

# 4.1 MACRO CONTEXT

The proposal situates itself within the inner City of Pretoria, a bustling district that has developed in the form of a grid structure from identified important centres, Church Square being the most prominent. The Sammy Marx Precinct, identified as one of the sub-divided inner city components by the Re Kgabisa Tshwane development framework, is identified as the focus of the urban framework analysis.

This precinct is defined by Struben Street in the north, Schoeman Street in the south, Andries Street in the west and Du Toit Street in the east. The proposed site sits on the corner of Church Street and Du Toit Street, three blocks east from Church Square, and is part of a regeneration framework that suggested the block and bordering blocks become part of an educational precinct (Du Plessis, 2010). The implementation of a cultural centre fits into this puzzle of development, with education being the focus of the programme. The block development framework of Du Plessis's framework is proposed to be implemented with the new urban framework: "React". Derelict buildings are re-envisioned as potential education hubs within this educational precinct, as well as mixed-use and housing facilities. Pedestrian activity is envisioned to be the dominating actions within the precinct, which coincides with those aspirations of the "React" framework proposal. It is noticed that automotive industries and light industrial buildings dominate the areas to the east of Du Toit Street, as one moves beyond Nelson Mandela Drive. Towards the west however, cultural activity is dominant: Lilian Ngoya Square and Church Square both boast informal trade and high pedestrian activity, as well as cultural landmarks like the State Theatre. This "belt" of pedestrian activity runs up to Prinsloo Street, a block from the proposed educational precinct, after which vehicular activity dominates.

# 4. 2 FRAMEWORK: REACT

The "React" framework suggests a reaction to the existing urban fabric, rather than an imposition on it. It begins to talk about the city on a larger scale, moving in towards a more intimate level:

Focus is placed on various elements dealing with the current manifestation of activities in the city and existing fabric, including traffic principles, the existing grid-like planning of the city and the blocks within the city that are currently vehicle-orientated.

The response to these elements aims to sensitively illustrate how some of the problems in the city can be alleviated by introducing solutions that will create "inter-block" systems (breaking down large and impermeable blocks into interconnected systems).

## 4.2.1 KEY ASPECTS OF FRAMEWORK

- 1. Consolidate- and react to the existing urban fabric
- Scales: urban, architectural and detail
- 3. Focussing on planning, edges and activities in particular.



Figure 4.2: Masterplan (not to scale) indicating "REACT" framework principles (Author, 2011).

# **MASTERPLAN**

- 1. Implementation of framework (responding to context)
- 2. Creating a network of positive public space
- 3. The framework promotes mid-block movement within the city to create links between the public spaces;
- 4. Hence creating links between the various urban interventions as highlighted.
- 5. Therefore strengthening the existing urban fabric without imposing on it.



# 4.2.2

# **PRINCIPLES**

# **PLANNING**

## PRINCIPLES

According to Gehl (2010) there are various principles that are required for an urban framework to be carried out successfully on a planning level (Gehl, 2010).

The following diagrams illustrate positive and negative planning principles respectively, as adapted from Gehl (2010) (Author, 2011).

