

The Natural in-Between Place for Stress Relief through Biophilic Design

Masja Rietveld, Architectural Engineering Graduation Studio, 17-01-2024

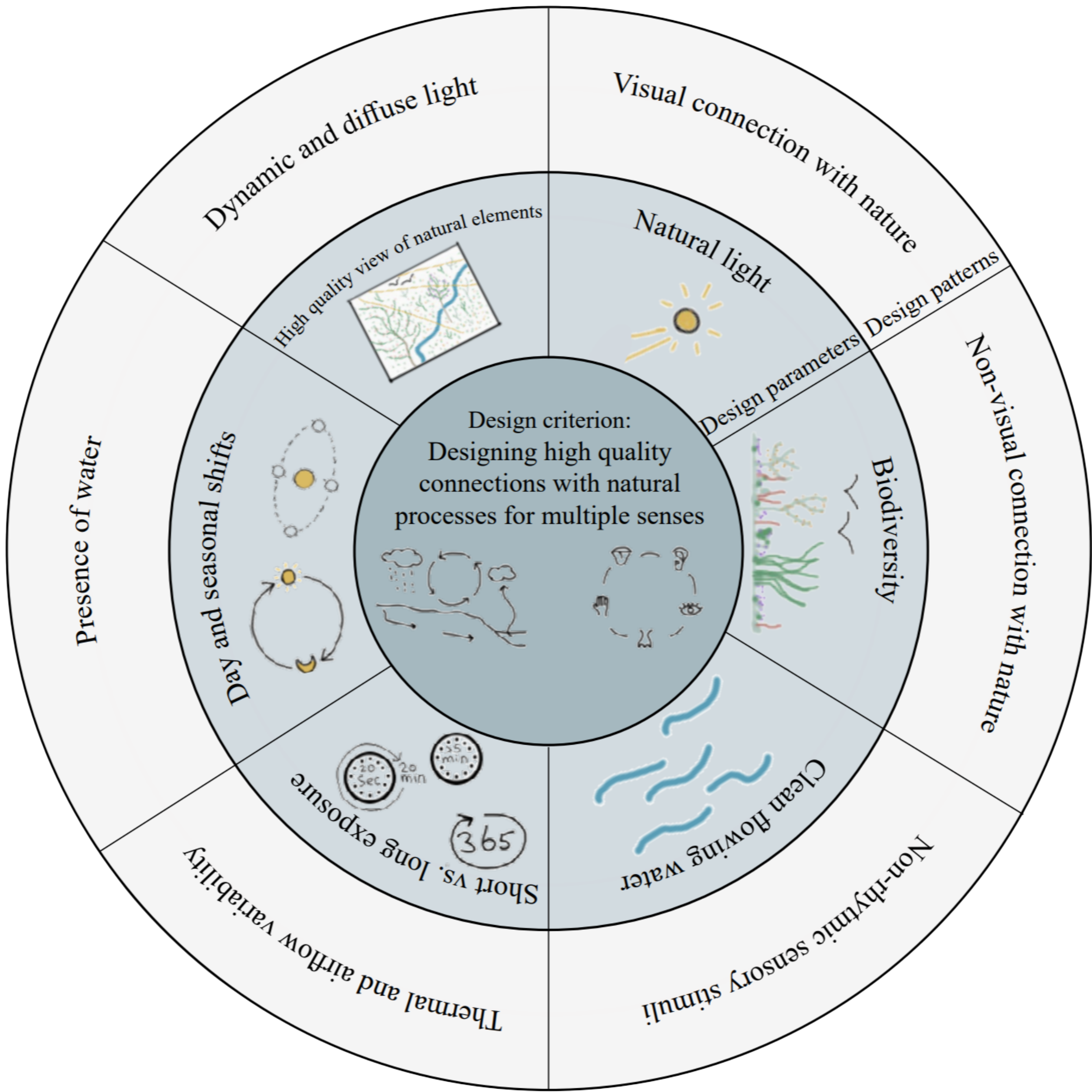
INTRODUCTION



SECTION B-B SCALE 1:150

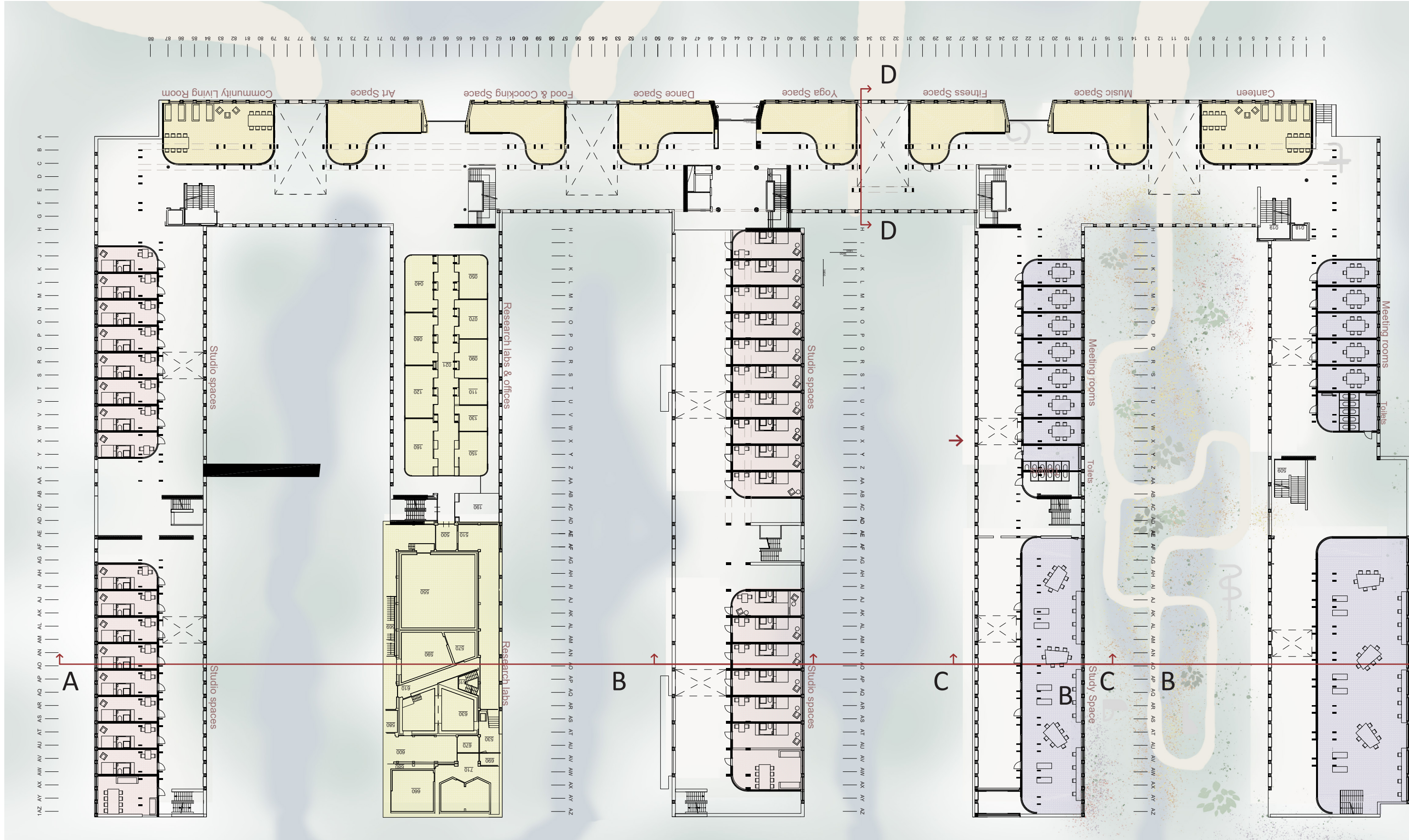
We as humans have evolved in nature. This causes our mental health, with stress as the most important aspect, to suffer from our contemporary modern life in the city. In addition, awareness of natural processes is important for sustainability. Biophilic design can be a solution. Biophilic design draws on our biologically ingrained tendency to interact with and experience nature. The problem, however, is that there are already many studies proving the qualities of biophilic design, but there is not yet a translation for application for the architect. This translation was made within this project by creating a design guide, concluding with a tool for architects. Then, the TNW building on the TU Delft Campus was used as a prototype. This building needs to be renovated and is currently the Applied Sciences Faculty. The renovation design consists of living, studying and an active “street” with sports and culture and, by applying the tool, responds to the perception of natural processes for students, since this group experiences a lot of stress.

