

# **Artis Islands**

**2019/20 2nd Semester studio at:  
RAVB - Rotterdamse Academie van Bouwkunst**

**Pygmy Hippo  
Project by: Savine Abendroth**

**Project book**



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# Introduction

The zoo is both architectural and cultural project, it produces and represents shifting ideas of nature. Shifts in the relation between man and animal are reflected in how the zoo is organized and how the animal is framed. In its totality the zoo is an agglomeration of worlds, islands inhabited by animals, microcosms that recreate or reinterpret their natural habitats. Each island provides the visitor with a scene, stages the encounter between animal and human, frames the view of the visitor and opens up new perspectives. Each exhibit is a staged setting in which animal and human are central players, each scene united with and wholly distinct from nature.

The studio takes Artis, the oldest zoo of the Netherlands, as a model to consider the zoo as an architectural project. Artis was founded in 1838 and has recently been undergoing major renovations. The students are asked to select one of the existing animal exhibits and redesign it with consideration for animal inhabitant and human visitor. Each zoo exhibit includes an architecture that combines the scenic with the functional, backdrop with utility. Composition and form are central to the evolution of the designs. The absence of a dense urban context allows the student to form and depict their visual fascinations in relation to the zoo.

Text by Studio Verter





# Personal Position

## Statement

**There is a long history behind Zoos. Zoos used to be showcases. Animal welfare was not important. Nowadays the roles are twisted. Animal welfare comes first, but there is no showcase anymore. I think these aspects need to be balanced again. Within the pygmy hippo enclosure, you are not only looking at showcases. You are also in one.**

**The rainforest stimulates multiple senses. The plants, humidity and heat in the enclosure will be real. An abstraction of any of those aspects can't match these great impacts of wild nature. On the other hand lightning, materialisation and elements like rocks can be an adaption to emphasize wild nature. The boundary within adaption will be the hippo itself. The Hippo is holy.**



Easier to handle and less territorial than his bigger brother  
Perfect candidate as a new resident of Artis

# The Pigmy Hippo

## Info





Warm, high humidity  
Swim in the swamps and rest in the dense forest

# Habitat

Wild nature



They only occur in this small part of the world  
Liberia Rainforest



Humidity, sounds and surprise effects, density and swamps  
Elements that can't be abstracted because of their great impact

# Habitat

Representation | Literal copy





Lightning

The way how the light shines through the rainforest can be translated as an adaption into architecture



