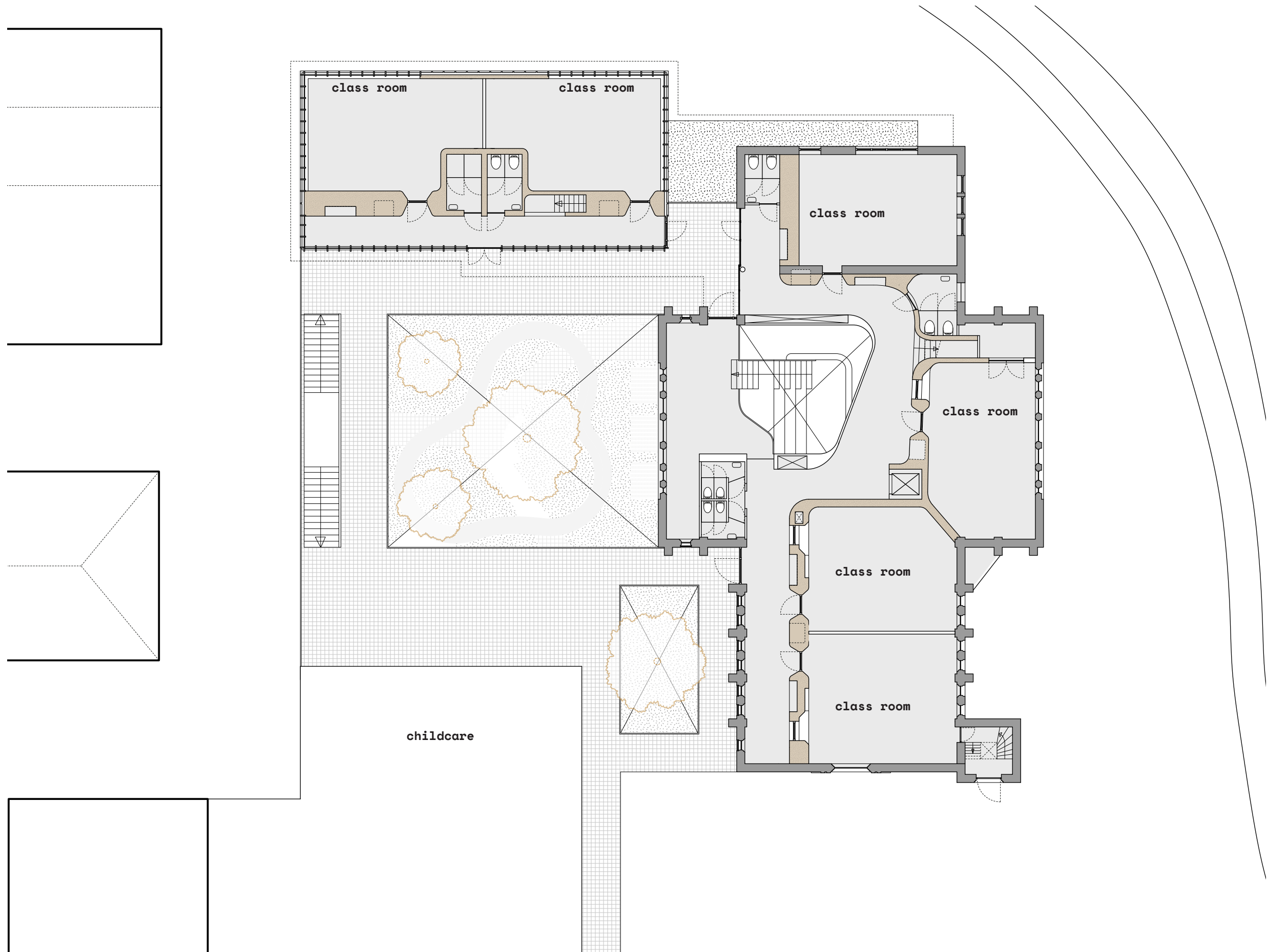




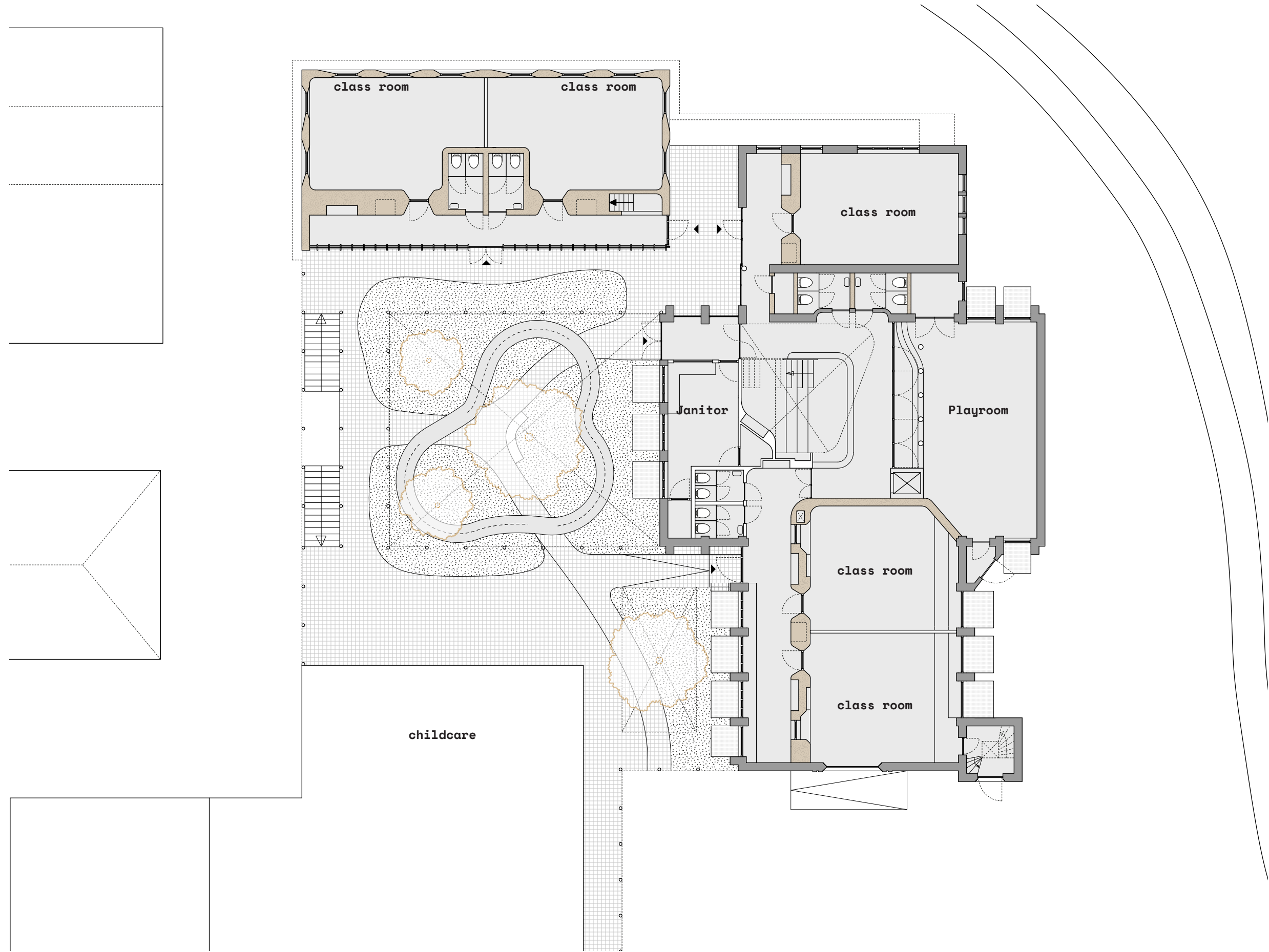




