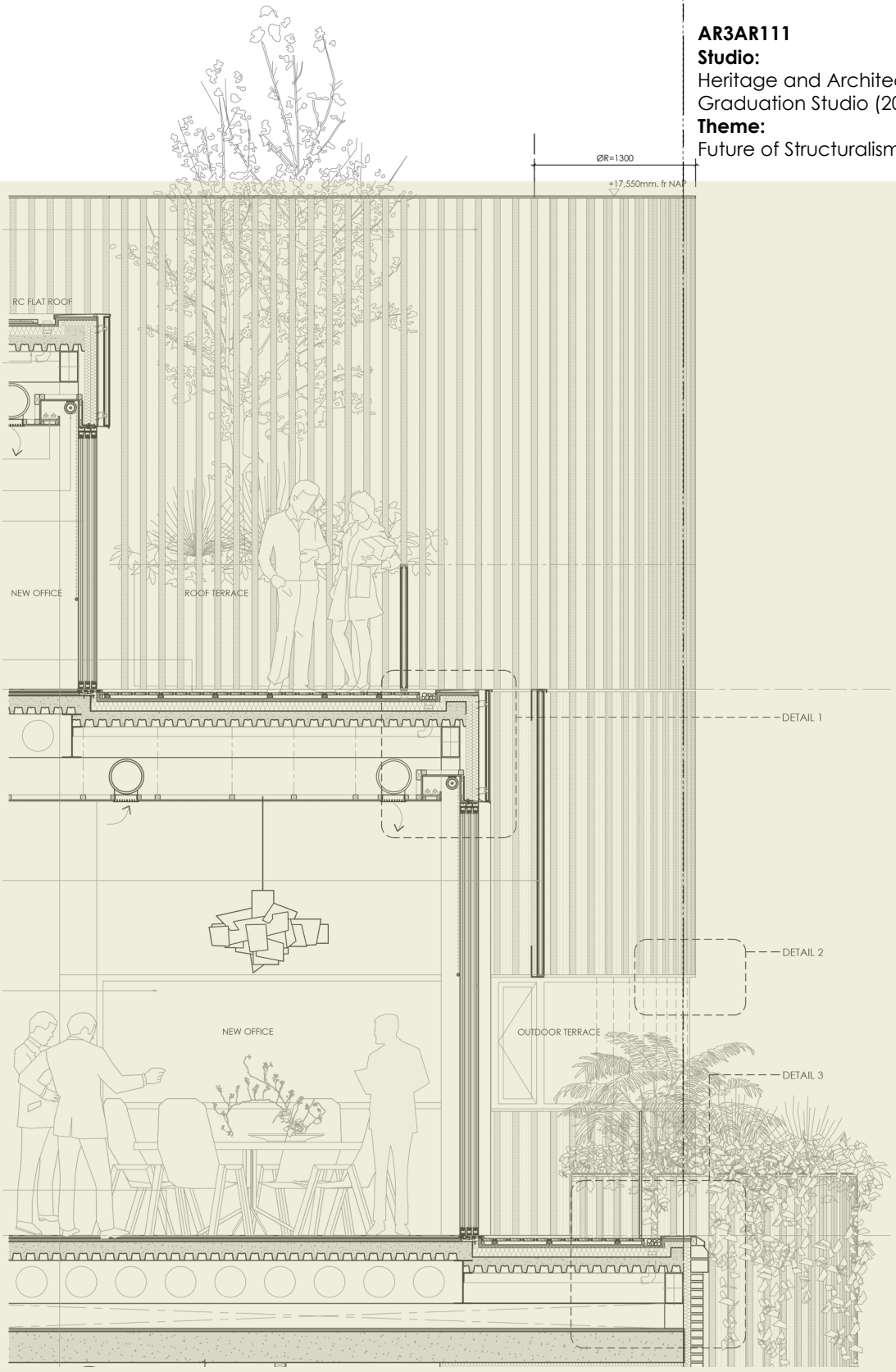
“P5 PRESENTATION”
28/06/2018

LEIDEN
HUMANITIES
Campus
& Boutique Residences

AR3AR111
Studio:
Heritage and Architecture
Graduation Studio (201718 Q1)
Theme:
Future of Structuralism



LEIDEN
HUMANITIES
Campus
& Boutique Residences

AR3AR111
Heritage and Architecture Graduation Studio
(201718 Q1)

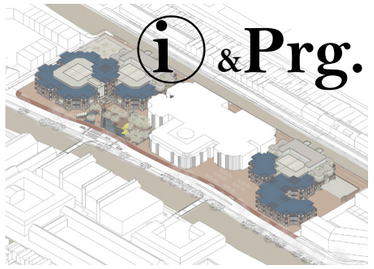
MSc4 Future of Structuralism

Graduation Rpoject

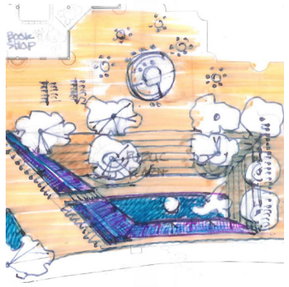
Heritage and Architecture,
Faculty of Architecture and the Built environment,
Delft University of Technology
(May2018)

Studio:	AR3AR111 Heritage and Architecture Graduation Studio (2017/18)
Theme:	Future of Structuralism
Location:	Faculty of Humanities, Leiden University, Leiden, the Netherlands
Project Title:	**72** | **50** Beyond the Boundaries The Proposed Addition and Alteration of the Humanities Faculty Building (Cluster1)

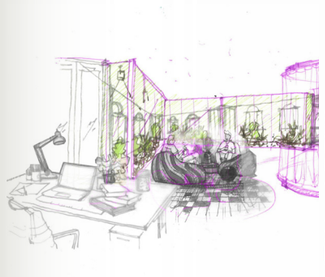
CONTENTS



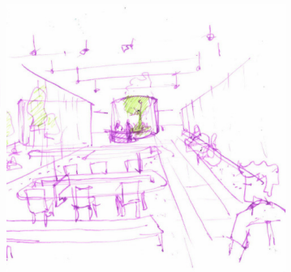
Introduction
& Program Proposal



Ground Floor Alteration



Interior reconfigurations



New Additions

Conclusion

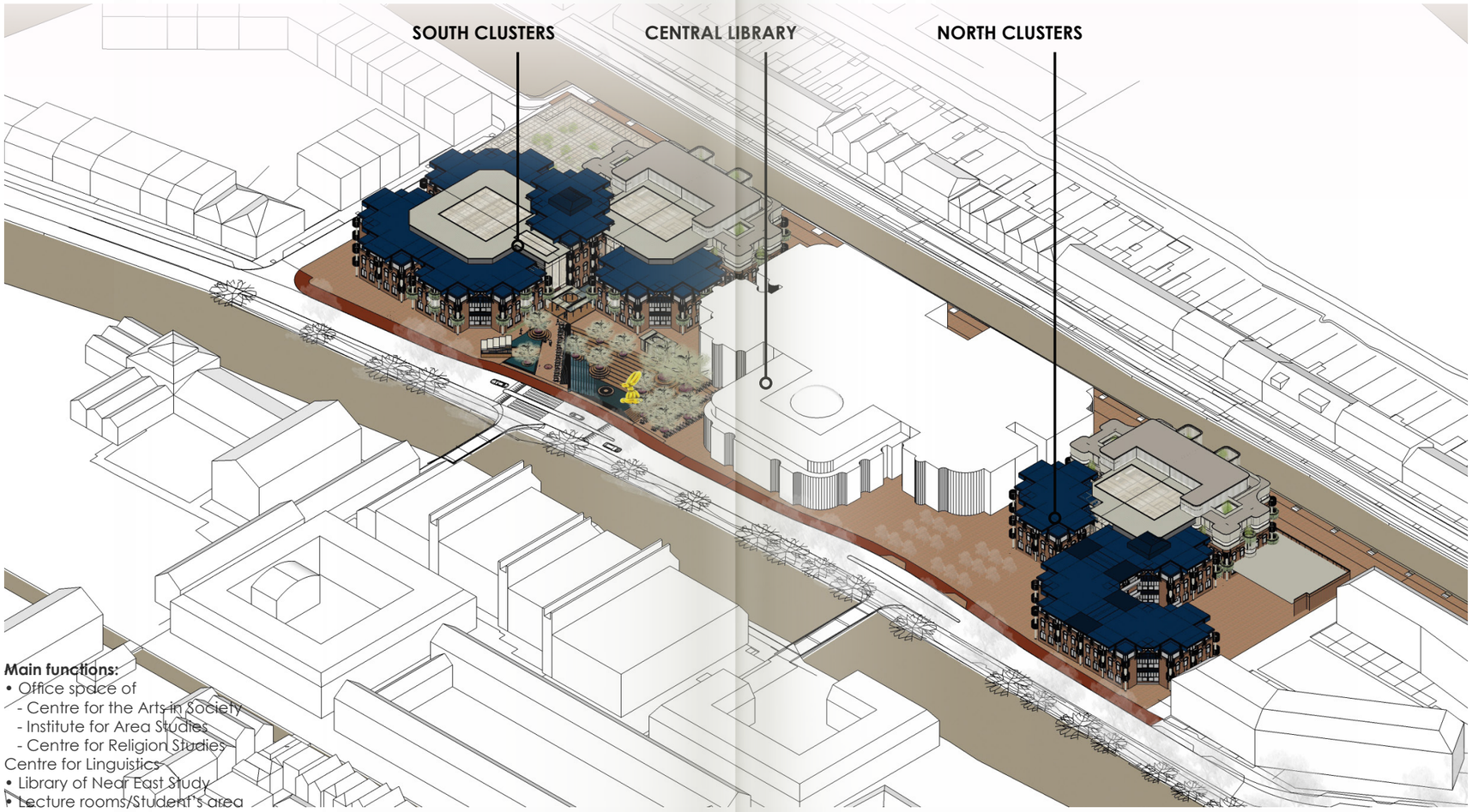
Introduction

Faculty of Humanities
Building (Cluster1)

Architect: Joop van Stigt

Year of Construction: 1982, 1981

GFA: 15,0000 sq.m.



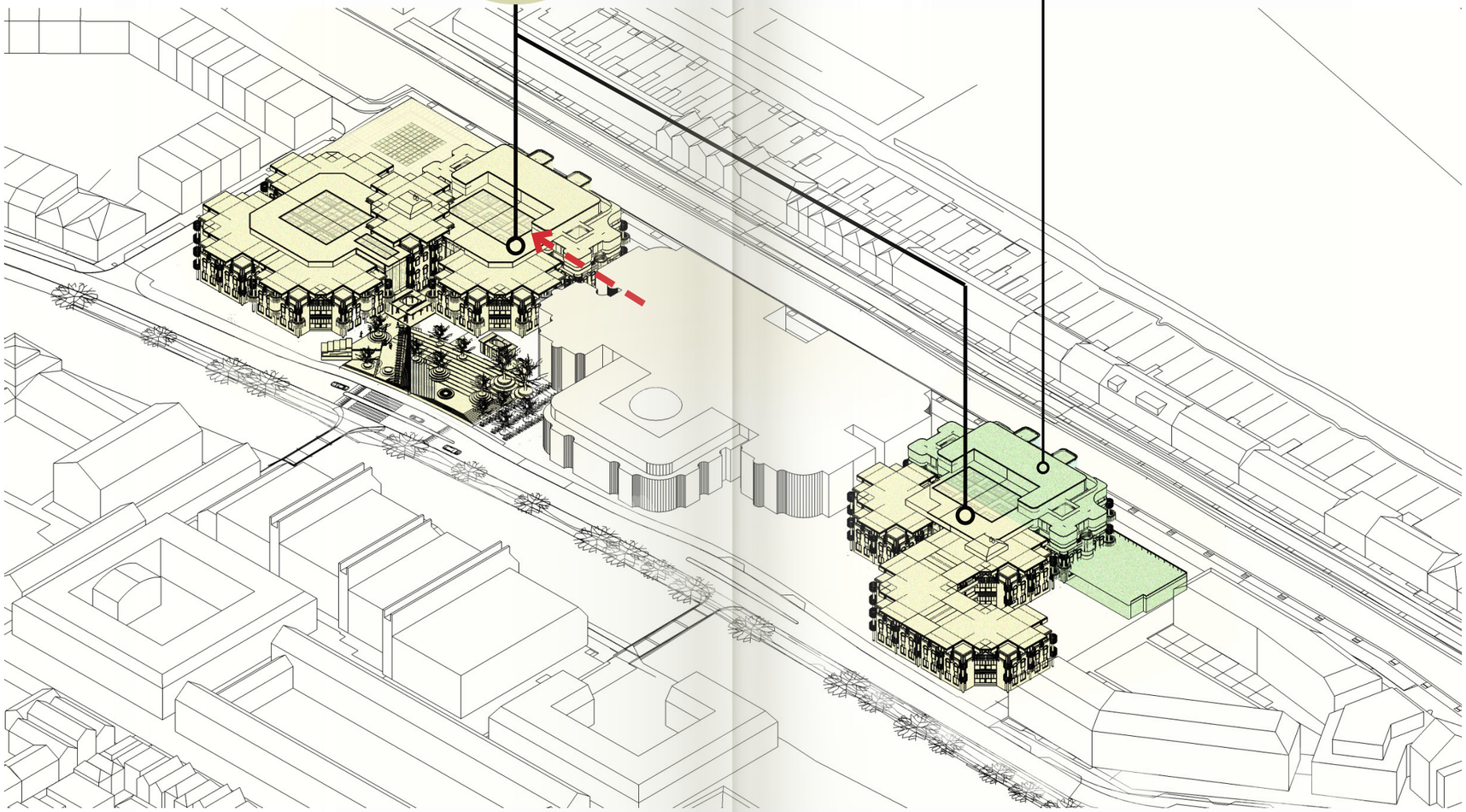
Main functions:
• Office space of
- Centre for the Arts in Society
- Institute for Area Studies
- Centre for Religion Studies
Centre for Linguistics
• Library of Near East Study
• Lecture rooms/Student's area

Programs

Total GFA
19,500 sq.m.

Academic Functions
85%

Short-stay Residences
15%



Heritage Architect

Positions & Approaches

“A collaboration of the two architects”

Although **there were several positions embedded in the final design of this project,** there are some **common ambitions** among these thoughts. The transformation approach and heritage architect position in this graduation project

“is laid toward the merging between the existing characteristics and the new interventions.”

The Indonesian rice-terrace image is an illustration of my architectural ambition in this graduation project. The scenery of hand-carved cascading steps

“is the result of critical demand on space/function in a high constraint condition.”

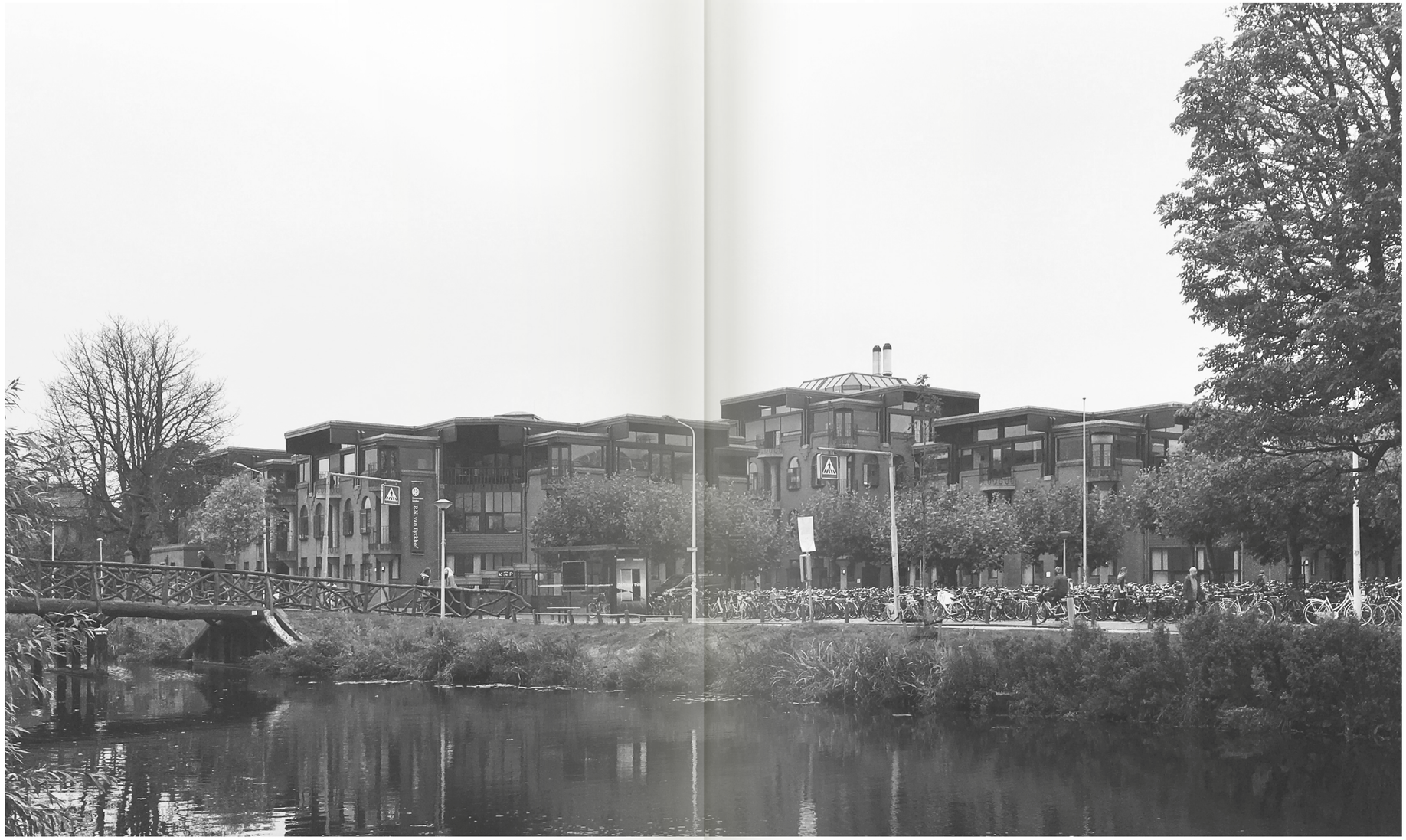
original steep terrains. This UNESCO World Heritage’s Cultural Landscape Site is a great integration of human needs and natural landscape.

In conclusion, I would consider this redevelopment proposal as a collaboration between the original and the new architects. In other words, **this alteration scheme is not aimed to overcome nor colonize the extant built heritage of Joop van Stigt.**

In addition, the alterations to these 70's structuralism buildings will **be done in a reversible approach.** The original significant design compositions and technique will be retained and made good. At the same time, the intervention will also **mark the changes in time through the appearance** of old and the new designs. Lastly, this redevelopment will not only responding to the contemporary/new requirements, in fact, this proposal will be positioned as a device to enlarge the humanities field of studies in the coming future.

Tegallalang Rice Terraces, Bali, Indonesia - SUITCASE Magazine

Acropolis and the city center of Athens - www.visitgreece.gr

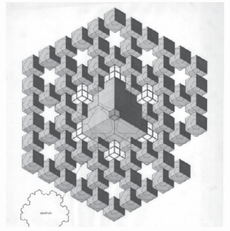
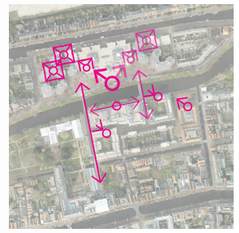
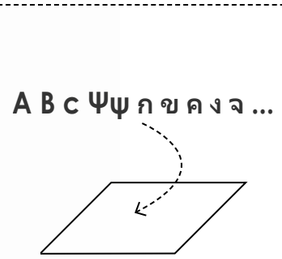
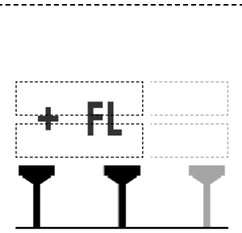
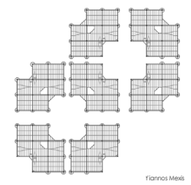

P.N. van Eyckhof

Structuralism architecture

Research Summary

“Qualities / Current Situations / Advantages, Disadvantages”

By using Leiden Humanity Faculty as a case study, there are two main structuralism design strategies that have a strong influence on the proposal and development of this graduation project. These include the significant appearance of a modular system, humanity based design and the flexibility of the structure.

	1 Universal design languages	2 Social Interaction Strategies	3 The flexibility of a given structure
Existing Qualities	 Piet Blom, the Speelhuis Theatre and Cube Houses, c. 1974. - www.archdaily.com	 Diagram of social spaces network in Leiden Inner City Campus - W. Toernevachat, GoogleEarth	Reinforced concrete structure of Humanities Faculty Buildings in 1981 - Cement XXXIII
Current Situations			Reinforced concrete structure of Humanities Faculty Buildings in 1981 - Cement XXXIII
Advantages	(One Detail) x 16		
Disadvantages			 Fiannos Mexis

Redevelopment

Key Objectives

Design Principle

" In principle, the main ambition of this redevelopment project is to bring the dried and rotten experience of Leiden Humanity Buildings back to life". The refurbishment and reinterpretation of the original structuralism design strategies will be implemented as the main position in this studies. This could be archived by assigning various minor and major intervention to the strategic locations in the complex. These alterations will set itself as the "Oasis in the desert" It aimed to transform a desolate land offering only hardship and discomfort to a lively environment. The new oasis provides relief in the middle of the heavy brick masonry atmosphere. It allows for the growth of life and activities that contribute to the future of humanity studies in these extant built heritage.

- Tangible Aspects
- Intangible Aspects

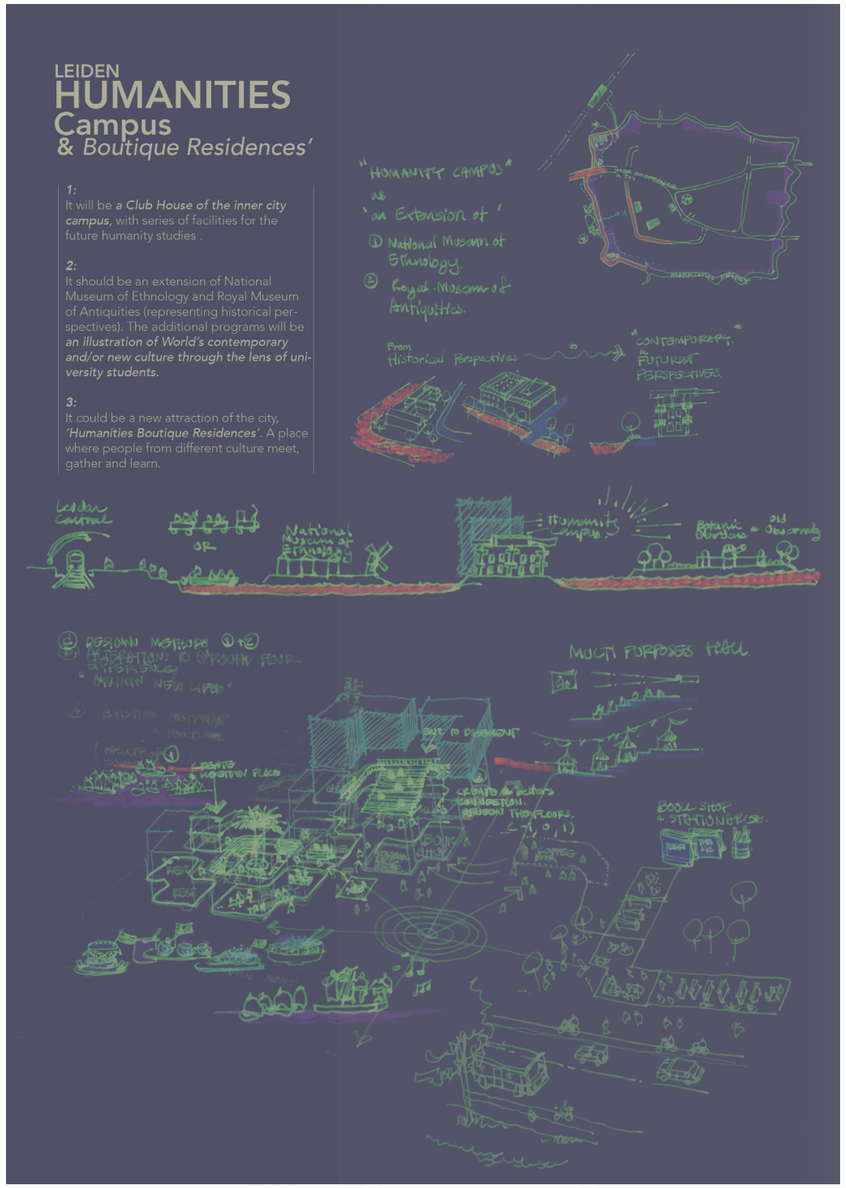
The impression of Leiden Humanity Buildings in the current stage - Namib-Naukluft Park, Namibia - Andrey Omelyanchuk

The 'Oasis' Illustration of the Redevelopment Principle - Ubari, a Sahara Desert oasis located Libia - www.izismile.com

Tangible Aspects

1. Building Scale
2. Campus Scale
3. Urban Scale

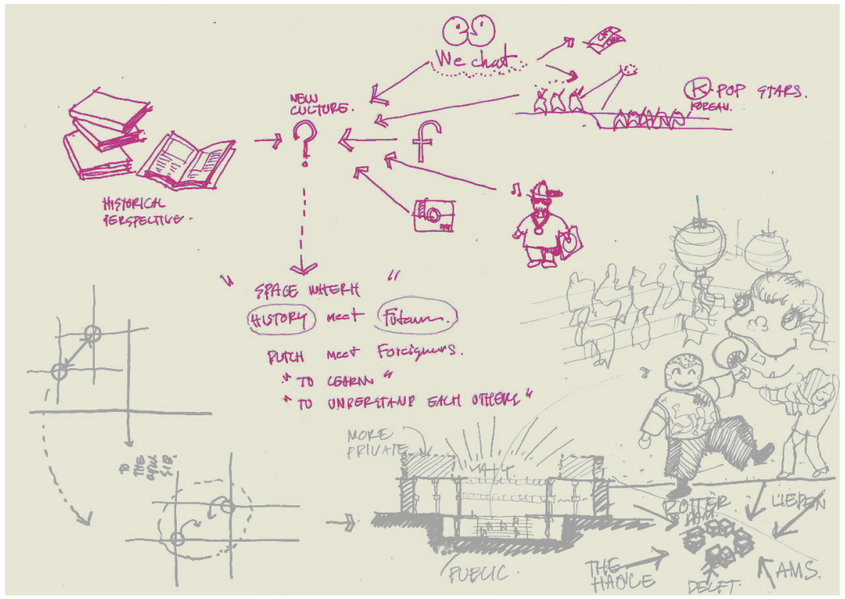
→ New life
→ University's Living Room
An extension of National Museum of Ethnology



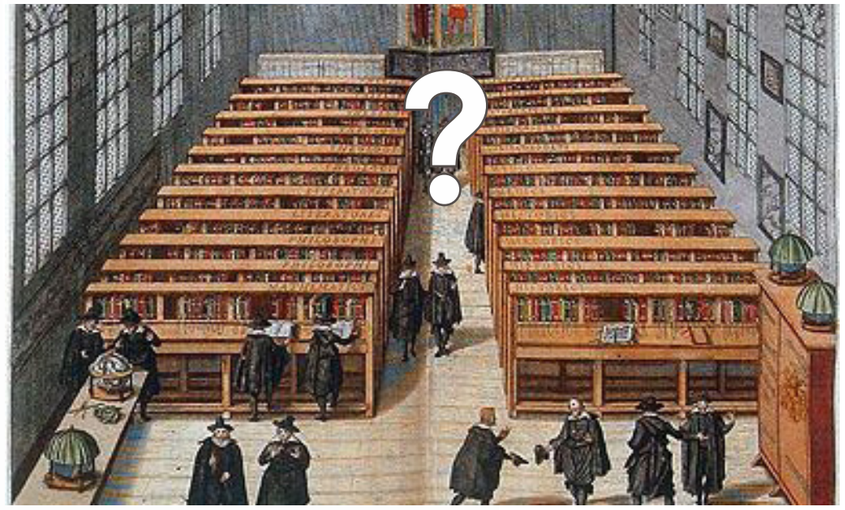
Intangible Aspects

4. Global Scale
5. Wider Social Aspect

→ A new 'gateway' to multi-cultural environments
→ Contributes to the futuer of Humanity Studies



Sketch of 'Cultural Evolution in Globalization societies' - W. Taemeyachat, November 2017



Drawing of the former Leiden University main library - www.nassau-nederlands.nl

Culture Evolutions

The influence of cultural evolutions on daily life and community behavior.

Pinterest

www.theatlantic.com

Pop Rock Band

Electronic Music

www.hdwallstock.com

New Cinemas

Bilmiyorsan.com

Talks

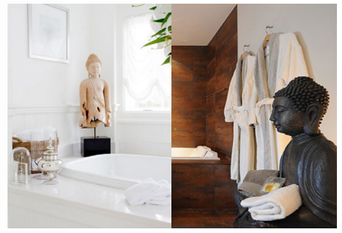
www.ted.com

Cultural Diversity

The variety of human societies or cultures in each civilization in Globalization environment.

Believe

m.prachachat.net



Decoration

Savitatruth.com

Maatjesharing eaten “the Dutch way”

thaivisa.com

Chinese Cooking

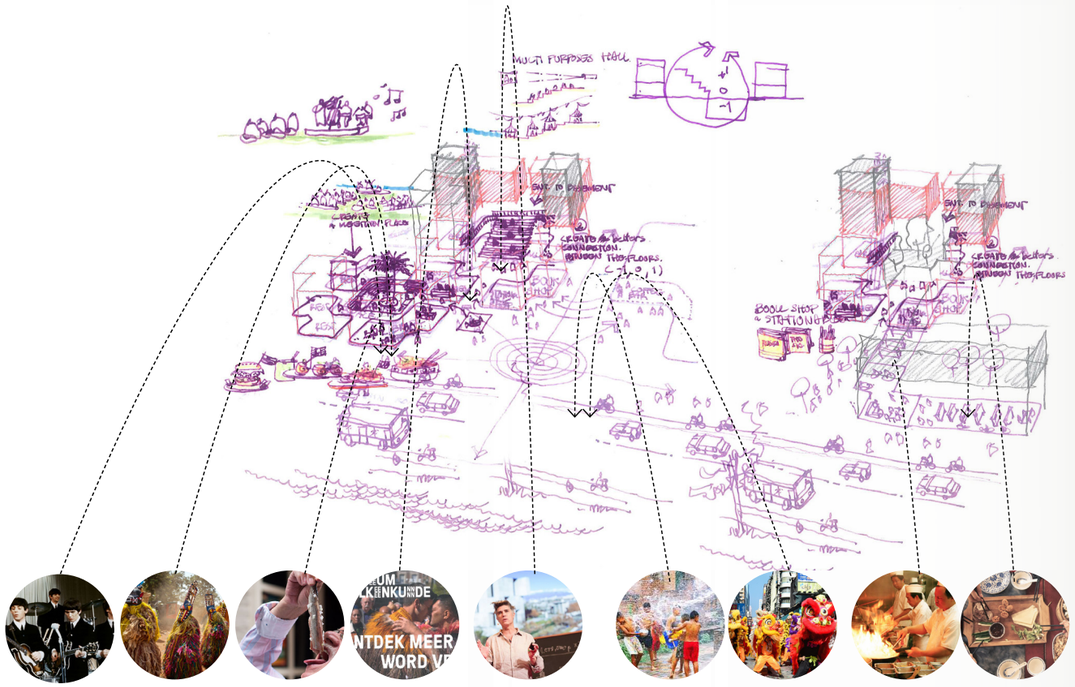
www.eater.com

African Dance

www.everfest.com

Songkran

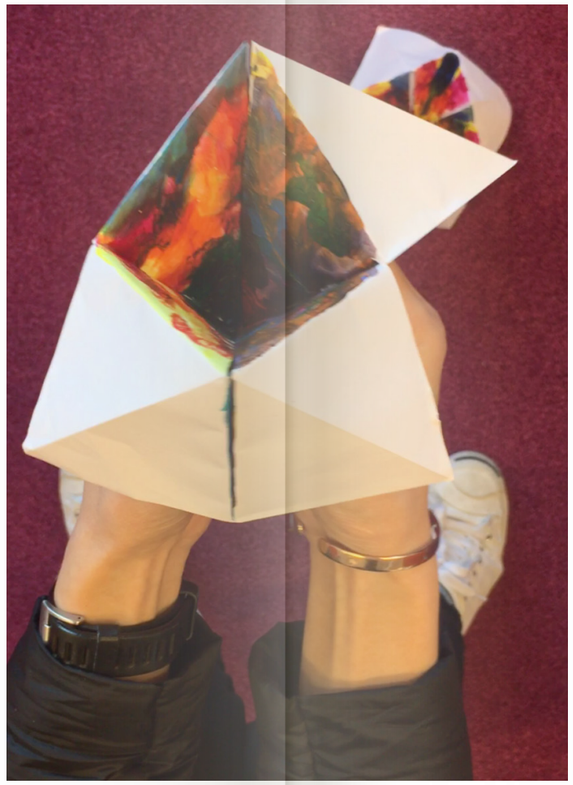
www.songkran.travel



A place to LIVE, WORK and PLAY.
The model represents the architectural ambition of this graduation project - W. Taemeyachat, November 2017

The new life

The model illustrates new activities and social interaction after the redevelopment -
S. Vangvasu November 2017



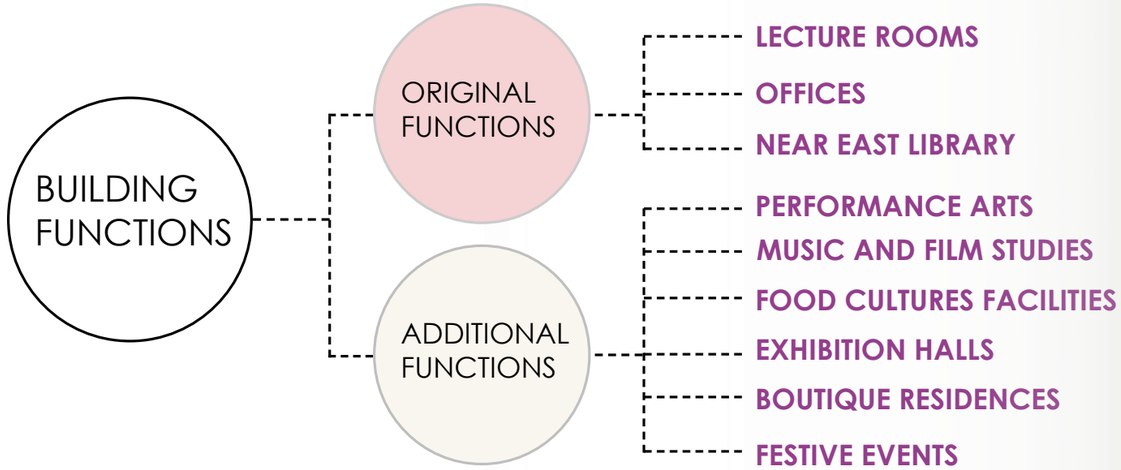
Programmatic improvements

Apart from requirements on extra area capacity, Leiden Humanities Buildings shall play a new role beyond the traditional arrangement of academic space and office building. In other words, these structuralism building shall provide innovative settings for a multidisciplinary and interdisciplinary approach to contemporary and future of humanity studies. The following new key initiatives are required to reach this mentioned objectives:

- Performance arts
- Music and film studies
- Food cultures facilities
- Exhibition halls
- Boutique residences (short-stay)
- Festive events/ new public plaza

Beside those, This redevelopment proposal contains several original functions and institutions as follows.

