



## 04. PHYSICAL CONTEXT

Figure 36. View of the site from across the street on the corner of Vermeulen- & Bosman Street (Author, 2010).

Founded in 1855 Pretoria has mostly developed along an east west axis in response to the restrictions posed by the topography of the terrain. This part of the city has a logical grid-based layout with Church Square still at its centre.

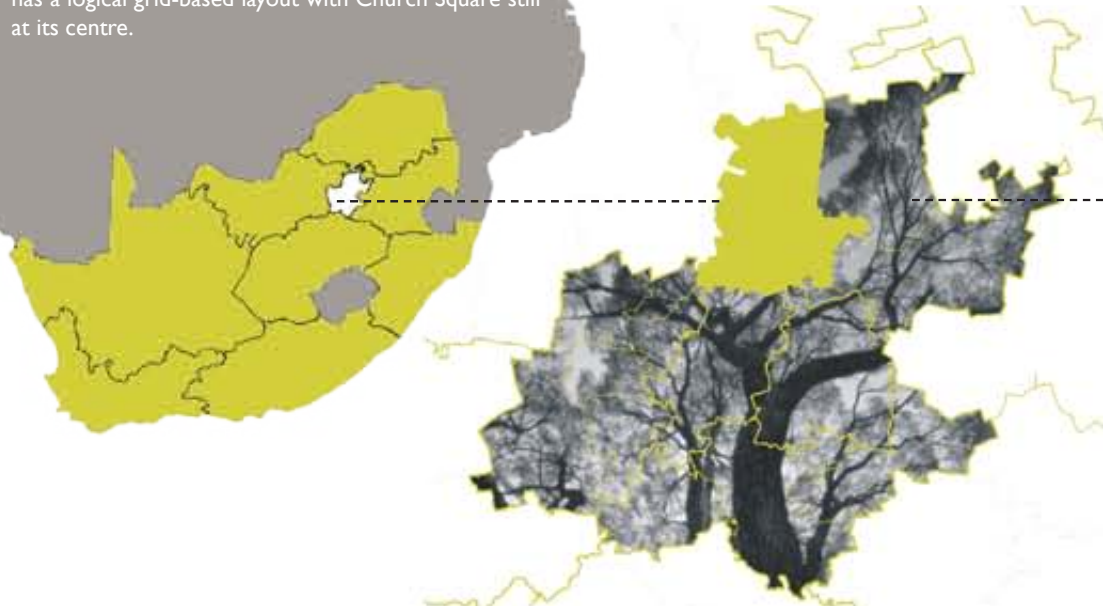


Figure 37. Gauteng within the context of Africa & South Africa (Author, 2010).

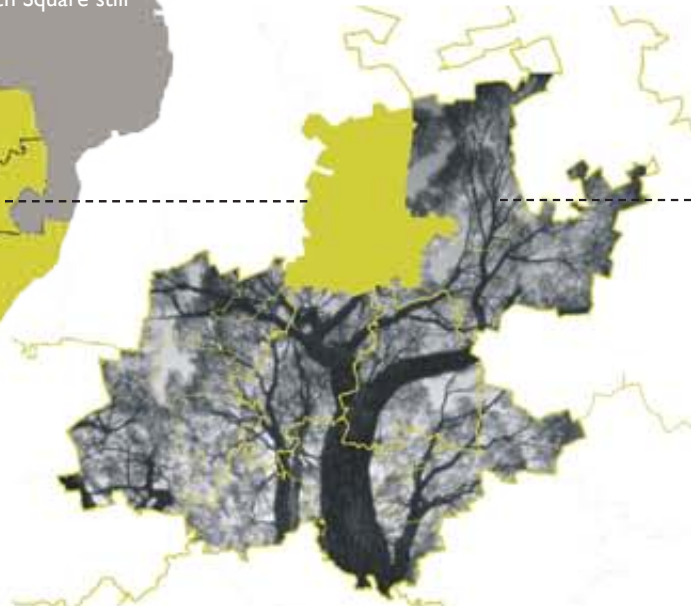


Figure 39. Pretoria within the context of Gauteng (Author, 2010).

The capital city of Pretoria is regarded as the core city of the multi- nodal municipal ward of Tshwane. The Central Business District of Pretoria lies between the borders of D.F Malan Drive to the west, Nelson Mandela Drive to the east, the Pretoria Railway Station to the south and Boom Street to the north.

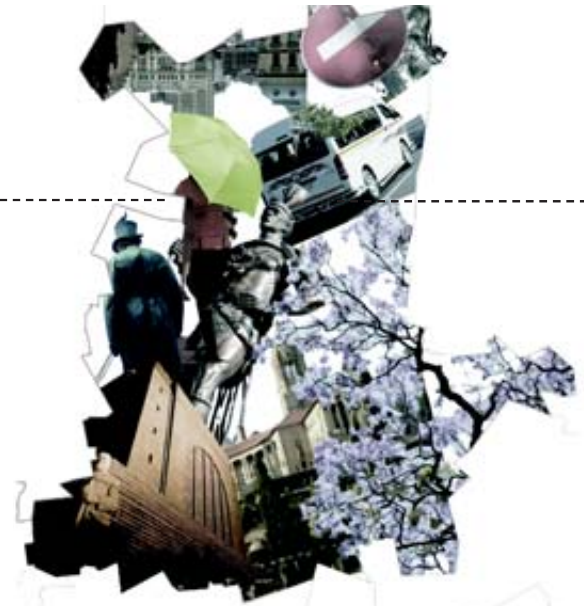


Figure 38. Figure 51. Figure 04 Impressions of Pretoria (Author, 2010).

## 4.1 SITE

The bookbinding workshop of the Government Printing Works  
Bosmanstraat 148, erf 1/218-222



*Relationship to the inner city*

Figure 41. Location of the Government Printing Works within the Pretoria CBD (Author, 2010).

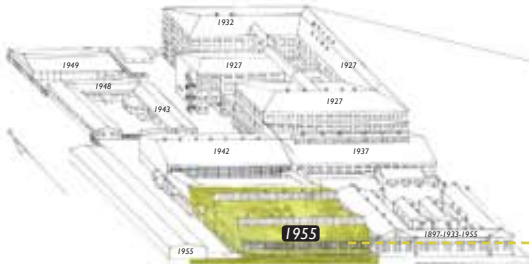


Figure 40. Perspective of the Government Printing Works (Author, 2010).

