PRESENTATION

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PROJECT TITLE

Independent living (housing) for elderly with a need for care in a protected environment.

LOCATION

Binnengasthuis area in downtown Amsterdam.
THEME STUDIO

The tolerance for change of the building complexes of the UvA

RESEARCH GOAL

Are there good reasons to transform a part of the Binnengasthuis area in Amsterdam into ‘independent housing for elderly with a need for care’?
FROM RESEARCH TO DESIGN
RESEARCH CONCLUSIONS

- The inner area of the Binnengasthuis is and was always a collections of inner courtyards.

- The inner courtyard surrounded by houses for elderly with care is a solution which was already used in the ‘hofjes‘ and still is used in new and existing solutions for housing for elderly with care.

- There are no elderly houses in the neighborhood of the Binnengasthuis area while there will be a need for more housing for the elderly with care in the near future in downtown Amsterdam (preferably by transforming existing buildings).

- By transforming the former Zusterhuis and Tweede Chirurgische Kliniek into housing for elderly with care, there is also a possibility of creating a more connected ‘housing zone‘.
Fig. 01 Binnengasthuis area, Amsterdam. View from the East.

(Source: Own drawing. Original source; Bing maps)

Fig. 02 Buildings on the Binnengasthuis area.
Inner courtyard.
Buildings which define the inner courtyard.

A Inner courtyard Oudemanhuispoort
B Inner courtyard between the Vendelstraat & Oudemanhuispoort
C Inner courtyard between the Vendelstraat & the Binnengasthuisstraat
D Inner courtyard between the Binnengasthuisstraat & Oude Turfmarkt

(Source: Own drawings (all on this page)

-existing dwellings
-other buildings Gasthuis area

current UvA buildings
-other buildings Gasthuis area

dwellings ‘vision’
-other buildings Gasthuis area

UvA buildings ‘vision’
-other buildings Gasthuis area
STARTING POINTS DESIGN
'The historic development on site has a social-cultural historic and architectonic historic value of national interest and should therefore be preserved.'

'The historic buildings have an easily adaptable structure, which enables new destinations without major interventions.'

(Source: Bureau monumentenzorg Amsterdam)

In general I agree with these arguments as starting points for my design.
PROGRAM

Tweede Chirurgische Kliniek: 5.440 m² BVO
Zusterhuis: 2.500 m² BVO
Total: 7.940 m² BVO existing buildings
Corner location (‘the gap’): 375 m² x 4 floors = 1500 m² BVO

Total new situation: ca. 9.500 m² BVO

Total number of appartments for elderly new: 49
Total number of care appartments new: 4

Appartments: ca. 55 - 90 m² (as in existing Wibo projects)
two and three room appartments
Housing conform Wibo and other regulations.
Collective additions: diver strongly per project and organisation.

Indication of possibilities in amenities:
Service center, hairdresser, cafe, restaurant, shop, meeting spaces,
hobby and clubs, ateliers etc.
important is that all chosen amenities are in close proximity.
The Zusterhuis en Tweede Chirurgische Kliniek are part of an enclosed enclave. The enclave is accessible through small entrances by means of gates. These are characteristic elements which should remain. By closing the ‘gap’ in the surrounding ‘wall’ of the Binnengasthuis area, these characteristics will be strengthened.
ARCHITECTURE AND URBAN CONTEXT

The Zusterhuis en Tweede Chirurgische Kliniek enclose an inner courtyard which is part of a semi public (connected) courtyard netwerk at the Binnengasthuis area. The courtyard netwerk is a historic characteristic of the Binnengasthuis area which should remain.

Semi public space (courtyard netwerk)
Open during the day.
(currently, except the gates with dotted arrows)
(Source: Studiecentrum Annex Bibliotheek, Uva-Binnengasthuisterrein-Amsterdam, BiermanHenketarchitecten, 2012)

Public space
(24 hours a day accessible)
(Source: Studiecentrum Annex Bibliothek, Uva-Binnengasthuisterrein-Amsterdam, BiermanHenketarchitecten, 2012)
The Tweede Chirurgische Kliniek has a staggered building line. The Zusterhuis has a ‘flat’ building line. This principle should be remained.
ARCHITECTURE

New additions to the existing buildings; analog appearance with modern detailing

Reference project: Gugalun House, Switzerland - Peter Zumthor
DESIGN
BUILDING TECHNOLOGY
COMPOSITION FLAT ROOF (from outside to inside)
- Renolit Akordgreen System
  (Sedum plants system on plastic roofing (Renolit))
- Kingspan rigid foam roof insulation, Rc = 5.0 m2K/W
- V8i Appartmentensvibl (prefab concrete floor, 260 mm)
- Stucco (interior)

COMPOSITION SLOPING ROOF (from outside to inside)
- Titanium Zinc plating with folded seams
- Unplanned wooden slats
- Kingspan Unival prefabs insulated roof element
  (Unival Aero, Rc = 6.0 m2K/W)

COMPOSITION DORMER (from outside to inside)
- Titanium Zinc plating
- Wood panelling construction
- Rigid foam insulation, Rc = 5.0 m2K/W
- Wood panelling construction
- Stucco finish on plasterboard (interior)
**EXTERIOR WALL (from outside to inside)**

- Facade stucco system:
  - Skrinkem Skiotact (nuanced rustic colors)
  - Strukoll Schuerfeefieler SILCAAT (6 mm)
  - Strukocem MC cement plaster (15 mm)
- Rough masonry (100 mm)
- Rigid foam cavity insulation: ’Kooltherm-K6-Spouplet’ (95 mm; Rₜₜ = 6 m²K/W)
- Kalksand/stone 100 mm, 150 mm finished with stucco (interior)

**COMPOSITION FLOOR (from top to bottom)**

- Zementement dekvloer 50 mm (cementitious screed)
- VB6 Appartementvloer’ (prefab concrete floor, 260 mm)
- with installation on site during construction
- stucco ceiling

**COMPOSITION WINDOW FRAME (from top to bottom)**

- ’Vent.0.8sun’
- (integration of a ventilation unit (Aluata) and sunscreen (Schietekins))
- Wooden window frame (painted in color) with insulation glass
- Natural stone sill (exterior)
- Artificial stone windowsill (interior)
COMPOSITION GROUND FLOOR (from top to bottom)
- Zandsteen dewatering 50 mm (pervious screed)
- VIB isolation plate 200 mm (prefab insulated (EPS) concrete floor)
- Rs = 5,0 m²K/W
- Krupuimte

FOUNDATION (form top to bottom)
- Reinforced concrete foundation beams in an EPS (insulation) mold
- Reinforced concrete foundation piles