- Office space of
  - Centre for the Arts in Society
  - Institute for Area Studies
  - Centre for Religion Studies
  - Centre for Linguistics
- Library of Near East Study
- Lecture rooms / Student's area
- 80% of the original parking lots



GFA Summary

Student's workspace			2000 sqm	10%
Lecture rooms			2100 sqm	11%
S	30 sqm	18 units		
M	50sqm	8 units		
L	85 sqm	3 units		
XL	400 sqm	3 units		
Library			2200 sqm	11%
Exhibition hall			800 sqm	4%
Hall 1	150 sqm			
Hall 2	230sqm			
Hall 3	420 sqm			
Office			5500 sqm	28%
Book shop			300 sqm	2%
F&B			1550 sqm	8%
Residences 28 Units			2000 sqm	10%
Studio	25-28 sqm	18 units		
1 bedroom	38-45 sqm	4 units		
2 bedrooms	90 sqm	4 units		
3 bedrooms	180 sqm	2 units		
Circulation			1550 sqm	8%
M&E			850 sqm	4%
Others			650 sqm	3%
			19500 sqm	

NEW FUNCTIONS
NEW ACTIVITIES
NEW EXPERIENCE

>> MORE SQUARE METERS NEEDED <<

HOW ?

NEW FUNCTIONS
NEW ACTIVITIES
NEW EXPERIENCE

>> MORE SQUARE METERS NEEDED <<

HOW ?

Find High Intervention Potential Zone

Activating the underutilized space

1. Activating the inner courtyards
2. Basement parking Reclamation

New Additions

1. New office space
2. New residences

Redevelopment

High Intervention Potential Zone

Transformation Principle

In principle, my approach seeks to be sympathetic to the historical value and spatial quality of the original Van Stigt's humanities faculty buildings whilst optimizing its allowable development potential as a venue for the future of humanity studies.

1. Activating the inner courtyards

2. Basement parking Reclamation

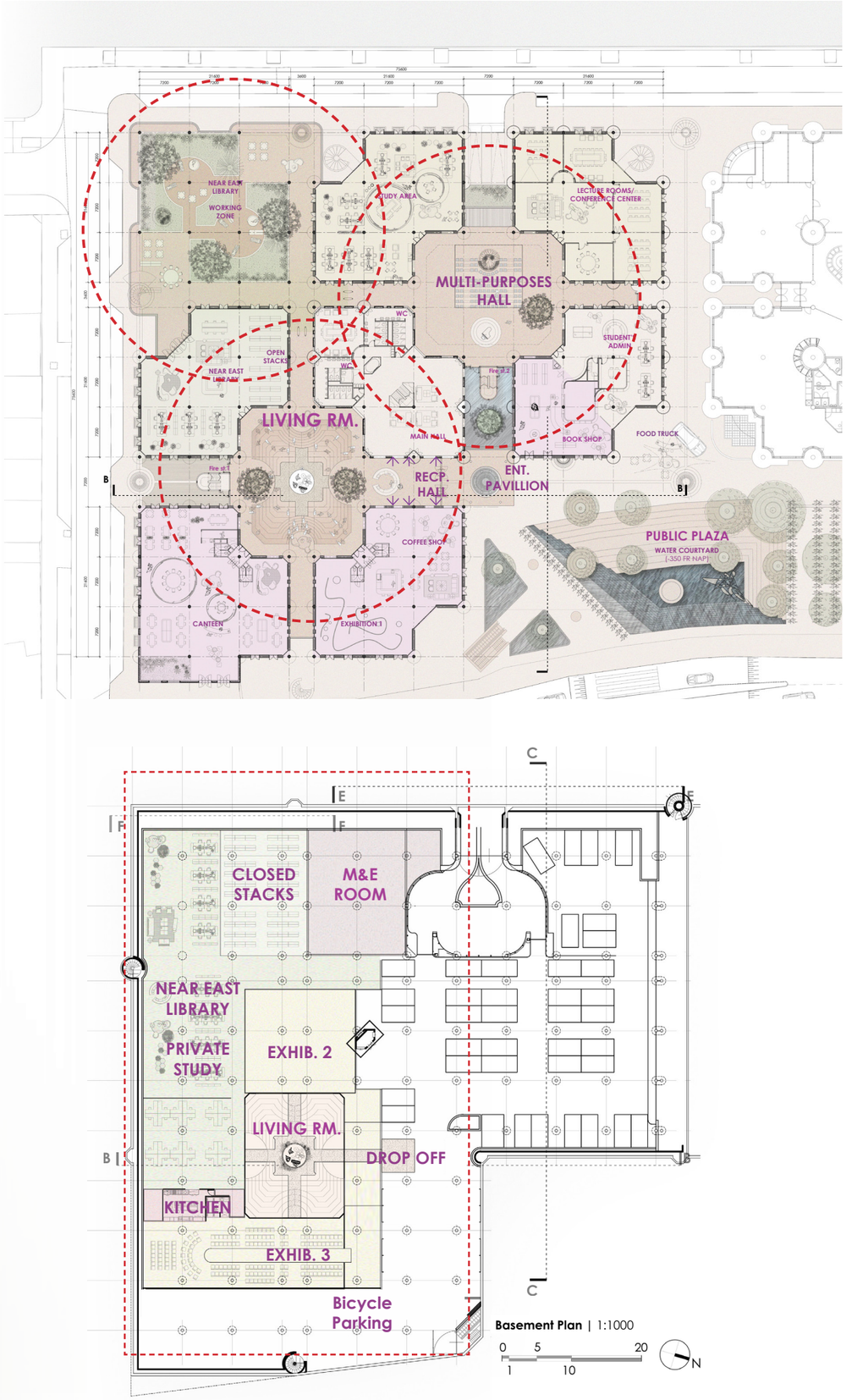
3. New Addition

Activating the underutilized space

1. Activating the inner courtyards
2. Basement parking Reclamation

Existing conditions

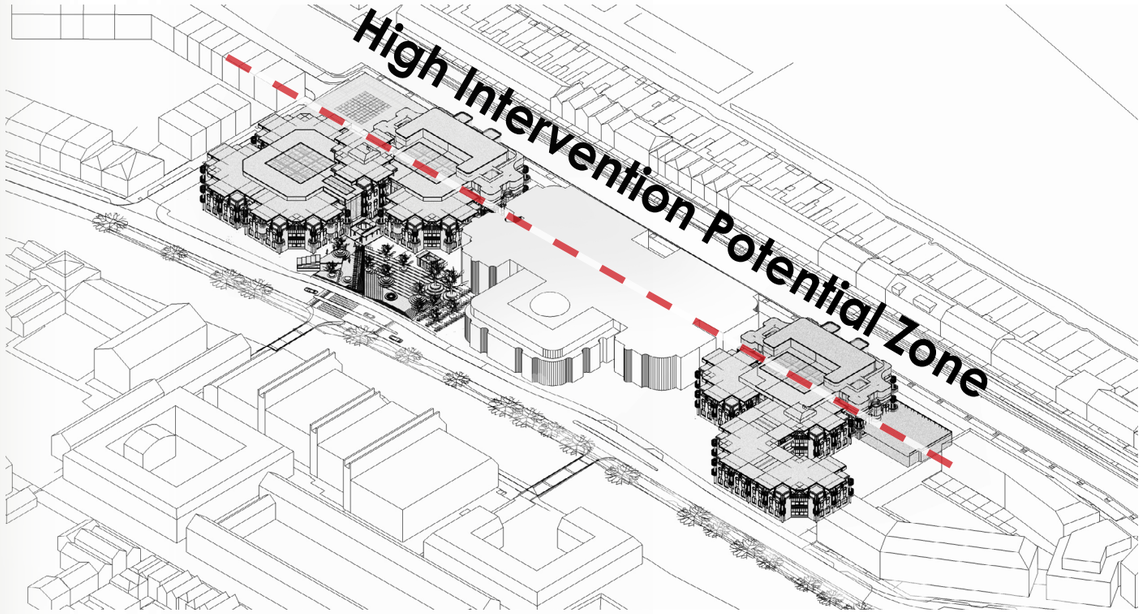
Existing conditions



New Additions

1. New office space

2. New residences



Redevelopment

Transformation Frameworks

Transformation Principle

In principle, my approach seeks to be sympathetic to the historical value and spatial quality of the original Van Stigt's humanities faculty buildings whilst optimizing its allowable development potential as a venue for the future of humanity studies.

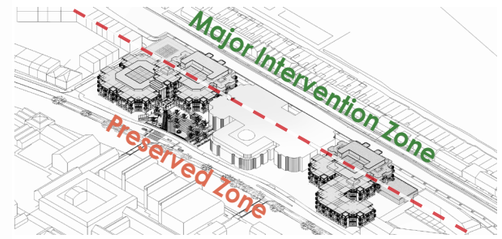
To be "Refurbished"

The existing design philosophies

To be "Kept"

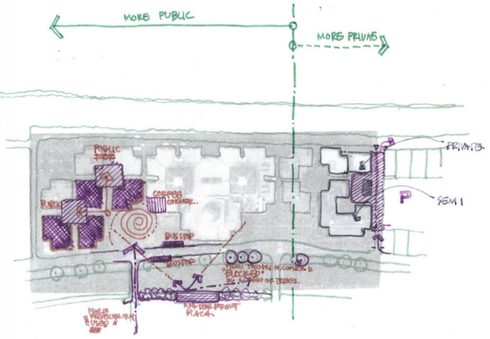
The towers adjacent to the main road, Witte Singel side.

Regarding the building itself:
• The identity and character of the building are expressed through its textured concrete structural 'mushroom columns', extruded brick masonry and timber roofscape. Retrofitting of the building shall avoid any method that involves major disturbing and covering the original appearance in any way.



To be "Amended"

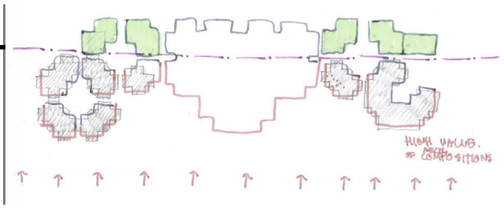
- Ground floor communal spaces
- Basement parking
- Interior layout
- M&E equipments



To be "Added"

Above the rear towers

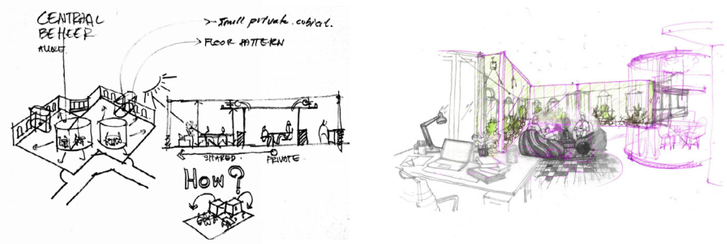
The rear buildings of this complex were constructed without the timer roof capping, these in-completed buildings serve potential sites for major interventions. While increasing overall gross floor area, the new addition will also offer the opportunity to be a new identity of this complex.



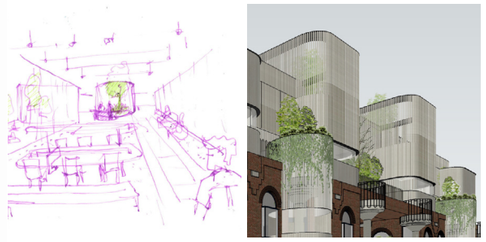
Redevelopment

Intervention Strategies & Design proposals

Ground Floor Alteration



Upper floors reconfigurations



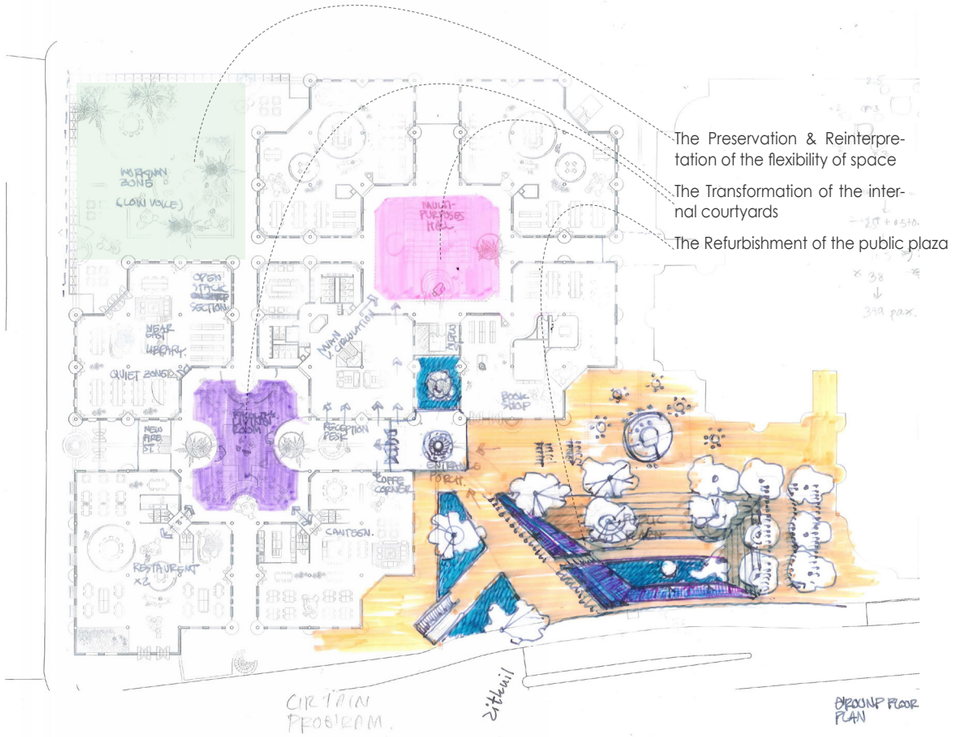
New Addittions

Ground Floor Alterations

1. Re-zoning
I. Public Zone
II. Private Functions
III. Intersection area

2. Urban connection at the public plaza

3. Creating identities
I. The new entrance
II. Sunken courtyard
III. Raised platform
IV. The Green Library



Ground Floor Alteration diagram - W. Taemeyachat, March 2018

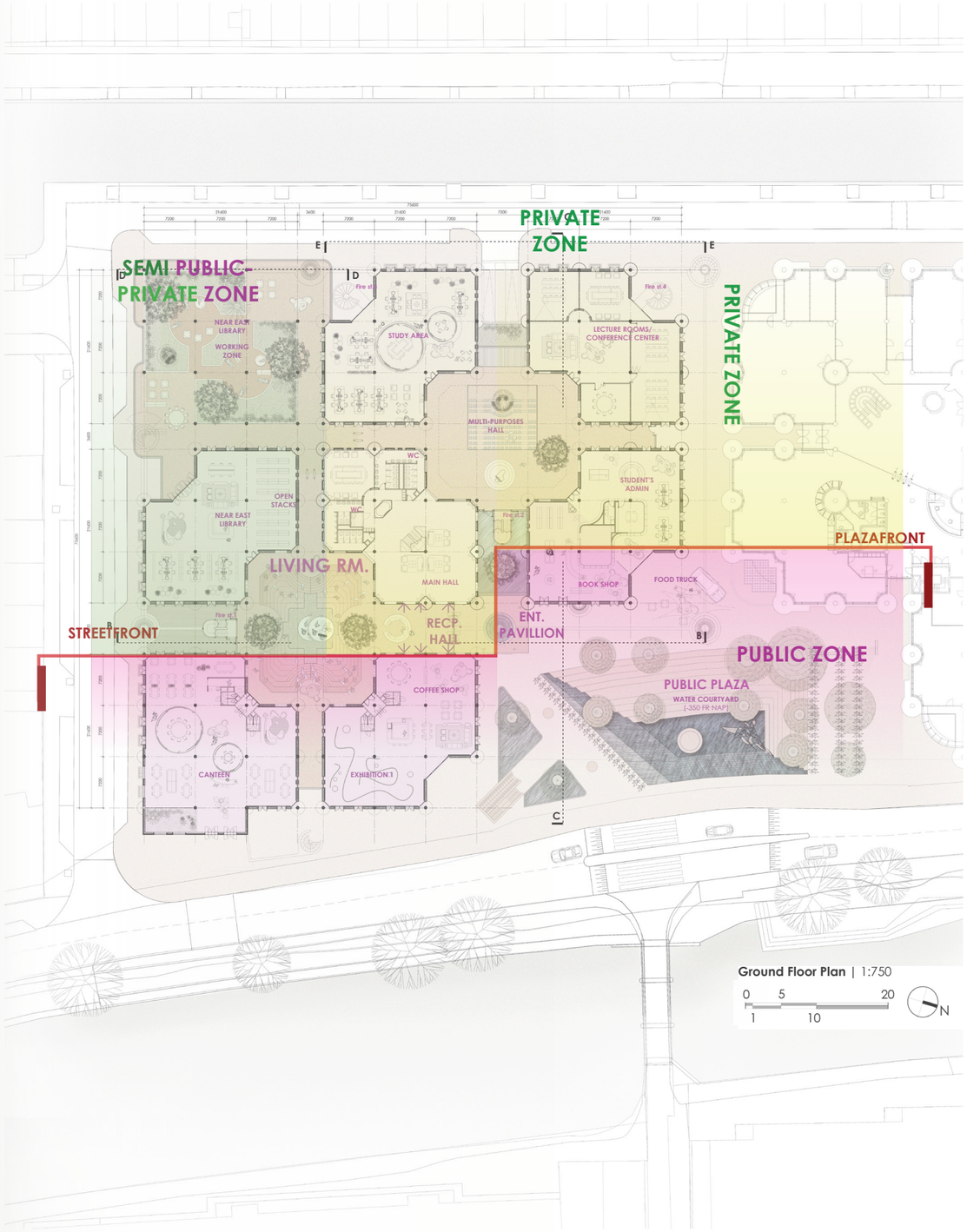
1. Re-zoning

In order to improve the way-finding and experiential journey through this structuralism repetition language, it is crucial to bring clarity to the current functional organization. In line with the original facilities and requirement for new functions, the improvement can be achieved by the following methods:

I. Public Zone
II. Private Functions
III. Intersection area

Aims

Zoning diagram - W. Taemeyachat, November 2017

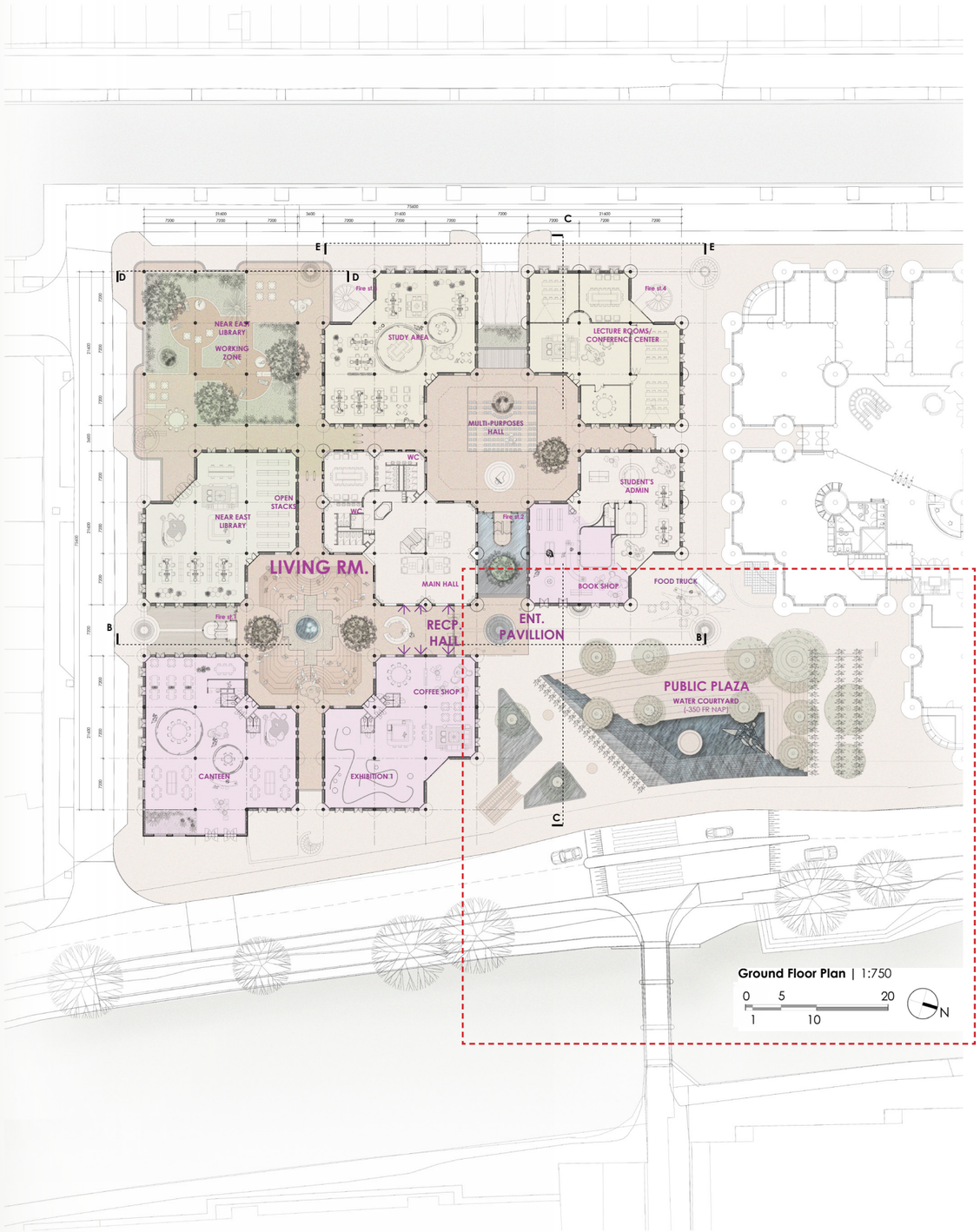


Actions

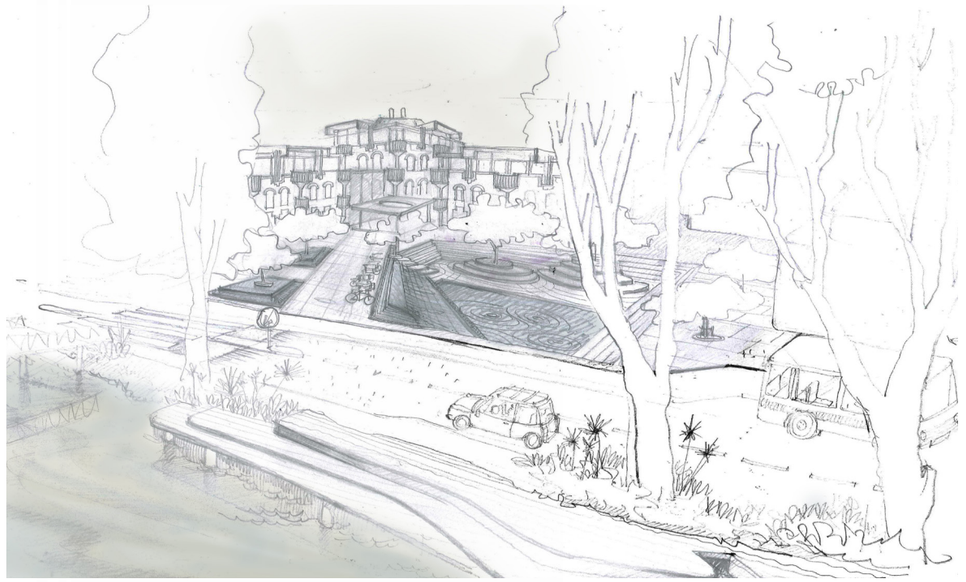
2. Urban connection at the public plaza

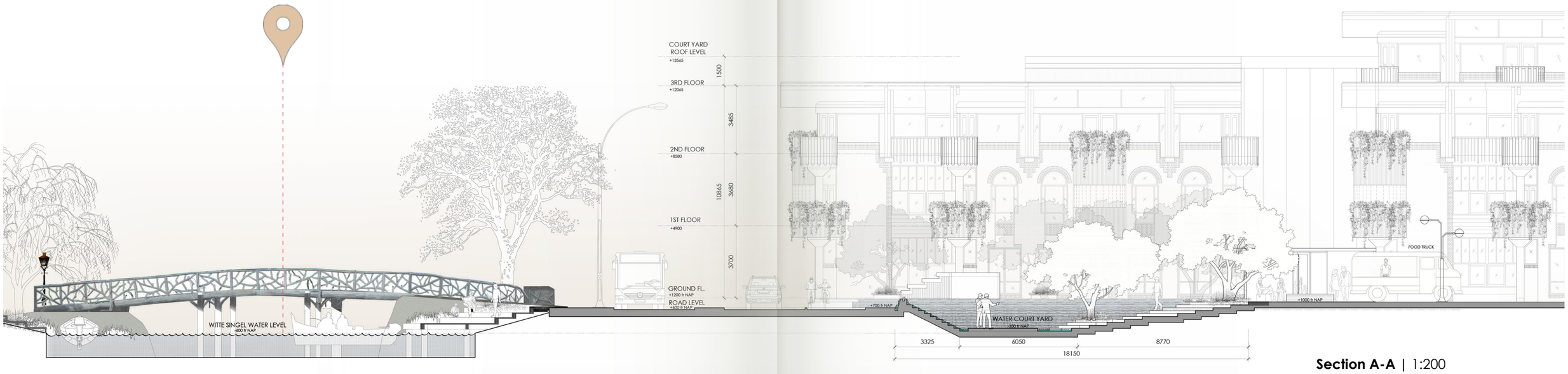
It is important to strengthen the relationship between the building and the urban tissues. The new space will be a venue for large events and outdoor performances. These activities enhance a lively appearance of the humanity campus.

Aims



Actions





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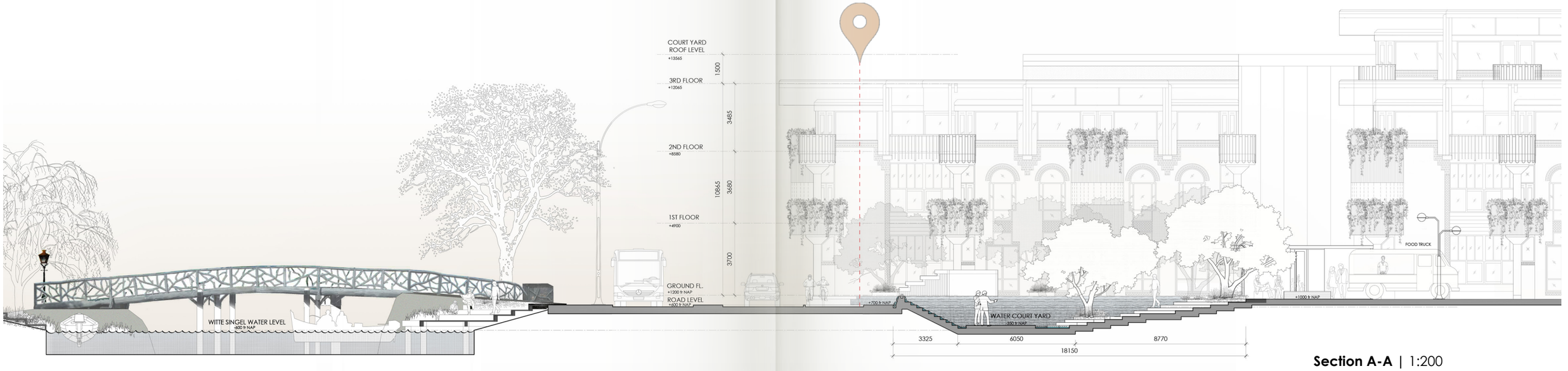
View of the main circulation routing towards new entrance pavilion- W. Taemeyachat, 2018



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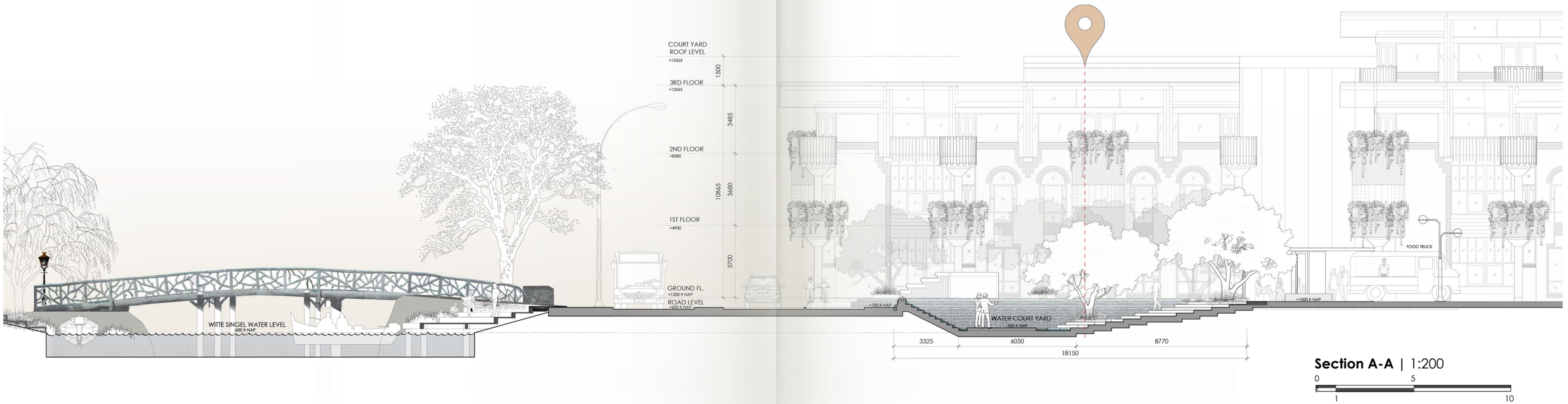
View of the refurbished public plaza with summer activities - W. Taemeyachat, 2018



Section A-A | 1:200

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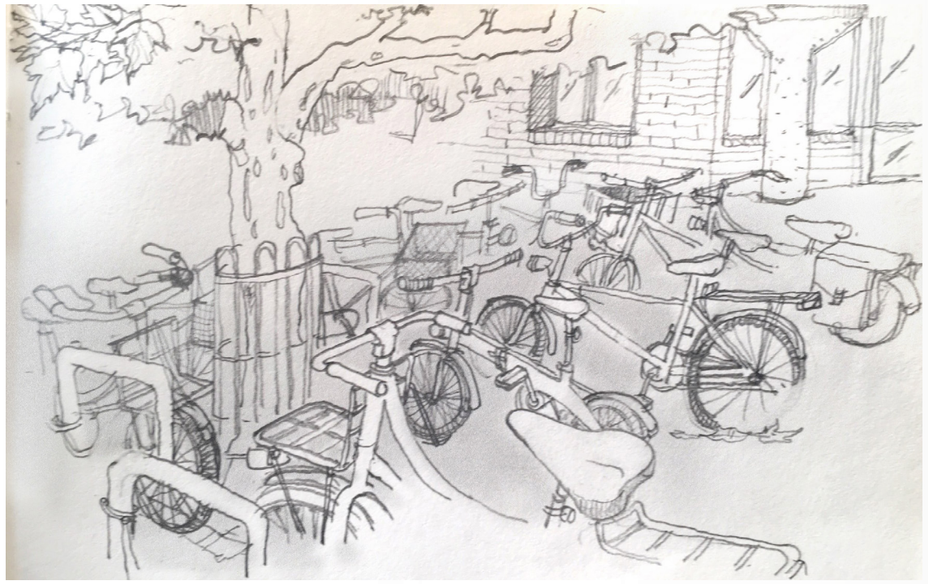
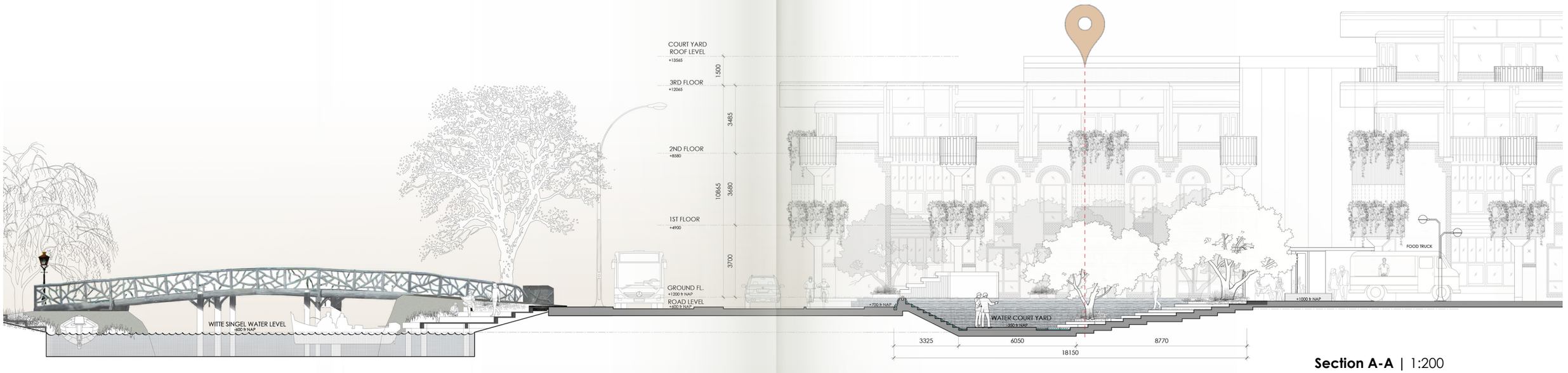


View of the refurbished public plaza with outdoor installation arts - W. Taemeyachat, 2018



Section A-A | 1:200

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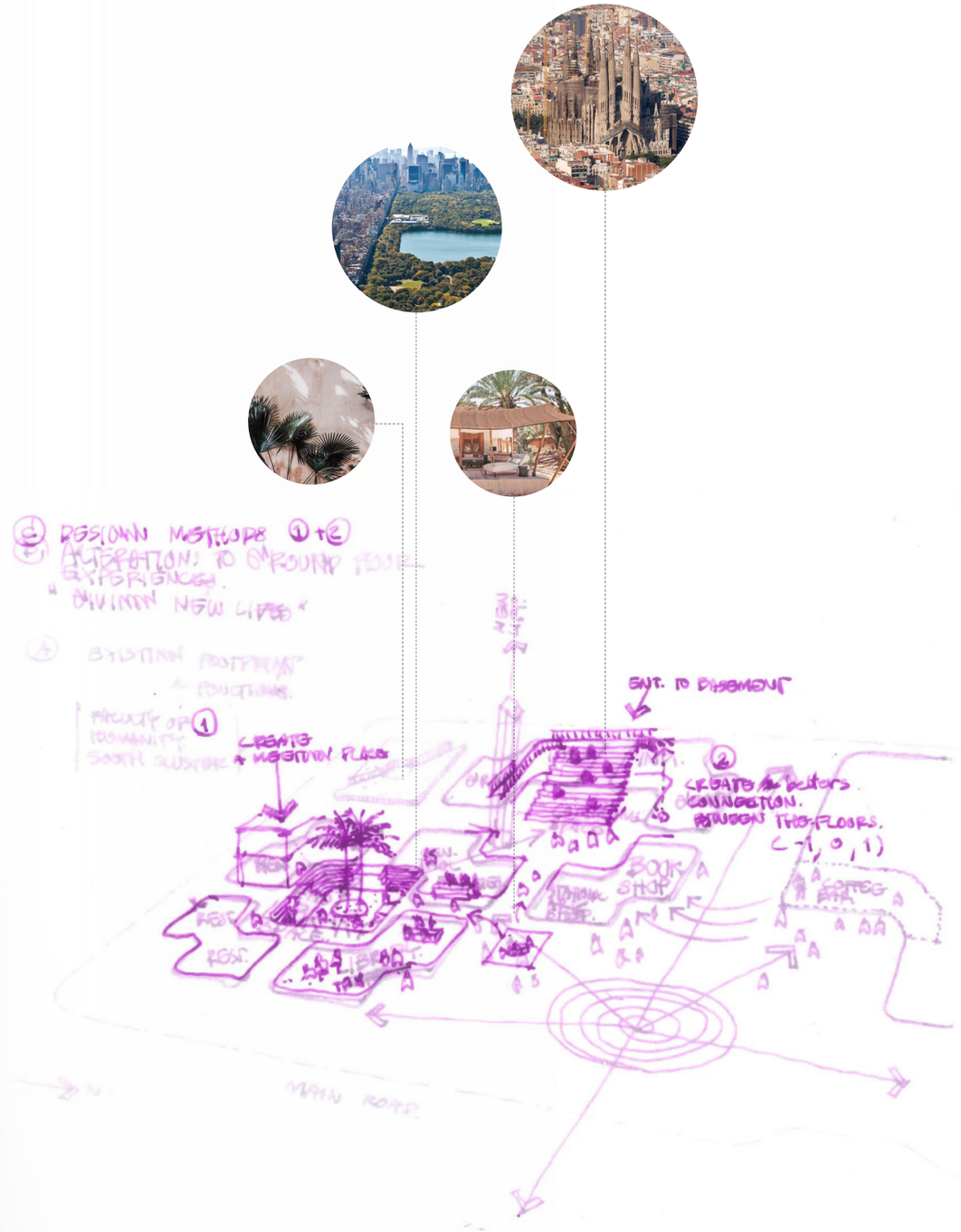
1 10

3. Creating identities

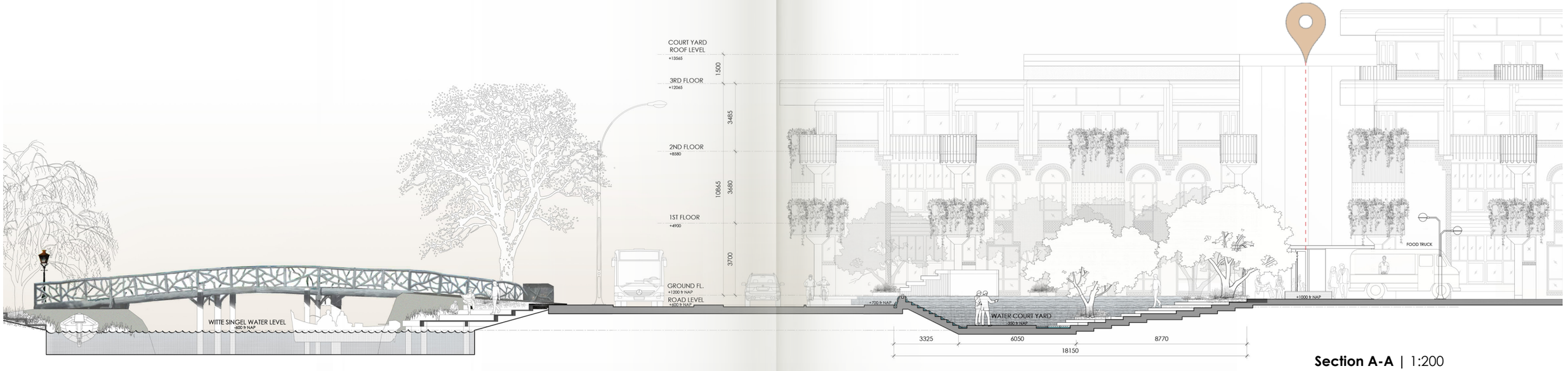
One method that helps improve the way-finding and internal circulation routings are the specific identity creation. If we look for design solutions from urban fabric of New York and Barcelona, we would notice that the confusing atmosphere of the universal modules could be resolved by assigning landmarks to break the repetition pattern in the cityscape.