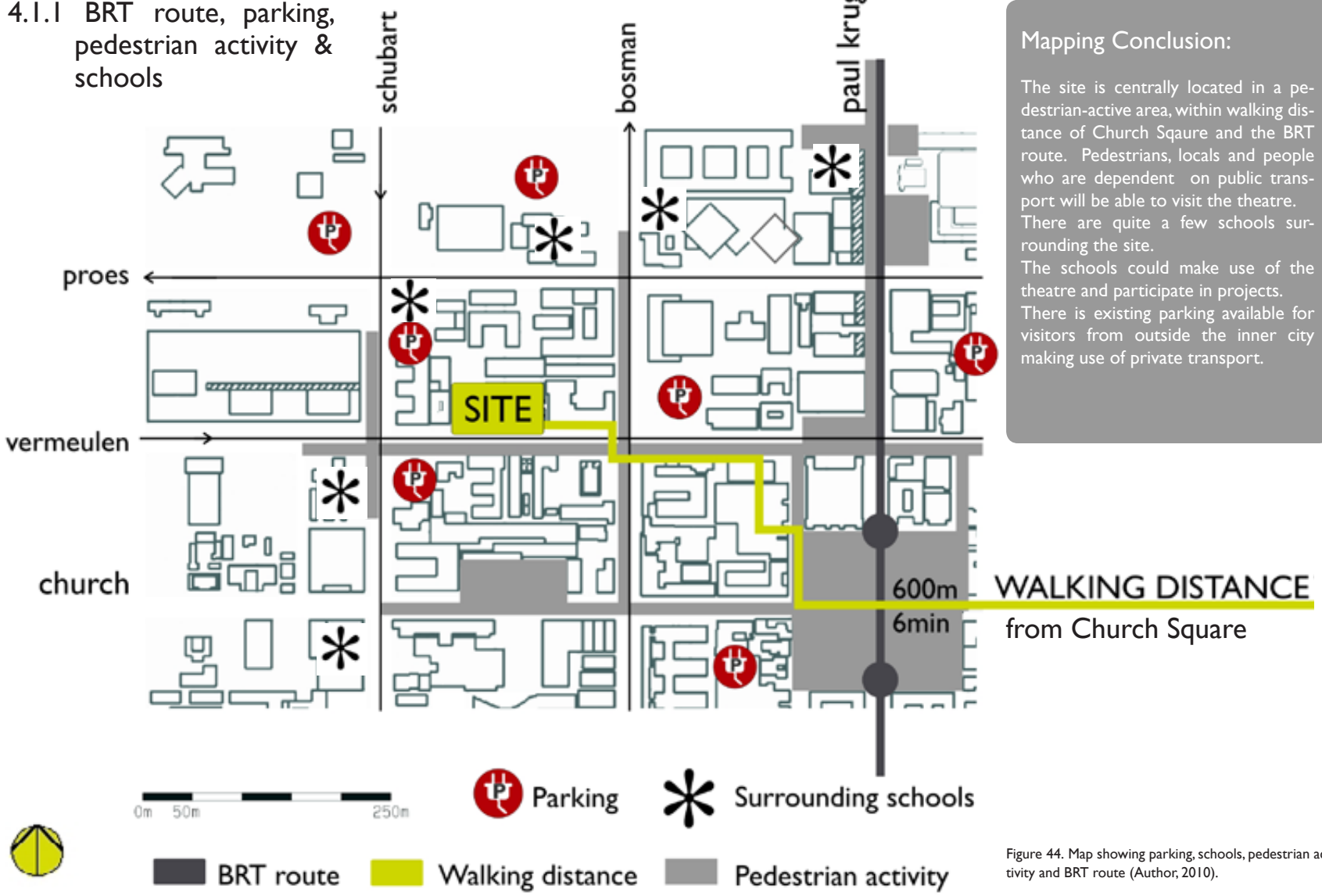


Figure 42. Location of the binding workshop in the contexts of The Government Printing Works (Geography department, UP, 2010).



Figure 43. Perspective showing the binding workshop & The Government Printing Works (Author, 2010).

### 4.1.1 BRT route, parking, pedestrian activity & schools



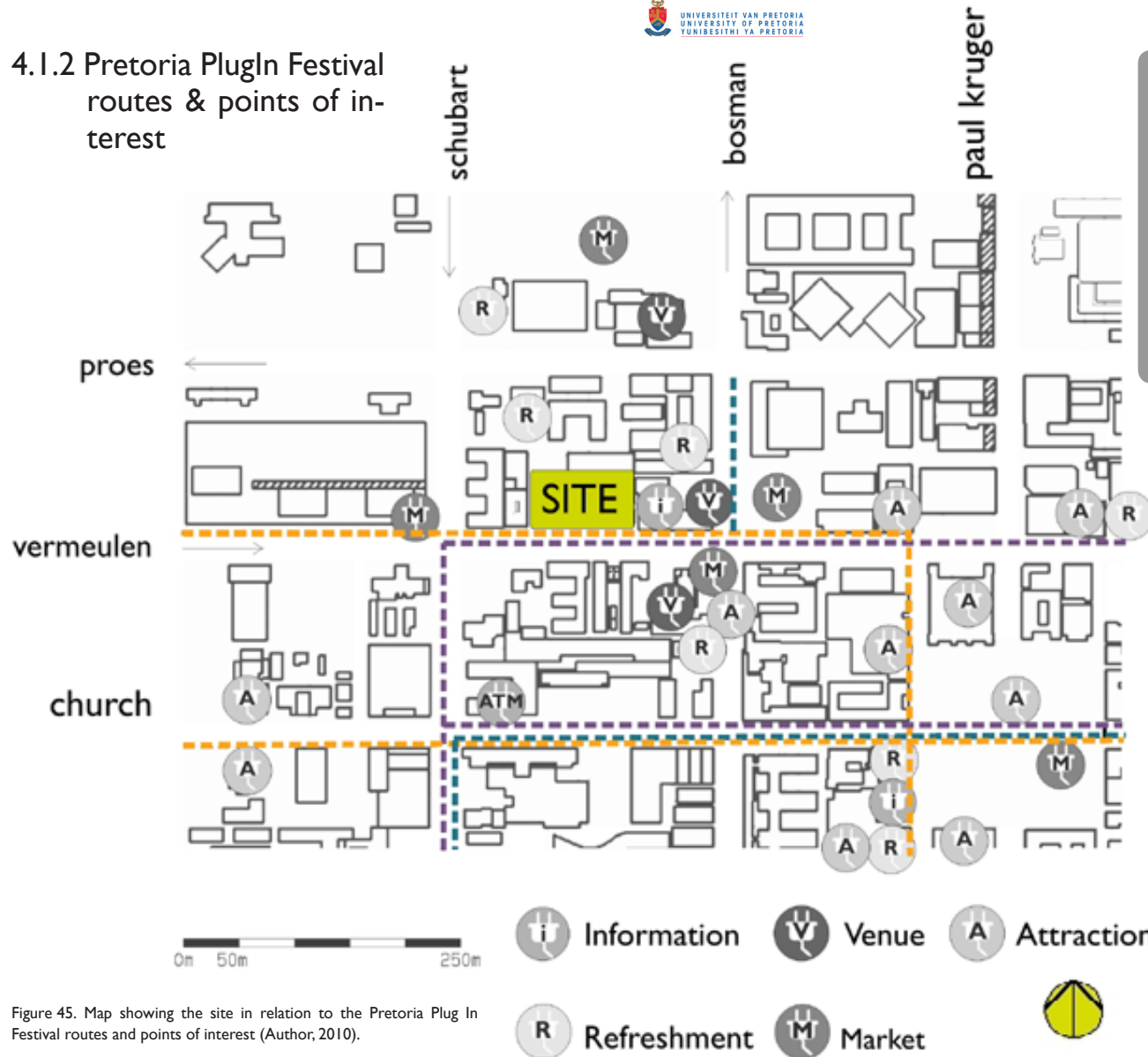
**Mapping Conclusion:**

The site is centrally located in a pedestrian-active area, within walking distance of Church Square and the BRT route. Pedestrians, locals and people who are dependent on public transport will be able to visit the theatre. There are quite a few schools surrounding the site. The schools could make use of the theatre and participate in projects. There is existing parking available for visitors from outside the inner city making use of private transport.