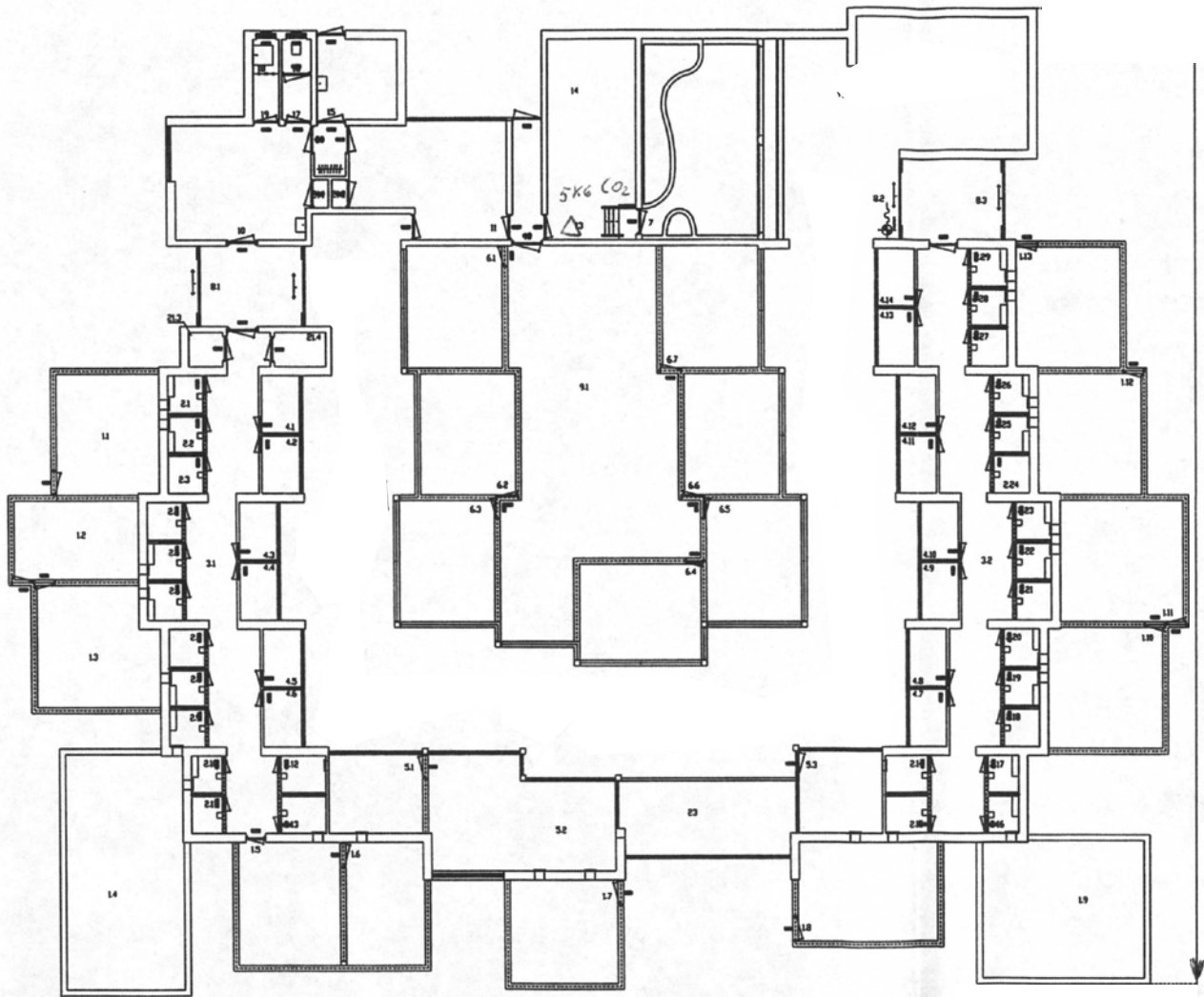
# Habitat

Representation | Adaption



Vistas

The jungle knows a lot of vistas. They can also be adapted into the design



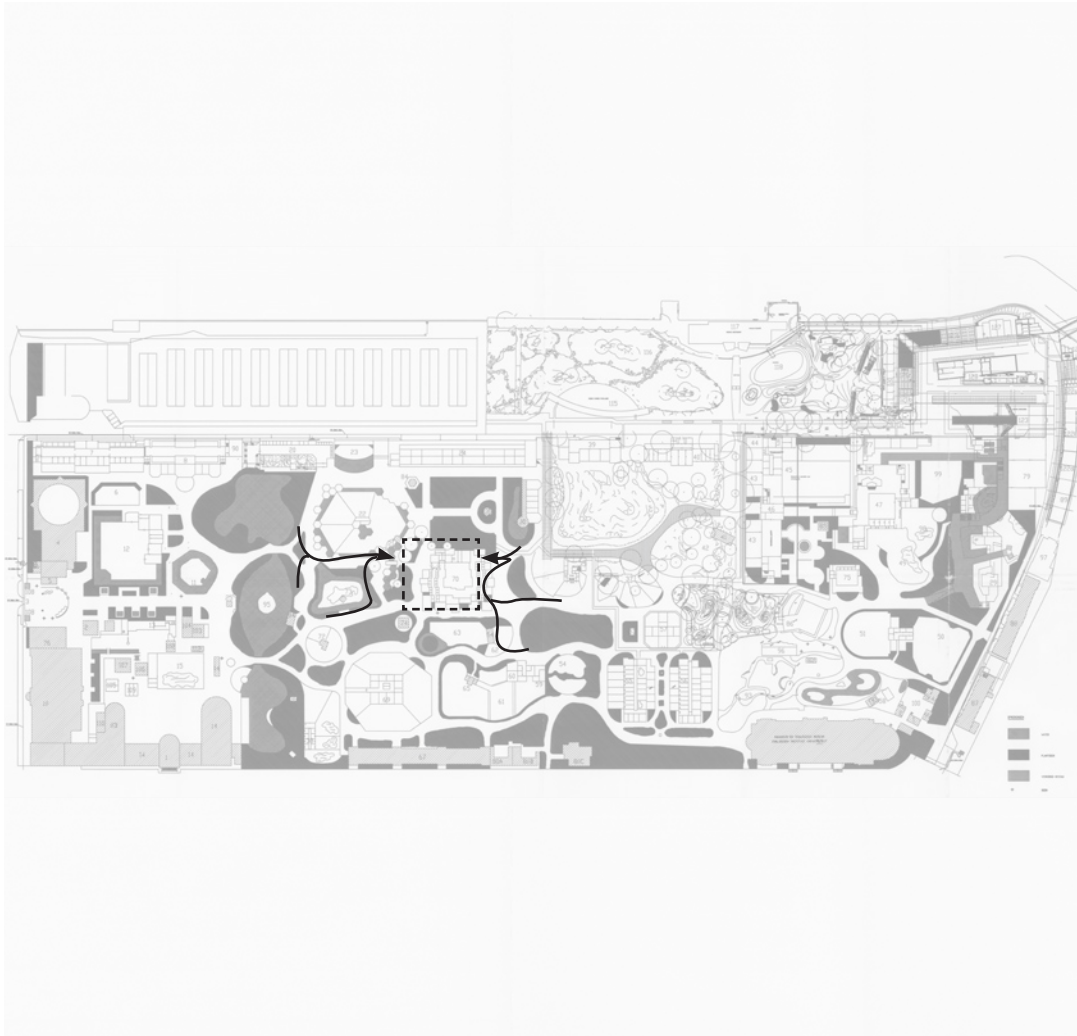
35 METER

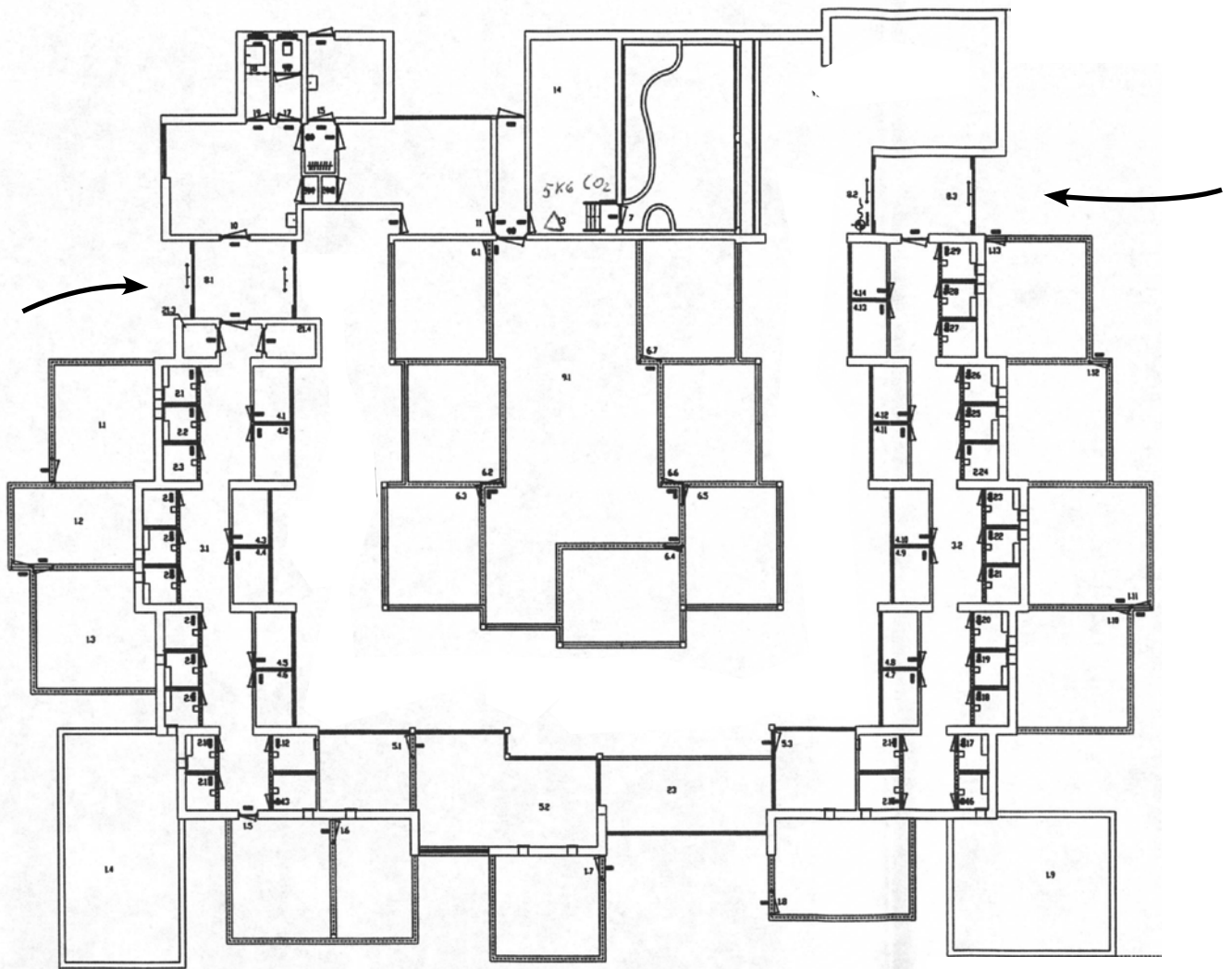
39 METER

Kleine Zoogdierenhuis  
The chosen indoor location in artis an it's dimensions

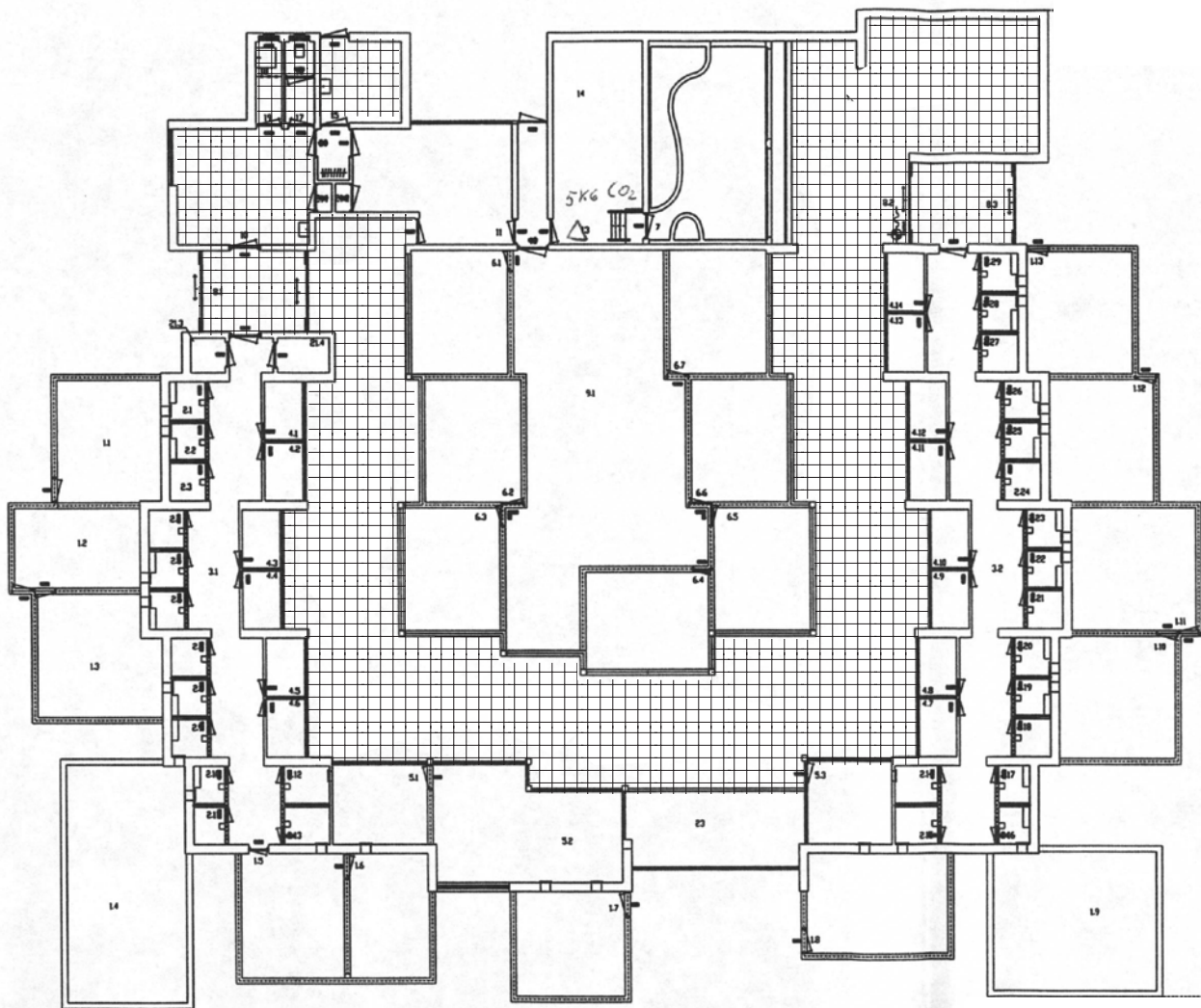
# Artis

## Existing situation





Kleine Zoogierenhuis  
Entrance and exit



Kleine Zoogdierenhuis  
Tiled path along 25 cages



Kleine zoogdierenhuis  
The existing building as a ruin

# Concept

Rising walls in Artis





Hygiene



Dry feeding area



Doors big enough for boxes



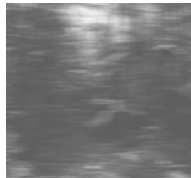
Natural shelters



Scratching places



Visual barriers animals



Dynamic area



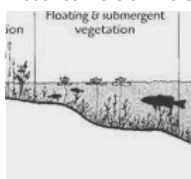
Optional split



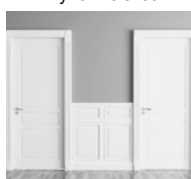
Sand floor



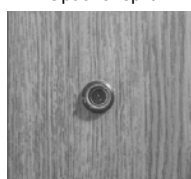
Bark mulch floor shelters



Slope towards water



Two doors for zookeepers



Visible through door



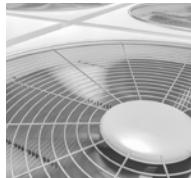
Firmly fixed construction



Minimum 9 gauge



Easy cleanable



1 full air change per hour



Hydraulic doors and split



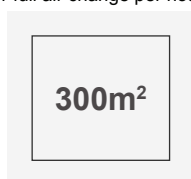
Drainage in floor



Big water filter system



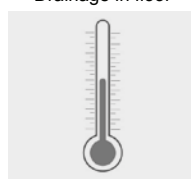
No dead ends



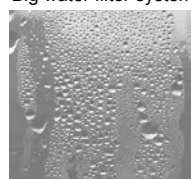
Minimum per couple



Minimum height



18 to 25 degrees F



50 to 70% humidity

Visualisation of all demands  
All integrated in the design



# Demands

Global Federation of Animal Sanctuaries

Global Federation of Animal Sanctuaries

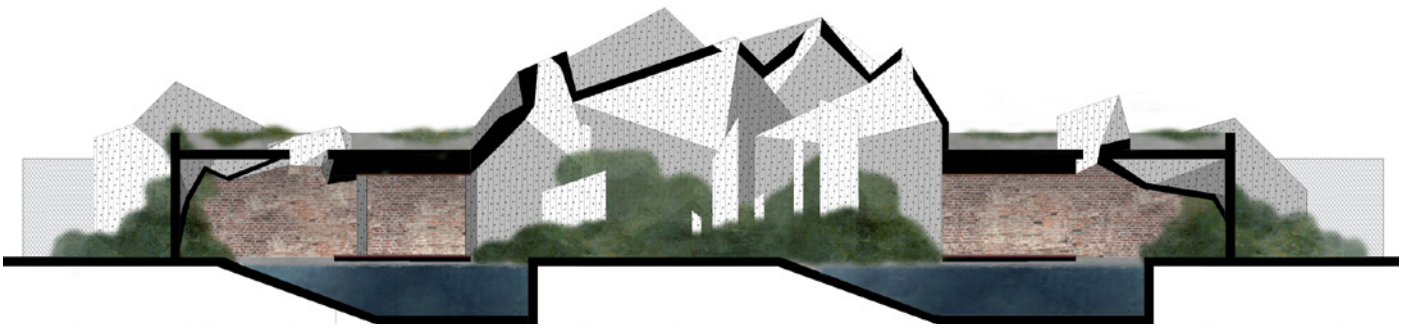


## Standards For Rhinoceros, Hippopotamus and Tapir Sanctuaries

Version:

June 2013

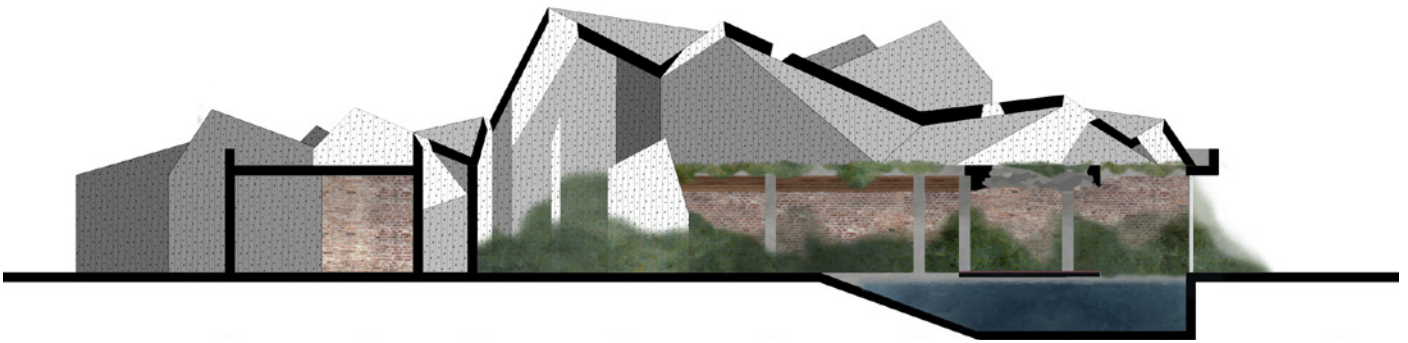
©2012 Global Federation of Animal Sanctuaries



