An investigation of restorative and experiential theories, applied within an open space framework for the Hospital Hill as a place that could benefit public health.

a development proposal for regeneration:

THE HOSPITAL HILL
2008

by Heleen Pretorius

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Submitted in partial fulfilment of the requirements for the Master Degree (Professional) in Landscape Architecture at the Faculty of Engineering, Built Environment and Information Technology of the University of Pretoria.
“...almost meaningless to ask how to design an experiential landscape in a conventional sense because a part of it resides in the life patterns and psychological activity of individuals and groups and this is outside the realm of conventional approaches to design. Instead it may be more meaningful to talk about trying to create the conditions within which experiential opportunity can be optimised.”

Thwaites, K and Simkins, I (2007):114
1. Introduction/Site description

2. Project Brief

3. Conceptual Design Indicators

   user needs

4. Literature Evaluation

5. Precedent studies

6. Framework

7. Master Plan

8. Sketch Plan

9. Technical Investigation

10. Conclusion
EXECUTIVE SUMMARY

The Hospital Hill is characterised by illegibility, under-utilised space and lack of circulation control. Hospital Hill contains the Medical campuses of the University of Pretoria, as well as the Tshwane District Hospital. The Tshwane District Hospital is in the process of being upgraded to a Regional Hospital. This upgrade has profound implications on spatial organisation within the Hospital Hill Precinct and relationships between institutions and users.

An open space development framework was compiled for the Hospital Hill. The Master Plan area focused specifically on the interface between the campuses of the University of Pretoria and the Tshwane Regional Hospital.

Dr. Savage Plaza was identified as the most important activity node of the Hospital Hill. This area was developed up to Sketch Plan design, applying some of the principles identified in the theory, to argue for the development of open spaces with the potential to benefit public health.

The hypothesis was tested and applied through the following methodology:
- Analysis of site specific design indicators
- Compilation of a user profile
- Literature
- Investigation of theories of restorative benefit and the experiential landscape to determine characteristics of an environment that could be beneficial to public health
- Precedents and previous studies

The Technical Investigation involved the development of a maintenance strategy for the open spaces. It includes the details of the hydrological systems applied at the Dr. Savage Plaza (stormwater detention feature, erratic fountain). Street furniture and edge details were investigated.
TABLE OF CONTENTS

EXECUTIVE SUMMARY ................................................................................................................................. iii

1. INTRODUCTION ........................................................................................................................................ 1
   1.1 Site description ..................................................................................................................................... 3
   1.2 Problem Identification .......................................................................................................................... 6
   1.3 Aim of Study ....................................................................................................................................... 7
   1.4 Methodology ...................................................................................................................................... 7

2. PROJECT BRIEF .......................................................................................................................................... 9
   2.1 Problem statement .............................................................................................................................. 10
   2.2 Design motivation ............................................................................................................................... 10
   2.3 Design hypothesis ............................................................................................................................... 10
   2.4 Client profile .................................................................................................................................... 11
   2.5 Project limitations and assumptions .............................................................................................. 11

3. CONCEPTUAL DESIGN INDICATORS .................................................................................................. 13
   3.1 Context ............................................................................................................................................. 13
   3.2 Land use .......................................................................................................................................... 14
      3.2.1 Existing land use ........................................................................................................................... 14
      3.2.2 Heritage ...................................................................................................................................... 15
      3.2.3 Cadastral information and ownership .................................................................................. 16
   3.3 Open space ...................................................................................................................................... 17
      3.3.1 Existing open space ..................................................................................................................... 17
      3.3.2 Under-utilised space ................................................................................................................... 17
      3.3.3 Derelict space ............................................................................................................................. 17
# Table of Contents

4.5.2 Transitional spaces ................................................................................................................42
4.5.3 Medical facilities .....................................................................................................................43
4.6 Characteristics of the restorative environment ........................................................................44
4.7 Restorative Open Space ............................................................................................................48
4.8 Application of Restorative Open Space to Hospital Hill .......................................................48

