

Design Development:

First concept, hierarchy of spaces:

The building will be mainly used by the following groups of users:

- The building functions as a community centre of sort that cater firstly for the immediate and direct users of the area. Performances, festivals, classes and outreach programmes involving dance will be available to the public. Educational programmes will be held, for children to the elderly and disabled.
- 20 students will be accommodated in the student housing. Underprivileged students gain the opportunity to follow careers in professional dancing, choreography and stage design through art sponsorship.
- Informal trading and small businesses will be accommodated in the shops and trading stalls.

As a result of this diversity in users the building functions were separated into different zones:

- Public zones: these areas can be seen as an extension of the public environment on the outside of the building. These areas need to be fully accessible to the public. Spaces include the central foyer, internet café, coffee shop, trading spaces, amphitheatre and the public environment surrounding the building.
- Semi-public zones: These spaces are still used by the public and the students, but need to be more quite as a result of specific activities. These spaces include the education centres.
- Semi private: these are private areas used communally by the students. They include the student foyers, self-catering facilities, laundromats, lounges and dance studios.
- Private areas: these areas include the student housing units.

The northern facade of the western wing of the building containing the shops, education centres and student housing needed to be articulated to define the different zones of usage. The facade is defined into horizontal planes, breaking the totality of the single vertical plane.

"The public edge of the building should house activities which benefit from interaction with the public realm, and can contribute to the life of the public space itself." (Bently, 1985:63)

The public zone containing the colonnaded base serves as a transitional zone between the interior of the retail spaces and the public environment of the setback pavement. The private zones containing the student housing has balconies looking out unto Jeppe Street. This threshold gives more privacy to the student housing units.

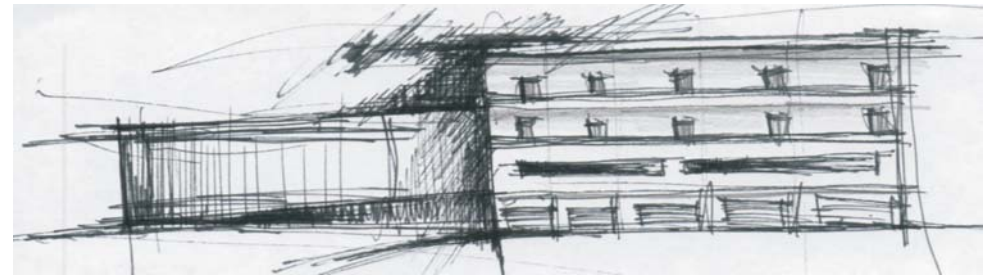
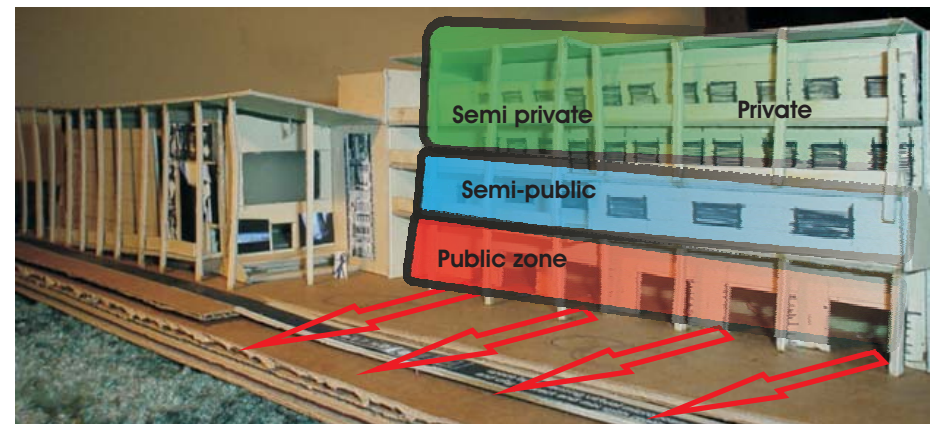


Fig 167. Definition of the facade into zones.



Concept development:

Several theories and guidelines were taken into consideration for the development of a concept. Various conceptual stages were worked through until the final concept was established. The process will be discussed chronologically.

The first concept:

The urban design guidelines set in the Newtown Cultural Precinct Urban Design Plan stated that buildings should define public space by establishing a facade line of buildings directly along the boundaries of the public space. This was achieved on the site by creating a hard edge along Jeppe and West Streets. The mechanisms used to ensure that buildings stand on their boundary lines are the mandatory build to lines along these two streets. These two hard edges worked with the opportunity to use axes along these two roads. Axial directions were used to create a composition of lines that unite in a spatial form of rhythms around these axes.

The main form of the building was established as a solid mass on the corner of Jeppe and West Streets with the edge of Jeppe Street extended up to the Turbine Hall to create a continuous edge. The interior of this mass was considered to be developed into a semi-private courtyard. This courtyard developed into the internal performance space.

The main axes divided the building mass into a more public performance zone on the corner of Jeppe and West and a more quieter education centre/student housing zone along Jeppe Street. This implied that certain zones of the building will function separately from others for the sake of privacy and security.

The first concept developed into a semi-private courtyard for the students, while the amphitheatre moved from towards the more public route along West Street. The amphitheatre needs to function as a transitional link between the public Turbine Square and the performance space inside the building.



Fig 170. First concept: the northern facade.

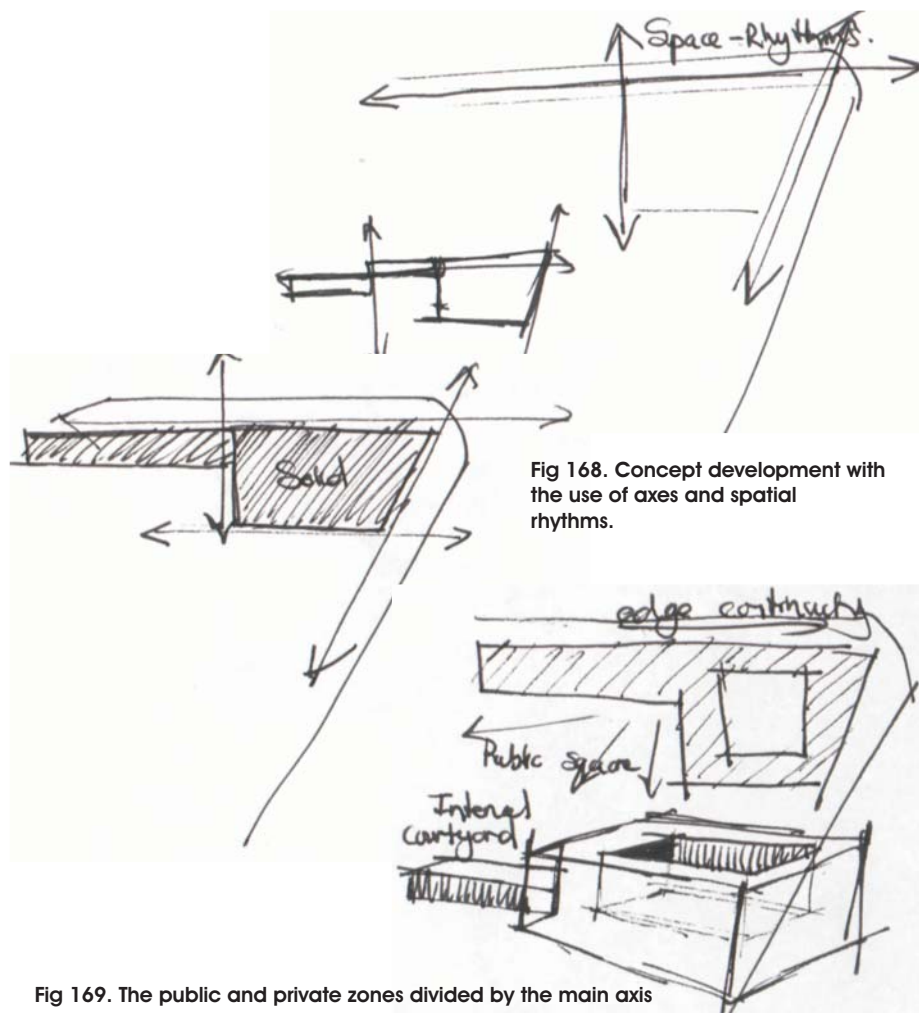
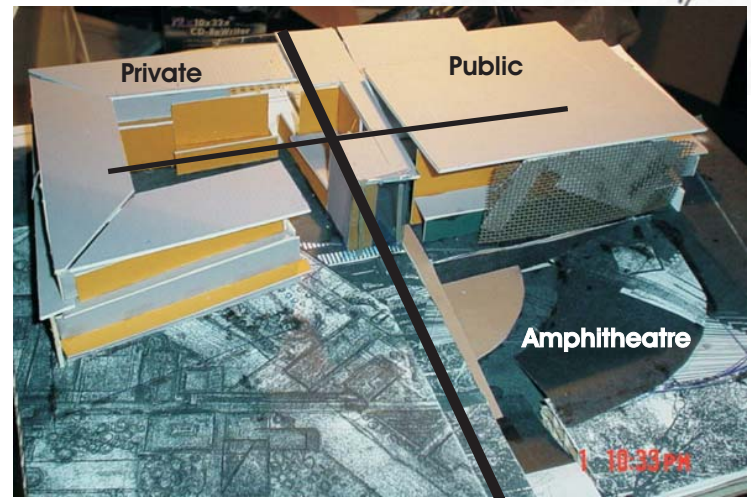


Fig 168. Concept development with the use of axes and spatial rhythms.

Fig 169. The public and private zones divided by the main axis



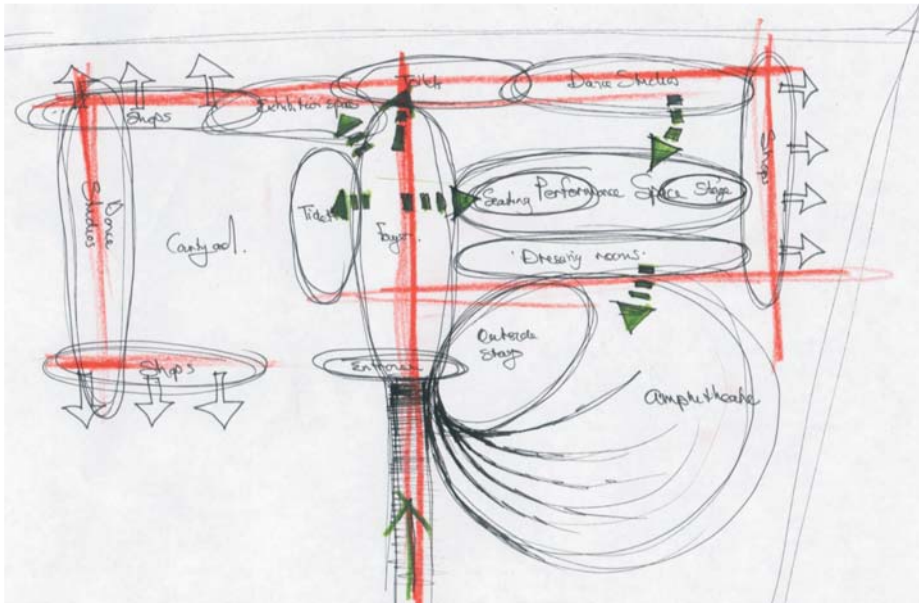


Fig 171. Relation between different functions in the building.

