DRAFT REPORT

CLIENT:
ASLA DEVCO

COMPiled BY
URBAN DYNAMICS WESTERN CAPE

TEL: (021) 948-1545
FAKS: (021) 948-1588
## INTRODUCTION

1.1 BACKGROUND ........................................................................................................ 1
1.2 BRIEF ...................................................................................................................... 1
1.3 PROPERTY DESCRIPTION AND OWNERSHIP ....................................................... 1
1.4 CONVEYANCER CERTIFICATE .............................................................................. 1
1.5 THE APPLICATION ................................................................................................. 1

## CONTEXTUAL AND SITE ANALYSIS

2.1 HISTORY OF McGREGOR ....................................................................................... 3
2.2 LOCALITY ............................................................................................................... 3
   2.2.1 Regional Context ............................................................................................ 4
   2.2.2 Local Context ................................................................................................ 5
2.3 ZONINGS .............................................................................................................. 5
2.4 LAND USES ......................................................................................................... 5
2.5 POLICY FRAMEWORK ......................................................................................... 6
   2.5.1 Provincial Spatial Development Framework ............................................... 6
   2.5.2 The Breaking New Ground Policy ................................................................. 7
   2.5.3 Western Cape Sustainable Human Settlement Strategy ............................ 8
   2.5.4 Langeberg Draft Spatial Development Framework ..................................... 9
2.6 EXISTING INFORMAL SETTLEMENT .................................................................... 9
# LAND IDENTIFICATION ASSESSMENT PROCESS

3.1 OBJECTIVE OF LAND IDENTIFICATION PROCESS ........................................ 11

3.2 THE IDENTIFICATION OF LAND IN McGregor ........................................... 11
   3.2.1 Site description ...................................................................................... 11
   3.2.2 PSDF & Isidima criteria ......................................................................... 13
   3.2.3 Assessment of site 1 ............................................................................. 13
   3.2.4 Assessment of site 2 ............................................................................. 14
   3.2.5 Assessment of site 3 ............................................................................. 14
   3.2.6 Assessment of site 4 ............................................................................. 15
   3.2.7 Assessment of site 5 ............................................................................. 15
   3.2.8 Assessment of site 5 ............................................................................. 15

# SITE ANALYSIS

4.1 LAND USE SURVEY ...................................................................................... 16
   4.1.1 Community Facility Standards .............................................................. 16
   4.1.1 Land Use Survey Findings ..................................................................... 17
   4.1.1 Complimentary Land Uses ................................................................... 17

4.2 SOIL POTENTIAL STUDY ............................................................................. 18

4.3 GEOTECHNICAL STUDY ............................................................................... 18

4.4 ENGINEERING SERVICES ........................................................................... 19
   4.4.1 Water .................................................................................................. 19
   4.4.2 Electrical .............................................................................................. 19
   4.4.3 Sewage ................................................................................................ 19
   4.4.4 Topography .......................................................................................... 19
   4.4.5 Summary .............................................................................................. 19

4.5 STORMWATER MANAGEMENT PLAN ......................................................... 20

4.6 HERITAGE IMPACT ASSESSMENT .............................................................. 20

4.7 SOCIAL-ECONOMIC STUDY ..................................................................... 23

4.8 VISUAL IMPACT ASSESSMENT ................................................................. 23

4.9 URDAN DESIGN STUDY ............................................................................ 24

4.10 ENVIRONMENTAL: BASIC ASSESSMENT ............................................... 24

4.11 SITE INFORMANTS ..................................................................................... 24
   4.11.1 Opportunities ...................................................................................... 24
   4.11.2 Constraints .......................................................................................... 25
   4.11.3 Synthesis of Opportunities & Constraints ........................................... 27
5 CONCEPTUAL DEVELOPMENT FRAMEWORK

5.1 OBJECTIVE .................................................................................................................. 28

5.2 PRINCIPLES APPLIED ................................................................................................. 28
   5.2.1 Planning Principles ................................................................................................. 28
   5.2.2 Design Considerations ........................................................................................... 28

5.3 URBAN DESIGN PRINCIPLES ...................................................................................... 28

5.4 SPATIAL DEVELOPMENT CONCEPT ........................................................................... 28
   5.4.1 Main structuring elements ..................................................................................... 28

5.5 ERF LAYOUT PARAMETERS ......................................................................................... 30
   5.5.1 Typologies ............................................................................................................... 31
   5.5.2 Orientation ............................................................................................................. 34
   5.5.3 High density/ semi-detached units .......................................................................... 34
   5.5.4 GAP units ............................................................................................................... 35
   5.5.5 Low density/ extensive residential ......................................................................... 35
   5.5.6 Food gardens ........................................................................................................... 35
   5.5.7 Public open spaces ................................................................................................ 35
   5.5.8 Training institute/community facilities .................................................................... 35
   5.5.9 Church/ Crèche ...................................................................................................... 35
   5.5.10 Pedestrian corridor ............................................................................................... 36
   5.5.11 Road network ....................................................................................................... 36

5.6 SUSTAINABILITY ASSESSMENT: APPLYING THE CRITERIA ................................... 36

6 DESIRABILITY CRITERIA

6.1 CHARACTER OF THE SURROUNDING AREA ............................................................... 41

6.2 LOCATION AND ACCESSIBILITY ................................................................................. 41

6.3 COUNCIL’S LAND USE POLICIES .............................................................................. 41

6.4 IMPACTS ON EXISTING RIGHTS ................................................................................ 41

6.5 SAFETY AND WELFARE OF THE COMMUNITY ....................................................... 42

6.6 CONSERVATION OF NATURAL AND BUILT-UP ENVIRONMENT ............................. 42

7 CONCLUSION
(ii) Figures

Figure 2.1: Regional Context Plan
Figure 2.2: Local Context Plan
Figure 2.3: Land Use Plan
Figure 2.4: Existing Informal Settlement
Figure 3.1: Alternative Site 1
Figure 3.2: Alternative Site 2
Figure 3.3: Alternative Site 3
Figure 3.4: Alternative Site 4
Figure 3.5: Alternative Site 5
Figure 4.1: Community Facilities
Figure 4.2: Geotechnical investigation test-pits
Figure 4.3: Preliminary Heritage Design Indicators
Figure 4.4: Opportunities and Constraints Plan
Figure 5.1: Draft Conceptual Development Framework
Figure 5.2: Proposed Semi-detached option A floor Plan
Figure 5.3: Proposed Semi-detached option A Frontage
Figure 5.4: Proposed Semi-detached option B Floor Plan
Figure 5.5: Proposed Semi-detached Option B Frontage
Figure 5.6: Proposed GAP Unit Floor Plan
Figure 5.7: Semi-detached Erf Orientation
Figure 5.8: Draft Layout

(iii) Tables

Table 1.1: Property Description
Table 2.1: Land Use
Table 3.1: Alternatives sites
Table 3.2: PSDF and Isidima criteria
Table 3.3: PSDF & Isidima assessment Alternative Site 1
Table 3.4: PSDF & Isidima assessment Alternative Site 2
Table 3.5: PSDF & Isidima assessment Alternative Site 3
Table 3.6: PSDF & Isidima assessment Alternative Site 4
Table 3.7: PSDF & Isidima assessment Alternative Site 5
Table 4.1: Guidelines on Community Facility Provision
Table 5.1: Erf Dimensions
Table 5.2: Planning Parameters
Table 5.3: Sustainability Criteria
Table 5.4: Sustainability Assessment McGregor Erf 360

(iv) Plans

Plan 1: Regional Context Plan
Plan 2: Local Context Plan
Plan 3: Community Facilities
Plan 4: Opportunities and Constraints
Plan 5: Draft Conceptual Development Framework
Plan 5: Draft Layout plan
(v) **Annexures**

<table>
<thead>
<tr>
<th>Annexure (A–O)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Power of Attorney</td>
</tr>
<tr>
<td>B</td>
<td>Title Deeds</td>
</tr>
<tr>
<td>C</td>
<td>Convenance Certificate</td>
</tr>
<tr>
<td>D</td>
<td>LUPO Application Form</td>
</tr>
<tr>
<td>E</td>
<td>Zoning Certificate</td>
</tr>
<tr>
<td>F</td>
<td>Soil Potential Study</td>
</tr>
<tr>
<td>G</td>
<td>Geotechnical Study</td>
</tr>
<tr>
<td>H</td>
<td>Engineering Report</td>
</tr>
<tr>
<td>I</td>
<td>Storm-water Management Plan</td>
</tr>
<tr>
<td>J</td>
<td>Heritage Impact Assessment</td>
</tr>
<tr>
<td>K</td>
<td>Archaeological Impact Assessment</td>
</tr>
<tr>
<td>L</td>
<td>Socio-economic Study</td>
</tr>
<tr>
<td>M</td>
<td>Visual Impact Study</td>
</tr>
<tr>
<td>N</td>
<td>Urban Design Report</td>
</tr>
<tr>
<td>O</td>
<td>Basic Assessment Report</td>
</tr>
</tbody>
</table>
1.1 BACKGROUND

The Langeberg Municipality recognise the need for housing within McGregor. Following the assessment of various alternative properties, Erf 360 was regarded as the most desitable property in close proximity to McGregor. The Western Cape Provincial Government acquired for housing development the property and consequently transferred Erf 360 for housing purposes to the Langeberg Municipality.