5. CRITICAL REVIEW OF PRECEDENT STUDIES ...........................................................................50
5.1 Nelson Mandela Square ............................................................................................................52
5.2 Baragwanath Public Transport Interchange and Trader's Market .......................................54
5.3 Olievenhoutbosch Ext 13 – Legong Activity Street ..................................................................56
5.4 Mitchell's Plain Transport Interchange .....................................................................................58
5.5 St. Andrews Square, Cape Town ...............................................................................................60
5.6 Paley Park, New York ................................................................................................................62
5.7 Open spaces: Health ....................................................................................................................64
5.7.1 Open spaces for the Domicil Senior Citizens Residence ......................................................64
5.7.2 Hospital of the Brothers of Charity, Munich ........................................................................63
5.9 Critical review .............................................................................................................................65
5.9.1 Legibility ..................................................................................................................................65
5.9.2 Circulation control ..................................................................................................................65
5.9.3 Space reclamation ...................................................................................................................65
5.9.4 Restorative space ...................................................................................................................65

6. HOSPITAL HILL URBAN DEVELOPMENT FRAMEWORK ..........................................................67
6.1 Problem – a need for restorative open place .............................................................................68
6.2 Vision and objectives ..................................................................................................................68
6.3 Existing frameworks ..................................................................................................................68
6.4 Proposed solutions .....................................................................................................................69
## 6.4.1 Circulation control

6.4.2 Legibility

6.4.3 Space reclamation

6.4.4 A Restorative Open Space System

6.4.5 Phasing

### 7. MASTER PLAN AREA – a system for regeneration

7.1 Problem

7.2 Objectives

7.3 Brief

7.4 Proposed solution

7.4.1 Zoning

7.4.2 Circulation control

7.4.3 Legibility

7.4.4 Space reclamation

7.4.5 Safety

7.4.6 Intensity of experience

7.4.7 Combined zoning map

7.4.8 Phasing

7.4.9 Experiential landscape map

7.4.10 Master Plan Concept

### 8. SKETCH PLAN

8.1 Objectives

8.2 Opportunities, problems and user needs

8.3 Existing activities

8.4 Brief
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4.1</td>
<td>Proposed activities</td>
<td>97</td>
</tr>
<tr>
<td>8.4.2</td>
<td>Vehicular circulation</td>
<td>98</td>
</tr>
<tr>
<td>8.4.3</td>
<td>Pedestrian circulation</td>
<td>98</td>
</tr>
<tr>
<td>8.4.4</td>
<td>Public transport</td>
<td>98</td>
</tr>
<tr>
<td>8.4.5</td>
<td>Boundaries</td>
<td>99</td>
</tr>
<tr>
<td>8.5</td>
<td>Concept</td>
<td>100</td>
</tr>
<tr>
<td>8.5.1</td>
<td>Conceptual development</td>
<td>100</td>
</tr>
<tr>
<td>8.5.2</td>
<td>Circulation</td>
<td>102</td>
</tr>
<tr>
<td>8.5.3</td>
<td>Users</td>
<td>103</td>
</tr>
<tr>
<td>8.5.4</td>
<td>A public square for the benefit public health</td>
<td>104</td>
</tr>
<tr>
<td>8.5.5</td>
<td>Experiential landscape</td>
<td>105</td>
</tr>
<tr>
<td>8.5.6</td>
<td>Programme</td>
<td>106</td>
</tr>
<tr>
<td>8.6</td>
<td>Journeys, sections and details</td>
<td>112</td>
</tr>
<tr>
<td>8.6.1</td>
<td>Dr. Savage Plaza</td>
<td>122</td>
</tr>
<tr>
<td>8.7</td>
<td>Materials and design guidelines</td>
<td>124</td>
</tr>
<tr>
<td>8.7.1</td>
<td>Paving</td>
<td>124</td>
</tr>
<tr>
<td>8.7.2</td>
<td>Lighting</td>
<td>126</td>
</tr>
<tr>
<td>8.7.3</td>
<td>Street furniture</td>
<td>128</td>
</tr>
<tr>
<td>8.7.4</td>
<td>Planting</td>
<td>130</td>
</tr>
<tr>
<td>9.</td>
<td>TECHNICAL INVESTIGATION</td>
<td>141</td>
</tr>
<tr>
<td>9.1</td>
<td>Hydrology</td>
<td>51</td>
</tr>
<tr>
<td>9.1.1</td>
<td>Irrigation and maintenance strategy</td>
<td>142</td>
</tr>
<tr>
<td>9.1.2</td>
<td>Stormwater Detention Feature</td>
<td>150</td>
</tr>
<tr>
<td>9.1.3</td>
<td>Water feature</td>
<td>159</td>
</tr>
<tr>
<td>9.2</td>
<td>Vertical garden and Information Kiosk</td>
<td>162</td>
</tr>
</tbody>
</table>
9.3 Street furniture .......................................................................................................................... 166
9.4 Edge details ................................................................................................................................ 182
10. CONCLUSIONS AND RECOMMENDATIONS ............................................................................. 187
11. BIBLIOGRAPHY .......................................................................................................................... 189
GLOSSARY OF TERMS

