Fig. 7.1.2
Aerial image of Phumolong (Randall, 2015)
Fig. 7.7
final section
Fig. 7.10
material and systems diagram

Section - A.A
water harvesting strategy
7.0 TECHNICAL CONCEPT

The technification of the scheme is split into three parts: Primary, Secondary and Tertiary.

1. The Primary Structure is the concrete basement, where the earth is excavated, then the concrete column and beam structure are constructed in order to serve as base for the multi-functional programme above.

2. The Secondary Structure is located on the ground floor, the structural elements are rigid (stereotomic) and serve as thermal mass and insulator of sound as this is where the teaching facilities are located.

3. The Tertiary method of construction is a light steel frame structure, designed as generic modular system in order to allow for future development vertically, should the original programme of the building change in the future.

The technological and sustainable systems have been integrated into the design process in order to allow the building to adapt to its context in robust and future proof manner. The sleepers scattered on site will be reused at structural and landscape elements in order to respond to the immediate environment and develop a new architectural language.
7.12 SBAT RATING TOOL

SUSTAINABLE BUILDING ASSESSMENT TOOL (SBAT- P) V1

PROJECT

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<tr>
<td>Date: 2015/12/10</td>
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<tr>
<td>Location: Mamelodi</td>
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<td>Company / organisation:</td>
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<td>Undertaken by:</td>
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<tr>
<td>Building type (specify): Community</td>
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<tr>
<td>Telephone:</td>
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<tr>
<td>Fax:</td>
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<tr>
<td>Internal area (m2): 2100 mqs</td>
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<tr>
<td>Number of users: 120</td>
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<tr>
<td>Email: <a href="mailto:msizimkhize01@yahoo.com">msizimkhize01@yahoo.com</a></td>
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<tr>
<td>Building life cycle stage (specify): Design/Construction/Operation</td>
</tr>
</tbody>
</table>

Social 3.3  Economic 3.7  Environmental 2.5

Overall 3.2
8.0 REFERENCES


OGBU, L. 2001. South Africa After Apartheid. From Township to Town: South Africa. Available from: https://placesjournal.org/article/south%ADafrica%ADfrom%ADtownship%ADto%ADtown/16/19 [Accessed: 09 October 2015].

### 8.1 ABBREVIATIONS

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<th>Abbreviation</th>
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<tbody>
<tr>
<td>Stats South Africa</td>
<td>STATS SA</td>
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<tr>
<td>National Treasury</td>
<td>DNT</td>
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<tr>
<td>The National Development Plan</td>
<td>NDP</td>
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<tr>
<td>Spatial Development Framework</td>
<td>SDF</td>
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<tr>
<td>Transit Orientated Development</td>
<td>TOD</td>
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<tr>
<td>South African Cities Network</td>
<td>SACN</td>
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