St. Elisabeth Heritage Garden Project

Seunghan Yeum (4572076)
0 Analysis
0-1. Urban analysis
0-1-1. Zutphen
0-1-2. Traces of city wall
0-2. Building analysis
0-2-1. Chrono mapping
0-2-2. Post-modernism

1 Problems
1-1. Problems
1-2. Main problems

2 Value assessment
2-1. Value matrix conclusion
2-2. Key elements
2-3. Research question

3 Programs & Users
3-1. Users
3-2. Programs

4 Design
4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route
Analysis

What was there? What is there?
River city Zutphen

- Issel river and Berkel river had important role
- Hanseatic town with a long and rich history
- Nieuwstad was established in 1250

Analysis

0-1. Urban analysis
0-1-1. Zutphen
0-1-2. Traces of city wall

0-2. Building analysis
0-2-1. Chrono mapping
0-2-2. Post-modernism
0 Analysis

0-1. Urban analysis
  0-1-1. Zutphen
  0-1-2. Traces of city wall

0-2. Building analysis
  0-2-1. Chrono mapping
  0-2-2. Post-modernism

Zutphen_Nieuwstad
- Above Berkel river
Site: St. Elisabeth complex
- Geweldigershoek 39, 7201 NC Zutphen
0-1. Urban analysis
0-1.1. Zutphen
0-1.2. Traces of city wall

0-2. Building analysis
0-2.1. Chrono mapping
0-2.2. Post-modernism

0. Analysis

1565-1863
Continuous outer and inner city walls

1795-1811
Breaking city walls for cultivating

1863
First construction of St. Elisabeth & Pastorie

1871-1878
Expansion of St. Elisabeth

1902-1912
Expansion of Chapel & Rebuilt of Pastorie

1934-1955
Waterway disappeared

1965-1979
Expansion of St. Elisabeth

1991
Demolishment of St. Elisabeth

1993-1994
Rebuilt of St. Elisabeth

1. Outer wall, block port
2. Ophenge
3. St. Elisabeth castle ring

4. Inner wall
5. Inner port
6. Inner blocks

10. St. Elisabeth church
11. New St. Elisabeth church

Relation between city wall and surrounding
0-1. Urban analysis
  0-1-1. Zutphen
  0-1-2. Traces of city wall

0-2. Building analysis
  0-2-1. Chrono mapping
  0-2-2. Post-modernism

**Spirits of site**

1. Defense: 1565 ~ 1649
2. Productive green: 1795 ~ 1934
3. Care: 1863 ~ 2018
4. Religion: 1871 ~ 1984
5. Tour: 2015
St. Elisabeth
- Two main volumes + fragmental volumes

*Fragmental volumes

1. Chapel
2. Central lobby including towers
3. Berkelpoort and city wall
0-1. Urban analysis
0-1-1. Zutphen
0-1-2. Traces of city wall

0-2. Building analysis
0-2-1. Chrono mapping
0-2-2. Post-modernism

Diverse units and materials in skin.

Post-modernism style
- Considering it as a record of time
1 Problems

What should be improved?
1. Problems

1-1. Problems

1-2. Main problems

Urban scale problems.

Blocked accessibility
*Glass passage, fences and river disconnect route

Lost value of heritages
*Surrounding of heritage is being neglected

Limited use of public green space
*Lake park is occupied by high school students
* Green space behind of pastoral is out of control
1-1. Problems

1-2. Main problems

Building scale problems.

Blocked accessibility
*North wing entrance is blocked

Lost value of heritages
*Chapel façade and tower are hidden

Broken function
*Chapel, kitchen and city wall terrace are vacant

Dark and closed space
*Corridors and offices
St. Elisabeth has separated valuable heritages from the public since 1993, and these cultural assets are not being properly maintained.

Is cultural property justified by means of private use?

Heritages are national asset. Every people have a right to learn history through the heritages and enjoy it. Therefore, **When the circumstances allowed, heritage must be shared in public.**
What is valuable?
2-1. Value matrix conclusion
2-2. Key elements
2-3. Research question
2.1. Value matrix conclusion

2.2. Key elements

2.3. Research question

Value assessment

High value

Medium value

Indifferent value

Negative impact

Pastorie has high age and historical value.