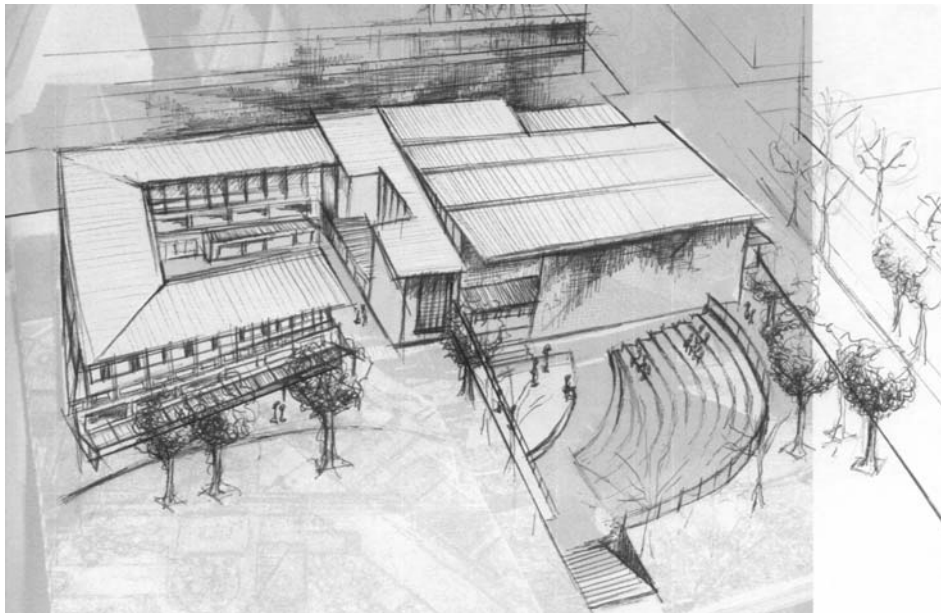


Fig 172. Perspective showing the first concept of the building

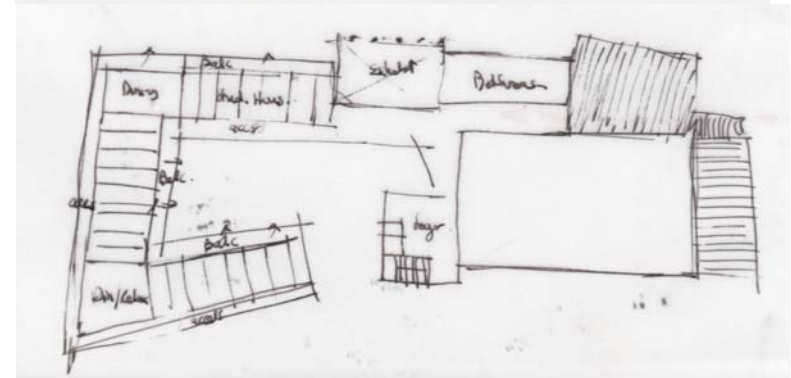
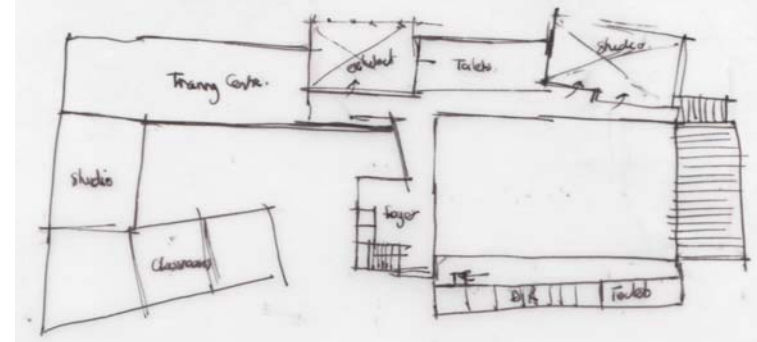
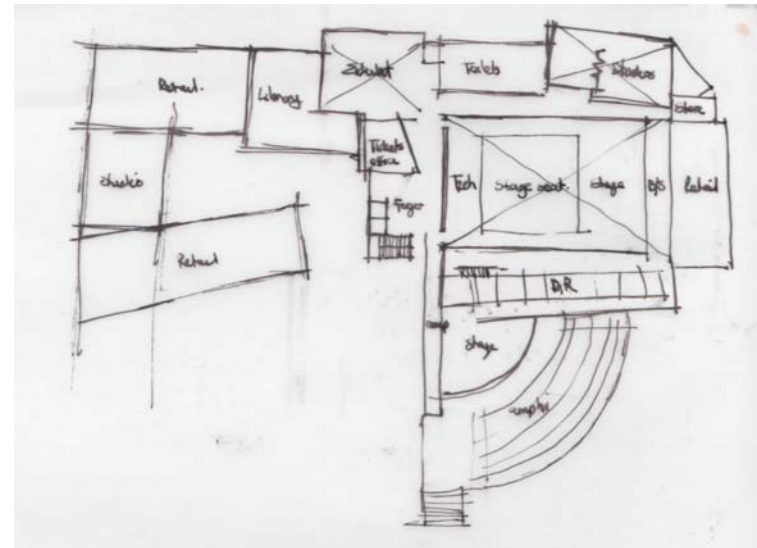


Fig 173. First concept: sketch plan development.



Fig 174. Corner of Jeppe and West Street.

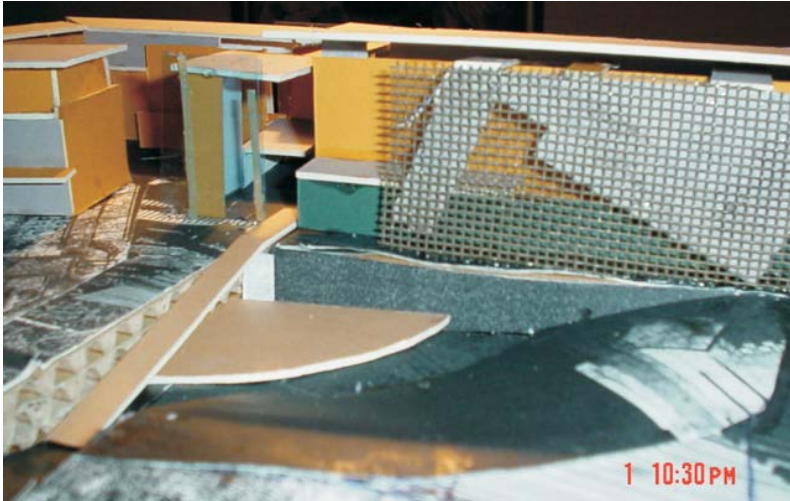
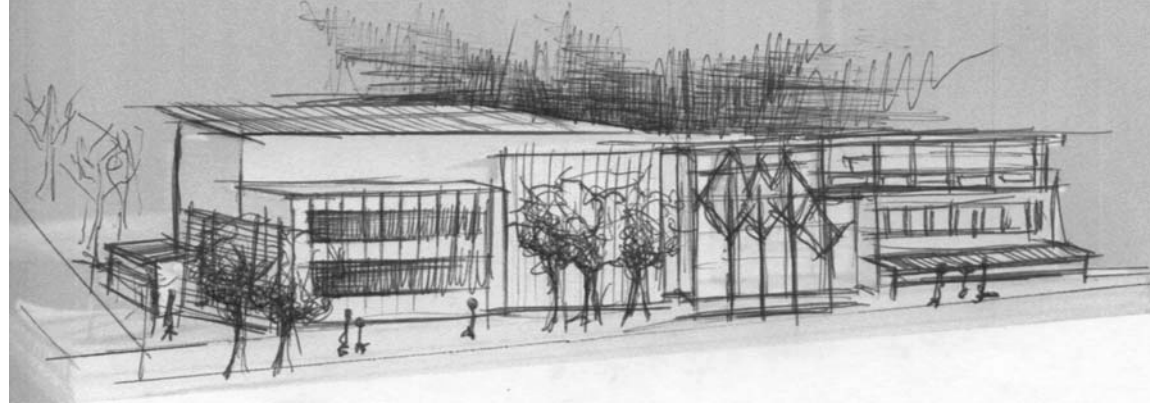
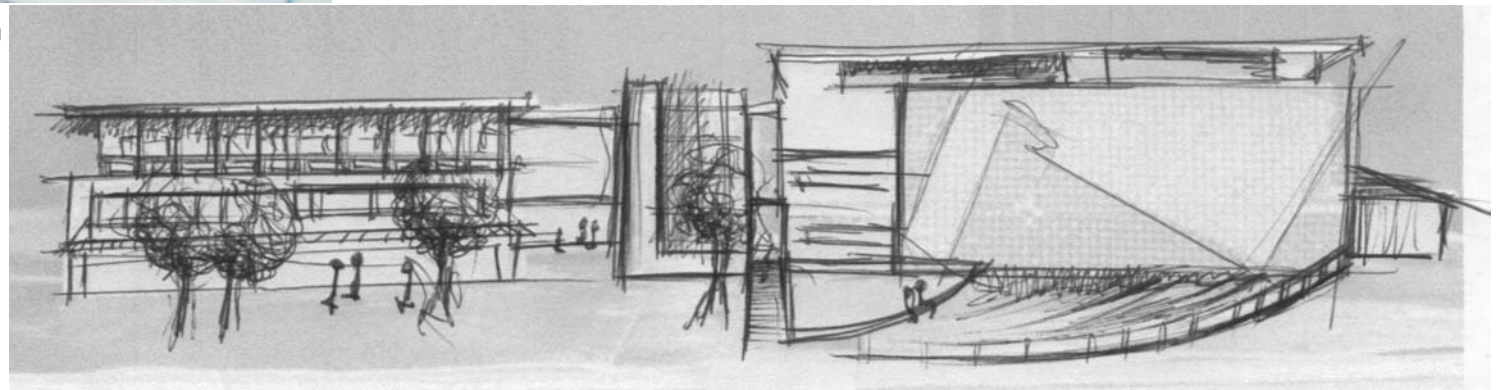


Fig 175. The ramp giving access to the building from the square and the amphitheatre



The second concept, development of the site:

The Turbine Square:

It is proposed in the Newtown Cultural Precinct Plan that the space adjoining the new development and the Turbine Hall be developed into The Turbine Square. This square forms an important node in the public environment running through the precinct.

Responsiveness:

The importance of a double frontage development became clear. The building needs to respond towards three directions:

- North towards Jeppe Street
- East towards West Street
- South towards the Turbine Hall

Small shops flow out onto the setback space along Jeppe Street, while informal trading

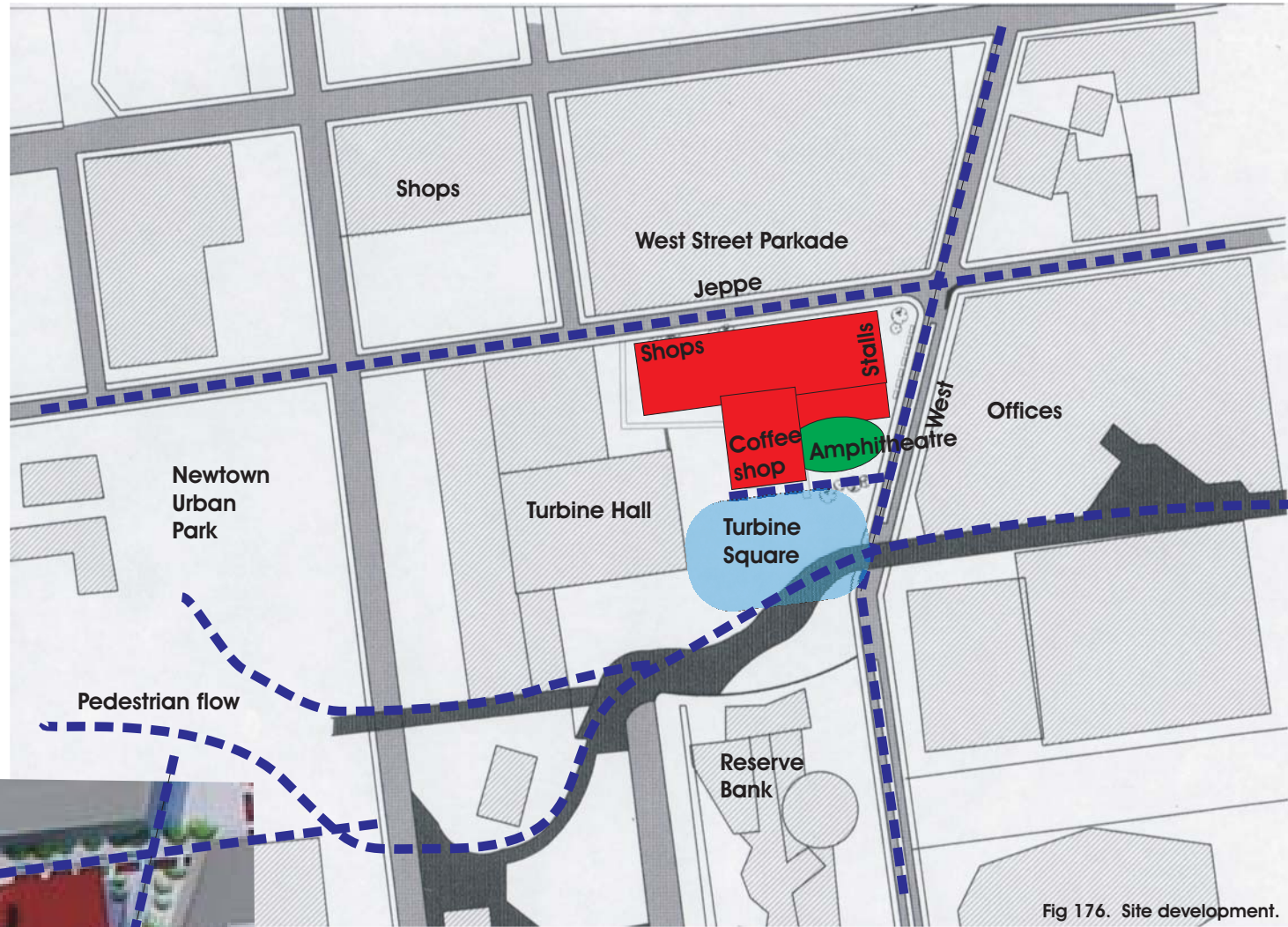


Fig 176. Site development.

stalls draw activity in along West Street. The amphitheatre and Internet/coffee shop would draw activities in from the square.

Main entrances:

Two main routes of pedestrian flow, from the west(Mary Fitzgerald Square) and from the east(Inner city) established two separate entrances possible. The central foyer needed to be accessible from both directions. All entrances needs to be clearly visible and legible. The ramp clearly indicates the entrance from the corner of Jeppe and West Street. The setback space in front of the entrance for the western movement is clearly



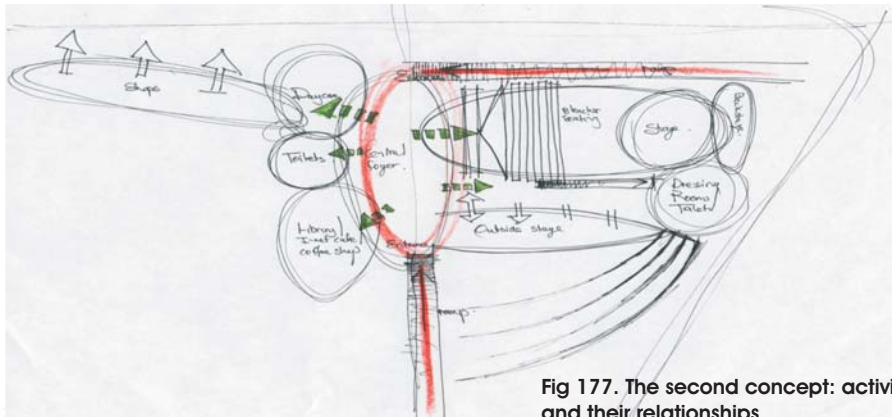


Fig 177. The second concept: activities in the building and their relationships.