**Actualisation:** The final layer in Maslow’s (1964) hierarchy of needs. Achieving actualisation is dependent on satisfying the lower levels of needs, including physiological need, needs for safety, love and belonging; esteem, cognitive and aesthetic needs. Actualisation involves achieving one’s true potential, by “becoming everything one is capable of becoming.”

**Area:** “A subjectively significant realm engendering a sense of coherence and containment.” (Thwaites and Simkins, 2007)

**Attention restoration:** Public health vs. therapeutic application of restorative environment. Recovery from everyday fatigue caused by the urban environment, and restoration of the capacity known as direct attention.

**Bio-physical environment:** Components of the environment that relate to topography, geology, hydrology, fauna and flora within the context of the Hospital Hill Precinct.

**Centre:** Subjectively significant location engendering a sense of here-ness and proximity (Thwaites and Simkins, 2007)

**Complexity:** An individual involvement variable that influences the visual preference of an individual towards an environment (Kaplan, 1975)

**Coherence:** The visual consistency of a sequential experience of an individual as he moves through a series of spaces.

**Direction:** “Subjectively significant continuity engendering a sense of there-ness and future possibility.” (Thwaites and Simkins, 2007)

**Ephemeral:** Transient effects caused by contrasts in nature, for example sun to shade, wet to dry and changes caused by seasonal effects. Ephemeral qualities are believed to aid in restorative benefit.

**Environment:** The sense of place of the Hospital Hill Precinct that is the result of an intricate and changing relationship between bio-physical, physical-built en socio-cultural environments.

**Extent:** An environment is of favourable extent to an individual when what the individuals wants to do corresponds with what the space has to offer (Hunziker et al., 2007).

**Fascination:** Effortless attention that stimulates feelings of wonderment, but should not require concentration. Soft fascination often correlates with restorative sensations.

**Health:** “……is not the mere absence of illness, but means physical, social and mental well being (Mercer, 1975 according to World Health Organization).”

**Imageability:** Quality of a physical object, which gives an observer a strong, vivid image (Lynch, 1960)

**Human-environment relationship:** “This holistic, mutually defining human-environment relationship is thus one of continuous, dynamic and evolutionary change, driven by the activity of people expressed through where it happens.” (Thwaites et al., 2007)
Legibility: “the ease with which [the city’s] parts can be recognized and can be organized into a coherent pattern” (Lynch, 1960: 2-3).

Open space: Areas predominantly free of building that provide ecological, socio-economic and place-making functions at all scales of the metropolitan area (Tshwane Open Space Framework, 2005).

Physical-built environment: The “figure” component of the figure-ground relationship within the context of the Hospital Hill Precinct.

Public health: The treatment of attention depletion of the urban individual through the availability of spaces with the ability to be restorative to a compatible individual, results in attention restoration and improves the ability of the general public to function within the urban environment.