Parking lot at the entrance has use value.

North front garden has medium social value.

Lüther’s courtyard (1865) has social and historic value.

Bakste street garden has historical value. Furthermore, boat float adds use value here.

The proximity of trees to the Pastorie.

A view of the city wall behind the Pastorie.

Connection wall to Pastorie (1871).

The Oude Watergracht has made space for a book garden since 1990, which functioned as a resting place for the residents.

Space between city wall and building has a high safety value.

High value

Medium value

Indifferent value

Negative impact
2. Value matrix conclusion

2.1. Value assessment

2.2. Key elements

2.3. Research question

Value assessment of wall tower

High value: original part of tower
Medium value: Restored part of tower

<table>
<thead>
<tr>
<th>Value Assessment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High value</td>
<td>Original part of the tower</td>
</tr>
<tr>
<td>Medium value</td>
<td>Restored part of the tower</td>
</tr>
<tr>
<td>Indifferent value</td>
<td>N/A</td>
</tr>
<tr>
<td>Negative impact</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The value assessment is based on the historical, architectural, and cultural significance of the wall tower. The original part of the tower is considered high value, while the restored part is of medium value. Factors contributing to these values include the architectural design, historical context, and aesthetic appeal.

High value: original part of tower
- Original part of the tower is a significant historical landmark, contributing to the cultural heritage of the area.
- The design and construction of the tower reflect the architectural style of its time, making it a valuable example of historical architecture.

Medium value: Restored part of tower
- Restored parts of the tower have undergone conservation efforts to preserve its structural integrity and aesthetic appeal.
- The restoration process has maintained the original design and materials, ensuring the tower remains a valuable cultural asset.

Indifferent value: N/A
- N/A

Negative impact: N/A
- N/A
6 Key elements with high value

Backyard has a future opportunity to connect key elements
How to connect St. backyard to surrounding to activate Nieuwstad, and to improve environment of key elements and residents?

-Which programs should be selected to attract people?
-How to protect privacy of residents while make backyard in public?
3 Programs & Users

How to attract people?
The amount of visitors increased strongly in the year 2015/2016. Especially the **cultural activities** increased.
Main users of project.

Current situation: Closed and disconnected relationship
Future situation: Open, Connected relationship
3 Programs & Users

3-1. Users
3-2. Programs

Cultural programs
Case study: Hedmark museum, Norway


City wall center

1. The only survived city wall in the Nieuwstad.
2. Absence of history information center for visitors
3. Good accessibility from the center of downtown.
3 Programs & Users

3-1. Users
3-2. Programs

Cultural programs
Case study: Sage Chapel, Cornell University

Music hall

1. Chapel has an optimal space for music performance.
2. Activate Klein Vaticaan after 3pm through afterschool music program.
3. A positive contribution to ‘Beethoven music festival’

History

Chapel

Story

Beethoven

https://music.cornell.edu/performance-spaces

Portrait of Beethoven by Joseph Karl Stieler, 1820 (Photo: WikiCommons)
3 Programs & Users

3-1. Users
3-2. Programs

Cultural programs
Case study: Villa Augustus, The Netherlands
Restaurant Area: 15.40m * 39.79n
Vegetable garden: 57m * 84m
Restaurant area * 8 = Vegetable garden

1. Water way from Berkel river existed in the backyard until 1912
2. Backyard used to be a medieval farm over 117 years (1795-1912)
3. Provide nutritious and healthy diet to residents and local people.
4. It contribute sustainability of the city through urban farm.
3 Programs & Users

3-1. Users

3-2. Programs

Private Space  Cultural Space  Public Space
Design

4

Design process

How to design?
Heritage garden

Providing rich heritage space experience by sharing St. Elisabeth backyard with visitors to activate inert atmosphere of Nieuwstad.
Recovering the space relationship between St. Elisabeth complex and heritages
Considering accessibility, activity, view & light and privacy issue.
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

Process 1: Key elements
Process 2: Partial demolish
Process 3: Garden design
Process 4: Elderly house renovation
4 Design

