# Proposed Walmer Housing Development, Erf 11305, Port Elizabeth

# **Final Scoping Report**

**Report Prepared for** 

# **Nelson Mandela Bay Municipality**



Report Number 475764/3 (erf 11305) DEDEAT Reference Number: ECm1/C/LN2/M/39-2014



**Report Prepared by** 



June 2015

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# **Nelson Mandela Bay Municipality**

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June 2015

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# List of Abbreviations

AIA	Archaeological Impact Assessment
BID	Background Information Document
CBA	Critical Biodiversity Area
DAFF	Department of Agriculture, Forestry and Fisheries
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism
DEA	Department of Environmental Affairs (National)
DSR	Draft Scoping Report
DWS	Department of Water Affairs and Sanitation
ECBCP	Eastern Cape Biodiversity Conservation Plan
ECPHRA	Eastern Cape Provincial Heritage Resources Authority
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
FLISP	Finance Linked Individual Subsidy Programme
FSR	Final Scoping Report
GDP	Gross Domestic Product
HIA	Heritage Impact Assessment
IAPs	Interested and Affected Parties
IDP	Integrated Development Plan
IDZ	Industrial Development Zone
MDC	Makhetha Development Consultants
NEMA	National Environmental Management Act
NFA	National Forest Act
NMBM	Nelson Mandela Bay Municipality

PES	Present Ecological State
POS	Public Open Space
PPP	Public Participation Process
RoD	Record of Decision
SAHRA	South African Heritage Resource Agency
SRK	SRK Consulting
ToR	Terms of Reference
WULA	Water Use Licence Application
+ve	Positive
-ve	Negative

# **Glossary of Terms**

Degraded habitat / land	Land that has been impacted upon by human activities (including introduction of invasive alien plants, light-moderate overgrazing, accelerated soil erosion, dumping of waste), but that still retains a degree of its original structure and species composition (although some species loss would have occurred) and where ecological processes still occur (albeit in an altered way). Degraded land is capable of being restored to a near-natural state with appropriate ecological management.
Development footprint	In respect of land, it is any evidence of physical alteration as a result of the undertaking of any activity.
Environment	The external circumstances, conditions and objects that affect the existence and development of an individual, organism or group. These circumstances include biophysical, social, economic, historical and cultural aspects.
Environmental Impact Assessment (EIA)	A study of the environmental consequences of a proposed course of action.
Finance Linked Individual Subsidy Programme (FLISP)	Provides down payment assistance in the form of a grant to qualifying beneficiaries who are in a financial position to secure a Home Loan from a Lender.
Forest	Includes - (a) a natural forest, a woodland and plantation; (b) the forest produce in it, and (c) the ecosystem which makes it up.
Forest Clump	Where three or more forest species occur together.
Fully State Subsidised Housing	Housing provided by the state without any expectation of the beneficiary making financial contributions to towards the house/services/transfer and registration costs.
GAP Open Market Housing	Housing in which the state does not subsidise the beneficiary. The beneficiary relies on private mortgage finance and or individual savings. This is open to those earning between R 15,000 to R 25,000 per month.
GAP Partially Subsidised Housing	The state subsidy is supplemented by private funding (savings, mortgages or bonds with a financial institution to develop the units). Currently this is open to beneficiaries earning a combined monthly income of between R 3,500 and R 15,000.
Indigenous vegetation	Vegetation consisting of indigenous plant species occurring naturally in an area, regardless the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years.
Interested and Affected Party	Any person, group of persons or organisation interested in or affected by an activity, and any Organ of State that may have jurisdiction over any aspect covered by the activity.
Mixed-use	The presence of two or more types of land use in an area.

Natural Forest	Means a group of indigenous trees- (a) whose crowns are largely contiguous; or (b) which have been declared by the Minister to be a natural forest under section 7 (2) of the National Forest Act (Act 84 of 1998)
Plan of Study for EIA	A document which forms part of a Scoping Report and sets out how an Environmental Impact Assessment must be conducted.
Registered Interested and Affected Party (IAP)	An Interested and Affected Party whose name is recorded in the register opened for the application / project.
Scoping	A procedure to consult with stakeholders to determine issues and concerns and for determining the extent of and approach to an EIA, used to focus the EIA.
Scoping Report	A written report describing the issues identified to date for inclusion in an EIA.
Social Housing	This is for beneficiaries who wish to rent and who earn between R 2,500 and R 7,500 per month. The policy states that rentals paid should not exceed 30 % of the gross income (R 750 - R 2,250). This determines the size of the unit allocated to the beneficiary. The units will be managed and owned by an accredited Social Housing Institution that will hold the stock for a minimum of 15 years and may either re-finance for another 15 years or sell it off to tenants thereafter.
Transformed habitat / land	Land that has been significantly impacted upon by human activities (such as cultivation, urban development, mining, landscaping, severe overgrazing), and where the original structure, species composition and functioning of ecological processes has been irreversibly altered. Transformed habitats are not capable of being restored to their original states.
Untransformed habitat / land	Land that has not been significantly impacted upon by human activities. These are ecosystems that are in a near-pristine condition in terms of structure, species composition and the functioning of ecological processes.
Riparian	The area of land adjacent to a stream or river that is influenced by stream-induced or related processes. Riparian areas which are saturated or flooded for prolonged periods would be considered wetlands and could be described as riparian wetlands. However, some riparian areas are not wetlands (e.g. an area where alluvium is periodically deposited by a stream during floods but which is well drained).
Wetland	Land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which under normal circumstances supports or would support vegetation typically adapted to life in saturated soil (Water Act 36 of 1998).

# Disclaimer

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (South Africa) (Pty) Ltd. (SRK) by various parties, including the Nelson Mandela Bay Municipality (NMBM). SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

# **1** Background and Introduction

# 1.1 Background of the project

The Nelson Mandela Bay Municipality (NMBM) proposes to construct housing and associated facilities and infrastructure on erf 11305, in Walmer. The erf is located to the west of Walmer Gqebera along Victoria Drive, Port Elizabeth, and bordered by the suburb of Walmer Heights to the North West, the Walmer Country Club to the north, and Arlington Race Course, to the east (see Site Locality Plan, Figure 1-1 below).

SRK Consulting (SRK) has been appointed by the NMBM, as the independent consultants, to conduct the Environmental Impact Assessment (EIA) in terms of NEMA, as amended, and the EIA Regulations, 2010, for the proposed Walmer housing development.

In terms of the National Environmental Management Act 107 of 1998 (NEMA), as amended, and the Environmental Impact Assessment (EIA) Regulations, 2010, an environmental assessment process must be undertaken for certain listed activities. The main activity associated with the proposed development is listed under GNR 545 of 18 June 2010 and as such requires a full Scoping and Environmental Impact Assessment.

Authorisation (Ref: ECm1/N/107-04) was previously granted by the Department of Economic Affairs, Environment and Tourism (DEAET) in April 2006 to a private developer for a change in land use and construction of housing units on erf 11305 (see copy of authorisation in Appendix M). This authorisation has since expired, the land has been purchased by the NMBM, and the nature of the development has changed, necessitating a new application for environmental authorisation. In July 2014 an application to commence the current EIA process was submitted to the Department of Economic Affairs, Environmental Affairs and Tourism (DEDEAT)<sup>1</sup>, who acknowledged receipt of the application on 20 August 2014 and supplied a reference number (see Appendix A).

The Scoping Study includes a Public Participation Process (PPP), aimed at identifying issues and concerns of Interested and Affected Parties (IAPs). The objective of the Scoping Study is to identify those issues and concerns that must be investigated in more detail, and which will be reported in a subsequent Environmental Impact Report (EIR). As part of the Scoping stage, certain baseline specialist studies were identified and carried out in order to flag environmental sensitive/ no-go areas at an early stage in project planning, so that where possible and necessary, environmentally sensitive areas could be accommodated in the project layout. The results of these studies are included in this Final Scoping Report (FSR). The report also presents the findings of the scoping study and offers an opportunity for key stakeholders and IAPs to review the issues identified, and to make any further comments.

## 1.1.1 Applicant Details

Nelson Mandela Bay Municipality	Contact person: Mr Walter Shaidi
PO Box 116	Tel: (041) 503 7525
Port Elizabeth	Fax: (041) 585 2907
6000	Email: wshaidi@mandelametro.gov.za

<sup>&</sup>lt;sup>1</sup> Formerly known as DEAET

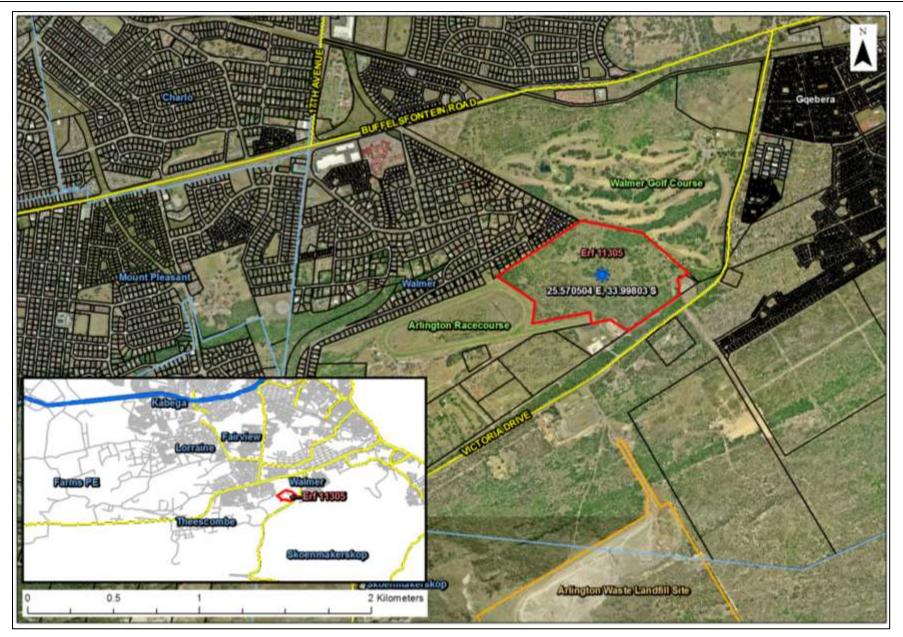


Figure 1-1: Site Locality Plan for the proposed Walmer Housing Development

## 1.1.2 Environmental Assessment Practitioner Details

SRK Consulting	Contact person: Ms Nicola Rump
PO Box 21842	Tel: (041) 405 4800
Port Elizabeth	Fax: (041) 405 4850
6000	Email: nrump@srk.co.za

# 1.2 Specialist studies

A number of specialist studies have been conducted during the scoping phase, with the aim of identifying any environmental constraints posed by the site at an early stage and where possible and necessary accommodate them in the proposed layout. Additional specialist studies are proposed to be conducted in the impact assessment phase, terms of reference for which (as well as the studies that have already been conducted) are included in Section 6.3. Where available, baseline descriptions summarised from the specialist reports (copies of which are attached as Appendix I – Appendix L) are included in Section 3.1. Details of the specialist team contracted to date are included in Table 1-1.

Table 1-1: Details of specialist studies completed to date

Study	Specialist	Appendix
Forest survey	Dr Belinda Clark - CEN	Appendix I
Palaeontology	Dr John Almond - Natura Viva	Appendix J
Archaeology	Celeste Booth – Albany Museum	Appendix K
Wetland and aquatic ecology	Brian Colloty – Scherman Colloty and Associates	Appendix L

# 1.3 SRK Profile and Expertise of Relevant Environmental Assessment Practitioners (EAP's)

SRK has been appointed by the NMBM as the independent consultants to undertake the EIA Process required in terms of applicable legislation.

SRK is a South African founded international organisation of professionals providing a comprehensive range of consulting services, expert advice and solutions to the natural resource industry, public sector and other niche sectors. .SRK provides focused advice and solutions for clients requiring specialised services, mainly in the fields of the environment and development, exploration, mining, water, rail and civil-geotechnics. Established in 1974, the SRK Group employs over 1500 people operating from about 40 established practices in Africa, Asia, Australasia, Europe, North and South America. SRK is registered as a member of the Consulting Engineers South Africa (CESA) and has a formal quality management system that is ISO9001 certified.

#### Project Manager: Nicola Rump, MSc, EAPSA

Nicola Rump is an environmental scientist and has been involved in environmental management for the past 7 years working on South African and international projects including EIAs and ISO 14001 auditing for a variety of activities. Her experience includes Basic Assessments, Environmental Impact Assessments, Environmental Management Plans, Environmental Auditing and Stakeholder Engagement.

#### Project coordinator: Tanya Speyers, BSc Hons.

Tanya is an Environmental Scientist with 2 years experience in Basic Assessments, Environmental Impact Assessments, Water Use Licence Applications and Environmental Control Officer Work.

#### Project Director and Internal Reviewer: Rob Gardiner, MSc, MBA, Pr Sci Nat

Rob Gardiner is the Principal Environmental Scientist and head of SRK's Environmental Department in Port Elizabeth. He has more than 19 years environmental consulting experience covering a broad range of projects, including Environmental Impact Assessments (EIA), Environmental Management Systems (EMS), Environmental Management Programmes (EMPr), and environmental auditing. His experience in the development, manufacturing, mining and public sectors has been gained in projects within South Africa, Lesotho, Botswana, Angola, Zimbabwe, Suriname and Argentina.

#### Box 1: Environmental Assessment Practitioner expertise

# **1.4 Statement of SRK Independence**

Neither SRK nor any of the authors of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK's fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

As required by the legislation, SRK has completed and submitted a declaration of interest, as part of the EIA application form. A copy of this is included in Appendix A of this report and the qualifications and experience of the individual practitioners responsible for this project are detailed in Box 1 above.

# 1.5 Assessment of the Scoping Report

Before proceeding to the EIA phase, the Scoping Report and Plan of Study for EIA are assessed by the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT).

In the spirit of cooperative governance, DEDEAT will consult with other relevant organs of state before making a decision. These organs of state could include:

- Department of Agriculture, Forestry and Fisheries (DAFF);
- Department of Water Affairs and Sanitation (DWS);
- Eastern Cape Provincial Heritage Resources Authority (ECPHRA).

SRK has distributed Background Information Documents (BIDs) to all the organs of state listed above, and will also give them an opportunity to comment on this report.

# 1.6 Legal Requirements Pertaining to the Proposed Project

The environmental legislation which is applicable to the authorisation of the proposed project is summarised in this Section.

## 1.6.1 National Environmental Management Act (Act No. 107 of 1998) (NEMA)

NEMA provides for co-operative environmental governance by establishing principles for decisionmaking on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of the State, as well as to provide for matters connected therewith. Section 2 of NEMA establishes a set of principles that apply to the activities of all organs of state that may significantly affect the environment. These include the following:

- Development must be sustainable;
- Pollution must be avoided or minimised and remedied;
- Waste must be avoided or minimised, reused or recycled;
- Negative impacts must be minimised; and
- Responsibility for the environmental health and safety consequences of a policy, project, product or service exists throughout its life cycle.

Section 28(1) states that:

"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring."

If such degradation/pollution cannot be prevented, then appropriate measures must be taken to minimise or rectify such pollution. These measures may include:

- Assessing the impact on the environment;
- Informing and educating employees about the environmental risks of their work and ways of minimising these risks;
- Ceasing, modifying or controlling actions which cause pollution/degradation;
- Containing pollutants or preventing movement of pollutants;
- Eliminating the source of pollution; and
- Remedying the effects of the pollution.

## Legal requirements for this project

The NMBM has a responsibility to ensure that the proposed housing development construction activities and the EIA process conform to the principles of NEMA. The proponent is obliged to take action to prevent pollution or degradation of the environment in terms of Section 28 of NEMA.

## 1.6.2 NEMA EIA Regulations

## 2010 EIA regulations

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities that may not commence without an environmental authorisation or existing activities in respect of which an application for environmental authorisation is required. In this context, EIA Regulations contained in

four General Notices in terms of NEMA (GN R 543, 544, 545 and 546) came into force on 18 June 2010.

GN R 543 lays out two alternative authorisation processes. Depending on the type of activity that is proposed, either a Basic Assessment process or a Scoping and EIA process is required to obtain environmental authorisation. GN R 544 lists activities that require Basic Assessment, while GN R 545 lists activities that require Scoping and EIA. The regulations for both alternative processes stipulate that:

- Public participation must be undertaken at various stages of the assessment process;
- The assessment must be conducted by an independent Environmental Assessment Practitioner;
- The relevant authorities respond to applications and submissions within stipulated time frames; and
- Decisions taken by the authorities can be appealed by the proponent or any other interested and affected party.

The following listed activities, identified in GN R 545 as requiring an Environmental Impact Assessment are relevant to the establishment of the proposed low cost housing development in Walmer:

15. Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more, except where such physical alteration takes place for (i) linear development activities, or (ii) agriculture or afforestation.

## 2014 EIA regulations

The 2014 revision of the EIA regulations came into effect on 8 December 2014. Although the project's application for environmental authorisation was made under the 2010 EIA regulations and therefore remains subject to the procedural requirements thereof, the assessment is also required to take into account all relevant equivalent or additional listed activities in terms of the 2014 EIA regulations.

No additional listed activities in terms of the 2014 EIA regulations are triggered by the proposed development, and the following equivalent activity (listed in GNR 984) applies:

15. The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for – (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

## Legal requirements for this project

The proposed housing development includes the listed activity in terms of GN R 545, which appears above. As such, the proponent is obliged to conduct an Environmental Impact Assessment for the proposed activity in accordance with the procedure stipulated in GN R 545.

## 1.6.3 National Heritage Resources Act No. 25, 1999

The protection and management of South Africa's heritage resources is controlled by the National Heritage Resources Act 25 of 1999. The enforcing authority for this act is the South African Heritage Resources Agency (SAHRA).

In terms of the Act, historically important features such as graves, trees, archaeological artefacts/sites and fossil beds are protected. Similarly, culturally significant symbols, spaces and landscapes are also afforded protection. In terms of Section 38 of the National Heritage Resources Act, SAHRA can call for

a Heritage Impact Assessment (HIA) where certain categories of development are proposed. The Act also makes provision for the assessment of heritage impacts as part of an EIA process and indicates that if such an assessment is deemed adequate, a separate HIA is not required.

The Act requires that:

"...any person who intends to undertake a development categorised as the ... or any development or other activity which will change the character of a site exceeding 5 000 m<sup>2</sup> in extent or involving three or more existing erven or subdivisions thereof must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development..."

### Legal requirements for this project

ECPHRA has been notified of the proposed housing project as per the requirement of the National Resources Heritage Act. It was determined that a Phase 1 Archaeological Assessment will be required as well as a Historical Structures Impact Assessment. The Palaeontologist specialist has confirmed that a letter of exemption will suffice.

### 1.6.4 National Forests Act: Act No. 84 of 1998

The NFA promotes the sustainable use and development of forests, and provides special measures for the protection of certain forests and trees. Section 3(3) of the National Forest Act (NFA) sets out principles to guide sustainable forest management. The principles of the Act in Section 3 include that "...natural forests may not be destroyed save in exceptional circumstances where, in the opinion of the Minister, a proposed new land use is preferable in terms of its economic, social or environmental benefits". This prescribes that no development affecting forests may be allowed unless "exceptional circumstances" can be proven.

In terms of Section 7 of the National Forests Act:

- 1. No person may
  - a. Cut, disturb, damage or destroy any indigenous tree in a natural forest; or
  - Possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any tree, or any forest product derived from a tree contemplated in paragraph (a), except in terms of –
    - i. A licence issued under subsection (4) or section 23; or
    - ii. An exemption from the provisions of this subsection published by the Minister in the Gazette on the advice of the Council.

The definition of "natural forest" in the NFA is as follows (Section 2(1)): 'A natural forest means a group of indigenous trees whose crowns are largely contiguous or which have been declared by the Minister to be a natural forest under section 7(2)'

Thus in terms of the NFA, all indigenous forests are protected and no trees may be cut, damaged or removed without a licence from DAFF (or a delegated authority). If not satisfied that proper consideration has been given to the protection of a forest, DAFF has the legal right to refuse a licence, even if authorisation for development has been granted by another sphere of government.

#### Legal requirements for this project

A forest survey was conducted to determine the remaining extent of forest on erf 11305 as per the Department of Agriculture, Forestry and Fisheries (DAFF) request. Forest clumps identified during the survey are protected in terms of the National Forests Act and will require authorisation from DAFF to destroy.

# 1.6.5 Notice of the List of Protected Tree Species under the National Forests Act, 1998 (GN R 716, 7 September 2012)

Government Notice 716 provides a schedule listing all protected tree species in South Africa. In terms of section 15 (1) of the National Forests Act, 1998, no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence granted by the Minister to an applicant and subject to such period and conditions as may be stipulated. The published list includes white milkwood (*Sideroxylon inerme*), which is found on the site. In order to destroy or remove protected species, a permit must first be obtained from DAFF.

#### Legal requirements for this project

Milkwood and any other protected species as listed in GN R 716, will require permits from DAFF before removal, damage or destruction.

#### 1.6.6 National Water Act No. 36 of 1998

The National Water Act 36 of 1998 provides for the promotion of efficient, sustainable and beneficial use of water in the public interest; for the facilitation of social and economic development; for the protection of aquatic and associated ecosystems and their biological diversity; and for the reduction and prevention of pollution and degradation of water resources. The Act also provides for emergency situations where pollution of water resources occurs. Section 21 of the Act describes activities that will require prior permitting before these activities may be implemented, including any changes to the river course and banks, changes to water flows and the discharge of water containing waste.

#### Legal requirements for this project

The development may include activities that are listed under section 21 in which case Water Use Licence Applications (WULAs) will be required.

