

**BASIC ASSESSMENT REPORT  
IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107  
OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS  
AMENDED)**

**October 2017**

**PROJECT TITLE**

**PROPOSED EXPANSION OF THE EXISTING CENTRAL CEMETERY ON A PORTION OF FARM  
RE/957, VREDENBURG**

**05 October 2018**

<b>REPORT TYPE CATEGORY</b>	<b>REPORT REFERENCE NUMBER</b>	<b>DATE OF REPORT</b>
Pre-Application Basic Assessment Report (if applicable) <sup>1</sup>	3234/18/PA	05 October 2018
Draft Basic Assessment Report <sup>2</sup>		
Final Basic Assessment Report <sup>3</sup> or, if applicable Revised Basic Assessment Report <sup>4</sup> (strikethrough what is not applicable)		

**Notes:**

1. In terms of Regulation 40(3) potential or registered interested and affected parties, including the Competent Authority, may be provided with an opportunity to comment on the Basic Assessment Report prior to submission of the application but must again be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority. The Basic Assessment Report released for comment prior to submission of the application is referred to as the "Pre-Application Basic Assessment Report". The Basic Assessment Report made available for comment after submission of the application is referred to as the "Draft Basic Assessment Report". The Basic Assessment Report together with all the comments received on the report which is submitted to the Competent Authority for decision-making is referred to as the "Final Basic Assessment Report".
2. In terms of Regulation 19(1)(b) if significant changes have been made or significant new information has been added to the Draft Basic Assessment Report, which changes or information was not contained in the Draft Basic Assessment Report consulted on during the initial public participation process, then a Final Basic Assessment Report will not be submitted, but rather a "Revised Basic Assessment Report", which must be subjected to another public participation process of at least 30 days, must be submitted to the Competent Authority together with all the comments received.

**DEPARTMENTAL REFERENCE NUMBER(S)**

Pre-application reference number:	16/3/3/6/7/1/F4/7/3234/18
File reference number (EIA):	
NEAS reference number (EIA):	
File reference number (Waste):	
NEAS reference number (Waste):	
File reference number (Air Quality):	
NEAS reference number (Air Quality):	
File reference number (Other):	
NEAS reference number (Other):	

## CONTENT AND GENERAL REQUIREMENTS

### Note that:

- The content of the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), any subsequent Circulars, and guidelines must be taken into account when completing this Basic Assessment Report Form.
- This Basic Assessment Report is the standard report format which, in terms of Regulation 16(3) of the EIA Regulations, 2014 (as amended) must be used in all instances when preparing a Basic Assessment Report for Basic Assessment applications for an environmental authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the EIA Regulations, 2014 (as amended) and/or a waste management licence in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("NEM:WA"), and/or an atmospheric emission licence in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA") when the Western Cape Government: Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority/Licensing Authority.
- This report form is current as of October 2017. It is the responsibility of the Applicant/ Environmental Assessment Practitioner ("EAP") to ascertain whether subsequent versions of the report form have been released by the Department. Visit the Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this checklist.
- The required information must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The tables may be expanded where necessary.
- The use of "not applicable" in the report must be done with circumspection. All applicable sections of this report form must be completed. Where "not applicable" is used, this may result in the refusal of the application.
- While the different sections of the report form only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.
- Unless protected by law, all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for believing that the information is protected.
- Unless otherwise indicated by the Department, one hard copy and one electronic copy of this report must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
- This Report must be submitted to the Department and the contact details for doing so are provided below.
- Where this Department is also identified as the Licencing Authority to decide applications under NEM:WA or NEM:AQA, the submission of the Report must also be made as follows, for-
  - Waste management licence applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (tel: 021-483-2756 and fax: 021-483-4425) at the same postal address as the Cape Town Office.
  - Atmospheric emissions licence applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (tel: 021 483 2798 and fax: 021 483 3254) at the same postal address as the Cape Town Office.

## DEPARTMENTAL DETAILS

CAPE TOWN OFFICE		GEORGE REGIONAL OFFICE
REGION 1 (City of Cape Town & West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Eden District)
Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000  Registry Office 1 <sup>st</sup> Floor Utilitas Building 1 Dorp Street, Cape Town  Queries should be directed to the Directorate: Development Management (Region 1) at: Tel.: (021) 483-5829 Fax: (021) 483-4372	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 2) Private Bag X 9086 Cape Town, 8000  Registry Office 1 <sup>st</sup> Floor Utilitas Building 1 Dorp Street, Cape Town  Queries should be directed to the Directorate: Development Management (Region 2) at: Tel.: (021) 483-5842 Fax: (021) 483-3633	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530  Registry Office 4 <sup>th</sup> Floor, York Park Building 93 York Street George  Queries should be directed to the Directorate: Development Management (Region 3) at: Tel.: (044) 805-8600 Fax: (044) 805 8650

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## ACRONYMS USED IN THIS BASIC ASSESSMENT REPORT AND APPENDICES:

BAR	Basic Assessment Report
CBA	Critical Biodiversity Area
DEA	National Department of Environmental Affairs
DEA&DP	Western Cape Government: Environmental Affairs and Development Planning
DWS	National Department of Water and Sanitation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM:ICMA	National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
PPP	Public Participation Process

## DETAILS OF THE APPLICANT

Applicant / Organisation / Organ of State:	Saldanha Bay Municipality		
Contact person:	Municipal Manager		
Postal address:	Private Bag X12, Vredenburg		
Telephone:	022 701 7000	Postal Code:	7380
Cellular:	NA	Fax:	022 715 1518
E-mail:	mun@sbm.gov.za		

## DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Name of the EAP organisation:	Eco Impact Legal Consulting (Pty) Ltd		
Person who compiled this Report:	Lauren Abrahams		
EAP Reg. No.:	SACNASP Cand.Sci.Nat (Biological Science) 100126/12		
Contact Person (if not author):	-		
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Telephone:	021 671 1660	Postal Code:	7735
Cellular:	066 210 9892	Fax:	021 671 9976
E-mail:	<a href="mailto:admin@ecoimpact.co.za">admin@ecoimpact.co.za</a>		
EAP Qualifications:	B Tech Oceanography: Cape Peninsula University of Technology (2010)		

Please provide details of the lead EAP, including details on the expertise of the lead EAP responsible for the Basic Assessment process. Also attach his/her Curriculum Vitae to this BAR.

### Ms Lauren Abrahams

Lauren Abrahams has completed her professional registration in terms of section 20(3) (b) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003) as a Candidate Natural Scientist in the field of practice Biological Science (Registration number 100126/12). She obtained her B Tech in Oceanography at the Cape Peninsula University of Technology in 2010.

Lauren has trained as an Environmental Assessment Practitioner since July 2015 and has been involved in the compilation, coordination and management of Basic Assessment Reports, Environmental Impact Assessments, Environmental Management Programmes, Waste Licence Applications, Water Use Licence Applications and Baseline Biodiversity Surveys for numerous clients.

**\*Refer to Appendix K: EAP CV**

## EXECUTIVE SUMMARY OF THE BASIC ASSESSMENT REPORT:

### **Introduction:**

The proposal is for the expansion of the existing Central Cemetery and associated infrastructure by approximately 18ha on a portion of farm RE/957 located on the southern boundary of the existing cemetery. An existing access road is located between the existing cemetery and the proposed development site.

The proposed development would entail the clearing of vegetation on the proposed development area for the expansion of the existing cemetery.

### **Alternatives:**

The proposal is for the **EXPANSION** of an existing cemetery.

No other reasonably practicable or feasible options exist in order to ensure that the Saldanha Bay region has sufficient burial capacity than to expand its existing cemeteries. No other favourable or feasible location alternative exists.

The cemetery expansion is proposed on the north eastern portion of Farm RE/957 located adjacent to the existing cemetery. The portion identified for the expansion shows evidence of being ploughed more than 10 years ago and the indigenous vegetation on the site shows evidence on degradation.

According to the Crop Census 2013\* the proposed development area is categorised as natural grazing.

The rest of Farm RE/957 is predominantly used for agriculture with a small portion of natural vegetation remaining in the north western corner of the property.

Potential contamination of groundwater is always a concern for any cemetery development. However, the proposed action will not have a significant adverse cumulative effect on topography, slopes, soils and groundwater resources, if operational and construction mitigation measures are implemented.

The landscape is to be surveyed through the geotechnical investigation which will inform the layout to ensure that designed according to such parameters.

**Conclusion:**

The proposed cemetery expansion area is located adjacent to the existing cemetery in an area with similar topography to that of the existing cemetery. The site is currently privately owned unused agricultural land categorised as natural grazing. The development areas shows evidence of being strip ploughed more than 10 years ago with alien species scattered throughout the site.

The expansion creates much needed burial space as the current cemetery is fast reaching capacity. Due to the important role that cemeteries play in a community, it is imperative that cemeteries should be located within an acceptable distance to the community it serves which is the case with the proposed expansion.

## SECTION A: PROJECT INFORMATION

### 1. ACTIVITY LOCATION

Location of all proposed sites:	The cemetery expansion is proposed on a portion of Farm RE/957, Vredenburg. The expansion is proposed to extend on the southern boundary of the existing Central Cemetery, located off regional road R399 Saldanha.
Farm / Erf name(s) and number(s) (including Portions thereof) for each proposed site:	Remainder of Farm 957.
Property size(s) in m <sup>2</sup> for each proposed site:	859.34ha
Development footprint size(s) in m <sup>2</sup> :	Approximately 189 000 m <sup>2</sup> (18.9 ha)
Surveyor General (SG) 21 digit code for each proposed site:	C04600000000095700000

### 2. PROJECT DESCRIPTION

(a) Is the project a new development? If "NO", explain:

YES

NO

The proposal is for the expansion of the existing Central Cemetery and associated infrastructure by approximately 18ha on a portion of farm RE/957 located on the southern boundary of the existing cemetery. An existing access road is located between the existing cemetery and the proposed development site.

(b) Provide a detailed description of the scope of the proposed development (project).

The proposal is for the expansion of the existing Central Cemetery and associated infrastructure by approximately 18ha on a portion of farm RE/957 located on the southern boundary of the existing cemetery. An existing access road is located between the existing cemetery and the proposed development site.

The proposed development would entail the clearing of vegetation on the proposed development area for the expansion of the existing cemetery.

**Please note:** This description must relate to the listed and specified activities in paragraph (d) below.

(c) Please indicate the following periods that are recommended for inclusion in the environmental authorisation:

(i)	the period within which commencement must occur,	Within 5 years of obtaining Environmental Authorisation.
(ii)	the period for which the environmental authorisation should be granted and the date by which the activity must have been concluded, where the environmental authorisation does not include operational aspects;	Within 10 years of obtaining Environmental Authorisation.
(iii)	the period that should be granted for the non-operational aspects of the environmental authorisation; and	Within 10 years of obtaining Environmental Authorisation.
(iv)	the period that should be granted for the operational aspects of the environmental authorisation.	Ongoing maintenance of infrastructure and implementation of EMP until decommissioning.

**Please note:** The Department must specify the abovementioned periods, where applicable, in an environmental authorisation. In terms of the period within which commencement must occur, the period must not exceed 10 years and must not be extended beyond such 10 year period, unless the process to amend the environmental authorisation contemplated in regulation 32 is followed.

(d) List all the listed activities triggered and being applied for.

**Please note:** The onus is on the applicant to ensure that all the applicable listed activities are applied for and assessed as part of the EIA process. Please refer to paragraph (b) above.