The residents of informal areas/dwellings and backyard dwellers within McGregor are the prospective beneficiaries of this proposed housing development.

The primary objective of this housing development is to address the poor living conditions of the residents within informal housing, un-serviced erven and backyard dwellers and consequently to provide sustainable and desirable housing development, with due consideration of the historic and small-town character of McGregor.

1.2 BRIEF

Urban Dynamics Western Cape Inc., has been appointed by Asla Devco (Pty) Ltd, the implementing agent, to prepare and submit an application to procure the rights for a housing development on the property indicated in the table below (refer Annexure A: Power of Attorney).

1.3 PROPERTY DESCRIPTION AND OWNERSHIP

The proposed application area is described in the title deed (refer Annexure B) as tabulated below:

<table>
<thead>
<tr>
<th>Property Description (Erf)</th>
<th>Extent (m²)</th>
<th>Title Deed</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erf 360</td>
<td>17,4109 Ha</td>
<td>T77065/2012</td>
<td>Langeberg Municipality</td>
</tr>
</tbody>
</table>

Table 1.1 Property Description

1.4 CONVEYANCER CERTIFICATE

The conveyancer conducted a deed search on all the affected title deeds (refer Annexure C). There are no restrictive title deed conditions against the proposed development.

1.5 THE APPLICATION

Application is hereby made in terms of Section 17 and 24 of the Land Use Planning Ordinance, 1985 (Ordinance No. 15 of 1985), for the following:
i. The rezoning of Erf 360, McGregor form Agricultural Zone I to Subdivisional Area for residential, business, open space, authority and road purposes in terms of Sections 17(1) and 22(i)(a) of the Land Use Planning Ordinance, 1985 (Ord 15 of 1985);

ii. The subdivision of Portion A in terms of Section 24 of the Land Use Planning Ordinance, 1985 (Ord 15 of 1985) to allow for the following:

- **Residential Zone I**
  - 503 erven of ± 125m² each
  - 17 erven of ± 200m² each
  - 5 erven of >800m² each

- **Business Zone**
  - One erf

- **Open Space I**
  - Four erven

- **Community Zone**
  - Two erven

- **Special Zone**
  - One

- **Transport Zone II**
  - Roads

iii. Building Line Departures in terms of Section (15)(1)(i) of the Land Use Planning Ordinance, 1985 (Ord. 15 of 1985) to allow a lateral building line of 0m for one of the lateral boundaries and a street building line of 2m of the Residential Zone I erven.
SECTION 2 CONTEXTUAL ANALYSIS

2.1 HISTORY OF Mc Gregor

Based on a booklet titled “McGregor Walks” published by the McGregor Heritage Society it is believed that the San or Bushmen where the first people to move through the McGregor area, following old game trails over the Riviersonderend Mountains to the ocean. It wasn’t until the end of the 18th century when farmers moved into this area taking advantage of the ideal Little Karoo climate (low rainfall, plenty of mountain water, hot summers and winter temperatures rarely below freezing).

Farmers started to build dams for mountain water run-off and arguments arose over water rights in court dating back as early as the end of the 18th century. The rich soil and sufficient water allowed the farmers to cultivate grape vines (mainly sultanas, table grapes and raisins). A wide variety of fruit and vegetables were also farmed with great success, this coupled with good land/field for sheep grazing made the McGregor district became an agriculturally attractive area.

Missionaries from the Moravian settlement at Genadendaal, near Greyton crossed the mountains to hold church services in the early part of the 18OO’s. The first sub-divisions of farms dated back to 1821. The township register was first opened in 1862, and by the mid-1800s the village was already taking shape.

The village was originally called ‘Lady Grey’ in tribute after British Governor Sir George Grey’s wife. In 1904 members of the then new Dutch Reformed Church in the village decided to name their village after their popular minister Rev Andrew McGregor who had served the community for 40 years. The Postmaster General of the Cape Colony renamed the post office to eliminate confusion with another town called Lady Grey in the Eastern Cape. Consequently, with the full agreement of the residents of the village, the governor decided to rename the whole village to McGregor on 9th of April 1906.

2.2 LOCALITY

2.2.1 REGIONAL CONTEXT

McGregor is located in the Langeberg Local Municipality located within in the Cape Winelands District Municipality. McGregor is a small village with a picturesque setting and is located approximately 150km east of Cape Town and is situated 22km south of Robertson and south west of Ashton and Montagu. Access along major routes exists from Cape Town (via N1 and R62) (refer Plan 1).
Figure 2.1: Regional Context Plan

Figure 2.2: Local Context Plan
2.2.2 LOCAL CONTEXT

The proposed development site, Erf 360 McGregor, is located on the south eastern side of the town. The property abuts Buitekant Street on the eastern boundary of the town and stretches up to the Hoeks River flood plain on the eastern boundary (refer Plan 2).

2.3 ZONING

Erf 380, McGregor is currently zoned ‘Agricultural Zone I’ in terms of Section 8 Zoning Scheme. The zoning certificate is attached as Annexure D.

2.4 LAND USES

The land uses of the properties abutting the application area are broadly set out in the table below:

<table>
<thead>
<tr>
<th>Direction</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Residential (medium density) with one Pre-Primary School</td>
</tr>
<tr>
<td>East</td>
<td>Critical Biodiversity Area</td>
</tr>
<tr>
<td>South</td>
<td>Olive Groves</td>
</tr>
<tr>
<td>West</td>
<td>Residential (low density)</td>
</tr>
</tbody>
</table>

Table 2.1: Land Use

McGregor is largely a residential town and business type land uses are located mainly along Voortrekker Street and to a lesser extent along Long Street. Approximately 80% of erven have been developed. The town is has a grid layout pattern with street blocks with regular dimensions of 150m by 150m (refer Figure 3.2).
A review of existing planning policies was undertaken to determine the planning policy framework pertaining to the application area and the surrounding environs in order to contextualise the application within this framework. The relevant policy documents are:

**2.5 POLICY FRAMEWORK**

![Figure 2.3: Land Use Plan](image)
2.5.1 Provincial Spatial Development Framework (PSDF) – June 2009

Objective of the framework

The Provincial Spatial Development Framework (PSDF) was approved as a Section 4(6) Structure Plan in terms of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985) in July 2009. The main guiding principle, on which the PSDF is based, is the need to achieve sustainable development. In this regard, development proposals are considered sustainable and acceptable if they are ecologically justifiable, socially equitable and economically viable (also referred to as the “triple bottom line”).

Proposals pertinent to this application

The following objectives are relevant to this application:

- Policy HR1: Optimise urbanisation in areas that have adequate resources and the economic growth potential to sustain further urbanisation.
- Policy UR2: Increase average residential densities in urban settlements to 25 dwelling units per hectare before further extension of the urban edge.
- Policy UR3: Achieve the density target by, inter alia, the infill of surplus vacant land, including brownfield sites and the utilisation of greenfield locations within the urban edge.
- Policy UR4: Densification should occur with due regard for environmental and heritage concerns as identified in EIA/HIA.
- Policy UR11: Locate 50% of the five major activities (public transport, residence, recreation, shopping and employment) within walking distance (1.5 km) of each other.

Planning Implications:

The proposed housing development is consistent with the PSDF as:

- The application areas are mostly vacant land;
- The adjacent area is already developed, ensuring available bulk infrastructure;
- The required density of 25 dwelling units per hectare will be achieved;
- The application areas are all within close proximity of community facilities.

2.5.2 Breaking New Ground (BNG) Policy: A comprehensive plan for the development of sustainable human settlements - October 2005

Objective of the framework

The intent of this policy document is to guide subsidy housing development over the next five years.

An overview of the objectives of the BNG Policy includes:

- Accelerating housing delivery as a key strategy for alleviation of poverty
- Utilising housing provision as a major job creation strategy
- Ensuring that property can be accessed by all as an asset for wealth creation and empowerment

---

1 Department Local Government and Housing, October 2005: Draft Discussion Document Prepared by the Human Settlement References Group.
- Utilising housing as an instrument for the development of sustainable human settlements, in support of spatial restructuring
- Promoting upgrading of informal settlements
- Providing community support facilities through housing delivery

**Proposals pertinent to this application**

The BNG Policy document provides guidelines for the process of subsidy housing provision. The proposed application area is consistent with these guidelines.