# **1.7** Approach to the Scoping Study

The approach taken in this study is guided by the principles of Integrated Environmental Management (IEM) as described in the IEM guidelines published by the Department of Environmental Affairs and Tourism in 1992 (now known as the Department of Environmental Affairs). The approach is therefore guided by the principles of transparency which are aimed at encouraging decision-making. The underpinning principles of IEM are:

- Informed decision making;
- Accountability for information on which decisions are made;
- A broad interpretation of the term "environment";
- Consultation with IAPs;
- Due consideration of feasible alternatives;
- An attempt to mitigate negative impacts and enhance positive impacts associated with the proposed project;
- An attempt to ensure that the social costs of the development proposals are outweighed by the social benefits;

- Regard for individual rights and obligations;
- Compliance with these principles during all stages of the planning, implementation, and decommissioning of the proposed development or activity; and
- Opportunities for public and specialist input in the decision-making process.

The study has also been guided by the requirements of the EIA Regulations set out in terms of the National Environmental Management Act (NEMA).

The EIA process consists of two phases, as depicted in Figure 1-2 below. The overall aim of the Scoping Phase is to determine whether there are environmental issues and impacts that require further investigation in the detailed EIA. More specifically, the objectives of the Scoping Phase for this EIA are to:

- Develop a common understanding of the proposed project with the authorities and IAPs;
- Identify stakeholders and notify them of the proposed activity and processes;
- Provide stakeholders with the opportunity to participate in the process and identify issues and concerns associated with the proposed activity;
- Identify potential environmental impacts that will require further study in the impact assessment phase of the EIA process; and
- Develop terms of reference for any studies that will be conducted in the impact assessment phase.

The activities that have been conducted to date as part of this Scoping Study are as follows:

- Advertisements of the development in "Die Burger" newspaper on 22 August 2014 and placement of an on-site poster on 8 September 2014 (see Appendix B);
- Distribution of the Background Information Document (BID) from 22 August 2014 to identified Interested and Affected Parties (IAPs), stakeholders and neighbouring residents. A copy of the BID is attached in Appendix C, and the list of notified IAPs and commenting institutions is given in Table 4-1 below;
- Distribution of the BID to the relevant Ward Councillors caretaking for Wards 1, 3 and 4 on 22 August 2014;
- Collation of public and IAP comments on the BID and adverts, including responses to these issues;
- Inclusion in the Draft Scoping Report of issues that were raised (Table 4-2);
- Preparation of a Draft Scoping Report;
- Distribution of the Draft Scoping Report to public venues for review by IAPs and distribution of an Executive Summary to all IAPs registered for this project for a 40 day comment period (30 March – 14 May 2015);
- Collation of public and IAP comments on the DSR (see Table 4-2 ), and incorporation of these into the Final Scoping Report (this report);
- Distribution of the executive summary of the Final Scoping Report to IAPs for a 21 day comment period; and
- Submission of Final Scoping Report and Plan of Study for EIA to DEDEAT for a decision regarding authorisation to proceed to the Impact Assessment phase of the EIA.

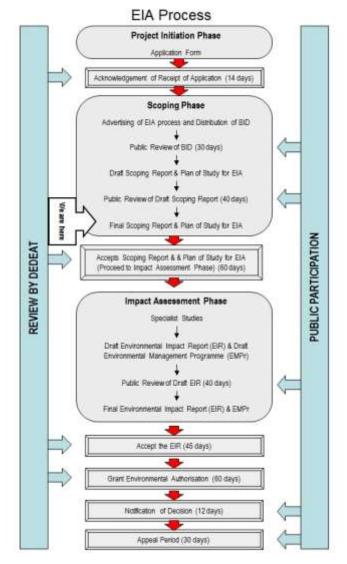


Figure 1-2: Environmental Impact Assessment (EIA) Process

# 1.8 Purpose of this Final Scoping Report

The Scoping process is aimed at identifying the issues and/ or impacts that may result from the proposed activities in order to inform the Impact Assessment phase of the EIA process. The Final Scoping Report (FSR) will form the basis of the Terms of Reference (ToR) for specialist studies, and it is therefore important that all issues and potential impacts that may be associated with the proposed development be identified and recorded.

The EIA process thus far has focussed on developing a more detailed description of the development proposal (which is expanded on in Section 2), and on identifying the potential impacts and issues and concerns of Stakeholders and IAPs.

IAPs are encouraged to review the FSR to ensure that their comments have been accurately recorded and understood.

These comments will be included in the FSR. The findings of the FSR will inform the Plan of Study for EIA.

# 1.9 Assumptions and Limitations

The following assumptions have been made during the Scoping Study and in the compilation of this document:

- That the development will cater for existing residents of informal settlements in the Walmer Gqebera area (i.e. not for residents who do not currently reside in the area);
- That, due to the cost of preparing detailed designs and plans, such detailed design/ planning
  information would only be developed in the event of environmental authorisation being granted.
  As such, it is anticipated that, as is typically the case in an EIA process, the EIA will assess
  broad land uses;
- Resettlement planning is not included as part of the specialist studies in this EIA. It is assumed that these components will be addressed outside the EIA as part of the NMBM's broader project planning, and will provide input into the EIA as required;
- That sufficient capacity for the provision of bulk services (e.g. waste management, sewage treatment, water supply, electricity supply) exists, or alternatively, if such services need to be upgraded, is it assumed that this is outside of the scope of this environmental assessment. This EIA process is therefore limited to the assessment (where relevant) of connections to existing bulk services and infrastructure.

Notwithstanding these assumptions, it is our view that this Final Scoping Report provides a good description of the potential issues associated with the proposed development, and a reasonable Plan of Study for EIA.

# 1.10 Structure of this Report

This report is divided into eight chapters:

Chapter 1	Background and Introduction
	Introduces the Scoping Study, and the legal context, for the proposed low cost housing development.
Chapter 2	Description of Development Proposal
	Describes the various components of, and the motivation for, the proposed low cost housing development.
Chapter 3	Nature of the Affected Environment
	Provides an overview of the affected biophysical and socio-economic environment in the Walmer Gqebera area as relevant to erf 11305.
Chapter 4	The Public Participation Process
	Describes the Public Participation Process (PPP) followed, and the issues & concerns that have been raised by Interested and Affected Parties (IAPs).
Chapter 5	Identification of Potential Impacts
	Describes the potential positive and negative environmental impacts of the proposed low cost housing development.
Chapter 6	Plan of Study for EIA
	Provides a plan on how SRK proposes to address the identified potential impacts in the EIA phase.

## Chapter 7 The Way Forward

Describes the next steps in the scoping process.

Chapter 8 References

# 2 Description of Development Proposal

# 2.1 Motivation for Proposed Activity

Housing and service delivery is a key challenge facing the Nelson Mandela Bay Municipality (NMBM). According to the NMBM's Draft Metropolitan Strategic Development Framework (MSDF, NMBM, 2015) the NMBM has a housing backlog of approximately 72,000 units (23,000 units in informal areas and 49,000 backyard shacks), with a projected growth demand of 6-7,000 units per year. The bulk of this housing need falls within the subsidised housing category. It has therefore identified the provision of quality housing and the structured upgrading of informal settlements as one of their main objectives.

In terms of the Municipal Systems Act 32 of 2000, all municipalities (i.e. metropolitan, district and local) have to undertake an Integrated Development Plan (IDP) process to produce IDPs. As the IDP is a legislative requirement it has a legal status and it supersedes all other plans that guide development at local government level. The provision of integrated and sustainable human settlements is listed as one of the strategic objectives of the Municipality's IDP (13<sup>th</sup> ed.), which means that housing must be accompanied by the provision of other services and amenities required to improve the socio-economic conditions of the residents of that area (i.e. access to community facilities such as educational, entertainment, cultural, health, sports and welfare services). This places considerable pressure on the need for land and infrastructure. The MSDF (NMBM, 2015) notes the efficient use of existing infrastructure as imperative for meeting the objectives of the IDP, adding that to avoid urban sprawl, new housing developments must implement principles that promote integration, sustainable use of resources, densification and mixed land uses.

The area of Walmer was identified in the 13<sup>th</sup> edition of the NMBM IDP as a restructuring zone for social housing and Walmer Gqebera was identified as a precinct where residential expansion needs to take place. According to The Mandela Bay Development Agency Annual Report 2012/13, Walmer Township (Gqebera) is home to more than 65,000 people. The proposed development aims to alleviate the population pressure and to lower housing density in the township by providing formal housing and services. In order to achieve this, additional land outside of the current Walmer Gqebera footprint is required to accommodate the overflow of residents. Erf 11305 is one of a few undeveloped municipally owned plots in the vicinity of Walmer Gqebera, with relatively direct access to existing bulk services infrastructure connections.

# 2.2 Proposed Activities

The Nelson Mandela Bay Municipality (NMBM) proposes to construct a low cost housing development together with associated facilities and infrastructure on erf 11305 in Walmer, to cater for the overflow of residents currently living in informal settlements in the Walmer Gqebera area. Approximately 1,700 residential units are proposed, but this number will depend on the environmental and other constraints of the site and layout agreed to with the beneficiaries. The development will connect onto existing bulk services infrastructure in the area. The proposed site is previously disturbed land which extends over an area of approximately 43.74 ha and is located on municipally owned property (see the Title Deed included in Appendix G).

The project planning is currently at Block Plan stage, which has as far as possible accommodated social sensitivities (relating to socio-economic differences between the adjacent Walmer Heights residential area and the proposed development), forest identified on the site (as per the legal requirements) as well as low areas of the site where stormwater would accumulate. This plan may require further amendment based on input from DAFF and any further information that emerges during the Scoping Phase. A preliminary site development plan is attached under Appendix F.

#### 2.2.1 Housing typologies

The layout provides for the development of formal residential units to accommodate beneficiaries to be relocated from informal settlements in Walmer Township. The beneficiaries will receive a formal structure (Free basic house/RDP) to be built in accordance with NHBRC Standards and National Building Regulation. The remainder of the units will be offered to beneficiaries who qualify for Social Housing, GAP Housing and Open Market from other areas other than just Walmer Township once the needs of the target groups are met

A portion of the layout abutting the suburb of Walmer Heights has been set aside for either social housing or GAP housing (possibly Finance Linked Individual Subsidy Programme (FLISP) units) to allow for a transition area between the Free Basic House and Walmer Heights. Details of the housing options and the relative proportions of each that could typically be included on the site are summarised below, and in Table 2-1, and illustrations showing typical examples of each housing type are provided in Table 2-2.

#### Free Basic House/RDP

- Fully State Subsidised Housing;
- Beneficiaries will depend entirely on being housed by the state without any expectation of making financial contributions towards the house/services/ transfer/ registration costs for the property to be received; and
- Units will be free standing and semi-detached single storey units.

#### GAP / FLISP Housing

- Partially subsidised housing. The state subsidy is supplemented by private funding;
- For financially employed individuals who can afford mortgage loans of up to R300,000; and
- Semi-detached, single and/or double storey housing.

#### **Social Housing**

- Units offered for rent. Policy stipulates that the rentals paid should not exceed 30% of the gross income. This would determine the size of unit allocated to the beneficiary. The units will be owned and managed by an accredited Social Housing Institution that will hold the stock for a minimum of 15 years, and may either re-finance for another 15 years or sell it off to tenants thereafter; and
- 3- 4 storey apartment buildings, in an access controlled complex, similar to Walmer Link development.

House Type	Approximate No. of Erven	Area per unit
Free Basic House	620	>40 m²
GAP/FLISP	240	>50 m²
Social/Rental/High Density	860	±30-54 m²

#### Table 2-1: Housing typologies for the proposed development

The design has adopted the concept of a transition zone to buffer and protect existing developments (Walmer Heights) as follows:

- The free basic houses/ RDP Units are located closer to Victoria Drive and further away from Walmer Heights. The last row is set back by approximately 100 m – 120 m from the eastern edge of Walmer Heights and 75 m – 150 m from the southern edge of the Golf Course;
- A buffer zone comprising Social Housing Units, a school site and public open space (forest clumps) is provided along the southern-edge of the Golf Course; and
- The buffer area between the RDP units and Walmer Heights is made up of FLISP/GAP housing and Open Market Housing.

The preliminary proposed site development plan is provided in Figure 2-1, and anticipated typical views of what the proposed development is likely to look like from various viewing points are provided in Table 2-4.

Semi-Detached Single Storey RDP house	Semi-Detached Single Storey Gap Housing
Semi-Detached Single Storey Social Housing - eg Walmer Link	Social Housing Units: 1, 2 & 3 Bedroomed Apartments - eg Walmer Link and Fairview Link
Social housing	apartments

#### Table 2-2: Typical examples of housing typologies proposed

## 2.2.2 Other land uses

The development will be an integrated settlement including different land use zones (in accordance with the Section 8 Scheme regulations, which are applicable to the area) in addition to the housing component. The proposed zones are summarised in the table below.

Table 2-3: Proposed land uses for the Walmer housing development

Zoning	Description of typical uses	% of site
Residential Zone IV	Dwelling-house, group house, town house, public housing, professional usage	13.68
Residential Zone I	Dwelling-house (Free Basic House)	21.90
Residential Zone I	Dwelling-house (Gap)	10.38
Business Zone I Town house, flats, residential building, place of assembly, place of entertainment, place of instruction, institution, bottle-store, supermarket, service trade.		1.53
Institutional Zone III	Institution	0.71
Institutional Zone I	Place of instruction	4.45

Authority Zone	Police stations, fire services, telecommunications facilities etc.	0.87
Special Zone	Special usage	0.36
Open Space Zone I	Public Open Space	24.58
Transport Zone II	Public Road	21.54
Total		100

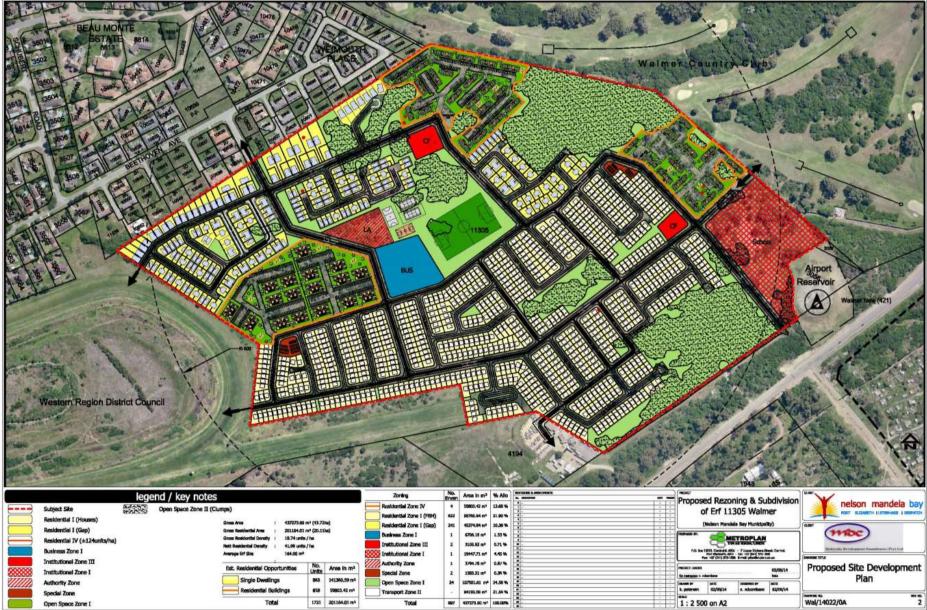


Figure 2-1: Preliminary proposed site development plan (see Appendix F for a larger version of this plan)



## 2.2.3 Other land uses

The development will be an integrated settlement including different land use zones (in accordance with the Section 8 Scheme regulations, which are applicable to the area) in addition to the housing component. The proposed zones are summarised in the table below.

Zoning	Description	Approx. % of site
Residential Zone IV	Dwelling-house, group house, town house, public housing, professional usage	13.68
Residential Zone I (Free Basic House)	Dwelling-house	21.90
Residential Zone I (Gap)	Dwelling-house	10.38
Business Zone I	Town house, flats, residential building, place of assembly, place of entertainment, place of instruction, institution, bottle-store, supermarket, service trade.	1.53
Institutional Zone III	Institution	0.71
Institutional Zone I	Place of instruction	4.45
Authority Zone	Police stations, fire services, telecommunications facilities etc.	0.87
Special Zone	Special usage	0.36
Open Space Zone I	Public Open Space	24.58
Transport Zone II	Public Road	21.54
Total		100

Table 2-5: Proposed land uses for the Walmer housing development

# 2.3 Infrastructure required

No infrastructure is currently in place on site, however electricity, sewer and water will be connected onto existing bulk infrastructure currently servicing the surrounding areas. Details of existing and proposed services infrastructure are shown on the conceptual services infrastructure map in Appendix F, the relevant components of which are presented in Figure 2-2.

## Roads

Two access routes to the site are proposed, via existing roads. Access to the majority of the area will take place from Victoria Drive (where a 60 - 80 m length of 6 m wide tarred road surface is proposed from a traffic circle at the access point on Victoria Drive) with an alternative access for the top western section of the site planned through Beethoven Street and Schubert Street towards Buffelsfontein Road and William Moffett Expressway. Future linkages to adjacent areas may also be possible.

#### Internal roads

The proposed internal road layout is shown on the site development plan (Appendix F). Where possible, forest clumps have been accommodated in the layout, which has also been amended based on DAFF's comment on a previous version of the layout. Internal roads are appropriately sized to accommodate municipal services vehicles (e.g. waste collection).

#### Stormwater drainage

The natural stormwater flow on site is indicated by the directional arrows on the preliminary services infrastructure map in Appendix F. Stormwater from the site will be directed via a pipeline into a proposed detention pond situated in the southern portion of the Walmer golf course. Environmental authorisation requirements for this detention pond are however outside the scope of this EIA.

### **Bulk Water supply**

Water will be supplied from the Emerald Hill reservoir via the existing airport reservoir feeder pipeline which runs along Victoria Drive past the southern boundary of erf 11305 and services the current Walmer Heights area.

### **Bulk sewer infrastructure**

Sewerage from the development will be conveyed via an existing 1200 mm diameter pipeline to the Driftsands Wastewater Treatment Works. The following three connecting pipeline alignment options are in the process of being investigated by the project design team for viability (based on available capacity), and are indicated on Figure 2-2:

- 1. An existing 250 mm diameter pipeline running north of the site;
- 2. A proposed 150 mm diameter pipeline running through the golf course parallel to the proposed stormwater pipeline, connecting to a proposed pipeline from the south of Gqebera (outside the scope of this project); and
- 3. A proposed 150 mm diameter pipeline from the south-west of the site.

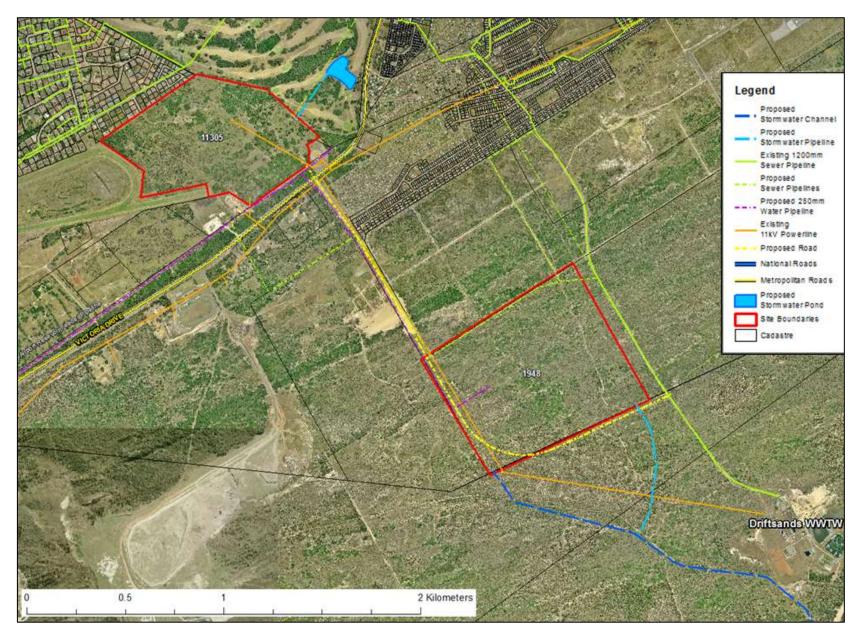
### **Bulk Electricity Supply**

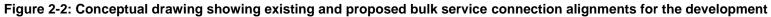
The NMBM has confirmed that electricity supply can be made available to the proposed development, and it is proposed that existing powerlines in the area will be used.

Substations may be required but the location thereof has not yet been determined, and any environmental authorisations required fall outside the scope of this EIA.

#### Solid Waste Management

Solid waste management services are to be provided by the NMBM, in accordance with the national Domestic Waste Collection Standards. This will include regular weekly removal of domestic refuse to the Arlington Landfill site.





# 2.4 Relocation Procedure

The process of relocating residents from Walmer Gqebera to erf 11305 is based on the NMBM's standard procedure as provided by the NMBM Human Settlements Division in Table 2-6 below. The procedure will be implemented by the NMBM, at an appropriate time in accordance with the overall project schedule.

Activity	Implementer
Meet with the Ward Councillor & Ward Committees.	Senior Informal Housing Officer
Discuss the plans to relocate the families, why and where they will relocate to.	Senior Informal Housing Officer
Request the Councillor to arrange a public meeting to discuss the relocation plans as well as electing a Task team (from the community) that will assist with the relocations.	Senior Informal Housing Officer Informal Housing Officer 8 Community Development Facilitator (CDF)
Decide of the list of names that will relocate and send them for prescreening (to Province $-3$ to 5 days to process).	Assistant Informal Housing Officer 8 Ward Councillor/ Task teams
Conduct Housing Consumer Education to prepare the potential beneficiaries on the upcoming relocations and related matters.	Community Development Facilitator
Outline the relocation process as well as informing them about the service- providers that will be relocating the families (loading & offloading of furniture).	Informal Housing Inspector
Present the pre-screening results to the Councillor and the Ward Committees.	Informal Housing Inspector
Decide on the dates of relocations and the number of families that will relocate per day.	Informal Housing Inspector/ Task team
Once all the above have been done and agreed upon, then relocations can commence, under the following conditions:	Informal Housing Inspectors/ Task team
• The responsible official will make sure that all shacks are dismantled completely before any material can be loaded on the truck (shack materials are Owner's responsibility to dispose of. Abandoned material will be removed to the tip-site);	
• All the necessary paper work will be done on site by the responsible officials;	
On rainy days, no relocations will take place;	
• Relocations should start at 08:00 and the last load should be not later than 13:00 to give the family enough time to rebuild the shack (in cases where there is no provision of temporary structure);	
• No person should dismantle the shack unless told to do so by the official or the task team members;	
• Only people that are on the Municipal database will be relocated (note that the database may include people other than South African citizens).	