4-1. Concept
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Process 1: Key elements
Process 2: Partial demolish
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Process 1: Key elements
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Process 1: Key elements
Process 2: Partial demolish
Process 3: Garden design
Process 4: Elderly house renovation
4. Design

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Strategy 1: Accessibility
Strategy 2: Activity
Strategy 3: View and light
Strategy 4: Privacy

Increase accessibility
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

Strategy 1: Accessibility
Strategy 2: Activity
Strategy 3: View and light
Strategy 4: Privacy

Generating social and cultural activities
Strategy 1: Accessibility
Strategy 2: Activity
Strategy 3: View and light
Strategy 4: Privacy

Provide active and bright view
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

Strategy 1: Accessibility
Strategy 2: Activity
Strategy 3: View and light
Strategy 4: Privacy

Setting resident zone to protect resident’s privacy
Two different main routes

1. Visitor’s route
1-1 Entrance to garden
1-2 Citywall center
1-3 Restaurant
1-4 Water garden
1-5 Music garden

2. Resident’s route
2-1 Main entrance
2-2 Music hall
2-3 Recreation room
Two different main routes

1. Visitor’s route
   1-1 Entrance to garden
   1-2 Citywall center
   1-3 Restaurant
   1-4 Water garden
   1-5 Music garden

2. Resident’s route
   2-1 Main entrance
   2-2 Music hall
   2-3 Recreation room
Existing situation: Berkelpoort

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
After renovation

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
1. Entrance to garden

Accessibility
- Entrance from the boat tour
- Entrance from the bridges

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-1 Entrance to garden

Activity
- New boat tour route
- The restoration of a lost waterway in 1912
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-1 Entrance to garden

View and Light
Continuous heritage landscape
-Move trees to Beethoven park
-Using 2m ground level difference
Existing situation: Citywall and tower
After renovation: View from the Berkelpoort
1-1 Entrance to garden

Activity
- Programs
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-1 Entrance to garden

Activity

- Programs

City wall garden
Existing situation: City wall
After renovation: Citywall center

4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-2 Citywall center

View and light
- Regain the relation with the city wall
- Emphasizing tower

St. Elisabeth building 1965-1991 (Zutphen archive)
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-2 Citywall center

View and light
- Balcony design for maximum light
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-2 Citywall center

View and light
- Balcony design for maximum light

Current situation
- Daylight test
  Average corridor brightness: 50lx
- Space test
  City wall alley: 5m
- Façade test
  Façade continuity: Connected

Experiment 1
- Daylight test
  Average corridor brightness: 75lx
- Space test
  City wall alley: 12m
- Façade test
  Façade continuity: Disconnected

Experiment 2
- Daylight test
  Average corridor brightness: 100lx
- Space test
  City wall alley: 5m
- Façade test
  Façade continuity: Connected

Experiment 3
- Daylight test
  Average corridor brightness: 200lx
- Space test
  City wall alley: 5m
- Façade test
  Façade continuity: Disconnected

Experiment 4
- Daylight test
  Average corridor brightness: 500lx
- Space test
  City wall alley: 12m
- Façade test
  Façade continuity: Connected

Provide right level of daylight to community zone and corridor: 200~500lx
Façade A (Before renovation)  Façade B (Before renovation)  Façade C (Before renovation)  Façade D (Before renovation)

-1m balcony extension to bring the garden view inside of the house
-Balcony is placed above the passage or garden
-Column should be avoided to acquire enough space
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-2 Citywall center

View and light
- Summer climate control
- Winter climate control
- Light control through sliding sunscreen
- Summer door open

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**Summer climate control**

- Direct light
- Indirect light
- Natural ventilation
- Air extraction
- Air supply
- Shaft for (WTW units)

**Winter climate control**

- Direct light
- Indirect light
- Air extraction
- Air supply
- Shaft (WTW units)
- Radiator

Sunscreen opened

Sunscreen closed
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route

1-2 Citywall center
View and light
- Façade material

Front: Perforated red bricks
Back: Solid red bricks

White plaster

Glass railing
UV Glass
Steeel railing

Steel plate roof
Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-2 Citywall center

Privacy
- Solid wall in front of housing unit
- Plant barrier and hidden house entrance
- Opaque glass
Demolish parts and reuse of modules

The parts marked in red will be demolished in remodeling project. If the newly added space follows the modules of the existing building, the disconstructed structural modules can be reused.