**EIA Regulations Listing Notices 1 and 3 of 2014 (as amended):**

Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.	The clearance of approximately 18ha of indigenous vegetation.	Development.
44	The expansion of cemeteries by 2 500 square metres or more.	The expansion of and existing cemetery and associated infrastructure by 18ha.	Development.
Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. R. 985)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
NA			

**Waste management activities** in terms of the NEM: WA (GN No. 921):

Category A Listed Activity No(s):	Describe the relevant Category A waste management activity in writing as per GN No. 921	Describe the portion of the development that relates to the applicable listed activity as per the project description
NA		

**Note:** If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I**.

**Atmospheric emission activities** in terms of the NEM: AQA (GN No. 893):

Listed Activity No(s):	Describe the relevant atmospheric emission activity in writing as per GN No. 893	Describe the portion of the development that relates to the applicable listed activity as per the project description.
NA		

(e) Provide details of all components (including associated structures and infrastructure) of the proposed development and attach diagrams (e.g., architectural drawings or perspectives, engineering drawings, process flowcharts, etc.).

Buildings Provide brief description below:	YES	NO
NA		
Infrastructure (e.g., roads, power and water supply/ storage) Provide brief description below:	YES	NO
NA		
Processing activities (e.g., manufacturing, storage, distribution) Provide brief description below:	YES	NO
NA		
Storage facilities for raw materials and products (e.g., volume and substances to be stored) Provide brief description below:	YES	NO
NA		
Storage and treatment facilities for effluent, wastewater or sewage: Provide brief description below:	YES	NO
NA		
Storage and treatment of solid waste Provide brief description below:	YES	NO
NA		
Facilities associated with the release of emissions or pollution. Provide brief description below:	YES	NO
NA		
Other activities (e.g., water abstraction activities, crop planting activities) – Provide brief description below:	YES	NO



The application is for the expansion of the existing Central Cemetery located in Vredenburg. The activity will comprise of the clearing of 18ha of degraded indigenous vegetation for the expansion of the cemetery and associated infrastructure.

### 3. PHYSICAL SIZE OF THE PROPOSED DEVELOPMENT

(a) Property size(s): Indicate the size of all the properties (cadastral units) on which the development proposal is to be undertaken	8622600	m <sup>2</sup>
(b) Size of the facility: Indicate the size of the facility where the development proposal is to be undertaken	188900	m <sup>2</sup>
(c) Development footprint: Indicate the area that will be physically altered as a result of undertaking any development proposal (i.e., the physical size of the development together with all its associated structures and infrastructure)	188900	m <sup>2</sup>
(d) Size of the activity: Indicate the physical size (footprint) of the development proposal	188900	m <sup>2</sup>
(e) For linear development proposals: Indicate the length (L) and width (W) of the development proposal	(L)	m
	(W)	m
(f) For storage facilities: Indicate the volume of the storage facility	0	m <sup>3</sup>
(g) For sewage/effluent treatment facilities: Indicate the volume of the facility (Note: the maximum design capacity must be indicated)	0	m <sup>3</sup>

### 4. SITE ACCESS

(a) Is there an existing access road?	YES	NO
(b) If no, what is the distance in (m) over which a new access road will be built?	0m	

(c) Describe the type of access road planned:

NA

**Please note:** The position of the proposed access road must be indicated on the site plan.

### 5. DESCRIPTION OF THE PROPERTY(IES) ON WHICH THE LISTED ACTIVITY(IES) ARE TO BE UNDERTAKEN AND THE LOCATION OF THE LISTED ACTIVITY(IES) ON THE PROPERTY

5.1 Provide a description of the property on which the listed activity(ies) is/are to be undertaken and the location of the listed activity(ies) on the property, as well as of all alternative properties and locations (duplicate section below as required).

The cemetery expansion is proposed on the north eastern portion of Farm RE/957 located adjacent to the existing cemetery. The portion identified for the expansion shows evidence of being ploughed more than 10 years ago and the indigenous vegetation on the site shows evidence on degradation. According to the Crop Census 2013\* the proposed development area is categorised as natural grazing.

The rest of Farm RE/957 is predominantly used for agriculture with a small portion of natural vegetation remaining in the north western corner of the property.

**\*Source: Western Cape Department of Agriculture. Crop Census 2013 [https://gis.elsenburg.com/apps/cfm/#]**

Coordinates of all the proposed activities on the property or properties (sites):	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec.)		
	32°	56'	58.57"	17°	58'	11.43"
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"

**Note:** For land where the property has not been defined, the coordinates of the area within which the development is proposed must be provided in an addendum to this report.

5.2 Provide a description of the area where the aquatic or ocean-based activity(ies) is/are to be undertaken and the location of the activity(ies) and alternative sites (if applicable).

NA

Coordinates of the boundary /perimeter of all proposed aquatic or ocean-based activities (sites) (if applicable):	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"

5.3 For a linear development proposal, please provide a description and coordinates of the corridor in which the proposed development will be undertaken (if applicable).

NA

For linear activities:	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
• Starting point of the activity	°	'	"	°	'	"
• Middle point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

**Note:** For linear development proposals longer than 1000m, please provide an addendum with co-ordinates taken every 250m along the route. All important waypoints must be indicated and the GIS shape file provided digitally.

5.4 Provide a location map (see below) as **Appendix A** to this report that shows the location of the proposed development and associated structures and infrastructure on the property; as well as a detailed site development plan / site map (see below) as **Appendix B** to this report; and if applicable, all alternative properties and locations. The GIS shape files (.shp) for maps / site development plans must be included in the electronic copy of the report submitted to the competent authority.

Locality Map:	<p>The scale of the locality map must be at least 1:50 000. For linear development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map.</p> <p>The map must indicate the following:</p> <ul style="list-style-type: none"> <li>• an accurate indication of the project site position as well as the positions of the alternative sites, if any;</li> <li>• road names or numbers of all the major roads as well as the roads that provide access to the site(s)</li> <li>• a north arrow;</li> <li>• a legend;</li> <li>• a linear scale;</li> <li>• the prevailing wind direction (during November to April and during May to October); and</li> <li>• GPS co-ordinates (to indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).</li> </ul> <p>For an ocean-based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94; WGS84 co-ordinate system.</p>
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Site Plan:	<p>Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:</p> <ul style="list-style-type: none"> <li>• The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be indicated on the plan, preferably together with a linear scale.</li> <li>• The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.</li> <li>• The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be indicated on the site plan.</li> <li>• The position of each element of the application as well as any other structures on the site must be indicated on the site plan.</li> <li>• Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the development <u>must</u> be indicated on the site plan.</li> <li>• Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.</li> <li>• Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):             <ul style="list-style-type: none"> <li>○ Watercourses / Rivers / Wetlands - including the 32 meter set back line from the edge of the bank of a river/stream/wetland;</li> <li>○ Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable);</li> <li>○ Ridges;</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>○ Cultural and historical features;</li> <li>○ Areas with indigenous vegetation (even if degraded or infested with alien species).</li> <li>● Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.</li> <li>● North arrow</li> </ul> <p>A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.</p> <p>The GIS shape file for the site development plan(s) must be submitted digitally.</p>
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## 6. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached as **Appendix C** to this report. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.

## SECTION B: DESCRIPTION OF THE RECEIVING ENVIRONMENT

### Site/Area Description

For linear development proposals (pipelines, etc.) as well as development proposals that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area that is covered by each copy on the Site Plan.

### 1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Flat	Flatter than 1:10	1:10—1:4	Steeper than 1:4
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### 2. LOCATION IN LANDSCAPE

(a) Indicate the landform(s) that best describes the site (highlight the appropriate box(es)).

Ridgeline	Plateau	Side-slope-of hill / mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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(b) Provide a description of the location in the landscape.

The proposed cemetery expansion site is located on the southern boundary of the existing Central cemetery off of the R399 (Main Road) Vredenburg. The site is located within an undulating area with a slope classification of between 0 - 3 %.

### 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

(a) Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)	YES	NO	UNSURE
Seasonally wet soils (often close to water bodies)	YES	NO	UNSURE
Unstable rocky slopes or steep slopes with loose soil	YES	NO	UNSURE
Dispersive soils (soils that dissolve in water)	YES	NO	UNSURE
Soils with high clay content	YES	NO	UNSURE
Any other unstable soil or geological feature	YES	NO	UNSURE
An area sensitive to erosion	YES	NO	UNSURE
An area adjacent to or above an aquifer.	YES	NO	UNSURE
An area within 100m of a source of surface water	YES	NO	UNSURE
An area within 500m of a wetland	YES	NO	UNSURE
An area within the 1:50 year flood zone	YES	NO	UNSURE
A water source subject to tidal influence	YES	NO	UNSURE

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department.

(Information in respect of the above will often be available at the planning sections of local authorities. The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

(c) Indicate the type of geological formation underlying the site.

Granite	Shale	Sandstone	Quartzite	Dolomite	Dolorite	Other (describe)
Provide a description.						
The development site is located in an area with a land type categorised as Db300 which is described as B horizons not red.						
<b>Soil:</b> Prismacutanic and/or pedocutanic diagnostic horizons dominant, B horizons mainly not red.						
<b>Geology:</b> Sand with underlying limestone and calcrete of the Langebaan Formation with granite of the Cape Granite Suite. <b>*Source: ENPAT. Soils and Geology. Soil Descriptions for the Western Cape</b> <b>[https://gis.elsenburg.com/apps/cfm/#]</b>						
The soil is classified as having very high erodibility with an erodibility factor of 0.74. <b>*Source: SA Atlas of Climatology and Agrohydrology (R.E. Schulze, 2009). Soil Erodibility.</b> <b>[https://gis.elsenburg.com/apps/cfm/#]</b>						
The soil clay and depth is categorised by the symbol ED, these types of soils are classified as soils with limited pedological development and can be described as Greyish, sandy excessively drained soils with a depth of >=750mm and a clay content of <15%. <b>*Source: Department of Agriculture, Forestry and Fisheries. Soil Clay &amp; Depth</b> <b>[https://gis.elsenburg.com/apps/cfm/#]</b>						

#### 4. SURFACE WATER

(a) Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoon	YES	NO	UNSURE

(b) Provide a description.

No surface water occurring naturally or artificially is present on the development site.

#### 5. THE SEAFRONT / SEA

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).

If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	YES	NO	UNSURE	
An area within 100m of the high water mark of an estuary/lagoon	YES	NO	UNSURE	
An area within the littoral active zone	YES	NO	UNSURE	
An area in the coastal public property	YES	NO	UNSURE	
Major anthropogenic structures	YES	NO	UNSURE	
An area within a Coastal Protection Zone	YES	NO	UNSURE	
An area seaward of the coastal management line	YES	NO	UNSURE	
An area within the high risk zone (20 years)	YES	NO	UNSURE	

An area within the medium risk zone (50 years)	YES	NO	UNSURE	
An area within the low risk zone (100 years)	YES	NO	UNSURE	
An area below the 5m contour	YES	NO	UNSURE	
An area within 1km from the high water mark of the sea	YES	NO	UNSURE	
A rocky beach	YES	NO	UNSURE	
A sandy beach	YES	NO	UNSURE	

- (b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

## 6. BIODIVERSITY

**Note:** The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed development. To assist with the identification of the biodiversity occurring on site and the ecosystem status, consult <http://bgis.sanbi.org> or [BGIShelp@sanbi.org](mailto:BGIShelp@sanbi.org). Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Tel.: (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) must be provided as an overlay map on the property/site plan as **Appendix D** to this report.