#### **Table 2-6: Relocation Procedure**

# 2.5 Management of the development during operation

The houses to be owned individually on free hold basis will be maintained by the households who benefit as is the case in the other suburbs and other housing projects in the NMBM. Public roads, facilities, infrastructure and public open spaces will be maintained by the NMBM. Social Housing Apartments will be developed and owned by an accredited Social Housing Institution (SHI) that will be responsible for the management, rent collection, maintenance, and liaison with tenants etc. The SHI will also maintain all the private open spaces within the social housing projects including the provision of

play equipment, etc. Social Housing is to be managed in line with the requirements of the Social Housing Regulatory Authority (SHRA) who would regularly visit the projects to ensure compliance.

The area will be managed in accordance with the Section 8 Zoning Scheme relating to Residential Zone (single dwellings), Residential Zone IV for flats/residential buildings, Business Zone 1, Institutional Zone I and III, Open Space Zones I and III, Transportation Zone II, Authority Zone and Special Zones. The NMBM will deal with building contraventions in a manner similar to other formally planned suburbs in the City.

# 2.6 **Project Alternatives**

#### 2.6.1 Site alternatives

Erf 11305 is proposed by the NMBM as a suitable location for the proposed housing development for several reasons. The erf is in close proximity to the Walmer Gqebera settlement where the residents who are to be relocated are currently living. The land is municipal property and will not require a lengthy/costly process of land acquisition. Although forest patches are present on site, the erf is not a greenfields site and has been previously disturbed through grazing and dumping. The site is bordered by developed land and falls within an area allocated for medium and high density residential development in terms of the Walmer Local Spatial Development Framework (Metroplan, 2014), therefore service infrastructure will be connected onto existing bulk services and will not require extensive additional connections.

Due to the limited land availability for development in the area, no other site alternatives are proposed as part of this application. As most of the housing recipients work in the areas close to the site, relocation elsewhere in the NMBM is not considered to be a suitable alternative for the residents given the socio-economic and logistical factors involved.

#### 2.6.2 Layout and design alternatives

During project planning, several iterations of the site development plan were considered to accommodate as far as possible the existing forest on the site, as well as socio-economic sensitivities relating to the adjacent residential areas. The layout proposed is however currently the only viable alternative from these perspectives and additional layout alternatives are not currently proposed for further assessment via the EIA.

Alternatives relating to bulk sewer connection pipelines (as described in Section 2.3) are in the process of being evaluated for viability, and should viable alternatives be found to exist, these will be assessed for relative environmental preference during the impact assessment phase.

# **3** Nature of the Affected Environment

The receiving environment has been described using a combination of on-site observations (by both specialists and SRK), spatial information and previous studies currently available to SRK.

# 3.1 Biophysical Environment

### 3.1.1 Geology

The geology of the site is described in the palaeontological specialist's exemption letter by Dr John Almond, a copy of which is provided in Appendix J and a summary of which is provided below.

Erf 11305 is underlain by coastal aeolianites (ancient, wind-blown dune sands) of the Nanaga Formation (Algoa Group) of Pliocene to Early Pleistocene age. These ancient dune sands crop out extensively to the west and east of Port Elizabeth (Le Roux 1992). In the present study area they unconformably overlie Palaeozoic sandstones and quartzites of the Peninsula Formation (Table Mountain Group; Op, pale blue in the map included as Figure 3-1). The Nanaga beds comprise calcareous sandstones and sandy limestones that often display large scale aeolian cross-bedding - well seen, for example, in deep N2 roadcuts between Colchester and Grahamstown. They may reach thicknesses of 150 m or more (Maud & Botha 2000). The Nanaga aeolianites are normally partially to well-consolidated, although unconsolidated sands also occur west of Port Elizabeth (Le Roux 2000). The upper surface of the aeolianites weathers to calcrete and red, clay-rich soil, and the dune sands themselves may be profoundly reddened. The age of the palaeodunes decreases towards the modern coastline, reflecting marine regression (relative sea level fall) during the period of deposition. The oldest outcrops located furthest from the modern coast are the most elevated, having experienced some 30 m of uplift in the Pliocene, and may even be Miocene in age (Roberts et al., 2006). Typically the ancient dunes are preserved as undulating ridges of rounded hills trending parallel to the modern shoreline (Le Roux 1992).

## 3.1.2 Topography

The topography of the area is relatively flat to undulating, at c. 110 m amsl. Depressions have been noted where water could collect (Refer to Stormwater Analysis Map in Appendix F)

#### 3.1.3 Land Use

The proposed site is currently undeveloped and is municipally owned (see Title Deed in Appendix G). Although no formal development has taken place the site is used by the Walmer Gqebera residents for growing crops, grazing livestock, recreational purposes (soccer field), and is also a transit area for pedestrians between the existing Gqebera and Walmer Heights and surrounds. As is typical of vacant land in the urban environment, the site is also used for illegal dumping of rubble.

The site is bounded by Walmer golf course to the east, Victoria Drive and Walmer Gqebera to the southeast, the former Arlington racecourse to the southwest and the middle to high income residential suburb of Walmer heights to the north.

## 3.1.4 Palaeontological resources

The potential for palaeontological resources on the site was investigated via desktop study by Dr John Almond of Natura Viva. In accordance with the specialist's recommendations, a letter of exemption from more detailed palaeontological studies was submitted to ECPHRA, as the specialist concluded that the sedimentary rocks underlying the site are largely unfossiliferous. A summary of the study findings is included below, and a copy of the full report is included as Appendix J.

The site is located in an area underlain by Quartenary Aeolian sands of the Nanaga Formation, which are characteristically of low palaeontological significance. According to Le Roux (1992) and Almond (2010) the fossil biota of the Pliocene to Early Pleistocene Nanaga Formation consists of fragmentary marine shells, foraminifera and a small range of terrestrial snails. Dense arrays of calcretised rhizoliths commonly occur in these and cotemporary aeolianites along the southern and south-western coast. A wider range of terrestrial fossils might be found here in future, albeit only rarely due to extensive post-depositional diagenesis. The overall sensitivity of the Nanaga Formation is assessed as low, although pockets of locally high sensitivity may occur.

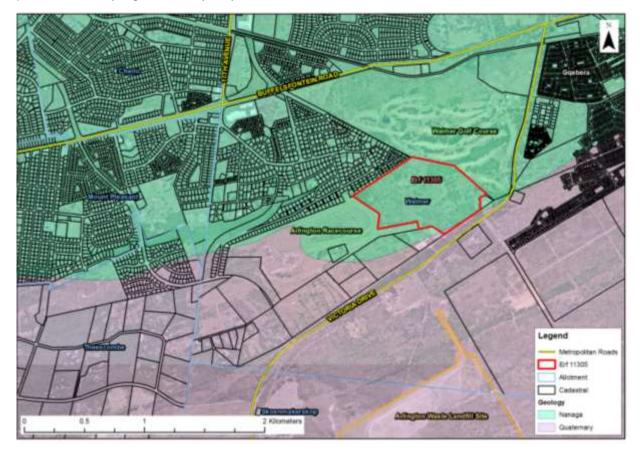


Figure 3-1: Geological map showing the location of the study area on Erf 11305.

## 3.1.5 Archaeological and historical sites

A phase 1 archaeological impact assessment of the site was undertaken by Celeste Booth of the Albany Museum. A summary of the study findings is included below, and a copy of the full report is included as Appendix K.

The proposed area for the housing development is situated on the boundary of the generally accepted 5 km archaeologically sensitive coastal zone. Little systematic archaeological research has been conducted within the immediate area of the proposed development. However, several relevant archaeological and heritage impact assessments have been conducted within the immediate surrounding vicinity and along the wider coastal region between Kings Beach and Van Stadens River. These impact assessments have identified several Early, Middle, and Later Stone Age stone artefacts and sites distributed along the coastline as well as evidence of Khoekhoen pastoralist occupation and/or interaction by the presence of broken earthenware pot sherds. Historical research on the early settlement in Walmer shows that the area proposed for the development and surrounds was situated on the farm Welbedacht and was later divided into several properties.

Archaeological sites in the form of shell middens and scatters have also been reported along this coastline and within the 5 km archaeologically sensitive coastal zone. However, no archaeological heritage remains or expected shell midden sites were observed within the proposed area for development. The ruins of a farmstead, dwelling, and associated infrastructure were documented on the property. The ruins of the buildings may be older than 60 years, however, modifications to the buildings may have been made over time.

### 3.1.6 Surface Water

A wetland and aquatic ecology impact assessment of the site was undertaken by Dr Brian Colloty of Scherman Colloty and Associates. A summary of the study findings is included below, and a copy of the full report is included as Appendix L.

The study area is located within the Baakens River catchment, however no connections via channels, streams, or rivers occur between the site and the Baakens River. Any potential connectivity has been further been reduced by the roads (present and past).

This is further supported by the National Freshwater Ecosystems Priority Atlas (NFEPA - Nel *et al.*, 2011) and Eastern Cape Biodiversity Conservation Plan (ECBCP) spatial databases. The NFEPA project has captured and rated the importance of rivers and wetlands on a national basis and indicates that no such habitats (riverine or wetland) or priority areas are located within or adjacent to the site. This is a similar case for the ECBCP and NMBM Bioregional Plan (NCAP) data.

The study area is therefore characterised by the high degree of modification linked to the development of roads, housing (formal and informal) and alien tree invasion and high levels of illegal solid waste and building rubble disposal.

Several areas were shown in the available aerial photographs as likely wetland areas, but on-site verification proved them to be either bare soils areas or dune hummocks (slack) with alien / secondary vegetation. Therefore no wetland areas were found within or adjacent to the study site.

#### 3.1.7 Groundwater

Groundwater seepage (very weak to weak) can be expected within 0.9 - 1.6 m below surface. Conditions for the development of a perched water table are likely to develop at the contact of the underlying calcrete particularly within areas underlain by well-cemented calcrete zones with minimal fracturing. Storm water is envisaged to infiltrate downwards through the unconsolidated Aeolian sand and collect at the contact with the underlying calcrete layer.

## 3.1.8 Terrestrial Ecology

#### **Vegetation Description**

Erf 11305 is found in an area where Sardinia Bay Forest Thicket dominates (See Figure 3-3). This vegetation type is classified as 'Vulnerable', however some transformation has taken place as a result of various activities taking place on the land. A forest survey was conducted by Dr Belinda Clark of CEN Integrated Environmental Management Unit on the request of the Department of Agriculture, Forestry and Fisheries (DAFF). A summary of the report findings is included below and a copy of the full report is included in Appendix I.

Figure 3-2 indicates the findings of the forestry survey which identified several forest clumps and clumps within the proposed site boundaries. A list of the dominant forest species recorded including

*Sideroxylon inerme* and *Pittosporum viridiflorum* (protected species) is provided in Table 3-1. Where a protected species was observed within a forest clump, the clump was designated as 'protected'<sup>2</sup>.

Anacardiaceae	Salicaceae
Searsia crenata	Dovyalis rhamnoides
Searsia glauca	Solanaceae
Searsia pterota	Lycium ferocissimum
Searsia tomentosa	Myrtaceae
Apocynaceae	Eucalyptus sp. *
Carissa bispinosa	Pittosporaceae
Asphodelaceae	Pittosporum viridiflorum
Aloe africana	Ranunculaceae
Asteraceae	Clematis brachiata
Brachylaena discolor	Rhamnaceae
Osteospermum moniliferum	Scutia myrtina
Tarchonanthus camphoratus	Rutaceae
Bigoniaceae	Clausena anisata
Tecoma capensis	Zanthoxylum capense
Celastraceae	Salvadoraceae
Lauridia tetragona	Azima tetracantha
Mystroxylon aethiopicum	Sapotaceae
Pterocelastrus tricuspidatus	Sideroxylon inerme
Putterlickia pyracantha	Tiliaceae
Ebenaceae	Grewia occidentalis
Euclea racemosa	Meliaceae
Fabaceae	Ekebergia capensis
Acacia spp. *	Rhamnaceae
Acacia karroo	Rhamnus prinoides
Lamiaceae	
Leonotis leonurus	

Table 3-1: List of dominant tree species recorded on the site (alien invasives indicated by \*)

The specialists identified two major forest clumps on the northern and south-eastern borders of the site. These clumps comprise a matrix of forest species interspersed with alien vegetation and pioneer species indicative of transformed land. The forest has been impacted by current and historic activities that have taken place on the property include clearing for planting of crops, fires, and dumping. This has led to large parts of the site becoming infested with alien vegetation.

A list of indigenous species on site, identified by the aquatic specialist is provided in Table 3-2.

Table 3-2: Indigenous plant species recorded in the study area

Family	Scientific Name
Asteraceae	Conyza obscura
Asteraceae	Felicia erigroides
Poaceae	Cynadon dactylon
Poaceae	Eragrostis curvula
Poaceae	Eragrostis plana
Poaceae	Hyparrhenia hirta

<sup>&</sup>lt;sup>2</sup> Note that a clump that consists of three or more forest species is considered a forest community/ecosystem and is protected in terms of the NFA irrespective of whether it has protected species (listed in terms of NFA) in it or not.



#### Figure 3-2: Identified locations of protected forest clumps and individual trees

#### **Critical Biodiversity Areas**

The NMBM Final Bioregional Plan (SRK Consulting, 2014) identifies the Ecosystem Status of the various biodiversity features in the municipal area, including specific erven, or portions of erven, that are required for the conservation of a representative proportion of all biodiversity features in Nelson Mandela Bay. Such areas are categorised, on the basis of their role in achieving conservation objectives, as either existing Protected Areas, Protected Areas pending declaration, Critical Biodiversity Areas (CBAs), Ecological Support Areas, or Other Natural Areas (which are not required for conservation). Land use guidelines were also developed for each category. Figure 3-3 shows that no CBA's are present within the proposed area to be developed.

#### **Terrestrial Fauna**

Due to the transformed nature of the site and proximity to urban areas, the abundance and diversity of faunal species on the site is expected to be relatively low. Bird species expected to be found on the site include forest bird species, which would be concentrated in and around forest patches, as well as bird, small mammal and reptile species typical of the peri-urban setting. No species of conservation concern are anticipated to reside on the site.

#### 3.1.9 Air Quality

Air quality levels around the development site are consistent with the land uses surrounding the site, being largely residential, with some light industry. Smoke from occasional fires at the Arlington waste landfill site is likely to be the most significant contributor to air emissions in the area. Victoria Drive which runs alongside the southern section of the property is a road which experiences heavy traffic.

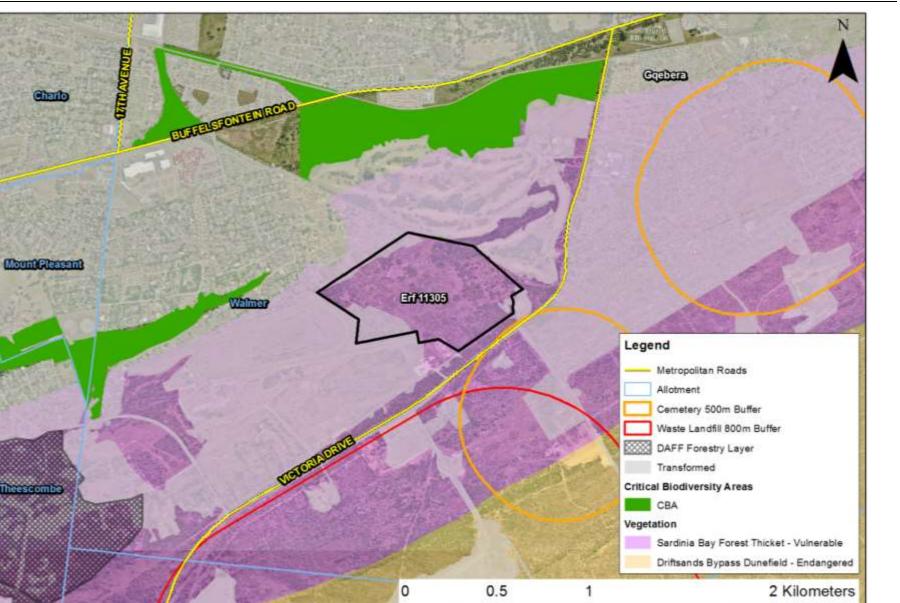


Figure 3-3: Sensitivity Map for Erf 11305

#### 3.1.10 Noise

The noise levels in the study area are typical of those in an urban residential setting, and increase from west to east as a result of the busy road (Victoria Drive) to the east, which experiences industrial as well as commuter traffic.

### 3.2 Social and Economic Environment

#### 3.2.1 Local Economy of the NMBM municipal area

The NMBM municipal area is the economic powerhouse of the Eastern Cape, contributing 35.1% to the provincial GDP. The manufacturing sector is the main contributing industry in the local economy; and the automotive industry alone accounts for approximately 7% of the country's GDP. The automotive industry remains one of the most established industries locally, as well as in the Eastern Cape Province (Fernridge Consulting, 2008). Most other industries in the NMBM are geared towards the motor vehicle industry, providing parts such as wiring harnesses, catalytic converters, batteries and tyres to the vehicle manufacturers.

The heavy industries are mainly located to the northern side of NMBM, whilst lighter industries are located in the Newton Park, Walmer, South End, Fairview and Greenbushes area to the south and south-west of Port Elizabeth. Apart from manufacturing, tourism is an active contributor to the local economy, while services and creative industries have been targeted for robust development and have the potential to support economic growth (www.investinnelsonmandelabay.co.za).

NMBM is also a major seaport, with the most significant ore loading facilities in the southern hemisphere. The Coega IDZ and deep-water port are intended to be the main employment node in the future as most of the industrial areas have reached capacity. While Coega IDZ currently also accommodates some smaller industries, it is primarily intended to host heavy and large-scale industry and transport functions relating to the bulk handling harbour.

The population of the NMBM was counted as 1,152,115 in the census of 2011 with approximately 324,292 households. For the purposes of this report the concept 'unemployed' refers to the portion of the economically active population (15 to 65 years) actively looking for work, but that are unable to find employment. The average unemployment rate of the NMBM is estimated to be 36.6% (Census 2011)

#### Healthcare facilities

The NMBM is serviced by four public hospitals, i.e. Dora Nginza Hospital (KwaZakhele), Livingstone Hospital (Korsten), PE Provincial Hospital (Central) and Uitenhage Provincial Hospital (Channer Street). These hospitals have Trauma Units and are serviced by the regional ambulance service. Three TB Hospitals are located in Greenbushes, New Brighton and Uitenhage respectively. According to the Integrated Development plan (2006-2011) of the NMBM, Nelson Mandela Bay has 50 permanent and satellite municipal clinics and 13 mobile clinics; these include three day hospitals and nine Eastern Cape Department Clinics

#### **Education Facilities**

There are approximately 273 schools within the NMBM, one university (Nelson Mandela Metropolitan University), four technical colleges and two FET institutions (NMBM IDP 2006-2011).

#### 3.2.2 Ward 4 socio-economic environment

The main residential area included in Ward 4 of the NMBM is Walmer Gqebera (see ward boundary map in Figure 3-4), and 2011 census statistics for this ward (obtained from the Statistics South Africa website, <u>www.statssa.gov.za</u>) quoted in the subsections below are therefore assumed to be reflective of those for Gqebera.

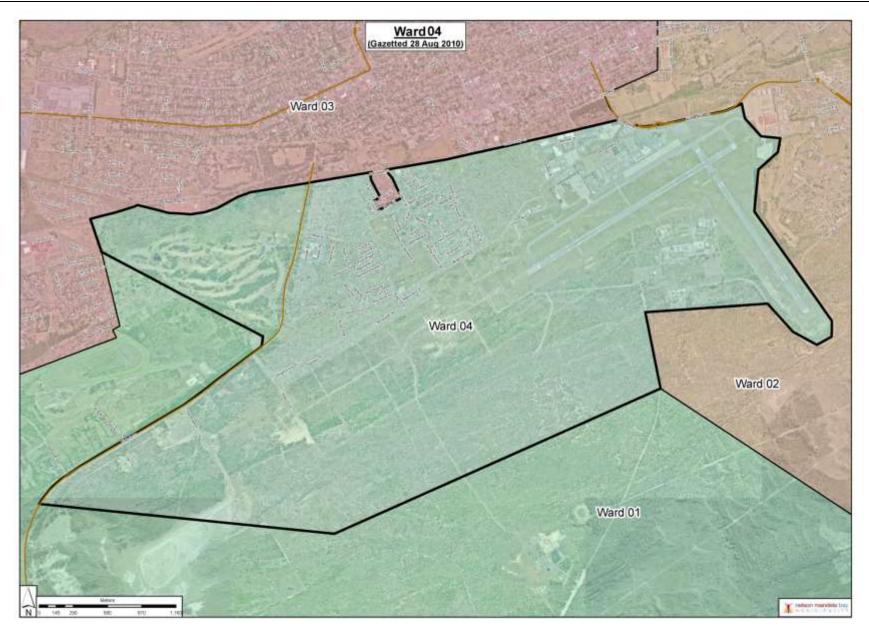


Figure 3-4: Map showing boundaries for Ward 4

#### **Population demographics**

Ward 4 has an estimated population of approximately 26,000 people (as per 2011 Census data), making up approximately 2% of the total population of the NMBM municipal area, and consists of approximately 49% males and 51% females. The most commonly spoken first language is Xhosa (87%).

Household size in Ward 4 generally follows the trends for NMBM, with the majority of households (80%) consisting of between one and four occupants. It is unclear however whether this includes backyard shack dwellers or children.