In particular, if the continuously repeated A and Am structural modules are reused, the amount of materials used in remodeling can be drastically reduced, and the energy for new material production can be reduced proportionally.

Structure and detail
- Adaptive reuse
- Reuse of disassembled building material
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route

1-2 Citywall center

Structure and detail
-Balcony extension
1-2 Citywall center

Structure and detail
-Balcony extension

4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
After renovation: Citywall garden

4 Design
4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route
After renovation: Restaurant roof terrace

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor's route
4-7. Resident's route
After renovation: Restaurant
1-3 Restaurant

Accessibility
- From the ramp
- From the elevator

Basement level
1-3 Restaurant

Activity - Programs
1. Machine room
2. Kitchen
3. Dining area
4. Lobby
5. Man's restroom
6. Woman's restroom
4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant

View and light
- Relation with Berkel river
- Relation with citywall
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant

View and light
- Summer climate control
- Winter climate control
- Heat recovery
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant
View and light
Continuous landscape
- Brick Arch
- Horizontal lines

- White plaster
- Old bricks (Dark brown)
- Glass railing
- Red bricks
- Stone
- UV Glass
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant

View and light
Continuous landscape
-Brick floor and wall
-White ceiling for light reflection
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant

Structure and Detail
-Structure diagram

Recycled precast hollow concrete slab

Brick load bearing column

THQ Ligger

Brick and stone facade

Water tight concrete casted at once

Main structure
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-3 Restaurant

Structure and Detail

Detail 7
- Citywall view roof top restaurant
- Glass railings for visual expansion of citywall
- Recycled precast hollow concrete slab

Detail 8
- River view roof top restaurant
- Plants railings for continuous garden landscape
- Recycled timber boards
Existing situation: Tower

4 Design
4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route
After renovation: Water garden
1. Concept
2. Design ambition
3. Design process
4. Design strategy
5. Master plan
6. Visitor's route
7. Resident's route

Activity
1. Water garden
2. Tower island
3. Restaurant
4. Garden
5. Berkel river
6. Recreation room
7. Visitor's route
8. Resident's route

Precedent: Barbican center, London

https://www.pinterest.com/pin/395331673514155593/
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route

1-4 Water garden

View and light
- Relation with tower
- Relation with Berkel river
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-4 Water garden

View and light
-Sequence of water experience
Existing situation: Tower remains and Pastorie
After renovation: Music garden
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

1-5 Water garden

Accessibility
- 1: Route to music hall
- 2: Route to music school
- 3: Route to Beethoven park
Precedent: Vegetable farm, Villa Augustus

https://www.tripadvisor.com/LocationPhotoDirectLink-g188627-d1828608-i175881564-Villa_Augustus-Dordrecht_South_Holland_Province.html

1. Concept
2. Design ambition
3. Design process
4. Design strategy
5. Master plan

4-6. Visitor's route
4-7. Resident's route

Activity
1. Outdoor podium
2. Music hall
3. Vegetable garden
4. Grass

Design

1-5 Water garden

Ground floor

2

3

4

5 Water garden
Activity
1. Outdoor podium
2. Music hall
3. Vegetable garden
4. Grass
Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

1-5 Water garden

View and light
Continuous landscape
-Commemorative stones

Materials:
- History board: Stone
- Podium: Stone tile
- Path, Wall: Red brick
- Heritages: Old brown brick

Image descriptions:
- Pathway with red brick
- Stone wall with stone tile
- Trees and greenery
- Heritage stones
Two different main routes

1. Visitor’s route
   1-1 Entrance to garden
   1-2 Citywall center
   1-3 Restaurant
   1-4 Water garden
   1-5 Music garden

2. Resident’s route
   2-1 Main entrance
   2-2 Music hall
   2-3 Recreation room

4 Design
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4-6. Visitor’s route
4-7. Resident’s route
Existing situation: Main entrance