I. The new entrance
II. Sunken courtyard
III. Raised platform
IV. The Green Library

Aims



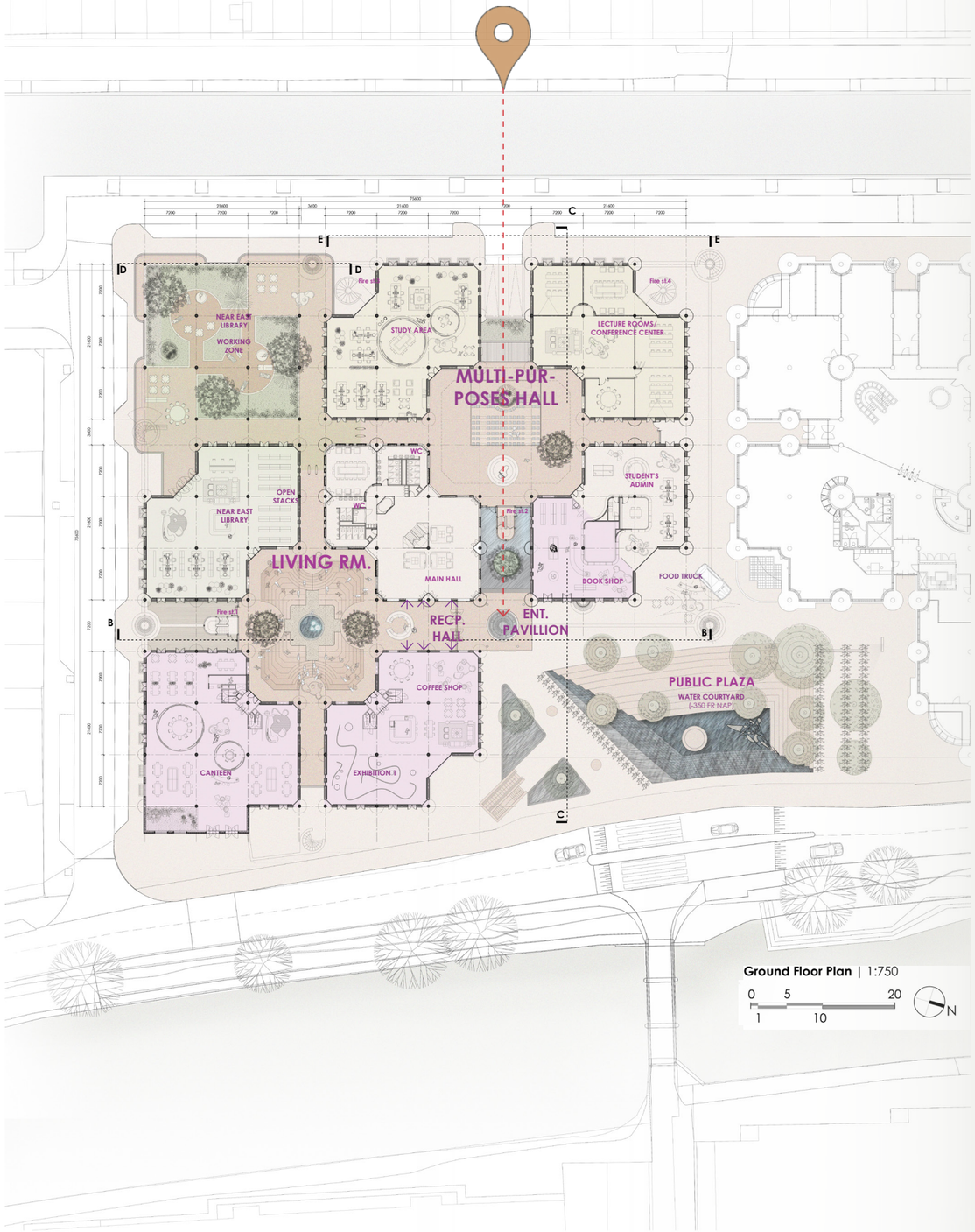
Actions



Section A-A | 1:200

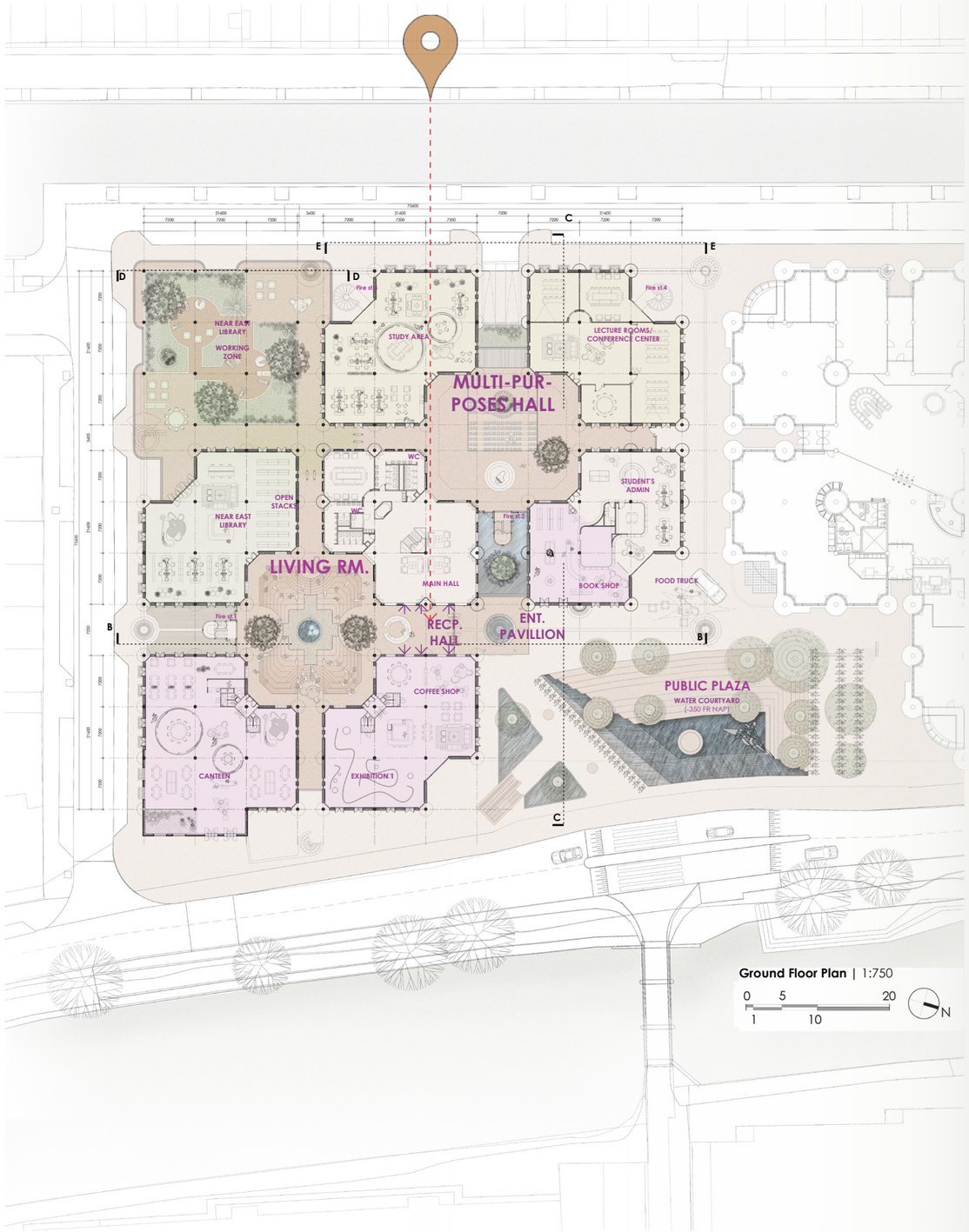
0 5

1 10


NEAR EAST LIBRARY
WORKING ZONE
STUDY AREA
MULTI-PUR-POSES HALL
LECTURE ROOMS/ CONFERENCE CENTER
Fire st.3
Fire st.4
WC
OPEN STACKS
NEAR EAST LIBRARY
WC
STUDENT'S ADMIN
Fire st.2
LIVING RM.
MAIN HALL
BOOK SHOP
FOOD TRUCK
Fire st.1
RECP. HALL
ENT. PAVILLION
COFFEE SHOP
PUBLIC PLAZA
WATER COURTYARD
(-350 FR NAP)
CANTEEN
EXHIBITION 1
A
B
C
D
E
Ground Floor Plan | 1:750
0 5 20
1 10
N

Universiteit Leiden
Van Wijkplaats

Universiteit Leiden


NEAR EAST LIBRARY
WORKING ZONE
STUDY AREA
MULTI-PUR-POSES HALL
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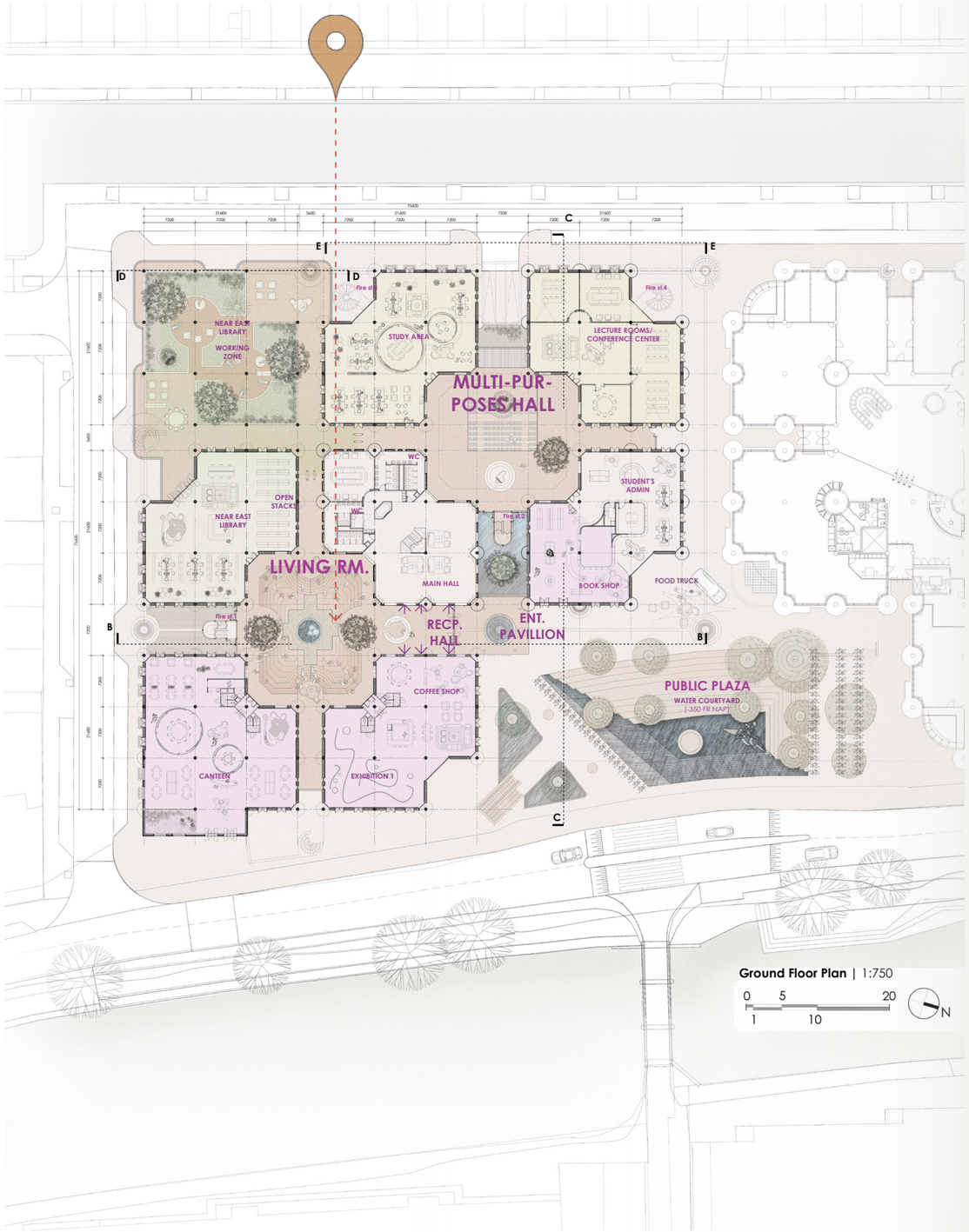
CANTEEN
EXHIBITION 1
A
B
C
D
E
Ground Floor Plan | 1:750
0 5 20
1 10
N

P. N. van Eyckhof
Waarvoor uw tuinman ylood. Ik was verrast,

Universiteit Leiden
Universiteit Leiden


NEAR EAST LIBRARY
WORKING ZONE
STUDY AREA
MULTI-PUR-POSES HALL
LECTURE ROOMS/ CONFERENCE CENTER
WC
STUDENT'S ADMIN
OPEN STACKS
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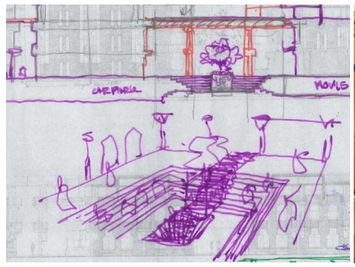
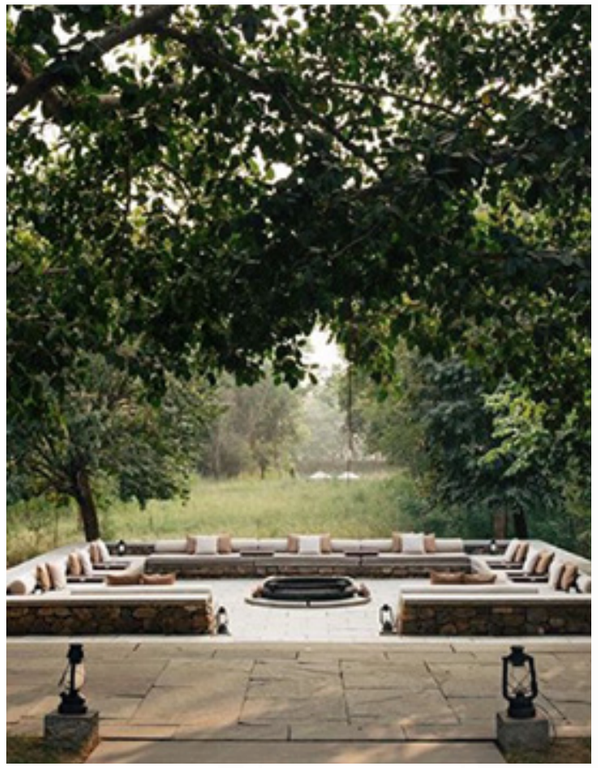
COFFEE SHOP
CANTEEN
EXHIBITION 1
Fire st.1
Fire st.2
Fire st.3
Fire st.4
Ground Floor Plan | 1:750
0 5 20
1 10
N

FACULTY OF
TOURISTIC
SOUTH CLUSTER
1
CREATE
A MEETING PLACE

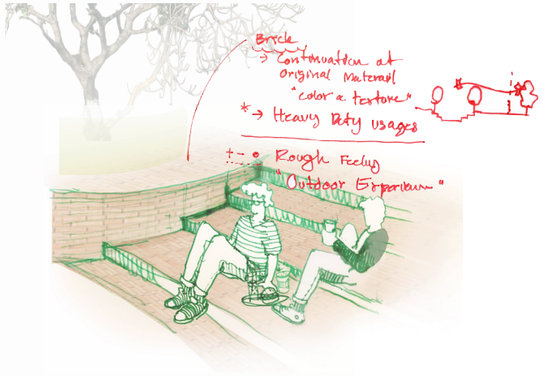


' The Living Room'

Design Experiment
The Living Room experience



Outdoor seating - Aman i Khas



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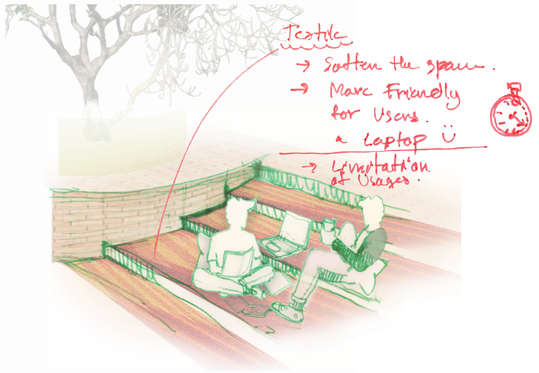

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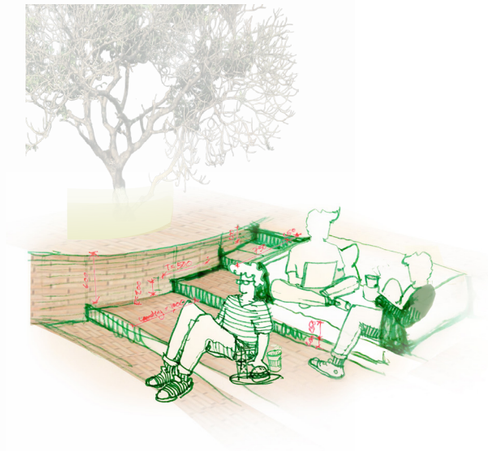

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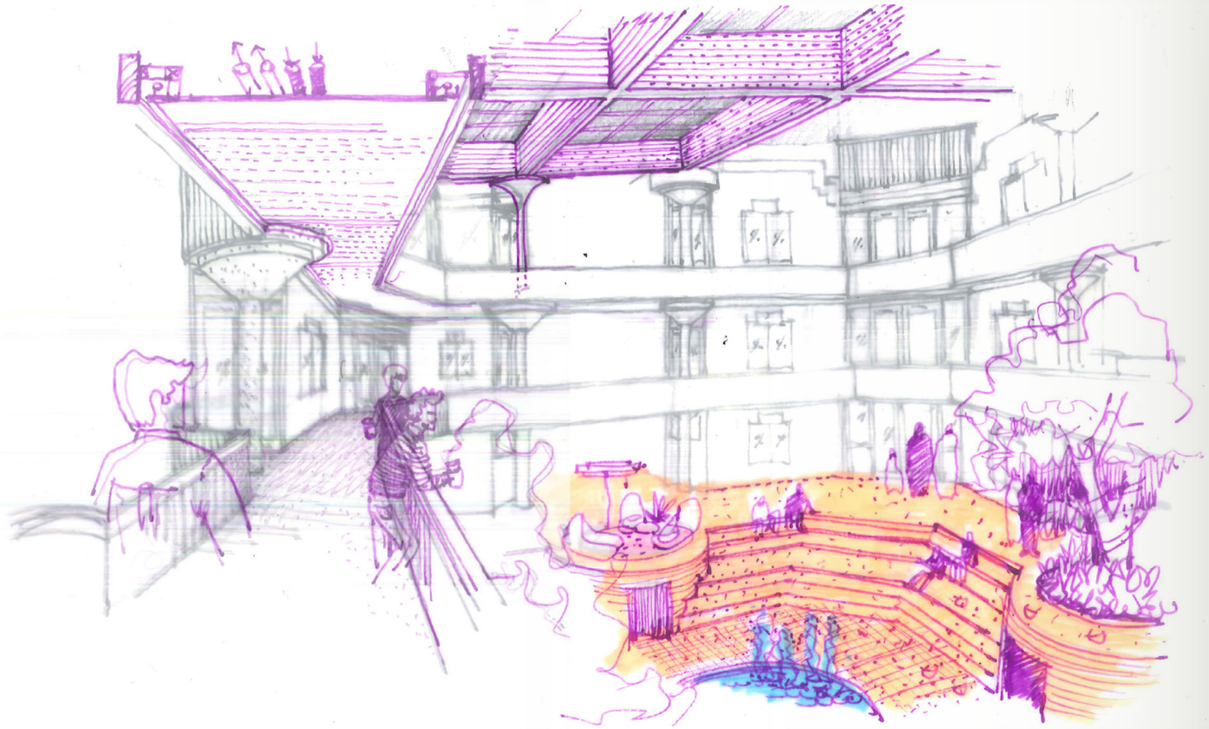
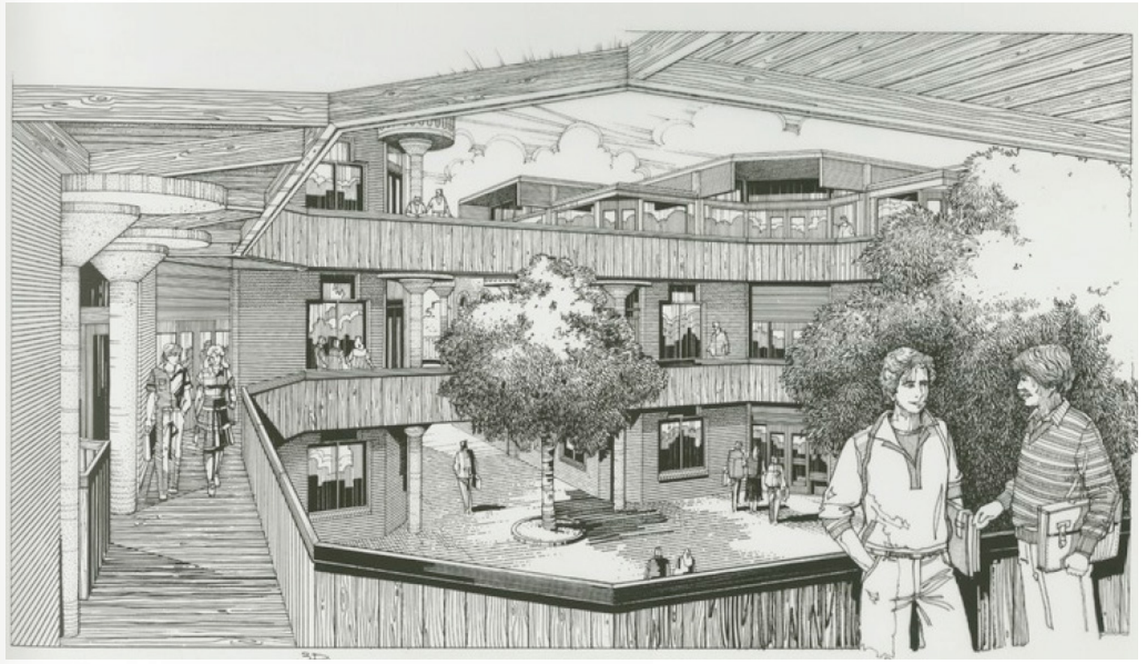
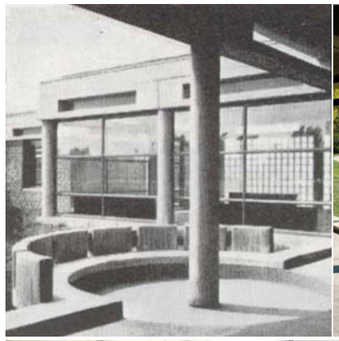




THE 70'S ZITKUIL

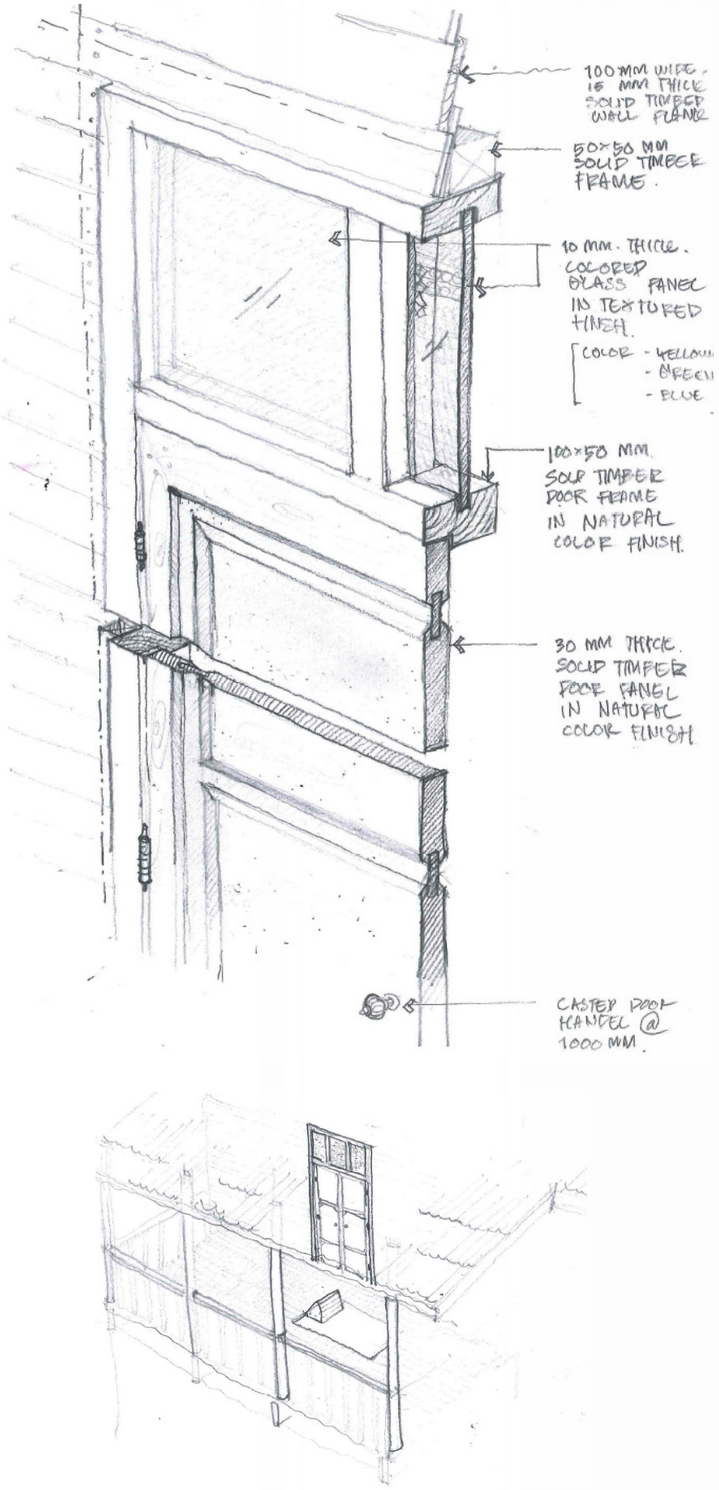


The design proposal will be **a Club House of the inner city campus,** with series of facilities for the future humanity studies .