#### Standard of living

The majority of residents of Ward 4 (approximately 50%) live in informal dwellings, either in backyards or in informal settlements. As expected, this proportion roughly correlates with those that do not receive formal municipal services.

Delivery levels for most municipal services in Ward 4 for the 7,800-odd households surveyed during the 2011 national census, are significantly lower than those for the NMBM as a whole, however comparative figures for other townships in the NMBM are not available.

Approximately 46% of the households in Ward 4 reportedly do not have waterborne sewage (as opposed to 13% for the greater NMBM). Of these, the vast majority were reliant on bucket ablution facilities.

Approximately 38% of households in Ward 4 reported to have potable water on tap in the dwelling (this increases to 74% for the greater NMBM), 18% have access to a tap in their yard as the closest water source, and the remaining majority of residents being reliant on community stands up to 1 km from their dwelling (42%).

The main energy source for household lighting and cooking in Ward 4 was reported to be electricity (approximately 58%, as opposed to 90% in the broader NMBM), of which informal connections make up a large proportion. The most common alternative energy source is paraffin (39%). Wood and coal collectively make up approximately 1% of the energy source for cooking in Ward 4. For household heating, electrical appliances make up a much smaller proportion (27% for Ward 4), and paraffin (41%) and wood (5%) are the most commonly used sources.

Contrary to other reported services, refuse removal rates for Ward 4 were reported to be higher than those for NMBM as a whole, with 95% of households reportedly receiving weekly collections (83% for NMBM).

#### **Employment and education levels**

Employment rates reported for Ward 4 were slightly higher than those for the broader NMBM (approximately 46% for males and 35% for females), with unemployment rates at about 21%. The majority of the households (approximately 85%) in Ward 4 fall below the R 3,500 per month income threshold for GAP housing, with approximately 50% of households falling in the R 800-R3,200 per month category. Income is generally lower than for the broader NMBM, which shows higher representation in the higher income categories.

Education levels for Ward 4 show the majority of census respondents had some secondary education (48%) or has passed matric (25%) as their highest qualification, however significantly less higher education graduates (2%). These are lower than the reported levels for matriculation and higher education for the broader NMBM (31% and 11% respectively). There was no significant difference in education levels between males and females.

# 4 **Public Participation**

The Public Participation Process (PPP) forms a key component of the EIA process. The objectives of the PPP are outlined below, followed by a summary of the approach taken.

## 4.1 Objectives and Approach

The overall aim of the PPP is to ensure that all Interested and Affected Parties (IAPs) have adequate opportunities to provide input into the process. More specifically, the objectives of the PPP are as follows:

- Identify IAPs and notify them of the proposed project and of the EIA process;
- Provide an opportunity for IAPs to raise issues and concerns;
- Provide an opportunity for IAPs to review the Draft Scoping Report prior to its finalisation; and
- An opportunity to see how comments on the Draft Scoping Report have been accommodated in the Final Scoping Report, and to submit further comment (if required) directly to DEDEAT.

# 4.2 Public Participation Activities

The Public Participation Process that was undertaken to solicit public opinion regarding the proposed activity has included the following activities so far:

- Advertisements of the development in " "Die Burger" newspaper on 22 August 2014 (see Appendix B) and the placement of two on-site posters (see Appendix B);
- Distribution of the Background Information Document (BID) on 22 August 2014 to identified Interested and Affected Parties (IAPs), stakeholders and neighbouring residents. A copy of the BID is attached in Appendix C, and the list of registered IAPs and authorities is given in Table 4-1;
- Collation of public and IAP comments on the BID and adverts, including responses to these issues (see comments and responses in Table 4-2);
- Inclusion of original correspondence from IAPs (Appendix D) in the Draft Scoping Report, as well as minutes of relevant meetings with potential housing recipients from Gqebera (see Appendix E);
- Preparation of a Draft Scoping Report including a Plan of Study for EIA;
- Distribution of the Draft Scoping Report to public venues for review by IAPs, and submission to relevant authorities;
- Distribution of the Executive Summary to all IAPs registered for this process;
- Provision of a 40 day comment period on the Draft Scoping Report;
- Collation of public and IAP comments on the DSR, and incorporation of these into the Final Scoping Report (FSR);
- Distribution of the Executive Summary to all IAPs registered for this process; and
- Distribution of the FSR to public venues for review by IAPs, and submission to relevant authorities for a 21 day comment period.

The activities that must still be conducted as part of the Scoping process are described below:

• Submission of the FSR to DEDEAT for approval of the Plan of Study for EIA and a decision regarding authorisation to proceed to the Impact Assessment phase of the EIA.

#### 4.2.1 Availability of Final Scoping Report

The Executive Summary of this FSR has been distributed to registered IAPs. Printed copies of this report will be available for public review at the Walmer Library (Main Road, Walmer, Port Elizabeth).

The report can also be accessed as an electronic copy on SRK Consulting's webpage via the 'Public Documents' link: <u>http://www.srk.co.za/en/za-walmer-housing-development-erf-11305-port-elizabeth</u>

Comments on the Final Scoping Report should be sent directly to DEDEAT and a copy to SRK by **12h00 on 2 July 2015**. Any comments received will be integrated into the Final Scoping Report.

#### 4.2.2 Registered IAPs and issues raised

A list of registered IAPs, relevant authorities and stakeholders is included in Table 4-1, along with the reference number assigned to each comment sheet submitted by that particular IAP (where relevant). These reference numbers correspond with those in the comments and responses table (Table 4-2).

Comments received from IAPs in response to the BID and subsequently on the DSR (comments indicated in **bold** font) are summarised in Table 4-2, which includes responses from relevant members of the project team, outlining (where relevant) how these issues will be addressed in the Impact Assessment Phase. Copies of the original numbered correspondence received from IAPs are included as Appendix D.

Name & Surname	Organisation	Comment ref no <sup>3</sup>
Ms Marisa Bloem	DWA	
Mr Renaldo Nell	DWA	
Ms Lizna Fourie	DWA	
Mr Thabo Nokoyo	DAFF	
Mr Sello Mokhanya	ECPHRA	
The Manager Walmer Country Club	Neighbouring Landowner	318
Chris Roberts (The President Walmer Country Club)	Neighbouring Landowner	318
HR Williams	Neighbouring Landowner	
Tregunno Family Trust	Neighbouring Landowner	
WJ Goosen	Neighbouring Landowner	
Albert Pretorius (HSH Vehicle and Plant Hire CC)	Neighbouring Landowner	208
KG Gojo	Neighbouring Landowner	
AF Pretorius	Neighbouring Landowner	
JG Nel	Neighbouring Landowner	119
N Pukuza	Neighbouring Landowner	
DB & NG Mpampele Family Trust	Neighbouring Landowner	
LC Ewers	Neighbouring Landowner	298

Table 4-1: Registered IAPs and commenting authorities, and corresponding comment reference numbers

<sup>&</sup>lt;sup>3</sup> If applicable – corresponds with numbers

Name & Surname	Organisation	Comment ref no <sup>3</sup>
Anton Swart Projects CC	Neighbouring Landowner	172
Lezmin 2511CC	Neighbouring Landowner	
AK & Z Ntlokwana	Neighbouring Landowner	115
Stone Property Trust	Neighbouring Landowner	
J Nel	Home Owners Associations	105,111
AJ & MM Booysen	Home Owners Associations	106,250
Andrew Southby	Home Owners Associations	42
Paul Cobbold	Home Owners Associations	166
Kevin Toulmin	Home Owners Associations	246
Anthony Groom	IAP	
Azad Cassim	IAP	
Koos Pretorius	IAP	
Jeoffrey Matshoba	IAP	
Wandile Gxekwa	IAP	
Mfundo Nduvane	IAP	
Ayanda Tyokwane	IAP	
Dolly Mkata	IAP	
Vuyokazi Jafta	IAP	55
Richard & Anita Weatherall-Thomas	IAP	20
Marino Gherbavaz	IAP	51
ML & K Greyvenstein & D Breetzke	IAP	50, 281
Lawrence Joubert	IAP	26,49,79,156,179,186,252, 291, 293
J Snetler	IAP	48
Christo Zeelie	IAP	47
LC Ewers	IAP	46
Suzette Smith	IAP	45
M, M & L McSorley	IAP	44,234
Lorna Brown	IAP	43
Sarah Jane Hall	IAP	41
Peter Chilcott	IAP	40, 309
Andrew Serfontein	IAP	39
ACM Orrey	IAP	38, 258, 305
Graham Mould	IAP	37
Chris De Lauwere	IAP	259
RC de Lauwere	IAP	36
Rosalind Sugden	IAP	35, 294
Louise de Vos	IAP	34
DH, Y, M & L Rivas	IAP	33, 267
J Greenwood	IAP	32
Noel Harvey	IAP	31

Name & Surname	Organisation	Comment ref no <sup>3</sup>
Vernon de Vos	IAP	30
Lynn McGregor	IAP	29
Elizabeth Prins	IAP	28
J & M Hopkins	IAP	27,250
Sheryl-lyn Lee	IAP	25
Bruce & Shantell Hieldon	IAP	24
Molyneux	IAP	23
W Baartzes & N Jonas	IAP	22
Patricia Scott	IAP	21
BE & MJ Cheater	IAP	19,255
JC Eastwood	IAP	18
Nicolette Leonard	IAP	17
Mario Kleynhans	IAP	16
Wim& Anna-Marie De Waard	IAP	15, 267
JJ van Wyk (HSH)	IAP	14
Alan & Joanne Moore	IAP	13, 308
JA & S Neuschafer	IAP	12, 303
Andre Victor	IAP	11, 288
G Paneras	IAP	10
Venessa Smuts	IAP	9
GJ Swanepoel	IAP	8,250
Sybrand Fourie	IAP	7, 297
Jonathan Swatts	IAP	6
Karin van der Vyver	IAP	
Jolandie Pretorius	IAP	120
Nicki & Frank Vorath	IAP	118
Clifford Bradley Pocock	IAP	117
S & M den Drijver	IAP	116
Brian Basson	IAP	114, 314
Charles Jackson	IAP	113
Karen Hollely	IAP	112, 315
John Puffett	IAP	110
Andre Odendaal	IAP	109, 299
Peter John Lyle	IAP	108
Ronald Sinden	IAP	107
M Lemberger	IAP	104
Cedric & Wendy Kleingeld	IAP	102,103
RM & RE Claassen	IAP	101, 254
Sally Rowe	IAP	100
TA Mollison	IAP	99
Candice Rowe	IAP	98

Name & Surname	Organisation	Comment ref no <sup>3</sup>
D Tassiopoulus	IAP	97,192
Alwyn du Preez	IAP	96
EW Engelbrecht	IAP	95
Gail du Preez	IAP	94
Kevin Raymond Williams	IAP	93
Tanya Erasmus	IAP	92
Gary Paul	IAP	91
JJD Liston	IAP	90
AJ & BC van Vuuren	IAP	89
Cathy & Willem Bosch, Caryn Coetzer	IAP	88
Maura Jarvis	IAP	87
Beres Gregory Bosman	IAP	86
Deane Lo-Ning	IAP	85
Jean Deysel	IAP	84
Maureen Trower	IAP	83, 272
H van Eck	IAP	82
B Connolly	IAP	81
TJ & EMM le Grange	IAP	80, 257
N Redelinghuys	IAP	78
MA Finlay	IAP	77
Lee Perry	IAP	76
Matt Jamneck & Katie Martin	IAP	75, 277, 296
Barbara Blom	IAP	74
Riaan van Rensburg	IAP	73
A Oxenham	IAP	72
Carol-Anne Brent	IAP	71
Tania Crouse	IAP	70
J-P Naude	IAP	69
Gavin & Wendy Ridge	IAP	68
Ferdinand Bernard Rohm	IAP	67,256
T Pretorius	IAP	66
DS Papenfus	IAP	65
A Conradie	IAP	64
Andrew Phillips	IAP	63
Michelle Pretorius	IAP	177
Kelly Pretorius	IAP	176
Elani Eckert	IAP	175
Graeme, Angela, Bradley & Alexa van Zyl	IAP	174,249
Gavin M April	IAP	173
Debbie Hustler	IAP	171
Tobeka Nguza	IAP	170

Name & Surname	Organisation	Comment ref no <sup>3</sup>
J de Jager	IAP	193
Brett, Janice, Kristin & Rachel Giddy	IAP	5, 285
Klaus Heimes	IAP	4
Rob & Cindy Millar	IAP	2,3
HL Wagner	IAP	184
RW & TA Heideman	IAP	182,183
Kurt Heideman	IAP	
W de Jong	IAP	181
Sonja Tifloen	IAP	180, 261
Johan Stassen	IAP	169
lan Meaker	IAP	168
Blayne Scholtz	IAP	
M & E van der Westhuizen	IAP	250
M & T Swanepoel	IAP	250
CC Kritzinger	IAP	250
Z & R Wagenaar	IAP	250
M Matthews	IAP	
IJG van Zyl	IAP	167
Magda Kemp	IAP	165,260
GP Melville	IAP	164, 295
LK and PA Marais	IAP	155, 262
Gavin Eales	IAP	161
Desmond Eales	IAP	162
Wells Stringer	IAP	163
Trevor Burley & Monique Channon	IAP	263
RG Jonsson	IAP	160
Pauline Tunstead	IAP	159
Roy Ronald van Niekerk	IAP	264
Peta Fothergill	IAP	158
Christopher Cocks & Rina Whitehead	IAP	157, 265
DJJ van Rensburg	IAP	154
Nichola Harty	IAP	153
Gwethalyn & Marius Vincent	IAP	267
lan Tyropolli	IAP	267
Bennie Stadler	IAP	152
Beau Barfknecht	IAP	151
Ane Oosthuizen	IAP	
Denise Neilsen	IAP	150
Allan & Kathleen Botha	IAP	149,237
Rynhard & Rene Jonker	IAP	145,148,227
Nicholas Kruger	IAP	147

Name & Surname	Organisation	Comment ref no <sup>3</sup>
Barry & Sanmari Nell	IAP	271
MA Bradley	IAP	211, 270
Leigh Done	IAP	269
Ross Done	IAP	269
Margie Gaddin	IAP	269
Erwin & Tyrone Kemp	IAP	268
Wayne Gerber	IAP	146
Tania & Mark van Thiel Berghuys	IAP	144
WJ & RA Copeland	IAP	273
Stephen Smuts	IAP	143
CH Thiart	IAP	142, 274, 310
Andrea & Darryl Buchanan	IAP	275
Peter Wilson	IAP	141
Janine Lee	IAP	140, 311
Charl Smuts	IAP	139
Ronnie, Sheryl & Megan Smith	IAP	138
Keith, Janet & Jenna-Lee Meyer	IAP	276
Johan van Dyk	IAP	61,62,198
Oswald Long	IAP	185,188
Linda Fourie	IAP	
Gary Paul	IAP	60
Bill Sanderson	IAP	59
Errol du Preez	IAP	58, 278
Lawrence Norman	IAP	1
John & Mary McQuaide	IAP	57, 286
Johan Claassen& Betty Stroebel	IAP	279
Robert & Ann Moresby-White, Cynthia Walker	IAP	284
Niel, Gerty, Mia & Wian Holtzhausen	IAP	283
AA & R Verster	IAP	242, 282
RC Knight & JM Levy	IAP	187
Hendrik Pienaar	IAP	280
C White	IAP	137
Fiona Richard	IAP	136, 313
Michael Pow Chong & Rita Anderson	IAP	135
L & C vd Berg, E & D Schmidt, T Kenny	IAP	248
Colin Ingram	IAP	247
Pierre Knoesen	IAP	134
C & D Pedersen	IAP	
T Landman	IAP	133,245
Kathy, Morne & Christopher Zaayman	IAP	244

Name & Surname	Organisation	Comment ref no <sup>3</sup>
M Prahaladh	IAP	231,243
D & L Du Preez	IAP	132,242
Bronwyn Faifer	IAP	131
Helen & Paul & Michael & Louise Greenwood	IAP	127,128,129,130
Dianne Robey & Eugene Bester	IAP	241
MA Leclercq	IAP	229,240
Annalize Dunn	IAP	126
Rob & Valerie Greenwood	IAP	124,125
I & D Simpson	IAP	121,239
Eduan Vermaak	IAP	238, 290
Maryanne King	IAP	
Mervyn Stevens	IAP	123
Elwyn Harlech-Jones	IAP	122
D & S Hayidakis	IAP	236
L & V Martin	IAP	
PF Ball	IAP	189
Louise Palmer	IAP	190
Club Manager	IAP	
Shirley Thomas	IAP	287, 306
Fiona & Stephen Smith	IAP	199,214,227
D & A van Antwerp	IAP	210,227
JM Holdsworth	IAP	227
C Clarkson	IAP	227
K O'Dea	IAP	227
VC Rosslee	IAP	227
C Knapton	IAP	216,227
F Smook	IAP	227
D Myburgh	IAP	227
TV Nqini	IAP	227
R Clark	IAP	227
I Wegner	IAP	227
J Nel	IAP	227
Jan vd Westhuizen	IAP	227
Elmare Le Gras	IAP	217,227
K Du Preez	IAP	227
T, V G and R Raepsaet	IAP	235
Shaun & Amanda Grieb	IAP	218,229
RP Robinson	IAP	215
Sally-Anne Huppelschoten	IAP	213
Tracey Smith	IAP	212

Name & Surname	Organisation	Comment ref no <sup>3</sup>
EF & TC De Bruin	IAP	209
Peter Raymer	IAP	
Chantelle de Wit & Erik Meyer	IAP	233
J & Kathy Cillie	IAP	207,232
Gerard & Lauren Sutton	IAP	230
Shaun Martin	IAP	206
D Ostling	IAP	221,229
Esther Steenberg	IAP	200,229
B Hall	IAP	203,229
R Weishaupt	IAP	202,229
R Rijs	IAP	229
M & S Lee	IAP	229
M & S Darlow	IAP	205,229
JB Hansen	IAP	229
lan Judd	IAP	220,229
Wilhelmina Britz	IAP	204,229
RT van Schoor	IAP	201
Arthur Mutlow	IAP	225
Willie & Reina Zastron	IAP	223,224
RAS & Donna-Jean Abrey	IAP	196,197,228
Graham Clarke	IAP	226
Charles Davies	IAP	195
Roger Smith	IAP	222, 301
Peter Gouws	IAP	194
Mark & Colleen Goldsmith	IAP	
Lorna Brown	IAP	300
Pam	IAP	
Marilyn Zimmerman	IAP	178
R. Ross	IAP	229
Neville de la Mare	IAP	251
Erica de la Mare	IAP	251
Angela de la Mare	IAP	251
Tony de la Mare	IAP	251
Gill, Craig & Robyn Wilson	IAP	251
Craig Stirk	IAP	251
Veronica Smith	IAP	251
Danelle Joubert	IAP	252
Joan and David Hewitt	IAP	253
M.W Ildestra	IAP	229
N.J Kercuusef	IAP	229
Sharon Samuel	IAP	307

Name & Surname	Organisation	Comment ref no <sup>3</sup>
Craig De Lange	BDLS Attorneys	312
Louise Barnett (Sardinia Bay Conservancy)	IAP	304
PPWH	IAP	289, 291, 292, 316, 317
Welbedacht Estate Home Owners Association		302
R Wylde	Cllr Ward1	54
DA Hayselden	Cllr Ward 3	
NC Benya	Cllr Ward 4	
Andrew Gibbon	Cllr Ward 40	56
Khaled El-Jabi	Nelson Mandela Bay RPA & Fusion Properties 455	53
MSW Potgieter	NMBM	52

# Table 4-2: Summary of comments received from IAPs on the BID and DSR<sup>4</sup>, and responses provided

Comment ref. no.	Issue raised	Response	
Comments relating	Comments relating to the process		
23; 39; 43; 45; 66; 90; 91; 93; 94; 95; 97; 105; 106; 111; 120; 192; 214	The Background Information Document is too vague to give comprehensive feedback or objections.	[SRK]: The intention of the BID is merely to inform IAPs of the project and the EIA process which will follow. More detailed information regarding the project will be provided in subsequent reports during the EIA process.	
18; 19; 23; 26; 28; 35; 38; 39; 40; 43; 45; 55; 57; 58; 66; 71; 79; 82; 88; 90; 91; 93; 94; 95; 96; 97; 105; 111; 115; 120; 121; 124; 125; 135 - 138; 140; 141; 144; 147; 169; 188; 192; 207; 214, <b>293, 303, 317</b>	The Background Information Document was not distributed to all interested and affected parties.	[SRK]: Comment noted. The Regulations do not require SRK to distribute the BID to every potential IAP. The BID was distributed to all IAPs who we are legally required to notify directly, as well as any other relevant potential IAPs or stakeholders SRK was aware of.	
293	Which parties do the Regulations require SRK Consulting to notify directly of the project?	[SRK]: The direct notification of individuals is governed by Regulation 54(2)(b) of the National Environmental Management Act 107 of 1998. Also kindly refer to Section 4.2 for more detailed information regarding the notification process.	
188;	Concern that the deadline for comment on the BID was not extended.	[SRK]: The BID is not a legally required document. IAPs will be provided with further opportunities during the EIA process to comment, and will be informed of these. It is however noted that the responsibility of the IAP is to ensure that comments reach SRK within the allocated timeframe. Note also that in this case all comments received up to completion of the DSR have been included.	
189;	Were the onsite posters displayed prominently? Where?	[SRK]: Refer to Section 4.2 and Appendix B for detailed information regarding the onsite posters.	
293	The Background Information Document is misleading /deceptive	[SRK]: The intention of the BID is merely to inform IAPs of the project and the EIA process which will follow. More detailed information regarding the project will be provided in subsequent reports during	

