



PRECEDENTS

05: PRECEDENTS



MARIA MAPHOSO 66 years.

I can speak to anybody

05: PRECEDENTS

The following precedents were investigated because of their influence on the author.

1 - INFLUENTIAL ARCHITECT

ALVAR AALTO (1898 - 1976)

Alvar Aalto designed each building with a good understanding of the site, the function of the building and the proposed human interaction with the building. Each project was a continuous experiment, and similarities can be seen in following projects. Aalto used a wide range of materials and technologies while maintaining a balanced relation between them. All materials and functions were part of a whole (Groak 1992: 210).

Aalto believed that architecture is the mediator between the natural and the rational order, between nature and man. The ideogram of sky, rational and horizon, natural can be seen in various plans and section of Aalto's work, portraying the contrast between natural and man-made, free form and regular.

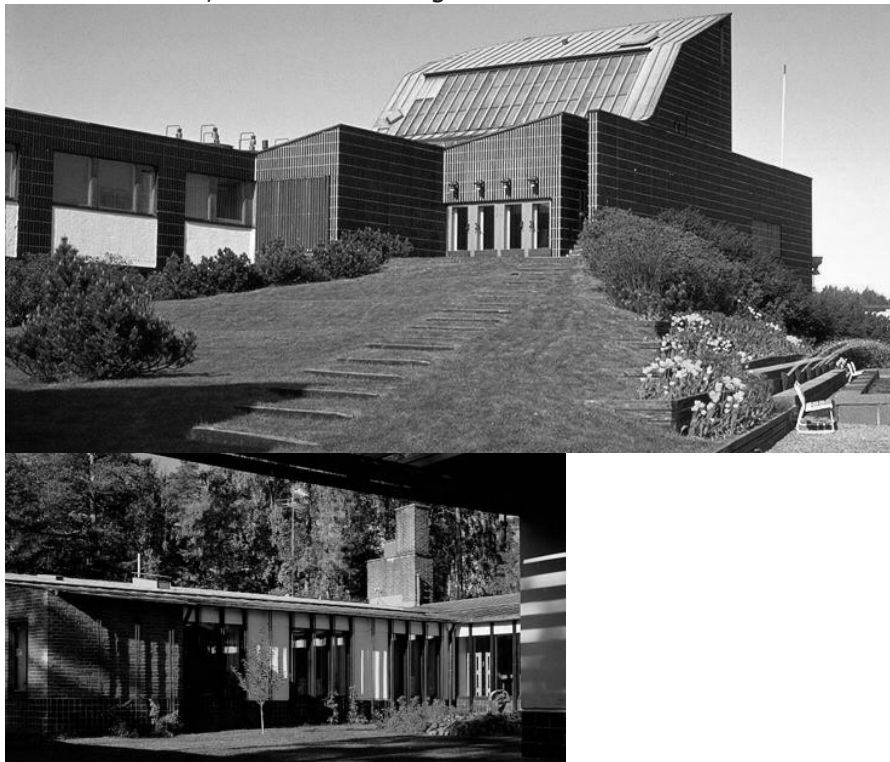


Figure 5.1: Courtyard, Town Hall, Saynatsalo (Weston 1993)

Figure 5.2: View of the Town Hall, Senajoki, Finland, 1965 (Groak 1992: 217)