' The Living Room'

Cultural performances at Leiden University

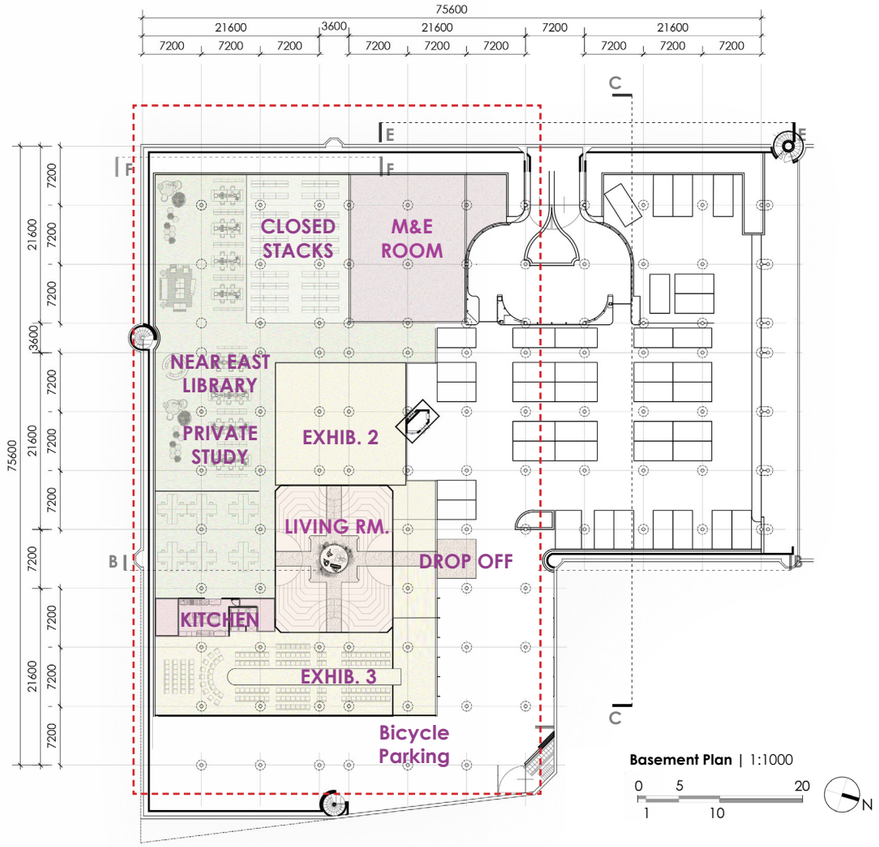
‘ a Living Museum’



‘ a Living Museum’

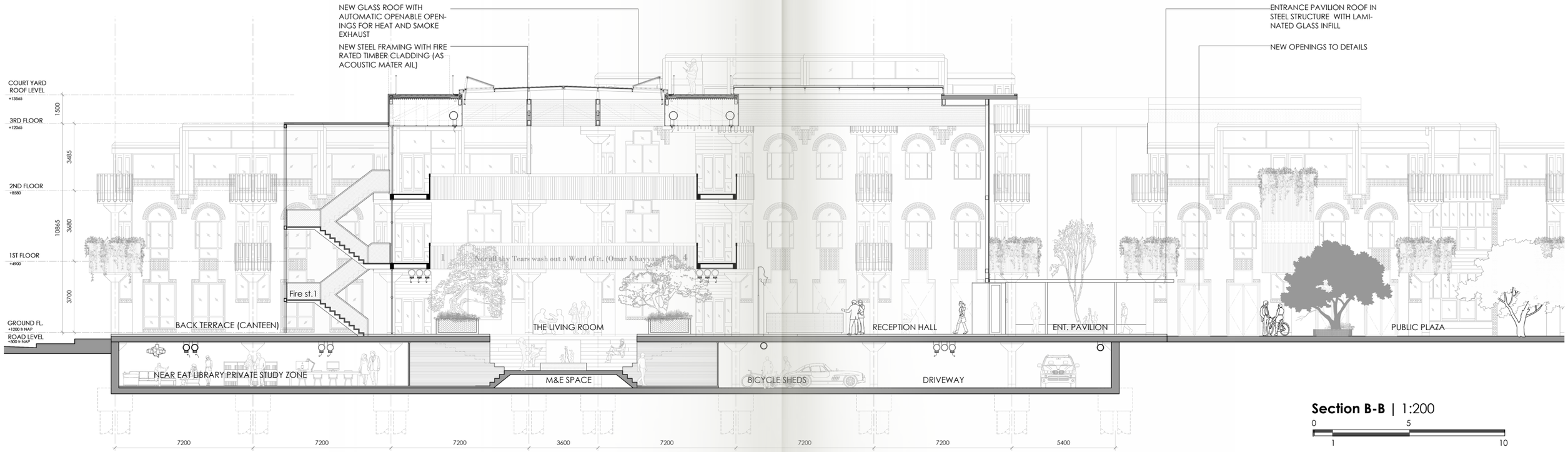
Ground Floor Plan | 1:500

0 5 20
1 10



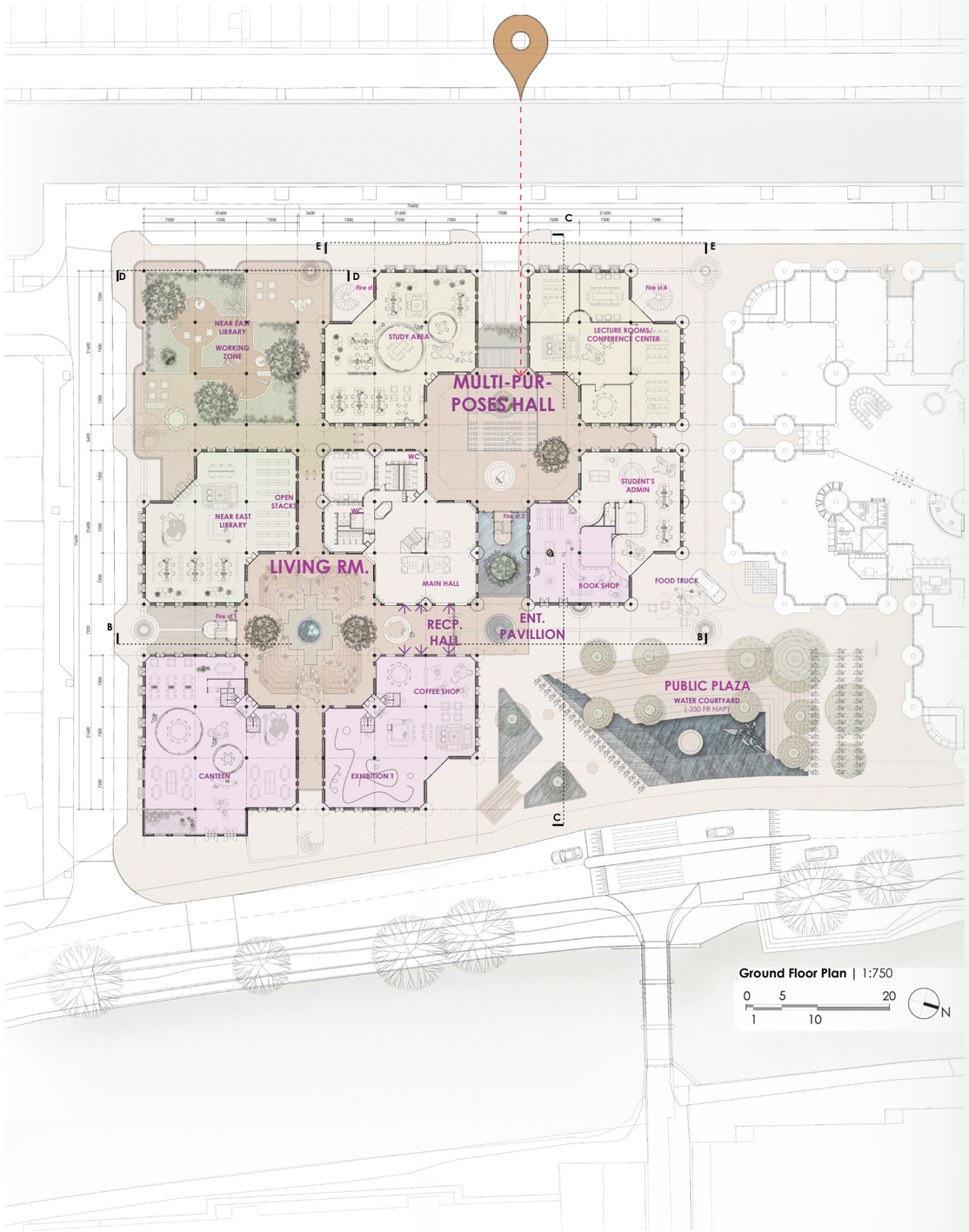
Basement Plan | 1:1000

0 5 20
1 10



Section B-B | 1:200

0 5
1 10


NEAR EAST LIBRARY
WORKING ZONE
STUDY AREA
MULTI-PUR-POSES HALL
LECTURE ROOMS/ CONFERENCE CENTER
WC
STUDENT'S ADMIN
OPEN STACKS
NEAR EAST LIBRARY
WC
LIVING RM.
MAIN HALL
BOOK SHOP
FOOD TRUCK
RECP. HALL
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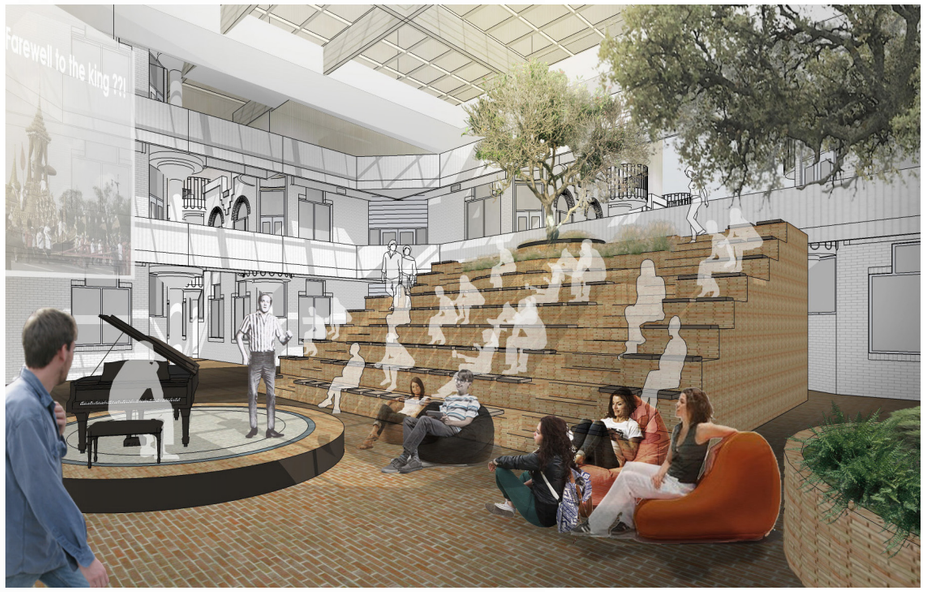
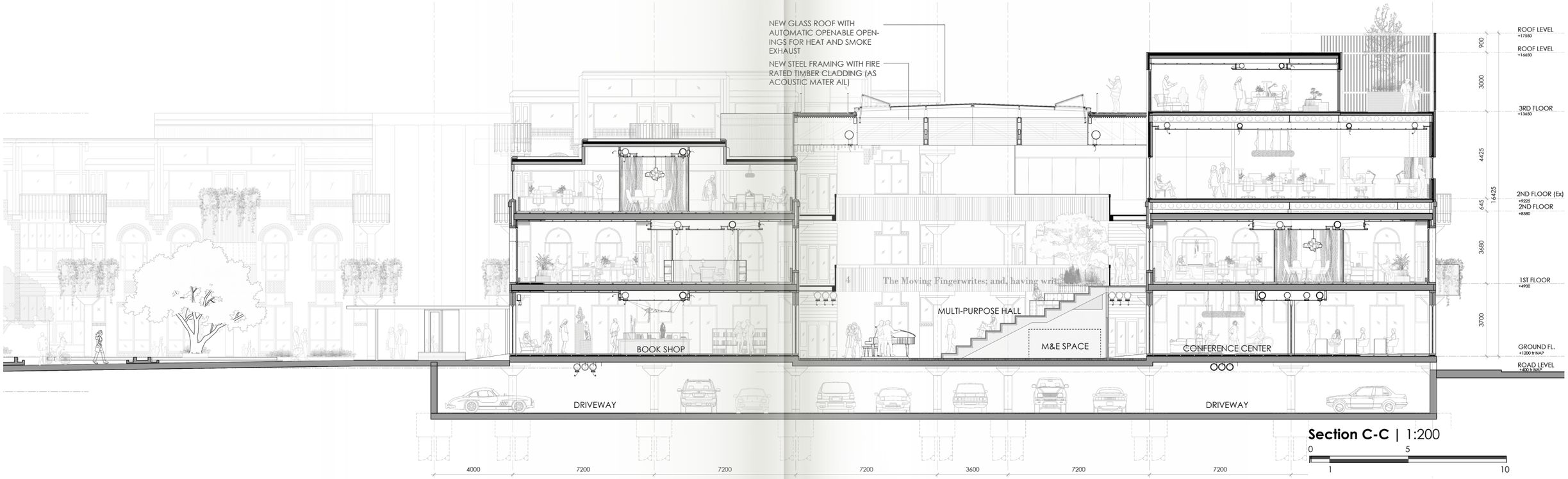
PUBLIC PLAZA
WATER COURTYARD
(-350 FR NAP)
COFFEE SHOP
CANTEEN
EXHIBITION 1
Fire st.1
Fire st.2
Fire st.3
Fire st.4
A
B
C
D
E
Ground Floor Plan | 1:750
0 5 20
1 10
N

Two roads diverged in a wood, and I–
2
I took the one less traveled by,


Farewell to the king ?!



Section C-C | 1:200

0 5

1 10

NEAR EAST LIBRARY
WORKING ZONE
STUDY AREA
MULTI-PUR-POSES HALL
LECTURE ROOMS/ CONFERENCE CENTER
Fire st.3
Fire st.4
WC
STUDENT'S ADMIN
OPEN STACKS
NEAR EAST LIBRARY
WC
Fire st.2
LIVING RM.
MAIN HALL
BOOK SHOP
FOOD TRUCK
Fire st.1
RECP. HALL
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CANTEEN
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A
B
C
D
E
Ground Floor Plan | 1:750
0 5 20
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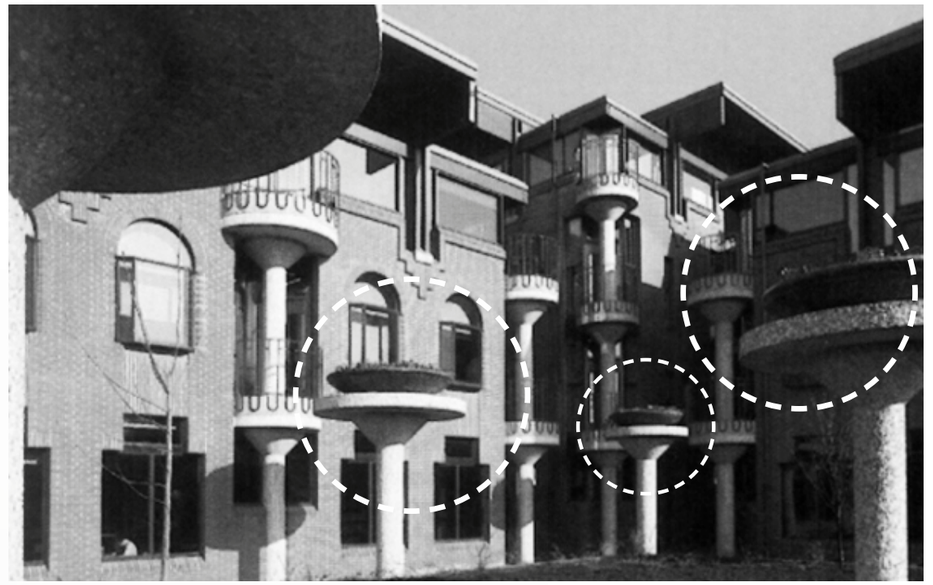
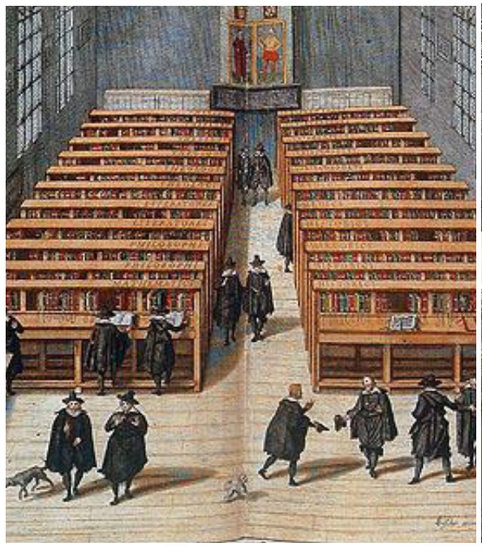
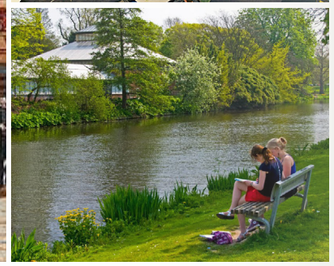


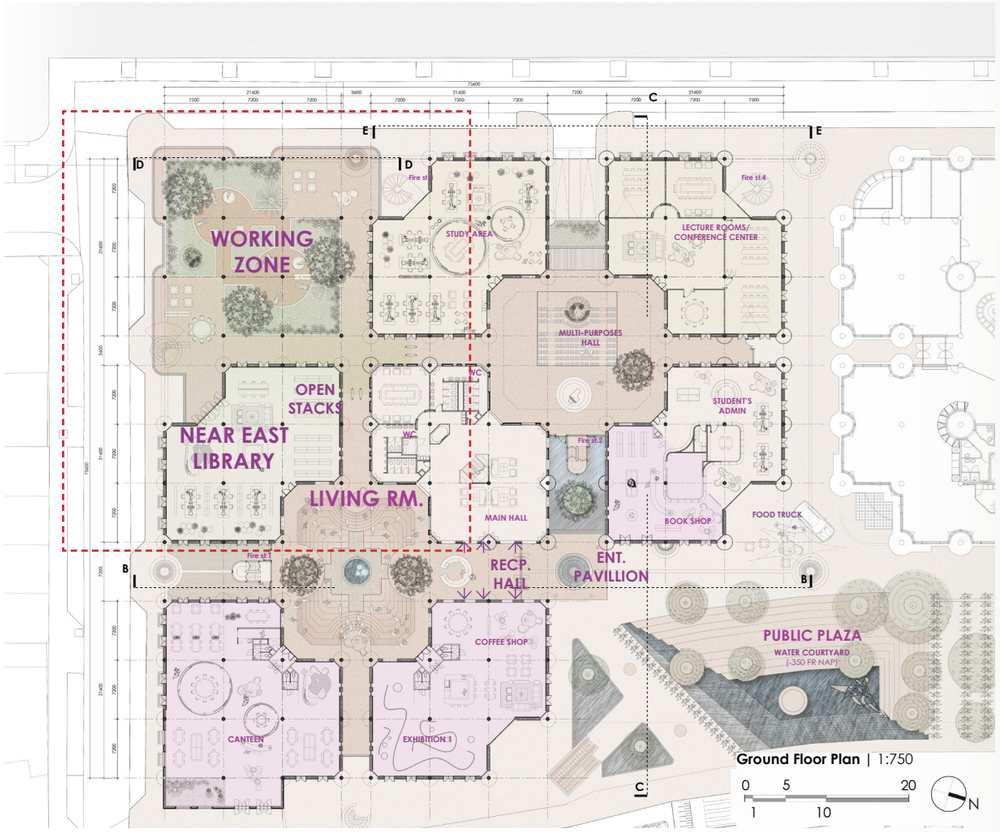
The Garden Library

Near East Library will be situated on the quietest corner of the site. This function will be shared by the internal users and external visitors.

The original 'mushroom garden' of the South Cluster will be cover by a new glass roof. The new interior space will house large library's working space. Lush trees and shrubs will be plated in this hall. The green environment will contribute to the new image of University library. This improved learning environment is a reinterpretation of the original humanity design approach.

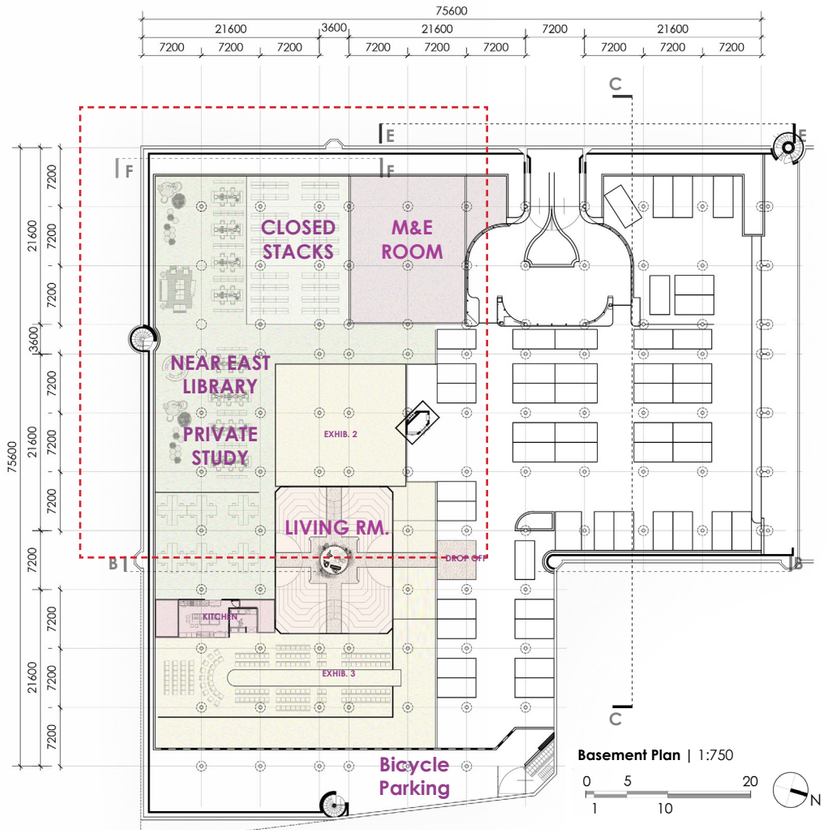






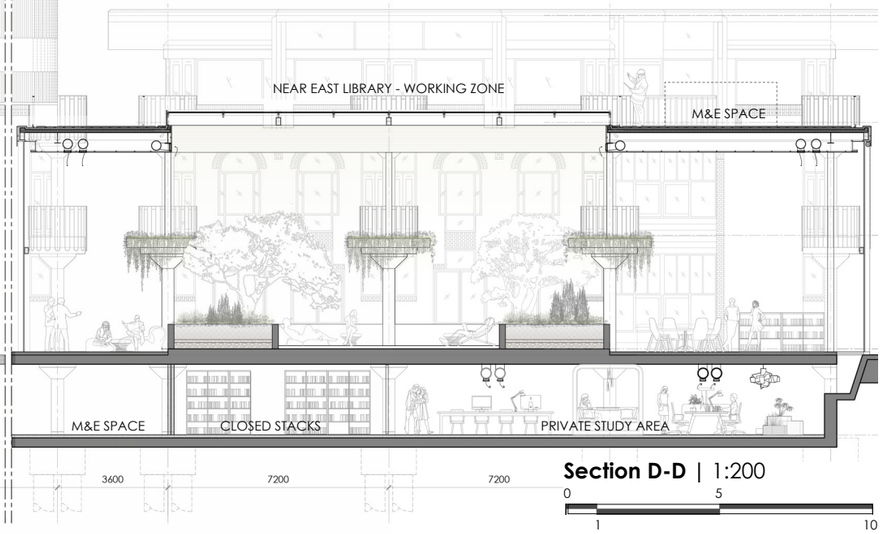
Ground Floor Plan | 1:750

0 5 20
1 10



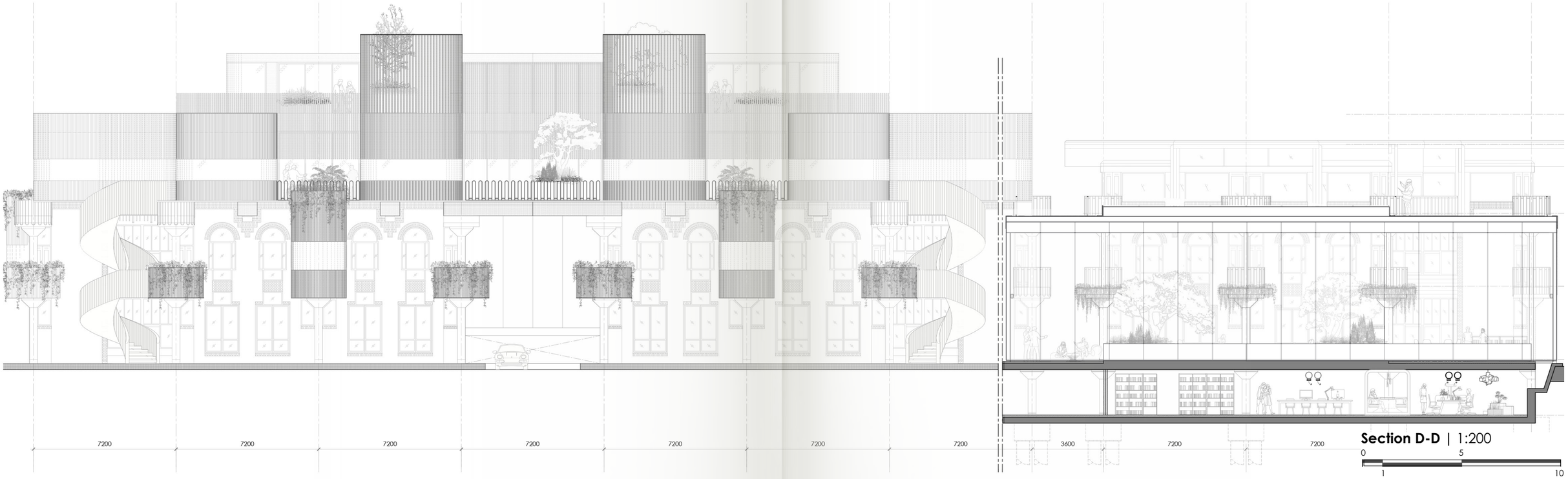
Basement Plan | 1:750

0 5 20
1 10



Section D-D | 1:200

0 5
1 10



Section D-D | 1:200

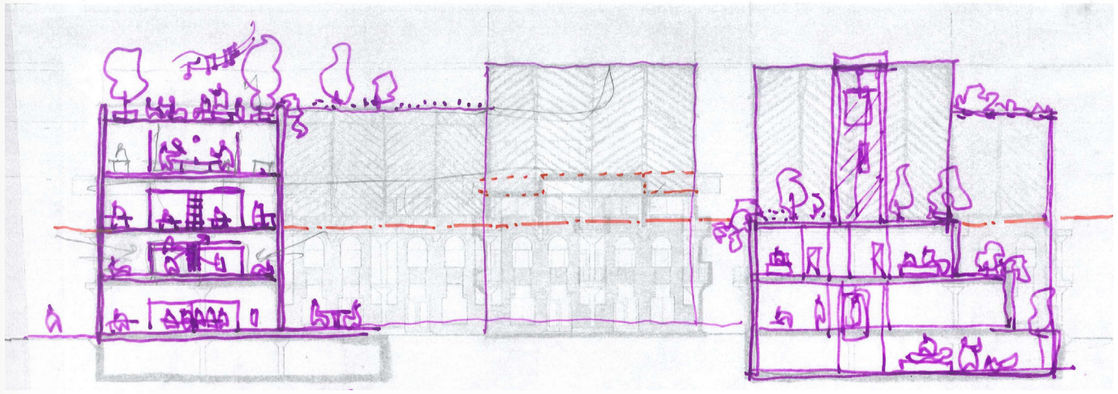
0 5

1 10

Upper Floors Reconfigurations & Additions

1. Alterations to the existing interior designs

2. New Addition

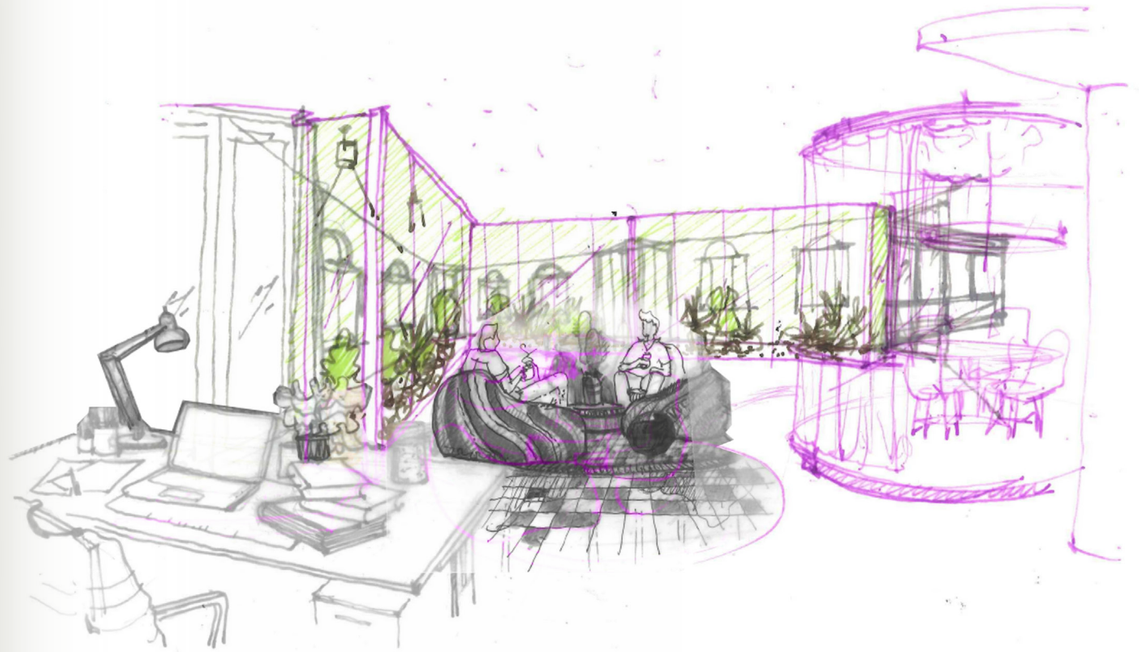


1. Alterations to the existing interior designs

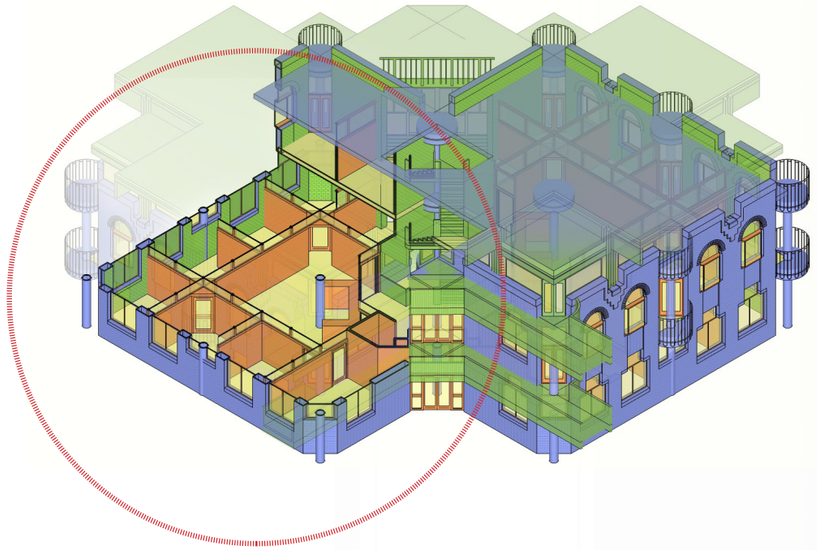
To improve the quality of the interior space

To improving the building efficiency

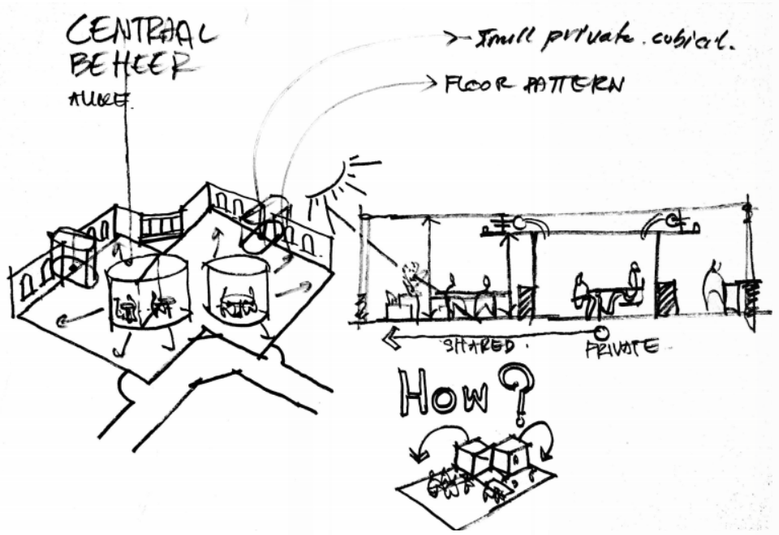
Aims

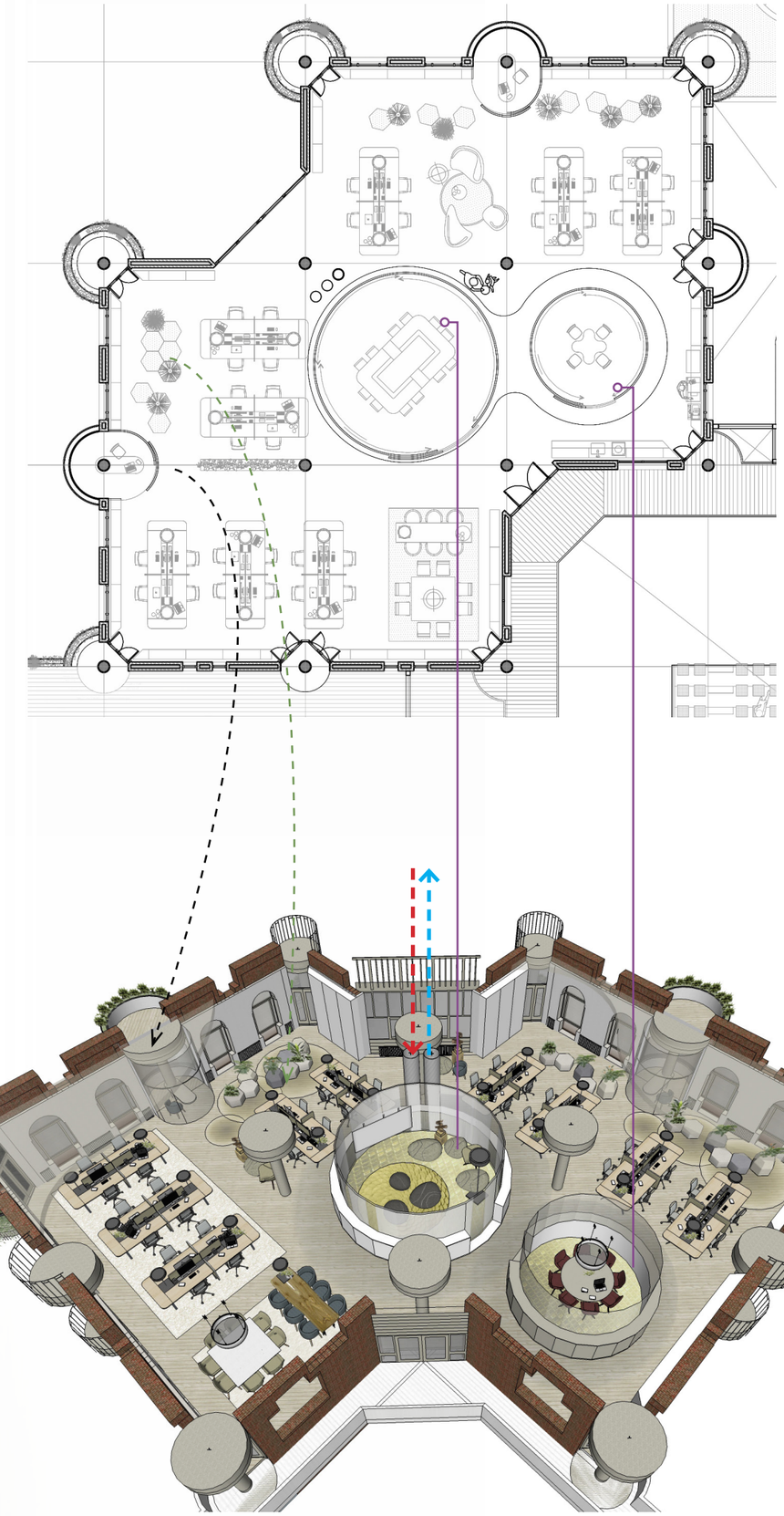


Actions



Value assessment diagram - W. Taemeyachat, 2018

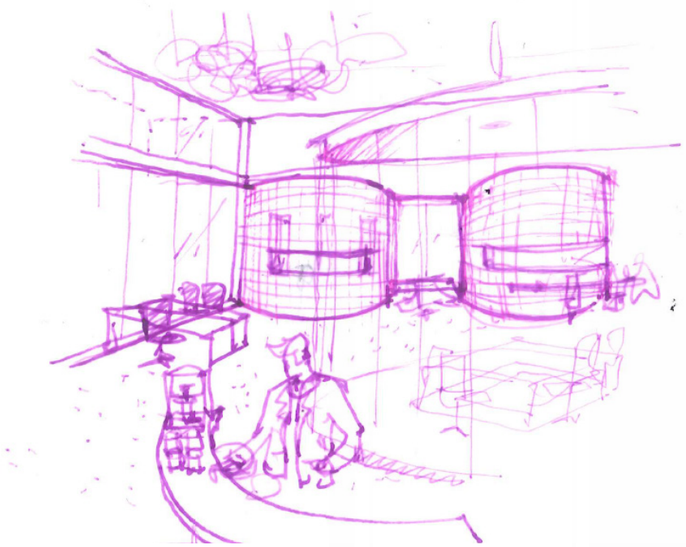




In this proposal, series of communal seating area will be situated aside to lush planters. I believe that the integration of greenery would contribute to better interior space quality. The plants can reduce the impact of stress in the intense working environment. Positive emotional and cognitive effects can be obtained from greenery adjacent to each workstation

View of the new open plan office interior and the adjacent greenery - W. Taemeyachat, 2018

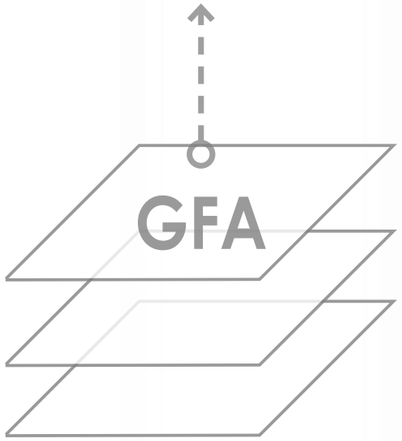
View of the new communal function room, in the middle of each floor plate - W. Taemeyachat, 2018



