CHAPTER 07

ON SITE

It has been said that, at its best, preservation engages the past in a conversation with the present over a mutual concern for the future.

- William Murtagh (Bell, Kiefer & Tinnell 2011) -

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SITE INTRODUCTION

As discussed in Chapter 4, well-located land for residential development in urban areas is a critical issue in providing low-cost housing (Tissington 2011:19). Thus, a housing development in Marabastad is ideal due to its location just outside the CBD. The proposed site for the study covered in this dissertation is bordered by the two main roads of Marabastad: Boom Street to the south and 7th Street to the east, both of which carry fast-moving traffic, whereas Mogul Street (to the north) and Jerusalem Street (to the west) have slow-moving traffic. All the street edges have high pedestrian activity with informal and formal trade set up on the sidewalk. Food stalls and restaurants are abundant throughout Marabastad, which contributes to the high energy and activity on the street. No area is specifically designated as public space, and therefore it can be argued that the public space throughout Marabastad exists on the street and sidewalk, and it is where people work, eat and socialise.

Le Roux (1991) conducted an extensive heritage value report on the buildings of Marabastad, which has been accepted by the Pretoria Inner City Partnership Development. Buildings were identified for different heritage value reasons, including architectural value and use value. Le Roux (1991) states that these buildings should not be seen as individual elements, but that they should rather be seen as a collective that represents a certain way of life that existed in Marabastad (Le Roux 1991).