<sup>&</sup>lt;sup>4</sup> Note: comments on the DSR are indicated in **bold font.** 

		the EIA process.
293	The information distribution methods are not satisfactory	[SRK] The legal requirements with regard to public participation have been followed.
292,293, 316, 317	Responses given in the draft scoping report where too vague.	[SRK] It is unclear which specific responses are being referred to. At scoping stage, the potentia impacts of the project have not yet been assessed More specific information on these will be provided in the DEIR.
Comments relating	to design	
12; 28; 40; 51; 69; 73; 95; 107; 124; 126; 138; 180; 186; 227 - 287	High density population.	[SRK]: information regarding the anticipated density o the proposed housing is described in the projec description in Section 2.2.
38; 51; 71; 107; 132; 136; 140; 175; 186; 289, 292, 293, 303, 305, 317	Design will allow for informal settlements to be developed. How will future additions of shacks to these houses be monitored? <b>Concern regarding ability of</b> <b>council to control this.</b>	[Metroplan]: The layout provides for the development or formal residential units to accommodate beneficiaries to be relocated from informal settlements in Walmer Township. The beneficiaries will receive a forma structure (brick and mortar with tiled roofs) to be built in accordance with NHBRC Standards and Nationa Building Regulation. The rest of the units will be offered to beneficiaries who qualify for Social Housing, GAF Housing and Open Market from other areas other than just Walmer Township once the needs of the targe groups are met. The area will be managed in accordance with the Section 8 Zoning Scheme relating to Residential Zone (single dwellings), Residential Zone IV for flats/residentia buildings, Business Zone 1, Institutional Zone I and III Open Space Zones I and III, Transportation Zone II Authority Zone and Special Zones. The NMBM will dea with building contraventions in a manner similar to othe formally planned suburbs in the City.
123; 141; 151;	What are the constraints of the erf determining the possible number of dwellings that may be built and how many could that be? <b>Concern regarding ability of</b>	[Metroplan]: Residential Zone I permits the developmen of the primary dwelling together with associated outbuildings. It makes provision for an additional dwelling by Special Consent of Council. Due to the size of erven is proposed that additional dwelling be not allowed and
293 289, 293, 305, 311, 313	council to control this. How will the municipality regulate the population	therefore the special consent procedure will not be invoked. No other consent uses are set out.
289, 292, 293, 294,303, 305, 309, 311, 313, 317	numbers? How will the municipality control the erection of illegal dwellings and informal settlements? Require a formal contract to be drawn up restricting owners	
	from erecting illegal dwellings, conform to current urban standards found in Walmer Heights.	
292, 312, 317	Legislation needs to be in place to have control over who owns a RDP home and a plan to control illegal occupants.	[SRK] the process for allocation of RDP homes is controlled, the aim being to avoid this problem.
292, 317	Legislation to have control over population in RDP zone and	[SRK] the process for allocation of RDP homes is controlled, as is the process of allocation of

	other zones	subsidised housing.
115;	How many metres of open ground will there be between the boundary walls of existing houses adjacent to the proposed development and the first row of low cost houses?	[Metroplan]: The design has adopted the concept of a transition zone to buffer and protect existing developments. Free basic houses/ RDP Units are located closer to Victoria Drive and further away from Walmer Heights. The last row of housing is set back by approximately 100m - 120m from the eastern edge of Walmer Heights and 75m - 150m from the southern edge of the Golf Course. [SRK]: the proposed layout has as far as possible taken
		into account both social and environmental challenges presented by the site. Refer to Section 2.2. Please note the differences between the various housing typologies proposed in the project description.
38;	Does the municipality intend to build a boundary wall to prevent residents of the housing development being able to walk directly through all the undeveloped erven along the boundary area?	[Metroplan]: The development is not planned as a hybrid subdivision with a single controlled entrance and exit gate. It will largely be a conventional suburb where interaction and movement is promoted in order to ensure access and promote social cohesion. Only the Social Housing sites will have 'gated status" where access and control will be via a manned gate.
		The layout provides flexibility for FLISP/Open Market units to also become "gated" communities with controlled access/exit points as required by potential beneficiaries. The intention is that all the other erven in the proposed development will be developed. Boundaries around undeveloped privately owned erven outside the project boundary are the responsibility of private land owners.
22; 41; 71; 173;	All suburbs require public open space.	[SRK]: Comment noted. Public Open Space areas are shown on the site development plan (Figure 2-1) and amount to approximately 25% of the development area.
11; <b>293</b>	The number of the units should be reduced and the size of the units increased. We do not agree on the size of units and the size of Erf units' subdivision. The number of the units should be reduced and the size of the units increased.	<ul> <li>[Metroplan]: The values of the units to be built are based on the subsidies allocated to the respective prospective beneficiaries (see house product prices below) and therefore the size of units cannot be arbitrarily increased.</li> <li>Free Basic &gt;40m<sup>2</sup> ±R160,000.00</li> <li>Social Housing ±30-54m<sup>2</sup> ±R340,000.00</li> <li>FLISP &gt;50m<sup>2</sup> ±R300,000.00</li> </ul>
		• Open Market $>50m^2$ ±R400,000.00 The number of units planned has been to accommodate some 50% of 1500 households to be relocated as part of the de-densification of Walmer Township. The number of units has not been arbitrarily determined and can also not be limited based on unsubstantiated requests. Limits on the numbers of households from Walmer to be relocated below the 50% allocation would mean that another piece of land would have to be laid out for the households that are excluded from the area.
38; 123; 140;	Residents were under the impression that Erf 11305 would be used to build government subsidised 'Links' style developments like those under construction along Buffelsfontein Rd and William Moffett. Is this not the case? If not, what exactly is defined as 'low cost housing'?	[Metroplan]: Erf 11305 Walmer was purchased by the Eastern Cape Provincial Department of Human Settlements (EC DoHS) for the development of a mixed residential area, which would accommodate some of the households to be relocated from Walmer Township, where they currently live in informal structures, overcrowded conditions and without access to basic services (including reliance on bucket sanitation) and lack of security of tenure. The EC DoHS also promotes

		residential development in line with the BNG 2004 Policy Statement which would accommodate Social Housing and FLISP/ GAP housing in line with the Walmer Link Development. The proposed layout makes provision for FLISP/ GAP Housing and Social Housing to act as a transition zone between the Free Basic Houses, to be built closer to Victoria Drive, and Walmer Heights to the west. The developments in Walmer Link and Fairview are fully or partially subsidized by the State through subsidies made available to qualifying beneficiaries. A similar approach will be followed in the development of Erf 11305 Walmer except that the area will also cater for Free Basic House (RDP) units closer to Victoria Drive. A portion of the transition zone will be developed for single residential dwellings (FLISP/GAP and Open Market Housing) to facilitate the integration with Walmer Heights. The transition zone can either be developed as a conventional suburb with unlimited public access or as a "gated" community depending on the preference of potential beneficiaries [SRK]: Refer to project description and layout in Section 2.2, which includes a description of the various housing
14;	We were under the impression that the agreement was to build upmarket housing.	typologies proposed. [SRK]: It is assumed that this is a reference to a previous Record of Decision (RoD) granted for a housing development on the property. This RoD has subsequently expired, necessitating a new EIA process for development of the site.
31; 145;	Rather develop medium to upmarket homes to cater for emerging market	[SRK]: Upmarket housing as a design alternative will not be assessed in the EIA, as this is outside the NMBM's housing delivery mandate.
38; 114; 157;	There is a disparity between conditions governing residents of the Walmer Heights Home Owners Association (WHHOA) and the absence of any conditions pertaining to the building standards and environmental issues of the development.	[Metroplan]: The potential disparity between areas managed by WHHOA and that of the proposed development is acknowledged. There is no denying that Walmer Heights is a high income residential area affordable to a select few households. The demand for the Walmer Heights type development is likely to be limited for the same reasons. This would partly explain why the previous owners of Erf
314	The objects of the WHHOA is clearly defined in the constitution insofar as creating an environment for secure, healthy, harmonious and hygienic living; the control of environmental pollution; and the care, maintenance, upkeep and control over the entire development area. It further dictates that owners shall repair and maintain their properties. Failure to comply with these conditions will entitle the WHHOA to remedy the member's failure to do so, and recover the associated costs for doing so. Control	<ul> <li>11305 Walmer opted to sell the land to the State rather than to develop it themselves. The land was also offered to private buyers but none were able to conclude a deal with the owners partly because of the high level of risk in this property market.</li> <li>The plan not only recognises this affordability and demand context but also provides a gradual transition between Walmer Heights and the proposed development, through the development of Social Housing and FLISP/ GAP Projects that lend themselves to being managed on similar grounds as the Home Owners Association (i.e. Social Housing is managed by Accredited Social Housing Institutions in line with guidelines set by the SHRA).</li> <li>The layout has taken into account the environmental constraints as follows:</li> <li>Over 89% of forest clumps will be preserved in the layout</li> </ul>

	measures are in place to ensure that no construction, erection or implementation of any improvements on properties is commenced without the prior approval of plans for any such improvements.	<ul> <li>Protected forest is retained within Public Open Space areas or within larger school sites</li> <li>[SRK]: Environmental authorisation conditions specific to this project, will be specified by DEDEAT. The development will have to adhere strictly to these conditions.</li> </ul>
155; 293, 315	The proposed development flouts the most desirable principles of urban planning. RDP homes do not integrate into an established wealthy suburb.	<ul> <li>[Metroplan]: The development is based on the principles of urban planning in that it fulfils the following:</li> <li>Seeks to make better utilisation of well-located land and services infrastructure to accommodate as many households as possible and promote functional integration</li> <li>Provides for Mixed and Varied Tenure Options. It provides for free basic houses for qualifying beneficiaries, on a freehold basis, social housing for household not ready to own but who prefer to rent, bank financed households on freehold title basis with assistance from partial state subsidies and open market fully privately funded houses.</li> <li>Caters for households with a range of income, ranging from housing that is fully subsidized to partially subsidised by the State and housing fully funded by the private sector and other combinations in between. This is also in line with the NMBM Housing Policy, Outcome 8 Policy Statement and National Development Plan amongst other strategic national policy.</li> <li>De-densification and upgrading of informal settlements: Erf 11305 Walmer is one of the destination areas for families living in squalor, without access to basic services, security of tenure, sanitation (who also continue to use bucket toilets). Some of the families have been living under these conditions for over 10 years. Due to the overcrowding in the informal settlement it is not possible to accommodate all households who relocate. The alternative is for households to relocate to other places on the urban periphery and far from places of employment and without social and public amenities. This would exacerbate inherited urban patterns reminiscent of apartheid planning principles and ideology.</li> <li>Spatial Transformation of inherited urban settlement of alfordable housing to the west of Victoria Drive (already pioneered by Walmer Link Project) to improve spatial integration and bridge the separation between income and social groups, develop underutilised well located vacant land that is close to a community</li></ul>
141;	Potential to use different zonings to buffer and protect existing	conditions partly due to the lack of land. [Metroplan]: The design has adopted the concept of a transition zone to buffer and protect existing

	developments.	developments as follows:
312	Establishment of an adequate buffer zone.	<ul> <li>Free basic houses/ RDP Units are located closer to Victoria Drive and further away from Walmer Heights. The last row is set back by approximately 100m - 120m from the eastern edge of Walmer Heights and 75m - 150m from the southern edge of the Golf Course.</li> </ul>
		<ul> <li>A buffer zone comprising Social Housing Units, a school site and public open space (forest clumps) provided along the southern-edge of the Golf Course.</li> </ul>
		<ul> <li>The buffer area between the RDP units and Walmer Heights is made up of:</li> </ul>
		<ul> <li>FLISP/ GAP Housing for employed individuals who can afford mortgage loans of up R300,000.00</li> </ul>
		<ul> <li>Open Market Housing costing above R300, 000.00. It is envisaged that the units will be in the R400,000.00 price range</li> </ul>
		<ul> <li>Can be developed as a "gated" area or conventional suburb</li> </ul>
121;	Restriction on minimum erf size in Walmer Heights.	[Metroplan]: The development falls outside the Walmer Heights area and is therefore not subject to the minimum erf sizes for Walmer Heights. The Section 8 Scheme does not set a minimum erf size for erven in the Residential Zone 1 and Residential Zone IV zones. The Land Use Planning Ordinance provides for the "departure" route from the provisions in any scheme to enable specific types of developments to be approved in certain areas. This has already been implemented in Walmer Link, Greenshields Park, Kings Court and other high or medium density residential developments in the immediate area.
		The layout plan is also in line with the following policy plans that guide land use in the NMBM and in the local area:
		<ul> <li>NMBM SDF 2009: Plan calls for densification to contain urban sprawl, improve spatial efficiency by making better use of well-located land and services and to enable the retention of lower income families closer to the CBD and places of employment and to existing social and public amenities.</li> </ul>
		<ul> <li>Walmer LSDF: Designates the area for higher and middle density development at:</li> <li>High Density: 120 units/ ha</li> </ul>
		<ul> <li>Medium Density: 80 units/ ha</li> </ul>
		The layout covers a gross area of 43.73Ha is planned for 1721 units at a gross density of 39.36 units/ ha and a nett density of 84.67 units/ ha.
18; 141;	No plans / layout of the development have been made available.	[SRK]: Please refer to Section 2.2 and Figure 2-1 & Appendix F
19; 38; 51; 81; 90; 91; 93; 94; 95; 96; 148;	Lack of sufficient schools, clinics and creches in the area.	[SRK]: Provision is made in the preliminary layout plan (see Section 2.2 and Figure 2-1) for these establishments.
38; 51; 96; 153; <b>292;</b>	Lack of socio-urban infrastructure	[SRK]: Provision is made in the preliminary layout plan

293; 317	(parks, sporting facilities, theatres, shopping centers, entertainment & libraries).	(see Section 2.2 and Figure 2-1) for appropriate amenities.
289, 293	An additional 6800 residents would fall in a high density population.	[SRK]: Information regarding the anticipated density of the proposed housing is described in the project description in Section 2.2.
		[Metroplan] The layout covers a gross area of 43.73Ha and is planned for 1721 units at a gross density of 39.36 units/ ha and a nett density of 84.67 units/ ha.
311, 313, 316	Appears to be more that 600 RDP houses on the map.	[SRK] the preliminary layout shown in Figure 2-1 provides for 622 Residential 1 (free basic) units.
293, 311, 313, 317	Excessive number of houses and occupants for size of area	[SRK]: Information regarding the anticipated density of the proposed housing is described in the project description in Section 2.2.
		Proper planning principles have been followed.
292, 293, 303, 305, 309, 317	The 150m blending zone needs to be built first to guarantee its development.	[SRK] the schedule for development will depend on various factors, however any changes to the design post-authorisation (should authorisation be granted) will require an amendment process.
293, 303, 305, 311, 312, 313, 314	We require a perimeter / boundary wall around the development. Controlled access to the development.	[Metroplan]: The development is not planned as a hybrid subdivision with a single controlled entrance and exit gate. It will largely be a conventional suburb where interaction and movement is promoted in order to ensure access and promote social cohesion. Only the Social Housing sites will have 'gated status" where access and control will be via a manned gate.
		The layout provides flexibility for FLISP/Open Market units to also become "gated" communities with controlled access/exit points as required by potential beneficiaries.
292, 293, 317	The Sports fields are not on the same design scope as Walmer Heights, they only cater for a select portion of the population and not the entire family like an open park would.	[SRK] in addition to sports fields, public open spaces, which would function as parks, are also included in the development layout.
310	The public Open Spaces should border the North Westerly boundary of Erf 11305.	[SRK] the location of public open spaces is determined to a large extent by the location of forest patches, which are required to be preserved (primarily as public open spaces).
293	Residents were under the impression from the BID that only 1200 homes are proposed for the site.	[SRK] the intention of the BID was to provide an overview of the project, based on the information available at the time. Subsequent refinement of the project description has occurred as reported in the FSR.
292, 293, 317	The Taxi rank does not come into line with the urban design of Walmer Heights.	[SRK] the layout has been designed in accordance with the relevant planning requirements and includes provision for facilities required to best serve the anticipated residents. Due to differences in
		requirements of the residents between Walmer Heights and the proposed development, design differences are inevitable.

	onto Victoria drive.	tarred road connecting Victoria Drive to the development. See Section 2.3 for details.
292, 293, 317	Lack of socio-urban infrastructure (parks, sporting facilities, theatres, shopping centres, entertainment & libraries).	[SRK]: Provision is made in the preliminary layout plan (see Section 2.2 and Figure 2-1) for appropriate amenities.
310	The high density housing area should move to the central areas of the erf 11305 or border Victoria Drive.	[SRK] The preliminary layout of the development has been developed taking the various environmental, social and design constraints of the site into consideration.
310, 314	The proposed development has impacted negatively on the property values in the Walmer Heights area. Provision must be made to increase the layout abutting Walmer Heights for an increased number of FLISP / GAP type units to allow for a greater transitional area between the free basic type units and Walmer Heights.	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas, as well as recommendations regarding mitigation of any impacts.
294	Street lights (solar solutions) should be places all along the streets of these new developments.	[SRK] comment noted. Where technically feasible, the use of such technologies will be encouraged.
292, 312, 317	Legislation needs to be in place to control how a RDP home will be maintained as the residents will have no invested interest in a free home.	[SRK] comment noted.
312	Establishment of a management company with authority to uphold and maintain the development adequately.	[SRK] comment noted. The social (rental) units will be managed and maintained by a management company.
292, 317	Legislation and a management team with authority to control the RDP zone on scheduled basis needs to be in place.	[SRK] comment noted.
305	Will informal settlements be allowed to occupy all the other erven mentioned on page 62 until more RDP houses are built?	[SRK] the primary motivation of the project to move some people out of currently occupied areas so that current informal settlements can be formalised (which will entail dedensification of Gqebera). Key to this will be controlling influx of additional shack dwellers, by way of careful scheduling of relocations and construction.
Comments relating	to the environment	
12;91; 92; 93; <b>289, 290,</b> <b>298, 304</b>	Concern of impact of development on environment.	[SRK]: Comment noted. The EIA will assess this (see Section 5.2).
153;	Carbon footprint will increase.	[SRK]: It is unclear in what way this may / may not happen. Clarity is requested to enable us to address the concern.
176; 177;	Area is close to a nature reserve and bird sanctuary and birds use this area to travel across, as well	[SRK]: The potential impacts on the surrounding ecology of the development will be assessed in the EIA. We are however unaware of any nature reserve and/or bird

294	For every tree removed, new trees should be planted. This	[SRK] Noted. The preliminary layout allows for the preservation of approximately 90% of forest clumps
315	The loss of bird, veld and wild life vistas.	[SRK]: potential impacts on fauna and flora will be evaluated as part of the EIA. The Environmental Management Programme (EMPr) will also include measures to minimise or mitigate impacts on fauna and flora.
315	Impact on Heritage Resources (An old farmhouse exists on the site)	[SRK]: An historical structures impact study is proposed (see Terms of Reference in Section 6.3.3) to address this impact.
172; 175;	Increase in water pollution.	[SRK]: A wetland study was undertaken which did not identify any surface water resources in the area which could potentially be polluted. The EMPr will include standard management measures to prevent pollution of stormwater and groundwater resulting from the proposed development.
132; 136;	Resultant destruction of the green belt.	[SRK]: The site falls outside the designated Critical Biodiversity Areas (CBA's) of the Metro. Ecological impacts resulting from the proposed development will be assessed in the EIA.
64; 167;	The development has the potential to affect the natural flow of water.	[SRK]: A stormwater management plan has been developed for the site, taking the natural topography into account (see drawing indicating services infrastructure in Appendix F).
25; 29; <b>289,292, 311,</b> <b>313 , 316, 317</b>	The area is Indian Ocean Forest, more specifically Sardinia Bay Forest Thicket, which is protected.	[SRK]: Comment noted. A forest specialist survey has been conducted and the development layout has taken the identified forest areas into account where possible. The relevant permissions from DAFF are being sought.
177;	Guinea fowl, hares and rabbits will be hunted as a food source.	[SRK]: Comment noted. It is likely that any impacts relating to hunting of fauna are already occurring on the site and surrounding areas. Clearing and development of the site will result in migration of fauna to adjacent areas, which may or may not make them more vulnerable to hunting, depending on the area. The EMPr will include measures to prevent hunting on the site by construction workers, and the relevant legislation governing hunting of wildlife would apply.
6; 12; 21; 22; 24; 35; 38; 41; 43; 63; 64; 65; 71; 112; 116; 118; 136; 153; 173; 176; 177;	There are many small animals including rabbits, hare, deer, duiker, grysbok, mongoose, snakes and tortoises; and birds including eagle, hawk, Egyptian geese, guinea fowl and blue crane in the area which will be displaced by the development. How will the indigenous fauna be protected?	[SRK]: potential impacts on fauna will be evaluated as part of the EIA. The Environmental Management Programme (EMPr) will also include measures to minimise or mitigate impacts on fauna.
12; 21; 22; 23; 29; 35; 38; 41; 42; 43; 45;56; 63; 64; 65; 66; 90; 94; 95; 96; 97; 112; 116; 118; 120; 136; 141; 153; 176; 177; <b>304</b>	There are indigenous trees and plants on the proposed land i.e. milkwoods and harperfillums. The development will break up the current natural vegetation on the site. How will the indigenous flora be protected and the National Forestry Act be applied?	[SRK]: A specialist forestry mapping survey of the site has been undertaken (see report in Appendix I) and the preliminary development layout plan has accommodated its findings as well as DAFF's comments. The layout plan will require final approval from DAFF to ensure that forest is sufficiently protected. Where damage to protected species is unavoidable, the necessary permits will be obtained.
	as for feeding purposes.	sanctuary in close proximity to the proposed site.