- (a) Highlight the applicable biodiversity planning categories of all areas on preferred and alternative sites and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category. Also describe the prevailing level of protection of the Critical Biodiversity Area ("CBA") and Ecological Support Area ("ESA") (how many hectares / what percentages are formally protected).

Systematic Biodiversity Planning Category	CBA	ESA	Other Natural Area ("ONA")	No Natural Area Remaining ("NNR")
If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan and the conservation management objectives	None present on the site.			
Describe the site's CBA/ESA quantitative values (hectares/percentage) in relation to the prevailing level of protection of CBA and ESA (how many hectares / what percentages are formally protected locally and in the province)	None present on the site.			

- (b) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m <sup>2</sup> )		Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.)
Natural	50%	m <sup>2</sup>	The proposed development site was strip ploughed more than 10 years ago. Thus only 50 % of the development area is in a natural condition.
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	m <sup>2</sup>	
Degraded (includes areas heavily invaded by alien plants)	0%	m <sup>2</sup>	
Transformed (includes cultivation, dams, urban, plantation, roads, etc.)	50%	m <sup>2</sup>	The proposed development site was strip ploughed more than 10 years ago. Thus 50 % of the development area has been transformed as a result of cultivation activities.

- (c) Complete the table to indicate:
- the type of vegetation present on the site, including its ecosystem status; and
  - whether an aquatic ecosystem is present on/or adjacent to the site.

Terrestrial Ecosystems		Description of Ecosystem, Vegetation Type, Original Extent, Threshold (ha, %), Ecosystem Status
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critically	NA
	Endangered	Saldanha Flats Strandveld Status 2016: EN Status 2014: Endangered (EN) Status 2011: VU Change: more threatened Change Type: VU-EN Change Year: 2014
	Vulnerable	NA
	Least Threatened	NA

Aquatic Ecosystems						
Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
YES	NO	UNSURE	YES	NO	YES	NO

(d) Provide a description of the vegetation type and/or aquatic ecosystem present on the site, including any important biodiversity features/information identified on the site (e.g. threatened species and special habitats). Clearly describe the biodiversity targets and management objectives in this regard.

The following indigenous vegetation species were recorded during the survey –

*Zaluzianskya villosa*, *Willdenowia incurvata*, *Euclea racemose*, *Thamnochortus spicigerus*, *Searsia laevigata*, *Searsia glauca*, *Ruschia macowanii*, *Putterlickia pyracantha*, *Hermannia sp.*, *Cissampelos capensis*.

No species of Conservation Concern (SCC) were recorded on site.

Alien Trees, Weeds and Grasses-

- *Acacia cyclops*

No CBA or ESA occur on site according to the 2017 Western Cape Biodiversity Spatial Plan.

The conservation value of the area is recorded as being low. It is surrounded by an existing cemetery to the north and roads to the south, east and west. Most of the vegetation on site is degraded and was previously ploughed into cultivated strips more than 10 years ago.



**Photo 1:** Previously ploughed strips.



**Photo 2:** Natural vegetation portion of the site.

The botanical sensitivity allocated to the site is low.

## 7. LAND USE OF THE SITE

**Note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):				

(a) Provide a description.

The proposed development site is currently unused agricultural land categorised as natural grazing land according to the 2013 crop census\*. The proposed development site shows evidence of being strip ploughed more than 10 years ago.

**\*Source: Western Cape Department of Agriculture. Crop Census 2013 [https://gis.elsenburg.com/apps/cfm/#]**

## 8. LAND USE CHARACTER OF THE SURROUNDING AREA

(a) Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

**Note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	A Race Track is located on the southern boundary of the proposed development area.			

(b) Provide a description, including the distance and direction to the nearest residential area, industrial area, agri-industrial area.



North of the proposed development site is the existing cemetery and north of that is agricultural land privately owned.

East of the proposed development is agricultural land privately owned.

South of the proposed development is vacant land privately owned as well as the Saldanha Bay Race Track (Oval Racing) privately owned.

West of the proposed development is the R399 as well as vacant agricultural land privately owned.

The town of Vredenburg is located approximately 5km North East of the proposed development site.

The town of Saldanha is located approximately 6.5km South West of the proposed development site.

The Saldanha Port is located approximately 6.3km South East of the proposed development site.

## 9. SOCIO-ECONOMIC ASPECTS

- a) Describe the existing social and economic characteristics of the community in the vicinity of the proposed site, in order to provide baseline information (for example, population characteristics/demographics, level of education, the level of employment and unemployment in the area, available work force, seasonal migration patterns, major economic activities in the local municipality, gender aspects that might be of relevance to this project, etc.).

Historically Vredenburg developed from a farming community, with the town of Vredenburg being founded in 1862 when a church was built at a water spring. During 1880, the first government school was built followed by the post office in 1886. A shortage of fresh water slowed the growth of Vredenburg with the town gaining Municipal Status in 1932.

**\*Source: Saldanha Bay Municipality 4<sup>th</sup> Generation Integrated Development Plan 2017 - 2022.**

### **Introduction**

Saldanha Bay Municipality (WC014) is a local municipality located on the West Coast of South Africa, approximately 140 kilometers north of Cape Town. It forms part of the West Coast District Municipality (DC1), situated in the Western Cape Province. The Swartland Municipality borders the municipality in the west by the Atlantic Ocean, in the north by the Bergrivier Municipality and the east.

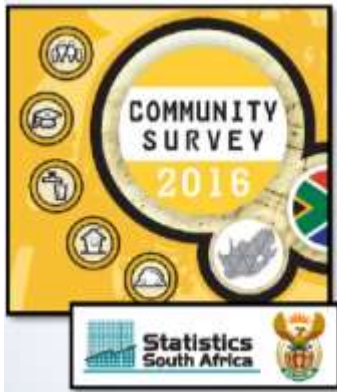
The Saldanha Bay Municipality covers an area of 2 015 km<sup>2</sup> (approximately 166 565,48 hectares) and has a coastline of 238km. In total 6.5% of the geographical land are urban land and 93.5% rural land. Overall Saldanha Bay municipality constitutes 6.4% of the entire West Coast geographical land making it the smallest municipal area in the district. The area includes the towns of Hopefield; Langebaan, Saldanha, Jacobsbaai, Vredenburg, Paternoster and St Helenabaai. The administrative office of SBM is located in Vredenburg, with satellite offices in Hopefield, St Helena Bay, Paternoster, Saldanha and Langebaan.

The 2016 Community Survey statistics:

# 2016 COMMUNITY SURVEY



	Households		Total Population			Youth proportion		Education	Poverty	
	Total	Size	Male	Female	Total	Youth (15-34)	% Youth	Persons > 20 with Grade 12	Head count	Intensity
2011	22835	3,4	49389	49 804	99193	36264	36,6%	24137	2,2%	41,0%
2016	35590	3,1	55584	55588	111173	40696	36,6%	26723	6,7%	45,4%



	Housing							
	Formal		Traditional		Informal		Other	
	Total	%	Total	%	Total	%	Total	%
2011	23564	82%	134	1%	4950	17%	187	1%
2016	26592	75%	835	2%	7855	22%	268	1%

	Water				Sanitation			
	Access to piped water		No access to piped water		Flush/chemical toilet		Other Toilet	
	Total	%	Total	%	Total	%	Total	%
2011	28660	99%	175	1%	27 766	96%	1 068	4%
2016	32063	90%	3487	10%	30496	86%	5055	14%

## Population and Age

SBM has the second largest population at 111 173 (2011 Stats: 99 193) in the West Coast District which, according to the 2016 Community Survey conducted by Statistics South Africa. The forecasts of the Western Cape Department of Social Development, is that this total will gradually increase across the 5-year planning cycle and is expected to reach 122 265 by 2023. This equates to an approximate 9.8 % growth off the 2017 base estimate.

The 2016 community results revealed a strong concentration of persons within the age category of 15-34 years at 40 696 in comparison to the 2011 Statistics which reflected a total of 36 264. Whilst the percentage increase remained at 36.6% the in-and-out migration of persons seeking employment and business opportunities will have a significant impact on the municipal services with the realisation of the economic growth and development projects forecasted.

The Western Cape Department of Social Development reflected in the 2016 Socio-Economic Profile that there is an increasing dependency ratio of 44.0, 46.3 and 46.9 for the respective years of 2011, 2017 and 2023. As higher dependency ratios imply greater strain on the working age to support their economic dependents (children and aged), this increase will have far reaching social, economic and labour market implications.

From a national perspective, the relative decrease in the working age population will result in lower tax revenues, pension shortfalls and overall inequality as citizens struggle to tend to the needs of their dependents amidst increased economic hardship. At the municipal level, this decrease will also result in a smaller base from which local authorities can collect revenue for basic services rendered and will necessitate the prioritisation of spending on social services such as education, health and welfare.

## Education

Education remains one of the key avenues through which the state is involved in the economy. In preparing individuals for future engagement in the labour market, policy choices and decisions in the sphere of education play a critical role in determining the extent to which future economic and poverty reduction plans can be realised. Saldanha Bay's matric outcomes peaked at 90.5 per cent in 2013 and levelled out to 87.9 per cent in 2014 and 2015 respectively as per the Western Cape

Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015 Learner enrolment in Saldanha Bay increased at an average annual growth rate of 2.7 per cent between 2013 and 2015, which is an indication that access to education has improved in the Saldanha Bay area and should translate into opportunities for an inclusive society.

The learner teacher ratio within Saldanha Bay was at its lowest in 2012 and deteriorated in 2013 and 2014 to more than 30 learners per teacher. The learner to teacher ratio was at its highest in 2015 at 47.7 learners per teacher which is well above the national standard of 30.3 learners per teacher. Factors influencing the learner teacher ratio is the ability of schools to employ more educators when needed as well as schools struggling to collect fees from their learners are more likely to have high learner teacher ratios.

The drop-out rate for learners within Saldanha Bay that enrolled from grade 10 in 2014 to grade 12 in 2016 was recorded at 29.5 per cent, which is slightly higher than the average drop-out rate for the District (29.2 per cent) over the same period. This might be due to the fact that Saldanha Bay has a very high percentage of no-fee schools in the District, as research indicates that learners often drop-out of school due to lack of money.

### **Households**

The household indicators according to the 2016 Community Survey results reflect as follow:

The annual income for households living within the Saldanha Bay municipal area divided into three categories i.e. the proportion of people that fall within the low, middle and high income brackets. Poor households fall under the low income bracket, which ranges from no income to just of R50000 annually (R4166 per month). An increase in living standards can be evidenced by a rising number of households entering the middle and high income brackets.

Approximately 48.6 per cent of households in Saldanha Bay fall within the low income bracket, of which 14.1 per cent have no income. A sustained increase in economic growth within the Saldanha Bay municipal area is needed if the 2030NDP income target of R110000 per person, per annum is to be achieved.

The Non-Financial Census of Municipalities released by Statistics South Africa in 2016 indicates increases or decreases of indigent households per municipal area between 2014 and 2015.

The Saldanha Bay municipal area experienced an increase in the number of indigents between 2014 and 2015, which implies an increased burden on municipal resources.

### **Poverty Indicators**

The intensity of poverty as well as the poverty headcount is analyzed in this section. The intensity of poverty is measured by calculating the Poverty Gap Index, which is the average poverty gap in the population as a proportion of the poverty line. The Poverty Gap Index estimates the depth of poverty by considering how far, on the average, the poor are from that poverty line. The Poverty Gap Index is a percentage between 0 and 100 per cent. A theoretical value of zero implies that no one in the population is below the poverty line. Individuals whose income is above the poverty line have a gap of zero while individuals whose income is below the poverty line would have a gap ranging from 1 per cent to 100 per cent, with a theoretical value of 100 per cent implying that everyone in the population has an income that is below the poverty line or zero. A higher poverty gap index means that poverty is more severe.

