

CHAPTER 6 : DESIGN DEVELOPMENT

SITE DEVELOPMENT

6.1 CONNECTIONS

Based on the group framework (see chapter 2,2.6) and existing site conditions there are four important links to the selected site namely : Belle Ombre station to the North, the Bus Depot South of the site, 7th street on the Western edge linking Belle Ombre and the Bus Depot and Grand Street on the North-ern edge of the site which is a pedestrian walkway linking with the CBD. See Figure 6.1.



Figure 6.1 Site map with pictures showing major feeder routes and important links. Photos by and manipulated author 2010 (Munitoria,2010).

6.2 STREETS AND SURROUNDING BUILDINGS

6.2.1 Streets

Marabastad has two major vehicular feeder roads namely Bloed Street to the South of the selected site and Boom Street (Figure 2.15) a block North of the site. These two routes take people into the CBD from the West of Pretoria and out to the West from the CBD. On the edges of these streets are wide sidewalks that

allow pedestrians to travel in and out of the CBD. This indicates that there is a large number of people moving through Marabastad and close to the selected site. To add to the quantity of people moving past the selected site is 7th Street which is a direct road from Belle Ombre Station (figure 2.14) to the Bus Depot and Grand Street which according to the urban framework links Marabastad with the CBD with its pedestrian character.

The framework suggests upgrading the sidewalks, making it 2-2.5m wide and keeping the colonnaded veranda character that exists within Marabastad (see figure 6.2 and also see urban framework).

6.2.2 Surrounding Buildings

The adjacent buildings to the selected site are mostly 1-2 storeys high which is appropriate to the suggested 3 storey maximum height of the urban framework. It creates a small intimate scale which is also evident in the memory of Marabastad architecture. There are many dilapidated buildings in this area like the structure on the corner of 7th and Grand Street (See 6.3.a). Buildings that are in better condition are mostly used for small retail (See figure 6.3.c). The Mariammen (Figure 2.12D) temple that is a block West of the selected site is 3 storeys high and visible from site. It is also a reminder of the memory of this previous Indian location (See figure 6.3.b). The surrounding existing buildings are mostly walled architecture constructed as gable walls using face brick or plastered finish which contrast with the memory of Marabastad where masonry construction was prohibited.

On the Eastern side of the site is the Recycling Centre from the urban framework. This project uses mainly materials like portal frame steel structures and masonry walls.

On the Southern edge is the Jazz Park's which brings some green space to this area. The jazz park's hard surfaces and structures are constructed with interlocking paving and red facebrick.

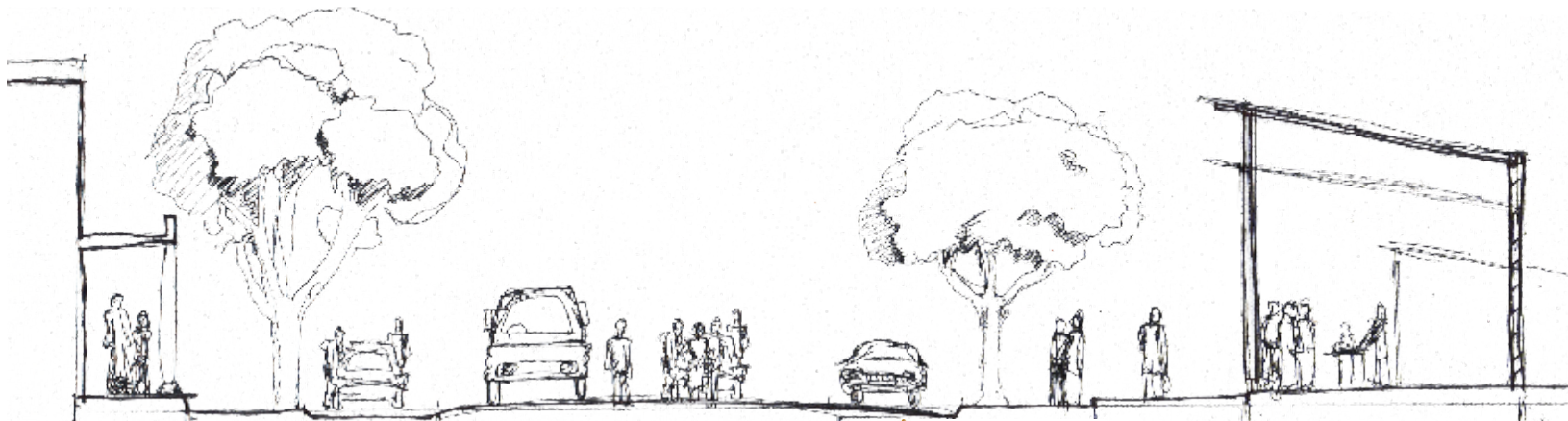


Figure 6.2
Section through
7th Street. Notice double sidewalk,
with sidewalk closest to building that
keeps colonnaded veranda character
(Author, 2010).

6.2 Streets and Surrounding Buildings



Figure 6.3.a
Half demolished structure corner of 7th and Grand Street. See brick and plaster material use (Author, 2010).