Rising walls integrated in the existing building  
Langitudinal section

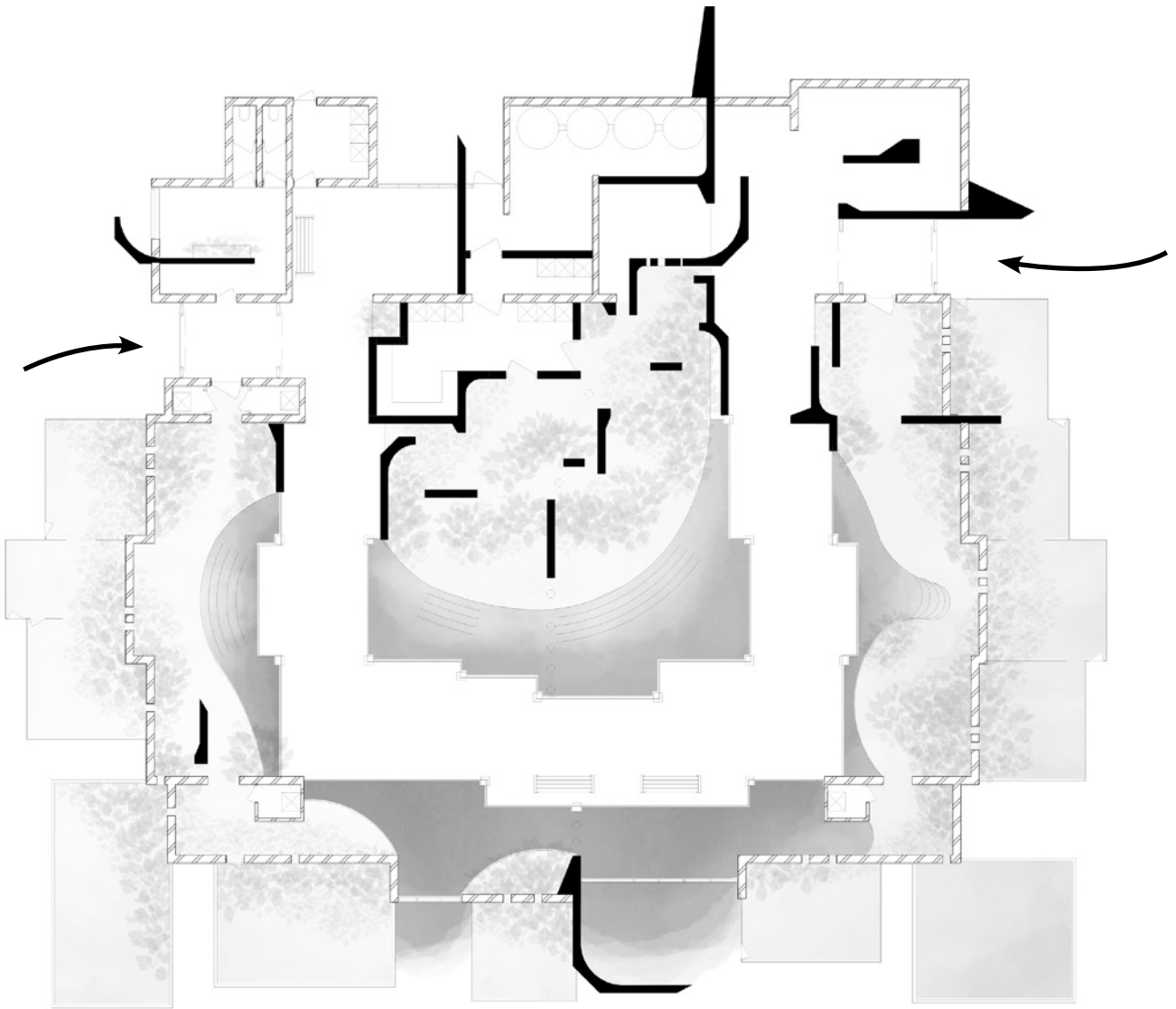
# Plan

## Rising walls in Artis



Artis Islands - RAVB

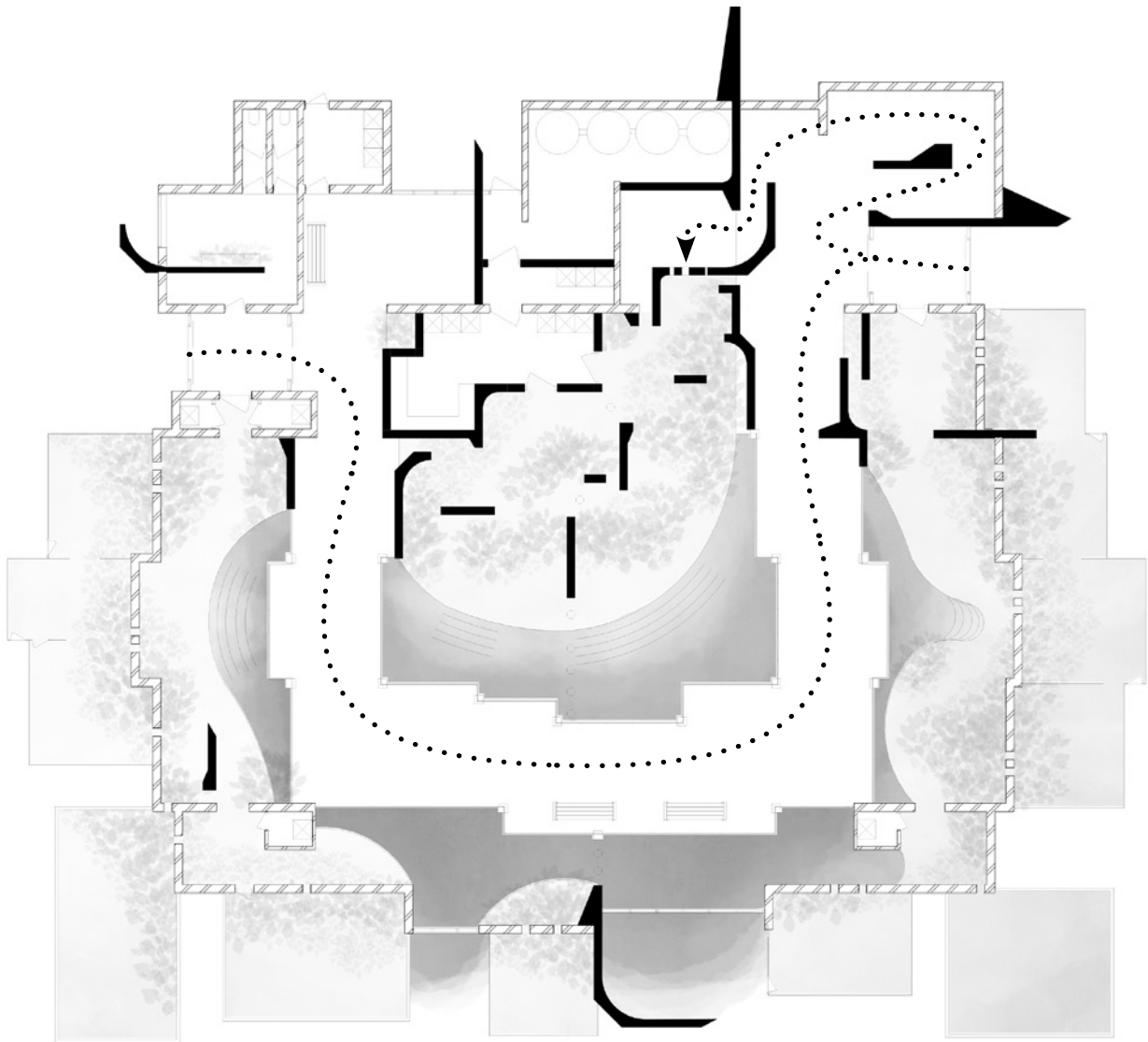
Rising walls integrated in the existing building  
Cross section