This section also provides information on annual household income for residents living within the Saldanha Bay municipal area. Poverty tends to be prevalent in areas where the majority of households fall within the low income bracket.

The higher poverty headcount shows that the number of poor people within the Saldanha Bay municipal area has increased significantly from 2.2 per cent of Saldanha Bay's population in 2011 to 6.7 per cent of the population in 2016. The increasing poverty headcount is a concern as it may strain municipal financial resources as more households demand free basic services.

The intensity of poverty, i.e., the proportion of poor people that are below the poverty line within

the Saldanha Bay municipal area, increased from 41.0 per cent in 2011 to 45.4 per cent in 2016. This percentage is high and should be dropping towards zero as income of more households within the Saldanha Bay municipal area moves away from the poverty line.

### **The Economy**

Economic growth at the municipal level is essential for the attainment of economic development, the reduction of poverty and improved accessibility. Fostering this growth requires an in-depth understanding of the economic landscape within which each respective municipality operates.

Saldanha Bay comprised R5.86 billion (or 30.56 per cent) of the District's total R19.16 billion GDP at the end of 2015. GDP growth averaged 2.95 per cent per annum over the period 2005–2015. This is below the District average of 3.42 per cent. Average annual growth of 2.67 per cent in the post-recessionary period remains below the long-term trend but is on par with the District average of 2.75 per cent.

Saldanha Bay employed 28 per cent (46330 labourers) of the West Coast District's labour force in 2015, and employment grew at a moderate rate of 1.7 per cent per annum on average since 2005, which was above the overall district employment growth rate of 1.1 per cent per annum. Employment growth has nevertheless picked up significantly in the post-recessionary period (2010–2015) averaging 2.5 per cent per annum—this is on par with the district's employment growth rate of 2.7 per cent per annum over this period. Saldanha Bay has experienced job losses prior to and during the recession, but these jobs have been recovered and approximately 5720 (net) additional jobs have been created since 2005 (the majority of which has been created post-2010).

The majority of the workforce in Saldanha Bay operates within the semi-skilled (32.50 per cent) and low-skilled sector (32.14 per cent). The semi-skilled sector was the only sector to experience a contraction in employment over the long term (-0.1 per cent per annum over the period 2005 – 2015). Low-skilled employment remained fairly stagnant over the long term, whilst skilled employment (which makes up 13.35 per cent of the municipality's workforce) grew at a moderate rate of 1.9 per cent per annum since 2005. The informal sector (which employs 22 per cent of the municipality's workforce) experienced robust growth of 7.8 per cent per annum over the past decade.

**Primary Sector - Agriculture, Forestry and Fishing** - This sector comprised R887.21 million (or 15.15 per cent) of the Municipality's GDP in 2015. It displayed steady growth of 2.85 per cent for the period 2005 – 2015; growth has nevertheless shown significant improvement in the post-recessionary period (the sector experienced a growth rate of 4.49 per cent per annum over the period 2010 – 2015).

Agriculture, Forestry and Fishing employed 31.77 per cent of the area's workforce. Employment over the period 2005 – 2015 has grown by 0.9 per cent per annum on average. Employment growth nevertheless improved significantly in the late half of the decade (growing at a rate of 4.5 per cent per annum on average since 2010). This growth has however been insufficient with regard to recovering all the jobs lost prior to- and during the recession, and as such, 500 jobs have been lost on net since 2005.

The labour force in the primary sector is characterised by a relatively large proportion of unskilled labour. The majority (43.32 per cent or 6 376 workers) of the workforce in Agriculture, Forestry and Fishing operate within the low-skill sector, which has experienced growth of 4.6 per cent per annum since 2010. The semi-skilled sector employs 32.59 per cent of the industry's workforce and has grown at a rate of 4.4 per cent per annum since 2010. The skilled sector employs the smallest proportion of the municipality's workforce (5.20 per cent or 765 workers). This segment has shown robust growth post-recession (4.7 per cent per annum).

Despite the fast growth since 2010, employment in these three categories has stagnated over the long term (2005 – 2015) and all the jobs lost between 2005 – 2010 have not yet been recovered. The informal sector makes up 18.89 per cent of the industry's workforce and experienced robust long term growth as employment grew by 4.6 per cent per annum over the period 2005 – 2015. Informal employment growth within the Agriculture, Forestry and Fishing industry remained consistent throughout the last 10 years and the informal sector may have absorbed some of the job losses

from the other sectors.

**The Secondary Sector – Manufacturing** - The manufacturing sector comprised R1.305 billion (or 22.3 per cent) of the Municipality's GDP in 2015, making it the second largest sector in the Saldanha Bay region. The sector has experienced moderate growth of 1.25 per cent per annum on average over the period 2010 – 2015, and fared slightly better over the long term with growth averaging 1.49 per cent per annum since 2005. GDP growth in the manufacturing sector is consistently below the long term overall GDP trend for the region as the sector struggles to fully recover after the recession.

The manufacturing sector employed 10.65 per cent of the area's workforce (making it the 4th largest employer in Saldanha Bay). Employment growth has nevertheless remained constrained over the past decade with a contraction of 0.7 per cent recorded for the period 2005 – 2015. Approximately 778 jobs have been lost on net in Saldanha Bay's manufacturing industry since 2005.

A large number of workers employed in the manufacturing sector are classified as semi-skilled (39.6 per cent) and low-skilled (31.8 per cent). Semi-skilled employment within the manufacturing sector contracted over the last decade, whilst employment within the low-skilled sector contracted by 0.3 per cent per annum since 2005. Only 11.8 per cent of those employed in the manufacturing sector are categorised as skilled workers, and employment growth within this category has remained relatively stagnant since 2005. The informal sector makes up 16.8 per cent of the industry's workforce and experienced robust long term growth as employment grew by 7.2 per cent per annum over the period 2005 – 2015. Informal employment within the manufacturing industry furthermore experienced robust growth of 6.6 per cent per annum post-recession.

**Construction** - The construction sector comprised R 239.3 million (or 4.08 per cent) of the municipality's GDP in 2015. Construction has nevertheless been the fastest growing industry since 2005, with growth averaging 5.94 per cent per annum. GDP growth has nevertheless slowed since the recession and averaged 1.80 per cent over the period 2010 – 2015 as the sector struggles to fully recover after the recession.

The construction sector employed only 4.96 per cent of the area's workforce in 2015. Employment in the municipality's construction sector has grown by 2.4 per cent per annum since 2005. Approximately 209 jobs have been created on net since 2005, the majority of which were created over the period 2010 – 2015 (where employment growth averaged 1.2 per cent per annum).

The majority (42.4 per cent) of the workers employed in the construction industry operate within the informal sector. Employment growth within this sector has been consistently high since 2005. Low-skilled employment makes up 17.5 per cent and semi-skilled employment makes up 33.1 per cent of the workforce in the construction industry, and employment within both these sectors has contracted over the past decade (with employment contracting the fastest in the latter half of the decade). Workers employed in these sectors who have lost their jobs may have found employment in the informal sector. Skilled employment makes up only 7.1 per cent of the construction industry's workforce, and has grown at a moderate rate of 2.2 per cent per annum over the period 2005 – 2015 (with growth nevertheless stagnating in the post-recessionary period as employment in the sector struggles to recover).

**Commercial Services** - Commercial services encompass the wholesale & retail trade, catering & accommodation, transport, storage & communication and finance, insurance, real estate & business services industries. This sector comprised R2.404 billion (or 41.0 per cent) of the Municipality's GDP in 2015 (the largest sector in the region). The industry grew at a faster rate than the overall municipality over the period 2005 – 2015 (3.59 per cent compared to the municipal average of 2.95 per cent); growth tapered downward to 2.87 per cent per annum in the post-recessionary (which is above the municipal average over this period).

This sector employed 32.1 per cent of the areas workforce (making it the largest employer). Employment has shown consistent growth throughout the past decade recording a 3.4 per cent growth rate per annum on average. Employment growth dropped to 2.1 per cent per annum over the period 2010 – 2015 which is below the overall municipal employment growth in the post-recessionary period. On net, 4 027 jobs have been created within the commercial services industry

in Saldanha Bay since 2005.

More than a third (35.2 per cent) of the industry's workforce is classified as semi-skilled, while 18.6 per cent is classified as low-skilled and 15.5 per cent is classified as skilled. Employment within the skilled and low-skilled sectors grew at moderate rates of 2.1 per cent and 2.4 per cent per annum since 2005, whilst the semi-skilled sector experienced relatively slower rates of 0.8 per cent over the period 2005 – 2015. Low-skilled employment growth tapered down to 2.0 per cent in the post-recessionary period, whilst skilled employment increased marginally to 1.9 per cent per annum over this period (2010 – 2015). Informal employment within the Commercial services industry makes up a significant portion (30.6 per cent) of the industries workforce and has experienced robust growth of 10.8 per cent per annum since 2005, and lower (but still strong) growth of 4.5 per cent per annum over the last 5 years. The informal sector is responsible for the majority of the new jobs created in the industry.

**Government and Community, Social and Personal Services** - The general government & community, social and personal services is moderately sized (comprising only 16.1 per cent or R943.63 million of the municipality's overall GDP in 2015). The industry experienced GDP growth of 3.61 per cent over the period 2005 – 2015 (and a marginally decreased rate of 3.21 per cent per annum since 2010) making it the third largest contributor to the overall municipal GDP figure within Saldanha Bay.

The industry similarly employs a noteworthy share (20.27 per cent) of the area's workforce and its employment growth over the period 2005 – 2015 averaged 3.4 per cent per annum. Employment growth has slowed since the recession (to 2.8 per cent per annum over the period 2010 - 2015).

A large proportion (39.9 per cent) of the industry's formally employed workforce are classified as low-skilled, while 23.9 per cent fall within the semi-skilled and 24.9 per cent are classified as skilled. Employment in the skilled category grew at 3.0 per cent per annum over the period 2005 - 2015 overall, and has decelerated slightly since the recession (with growth averaging 2.5 per cent per annum over the period 2010 – 2015). Low-skilled employment grew at 2.8 per cent per annum since 2005, with growth tapering off at 2.2 per cent in the post-recessionary period. Semi-skilled employment similarly grew at a rate of 1.9 per cent per annum since 2005, with growth tapering off at 1.6 per cent per annum in the post-recessionary period. The informal sector employed only 11.2 per cent of the industries workforce, but grew at a rate of 17.6 per cent per annum over the period 2005 – 2015 (this growth nevertheless stemming from a small base).

## 10. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that if section 38 of the NHRA is applicable to your proposed development, you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Heritage Western Cape must be given an opportunity, together with the rest of the I&APs, to comment on any Pre-application BAR, a Draft BAR, and Revised BAR.