Figure 6.3.b
Merriamen Temple in 6th Street. Notice detailed facade and use of colour (Author, 2010).



Figure 6.3.c
Existing retail in 7th Street opposite site. See use of face brick and intimate scale (Author, 2010).

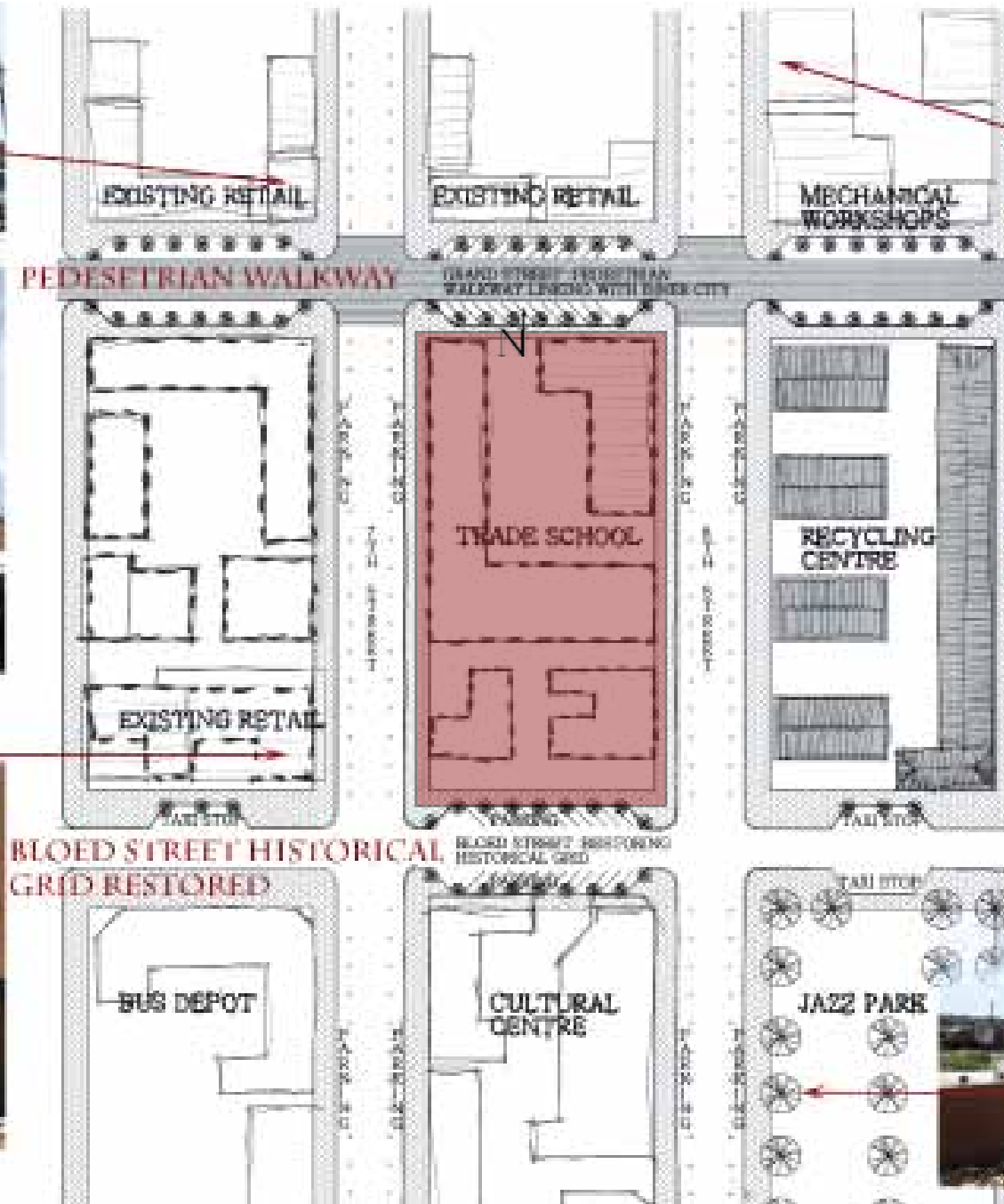


Figure 6.3.e
Corner of 8th and Grand Street (Author, 2010).



Figure 6.3.f
Proposed Recycling Centre. Notice portal frame structures (Kunz, 2007).

Figure 6.3.g
View from Jazz Park. See existing structures of IBR-sheeting and face brick (Author, 2010).



EXISTING RETAIL ON
7TH STREET.

MARIAMMEN TEM-
PLE ON 6TH STREET

EXISTING RETAIL ON 7TH
STREET. NOTICE WALLED
ARCHITECTURE AND USE OF
GABLE WALLS

JAZZ PARK ON
SOUTHERN EDGE OF
SELECTED SITE



SELECTED SITE. NOTICE
CAVITIES AND
DILAPIDATED
STRUCTURES

DILAPIDATED ADJACENT
STRUCTURES. USED AS RETAIL
AT PRESENT. NOTICE ROOF
SHAPE AND STRUCTURE.