Preferred environment: An environment that people can organise perceptually and also become involved with. (Kaplan, 1975)

Regeneration: The altering of existing spaces to such an extent that it results in an improved relationship between components of the social-cultural, natural and physical-built environment.

Restoration: “the process of renewing physical, psychological and social capabilities diminished in ongoing efforts to meet adaptive demands.” (Hartig, 2004).

Restorative: used in a general sense to explore the potential of outdoor settings in towns and cities to provide a general sensation of revival or renewal, mitigating the stress and mental fatigue which can arise from prolonged exposure to some aspects of urban environments (Thwaits et al., 2005)

Restorative landscape: Environments with higher degree of four factors consisting of coherence, complexity, legibility and mystery are more preferred by people. It installs a sense of being away, extent, fascination, compatibility. This theory emphasises that if the four properties within a landscape are strong enough, it could be called a restorative environment (Huang, 1995).

Restorative perception: The higher the preference (of the user) towards an environment, the higher the restorative perception of the environment.

Transition: “Subjectively significant point or area of change engendering a sense of transformation in mood, atmosphere or function.” (Thwaites and Simkins, 2007)

Socio-cultural environment: Another component of the environment that is in relationship with the bio-physical and physical-built environments within the context of the Hospital Hill.

Visual preference: Two information and two involvement variables are applicable: legibility and spatial definition are important informational variables; complexity and mystery are described as the two involvement variables. (Kaplan 1975)

Under-utilised space: The “figure” component of the figure-ground relationship, where the space contributes to the fragmentation, or is isolated, inaccessible or not being used to its full potential.
LIST OF ABBREVIATIONS

CBD: Central Business District
CDTA: Centre, Direction, Transition, Area
CTMM: City of Tshwane Metropolitan Municipality
P.A.H: Pretoria Academic Hospital
T.R.H: Tshwane Regional Hospital
T.D.H: Tshwane District Hospital
T.R.H.M: Tshwane Regional Hospital Master Plan
SAHRA: South African Heritage Resources Agency
U.P: University of Pretoria

LIST OF TABLES:
Table 1: Summary of User Needs
Table 2: Water requirements for maintenance strategy

LIST OF ANNEXURES:
Annexure A: Journey 1 and 2: Theory and guidelines

LIST OF FIGURES

Chapter 1: Introduction
Figure 1.1: Contextual map. (Author, 2008)
Figure 1.2: Site character collage. (Author, 2008)
Figure 1.3: User character collage. (Author, 2008)

Chapter 2: Project Brief
Figure 2.1: Design hypothesis. (Author, 2008)

Chapter 3: Conceptual Design Indicators
Figure 3.1: Context of the study area. (Author, 2008; Google Earth 2008)
Figure 3.2: The Hospital Hill Precinct. (Author, 2008)
Figure 3.3: The Site. (Author, 2008)
Figure 3.4: Land-use of the T.R.H.M imposed on an aerial photograph. (Medi-plan Architects, 2007)
Figure 3.5: Hospital Hill Precinct: Land-use. (Author, 2008)
Figure 3.6: Protection of Heritage. (Medi-Plan Architects, 2007)
Figure 3.7: Cadastral information and ownership map. (CTMM, 2008)
Figure 3.8: Classification of open spaces. (Author, 2008)

Figure 3.9: Exotic and indigenous vegetation inventory. (Author, 2008)
Figure 3.10: Topography. (Author, 2008)
Figure 3.11: User profile. (Author, 2008)
Figure 3.12: Distribution of user groups. (Author, 2008)
Figure 3.13: Identification of 3 journeys through the urban fabric. (Author, 2008)
Figure 3.14: Movement patterns. (Author, 2008)
Figure 3.15: Perceived characteristics. (Author, 2008)
Figure 3.16: Legibility. (Author, 2008)
Figure 3.17: Bulk services provision. (Author, 2008)
Figure 3.18: The steam pipe network. (Author, 2008)
Figure 3.19: Parking. (Author, 2008)
Figure 3.20: Unmaintained internal courtyard. (Author, 2008)
Figure 3.21: Remains of demolished buildings. (Author, 2008)
Figure 3.22: Performance criteria. (Author, 2008)
Chapter 4: Literature Evaluation