4  Design

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4 Design

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4-7. Resident’s route

After renovation: Main entrance
4 Design

4-1. Concept
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4-7. Resident’s route

2-1 Main entrance

Accessibility
1. Pedestrian route
2. Car route

-Connectivity

Ground floor
4 Design

4-1. Concept
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4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
Activity
1. Tower entrance
2. New elevator
3. Community zone
4. Service room
5. Housing unit
6. Tower terrace
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2.1 Main entrance
- View and light
- Relation with tower
- Direct connect to garden
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
View and light
- Summer climate control
- Winter climate control

Ground floor

106
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
View and light
1. Photovoltaic solar panels
2. Rain harvesting
3. Geothermal heat
4. Sun screen

Solar panel arrangement

- Transparent solar panel
- Polycrystalline Panel
2-1 Main entrance
- View and light
- Façade materials
- Anti reflective glass
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route
After renovation: Central lobby

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
- View and light
- Interior materials
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
Privacy
1. Perforated brick façade
2. Plant barrier
3. Hidden entrance
4. Semi public space
5. Height difference

Design

- Plant Barrier
- Hidden entrance
- Semi public space
- Height difference
- Perforated brick
Load bearing wall structure with 250mm Precast hollow concrete slab

Steel frame structure with 150mm precast hollow concrete slab

Before

After
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-1 Main entrance
Structure and detail

Detail 1:
- Glass curtain wall to expose tower behind.
- Reuse existing floor

Detail 2:
- Thin and slim slabs to maximize tower exposure
- Sustainable climate control through sun shades and ventilation windows

Detail 4:
- Skylight for natural light
- Solar panel to generate energy
- Green house roof

Detail 6:
- Glass curtain wall to expose tower
- Perforated wall for privacy issue

Thin and slim slabs and transparent façade to maximize tower exposure
Existing situation: Chapel

4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route
After renovation : Music hall
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
Accessibility
1. Resident route
2. Visitor’s route
- Direct connect to garden
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
Activity
1. Music hall
2. Community zone
3. Music therapy center
4. Administrative office
5. Housing unit
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
View and light
-Relation with chapel
-Community Zone
- Balcony is placed above the parking lot
  - Column can be used to support balcony since it has enough ground space.

- Maximum balcony extension (2.5m) provides winter garden
  - Parking lot view can be replaced by winter garden view.

Average summer illuminance per extension, Required illumination standard for homes 150lux

1m extension: 206lx
2m extension: 164lx
2.5m extension: 148lx
3m extension: 135lx
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
View and light
- Façade materials

Old brown brick  White painted steel plate  Perforated red bricks  White plaster  Beige brick

Polycrystalline solar panel

White plaster

Façade materials

White painted steel plate

Beige brick

Old brown brick
After renovation: Music hall

4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor's route
4-7. Resident's route
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan

4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
View and light
-Interior materials

Old brown brick
White painted steel beam and column
Column Red bricks
Ceiling & Wall White plaster
Floor White terrazzo tile 20cm*20cm
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
Privacy
-Double entrance
-Opaque glass

Opaque glass
Double entrance
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-2 Music hall
- Structure and detail
  - Structure diagram
  - Perforated brick combining system

Steel frame structure
Perforated brick facade
2.5m balcony extension with column support
Existing situation: Recreation room
After renovation: Recreation room roof terrace
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-3 Recreation room
Accessibility
1. To recreation room
2. To music garden

Route 1
Route 2
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route
Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-3 Recreation room
Activity
1. Recreation room
2. Resident garden
3. Machine room
4. Restroom
5. Mini bar
4. Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-3 Recreation room
View and light
- Summer climate control
- Winter climate control
- Summer door open

Basement level
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route

2-3 Recreation room
View and light
-Continuous landscape
-Facade materials
-East and West

Recreation room west facade

Perforated red bricks
Red bricks
Stone
Window frame

Recreation room east facade
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route
4 Design

4-1. Concept
4-2. Design ambition
4-3. Design process
4-4. Design strategy
4-5. Master plan
4-6. Visitor’s route
4-7. Resident’s route