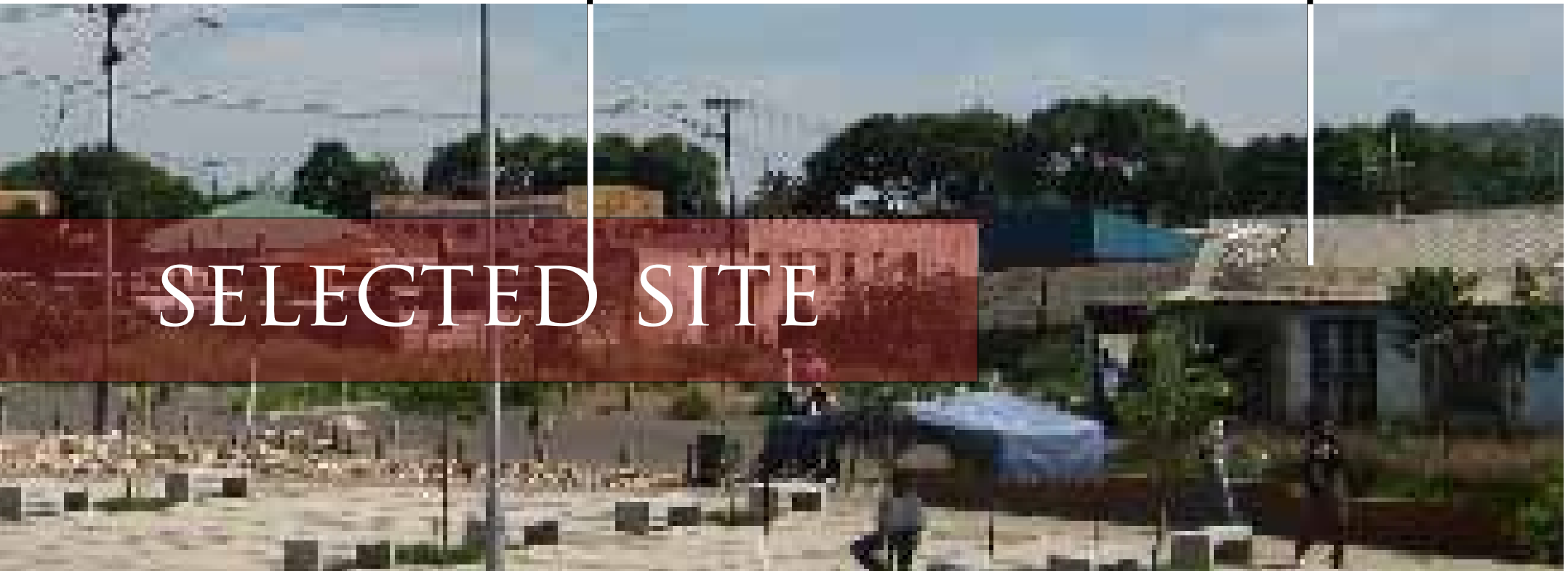


Figure 6.4
Site view of selected site and
surrounding buildings
(Author, 2010).

6.3 HIERARCHY OF SPACES ACCORDING TO MEMORY

The selected site had four buildings, a courtyard and a pathway on site that was discovered through the figure ground study. It is important to respect these previous spaces so that the intimate scale, the internal courtyards and movement patterns of Marabastad may be retained.

To give some order to the memory on the site each of these spaces needs a ranking in order to determine where the program and functions will be allocated.

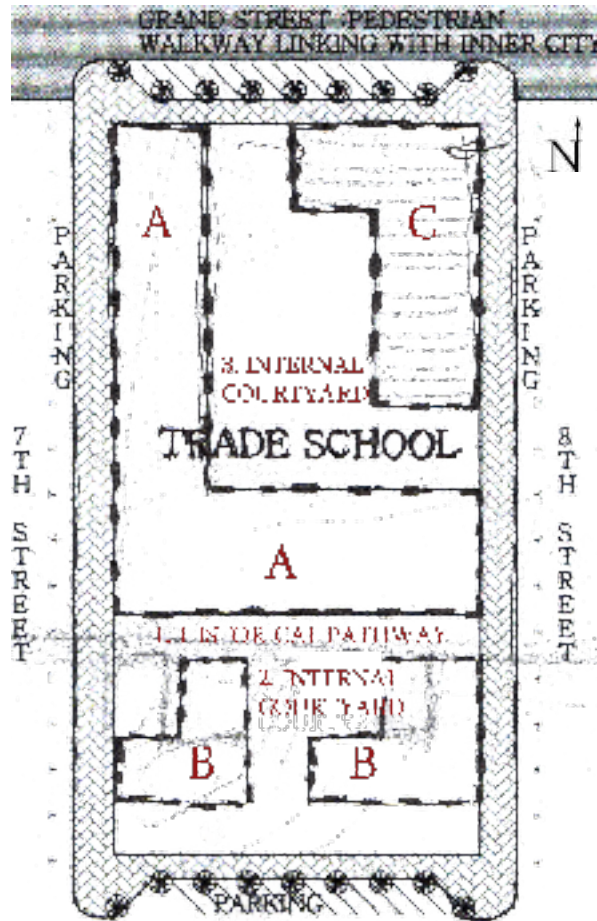


Figure 6.5
Site plan with the lines of previous buildings on site and the exterior spaces it created. This sketch also shows the allocation of hierarchy on site
(Author, 2010).