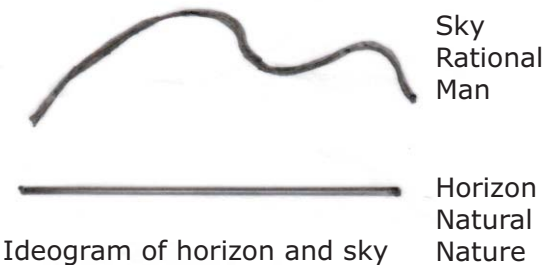


Figure 5.3: Ideogram of horizon and sky

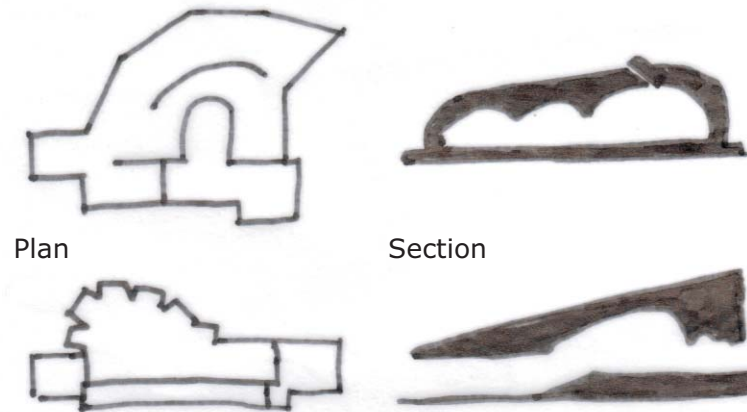


Figure 5.4: Ideogram represented in plan and section

In any of Aalto's projects, the site is the main generator of the design and is analysed by means of morphology, dimension, orientation, infrastructure and relationship with the surroundings (Groak 1992: 212). The original site was highlighted by emphasising the contours by creating retaining steps. External courtyards were always connected with the overall site, open for use by the general public. Of equal importance were the three considerations of the route:

- The path of the sun, capturing and manipulating the sunlight penetrating the building;
- The route of the observer around the site, reading and observing the site;
- The route of the observer inside the building, exploring and discovering new elements on the route (Groak 1992: 213).

Light, or the control of light, was an important factor and was manipulated to enhance the journey through the building. The primary reason for windows was to bring light into the building, not to serve as visual mediums. Aalto used all types of materials: reinforced concrete, brick, timber and many more. The only material he never really used was structural steelwork and cladding. Materials were always used in their natural form and never painted. Materials were not just used for their physical properties, but rather for their compositional and geometric qualities. Alvar Aalto focused on the human experience and acknowledged the site, using a holistic way to create humane and relevant architecture.



Figure 5.5: Entrance to library, Vyborg (Fleig: 1995)

Figure 5.6: Lending room, Library, Vyborg (Fleig: 1995)



Figure 5.7: Auditorium, Library, Vyborg (Fleig: 1995)

2 - LAYERING AND PROGRESSION

CONSTITUTIONAL COURT OF SOUTH AFRICA OMM DESIGN WORKSHOP

The concept of elders openly dispensing justice under a tree is highlighted and well represented as the main concept of the project. This building celebrates the constitutional democracy on the site of a previous apartheid regime prison. The architectural style originated in the existing surroundings and evolved into a language that speaks of openness and interwoven layering.

The court is made up of paths with distinct functions. The African stairs walkway is on the outside, leading up towards the entrance and square. Parallel on the inside is the exhibition gallery walkway that is a semipublic gallery, linking the court with the library. Between the exhibition walkway and the outside courtyard is the judges' walkway, visually linked to the main building, but isolated and private (Law-Viljoen 2006: 20).

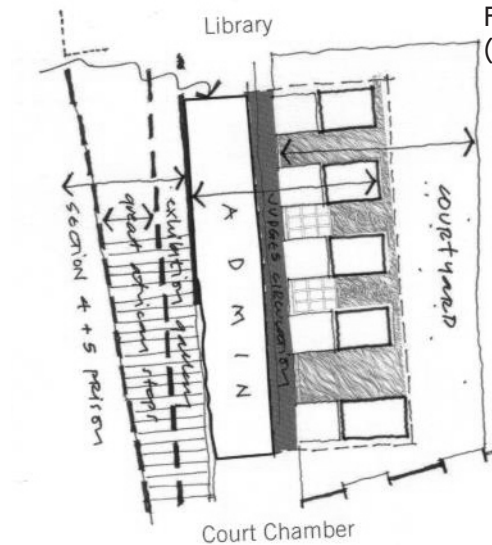


Figure 5.8: Walkway layout plan
(Law-Viljoen 2006: 59)



Figure 5.10: Louvered windows
in foyer (Author 2007)

Figure 5.11: Court seen from the square
with glass tower on the right (Author 2007)



Figure 5.9: Building name at
entrance (Author 2007)

Areas and functions are highlighted by the movement and progression towards them. To reach the important court chamber, one must first move through the outside square, the entrance podium and the public foyer. Even though all these spaces are public, a definitive progression of importance is felt as one approaches the chamber.