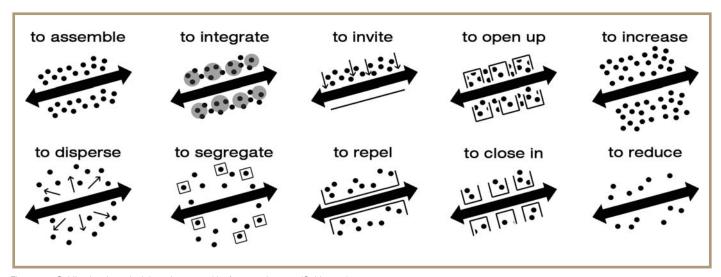
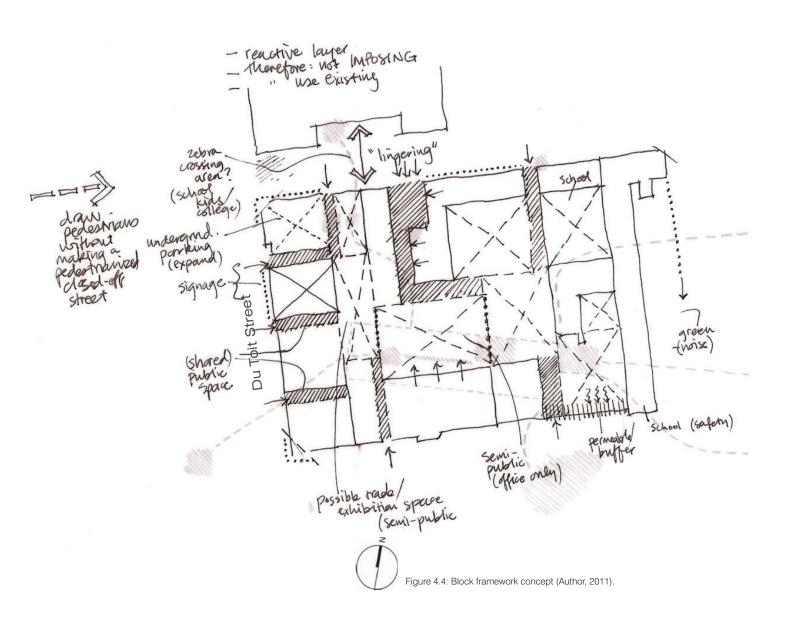


Figure 4.3: Gehl's planning principles reinterpreted by framework group (Gehl, 2010).



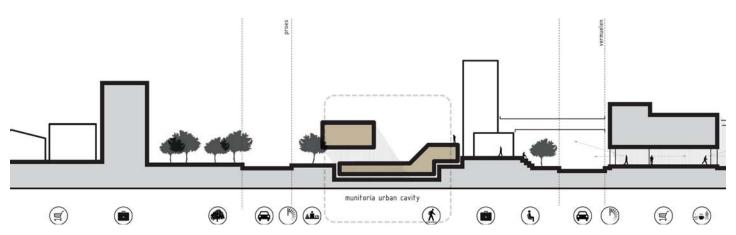
THE EDGE CONDITION

On an architectural level the edges need to respond to the urban planning principles and the public realm.

The chosen site for the crafts centre within the proposed educational cluster, adheres to the framework principles if the edges are considered, in that the edges are made permeable on ground floor, allowing public interaction and constant activity near the building periphery and consequently, within the building. Interaction with the building exterior is envisioned to allow for a variety of staying zones or lingering spaces, that tie in with the idea of making the precinct a slow-paced, pedestrian-friendly area.

The framework envisions an architecture that allows for permeability and transparency- in order for the user to interact with the city and hence to carry this interaction through to user and building.

Figure 4.5: Section through Sammy Marx Precinct (Author, 2011).





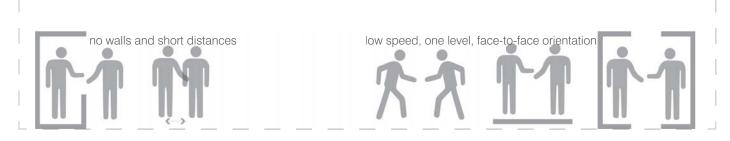


Figure 4.6: Edge condition principles according to Gehl (Gehl, 2010).

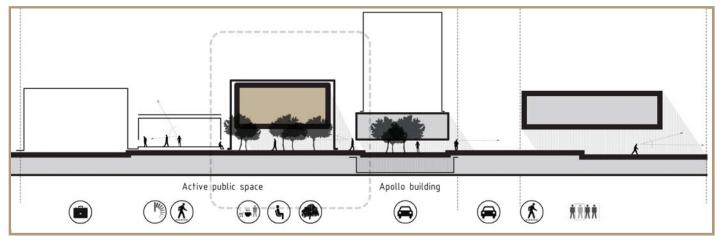
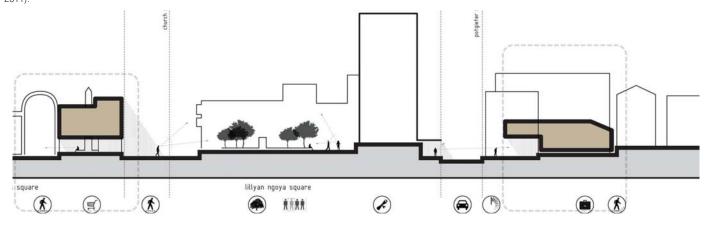


Figure 4.7: Section through Church Street and proposed development block (Author, 2011).