Figure 4.1: Maslow's hierarchy of needs (Maslow, A.H, 1943, Fig 7)

Figure 4.2: Experiential Landscape Theory (Thwaites, Simkins, 2007: plate 4)

Figure 4.3: Experiential Journey. (Author, 2008)

Figure 4.4: Experiential Journey. (Author, 2008)

Figure 4.12: Journey 3. (Author, 2008)

Figure 4.13: Guidelines for Public Health. (Author, 2008)

Figure 4.14: Design guidelines and patterns. (Author, 2008)

Chapter 5: Precedent Studies

Figure 5.1: Nelson Mandela Square. (Author, 2008)

Figure 5.2: Erratic fountain. (Author, 2008)

Figure 5.3: Car washers in the Square. (Author, 2008)

Figure 5.4: Shady seating on the edges. (Author, 2008)

Figure 5.5: Corridor flanking the library. (Author, 2008)

Figure 5.6: Baragwanath Transport Interchange. (Author, 2008)

Figure 5.7: Concrete architecture: Trading corridor. (Author, 2008)

Figure 5.8: View from Chris Hani Baragwanath Hospital accross pedestrian bridge towards Baragwanath Transport Interchange. (Author, 2008)

Figure 5.9: Pick-up and drop-off areas. (Author, 2008)

Figure 5.10: Pick-up and drop-off areas for taxis. (Gerald Garner, UGF; Feb 2007: 12)

Figure 5.11: Small square that emphasise intervisibility of different activities. (Author, 2008)

Figure 5.12: Trade space. (Christelle Jordaan in UGF, Feb 2007: 15)

Figure 5.13: Waiting areas. (Graham, 2007)

Figure 5.14: Interactive play equipment. (Graham, 2007)

Figure 5.15: Street furniture and paving. (Graham, 2007)

Figure 5.16: Aerial view of Mitchell’s Plain Transport Interchange. (Graham, 2007)

Figure 5.17: Paving detail. (Manie Meyer in UGF, Apr 2007:12)

Figure 5.28: Material use. (Manie Meyer in UGF, Apr 2007:12)

Figure 5.19: St. Andrew’s Square. (Karen Eicker in UGF; Apr 2007:14)

Figure 5.20: St. Andrew’s Square; Plan view. (OVP Associates in UGF, 2007)

Figure 5.21: Paley Park. (Author, 2008)

Figure 5.22: Domicil Senior citizen’s residence. (Baumeester, 2007)

Figure 5.23: Domicil Senior citizen’s residence. - Secluded resting. (Baumeester, 2007)

Figure 5.24: Hospital of the Brother’s of Charity - Internal courtyard (Baumeester, 2007)

Figure 5.25: Hospital of the Brother’s of Charity. Roof garden (Baumeester, 2007)

Chapter 6: Framework

Figure 6.1: Proposed zoning. (Author, 2008)

Figure 6.2: Proposed circulation. (Author, 2008, CTMM)

Figure 6.3: Legibility. (Author, 2008)

Figure 6.4: Space reclamation. (Author, 2008)

Figure 6.5: Open space hierarchy. (Author, 2008)

Figure 6.6: Composite framework. (Author, 2008)