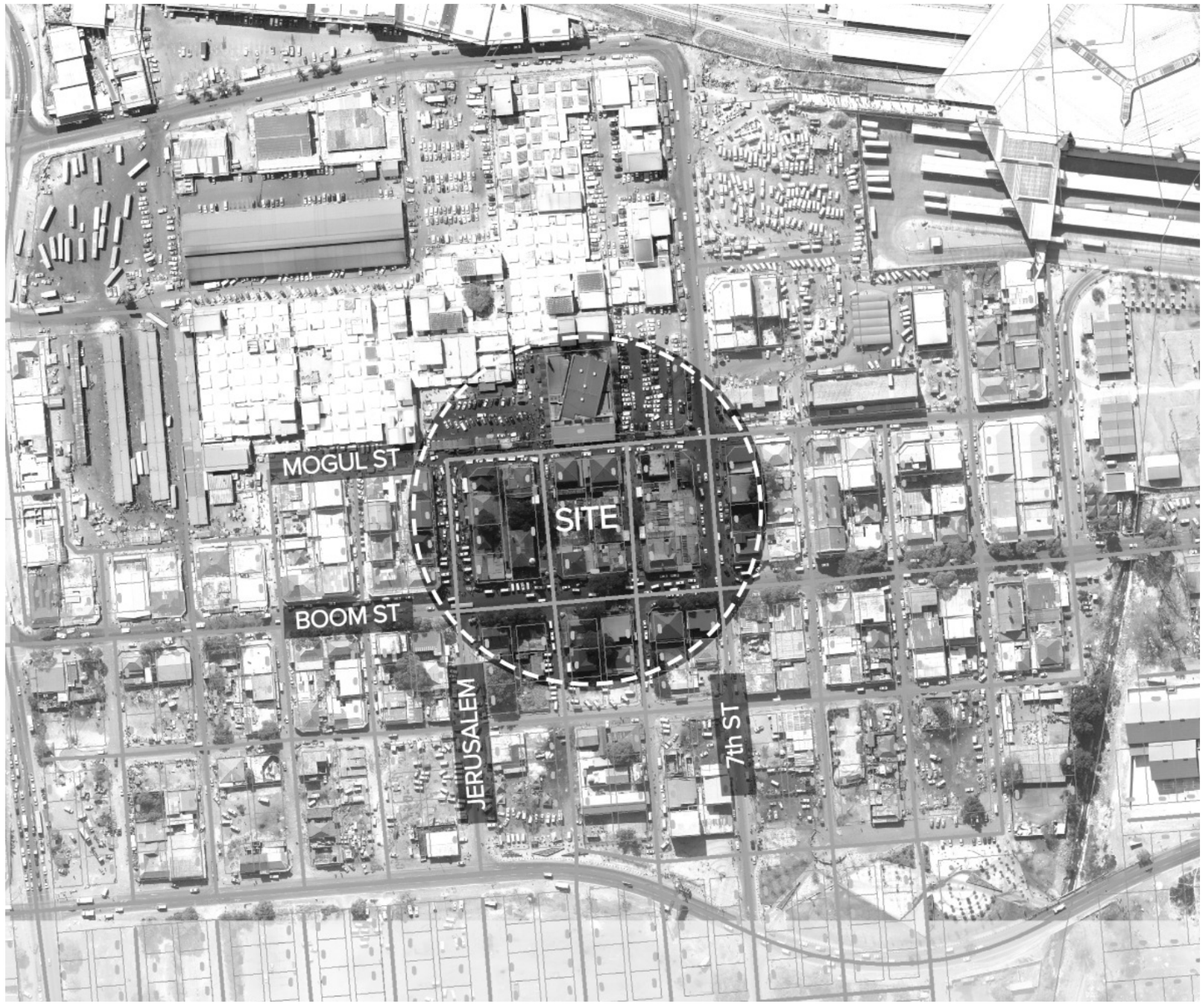


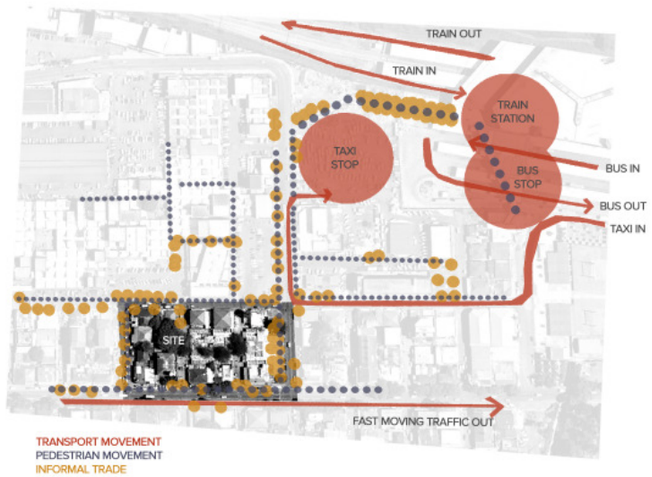
Figure 7.1 *Arial of Marabastad illustrating selected site location (Author).*

SITE ANALYSIS

A site analysis was done in order to identify activities that need to be incorporated into the design and problem areas that should be improved on. These improvements are seen as areas of opportunity.

The analysis was divided into subcatagories:

- Site in the context of Marabastad
- Physical components - vegetation and heritage structures
- Movement - pedestrian and vehicular traffic and informal activity
- Resultant spaces
- Activity levels - high to low activity



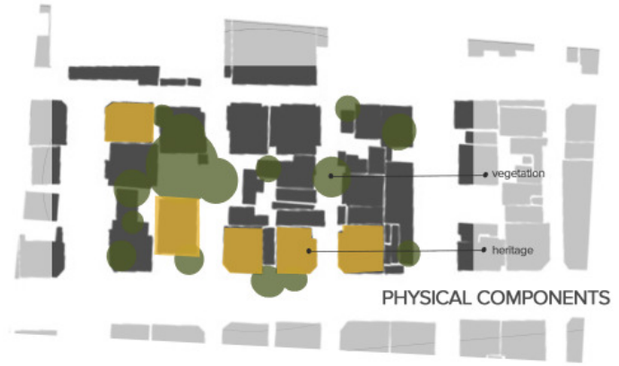
DESIGN RESPONSE

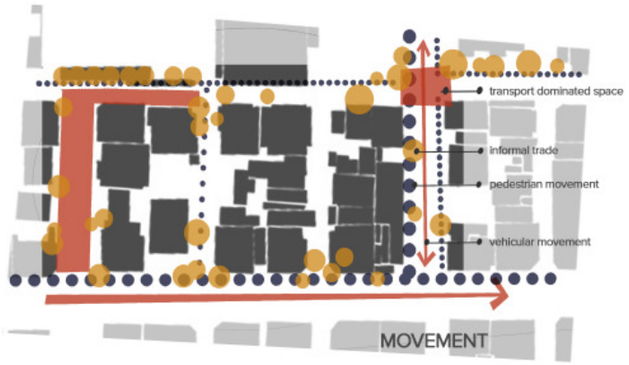
Significant structures and vegetation are identified. The design strives to strengthen¬ the heritage character of the place and it should exist in harmony with the existing structures.

Informal activity mainly occurs along the street edges and feeds off pedestrian movement. It occupies the little space available on the walkway. The design should embrace this informality and strive to integrate it in the design.

Formal shops are an important characteristic of Marabastad and these shops are still very relevant in this context. The proposal therefore proposes a mixed-use development to retain this public interface. The inner part of the block is identified as an area of opportunity to be improved and activated as public space. Restaurants identified on the east side of the block are integrated into the design as a food court with restaurants framing a small square.

The activity levels illustrate where public interaction is important and where it can be improved on. When relating the activity levels to the resultant spaces in the diagram above, the negative space is associated with the space with no activity, and this should be addressed.





