

CHAPTER 4 : PRECEDENT STUDIES

4.1 PROJECT : ALEXANDRA HERITAGE CENTRE

Location : Alexandra, Gauteng, South Africa

Architects : Peter Rich Architects

4.1.1 Background

The design of the centre was driven by site constraints and a study of the organic nature of Alexandra's internalised yard spaces. The topography suggested a bridge building that links the two corners of the site, domestic and civic spaces are combined through the use of material and manipulation of spatial sequences. There is a tension between the crafted finishes and recycled materials that is derived of the **memory** of a resourceful township fabric. This project is open-ended and able to be reprogrammed for future uses.

(Decklar et al., 2006 : 46-49)



Figure 4.1
Bridge connecting two corners of site
(Decklar et al., 2008 : 48-49).



Figure 4.2 Polycarbonate sheeting, steel frame and brickwork
(Decklar et al., 2008 : 48-49).



Figure 4.3
Shows internalised yard spaces of Alexandra incorporated into new building spaces of site.
(Decklar et al., 2008 : 48-49).

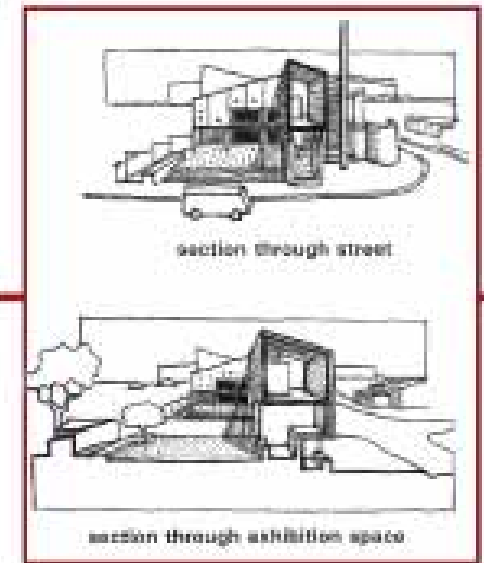


Figure 4.4
Sections showing relationship with street and bridge connecting opposite sides of site
(Decklar et al., 2008 : 48-49).

4.1.2 Influences

- The memory of materials used in the township influenced the material selection
- Spatial memory of internalised yards of township was reinterpreted in project.
- Adaptable steel frame building that allows for spatial flexibility and choice
- Reference of existing structures used in building.

4.1.3 Materials used

- Cement blocks
- Clay Bricks
- Steel H - Columns and I-Beams
- IBR Profile Metal Sheeting

4.2 PROJECT : CHAPEL OF LIGHT

Location : Vaal University of Technology, Vanderbijlpark, Johannesburg, Gauteng, South Africa

Architects : Comrie Wilkinson Architects and Urban Designers

4.2.1 Background

The chapel is situated in the centre of Vaal University of Technology. There is little context to respond to which made the development of a design concept difficult. Thus a conceptual and physical site had to be constructed within which to locate the building. The inside of the chapel is illuminated by direct and indirect sunlight. The red brick exterior is animated with light and shadow. The interior atmosphere is the opposite of the exterior which is calm and peaceful with its bagged wall finish, timber ceilings and dark slate flooring. (Joubert, 2009 : 210)



Figure 4.5
Elemental aesthetic of building
(Joubert, 2009 : 211).



Figure 4.6
Manipulation of light entering
building giving a calm atmosphere
(Joubert, 2009 : 211).

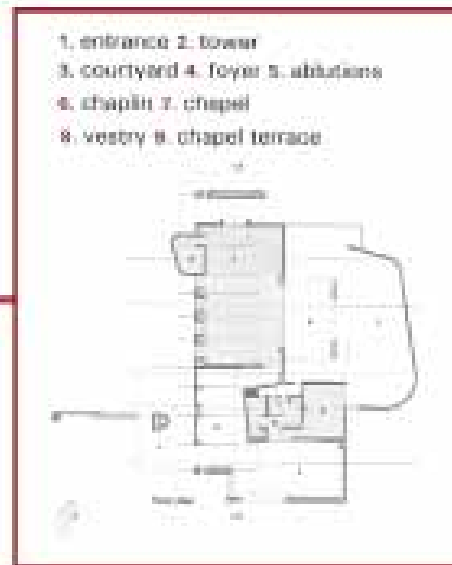


Figure 4.7
Plan showing flow of spaces
(Joubert, 2009 : 211).