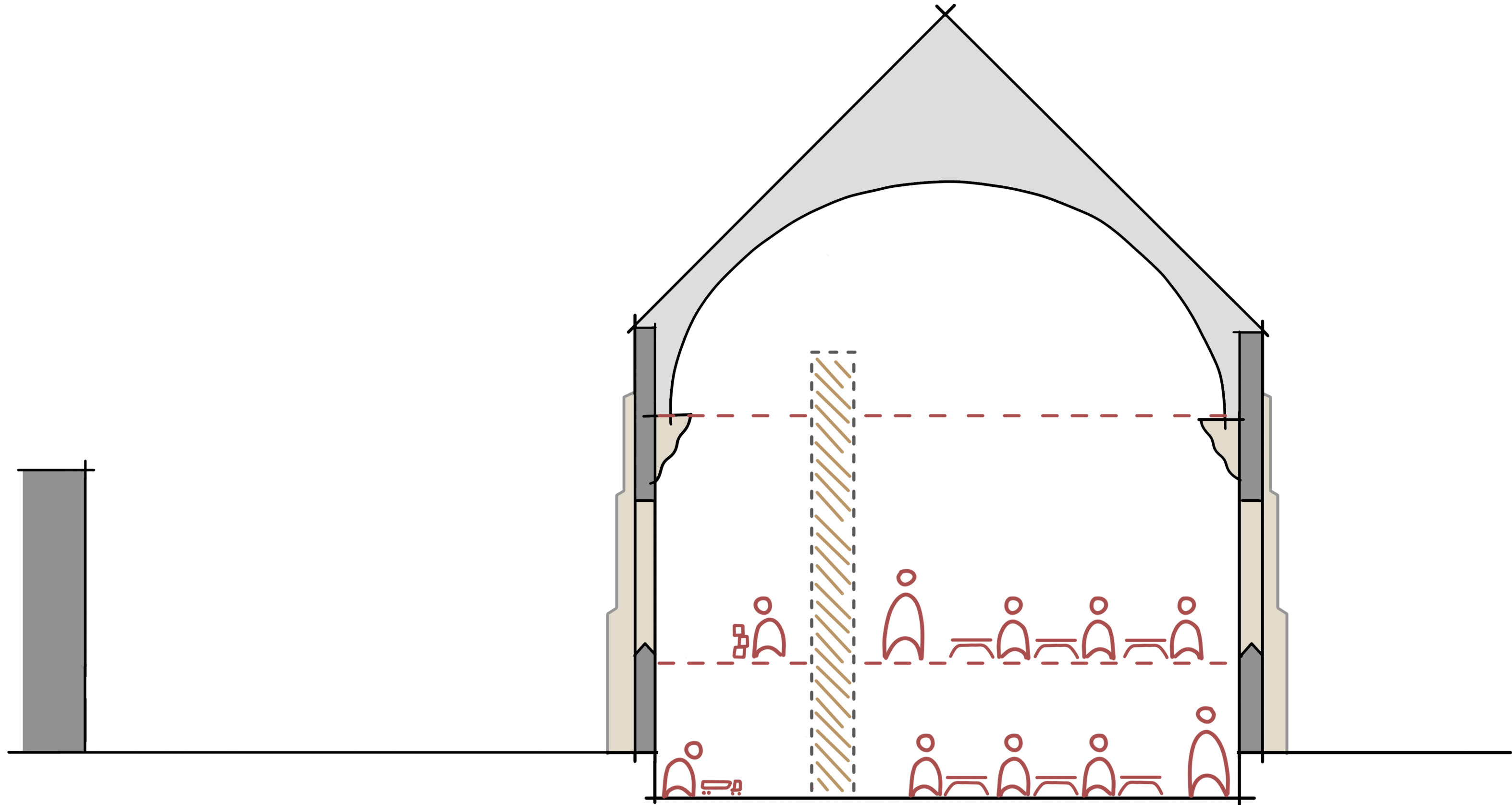


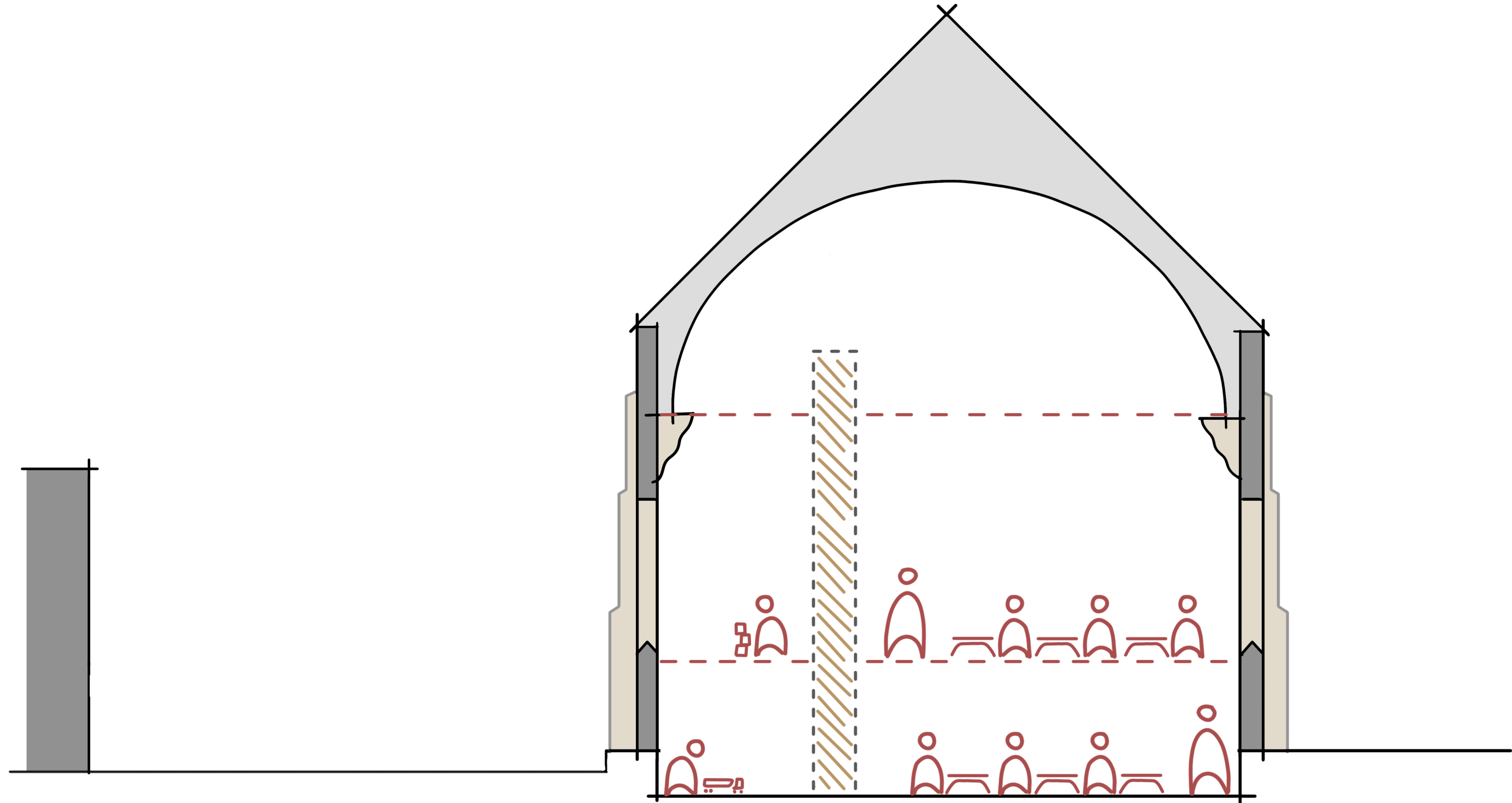


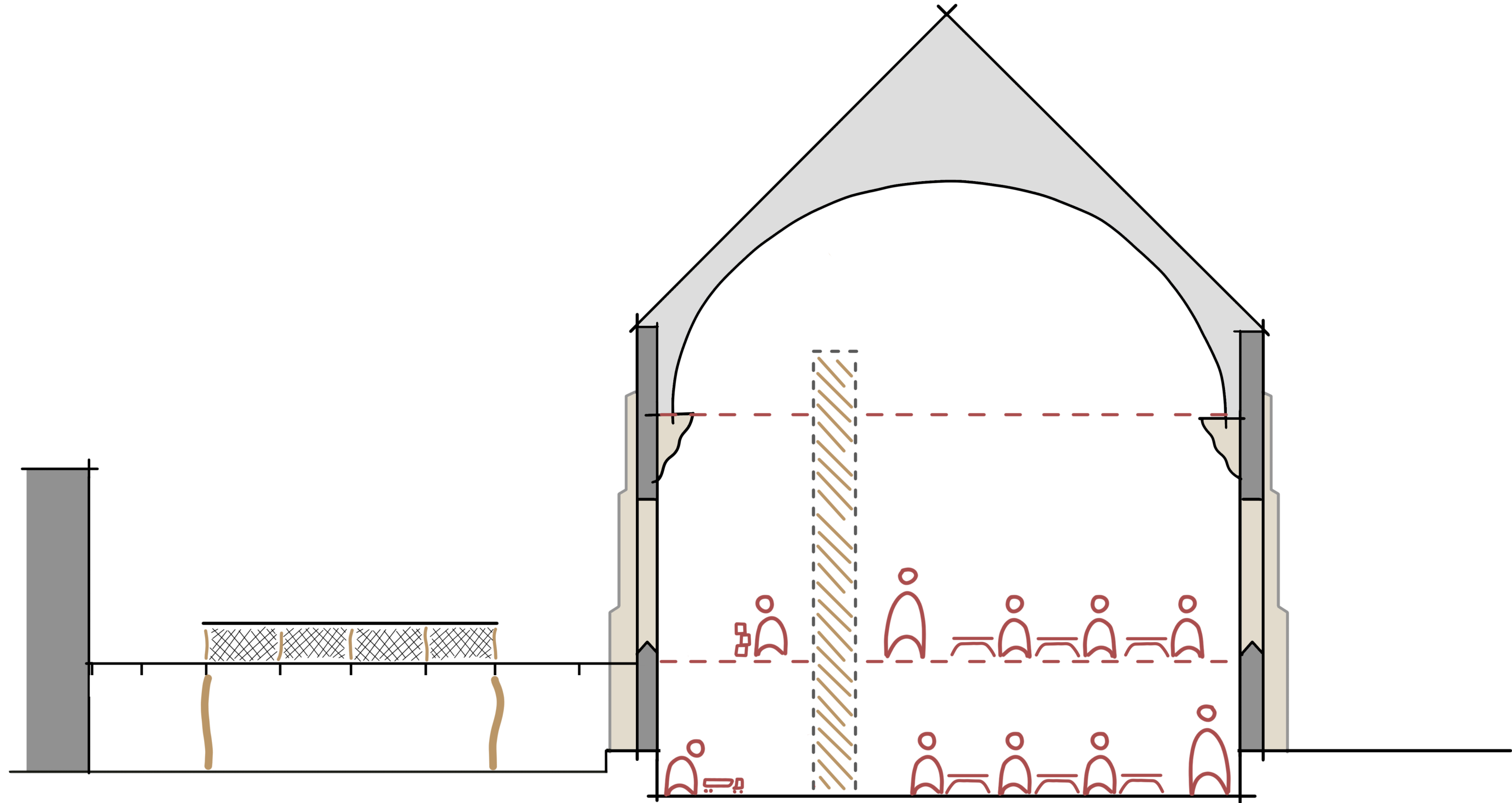