Fig 181. The second concept model

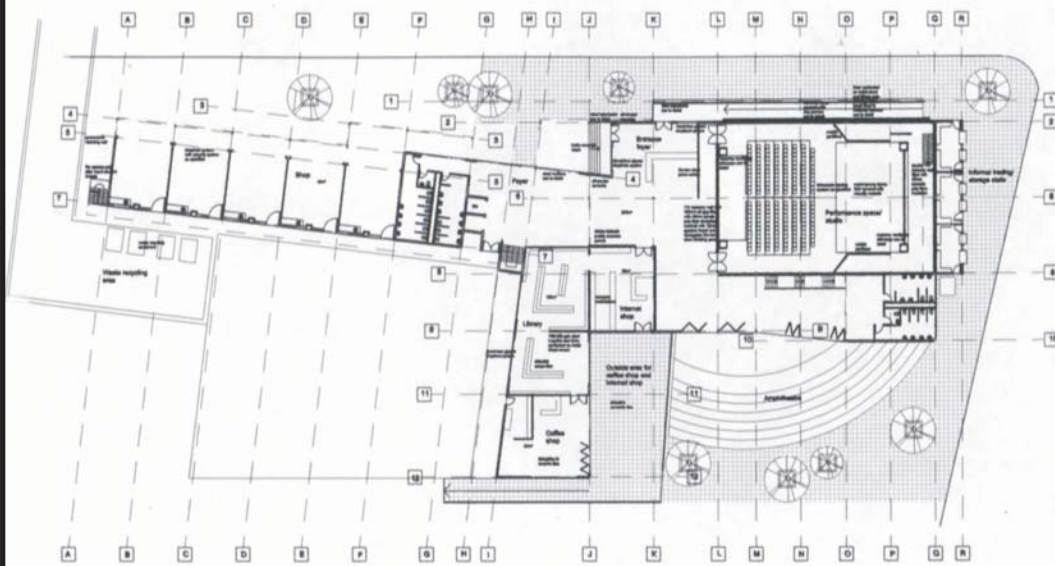


Fig 178. Ground floor plan

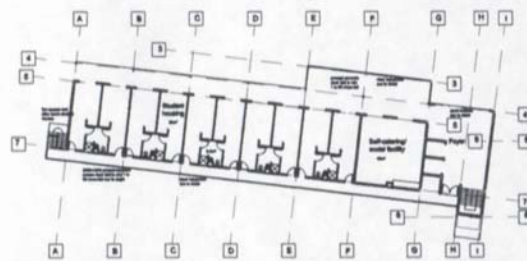


Fig 180. Second and third floor plans

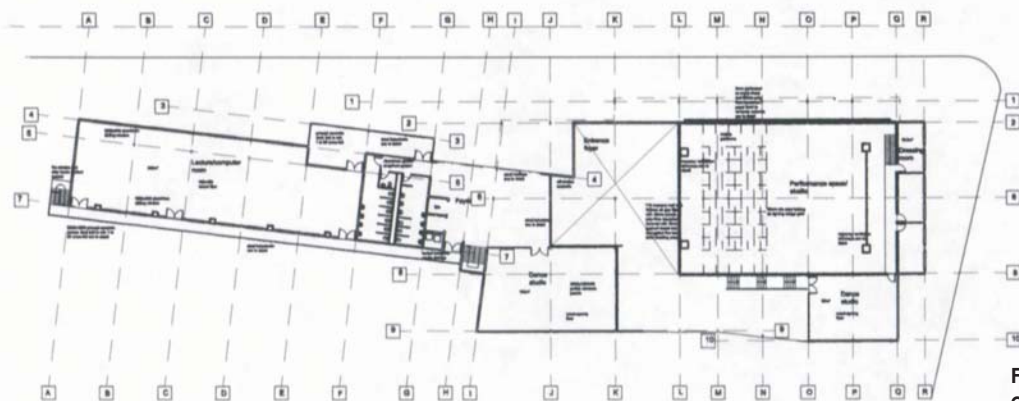


Fig 179. First floor plan



Fig 182. Informal trading spaces along West Street

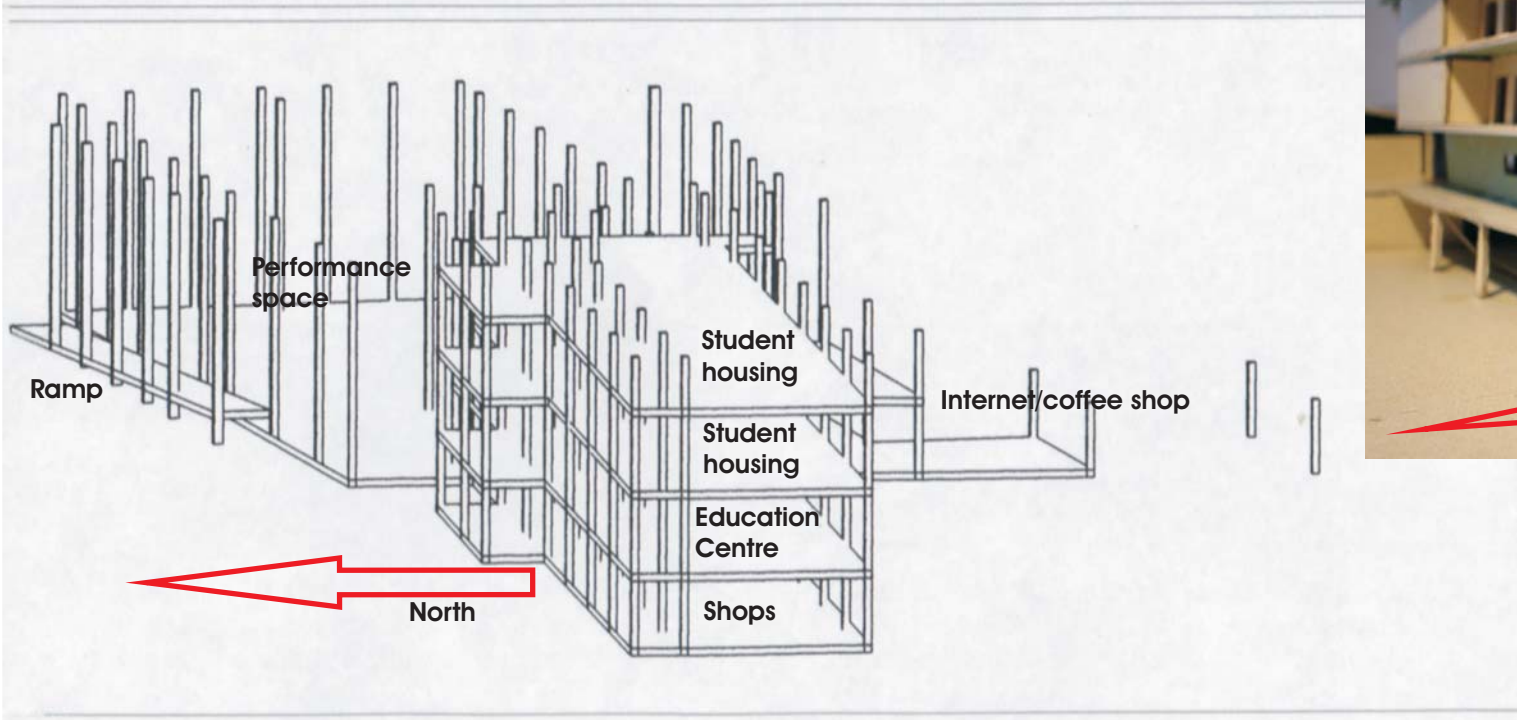
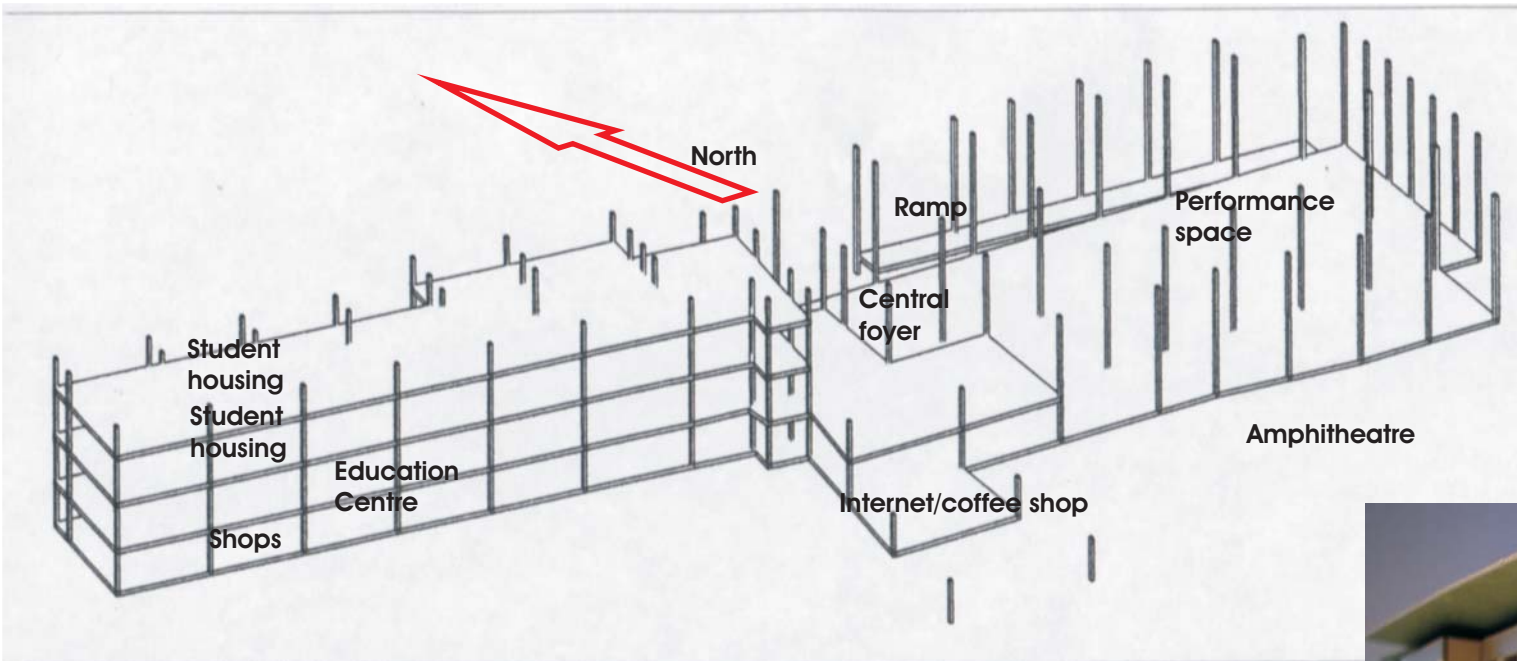


Fig 183. Structure of the second concept of the building

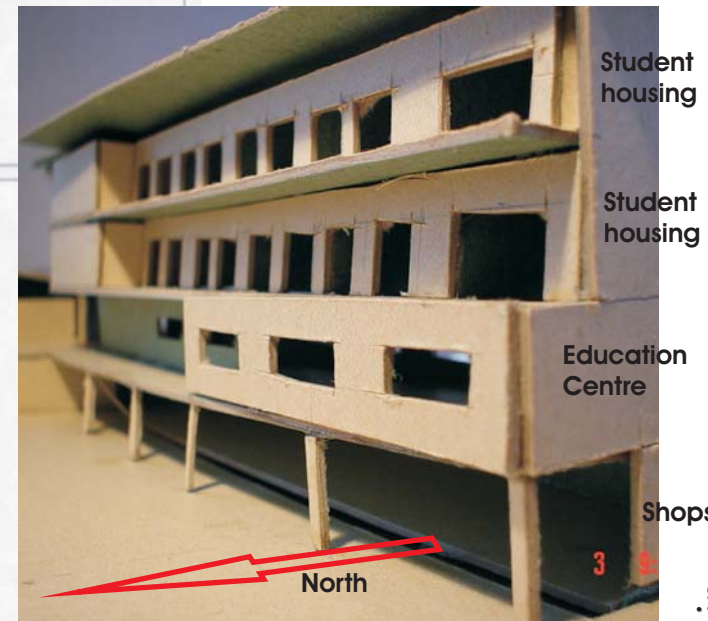


Fig 184. Northern facade

visible from the flow of pedestrian movement. The amphitheatre and outside stage is an intermediate space between the interior of the building and the square.