Cast concrete is the main building material and is applied in a wide range of applications – from smooth surfaces to raw planes, always in perfect harmony with surrounding materials such as glass, steel and brick. Much consideration has been given to natural ventilation in all the spaces and to embracing the sun in the winter season and shading it during summer months. A passive cooling system, a grey-water harvesting system and the selection of materials all play an important role in the day-to-day running of the building (Law-Viljoen. 2006: 140).

Figure 5.12: Different concrete usages in foyer (by author 2007)

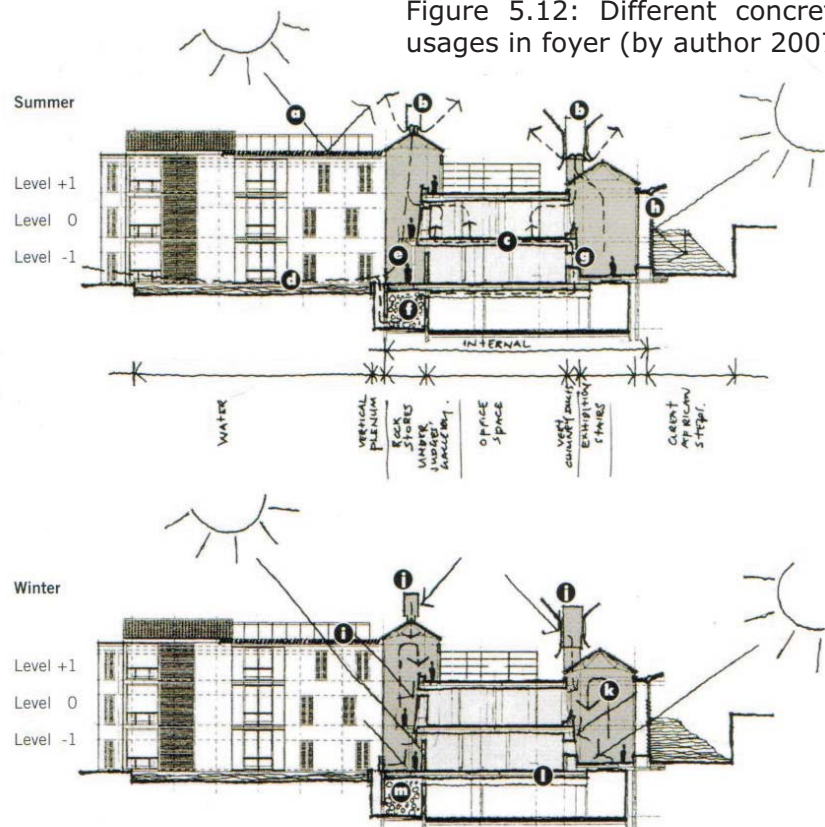


Figure 5.13: Passive cooling system (Law-Viljoen 2006: 140)

Figure 5.14: The African stairs (Author 2007)



3 - LIBRARY

UNIVERSITY LIBRARY, TOKYO, JAPAN

SHIGERU BAN

Shigeru Ban, who is known for his lightweight structures and use of recycled materials, designed the University library in Tokyo, Japan, his largest building to date. The five-storey library is positioned on the opposite side of the main entrance of the university with a plaza in between. The building is a combination of solid and void, and in full harmony with the neighbouring Neo-Classical buildings of the century-old campus (Webb 2007: 60).