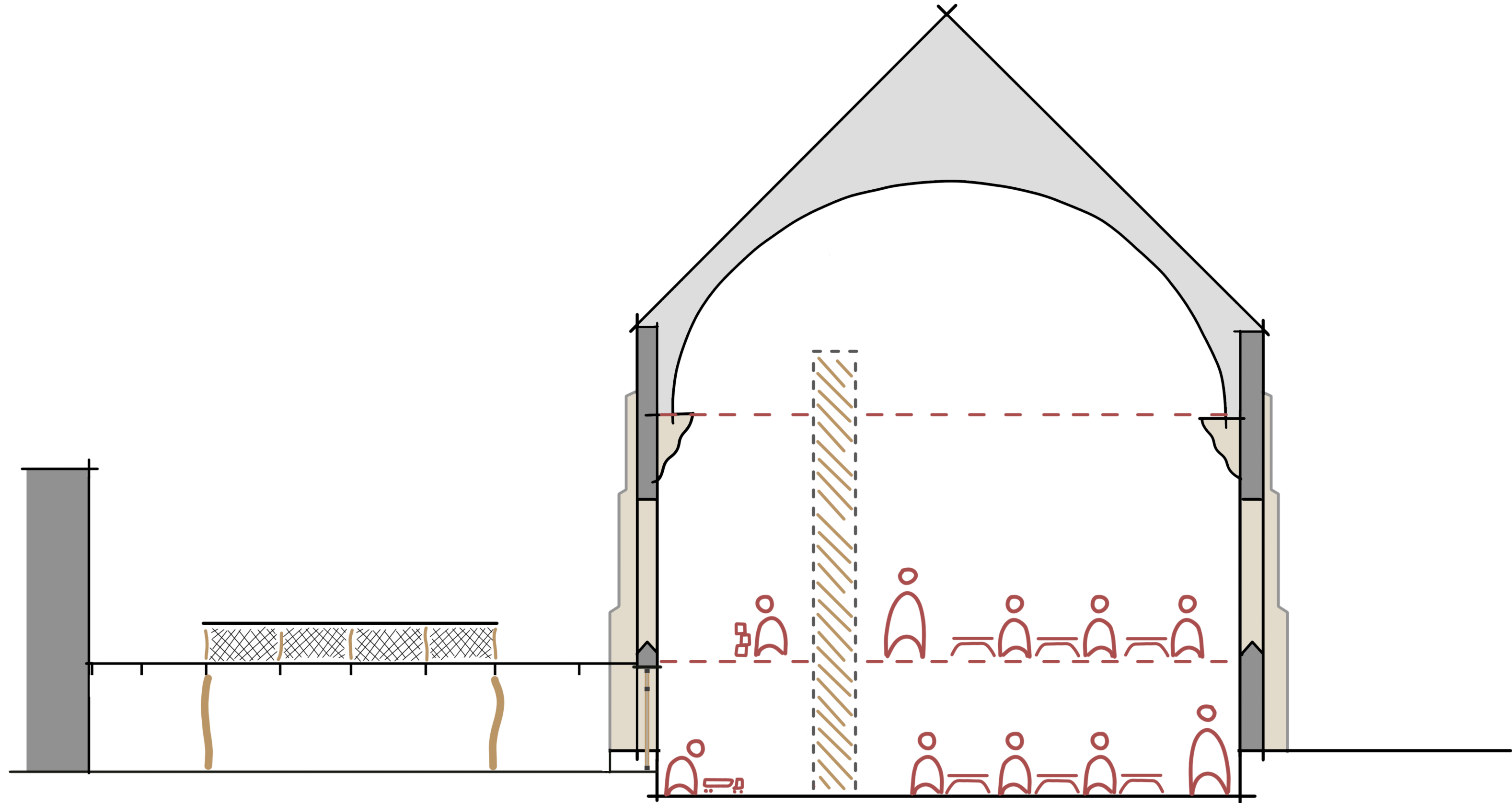


