**600m  
6min**  
**WALKING DISTANCE**  
from Church Square

Figure 44. Map showing parking, schools, pedestrian activity and BRT route (Author, 2010).

### 4.1.2 Pretoria Plug In Festival routes & points of interest



**Mapping Conclusion:**

The site is located within the boundaries of the proposed festival and in close proximity to new and existing points of interest.

The theatre will contribute to, and benefit from, the festival activities.

Figure 45. Map showing the site in relation to the Pretoria Plug In Festival routes and points of interest (Author, 2010).

### 4.1.3 Current land usage of property around the site

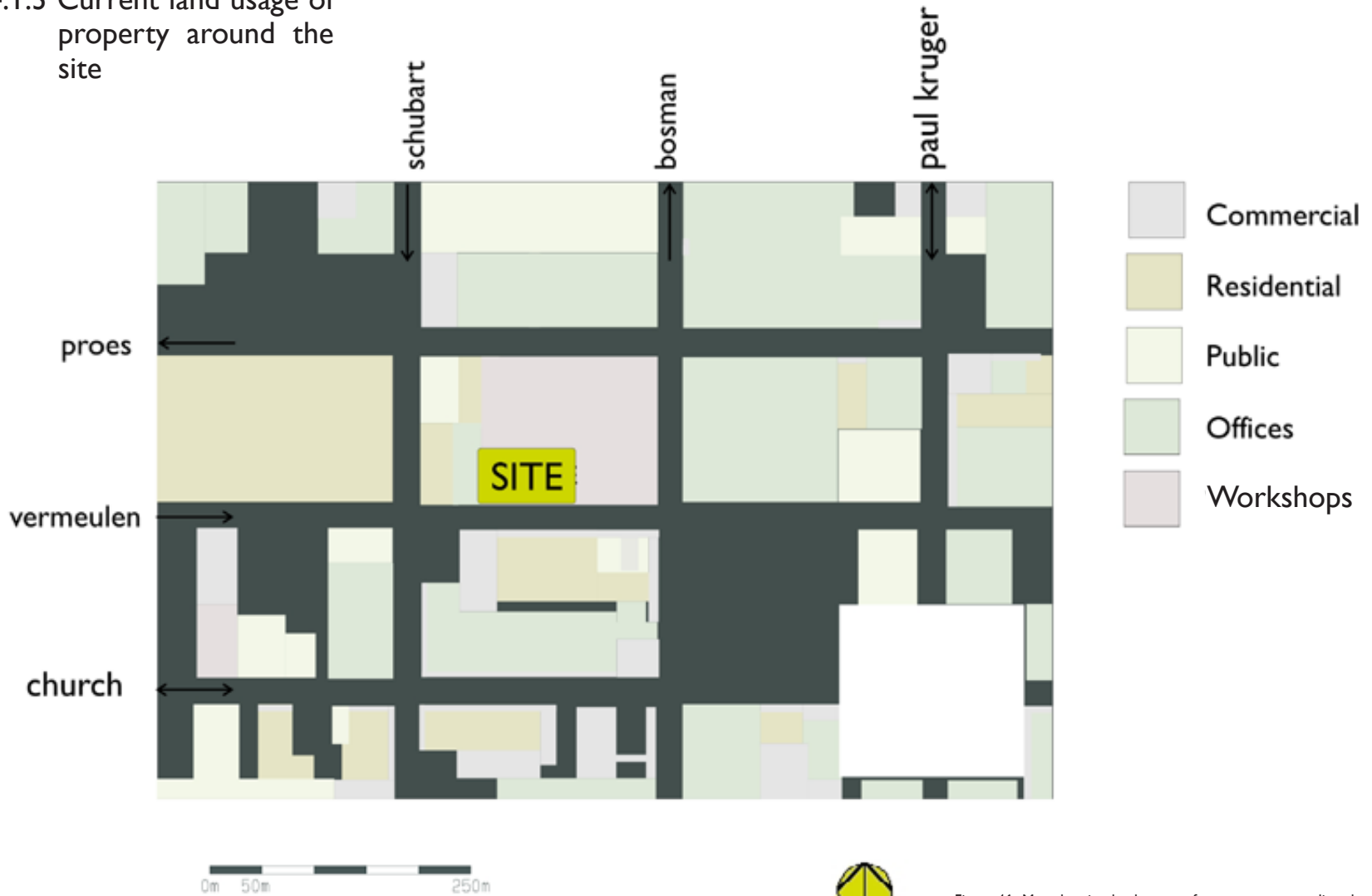


Figure 46. Map showing land usage of property surrounding the site (Author; 2010).



Figure 47. Digital collage showing impressions of the site and its surrounds (Author, 2010).



## 4.2 HISTORY CONTEXT OF THE SITE

Seen in isolation, the building that houses the book-binding workshop could be considered unimportant. The building's historical importance lies in the fact that it is part of a larger whole; the Government Printing Works, and therefore related to its development and associations.

Over the years the Printing Works printed, among other things, the SA Railway timetables, voters' lists, ballot papers, maps, cigarette excise duty labels, Union Government Gazettes, Matric exam papers, ID and passport documents.

The original printing works occupied a site in Church Street which were subsequently occupied by the State Library and later became the first home of the South African Reserve Bank.

Similarities found in comparing the Old Printing Press (Staatsdrukkerij, 1895) with the current binding workshop (1955) led the author to believe that the original printing press influenced the design of the binding workshop. In the light of available literature the following aspects could have been influential:

- Little detail, limited to the street facing facades (Minnaar, 2000, 68-75)
- Corner entrances unlike the central entrances of other government buildings of the time
- Other entrances are placed at the most useful positions for public access and workers entering from the street

**Architect:** Sytse Worpes Wierda (Government Engineer and Architect of the ZAR 1877 – 1899)

### 4.2.1 Wierda's point of approach:

Functional, utility and industrial architecture can still make a positive contribution to the image of the city through following the same city building principles of, for example, edgebuilding (randbebouing) and through using the same building materials (Minnaar, 2000, 68-75).

Commonalities between these types of buildings are also evident in the binding workshop:

- A basic system of links and integration
- Materials chosen according to local availability – red brick, sandstone, painted corrugated iron roof sheeting and wooden doors
- Ventilators and volumetric interpretations of facades.
- Placement of buildings to face the street or square.
- Autonomous buildings, proud and steadfast with a clear outline

### 4.2.2 Basic heritage evaluation adapted from Le Roux (1993,57)

*A: Architectonic or style importance*

*C: Contextual importance in relation to the street or as part of a group*

*D: Designer of importance*

*E: Economic and reuse potential*

*H: Historical importance due to association with a person, group or event or by age (Older than 50 years)*

*L: Landmark, visually or within community sentiment*

*P: Physical condition*

*T: Typological importance*



### Elements with historical importance Industrial heritage

- Ventilators
- Red face brick
- Jagged roof profile
- Clerestory windows
- Corrugated iron roof sheeting

1887

The Transvaal government purchased the printing plant and gave Jan Cilliers the order to establish a

## Government Printing Works.

1892

**Nationalized** and established as a state printing press by old president Paul Kruger

1875

President appointed the stamp commission

1877

British occupation – stamps displayed the **British queen's head**

1895

Department of **Public Works** were placed in charge and moved the Printing Works to a **new red-brick building on the corner of Vermeulen and Kock Street** (now Bosman)

1899 – 1902

During the **Anglo-Boer War** the **Printing Works** closed.