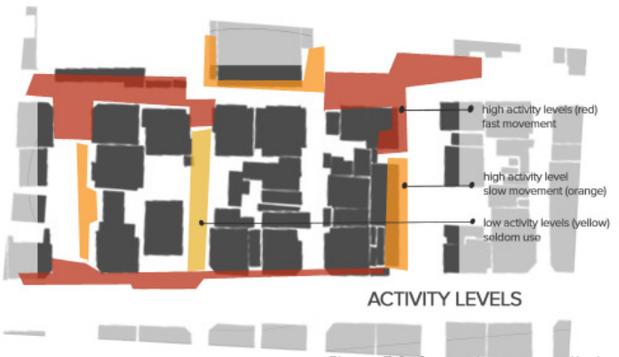


Figure 7.2 *Site analysis images (Author).*

Figure 7.3 Northern street elevation of site (Author).

HERITAGE ON SITE

The selected site has a number of existing structures, some of which have been identified as buildings with heritage value. The proposal acknowledges these structures and their value and it suggests an urban infill project to increase density and diversity while respecting the existing context and activities. The heritage structures are seen as an opportunity to demonstrate how urban regeneration can truly co-exist in the context of Marabastad.

Two pedestrian walkways that are not used often go through the site. The inner part of the block, which was identified as a usage landmark of the Market Square, is no longer used as market stalls. The inhabitants of Marabastad identified this area as dangerous and illegal activities take place there. The abandoned structure itself holds no heritage value. One of the more significant structures on the site is the White Mosque that was identified as an irreplaceable landmark. This structure has been fenced off, is rarely used and is in desperate need of repair. There are four other landmark buildings on the site, of which three are located on Boom Street. These structures are still being used as formal shops and storage, but have not been well maintained. They truly give a sense of how the original street section of Marabastad existed and how it was used. There is a clear series of thresholds from public to private (Le Roux 1991).

Figure 7.4 Selected site with identified heritage structures (Author).