Section 38 of the NHRA states the following:

*"38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-*

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) the construction of a bridge or similar structure exceeding 50m in length;*
- (c) any development or other activity which will change the character of a site-*
  - (i) exceeding 5 000m<sup>2</sup> in extent; or*
  - (ii) involving three or more existing erven or subdivisions thereof; or*
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*
- (d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or*
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,*

*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".*

- (b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the NHRA, must also be investigated, assessed and evaluated. Section 3(2) states the following:
- "3(2) Without limiting the generality of subsection (1), the national estate may include—*
- (a) places, buildings, structures and equipment of cultural significance;*

- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—
  - (i) ancestral graves;
  - (ii) royal graves and graves of traditional leaders;
  - (iii) graves of victims of conflict;
  - (iv) graves of individuals designated by the Minister by notice in the Gazette;
  - (v) historical graves and cemeteries; and
  - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including—
  - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
  - (ii) objects to which oral traditions are attached or which are associated with living heritage;
  - (iii) ethnographic art and objects;
  - (iv) military objects;
  - (v) objects of decorative or fine art;
  - (vi) objects of scientific or technological interest; and
  - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)"

Is Section 38 of the NHRA applicable to the proposed development?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	<p>A Notice of Intent to Develop (NID) was submitted to HWC, as the proposed development will change the character of a site "(i) exceeding 5 000m<sup>2</sup> in extent". HWC has provided comment on the submitted HWC NID which states as follows:</p> <p>"You are hereby notified that, since there is no reason to believe that the proposed cemetery expansion will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.</p> <p>However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities, all works must be stopped immediately and Heritage Western Cape must be notified without delay."</p> <p>The RoD has been included in Appendix E of the BAR.</p>			
Will the development impact on any national estate referred to in Section 3(2) of the NHRA?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			
Will any building or structure older than 60 years be affected in any way?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			
Are there any signs of culturally or historically significant elements, as defined in section 2 of the NHRA, including Archaeological or paleontological sites, on or close (within 20m) to the site?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			

**Note:** If uncertain, the Department may request that specialist input be provided **and** Heritage Western Cape must provide comment on this aspect of the proposal. (Please note that a copy of the comments obtained from the Heritage Resources Authority must be appended to this report as Appendix E1).

## 11. APPLICABLE LEGISLATION, POLICIES, CIRCULARS AND/OR GUIDELINES

- (a) Identify all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to the development proposal and associated listed activity(ies) being applied for and that have been considered in the preparation of the BAR.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	ADMINISTERING AUTHORITY and how it is relevant to this application	TYPE Permit/license/authorisation/comment / relevant consideration (e.g. rezoning or consent use, building plan approval, Water Use License and/or General Authorisation, License in terms of the SAHRA and CARA, coastal discharge permit, etc.)	DATE (if already obtained):
National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	Environmental Authorisation Application	N/A
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA]	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Environmental Management: Air Quality Act, 39 of 2004 [NEMAQA] and Relevant Regulations	Western Cape Department of Environmental Affairs and Development Planning	N/A	N/A
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Department of Water Affairs	N/A	N/A
Conservation of Agricultural Resources Act, 43 of 1983 [CARA]	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	N/A	N/A
National Health Act, 61 of 2003 [NHA] <b>Regulations Relating To The Management Of Human Remains</b>		Development of a cemetery.	N/A
Constitution of the Republic of South Africa, 1996 [CRSA]		General application of individual rights of all on and adjacent to the site	N/A
Fencing Act, 31 of 1963 [FA]		N/A	N/A
National Building Regulations and Building Standards Act 103 of 1977 [NBRBSA] and relevant regulations		N/A	N/A
National Heritage Resources Act 25 of 1999 [NHRA]	Heritage Western Cape South African Heritage Resource Agency	NID	RoD Received
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		N/A	N/A
Fertilizers, Farm Feeds, Agricultural Remedies And	National Department of Agriculture, forestry and	N/A	N/A



Stock Remedies Act, 36 Of 1947 [FFARSRA] and Relevant Regulations	Fisheries Western Cape Department of Agriculture		
Western Cape Noise Control Regulations [P.N. 200/2003]		Construction and operation of the cemetery must comply with the requirements of these regulations.	NA
Section 42 of Spatial Planning and Land Use Management Act (16 of 2013) ("SPLUMA")	Saldanha Bay Municipality	Rezoning application	N/A
Western Cape Land Use Planning Act, 2014 ("LUPA")	Saldanha Bay Municipality	Rezoning application	N/A
Saldanha Bay Municipality: Cemeteries and Crematoria By-Laws	Saldanha Bay Municipality	Development of a cemetery	N/A

POLICY/ GUIDELINES/BY-LAWS	ADMINISTERING AUTHORITY
EADP 0028/2014 One Environmental Management System	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Need and desirability	The Department of Environmental Affairs (first version published in terms of section 24J of the NEMA in 2014 and second version in 2017)
Guideline for Environmental Management Plans (EMP's)	Western Cape Department of Environmental Affairs and Development Planning
Guideline of Specialist Reports	Western Cape Department of Environmental Affairs and Development Planning
Western Cape Biodiversity Spatial Plan Handbook 2017	CapeNature Western Cape Department of Environmental Affairs and Development Planning

(b) Describe how the proposed development **complies with and responds** to the legislation and policy context, plans, guidelines, spatial tools, municipal development planning frameworks and instruments.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	Describe how the proposed development complies with and responds:
NEMA	Various general activities, including but not limited to, the control of emergency incidents and the care and remediation of environmental damage.
NEMWA	All waste management activities to be conducted during the development and operational phases of the project to adhere to the requirements of the act and its applicable regulations.
NEMBA	The management and conservation of biological diversity and the sustainable use of indigenous biological resources.
NEMAQA	Activities that may affect the air quality on site and the environment surrounding it.
NWA	Impacts and pollution to ground and surface water.
CARA	Weeds and the tolerance thereof.
National Health Act [Regulations Relating To The Management Of Human Remains]	Development and operation of a cemetery.
Constitution of the RSA	General application to individual rights of all on and adjacent to the sites.
Fencing Act	The erection and maintenance of fences.
National Building Regulations and Building	The erection of new buildings.

Standards Act	
NHRA	Development of the site and dealing with graves and burial sites and any structures older than 60 years.
NVFFA	Any activities that could result in the start of veld fires.
FFFARSRA	Activities associated with pest control and the use of agricultural remedies.
Guideline on Public Participation	The public participation guideline is used to determine the requirements in terms of implementing the public participation process during the basic assessment process to be conducted. The guideline was also used to determine the most effective communication strategies for public participation.
Guidelines on Alternatives	The guidelines for alternatives assessment was used to develop a methodology for alternatives assessment. This methodology was applied to determine and assess the most viable alternatives to the project. The assessment was undertaken against the baseline environment (i.e. the no-go option).
Guideline on Need and desirability	The guideline was taken into account to determine whether the project complied according to the concept of Best Practicable Environmental Option as well as environmental and social sustainability.
Guideline for EMP's	The guideline for EMP's was taken into account to determine the most effective minimize, mitigation and management measures to minimise or prevent the potential environmental impacts identified during the basic assessment process
EADP 0028/2014 One Environmental Management System	The guideline was used to ensure that a holistic approach to the EIA process is followed.
Western Cape Biodiversity Spatial Plan Handbook 2017	The handbook and the guidelines used therein have been considered in determining the relative environmental/biodiversity impact as a result of the proposed activities associated with the proposal.
Saldanha Bay Municipality: Cemeteries and Crematoria By-Laws	Development and operation of a cemetery.

**Note:** Copies of any comments, permit(s) or licences received from any other Organ of State must be attached to this report as **Appendix E**.

## Section C: PUBLIC PARTICIPATION

The PPP must fulfil the requirements outlined in the NEMA, the EIA Regulations, 2014 (as amended) and if applicable, the NEM: WA and/or the NEM: AQA. This Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must also be taken into account.

- Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was an exemption applied for.

In terms of Regulation 41 of the EIA Regulations, 2014 (as amended) -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates, is or is to be undertaken; and	YES	EXEMPTION	
(ii) any alternative site	YES	EXEMPTION	N/A
(b) giving written notice, in any manner provided for in Section 47D of the NEMA, to -			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	N/A
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	EXEMPTION	

(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	EXEMPTION	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	EXEMPTION	
(vi) any other party as required by the Department;	YES	EXEMPTION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	EXEMPTION	
(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	EXEMPTION	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	YES	EXEMPTION	N/A
(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	YES	EXEMPTION	N/A
<b>If you have indicated that "EXEMPTION" is applicable to any of the above, proof of the exemption decision must be appended to this report.</b>			
Please note that for the NEM: WA and NEM: AQA, a notice must be placed in at least two newspapers circulating in the area where the activity applied for is proposed.			
If applicable, has/will an advertisement be placed in at least two newspapers?	YES	NO	
If "NO", then proof of the exemption decision must be appended to this report. <b>NA</b>			

2. Provide a list of all the State Departments and Organs of State that were consulted:

State Department / Organ of State	Date request was sent:	Date comment received:	Support / not in support
DEA&DP: Development Management <b>(Competent Authority)</b>	-	-	-
CapeNature	-	-	-
DEA&DP: Pollution and Chemicals Management	-	-	-
DEA&DP: Waste Management	-	-	-
Department of Agriculture, National Department	-	-	-
Department of Agriculture, Western Cape (provincial)	-	-	-
Department of Water and Sanitation	-	-	-
Heritage Western Cape	-	-	-
Saldanha Bay Municipality	-	-	-
West Coast District Municipality	-	-	-
Western Cape Department of Health	-	-	-

3. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated, or the reasons for not including them.  
(The detailed outcomes of this process, including copies of the supporting documents and inputs must be included in a Comments and Response Report to be attached to the BAR (see note below) as **Appendix F**).

Await Comment.

4. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.

Await Comment.

**Note:**

Even if pre-application public participation is undertaken as allowed for by Regulation 40(3), it must be undertaken in accordance with the requirements set out in Regulations 3(3), 3(4), 3(8), 7(2), 7(5), 19, 40, 41, 42, 43 and 44.

If the "exemption" option is selected above and no proof of the exemption decision is attached to this BAR, the application will be refused.

A list of all the potential I&APs, including the Organs of State, notified and a list of all the registered I&APs must be submitted with the BAR. The list of registered I&APs must be opened, maintained and made available to any person requesting access to the register in writing.

The BAR must be submitted to the Department when being made available to I&APs, including the relevant Organs of State and State Departments which have jurisdiction with regard to any aspect of the activity, for a commenting period of at least 30 days. Unless agreement to the contrary has been reached between the Competent Authority and the EAP, the EAP will be responsible for the consultation with the relevant State Departments in terms of Section 24O and Regulation 7(2) – which consultation must happen simultaneously with the consultation with the I&APs and other Organs of State.

All the comments received from I&APs on the BAR must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** of the BAR. If necessary, any amendments made in response to comments received must be effected in the BAR itself. The Comments and Responses Report must also include a description of the PPP followed.

The minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded, must also be submitted as part of the public participation information to be attached to the final BAR as **Appendix F**.

Proof of all the notices given as indicated, as well as notice to I&APs of the availability of the Pre-Application BAR (if applicable), Draft BAR, and Revised BAR (if applicable) must be submitted as part of the public participation information to be attached to the BAR as **Appendix F**. In terms of the required “proof” the following must be submitted to the Department:

- a site map showing where the site notice was displayed, a dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a “mail drop” was done, a signed register of “mail drops” received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement (“newspaper clipping”) that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

## SECTION D: NEED AND DESIRABILITY

**Note:** Before completing this section, first consult this Department’s Circular EADP 0028/2014 (dated 9 December 2014) on the “One Environmental Management System” and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department’s website: <http://www.westerncape.gov.za/eadp>. In this regard, it must be noted that the *Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010* published by the national Department of Environmental Affairs on 20 October 2014 (GN No. 891 on Government Gazette No. 38108 refers) (available at: [http://www.gov.za/sites/www.gov.za/files/38108\\_891.pdf](http://www.gov.za/sites/www.gov.za/files/38108_891.pdf)) also applied to EIAs in terms of the EIA Regulations, 2014 (as amended).