**Planning Implications:**

The proposed development is consistent with the broad guidelines of the BNG Policy, as the application area ensures:

- access to affordable, well-located housing;
- integration with the existing communities; and
- access to existing socio-economic facilities.

### 2.5.3 Western Cape Sustainable Human Settlement Strategy (WCSHSS) – Undated

The WCSHSS provides guidelines for different policy frameworks, compiled by the Western Cape provincial government, as part of the process to deliver sustainable housing to communities in need. In a nutshell, the WCSHSS aims to fully integrate the poor into the towns and cities and to move away from a dualistic housing market, while ensuring that residential densities within urban areas strive towards achieving densities of at least 25 dwelling units/ha. The core focus of this strategy is based on three shifts, namely:

- The shift from housing construction to sustainable human settlements
- The shift to the use of sustainable resources
- The shift to real empowerment

The WCSHSS provides a framework within which subsidy housing developments should aim to integrate communities.

**Planning Implications:**

*Forthcoming from the above, the WCSHSS clearly supports the proposed development as existing resources i.e. bulk services is used for the proposed development. In this regard, the focus is mainly on creating integrated communities and sustainable human settlements that are developed in a manner that would facilitate integration between existing communities.*
The proposed development is located within existing communities enhancing integration possibilities. Furthermore, the proposed development is consistent with the guidelines of the WCHSS as the achieved density of the proposed development is approximately 30 dwelling units/ha.

2.5.4 Langeberg Municipality Spatial Development Framework (2014)

The Langeberg Municipality is currently reviewing its Spatial Development Framework (SDF) and Human Settlement Plan (HSP). CNDV Africa, town and regional planners and urban designers has been appointed to compile the SDF for the Langeberg Municipality.

During discussions with the appointed project team and Municipality, it was confirmed that it is their intention to include this application area (erf 360) into the urban edge and that the site will be identified for housing purposes.

Planning Implications:

Erf 360, McGregor is consistent with the current status of the Draft Langeberg Spatial Development Framework (2014) and will be identified for housing purposes.

2.6 EXISTING INFORMAL SETTLEMENT

An existing informal settlement is currently located on the north-eastern edge of McGregor (refer Figure 2.4). A shortage of housing opportunities within McGregor combined with the influx of seasonal farm workers into the area resulted in this settlement. This informal settlement houses approximately 110 families (TBC).

The main constraints pertaining to this informal settlement are:

- Un-serviced erven
- Area located below Hoeks River floodline
- Area located within Critical Biodiversity Area (CBA)
- Area located outside urban edge
- Informal dwelling structures
- Informal road network

The provision of access to basic needs and services is regarded as fundamental as well as a constitutional human right. This includes access to potable water, sanitation, electricity and housing opportunities. The abovementioned is the main objective of the proposed housing development. This project is also focussed to enable ownership and provide a sense of pride in order to contribute to socio-economic upliftment.
Figure 2.4: Existing Informal Settlement
SECTION 3  LAND IDENTIFICATION ASSESSMENT PROCESS

3.1 OBJECTIVE OF LAND USE IDENTIFICATION PROCESS
The need for housing in McGregor is estimated to be approximately 450 units (await socio-economic study confirmation), requiring a developable area estimated at ± 15 ha (@30 units per hectare). Five (5) vacant land portions have previously been identified by the municipality as potential future housing development areas to accommodate the existing need for human settlements in McGregor.

The objective of the following analysis is to assess the viability of the 5 sites previously identified for future development, in order to establish the most desirable option for housing development within McGregor.

This assessment is within the view of subsidised housing, and also indicate due consideration to the most desirable land use option for all income groups, housing alternatives, the character of McGregor and the biophysical characteristic of each site.

3.2 THE IDENTIFICATION OF LAND IN MCGREGOR

3.2.1 DISCRIPTION OF SITES:

The following sites where identified for possible alternatives:

<table>
<thead>
<tr>
<th>SITE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITE 1: Erven 330,921-926,389,1174-1175</td>
<td>Located on the north western corner of McGregor - refer figure 3.1</td>
</tr>
<tr>
<td>SITE 2: Portion of Erf 330</td>
<td>Located on the north western edge of McGregor - refer figure 3.2</td>
</tr>
<tr>
<td>SITE 3: Erven 946,968-994</td>
<td>Located on the south eastern corner of McGregor - refer figure 3.3</td>
</tr>
<tr>
<td>SITE 4: Portion of Erf 330</td>
<td>Located on the south eastern edge of McGregor - refer figure 3.4</td>
</tr>
<tr>
<td>SITE 5: Erf 360, MCGREGOR</td>
<td>Located on the eastern edge of McGregor - refer figure 3.5</td>
</tr>
</tbody>
</table>

Table 3.1: Alternatives sites

Figure 3.1: Alternative Site 1

Figure 3.2: Alternative Site 2
**Figure 3.3**: Alternative Site 3

**Figure 3.4**: Alternative Site 4

**Figure 3.5**: Alternative Site 5
3.2.2 PSDF AND ISIDIMA CRITERIA:
The PSDF and Isidima criteria was applied to assess and determine the most desirable site for housing development within McGregor.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSDF and Isidima - Criteria</td>
<td></td>
</tr>
<tr>
<td>- Public Land</td>
<td>Utilise public land to facilitate urban restructuring</td>
</tr>
<tr>
<td>- Urban Restructuring</td>
<td>Contain urban growth within the agreed urban edge. Promote integration and the containment of the existing urban edge to prevent urban sprawl.</td>
</tr>
<tr>
<td>- Densification</td>
<td>Encourage overall density of 25u/ha within towns before further extension to urban edge is considered.</td>
</tr>
<tr>
<td>- Access to Economic Opportunities</td>
<td>Create convenience by locating facilities within walking distance (±1km) to schools, clinics, business, public transport, etc.</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
</tr>
<tr>
<td>Biophysical</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>Optimise public land</td>
</tr>
<tr>
<td>Biophysical</td>
<td>Avoid environmentally sensitive areas, development within flood lines, steep slopes, un-even terrain</td>
</tr>
<tr>
<td>Services</td>
<td>Cost-effective linkage / availability of bulk services</td>
</tr>
<tr>
<td>Size</td>
<td>Subsidised - Average gross density of 35u/ha</td>
</tr>
<tr>
<td>Property Market</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1 – Portion of Erf 330 &amp; Erven 389,921-926, 1174-1175</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>• Langeberg Municipality</td>
</tr>
<tr>
<td>Size</td>
<td>• ±1.36 ha. • Site too small to meet the required size of approximately 15ha.</td>
</tr>
<tr>
<td>Urban Restructuring</td>
<td>• Site inside urban edge. • Densification will be in conflict with existing urban structure/urban fabric. • Integration possibilities limited.</td>
</tr>
<tr>
<td>Densification</td>
<td>• Possible up to approximately 15u/ha</td>
</tr>
<tr>
<td>Biophysical</td>
<td>• Even terrain • Existing structures exist on site</td>
</tr>
<tr>
<td>Services</td>
<td>• Bulk services connection possible (TBC)</td>
</tr>
<tr>
<td>Property Market</td>
<td>• High income/low density residential market</td>
</tr>
<tr>
<td>Maximum number of housing opportunities</td>
<td>• ±20 Units</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Site 1 not recommended for the proposed development of subsidy and GAP housing.</td>
</tr>
</tbody>
</table>

**Table 3.2 PSDF and Isidima criteria.**

**Table 3.3: PSDF & Isidima Assessment Alternative Site 1**
### 3.2.4 ASSESSMENT: SITE 2

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Site 2 – Portion of Erf 330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Langeberg Municipality</td>
</tr>
<tr>
<td>Size</td>
<td>± 1.93ha</td>
</tr>
<tr>
<td></td>
<td>Site too small to meet the required size of approximately 15ha.</td>
</tr>
<tr>
<td>Urban Restructuring</td>
<td>Site inside urban edge</td>
</tr>
<tr>
<td></td>
<td>Densification will be in conflict with existing urban structure/urban fabric.</td>
</tr>
<tr>
<td></td>
<td>Integration possibilities limited.</td>
</tr>
<tr>
<td>Densification</td>
<td>Possible up to approximately 20u/ha</td>
</tr>
<tr>
<td>Biophysical</td>
<td>Slope towards north-eastern side.</td>
</tr>
<tr>
<td></td>
<td>Un-even terrain</td>
</tr>
<tr>
<td>Services</td>
<td>Bulk services connection possible (TBC).</td>
</tr>
<tr>
<td>Property Market</td>
<td>High income/low density</td>
</tr>
<tr>
<td></td>
<td>GAP</td>
</tr>
<tr>
<td>Maximum number of housing opportunities</td>
<td>± 20 Units</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Site 2 not recommended for the proposed development of subsidy and GAP housing.</td>
</tr>
</tbody>
</table>