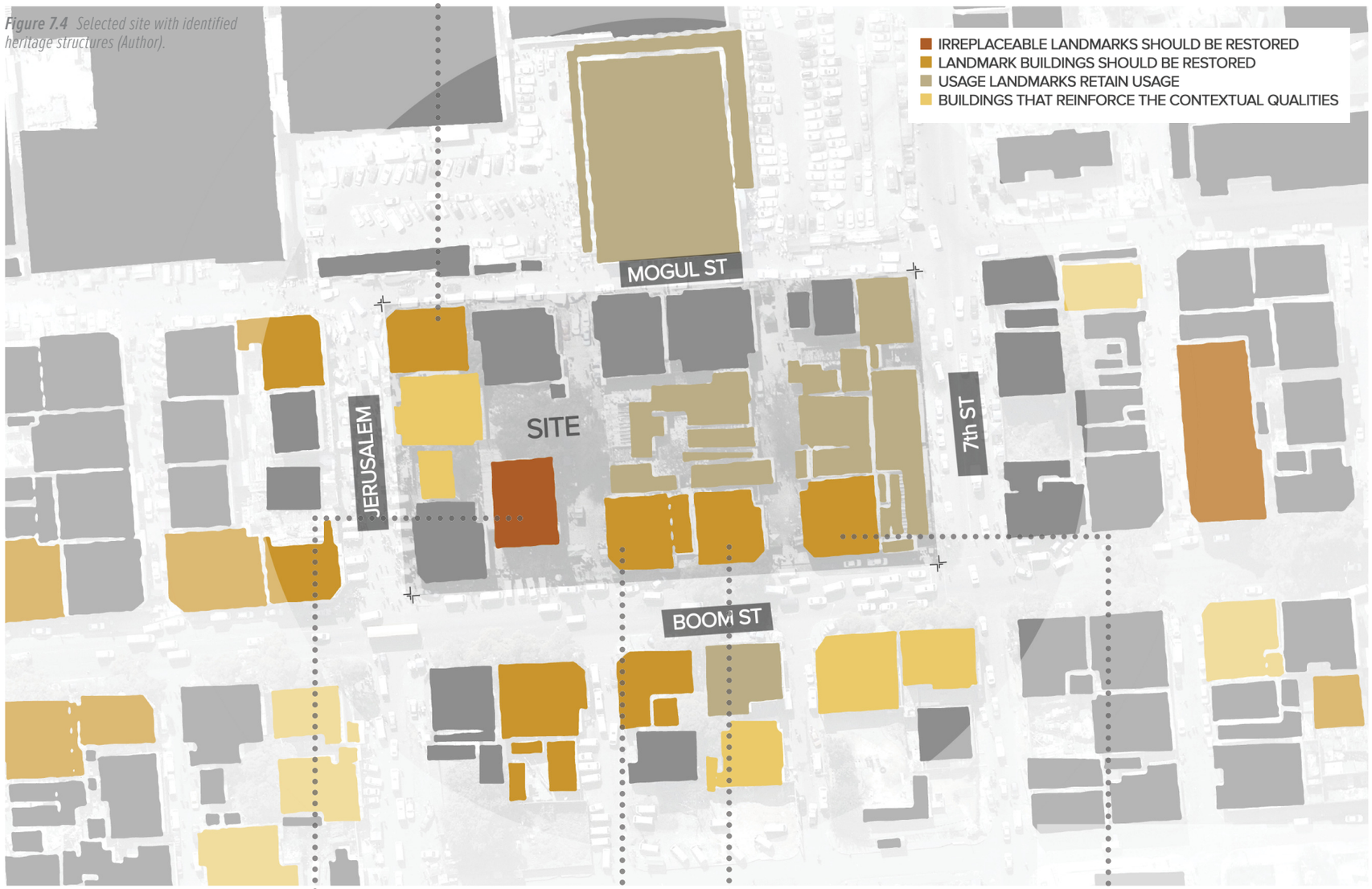


Figure 7.5 Southern street elevation of site (Author).

STATEMENT OF SIGNIFICANCE

HISTORICAL – The identified site is the site of the old markets in Marabastad and the White Mosque (Aga Khan) in Boom Street, which dates from 1930 (Van der Waal 1994:18). These buildings represent the religious presence of the Indian community. The mosque has been identified as an irreplaceable landmark in the framework of Le Roux (1991). This structure should be restored and integrated with the public space around it.

CULTURAL - The markets played a significant role in the township life of Marabastad. This was a civic space where the diverse community integrated and gathered. As the edges of the site became more active, the inner part of the block became less important as the markets moved to the active edges. This left the inner part where the markets used to be vacant. Today, it has little public activity or remnants of the historical market use. Although it is not used today as it was in Old Marabastad, Le Roux (1991) identified the site as a usage landmark, where he identified significant structures and proposed the creation of a conservation district.

ARCHITECTURAL - The verandas of the buildings indicate the unique way of life in these streets in the past. There is a prominent series of thresholds from the public to the private realm (illustrated in the Figure # typical section). Shared communal spaces to the inner part of the block were significant and contributed to creating an integrated community.

POLITICAL - The removal of the residential component during the apartheid years has left areas abandoned. The absence of public activities and through information obtained in certain unstructured interviews conducted during site visits revealed that the inner part of the block, which was concealed from the active edges, has been identified as a dangerous area where illegal activities take place.

PHYSICAL – The site falls in the conservation area that was proposed by Le Roux (1991). The activities on the site are still relevant and should be acknowledged in the proposal. The interior of the city block has to be reprogrammed to increase safety and activity within the site.

Figure 7.6 *Sketch of delapidated building (Author).*

HERITAGE ISSUES AND APPROACHES

Integrated conservation is an approach that aims at revitalising dilapidated areas by adapting existing structures and using existing infrastructures to make them relevant to today's society (Clarke & Corten 2011:882). These principles were applied to the Charter for the Conservation of Historic Towns and Urban Areas in 1987, known as the Washington Charter (ICOMOS, 1987). The Washington Charter of 1987 was adopted by the International Council on Monuments and Sites (ICOMOS) to set out the steps necessary to protect, conserve and restore large and small historical urban areas, as well as to guide the development of and adaptation to contemporary life (ICOMOS, 1987).

The significance of urban heritage as a social, cultural and economic asset for the development of historical cities is articulated by the Historic Urban Landscape (HUL) approach, which was adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 2011 (UNESCO, 2013). This approach not only aims at securing the sustainable future of existing physical environments, but also focuses on the entire human environment, including its tangible and intangible qualities. The existing built environment, cultural diversity, socio-economic networks, local community values and environmental factors should be considered in the planning and design of project proposals (UNESCO, 2013).

Design decisions are based on these conservation principles to ensure that the new building exists harmoniously in its historical context and contemporary life. Understanding the existing structures spatially (as a series of threshold spaces) and programmatically can help generate a rich development that gives life to and strengthens the historical identity.

A common notion that is articulated in all of the principal international charters is the concept of the building in its context that not only responds to individual work, but also to the context in which it is situated. The approach to form making, when a building has to respond to its existing context, can be placed on a scale between *mirroring* and *opposing* the exising (Barker, 2015). Arthur Barker in his *Memory in architecture: Chapter two* discusses the importance of appropriate architectural design responses in built heritage environments. He describes that at the one end there is the conservative side which mimics the exiting. On the other end of the scale is contrasting the existing. The middle ground approach would then be to interperet the old in an attemt to create the new (Barker, 2015).