1. Is the development permitted in terms of the property’s existing land use rights?	YES	NO	Please explain
The property is zoned as Agriculture 1, and the proposed development site shows evidence of being strip ploughed in excess of 10 years ago for agricultural purposes. The proposed development site is also categorised as natural grazing as per the 2013 Crop Census (as referenced in section A part 5 above).			
A rezoning application would be required.			
2. Will the development be in line with the following?			
(a) Provincial Spatial Development Framework (“PSDF”).	YES	NO	Please explain
The expansion of the central cemetery is in line with the objectives manifested in the approved Western Cape Provincial SDF.			
(b) Urban edge / edge of <b>built environment</b> for the area.	YES	NO	Please explain
The existing cemetery is located outside of the built environment as such the expansion is similarly located outside of the built environment.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal <b>IDP and SDF</b> ?).	YES	NO	Please explain
The expansion of the central cemetery is in line with the approved Saldanha Bay SDF and IDP.			
(d) An Environmental Management Framework (“EMF”) adopted by this Department. (e.g., Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO	Please explain

No EMF adopted for the area.			
(e) Any <b>other</b> Plans (e.g., Integrated Waste Management Plan (for waste management activities), etc.)).	YES	NO	Please explain
Not applicable for this application.			
3. Is the land use (associated with the project being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (in other words, is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain
The expansion of the central cemetery is in line with the 2011 approved Saldanha Bay SDF and IDP. The expansion is also in line with the 2017 Conceptual municipal SDF (in draft form awaiting approval).			
4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur on the proposed site at this point in time?	YES	NO	Please explain
The expansion of the central cemetery is in line with the 2011 approved Saldanha Bay SDF and IDP. The expansion is also in line with the 2017 Conceptual municipal SDF (in draft form awaiting approval).			
5. Does the community/area need the project and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g., development is a National Priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
According to the 2011 approved municipal SDF the existing cemeteries would have sufficient capacity for the next 5 years (until 2016). The expansion of the central cemetery is in line with the 2011 approved Saldanha Bay SDF and IDP. The expansion is also in line with the 2017 Conceptual municipal SDF (in draft form awaiting approval).			
6. Are the necessary <b>services</b> available together with adequate unallocated municipal capacity (at the time of application), or must additional capacity be created to cater for the project? (Confirmation by the relevant municipality in this regard must be attached to the BAR as <b>Appendix E</b> .)	YES	NO	Please explain
Water, electricity and sanitation services should it be required will be provided by the Municipality.			
7. Is this project provided for in the <b>infrastructure planning</b> of the municipality and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant municipality in this regard must be attached to the BAR as <b>Appendix E</b> .)	YES	NO	Please explain
The expansion of the central cemetery is in line with the 2011 approved Saldanha Bay SDF and IDP. The expansion is also in line with the 2017 Conceptual municipal SDF (in draft form awaiting approval).			
8. Is this project part of a <b>national programme</b> to address an issue of national concern or importance?	YES	NO	Please explain
The provision of space for burial purposes is a function of the Municipality and the Municipality is mandated by provincial and consequently National to fulfil the functions that they are mandated to provide.			
9. Do location factors favour this land use (associated with the development proposal and associated listed activity(ies) applied for) at this place? (This relates to the contextualisation of the proposed land use on the proposed site within its broader context.)	YES	NO	Please explain
The application is for the expansion of the existing cemetery. The proposed development area for the expansion is the obvious option for the activity.			
10. Will the development proposal or the land use associated with the development proposal applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	NO	Please explain
No sensitive natural and cultural areas will be significantly impacted upon by the proposed development.			
11. Will the development impact on people's health and well-being (e.g., in terms of noise, odours, visual character and 'sense of place', etc.)?	YES	NO	Please explain
The proposed development is for the expansion of the existing cemetery and will therefore blend-in well with the existing aesthetic of the area.			
12. Will the proposed development or the land use associated with the proposed development applied for, result in unacceptable opportunity costs?	YES	NO	Please explain
The proposed development area is privately owned land which the Municipality must negotiate terms of occupation / ownership of the proposed development prior to proceeding with the proposed cemetery expansion. The land owner would be able to negotiate terms so that it does not result in unacceptable opportunity costs.			
13. What will the <b>cumulative impacts</b> (positive and negative) of the proposed land use associated with the development proposal and associated listed activity(ies) applied for, be?			

**Negative impacts:**

Loss of unused agricultural land (natural grazing)

**Positive impacts:**

Provision of sufficient burial space for the community.

14. Is the development the <b>best practicable environmental option</b> for this land/site?	YES	NO	Please explain
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The development area is currently unused and degraded vegetated land that has been categorised as natural grazing. The development area has been strip ploughed more than 10 years ago and there are alien species scattered throughout the site. As such the area proposed for the cemetery is the best practicable environmental option for the expansion of the cemetery.

15. What will the benefits be to society in general and to the local communities?	Please explain
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Provision of sufficient burial space for the communities surrounding the cemetery. The expansion will provide more capacity in a cemetery that is centrally located in the Saldanha Bay Municipality that is accessible to may of the towns in the jurisdiction.

16. Any <b>other</b> need and desirability considerations related to the proposed development?	Please explain
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NA

17. Describe how the <b>general objectives of Integrated Environmental Management</b> as set out in Section 23 of the NEMA have been taken into account:
--

- The general principles as set out in Section 2 of NEMA are implemented as described below in 18.
- The potential impacts for both the construction and the operational phase have been identified in this report – this allows for the appropriate management and mitigation measures to be identified and implemented where and when necessary to prevent environmental degradation and promote sustainability.
- All decisions during the planning and assessment by all involved for the activity promote the integration of the principles of environmental management set out in Section 2 to minimize and mitigate any significant effect on the environment. All these mitigations and management measures were included as proposed EA conditions and included in the EMP.
- All involved in the planning and design identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage. The risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in Section 2 were taken in consideration and used in the assessments, mitigations and recommendations throughout this report.
- Adequate and appropriate opportunity for public participation was provided and included in Appendix F as per the guidelines and regulations in decisions that may affect the environment. The consideration of environmental attributes in management and decision making which may have a significant effect on the environment was ensured. The modes of environmental management best suited to ensure that a particular activity is pursued in accordance with the principles of environmental management set out in Section 2, was identified and employed. Refer to section below.

18 Describe how the <b>principles of environmental management</b> as set out in Section 2 of the NEMA have been taken into account:
---

A full public participation as described in the legislation and guidelines will be/ is followed. The proposed development will not have a significant impact on biodiversity. The proposed development is situated within an existing urban edge and will not disturb the landscape and sites that constitute the nation's cultural heritage. The proposed development will not exceed or exploit renewable resource to an extent that they reach a level beyond which their integrity is jeopardised. The proposed development will not have a significant environmental impact and it is recommended that the Environmental Management Programme be adhered to accordingly.

## SECTION E: DETAILS OF ALL THE ALTERNATIVES CONSIDERED

**Note:** Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website <http://www.westerncape.gov.za/eadp>.

The EIA Regulations, 2014 (as amended) defines "alternatives" as "in relation to a proposed activity, means different means of fulfilling the general purpose and requirements of the activity, which may include alternatives to the—

(a) property on which or location where the activity is proposed to be undertaken;

(b) type of activity to be undertaken;

(c) design or layout of the activity;

(d) technology to be used in the activity; or

(e) operational aspects of the activity;

(f) and includes the option of not implementing the activity;"

The NEMA (section 24(4)(a) and (b) of the NEMA, refers) prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in the NEMA and the National Environmental Management Principles set out in the NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management (section 23 of NEMA, refers) is, *inter alia*, to "identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management" set out in the NEMA.

The identification, evaluation, consideration and comparative assessment of alternatives directly relate to the management of impacts. Related to every identified impact, alternatives, modifications or changes to the activity must be identified, evaluated, considered and comparatively considered to:

- in terms of negative impacts, firstly avoid a negative impact altogether, or if avoidance is not possible alternatives to better mitigate, manage and remediate a negative impact and to compensate for/offset any impacts that remain after mitigation and remediation; and
- in terms of positive impacts, maximise impacts.

### 1. DETAILS OF THE IDENTIFIED AND CONSIDERED ALTERNATIVES AND INDICATE THOSE ALTERNATIVES THAT WERE FOUND TO BE FEASIBLE AND REASONABLE

**Note:** A full description of the investigation of alternatives must be provided and motivation if no reasonable or feasible alternatives exists.

(a) Property and **location/site** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The proposal is for the **EXPANSION** of an existing cemetery.

Looking at the existing cemetery and the viable property or developable areas surrounding the existing cemetery the proposed development area appears to be the most reasonable and feasible locality based on the following reasons:

- North of the existing cemetery is private property on which only half of the available farm is categorised as Critical Biodiversity.
- West of the existing cemetery is private land with critical terrestrial biodiversity as well as sensitive aquatic features which is not a recommended developable area for the establishment of a cemetery.
- East of the existing cemetery is privately owned agricultural land that appears to have been strip ploughed and cultivated less than 10 years ago.
- South of the existing cemetery is the proposed development area which does not have any sensitive environmental features and appears to have been strip ploughed more than 10 years ago. It is therefore not actively being used for agricultural activities.

As such the area proposed for the cemetery expansion is the best practicable option.

- (b) **Activity** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The proposal is for the **EXPANSION** of an existing cemetery.

- (c) **Design or layout** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The proposal is for the **EXPANSION** of an existing cemetery.

The design and layout of the expansion area will be determined once the geotechnical assessment has been concluded and the report has been received.

- (d) **Technology** alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The proposal is for the **EXPANSION** of an existing cemetery.

Technology alternatives should there be any would be discussed once a layout has been drafted by the engineers.

- (e) **Operational** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The proposal is for the **EXPANSION** of an existing cemetery.

The cemetery will be operated as per the requirements of the National Health Act, 61 of 2003: Regulations Relating to the Management of Human Remains as well as the Saldanha Bay Municipality: Cemeteries and Crematoria By-Laws.

- (f) The option of **not implementing** the activity (the 'No-Go' Option):

The property would remain as it currently is - privately owned agricultural land categorised as natural grazing.

The communities within the Saldanha Bay area would also not have sufficient burial capacity within the region to accommodate the ever expanding towns within the region.

- (g) **Other** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Not Applicable.

- (h) Provide a **summary** of all alternatives investigated and the outcome of each investigation:

The proposal is for the **EXPANSION** of an existing cemetery.

No other reasonably practicable or feasible options exist in order to ensure that the Saldanha Bay region has sufficient burial capacity than to expand its existing cemeteries. No other favourable or feasible location alternative exists.

- (i) Provide a detailed **motivation for not further considering** the alternatives that were found not feasible and reasonable, including a description and proof of the investigation of those alternatives:

The proposal is for the **EXPANSION** of an existing cemetery.

No other reasonably practicable or feasible options exist in order to ensure that the Saldanha Bay region has sufficient burial capacity than to expand its existing cemeteries. No other favourable or feasible location alternative exists.



## 2. PREFERRED ALTERNATIVE

- (a) Provide a **concluding statement** indicating the preferred alternative(s), including preferred location, site, activity and technology for the development.