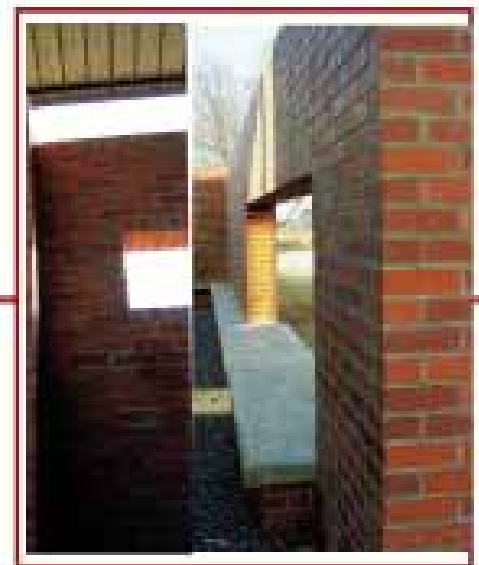


Figure 4.8
Exterior light is more animated
than interior
(Joubert, 2009 : 211).

4.2.2 Influences

- Little context to respond similar to the dissertation.
- Construction of a physical and conceptual site
- The manipulation of light and use of different materials to create different atmospheric exterior and interior spaces.
- Elemental aesthetic, clear distinction between horizontal and vertical elements.

4.2.3 Materials used

- Face Brick
- Bagged Masonry Wall
- Timber
- Slate
- Steel H-Columns
- Steel trusses
- IBR Roofing

4.3 PROJECT : FACULTY OF LAW BUILDING

Location : Hillcrest, University of Pretoria, Gauteng, South Africa

Architects : KrugerRoos Architects and Urban Designers

4.3.1 Background

The Faculty of law building is situated on the Northern part of the University of Pretoria's main campus. The space of the campus is drawn inside and imitated to create a well-defined and context conscientious outdoor space. It has the sense of a smaller campus within the larger campus. This concept is evident in the sketch - plans with a circulation spine connecting lecture halls, gathering spaces and courtyards, offices to the library and the administrative core. The four - storied circulation spine welcomes Pretoria's moderate climate into the interior spaces. The lofty roof allows light to penetrate the building and the tactically placed walkways control sun penetration (Joubert, 2009 : 70).