According to the Burra Charter, "places of cultural significance include the site, area, land, landscape, building...group of buildings" (ICOMOS, 1999). The Australian Burra Charter has been adapted by the South African National Heritage Resources Act (Act No. 25 of 1999) (NHRA) and is the most commonly known and practiced charter in South Africa (ICOMOS SA, [sa]). The NHRA encourages the preservation and nurturing of non-renewable heritage resources and should be used for its social and economic contribution (South Africa, 1999).

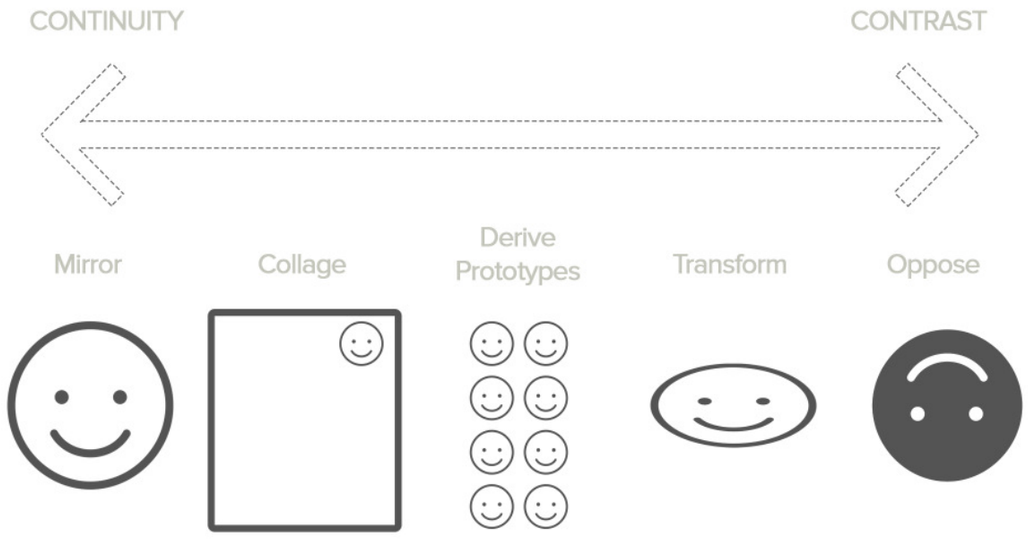


Figure 7.7 *Scale of heritage response approaches (Barker, 2015, edited by Author).*

Figure 7.8 *Sketch of activity on street, pedestrians and informal trader (Author).*

REACTION TO STATEMENT OF SIGNIFICANCE

In conclusion to the study of heritage structures on the site, it is clear that there is opportunity for intervention, but it has to be respondent to the structures that will remain on site. The existing structures that are kept should be integrated into the new proposal for the site. The proposed mixed-use residential infill project aims to respond to historical, current and future conditions.

HISTORICAL – The proposal will reintroduce the residential component that was once present in Marabastad. This will aim at reinstating a permanent community in Marabastad and will help enable the inhabitants to reclaim public space and ownership of the place. The abandoned market that was identified as an existing landmark is still economically relevant, as seen throughout Marabastad. The original location in the middle of the site is, however, isolated from the public realm (streets). Concealed from the public, this area has become dangerous, with illegal activities taking place. The markets will be reintroduced on a more active edge, with pedestrian movement on a public edge in the proposed development (see Chapter 8).

CURRENT – The presence of informal restaurants, informal shops and formal traders contributes to the active street edges, and these spaces will be included in the proposed development. The proposal of a mixed-use development supports these activities on the ground floor in the edge buildings with a public interface. This proposal aims to build on the existing activities on site, and the proposal of residential units on the upper floors reflects on the former mixed-use area where people lived above their shops.

FUTURE - In reintroducing the residential component, the proposal has to anticipate the diversity of people and family structures who will live in Marabastad, and thus has to provide additional outdoor spaces where people can meet, play and repose. This is supported by the research and theories discussed in chapters 4 and 5.

APPROACH TO EXSTING FABRIC - RESTORATION

The significance of authenticity and the original material of the existing fabric is emphasised by the Burra Charter, which states that there must be a clear distinction between the new (reconstruction and adaptation) and the old (ICOMOS 1999). With the Pretoria Inner City Partnership regeneration projects, the valuable historical fabric of Marabastad is threatened and could lead to absolute losses of cultural, social and economic activities (ICOMOS, 1987). From our observations during site visits, many of the buildings on site that have heritage value are still being used, but many of these structures have fallen into a state of decay because of neglect and lack of maintenance. As recommended by the Burra Charter (ICOMOS, 1999), these old structures that are conserved should be restored to their known earlier state without the introduction of new materials.