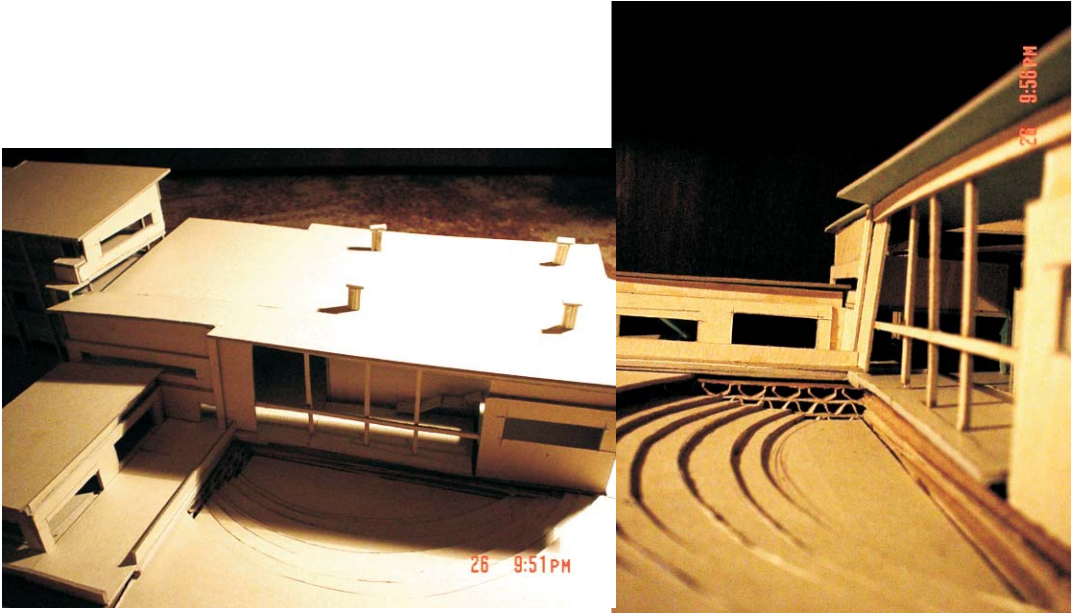


Fig 185. Amphitheatre and outside stage

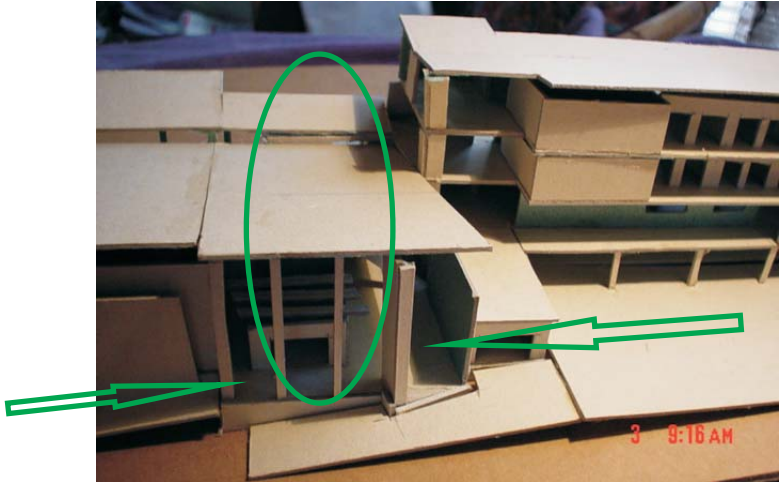


Fig 186. Two entrances and the central foyer

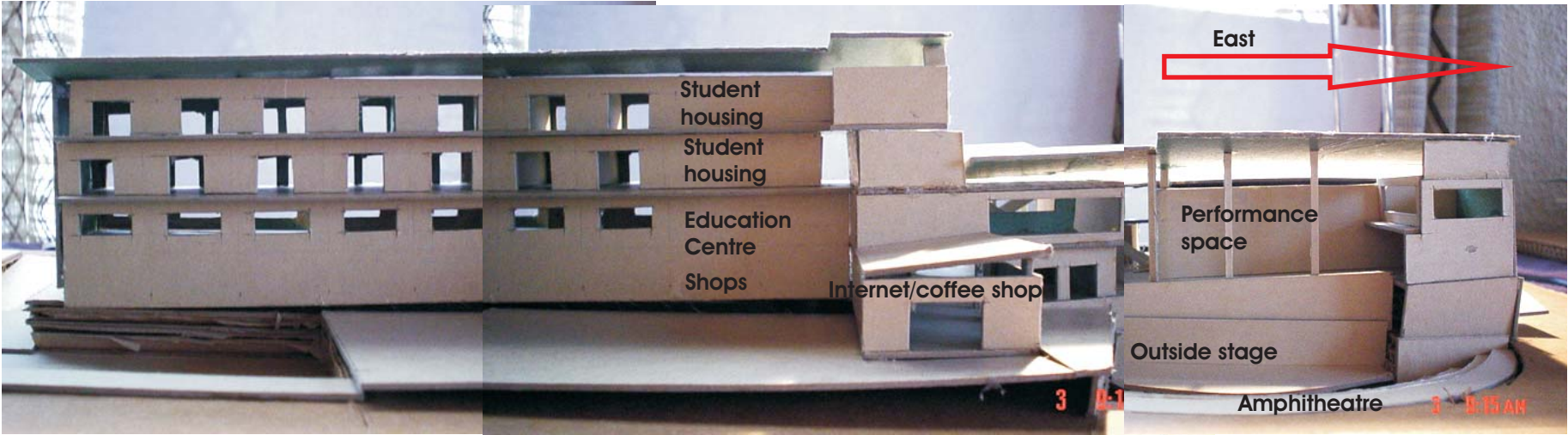


Fig 187. Southern facade

The final concept, accessibility:

The second concept showed problems concerning accessibility from the South. The amphitheatre itself needed to be responsive to two directions; looking onto the outside stage area and towards the square. The east-west orientation of the performance space changed to a north-south direction. This changed the stage into a double-sided space. The stage is now an "open stage" which can be viewed from the bleacher seating or the amphitheatre. The stage extends to and outside stage. This creates a different performance environment to the usual, drawing the public space into the building. The use of the movable acoustic panels allows this multi-functional usage of space.

In the final concept the southern boundary became more accessible towards the square. The coffee shop opens up towards the square and the first floor looks out onto the outside stage area. The eastern edge containing the trading stalls became more defined.

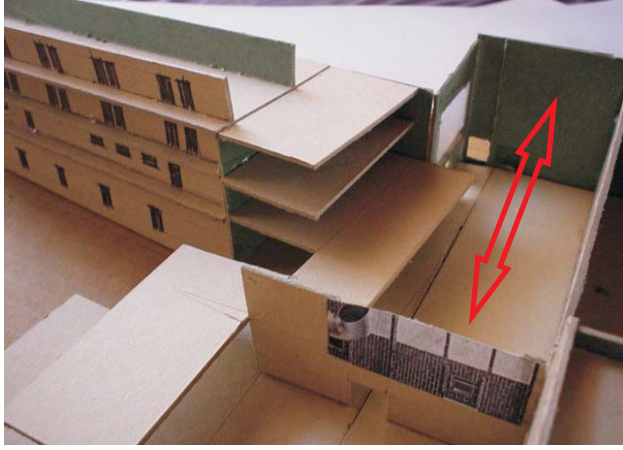
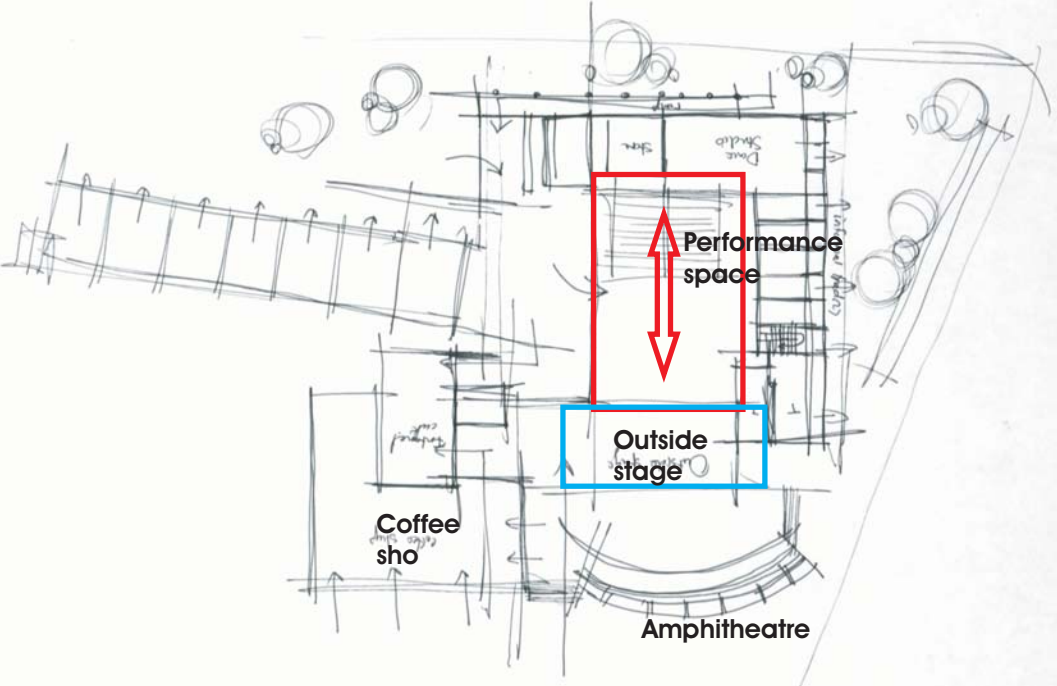


Fig 188. New north-south orientation of the performance space



Fig 189. The outside stage creates a different performance environment

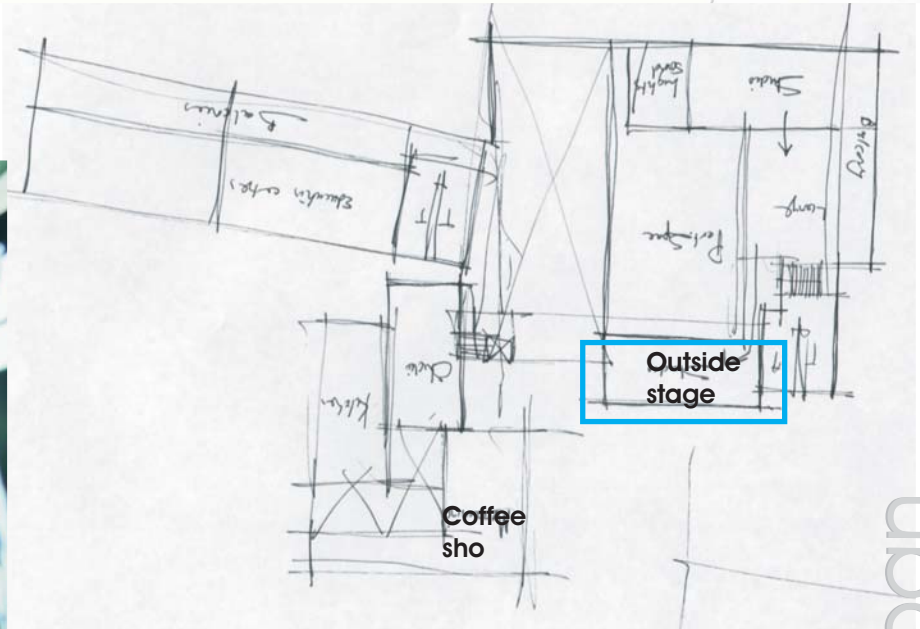


Fig 190. Final concept: sketch plan development

Development of the section:

The development of the section involved seeking solutions for spatial experience, views and the establishing of a human-scaled environment.

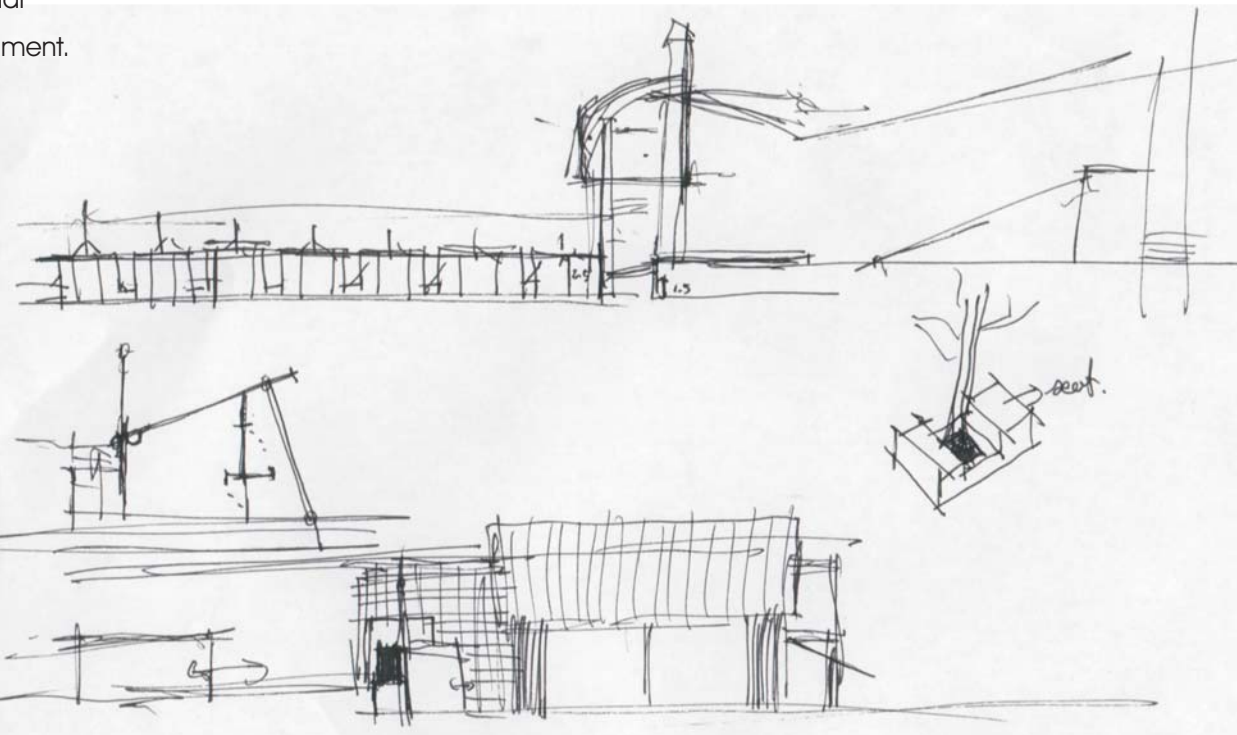
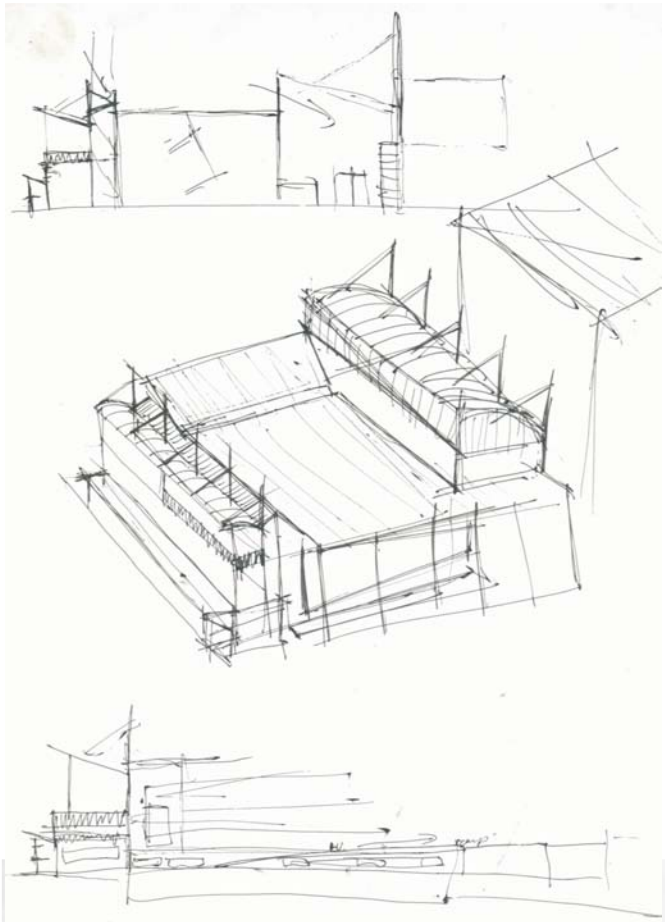