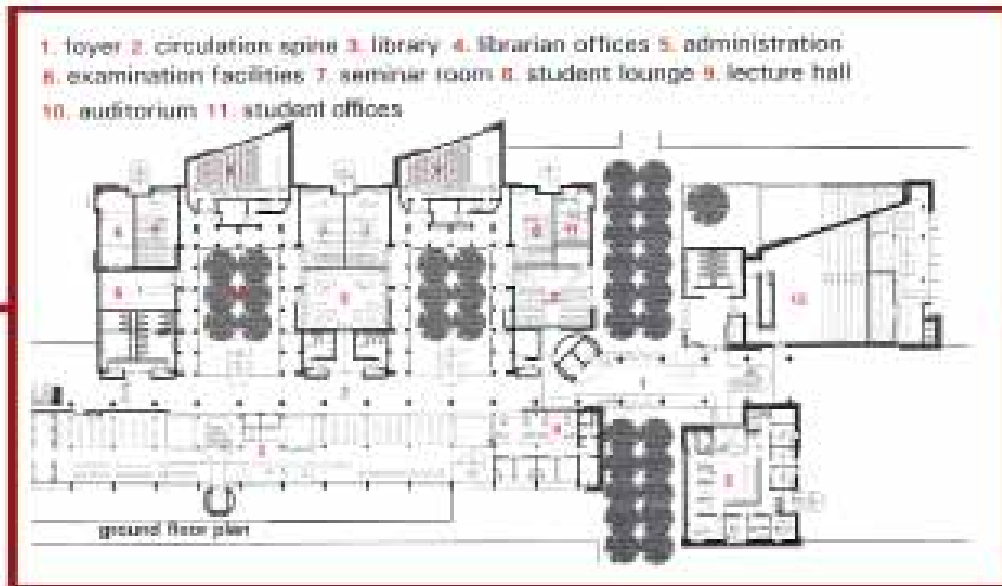


Figure 4.9
Plan showing 4 storey circulation spine(2) that creates mini campus atmosphere (Joubert,2009 : 211).



Figure 4.10
Interior showing lofty roof and walkways that control light quality into library (Joubert, 2009 : 211).



Figure 4.11
One of the interior courtyards with spiral staircases connecting different spaces atmosphere (Joubert, 2009 : 211).

4.3.2 Influences

- Context of a campus space interpreted on the interior of the building.
- Different atmospheres are achieved for interior and exterior.

4.3.3 Materials used

- Steel profiles
- Glass
- Plastered masonry walls
- Concrete

4.4 PROJECT : GUGULETHU MEAT MARKET

Location : Gugulethu, Cape Town, South Africa

Architects : CS Studio Architects

4.4.1 Background

The market is magnet for social activities that include music, food and interactions. The project consists of a large open space and a series of small enclosed spaces. The trading occurs underneath a large roof. The large open space opens up towards the street with an L-shape building wrapping the south-west boundaries. The scheme enhances the existing spatial pattern and doesn't alienate local traders.

(Smuts.1999:44-46)



Figure 4.12
Roof over market space with shops at the back.
Clear distinction between spaces and programme
(Smuts, 1999 : 44).



Figure 4.13
Market space opening up towards street edge.
(Smuts, 1999 : 44).



Figure 4.14
Plan showing flow of spaces into each other.
From left to right are shops into market into street
(Smuts, 1999 : 44).

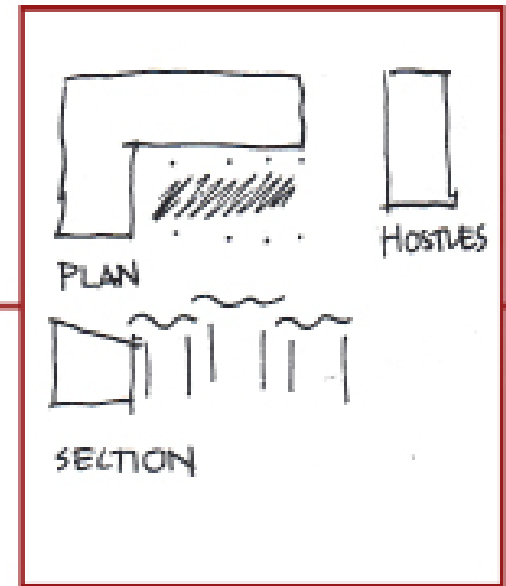


Figure 4.15
Conceptual sketches showing hierarchy and flow of spaces
(Smuts, 1999 : 44).

4.4.2 Influences

- Hierarchy of spaces that flow into each other. Shops into the market and the market onto the street.
- Distinction of spaces and programmes is clear.
- Tectonics of steel and concrete.

4.4.3 Materials used

- Steel profiles
- IBR sheeting
- Concrete
- Masonry

4.6 PROJECT : SOWETO CAREERS CENTRE

Location : Soweto, Gauteng, South Africa

Architects : Jo Noero

4.6.1 Background

The centre creates a community focus and relates well to its context, topography, site limitations and existing buildings on site. It has a variety of well designed spaces suitable for a mixture of functions. Materials were resourcefully selected and typical vernaculars of self built houses were used to demonstrate to the users the good aesthetic and functional performance potential thereof. The centre has a hybrid design that allows multi- functional use of spaces allowing the centre to be active most of the time (Slessor, 1994 : 22-29).