Figure 7.9 *Sketches of conservation approaches (Author).*

APPROACH TO NEW CONSTRUCTION

The Washington Charter (ICOMOS 1987) sees the inhabitants of the heritage area playing an important role in the success of the project, and their involvement is encouraged. The Charter recommends a systematic approach that allows for adaptation and integration by the residents. The introduction of new activities and functions should be compatible with the historical area, and the adaptation to contemporary life requires the careful installation of public services. Housing improvement is one of the basic objectives of conservation. According to the Washington Charter (ICOMOS, 1987), the historical character of the urban area includes urban patterns, the relationship between buildings and open space, the interior and exterior, scale, size, material and colour.

The proposal aims at sensitively integrating contemporary architecture into the existing context by considering relations of scale, size, material and use. This is based on the Charter for the Conservation of Historic Towns and Urban Areas (ICOMOS, 1987), which states that the introduction of contemporary elements that exist in harmony with the existing elements can contribute to the enrichment of the area.

To better understand the historical urban context (ICOMOS, 2001), the architecture of Marabastad was analysed according to the following categories:

- Roofs
- Fenestration
- Column
- Materiality
- Typical street section
- Typical street elevation

The study was focussed on the proposed site and the streets around it.

ROOF STUDY

- Veranda low-pitch lean-to roof -

The most significant roof element in Marabastad is the low-pitch veranda structure that defines the walkway. This element is applied in many ways, but the space that is created through this element is seen as part of the public realm, often populated by informal traders, or it acts as an extension to display goods for the formal shops. The usual roof height is 2500mm.

- Hipped and pitched roof -

The primary roof element is the double-pitched roofs or hipped roofs. From sectional studies and photographic evidence, the roof pitch varies between 15° and 45°. The slope of the roofs is towards the street, ending with a 200 to 600 mm overhang, or it connects to a veranda structure.

- 'Flat' roof -

Parapet walls are used with mono-pitched roofs to give the illusion of flat roofs from the street elevation.

Figure 7.10 *Analytical sketches and relevant photographs (Author).*

FENESTRATION STUDY

- Shopfront -

Shops occupy almost the entire ground level relating to the active street edge. Full-length glass façades or rolling doors open onto the street to display goods. The threshold between the walkway and the shops is defined by one or two steps.

- Upper floor fenestration -

Fenestration of the upper floors shows a clear repetition and rhythm. The sizes of the windows depend on the interior layout and room elevation studies and photographic evidence. Windows are usually at 900 mm sill height and go up to 2 300 mm in total height.

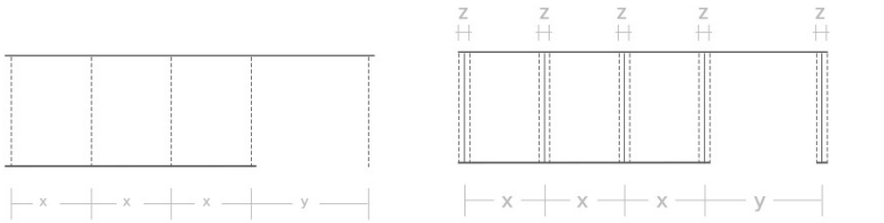
COLUMN STUDY

- Columns -

Columns are spaced at equal intervals, but vary in form and materiality. Roman Tuscan columns are iconic elements evident along Boom Street. Other columns are painted brick columns. People often sit on the base, lean-to the structure or set chairs out next to these elements. Thin steel elements are easily adaptable and related to informal activities where people can manipulate and display goods.

Figure 7.11 *Analytical sketches and relevant photographs (Author).*

SUMMARY OF ELEVATIONAL COMPOSITION



Vertical Rhythms

Vertical Rhythms - defined by columns

Horizontal Rhythms

Fenestration and Shopfronts

Figure 7.13 *Elevational composition (Author).*

MATERIALITY

- Walls -

Bricks are the most common material used for walls in buildings on the site. Two buildings on site have a plaster and paint finish.

- Roofs -

The most common roof materials identified on site are corrugated and kliplok sheeting. Informal structures are set up by informal traders on a daily basis. These consist of plastic or steel structures with a plastic or tent fabric, which proves to be highly adaptive.