Government printing was made possible by establishing a **mobile plant** on a train that ran between Pretoria and Delagoa Bay.

Towards the end of the war the **Printing Works re-opened** with an entirely new staff, engaged by Lord Milner, the High Commissioner in Durban

1901

The bust of the President appeared on stamps.

Up to 1901 **only hand composition** and ordinary letterpress machine minding and bookbinding were in operation.

1926

The red-brick building got too small and the staff and equipment moved to a **new and commodious building** on an adjoining site valued at £350 000 and occupied more than 700000 square feet in 1955

1955

The quartermaster of the **South African Police** occupies the **red brick building**.

Greatly **modernized** by the installation of new machinery. Original value of equipment – £500 000  
350000 copies of the Transvaal telephone directory consumes more than **450 tons of paper**

## 4.3 RELATIONSHIP WITH OTHER EXISTING STRUCTURES

### LONG-TERM INFLUENCE OF THE TEMPORARY THEATRE

Activating under-utilized space  
 Reclaiming lost space  
 Learning through experimenting:  
 -facilitate temporality & recycling  
 -programming, construction & materials  
 Learning through repetition  
 Testing of theory

ARCHITECTURAL

Cultural education  
 Sparking interest in culture  
 Exposure to cultural activities  
 Promoting art & culture in the public realm

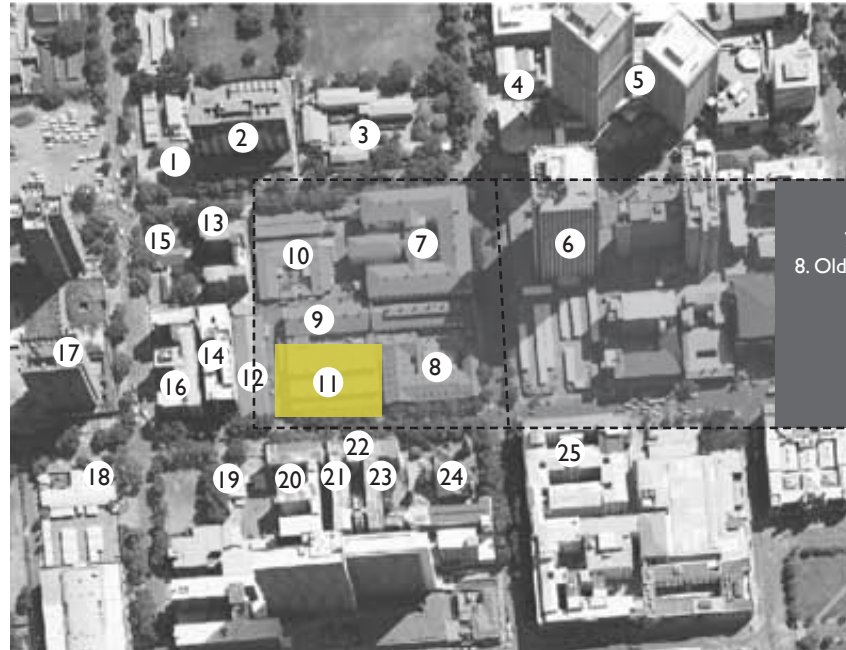
CULTURAL

Workshops & training  
 Skills transfer  
 Job creation  
 Income generation  
 Cyclical - lasting benefits

ECONOMICAL

People getting together to work & play  
 Promotes community identity  
 Community events during the festival  
 - common design language/character  
 - create a local brand  
 Establishing a community facility

SOCIAL



1. Engen Garage & sports bar
2. Batho Pele house
3. Eendraght Primary School
4. Primary School
5. Telkom Tower
6. Telkom Tower South

7. Press: workshops, offices & cafeteria
8. Old government publishing house & press
9. Paper recycling
10. Workshops, storage & offices
11. Lithography & binding
12. Parking

13. House Davidtz Old Age Home
14. City Forum - offices
15. Pennies Primary School
16. Vergesig - apartment block
17. Schubart Park
18. Nursery school
19. Van Zyl's Fitment Centre
20. Social housing
21. Social housing
22. Retail on street level
23. Social housing
24. Groote Kerk
25. Old Department of Public Works

Figure 48. Aerial photo graph showing the site in relation to other existing structures (Geography department, UP, 2010).





Figure 49. Other existing structures and facilities (Author, 2010).

### 4.3.1 Natural elements

The most prominent natural element on the site are the large Jacaranda trees lining Vermeulen Street parallel to the south facade of the building. There are six big trees at regular intervals towering up to the top of the roof and shading the building.

### 4.3.2 Street edge

The south facade is the only street edge of the building. The column, slab and infill composition are visible on this facade. Large steel frame windows are elevated from the street restricting any view into the building from outside. The incline of the sidewalk decreases towards the west. Although the edge of the building is completely closed off from the street, the trees provide a pleasantly shaded walkway along it. Pedestrians frequent this street judging by the palimpsest of posters and flyers against the edge of the building.



Figure 50. Views of the street edge and Jacaranda trees (Author, 2010).

### 4.3.3 Existing community facilities that could contribute to, or benefit from the re-use of the site as a temporary theatre

#### **Schools:**

**Festival:** community participation, fund-raising & showcasing talents  
**After:** upgrading facilities + new venue = fund-raising, recitals, exhibitions, skills training, workshops, functions & performances

#### **Groote kerk (church):**

**Festival:** Music & Choir performances, guest speakers fund-raising, youth involvement  
**After:** Youth facility, Venue for Christmas play in collaboration with Huis Davidtz

#### **Residential component:**

**Festival:** community building, workshops & on-the-job skills training needed for festival  
**After:** community venue, continued workshops & training, job creation - residents become the staff/workforce

#### **Huis Davidtz Old Age Home:**

**Festival:** Tea garden, venue, craft workshops & market  
Creating awareness  
**After:** continued workshops, training, new venue for events, community involvement  
job creation - admin & maintenance

## 4.4 HOST BUILDING -ANALYSIS & APPROACH

### 4.4.1 Temporary use of found space

While this study was conducted (2010) the Government Printing Works in central Pretoria occupied the largest part of the block between Proes, Vermeulen, Shubart, and Bosman Street. At the time the relocation of this state facility, to the corner of Proes and Paul Kruger Street, two blocks to the east, was already underway and intended for completion by 2013 Reynhard.

Since 1970 a series of productions by Peter Brook experimented with performing in a variety of found spaces. In the context of this study 'found space' refers to existing spaces that had not been designed for theatrical performances but can, nevertheless, be converted into theatres with surprising success. Usually these performances also have the support of a community, relieved that a use has been found for an empty or precious old building. Little, or nothing, would otherwise be done to these spaces (Mackintosh, 1993, 83).