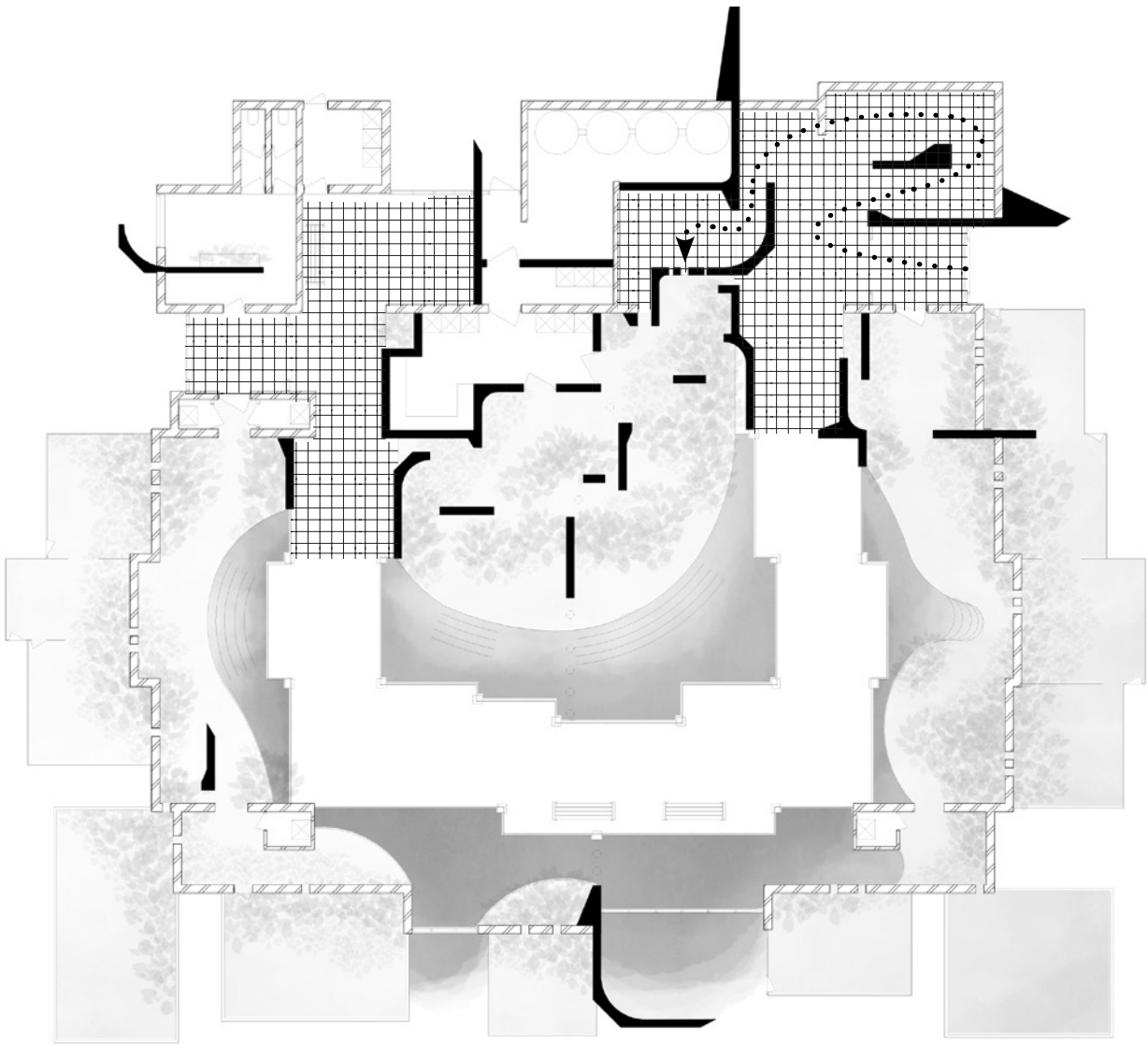


Entrances  
Plan

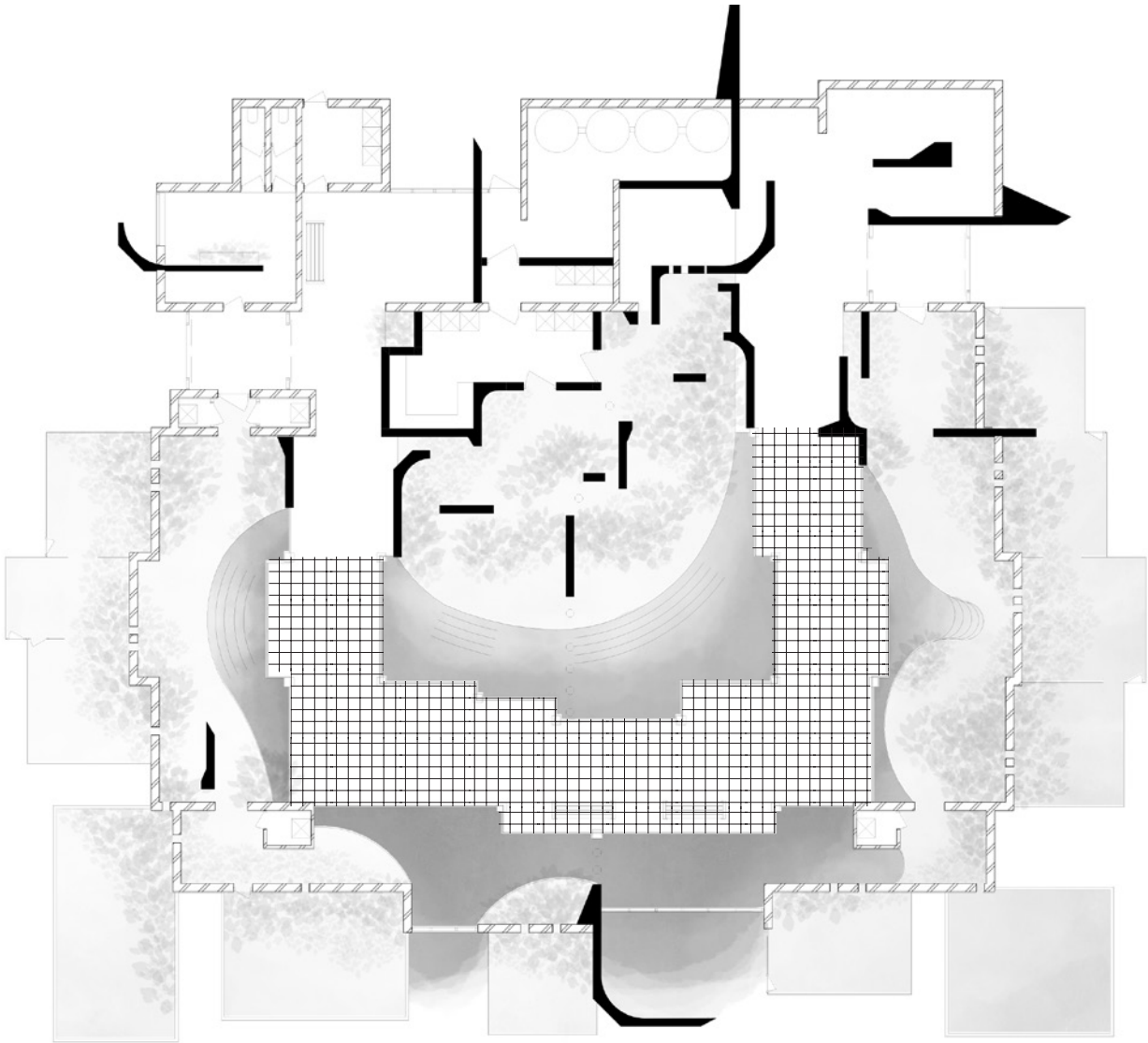
# Plan

## Routes and areas

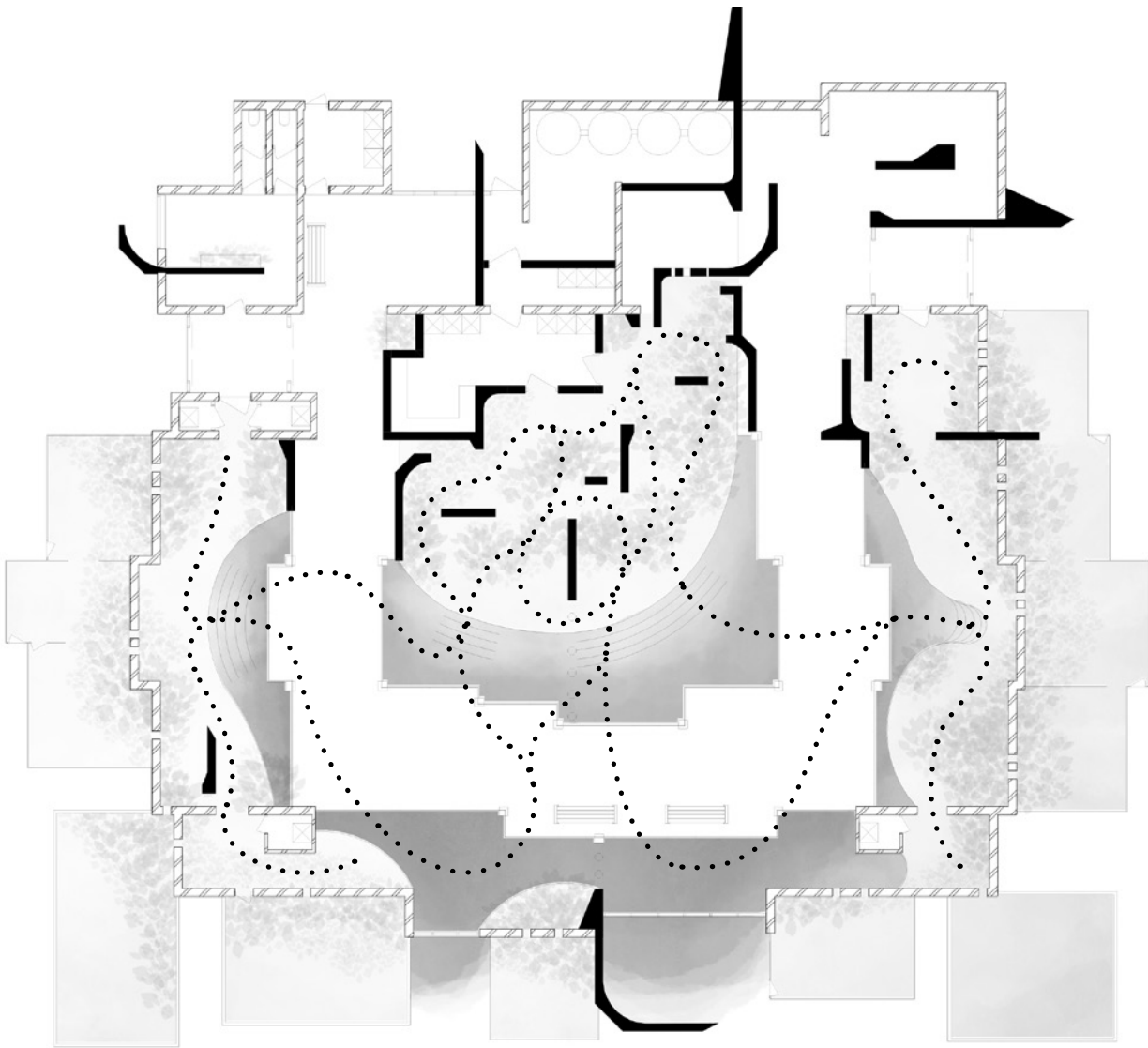




Seeking areas  
Plan

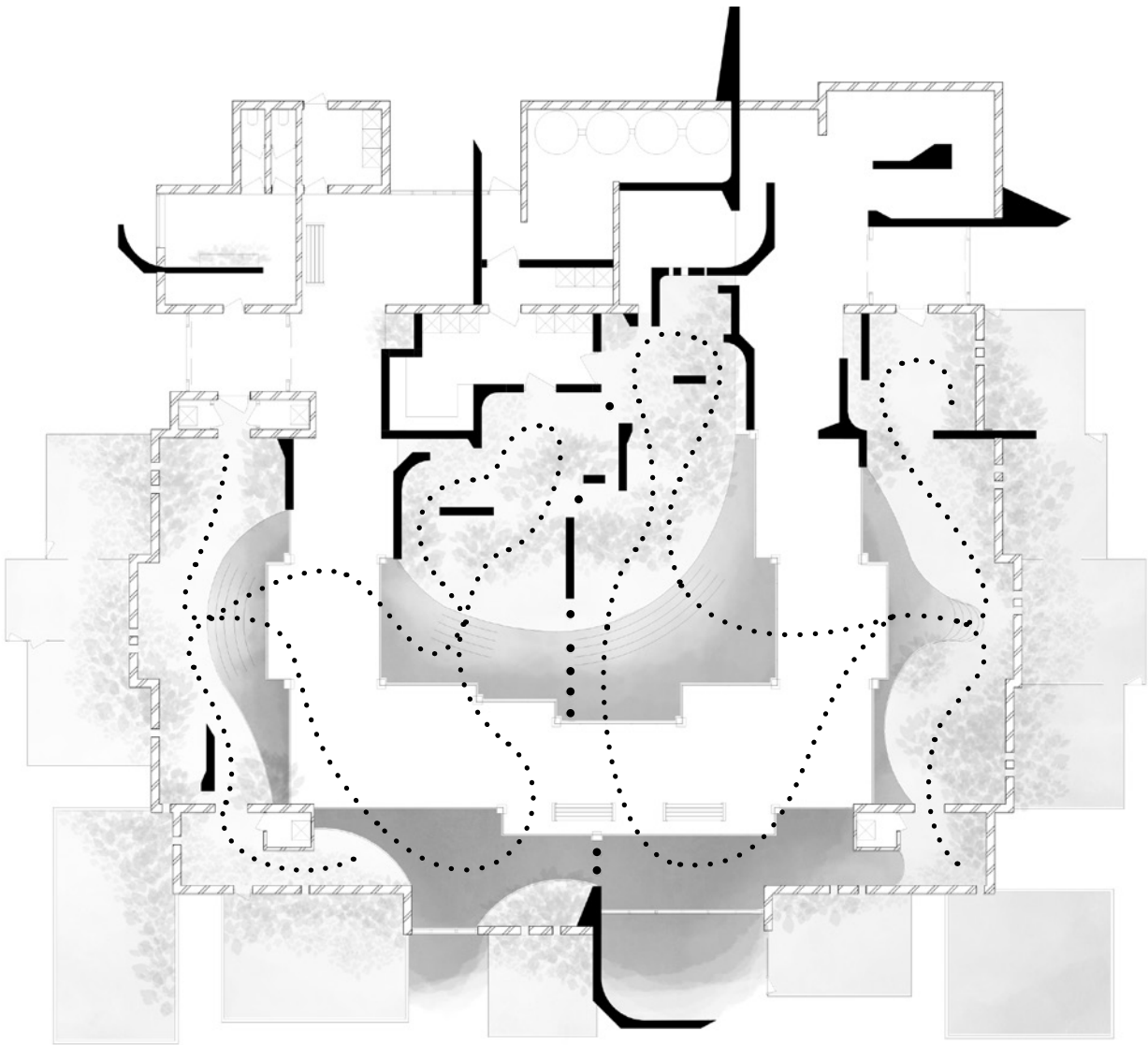


Surprise area  
Plan

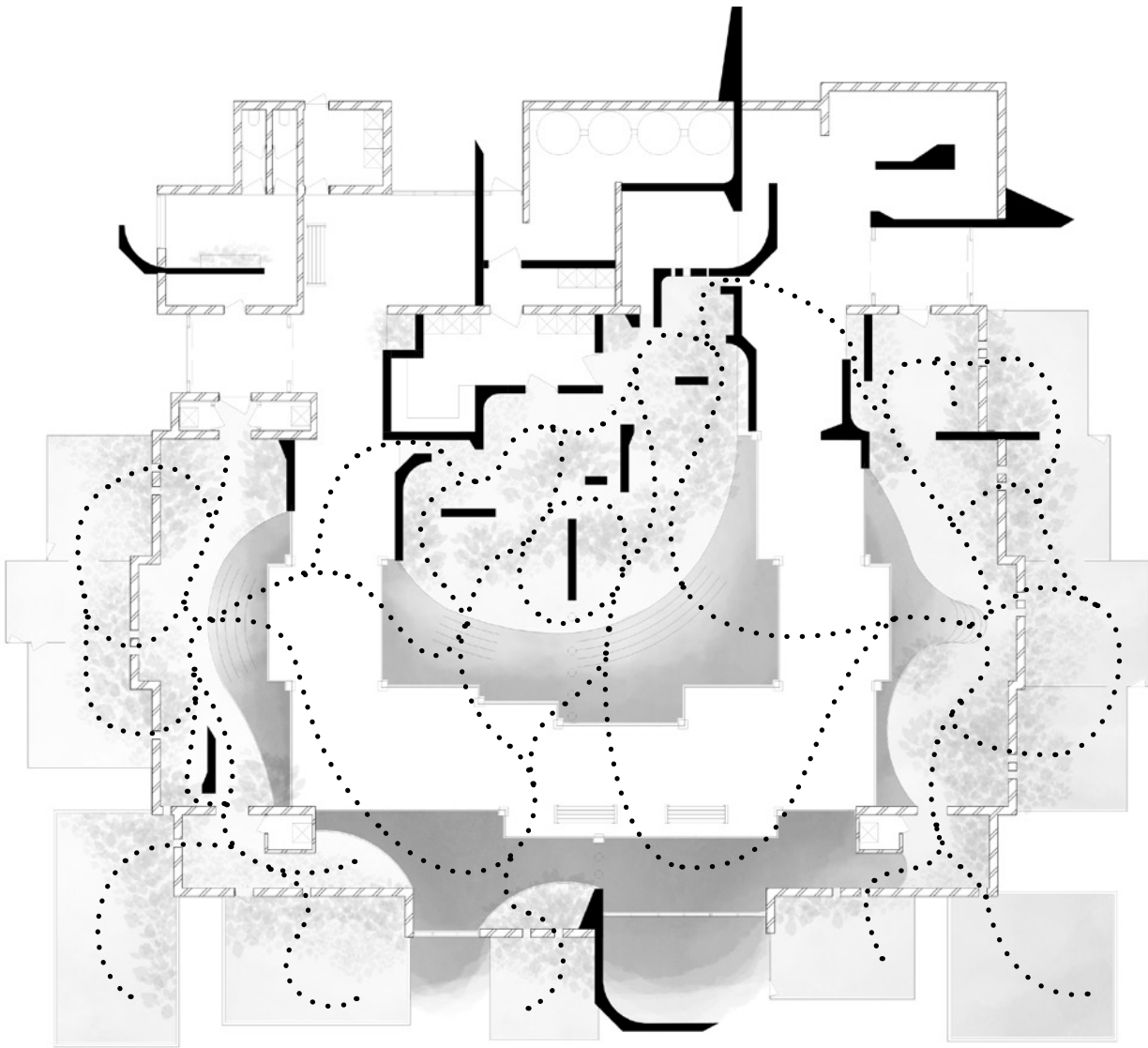


Hippo route | all open  
Plan