AMBITION THEMES

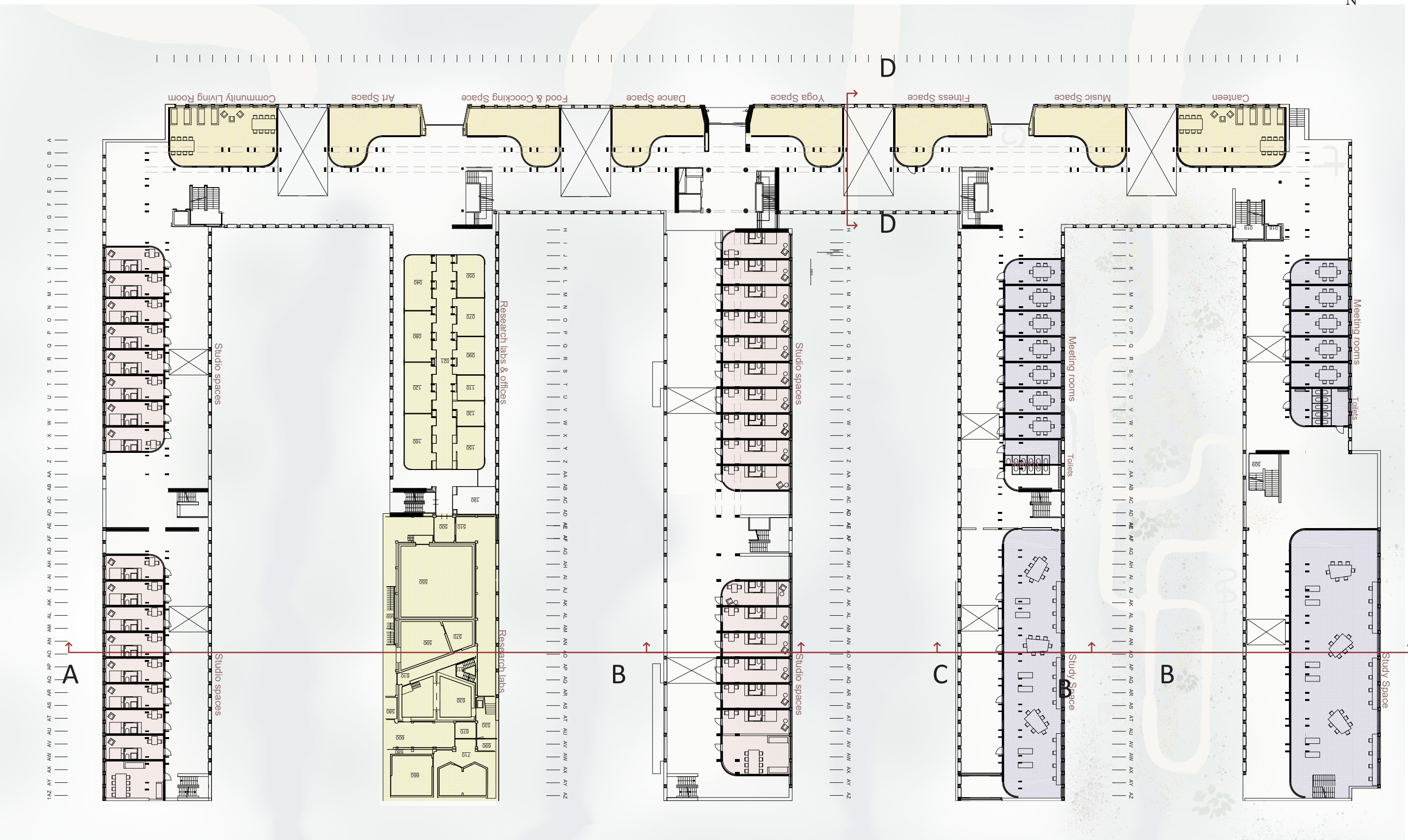


BIOPHILIC STRESS RELIEF TOOL FOR ARCHITECTS

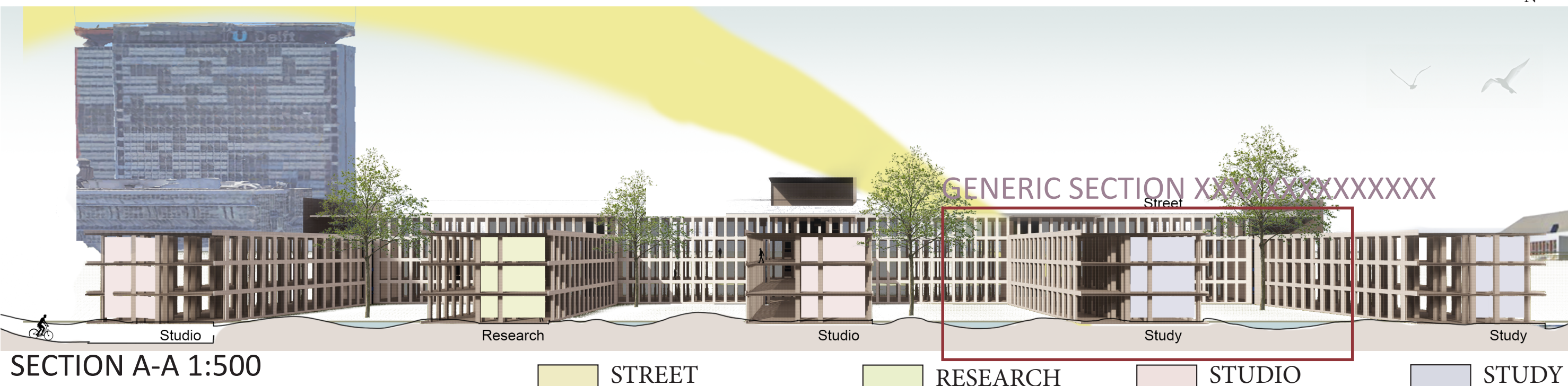
SITUATION



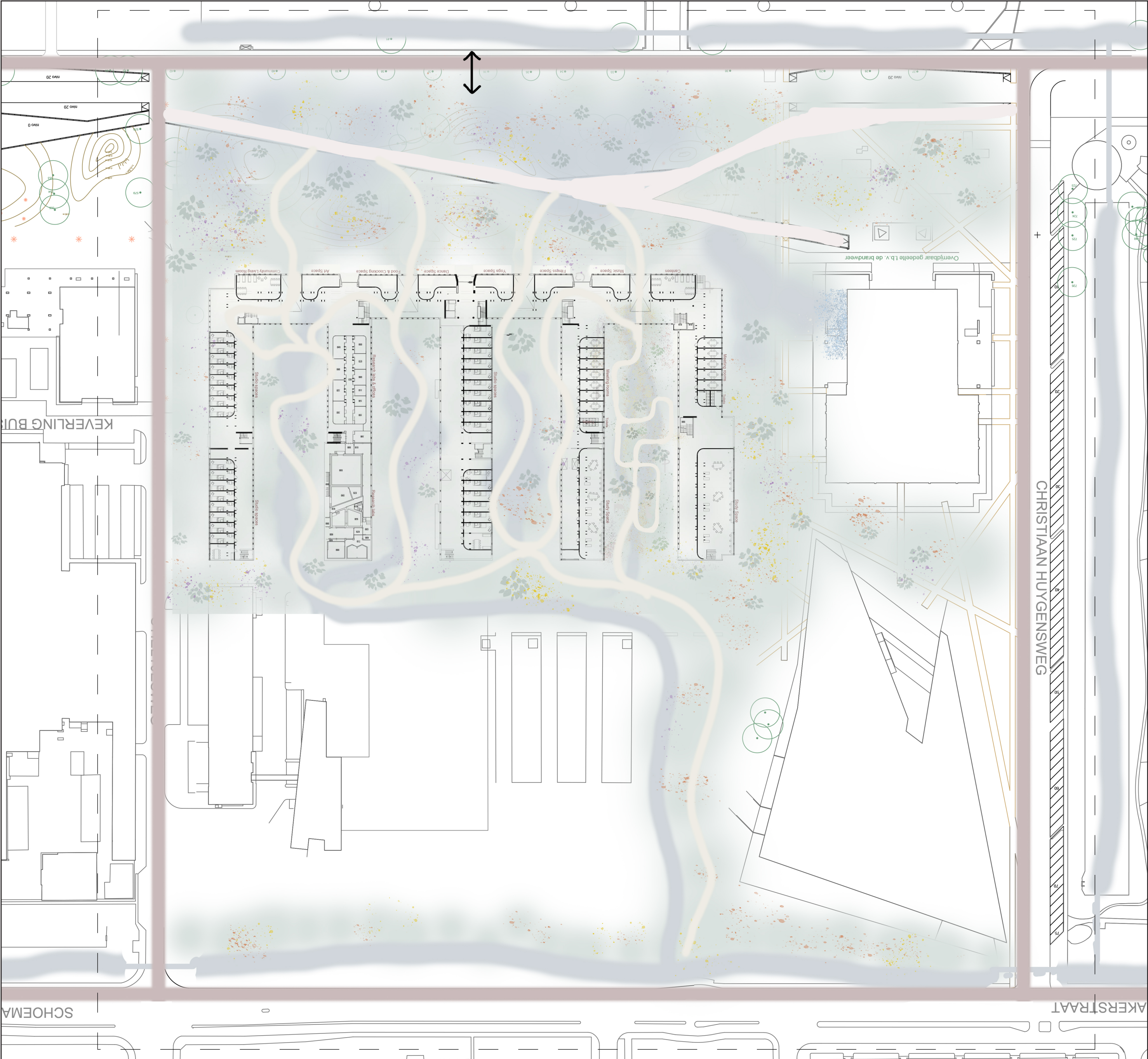
GROUND FLOOR 1:500



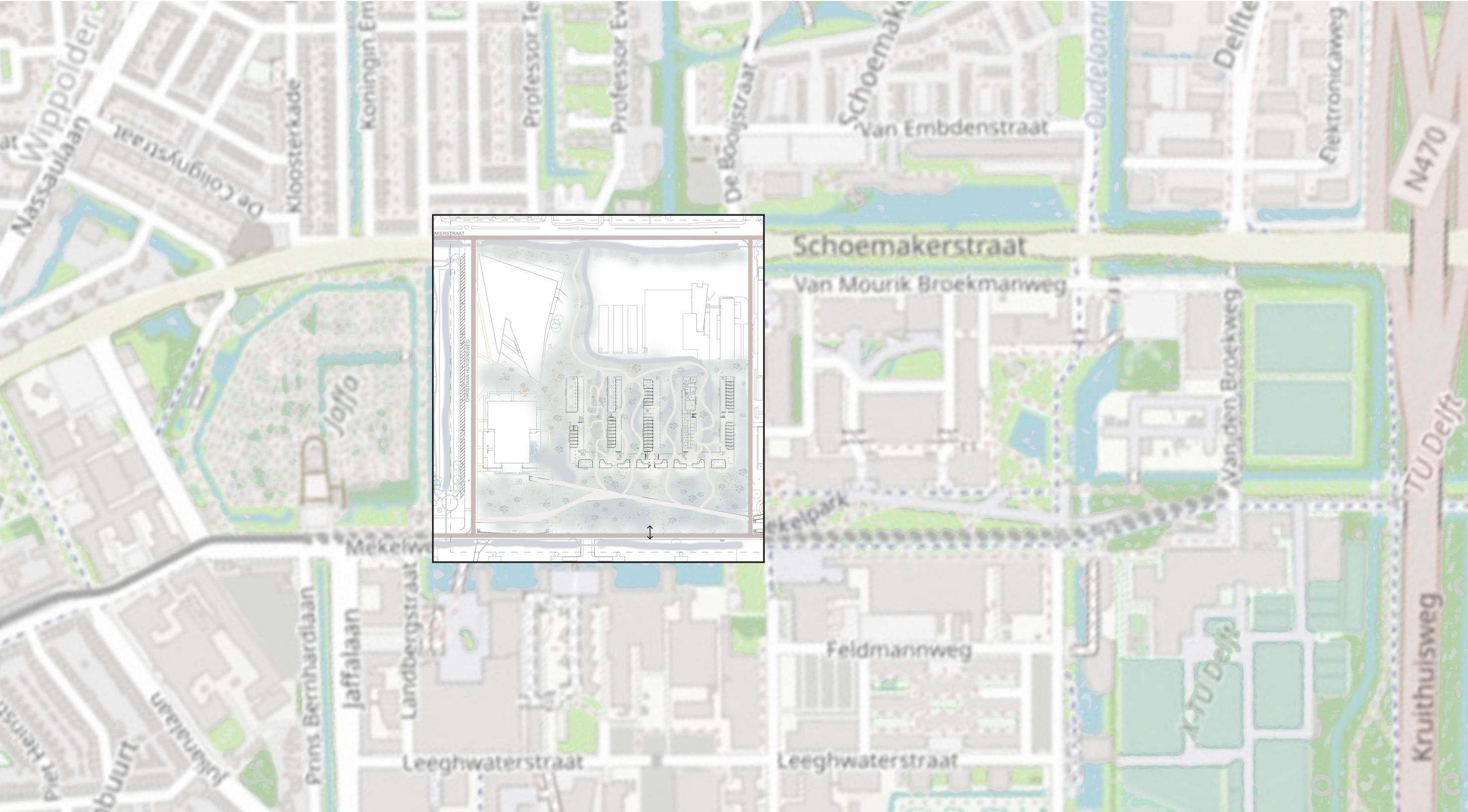