#### Examples

- Roundhouse – A circular 19th century steam engine shed in London
- Joseph Papp public theatre – Library in New York
- Schechner's performing arts garage – Garage in New York
- Mnouchkine's Cartoucherie de Vincenne – an old ammunition factory outside Paris (Mackintosh, 1993, 86)

Traditionally theatre stages are neutral, black boxes suspended in space. Designed specifically to host different productions, the black box theatre relies on function and performance rather than on spatial experience. This type of theatre is referred to as a 'black box' because it is typically a dark rectangular volume with no reference to the external environment. Although the size and the technical capability of a black box theatre impose some constraints on the director and designers, in effect they work on a blank canvas.

In 1989 Ariane Mnouchkine made the case for 'found space'. The development of this concept emphasised the fact that existing buildings and spaces have existing character, experiential qualities and dramatic potential. The found space (permanent) functions as a sacrificial backdrop to the performance (temporary) and becomes a theatre building in its own right. In turn the design and experience of the performance are directed and influenced by the existing space. This means that existing spaces other than traditional theatres has the potential to become a theatre.

*"Theatre is the place where fiction and reality come together to promote each other. Real and unreal exist in tension; two opposites manifested at the same time and never fully one or the other. The potentials of space for performance are necessarily spaces where the reality and illusion are both a simulation of the material world but also real"* (Oddey & White, 2006: 15)

Found space is the opposite of the black box theatre, the famous multi-purpose technical box which in fact bristles with limitations (Mackintosh, 1993, 86)

The architecture of theatre space has both a physical and metaphysical function.


Years ago directors were saying: "Give us a neutral space and we'll handle the rest. I'm not sure if they would still say the same thing today. I say an empty space but an inspiring empty space that can be filled with images." Existing space will also have its own ghosts from the past; memories, associations and meaning. (Mackintosh, 1993, 86)

According to Mackintosh (1993, 86) this unconventional preference for space that is not purpose-made might seem incomprehensible to architects. Actors, designers and directors however have the opportunity to comprehend immediately the practical and poetic dimension of an existing space; becoming aware of its character and dramatic potential.

A performance in a found space clearly advertises that the theatre played here is going to be a different experience from theatre played in a traditional theatre building. The audience will have a heightened sense of expectation and as a result take greater notice of the architectural quality of the space.

*"The audience gets a buzz from the feeling that the players have come to town and taken over this particular structure."* (Mackintosh, 1993, 86)

Figure 51. Interior view of the host building (Author, 2010).



*“For us La Cartoucherie is almost the ideal place. Of course the ceiling is rather low and the truss rods sometimes get in our way, but it is a house, a theatre, a large gracefully shaped umbrella made out of solid material that can be sculpted, painted, arranged and veneered.”*  
*Ariane Mnouchkine (Cited in Mackintosh, 1993, p.86)*

## 4.4.2 Reasons for choosing this site

- It falls within the Pretoria PlugIn Festival boundaries
- The site is within walking distance of Church Square
- Currently, The Government Printing Works is in the process of being relocated and is expected to remain empty for three to five years
- There is active pedestrian traffic along Vermeulen Street as suggested by the palimpsest of posters and flyers against the southern facade
- Vermeulen is a pleasant tree-lined street that can be incorporated into the design
- Natural southern light from clerestory windows can be employed
- The site is accessible for pedestrians and vehicles
- The existing hoist, and a large opening, allow for equipment and scenery to be lifted into the space.
- The industrial-capacity concrete floor slab and beams can carry an audience as confirmed by engineer
- The building contains a large double-volume space with minimal obstructions
- This building is part of a larger building complex that can contribute to, and benefit from, this intervention.

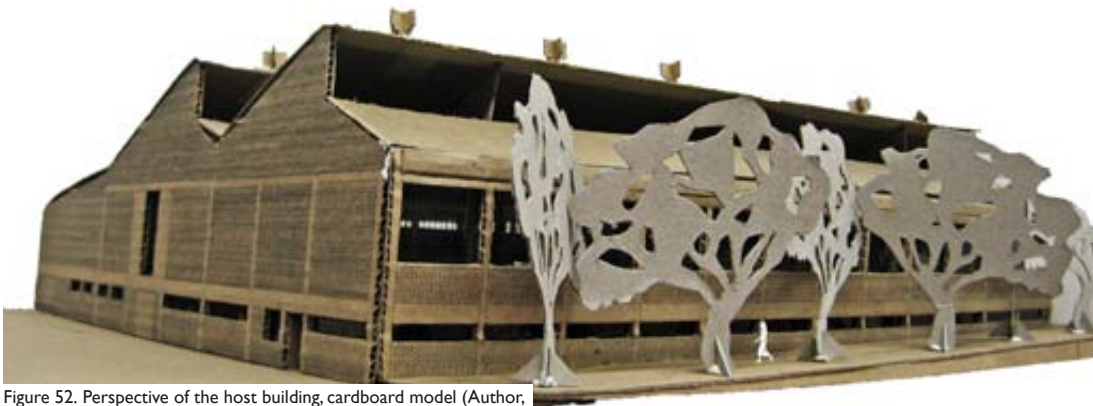


Figure 52. Perspective of the host building, cardboard model (Author, 2010).

Figure 53. Exterior views of the host-building (Author, 2010).