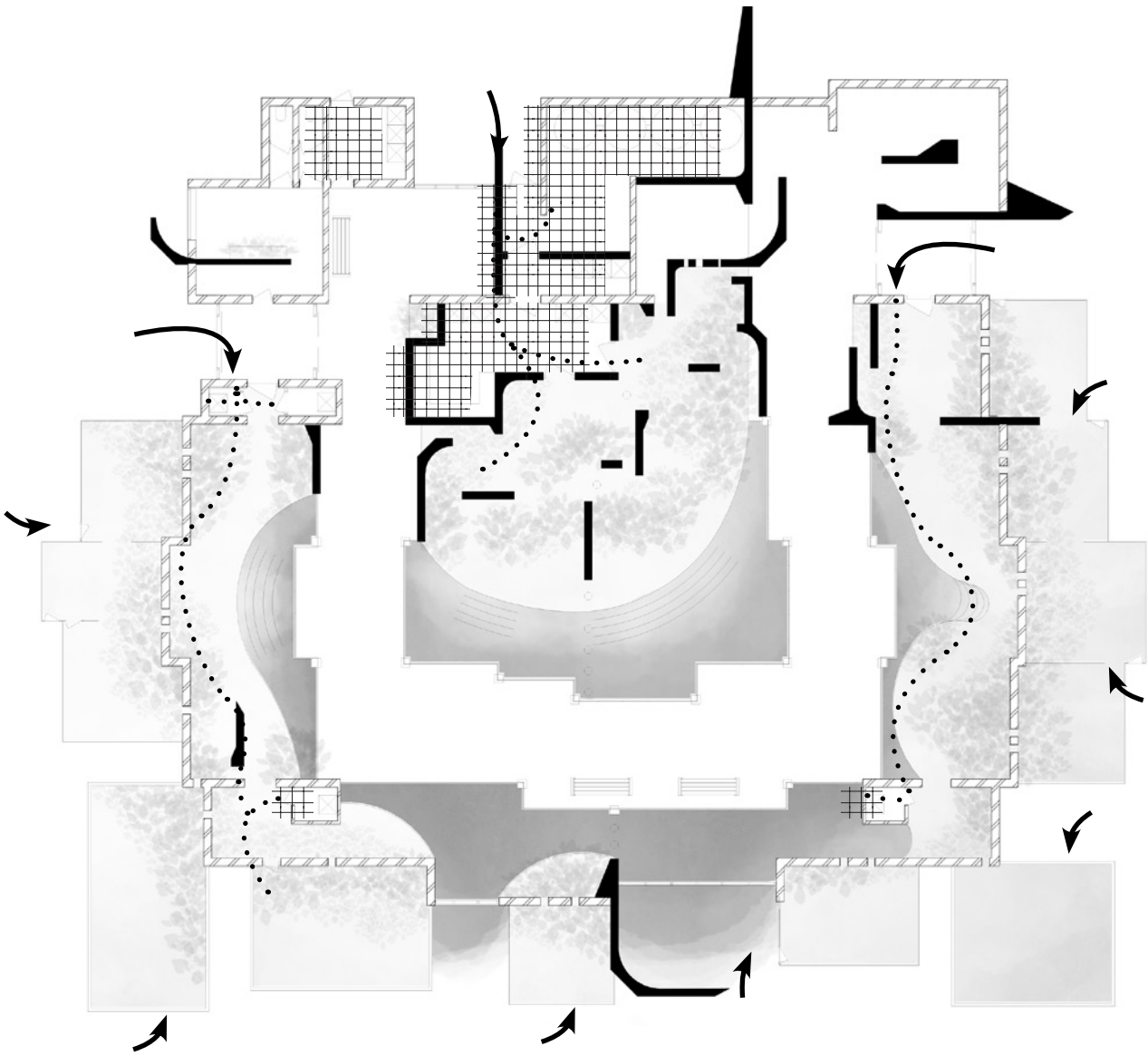




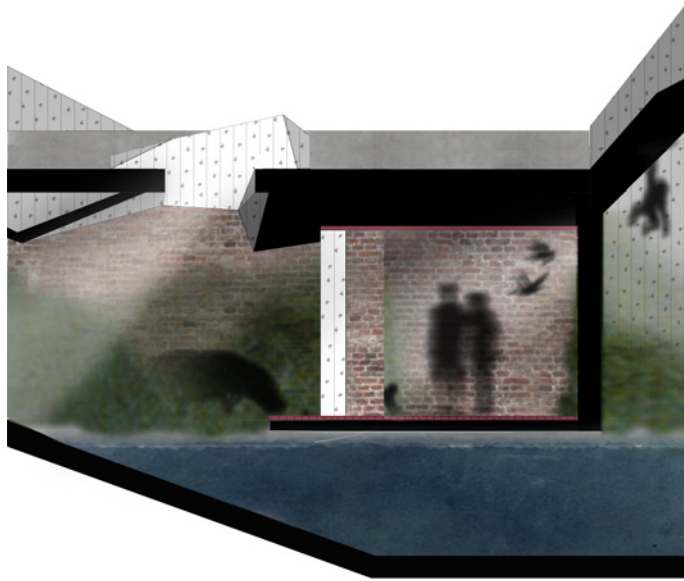
Hippo route | optional split  
Plan



Other animals route  
Plan



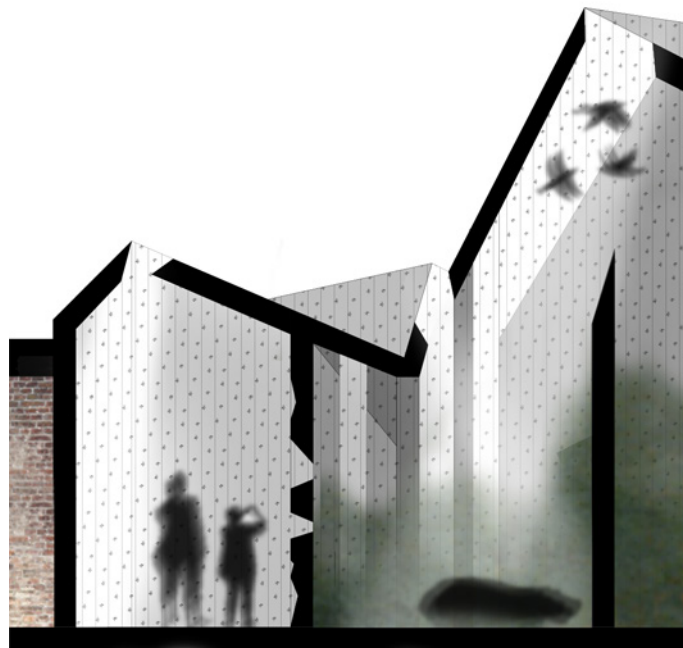
Zookeepers route and areas  
Plan



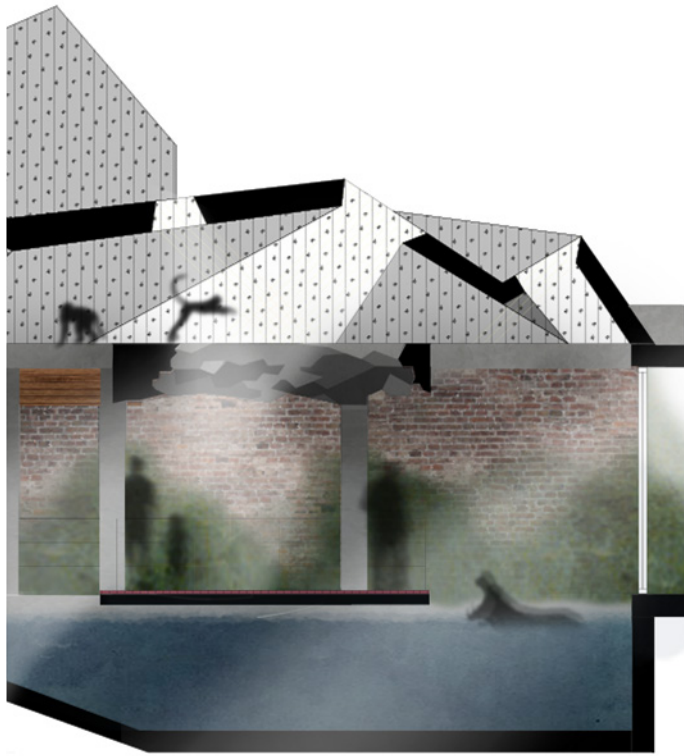
Seeking area | wall boundaries with smaller and wider openings  
Section fragment