GENERIC 1ST & 2ND FLOOR 1:00



SECTION A-A 1:500



BLOCK SITUATION 1:1000



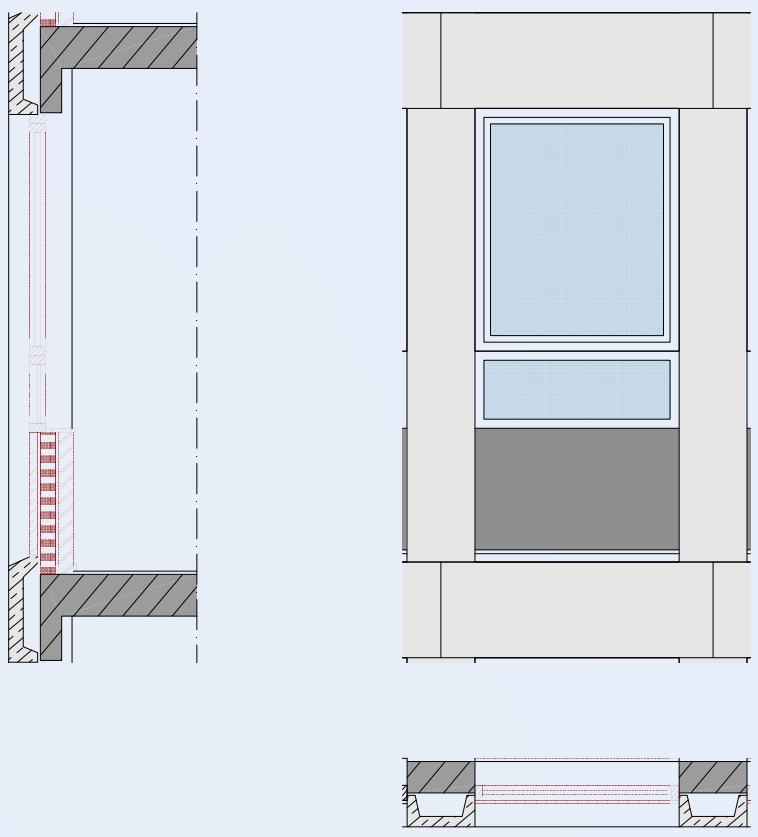
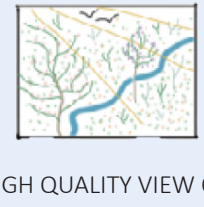
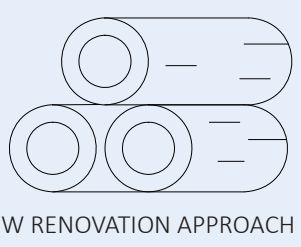
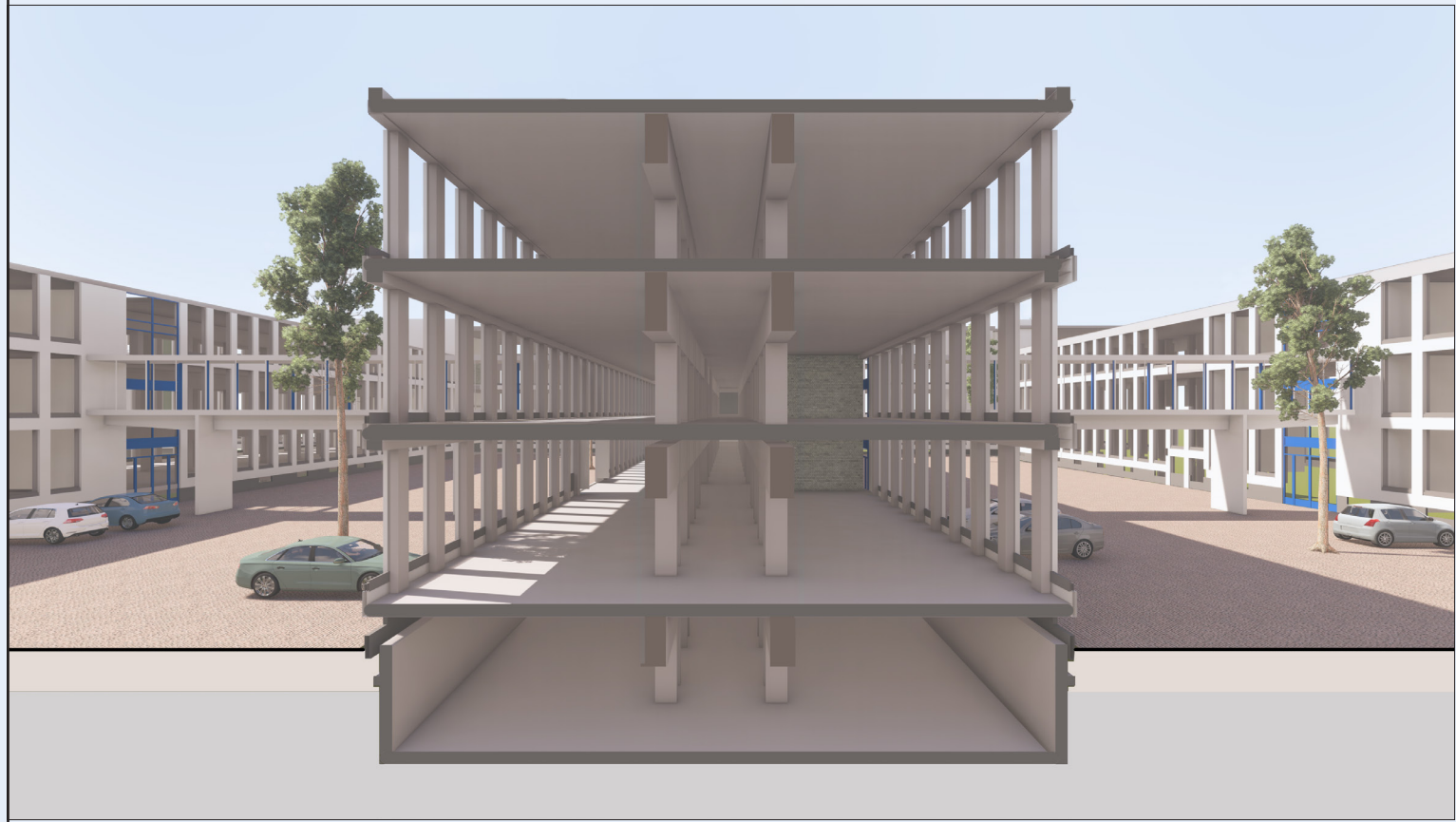