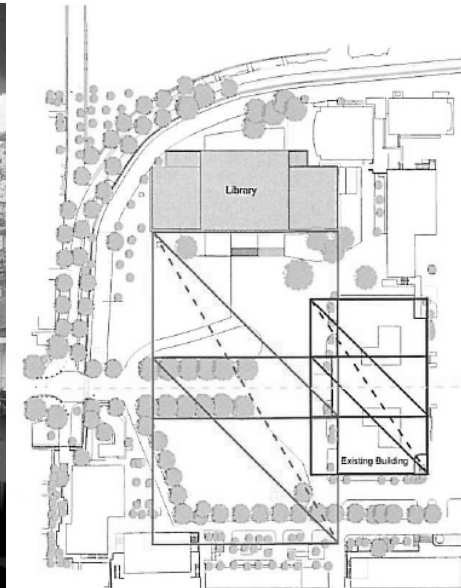
The plan and elevation were generated from three golden rectangles, in direct relation with the original building it replaced. The building is made up of three sections which are structurally independent from each other (Webb 2007: 60). The side sections house the bookshelves and private glass cubicles for solitary study. The ground floor of the middle section houses the reception and reading room. The lobby is divided into different talking layers. At the entrance is an isolated lobby, a glass-walled lounge acting as the mediator between the quiet study area inside and the noisy outside. The second layer is in the atrium and only allows quiet conversation.



Figure 5.15: Approach to library
(Webb 2007: 60)



Figure 5.16: The pods in the atrium
(Webb 2007: 63)



site plan

Figure 5.17: Site plan
(Webb 2007: 60)

In the atrium space of the middle section there are five mushroom-like pods, constructed of arched steel ribs with glass in between and accessed by a flying bridge (Webb 2007: 64). The oval pods serve as meeting rooms for seminars or just break-out areas for students.

A definitive layering of privacy exists without hampering visibility. The private pods are visible from the lobby with no interference by activities in the lobby. The bookshelves are almost hidden in the side wings, with the human facilities in a primary position in the middle. The human experience and interaction between 'man and literacy' was the most important consideration.



Figure 5.18: Front elevation at night (Webb 2007: 62)



Figure 5.19: Section progression

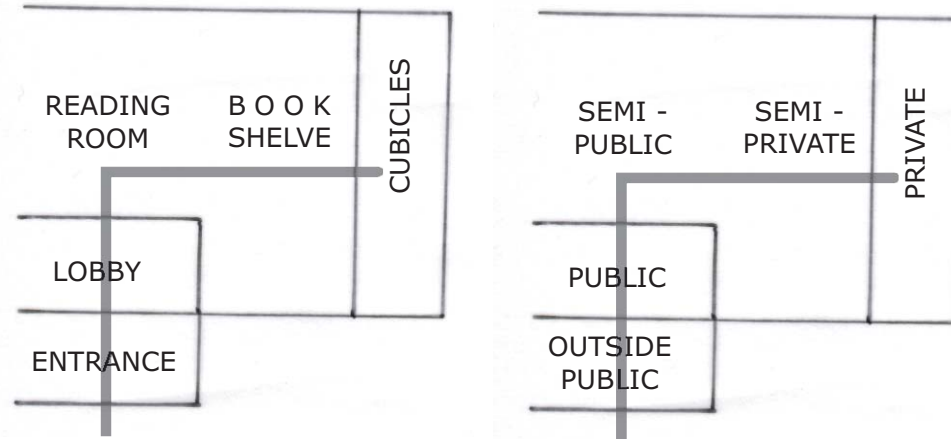


Figure 5.20: Progression in privacy on plan

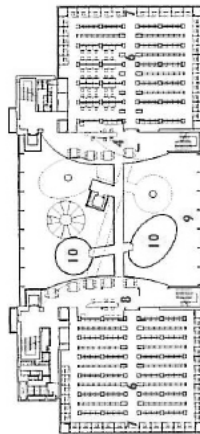


Figure 5.21: Typical floor layout (Webb 2007: 62)



Figure 5.22: View inside a pod (Webb 2007: 65)

4 - ADULT ILLITERACY CENTRE

MAMELODI EAST COMMUNITY CENTRE

For a precedent dealing with adult illiteracy, the author investigated various adult literacy programmes in Tshwane. The ABET programme at the Mamelodi East Community centre was thoroughly investigated by the author. The selected programme is part of an ABET campaign by the City of Tshwane Metropolitan Municipality. Two trained ladies have been appointed to educate the illiterate adults at the community centre, which consists of a hall, administrative office, auditoriums, a kitchen and a library.