# Plan

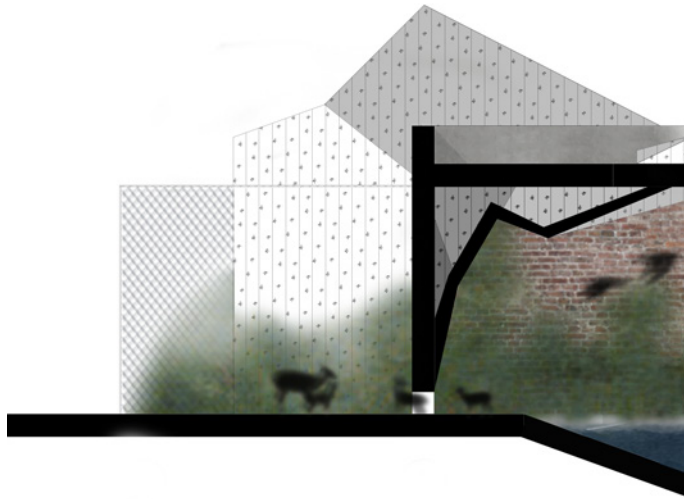
## Fragments



Sneak peek area | Small openings in the boundaries to have a look in their shelter  
Section fragment



Surprise area | boundaries by distance  
Section fragment



Sneak through area (animals only)  
Section fragment



Wooden ceiling, tiled floor, brick  
Keep existing materials

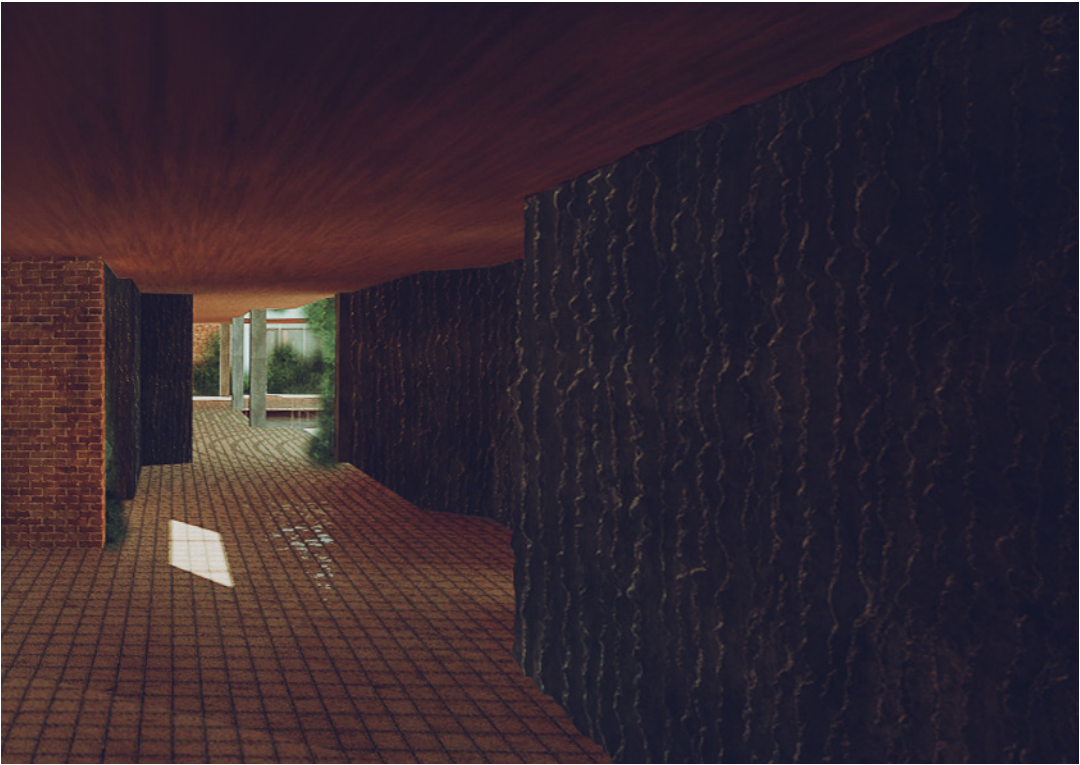


# Plan

## Material palette



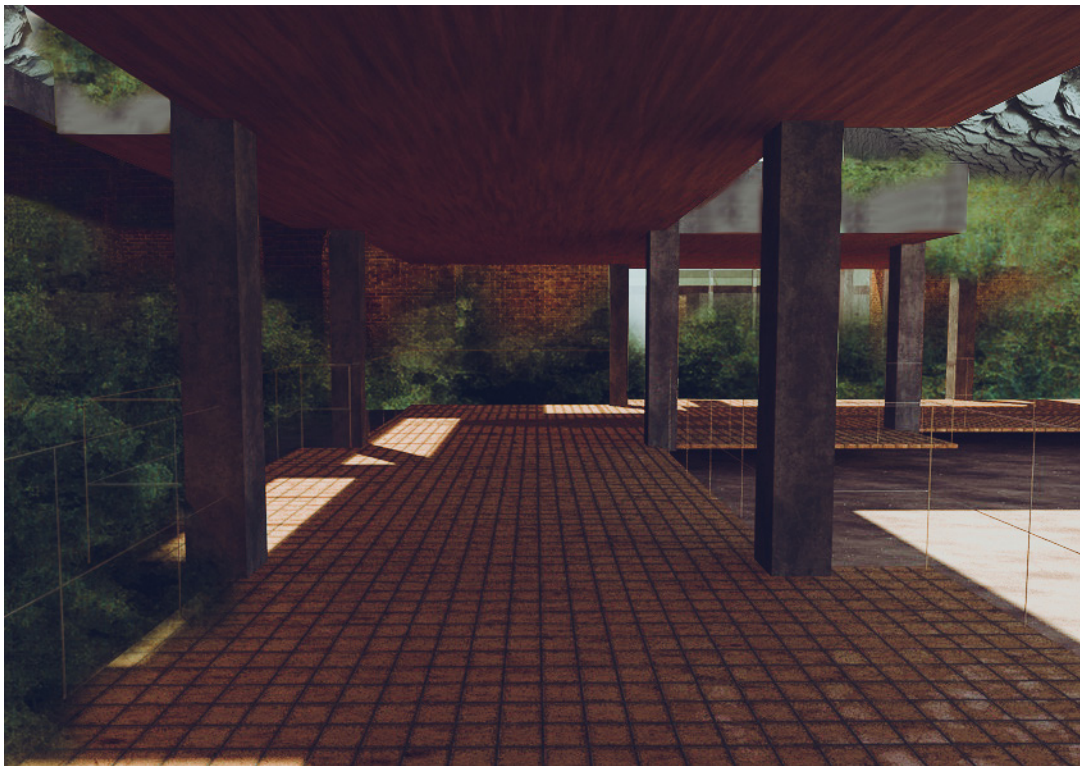
Dense real plants, rough concrete, dark sand floor and bark mulch  
New materiald