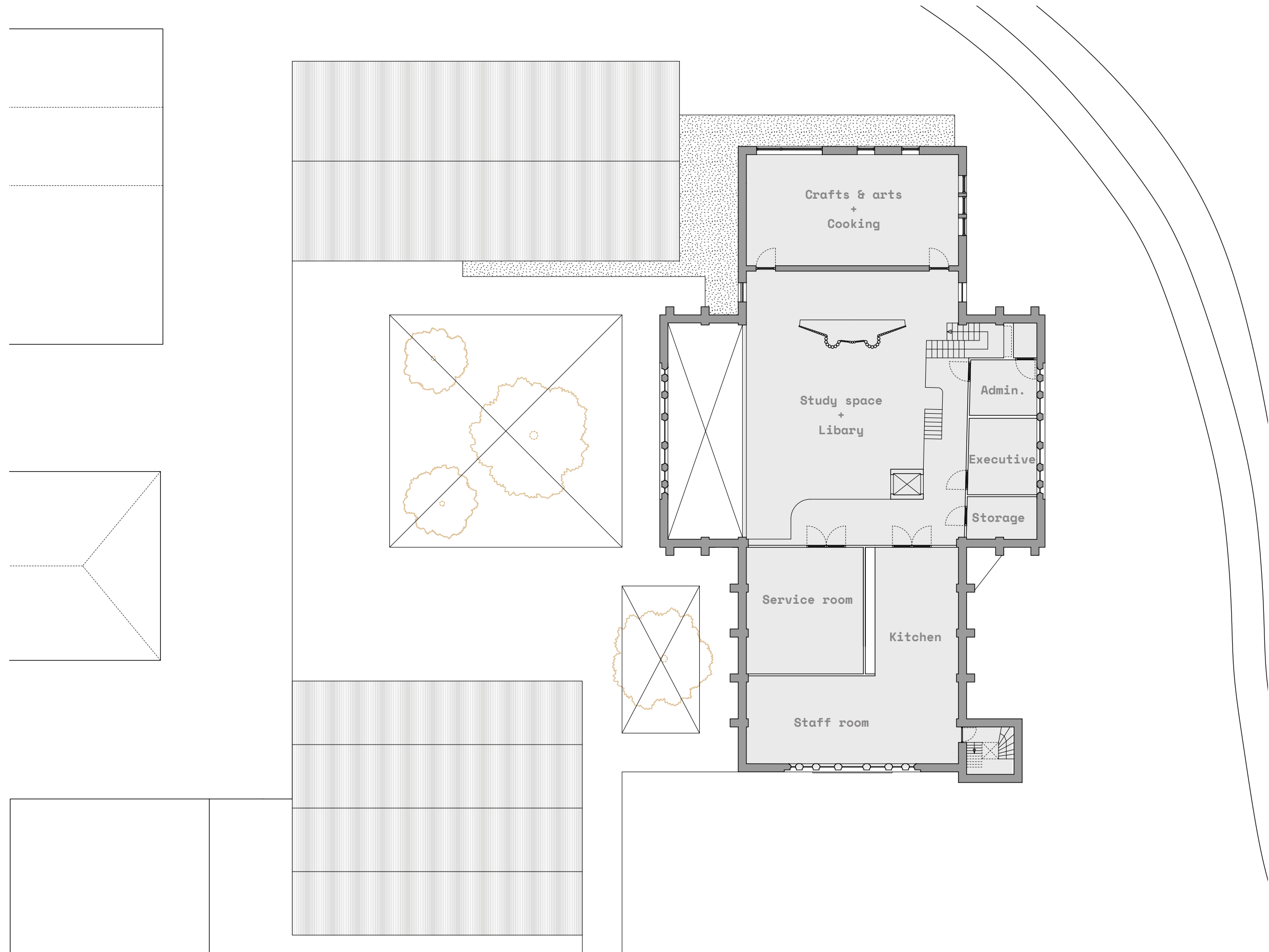




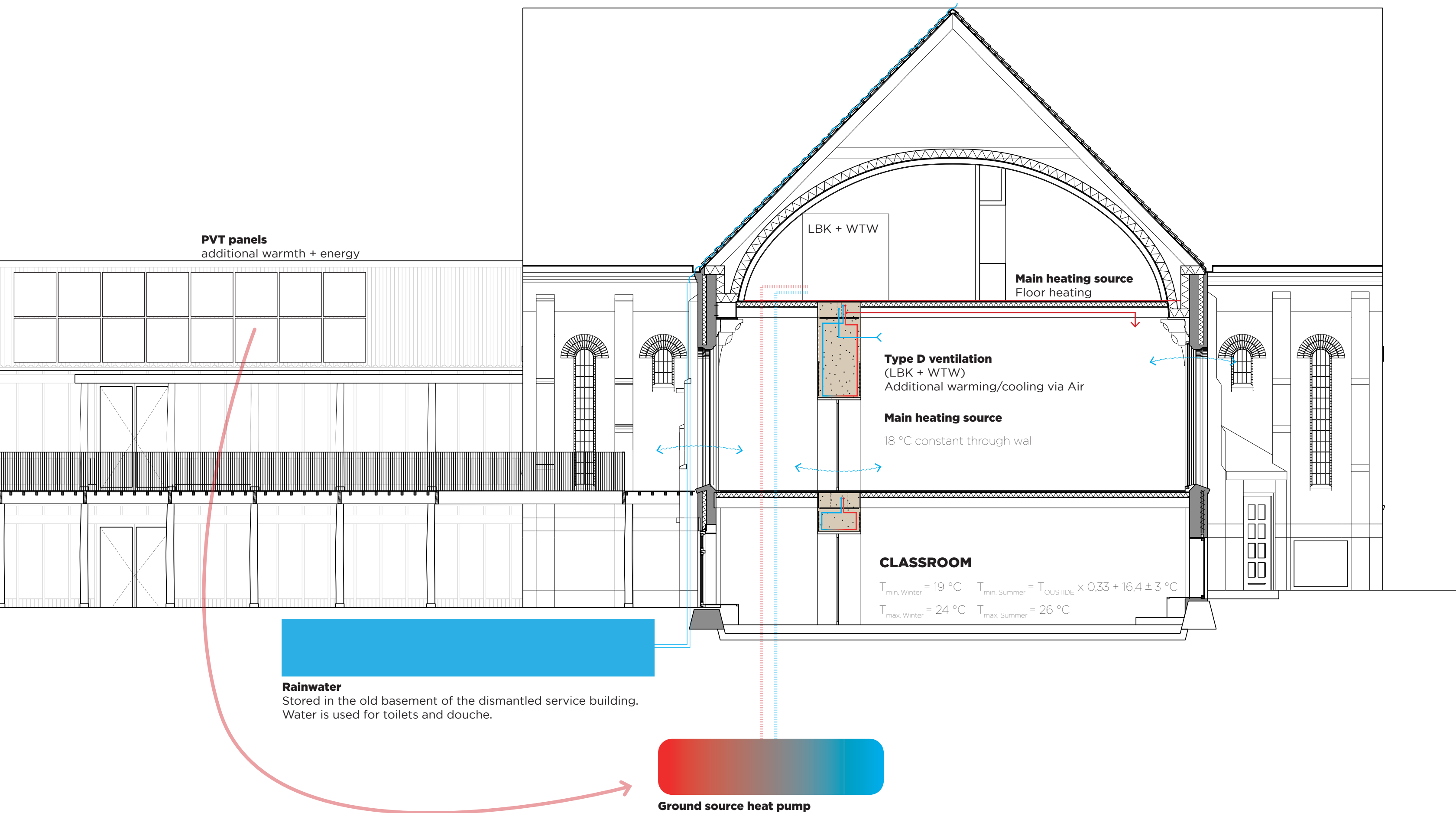


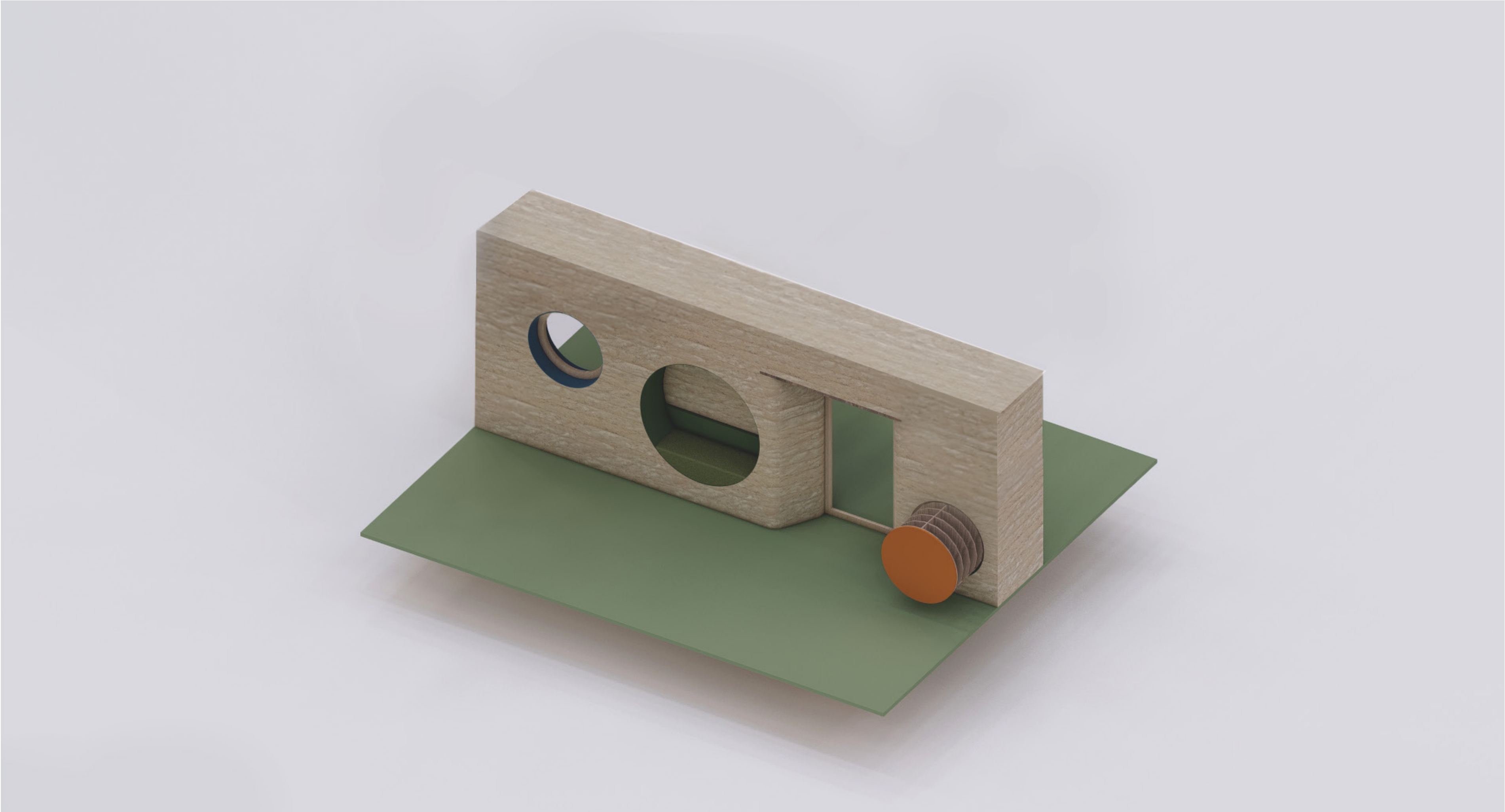