	will improve the aesthetics of the proposed developments and help with air pollution. It will also encourage the bird species to return to the neighbourhood.	on the site, in accordance with DAFF's requirements.
294	People should be educated about the dangers of using pesticides which are endangering our beautiful owls, hawks and eagles in this area.	[SRK] agreed. Pesticide use is a universal problem in most urban areas.
Comments relating	to social impacts	
38; <b>293</b>	What social upliftment strategies form part of the development?	[SRK]: The development entails the provision of housing which includes the provision of sanitation, electricity, water. Provision is also made in the development layout for social facilities such as schools, sports fields and churches.
67; 125; <b>289, 297</b>	Increase in vagrants in area.	[SRK]: Public vagrancy is an issue that cannot be controlled and is symptomatic of broader socio-economic issues which are outside the scope of this EIA to address. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will however attempt to address impacts on crime and social ills in neighbouring areas.
38; 148; <b>293; 305</b>	Alcohol abuse in public areas.	[SRK]: Public drinking is controlled by the relevant municipal by-laws and is symptomatic of broader socio- economic issues which are outside the scope of this EIA to address.
23; 32; 38; 39; 42; 43; 45; 76; 90; 91; 92; 93; 95; 97; 109; 120; 135; 192; <b>289; 293; 311;</b> <b>313</b>	Increase in loitering.	[SRK] It would be difficult for an EIA to assess the impacts of loitering and make predictions with regard thereto. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will however attempt to address impacts on crime and social ills in neighbouring areas.
301; 303	Different social and cultural norms will pose difficulties	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of the appropriateness of the development in the context of social gradients with neighbouring areas.
293	Slaughtering of animals and other such act's is also common practice in RDP developments	[SRK] differences in cultural practices between residents in mixed suburbs are universal. The municipal health by-law, currently published as a second draft, includes provisions to regulate the traditional or cultural slaughtering of animals on any premises other than in an abattoir.
Comments relating to the economic impacts		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Danger of depreciation of property values. Desirability of Walmer Heights will decline. Potential homeowners to the area will be deterred as a result of the proposal. Rental activity will increase, as owners will not be able to sell. Rental amounts will drop.	[Metroplan]: Property values are a function of the market and demand and availability. The support for Walmer Link type development by some of the respondents would seem to suggest that the Walmer Link type of development would not be perceived negatively by the market. It would therefore not be less likely to impact the local market negatively either. Otherwise the market would already be experiencing downward spiral. None of the respondents have pointed to any evidence of a fall resulting from the Walmer Link project, on the

137;       139;       140;       141;         145;       147;       149;       157;         158;       165;       167;       169;         170;       172;       173;       175;         179;       180;       182;       184;         186;       192;       193;196;       198;         199;       202;       204;       206;         207;       213;       215;       218;         219;       ;226       -       287;       288,         289,292,293,296,297,       298,299,301,302,       303,304,305,306,       307,308,309,311,         312,313,314,317       314,317       314,317		development of Walmer Heights closer to Walmer Township. In fact there seems to be support for Walmer Link type housing to act as the transitional zone with Walmer Heights [SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas.
8; 49; 88; 147; 186; <b>289, 293</b>	Who will be held accountable for losses in property value?	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas, as well as recommendations regarding mitigation of any impacts.
6; 8; 27; 38; 49; 58; 135; 141; 172; 186;215; <b>293, 296, 303, 305</b>	Will the rates and taxes and land evaluation be done again after the project to adjust for losses in property value?	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas, as well as recommendations regarding mitigation of any impacts. It would be up to the NMBM to come up with a strategy in this regard, if and when a loss in property values in the area that can be directly linked to the proposed development becomes evident.
1; 49; 126; 131; 132; 134; 136; 138; 145; 147; 149; 186; 198 ;227- 287; <b>289, 293,</b> <b>311, 312, 313</b>	Possibility of insurance premium increases due to close proximity of the housing development.	[SRK]: Comment noted. Increases in insurance premiums cannot be predicted at this stage. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will however attempt to address impacts on crime and social ills in neighbouring areas.
115; 183; <b>293, 314</b> <b>305</b>	The development will deter further development in the area. Query regarding developments planned for other vacant land in the area (including erf 1953), and implications of these on the buffer zone included in the development plans for erf 11305	[Metroplan]: The proposed development is on vacant land that has remained undeveloped for a long time due partly to low demand within the higher income residential market. The immediate area has over 140Ha of vacant land that has also remained undeveloped due to the lack of bulk infrastructure services and which would require significant capital outlay from a private developer or the respective land owners (including erven 559, 1953, 3988, 4195, 6991 & 11302 Walmer and land south-west of Glendore Road). The purchase of the land by the State will enable the State to utilise the Urban Settlement Development Grant (USDG) to install the much need bulk infrastructure that will not only serve Erf 11305 Walmer but the rest of the vacant land south of the subject site up to Glendore Road. The prospective developers of Walmer Cosmo who
		presented their concept plan to the NMBM already (and has been approved by Council) are fully aware of the proposed development on Erf 11305 Walmer. They acknowledge that the two projects can co-exist and also complement one another. [SRK] any other developments proposed for the surrounding area are separate to this development
		and are outside the scope of this EIA, although they may form part of broader development plans for the area. The buffer zone included in the preliminary

		layout for erf 11305 is not conditional on any other developments.
22; 41; 112; 131; 135; 136; 172; 207; <b>289,292,</b> <b>293, 311, 312, 313,</b> <b>315, 317</b>	Added security will be needed and it will be the burden of the owner to add it.	[SRK]: Comment noted. This is a universal issue in many parts of South Africa. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will however attempt to address impacts on crime and social ills in neighbouring areas, and recommend mitigation measures.
19; 78; <b>293, 303, 305</b>	Lack of employment opportunities in area.	[SRK]: The proposed housing recipients are all current residents of Gqebera, many of which are employed in the surrounding area. No significant impact on employment levels is therefore anticipated. Relocation of the residents away from Gqebera area is however likely to result in an increase in unemployment due to transportation challenges.
293	The development should not be drastically different to Walmer Heights as it will devalue the area (and has already done so). We do not believe that the development will compliment Walmer Heights in is its current	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas.
	form. Homes in Walmer Heights will not be upgraded due to value already lost in market by home owners.	
	A study should be conducted to estimate the effect on future building and development demand in the area.	
289, 292, 317	Long term sustainability study should be conducted as to not devaluate established rate paying WH	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas.
305	How will the socio-economic impact assessment study be carried out? (How will they gather data, will the local residents be contacted)	[SRK] the methodology used for the socio-economic impact assessment will mainly entail analysis of existing information and modelling of future trends. The specialist will also review issues raised in the EIA process by IAPs.
292, 317	Legislation needs to be in place to allow proper management the RDP development to protect Walmer Heights home owners property investment values.	[SRK]: a socio-economic study is proposed (see Terms of Reference in Section 6.3.6) and will include an assessment of impacts on property values in neighbouring areas and propose management measures.
Comments relating to safety concerns		
1; 6; 8; 12; 13; 15; 19; 21; 26; 27; 31; 32; 33; 37 - 40; 42-45; 50; 51; 55; 61; 65; 66; 67; 69; 70; 74; 76; 89; 91; 92; 95; 97; 101; 118; 120; 121; 124; 125; 126; 131; 134; 136; 137; 139; 141; 144; 145;	Danger of increased crime rate.	[SRK]: The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas.

147, 140, 140, 450		]
147; 148; 149; 158; 169; 170; 172; 175; 182; 184; 186; 192; 196; 198; 200; 203; 205; 213; 218; 227- 287; 289, 292, 293, 296, 301, 302, 305, 311, 312, 313, 314, 315, 317		
6; 13; 26; 30; 34; 48; 75; 79; 86; 139; 171; 186; 187; 193; 199; 206; 219; <b>289, 293</b>	Will increase burglaries and robberies. The bush between Beethoven Avenue and the settlement will be used as a direct escape route to the housing development.	[SRK]: Development of the site will result in loss of much of the vegetation on the site, which may reduce the attractiveness of the site for criminal activities relative to the current situation. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas.
5; 9 -12; 16; 23 - 26; 28; 29; 30; 35; 36; 40; 45; 46; 48; 59; 64; 66; 67; 73; 77; 78; 80; 81; 82; 85; 86; 88; 90; 94; 98; 99; 100; 107; 110; 113; 116; 117; 120; 131; 132; 135; 136; 137; 145; 167; 169; 171; 175; 182; 204; 205;207;215; 289, 292, 293, 297, 298, 302, 303, 305, 311, 312, 313, 317, 318	Safety and security concerns.	[SRK]: The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas.
51; 74; <b>289,292, 293,</b> <b>305, 317</b>	Poor local municipal law enforcement and lack of effective policing in the area.	[SRK]: Comment noted.
73; 171; <b>293</b>	Vandalism of property by unemployed prospective residents.	[SRK]: Vandalism is a universal problem indicative of broader socio-economic issues. The proposed housing recipients are however already resident in the Gqebera area (and many are already employed) and it is hoped that vandalism of municipal property will decrease as service delivery to these residents is effected. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will however attempt to address impacts on crime and social ills in neighbouring areas.
38; 51; <b>293, 315</b>	Risk of fires due to houses being built close together and fire used for cooking and heating. What protection will boundary properties have?	[Metroplan]: The units will be built in accordance with building line restrictions applicable to Residential Zone 1 and Residential Zone IV as set out in the Section 8 Scheme Regulations. It is proposed to depart from some of the building line and bulk factor restrictions applicable to Residential Zones 1 and IV but this will not compromise the safety and fire protection in the proposed development. Similar guidelines have already been implemented in Walmer Link It is proposed to depart from the 4m street building line to a 1 m all round building line. A zero (0) metre side building line where no opening windows are provided is also required to enable the development of row and semi-detached units. The fact that the erven are smaller and narrower does

		not increase the risk of fire damage as units will be built in accordance with applicable building lines, building coverage will be restricted to less than $80\%$ ( $40m^2 - \pm 110m^2$ floor area) and the units will comply with the National Building Regulations, the NHBRC and SCCCA requirements. [SRK]: the houses will be electrified and therefore it is assumed fire will not be the primary source of heat for cooking and heating (as is currently also not the case – see Section 3.2.2 of the DSR).
19; 51; 207; <b>293</b>	Rise of 'shebeen' type establishments and illegal trading of food and associated items will lead to lawless behaviour.	[Metroplan]: Taverns within residential areas can only be allowed subject to the Special Consent of Council following a formal application process and with the consent of the Liquor Board and require the extensive consultation and participation of the resident population. Dedicated areas are set aside for mixed use purposes where informal stalls can be set up. These will be managed in full compliance of the NMBM Informal Trading and Licensing Policy. Allowing informal business on designated sites will enable the NMBM to extend municipal infrastructure services, provide management support to the traders and set strict health and licensing guidelines. Informal business areas will also provide an opportunity for entrepreneurs to earn more income from small business ventures to supplement family income and broaden affordability levels as well as provide services within walking distance to the households that don't have the funds and time to travel and access day to day services outside the area.
1; 9; 12; 13; 21; 25; 28; 32; 38; 40; 44; 49; 50; 65; 67; 73; 76; 77; 78; 80; 81;85; 99; 101; 113; 121; 124; 125; 126; 131; 132; 134 - 137; 144; 145; 147; 148; 186; 207;227-287; 289, 292, 293, 296, 301, 317	Service delivery protest and strikes will affect all residents. Risk of damage to property, roads and burning of tyres.	[SRK]: The purpose of the proposed development is to provide housing and essential services to residents currently lacking these, and therefore a reduction in service delivery protests is anticipated.
1; 26; 126; 136; 138; 149; 186; 207;227-287; 289, 292, 293, 311, 313, 317	Danger of taxi violence, drug dealers, turf wars and gang violence.	[SRK]: The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas.
4; 6; 22; 41; 49; 70; 84; 88; 112; 115; 126; 131; 135; 136; 138; 149; 169; 173; 174; 186; 226- 287; <b>288, 292,</b> <b>293, 304, 317</b>	The development will adversely affect the suburb's character and lifestyle prevalent in Walmer Heights.	[SRK] The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will address these impacts.
293 , 305	We do not believe that any law enforcement will take place in this development as is the case with current RDP developments in Port Elizabeth.	[SRK] law enforcement is the responsibility of the relevant authorities and is outside the scope of this assessment. The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas.
293	Introduction of universal problems into an area that is	[SRK] Noted.

	free of those problems does not limit the responsibility of the developer of that land.	
292, 293, 311, 312, 313, 316, 317	Security services need to be implemented to secure the entrance and patrol the development.	[SRK]: The proposed socio-economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas, and make recommendations regarding mitigation.
293	The Arlington Race way is currently being utilised by thieves to rob homes and escape without entering Walmer Heights roads. Clearing the bush will allow them to use motorised transport in those areas this will allow for easier and faster escape from the crime scene.	[SRK] Development of the site will result in loss of much of the vegetation on the site, which may reduce the attractiveness of the site for criminal activities relative to the current situation. The proposed socio- economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas. The fate and control of land outside erf 11305 is outside the scope of this EIA.
318	Require a security wall between the Walmer golf club and the development.	[SRK] Comment noted. The proposed socio- economic study (see Terms of Reference in Section 6.3.6) will attempt to address impacts on crime and social ills in neighbouring areas, and propose mitigation measures where required.
Comments relating	to traffic	
1; 26; 138; 186; 288, 289, 292, 293, 303, 304,311, 313, 317	Lack of sidewalks / pedestrian walkways will force pedestrians to walk in heavily congested roads leading to pedestrian fatalities.	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the design planning for the project, and findings of this study will inform the EIA. This study should include investigation on pedestrian safety and the need for pedestrian facilities.
79; 186; <b>312</b>	Additional residents will make timely evacuation in case of emergency impossible. Additional access to Victoria Road should congestion, protest or natural disasters affect the access.	[Metroplan]: It is not clear why "timely evacuation" is flagged as a potential problem and neither have the circumstances leading to this "evacuation" been well explained. The area is planned in accordance with applicable Municipal by laws, design standards and policies. The roads are wide enough to cope with any emergency
		evacuation out of the area. All the road reserves permit the construction of tarred roads to full municipal standards. Given the low levels of vehicular ownership and the reliance on public transport amongst the majority of the envisaged residents, the existing roads are anticipated to adequately cater for the area. Emergency Vehicles (Fire trucks and Ambulance services) will be adequately accommodated. Furthermore the link to both Victoria Drive and Beethoven Street is required to ensure that the area has access to a number of "escape" routes rather than be boxed in and to be only accessible to and from Victoria Drive. The layout makes provision for future potential linkages to and through the Golf Course to the north and the continuation of road linkages towards the proposed Walmer Cosmo Development. [SRK]: A Traffic Impact Assessment (TIA) will be
		conducted for the project (see Terms of Reference in Section 6.3.5), and findings of this study will inform the EIA.

38;	Will Walmer Heights be the access point for trucks during the construction process?	[SRK] it is anticipated that most trucks will access the site from Victoria Drive as opposed to Walmer Heights, as this route is more suited to heavy vehicle traffic. A Traffic Impact Assessment (TIA) is proposed (see Terms of Reference in Section 6.3.5) and will include recommendations regarding traffic management measures.
1; 5 - 13; 15; 20; 21; 24; 25; 27; 28; 29; 32; 35; 36; 38; 40; 42; 44; 49; 50; 51; 61; 65; 67; 70; 72; 73; 75 - 83; 85; 86; 88;90; 91; 97 - 101; 104; 108; 110; 112; 113; 121; 125; 126; 131; 132; 137; 139; 140; 145; 147; 148; 149; 151; 167; 171; 172; 175; 180; 184; 186; 189; 196; 199;200;202;205;206;2 07;213;215;218;219; 227-287	Increase in traffic congestion. How will this be catered for?	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate this concern and make recommendations regarding mitigation measures.
7; 51; 63; 74; 80; 84;104; 124; 131; 157; 159; 183; 186; <b>299,</b> <b>308</b>	Feeder roads unable to handle additional traffic loads (specifically Beethoven Ave, Glendore Rd, Sebelius Rd, Titian Rd, Buffelsfontein Rd & 17th Ave).	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate this concern and make recommendations regarding mitigation measures.
8; 9; 12; 15; 25; 38; 44; 48; 49; 78; 89; 90; 94; 96; 101; 110; 113; 115; 116; 123; 124; 141; 188;	Which routes are proposed as access roads to the development?	[Metroplan]: The site will be accessed mainly from Victoria Drive with an alternative access for the top western section of the site planned through Beethoven Street and Schubert Street towards Buffelsfontein Road and William Moffett Expressway. Future linkages may be possible through Walmer Cosmo to Glendore Road and to Buffelsfontein Road via the Golf Course.
4; 167; 193;222	Access should be from Victoria Drive as it is on taxi routes and would otherwise alter the nature of Walmer Heights.	[Metroplan]: Access to the bulk of the area will take place from Victoria Drive but areas closer to Walmer Heights would be more conveniently accessed through Buffelsfontein Road and the William Moffett Expressway.
		Having only one access from Victoria Drive would create a landlocked and poorly integrated residential area. It will also make the sale of Open Market and FLISP/GAP housing bordering Walmer Heights more difficult to market and sell to the target group. This in turn would attract the opposite of the target group for households who would be able best to develop their housing on the transitional zone that can better integrate with Walmer Heights.
		Access to local and regional size shopping facilities at the Kings Mall, Moffett on Main and Walmer Park respectively would only be possible via either Victoria Drive/ Buffelsfontein or Victoria Drive/ Glendore Road, both of which will be long and necessitate additional journey time and increased travel costs and increased effort for the prospective residents.
		The de-proclamation of part of the Driftsands Drive link between Victoria Drive and Buffelsfontein Road, across the Walmer Golf Course, with the active support of some households now living along the Golf Course, has taken

		away another potential road link that may have addressed the concerns of residents about traffic through Walmer Heights.
		Beethoven Avenue and Schubert Road are wide enough to handle any additional traffic to and from Titian Avenue. [SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate this concern and make recommendations regarding mitigation measures.
167; <b>294, 300, 310</b>	Access to development via Titian/Beethoven St is not feasible due to road geometry and safety issues for residents and pets.	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the EIA (see Terms of Reference in Section 6.3.5) to investigate these concerns and make recommendations regarding mitigation measures.
6; 81; 109; <b>289, 303</b>	Additional traffic will damage roads in area.	
38;	Will traffic calming measures be built along Beethoven Rd?	
183;	No plan in place to widen Buffelsfontein Rd where the development in area is growing exponentially.	
104;	Double lane traffic could be a help to ease traffic congestion.	
294	Double lanes need to be built all along Buffelsfontein and Heugh Road. A Double lane needs to be built at the Victoria Drive /Buffelsfontein intersection with a turning lane traffic light.	
	Glendore and Genadendal will require double lanes with the multitude of houses that are being built in Salisbury Park.	
159;	Victoria Drive should be a double lane with adequate facilities for pedestrians and cyclists.	
293	A long term traffic assessment should be implemented.	
289,292, 304, 312, 314, 317	The present infrastructure will not support the increase in pedestrians, traffic, taxies and other forms of transport.	
292, 317	A dedicated bicycle lane next to pedestrian walk way is required.	
294	Glendore road needs a pedestrian path.	
295	There is no provision for pedestrian nor motor exit on the eastern end into Victoria Drive. This implies a 4-5 Km	

	detour for those using vehicles. Pedestrians will simply create their own route out of the new development.	
293	The upgrading of roads infrastructure in Walmer Heights needs to be done to accommodate residents.	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate these concerns and make recommendations
311, 312, 313	Inadequate access roads (in terms of number and placement.)	regarding mitigation measures.
299, 303, 314	Increase in public transport. Difficulty in exiting your property, danger to pedestrians, and damage to road surfaces.	
310	Buffelsfontein Road should be upgraded from Wentworth Road to 8 <sup>th</sup> Avenue Walmer due to the new application for development on erven 559 and 7005 Walmer.	
294	William Moffett Expressway needs and extra lane.	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the EIA (see Terms of Reference in Section 6.3.5), however William Moffett expressway is outside the scope of this assessment.
294, 304	Roads in and around the area need to upgraded and maintained (Victoria drive had potholes etc).	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the EIA (see Terms of Reference in Section 6.3.5), and will make recommendations regarding upgrades. Maintenance will be subject to the NMBM's road maintenance schedule.
288	An alternative road should be constructed between the Walmer heights/Walmer Golf Course boundary linking Buffelsfontein with the proposed development.	[SRK]: A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate this concern and make recommendations regarding mitigation measures.
38; 43;	What provision is being made for roads?	[SRK]: Please refer to the draft layout plan (Figure 2-1 and Appendix F).
7; 20; 23; 26; 36; 38; 39; 43; 45; 50; 61; 91; 92; 93; 95; 101; 107; 109; 120; 121; 126; 131; 134; 138; 140; 147; 149; 169; 172; 186; 227- 287; 288, 289,292, 293, 296, 299, 303, 306, 309, 311, 313, 314, 317	Increase in foot traffic.	[SRK]: Comment noted. It is assumed that the comment relates to a safety concern. A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate and make recommendations regarding pedestrian safety. Sidewalks may need to be considered.
44; 50; 116; <b>289,</b> <b>290,292, 293, 304, 311,</b> <b>313, 317</b>	Roaming of animals in suburbs / stray animals.	[SRK]: Presumably this concern relates to traffic safety. A Traffic Impact Assessment (TIA) will be conducted as part of the project design planning (see Terms of Reference in Section 6.3.5) to investigate and make recommendations regarding traffic safety, however it is unlikely to directly address issues relating to stray animals.