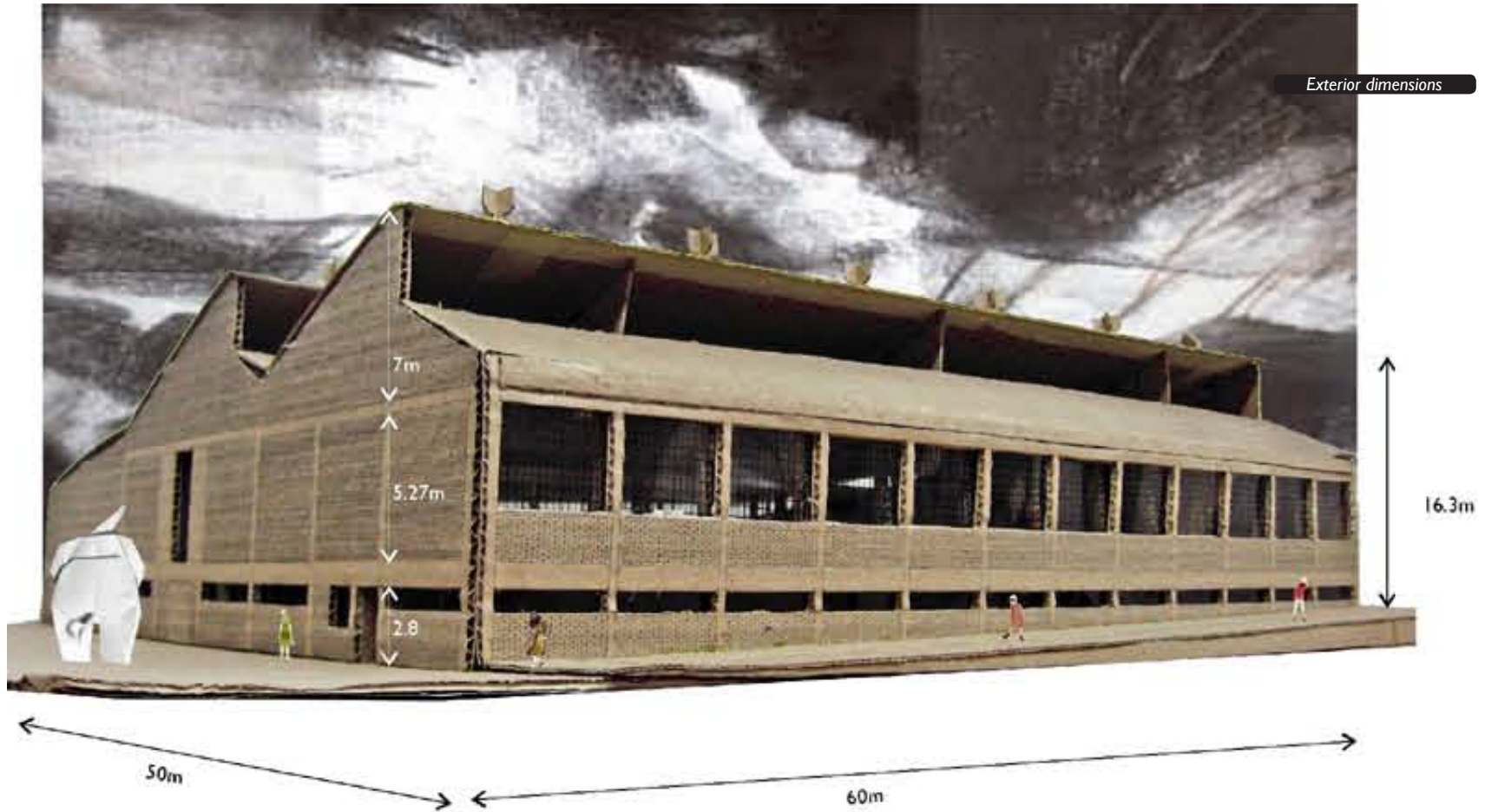


Figure 54. Cardboard model of the host building showing exterior dimensions (Author, 2010).

## 4.5 STRUCTURE

*“Interior architecture is the spatial manipulation of an existing building whilst engaging with its structural DNA, history, context, orientation and proposed program.”  
(Gigli, 2007, 34)*

The structure of the existing building is composed of a concrete column and beam-system with a 340mm thick concrete floor-slab and brickwork infill. The roof is supported by 40x40x5mm angle iron trusses bolted together and spaced at 4945mm centres. The trusses are supported by the 345x460mm columns also spaced at 4945mm.

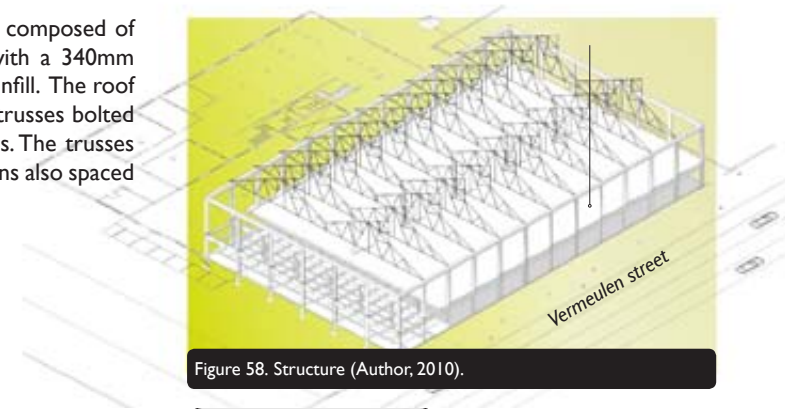
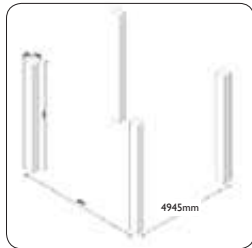
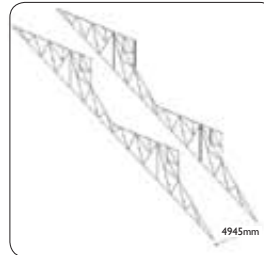


Figure 58. Structure (Author, 2010).



Interior dimensions

$l=59310\text{mm}$   
 $w=35880\text{mm}$   
 $h=6120\text{mm}$



Interior dimensions

$l=59310\text{mm}$      $l=59310\text{mm}$   
 $w=14260\text{mm}$      $w=35880\text{mm}$   
 $h=5270\text{mm}$      $h=6120\text{mm}$

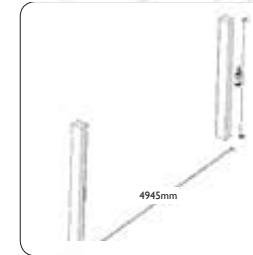


Figure 59. Column & truss spacing (Author, 2010).



Figure 55. Perspective of the ground floor (Author, 2010).



Figure 56. Perspective of the first floor with trusses (Author, 2010).

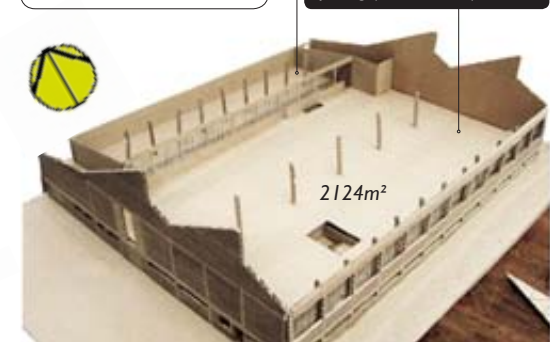


Figure 57. Perspective of the first floor without trusses (Author, 2010).