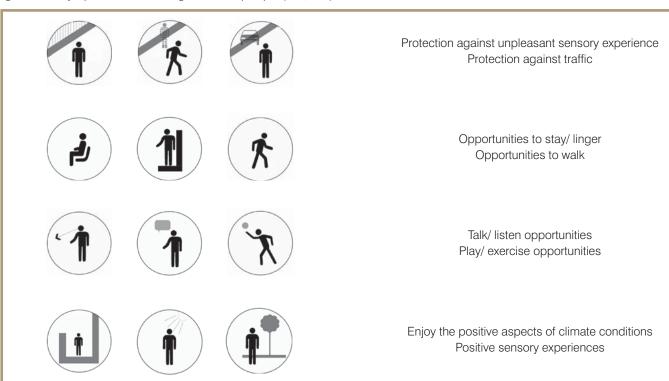




ACTIVITIES WITHIN THE CITY

The framework suggests reacting to the opportunities within the city by reinterpreting Gehl's ideas of protection, comfort and delight as urban comfort, urban opportunities and urban experience.

Figure 4.8: Activity implementations according to framework principles (Gehl, 2010).



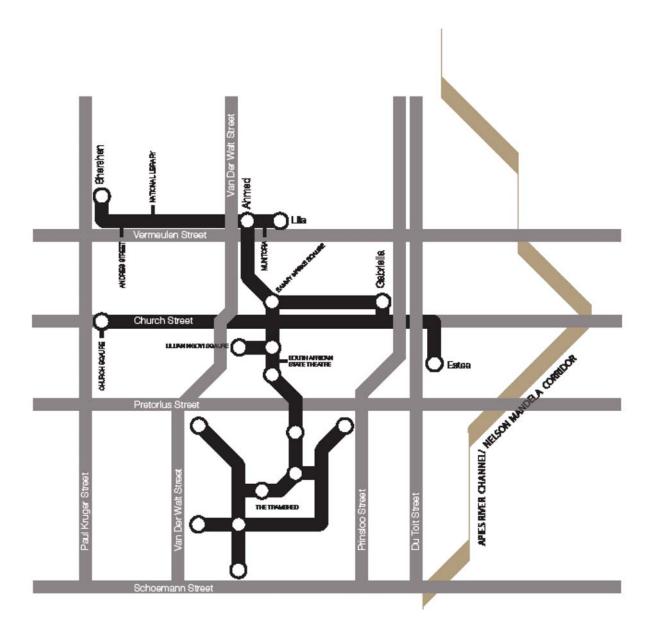


Figure 4.9: Abstract diagram connecting and linking a network of public space (Author, 2011).



# 4.3 BUILDING

ANALYSIS

B. BLANK SLATE ("TABULA RASA")

According to Coles and House (2007), interior architecture is a discipline that is (to a great extent) involved with the remodelling (adaptive reuse) and repurposing of existing buildings. It is important to note that the discipline has a fundamental role to play in the sustainable use of the built environment.

Building analysis is listed as the first step in understanding the interior, before such undertakings as adaptive reuse can take place.

The needs and requirements of the client is a second element that is necessary to be understood before interior interventions are envisioned.

#### A. FXISTING MATERIALITY

External walls are of brick and mortar construction, but the internal column spacing enables them to be non load-bearing entities.

The facade is concrete and suggests it has been added to a primary facade sub-structure.

#### **INTERIOR**

Exposed brick and plastered brick (rough versus smooth). Plaster: various layers (suggests reused at various times). Concrete floor: no finishes.

Textures: due to new layers of plaster- textures are uneven throughout.

Beams- texture alludes to timber shuttering for finish (State Theatre in the same precinct).

Le Corbusier's term refers to the state of a building before intervention (Coles and House, 2007: 16).