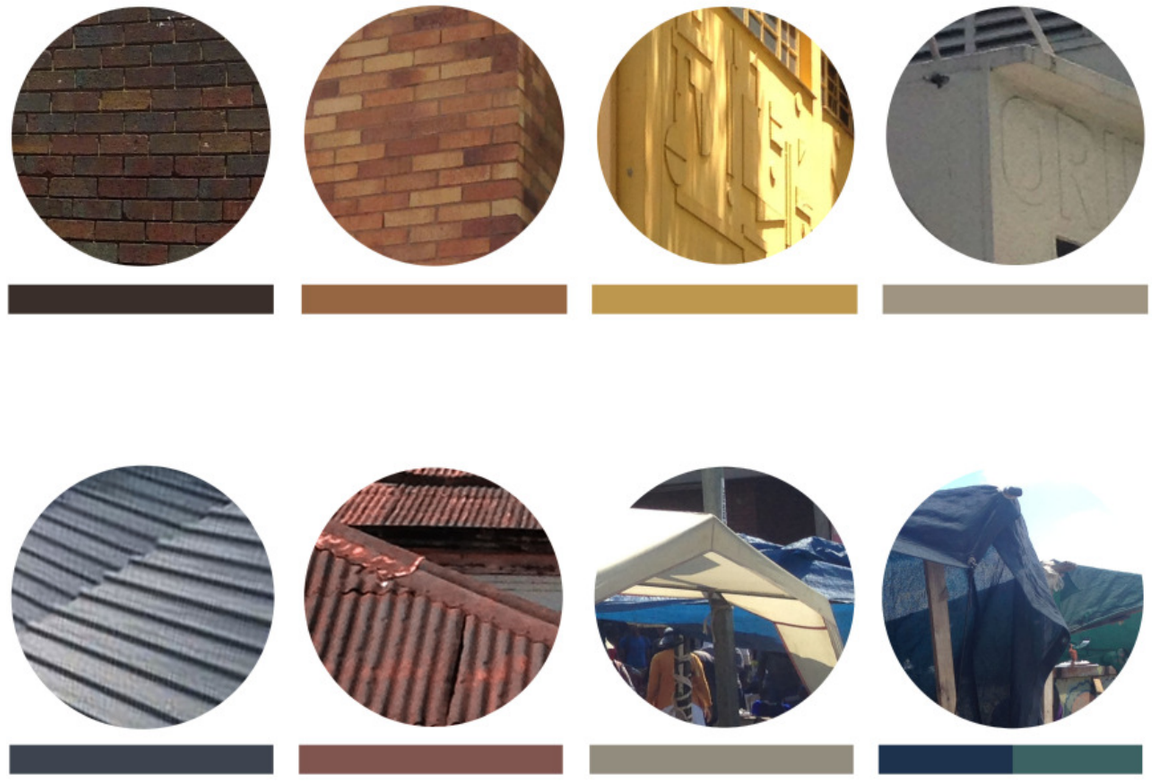


Figure 7.12 *Photographs showing materiality of Marabastad (Author).*

SECTIONAL ANALYSIS

This section illustrates the fundamental workings of the built fabric of Marabastad. The front façade conveys simplicity and apparent legibility, yet the section reveals a complex series of thresholds that translates from a public interface to concealed private space and a courtyard and workshop in the back.

The thresholds that exist

- The vehicular road contributes to pedestrian movement through Marabastad. Parking takes up most of the space in front of formal retail stores, but where the curb is not taken over by transport, informal traders occupy it.

- Trees also contribute to a visual filter and create a sense of threshold from the vehicular movement on the road and the pedestrian movement on the sidewalk.

- The colonnade creates another definite threshold to pass through before reaching the covered arcade. The colonnade creates a designated space for pedestrians and informal traders. It also creates shaded walkways along the shopfronts.

- Formal shopfront/building façade - The building façade conveys a sense of permanence through the use of brick, and separates the public realm from the shop, which is a controlled semi-public space.

- Backrooms/workshops - The spaces behind the buildings are little more than sheds that change constantly to fit the needs of users. These spaces are highly adaptable and can change to accommodate programmatic requirements, which makes these buildings resilient. Common uses range from houses to workshops or shebeens.

Looking at the city block as a whole, the merger of the backyards creates enclosed courtyards.