# 4.6 ACCESS, VERTICAL CIRCULATION & ABLUTION FACILITIES

## Ground floor-lithography workshop

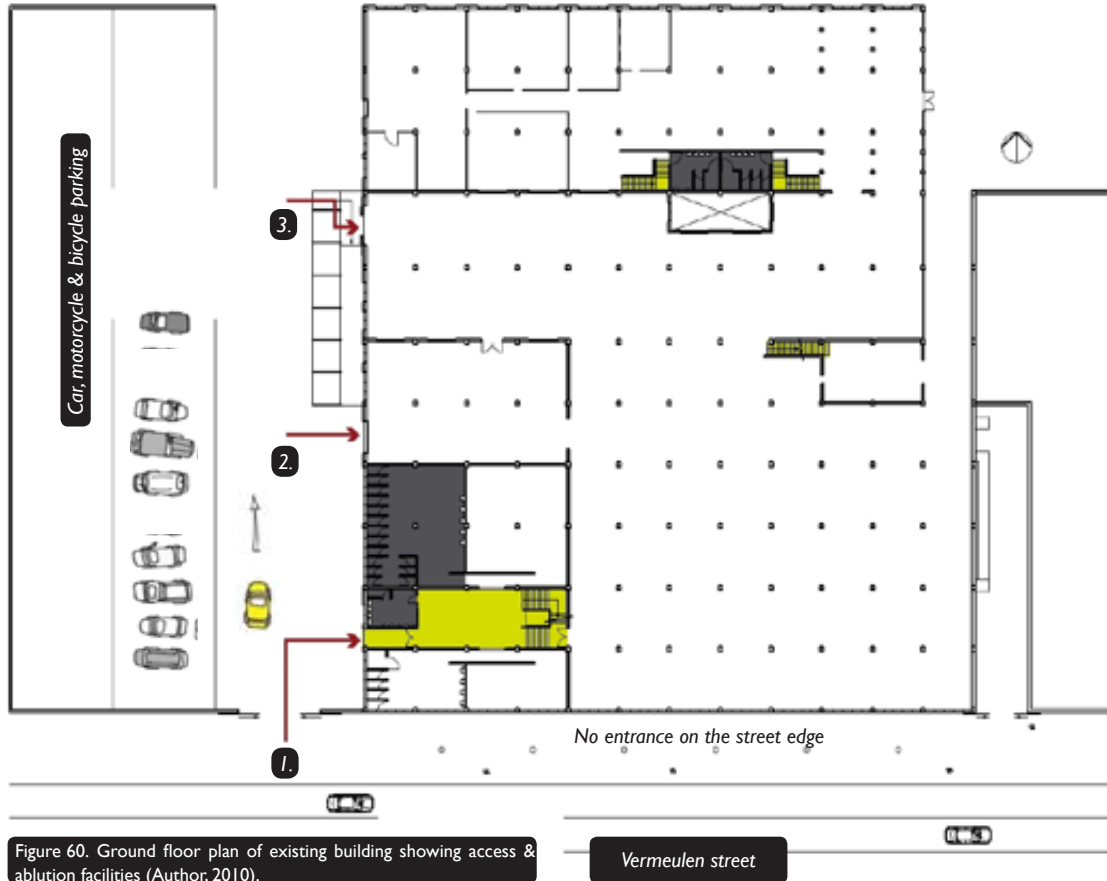


Figure 60. Ground floor plan of existing building showing access & ablution facilities (Author, 2010).

Existing vertical circulation

Existing ablution facilities

Main existing entrances & exits



Figure 61. View of the entrance (Author, 2010).



Figure 62. View of service access in the western facade (Author, 2010).



Figure 63. View of the female ablution facilities; 9 wc's, 6 showers & 5 basins (Author, 2010).

## First floor-binding workshop

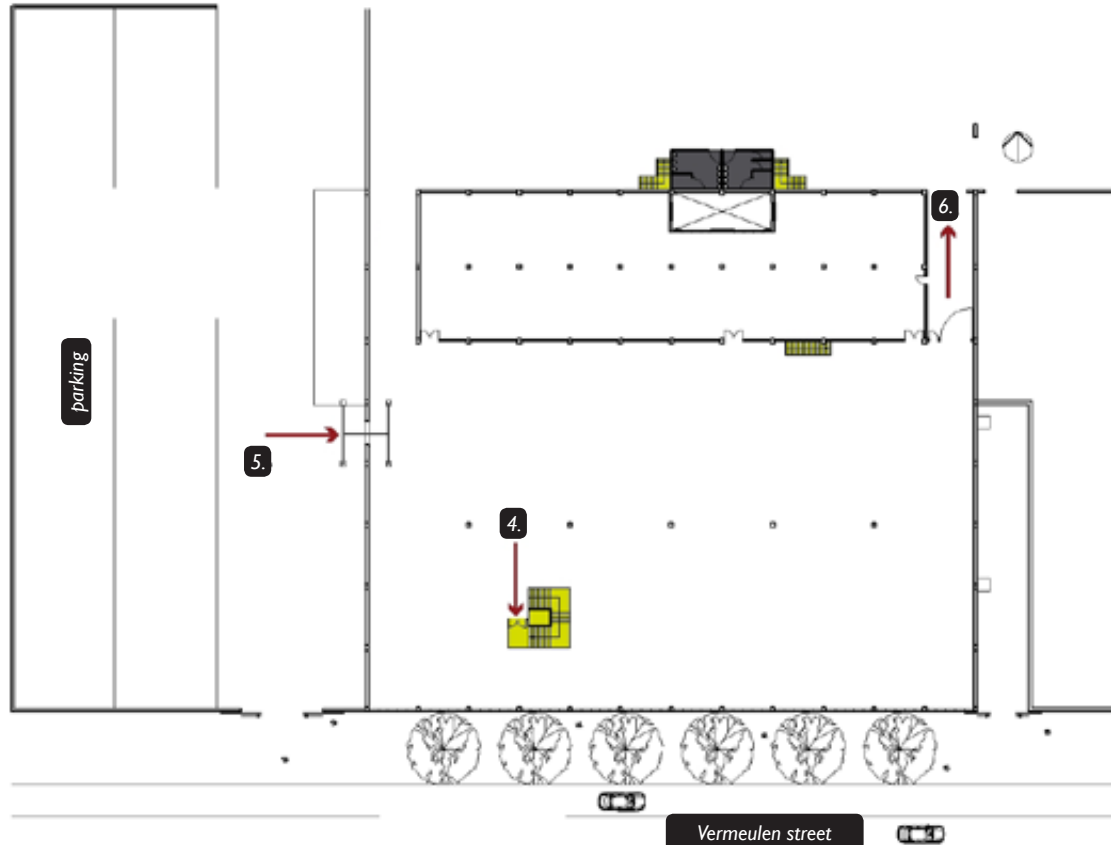


Figure 69. Ground floor plan of existing building showing access & ablution facilities (Author, 2010).

Existing vertical circulation

Existing ablution facilities



Figure 64. View of the staircase leading to the first floor (Author, 2010).



Figure 65. Exterior view of the door going up to the first floor (Author, 2010).

Figure 66. View of the access hoist going up to the first floor (Author, 2010).

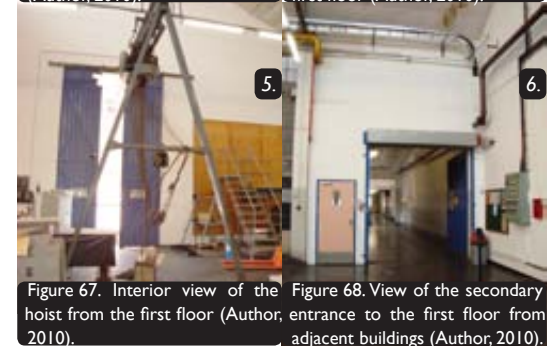


Figure 67. Interior view of the hoist from the first floor (Author, 2010).

Figure 68. View of the secondary hoist from the first floor (Author, 2010).

→ Main existing entrances & exits

## 4.7 FOCUS AREA

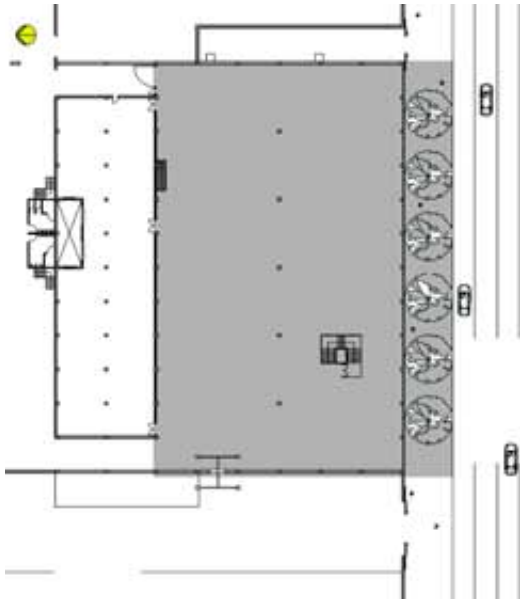


Figure 70. First floor plan indicating the focus area of the study (Author,2010).