1. Historical Pathway

This route goes through the selected site and the two adjacent sites. This path creates a buffer or transitional space that divides the site into two sections. This is ideal to create the two categories named in the concept development chapter namely noisy and quiet.

2. Internal Courtyard (Noisy)

This courtyard between two buildings becomes a transitional space from the pathway to the adjacent buildings. It also allows for adjacent spaces to open up to it that creates a larger space. An even larger space could be created if A and B opens up to this courtyard.

3. Internal Courtyard (Quiet)

The second courtyard is bigger than the first that could be used by students as a quiet or private courtyard. The adjacent spaces can also open up to this space to create a variety of spatial use.

A. Large L-shaped building

This L-shaped building that had previously been on the site created an edge along 7th Street which didn't accommodate the many feet moving along this edge. It also neighbours the historical route and should represent the intimate scale of a pathway in Marabastad. Its central position is ideal to have a buffer space between the noisy and quiet parts of the site.

B. Two smaller L-shaped buildings on Southern edge

These two previous buildings created an edge for internal courtyard 2 and also created an edge condition on the Western and Eastern sides of the site.

C. Existing L-shaped building on Northern edge

This is the only existing structure on site. It is not a heritage building and is very dilapidated and structurally unsound. It does however enclose the same space of the previous building that was on site. This structure will be demolished and its material used as pavement material in the courtyard and the sidewalks of the site.

6.4 ALLOCATING THE PROGRAM

Considering the memory of the selected site, the quiet and noisy sections and the hierarchy on site the program or function is allocated.

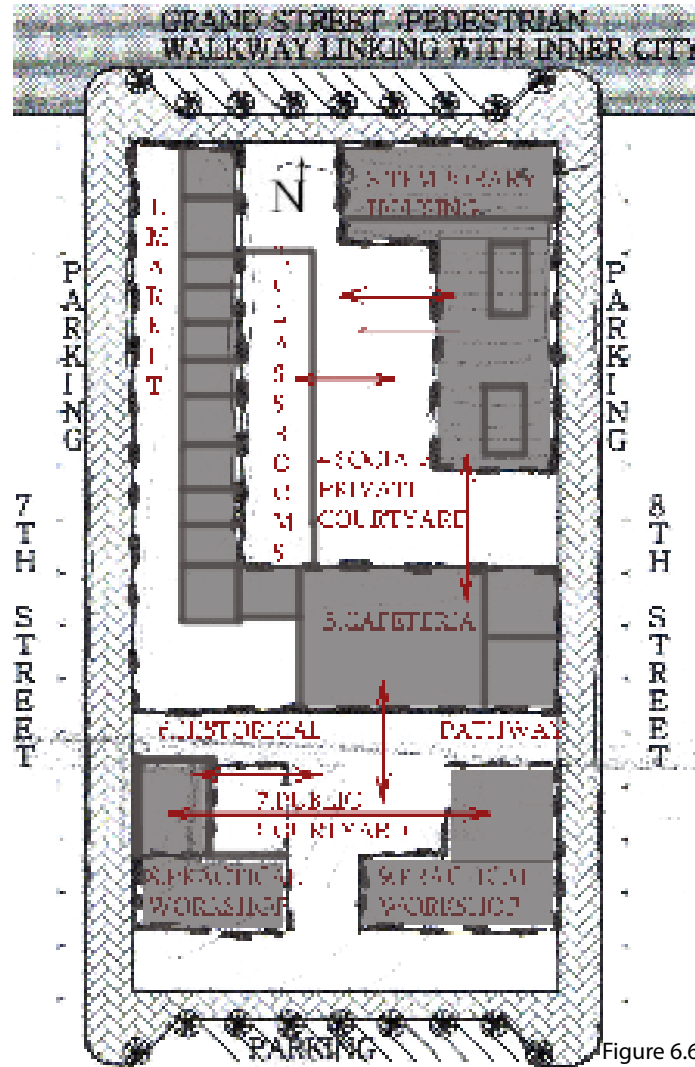


Figure 6.6 Site plan showing allocation of program. Arrows indicate how different spaces open up to each other creating variety of spatial use. (Author, 2010).

1. Market

The market has been allocated next to 7th Street because it is a direct link to Belle Ombre Station and the bus depot. This means that there will be a lot of feet moving along this edge and that it is an appropriate place for the market. The market space will have storage space and an open covered space where previous students of the trade school could sell to the public.