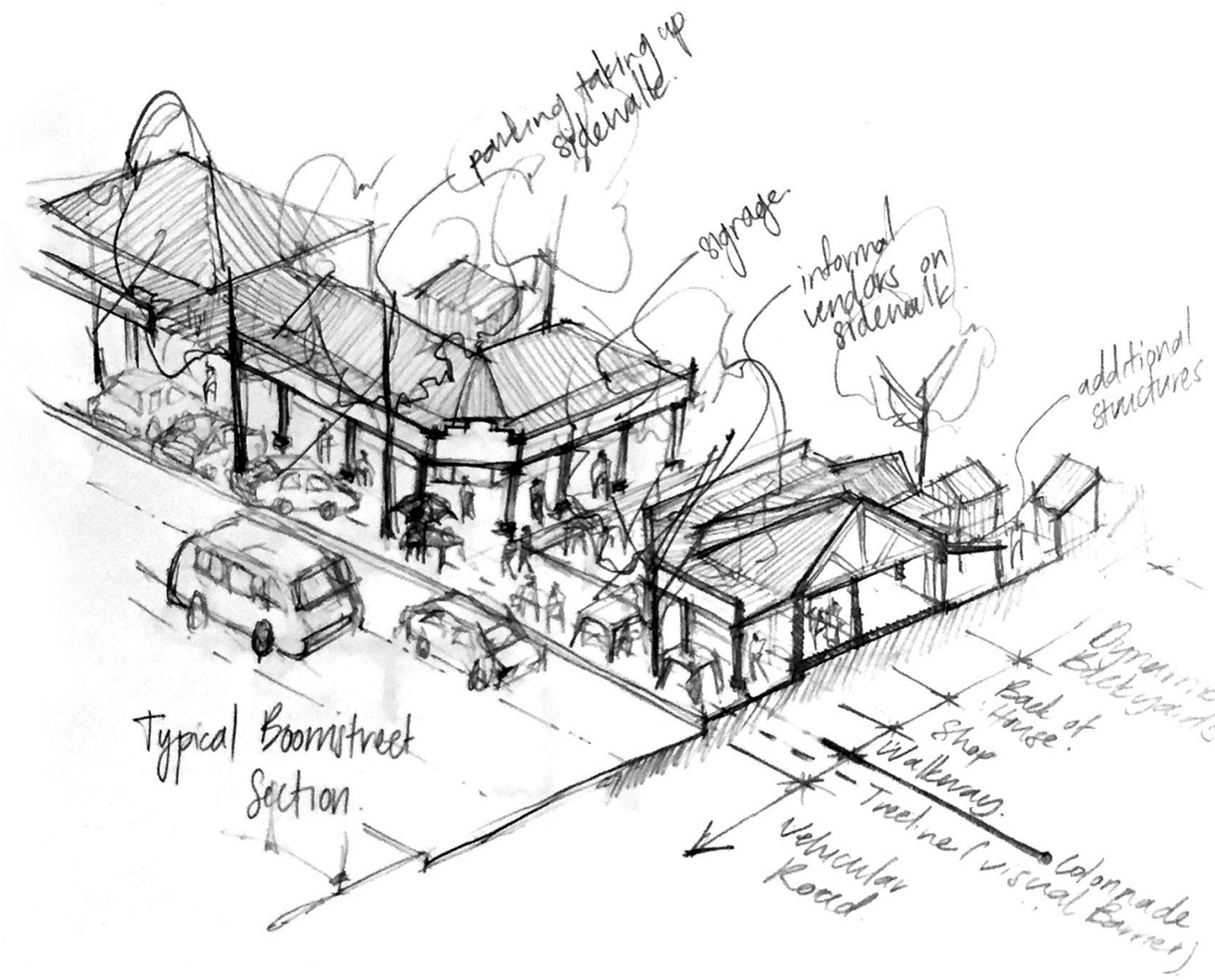


Figure 7.14 *Sectional analysis scetch illustrating thresholds and transition from the public to the private realm (Author).*

Figure 7.15 *Sketch of the White Mosque located on the selected site (Author).*

APPROACH TO NEW CONSTRUCTION

There is a strong architectural concept of the fixed and the flexible, the old and the new that can be translated to the formal and the informal. The design responds to the understanding of a series of thresholds that exist. These thresholds define the transition from the public (street) to the private realm (room). The design seeks to create an architecture that relates to the existing fabric of Marabastad in a contemporary way, and strives to capture the characteristics of how space is used in Marabastad.

Through the studies of the roofs, it is evident that there is a relationship between the roofs and the streets. Elements, such as the veranda, can be drawn from to define public space. The slope towards the street creates a comfortable building scale for the pedestrian. This will drive the design to relate to a human scale.

From the fenestration studies, there is a clear repetitive rhythm and visual composition. The design strives to retain this composition while applying a contemporary aesthetic. When considering the use of columns in the project, it will be informed by how columns are used as seating and as a device that informal users can structurally latch onto.

The fine grain and scale of the site in Marabastad is the main driver of the technical concept. The identified scale of Marabastad is one- or two-storey buildings and consists of a one-plot-one-house building typology. To densify the site, as discussed in Chapter 3, an urban infill project of three to four storeys is proposed. The elevational composition and primary materials identified in Marabastad will be used to express the existing scale and fine grain in the design. The infill, representing the new, will make use of contextual material, but will explore contemporary ways of using these materials, i.e. corrugated sheeting, originally used as a roof material in Marabastad, will be used as a wall material. This also means that the upper floors, higher than two storeys, will require a different architectural language to the two storeys responding contextually. This is further explored in the design and technical development.development.