CAMPUS SITUATION 1:5000

0. EXISTING 1:200

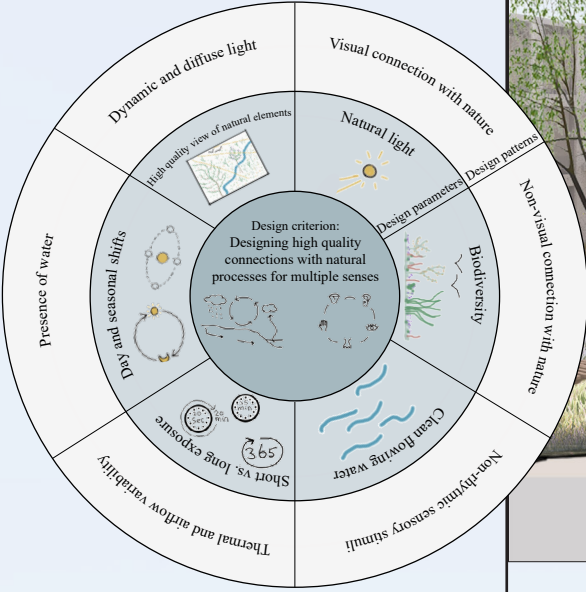
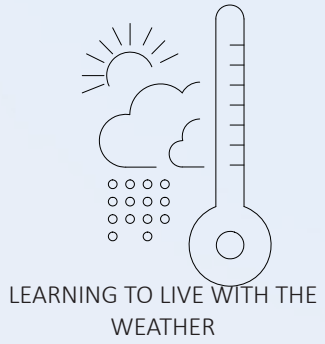


INTERVENTIONS GENERIC SECTION

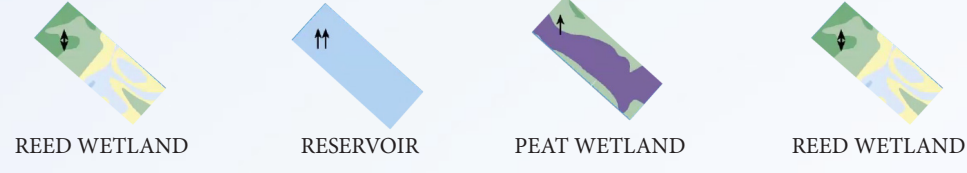
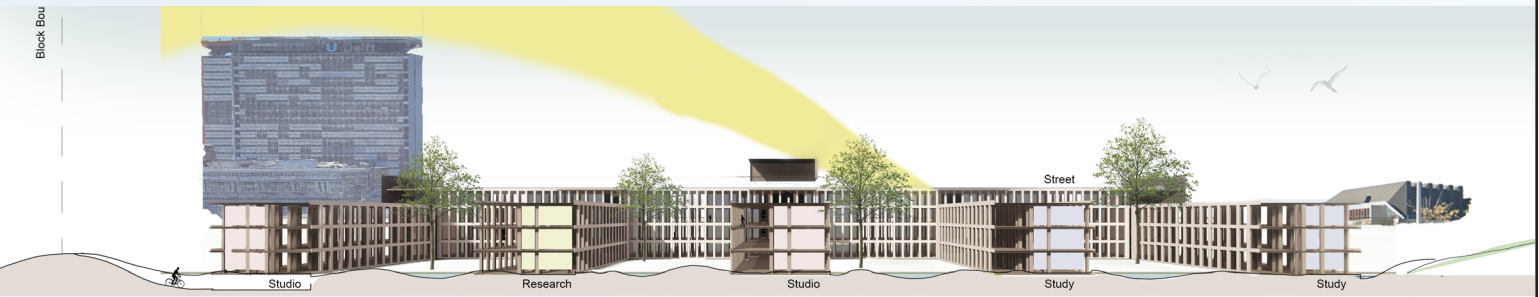
1. OPEN STRUCTURE 1:200