The proposal is for the **EXPANSION** of an existing cemetery.

No other reasonably practicable or feasible options exist in order to ensure that the Saldanha Bay region has sufficient burial capacity than to expand its existing cemeteries. No other favourable or feasible location alternative exists.

## SECTION F: ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE ALTERNATIVES

**Note:** The information in this section must be DUPLICATED for all the feasible and reasonable ALTERNATIVES.

### 1. DESCRIBE THE ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT AND ITS ALTERNATIVES, FOCUSING ON THE FOLLOWING:

- (a) Geographical, geological and physical aspects:

The cemetery expansion is proposed on the north eastern portion of Farm RE/957 located adjacent to the existing cemetery. The portion identified for the expansion shows evidence of being ploughed more than 10 years ago and the indigenous vegetation on the site shows evidence on degradation. According to the Crop Census 2013\* the proposed development area is categorised as natural grazing.

The rest of Farm RE/957 is predominantly used for agriculture with a small portion of natural vegetation remaining in the north western corner of the property.

Potential contamination of groundwater is always a concern for any cemetery development. However, the proposed action will not have a significant adverse cumulative effect on topography, slopes, soils and groundwater resources, if operational and construction mitigation measures are implemented.

The landscape is to be surveyed through the geotechnical investigation which will inform the layout to ensure that designed according to such parameters.

- (b) Ecological aspects:

Will the proposed development and its alternatives have an impact on CBAs or ESAs? If yes, please explain: Also include a description of how the proposed development will influence the quantitative values (hectares/percentage) of the categories on the CBA/ESA map.	YES	NO
Not Applicable.		
Will the proposed development and its alternatives have an impact on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)? If yes, please explain:	YES	NO
Not Applicable.		
Will the proposed development and its alternatives have an impact on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species? If yes, please explain:	YES	NO
Not Applicable.		
Describe the manner in which any other biological aspects will be impacted:		
The proposal entails the clearance of 18.9ha of indigenous vegetation on the development area. The development area shows evidence that it has been strip ploughed more than 10 years ago and that it is scattered throughout with alien vegetation. The proposed development will lead to the loss of indigenous vegetation on the development site. It will also lead to the loss of agricultural land categorised as natural grazing.		
Will the proposed development also trigger section 63 of the NEM: ICMA?	YES	NO
If yes, describe the following: (i) the extent to which the applicant has in the past complied with similar authorisations; (ii) whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent		

<p>to which the proposed development proposal or listed activity is consistent with the purpose for establishing and protecting those areas;</p> <p>(iii) the estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area;</p> <p>(iv) the likely socio-economic impact if the listed activity is authorised or is not authorised;</p> <p>(v) the likely impact of coastal environmental processes on the proposed development;</p> <p>(vi) whether the development proposal or listed activity—</p> <p>(a) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations;</p> <p>(b) is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17 of NEM: ICMA;</p> <p>(c) is situated within coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18 of NEM: ICMA;</p> <p>(d) is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot satisfactorily be mitigated;</p> <p>(e) is likely to be significantly damaged or prejudiced by dynamic coastal processes;</p> <p>(f) would substantially prejudice the achievement of any coastal management objective; or</p> <p>(g) would be contrary to the interests of the whole community;</p> <p>(vii) whether the very nature of the proposed activity or development requires it to be located within coastal public property, the coastal protection zone or coastal access land;</p> <p>(viii) whether the proposed development will provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area; and</p> <p>(ix) the objects of NEM: ICMA, where applicable.</p>
Not Applicable.

(c) Social and Economic aspects:

What is the expected capital value of the project on completion?	UNKNOWN
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	UNKNOWN
Will the project contribute to service infrastructure?	YES NO
Is the project a public amenity?	YES NO
How many new employment opportunities will be created during the development phase?	UNKNOWN
What is the expected value of the employment opportunities during the development phase?	UNKNOWN
What percentage of this will accrue to previously disadvantaged individuals?	-%
How will this be ensured and monitored (please explain):	
A participation goal would be included in the contract to force the contractor to use previously disadvantaged individuals. This would be monitored and the contractor would be penalised should he not comply.	
How many permanent new employment opportunities will be created during the operational phase of the project?	UNKNOWN
What is the expected current value of the employment opportunities during the first 10 years?	NA
What percentage of this will accrue to previously disadvantaged individuals?	NA
How will this be ensured and monitored (please explain):	
-	
Any other information related to the manner in which the socio-economic aspects will be impacted:	
NA	

(d) Heritage and Cultural aspects:

<p>A Notice of Intent to Develop (NID) was submitted to HWC, as the proposed development will change the character of a site "(i) exceeding 5 000m2 in extent". HWC has provided comment on the submitted HWC NID which states as follows:</p> <p>"You are hereby notified that, since there is no reason to believe that the proposed cemetery expansion will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.</p> <p>However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities, all works must be stopped immediately and Heritage Western Cape must be notified without delay."</p> <p>The RoD has been included in Appendix E of the BAR.</p>
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## 2. WASTE AND EMISSIONS

### (a) Waste (including effluent) management

Will the development proposal produce waste (including rubble) during the development phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	Builders waste Volumes Approximately 500 kg	
All non-recyclable waste will be removed from site to a licensed landfill site. Waste that can be recycled will be where possible.		

Will the development proposal produce waste during its operational phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	NA m <sup>3</sup>	

Will the development proposal require waste to be treated / disposed of on site?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	NA m <sup>3</sup>	

If no, where and how will the waste be treated / disposed of? Please explain. Indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	Builders waste Volumes Approximately 500 kg	
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All non-recyclable waste will be removed from site to a licensed landfill site. Waste that can be recycled will be where possible. During the construction phase waste will be removed to the municipal landfill site.

Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal?  
If yes, provide written confirmation from the municipality or relevant authority.

YES NO

Will the development proposal produce waste that will be treated and/or disposed of at another facility other than into a municipal waste stream?

YES NO

If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal?  
Provide written confirmation from the facility.

YES NO

Does the facility have an operating license? (If yes, please attach a copy of the licence.)

YES NO

Facility name:

Contact person:

Cell:

Postal address:

Telephone:

Postal code:

Fax:

E-mail:

Describe the measures that will be taken to reduce, reuse or recycle waste:

- Soil removed during construction will be reused for infilling as required.
- All non-recyclable waste will be removed from site to a licensed landfill site.
- Waste that can be recycled will be where possible.

### (b) Emissions into the atmosphere

Will the development proposal produce emissions that will be released into the atmosphere?	YES	NO
If yes, does this require approval in terms of relevant legislation?	YES	NO
If yes, what is the approximate volume(s) of emissions released into the atmosphere?	m <sup>3</sup>	
Describe the emissions in terms of type and concentration and how these will be avoided/managed/treated/mitigated:		
Not Applicable.		

### 3. WATER USE

(a) Indicate the source(s) of water for the development proposal by highlighting the appropriate box(es).

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	The project will not use water
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**Note:** Provide proof of assurance of water supply (e.g. Letter of confirmation from the municipality / water user associations, yield of borehole)

(b) If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	NA	m <sup>3</sup>
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(c) Does the development proposal require a water use permit / license from DWS? If yes, please submit the necessary application to the DWS and attach proof thereof to this application as an Appendix.	YES	NO
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(d) Describe the measures that will be taken to reduce water demand, and measures to reuse or recycle water:  The Western Cape is a water scarce province; as such the use of water should be in strict compliance with the water restriction applicable to the region. Water saving initiatives such as the use of non-potable water for construction should be implemented.
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### 4. POWER SUPPLY

(a) Describe the source of power e.g. municipality / Eskom / renewable energy source.

If required – from the Swartland Municipality.
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(b) If power supply is not available, where will power be sourced?

NA
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### 5. ENERGY EFFICIENCY

(a) Describe the design measures, if any, that have been taken to ensure that the development proposal will be energy efficient:

NA
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(b) Describe how alternative energy sources have been taken into account or been built into the design of the project, if any:

NA
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### 6. TRANSPORT, TRAFFIC AND ACCESS

Describe the impacts in terms of transport, traffic and access.

An existing access road is located between the existing cemetery and the proposed development site.  Traffic and transport should be similar to the existing traffic impacts associated with the existing cemetery. It is not foreseen that the expansion will result in additional traffic to the area.
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### 7. NUISANCE FACTOR (NOISE, ODOUR, etc.)

Describe the potential nuisance factor or impacts in terms of noise and odours.

Noise will be generated during the construction of the cemetery - this is noise generally associated with construction activities and will be temporary for the duration of construction.  Noise during the operational phase - this would be noise associated with funeral services which is
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generally considered as low as any noise generated to be in terms of the applicable local and provincial legislation governing noise and nuisance.

**Note:** Include impacts that the surrounding environment will have on the proposed development.

## 8. OTHER

NA

## SECTION G: IMPACT ASSESSMENT, IMPACT AVOIDANCE, MANAGEMENT, MITIGATION AND MONITORING MEASURES

### 1. METHODOLOGY USED IN DETERMINING AND RANKING ENVIRONMENTAL IMPACTS AND RISKS ASSOCIATED WITH THE ALTERNATIVES

- (a) Describe the **methodology** used in determining and ranking the nature, significance consequences, extent, duration and probability of potential environmental impacts and risks associated with the proposed development and alternatives.

The assessment criteria were developed based on the Department of Environmental Affairs' Integrated Environmental Management Series guideline documents.

Criteria	Description		
<b>Nature</b>	A description of what causes the effect, what will be affected, and how it will be affected.		
	<b>Type</b>	<b>Score</b>	<b>Description</b>
<b>Extent (E)</b>	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site
	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
<b>Duration (D)</b>	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent (P)	5	Will not cease
<b>Magnitude (M)</b>	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way
	High (H)	8	processes are altered to the extent that they temporarily cease
	Very high (VH)	10	Results in complete destruction of patterns and permanent cessation of processes.
<b>Probability (P)</b> The likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
<b>Significance (S)</b>	Determined through a synthesis of the characteristics described above: <b>S = (E+D+M) x P</b> Significance can be assessed as low, medium or high		

<b>Low: &lt; 30 points:</b>	The impact would not have a direct influence on the decision to develop in the area		
<b>Medium: 30 – 60 points:</b>	The impact could influence the decision to develop in the area unless it is effectively mitigated		
<b>High: &gt; 60 points:</b>	The impact must have an influence on the decision process to develop in the area		
<b>No significance</b>	When no impact will occur or the impact will not affect the environment		
<b>Status</b>	Positive (+)		Negative (-)
<b>The degree to which the impact can be reversed</b>	Completely reversible (R)	90-100%	The impact can be mostly to completely reverse with the implementation of the correct mitigation and rehabilitation measures.
	Partly reversible (PR)	6-89%	The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
<b>The degree to which the impact may cause irreplaceable loss of resources</b>	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
<b>The degree to which the impact can be mitigated</b>	Completely mitigatable (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatable (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide a measure of mitigatability
	Un-mitigatable (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

(b) Please describe any gaps in knowledge.

EAP is only knowledgeable with regards to the environmental impacts, biodiversity and ecosystems aspects.

(c) Please describe the underlying assumptions.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

(d) Please describe the uncertainties.

None at this stage.

(e) Describe adequacy of the assessment methods used.

Based on the EAP's assessment information was provided to address the concerns and assess the impacts of the proposed development on the environment. Information as provided by the applicant and as collected by the EAP during site surveys etc. has been used to inform the current development proposals.