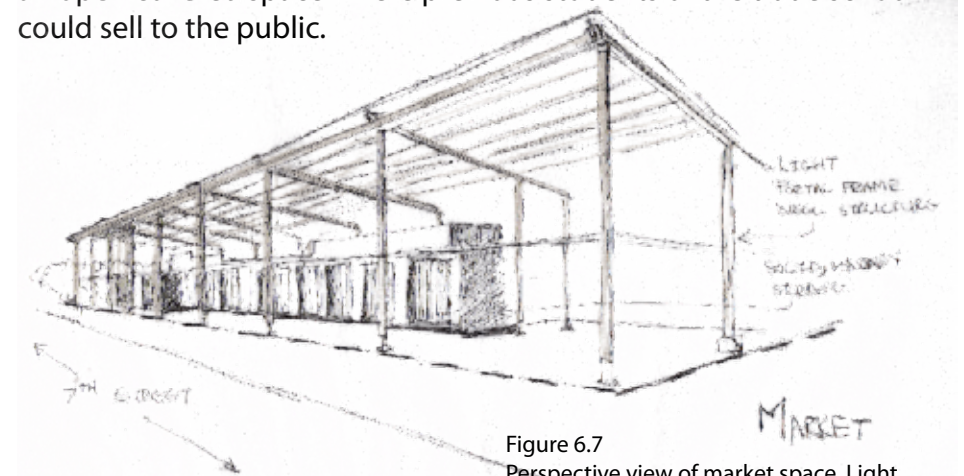


Figure 6.7 Perspective view of market space. Light portal frame roof structure with storage and trading space underneath. (Author, 2010).

2. Classrooms

The classrooms are placed in the private courtyard or quiet section where theoretical lectures will be held. Each classroom can open up into each other to create one big space or different sized classrooms depending on the need (see figure 6.8 and 6.9).



Figure 6.8 Section through market, classrooms, courtyard and housing. Notice how classrooms and social spaces open towards courtyard. (Author, 2010).

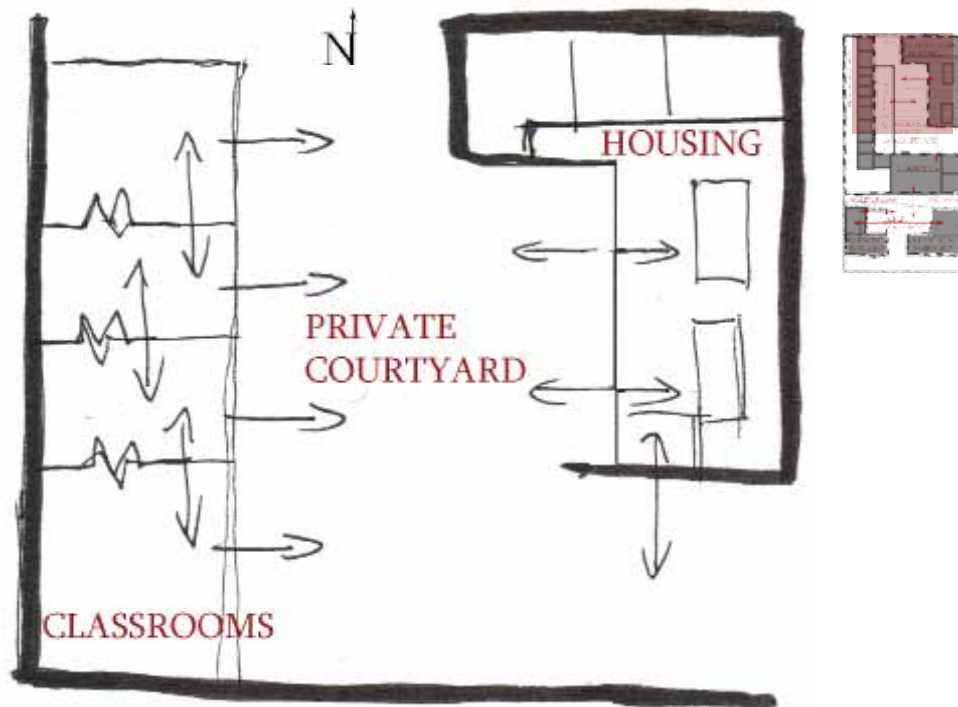


Figure 6.9
Plan showing how classrooms open up and become one bigger space and spaces opening towards courtyard (Author, 2010).

3. Temporary Housing

Temporary housing is provided for trade school students at the Northern side of the site. Social spaces open up towards the courtyard (see figure 6.8 & 6.9).

4. Social/Private Courtyard

This courtyard between the classrooms, cafeteria and temporary housing is a more private courtyard that will be used by students of the trade school for social interaction (see figure 6.8 & 6.9).

5. Cafeteria

The cafeteria is in the middle of the site. It will be used by the students of the trade school and by the public, allowing a sense of integration between public and private. The cafeteria acts as a buffer space between the quiet and noisy sections of the site.

6. Historical Pathway

This pathway that runs through the site and adjacent sites is a very important space in the project. It keeps the integrity of the memory of scale, use of space and movement patterns of Marabastad. From this route skills training can be viewed by the public and thus allow for visual integration. It is also a transitional space between the cafeteria and the workshops.

7. Public Courtyard

The public courtyard between the workshops can be used by the students but can also become a public space where workshops open up to the courtyard.

8 & 9. Practical Workshop

The workshops are placed on the Southern side of the site or the noisy section. They will be wood, tailoring, plumbing and electrical practical workshops, this was chosen due to the proposed new housing development which would acquire these services. These workshops are private but allow for visual integration by public to create an awareness of self - empowerment through skills training.