THE LIBRARY

Every space in the 100 square metre library is optimised to serve the community. With no educational facilities at home, the public makes full use of the library. The counter area serves as an internet café, the administrative area and the book checkout point. Bookshelves line the walls, with tables and chairs in between. The desks are used for studying and casual reading with no privacy or isolation.



Figure 5.23: Mamelodi community centre's library - view of reading room (Author 2007)

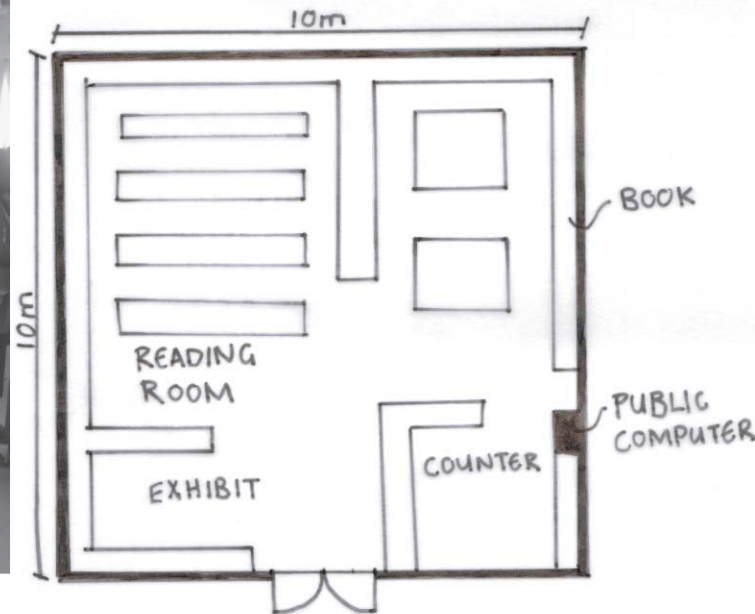


Figure 5.24: Layout plan of the Mamelodi community centre's library

THE ABET CLASSES

As there are no classrooms or auditoriums, the ABET classes are presented in any available space. All that is needed to educate the illiterate adults is seats and a portable board for the teacher to write on. During all the visits by the author, the level one and two Abet classes were held in the community centre's kitchen. Plastic chairs are used as seats and the kitchen workbench doubles as a table. The majority of learners are elderly women, who struggle with the inadequate lighting and the high work bench. The level three class is held in a more suitable hall.

Figure 5.25: Level three class in auditorium (Author 2007)



Figure 5.26: Level 1 and 2 class in kitchen (Author 2007)



Figure 5.27: Lady at kitchen workbench (Author 2007)

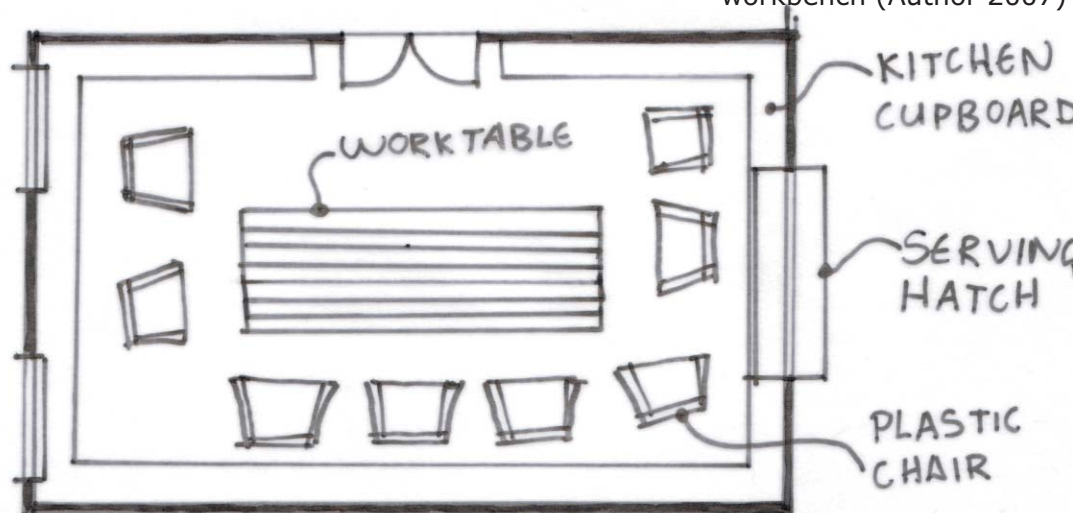


Figure 5.28: Layout plan of kitchen used for ABET class (Author 2007)