**2. IDENTIFICATION, ASSESSMENT AND RANKING OF IMPACTS TO REACH THE PROPOSED ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE WITHIN THE SITE**

**Note:** In this section the focus is on the identified issues, impacts and risks that influenced the identification of the alternatives. This includes how aspects of the receiving environment have influenced the selection.

(a) List the identified impacts and risks for each alternative.

Alternative 1:	<p><b><u>GEOGRAPHICAL AND PHYSICAL</u></b></p> <ul style="list-style-type: none"> <li>• Ground water contamination</li> <li>• Soil contamination</li> <li>• Compaction of soil</li> <li>• Increased Stormwater run-off</li> </ul> <p><b><u>ECOLOGICAL AND BIOLOGICAL</u></b></p> <ul style="list-style-type: none"> <li>• Loss of indigenous vegetation</li> </ul> <p><b><u>SOCIO-ECONOMIC</u></b></p> <ul style="list-style-type: none"> <li>• Traffic impacts</li> <li>• Noise</li> </ul> <p><b><u>HERITAGE AND CULTURAL HISTORIC</u></b></p> <ul style="list-style-type: none"> <li>• Cultural-Historical Impacts</li> <li>• Visual Impacts</li> </ul>
No-go Alternative:	The No-Go option will result in the site remaining as is presently.

(b) Describe the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated.

The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. (The EAP has to select the relevant impacts identified in blue in the table below for each alternative and repeat the table for each impact and risk).

**Impact Tables have been included in APPENDIX J of the BAR.**

**Note:** The EAP may decide to include this section as Appendix J to the BAR.

(c) Provide a summary of the site selection matrix.

No site selection matrix was undertaken. No site alternatives have been proposed for this project as the purpose of this application is for the expansion of the existing cemetery.

(d) Outcome of the site selection matrix.

Not Applicable.

### 3. SPECIALIST INPUTS/STUDIES, FINDINGS AND RECOMMENDATIONS

**Note:** Specialist inputs/studies must be attached to this report as **Appendix G** and must comply with the content requirements set out in Appendix 6 of the EIA Regulations, 2014 (as amended). Also take into account the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014, any subsequent Circulars, and guidelines available on the Department's website (<http://www.westerncape.gov.za/eadp>).

Provide a summary of the findings and impact management measures identified in any specialist report and an indication of how these findings and recommendations have been included in the BAR.

#### **Ecological Baseline Assessment**

#### **Eco Impact Legal Consulting - June 2018**

Summary of recommendations as listed in the report and additional recommendations to be implemented are listed below:

#### **Construction, Operational and Rehabilitation phases -**

- The project implementation process should be subject to standard Environmental Management Programme (EMP) prescripts and conditions and only proceed under supervision of a competent and diligent Environmental Control Officer, both during the construction, operational and decommission/rehabilitation phases.
- Undertake development activities only in identified and specifically demarcated areas as proposed.
- Demarcate no-go areas before any land clearing occurs under the supervision of an ECO. Demarcation must be clearly visible and effective and no-go area must remain demarcated throughout construction phase.
- Personnel should be restricted to the construction camp site and immediate construction areas only.
- Remove and conserve topsoil layer and overburden material for rehabilitation after construction activities have ceased
- Implement site specific erosion and storm water runoff management measures as according to EMP requirements to prevent (or if prevention is not possible limit) any erosion from occurring on the development footprint area and surrounds.
- Proper waste bins to be provided during construction and operation and all waste to be regularly (at least once a week) removed to municipal landfill site.
- If any fuel or hazardous materials is spilled on site it must be treated as according to EMP requirements.
- The cement mixing area must be within a demarcated area and no cement mix runoff water escapes from cement mixing area.
- The landowner/s must adhere to his/her legal obligations to actively eradicate and manage alien tree infestations present on the applicable and surrounding properties.
- Site specific construction and operational phase storm water management plan must be compiled and implemented to prevent any erosion or significant increase in storm water runoff from occurring.
- Should any signs of erosion or artificial recharge be observed the municipality must implemented rectification and preventions measures immediately and consult with the appointed ECO before implementing these measures.
- Only use vegetation indigenous to the area to rehabilitate impacted/decommissioned areas and implement ongoing monitoring of the rehabilitated areas until successful rehabilitation has taken place.
- After topsoil has been replaced ongoing monitoring and removal of alien vegetation regrowth must be conducted to ensure effective rehabilitation of indigenous vegetation.
- Decommissioned areas must be rehabilitated and planted with indigenous vegetation immediately after built structures have been removed.
- Monitor rehabilitation of areas impacted outside of the proposed development areas or decommissioned areas on a 6 monthly basis until effective/successful rehabilitation has been obtained.
- If erosion is detected during or after rehabilitation implement erosion rectification and preventions measures as guided by an ECO



Eco Impact is of the opinion, and based on the survey and desk study done, that the proposed development activities; if designed and implemented according to the recommendations as provided in this report, will not have an unacceptable significantly negative impact on the environmental aspects of the site and surrounds as assessed in this report.

**\*We await the Geotechnical Report from the appointed Engineer**

#### 4. ENVIRONMENTAL IMPACT STATEMENT

Provide an environmental impact statement of the following:

(i) A summary of the key findings of the EIA.

The assessment of these impacts before and after recommended mitigation is summarised in the table below. After mitigation, none of the impacts are assessed as being above LOW significance.

##### **Construction Phase:**

- Compaction of soil - (medium impact before and after mitigation);
- Increase in stormwater run-off - (low impact before and after mitigation);
- Loss of indigenous vegetation - (medium impact before and after mitigation);
- Traffic Impacts - (low impact before and after mitigation);
- Noise Impacts - (low impact before and after mitigation);
- Cultural-Historical Impacts - (low impact before and after mitigation);
- Visual Impacts - (low impact before and after mitigation);

##### **Operational Phase:**

- Groundwater resources - (high impact before mitigation and low impact with mitigation measures);
- Soil contamination - (high impact before mitigation and low impact with mitigation measures);
- Compaction of soil - (medium impact before and after mitigation);
- Increase in stormwater run-off (low impact before and after mitigation);
- Traffic Impacts - (low impact before and after mitigation);
- Noise Impacts - (low impact before and after mitigation);
- Cultural-Historical Impacts - (low impact before and after mitigation);
- Visual Impacts - (low impact before and after mitigation);

##### **Decommissioning Phase:**

Similar to impacts associated with construction phase.

(ii) Has a map of appropriate scale been provided, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers?	YES	NO
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(iii) A summary of the positive and negative impacts that the proposed development and alternatives will cause in the environment and community.

##### **Positive:**

- Provision of burial capacity for the Saldanha Bay Region

##### **Negative:**

- Loss of indigenous vegetation

#### 5. IMPACT MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Based on the assessment, describe the impact management, mitigation and monitoring measures as well as the impact management objectives and impact management outcomes included in the EMP. The EMP must be attached to this report as Appendix H.

The key mitigation measure is impact avoidance. Where adverse impacts cannot reasonably be prevented, construction and operations should be managed through the effective implementation of the EMP with a strong emphasis on post-construction rehabilitation and operational management and monitoring. Please refer to the EMP for more details on the mitigation and management measures.

(b) Describe any provisions for the adherence to requirements that are prescribed in a Specific Environmental Management Act relevant to the listed activity or specified activity in question.

None at this stage.

(c) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

The applicant is the operator of the existing cemetery and does have the financial means to implement the conditions of the EA together with the management, mitigation and management measures included in the EMPr.

(d) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

None at this stage.

(e) Describe any assumptions, uncertainties, and gaps in knowledge which relate to the impact management, mitigation and monitoring measures proposed.

EAP is only knowledgeable with regards to the environmental impacts, biodiversity and ecosystems aspects.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

## SECTION H: RECOMMENDATIONS OF THE EAP AND SPECIALISTS

(a) In my view as the appointed EAP, the information contained in this BAR and the documentation attached hereto is sufficient to make a decision in respect of the listed activity(ies) applied for.	YES	NO
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(b) If the documentation attached hereto is sufficient to make a decision, please indicate below whether, in your opinion, the listed activity(ies) should or should not be authorised:

Listed activity(ies) should be authorised:	YES	NO
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Provide reasons for your opinion

The proposed cemetery expansion area is located adjacent to the existing cemetery in an area with similar topography to that of the existing cemetery. The site is currently privately owned unused agricultural land categorised as natural grazing. The development areas shows evidence of being strip ploughed more than 10 years ago with alien species scattered throughout the site.

The expansion creates much needed burial space as the current cemetery is fast reaching capacity. Due to the important role that cemeteries play in a community, it is imperative that cemeteries should be located within an acceptable distance to the community it serves which is the case with the proposed expansion.

(c) Provide a description of any aspects that were conditional to the findings of the assessment by the EAP and Specialists which are to be included as conditions of authorisation.

Recommended that the EA prescribe that:

- Recommendations of specialists should be complied with.
- Should any heritage artefacts be exposed during construction that all activities be stopped, and Heritage Western Cape contacted pre any further action being permitted.
- The project implementation process should be subject to standard Environmental Management Programme prescripts and conditions under supervision of a competent and diligent ECO, during its construction and decommissioning phases.
- Groundwater Monitoring
  - Groundwater monitoring should be conducted at least once a year.
  - Groundwater monitoring must include but not limited to Heterotrophic Plate Count, Faecal coliforms, Faecal streptococci, Escherichia coli and staphylococcus aureus.

<ul style="list-style-type: none"> <li>Implementation of the on-site storm water system as well as the perimeter drains diverting surface water around the site.</li> </ul>	
(d) If you are of the opinion that the activity should be authorised, please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an environmental authorisation.	
Recommended that the EA prescribe that:	
<ul style="list-style-type: none"> <li>Should any heritage artefacts be exposed during construction that all activities be stopped, and Heritage Western Cape contacted pre any further action being permitted.</li> <li>The project implementation process should be subject to standard Environmental Management Programme prescripts and conditions under supervision of a competent and diligent ECO, during its construction and decommissioning phases. That the facility be audited on yearly bases by an external environmental auditor during operations.</li> </ul>	
(e) Please indicate the recommended periods in terms of the following periods that should be specified in the environmental authorisation:	
i. the period within which commencement must occur;	5 Years
ii. the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects;	10 Years
iii. the period for which the portion of the environmental authorisation that deals with non-operational aspects is granted; and	10 Years
iv. the period for which the portion of the environmental authorisation that deals with operational aspects is granted.	Unlimited

## SECTION I: APPENDICES

The following appendices must be attached to this report:

APPENDIX		Confirm that Appendix is attached
Appendix A:	Locality map	Yes
Appendix B:	Site development plan(s)	No
	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	Yes
Appendix C:	Photographs	Yes
Appendix D:	Biodiversity overlay map	Yes
Appendix E:	Permit(s) / license(s) from any other Organ of State, including service letters from the municipality.	No
	Appendix E1: Copy of comment from HWC.	Yes
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses report, proof of notices, advertisements and any other public participation information as is required in Section C above.	Yes
Appendix G:	Specialist Report(s)	Yes
Appendix H :	EMPr	Yes
Appendix I:	Additional information related to listed waste management activities (if applicable)	NA
Appendix J:	If applicable, description of the impact assessment process followed to reach the proposed preferred alternative within the site.	NA
Appendix K:	Any Other (if applicable).	Yes

## SECTION J: DECLARATIONS

TO BE PROVIDED WITH THE FINAL BAR