The intervention requires that the building be understood formally in terms of its potential: therefore the structure, orientation and existing nature need to be fully understood.

The warehouse has been reused over time, mostly as an educational facility, and is currently undergoing refurbishment to become a primary school. The blank slate offers both opportunities and limits: the building is cold and light quality into most interior spaces is weak. The "canvas's" orientation also poses a limit: the main entrance is situated on the western side and is street-facing, making all interventions dominated by this orientation.

"Blank slate" suggests starting from nothing and generating a sense of place (Coles and House, 2007: 16).

## C. SPACE AND FORM

Multi-storey and vacant building with a column, slab and beam structure

## D. PROPORTIONS

Modernist aesthetic that is prominent in the Inner City of Pretoria in terms of Pretoria Regionalism.



"Fin" feature suggests possible previous division in activities (unique exterior and standard interior/ strong facade and weak interior).

Horizontality is broken with verticality.

## RATIOS

Floor to slab height= 4300mm Floor to beam height= 3800mm

### F. STRUCTURE

Columns, reinforced concrete slab and beam structure. Integrity of structure: all intact, except for decay visible in facade.

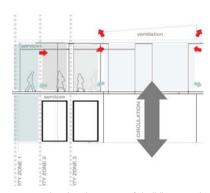


Figure 4.10: Concept exploration in terms of building envelope and activities (Athor2011).

## F. CIRCULATION AND MOVEMENT

Existing vertical circulation: not in use as it is situated on the periphery of the building's interior, hidden from the primary entrance.

Potential to create opening(s) for new circulation that acts as a linking medium, which would allow for light penetration if the structure allows it.

# G. INTERVENTION POSSIBILITIES

The introduction of an atrium that allows for ventilation is a possibility. Light can also be borrowed by creating an opening like this in the existing structure and the resultant intervention can contribute to a variety of experiences around it.

Strengths: on site with developed block framework; existing proposed educational; busy intersection/ notable vehicular movement

Weaknesess:

- 1. orientation (west-facing)
- 2. northern facade blocked by adjacent

buildina

- 3. vacant
- 4. state of decay
- 5. edges not well-defined

Opportunities:

- 1. exclusive basement parking
- 2. northern facade- visible to public (structure)
- 3. vacant, therefore optimal interior spaces
- 4. adjacent school- possible link
- 5. no specific associations, therefore value

can easily be added



# 4.4 HERITAGE APPROACH TO INTERVENTION

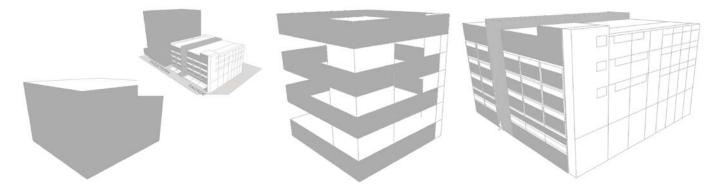
The reason for alteration is important to consider in terms of the heritage value of the chosen building. The Burra Charter (Burra Charter, 2009) identifies different degrees of approaches to conservation. The proposed building needs to be evaluated in terms of cultural significance before the degrees of intervention can be implemented.

Fred Scott's theory on alteration outlines different phases to undergo before alteration commences:

"The idea of stripping back centrally depends on the idea of a supposed ideal form, from which one's own host building is derived."



(Scott, 2008: 108)



CONSERVE RETAINUS E MEANING

CHANGE INTERPRET

N E W W O R K

Figure 4.11: Building envelope analysis (Author, 2011).

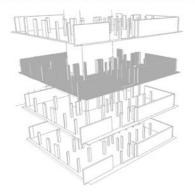


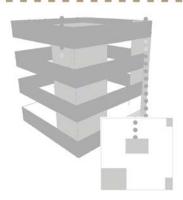
MEDIUM-HIGH CHANGE: maintain the external fabric, reconfigure the internal space, with SOME modification of the building's structure.