**Table 3.4: PSDF & ISIDIMA Assessment Alternative Site 2**

### 3.2.5 ASSESSMENT: SITE 3

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Site 3 – Erven 946,968-994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Langeberg Municipality</td>
</tr>
<tr>
<td>Size</td>
<td>± 3.14ha</td>
</tr>
<tr>
<td></td>
<td>Site too small to meet the required size of approximately 15ha.</td>
</tr>
<tr>
<td>Urban Restructuring</td>
<td>Site inside urban edge</td>
</tr>
<tr>
<td></td>
<td>Low-density development already approved on site.</td>
</tr>
<tr>
<td></td>
<td>Integration not possible</td>
</tr>
<tr>
<td>Densification</td>
<td>Not possible</td>
</tr>
<tr>
<td>Biophysical</td>
<td>Relatively even slope</td>
</tr>
<tr>
<td></td>
<td>Un-even terrain on southern side of site.</td>
</tr>
<tr>
<td>Services</td>
<td>Bulk service connection possible (TBC).</td>
</tr>
<tr>
<td>Property Market</td>
<td>High income/low density</td>
</tr>
<tr>
<td>Maximum number of housing opportunities</td>
<td>27 Units</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Site 3 not recommended for the proposed development of subsidy and GAP housing.</td>
</tr>
</tbody>
</table>

**Table 3.5: PSDF & ISIDIMA Assessment Alternative Site 3**
3.2.6 ASSESSMENT: SITE 4

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Site 5 – Portion Erf 330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>• Langeberg Municipality</td>
</tr>
<tr>
<td>Size</td>
<td>• ±9.21 ha</td>
</tr>
<tr>
<td></td>
<td>• Site too small to meet the required size of approximately 15ha.</td>
</tr>
<tr>
<td>Urban Restructuring</td>
<td>• Outside urban edge; Irregular urban form</td>
</tr>
<tr>
<td></td>
<td>• Integration possibilities limited due to site not abutting existing residential areas.</td>
</tr>
<tr>
<td>Densification</td>
<td>• Possible up to 30u/ha</td>
</tr>
<tr>
<td>Biophysical</td>
<td>• Relatively steep slope draining towards the east</td>
</tr>
<tr>
<td></td>
<td>• Un-even terrain</td>
</tr>
<tr>
<td>Services</td>
<td>• Bulk services connection possible (TBC)</td>
</tr>
<tr>
<td>Property Market</td>
<td>• Subsidy &amp; GAP</td>
</tr>
<tr>
<td>Maximum number of housing</td>
<td>±250 Units</td>
</tr>
<tr>
<td>opportunities</td>
<td>Site 4 not recommended based on:</td>
</tr>
<tr>
<td></td>
<td>• location outside urban edge</td>
</tr>
<tr>
<td></td>
<td>• un-even slope</td>
</tr>
<tr>
<td></td>
<td>• natural extension of existing urban footprint not possible.</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Site 4 not recommended based on:</td>
</tr>
<tr>
<td></td>
<td>• location outside urban edge</td>
</tr>
<tr>
<td></td>
<td>• un-even slope</td>
</tr>
<tr>
<td></td>
<td>• natural extension of existing urban footprint not possible.</td>
</tr>
</tbody>
</table>

*Table 3.6: PSDF & ISIIMA Assessment Alternative Site 4*

3.2.7 ASSESSMENT: SITE 5

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>Site 5 -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>• Langeberg Municipality</td>
</tr>
<tr>
<td>Size</td>
<td>• ±17.41ha</td>
</tr>
<tr>
<td>Urban Restructuring</td>
<td>• Consistent with current status of urban edge (Draft SDF 2014)</td>
</tr>
<tr>
<td>Densification</td>
<td>• Possible up to approximately 30u/ha</td>
</tr>
<tr>
<td></td>
<td>• Integration possible</td>
</tr>
<tr>
<td></td>
<td>• Natural extension of urban framework possible via Church and Hartzenberg Street</td>
</tr>
<tr>
<td>Biophysical</td>
<td>• Relatively even slope draining towards the eastern edge abutting the Hoeks River flood plain.</td>
</tr>
<tr>
<td></td>
<td>• Even terrain.</td>
</tr>
<tr>
<td></td>
<td>• Existing farm/irrigation dam on site.</td>
</tr>
<tr>
<td>Services</td>
<td>• Bulk services connection available</td>
</tr>
<tr>
<td>Property Market</td>
<td>• GAP, Subsidy, Extensive residential</td>
</tr>
<tr>
<td>Maximum number of housing</td>
<td>±530 Units</td>
</tr>
<tr>
<td>opportunities</td>
<td>Site 5 recommended for the proposed development of subsidy and GAP housing.</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Site 5 recommended for the proposed development of subsidy and GAP housing.</td>
</tr>
</tbody>
</table>

*Table 3.7: PSDF & ISIIMA Assessment Alternative Site 5*

3.2.8 CONCLUSION

All options for infill development and urban expansion were considered. Sites 1, 2 and 3 all have limited opportunity for development, but not desirable for high-density subsidy housing. Biophysical restrictions exist for site 4. Site 5, the proposed application area, is the only desirable and logical area for urban expansion, taking into consideration the size, number of residential opportunities, biophysical characteristics, connectivity to services etc.
4.1 LAND USE SURVEY

4.1.1 Community Facility Standards
A land use survey was conducted on 05 August 2013. The objective of the land use survey was to record all non-residential land uses in order to determine the need for any additional community facilities in McGregor in general and more specifically for the proposed development.

The land use survey confirmed that the following community facilities are located in McGregor (refer Plan 3 for exact location of facilities):

- One (1) Post Office
- One (1) Local Clinic
- One (1) Municipal Offices
- One (1) Police Station
- One (1) Library
- Three (3) Places of Worship
- One (1) Public Pre-Primary School
- One (1) Public Primary School (Grade R-8)
- One (1) Private School (Grade R-12)
- Five (5) Mini Markets
- One (1) General Dealer/Supermarket
- One (1) Filing Station

The Draft Development Parameters’ (undated), published by the Department of Environmental Affairs and Development Planning (DEA&DP) is summarised in the table below and will be used as a guideline in order to determine whether the existing community facilities are over- or under provided.

<table>
<thead>
<tr>
<th>FACILITY CATEGORY</th>
<th>COMMUNITY FACILITY</th>
<th>REQUIREMENT</th>
<th>SIZE (HA)</th>
<th>REQUIREMENT (Based on 530 Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Facility</td>
<td>Pre-Primary School</td>
<td>1/2400 people</td>
<td>1/600 DU</td>
<td>130-300m²</td>
</tr>
<tr>
<td></td>
<td>Public Primary Schools</td>
<td>1/3000-4000 people</td>
<td>1/1000DU</td>
<td>Without sport facilities: 2.0Ha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With sport facilities: 2.8Ha</td>
</tr>
<tr>
<td></td>
<td>Public Secondary Schools</td>
<td>1/10 000 people</td>
<td>1/2500 DU</td>
<td>Approximately 3 Ha</td>
</tr>
<tr>
<td></td>
<td>Tertiary Educational Facility</td>
<td>At least 150 000 people</td>
<td>1/37 500 DU</td>
<td>Dependant on Facility</td>
</tr>
<tr>
<td>Health and Welfare Facilities</td>
<td>Mobile Clinics</td>
<td>1/5000 people</td>
<td>1/1250 DU</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Local Public Clinics</td>
<td>1/120 000 people</td>
<td>1/30 000 Du</td>
<td>0.75-3Ha</td>
</tr>
<tr>
<td></td>
<td>Public Hospitals</td>
<td>1/450 000 people</td>
<td>1/112 500 Du</td>
<td>20-40ha</td>
</tr>
<tr>
<td></td>
<td>Regional Public Hospitals</td>
<td>1/4 500 000 people</td>
<td>1/1 125 000 Du</td>
<td>35Ha</td>
</tr>
<tr>
<td></td>
<td>Children’s Homes</td>
<td>1/50 000 people-200 000 people</td>
<td>1/11 250-50 000 Du</td>
<td>2ha</td>
</tr>
<tr>
<td></td>
<td>Homes for the Aged</td>
<td>1/50 000 people</td>
<td>1/12 500 Du</td>
<td>0.5-2Ha</td>
</tr>
</tbody>
</table>
Table 4.1: Guidelines on Community Facility Provision