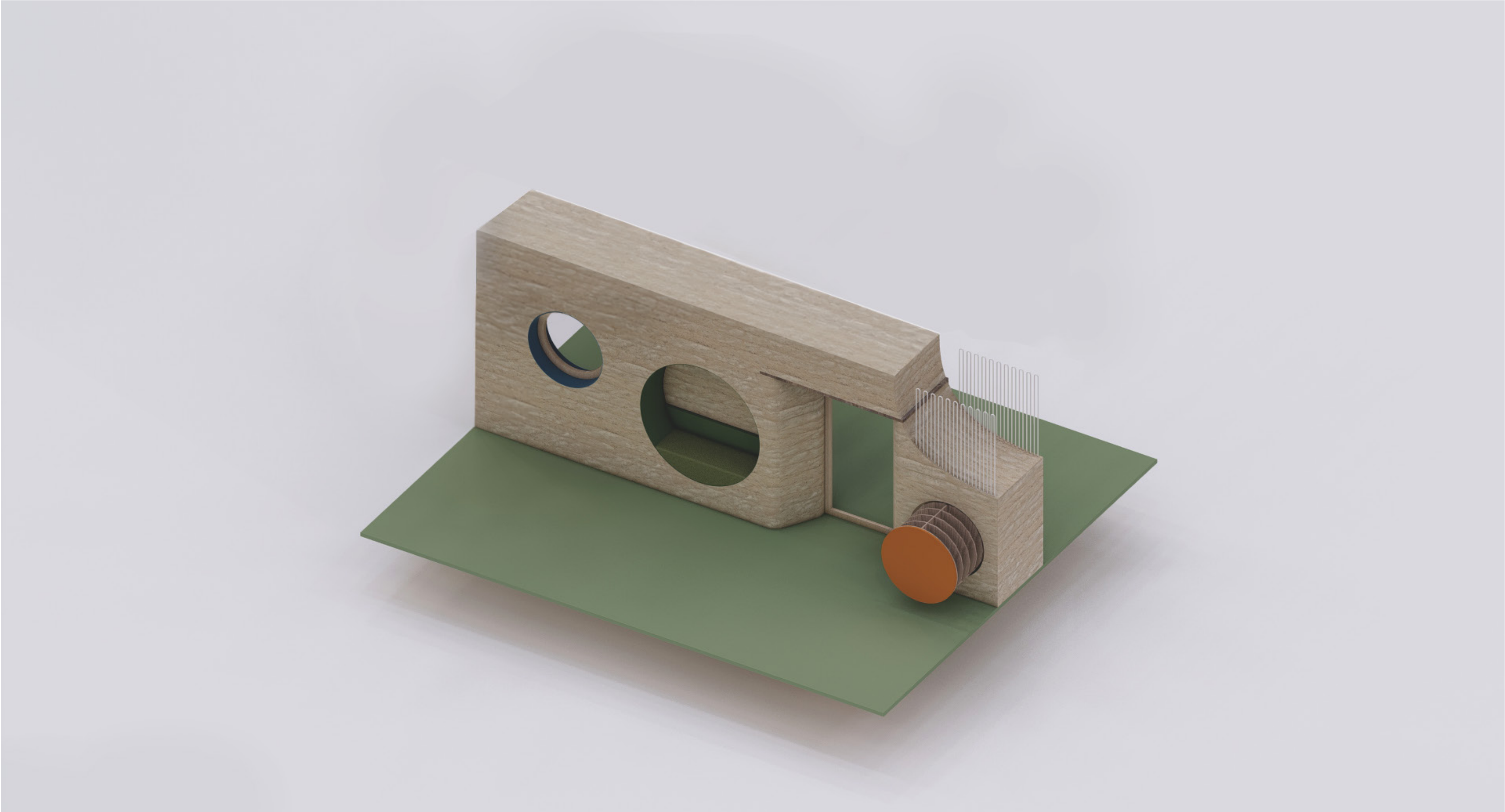


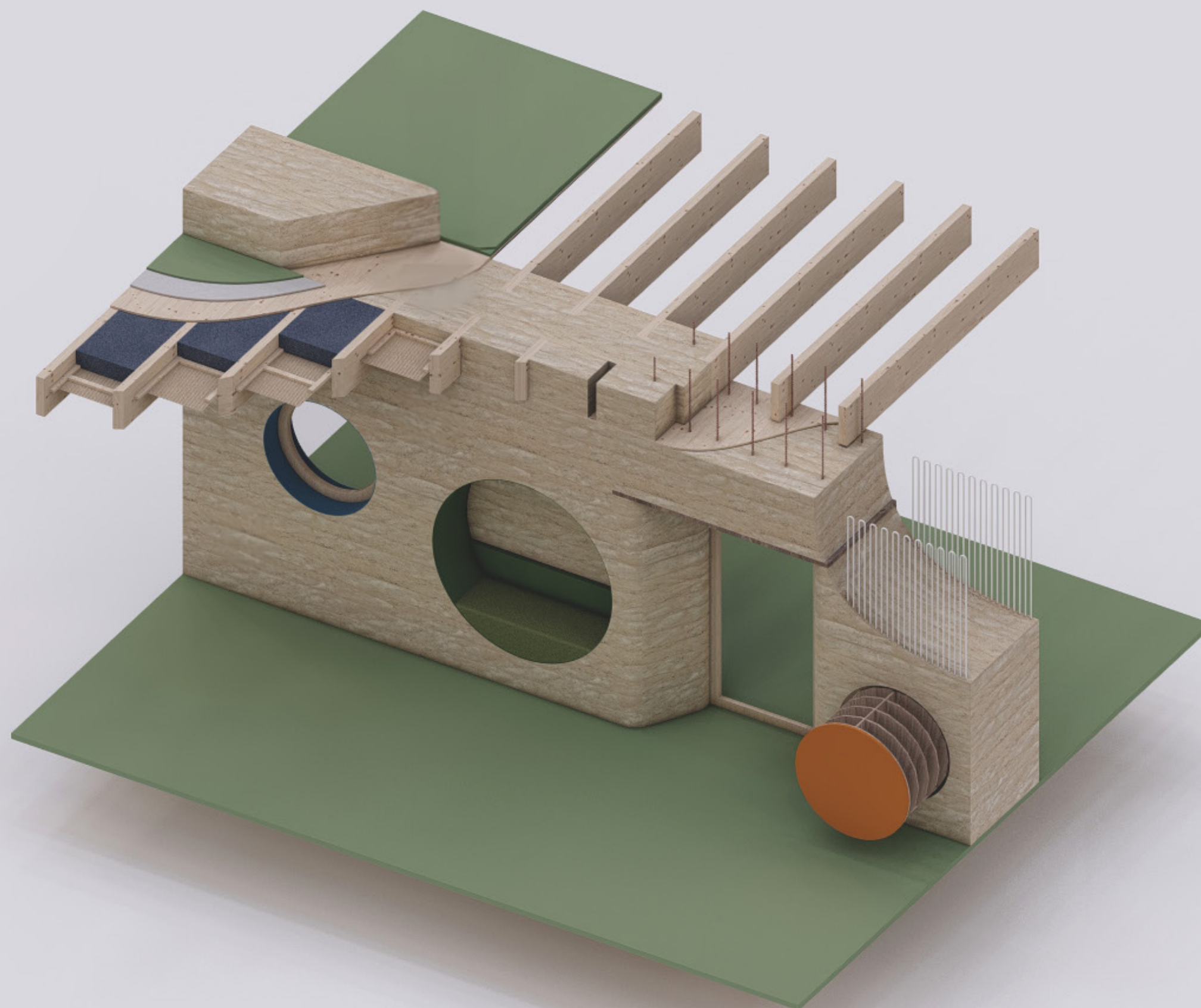