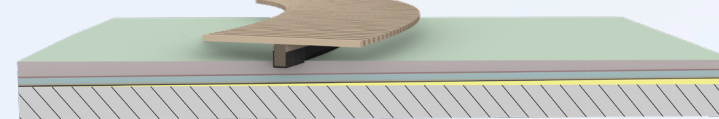
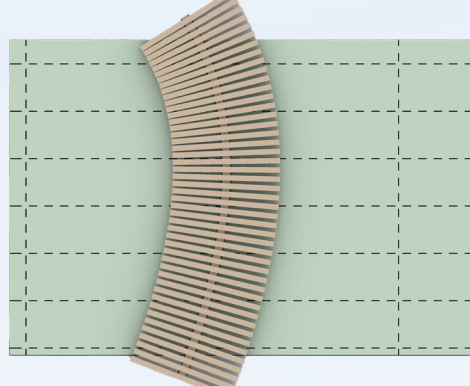
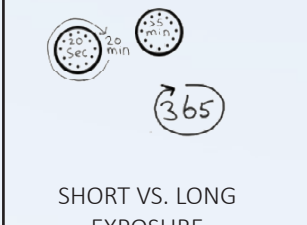
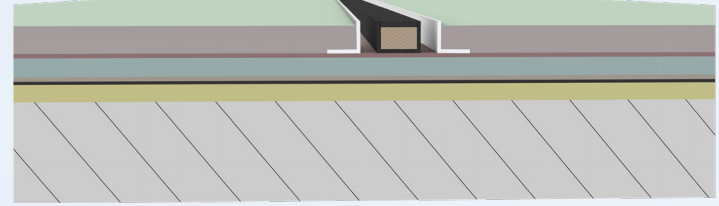
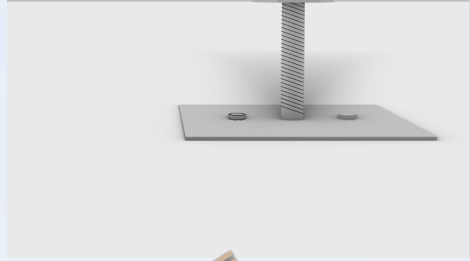
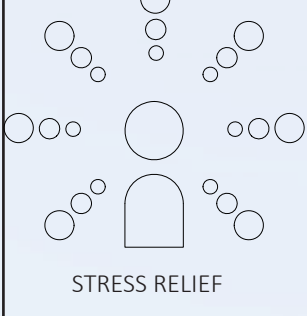
3. CLAY CLIMATIZED ZONES 1:200



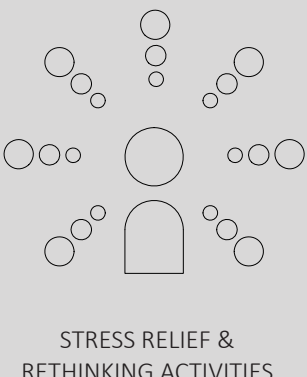
2. LANDSCAPE 1:200



4. ROUTING 1:200

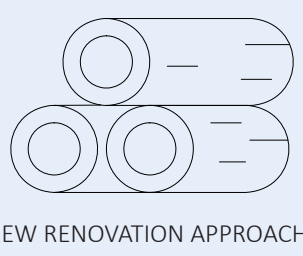
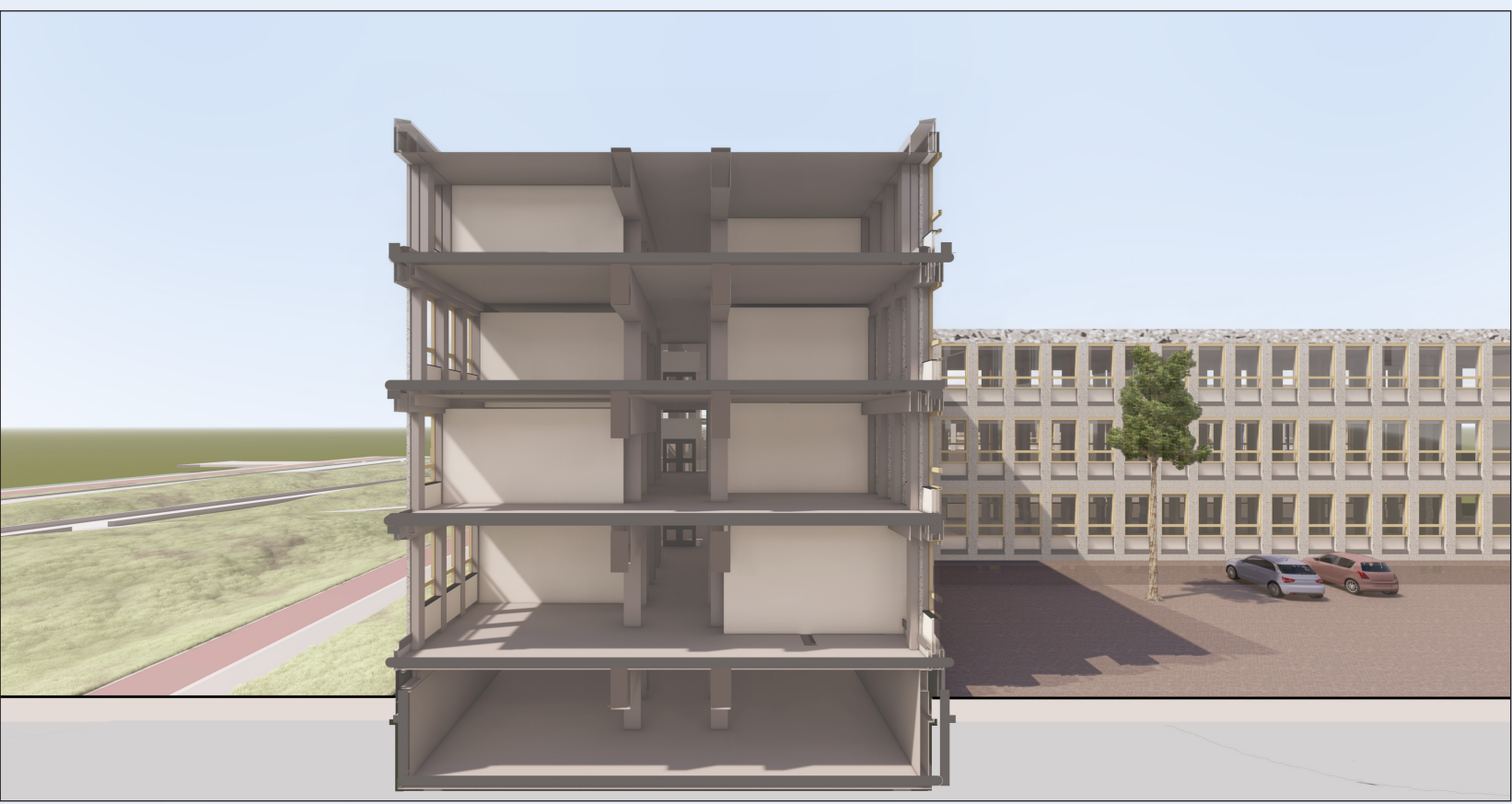