Fig 191. Development of the section

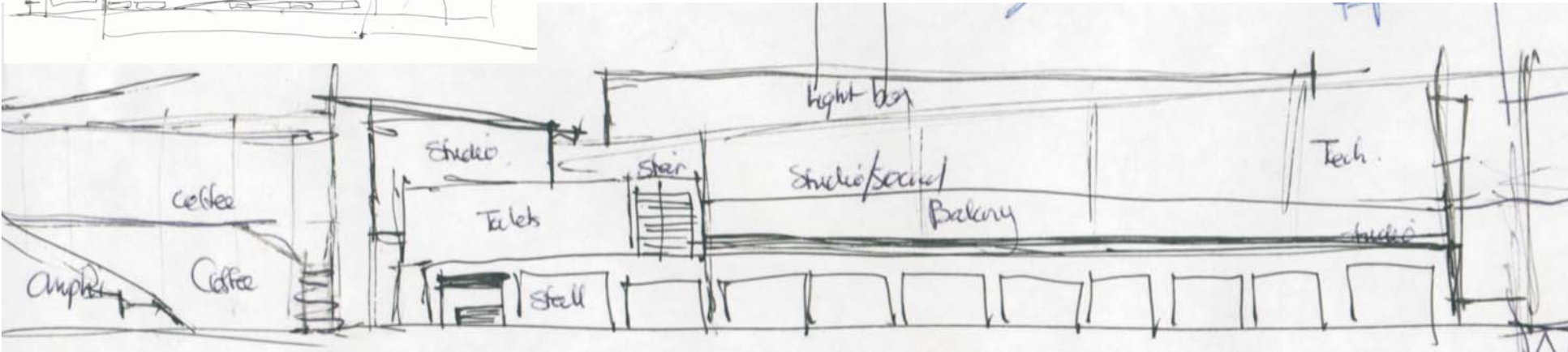


Fig 192. Development of the eastern elevation

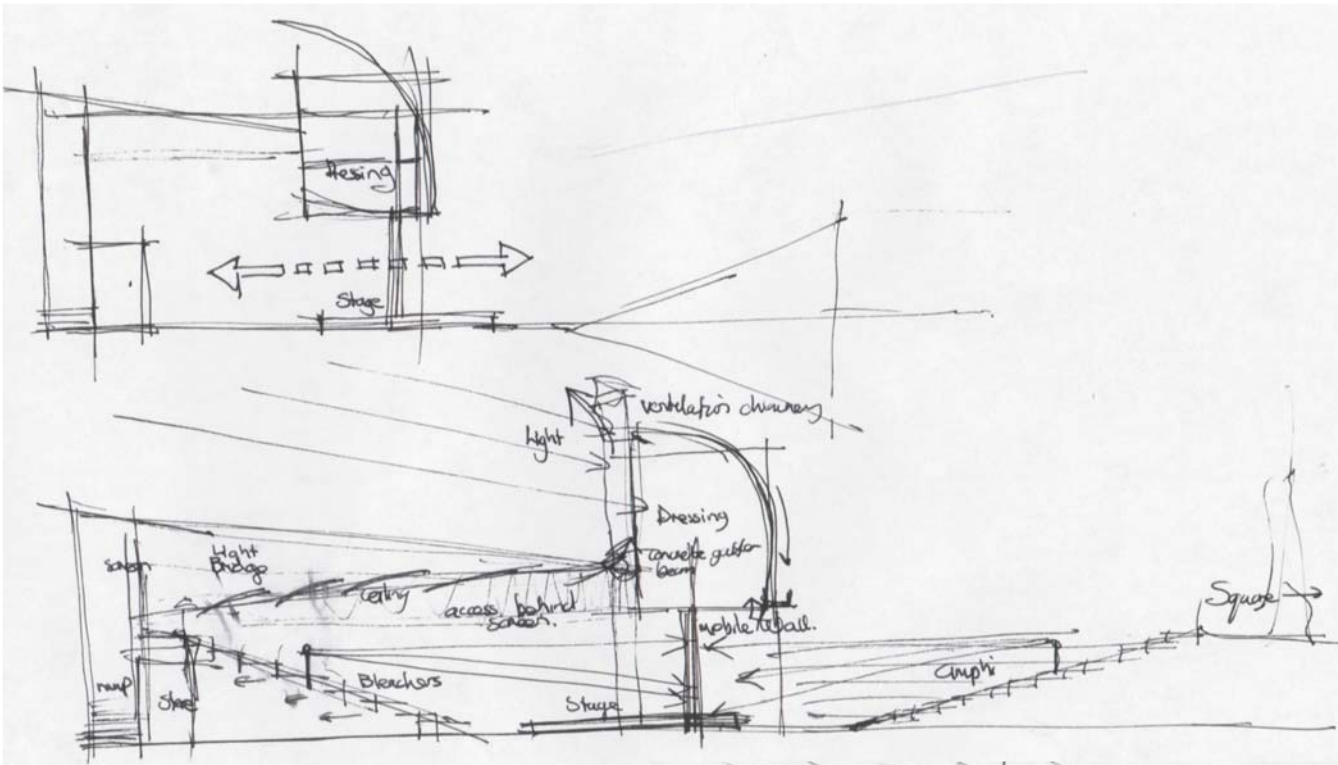
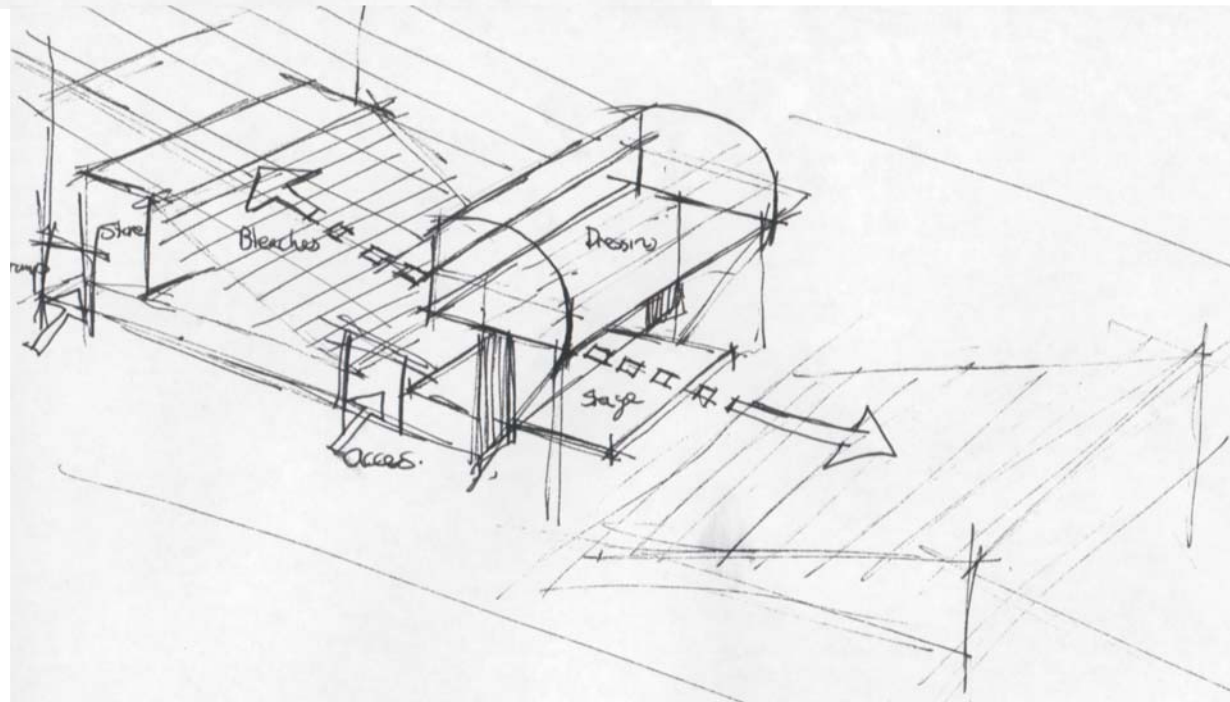