There needs to be additional entrance to the facility to decrease traffic.	[SRK]: Comment noted. A Traffic Impact Assessment (TIA) is proposed (see Terms of Reference in Section 6.3.5) to investigate and make recommendations regarding traffic flow.	
The map of the development shows only one entrance. This will result in high motor and pedestrian traffic.	[Metroplan]: The site will be accessed mainly from Victoria Drive with an alternative access for the top western section of the site planned through Beethoven Street and Schubert Street towards Buffelsfontein Road and William Moffett Expressway. Future linkages may be possible through Walmer Cosmo to Glendore Road and to Buffelsfontein Road via the Golf Course.	
Beethoven Avenue should not become an access road until such time as the buffer zone has been developed and all surrounding road infrastructure upgraded and developed including the widening of Buffelsfontein Road to cater for the increase in traffic.	[SRK]: Comment noted. A Traffic Impact Assessment (TIA) is proposed (see Terms of Reference in Section 6.3.5) to investigate and make recommendations regarding traffic flow etc.	
The Taxi rank area needs to be on Victoria drive to keep traffic out of WH.		
Taxis and busses must use Victoria Drive as their main access point to transport the residents from the RDP houses.		
Concern regarding location of the Bus stop or Taxi rank.		
Speed humps along Beethoven Avenue from Schubert Street to Weymouth place and on the road to the right of Weymouth Place that enters the buffer zone will need to be built to slow down traffic.		
Traffic impacts on Titian Road during peak hours will need to be addressed as the traffic lights currently only allow very few cars through during peak times.		
Additional access road into Victoria road should be created		
Comments relating to pollution		
Urination and discarding of food waste on pavements.	[SRK]: These issues will be addressed in terms of the NMBM's existing waste management plan.	
The existing plan is not applicable here a new strategy needs to implemented	It is assumed that this plan will be updated at regular intervals and will accommodate new suburbs as they are developed.	
General pollution, lack of pride in the environment, dumping and littering will be prevalent.	[SRK]: This is a widespread problem, not specific to low cost housing developments. The NMBM has a waste management strategy to address these issues as far as possible.	
	entrance to the facility to decrease traffic. The map of the development shows only one entrance. This will result in high motor and pedestrian traffic. Beethoven Avenue should not become an access road until such time as the buffer zone has been developed and all surrounding road infrastructure upgraded and developed including the widening of Buffelsfontein Road to cater for the increase in traffic. The Taxi rank area needs to be on Victoria drive to keep traffic out of WH. Taxis and busses must use Victoria Drive as their main access point to transport the residents from the RDP houses. Concern regarding location of the Bus stop or Taxi rank. Speed humps along Beethoven Avenue from Schubert Street to Weymouth place and on the road to the right of Weymouth Place that enters the buffer zone will need to be built to slow down traffic. Traffic impacts on Titian Road during peak hours will need to be addressed as the traffic lights currently only allow very few cars through during peak times. Additional access road into Victoria road should be created to pollution Urination and discarding of food waste on pavements. The existing plan is not applicable here a new strategy needs to implemented General pollution, lack of pride in the environment, dumping and	

290, 293, 309		
107; <b>289, 293</b>	Increase in household rubbish is a health risk to the community if not properly and regularly disposed of.	[SRK]: the development will be subject to the NMBM's regular waste collection schedule (weekly collections). Waste management is described in Section 2.3.
51; 61; 116; 131; 172; 177; 186;	Danger of air pollution. Effect of coal or wood burning fires used as primary source of heat / cooking.	[SRK]: Residents will have access to electricity for heating / cooking purposes. In addition, paraffin is currently the main fuel source rather than coal/ wood (see Section 3.2.2 of the DSR).
289, 293	Please provide evidence that paraffin is used as main fuel source.	[SRK] information regarding fuel sources was obtained from the 2011 census statistics for this ward (obtained from the Statistics South Africa website, www.statssa.gov.za.
301	Will create dirt and disruption during the construction phase.	[SRK] A draft Environmental Management Programme (EMPr) will be included as part of the EIR, which will include standard mitigation measures to minimise impacts during construction.
315	Waste generated while building will impact current owners adversely.	[SRK] The draft EMPr will include standard mitigation measures to minimise impacts during construction, including waste management.
292, 304, 317	No facilities for Refuse Collection in the area.	[SRK]: the development will be subject to the NMBM's regular waste collection schedule (weekly collections). Waste management is described in Section 2.3.
293	What guarantee does WH have the council will continue to provide free services to the area indefinitely?	[SRK]: no service can be guaranteed indefinitely, however the development proposal includes that the area will be subject to the NMBM's regular waste collection schedule (weekly collections). Waste management is described in Section 2.3.
294	Litter needs to be controlled. No dumping signs need to be placed in these areas and rubbish bins need to be provided so pedestrians can throw away their litter.	[SRK]: Noted. The development will be subject to the NMBM's regular waste collection schedule (weekly collections). Waste management is described in Section 2.3.
	NMBM needs to ensure they collect the rubbish on a weekly basis, and litter pickers need to be placed in these areas to keep the neighbourhood looking clean.	
Comments relating	to noise pollution	
1; 5 - 8; 12; 15; 20 - 23; 26; 28; 33; 35; 36; 38 - 43; 45; 46; 49; 51; 55; 61; 64; 66; 67; 70; 79; 82; 84; 88; 89; 92; 97; 101; 107; 109; 110; 112; 113; 115; 117; 118; 120; 121; 124; 125; 126; 131; 135; 136; 137; 141; 144; 145; 147; 148; 149; 172; 173; 175; 176; 184; 186; 192; 199; 200; 202; 204; 206;	Danger of increased noise pollution and disturbance of the peace due to increased pedestrian traffic, vehicular traffic, music, dogs constantly barking etc. Concern that the NMBM cannot manage the noise levels	[SRK]: The development will be subject to the NMBM's noise control regulations, which are intended to manage noise levels. The EMPr will include standard mitigation measures to minimise noise impacts during construction.

215; 218; 227- 287; 289,292, 293, 297, 298, 299, 301, 303, 304, 305, 309, 311, 312, 313, 316, 317		
186;	Inhabitants will have trouble sleeping due to noise pollution on roads. Lack of sleep due to noise pollution will lead to job losses and poverty. Will these people be able to get a grant or sue the municipality for these losses?	[SRK]: The NMBM noise control regulations include mechanisms for addressing noise disturbance, should it occur.
Comments relating	to infrastructure	
6; 38; 50;	Increase in electricity theft. How does the municipality intend to handle this?	[SRK]: Houses will be electrified which should decrease the frequency of illegal connections
293	We do not believe providing electrified homes will reduce the number of illegal connections.	Power provision issues relating to Walmer Heights are outside the scope of this EIA and therefore should be taken up directly with the NMBM.
	We would want stable power to Walmer Heights homes before these homes are electrified for free as WH pays for electricity.	
6; 12; 18; 23; 26; 29; 38; 39; 43; 44; 45; 51; 63; 66; 69; 73; 78; 84; 91 -96; 104; 107; 109; 118; 120; 136; 140; 141; 145; 151; 153; 157; 174; 180; 182; 186; 196; 197; 201; 202; <b>289,292, 293,</b> <b>300,301, 303, 305, 308,</b> <b>311, 312, 313, 317</b>	The existing infrastructure is inadequate to support proposed development. Bulk services to area will be placed under strain and compromise quality of current services. Will existing infrastructure be upgraded to accommodate the increased pressure?	[SRK]: Please refer to the project description (Section 2.3).
172; <b>293</b>	Where will NMBM be getting the funds for the provision of necessary services?	[Metroplan]: The purchase of the land by the State will enable the State to utilise the Urban Settlement Development Grant (USDG) to install the much need bulk infrastructure that will not only serve Erf 11305 Walmer but the surrounding areas as well.
22; 112; 145; 173;	I object to individuals receiving services (sewer, water, electricity) for minimal charge or no charge	[SRK]: Comment noted.
38;	Will the development have flush toilets and proper sewerage connections or will the 'bucket system' be in use?	[SRK]: Please refer to the project description in Section 2.
183; 226	No stormwater drainage in Buffelsfontein Road and Victoria Drive	[SRK]: A stormwater management plan for the site ha been developed. Stormwater will be directed into th proposed new stormwater detention pond under development in the adjacent golf course (see Figure 2- and Appendix F).
167;	Vast amount of stormwater comes through Arlington and surrounds. The development will cut off the natural flow.	
51;	High levels of rainfall in area will result in damage to houses due to	

	poor drainage and result in people moving to higher grounds.	
315; 289	Stormwater drains blocking due to erosion and inadequacy	
289, 292, 317	Sand Dune and land erosion	
308	When will the sewer upgrade be done?	[SRK] the exact timeframes for this have not yet been determined, and will depend on related development schedules
312	Concern regarding infrastructure to support the proposed increased population.	[SRK] the required supporting infrastructure forms part of the development proposal. The NMBM has confirmed capacity to accommodate the development with regard to services.
289, 292, 293, 294, 301, 317, 308	Concern over deterioration of existing services eg water pressure and supply problems.	[SRK] the NMBM has confirmed capacity to accommodate the development with regard to services.
Comments relating	to visual impact	
16; 22; 41; 51; 136; 140; 171; 172; 173; 186; <b>290, 315</b>	Proposed development will have a negative visual impact. The general view and scenery will be adversely affected.	[SRK]: Anticipated typical views of the proposed development from various viewing points are provided in Table 2-4 and it is proposed that visual impacts will be assessed by the EAP during the EIA.
6;	What will the proposed structures look like?	[SRK]: Please refer to the project description in Section 2.2.1, as well as Table 2-2, which provides images of what the housing typologies proposed typically look like.
67; 78; 107;	Washing hanging over/on fences and balconies.	[SRK]: This is a visual impact of very low significance which will not be addressed in the EIA.
136; 140; 186; 289, 292, 293, 307, 311, 313, 317	Can those who receive these houses maintain them in keeping with the aesthetics of the area?	[Metroplan]: The houses to be owned individually on free hold basis will be maintained by the households who benefit as is the case in the other suburbs and other housing projects in the Metro. Public roads and public open spaces will be maintained by the NMBM. Social Housing Apartments will be developed and owned by an accredited Social Housing Institution (e.g. Imizi Housing Association) that will be responsible for the management, rent collection, maintenance, and liaison with tenants etc. The SHI will also maintain all the private open spaces within the social housing projects including the provision of play equipment, etc. Social Housing is to be managed in line with the requirements of the Social Housing Regulatory Authority (SHRA) who regularly visit the projects to ensure compliance. It must also be understood that the ability of households to maintain their houses is also related to their affordability levels. The houses provided, in terms of size, construction costs and quality are in keeping with the affordability of the prospective beneficiaries. If the prospective households do not have to spend a large portion of their income on expensive units or on travel to and from work, shops, social and public amenities, the more disposable income they will have in order to maintain their units and look after their private gardens. Most low income families in need of formal shelter in the NMBM have traditionally been relocated far away from their current places of residence, often to the urban periphery, where they have to spend over 30-40% of gross income on travel. This leaves very little or no

		disposable income with which to invest on their current unit. Erf 11305 Walmer is adjacent to Walmer Township and beneficiary households would therefore be spared relocation to the urban periphery in Wells Estate, Motherwell and Zanemvula. It is also within 7kms of the CBD and is close to the PE Airport and closer to the Beach than other low income residential areas.
Comments relating	to site alternatives	
2; 3; 6; 15; 26; 33; 89; 118; 172; <b>293, 298,</b> <b>305; 307</b>	An alternative, more suitable location for the development must be considered.	[SRK]: Location alternatives are not being considered as part of this EIA. The current site was selected for the development as (among other reasons) it is state owned and would involve minimal relocation distance.
38; <b>293, 305</b>	The municipality owns extensive property on the same side of Victoria Drive as the current Gqebera area which can be used for this development. It appears there was never any intention to seek more suitable land for RDP houses.	[SRK]: It is SRK's understanding that much of the developable portion of this land may be under a lease agreement, and is subject to serviceability or other development constraints.
172;	NMBM has hundreds of hectares (Madiba Bay Development) of land next to the existing Walmer Township which can be used.	[SRK]: It is SRK's understanding that much of the developable portion of this land may be under a lease agreement, and is subject to serviceability or other development constraints.
56; <b>293; 305</b>	More appropriate municipal- owned land located adjacent to the airport This project should be fully developed FIRST to give time for the buffer zone to be completed before any RDP houses are built on erf 11305.	[SRK]: A separate project is underway for a housing development on the piece of land referred to, to provide additional housing for residents who cannot be accommodated on erf 11305. According to the current anticipated development schedule, pending environmental authorisation, this project (on land adjacent to the airport) will be developed before erf 11305.
155;	We suggest the Fairview area where an upgraded and socially improved environment could be created for low-cost housing.	[SRK]: The rationale for the selection of erf 11305 is to keep relocation distance to minimum to minimise disruptions to social cohesion and existing livelihoods. The NMBM does not own suitable property in the
293	The lack of land ownership by the developer should not grant them impunity to develop land in an irresponsible manner as they please.	Fairview area. [SRK] agreed.
6; 136; <b>293</b>	The current Walmer Township should rather be converted into housing developments, moving residents out of Walmer Township will just create more space for new residents to move in.	[SRK]: The project motivation is to move some people out of currently occupied areas so that current informal settlements can be formalised (which will entail dedensification of Gqebera) and also to house people currently residing in uninhabitable areas of Gqebera.
Comments of a gen	eral nature	
51; <b>293</b>	Loss of privacy. Introducing 1000+ pedestrians poses a serious privacy problem for residents. This result in value lost on properties	[SRK]; The nature of the IAPs' concerns are unclear. Clarity is requested to enable us to address these comments.
48;	Will have an effect on marathons	

	and sport runners.	
N		
<b>305</b> t	Why is the school not a priority?	[SRK] provision for schools is allowed for in the layout, however these are the department of education's responsibility to implement.
301, 305 O	Laws and By laws need to be observed.	[SRK] agreed

te that while no formal comments as part of the EIA process were received from potentially affected residents of Gqebera, regular meetings are held between the project planning team and potential housing recipients, as part of the planning for the broader de-densification and redevelopment plans for certain parts of Gqebera. Where available, minutes of these meetings are included in Appendix E.

#### 4.2.3 Key environmental and social concerns identified during the PPP

Based on the comments received from IAPs, the following key potential social and environmental concerns have been identified:

- Economic concerns decrease in property values in adjacent more affluent areas;
- Social issues increased crime and social ills in adjacent more affluent areas;
- Traffic issues relating to flow and safety (of both motorists and pedestrians);
- Services infrastructure capacity to handle the additional load;
- Stormwater management;
- Ecological impacts loss of fauna and flora;
- Visual impacts and change in visual character;
- Pollution and litter resulting from the development;
- Increased risk of fires affecting surrounding residential areas;
- Noise.

The Plan of Study for EIA (Chapter 6) provides detail on how these concerns will be addressed via the EIA process.

# 5 Identification of Potential Impacts

The identification of potential impacts of the proposed activity is based on the following factors:

- The legal requirements;
- The nature of the proposed activity;
- The nature of the receiving environment; and
- Issues raised during the public participation process.

Considering the factors listed above, the following environmental impacts were identified which could potentially result from the proposed housing development on erf 11305:

- Impacts on heritage resources;
- Terrestrial ecological impacts;
- Socio-economic impacts;
- Impacts on aquatic environments;
- Traffic impacts;
- Waste management impacts;
- Visual impacts;
- Stormwater and erosion impacts;
- Fire safety risks; and
- Construction related impacts.

The above listed impacts and their relevance to the proposed project area are described in more detail in the sections below.

#### 5.1 Impacts on heritage resources

According to the Phase 1 Archaeological Study (Appendix K), no archaeological heritage remains or shell midden sites were observed within the proposed area for development, and these are unlikely to be present on the site. It is possible however, that construction activities (especially excavation and earth-moving activities) could expose and potentially damage or destroy concentrations of historical and pre-colonial archaeological heritage material, and or human remains.

The palaeontological specialist in his letter of exemption (Appendix J) noted that the site is not known to contain paleontological resources of value. However, a small chance remains of such items being damaged or disturbed during excavation and other earth works related to construction.

Impacts relating to archaeological and palaeontological resources have been assessed via the specialist studies referred to above, and no further assessment is therefore proposed. The recommendations of the specialists, will be in the EMPr for construction (included as part of the EIR), outlining the procedure to be followed in the event of heritage remains being uncovered.

The ruins of a farmstead, dwelling and associated infrastructure were also documented on the property. It is possible that these ruins may be older than 60 years old, however this could not be confirmed without assessment by an historical buildings specialist. Although the proposed project layout does not appear to directly overlap with these sites, construction activities in the immediately adjacent areas may result in damage or destruction of these structures. Assessment by a specialist historical archaeologist or historical architect is therefore proposed (see Terms of Reference in Section 6.3.3) to assess the significance and age of the built environment structures, and recommend appropriate mitigation measures if necessary.

## 5.2 Terrestrial ecological impacts

Vegetation will need to be cleared in order to prepare the site for installation of services infrastructure and construction of houses and other associated structures. The site sensitivity map (Figure 3-3) identified the various vegetation types in and around the study area as well as their conservation status (according the NMBM's Draft Bioregional Plan) as well as Critical Biodiversity Areas (CBA's) in the surrounding area. The sensitivity map confirms that no vegetation of conservation concern or CBA areas occur within the proposed development site. For this reason, as well as the fact that the site is within a peri-urban setting and has largely been transformed due to previous farming activities, and degraded through invasion by invasive alien plant species, its ecological sensitivity is considered to be relatively low.

Habitat supporting faunal species will however be lost and fragmented through vegetation clearing for the development, displacing these animals to adjacent areas and possibly placing them at higher risk of hunting as areas that previously were not easily accessible will be opened up. Clearing and disturbance of the soil during construction will also promote the growth and spread of invasive alien vegetation on the site. It is proposed that these impacts will be assessed by the EAP and addressed via standard mitigation measures in the EMPr for construction.

A number of protected tree species and forest clumps have been identified on erf 11305 through a Forest Mapping Survey (refer to Appendix I), which has been approved by DAFF. Where possible, the layout has accommodated these forested areas so that destruction of forest will be minimised, and DAFF's comments in this regard have also been taken into account in the layout. Forest patches to be preserved will be accommodated as designated Public Open Space areas, and where destruction of forest or trees has been agreed to by DAFF (in what they deem to be 'exceptional" circumstances), permit applications in this regard will be submitted. Impacts relating to destruction of forest will be assessed by the EAP, and appropriate mitigation measures provided in the EMPr to avoid or minimise impacts on forest during construction and operation of the proposed development.

## 5.3 Socio-economic impacts

The proposed project will impact positively on the current housing problem experienced in the Nelson Mandela Metropolitan area. Provision of formal housing as well as services will significantly improve the standard of living of the beneficiaries currently living in informal settlements, and people with different accommodation needs and income levels will have access to housing as different housing typologies are proposed.

The development may however also negatively impact on property values in the adjacent high income suburb of Walmer Heights. This may also be associated with a decrease in the NMBM's income from municipal rates in the area. In addition, there is widespread concern from IAPs in this area that the proposed development would result in an increase in crime associated with the positioning of low income housing adjacent to high income areas.

In addition to amendments that have been made to the development layout to create a more gradual economic gradient between high and low income areas, a socio-economic study by a specialist in this field is proposed to further assess these issues (see Terms of Reference in Section 6.3.6). As the potential positive impacts of development of this type are relatively well understood, the study will focus on developing an understanding of the potential social and economic impacts on adjacent neighbourhoods and make recommendations regarding mitigation measures to avoid or minimise negative impacts, which will be included in the EMPr.

## 5.4 Traffic impacts

It is anticipated that this development will increase the traffic on nearby roads and intersections, both during construction and operation. Although most of the housing beneficiaries will not own cars and will rely on public transport (as per the current situation, as they are already resident in the Gqebera area), changes in traffic flow in certain areas are expected. The most significant change is likely to be to traffic flow in the Walmer Heights area, as vehicles from the proposed development use interconnecting roads in this area to connect onto the already congested Buffelsfontein road. Pedestrian traffic in these areas could also be expected to increase. The increased traffic and pedestrians may have impacts on traffic safety and wear and tear on roads.

A traffic impact study, taking into account the potential issues listed above (see Terms of Reference in Section 6.3.5), is proposed as part of the engineering design of the project, and the findings of this study will inform the assessment of these impacts by the EAP, and management recommendations made will be included in the EMPr.

## 5.5 Impacts on aquatic environments

Due to the topography and extent of the site, the potential for wetlands and aquatic environments in or around the study site was assessed by Dr Brian Colloty of Schermann, Colloty and associates (Refer to Appendix L for study report). No aquatic environments - man-made or natural - were observed on or within 500 m of the site by specialist, and therefore further assessment of impacts on aquatic environments is not proposed. Standard mitigation measures to manage minor impacts resulting from pollution of water resources (through contaminated stormwater) during construction will be provided in the EMPr.

## 5.6 Stormwater and erosion impacts

Vegetation clearing and disturbance of soils during construction will leave them vulnerable to erosion by water and wind. This could lead to increased sediment load in stormwater runoff, potentially clogging the receiving stormwater infrastructure. Loss of topsoil and erosion will also limit the potential for vegetation growth in these areas, leading to further erosion.

Concern has been raised about stormwater management in the general area, which is subject to large volumes of stormwater from the surrounding developed areas. The increase in hardened surfaces associated with the operation of development will result in less infiltration of stormwater into the soil and increased runoff, potentially exacerbating stormwater impacts.

Stormwater management planning by the design engineers has been included in the project design to limit erosion and damage to infrastructure. Impacts in this regard will be assessed by the EAP, and standard mitigation measures to manage erosion and stormwater will be included in the EMPr for both construction and operation.

## 5.7 Waste Management Impacts

Lack of adequate waste management during construction could result in spread of litter, illegal dumping, contamination of soil and water resources, and increased prevalence of scavengers at the site.

During operation, waste generated by the residences/businesses and facilities proposed on the site could result in similar impacts as those mentioned above for construction if not adequately managed. Waste entering the stormwater system may also result in blockages and downstream contamination. The area will be included in the NMBM's standard weekly waste collection routine.

Impacts relating to waste management will be assessed by the EAP, and if necessary additional mitigation measures will be provided in the EMPr to manage waste related impacts on the site and surrounding area during construction and operation.

#### 5.8 Visual impacts

The site is currently undeveloped, and clearing and development of the site, as well as lighting at night, will change its visual character, which may be perceived negatively by residents of adjacent areas overlooking the site. Being largely residential, the development is however consistent with that of the broader area, and being formalised, the housing design will conform with architectural and design standards. The forested areas that will remain on the site are also expected to provide some degree of visual shielding. During construction, dust resulting from vegetation clearing and earthworks may also be visible from a distance. It is proposed that visual impacts are assessed by the EAP and managed through standard mitigation measures provided in the EMPr.