Figure 71. View of the south facade indicating the focus area of the study (Author,2010).

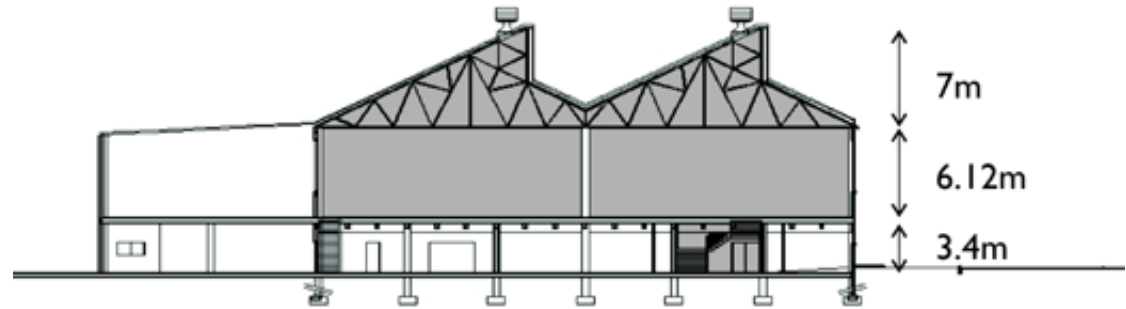


Figure 72. Typical section indicating the focus area of the study (Author,2010).

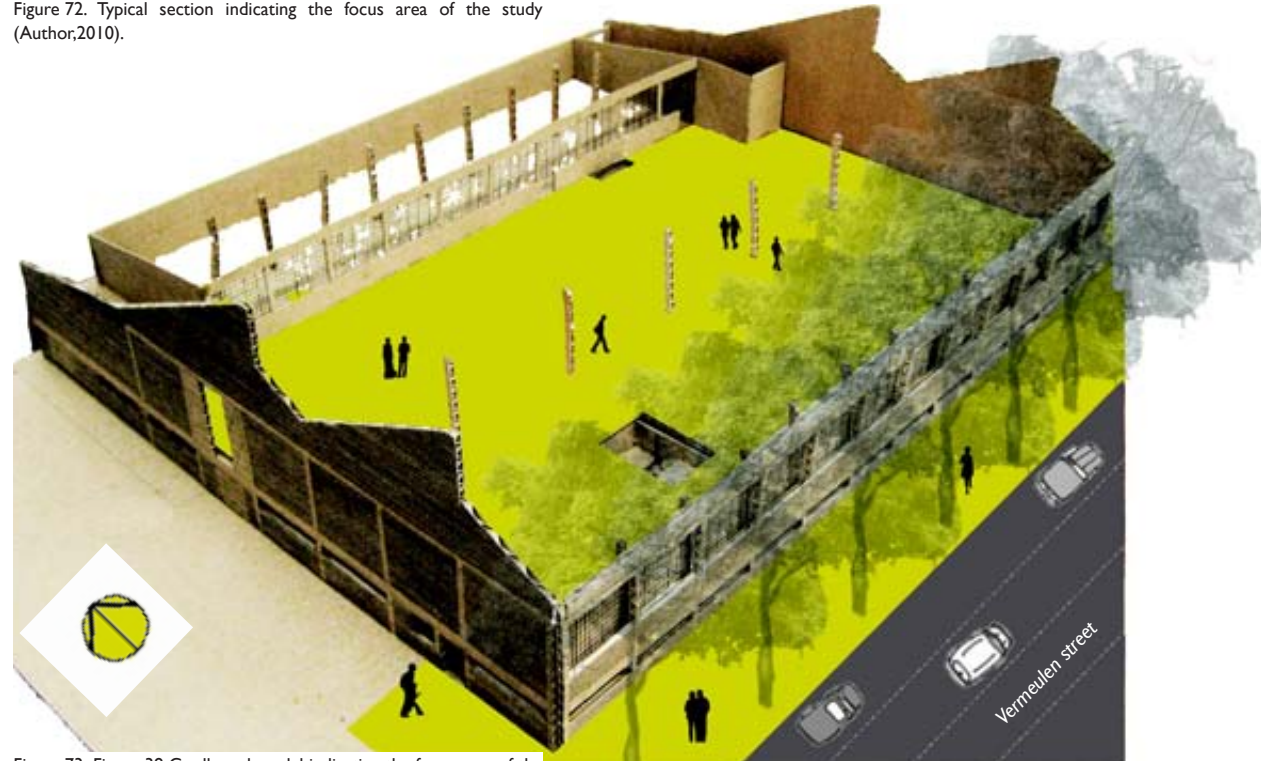


Figure 73. Figure 38 Cardboard model indicating the focus area of the study (Author,2010).



*Factories often make great theatres because they have been built to house creations, productions, works, inventions and explosions.”*

*Ariane Mnouchkine (Cited in Mackintosh,*

*1993, 86)*

Figure 74. Interior view of cardboard model showing natural light effect (Author,2010).



Figure 75. Interior view A (Author,2010).



Figure 76. Steel frame windows in South Facade (Author,2010).

1.

## VIEW A



Figure 77. Wall thickness seen through the opening for hoist (Author,2010).

2.

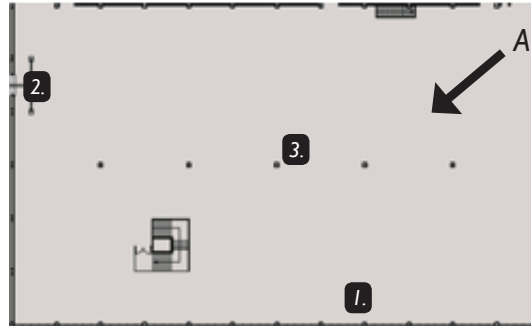


Figure 78. Plan showing view A, 1-3 (Author,2010).



Figure 79. Steel truss supported by column. Note the water pipe, electrical cables and sprinkler system supported by the truss structure (Author,2010).

3.





Figure 80. Interior view B (Author,2010).



## VIEW B

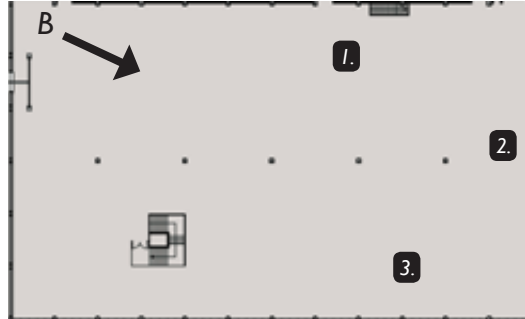


Figure 83. Plan showing view B, 1-3 (Author,2010).



Figure 84. Existing electrical fans (Author,2010).



Figure 85. Interior view C (Author, 2010).



Figure 86. Existing ventilation system (Author, 2010).

## VIEW C



Figure 87. Hoist and opening through western facade (Author, 2010).

1.



Figure 88. Plan showing view C, 1-3 (Author, 2010).

2.



3.

Figure 89. Existing sink, provided with hot and cold running water (Author, 2010).