5 - MATERIALS

TOLPLAN OFFICES AND HOUSE STEYN/KUNZ, PRETORIA THOMAS GOUWS (ARCHITECT)

Both project layouts are based on an H-shape with courtyards that are in contact with the outer site. The sites were investigated in detail by Gouws to determine the right location to optimise natural light. Familiar materials were used and attention was given to the details where materials and elements meet. Thomas Gouws complements the African landscape by using materials in harmony like face brick, concrete, glass and steel. According to Botes (2006: 52), the pitch roofs define the space and do not contain it. Overhangs are supported by I-beams and the beam filling and gable ends are glazed to create the illusion of floating.

The richness and spatial awareness of the projects can only be appreciated when visiting the buildings. The projects of Thomas Gouws speak of an understanding of the site and the full use of the selected materials.



Figure 5.31: House Steyn - balcony detail (Botes 2006: 53)

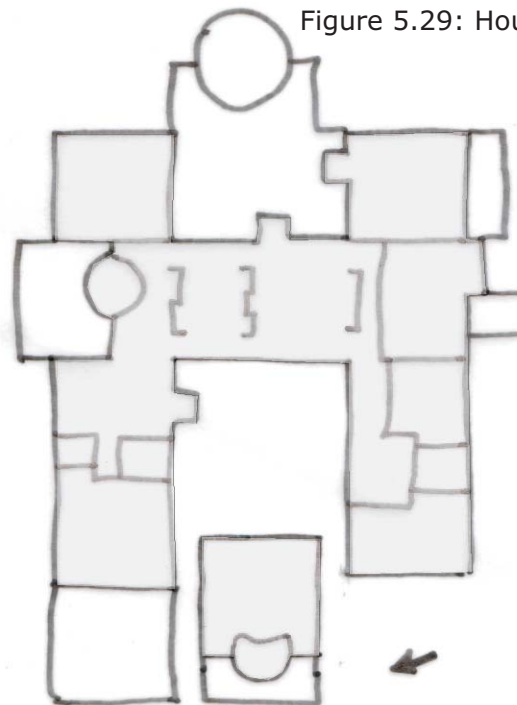


Figure 5.29: House Steyn - layout plan

Figure 5.30: House Steyn - The courtyard (Botes 2006: 53)



Figure 5.32: House Steyn - entrance (Botes 2006: 51)



Figure 5.33: Tolplan - concrete fins (Author 2007)



Figure 5.34: Tolplan - approaching the entrance (Author 2007)