## 5.9 Impacts related to construction

Additional impacts during the construction phase could potentially relate to the following:

- Sanitation and water supply;
- Nuisance dust impacts;
- Noise impacts;
- Safety and security;
- Chemical pollution of soils and stormwater due to spills or leaks
- Damage to other infrastructure (eg. underground cables and pipelines);
- Veld fires and fire management; and
- Interruption to services supply.

The potential impacts above will be assessed by the EAP and should be minimised by standard wellmanaged construction procedures. However, specific mitigation measures for construction related impacts will be included in the EMPr in order to alleviate the effects of the identified impacts.

## 5.10 Fire safety risks

As the development will entail the clearing and development of areas currently overrun with invasive alien trees (which are prone to burning), the risk of veld fires in the area is anticipated to decrease. This is further supported by the fact that the proposed houses will be electrified and wood or paraffin will therefore not be the main energy source.

However, the development itself may be at risk of fire resulting from spread of bush fires from surrounding undeveloped areas (due to the prevalence of invasive alien trees in the area, fires are not uncommon). This impact will be assessed by the EAP and management recommendations to control spread of fires will be included in the EMPr.

# 6 Plan of Study for EIA

## 6.1 Specialist Studies

The following seven specialist studies are proposed in order to investigate the potential environmental impacts associated with the proposed development, some of which have already been completed (as indicated below):

- Forestry Survey (completed)
- Archaeological Impact Assessment (completed);
- Historical Structures Impact Assessment;
- Palaeontological Impact Assessment (Exemption letter required-completed);
- Wetland and aquatic ecology Impact Assessment (completed);
- Traffic Impact Assessment (note this study will take place outside the EIA, as part of the engineering design process); and
- Socio Economic Impact Assessment.

Terms of reference for each of these studies are included in Section 6.3. Other identified potential impacts falling outside the scope of the studies listed above, will be assessed by the EAP, and minor impacts mainly related to the construction phase of the project will not be assessed but will be addressed via the generic mitigation measures for construction listed in the EMPr (which form part of the Draft EIR).

## 6.2 Impact Rating Methodology

The assessment of impacts will be based on the professional judgement of specialists at SRK Consulting, fieldwork, and desk-top analysis. The significance of potential impacts that may result from the proposed development will be determined in order to assist the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) in making a decision.

The significance of an impact is defined as a combination of the consequence of the impact occurring and the probability that the impact will occur. The criteria used to determine impact consequences are presented in Table 6-1 below.

Rating	Definition of Rating	Score			
A. Extent- the area over which the impact will be experienced					
None		0			
Local	Confined to project or study area or part thereof (e.g. site)	1			
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic	2			
(Inter) national	Nationally or beyond	3			
B. Intensity- the m	B. Intensity- the magnitude of the impact in relation to the sensitivity of the receiving environment				
None		0			
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1			
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2			

Table 6-1: Criteria used to determine the Consequence of the Impact

High	Site-specific and wider natural and/or social functions or processes are severely altered	3
C. Duration- the time frame for which the impact will be experienced		
None		0
Short-term	Up to 2 years	1
Medium-term	2 to 15 years	2
Long-term	More than 15 years	3

The combined score of these three criteria corresponds to a **Consequence Rating**, as follows:

#### Table 6-2: Method used to determine the Consequence Score

Combined Score (A+B+C)	0 – 2	3 – 4	5	6	7	8 – 9
Consequence Rating	Not significant	Very low	Low	Medium	High	Very high

Once the consequence has been derived, the probability of the impact occurring will be considered using the probability classifications presented in Table 6-3.

Table 6-3: Probability Classification

Probability- the likelihood of the impact occurring		
Improbable	< 40% chance of occurring	
Possible	40% - 70% chance of occurring	
Probable	> 70% - 90% chance of occurring	
Definite	> 90% chance of occurring	

The overall **significance** of impacts will be determined by considering consequence and probability using the rating system prescribed in the table below.

Significance Rating	Possible Impact Combinations			
	Consequence		Probability	
Insignificant	Very Low	&	Improbable	
	Very Low	&	Possible	
Very Low	Very Low	&	Probable	
	Very Low	&	Definite	
	Low	&	Improbable	
	Low	&	Possible	
Low	Low	&	Probable	
	Low	&	Definite	
	Medium	&	Improbable	
	Medium	&	Possible	
Medium	Medium	&	Probable	
	Medium	&	Definite	
	High	&	Improbable	
	High	&	Possible	
High	High	&	Probable	
	High	&	Definite	

Table 6-4: Impact Significance Ratings

Significance Rating	Possible Impact Combinations			
	Consequence		Probability	
	Very High	&	Improbable	
	Very High	&	Possible	
Very High	Very High	&	Probable	
	Very High	&	Definite	

Finally, the impacts will also be considered in terms of their status (positive or negative impact) and the confidence in the ascribed impact significance rating. The system for considering impact status and confidence (in assessment) is laid out in the table below.

#### Table 6-5: Impact status and confidence classification

Status of impact			
Indication whether the impact is adverse (negative) or	+ ve (positive – a 'benefit')		
beneficial (positive).	– ve (negative – a 'cost')		
Confidence of assessment			
The degree of confidence in predictions based on	Low		
available information, SRK's judgment and/or	Medium		
specialist knowledge.	High		

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- **Insignificant:** the potential impact is negligible and will not have an influence on the decision regarding the proposed activity/development.
- **Very Low:** the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity/development.
- Low: the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- **Medium:** the potential impact should influence the decision regarding the proposed activity/development.
- **High:** the potential impact will affect the decision regarding the proposed activity/development.
- Very High: The proposed activity should only be approved under special circumstances.

Practicable mitigation measures will be recommended and impacts will be rated in the prescribed way both with and without the assumed effective implementation of mitigation measures. Mitigation measures will be classified as either:

- Essential: must be implemented and are non-negotiable; or
- **Optional:** must be shown to have been considered and sound reasons provided by the proponent, if not implemented.

## 6.3 Terms of Reference for Specialist Studies

The proposed Terms of Reference (ToR) for each of the identified specialist studies are provided in this section. In cases where the studies have already been completed, any additional issues requiring specialist comment or assessment identified during the scoping phase will be included in a revised version of the study report.

#### 6.3.1 Forestry Survey

The ToR for the Forest Survey were as follows:

- Conduct an on-site assessment of the remaining extent of forest clumps and species;
- Compile a list of dominant forest tree species observed;
- Provide a map indicating where forest clumps and species occur on site; and
- Demarcate the location of protected species listed in terms of the National Forest Act (NFA).

#### 6.3.2 Archaeological Impact Assessment

The ToR for the Phase 1 Archaeological Impact Assessment (AIA) were as follows:

- Conduct a literature review of known archaeological resources within the area with a view to determining which of these resources are likely to occur within the development footprint;
- Comment on potential impacts on these resources resulting from the development;
- Make recommendations regarding the mitigation of any damage to the archaeological resources identified; or that may be identified during the construction phase.

#### 6.3.3 Historical Structures Impact Assessment

Based on the findings of the AIA mentioned above, a historian or built environmental specialist should be appointed to determine the significance of the impact on historical buildings and structures identified on the site, if the final layout agreed upon is likely to result in damage or destruction of these structures. The proposed ToR for the Historical Impact Assessment (if required) are as follows:

- Determine whether the structures documented within the proposed development are older than 60 years;
- Assess the sensitivity and significance of the structures within the proposed development area and the impact on local communities (if any); and
- Determine whether a permit is required from the ECPHRA to demolish these structures for development purposes.

#### 6.3.4 Wetland and Aquatic Ecology Impact Assessment

The ToR for the wetland impact assessment specialist study were as follows:

- Identify and delineate any riparian and wetland areas on and within 500 m of erf 11305
- Asses the Present Ecological State (PES) of any wetland identified
- Comment on potential impacts on water resources resulting from the development; and
- Make recommendations regarding the mitigation of any potential damage to wetlands.

#### 6.3.5 Traffic Impact Assessment

The ToR for the traffic study are proposed to include the following:

- Determine existing and predict additional vehicular traffic volumes (including peak volumes) resulting from the proposed development on the following roads (and any other relevant access roads):
  - o Buffelsfontein Road;
  - Beethoven Avenue;
  - Victoria Drive;
  - Schubert Road;
  - Sibelius Street;
  - Titan Road;
  - o Haydn Street
- Evaluate the adequacy of the existing roads to accommodate increased traffic volumes resulting from the proposed development; and

• Make recommendations and provide advice to the team regarding appropriate management of the traffic flows and how best to incorporate these into the proposed development.

#### 6.3.6 Socio-economic Impact Assessment

Socio-economic issues relating to the potential housing recipients and broader residents of Gqebera appear to be relatively well understood by the proponent, given the ongoing redevelopment plans for the township and stakeholder engagement in this regard. The primary aim of the socio-economic study would therefore be to address concerns raised by IAPs of the adjacent more affluent neighbourhoods, while also recognising the broader socio-economic context of the area and the NMBM as a whole.

While it is recognised that due to the subjective nature of socio-economic impacts of this nature, and relatively novel (in the South African context) approach to town planning proposed by the project, it may not be possible to adequately and objectively assess all concerns raised, the proposed ToR for the Socio-economic Specialist Study are as follows:

- Define the area potentially directly affected either socially or economically by the proposed project;
- Describe the baseline socio-economic conditions and character of this area, including property values;
- Comment on the appropriateness of the location of the development in light of the social and economic gradients of the area, as well as policy and other relevant considerations;
- Assess the potential impacts of the development proposal on socio-economic conditions in the surrounding areas including:
  - Projected effect on property value of adjacent neighbourhoods, and the associated impact on municipal rates in the area; and
  - Projected effect on security, crime and social ills in adjacent neighbourhoods;
- Address comments raised by IAPs from surrounding areas relating to the above;
- Make recommendations and provide advice to the team regarding appropriate management of impacts identified and how best to incorporate these into the proposed development.

#### 6.4 **Programme of Activities**

The key activities and the provisional timetable required to achieve the objectives of the Environmental Impact Assessment study are summarised in Table 6-6 below, indicating periods for public comment (note comment periods on the final reports are as stipulated by DEDEAT specifically for this project).

Table 6-6: Provisional timeframes for EIA milestones to be completed

Stage / Activity	Target Dates		
Stage / Activity	Start	End	
Submission of Final Scoping Report and Plan of Study for EIA to DEDEAT and 21 day comment period	9 June 2015	2 July 2015	
DEDEAT acceptance of FSR and approval of Plan of Study for EIA (potentially including recommendations)	2 July 2015	3 August 2015	
Conduct additional Specialist Studies and Compile Draft EIR (if no additional study recommendations)	10 June 2015	4 August 2015	
Submission of Draft EIR for Public Comment (40 days)	4 August 2015	14 September 2015	
Distribute Final EIR for 30 day comment period	14 September 2015	15 October 2015	
DEDEAT decision making on Final EIR (105 days)	15 October 2015	19 February 2015	

## 6.5 Public Participation Process

The registered Interested and Affected Parties (IAPs) will be kept up to date on the progress by being notified of the availability of reports for comment.

# 7 Way Forward

The public participation programme has given IAPs an opportunity to assist with the identification of issues and potential impacts, and further opportunity will be provided during the Impact Assessment phase.

The Executive Summary of this Final Scoping Report has been distributed to all registered IAPs. Printed copies of this report are available for public review at the **Walmer Public Library** (Main Road, Walmer, Port Elizabeth). The report can also be accessed as an electronic copy on **SRK Consulting's webpage** via the 'Public Documents' link: <u>http://www.srk.co.za/en/za-walmer-housing-development-erf-11305-port-elizabeth</u>

The public are encouraged to review this Final Scoping Report and send any further written comment by **12h00 on 2 July 2015** to DEDEAT directly (Reference Number ECm1/C/LN2/M/39-2014), using the following contact details:.

Ms Nicole Gerber Department of Economic Development, Environmental Affairs and Tourism Private Bag X5001, Greenacres, 6057 Email: Nicole.Gerber@dedea.gov.za Fax: (041) 508 5865

A copy of any comments must also be forwarded to:

SRK Consulting PO Box 21842, Port Elizabeth, 6000 Email: <u>portelizbeth@srk.co.za</u> Fax: (041) 509 4850

#### Prepared by:



Tanya Speyers Environmental Scientist

SRK Consulting - Certified Electronic Signature -V- SF sulting C 475764/42091/Report 2292-5372-4820-RUMP This signature has been printed digitally. The Author has given permissi use for this document. The details are stored in the SRK Signature Data

Nicola Rump Senior Environmental Scientist

#### **Reviewed by**



Rob Gardiner Partner, Principal Environmental Scientist

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

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# Appendices

# Appendix A: EIA Application Form and EAP Declaration of Interest

# Appendix B: Newspaper Advertisements and on-site posters



Poster placed on fence at the Beethoven Ave access to erf 11305



Poster along Victoria Drive opposite the airport reservoir

# **Appendix C: Background Information Document**

# Appendix D: Copies of IAP Correspondence

# Appendix E: Copies of meeting minutes

## Appendix F: Site maps & Design Drawings

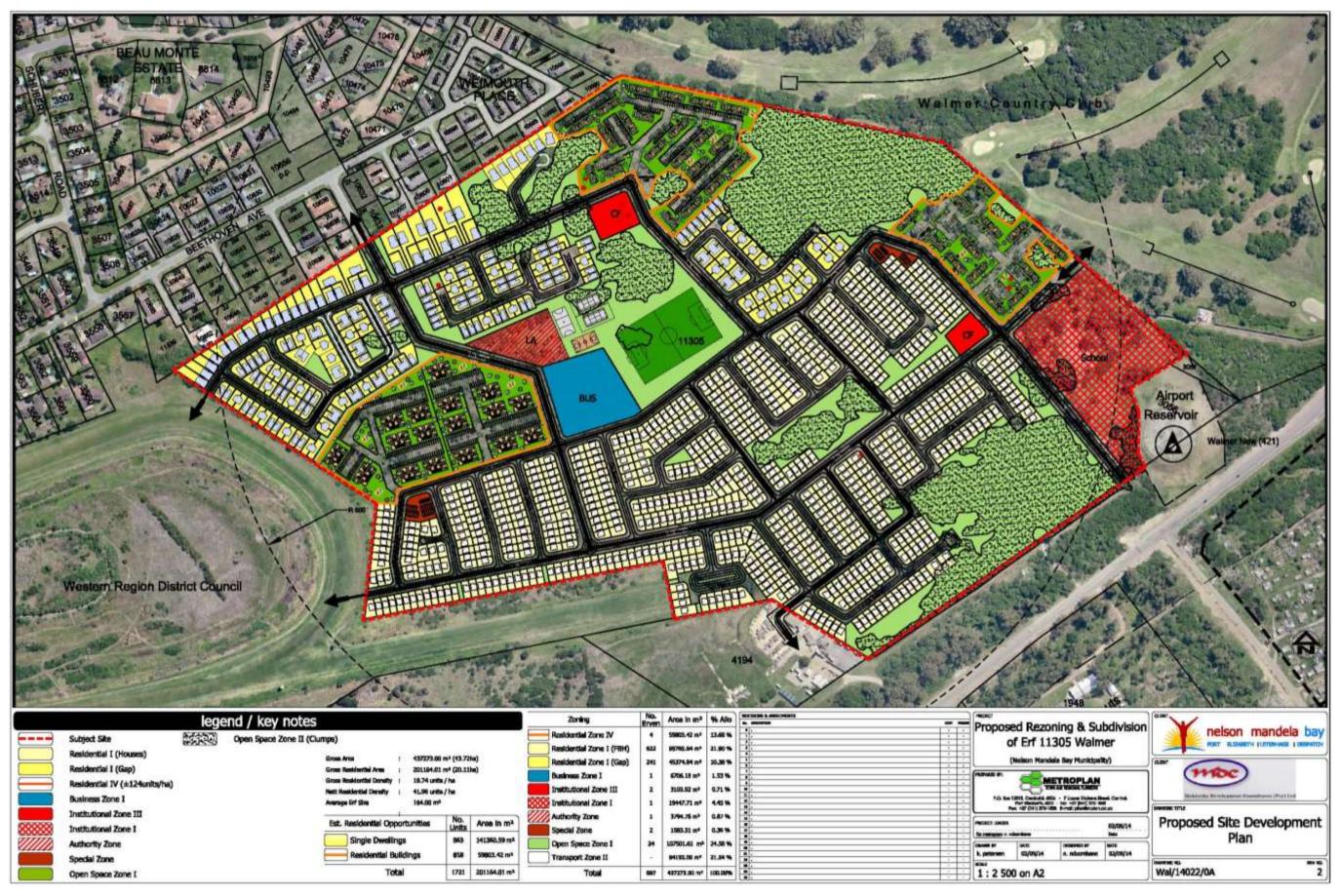


Figure 8-1: Proposed layout of the housing development

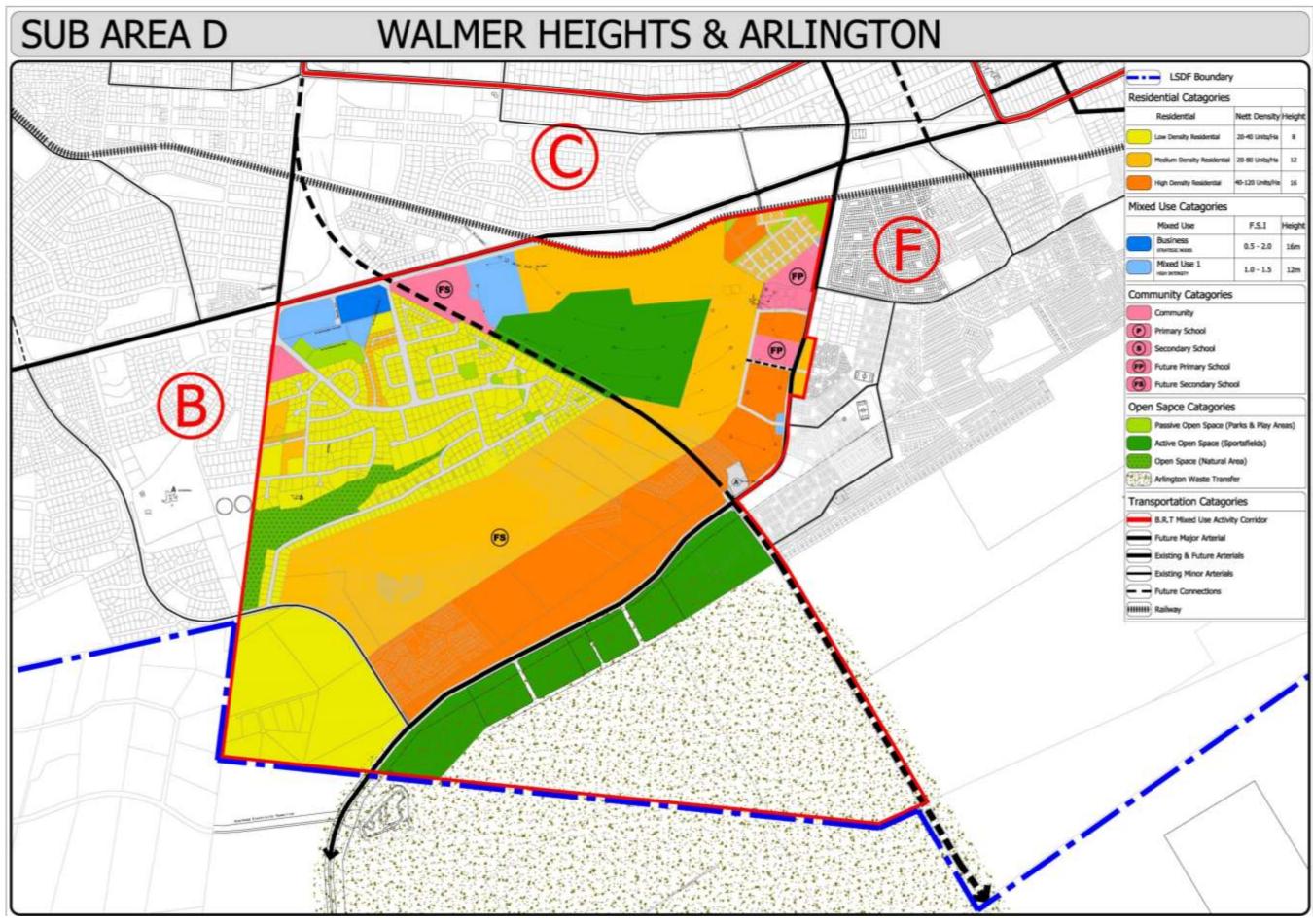


Figure 8-2: Local Spatial Development Framework of the study area (Metroplan, 2014)

Appendix G: Title Deeds

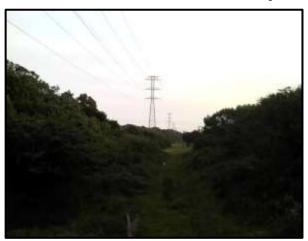
# Appendix H: Site Photographs



North western entrance to the site off Walmer Heights

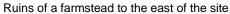


Eastern view of the site towards the airport reservoir





Powerline running to the south of the site parallel to Ru Victoria drive





Illegal Dumping



Area invaded by Castor oil plant (Ricinus communis)



Forest on site

Protected Milkwood Tree (Sideroxylon inerme)

# Appendix I: Forest Survey Report

# Appendix J: Palaeontological Exemption Letter

## Appendix K: Archaeological Impact Assessment

# **Appendix L: Aquatic Impact Assessment**

# **Appendix M: Previous Record of Decision**

# **SRK Report Distribution Record**

Report No.

439278/3 (erf 11305)

Copy No.

Name/Title	Company	Сору	Date	Authorised by
Mr A Struwig/ Ms N Gerber	DEDEAT	1	9 June 2015	R Gardiner
Ms M Bloem	DWS	2	9 June 2015	R Gardiner
Ms J Miller	NMBM: Environmental Services	3	9 June 2015	R Gardiner
Mr X Goba	NMBM: Infrastructure & Engineering	electronic	9 June 2015	R Gardiner
DAFF	Thabo Nokoyo	4	9 June 2015	R Gardiner
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