### Social and Cultural Facilities

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Size (people)</th>
<th>Density (Du)</th>
<th>Area (Ha)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Halls/Centres</td>
<td>1/10 000 people</td>
<td>1/2500 Du</td>
<td>0.2-0.5Ha</td>
<td>0</td>
</tr>
<tr>
<td>Libraries</td>
<td>1/35 000 people</td>
<td>1/8750 Du</td>
<td>0.1-0.2Ha</td>
<td>0</td>
</tr>
<tr>
<td>Places of Worship</td>
<td>1/2000 people</td>
<td>1/500 Du</td>
<td>0.015-0.3Ha</td>
<td>1</td>
</tr>
<tr>
<td>Municipal Offices</td>
<td>1/50 000 people</td>
<td>1/12 500 Du</td>
<td>0.3Ha</td>
<td>0</td>
</tr>
<tr>
<td>Post Office</td>
<td>1/10 000 people</td>
<td>1/2500 Du</td>
<td>Min 100m²</td>
<td>0</td>
</tr>
<tr>
<td>Police Station</td>
<td>1/25 000 people</td>
<td>1/6250 Du</td>
<td>0.1-1.0Ha</td>
<td>0</td>
</tr>
<tr>
<td>Fire Stations</td>
<td>1/60 000 people</td>
<td>1/15 000 Du</td>
<td>Min 1.2Ha</td>
<td>0</td>
</tr>
<tr>
<td>Magistrates Court</td>
<td>-</td>
<td>-</td>
<td>0.6-2.3Ha</td>
<td>0</td>
</tr>
<tr>
<td>High Courts</td>
<td>1/200 000 people</td>
<td>1/50 000 Du</td>
<td>0.5-1.2Ha</td>
<td>0</td>
</tr>
</tbody>
</table>

### Public Service Facilities

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Size (people)</th>
<th>Density (Du)</th>
<th>Area (Ha)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Neighbourhood Play Lots</td>
<td>1/1000 people</td>
<td>1/250 Du</td>
<td>500m²</td>
<td>2</td>
</tr>
<tr>
<td>Community Functional Play Parks</td>
<td>1/2000-40 000 people</td>
<td>1/500-10 000 Du</td>
<td>500m²-1.0Ha</td>
<td>0</td>
</tr>
<tr>
<td>Regional Parks</td>
<td>1/20 000 people</td>
<td>1/5000 Du</td>
<td>5Ha</td>
<td>0</td>
</tr>
</tbody>
</table>

### Recreational Facilities and Open Space

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Size (people)</th>
<th>Density (Du)</th>
<th>Area (Ha)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Sports Fields</td>
<td>1/5000-6000 people</td>
<td>1/1250-15 000 Du</td>
<td>0.02-2.0Ha</td>
<td>0</td>
</tr>
<tr>
<td>Stadiums</td>
<td>1/100 000 people</td>
<td>1/25 000 Du</td>
<td>3Ha</td>
<td>0</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>1/100 000 people</td>
<td>1/25 000 Du</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

### Waste Management Facilities

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Size (people)</th>
<th>Density (Du)</th>
<th>Area (Ha)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Waste Disposal Facility</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hazardous Waste Facility</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Waste Water Treatment Facility</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### 4.1.2 Land Use Survey Findings

According to the land use survey all existing community facilities are located within 1 km of the centre of the proposed development (refer figure 4.2). The PSDF policy and guidelines prescribe a maximum distance from the proposed development to the various social facilities of 1km or approximately 10 min by foot (Policy UR11 of the PSDF). The Central Business District (CBD) is approximately 800m from the proposed development.

It should be stated that the beneficiaries of the proposed development already reside within the town of McGregor. Striving to achieve sustainable communities, provision should be made for any shortfall/need for non-residential use and/or community facilities. By applying the guidelines, provision should be made for at least one crèche and one church erf.

#### 4.1.3 Complimentary Land Uses

Notwithstanding the compliance with the minimum standards for community facilities, the opportunity exists to include complimentary land uses contributing to the empowerment and upliftment of the community. It is proposed to include an agri-training centre within the existing farmstead and ancillary buildings. This centre together with the establishment of food gardens will contribute to educational- and recreational opportunities. An open air food (Saturday) market is proposed on the location of the existing dam. It is proposed to ‘infill’ the dam structure thus providing the opportunity for the beneficiaries and residents of McGregor to sell their fresh produce and related items.

It is also proposed to include various public open spaces to allow for a network of green open spaces throughout the proposed development (refer section 4.6).
4.2 SOIL POTENTIAL STUDY
(Await report)

4.3 GEOTECHNICAL STUDY
(This section is a summary of the report compiled by Messrs Core Geotechnical Consultants.)

Messrs Core Geotechnical Consultants, undertook a phase 1 geotechnical investigation on the application area (refer Annexure G).

The area for the proposed McGregor Housing development comprises a site located on the south-eastern side of the town of McGregor. Geologically, the site is underlain from ground surface by dense gravelly silts of colluvial origin and gravelly residual clays. Over the major portion of the site, these soils overlie and mask completely to moderately weathered shales of rock consistency of the Bokkeveld Group. No water table was encountered on site during the investigation and the main water table probably occurs as a fractured rock aquifer at greater depth.

The site investigation was however carried out during the dry summer period and winter rainfall might result in a perched water table developing in the transported soils above the relatively impermeable
rock. Surface water flow (sheet run-off) down-slope is also likely to develop during intense rainfall events.

Recommendations for foundation design and drainage are given in Sections 8 and 9 (refer Annexure F) respectively. Conventional strip foundations founded in the weathered bedrock where possible and, where not possible, modified strip foundations are recommended, with modified construction and design precautions as required. Sound water management is recommended to prevent water ingress into soils below foundations and roadways in order to minimize long-term maintenance.

This Phase 1 geotechnical site investigation indicates that the area investigated, is generally suitable for project linked subsidy housing development, provided that the aspects of concern relating to the geotechnical character of the site are addressed.

**Figure 4.2: Geotechnical investigation test-pits**

### 4.4 ENGINEERING SERVICES

*(Await report)*
Messrs Worley Parsons Consulting Engineers investigated the application area to establish the availability of bulk engineering services. According to this report, all bulk services are available (refer Annexure H).

4.4.1 Water:

4.4.2 Electrical:

4.4.3 Sewage:

4.4.4 Topography:

4.4.5 Summary:

Following the afore-mentioned interpretation and summary of the engineering services report, compiled by Messrs Worley Parsons Consulting Engineers, it can be concluded that the proposed housing development will be fully serviced with the required civil services, in terms of water, sewerage, electricity and storm-water, and will be connected to the existing bulk services infrastructure of McGregor. The required upgrades will be implemented in order to ensure that the service infrastructure can operate effectively and contribute to the standard of living and the health and safety of the community.

4.5 STORMWATER MANAGEMENT PLAN

(Await)

Messrs Worley Parsons Consulting Engineers

4.6 HERITAGE IMPACT ASSESSMENT (Draft)

(This section is a summary of the report compiled by Messrs Aikman Associates.)

Messrs Aikman Associates; Heritage Management was appointed to undertake a Heritage Impact Assessment (refer Annexure H) in terms of the National Heritage Resources Act (Act 25 of 1999). The outcome of this assessment is to indicate that this site is suitable for residential development purposes, while the report also strongly recommends various mitigations measures to be incorporated within the layout design and housing typologies.

The assessment that has been carried out indicates that the proposed housing development, related facilities and infrastructure will have an impact on the townscape of McGregor. The heritage related design indicators should however act as a major informant in the formulation of the Site Development Plan, and it is therefore this assessor’s opinion that this impact can be ameliorated and conservation objectives can be met.

The main heritage design indicators are specified below;

(i) Agricultural edge to Buitekant Street

It is proposed to retain this outer edge condition so that an agricultural edge can be created on the south western side of Buitekant Street. A narrow band accommodating smallholdings and
the existing dam should be developed. The existing farm track at the base of the dam provides a natural boundary to this zone. The two existing cottages should be retained as part of the agricultural edge. A windbreak of trees should be planted on the township edge of this zone.

(ii) The extension of Church Street

Church Street is a major cross street in the village and should be extended onto Erf 360. A public/community facility at the intersection of Church- and Buitekant Street can create a “special place” in the village. This should be a gateway into the new residential area. With the agricultural edge and public/community facility at the intersection, there is no need for the development of the remainder of the site to be aligned with the village’s historical grid.