Figure 6.7: Proposed phasing. (Author, 2008)
<table>
<thead>
<tr>
<th>Chapter 7: Master Plan</th>
<th>Chapter 8: Sketch Plan</th>
<th>Chapter 9: Technical investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 7.1: Master plan concept. (Author, 2008)</td>
<td>Figure 8.1: Existing land use. (Author, 2008)</td>
<td>Figure 9.1: Areas zoned in the restorative open space framework that would require water for irrigational purposes. (Author, 2008)</td>
</tr>
<tr>
<td>Figure 7.2: Primary circulation. (Author, 2008)</td>
<td>Figure 8.2: Land use – site character. (Author, 2008)</td>
<td>Figure 9.2: Existing stormwater network and catchment areas. (Author, 2008)</td>
</tr>
<tr>
<td>Figure 7.3: Legibility zones. (Author, 2008)</td>
<td>Figure 8.3: Proposed land use indicating re-alignment of Dr. Savage Rd. (Author, 2008)</td>
<td>Figure 9.3: Location of dams with associated drainage region. (Author, 2008)</td>
</tr>
<tr>
<td>Figure 7.4: User groups. (Author, 2008)</td>
<td>Figure 8.4: Sketch plan area. (Author, 2008)</td>
<td>Figure 9.4: Conceptual placement of irrigation zones (Author, 2008)</td>
</tr>
<tr>
<td>Figure 7.5: Network of Restorative spaces. (Author, 2008)</td>
<td>Figure 8.5: Concept development. (Author, 2008)</td>
<td>Figure 9.5: Typical north-south section through Dam 1 during Spring and Autumn. (Author, 2008)</td>
</tr>
<tr>
<td>Figure 7.6: Intensity of experience. (Author, 2008)</td>
<td>Figure 8.6: Proposed circulation. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 7.7: Proposed zoning. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 7.8: Proposed phasing. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 7.9: Anticipated Experiential landscape map. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 7.10: Hypothesis. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 7.11: Master Plan concept. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 7.12: Proposed Master Plan. (Author, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 8: Sketch Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure 8.1: Existing land use. (Author, 2008)</td>
<td>Figure 8.7: Conceptual distribution of users (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 8.2: Land use – site character. (Author, 2008)</td>
<td>Figure 8.8: Experiential landscape. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 8.3: Proposed land use indicating re-alignment of Dr. Savage Rd. (Author, 2008)</td>
<td>Figure 8.9: Generation of activities within a hierarchy of locational, directional and transitional open spaces. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 8.4: Sketch plan area. (Author, 2008)</td>
<td>Figure 8.10: Arrangement of activities on the “activity edge”. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 8.5: Concept development. (Author, 2008)</td>
<td>Figure 8.11: Relationship between activities and user needs. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td>Figure 8.6: Proposed circulation. (Author, 2008)</td>
<td>Figure 8.12: The resultant experiential landscape.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.13: Sketch Plan zoning. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.14: Proposed sketch plan. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.15: Experiential journeys for Dr. Savage Plaza. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.16-27: Experiential journey’s. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.28: Diagrammatic 3d view of Dr. Savage Plaza. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.29: Paving and materials. (Author, 2008, Corrobrick.co.za; Infrset.co.za)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.30: Sketch plan – paving and materials. (Author, 2008) (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.31: Sketch designs for street furniture. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.32: Sketch plan – placement of street furniture.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.33: Planting Palette. (Joffe, 2001)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.34: Sketch plan: planting strategy. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.35: Section A. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.36: Section B. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.37: Section C. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.38: Section D. (Author, 2008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figure 8.39: Section E. (Author, 2008)</td>
<td></td>
</tr>
</tbody>
</table>
Figure 9.6: Typical north-south section through Dam 1 during Summer. (Author, 2008)
Figure 9.7: Typical north-south section through Dam 1 during Winter. (Author, 2008)
Figure 9.8: Typical detail: Stormwater inlet into dam. (Author, 2008)
Figure 9.9: Section through dam linings. (Author, 2008)
Figure 9.10: Section through pump chamber. (Author, 2008)
Figure 9.11: Components of the stormwater detention system. (Author, 2008)
Figure 9.12: Diagrammatic description of stormwater feature system. (Author, 2008)
Figure 9.13: Typical section of drainage channel toward stormwater feature. (Author, 2008)
Figure 9.14: Plan of drainage channel toward stormwater feature. (Author, 2008)
Figure 9.15: Diagrammatic plan of the feature wall. (Author, 2008)