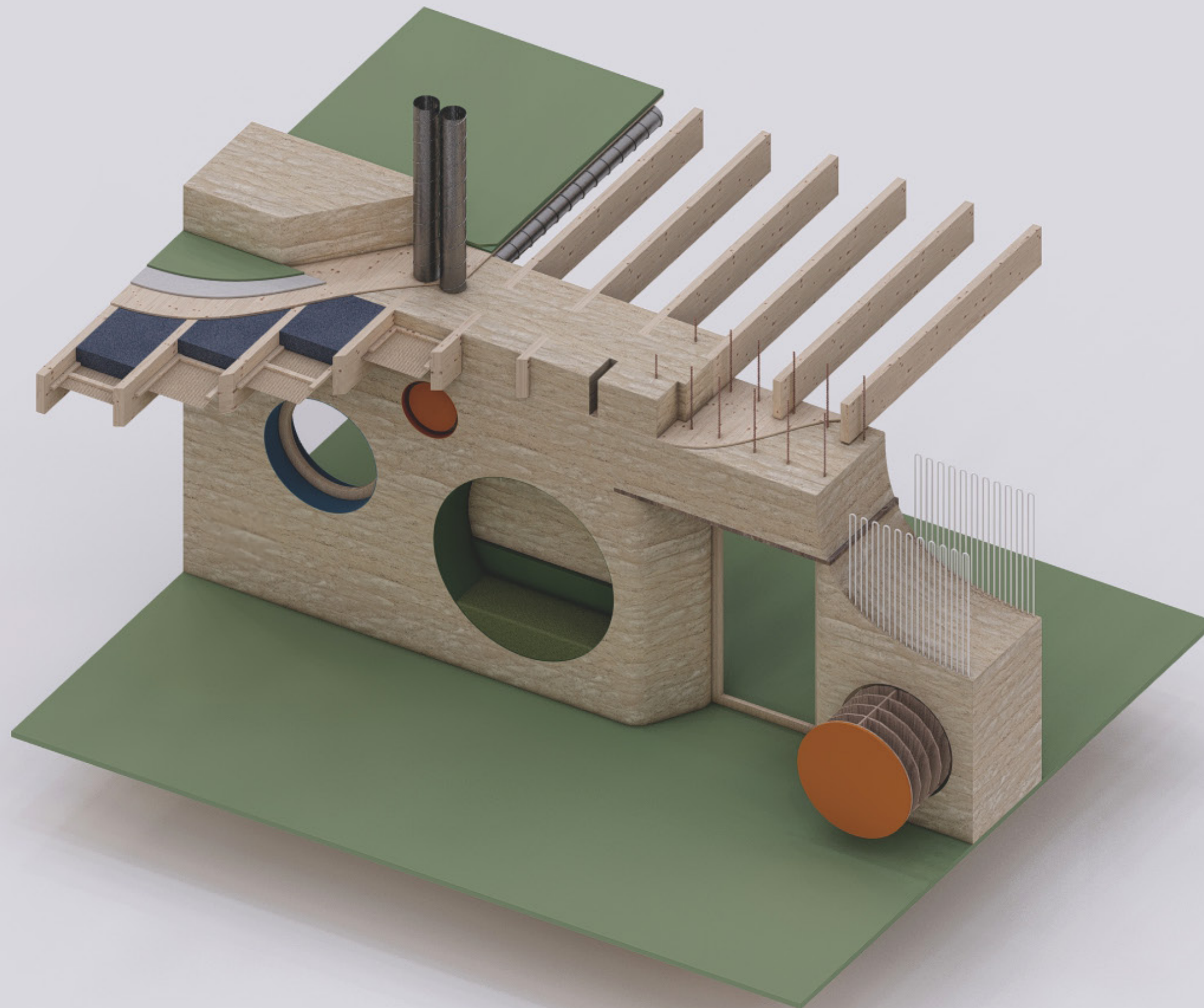


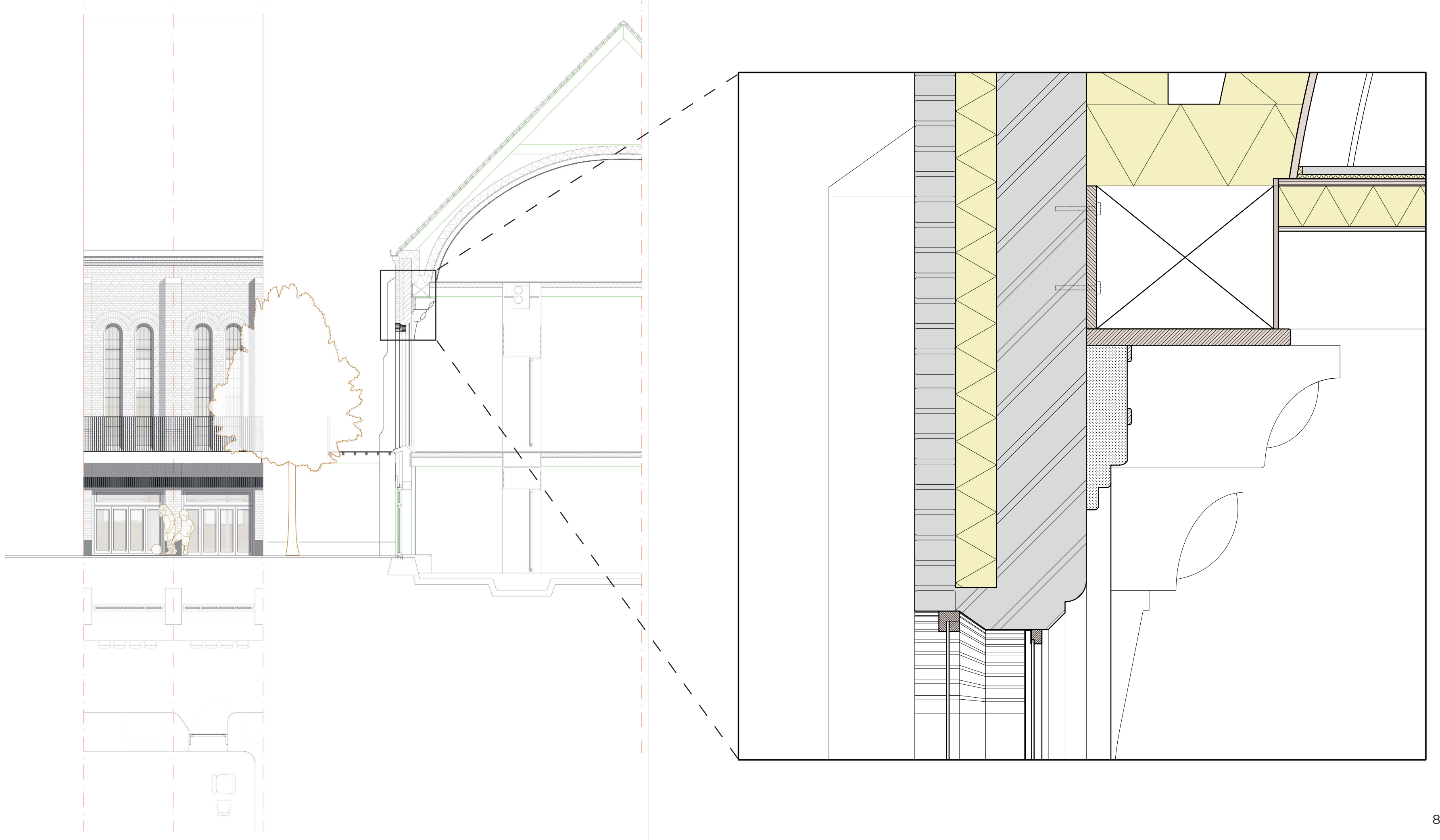