Fig 193. Development of the section



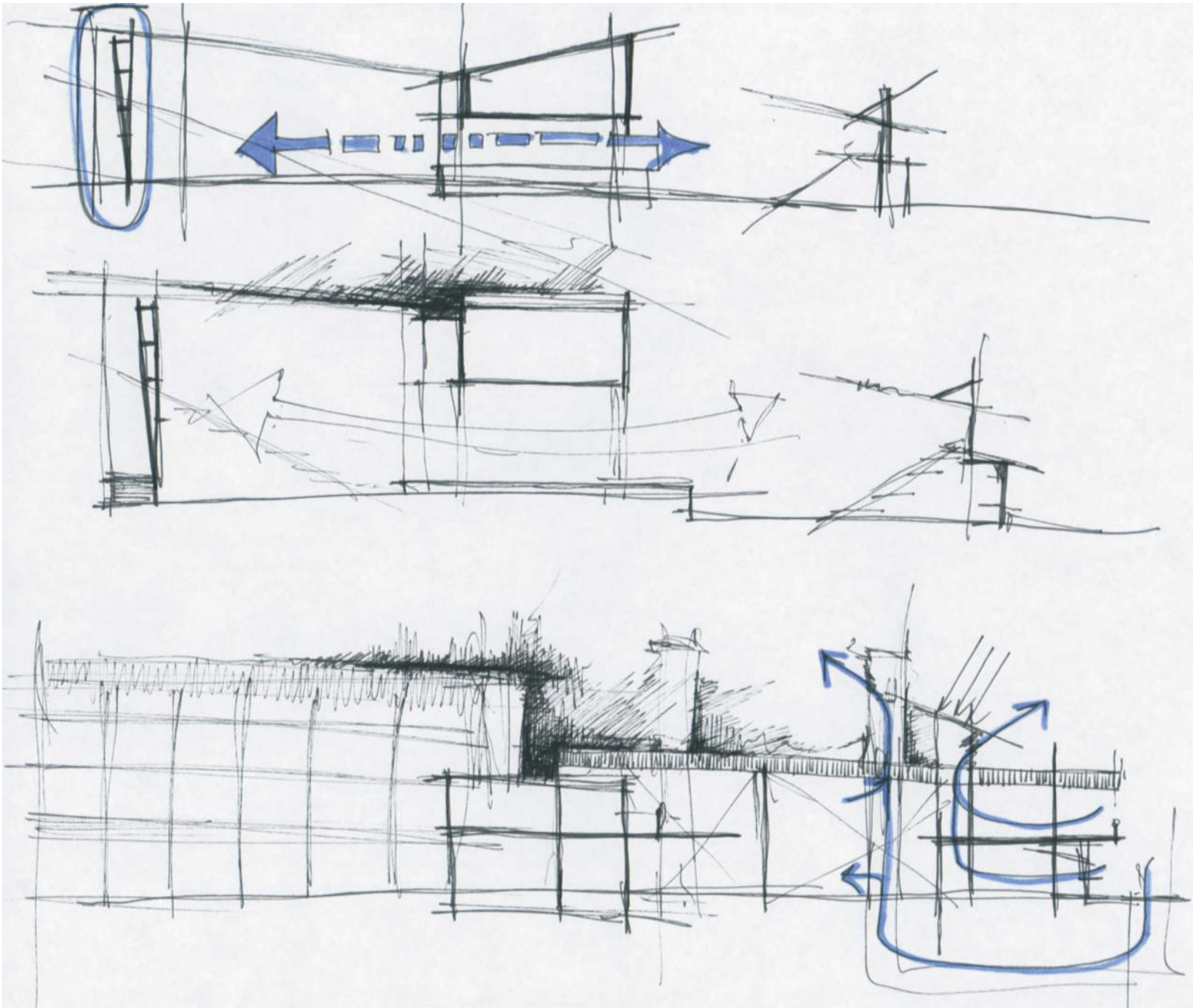


Fig 194. Development of the section

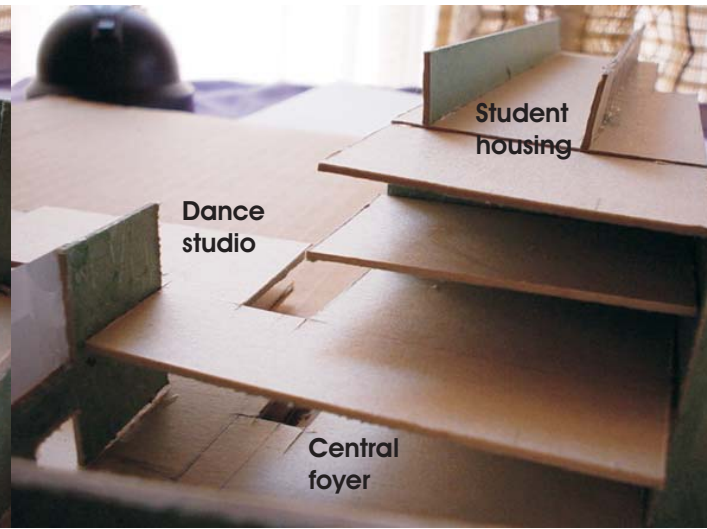
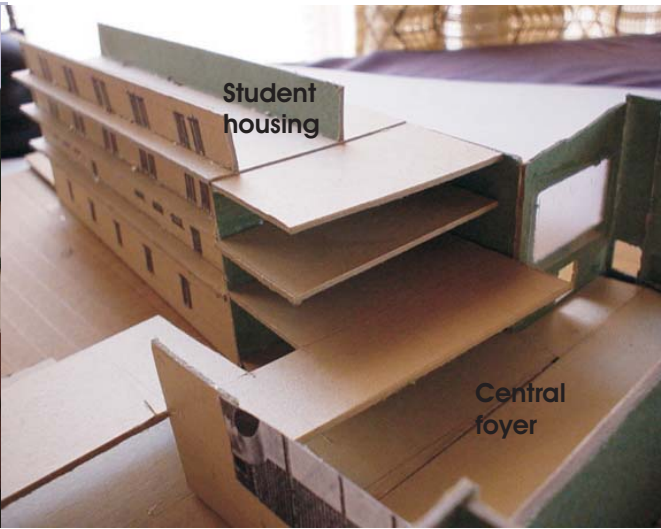
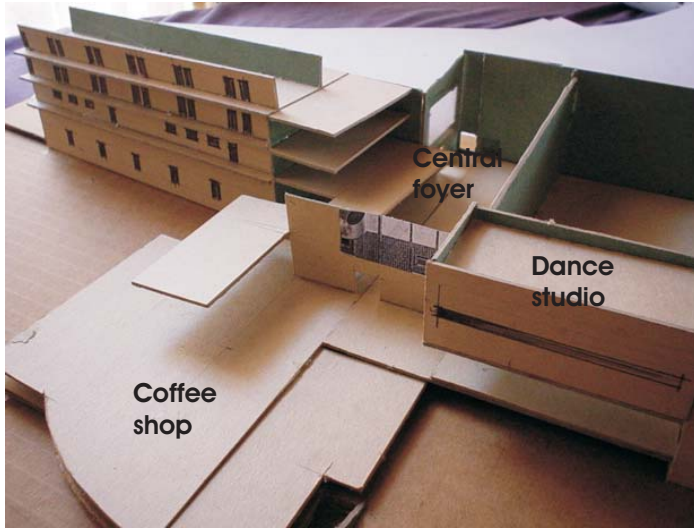
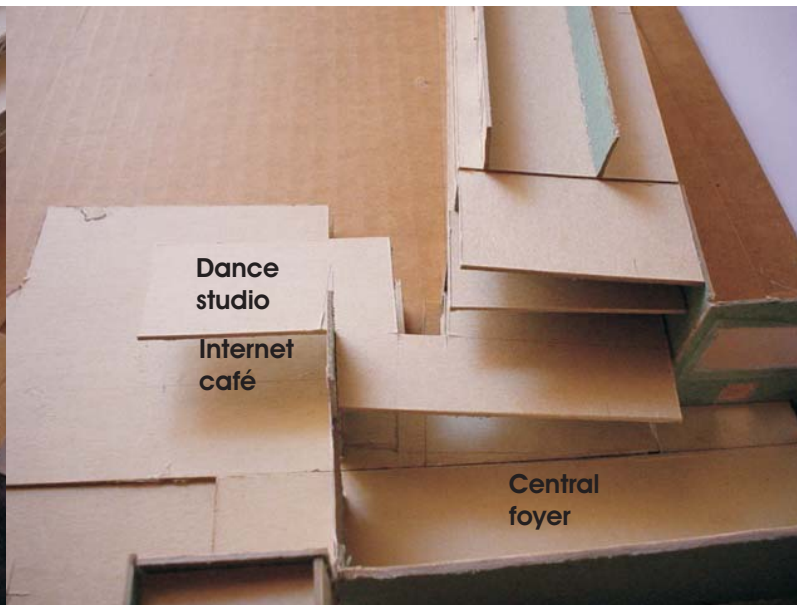
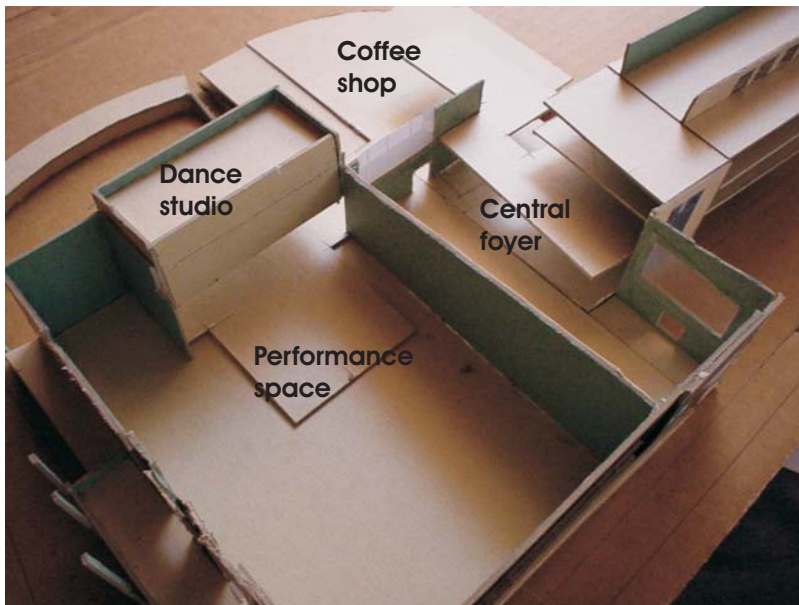


Fig 195. Three- dimensional development of the final concept.



Development of details:

Movable acoustic panels were needed to separate the internal performance space from the outside stage. This enables the performance space to accommodate uses during the day and night. These panels rotate along an axis to be stacked together at the side walls of the stage. A pen runs in a guiding channel at floor level to keep the panel stable.

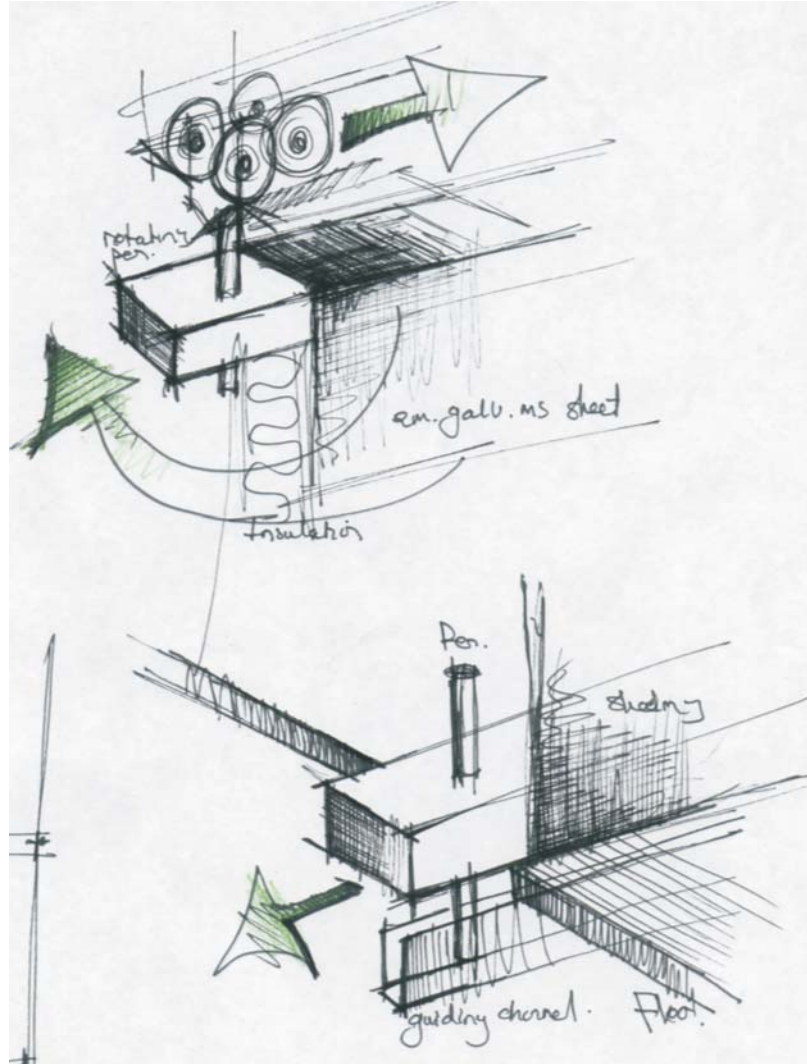


Fig 196. Concept drawing of the panels

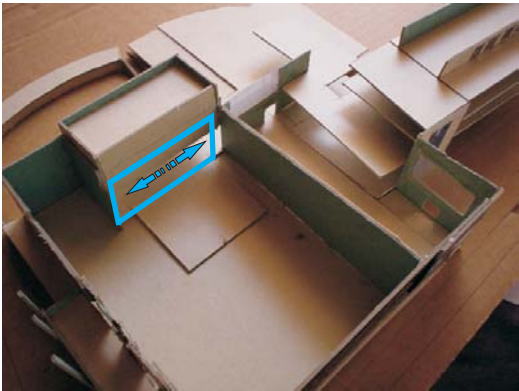


Fig 197. Location of the panels

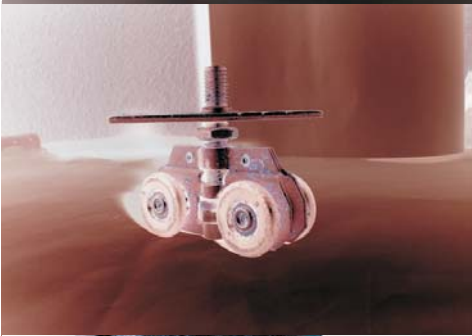
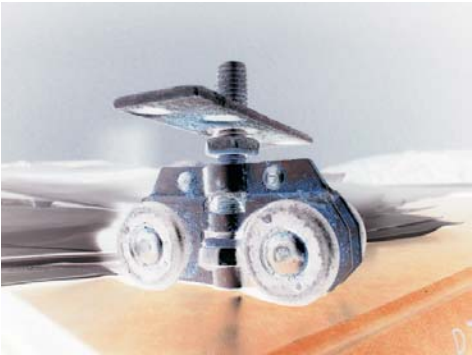
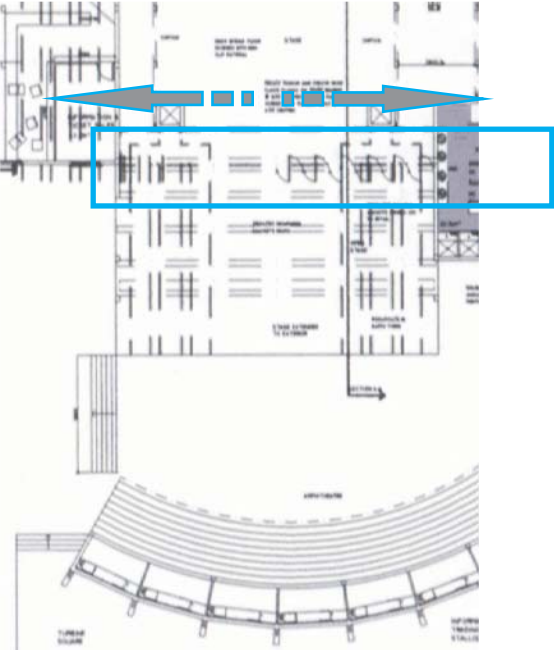


Fig 198. Rotating system with wheels

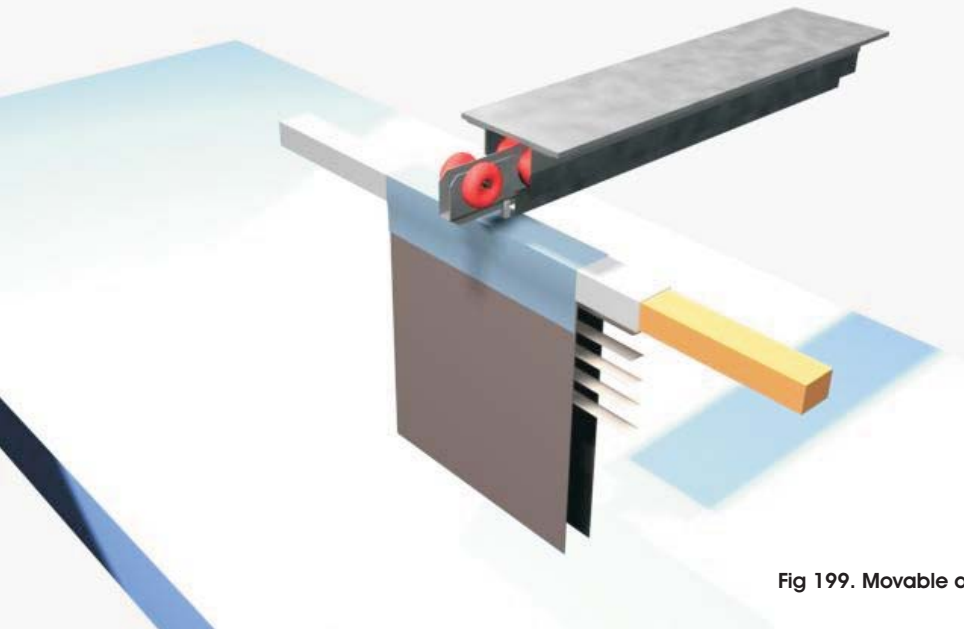
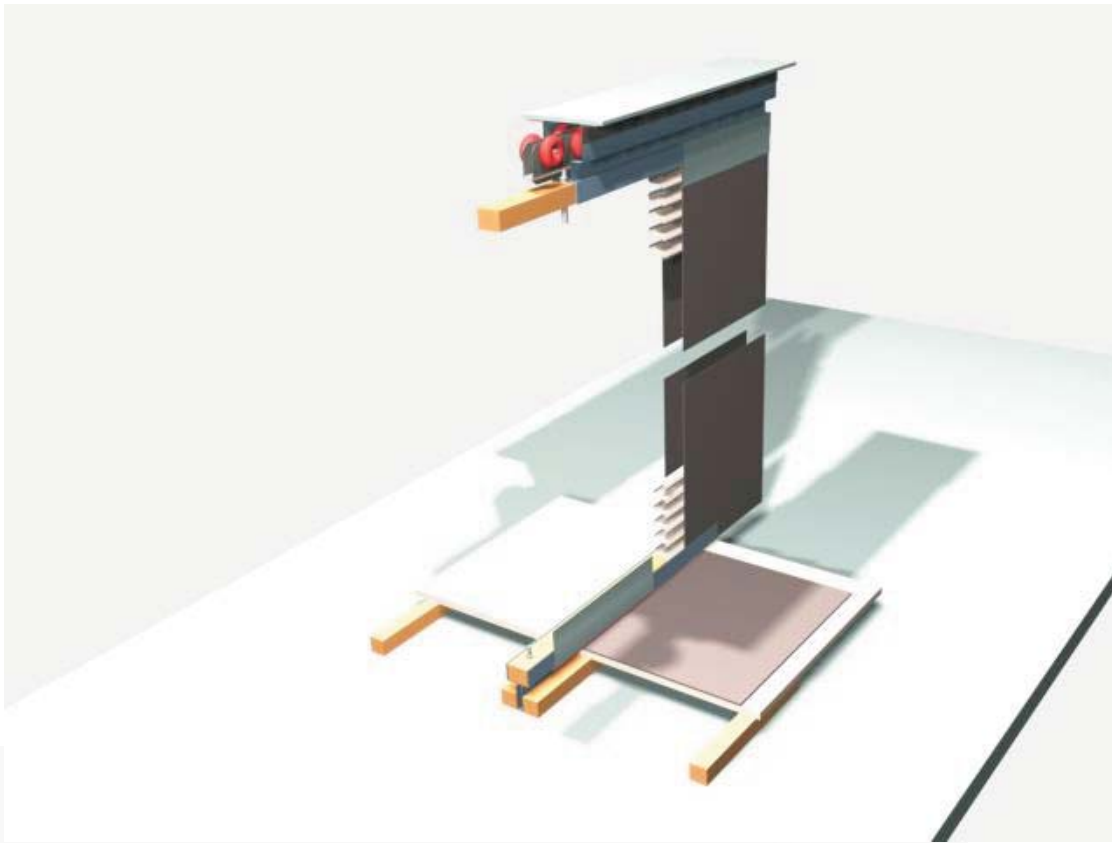


Fig 199. Movable acoustic panel.