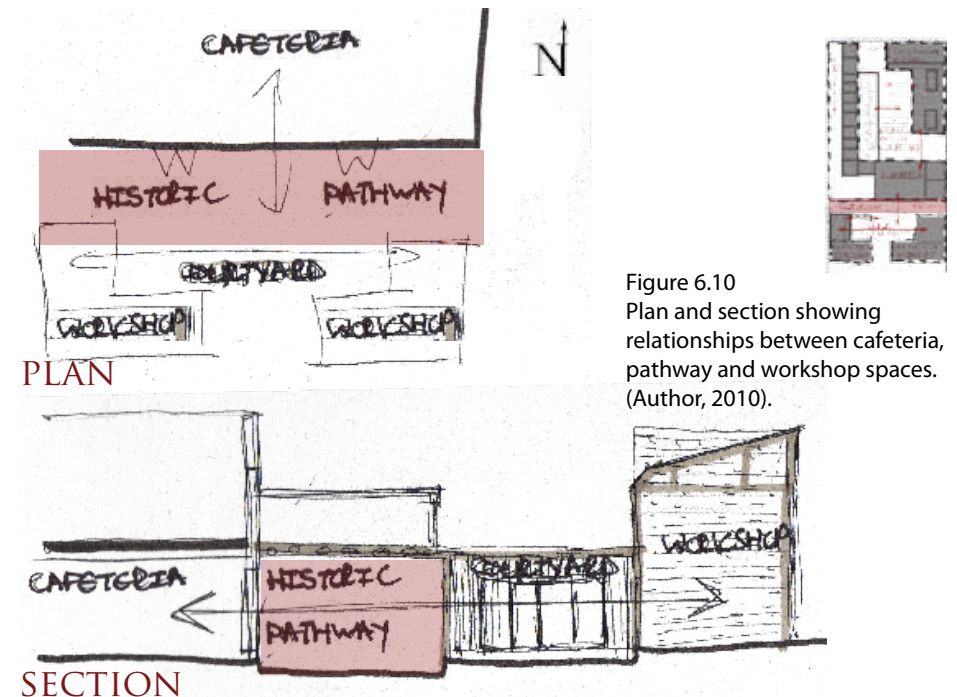


Figure 6.10
Plan and section showing relationships between cafeteria, pathway and workshop spaces. (Author, 2010).

6.5 CONTEMPORARY PURPOSE OF PROGRAM

The contemporary purpose of the program is also inspired by memory. The programme of a trade school was chosen to bring resources back to Marabastad which are skills. People were forced to leave their homes and with that they left behind business and educational opportunities. The trade school allows the public to view the skills training in the workshops which brings back a sense of self empowerment to the community. There is opportunity for students and public to socialise and brings back the sense of community. The students also have the opportunity to live on site which brings back the live-work culture that Marabastad had. The trade school is socially sustainable as it allows former students to use the market space and some of the workshop facilities until they get employment or get their business on its feet.

6.6 TRANSITIONS AND EDGES

The edges of the site are surrounded by sidewalk and street conditions on all sides. The edges of buildings also act as transitional spaces between interior and exterior spaces. The sidewalks are wide enough to introduce trees and public seating (see figure 6.12).

6.5.1 Northern edge

The northern edge borders on Grand Street which is a pedestrian road moving into the CBD. It is a quieter road with parking on the edge of the site. Between the market and Housing are seating facilities for the public or students before entering the private courtyard (see figure 6.15).

6.5.2 Eastern edge

This edge is also a quiet road with less feet than the other edges. The sidewalk allows for trees. There is seating against the walls of this edge. The historic road can be accessed from this edge (see figure 6.11 & 6.12).

6.5.3 Southern edge

The edge borders on Bloed Street and hosts the entrance to the practical workshops. This edge is wide enough to have a public space between Bloed Street, which is a busy road, and the workshops. The Southern edge also becomes a visual advertisement for the trade school (see figure 6.13 & 6.14).

6.5.4 Western edge

The Western edge borders 7th Street which links Belle Ombre Station and the bus depot. This edge hosts the market which is a covered public space. The historic pathway can also be accessed from this edge (see figure 6.5 & 6.6).

6.5.5 Historic Walkway

This walkway moves straight through the site and is a transitional space between the cafeteria and workshops. The walkway has a light structure overhead with the appropriate scale that contrasts the solid buildings around it (see figure 6.10).