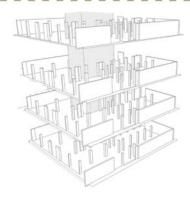
(Kincaid, 2002: 53)

ANALYSIS: REMOVAL OF ROTTED FABRIC CONSERVATION: REPAIR OR REPLACE POTENTIAL DEMOLITION PROCEDURES INTERVENTION LEADING TO CHANGE OF USE

- 1. Plaster removed, leaving brick and mortar sub-structure; remove secondary, non-structural walls, therefore light will penetrate deeper.
- 2. Repair west-facing facade that has been neglected in terms of restoration: additions and subtractions have damaged the valuable facade. The Modernist typology has been tampered with; the author believes this to have been detrimental to the original fabric.
- 3. The introduction of possible structural changes to the interior has been identified due to structural allowances, existing services and building orientation.
- 4. New intervention that will serve as reminder of the building in its original state as well as confront existing built elements.







RECONSTRUCT PRESERVE RESTORE MAINTAIN



BURRA CHARTER PRINCIPLES

Kincaid suggests that a few questions be answered in order to test the use- and technical viability of an adaptive use strategy. In terms of the interior, the floor-to-ceiling height should be considered, as part of the "first-stage characteristics" (Kincaid, 1997: 46). In the case of the Metro building, the floor-to-floor height range is 4.3m to 5m.

Physical characteristics of the metro building include:

- 1. strong exterior facade of the Modern period
- well-designed facade, the entrance at ground level being most prominent
- 3. access, consisting of one entrance in Du Toit Street
- 4. 1 existing core area (single entrance and single core)

Locational aspects as put forth by Kincaid (2002) include:

- 1. existing street characteristic: Du Toit Street just off Church Street- vehicular movement is prominent (cars, busses, taxis)
- local amenities: near Church Square, State Theatre and Department of Arts and Culture; in the vicinity of many underutilised buildings; deductions: strong social and average physical (Kincaid, 2002: 49).
- Gautrain station (Pretoria) approximately 1.5km from site; taxi rank off Du Toit Street; site situated on major bus routes in city; deductions: public transport= 2 forms within 10 minutes
- 4. private transport rating: western facade sits on Du Toit Street, which is public and open to all vehicles



Figure 4.12 (above and opposite): Metro building (circa 1960), exterior and interior views (Author, 2011).



Kincaid particularly refers to selective demolition, referring to those elements of the building that, when demolished, will be beneficial to the building in its new use: it can extend the range of future uses; it can improve on sustainability and allow for the building to become more financially viable (Kincaid, 2002: 59).

The introduction of an atrium (slab demolishment) allows:

- the deep-plan space to become a high quality space in terms of light entering interior "streets"
- vertical circulation encouraging multiple uses 2.
- new entrance areas to encourage public use
- the ground floor to become flexible in its public use
- for the upgrade of the interior, conserving elevations of heritage value

These aspects will affect the technical viability as well as the use viability of the design intervention. Kincaid (2002) refers to the former as those investigations into the possible physical changes that can happen to the building and the latter, as the identification of the possible uses within certain constraints.

Illustrated in the building analysis (see Figure 4.11) as part of the proposed framework, the Metro building has proven to be susceptible to a large degree of physical change in the interior and on ground floor level, whereas the exterior above ground floor is structurally untouched, with minor changes to window treatments as a means to improve thermal comfort in the interior.



# 4.4.1 CRAFT AS AN ENTITY IN THE INNER CITY

Various elements in the inner city are representative of either craft or craftsmanship, depending on the context the elements find themselves in. The combination of textures add to the idea of craft as materiality.

The Arts and Craft Movement is prevalent in the architecture and in the articulation of elements relating to the building: facade articulation, lamp posts, column treatments and signage.

Textures in the vicinity of the site are important to consider when choosing materials within the building, in order to intervene in a sensitive and applicable way.

Craftsmanship is also present in the way people make a living in the inner city. The stretch from Church Square through to Lilian Ngoya Square, is populated with craft stalls, representing products derived from beading, weaving, woodwork, ceramics and metalwork.



CRAFT AS ARCHITECTURE



CRAFT AS MATERIALITY



CRAFT AS A WAY OF LIFE

Figure 4.13: Existing textures and materiality surrounding the site (Author, 2011).