(iii) Appropriate housing typologies

The village is characterised by a great variety of house types. The oldest form being the simple 3-bay cottage with a pitched thatch roof and external hearth and chimney. A later version has a simple parapet with a low-pitched roof of corrugated iron. Both these archetypes were often connected in pairs or as semi-detached dwellings. It will be important to create as much variety as possible as Erf 360 slopes down towards the river and the roof-scape will be an important visual element. Even as has been recommended that only three house types are used variety can be achieved by the use of double pitch roofs, lean-to roofs with a simple parapet and by linking units as illustrated below. The McGregor Heritage Society requested that consideration be given to building external hearths. These could be a feature of corner sites and those in visually prominent positions.

(iv) Tree planting

While the village is not characterised by avenues of trees as in Stellenbosch and other historic towns and villages, trees can play an important role in reducing the impact of high density residential development. It has been recommended that a gateway be created at the intersection of Church Street and Buitekant Street with the siting there of a public/community facility. This public place should be heavily treed to create summer shade. It was also recommended that a windbreak of trees should be planted along the lower edge of the agricultural zone. Besides this, groups of trees should be planted strategically to break up the homogeneity of the township layout.

(v) Agri-Training Institute and accompanying facilities

The abovementioned concept will contribute to the creation of sustainable communities and neighbourhoods. The concept is focussed on the empowerment and training of the beneficiaries which will also facilitate economic growth in the proposed development by means of firstly agricultural training, a food garden area for production and a fresh produce market. The need for housing being the result of socio-economic problems of unemployment and education the above mentioned proposal could help to alleviate this problem.
The mitigation measures as indicated above will form part of the layout design process in order to incorporate the unique heritage characteristics of McGregor within the proposed development.
4.7 SOCIO-ECONOMIC STUDY (Draft)

Leap Sustainable Developments was appointed to undertake a specialist Social Impact Assessment (SIA) as part of the EIA process (refer Annexure L).

Preliminary issues and impacts identified are as follows;

(i) Cultural impacts
(ii) Gender relations
(iii) Health and social well being
(iv) Quality of living environment
(v) Economic and material well being
(vi) Family & community well being
(vii) Institutional, legal, political and equity

From the preliminary assessment it is likely that the proposed development could have an overall positive impact on the residents and town of McGregor depending on the design and character of the proposed development.

4.8 VISUAL IMPACT ASSESSMENT (DRAFT)
(This section is a summary of the report compiled by Urban Dynamics Architects.)

Urban Dynamics Architects was appointed to undertake a specialist Visual Impact Assessment (VIA) as part of the EIA process (refer Annexure M). In context of this investigation the visual impact assessment will be as follows.

- The visual sensitivity of the proposed development ranges from moderate, in the context of the surrounding rural development of McGregor, and high, in context of the localised environment.
- The visual intrusion ranges from moderate (into abutting and adjoining streets and immediate neighbours) and high (from the properties broader cultural and scenic landscape setting).
- The visual absorption of the context of the proposed development is low i.e. the ability of the landscape to conceal the proposed development at a local and regional context.
The proposed development of erf 360 will impact on the sense of place particularly in respect of the existing property and its direct neighbours, and also on the cultural-historic context of McGregor at large. The loss of the characteristic vineyards of erf 360, the proposed infill of the existing dam and the demolition of smaller labourers’ cottages will all impact on the existing character of this neighbourhood, and the town itself. Furthermore, the proximity from the proposed development to the Hoeks riverine corridor and floodplain will irrevocably alter the visual reading of McGregor. Taking into account that erf 360 is located inside the urban edge (SDF currently under review) as well as two properties adjacent to erf 360 development has already taken place, the significance of the visual intrusion is somewhat diminished.

Mitigating measures if tested and adhered to, will to a degree, ameliorate the extend of the visual impact. The management and maintenance of these landscape and urban-architectural mitigation measures will improve their effectively over time.

4.9 URDAN DESIGN STUDY
(Await report)

4.10 ENVIRONMENTAL: BASIC ASSESSMENT
(Await report)

4.11 SITE INFORMANTS
The proposed housing development presents the following opportunities and constraints (refer Plan 4).

4.11.1 Opportunities

- Access

  The existing road system provides excellent and cost effective access, firstly towards the application areas, and secondly between the existing community facilities and the CBD.

- Service Infrastructure Costs

  Existing bulk services networks and possible links are located within close proximity of the proposed application area. The connection/linkage with these existing networks contributes substantially to the reduction of the development cost.

- Proximity to Community Facilities

  The proposed development area is directly linked with existing social facilities located within the residential areas.
- **Slope**

The proposed application is area is located on a relatively flat terrain with a gentle eastern slope with minimal constraints for bulk earthworks, and therefore the topography would contribute towards a cost effective layout.

- **Existing infrastructure**

An existing farmstead is located on the proposed application area with accompanying services (water, sewerage, electricity). The existing farmstead and ancillary buildings could be utilised for community and socio-economic development purposes that would realise direct benefits for the beneficiaries.

- **Shape of the site, infill and urban form**

The triangular shape of the site will be the only logical infill opportunity. Infill will “Round-off. The urban form as the development will extent up to the Hoeksrive floodplain and therefore the river edge will become a natural eastern boundary.

4.11.2 Constars

- **Visual Impact**

The location of the proposed development is prone to impact on visual lines and corridors and thus affecting the unique character of McGregor. Mitigation measures should be implemented within the layout design to minimise the visual impact and retain the aesthetic value of the town.

- **Existing Dam**

An existing dam is located in the south western area of the application area, which limit the size of developable area suitable for residential development. If the dam is to be kept in its original state, drowning can be a real danger and proper management and supervision will be of critical concern (refer Section 5.2.2).

- **Agricultural**

An olive grove is located on the southern boundary of the proposed development area. As a result of fertilizing of these groves, the potential for hazardous impact exists. High density residential development abutting the olive groves could also have a negative impact as pollution and other associated residential activities may impact on the growth and production of these trees.
- **Biodiversity Edge**

A Critical Biodiversity Area (CBA) is located on the eastern edge. The impact on this edge, if not controlled can be detrimental to the conservation of this floodplain. This edge should be well established and maintained in order to minimise effects on these non-residential land uses.

- **High Income Residential Edge**

A high income residential edge is located on the western boundary of the proposed development adjacent to Buitekant Street. The urban structure prevalent on this edge should be mirrored within the proposed development to minimise the impact and transition from low density to high density residential development.

- **Middle Income Residential Edge**

A middle income residential edge can be found on the northern edge of the proposed development. The proposed development should place erven on this edge to reflect the existing erf sizes and urban fabric/pattern.

![Figure 4.4: Opportunities and Constraints Plan](image-url)
4.11.3 Synthesis of Opportunities & Constraints
The above-mentioned analysis of the physical opportunities and constraints give a detailed overview of the local and micro informants that have a direct effect on the proposed housing development. It can be derived from the above that the application areas have various strengths/opportunities in its locality, accessibility and land use context.

The constraints identified (i.e. dam, high/middle income edges, agricultural edge and CBA edge) can be converted into opportunities that allows for an integrated development, variety of sizes/income groups, community upliftment and economic development through the implementation of a range of initiatives i.e. agri-based training and open air (Saturday) food market. In responding to the opportunities and constraints, the “best fit” design can be developed to create a unique development that can become a role model for similar housing projects.
SECTION 5 CONCEPTUAL DEVELOPMENT FRAMEWORK

5.1 OBJECTIVE

A conceptual development framework was compiled by Urban Dynamics Architects (UDA) in order to address the potential visual- and urban design impacts and to establish a design-orientated layout sensitive to the character and layout pattern of McGregor.

5.2 PRINCIPLES APPLIED

5.2.1 Planning Principles:

The following high level planning principles will be applied to the design process:

- Aim towards achieving spatial sustainability
- Give special consideration to the protection of prime and unique agricultural land
- Promote and stimulate the effective and equitable functioning of land markets
- Promote land development in locations that are sustainable and limit urban sprawl.
- Promote land development that strive towards viable communities

5.2.2 Design Principles:

The following principles and design considerations have been applied in order to address the current housing need within McGregor Erf 360:

- Establish a pedestrian-orientated and friendly environment.
- Establish systems of continuous routes to promote accessibility to social and economic activities.
- Implement a cost-effective design in order to optimise the use of available land, as well as resources.
- Promote the optimisation of vacant municipal land within the urban footprint.
- A design that will enhance the functionality of services, and promote access to local amenities.
- A design that will enable the provision of civil engineering services in a cost-effective manner where possible.
- Planned linkages to accommodate the drainage pattern within the various proposed developments.

5.3 URBAN DESIGN PRINCIPLES

(Await report)

5.4 SPATIAL DEVELOPMENT CONCEPT

5.4.1 Main structuring elements:

The following basic design considerations were applied to inform the design concept and conceptual development framework:
• **Extension of Church Street**

  Church Street will be extended into the new development area in order reflect the existing grid layout pattern of McGregor. The extension of Church Street will also facilitate a view corridor into the development as well as a vista into the Hoeks River biodiversity area.