1. OPEN STRUCTURE

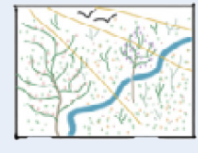


5. USE - SECTION C-C 1:50

0. EXISTING - ENTRANCE SECTION 1:200



A NEW RENOVATION APPROACH

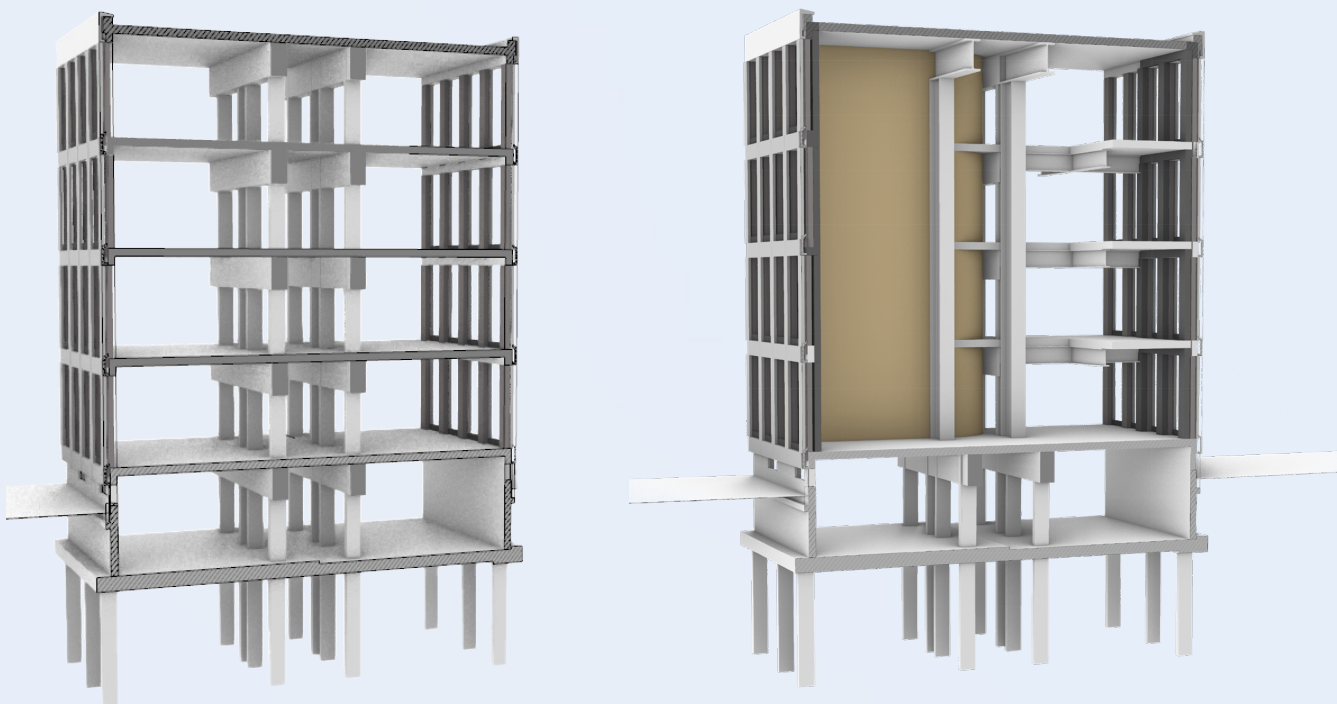
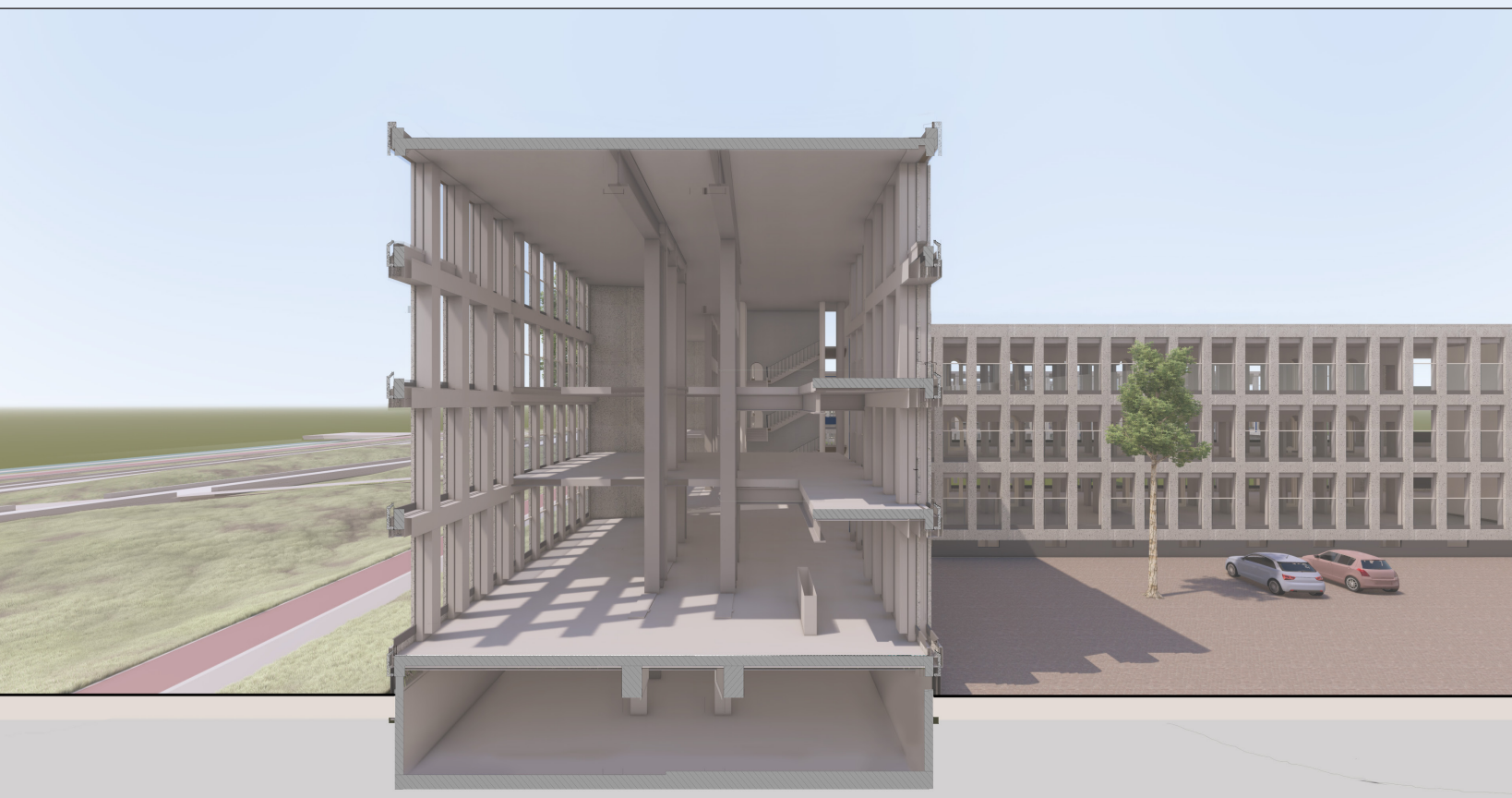