View of the new communal function rooms - W. Taemeyachat, 2018

View of the new private cell - W. Taemeyachat, 2018

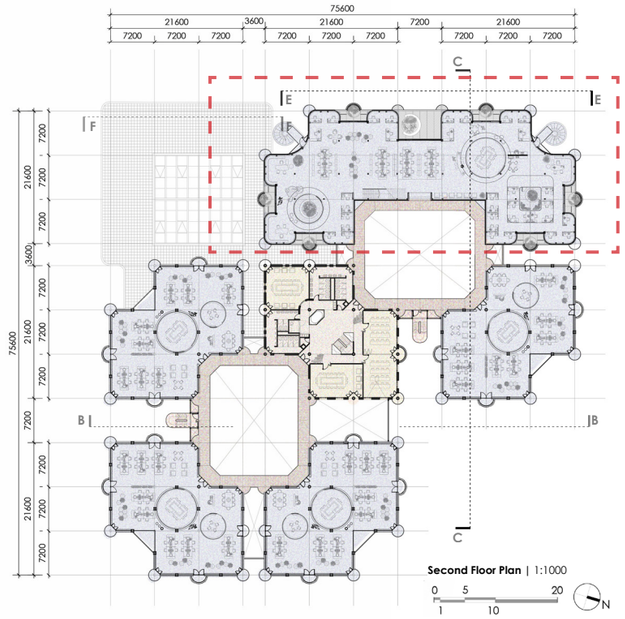
2. New Addition

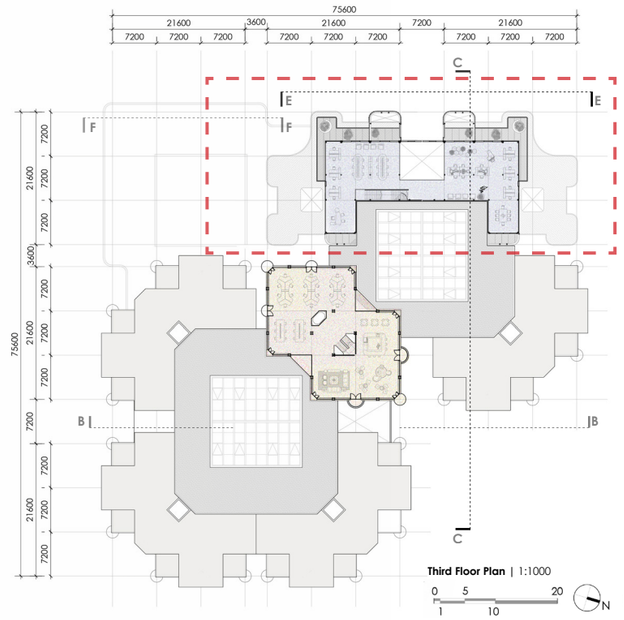


To increase the quantity of existing gross floor area

To improve the quality of the interior space

Aims



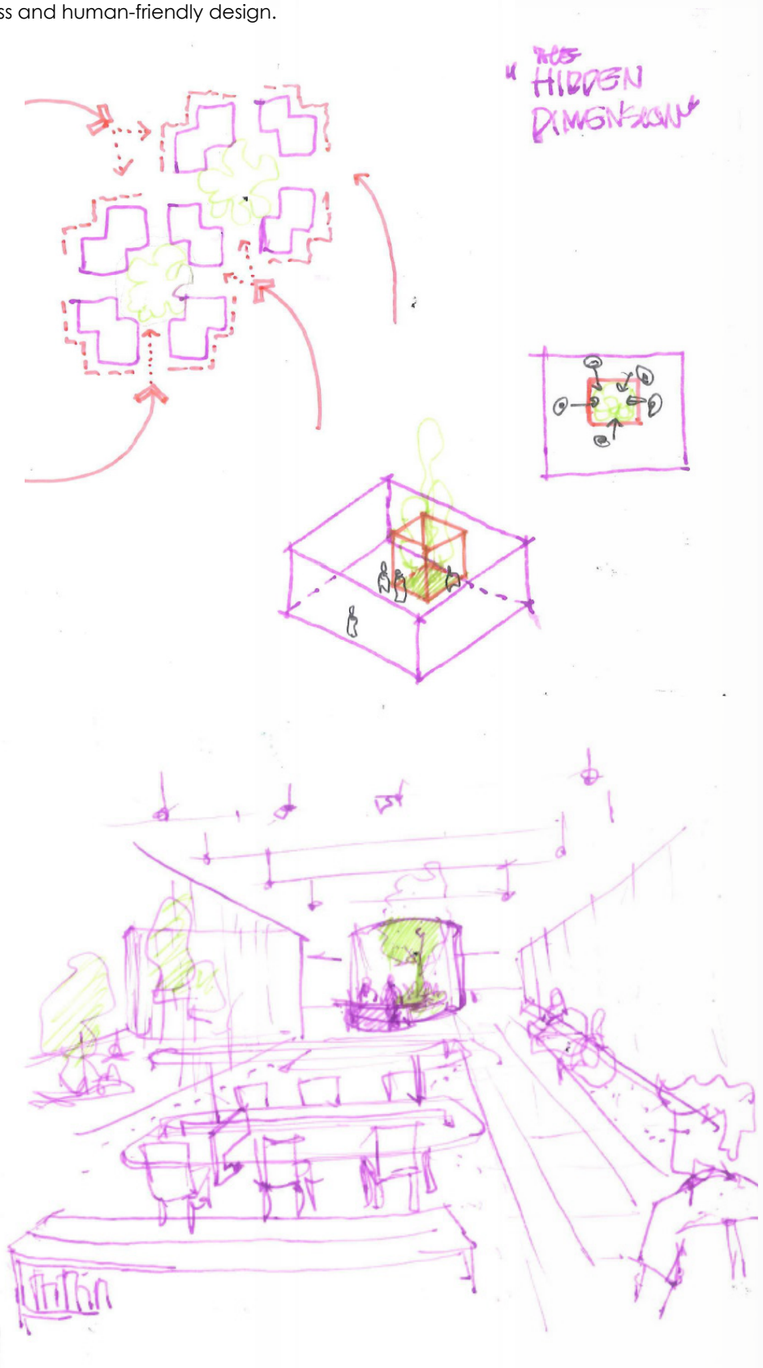


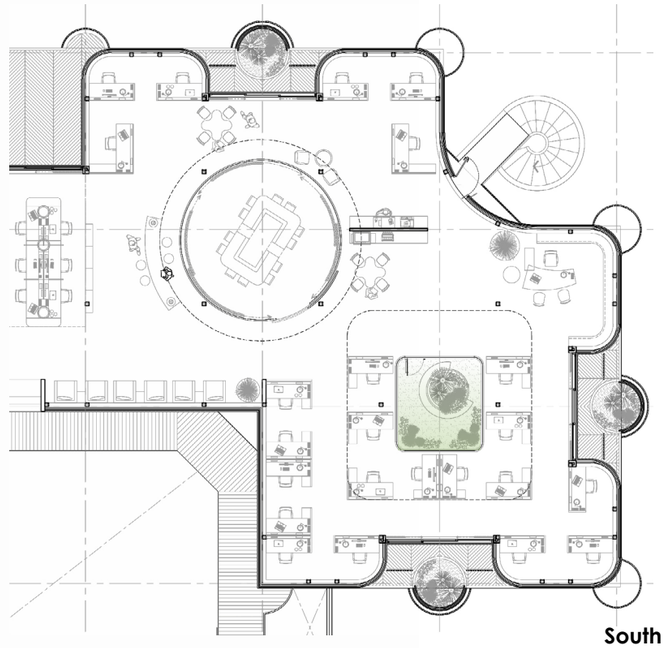
Actions

A continuation of the greenery

On the extension parts, the idea of internal greenery and the stress releaser have also been introduced as a main space design strategy. The new plan represents the reinterpretation of the original communal courtyard strategies. There will be a large communal meeting space for people working in this new addition.

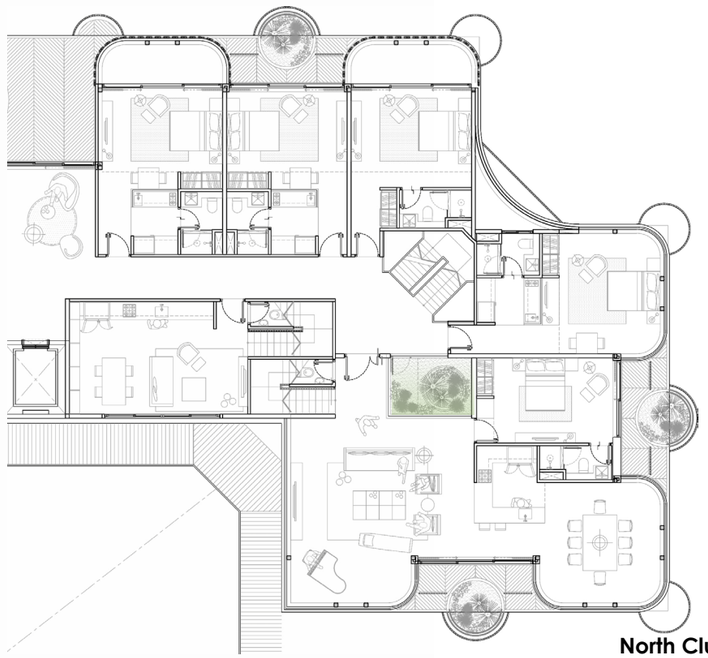
In addition, some of those large communal space will be transformed into a 'green courtyards". This regards the idea to help reduce stress and human-friendly design.





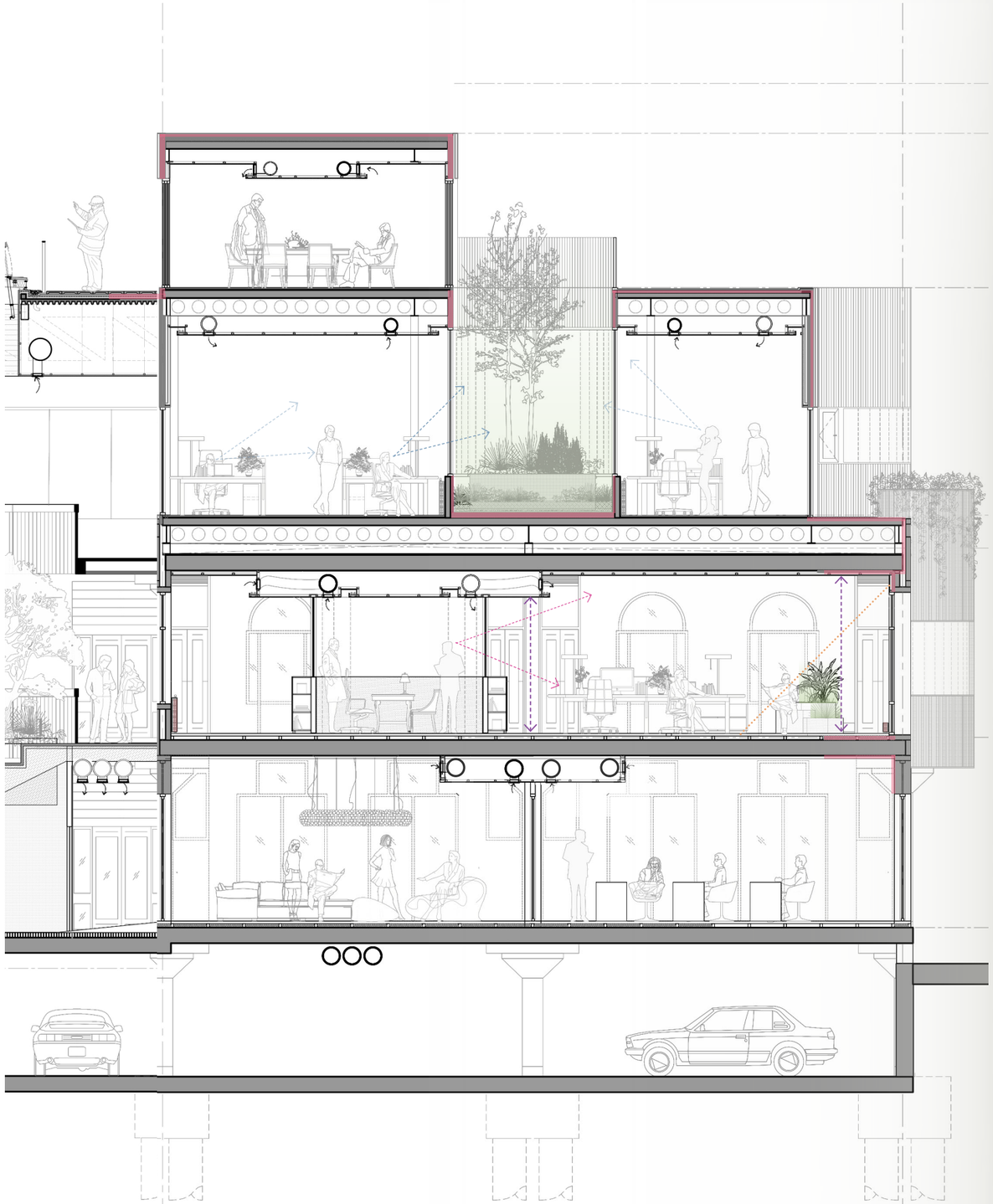
South Clusters
Second Floor Plan | 1:250

0 5 20
1 10
N



North Clusters
Second Floor Plan | 1:250

0 5 20
1 10
N



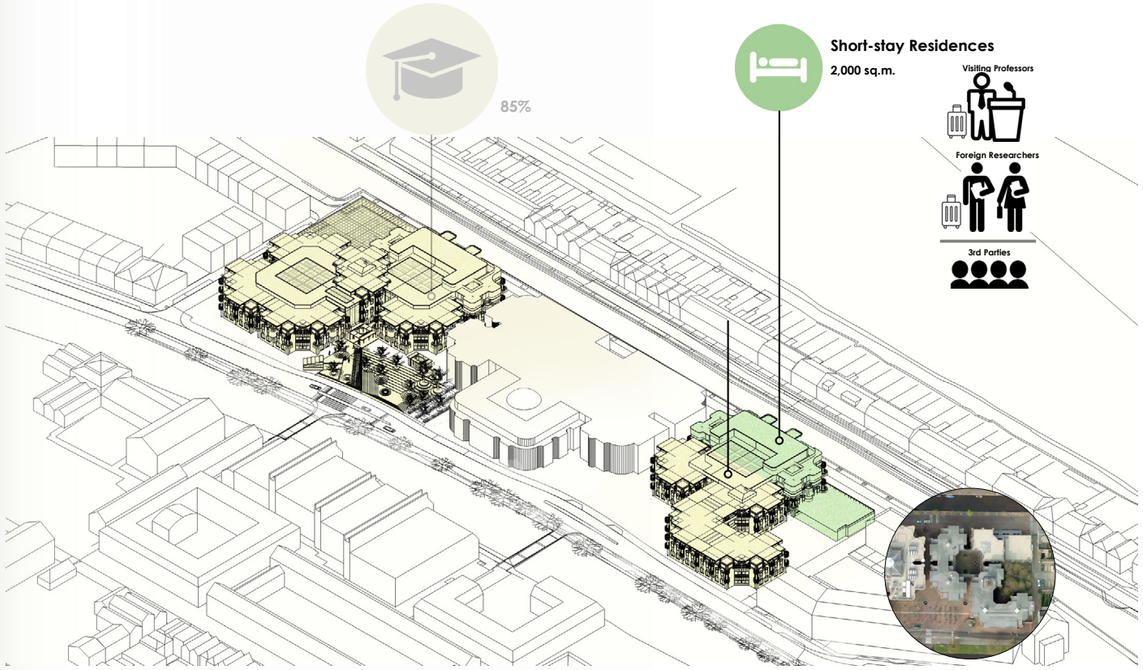
Section across the new green courtyard | 1:100

0 5 20
1 10

Green courtyard - Wendell Burnette Architects

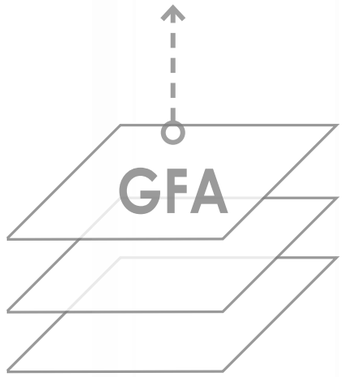
Residential Function Provision

1. The transformation of the existing layout
2. The new additions
3. Provision for future expansion



Functional Diagram

1. The transformation of the existing layout



Aims

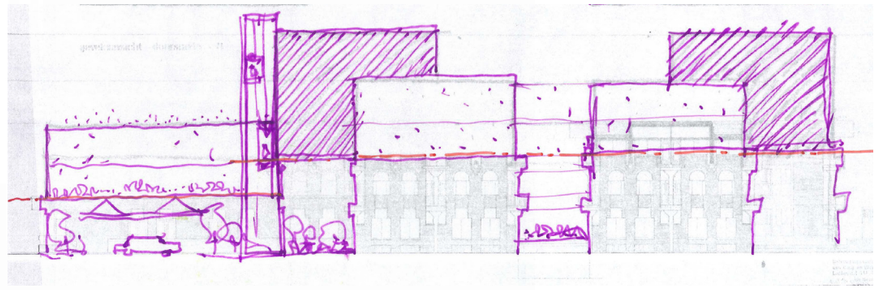
Short-stay Residences

Visiting Professors

Foreign Researchers

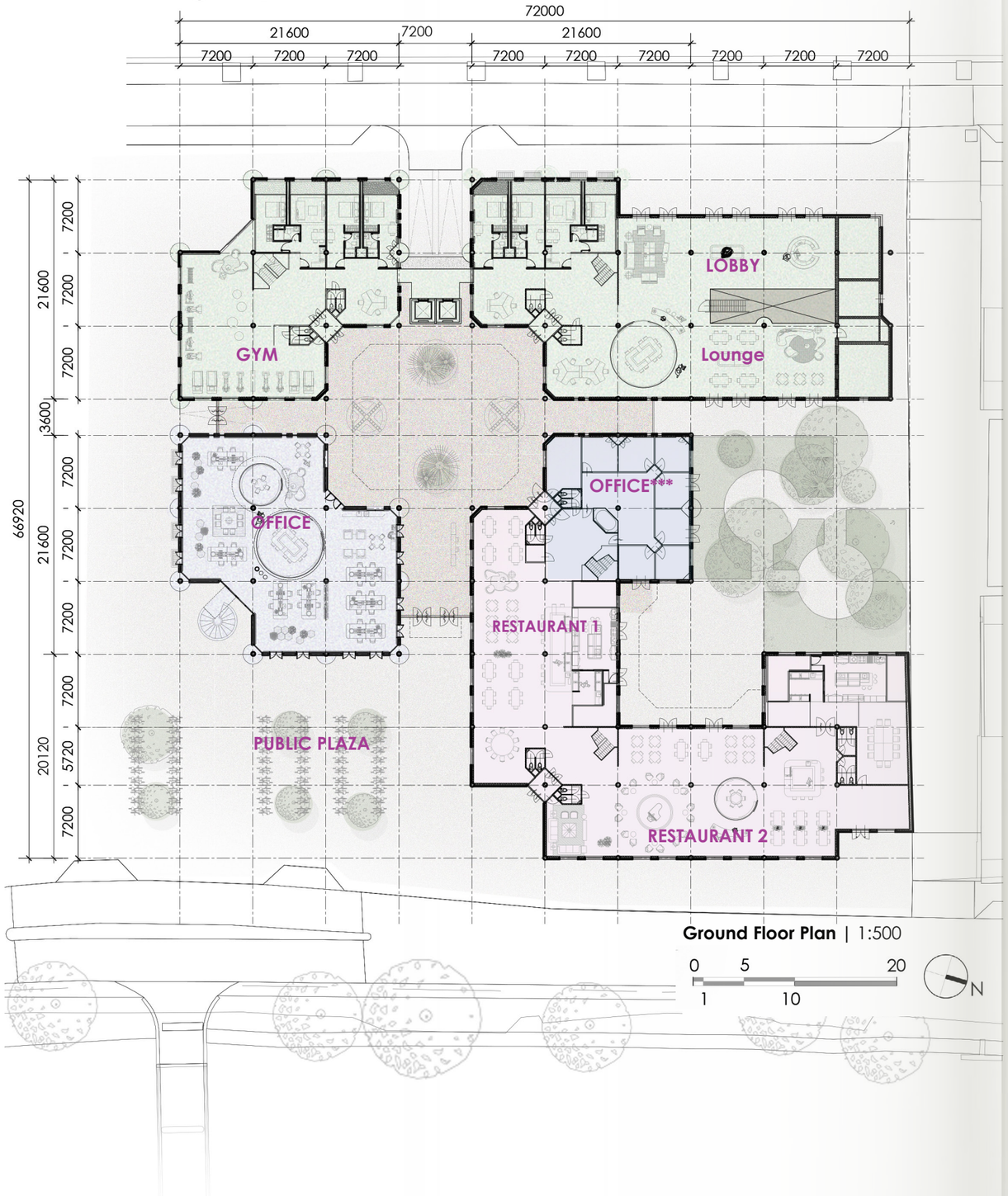
Short-stay Residences

3rd Parties

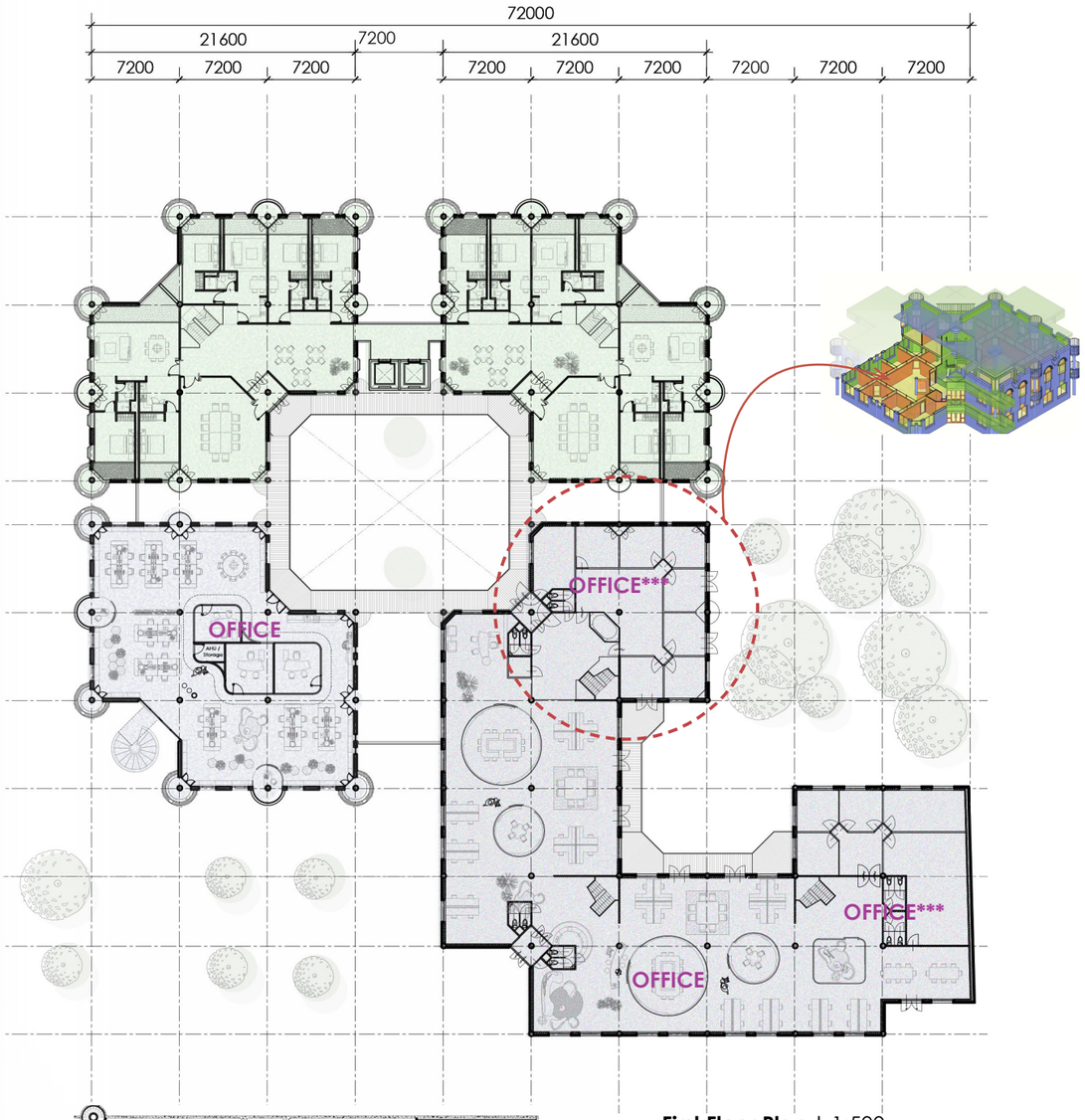


Actions

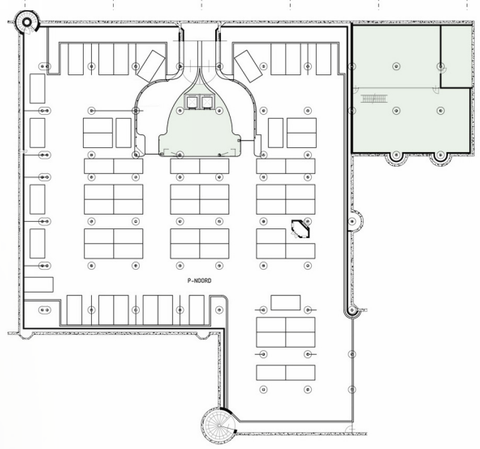
1. The transformation of the existing layout



Ground Floor Plan | 1:500

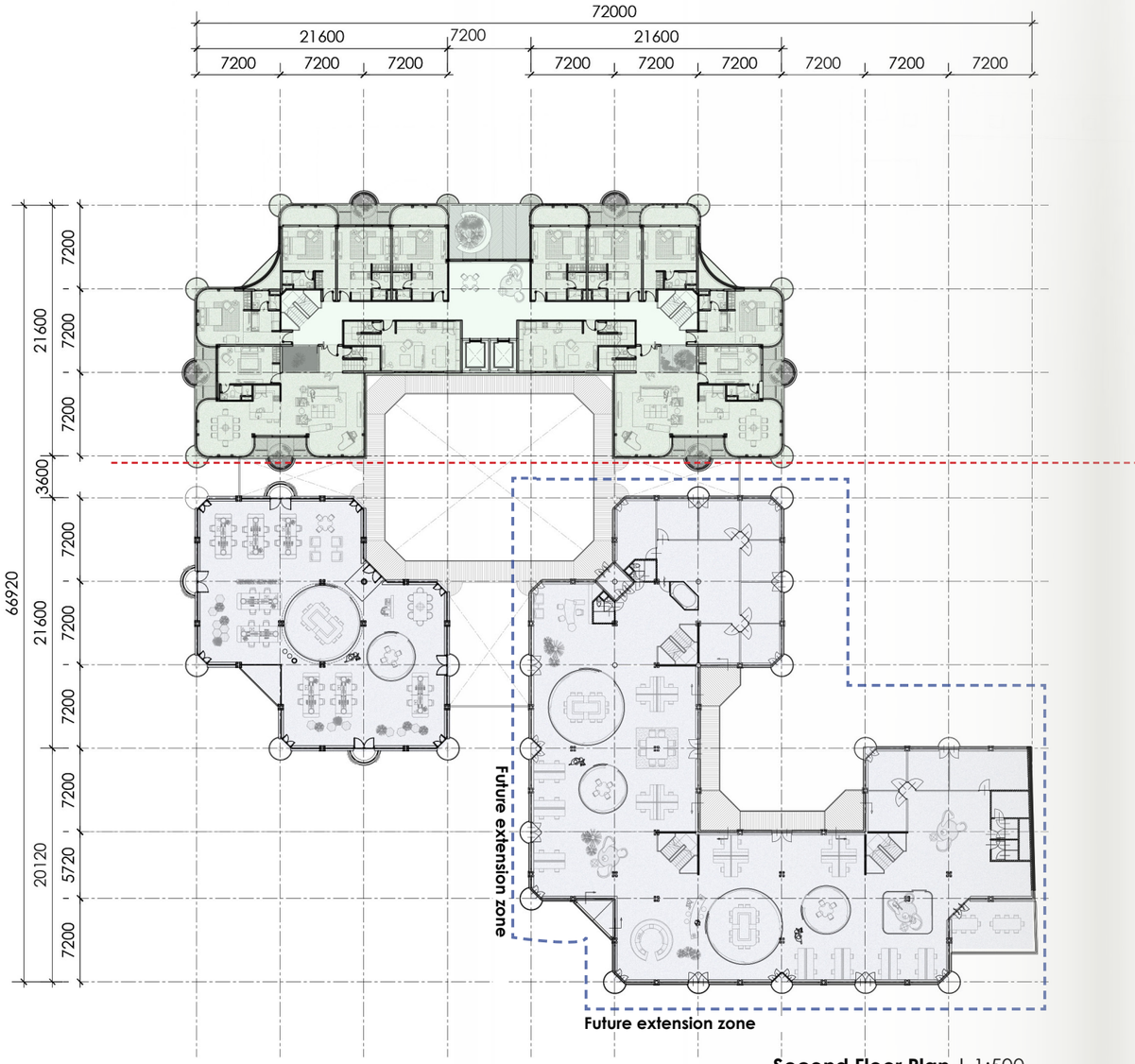


First Floor Plan | 1:500



Basement Plan | 1:1000

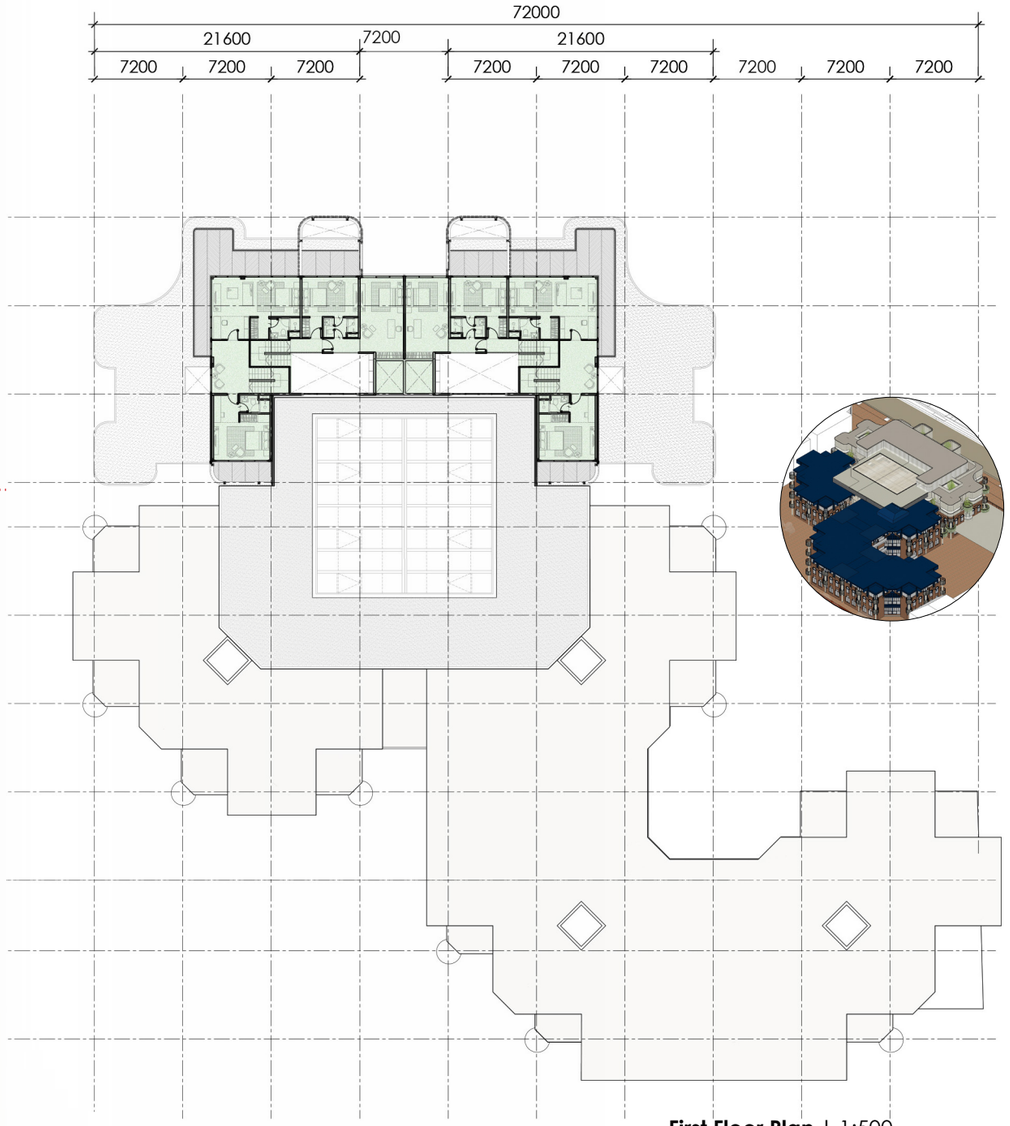
2. The new additions



Second Floor Plan | 1:500

0 5 20
1 10

N

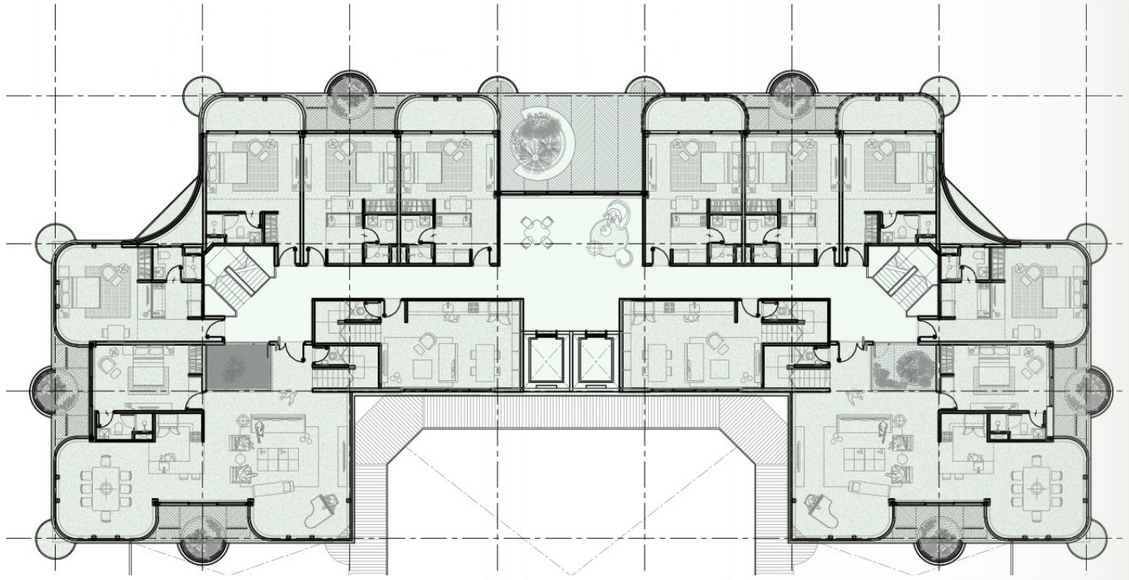


First Floor Plan | 1:500

0 5 20
1 10

N

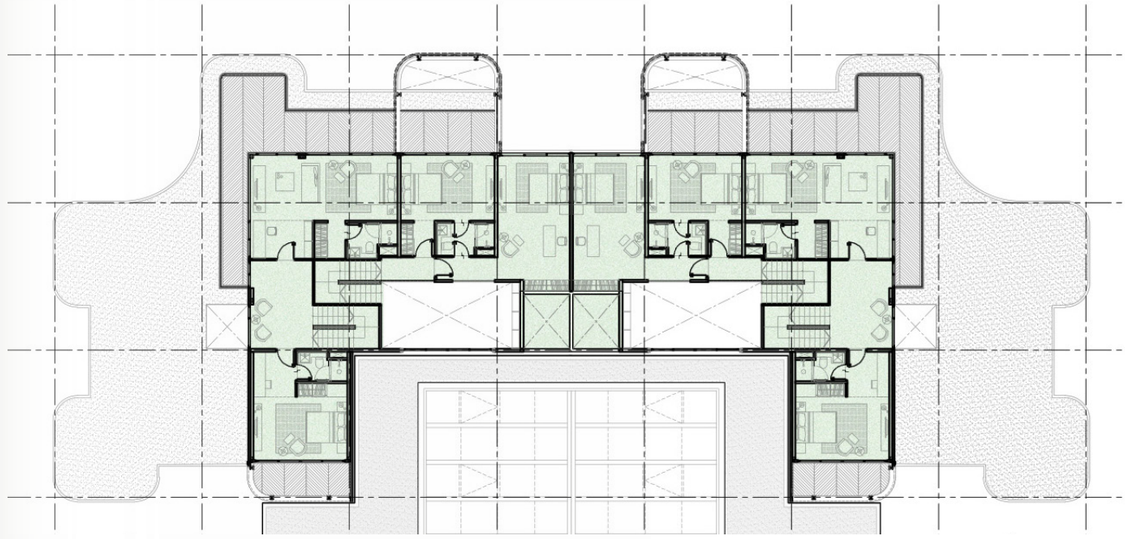
P4's room arrangement
May 2018



Second Floor Plan | 1:500

0 5 20
1 10

N



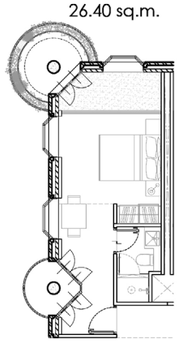
Third Floor Plan | 1:500

0 5 20
1 10

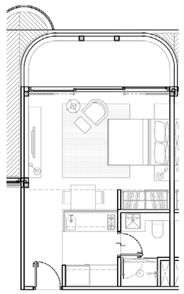
N

Design Experiment
Room layout - Extension parts

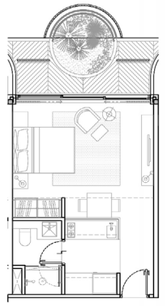
Type A
Studio Unit
26.40 sq.m.