• **Green buffer**

  A green buffer will be maintained along the eastern boundary of the application area in order to preserve the Hoeks River CBA and to incorporate storm-water retention ponds as required according to the Storm-water Management Plan (*refer Section 4.5*).

• **Low density buffer**

  A low density residential area with extensive residential properties (>1000m²) will be established on the western side along Buitekant Street. This area will function as a transitional area between the existing low density area to the proposed high density development.

  Furthermore, the extensive residential properties will incorporate the existing grid layout pattern into the new proposed development as well as the street scape and urban form elements of the existing town.

• **High density**

  A high density residential area will be established whereby the average density of 25du/ha, as prescribed by the PSDF, will be achieved. The bulk of the housing need in McGregor will be addressed within this area.

• **GAP units**

  Gap housing opportunities will be created along the northern boundary of the application area. This area will address the potential demand of the existing GAP housing market and also create a transitional area from the existing low density area to the high density development.

• **Network of open spaces/pedestrian paths**

  A pedestrian pathway will be created in the green buffer which will be connected to a network of open spaces in the layout. This network will establish a pedestrian-orientated and friendly environment also contributing to the visual corridors of the proposed layout.

• **Existing Dam**

  The proposed development presents two alternatives for the existing dam.

    1.) Keep the dam in its original state.
    2.) Fill the dam to provide an open air market and or open space area.
If the dam is to be kept in its original state, drowning can be a real danger and proper management and supervision are of critical concern. Water seepage below the dam wall should be considered a real possibility/constraint if the dam is to be kept in its original state. According to the National Water Act, 1998 (Act 36 of 1998); “if a dam stores/contains more than 50 000 cubic metres of water, and which has a wall of a vertical height of more than five metres, measured as the vertical difference between the lowest downstream ground elevation on the outside of the dam wall and the non-overspill crest level or the general top level of the dam wall” a safety certificate should be acquired. Furthermore safety approval of a registered engineer will need to be required to allow for residential development below the dam wall.

If the dam is to be filled and integrated within the proposed development as an open air market with proper landscaping, this area provides the ideal opportunity as an integration space within the town.

### Figure 5.1: Draft Conceptual Development Framework

#### 5.5 ERF LAYOUT PARAMETERS

The Langeberg Municipality, in conjunction with the implementing agent, Asla Devco (Pty) Ltd, and the professional team determined through a range of iterations taking into consideration units typologies, development and services costs as well as overall design pattern, that the dimensions of the proposed erven should be as follows:
In order to provide for better utilisation of the erven, the relaxation of one of the two lateral boundary building lines and street building lines is suggested (refer to the application description item 1.5).

The development parameters of the residential erven, as per Section 8 Zoning Scheme are summarised in table 5.1 below:

<table>
<thead>
<tr>
<th>Land use</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-detached erven</td>
<td>±9.65m × 13m</td>
</tr>
<tr>
<td>GAP erven</td>
<td>±10m × 20m</td>
</tr>
<tr>
<td>Extensive residential erven</td>
<td>±25m × 45m</td>
</tr>
</tbody>
</table>

*Table 5.1: Erf Dimensions*

5.5.1 Typologies (TBC)

As a result of the unique character of McGregor and the strong architectural heritage prominence throughout the town, it was proposed to develop exclusive housing typologies in order to complement the existing character of McGregor.

Typology A – Semi-detached housing unit: These units are proposed to be developed as the bulk of the residential development.

- Erf Size: ± 126m².
- Footprint: ±38.5m.
- Bedrooms: Two bedrooms of ±6.2m² each.
- Living Area: One open plan living area of ±16.6m².
- Kitchen: One open plan kitchen of ±3.6m².
- Bathroom: One bathroom of ±3.4m².
Typology B – Semi-detached housing unit: These units are proposed to be developed along the extension of Church Street with the proposed ‘stoep’ facing onto the street.

- Erf Size: ± 126m².
- Footprint: ±47.4m (including porch).
- Bedroom: Two bedrooms of ±6.4m² each.
- Living area and Kitchen: One open plan living room and kitchen area of ±17.5m².
- Bathroom: One bathroom of ±3.6m².
- Porch/Stoep: 8.2m²
**TYPE B – Single housing unit:** These units are proposed to be developed as a ‘transition’ from low density to high density residential areas located on the northern edge, as well as on the western side abutting extensive residential erven.

- **Erf Size:** ± 200m²
- **Footprint:** ± 40.5m²
- **Bedroom:** Two bedrooms of ±6.5m² each
- **Living area and Kitchen:** One open plan living room and kitchen area of ±20.5m².
- **Bathroom:** ±3.7m²
5.5.2 Orientation
In order to provide for a cost effective layout design and to contribute to the overall sustainability of the proposed development where possible, the erven are orientated parallel with the contours. The result being a single platform for many housing units, instead of individual platforms for each unit.

5.5.3 High density/ semi-detached units
In total 503 of these erven are proposed within the application area. The size of these erven will be approximately 126m². The bulk (±6.7ha) of the proposed development will consist of these erven.
5.5.4 GAP units
In total 17 GAP erven are proposed within the development. The placement of these erven is on the northern edge abutting the existing middle income residential area, as well as on the western side adjacent to the proposed extensive residential properties. Primary access will be gained via Hartzenberg Street on the north and Church Street to the west.

5.5.5 Low density/extensive residential
On the western edge of the proposed development abutting Buitekant Street, 5 extensive residential erven are proposed. These erven resemble the erf sizes of the adjacent Buitekant- and Van Reenen Street. These erven are proposed to be larger than 1000m² and will reflect the existing urban footprint/fabric and allow for the integration of the unique character of McGregor into the proposed development.

5.5.6 Food gardens
The food gardens are an initiative that can be driven by a partnership between the Langeberg Strategy, Social Development Department and credible NGO’s. The Langeberg Municipality have the option to enter into a lease agreement and have the said NGO manage the gardens. The possibility also exists to set up a trust with membership from the local ratepayers association, the Langeberg municipality, schools and churches.

These proposed gardens are located on the southern boundary of the proposed development and is bordered by the existing olive grove of the neighbouring farm. The total area for these farms will be approximately 1.6 ha in extent.

5.5.7 Public open spaces
In total approximately 0.5ha are proposed for public open space. The proposed pedestrian corridor within the extension of Church Street will link these open spaces to form a network of public open spaces. These open spaces will also contribute to the aesthetic value of the proposed development and subsequently strengthen the visual corridor towards the Hoeks river floodplain. Storm-water attenuation measures could also be located within certain parts of these areas (refer Section 4.5).

5.5.8 Training institute/community facilities
The proposed agri-training institute will be located on the existing farmstead on the south-eastern corner of the application area. In total, the proposed area for this supplementary community facility will amount to 0.74ha. The existing farm house and ancillary buildings will be utilised for this proposed facility, minimizing the cost involved to establish this facility.

5.5.9 Church/crèche
One (1) single large erf of 1 200m² will be located at the entrance of the proposed development, on the corner of Church Street and an internal collector road. As concluded from the land use survey as well as from the assessment of the development parameter (refer Section 4.1) either a crèche or church facility should be provided within the proposed development. A socio-economic study will inform the proposed land use within the detail planning phase.
5.5.10 Pedestrian corridor
A pedestrian corridor is proposed to link the open air market on the western edge, with the Hoeks River floodplain on the eastern edge. This walkway strengthens the visual corridor, and reflects the existing unique character of McGregor within the proposed development. The proposed pedestrian corridor will function as one of the main ‘spines’ together with the extention of Church Street to create a focal point in the form of a town square in the centre of the application area.

5.5.11 Road network
A total of approximately 4.4ha will be utilised for road purposes within the proposed application area. The proposed development will be serviced by two 13m entrances via the extension of Church- and Hartzenberg Street. Internally Church Street (13m) will then function as the main internal collector route. Several 10m internal roads will provide access to the residential- and supporting land uses.

5.6 SUSTAINABILITY ASSESSMENT: APPLYING THE CRITERIA

The core of the BNG (Breaking New Ground) strategy of the Department of Local Government and Housing (DLGH) is the application of the sustainable settlement criteria. The department has provided the so-called ‘Step 2- Criteria for evaluating housing project benefits’. These criteria have been categorised according to the triple bottom line principles for sustainable development, namely:

- Economic efficiency
- Social justice
- Ecological integrity
- Compliance with relevant spatial policies

The application of the criteria should apply in all cases where appropriate located land needs to be identified.

The criteria in the table below have been applied to the analysis in order to “measure” the sustainability of the development proposal for subsidy and GAP housing.