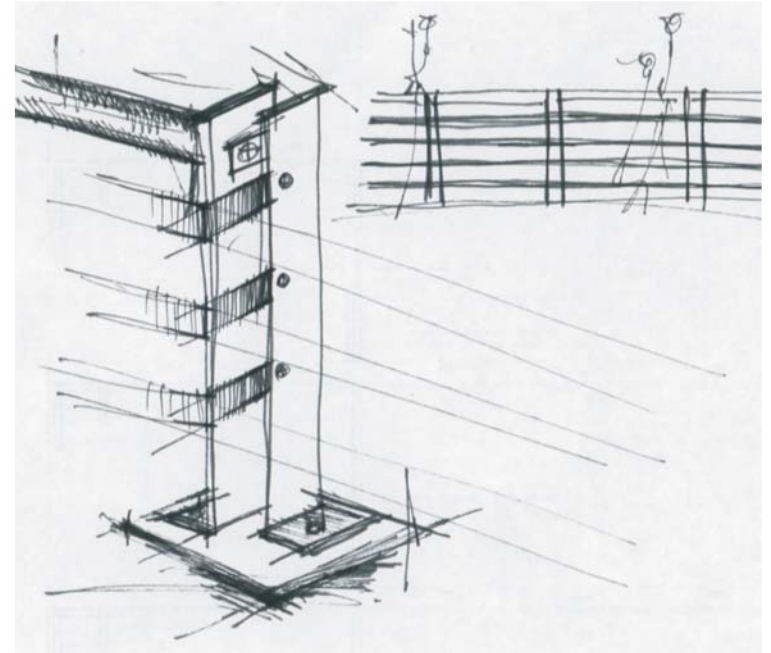


Fig 200. Concept drawing of the steel balustrade.

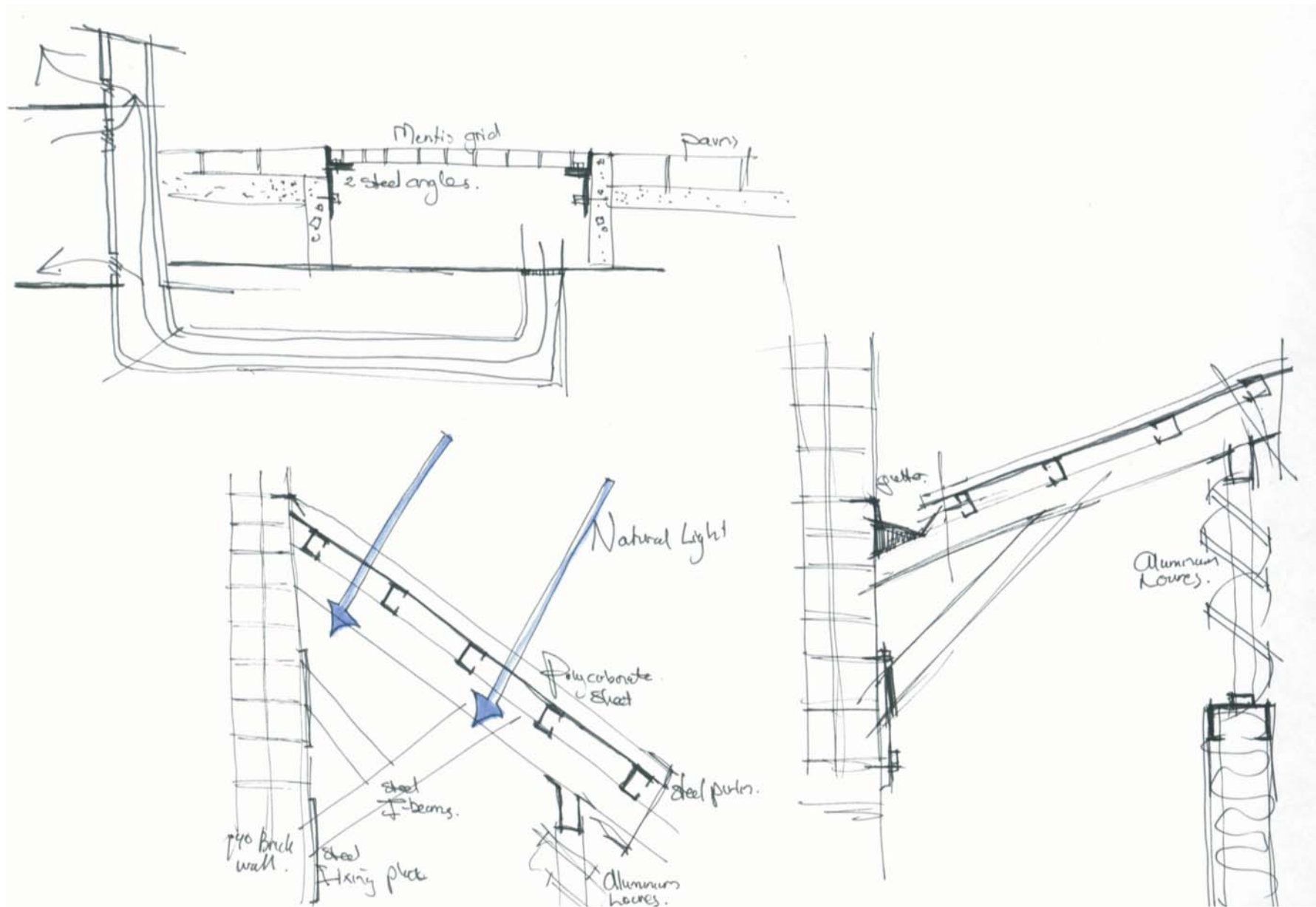


Fig 201. Concept drawings of the details.

Reflecting context in the details, historical context:

The building is situated next to the Turbine Hall. This historic building was the first coal-fired power station in Johannesburg. This building is now Johannesburg's newest music venue. The broken windows are kept in place as a reminder of the building's haunted past. It was important that the new building should be designed in respect of the historical context. An analysis and reinterpretation of historical clues ensured that the elevation treatment and

facade modulation reflected the historical context. The shape of the Turbine Halls' windows has a 1:1.5 ratio. This proportion is expressed in the design of the sound-absorptive screen running along Jeppe Street. Rectangular apertures are punched through the panels in an erratic, scattered manner to reflect the broken windows of the Turbine Hall.

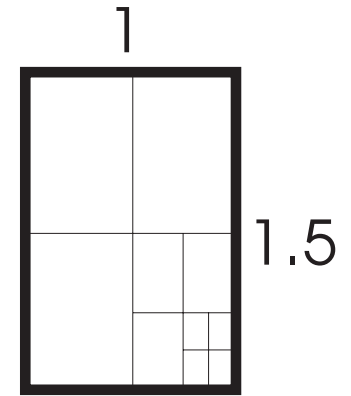


Fig 203. The 1:1.5 ratio of the windows.



Fig 202. The broken windows of the Turbine Hall.

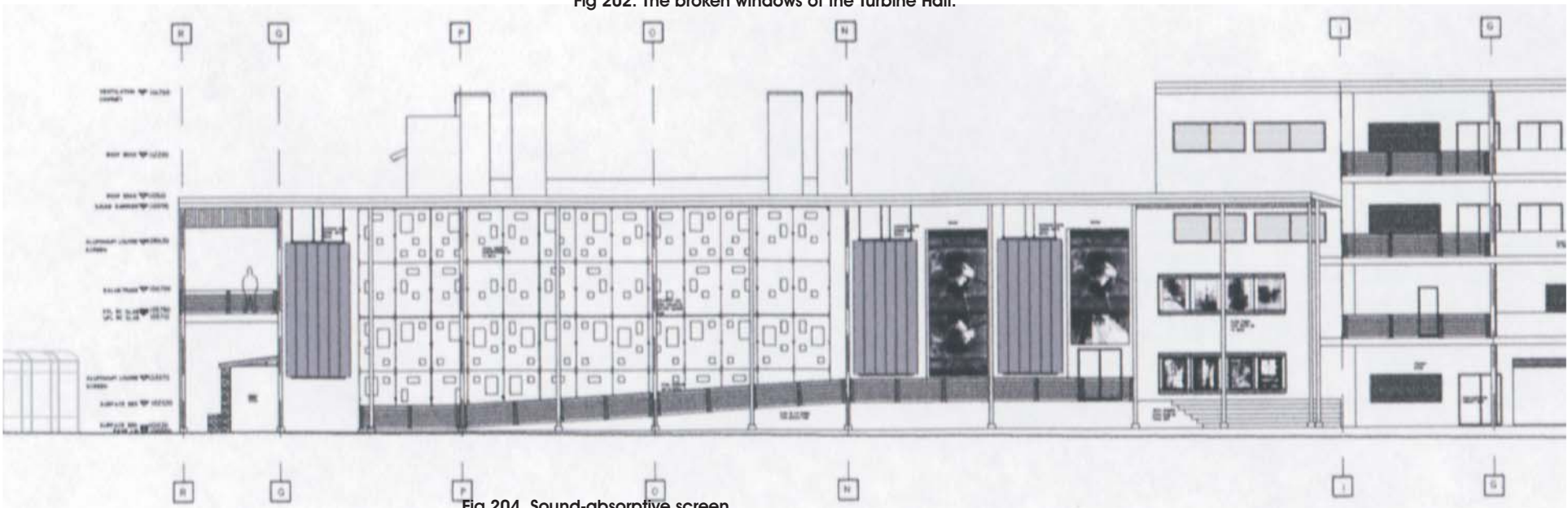


Fig 204. Sound-absorptive screen

Reflecting context in the details, visual art for urban regeneration:

“Transforming the City of Johannesburg into a huge art gallery, attracting local, national and international attention ... This intervention represents an unusual affirmation of the importance of arts and culture to the life of a city; not only has this awakened a new sense of energy and dynamism in the public and private sector, it has also taken South African contemporary art into the public arena.” (Ludman, 2003)

Business and Arts South Africa honoured the city of Johannesburg for its campaign to use art for urban regeneration. This innovative and imaginative form of art sponsorship was designed to ignite urban regeneration and to draw people back into the inner city.

Johannesburg became an outdoor art gallery when the “JHB ART CITY” visual arts exhibition Wall Project went on show during the World Summit on Sustainable Development in 2002. Works of art by South African artists were enlarged and displayed on buildings in the city. The chosen works are scanned and enlarged without distortion to be displayed as massive murals on the sides of buildings or on billboard-style mountings. Originals of the works are displayed



Fig 205. The Turbine Hall dressed in canvas.

at venues around the city, like the Electric Workshop.

These art-in-the-city projects makes visual art more accessible to Johannesburg’s citizens in their every day lives. The displays beautifies the urban environment to a place people can be proud of.

This concept of treating building surfaces as canvases was extended to the glass facades in the new building. Glass panels (1.6m x 1.3m) contain sections of printed canvases, displaying images towards the outside and inside of the building. These panels containing the images are removable to change the contents. Mosaics are used throughout the building.

“We repudiate so-called easel art and all such art which springs from ultra-intellectual circles, for it is essentially aristocratic. We hail the monumental expression of art because such art is public property.” (Lipman, 2003:39)

This display of public art is a small step in healing a decayed city. It might not resolve real problems in the city like poverty, but it gives visibility to pressing communal issues. The displays serve as a medium of communication between people of different cultures who inhabit the same city.



Fig 206. Art works displayed on buildings in the city.