Seeking area  
Impression

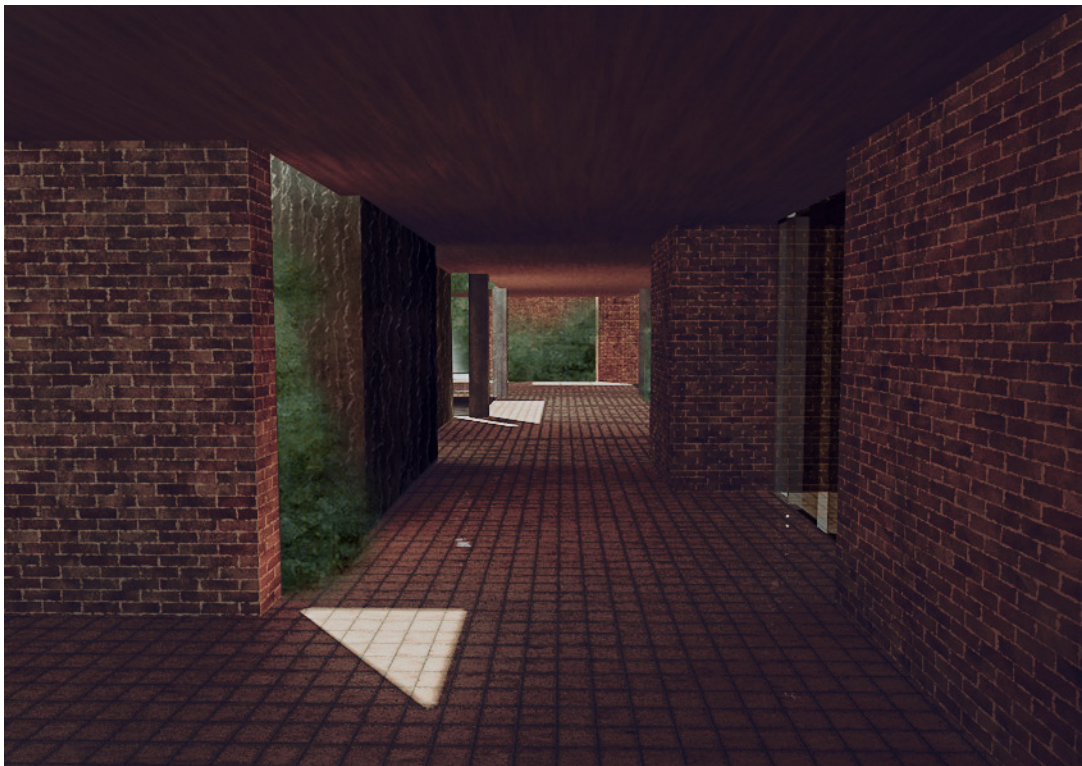
# Plan

## Impressions





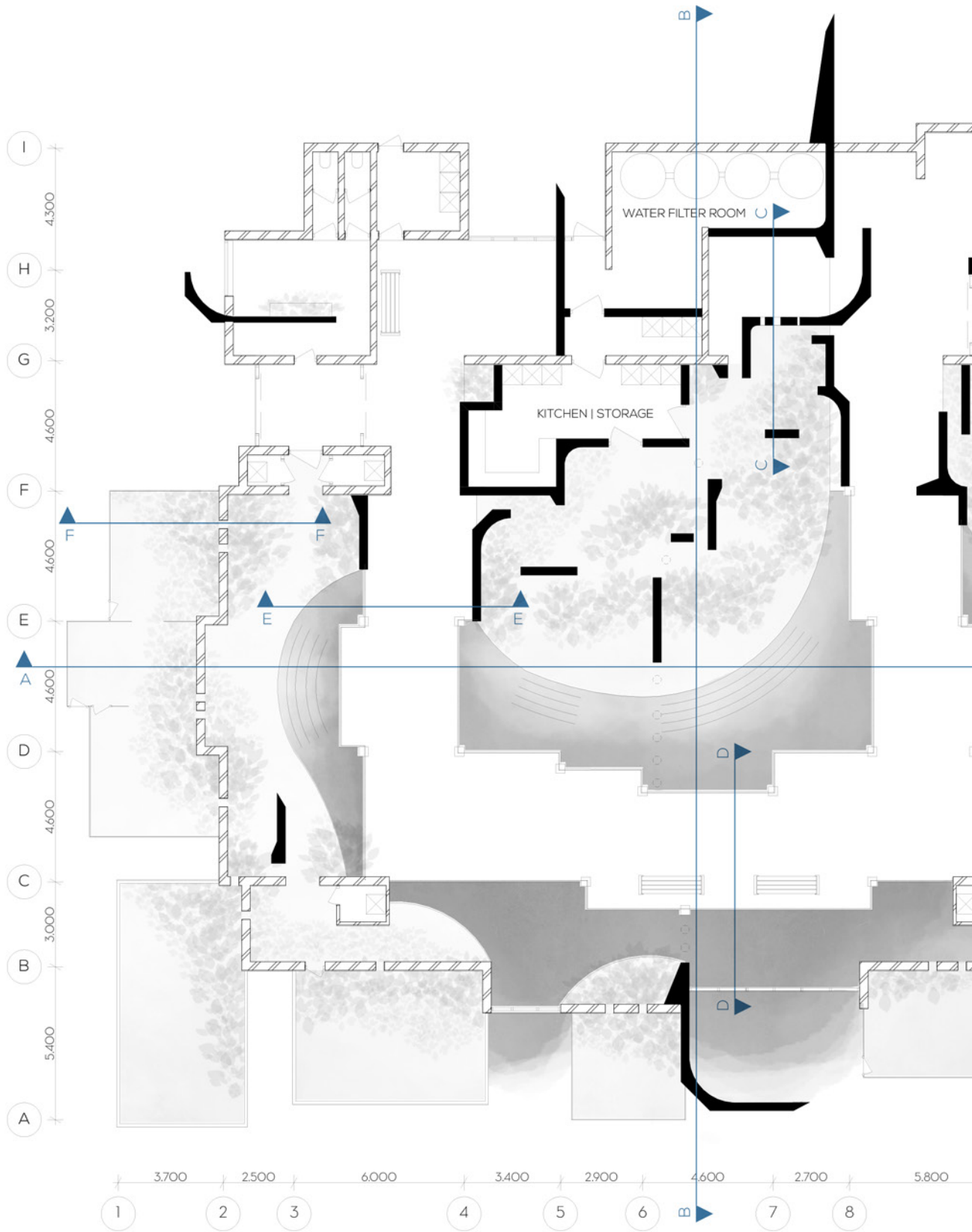
Surprise area  
Impression



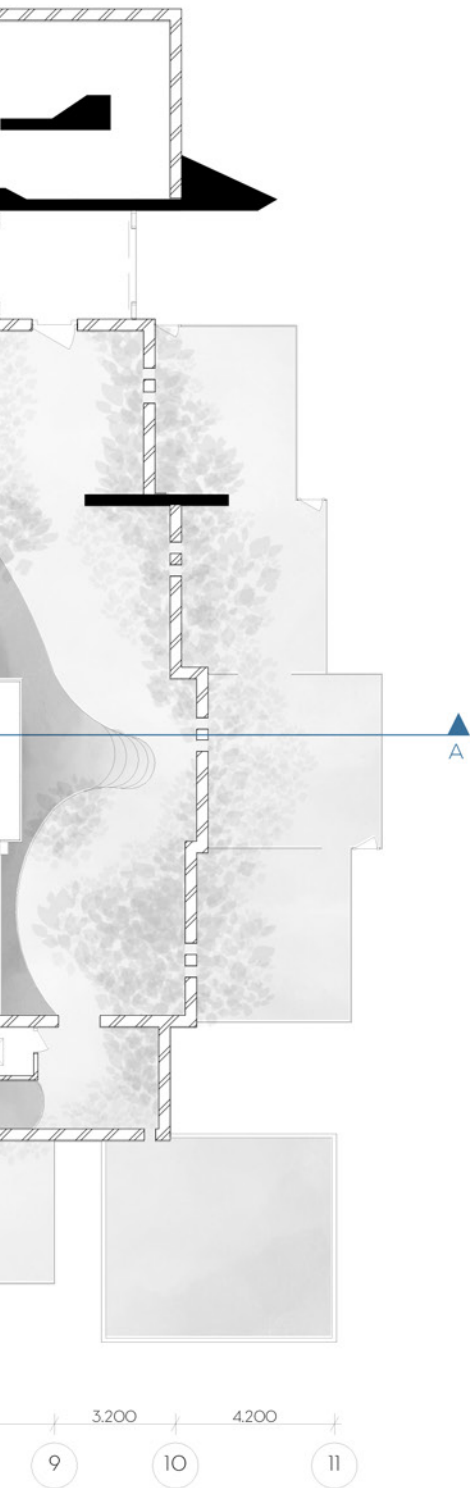


# Complements

Drawing set



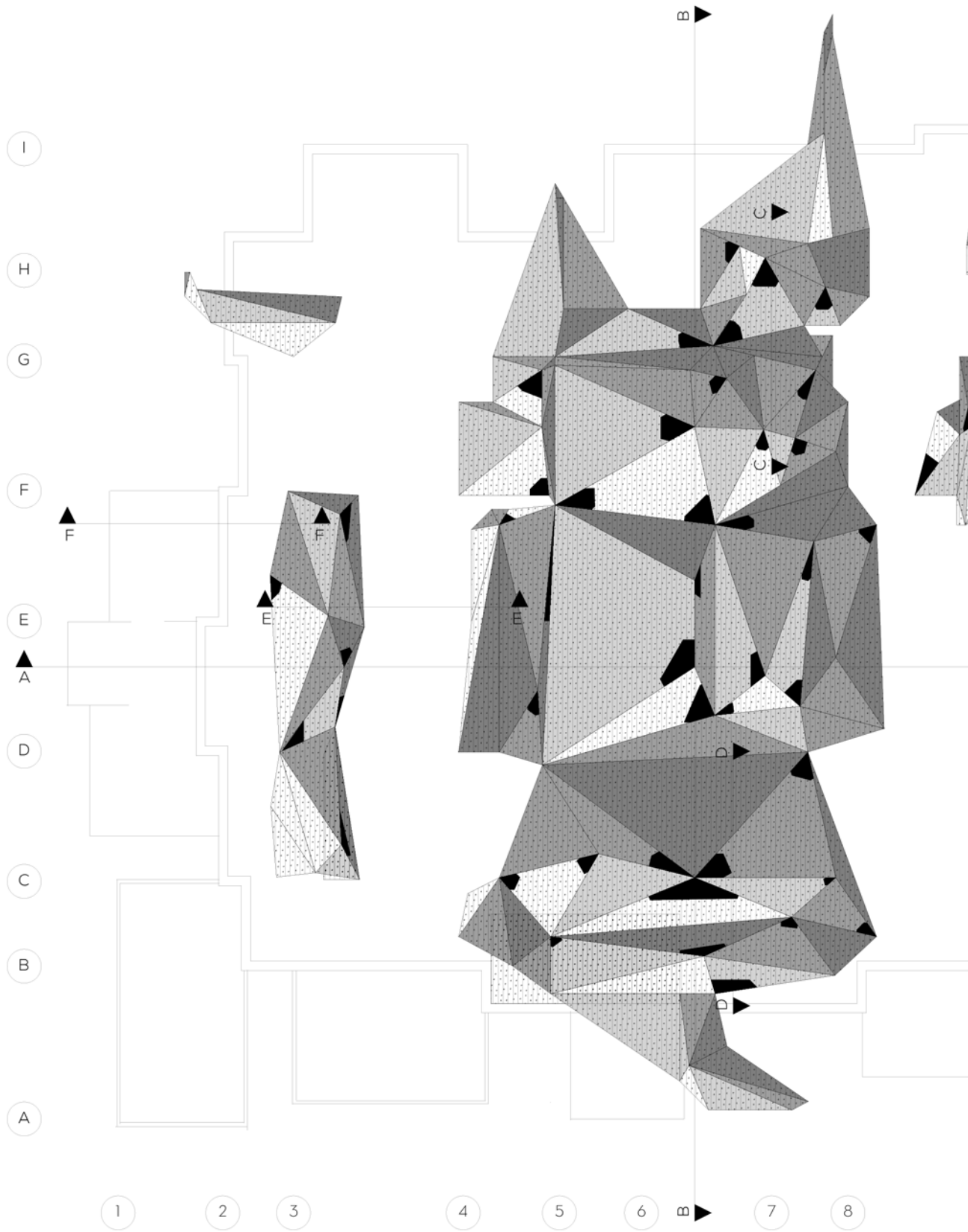


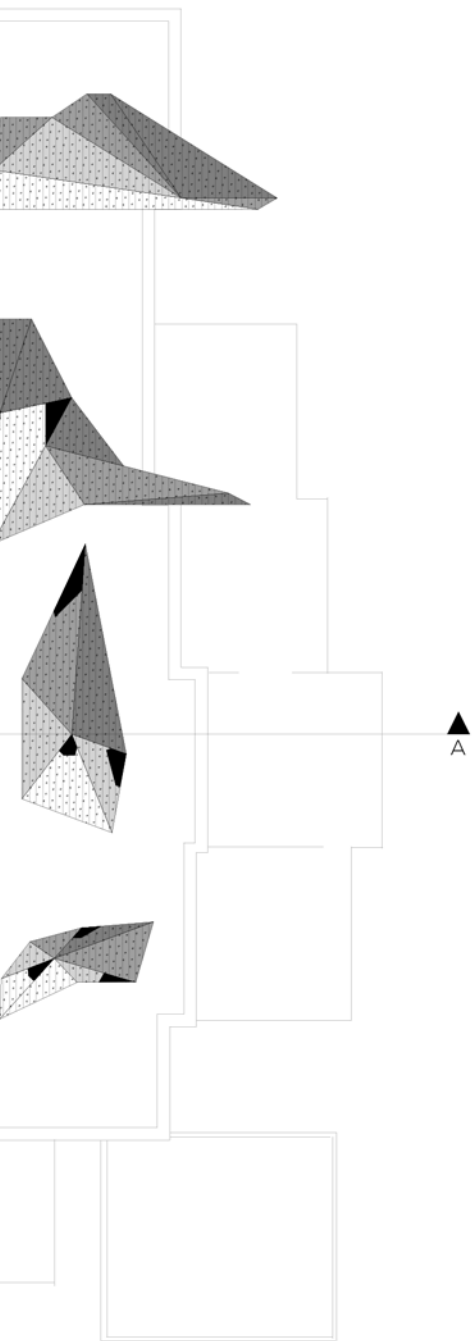


**FLOOR PLAN**

Kleine zoogdierenhuis | 1:200 | A3 | 13-06-20

**002**





9

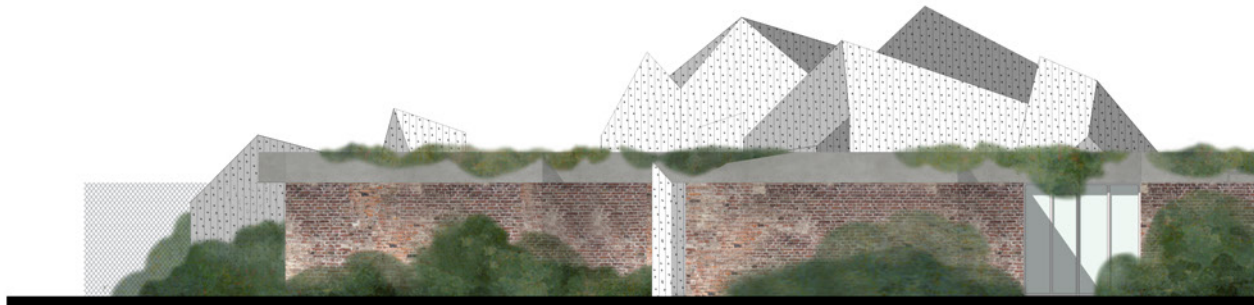
10

11

## ROOF PLAN

Kleine zoogdierenhuis | 1:200 | A3 | 12-06-20

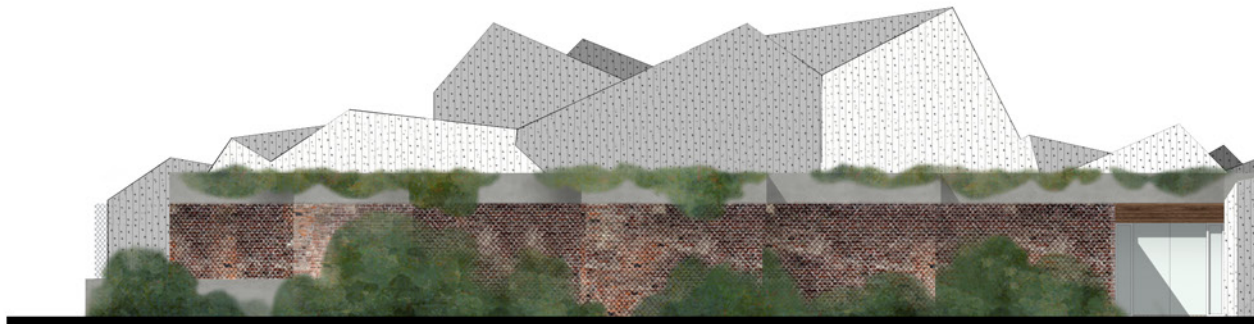
003



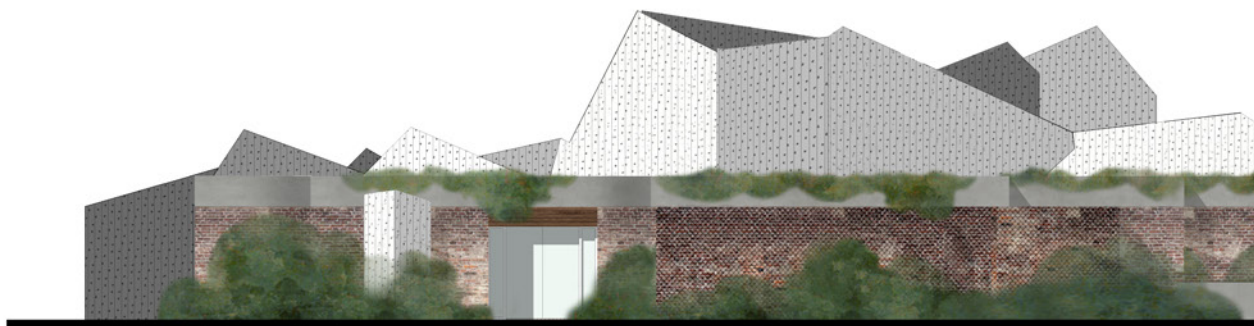
**LEFT FACADE**



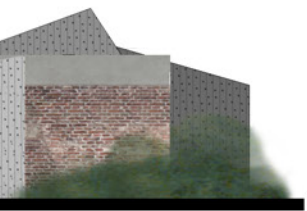