The sustainability criteria summarised in Table 3.2 for evaluating housing project benefits are derived from the document produced by the Department Human Settlements, namely *Guidelines for The Preparation of Credible Human Settlement Plans* (July 2010).

The analysis of the proposed development in terms of the sustainability criteria are presented in Table 3.3. The objective of this analysis is to determine the degree of sustainability of the entire development.
<table>
<thead>
<tr>
<th>KEY OBJECTIVES</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A: ECONOMIC EFFICIENCY</strong></td>
<td>(Based upon provincial guidelines of PSDF, MEDS and integrated with settlement specific requirements)</td>
</tr>
</tbody>
</table>
| Enhance economic security and promote employment | Access to economic opportunities  
Proximity to relevant employment opportunities |
| Promote an affordable and integrated range of housing opportunities | Ability to leverage additional resources  
Ability to mobilise commercial housing finance  
Cross subsidisation of housing by other developments  
Mixed uses including commercial, business industry  
Mixed income communities |
| Promote optimal use of space and infrastructure | Extent of existing bulk infrastructure  
Bulk services e.g. water, sewerage, electricity and roads  
Transport capacity, including public transport linkages  
Provision of higher density housing which supports efficiencies along major routes. |
| Promoting economic activity and SMME’s | Layout and/or design promoting and supporting economic activities  
Support to small business sector development and building connections between the second and first economy  
Extent to which provision is made for commercial/SMME activities |

| **B: SOCIAL JUSTICE** | |
| Quality of life and access to resources | Improved access to social development resources  
Reliable basic services |
| Promoting social & spatial integration | Proximity and linkages with other income or social groups/communities |

| **C: ECOLOGICAL INTEGRITY** | |
| Attaining sustainability | Compatibility with existing cultural landscapes, artefacts and buildings  
Application of building materials to conserve costly  
Demonstrate the minimisation of consumption of scarce environmental resources such as water and electricity  
Promote ecologically sensitive settlement design alternatives |

| **D: COMPLIANCE WITH SPATIAL POLICIES** | |
| Spatial Development Framework | Compliance with Spatial Development Framework |
| Human Settlement Plan | Compliance with the proposed development areas as set out in the Human Settlement Plan |

---

*Table 5.3: Sustainability Criteria*

As part of the assessment process, a value is allocated to each criterion. The values are:

- **0** = does not comply with sustainability criteria
- **1** = complies to a degree
- **2** = fully complies with sustainability criteria

The following table present an assessment of the proposed development area in terms of the above-mentioned sustainability criteria.
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>COMMENTS</th>
<th>ECONOMIC EFFICIENCY</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access to economic opportunities</td>
<td>The proposed development is approximately 800m from the CBD. Access to community facilities are possible through the extension of church street as well as Hartzenberg street.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>• Promotion of affordable and integrated range of housing opportunities</td>
<td>High ability to leverage additional resources by means of extensive residential units.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Land value is high.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to mobilise commercial finance is possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good opportunity for small neighbourhood node, given the proposed opportunity for the production and retail of agricultural produce.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Good opportunity for subsidy market and GAP market housing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Promote optimal use of available space and infrastructure</td>
<td>Bulk civil services available and capacity to be optimised.</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Excellent accessibility and mobility via extension of Church Street and proposed pedestrian linkages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Promoting economic activity and SMME’s</td>
<td>The proposed development is able to promote economic activity and SMME’s as a result of the proposed Agri-training centre, food gardens and fresh food market.</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL JUSTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quality of life and access to resources</td>
</tr>
<tr>
<td>• Access to social facilities</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>• Promoting social and spatial integration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECOLOGICAL INTEGRITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Compatibility with existing cultural landscapes and buildings</td>
</tr>
<tr>
<td>• Promote ecologically sensitive settlement design</td>
</tr>
<tr>
<td>• Overall promotion of sustainability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D: COMPLIANCE WITH SPATIAL POLICIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Spatial Development Framework</td>
</tr>
<tr>
<td>• TOTAL SCORE</td>
</tr>
</tbody>
</table>

**Table 5.4: Sustainability Assessment McGregor Erf 360**

The sustainability analysis concludes that the proposed development comply with the main pillars of sustainability (Economic, Social and Ecological) as well as with relevant spatial policies. This result of this study indicates a high level of sustainability. The proposed development is therefore planned as a
township that complies with most of the sustainability criteria (90%) from the Department of Human Settlements.
Section 6 of the Land Use Planning Ordinance stipulates that applications may only be refused if they lack desirability or if they negatively affect existing rights. Furthermore, the ordinance prescribes that, when a decision is made, the health, welfare and safety of the community, and the built-up and natural environment must be considered.

6.1 CHARACTER OF THE SURROUNDING AREA

The properties located in the vicinity of the application area are residential and agricultural in nature. The proposed development area can easily be integrated within existing residential neighborhoods of McGregor by means of the proposed extension of existing roads. The proposed development will therefore be consistent with the surrounding residential character.

6.2 LOCATION AND ACCESSIBILITY

The proposed development is located on the eastern edge of McGregor abutting Buitekant Street. Residential neighborhoods adjacent to the proposed development have well located/distributed social amenities established within these areas. Internal distributor roads linking these areas with social amenities and the CBD are, Breë-, Tindall- and Church Street linking with Buitekant Street and Hartzenberg Street.

The proposed development internal services will be linked to the existing engineering services in the facinity of the proposed development areas. The proposed application is seen as a logical extension of residential character of the surrounding areas.

6.3 COUNCIL’S LAND USE POLICIES

The proposed development is consistent with existing planning policies applicable to the study area:

The PSDF, Breaking New Ground and Western Cape Human Settlement Strategy all advocate the delivery of sustainable housing to communities in need. The development of the application area will ensure access to affordable, well-located housing contributing towards integration.

The area within which the proposed development is located is viewed as being important for residential densification. This view is further substantiated in all the applicable spatial policy frameworks reviewed. Densification is supported across the board and on the basis thereof, the policy assessment found that the proposed development of the application properties is most consistent with the relevant policy frameworks.

6.4 IMPACTS ON EXISTING RIGHTS

The proposed development will in no way negatively impact on the existing zoning rights as the majority abutting properties are zoned Single Residential Zone. The proposed development is therefore compatible with the zonings and land use of the surrounding properties and will also
contribute to the densification of the existing urban structure, and help to alleviate the housing need that currently exist within McGregor.

6.5 SAFETY AND WELFARE OF THE COMMUNITY

The safety and the welfare of the community will at all times be prioritised during the implementation and operational phases of this proposed housing project. The locality of the development adjacent to the existing residential development, the absence of any potentially threatening elements such as hazardous industries, polluted water bodies and flood-proned areas. Furthermore, the proposed provision of acceptable level of services will contribute to a safe environment and will enhance the welfare and livelihoods of the community.

All issues related to safety and community welfare have therefore been addressed by:

- establishing a pedestrian-orientated and friendly environment;
- promoting a system of continuous routes and accessibility to social and economic activities;
- implementing cost-effective layout design;
- optimising the use of available resources;
- incorporating mitigation measures in order to ensure the unique character of McGregor within the proposed development.

6.6 CONSERVATION OF THE NATURAL AND BUILT-UP ENVIRONMENT

In principle there are no significant negative environmental concerns. Particular care has been taken with the proposed designs of the development to ensure it will make a positive contribution to the area. The proposed development is located within the urban edge, which contributes to the optimum use of available land and would facilitate increased residential densities. The proposed development should not have any significant impact on the natural or built environment.
SECTION 7 CONCLUSION & RECOMMENDATION

The application area, as motivated in this report, provides an excellent opportunity for a housing development. This development therefore is regarded as desirable within its local context and well integrated within the existing and future town.

The desirability of this proposal can further be motivated through the following considerations:

- The proposal will contribute towards alleviating the growing need for subsidy-based housing in McGregor.
- The integration of the proposed land uses with the surrounding development as well the opportunity for integration within the proposed development.
- Consistent with the spatial policy plans for the area.
- The improvement in quality of life of the residents and McGregor community as a whole.

It is therefore recommended that this application be approved in terms of the Land Use Planning Ordinance, 1985 (Ordinance No. 15 of 1985) as follows:

- **Residential Zone I**
  - 503 erven of ± 125m² each
  - 17 erven of ± 200m² each
  - 5 erven of >800m² each

- **Business Zone**
  One erf

- **Open Space I**
  Four erven

- **Community Zone**
  Two erven

- **Special Zone**
  One

- **Transport Zone II**
  Roads

iv. Building Line Departures in terms of Section (15)(1)(i) of the Land Use Planning Ordinance, 1985 (Ord. 15 of 1985) to allow a lateral building line of 0m for one of the lateral boundaries and a street building line of 2m of the Residential Zone I erven.