HIGH QUALITY VIEW OF NATURAL ELEMENTS

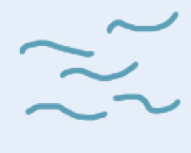


NATURAL LIGHT

1. OPEN STRUCTURE 1:200



SHOWING NATURAL PROCESSES

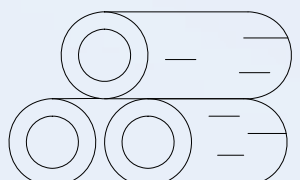


CLEAN FLOWING WATER

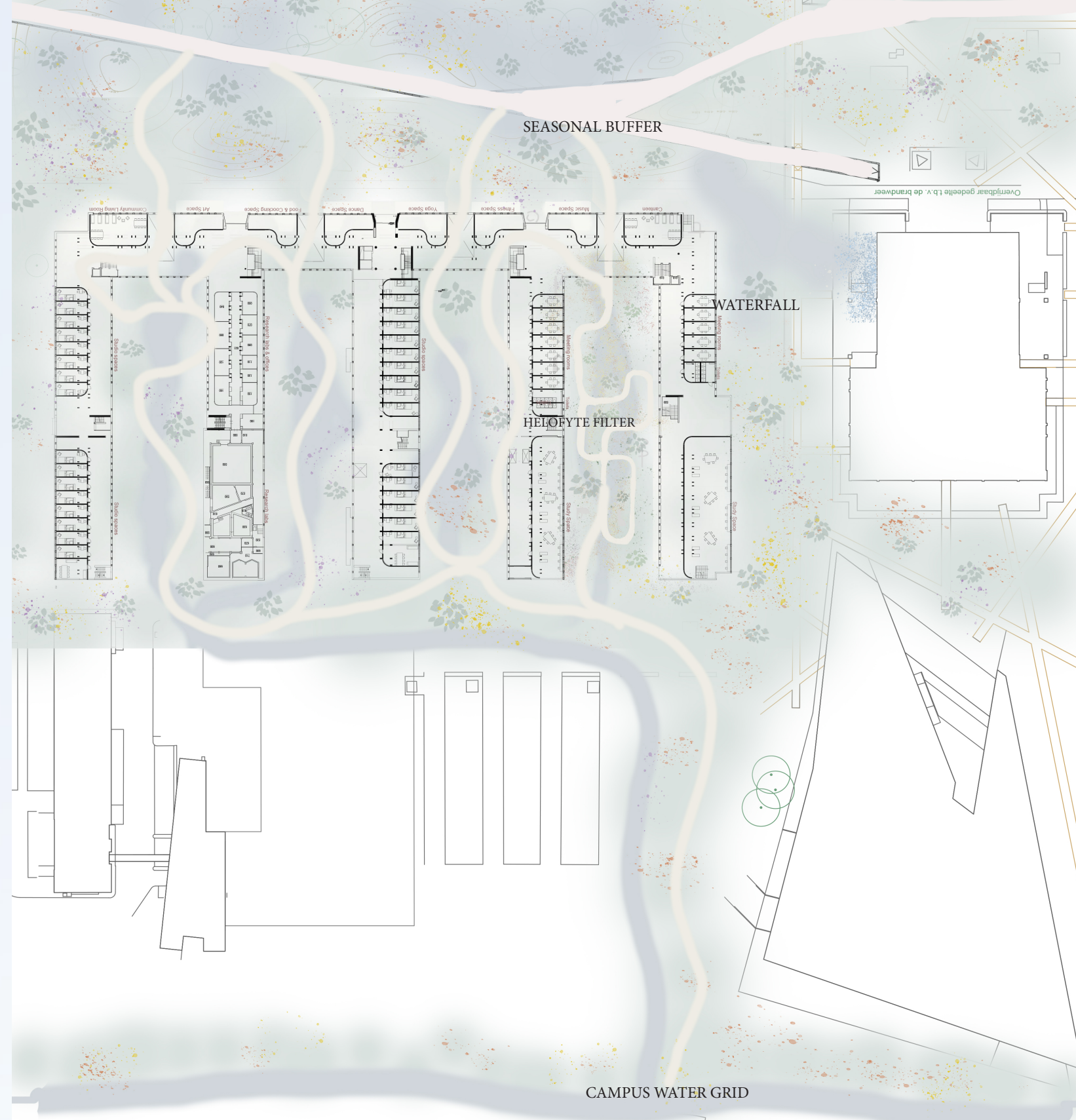
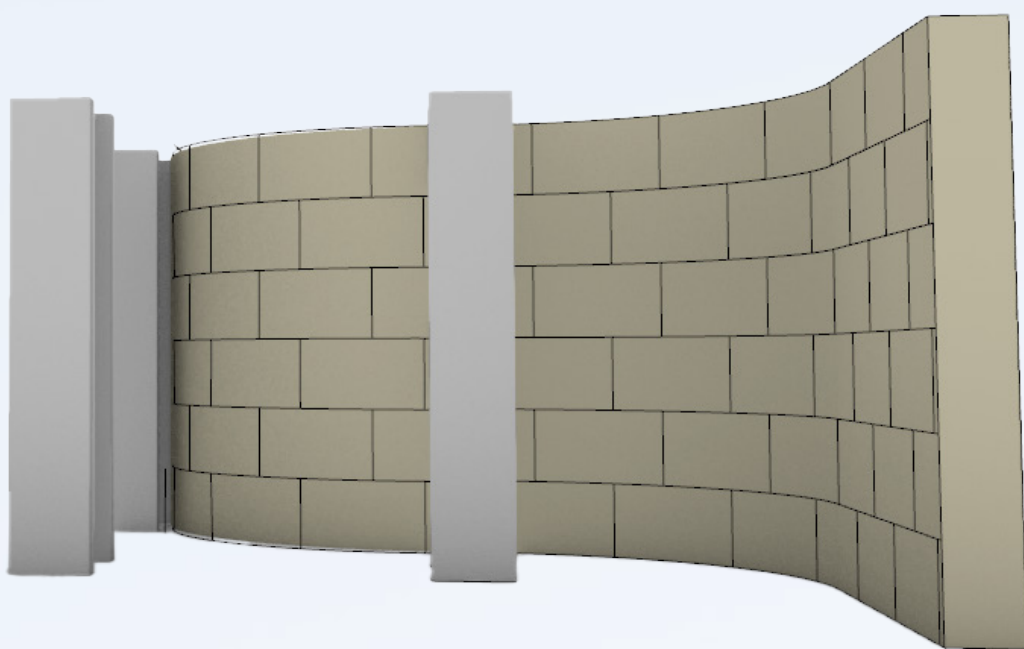
2. LANDSCAPE 1:200



3. CLAY CLIMATIZED ZONES 1:200



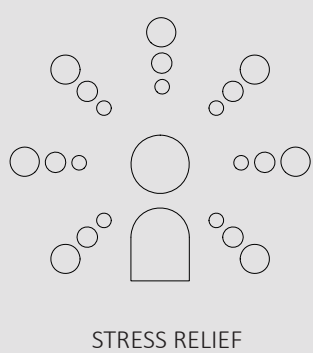
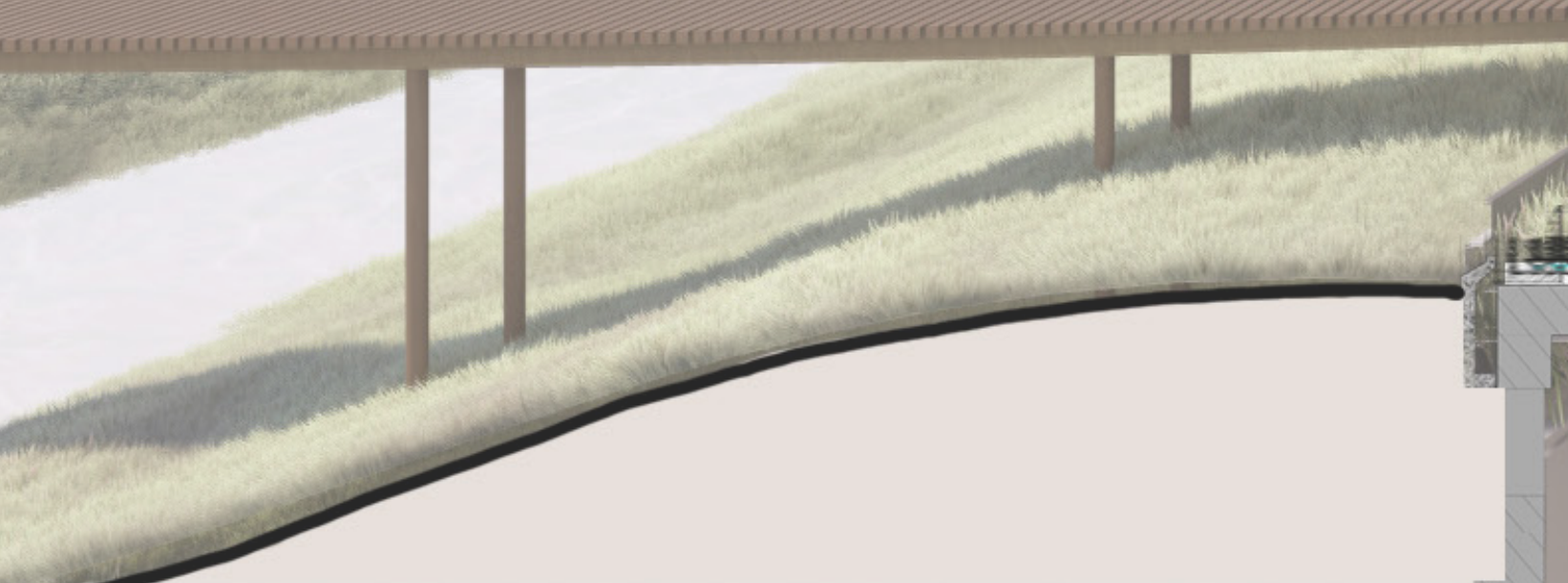
HEALTHY LOCAL AND NATURAL MATERIALS