Figure 9.16: Rock-filled wire-mesh and steel structure. (Author, 2008)
Figure 9.17: Stone-clade walls and veldgrass at Apartheid’s Museum. (Author, 2008)
Figure 9.18: Rock-filled wire-mesh and steel structure. (Asensio, 2005)
Figure 9.19: Section through the stone packed wire-mesh and steel structure: Feature wall. (Author, 2008)
Figure 9.20: Elevation of feature wall connection to walls, steps and ramps. (Author, 2008)
Figure 9.21: Perspective of sunken seating areas: channels. (Author, 2008)
Figure 9.22: Drainage of water from one detention structure to the next. (Author, 2008)
Figure 9.23: Sunken seating and stormwater detention features. (Author, 2008)
Figure 9.24: Erratic fountain supply system. (Author, 2008)
Figure 9.25: Typical section: erratic fountain. (Author, 2008)
Figure 9.26: Interactive water feature (Asensio 2005)
Figure 9.27: Feature lighting (Asensio, 2005)
Figure 9.28: Plan of erratic fountain. (Author, 2008)
Figure 9.29: Vertical vegetation structure. (Abelho 2007)
Figure 9.30: Green tower and information kiosk. Southern elevation. (Author, 2008)
Figure 9.31: Diagrammatic plan of information kiosk. (Author, 2008)
Figure 9.32: Thunbergia alata. (Joffe, 2001)
Figure 9.33: Senecio macroglossus (Joffe, 2001)
Figure 9.34: Clemantis bracheata (Joffe, 2001)
Figure 9.35: Section of green tower and information kiosk. (Joffe, 2001)
Figure 9.36: Plan of green platforms. (Author, 2008)
Figure 9.37: Section: green platform. (Author, 2008)
Figure 9.38: Detail: vertical garden (Author, 2008)
Figure 9.39: Bollard with light. Elevation (Author, 2008)
Figure 9.40: Bollard without light. Plan (Author, 2008)
<table>
<thead>
<tr>
<th>Figure No.</th>
<th>Description</th>
<th>Author, Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.41</td>
<td>Bollard with light. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.43</td>
<td>Bollard with light. Section perspective</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.44</td>
<td>Coloured, glazed ceramic tiles in concrete</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.45</td>
<td>Litter bin. Part elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.46</td>
<td>Litter bin. Plan</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.47</td>
<td>Litter bin. Section perspective</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.48</td>
<td>Bench without backrest. Part elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.49</td>
<td>Bench without backrest. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.50</td>
<td>Bench without backrest. Plan</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.51</td>
<td>Bench without backrest. Perspective</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.52</td>
<td>Bench without backrest. Detail</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.53</td>
<td>Bench with backrest. Part elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.54</td>
<td>Bench with backrest. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.56</td>
<td>Bench with backrest. Perspective</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.57</td>
<td>Bench with backrest. Detail</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.60</td>
<td>Lamp post. Elevation. Double option in high-use areas</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.61</td>
<td>Lamp post. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.62</td>
<td>Inspection hole and conduit</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.64</td>
<td>Shelter. Elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.65</td>
<td>Shelter. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.66</td>
<td>Connection of bench to H-profile</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.67</td>
<td>Connection between H-profile and IBR-sheeting</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.68</td>
<td>Shelter. Plan</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.69</td>
<td>Trade stall. Elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.70</td>
<td>Fixing of IBR sheeting to main steel structure</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.71</td>
<td>Fixing of IBR sheeting to main steel structure</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.72</td>
<td>Trade stall. Plan</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.73</td>
<td>Trade stall. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.74</td>
<td>Trellis. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.76</td>
<td>Trellis. Elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.77</td>
<td>Terraced lawn seating. Elevation</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.78</td>
<td>Stone packed retaining wall</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.79</td>
<td>Terraced lawn seating. Section</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.80</td>
<td>Transition of public space to semi-private space of formal and public buildings.</td>
<td>(Author, 2008)</td>
</tr>
<tr>
<td>9.81</td>
<td>Red-brick seating walls</td>
<td>(Author, 2008)</td>
</tr>
</tbody>
</table>
Figure 9.82: Perspective of plinth and seating areas of main admin building.  
(Author, 2008)

Figure 9.83: Plinth to main administration building. Section.  
(Author, 2008)