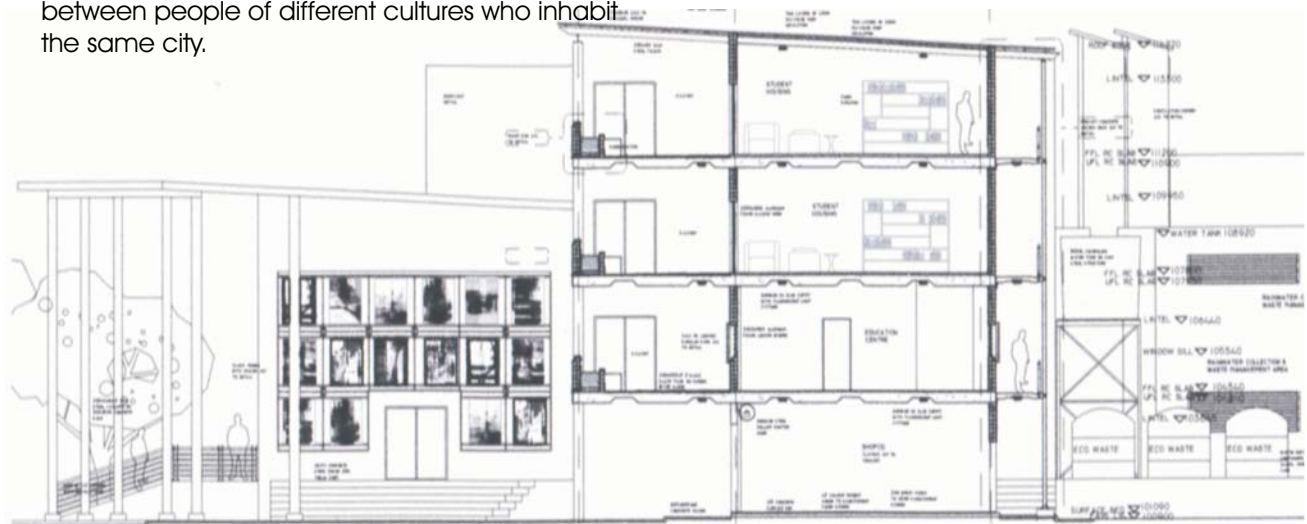


Fig 207. Glass panels with images.



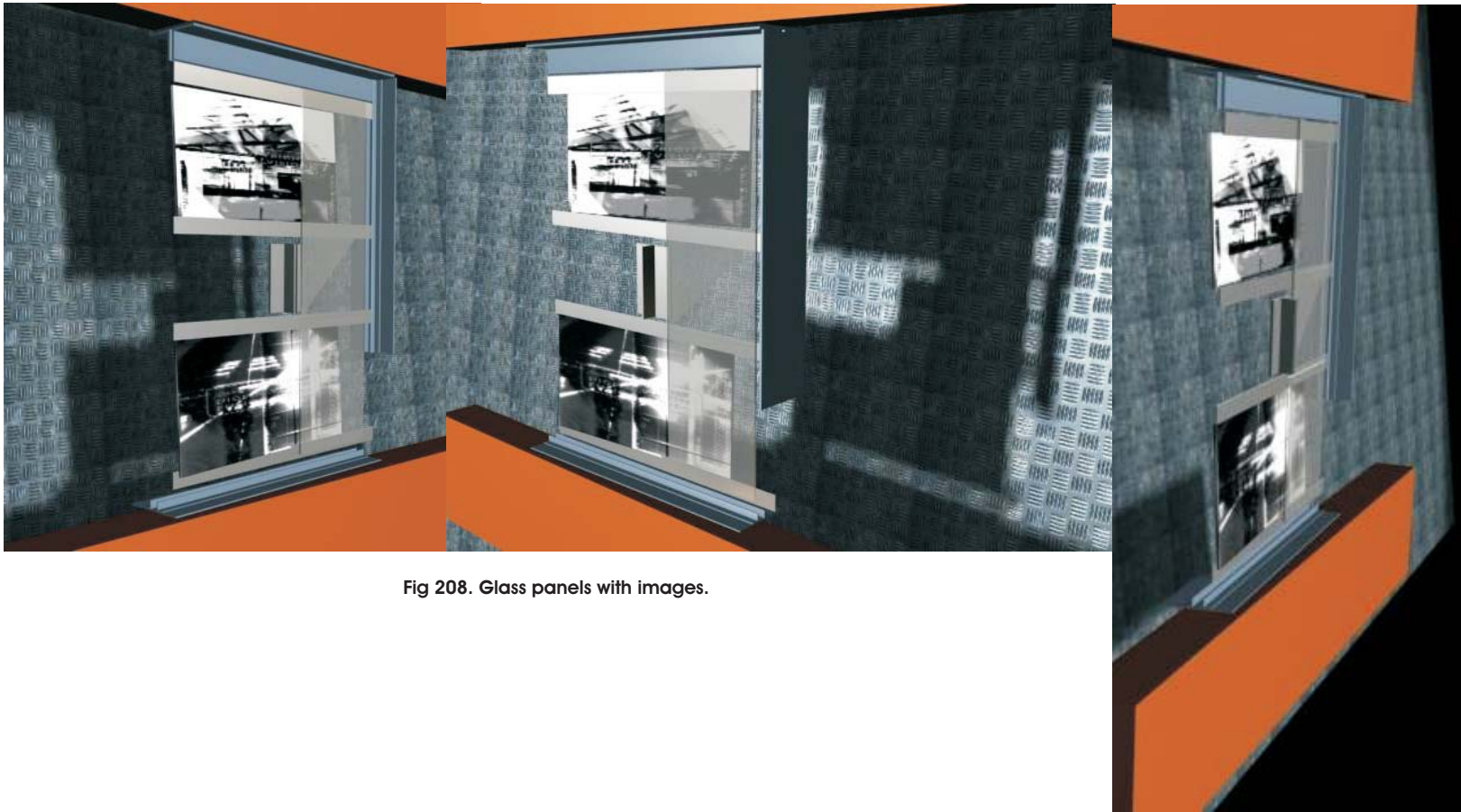


Fig 208. Glass panels with images.

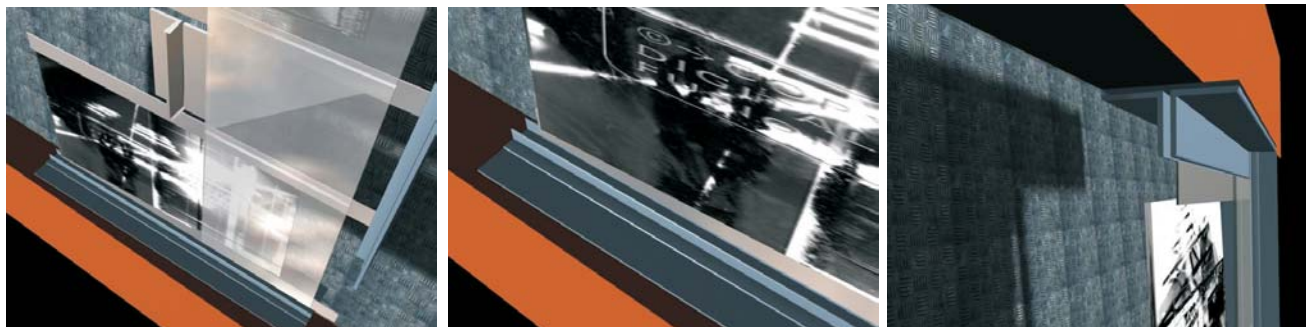


Fig 209. Glass panels: details.

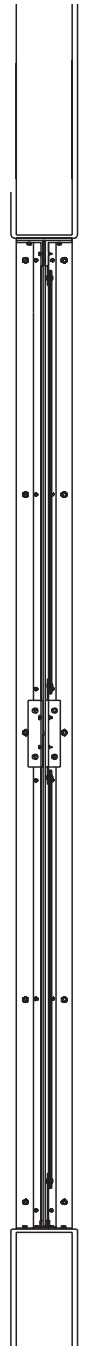


Fig 210. Section through glass panel.

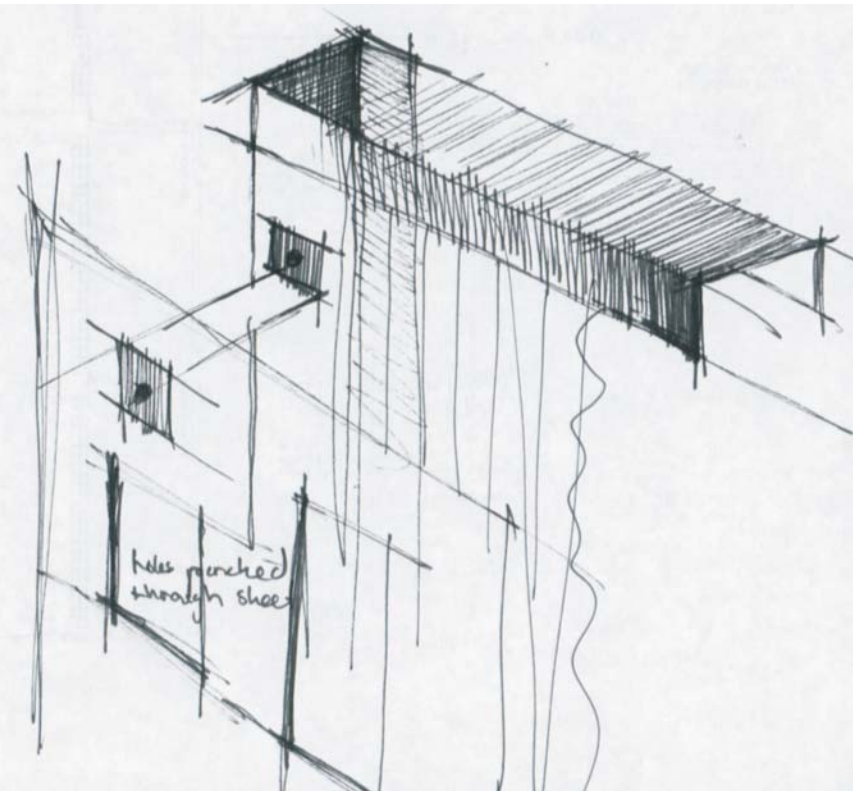


Fig 211. Concept sketch of sound-absorptive screen.



Fig 212. Sound-absorptive screen.

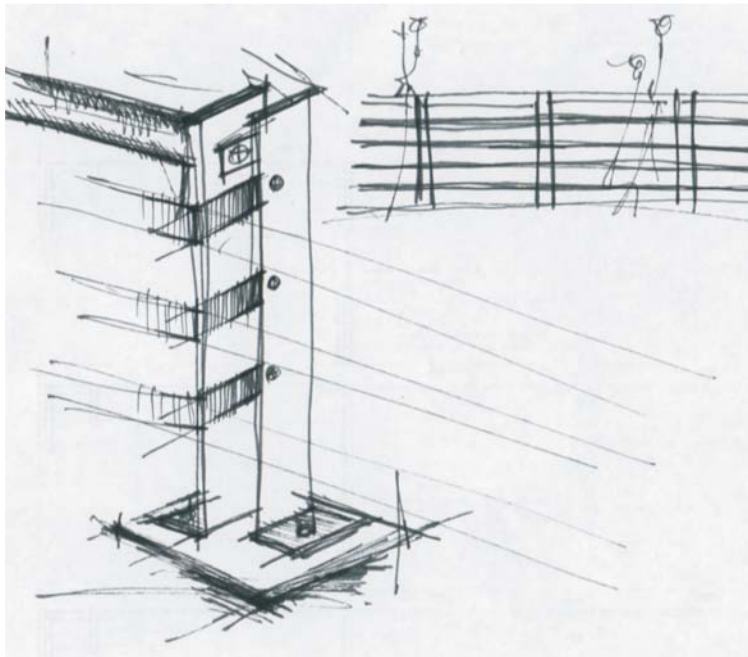


Fig 213. Concept sketch of balustrade.

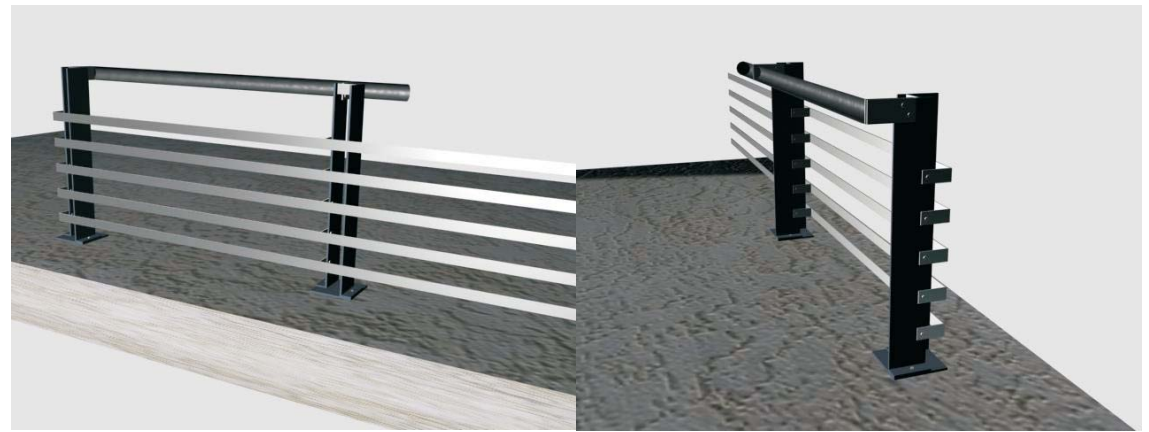


Fig 214. Steel balustrade.

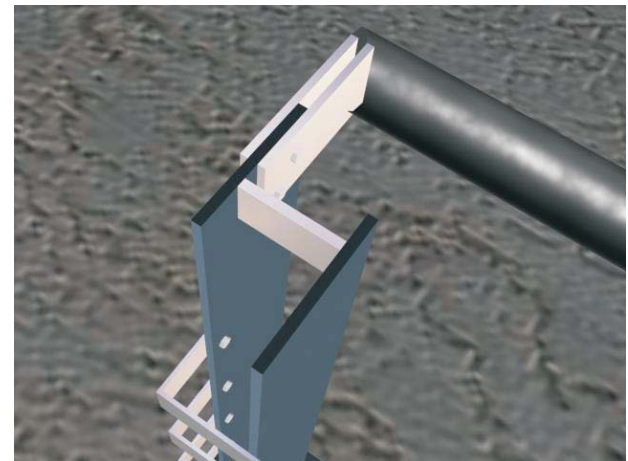


Fig 215. Balustrade: details.