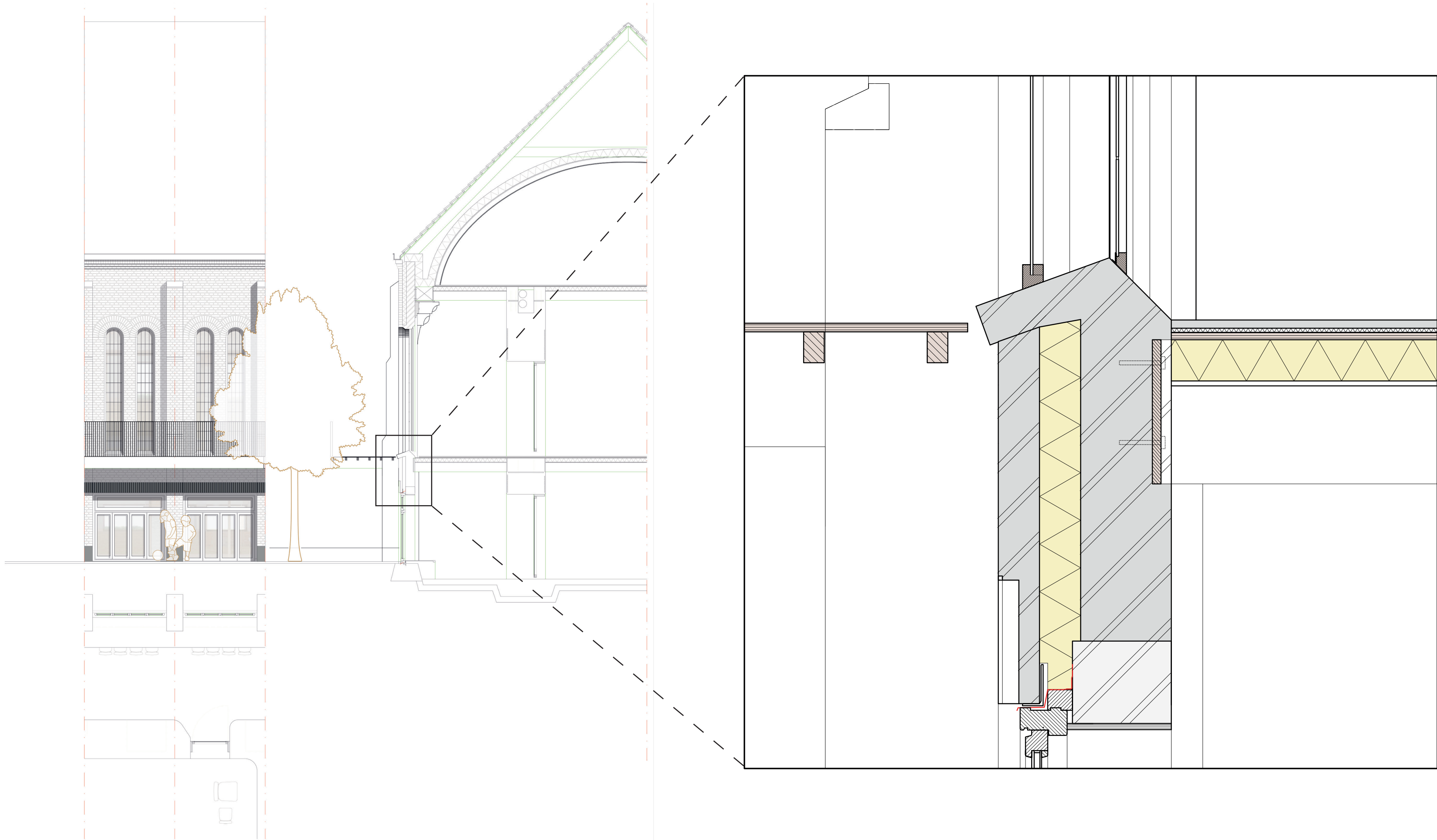


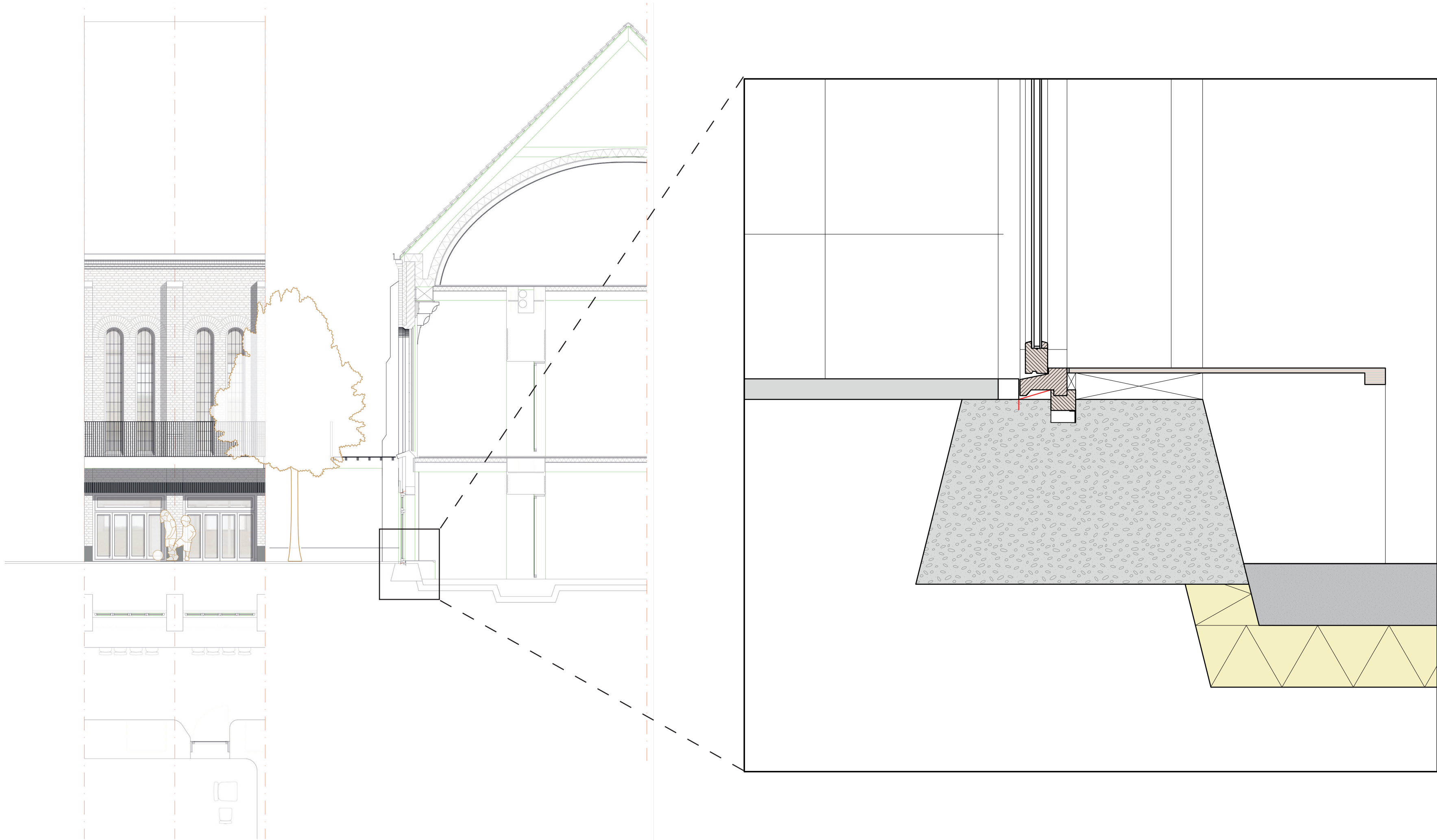




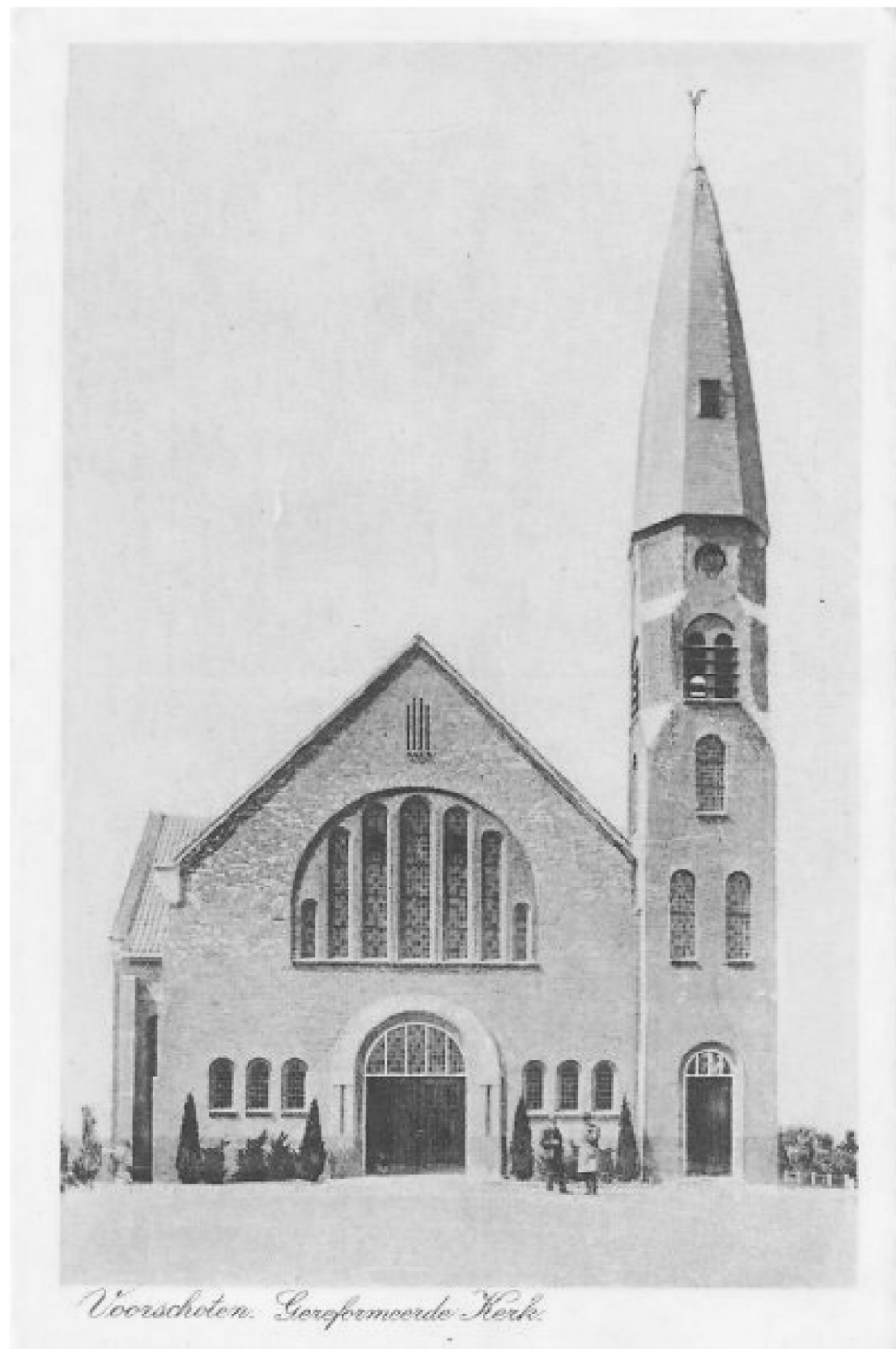