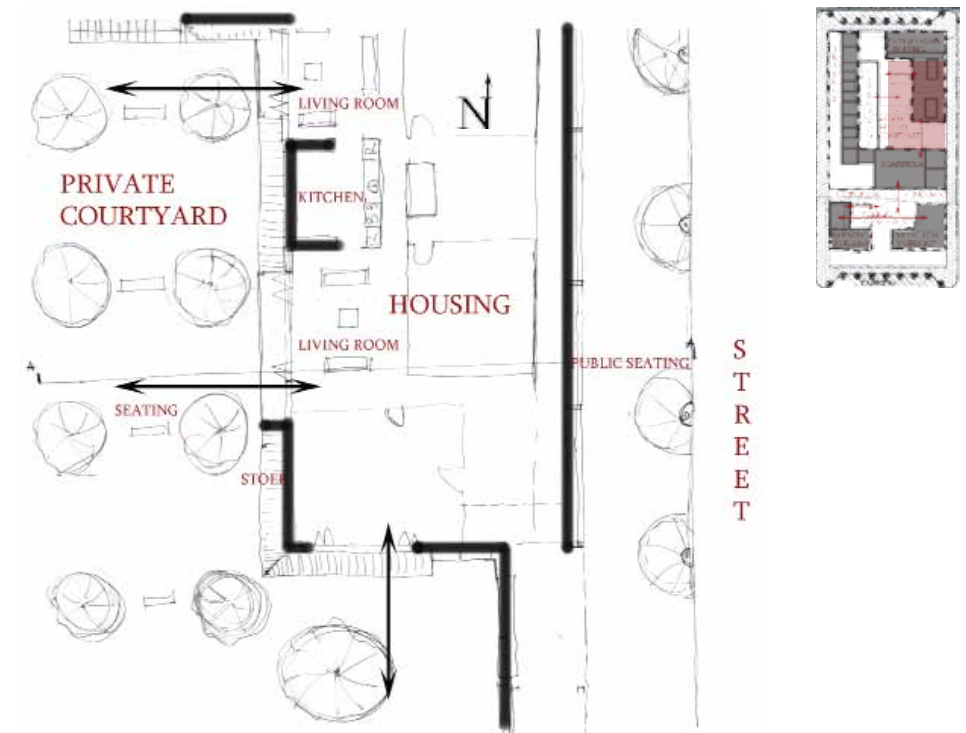


Figure 6.11
Plan of housing and courtyard showing the treatment of the edge conditions allowing them to be interactive through social activities (Author, 2010).

TRANSITIONS AND EDGES

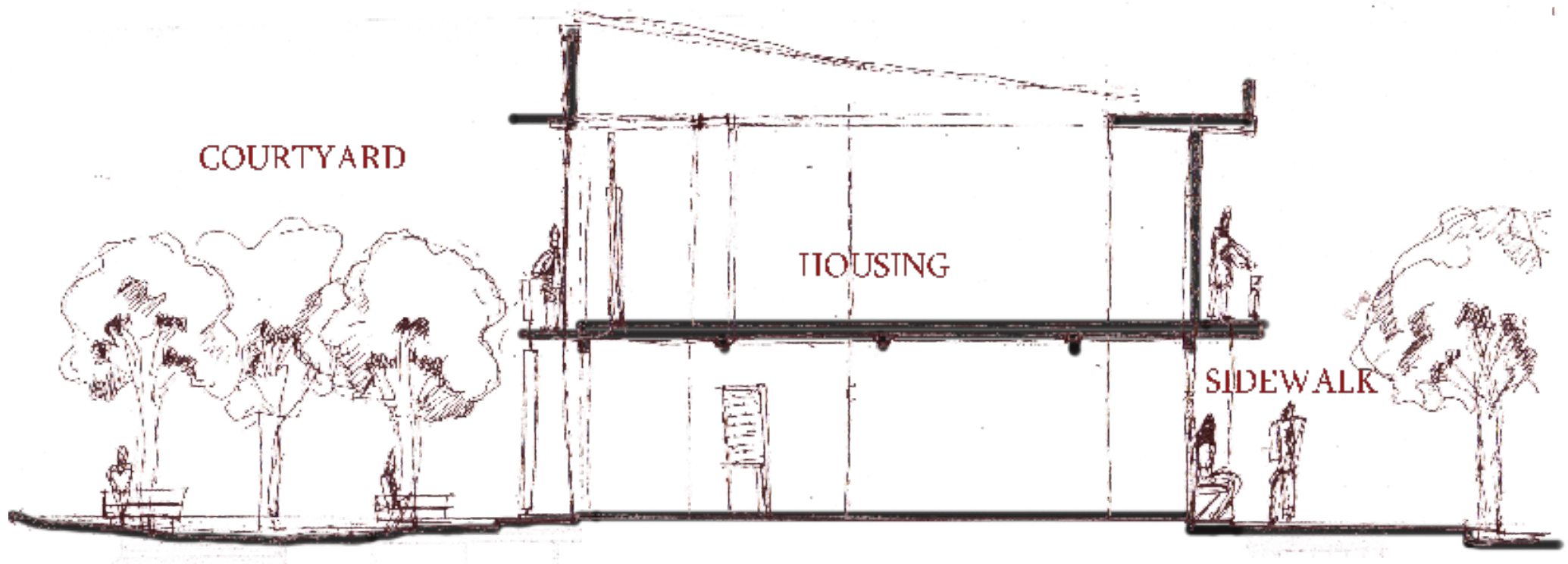


Figure 6.12
Section through courtyard, housing, sidewalk and street. Notice seating and balcony at sidewalk edge. Seating allows for social interaction and balconies create small intimate space on sidewalk. Housing social spaces open up to the courtyard space (Author 2010).