Figure 4.16
Top view of model. Note how interior spaces open up onto courtyards (Slessor, 1994 : 23).



Figure 4.14
Steel frame and IBR cladding allow for adaptable spaces (Slessor, 1994 : 23).



Figure 4.15
Smaller intimate scale creates transitions between interior and exterior spaces (Slessor, 1994 : 24).



Figure 4.16
Hybrid open space that opens up to larger courtyard. (Slessor, 1994 : 24).

4.6.2 Influences

- Construction of steel and IBR - profile metal sheeting and masonry brick walls
- The hybrid designed spaces create an open variety of functions within one complex development.
- Hierarchy of spaces. Small intimate scale to large open spaces.

4.6.3 Materials used

- IBR profile metal sheeting
- Steel columns
- Plastered finishes brightly painted masonry brick walls.

4.5 PROJECT : THOMASTON FARMER'S MARKET

Location : Thomaston, Newbern, USA

Architects : Rural Studio

4.5.1 Background

The Thomaston market is the rural studio's first foray into architecture to advance economic and town development. It is a civic building that hosts a farmer's market and is mainly columns and a roof, a butterfly of corrugated metal with a prominent drain at its centre. The roof's support is ribbed metal purlins, horizontal steel piping and piped steel columns. (Oppenheimer. 2002 : 134-137)

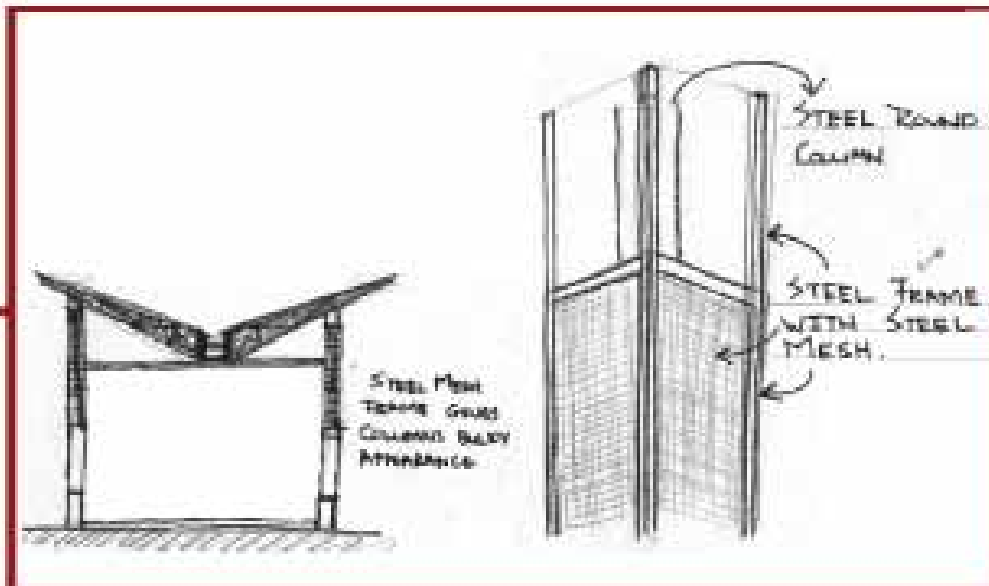


Figure 4.17
Sketch that illustrates the use of steel frame with mesh to create bulky aesthetic (Author, 2010).



Figure 4.18
Columns with bulky appearance and roof with light aesthetic (Oppenheimer, 2002:134).



Figure 4.19
Construction of columns with concrete, steel and steel mesh to create bulky appearance more economic than column made of only concrete (Oppenheimer, 2002:134).

4.5.2 Influences

- Round steel columns are fixed to concrete footing and surrounded with steel mesh frames which gives it its bulky appearance.
- The roof is light in appearance contrasting with the bulky columns. The manipulation of steel components can assist in the visual appearance of certain elements.
- Well balanced scale for type of market needed in dissertation.

4.5.3 Materials used

- Steel columns and trusses.
- Steel wire mesh.
- Painted cast in-situ concrete.