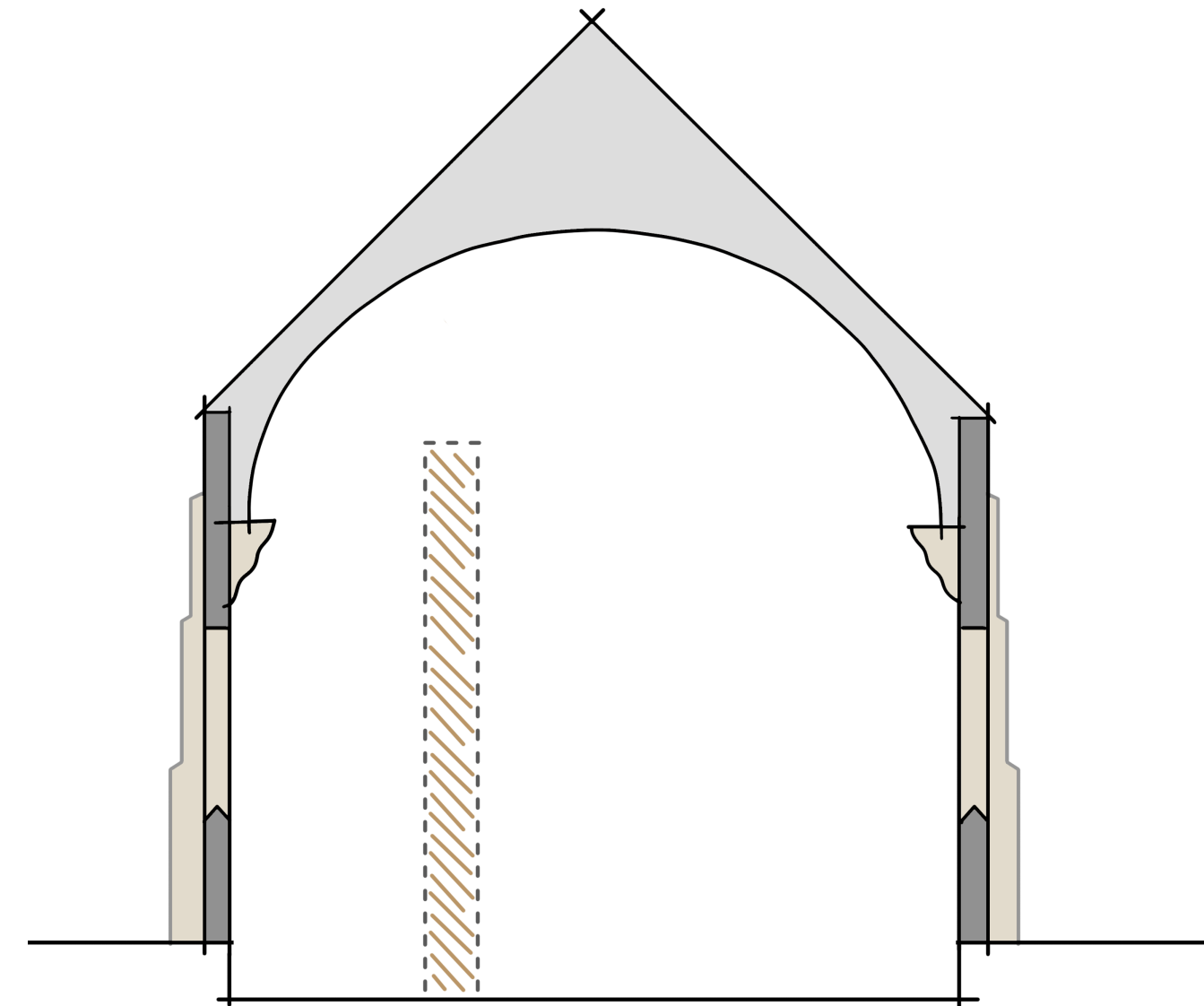




1925



2023



+100 years?