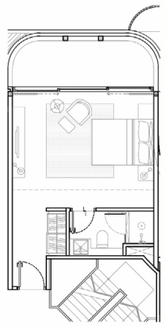
Type B
Studio Unit
31.85 sq.m.



Type C
Studio Unit
31.85 sq.m.

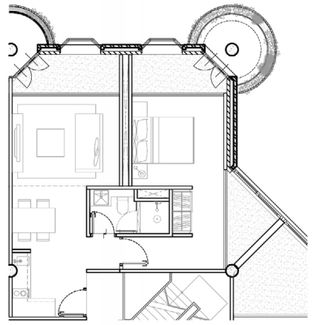


Type D
Studio Unit
38.65 sq.m.



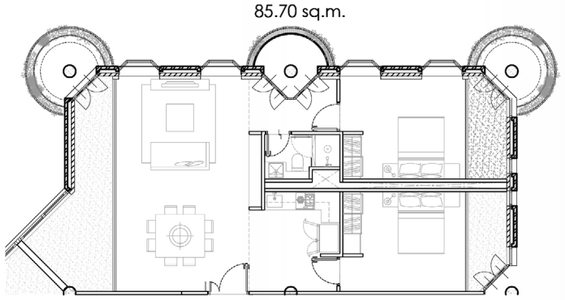
Studio	25-38 sqm	16	units

Type E
1 Bedroom Unit
46.90 sq.m.



1 bedroom	38-45 sqm	4	units

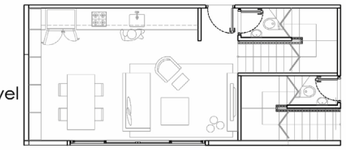
Type F
2 Bedrooms Unit
85.70 sq.m.



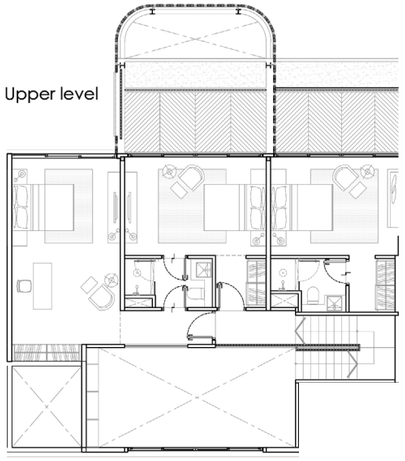
2 bedrooms	90 sqm	4	units

Type G
2 Bedrooms Unit (Duplex)
94.30 sq.m.

Lower level



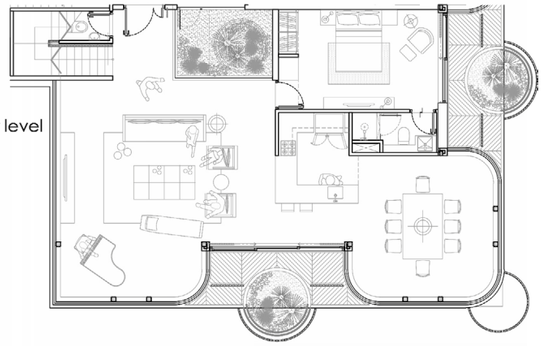
Upper level

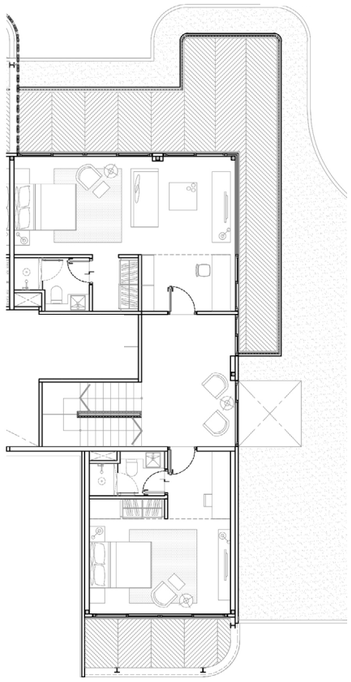


2 bedrooms (duplex)	94 sqm	2	units

Type H
3 Bedrooms Unit (Duplex)
180 sq.m.

Lower level

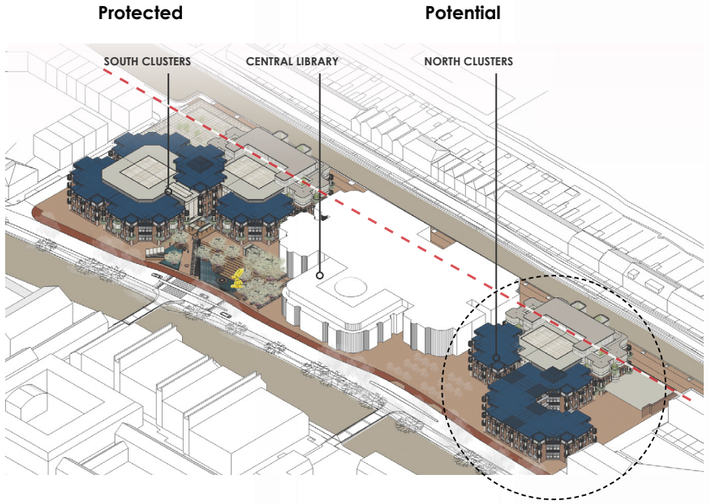


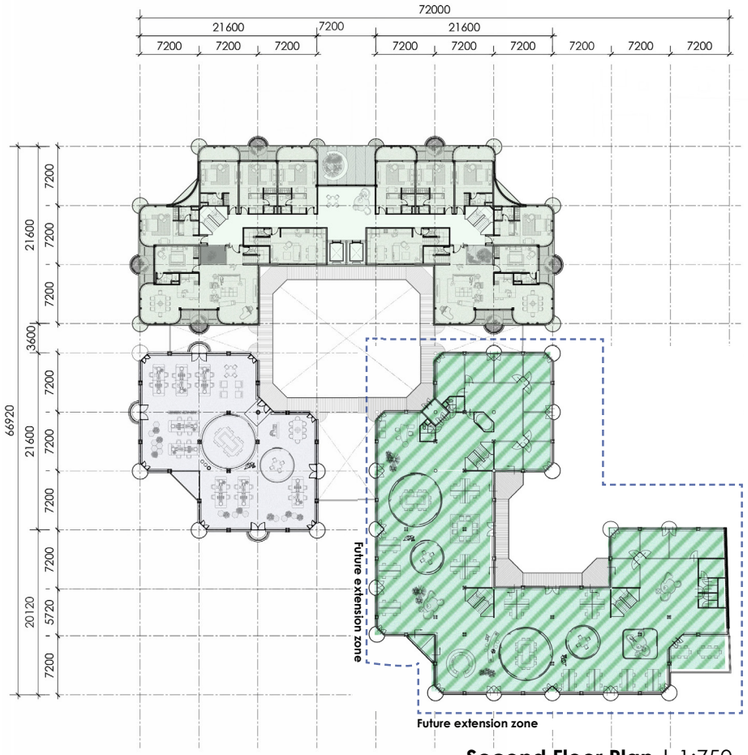


3 bedrooms (duplex)	198 sqm	2	units

Residences 26 Units				2000	sqm
Studio	25-38 sqm	16	units		
1 bedroom	38-45 sqm	4	units		
2 bedrooms	90 sqm	4	units		
2 bedrooms (duplex)	94 sqm	2	units		
3 bedrooms (duplex)	198 sqm	2	units		

3. Provision for future expansion




72000
21600
7200
7200
7200

Intervention Strategies
& Design proposals

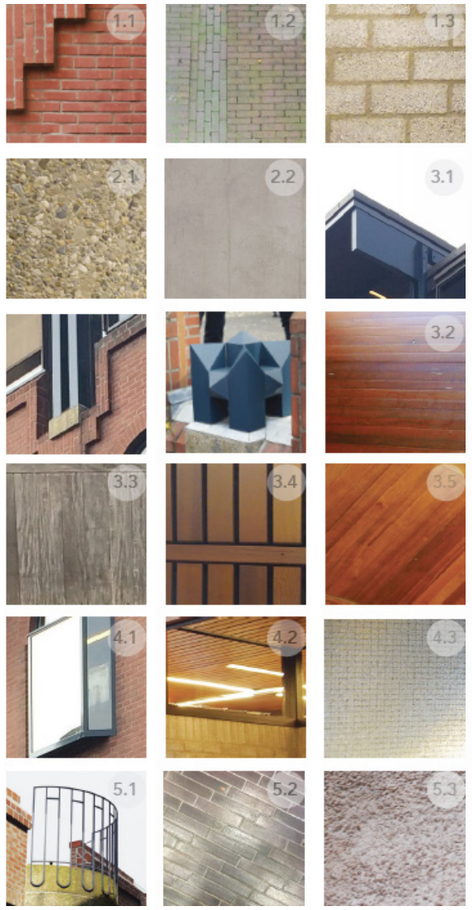
The reinterpretation of the original facade design

Language

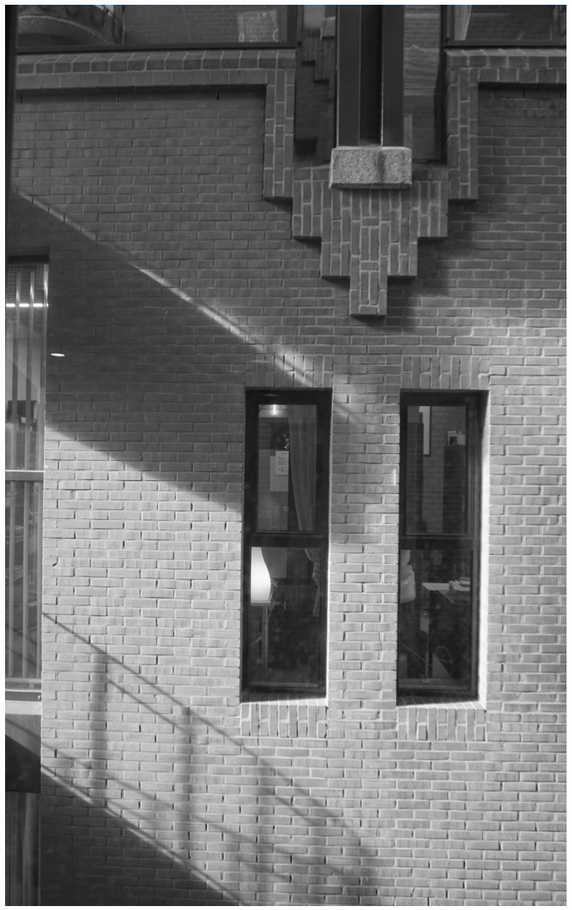
1. Analysis
2. Design experiment
I. Aluminum Cladding in purple powder coated
II. Perforated brick block
III. Terracotta Facade

1. Analysis

Existing Material Palette

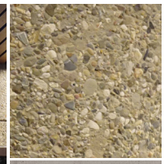


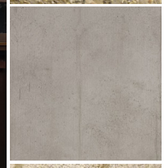
Existing Facade Composition

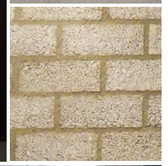


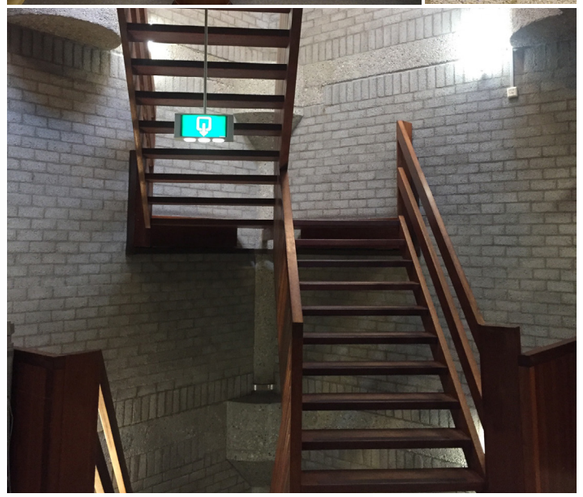
Existing facade design in relation with the Urban Context

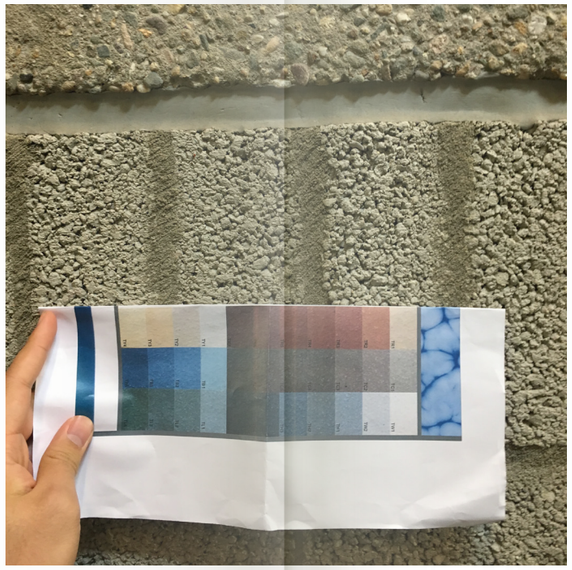
Existing internal facade composition

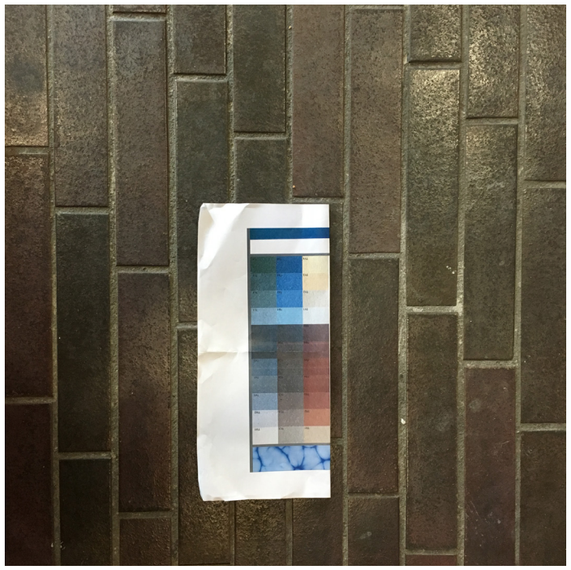


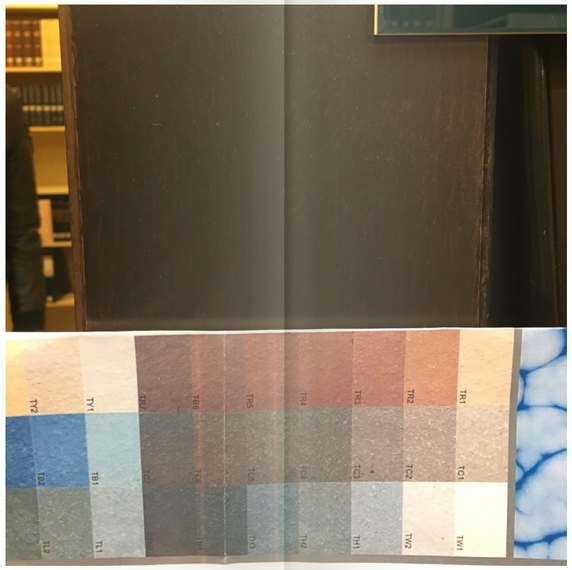










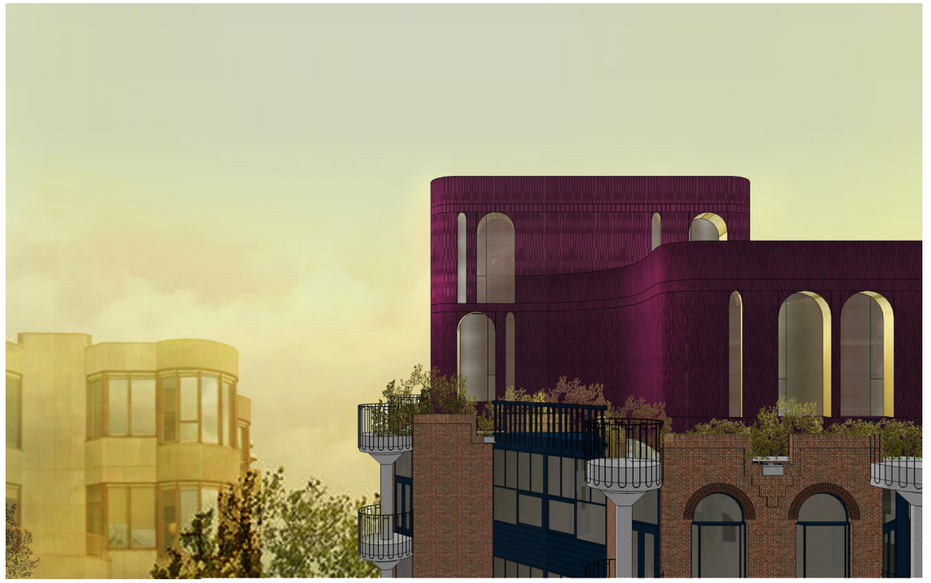


2. Design Experiments

I. Aluminum Cladding in purple powder coated

II. Perforated brick block

III. Terracotta Facade



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I. Aluminum Cladding in purple powder coated

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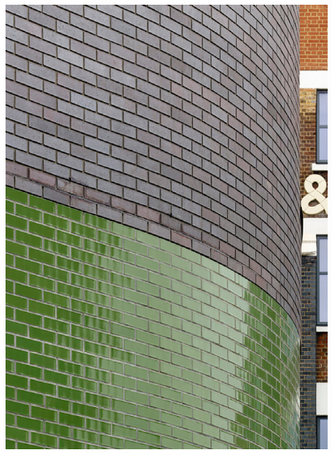
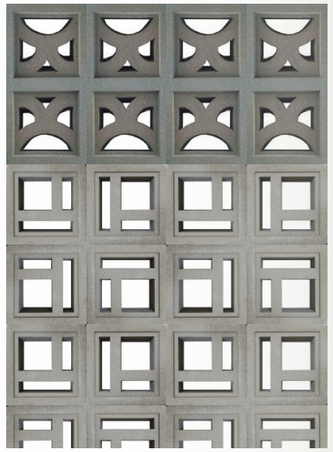
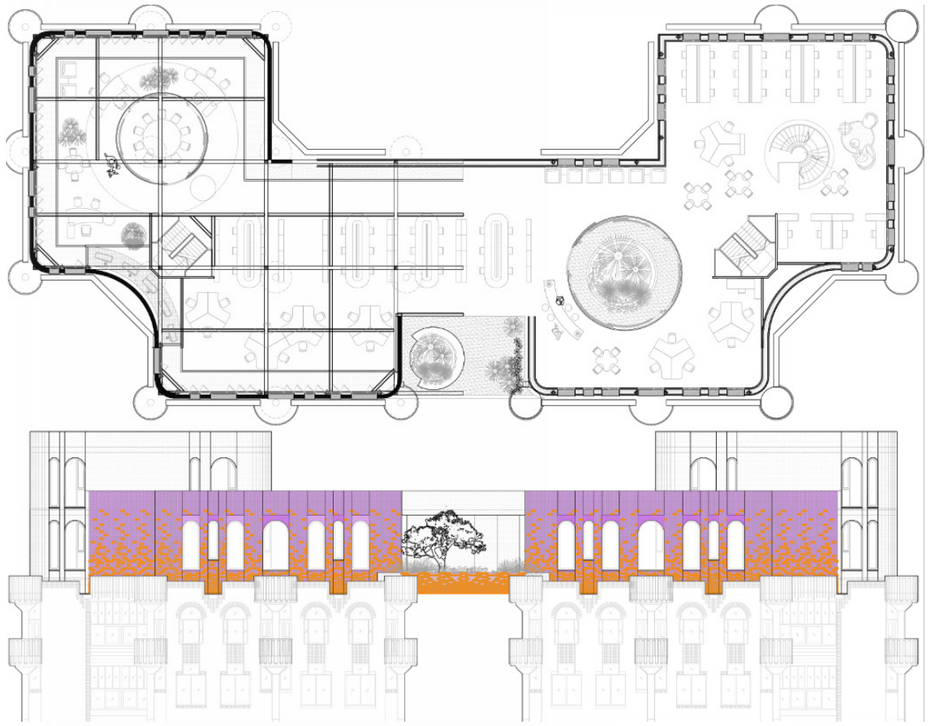
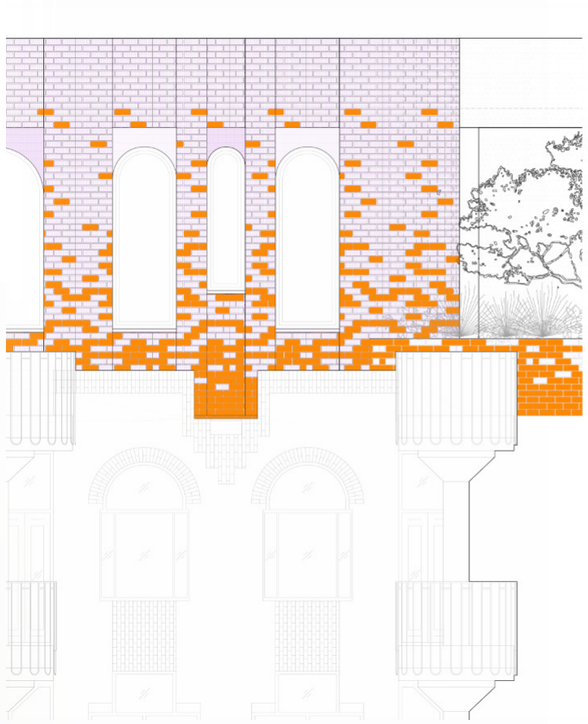
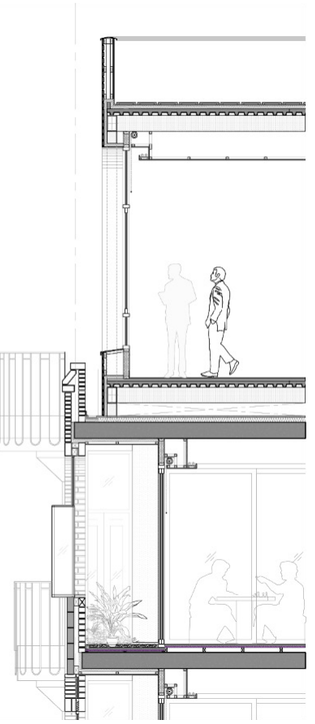








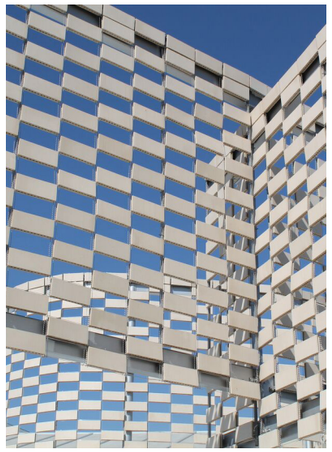


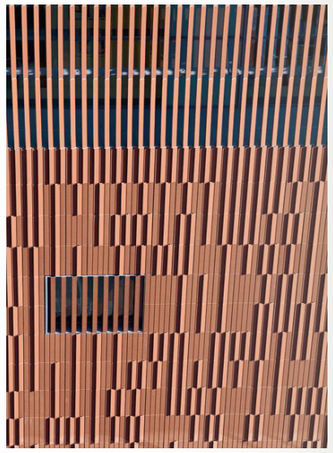
2. Design Experiments

I. Aluminum Cladding in purple powder coated

II. Perforated brick block

III. Terracotta Facade





2. Design Experiments

I. Aluminum Cladding in purple powder coated

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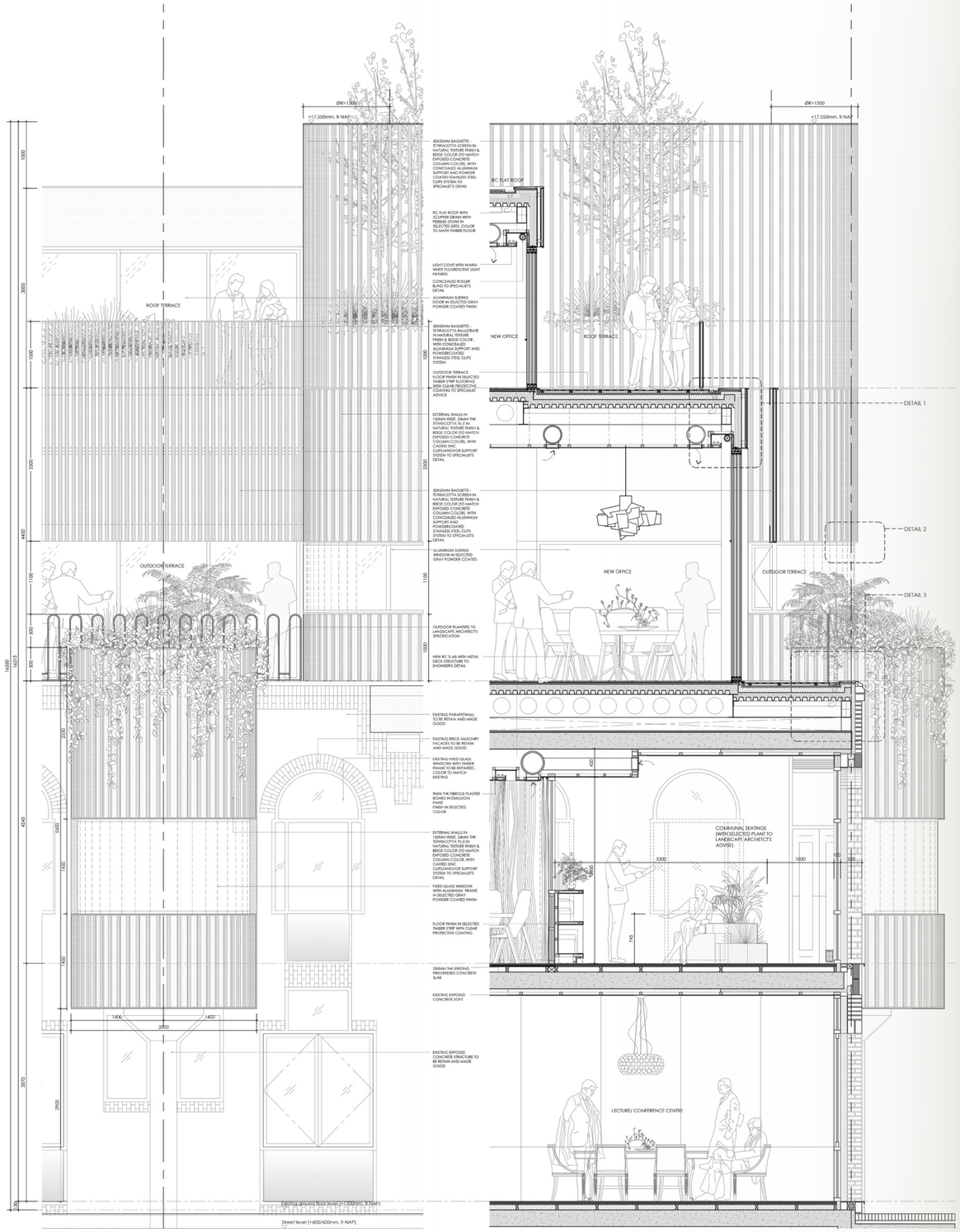
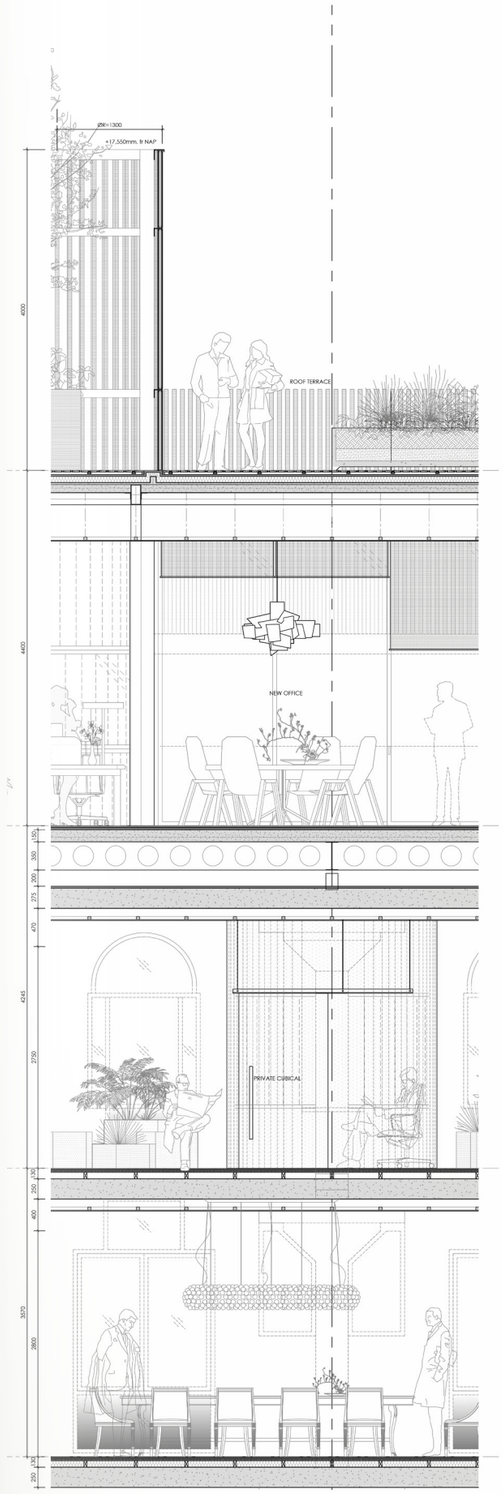
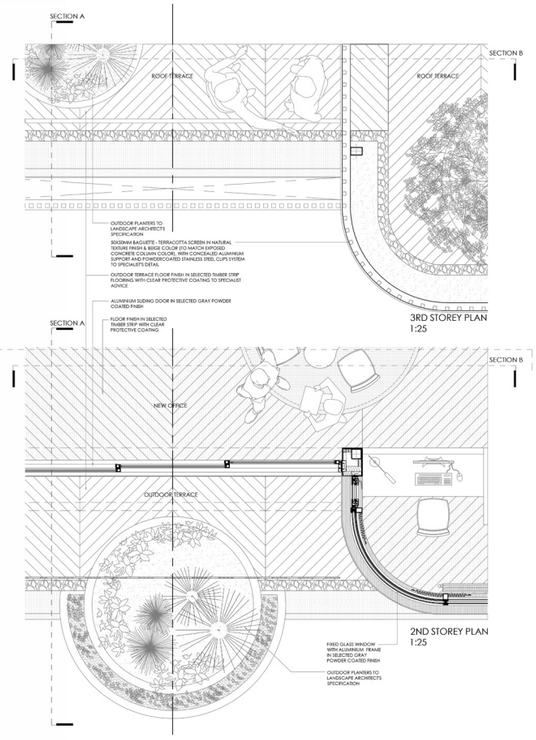


EXTERNAL ELEVATION

SECTION A-A



SECTION B-B



ANNOTATIONS

1 50X50MM BAGUETTE - TERRACOTTA SCREEN IN NATURAL TEXTURE FINISH & BEIGE/LIGHT GREY COLOR (TO MATCH EXPOSED CONCRETE COLUMN COLOR)

2 CONCEALED ALUMINIUM SUPPORT AND BEIGE/LIGHT GREY COLORPOWDER COATED STAINLESS STEEL CLIPS SYSTEM TO SPECIALIST'S DETAIL

3 250X125X5MM THK. L-ANGLE M/S BEAM AS SCREEN FRAMINMG (TO STRUCTURAL ENGR'S'S SPECIFICATION) IN SELECTED BEIGE/LIGHT GREY COLOR SPRAY PAINTED TO MATCH TERRACOTTA SCREEN

4 EXTERNAL WALLS IN 150MM WIDE, 24MM THK TERRACOTTA TILE IN NATURAL TEXTURE FINISH & BEIGE/LIGHT GREY COLOR (TO MATCH EXPOSED CONCRETE COLUMN COLOR)