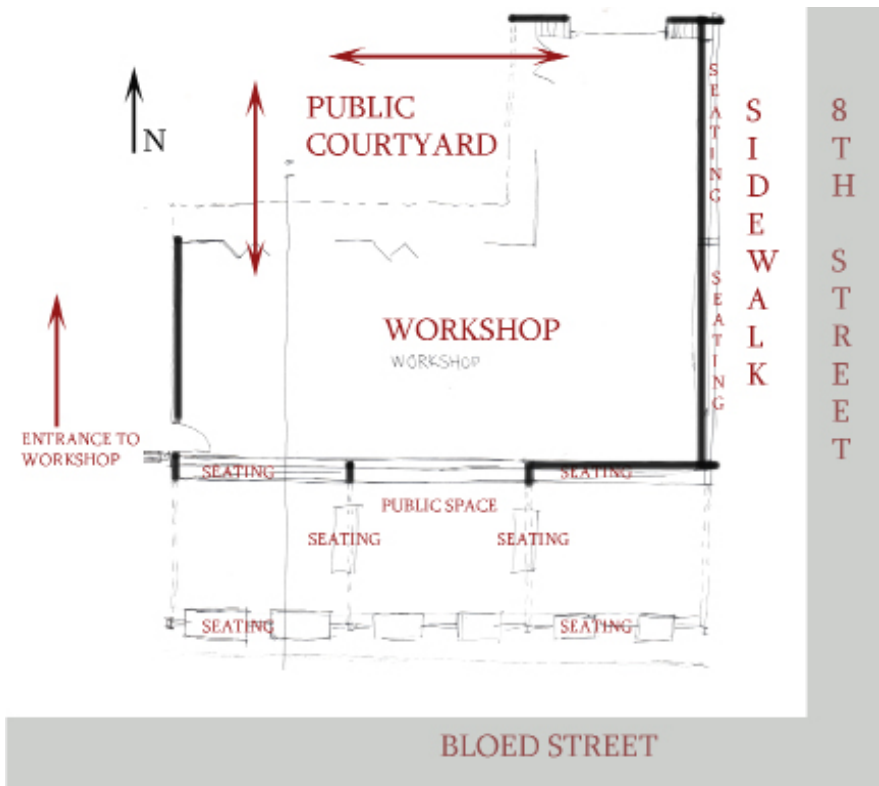


Figure 6.13
Plan showing spatial relationship between workshop, public space and sidewalk. Notice interactive seating on Eastern and Southern edges (Author 2010).

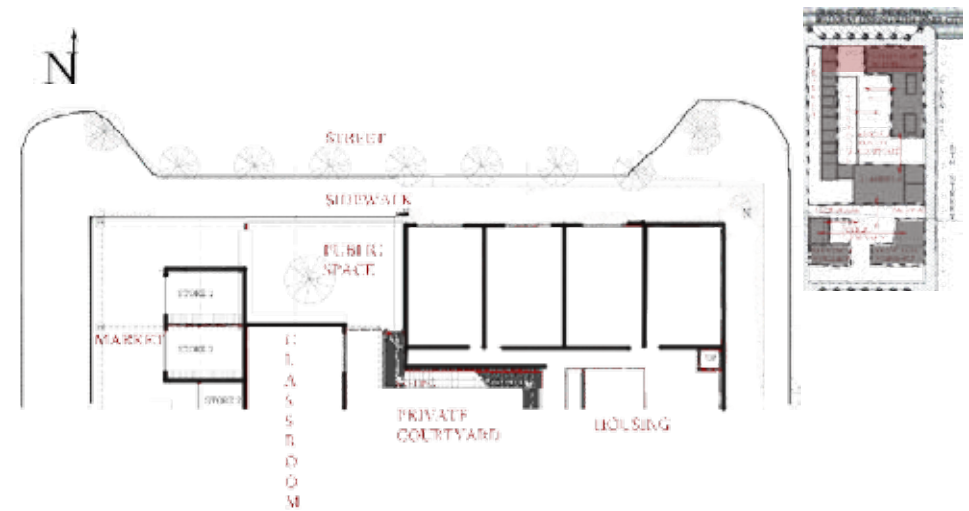


Figure 6.15
Plan showing edge condition on Northern edge of site. Notice solid and open conditions and flow of spaces into each other (Author 2010).

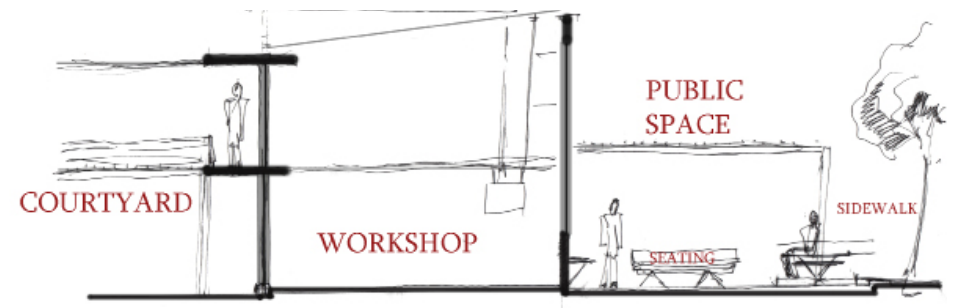


Figure 6.14
Section showing spatial relationship between workshop, public space and sidewalk. Notice interactive seating and Southern edges (Author 2010).