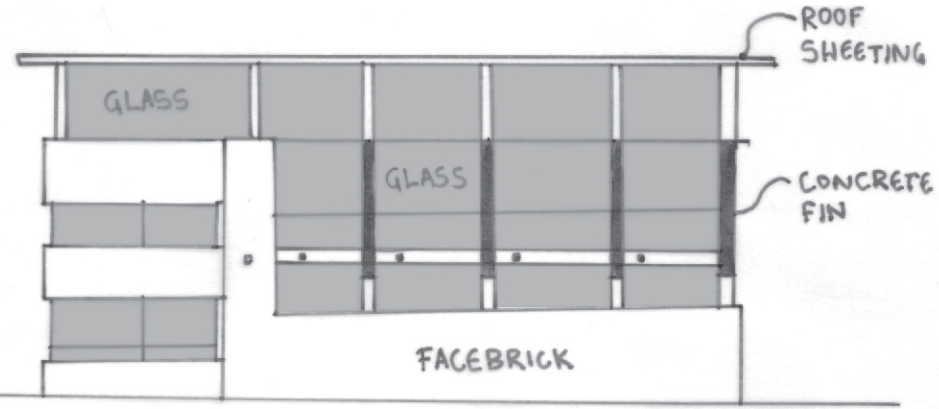


Figure 5.35: Tolplan - north elevation

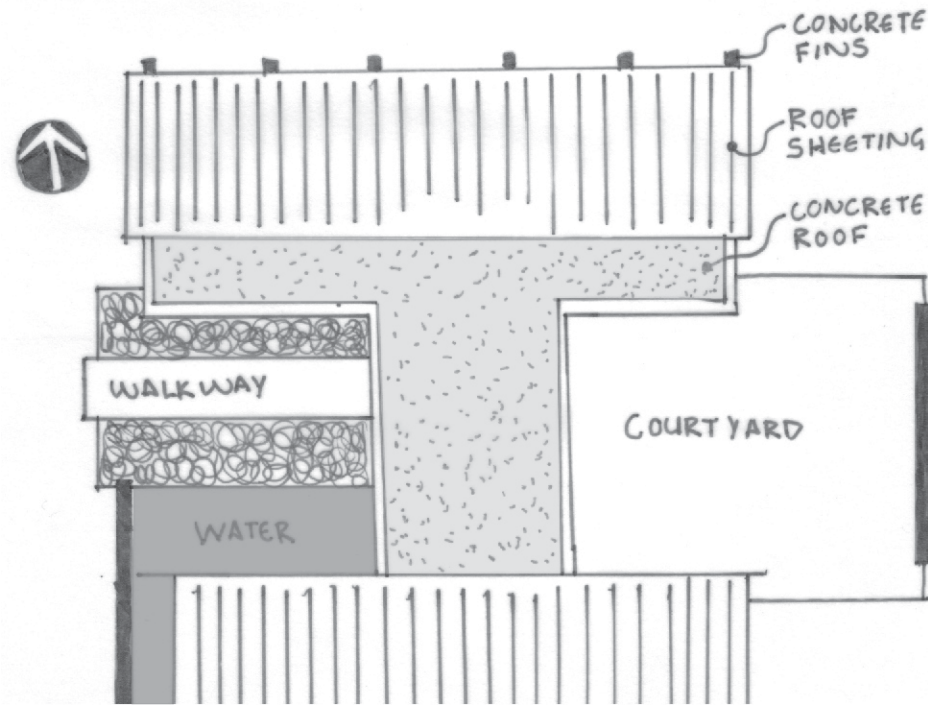


Figure 5.36: Tolplan - site plan



Figure 5.37: Tolplan - front facade from Lynnwood street (Author 2007)



Figure 5.39: Tolplan - north facade (Author 2007)



Figure 5.38: Tolplan - Eastern facade with courtyard (Author 2007)

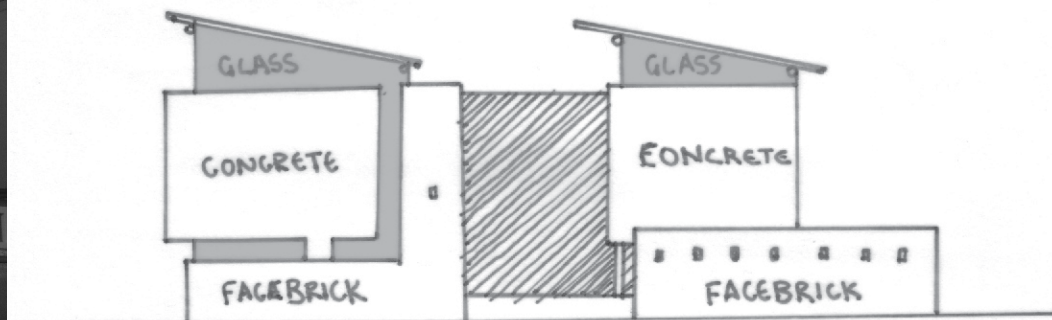


Figure 5.40: Tolplan - west elevation