5 WALL CLADDING FIXING IN CASTED ZINC CLIPS/ANCHOR SUPPORT SYSTEM TO SPECIALIST'S DETAIL

6 50X50MM BAGUETTE - TERRACOTTA BALUSTRATES IN NATURAL TEXTURE FINISH & BEIGE COLOR , WITH CONCEALED ALUMINIUM SUPPORT AND POWDERCOATED STAINLESS STEEL CLIPS SYSTEM

8 OUTDOOR TERRACE FLOOR FINISH IN 100MM WIDE, 20MM THK. SELECTED TIMBER STRIP FLOORING WITH CLEAR PROTECTIVE COATING TO SPECIALIST ADVICE

9 RC FLAT ROOF WITH SCUPPER DRAIN WITH PEBBLES STONE IN SELECTED SIZES, COLOR TO MATH TIMBER FLOOR

10 THERMAL INSULATION TO SPECIALIST'S SPECIFICATION

11 G/S FLASHING SEALED & SEALANT TO SPECIALIST'S DETAIL IN SELECTED MAT BEIGE/LIGHT GREY COLOR COATED

12 WATERPROOFING MEMBRANE TO ARCHITECT'S APPROVAL

13 NEW RC SLAB WITH METAL DECK STRUCTURE TO ENGINEER'S DETAIL

14 LIGHT COVE WITH WARM WHITE FLUORESCENT LIGHT FIXTURES

15 CONCEALED ROLLER BLIND TO SPECIALIST'S DETAIL

16 9MM THK. FIBROUS PLASTER BOARD CEILING IN WHITE EMULSION PAINT FINISH

17 ALUMINIUM SLIDING DOOR IN SELECTED GRAY POWDER COATED FINISH

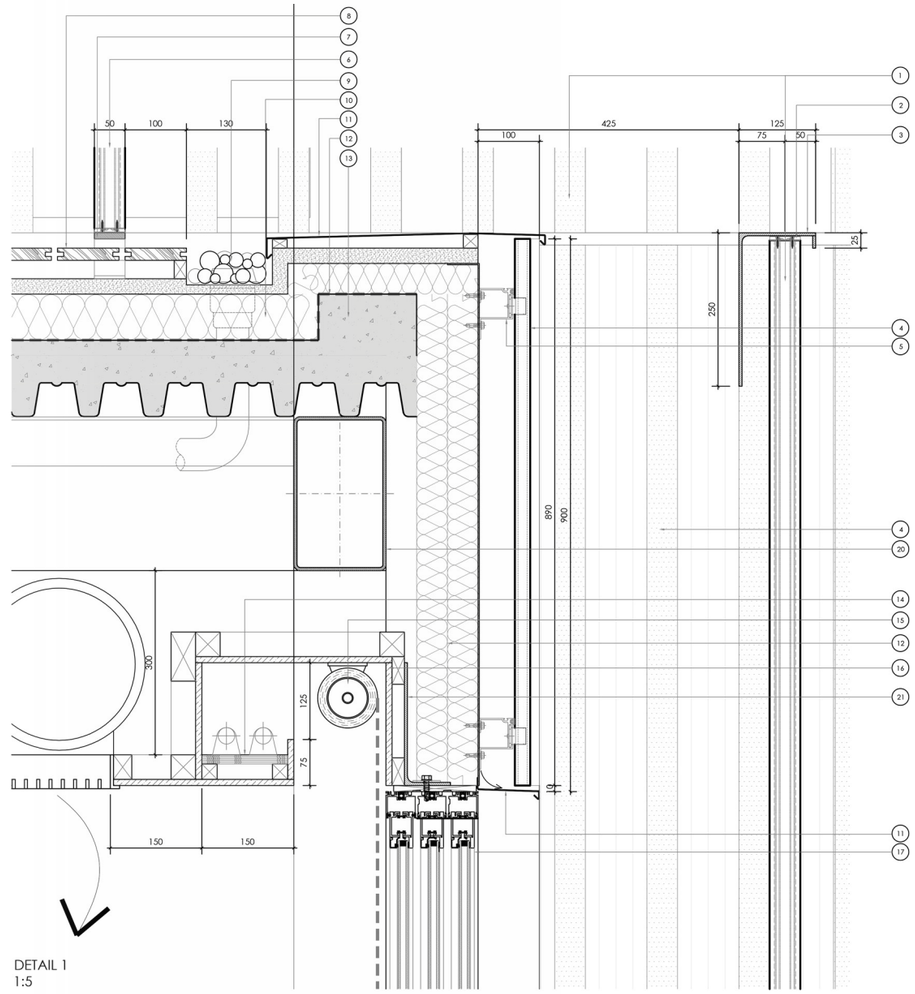
18 FIXED GLASS WINDOW WITH ALUMINIUM FRAME IN SELECTED GRAY POWDER COATED FINISH

19 LIGHT FILTERING CURTAIN CURTAIN TO INTERIOR DESIGNER SELECTION AND SPECIFICATIONS

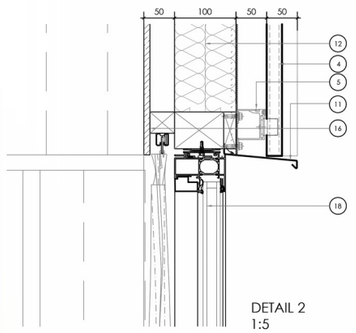
20 250X150X5MM THK. RSH M/S BEAM TO STRUCTURAL ENGR'S DETAIL

21 200X100X5MM THK. L-ANGLE M/S BEAM AS AS WINDOW FRAMEING, TO STRUCTURAL ENGR'S'S SPECIFICATION

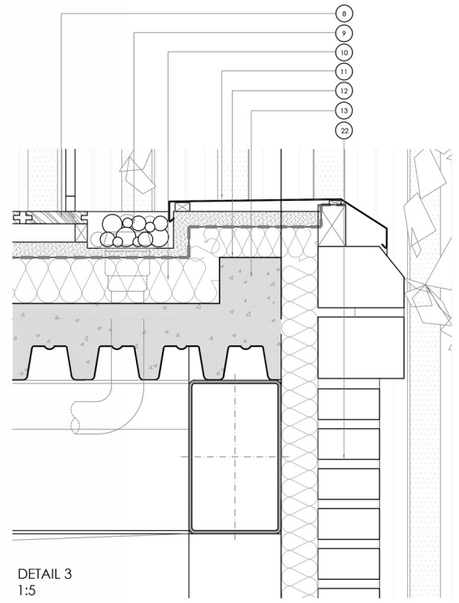
22 EXISTING PARAPETWALL / BRICK MASONRY FACADES TO BE RETAIN AND MADE GOOD



DETAIL 1
1:5



DETAIL 2
1:5



DETAIL 3
1:5

Redevelopment

Technical Matters

1. Structural framing

2. Building sustainability

3. Fire safety

5.1. Structural framing

5.1.1. Structural intervention concept
5.1.2.Initial Stage / Structural dilemma
5.1.3. Previous experiment
5.1.4. Final design

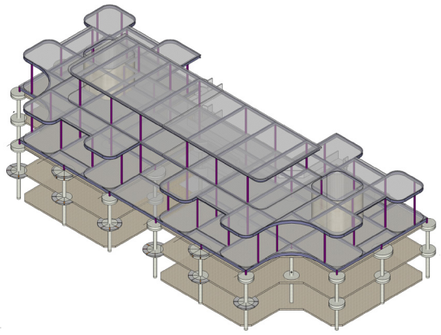
5.1 STRUCTURE

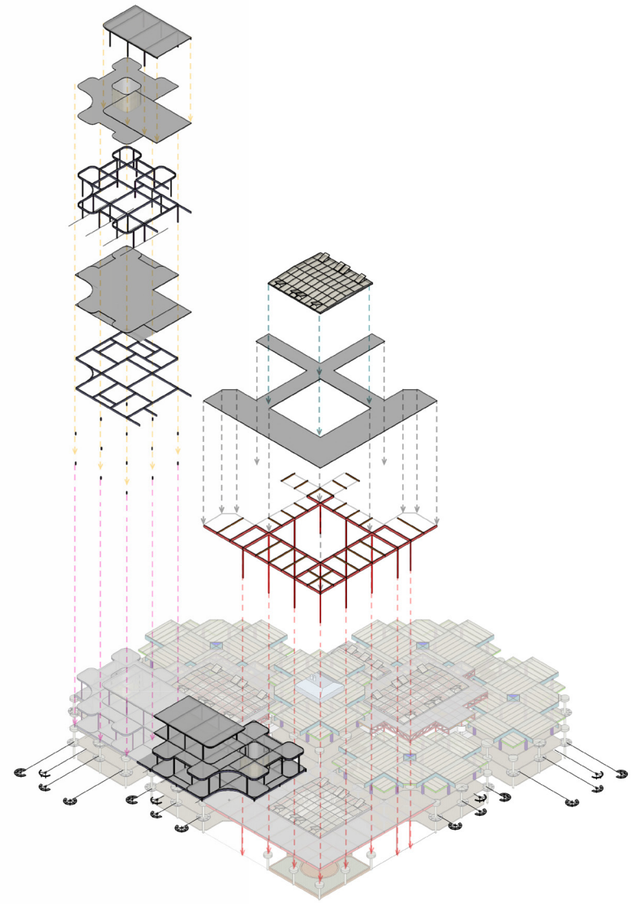
5.1.1. Structural intervention concept

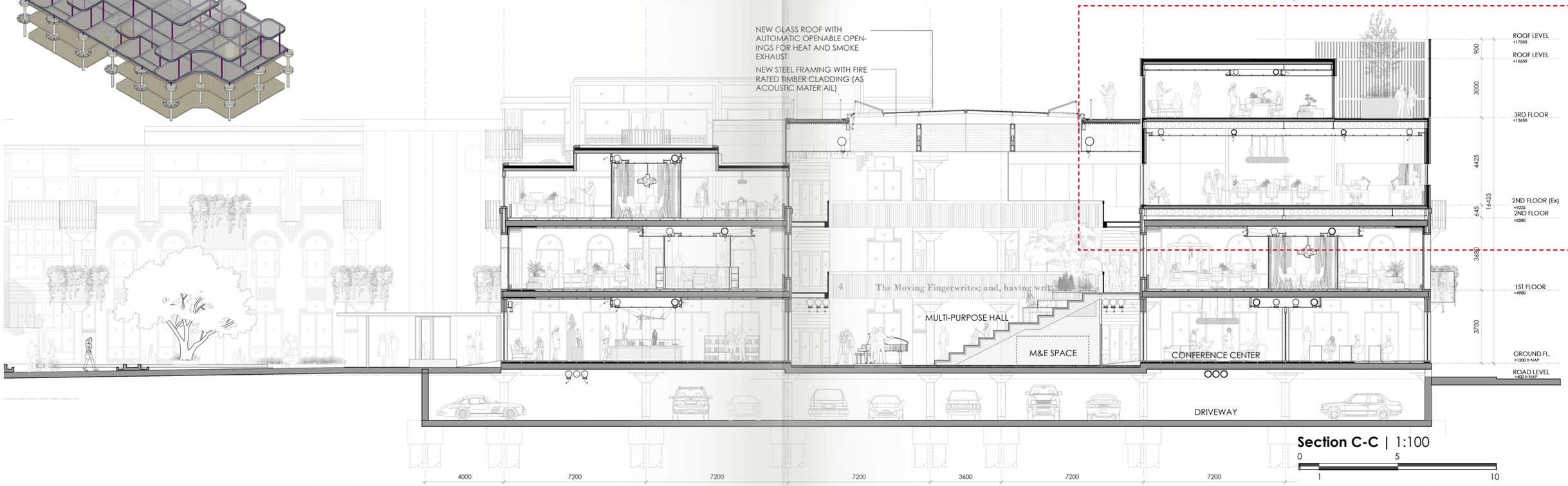
In principle, the new extension of this development will be constructed in the light-weight structural framing. The integration of metal deck and reinforced concrete permits a reduction in required member size, hence leading to material savings in concrete and steel, which eventually translate to cost savings.

In addition, the reduction of materials and structural member sizes contribute to a reduction in building self-weight, enabling smaller vertical load resisting members such as columns, piles and give a higher flexibility for M&E ducting.

The series of main I-beams are located at the bottom of the new extension, linking between the sixteen stumps that resting right on top of each existing concrete column locations. The five new cores are carefully located to avoid the major structural intervention to the original brick masonry facades.





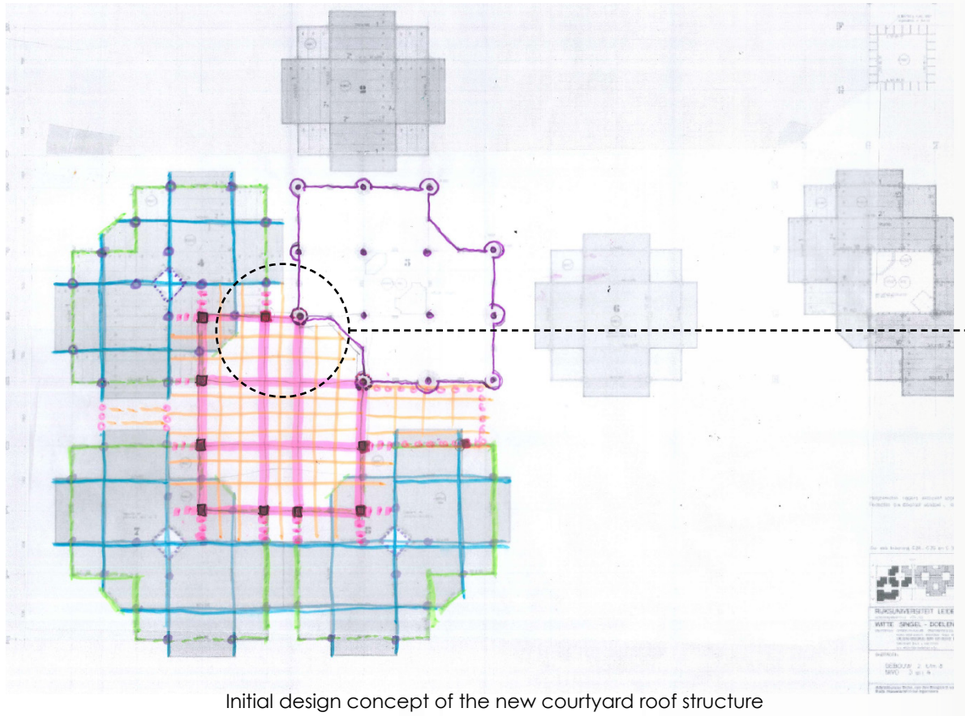


Section C-C | 1:100

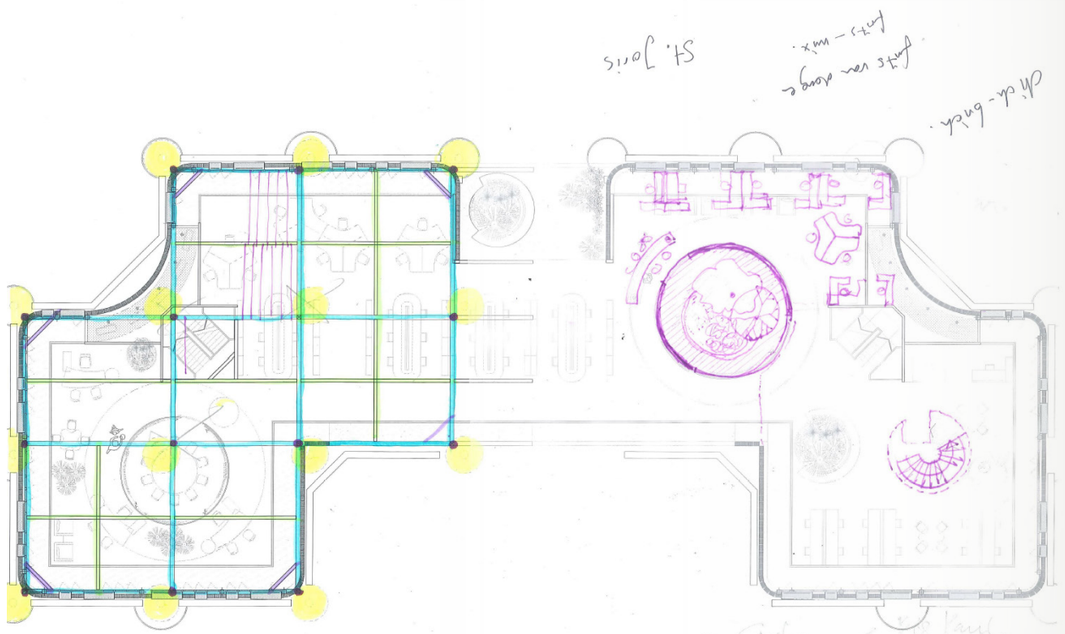
0 5 1 10

5.1. Structural framing

5.1.1. Structural intervention concept
5.1.2.Initial Stage / Structural dilemma
5.1.3. Previous experiment
5.1.4. Final design



Initial design concept of the new courtyard roof structure

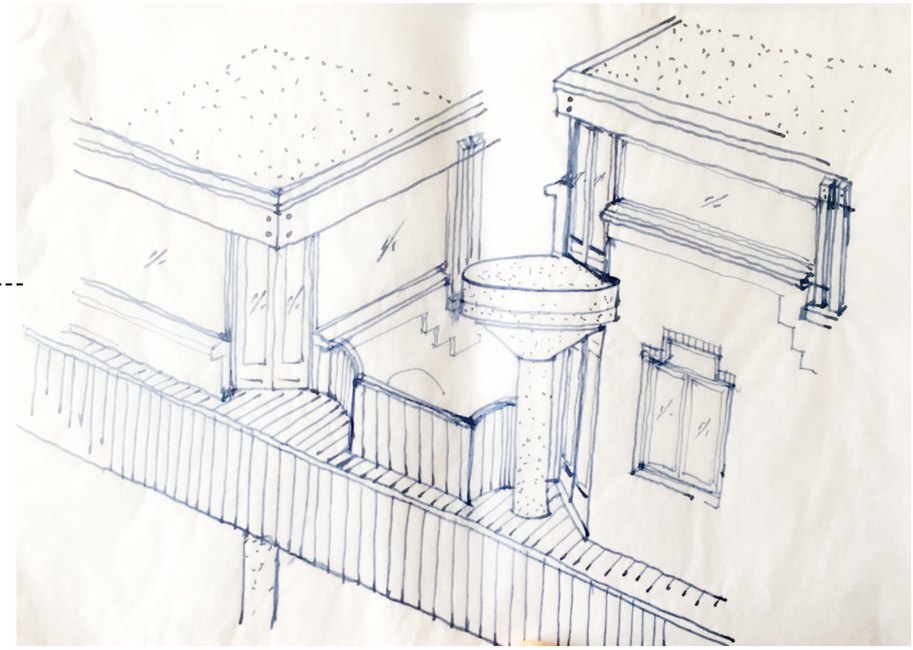


Initial design concept of the new extension structure

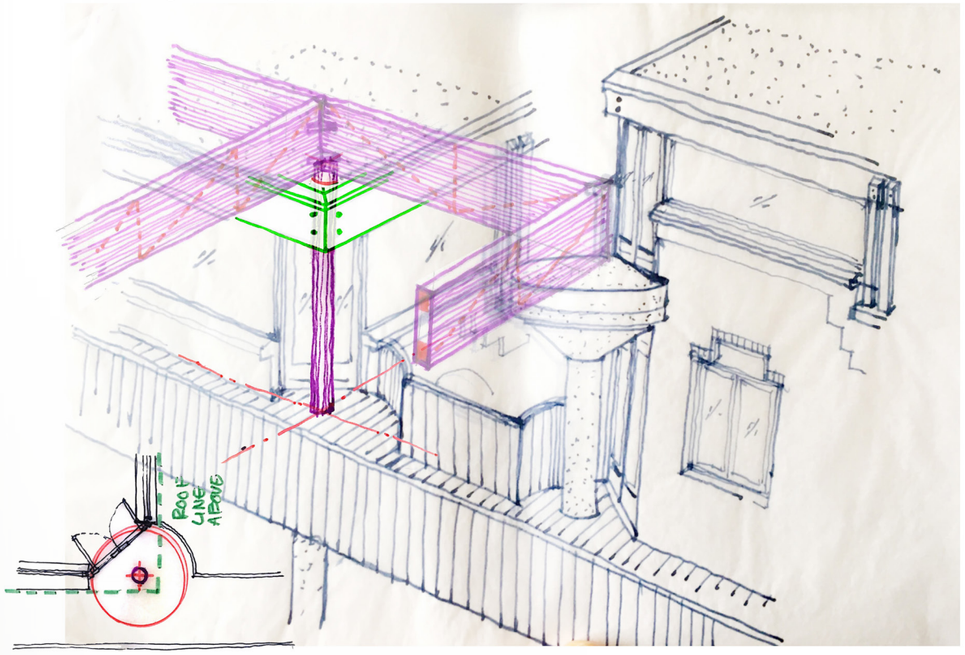
5.1. Structural framing

5.1.1. Structural intervention concept
5.1.2.Initial Stage / Structural dilemma
5.1.3. Previous experiment
5.1.4. Final design

Structural dilemma:
Connection between the existing structures and the new courtyard roof



The clashing of the original timber roof and the new steel column



5.1. Structural framing

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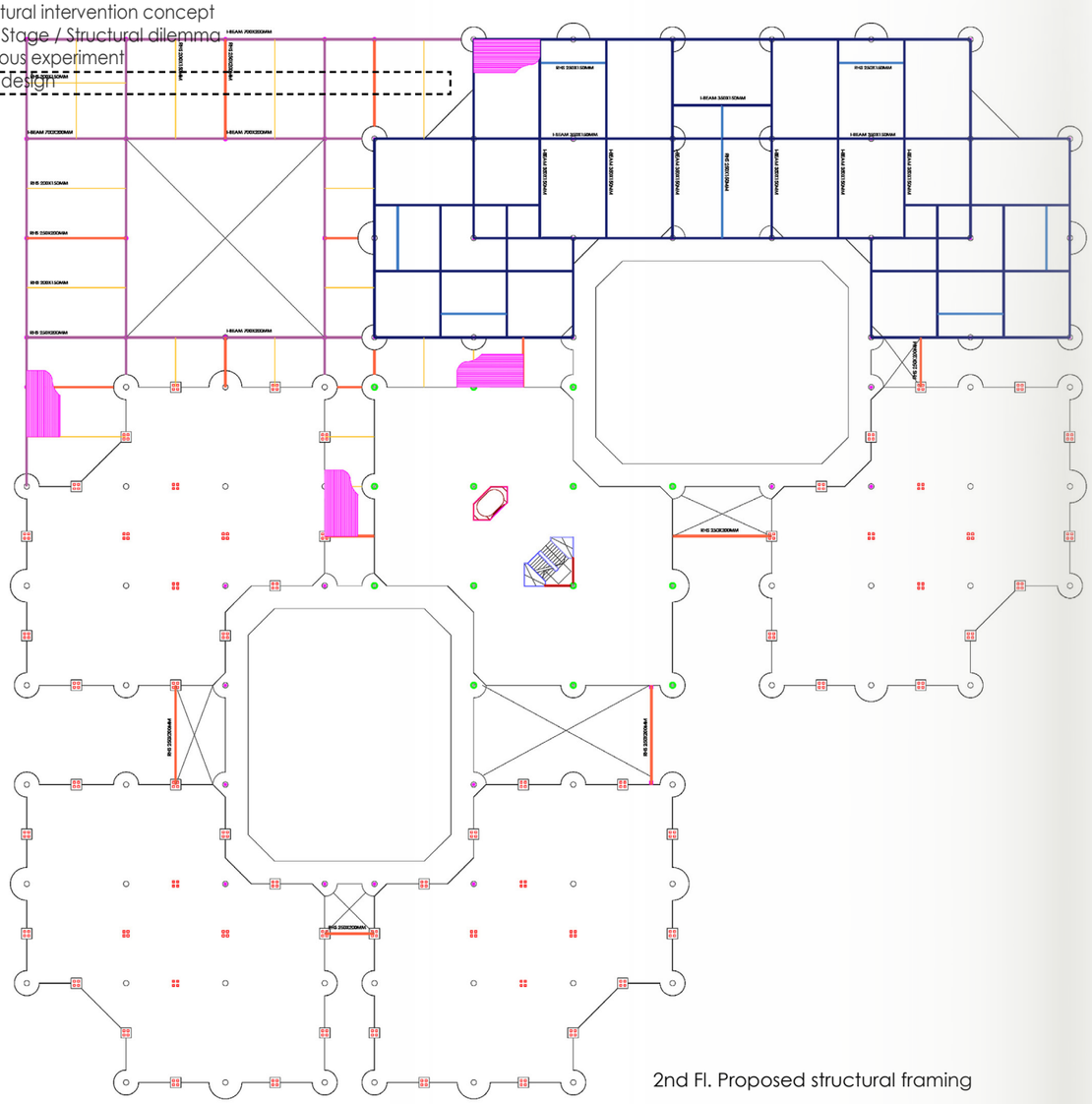
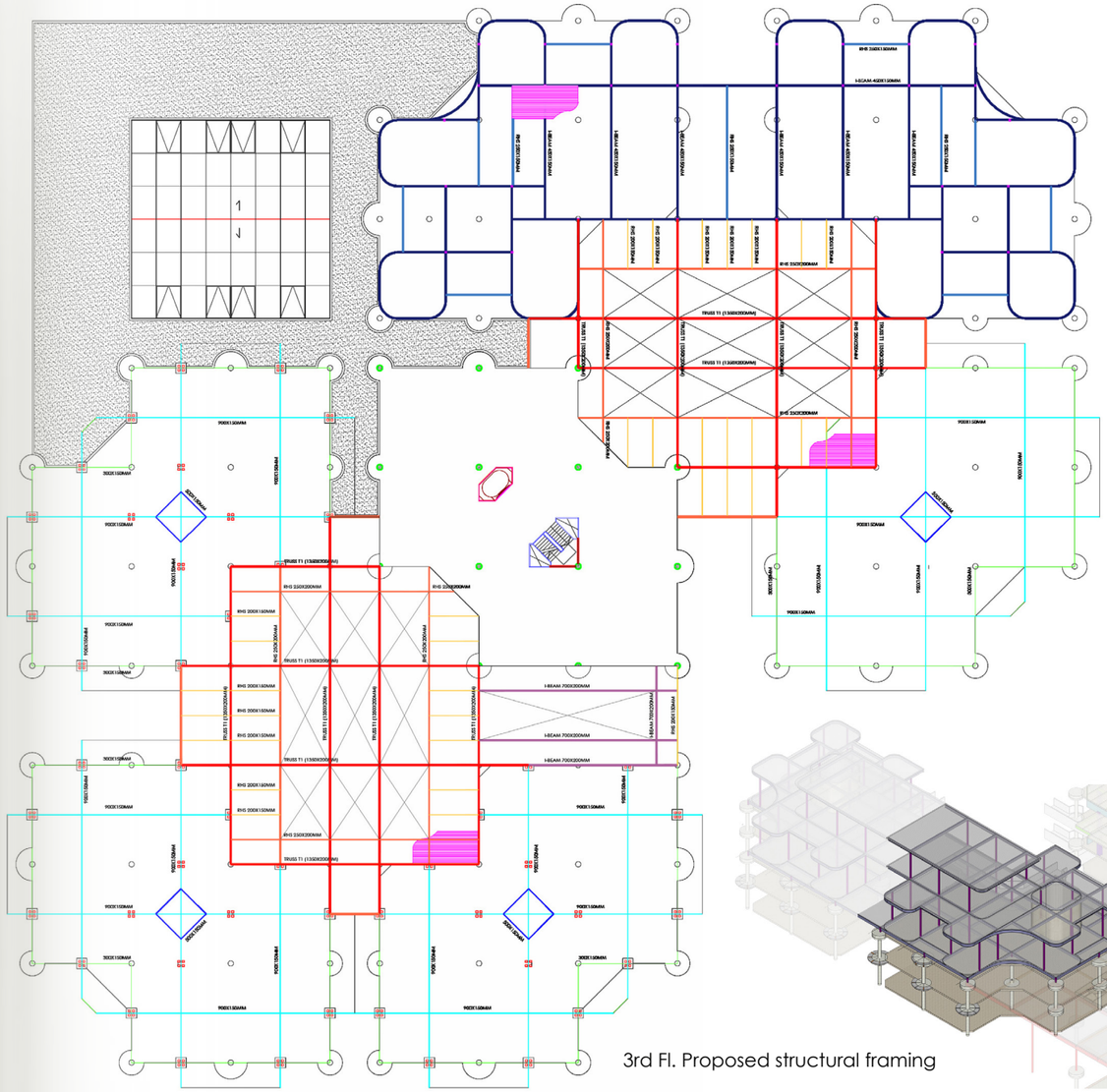
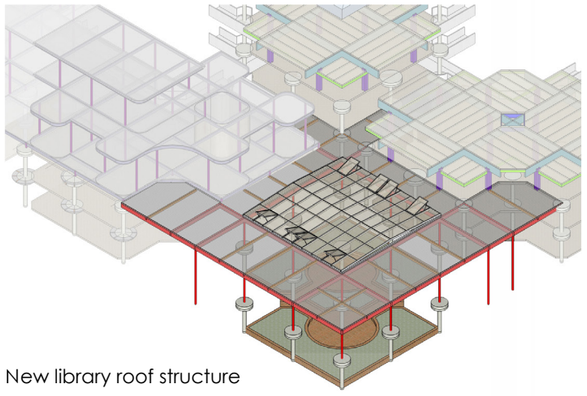


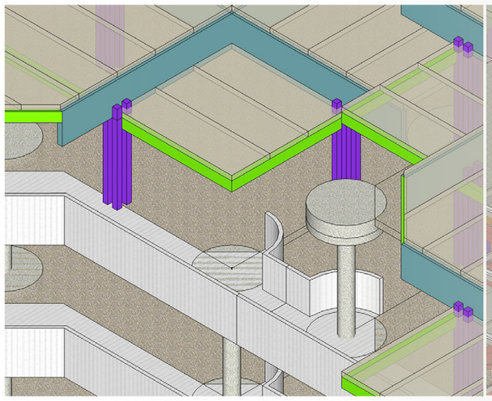
2nd Fl. Proposed structural framing

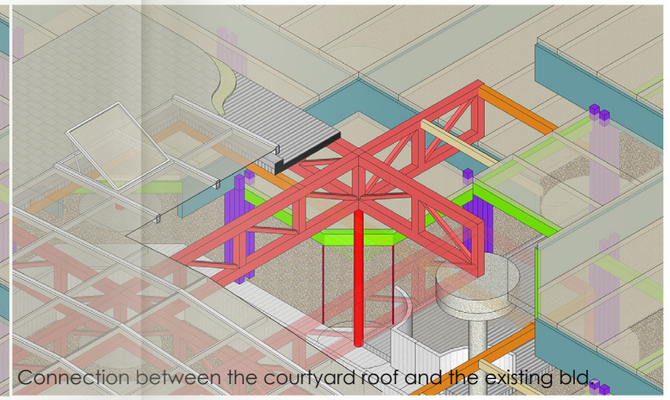


3rd Fl. Proposed structural framing

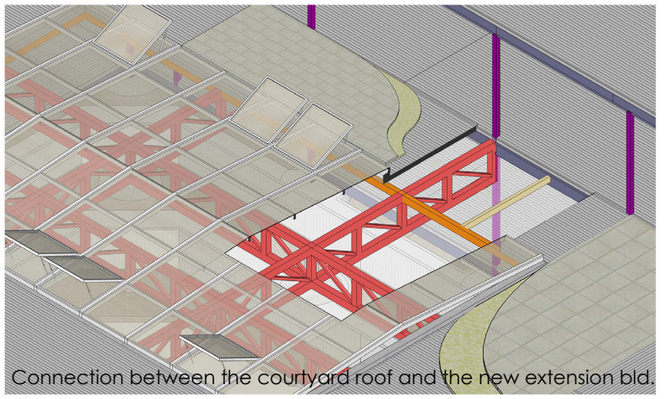


New library roof structure





Connection between the courtyard roof and the existing bld.



Connection between the courtyard roof and the new extension bld.

5.2 Building Sustainability

5.2.1. Climate Control

The building is designed to promote passive architecture. A large open atrium and courtyard that punctuates the building plates generate a cooling effect that allows hot air to escape through the opening on the roof level and induces natural breezes flowing through the building during summer while keeping the indoor temperature warm and heat the air up via the sunlight through the glass roof.

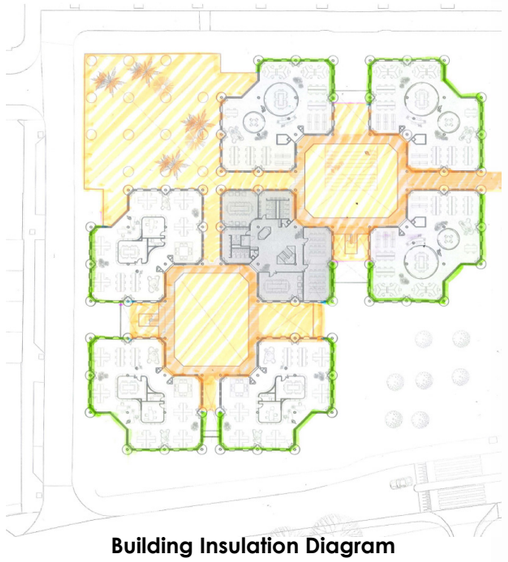
5.2.2 Heating and Cooling System

With the air-conditioning system designed to achieve a consistent operative temperature between 20˚C to 25 ˚C and a Relative Humidity of less than 70%, consistent indoor conditions for building occupants' thermal comfort can be assured.

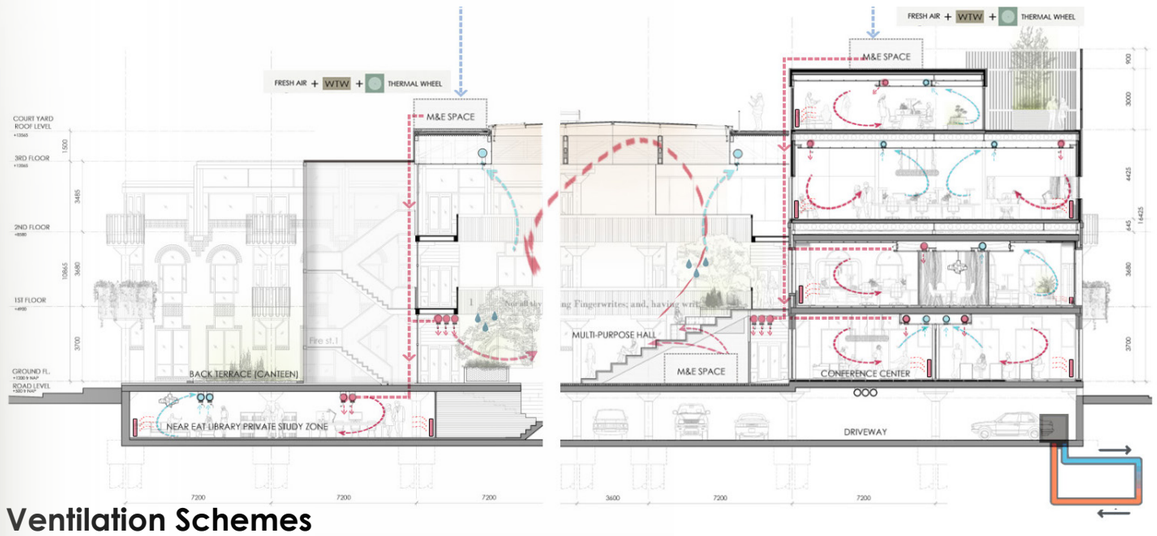
5.2.3. Energy Saving Provisions

Provisions of a central cooling and heating system are proposed to serve the communal areas and the enclosed courtyards for a high level of efficiency configuration. Independent controller systems are provided for various functions including office spaces, restaurants, conference center, lecture rooms and the residences.