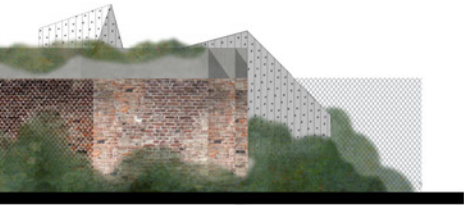
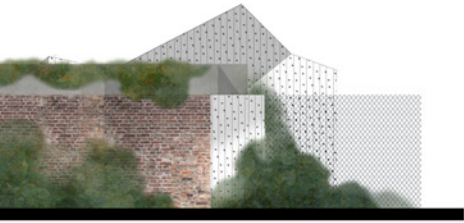
**RIGHT FACADE**

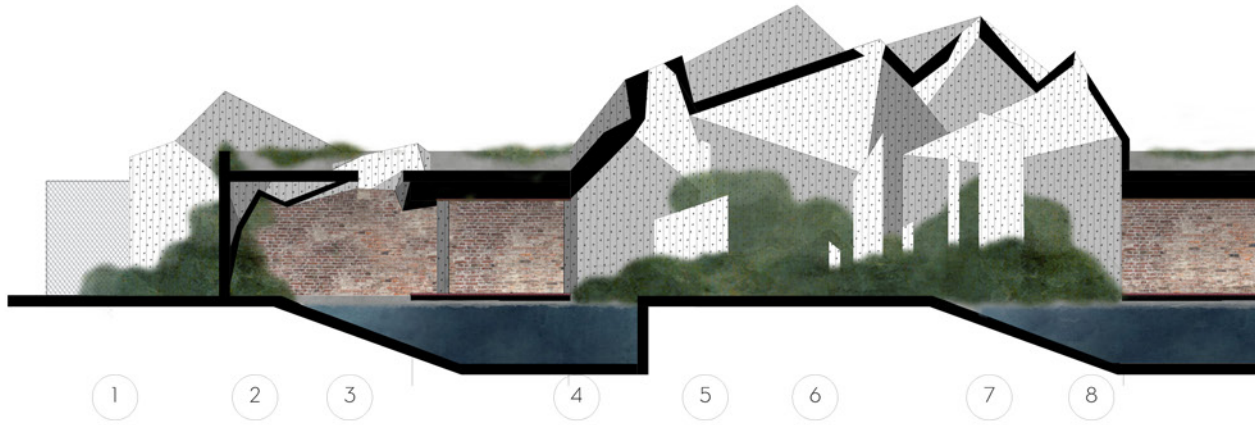


**BACK FACADE**

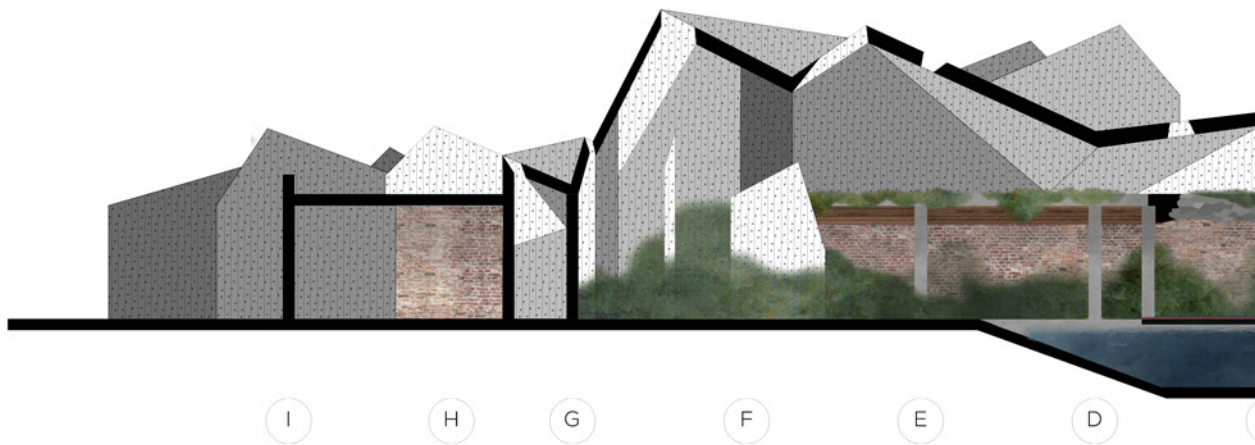


**FRONT FACADE**

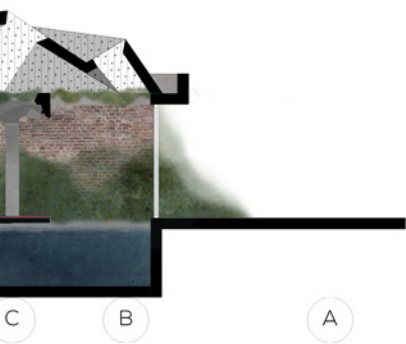
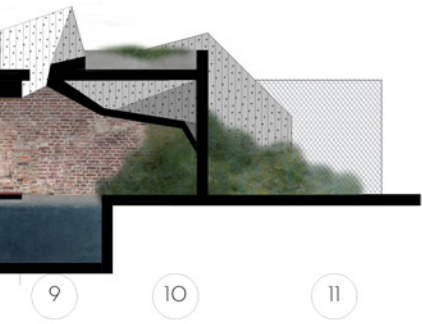


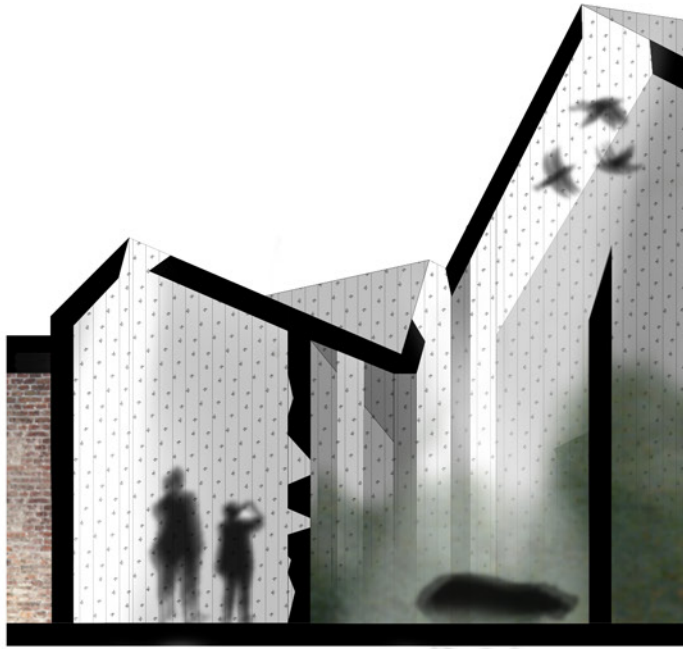


**SECTION A-A**



**SECTION B-B**



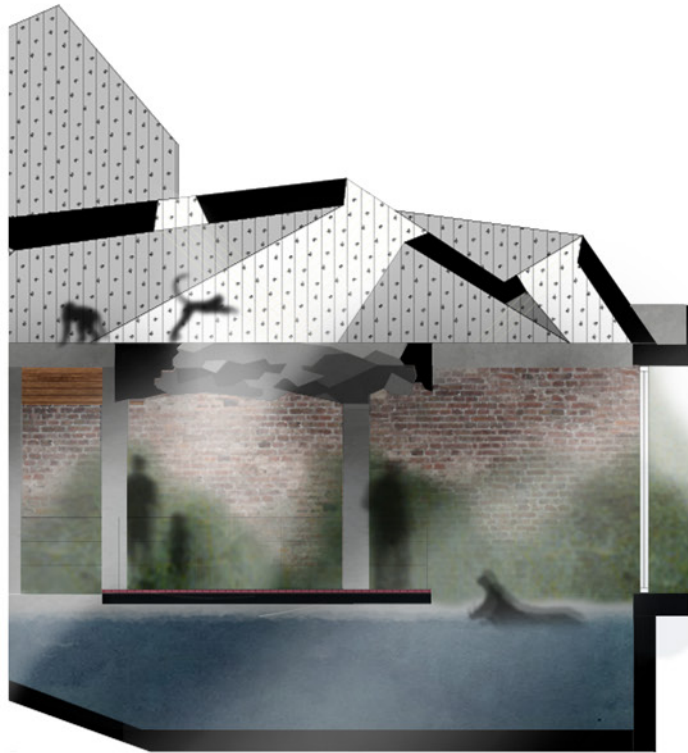


SECTION C-C

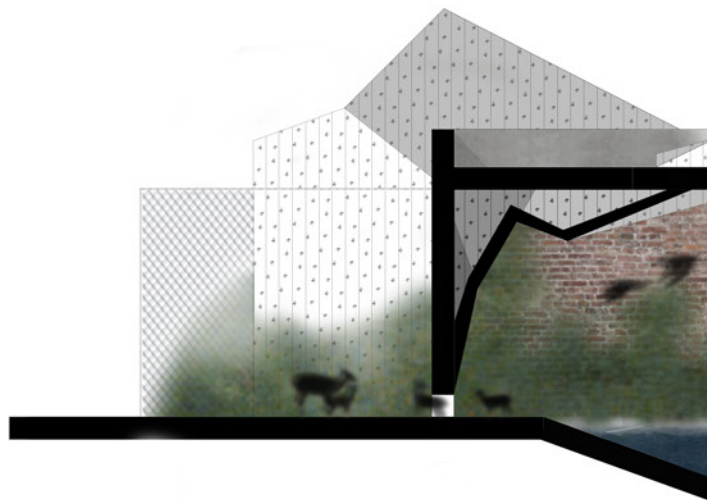


SECTION E-E





**SECTION D-D**



**SECTION F-F**

**SECTION FRAGMENTS**

Kleine zoogdierenhuis | 1:100 | A3 | 12-06-20

**005**