4. ROUTING 1:200



5. PERCEPTION - ENTRANCE SECTION 1:50

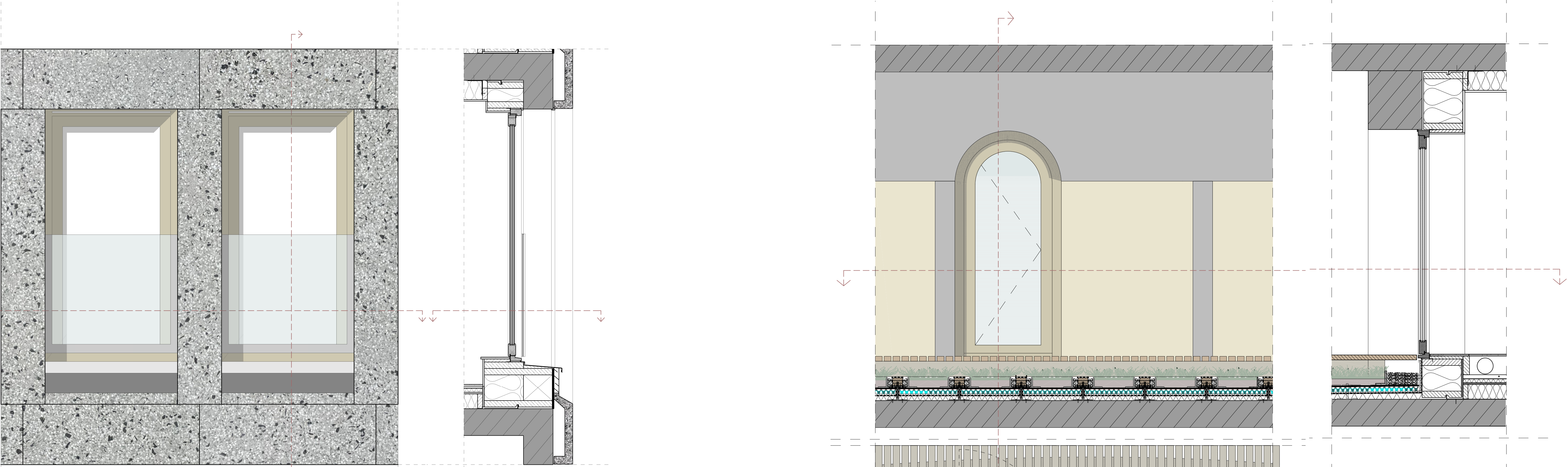


STRESS RELIEF

5. USE - SECTION D-D 1:50

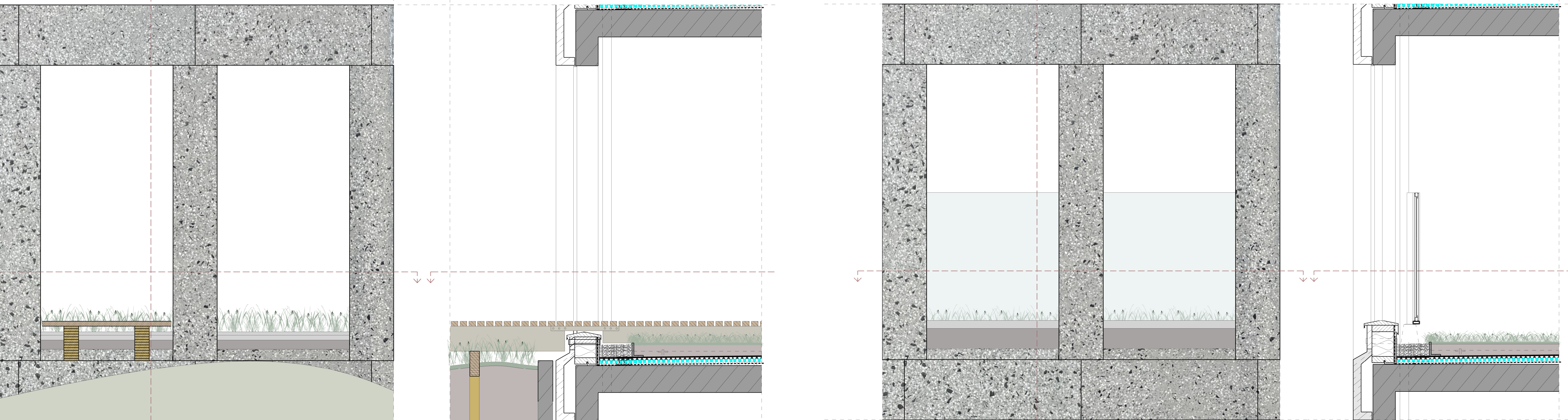


GENERIC SECTION IN DETAIL



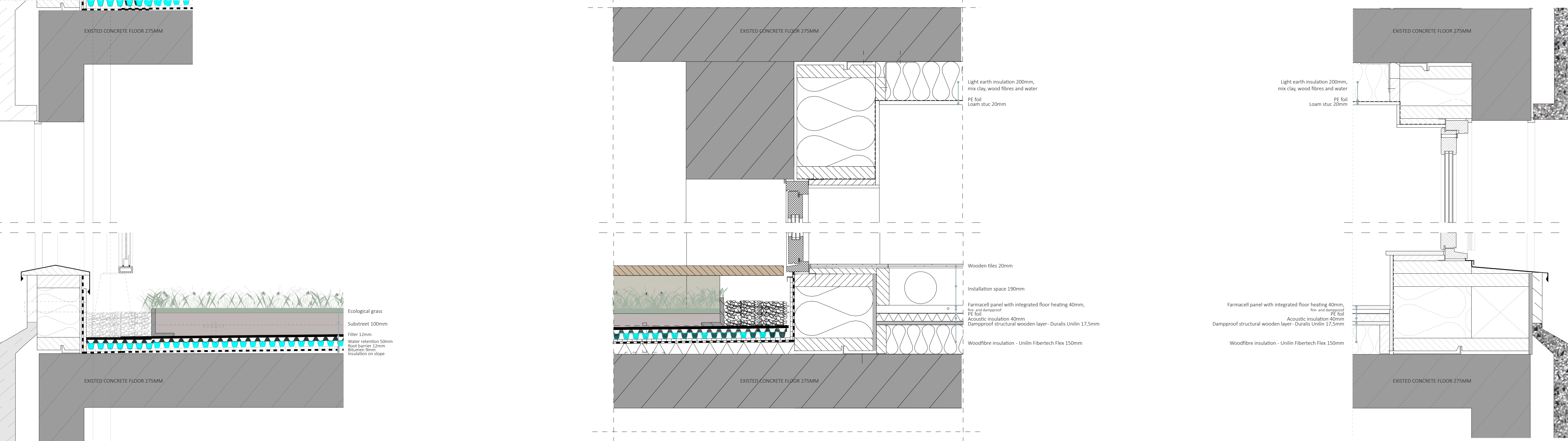
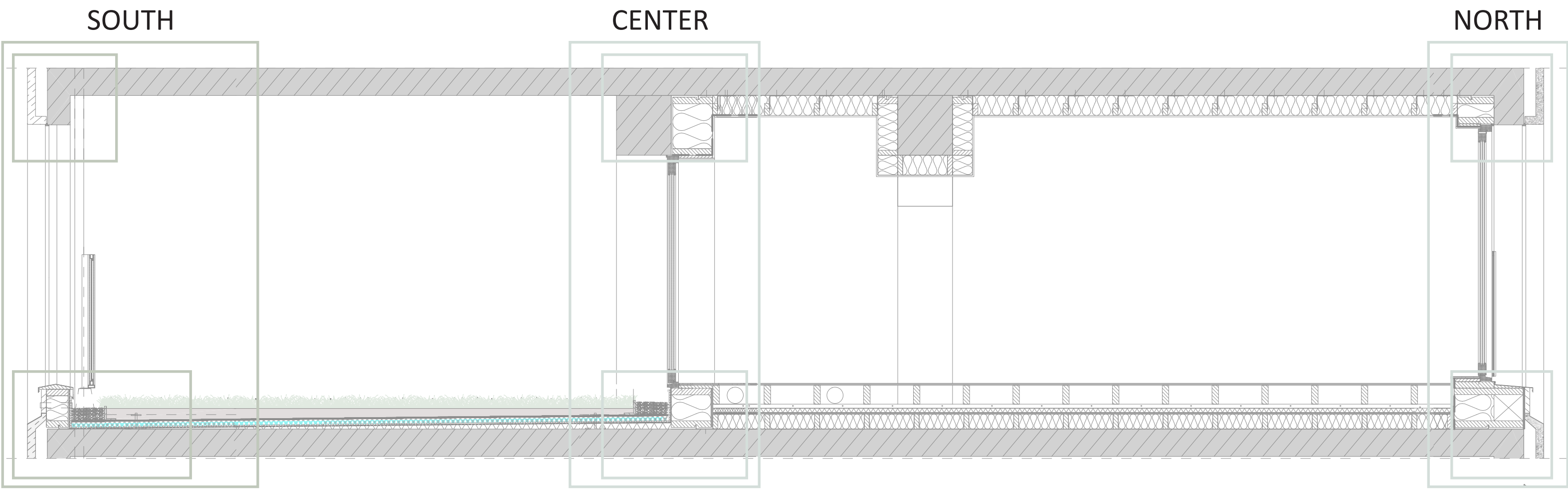
FRAGMENT NORTH 1:20

FRAGMENT CENTER 1:20



FRAGMENT SOUTH GROUND FLOOR 1:20

FRAGMENT SOUTH FIRST AND SECOND FLOOR 1:20



DETAILS 1:10