The integration of the mentioned passive design and the provision of Geothermal energy, heat pump and WTW system help to increase the efficiency of the self-sustain building. These pre-heating and cooling systems are located on the basement floor and the M&E space on the above the new courtyard roofs.

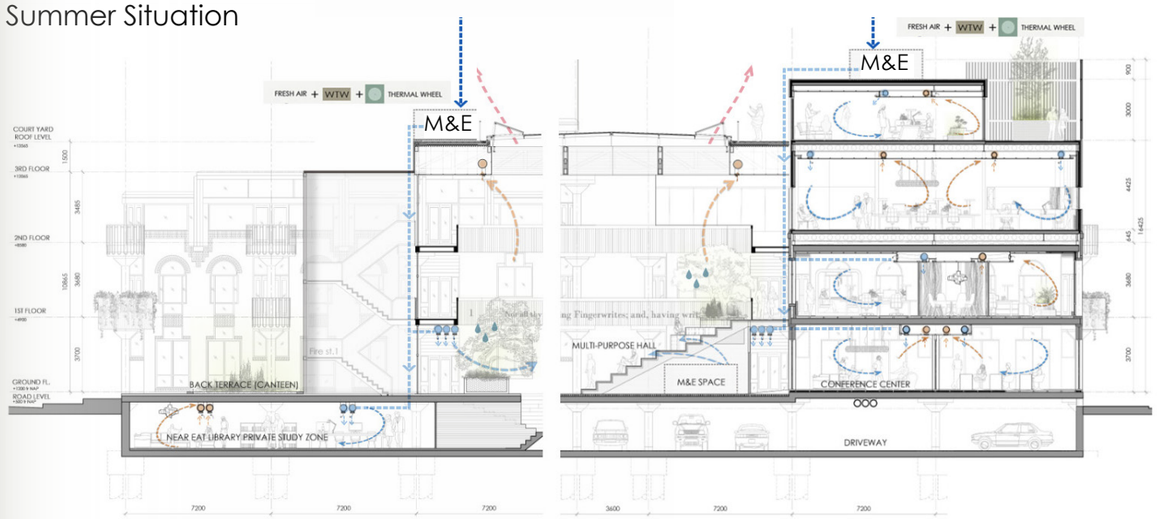


Building Insulation Diagram



Ventilation Schemes

Summer Situation



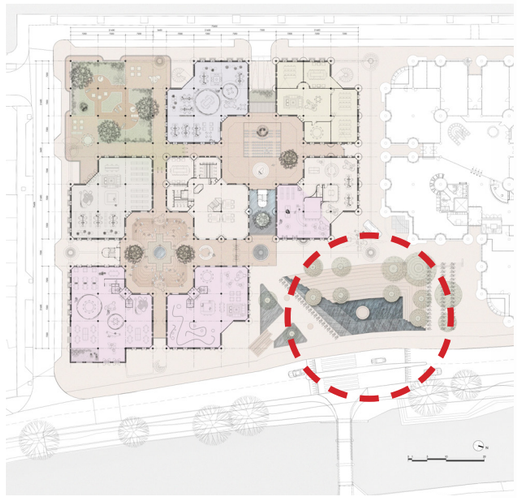
Winter Situation

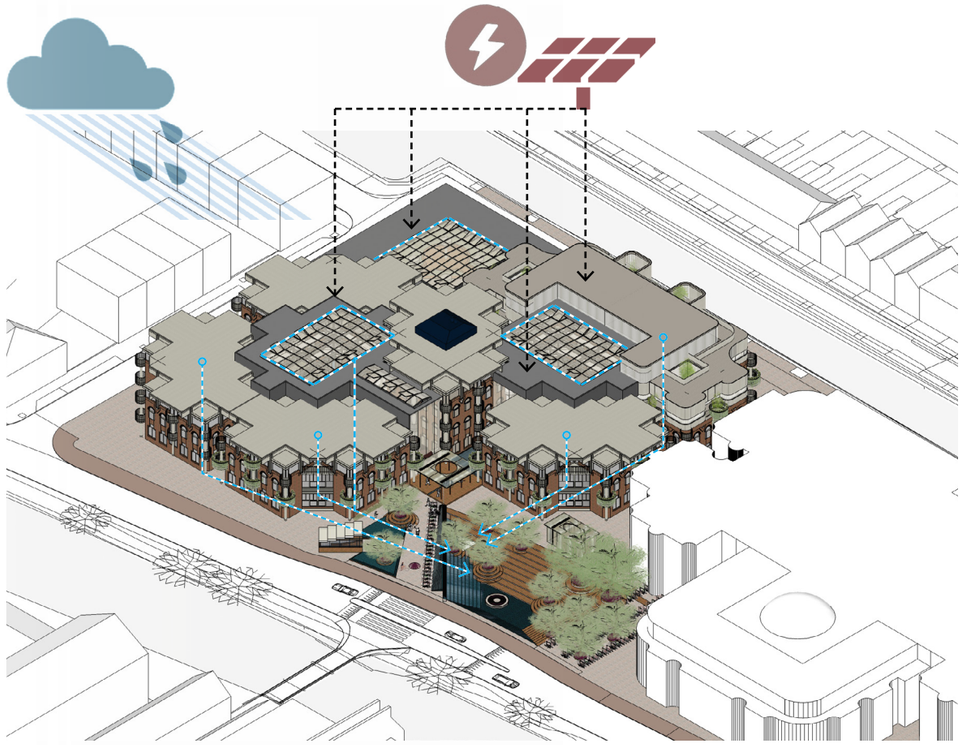
5.2.4. Water Management

To lower the consumption of water resources as much as possible. The use of automatic irrigation system equipped with rain sensors using 100% non-potable water, they reduce the consumption of water for irriga-tion. Rainwater harvesting, a collection of AHU condensate are also proposed to make up water for the cooling-heating system, toilet flushing. The proposed self-cleaning façade system also improves the water efficiency of the development.

5.2.5. Renewable Energy

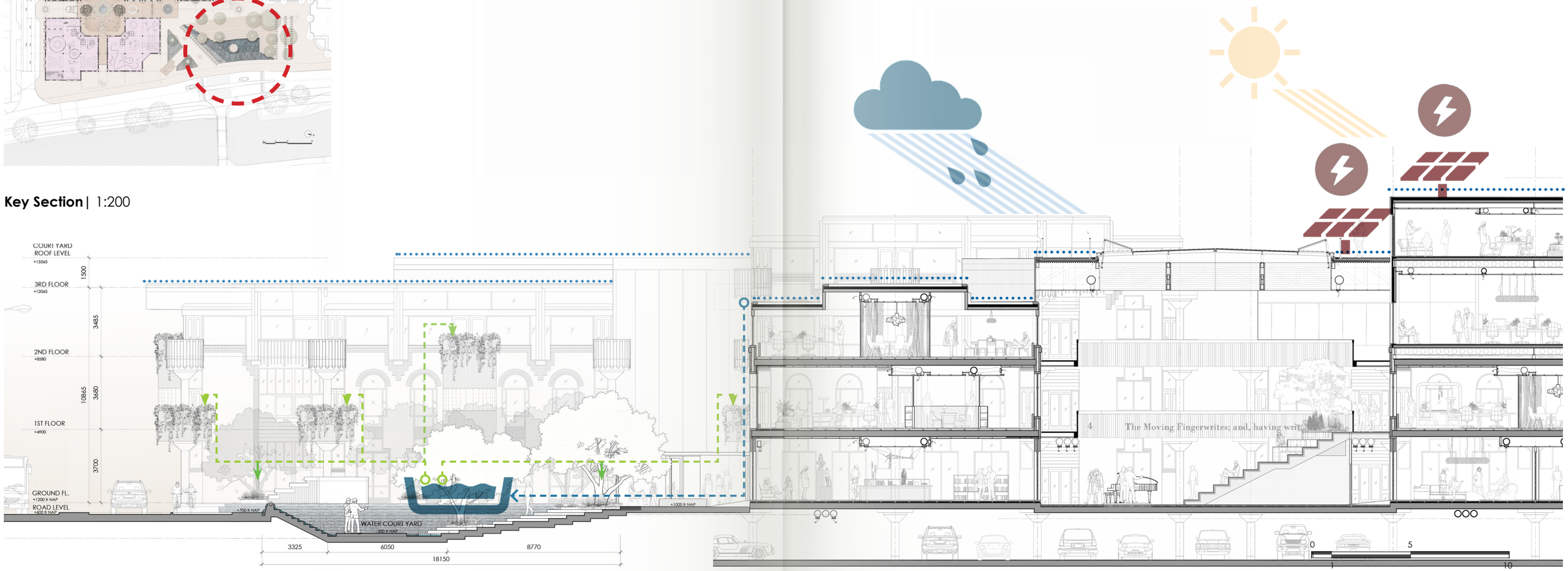
Solar panel installation of 50kWp on the courtyard roof provides an alternative renewable energy source for this faculty facilities.





Rainwater Harvesting & PV Panel location Diagram

Key Section | 1:200

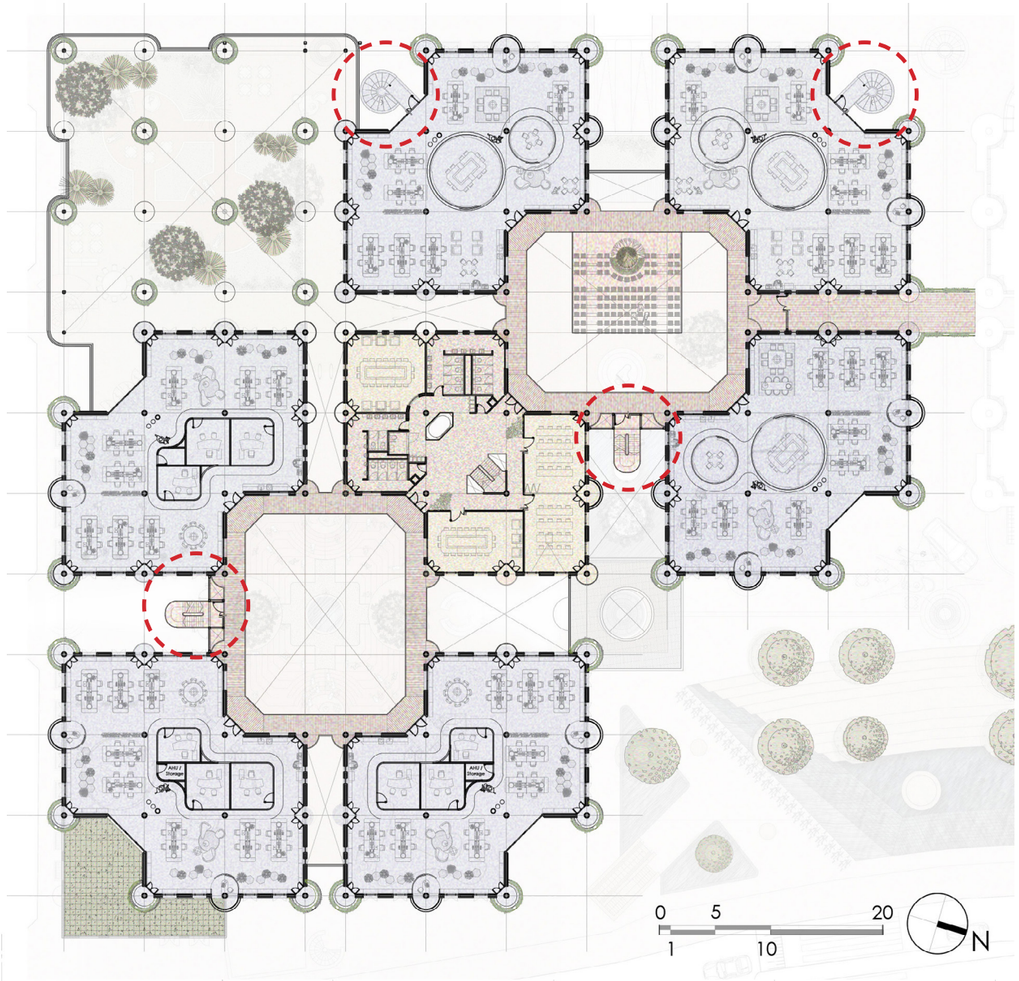


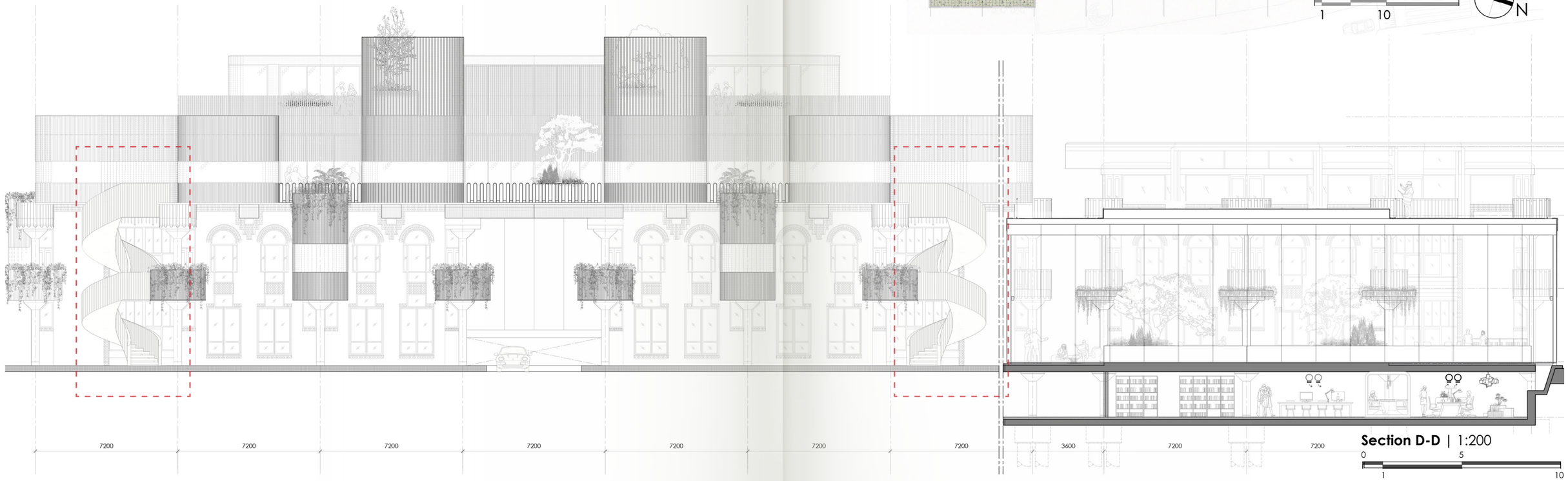
5.3 Fire Safety

The new academic building planning is based on the regulation requirements, each compartment area is below the maximum 1,000 m2 and separated by fire-rated materials.

Four new locations of fire escape staircase are introduced connecting from the ground floor to the top floors. All escape routing are within 30m travel distance from the fire-safe zone.

Fire sprinkler system could be integrated with smoke detector system to provide a localized fire protection (if necessary. Exhaust fans will be provided for smoke ventilation in central atrium space.





Section D-D | 1:200

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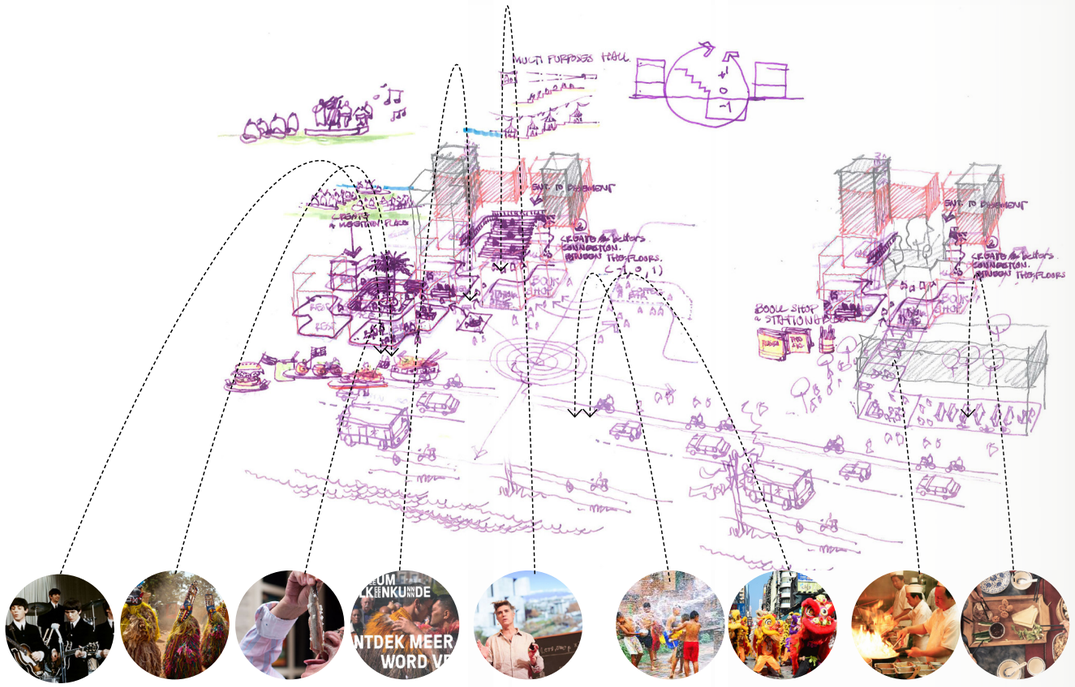
1 10

Conclusions


MULTI PURPOSES HALL
BOOKSHOP STATION
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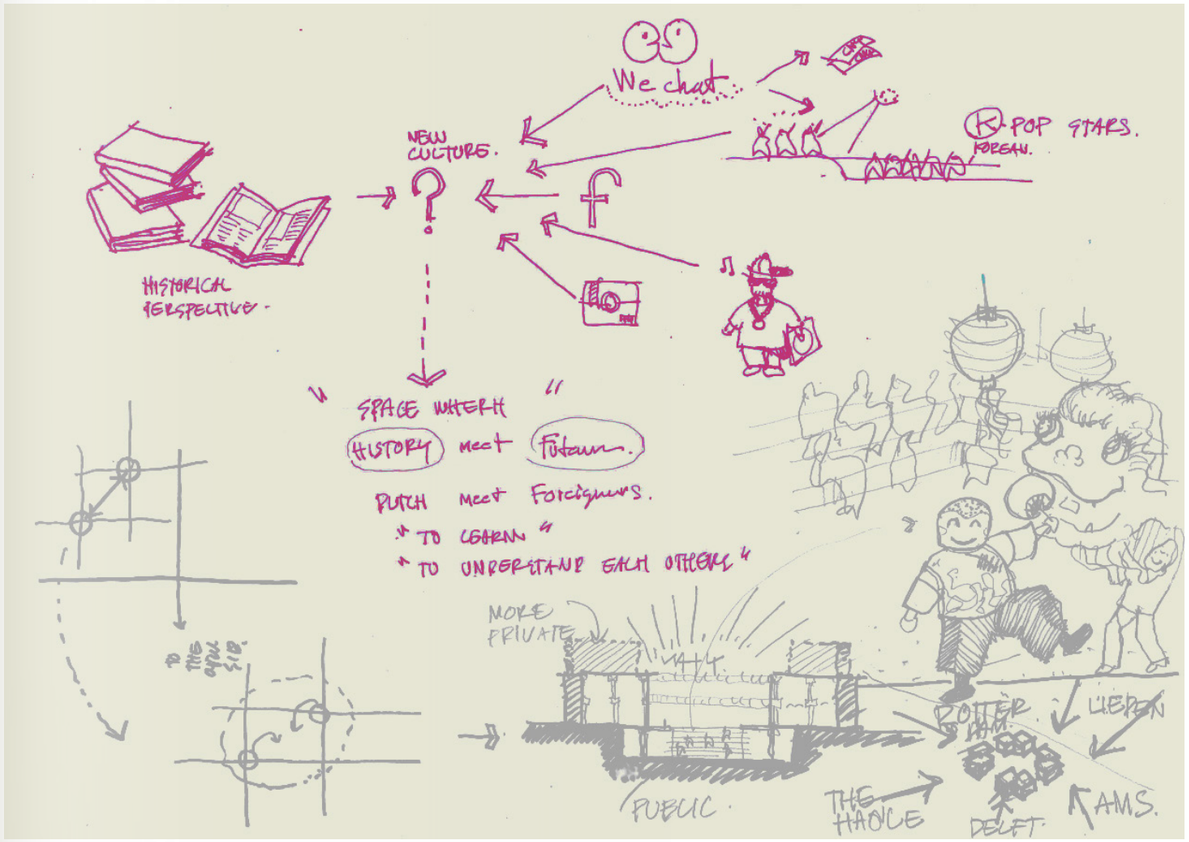
We chat
K-POP STARS.
KOREAN.
NEW CULTURE.
HISTORICAL PERSPECTIVE.
SPACE WHERE
HISTORY meet Future.
PUTCH meet Foreigners.
* TO LEARN
* TO UNDERSTAND EACH OTHER
MORE PRIVATE
PUBLIC
THE HAGUE
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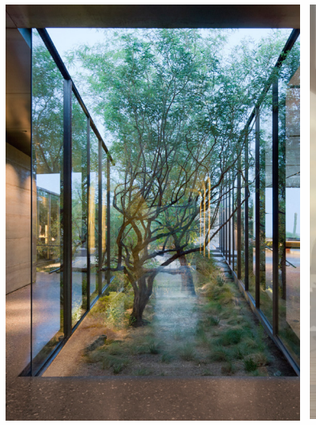
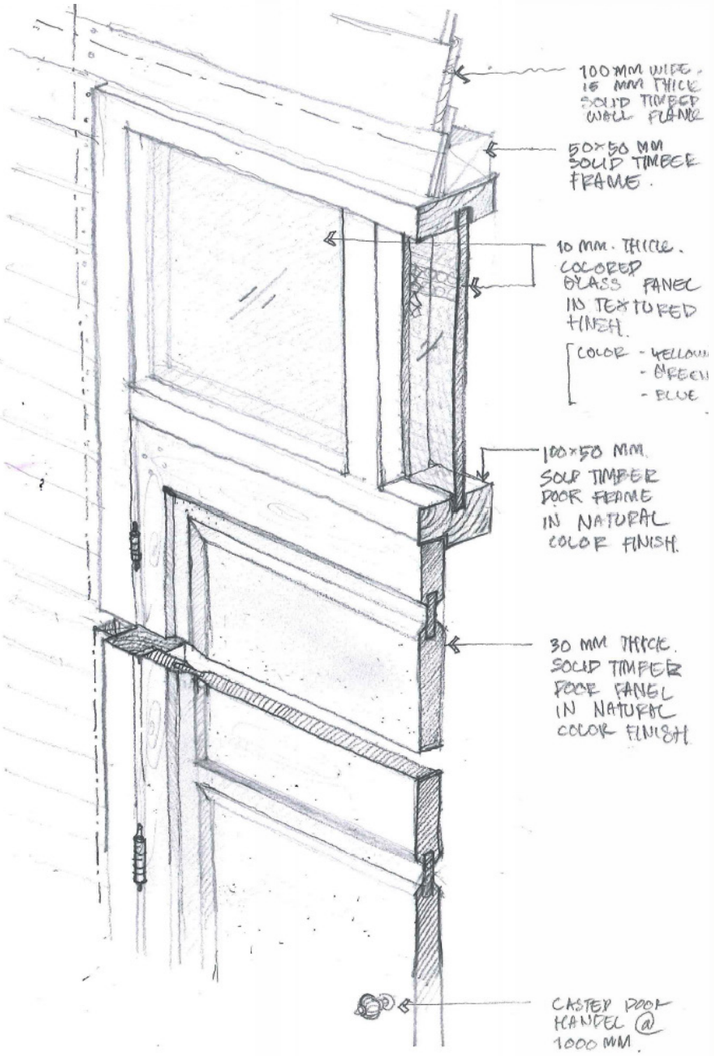
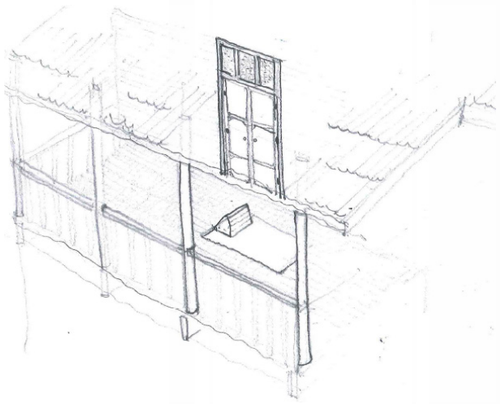
AMS.

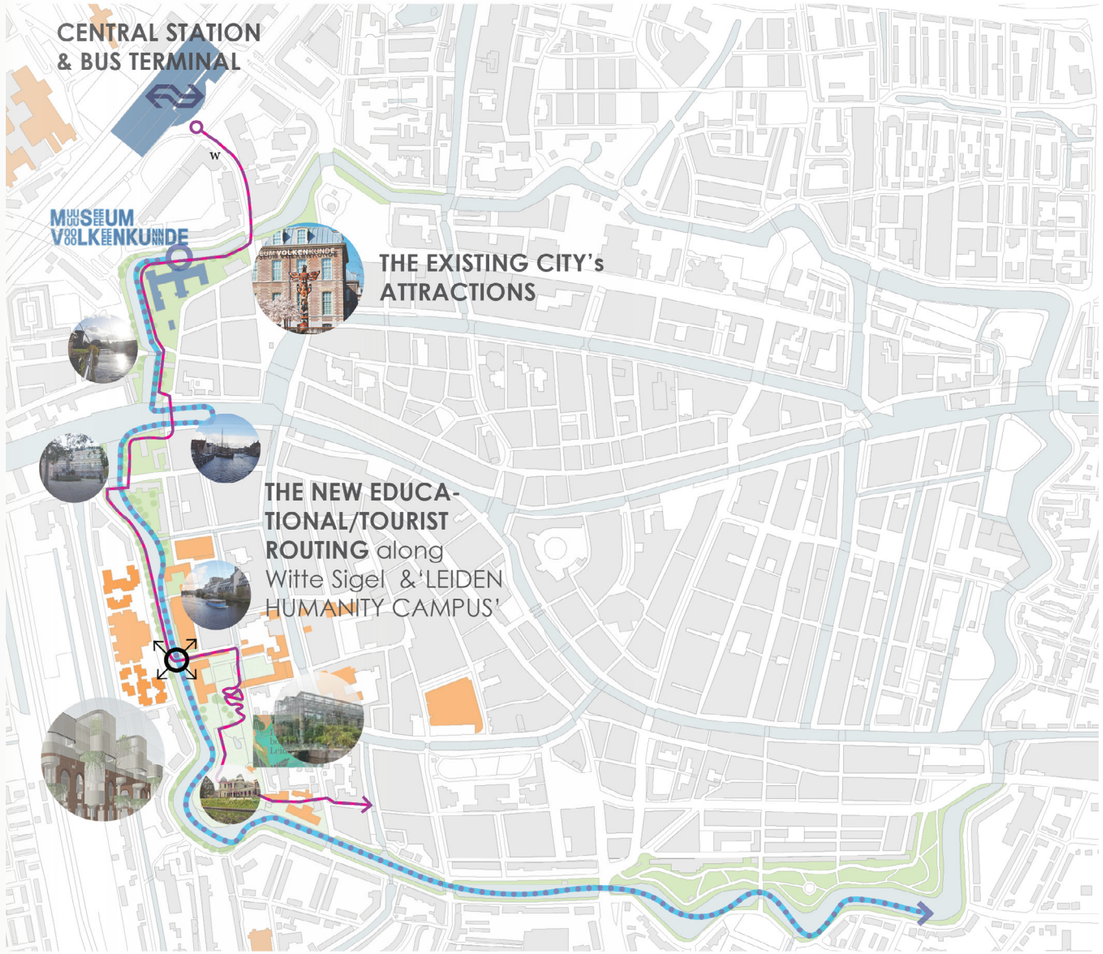


‘ The Living Room’

‘ a Living Museum’


100 MM WIDE - 15 MM THICK SOLID TIMBER WALL FRAME
50×50 MM SOLID TIMBER FRAME.
10 MM. THICK. COLORED GLASS PANEL IN TEXTURED FINISH.
COLOR - YELLOW
- GREEN
- BLUE
100×50 MM. SOLID TIMBER DOOR FRAME IN NATURAL COLOR FINISH.
30 MM THICK. SOLID TIMBER FOOT PANEL IN NATURAL COLOR FINISH
CASTER POOL HANDEL @ 1000 MM.




CENTRAL STATION & BUS TERMINAL
MUSEUM VOOR VOLKENKUNDE
THE EXISTING CITY's ATTRACTIONS
THE NEW EDUCATIONAL/TOURIST ROUTING along Witte Sigel &'LEIDEN HUMANITY CAMPUS'

6. REFLECTION

6.1. Studio: Future of Structuralism

6.2. Graduation Projects: Leiden Humanity Campus

6.2 Graduation Projects: Leiden Humanity Campus

Looking through the physical alteration/upgrade perspectives, I personally believe that the new design should help improve these particular issues. Any alteration to this extant built fabric should offer a clear sense of directions to the users. At the same time, the intervention shall also improve the poor ground floor experiences in the current situation.

In addition, if we look at these structuralism buildings through the lens of theoretical approach, it is important to restore the original "Social interaction Strategies" in the courtyard areas.

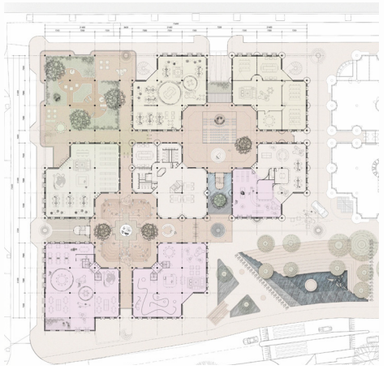
After exploring the various options throughout that past eight months, I noticed that significant different intern of building appearances between mine and Yiannos Mexis's design. The only two MSc4 students, dealing with Leiden project, stand on different architectural positions in this adaptive reuse development.

In contrast, I realized a strong relationship interm of scientific framworks between mine and my colleague's proposals. In fact, we more and less have a similar strategy on the planning level. This resulted in the functional arrangement and the zoning of these buildings. We both give priority to the Witte Singel side. We tried to improve the connection between the faculty building to the other facilities of this Inner City Campus.

This similarity illustrates that there should be some common logic for the adaptive reuse of Leiden faculty buildings. These transformation frameworks and intervention strategies are proven and could be implemented as a set of design fundamentals and recommendation for the restoration architects dealing with this university buildings additions and alterations. I hope that our studies of Joop van Stigt's faculty buildings would contribute to academic building redevelopments in the future.

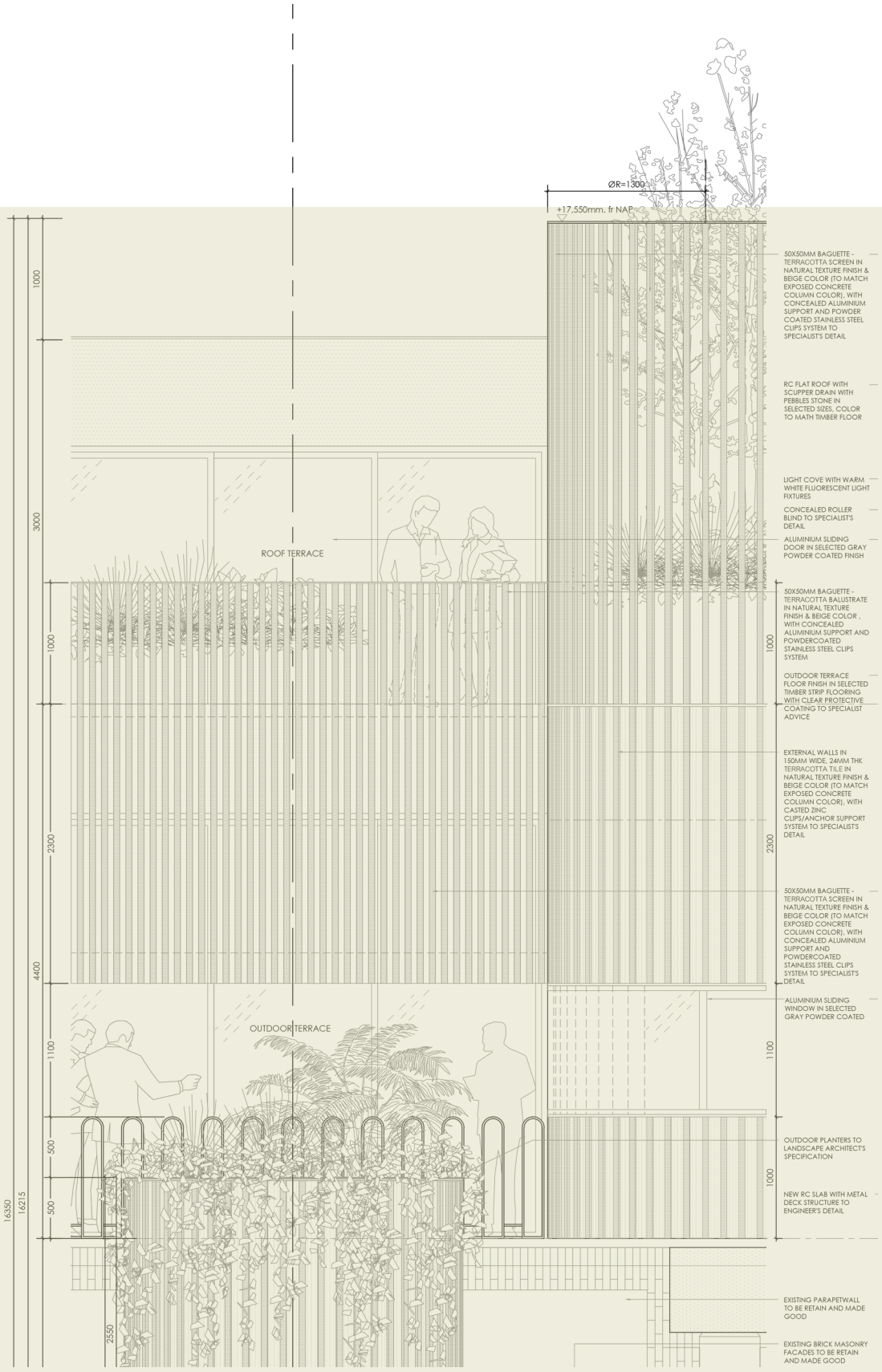
Ground Floor Plan
- Y. Mexis

Ground Floor Plan
- W. Taemeyachat



View of the South Clusters
- Y. Mexis

View of the South Clusters
- W. Taemeyachat



TU Delft

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Delft University of Technology
Faculty of Architecture and the Built Environment